

AGENDA ATTACHMENTS

16TH FEBRUARY 2021

ORDINARY COUNCIL MEETING

1

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Central Highlands Council

MINUTES – ORDINARY MEETING – 19TH JANUARY 2021

Draft Minutes of an Open Ordinary Meeting of Central Highlands Council held at Hamilton Hall, on Tuesday 19th January 2021, commencing at 9am.

1.0 OPENING

The Mayor advises the meeting and members of the public that Council Meetings, not including Closed Sessions, are audio recorded and published on Council's Website.

Mayor L Triffitt opened the meeting at 9.00am.

2.0 ACKNOWLEDGEMENT OF COUNTRY

3.0 PRESENT

Mayor L Triffitt, Deputy Mayor J Allwright, Clr A Archer, Clr A W Bailey, Clr S Bowden, Clr A Campbell, Clr J Honner, Clr J Poore, Mrs Lyn Eyles (General Manager), Mr Adam Wilson (Deputy General Manager) and Mrs Katrina Brazendale (Minutes Secretary).

4.0 APOLOGIES

Clr R Cassidy

5.0 PECUNIARY INTEREST DECLARATIONS

In accordance with Regulation 8 (7) of the Local Government (Meeting Procedures) Regulations 2015, the Mayor requests Councillors to indicate whether they or a close associate have, or are likely to have a pecuniary interest (any pecuniary or pecuniary detriment) or conflict of interest in any Item of the Agenda.

Nil

6.0 CLOSED SESSION OF THE MEETING

Regulation 15 (1) of the *Local Government (Meeting Procedures) Regulations 2015* states that at a meeting, a council by absolute majority, or a council committee by simple majority, may close a part of the meeting to the public for a reason specified in sub-regulation (2).

As per *Regulation 15 (1) of the Local Government (Meeting Procedures) Regulations 2015*, this motion requires an absolute majority

Moved: Clr J Honner

Seconded: Clr A Campbell

THAT pursuant to *Regulation 15 (1) of the Local Government (Meeting Procedures) Regulations 2015*, Council, by absolute majority, close the meeting to the public to consider the following matters in Closed Session

ltem Number	Matter	Local Government (Meeting Procedures) Regulations 2015
1	Confirmation of the Minutes of the Closed Session of the Ordinary Meeting of Council held on 8 December 2020	Regulation 15 (2)(g) - information of a personal and confidential nature or information provided to the council on the condition it is kept confidential
2	Consideration of Matters for Disclosure to the Public	Regulation 15 (8) - While in a closed meeting, the Council, or Council Committee, is to consider whether any discussions, decisions, reports or documents relating to that closed meeting are to be kept confidential or released to the public, taking into account privacy and confidentiality issues

CARRIED

FOR the Motion:

Mayor L Triffitt, Deputy Mayor J Allwright, Clr A Archer, Clr A W Bailey, Clr S Bowden, Clr A Campbell, Clr J Honner and Clr J Poore.

6.1 MOTION OUT OF CLOSED SESSION

Moved: Clr J Honner

Seconded: Clr J Poore

THAT the Council:

- (1) Having met and dealt with its business formally move out of the closed session; and
- (2) Resolved to report that it has determined the following:

ltem Number	Matter	Local Government (Meeting Procedures) Regulations 2015
1	Confirmation of the Minutes of the Closed Session of the Ordinary Meeting of Council held on 8 December 2020	Minutes of the Closed Session of the Ordinary Meeting of Council held on 8 December 2020 were confirmed
2	Consideration of Matters for Disclosure to the Public	Matters were considered

CARRIED

FOR the Motion:

Mayor L Triffitt, Deputy Mayor J Allwright, Clr A Archer, Clr A W Bailey, Clr S Bowden, Clr A Campbell, Clr J Honner and Clr J Poore.

OPEN MEETING TO PUBLIC

Due to COVID-19 a limit of 4 members of the public, at any one time will be applied.

7.0 **DEPUTATIONS**

10.30 – 10.45 Robyn Lewis – Central Highlands Tasmania Wildlife Group spoke on the need for reduced speed limit at Miena.

7.1 PUBLIC QUESTION TIME

8.0 MAYORAL COMMITMENTS

1 December 2020 3 December 2020 4 December 2020 5 December 2020 7 December 2020 8 December 2020 9 December 2020 10 December 2020 15 December 2020 15 December 2020 17 December 2020 18 December 2020 23 December 2020	Bothwell District High School Awards Presentation LGAT Conference Hobart Meeting Local Government Division Business of Council Tele meeting with Councillors x 2 Business of Council Ordinary Council Meeting Tele meeting with Councillors x 2 Business of Council Ouse Primary School Awards Presentation Westerway Primary School Awards Presentation Business of Council Business of Council Staff Break-up Function Business of Council
23 December 2020	Staff Break-up Function
6 January 2021	Business of Council
7 January 2021	Meeting with General Manager and Deputy General Manager
8 January 2021	Business of Council and Tele meeting with rate payer and Councillor

8.1 COUNCILLOR COMMITMENTS

Deputy Mayor J Allwright

17 November 2020	Ordinary Council Meeting- Hamilton
26 November 2020	T.G.A.L.T Workshop Bothwell
30 November 2020	Audit Panel Meeting-Hamilton
8 December 2020	Ordinary Council Meeting- Bothwell
17 December 2020	Gretna Fire Brigade Christmas Barbeque - Gretna
12 January 2021	Planning Committee Meeting - Bothwell

Clr A Campbell

17 November 2020	Ordinary Council Meeting- Hamilton
18 November 2020	Hatch Meeting- Hamilton
26 November 2020	T.G.A.L.T Workshop Bothwell
30 November 2020	Audit Panel Meeting-Hamilton
30 November 2020	Australia Day Meeting-Hamilton
3 December 2020	Drought Workshop- Bothwell
7 December 2020	Phone call- LGAT
8 December 2020	Ordinary Council Meeting- Bothwell
17 December 2020	Phone call from Community member

Clr J Honner

8 December 2020

Ordinary Council Meeting- Bothwell

STATUS REPORT COUNCILLORS

Item No.	Meeting Date	Agenda Item	Task	Councillor Responsible	Current Status	Completed Date
				Mayor Triffitt, Clr Campbell &	On going to provide Council with updates each Council	
3	18-Feb-20	16.5	Cattle Hill Wind Farm Community Fund Committee	Clr Honner	meeting	

Jason Branch (Manager Works and Services) attended the meeting at 10.14 a.m.

CARRIED

Moved: Clr J Poore

Seconded: Clr J Honner

THAT Council write a letter to Goldwind indicating Council's disappointment that's their inaction with regard to advising who they wish to have on the committee for the Grant Funding and the lack of transparency regarding if they are fully operational.

FOR the Motion:

Mayor L Triffitt, Deputy Mayor J Allwright, Clr A Archer, Clr A W Bailey, Clr S Bowden, Clr A Campbell, Clr J Honner and Clr J Poore.

8.2 GENERAL MANAGER'S COMMITMENTS

8 December 2020Council Meeting15 December 2020MAV Insurance Forum12 January 2021Planning Committee Meeting

8.3 DEPUTY GENERAL MANAGER'S COMMITMENTS

8 December 2020	Ordinary Council Meeting
15 December 2020	LGAT Health and Wellbeing Advisory Group
15 December 2020	MAV Insurance Forum
15 December 2020	Local Government Work Health and Safety Meeting
21 December 2020	South Regional Emergency Management Recovery Coordinators Meeting - PPE training for Local Government

9.0 NOTIFICATION OF COUNCIL WORKSHOPS HELD

9.1 FUTURE WORKSHOPS

9 February 2021 – Powers, Functions & Duties of Councillors 11.00 a.m. Bothwell

10.0 MAYORAL ANNOUNCEMENTS

The Mayor read a letter that she had received from Minister Michael Ferguson with regard to the Shannon River Bridge.

Moved: Clr J Honner

Seconded: Clr W Bailey

THAT Council write a letter to Minister Ferguson regarding Council's concerns, including incidents that have happened in the area of the Bridge and seek a timeframe.

FOR the Motion:

CARRIED

Mayor L Triffitt, Deputy Mayor J Allwright, Clr A Archer, Clr A W Bailey, Clr S Bowden, Clr A Campbell, Clr J Honner and Clr J Poore.

11.0 MINUTES

11.1 RECEIVAL DRAFT MINUTES ORDINARY MEETING

Moved: Clr J Honner

<u>Seconded</u>: Clr S Bowden

THAT the Draft Minutes of the Open Council Meeting of Council held on Tuesday 8th December 2020 be received.

FOR the Motion:

Mayor L Triffitt, Deputy Mayor J Allwright, Clr A Archer, Clr A W Bailey, Clr S Bowden, Clr A Campbell, Clr J Honner and Clr J Poore.

11.2 CONFIRMATION OF MINUTES ORDINARY MEETING

Moved: Clr J Poore

Seconded: Deputy Mayor J Allwright

THAT the Minutes of the Open Council Meeting of Council held on Tuesday 8th December 2020 be confirmed. CARRIED

FOR the Motion:

Mayor L Triffitt, Deputy Mayor J Allwright, Clr A Archer, Clr A W Bailey, Clr S Bowden, Clr A Campbell, Clr J Honner and Clr J Poore.

11.3 RECEIVAL DRAFT MINUTES PLANNING COMMITTEE MEETING

Moved: Deputy Mayor J Allwright

Seconded: Clr J Poore

THAT the Draft Minutes of the Planning Committee Meeting held on Tuesday 12th January 2021 be received.

FOR the Motion:

Mayor L Triffitt, Deputy Mayor J Allwright, Clr A Archer, Clr A W Bailey, Clr S Bowden, Clr A Campbell, Clr J Honner and Clr J Poore.

12.0 BUSINESS ARISING

15.2	Correspondence sent by Development & Environmental Services Manager
15.3	Correspondence sent by Development & Environmental Services Manager
15.4	Council policy on council website
17.2	Council policy on council website
17.4	Correspondence sent by Deputy General Manager
17.7	Correspondence sent by Deputy General Manager
17.10	Correspondence sent by Deputy General Manager
18.2	Correspondence sent by Deputy General Manager

13.0 DERWENT CATCHMENT PROJECT REPORT

Moved: Deputy Mayor J Allwright Seconded: Clr J Honner

THAT the Derwent Catchment Project report be received.

FOR the Motion:

Mayor L Triffitt, Deputy Mayor J Allwright, Clr A Archer, Clr A W Bailey, Clr S Bowden, Clr A Campbell, Clr J Honner and Clr J Poore.

CARRIED

CARRIED

CARRIED

CARRIED

14.0 FINANCE REPORT

Moved: Clr J Honner

THAT the Finance Reports be received.

FOR the Motion:

Mayor L Triffitt, Deputy Mayor J Allwright, Clr A Archer, Clr A W Bailey, Clr S Bowden, Clr A Campbell, Clr J Honner and Clr J Poore.

Seconded: Clr J Poore

Seconded: Clr A Campbell

Moved: Clr J Honner

THAT Item 16.0 Works and Services be brought forward on the agenda.

FOR the Motion:

Mayor L Triffitt, Deputy Mayor J Allwright, Clr A Archer, Clr A W Bailey, Clr S Bowden, Clr A Campbell, Clr J Honner and Clr J Poore.

16.0 WORKS & SERVICES

Moved: Clr A Campbell

Seconded: Clr J Honner

THAT the Works & Services Report be received.

FOR the Motion:

Mayor L Triffitt, Deputy Mayor J Allwright, Clr A Archer, Clr A W Bailey, Clr S Bowden, Clr A Campbell, Clr J Honner and Clr J Poore.

Robyn Lewis attended the meeting at 10.33 a.m.

16.1 SPEED LIMIT IN THE TOWN OF MIENA

Moved: Clr J Poore

Seconded: Deputy Mayor J Allwright

THAT Council send a letter of support through to State Growth for the reduction of the speed limit in the township of Miena from 80 to 60.

FOR the Motion:

Mayor L Triffitt, Deputy Mayor J Allwright, Clr A Archer, Clr A W Bailey, Clr A Campbell and Clr J Poore. AGAINST the Motion: CIr S Bowden and CIr J Honner

Robyn Lewis left the meeting at 10.55 a.m.

PELHAM ROAD UPGRADE STAGE 2 16.2

Moved: Clr J Honner

THAT Council allocate an additional \$70,000 in the Capital Works budget for Pelham Road Stage 2.

FOR the Motion:

Mayor L Triffitt, Deputy Mayor J Allwright, Clr A Archer, Clr A W Bailey, Clr S Bowden, Clr A Campbell, Clr J Honner and Clr J Poore.

8

Seconded: Clr A W Bailey

Minutes 19th January 2021

CARRIED

CARRIED 6/2

CARRIED

CARRIED

CARRIED

17.0 ADMINISTRATION

17.1 TASMANIAN CIVIL AND ADMINISTRATIVE TRIBUNAL AMENDMENT BILL 2020

Moved: Clr J Honner

Seconded: Clr J Poore

THAT Councillors provide their comments on the Tasmanian Civil and Administrative Tribunal Bill 2020 to the General Manager by Friday the 29 January 2021 so that a Council can provide comments to the Department of Justice.

FOR the Motion:

Mayor L Triffitt, Deputy Mayor J Allwright, Clr A Archer, Clr A W Bailey, Clr S Bowden, Clr A Campbell, Clr J Honner and Clr J Poore.

17.2 STATE GRANTS COMMISSION HEARINGS AND VISITS 2021

Moved: Clr A Campbell

Seconded: Clr A W Bailey

THAT Councillors provide their comments on the State Grants Commission - Discussion Papers, Facts Sheets and reports to the General Manager by Friday the 29 January 2021 so that a Council can provide comments to the State Grants Commission before the Hearings and Visits begin.

FOR the Motion:

Mayor L Triffitt, Deputy Mayor J Allwright, Clr A Archer, Clr A W Bailey, Clr S Bowden, Clr A Campbell, Clr J Honner and Clr J Poore.

Graham Rogers (Manager Development Services) attended the meeting at 11.13 a.m.

17.3 BUILDING BETTER REGIONS FUND ROUND 5

Moved: Deputy Mayor J Allwright Seconded: Clr A Campbell

THAT the Deputy General Manager investigates and applies for a grant for Stage 2 at Bronte

FOR the Motion:

Mayor L Triffitt, Deputy Mayor J Allwright, Clr A Archer, Clr A W Bailey, Clr S Bowden, Clr A Campbell, Clr J Honner and Clr J Poore.

Damian Mackey attended the meeting at 11.30 a.m.

Moved: Clr A Archer

Seconded: Clr J Honner

THAT the Development of Environmental Services Manager call for expressions of interest in designing an all-weather cover over the pool, making it an all year facility.

LOST 4/4

CARRIED

FOR the Motion: Mayor L Triffitt, Clr A Archer, Clr S Bowden and Clr J Honner *AGAINST the Motion:* Deputy Mayor J Allwright, Clr J Poore, Clr A W Bailey and Clr A Campbell

10

17.4 LOCAL ROADS AND COMMUNITY INFRASTRUCTURE GRANT (PHASE 2)

Moved: Clr A W Bailey

THAT Council approve 'Stage 6' of Pelham Road

FOR the Motion:

Mayor L Triffitt, Deputy Mayor J Allwright, Clr A W Bailey, Clr A Campbell, Clr J Honner and Clr J Poore. FOR the Motion: Clr A Archer, Clr S Bowden

Moved: Clr J Poore

THAT the meeting move back to Item 15.0 Development & Environmental Services

FOR the Motion:

Mayor L Triffitt, Deputy Mayor J Allwright, Clr A Archer, Clr A W Bailey, Clr S Bowden, Clr A Campbell, Clr J Honner and Clr J Poore.

Seconded: Clr A Campbell

Seconded: Deputy Mayor J Allwright

15.0 DEVELOPMENT & ENVIRONMENTAL SERVICES

In accordance with Regulation 25(1) of the Local Government (Meeting Procedures) Regulations 2015, the Mayor advises that the Council intends to act as a Planning Authority under the Land Use Planning and Approvals Act 1993, to deal with the following items:

Moved: Clr A Campbell

Seconded: Clr J Honner

THAT the Development & Environmental Services Report be received.

FOR the Motion:

Mayor L Triffitt, Deputy Mayor J Allwright, Clr A Archer, Clr A W Bailey, Clr S Bowden, Clr A Campbell, Clr J Honner and Clr J Poore.

15.1 DRAFT CENTRAL HIGHLANDS LOCAL PROVISIONS SCHEDULE – FURTHER FEEDBACK FROM THE TASMANIAN PLANNING COMMISSION.

Moved: Clr A Archer

Seconded: Clr S Bowden

THAT Council endorse the resolution of the 12 January 2021 Planning Committee meeting, that Council:

- A. Respond to the 23 December 2020 correspondence from the Tasmanian Planning Commission pertaining to the Central Highlands Draft Local Provisions Schedule, advising the following:
 - 1. In regard to the allocation of the Rural and Agriculture Zones, Council cannot respond to the Commission's questions until the status of the AK Consulting '*Decision Tree & Guidelines for Mapping the Agriculture and Rural Zones*' is clarified. Whilst Council representatives have been verbally advised that this report does have standing, the Commission's questions indicates it does not.

If it does not have standing in the Commission's eyes, Council seeks and explanation. This report was funding by the State at the express request of the Southern Councils to guide the allocation of the Rural and Agriculture Zones in the formulation of their Local Provisions Schedules. At the time, this approach was endorsed by Government and Commission representatives.

CARRIED 2/6

CARRIED

CARRIED

If the AK Consulting Decision Tree cannot be used, Council will be forced to expend considerable financial resources to engage consultants, (which in its view would be unnecessary), and the progression of the draft LPS will be further delayed.

2. In regard to the spatial extent of heritage place listings on rural properties, Council seeks a full explanation as to why the removal of superfluous titles, that have now been removed from the corresponding Tasmanian Heritage Register listings, cannot be allowed in the LPS. These listings unnecessarily encumber thousands of hectares of the Central Highlands. This is land where there is, and never has been, a deliberate decision to list the land.

It could well be argued that the removal of superfluous titles should be seen in exactly the same light as the correction of incorrect title references or street addresses that is being allowed by the Commission in the LPS heritage list.

Noting that Council's policy is that its local heritage list is to only include properties that are on the Tasmanian Heritage Register, Council foreshadows that if its list cannot be corrected as outlined above, it will remove the list entirely from the draft LPS.

- 3. In regard to the Draft Lake Meadowbank Specific Area Plan, Council cannot respond to the Commission's request that Council provide justification for its inclusion in the LPS until the Commission provides feedback on the rationale Council has already provided.
- Β. Consult with the Southern Region's Technical Reference Group (Planning) to establish how similar issues are being dealt with by the Tasmanian Planning Commission in other municipal areas, with a view to potentially pursuing areas of common interest jointly with other councils.
- C. Seek advice from the Office of the Coordinator General regarding the above.

CARRIED

CARRIED

FOR the Motion:

Mayor L Triffitt, Deputy Mayor J Allwright, Clr A Archer, Clr A W Bailey, Clr S Bowden, Clr A Campbell, Clr J Honner and Clr J Poore.

Damian Mackey (Planning Consultant SMC) left the meeting at 11.56 a.m.

15.2 AUSTRALIA DAY CELEBRATION AT BOTHWELL SWIMMING POOL

Moved: Deputy Mayor J Allwright Seconded: Clr A Campbell

THAT Council allocate \$300 for the purchase of pool inflatables and for a BBQ at the Bothwell Swimming Pool on Tuesday 26th January 2021.

FOR the Motion: Mayor L Triffitt, Deputy Mayor J Allwright, Clr A Archer, Clr A W Bailey, Clr S Bowden, Clr A Campbell, Clr J Honner and Clr J Poore.

15.3 **DES BRIEFING REPORT**

PLANNING PERMITS ISSUED UNDER DELEGATION

The following planning permits have been issued under delegation during the past month.

NO PERMIT REQUIRED

DA NO.	APPLICANT	LOCATION	PROPOSAL
2020 / 00089	Tasbuilt Homes And	8 Pauciflora Drive, London	Dwelling & Carport
	Cabins	Lakes	
2020 / 00090	A Bruty	15 Meredith Springs Road,	Dwelling
		Miena	
2020 / 00096	J C Limbourn	111 Jones Road, Miena	Dwelling Addition
2020 / 00097	K W Towns	691 Ellendale Road, Ellendale	Farm Shed
2020 / 00098	G W Barrett	5 Robertson Road, Miena	New Dwelling

PERMITTED

DA NO.	APPLICANT	LOCATION	PROPOSAL
2020 / 00088	B J Kemp	26a Patrick Street, Bothwell	Outbuilding (Shipping Container)
2020 / 00082	S Y Down	Lyell Highway, Ouse	Outbuilding
2020 / 00082	S Y Down	Lyell Highway, Ouse	Outbuilding
2020 / 00083	P E Piuselli	6937 Lyell Highway, Ouse	Boundary Adjustment
2020 / 00092	H Vanderplas	58 Bronte Estate Road, Bronte Park	Dwelling & Re-clad and Re-roof Shed

DISCRETIONARY

DA NO.	APPLICANT	LOCATION	PROPOSAL
2020 / 00068	A R J & K A Ashlin	7791 Highland Lakes Road, Miena	Outbuilding (Shipping Container)
2020 / 00081	W P Dexter	36 High Street, Bothwell	Outbuilding
2020 / 00082	S Y Down	Lyell Highway, Ouse	Outbuilding
2020 / 00079	Core Collective Architects	2120 Hollow Tree Road, Hollow Tree	Demolition, Alterations & Additions, Change of Use Barn to Visitor Accommodation
2020 / 00085	D E McMillan	131 Wayatinah Road, Wayatinah	Additions to Caravan Park (3 x Annexes Retrospective)
2020 / 00087	C Vanderplas	54 Bronte Estate Road, Bronte Park	Dwelling and Outbuilding
2020 / 00094	Design To Live Pty Ltd	53 Dolerite Crescent, Flintstone	Dwelling, Carport & Outbuilding

Registrations

Kennel Licences

Moved: Clr J Honner

ANIMAL CONTROL

IMPOUNDED DOGS

THAT Council move back to Item 17.5 'Heartlands' sign on the way to Bothwell.

FOR the Motion:

Mayor L Triffitt, Deputy Mayor J Allwright, Clr A Archer, Clr A W Bailey, Clr S Bowden, Clr A Campbell, Clr J Honner and Clr J Poore.

'HEARTLANDS' SIGN ON THE WAY TO BOTHWELL 17.5

Moved: Clr A Archer

THAT Council

Remove the sign of the Ross Bridge; •

No dogs have been impounded over the past month.

STATISTICS AS OF 12 JANUARY 2021

Number of Dogs Pending Re-Registration - 4

Number of Dogs Registered -947

Number of Licenses Issued -29 Number of Licences Pending - 0

- Obtain a cost for a sign at each end of the Municipality; and
- Provide \$250 for prize of photo competition

FOR the Motion:

Mayor L Triffitt, Deputy Mayor J Allwright, Clr A Archer, Clr A W Bailey, Clr S Bowden, Clr A Campbell, Clr J Honner and Clr J Poore.

The meeting was adjourned 12.08 p.m. and resumed at 12.46 p.m.

Clr A Archer and Deputy General Manager Adam Wilson was not in attendance when the meeting resumed

DRAFT CHILD SAFE ORGANISATIONS BILL 2020 17.6

Moved: Clr J Honner

Seconded: CIr A Campbell

THAT Councillors provide their comments on the Draft Child Safe Organisations Bill 2020 to the General Manager by Friday the 5 February 2021 so that a Council can provide comments to the Local Government Association of Tasmania.

FOR the Motion:

Mayor L Triffitt, Deputy Mayor J Allwright, Clr A W Bailey, Clr S Bowden, Clr A Campbell, Clr J Honner and Clr J Poore.

Clr A Archer returned to the meeting at 12.48 p.m.

CARRIED

CARRIED

Seconded: Clr S Bowden

Seconded: Clr J Poore

CARRIED

17.7 TASMANIAN CIVIL AND ADMINISTRATIVE TRIBUNAL AMENDMENT BILL 2020

Moved: Clr J Honner

THAT Councillors provide their comments on the Tasmanian Civil and Administrative Tribunal Bill 2020 to the General Manager by Monday the 25 January 2021 so that a Council can provide comments to the Local Government Association of Tasmania.

Seconded: Clr A W Bailey

FOR the Motion:

Mayor L Triffitt, Deputy Mayor J Allwright, Clr A Archer, Clr A W Bailey, Clr S Bowden, Clr A Campbell, Clr J Honner and Clr J Poore.

Deputy General Manager Adam Wilson returned to the meeting at 12.55 p.m.

\$50 MILLION NATIONAL FLOOD MITIGATION INFRASTRUCTURE PROGRAM 17.8

Moved: Clr A Archer

Seconded: Clr S Bowden

THAT CIr A Archer liaise with the Deputy General Manager Adam Wilson and Josie Kelman (NRM) work with the Council to submit an application for a design and implementation on Clyde and Ouse Rivers

FOR the Motion:

Mayor L Triffitt, Deputy Mayor J Allwright, Clr A Archer, Clr A W Bailey, Clr S Bowden, Clr A Campbell, Clr J Honner and Clr J Poore.

Graham Rogers (Manager Development Services) left the meeting at 1.00 p.m.

INTERATIONAL CAMPAIGN TO ABOLISH NUCLEAR WEAPONS 'CITIES APPEAL' 17.9

Moved: Clr J Honner

Seconded: Clr A W Bailey

THAT the Central Highlands Council endorses the ICAN Cities appeal in celebration of the Treaty on the Prohibition of Nuclear Weapons, hence Council call on the Federal Government to sign and ratify the treaty on the Prohibition of Nuclear Weapons.

LOST 3/5

FOR the Motion: Mayor L Triffitt, Clr A W Bailey and Clr J Honner AGAINST the Motion: Deputy Mayor J Allwright, Clr A Archer, Clr S Bowden, Clr A Campbell and Clr J Poore

Clr A Archer left the meeting at 1.04 p.m.

17.10 DIABETES TASMANIA POLLIEPEDAL'21

Moved: Clr A Campbell

THAT Council make a donation of \$300.00 to the Diabetes Tasmania PolliePedal'21

FOR the Motion:

Mayor L Triffitt, Deputy Mayor J Allwright, Clr A W Bailey, Clr S Bowden, Clr A Campbell, Clr J Honner and Clr J Poore.

14

Seconded: Clr A W Bailey

CARRIED

CARRIED

17.11 REMISSIONS UNDER DELEGATION

Moved: Clr A W Bailey

Seconded: Clr J Honner

THAT the following remissions be granted

Penalty change of ownership
Penalty paid to incorrect property
Penalty gmail issue - notice not received
Penalty gmail issue - notice not received

FOR the Motion:

Mayor L Triffitt, Deputy Mayor J Allwright, Clr A W Bailey, Clr S Bowden, Clr A Campbell, Clr J Honner and Clr J Poore.

17.12 ANNUAL REPORT 2019-2020

Moved: Deputy Mayor J Allwright Seconded: Clr J Honner

THAT Council adopt the 2019-20 Annual Report as presented.

FOR the Motion:

Mayor L Triffitt, Deputy Mayor J Allwright, Clr A W Bailey, Clr S Bowden, Clr A Campbell, Clr R Cassidy, Clr J Honner and Clr J Poore.

18.0 SUPPLEMENTARY AGENDA ITEMS

Moved: Deputy Mayor J Allwright Seconded: Clr J Honner

THAT Council consider the matters on the Supplementary Agenda.

FOR the Motion:

Mayor L Triffitt, Deputy Mayor J Allwright, Clr A W Bailey, Clr S Bowden, Clr A Campbell, Clr J Honner and Clr J Poore.

18.1 MEADOWBANK CREST GATE REFURBISHMENT PROJECT

Moved: Deputy Mayor J Allwright Seconded: Clr A Campbell

THAT the Community Engagement Advisor for Hydro Tasmania be invited to attend the February Council meeting at 10.30am.

FOR the Motion:

Mayor L Triffitt, Deputy Mayor J Allwright, CIr A W Bailey, CIr S Bowden, CIr A Campbell, CIr J Honner and CIr J Poore.

19.0 CLOSURE

The meeting closed at 1.10 p.m.

CARRIED

CARRIED

CARRIED

CARRIED

OPTIONS PAPER

No Planning Approval Required Certificates

Background

The Tasmanian Government is committed to cutting red tape and has been in a process of red-tape reduction since 2015.

In June and December 2020 respectively, the Tasmanian Government passed two Building and Construction (Regulatory Reform Amendments) Bills. The first Bill introduced a range of regulatory reforms to tighten up the permit and approval processes within local government, TasWater and TasNetworks. The second Bill introduced similar reforms focused on accountability of State Government agencies in the permit and approval processes.

In addition to legislative change, some non-legislative reforms were identified that would tighten up permit and approval processes, that could be made by Determinations or policy changes, rather than by introducing new laws.

One such non-legislative reform was for 'No Permit Required Certificates'.

This reform was proposed in the Premier's Economic and Social and Recovery Advisory Council (PESRAC) Interim Report¹ in July 2020. The Interim Report provides an overview of the economic and social impacts of COVID-19 and outlines the Council's recommendations with regard to the recovery journey and its immediate priorities.

Recommendation 26 of the PESRAC Report stated:

The State Government should change the regulatory framework for developments that fall within 'no permit required' and 'permitted use' under planning schemes to deliver an efficient and timely approach for dealing with planning outcomes.

Initial consultation with the Local Government Association of Tasmania (LGAT) proposed that the Director of Building Control consider issuing a Determination under the *Building Act 2016* which would allow private planning consultants to issue 'No Planning Permit Required' Certificates, which



https://www.pesrac.tas.gov.au/__data/assets/pdf_file/0016/250441/Interim_Report.pdf

can then be relied upon by the Building Surveyor and Permit Authority when determining an application for building approval.

This paper outlines two options which may facilitate this proposed change and is to form the basis of further discussions with relevant stakeholders including Councils, Building Surveyors, Builders and Planning Consultants.

What is the issue?

There are a number of developments that may occur in Tasmania which do not require planning approval, including residential buildings in residential zones provided that the proposed buildings comply with the relevant planning provisions in the applicable planning scheme. This includes developments that are 'exempt' from the requirements in the planning scheme, or those classified as 'No Permit Required' in the planning scheme.

Currently, building surveyors, builders and permit authorities may request that an owner, or their agent, confirm that either planning approval has been granted, or that planning approval is not required. In order to provide the requested confirmation that no planning approval is required, the owner, or developer, is currently required to make a request to the planning authority at the relevant council. This request for confirmation, that no planning approval is required, can often lead to a significant delay due to planning resource constraints within councils, meaning work cannot progress.

Why is a change proposed?

The PESRAC Interim Report makes it clear that, with substantial stimulus measures from both State and Commonwealth Governments, short and medium-term building and infrastructure projects will be critical to economic activity and job creation. This is not solely a benefit as we rebuild and recover after the COVID-19 Pandemic, but also reduces unnecessary delay in development in the long term.

Blockages in the approval processes should be resolved through alternative arrangements to facilitate development and it is to this end that the options are provided below.

What are the options?

Option I. Amend the <u>Director's Determination – Certificates by Qualified</u> <u>Persons for an assessable item</u> to include certificates of No Planning Approval Required issued by Private Planning Consultants

Under the Building Act 2016, the Director of Building Control can issue a Determination that specifies the expertise and qualifications required for a person to provide a certificate for an

assessable item. A certificate issued by that person can then be relied upon by an authorised person as evidence that the assessable item complies with the Act.

This allows for independent advice or an assessment to be given by a specialist or expert on a requirement under the Building Act that another party, such as a Permit Authority or Building Surveyor can rely upon. Examples include soil testing reports, bushfire-prone area assessments, energy efficiency ratings, or an assessment of a component of a plumbing system.

This option proposes that the Director of Building Control amend the Determination to include Private Planning Consultants and allow for these persons to assess the planning requirements for a proposed development, and if appropriate to do so, issue a report or statement that certifies that the work does not require planning approval.

The statement or report of No Planning Approval Required would be accompanied by a Certificate of Qualified Person – Assessable Item (Form 55). It may then be relied upon by the approval provider (building surveyor or permit authority) and the person relying on this certification is given a degree of legal immunity, as provided under pt 21 div 5 of the *Building Act 2016*.

The certificate type provided by the Private Planning Consultant is to be restricted solely to providing a planning assessment that determines that no planning approval is required. This would not prohibit local councils from continuing to provide advice on whether or not a planning permit is required, and does not remove the local council from their statutory functions as planning authority.

For this option, the Determination will also specify requirements of the Private Planning Consultants, such as minimum qualifications and a requirement to hold Public Indemnity insurance. An example of this concept is provided, in preliminary draft form, at Appendix 1.

Benefits

- Will result in Private Planning Consultants being able to issue a report or statement that no planning approval is required.
- Will result in more efficient and timely confirmation that no planning approval is required, resulting in quicker building work commencements.
- Reduces burden on council planning authorities to assess proposed works which do not require planning approval
- Frees resources at local council to focus on assessing development applications which do require planning consent
- Provides certainty for building approval providers, such as building surveyors and permit authorities, that no planning consent is required.
- Can specify minimum insurance, qualifications and experience required of Private Planning Consultants who may provide certificate.

Considerations

- Lack of certainty that the planning consultant holds qualifications they purport to have, due to a lack of a requirement to hold a licence from CBOS
- If a licence is not required, the State Government cannot revoke the licence of a private planning consultant if they have demonstrated lack of sufficient competency which may present a risk to consumers
- Perception that Private Planning Consultants can undertake the duties of a local council planning authority

Option 2. Adopt Option I and require the Private Planning Consultants to hold a building services provider licence under the Occupational Licensing Act 2005.

Option 2 would extend the first option and introduce a requirement that private planning consultants be licensed to issue a statement or report that no planning approval is required.

This option would involve:

- Updating the Director's Determination to include a statement of a Private Planning Consultant as an assessable item (Option I); and
- Requiring that a Private Planning Consultant be licensed under the *Occupational Licensing Act* 2005 for the purpose of certifying planning work as not requiring planning approval.

To achieve the licensing requirements, the Administrator of Occupational Licensing may amend the <u>Administrator's Occupational Licensing (Building Services Work) Determination</u> to include a class of licence of Private Planning Consultant. This new class of licence would specify the requirements for insurance, qualifications and experience, and will also determine the scope for the licensed persons.

The Occupational Licensing Act 2005 applies to the occupation, trade or calling that is the performance of building services work as described in Part 4 of Schedule 2 of the Act. This includes the assessment and certification of premises, buildings and building work.

Section 30 of the Occupational Licensing Act 2005 provides that, for the purposes of issuing licences or permits under this Act, the Administrator may determine that –

- (a) any prescribed work is to be divided into classes of prescribed work; and
- (b) any class of prescribed work may be combined with any other class of prescribed work.

The Occupational Licensing (Building Services Work) Regulations 2016 defines Prescribed Work as work included at Part I of Schedule I of these Regulations, which includes:

3. Assessment or certification work that is -

...

- (a) assessment and certification of architectural or engineering designs of proposed building work, or demolition work, including work performed for the purpose of obtaining statutory approvals, permits or authorisations to perform that building or demolition work; or
- (c) inspection, assessment, testing, reporting, advising, authorisation or certification of building work, premises, buildings or temporary structures; or ...

So, given the above, Planning Consultancy, for the purposes of assessment and certification that proposed work does not require planning approval, may be covered under the *Occupational Licensing Act 2005*.

A draft initial concept for a licence provided by an amendment to the Administrator's Determination is included at Appendix 2 to this options paper.

Benefits:

- Will result in Private Planning Consultants being able to issue a certificate stating No Planning Approval Required.
- Can specify minimum insurance, qualifications and experience required of Private Planning Consultants who may provide the certificate.
- Provides additional certainty to approval providers that planning consultant is suitably qualified and experienced.
- Will result in more efficient and timely confirmation that No Planning Approval is Required, resulting in quicker building work commencements.
- Reduces burden on council planning authorities to assess proposed works which do not require planning approval.
- Frees resources at local council to focus on assessing development applications which do require planning consent.
- Provides certainty for building approval providers, such as building surveyors and permit authorities that no planning consent is required.
- Provides the ability for the Administrator of Occupational Licensing to revoke, or refuse to renew, the licence of a private planning consultant if the person has demonstrated a lack of sufficient competency or professional conduct.

Considerations:

- Additional cost (licensing) to private planning consultants
- Additional regulatory burden to private planning consultants
- Without supporting documentation (Fact Sheet/Guidelines) intent may not be well understood.

Option 3 Status Quo

Option 3 would retain the current process of an applicant needing to make contact with the local council planning authority to request confirmation that planning approval is not required for any proposed development or change of use. The process for this confirmation varies between councils and can be impacted by resource availability in councils which can prevent responses being provided in a timely manner.

Benefits

- No additional regulatory material for approval providers to comprehend.
- No additional costs to owner/developer (other than costs resulting from delayed commencement of work)

Considerations

- Will not provide an alternative option for an owner/developer to obtain a No Planning Approval Required certificate to satisfy an approval provider, meaning owners remain bound to council timelines.
- Does not result in the facilitation of recommendation 26 of the PESRAC Interim Report.
- Does not implement preferred options as discussed with State Government and LGAT.
- Does not free resources at council to commit to assessing and determining development applications which do require consideration for permit.
- Does not alleviate potential regulatory blockages, as described in the PESRAC interim report.

Will this allow a Private Planner to grant Planning Approval?

No, the ability to issue planning approvals for works that require consent under the *Land Use Planning and Approvals Act 1993* will remain the responsibility of the planning authority, being the local council. The options proposed in this paper only relate to proposed development or change of use where the work is determined to be 'exempt' or 'No Permit Required' under the relevant planning schemes.

Will council planning authorities require a licence?

No, the proposed options do not set any requirements on planning authorities within local government. The Planning Authority at council may continue to confirm that work is 'exempt' or 'no permit required'.

What now?

The Tasmanian Government is seeking feedback in respect of the potential regulatory impact that may be associated with the proposed options. Below are some brief points to focus the discussion, however Consumer, Building and Occupational Services (CBOS) welcome feedback on any points relating to this options paper.

Discussion Points

Do you have a preferred option listed above? Why?

Does Part 21 Division 5 of the Building Act 2016 provide sufficient immunity from liability for approval providers (building surveyors & permit authorities)?

Does a requirement for the Private Planning Consultant to hold a licence provide any additional clarity to approval providers?

Do you agree with the positive and negative aspects of the options?

Do you believe that any of the proposed options will result in a reduction of regulatory roadblocks?

Are there any other likely impacts associated with implementing any of the proposed options?

How do I submit feedback?

This options paper is provided on the Department of Justice Community Consultations website.

All written submissions on the options paper must be received by 5:00pm on 26 February 2021.

Email your submission to haveyoursay@justice.tas.gov.au

Other than indicated below, submissions will be treated as **public information** and will be published on our website at <u>www.justice.tas.gov.au/community-consultation</u>. Submissions will be published after the consultation period.

No personal information other than an individual's name or the organisation making a submission will be published.

For further information, please contact: <u>CBOS.info@justice.tas.gov.au</u> and include 'Attention: Policy & Projects – No Planning Approval Required' in the email subject.

Accessibility of Submissions

The Government recognises that not all individuals or groups are equally placed to access and understand information. We are therefore committed to ensuring Government information is accessible and easily understood by people with diverse communication needs

Where possible, please consider typing your submission in plain English and providing it in a format such as Microsoft Word or equivalent.

The Government cannot however take responsibility for the accessibility of documents provided by third parties.

Important Information to Note

Your name (or the name of the organisation) will be published unless you request otherwise.

In the absence of a clear indication that a submission is intended to be treated as confidential (or parts of the submission), the Department will treat the submission as public.

If you would like your submission treated as confidential, whether in whole or in part, please indicate this in writing at the time of making your submission clearly identifying the parts of your submission you want to remain confidential and the reasons why. In this case, your submission will not be published to the extent of that request.

Copyright in submissions remains with the author(s), not with the Tasmanian Government.

The Department will not publish, in whole or in part, submissions containing defamatory or offensive material. If your submission includes information that could enable the identification of other individuals then either all or parts of the submission will not be published.

The Right to Information Act 2009 and confidentiality

Information provided to the Government may be provided to an applicant under the provisions of the *Right to Information Act 2009* (RTI). If you have indicated that you wish all or part of your submission to be treated as confidential, your statement detailing the reasons may be taken into account in determining whether or not to release the information in the event of an RTI application for assessed disclosure. You may also be contacted to provide any further comment.

Appendix I.

Draft Concept for amendment to Assessable Items Determination

Certificate Type	Given by	Qualifications	Specialty Area
Planning Assessment – No Planning Approval Required	Private Planning Consultant	I. Membership with the Planning Institute of Australia; or	Land Use Planning matters.
		2. Completion of a degree recognised as an Accredited Course by the Planning Institute of Australia.	
		Professional Indemnity Insurance	

Appendix 2.

Category	Planning Consultant (building services provider)					
Classes	N/A					
Scope of work: (Standard requirements)	The licence allows the holder to assess and certify proposed building or demolition work against relevant planning legislation and provide, if appropriate to do so, a statement of 'No Planning Approval Required'.					
	The relevant building surveyor and/or permit authority may then rely on this certification from the Planning Consultant when taking into account consents or permits required under the Land Use Planning Approvals Act 1993.					
Licence restrictions/ conditions applicable	For the avoidance of doubt; Planning Consultants, licensed as building services providers under the <i>Occupational Licensing Act 2005,</i> are restricted to provide solely the statement of No Planning Approval Required, and are not permitted to perform the functions of the Planning Authority under the <i>Land Use Planning and Approvals Act 1993.</i>					
Minimum requirements for new application requirements for this Class						
Minimum qualifications	Membership with the Planning Institute of Australia; or					
completed (all new applicants)	Completion of a degree recognised as an Accredited Course by the Planning Institute of Australia; or					
	An appropriate degree (AQF 7 or higher) in Planning, submitted to the satisfaction of the Administrator.					
Experience	Five years' experience as a planner					
Insurance	Professional Indemnity as per Part 9 of the Determination					
Licence application fee	 An applicant is to pay the fee(s) as prescribed in the regulations made under the Act 					
Obligations of every licensee after a licence has been granted:						
Continuing Professional Development	• XX points minimum per year;					
	 refer to CPD scheme in Part 8 for details 					
Code of Practice	To observe or apply the relevant Codes					
	• Reference applicable Codes in Parts 10 and 11 for details					
Licence Fees (Ongoing)	• To be paid at the prescribed rate as per the regulations					
Insurance (Ongoing)	Professional Indemnity as per Part 9 of the Determination					

Draft Concept for amendment to Building Services Provider Determination

Department of Justice Consumer, Building and Occupational Services Phone: 1300 654 499 Email: CBOS.Info@justice.tas.gov.au www.cbos.tas.gov.au Drafted in the Office of Parliamentary Counsel

TASMANIA

WASTE AND RESOURCE RECOVERY BILL 2021

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WASTE AND RESOURCE RECOVERY BILL 2021

(Brought in by the Minister for Environment and Parks, the Honourable Roger Charles Jaensch)

A BILL FOR

An Act to encourage the diversion of waste from landfill, increase the recovery of resources from waste, introduce a waste levy system, provide for standards and guidelines to be made in relation to landfill and resource recovery facilities and establish the Tasmanian Waste and Resource Recovery Board

Be it enacted by Her Excellency the Governor of Tasmania, by and with the advice and consent of the Legislative Council and House of Assembly, in Parliament assembled, as follows:

PART 1 – PRELIMINARY

1. Short title

This Act may be cited as the *Waste and Resource Recovery Act 2021*.

2. Commencement

- (1) Except as provided by this section, this Act commences on the day on which this Act receives the Royal Assent.
- (2) Part 3 commences on a day to be proclaimed.

3. Interpretation

- (1) In this Act, unless the contrary intention appears
 - *Account* means the Waste and Resource Recovery Account established by section 24;
 - Appeal Tribunal means the Resource Management and Planning Appeal Tribunal established by the Resource Management and Planning Appeal Tribunal Act 1993;

approved means approved by the Director;

- *authorised officer* means an authorised officer appointed under section 9;
- *Board* means the Tasmanian Waste and Resource Recovery Board established by section 10;

landfill facility - see section 4;

- Local Government Association means the Local Government Association of Tasmania, continued as a body corporate by section 326 of the Local Government Act 1993;
- *operational plan* means an operational plan that takes effect under section 21(6);

operator means a person who –

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Waste and Resource Recovery Act 2021 Act No. of 2020

- (a) holds a valid approval, permit or licence; or
- (b) is subject to an order or notice that is in force –

that allows the person to operate a landfill facility;

payable levy amount – see section 32;

prescribed levy means the levy prescribed for the purposes of section 30;

regulations means regulations made under this Act;

resource recovery, in relation to waste, means the lawful –

- (a) reuse of the waste; or
- (b) recycling of the waste; or
- (c) recovery of energy or other resources from the waste;

resource recovery facility – see section 5;

waste strategy means a waste strategy that takes effect under section 20(5).

(2) Unless the contrary intention appears, a word or expression used in the *Environmental Management and Pollution Control Act 1994* has the same meaning in this Act as it has in that Act.

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4. Meaning of landfill facility

- (1) In this section
 - *land* means an area of land that is not covered by water but does not include any buildings or other structures on the area of land;
 - *lawfully disposed of* means disposed of in accordance with
 - (a) a valid approval, permit or licence; or
 - (b) an order or notice that is in force.
- (2) In this Act, a landfill facility is a facility at which waste is lawfully disposed of into, or onto, land.
- (3) Despite subsection (2), the regulations may prescribe that a specified facility, or class of facilities, is not a landfill facility for the purposes of this Act.

5. Meaning of resource recovery facility

- (1) In this section
 - *lawfully prepared* means sorted, or prepared, for resource recovery in accordance with –
 - (a) a valid approval, permit or licence; or

- (b) an order or notice that is in force.
- (2) In this Act, a resource recovery facility is a facility or other place
 - (a) at which
 - (i) waste is lawfully prepared; or
 - (ii) resource recovery takes place; or
 - (b) that is prescribed as a resource recovery facility.

6. Ministerial order

- (1) The Minister may, by order, declare that certain matter, or a class of matter, is excluded from this Act, or certain provisions of this Act.
- (2) Before making an order under subsection (1), the Minister is to consult with the Board and the Director in respect of the proposed order.
- (3) The provisions of sections 47(3), (3A), (4), (5),
 (6) and (7) of the *Acts Interpretation Act 1931* apply to an order under subsection (1) as if the order were regulations within the meaning of that Act.

7. Application of Act

The provisions of this Act are in addition to, and do not derogate from, any other law of the State.

8. Delegation

- (1) The Director may delegate any of the Director's powers or functions under this Act other than this power of delegation.
- (2) The Board may delegate any of the Board's powers or functions under this Act other than this power of delegation.
- (3) The Secretary of the Department may delegate any of the Secretary's powers or functions under this Act other than this power of delegation.

9. Authorised officers

- (1) The Director is an authorised officer for the purposes of this Act.
- The Director may appoint a State Service officer, State Service employee, or class of State Service officers or State Service employees, appointed or employed in –
 - (a) the Department; or
 - (b) another Agency, with the consent of the Head of that Agency –

as an authorised officer for the purposes of this Act, and those persons may exercise the powers and perform the functions of an authorised officer in conjunction with State Service employment.

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- (3) The Director may, with the consent of any person, appoint that person or an employee of that person as an authorised officer.
- (4) A person appointed as an authorised officer is appointed on the terms and conditions that the Director determines.

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PART 2 – ADMINISTRATION

Division 1 – Tasmanian Waste and Resource Recovery Board

10. Establishment of Tasmanian Waste and Resource Recovery Board

- (1) The Tasmanian Waste and Resource Recovery Board is established.
- (2) The Tasmanian Waste and Resource Recovery Board
 - (a) is a body corporate with perpetual succession; and
 - (b) may sue and be sued in its corporate name.

11. Membership of Board

- The Board consists of not less than 5, and not more than 7, members appointed by the Minister under subsection (2)(a).
- (2) The Minister may
 - (a) appoint a person to be a member of the Board; and
 - (b) appoint a member of the Board, whom the Minister considers to have expertise or experience in public administration, to be the chairperson of the Board.

- (3) One of the members appointed by the Minister under subsection (2)(a) is to be a representative of local government nominated by the Local Government Association.
- (4) In appointing the members of the Board under subsection (2)(a), the Minister is to ensure that the members
 - (a) have skill, experience and knowledge in one or more of the following matters:
 - (i) waste management;
 - (ii) resource recovery;
 - (iii) industry development;
 - (iv) regional development;
 - (v) finance;
 - (vi) public sector administration;
 - (vii) risk management;
 - (viii) corporate governance;
 - (ix) a particular function, or vocational interest, that is relevant to the functions of the Board; and
 - (b) are able to make a contribution to the functions of the Board.
- (5) Schedule 1 has effect in respect of the members of the Board.

Part 2 – Administration

(6) Schedule 2 has effect in respect of the meetings of the Board.

12. Name of Board

The Board may use and operate under a name approved, by notice in the *Gazette*, by the Minister.

13. Functions of Board

(1) In this section –

charitable recycler means an organisation that –

- (a) operates a program for the recycling of matter or that collects public donations for repurposing or reselling; and
- (b) in the opinion of the Board, is established solely for charitable purposes and not for profit or gain; and
- (c) is authorised or approved under section 5 of the *Collections for Charities Act 2001* by the Commissioner within the meaning of that Act; and
- (d) is a deductible gift recipient within the meaning of the *Income Tax Assessment Act 1997* of the Commonwealth.

(2) T	he Bo	pard has the following functions:
	(a)	to provide advice and recommendations to the Minister on matters relevant to the Act, both on request of the Minister and of its own volition;
	(b)	to prepare, promote, implement, review and assess the effectiveness of the waste strategy;
	(c)	to prepare, implement, review and assess the effectiveness of the operational plan;
	(d)	to audit and report on the use of funds from the Waste and Resource Recovery Account;
	(e)	to promote community, business and industry awareness of waste reduction and resource recovery;
	(f)	to promote and support State policies and programs relevant to the Act;
	(g)	to promote and support coordination and cooperation with local authorities and industry to prevent waste and promote resource recovery;
v	(h)	to consult with, and promote and support coordination and cooperation between, organisations (whether or not in the State) with objectives relevant to the Act;
	(i)	to administer for the banafit of charitable

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	be the subject of a Ministerial direction given and in effect under section 15 for the purposes of this paragraph, an assistance program to mitigate costs to those entities resulting from this Act;
(j)	to promote market development and local infrastructure for resource recovery and recycling of materials;
(k)	to perform any other functions that the Board has under this or any other Act;
(1)	to perform any other functions that may be prescribed.
(3) In th to –	e performance of its functions, the Board is
(a)	act in a way that advances improvements in waste management and resource recovery; and
(b)	further the objectives of the State's resource management and planning system set out in Part 1 of Schedule 1 to the <i>Environmental Management and Pollution Control Act 1994</i> .
14. Powers of	Board

The Board has the power to do all things necessary or convenient to be done for, in connection with, or incidental to, the performance of its functions, including but not limited to the following:

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- (a) to obtain the advice of any person or organisation in regard to any matter related to this Act;
- (b) to request that the Minister seek information on behalf of the Board on matters related to this Act from any other Minister;
- (c) enter into agreements, in respect of matters related to this Act, with local authorities, industry and organisations;
- (d) publish reports relating to any matter related to this Act;
- (e) provide information to the public on any matter related to this Act.

15. Ministerial direction

- The Minister may give the Board a direction (a Ministerial direction) at any time regarding the discharge of the Board's responsibilities under this Act.
- (2) In preparing a Ministerial direction, the Minister is to have regard to the Board's functions and powers.
- (3) A Ministerial direction is to be
 - (a) in writing and signed by the Minister; and
 - (b) laid before each House of Parliament within 10 sitting-days after it is given.

Part 2 – Administration

(4) The Board is to comply with a Ministerial direction.

Division 2 – Staff of Tasmanian Waste and Resource Recovery Board

16. Chief executive officer

- (1) Subject to, and in accordance with, the *State Service Act 2000*, a person may, at the request of the Board, be appointed as chief executive officer of the Board.
- (2) The chief executive officer is responsible to the Board for the general administration and management of the Board.

17. Responsibilities of a chief executive officer

(1) The chief executive officer is to –

- (a) perform or exercise any functions or powers delegated to the chief executive officer by the Board; and
- (b) perform or exercise any other functions or powers that the chief executive officer has under this or any other Act.
- (2) The chief executive officer must inform the Board, in writing, of any direct or indirect pecuniary interest that he or she has in any business, or body corporate that carries on a business, related to waste services, waste reduction or resource recovery, as soon as

practicable after he or she acquires, or becomes aware of, that interest.

18. Staff

- (1) Subject to and in accordance with the *State Service Act 2000*, persons may be appointed or employed for the purposes of this Act.
- (2) The Board may make arrangements with the Secretary of the Department for State Service officers and State Service employees employed in the Department to be made available to perform functions and exercise powers under this Act.
- (3) The Secretary of the Department may make arrangements with the Head of a State Service Agency for State Service officers and State Service employees employed in that Agency to be made available to perform functions and exercise powers under this Act.

Division 3 – Planning and reporting by Board

19. Waste strategy

- (1) Within 6 months after the commencement of this section, and before the expiry of every third year after that date, the Board is to prepare a waste strategy.
- (2) A waste strategy is to identify long-term and short-term objectives to
 - (a) maximise resource recovery; and

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	(b)	improve waste management practices.
(3)	A was	te strategy is to –
	(a)	identify programs and projects to achieve objectives identified in accordance with subsection (2); and
	(b)	include an analysis of waste disposal, resource recovery from waste and current waste management practices in Tasmania; and
	(c)	establish criteria and methods for assessing the adequacy of the strategy and its implementation, having regard to the requirements of this Act –
	in resp <i>the str</i>	bect of the following 3 years (the <i>period of ategy</i>).
(4)	A was	te strategy is to –
	(a)	be consistent with the objectives of the State's resource management and planning system set out in Part 1 of Schedule 1 to the <i>Environmental</i> <i>Management and Pollution Control Act</i> 1994; and
	(b)	be consistent with any applicable Ministerial direction given and in effect under section 15; and
	(c)	be in such form as the Board thinks fit.

20. Preparation, approval and amendment of waste strategy

- (1) In preparing a waste strategy, the Board
 - (a) is to consult
 - (i) the Minister; and
 - (ii) the Local Government Association; and
 - (iii) relevant industry stakeholders as determined by the Board; and
 - (b) may consult such other persons as it thinks fit.
- (2) After preparing a waste strategy, the Board is to submit a draft of the strategy to the Minister for approval.
- (3) The Minister may
 - (a) approve the draft waste strategy as submitted; or
 - (b) require the Board to amend the draft waste strategy and resubmit it for approval.
- (4) To avoid doubt, the Minister's power under subsection (3)(b) may be exercised more than once.
- (5) Once a draft waste strategy has been approved by the Minister for the period of the strategy –

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	(a) it takes effect as the waste strategy of the Board for that period; and
	(b) the Board is to act in accordance with the waste strategy during that period.
(6)	The Board, having regard to changes of circumstance or for other reasonable cause, may prepare an amendment to its waste strategy at any time.
(7)	Subsections (1), (2), (3) and (4) have the same application to an amendment as they have to the strategy itself, and the amendment takes effect once it has been approved by the Minister.
(8)	The Board is to ensure that the current waste strategy is available for public inspection on a website and at its principal place of business during normal office hours.
21. Oper	rational plan
(1)	The Board, on or before 31 May in each financial year, is to prepare an operational plan in relation to the next financial year.

- (2) An operational plan is to
 - (a) include
 - (i) a statement of the manner in which the Board is to meet the business and financial goals of the current waste strategy or, for the final year of the period of the

strategy under section 19, its next waste strategy; and

- (ii) set out the Board's budget for the next financial year (including estimates of its income and expenditure for that period); and
- (b) be consistent with the current waste strategy and any applicable Ministerial direction given and in effect under section 15.
- (3) After preparing an operational plan, the Board is to submit a draft of it to the Minister for approval.
- (4) The Minister may
 - (a) approve the draft operational plan as submitted; or
 - (b) require the Board to amend the draft operational plan and resubmit it for approval.
- (5) To avoid doubt, the Minister's power under subsection (3)(b) may be exercised more than once.
- (6) Once a draft operational plan has been approved by the Minister for the period of the strategy –
 - (a) it takes effect as the operational plan of the Board for that financial year; and

s. 22 Part 2 – Administration (b) the Board is to act during that financial year in accordance with the operational

plan.

- (7) The Board, having regard to changes of circumstance or for other reasonable cause, may prepare an amendment to its operational plan at any time.
- (8) Subsections (3), (4) and (5) have the same application to an amendment as they have to the plan itself, and the amendment takes effect once it has been approved by the Minister.
- (9) The Board is to ensure that the current operational plan is available for public inspection on a website and at its principal place of business during normal office hours.

22. Annual report

- (1) The Board is to prepare an annual report for each financial year.
- (2) The annual report is to contain at least the following information and documents:
 - (a) a report on the Board's activities and performance for the financial year, with particular reference to the Board's objectives, functions and powers;
 - (b) particulars of any Ministerial directions given and in effect under section 15 in or in respect of the financial year and any

actions taken by the Board in respect of those directions;

- (c) a summary of the waste strategy that took effect under section 20(5) for the period encompassing the financial year;
- (d) a summary of the operational plan that took effect under section 21(6);
- (e) the financial statements of the Board for the financial year;
- (f) a copy of the Auditor-General's report on those financial statements, as prepared and provided under section 19 of the *Audit Act 2008*;
- (g) any information that the Minister has, by notice to the Board, required to be put in the report.
- (3) The Board is to provide a copy of the annual report to the Minister so as to enable it to be tabled in accordance with subsection (4).
- (4) On or before 31 October in each year, the Minister is to cause a copy of the annual report to be laid on the table of each House of Parliament.
- (5) If the Minister is unable to comply with subsection (4) because a House of Parliament is not sitting on 31 October in any year, the Minister is to –

s. 23 Part 2 – Administration (a) on or before that day, provide or

- (a) on or before that day, provide copies of the annual report to the Clerk of that House; and
- (b) on or before that day, make copies of the annual report available to the public; and
- (c) within the first 7 sitting-days after that day, cause copies of the annual report to be laid before that House.

23. Minister may request information

The Minister may request that the Board provide to the Minister, within the period specified in the request, any information in the possession of the Board relating to the performance of functions or the exercise of powers by the Board under this Act.

Division 4 – Finance

24. Waste and Resource Recovery Account

- (1) For the purposes of this Act, an account called the Waste and Resource Recovery Account is established.
- (2) The Account is to be administered by the Secretary of the Department.
- (3) The funds contained in the Account may be applied by the following persons for the following purposes:
 - (a) by the Board –

Part 2 – Administration

- (i) for the purposes of implementing the strategic plan; and
- (ii) for the purposes of meeting all costs and expenses associated with the operation of the Board;
- (b) by the Director for the purposes of making adjustments in relation to the collection of the payable levy amount;
- (c) by the Secretary of the Department in an amount, and for a purpose, as prescribed.
- (4) For the purposes of subsection (3)(a)(ii), the costs and expenses associated with the operation of the Board are as follows:
 - (a) remuneration of
 - (i) the members of the Board; and
 - (ii) the chief executive officer (if appointed) of the Board; and
 - (iii) staff appointed or employed under section 18(1) by the Board;
 - (b) expenses relating to investments made by the Board;
 - (c) legal, accounting, advisory and taxation expenses;
 - (d) consultancy costs;
 - (e) a cost or expense reasonably incurred by the Board in the exercise of powers or

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Part 2 – Administration

the performance of functions under this Act.

25. Accounts

The Board may open and maintain such authorised deposit-taking institution accounts as it considers necessary.

26. Funds

The funds of the Board are –

- (a) any money provided to the Board by the State; and
- (b) any money applied by the Board from the Account in accordance with section 24(3)(a); and
- (c) any money received from any other source.

27. Investment

Subject to section 16 of the *Tasmanian Public Finance Corporation Act 1985*, the Board may invest any funds held by it of the kind referred to in section 26(b) and (c), and any interest accumulated in respect of those funds, in any manner that is consistent with –

- (a) sound commercial practice; and
- (b) a Ministerial direction given and in effect under section 15.

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28. Accounting records

- (1) In this section -
 - Australian Accounting Standards has the same meaning as in the Financial Management Act 2016.
- (2) The Board is to -
 - (a) keep accounting records that correctly record and explain its transactions (including any transactions as trustee) and financial position; and
 - (b) keep those records in a manner that
 - (i) allows true and fair accounts of the Board to be prepared from time to time; and
 - (ii) allows the accounts of the Board to be conveniently and properly audited or reviewed; and
 - (iii) subject to any contrary written direction of the Treasurer, complies with Australian Accounting Standards; and
 - (iv) complies with any written directions of the Minister or Treasurer; and
 - (c) retain those records for a period of not less than 7 years after the completion of the transaction to which they relate or for

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such longer period as the Treasurer may determine and notify to the Board.

PART 3 – WASTE LEVY

29. Application of Part

(1) In this section -

public authority means –

- (a) a council; or
- (b) another body corporate established by, or under, an enactment having jurisdiction limited to a district, locality or part of the State; or
- (c) a statutory authority.
- (2) In this Part, a reference to waste excludes the following:
 - (a) matter that contains asbestos;
 - (b) illegally discarded matter collected and disposed of by a public authority which has responsibility for such collection and disposal;
 - (c) matter declared to be excluded from this Part in an order made under section 6;
 - (d) matter prescribed to be excluded from this Part.

30. Prescribed levy

The levy payable in respect of a tonne of waste in any calendar month is the prescribed amount that applies in respect of that calendar month.

31. Resource recovery rebate

- An operator of a landfill facility is entitled to a rebate in respect of the facility in a calendar month if –
 - (a) at least one tonne of waste is removed from the landfill facility within that calendar month; and
 - (b) that waste was received by a resource recovery facility.
- (2) An operator is only entitled to a rebate under subsection (1) in respect of waste if the operator provides evidence, to the satisfaction of the Director, that that waste was received by a resource recovery facility.
- (3) The amount of a rebate under this section in respect of a tonne of waste is the amount of the prescribed levy that is payable in respect of the tonne of waste at the time at which the waste was removed from the landfill facility.

32. Payable levy amount for landfill facility

(1) In a calendar month, the amount of the levy payable in respect of a landfill facility for that calendar month is the prescribed levy payable

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for the waste received by that facility in that month less the rebate to which the operator is entitled under section 31 for that month in relation to that landfill facility.

- (2) If the amount payable under subsection (1) in respect of the landfill facility is greater than zero, that amount is the payable levy amount for that landfill facility for that calendar month.
- (3) If the amount payable under subsection (1) in respect of the landfill facility is zero or less
 - (a) that amount is to be deducted from the first payable levy amount for that landfill facility that is greater than zero; and
 - (b) if the deduction under paragraph (a) results in a payable levy amount for that landfill facility that is less than zero, the remainder of that amount, after the deduction, is to be deducted from payable levy amounts for subsequent calendar months in accordance with this subsection until fully discharged.

33. Waste levy return

 An operator must give to the Director, within 10 working days after the end of each calendar month, a waste levy return.

Penalty: Fine not exceeding 200 penalty units.

- (2) A waste levy return
 - (a) is to be in an approved form; and

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	(b) is to include the prescribed information, if any; and
	(c) must be accompanied by the payable levy amount under section 32, if any, in respect of the calendar month to which the waste levy return applies.
	(3) The payable levy amount given to the Director under subsection (2)(c) is to be paid into the Account.

PART 4 – OBLIGATIONS OF OPERATOR

34. Landfill facility requirements

(1) An operator must ensure that the landfill facility operated by the operator complies with the prescribed requirements.

Penalty: Fine not exceeding 200 penalty units.

(2) An operator must ensure that the landfill facility operated by the operator complies with any Ministerial standards issued and in force under section 52.

Penalty: Fine not exceeding 200 penalty units.

(3) An operator is to ensure that the landfill facility operated by the operator complies with any guidelines issued and in force under section 53.

35. Volumetric survey

- (1) In this section
 - *suitable surveyor*, in relation to a landfill facility, means a person, registered as a surveyor under the *Surveyors Act 2002*, who is independent of the management or business of that landfill facility.
- (2) An operator must
 - (a) within 28 days after
 - (i) the commencement of this section, if the landfill facility

operated by the operator was active on and before that day; or

- (ii) the landfill facility operated by the operator commences operation; and
- (b) within one year after a volumetric survey is carried out under paragraph (a) –

cause a volumetric survey to be carried out in relation to waste deposited at the landfill facility.

Penalty: Fine not exceeding 200 penalty units.

- (3) An authorised officer may at any time require, by notice in writing to an operator, the operator to cause a further volumetric survey to be carried out.
- (4) An operator must comply with a notice given under subsection (3).

Penalty: Fine not exceeding 200 penalty units.

- (5) A volumetric survey carried out under this section is to be carried out
 - (a) by a suitable surveyor; and
 - (b) at the expense of the operator of the landfill facility to which it relates.
- (6) The results of a volumetric survey carried out under this section must be given to the Director in an approved form within 10 working days after the completion of the survey.

Penalty: Fine not exceeding 200 penalty units.

36. Records

An operator must keep, for 5 years after they come into existence, the following documents in relation to the landfill facility operated by the operator:

- (a) a copy of each waste levy return given to the Director under section 33;
- (b) volumetric survey results given to the Director under section 35;
- (c) a report, containing the results of an audit, given to the Director under section 39;
- (d) copies of all correspondence between the operator and the Director;
- (e) a prescribed document.

Penalty: Fine not exceeding 200 penalty units.

37. Offences

- An operator must not knowingly evade, or knowingly attempt to evade, payment of a payable levy amount.
 - Penalty: Fine not exceeding 400 penalty units or imprisonment for a term not exceeding 24 months, or both.

Part 4 – Obligations of Operator

- (2) A person must not, in a record, return, report, result, document or information given in accordance with this Act, make a statement that is false or misleading in a material particular without –
 - (a) indicating that the statement is false or misleading and the manner in which it is false or misleading; and
 - (b) giving any correct information that is in the person's control if the person has, or can reasonably obtain, the correct information.
 - Penalty: Fine not exceeding 200 penalty units or imprisonment for a term not exceeding 12 months, or both.

PART 5 – ENFORCEMENT

Division 1 – Powers and procedures

38. Payment of overdue levy

- (1) If an operator fails to pay a payable levy amount, or part of a payable levy amount, as required under section 33, the Director may issue a notice in writing requiring the operator to pay the amount or part amount.
- (2) In considering whether the operator has failed to pay all or part of an amount referred to in subsection (1), the Director is entitled to make presumptions regarding the following matters (subject to the operator establishing the contrary):
 - (a) the amount of waste received by the landfill facility operated by the operator;
 - (b) the date on which waste was received by the landfill facility operated by the operator;
 - (c) the amount of waste removed from the landfill facility operated by the operator for the purposes of resource recovery.
- (3) An operator to whom a notice has been issued under subsection (1) must comply with the requirements specified in the notice within 10 working days after receiving the notice.

Penalty: Fine not exceeding 50 penalty units and, in the case of a continuing

Part 5 – Enforcemen	t
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offence, a further fine not exceeding 10 penalty units for each day during which the offence continues.

(4) The amount of a penalty in accordance with subsection (3) is to be given to the Director and to be paid by the Director into the Account.

39. Audit

(1) In this section -

approved auditor means an auditor approved in accordance with subsection (6).

- (2) The Director may issue a notice, in writing, to an operator requiring the operator to cause an audit of a landfill facility operated by the operator to be carried out by an approved auditor.
- (3) A notice issued under subsection (2) is to specify the following matters:
 - (a) the reasons for, and objectives of, the audit;
 - (b) the matters to be audited;
 - (c) the approved auditor to be employed to undertake the audit;
 - (d) the date by which a report containing the results of the audit is to be given to the Director.
- (4) An operator must comply with a notice issued under subsection (1).

Penalty: Fine not exceeding 200 penalty units.

- (5) An audit carried out in accordance with this section is to be carried out at the expense of the operator of the landfill facility to which it relates.
- (6) An authorised officer may approve an auditor for the purposes of this section if the authorised officer is satisfied of the following:
 - (a) that the auditor has qualifications and experience that are appropriate to the audit;
 - (b) that the auditor is independent of the facility where the audit is to be conducted and of any business conducted there;
 - (c) that the auditor is able to conduct the audit and to prepare a report in accordance with the notice issued in respect of the audit.
- (7) The Director may vary or revoke a notice issued under subsection (1) by giving notice, in writing, of that variation or revocation to the operator to whom the original notice relates.
- (8) A variation or revocation made under subsection (7) takes effect upon notice being given in accordance with that subsection.

40. Powers of authorised officers

- (1) For any reasonable purpose connected with the enforcement of this Act, an authorised officer may undertake any one or more of the following actions:
 - (a) enter a landfill facility, or any business premises related to the landfill facility, at any time during the normal business hours of that facility, with such assistants (including a suitable surveyor as defined in section 35, an auditor approved in accordance with section 39(6) or a police officer) and equipment as the authorised officer considers necessary;
 - (b) enter a landfill facility, or any business premises related to the landfill facility, at any time in the company of a police officer pursuant to a warrant;
 - (c) inspect or test any plant, equipment, machinery, vehicle or other thing at the landfill facility for the purpose of determining whether a provision of this Act or regulations is being, or has been, complied with, or cause or require it to be so inspected or tested, or seize it or require its production for such inspection or testing;
 - (d) require an operator to take such steps as the authorised officer directs to facilitate the examination or testing of any

machinery or equipment of a landfill facility operated by the operator;

- (e) require an operator to provide any records, returns, reports, results, documents or information relating to the landfill facility operated by the operator;
- (f) make copies of, take extracts from, or remove any records, returns, reports, results, documents or information referred to in paragraph (e).
- (2) In the course of the exercise of his or her powers under this Act, an authorised officer may
 - (a) use such force as is reasonably necessary, including the use of reasonable force to break into or open any part of, or anything at, a landfill facility or any business premises related to the landfill facility, other than a structure or a part of a structure being used as a dwelling; and
 - (b) take such photographs, films or audio, video or other recordings on, or in the vicinity of, a landfill facility or any business premises related to the landfill facility as he or she considers necessary; and
 - (c) use, or operate, such plant, equipment, machinery, vehicle or other thing at a landfill facility or any business premises related to the landfill facility as is necessary to exercise those powers.

Part 5 – Enforcement

- (3) A person must not, without reasonable excuse
 - (a) refuse to permit an authorised officer or the assistant of an authorised officer to enter a landfill facility or any business premises related to the landfill facility in accordance with this section; or
 - (b) hinder or obstruct an authorised officer in the exercise of his or her powers under subsection (1); or
 - (c) refuse or fail to comply with a requirement made by an authorised officer in the exercise of those powers.

Penalty: Fine not exceeding 200 penalty units.

41. Suspension of operations

- (1) If the operator fails to comply with a requirement of this Act that is punishable as an offence, the Director may issue a notice in writing to the operator requiring that some or all of the operations of a landfill facility operated by the operator be suspended.
- (2) A notice issued under subsection (1) is to -
 - (a) specify the date on which the suspension takes effect; and
 - (b) specify the conditions that must be met in order for the suspension to be lifted; and

- (c) state that the suspension will continue in effect until a revocation in accordance with this section is issued; and
- (d) state that the operator may appeal in accordance with subsection (5) or (6).
- (3) An operator must comply with a notice issued under subsection (1).

Penalty: Fine not exceeding 400 penalty units or imprisonment for a term not exceeding 24 months, or both.

- (4) If an operator to whom a notice issued under subsection (1) provides evidence, to the satisfaction of the Director, that the conditions required to be met, specified in accordance with subsection (2)(b), have been met as far as is reasonably practical, the Director must issue a revocation of the suspension, in writing, to the operator.
- (5) An operator to whom a notice has been issued under subsection (1) may, within 14 days after the day on which the notice was issued, appeal to the Appeal Tribunal on the grounds that the conditions required to be met, specified in accordance with subsection (2)(b), are unduly onerous.
- (6) An operator to whom a notice has been issued under subsection (1) may appeal to the Appeal Tribunal on the grounds that evidence referred to in subsection (4) has been supplied to the Director and that the evidence supplied ought to have satisfied the Director.

Part 5 – Enforcement

- (7) On receiving an appeal under subsection (5) or(6), the Appeal Tribunal may
 - (a) confirm the notice or the decision of the Director not to revoke the notice; or
 - (b) amend the conditions specified in the notice; or
 - (c) revoke the notice.
- (8) For the avoidance of doubt, a requirement to suspend some or all operations of a landfill facility under this section takes precedence over any other permit or authorisation in force in relation to the landfill facility.

Division 2 – Penalties and proceedings

42. Infringement notices

- (1) In this section
 - *infringement offence* means an offence under this Act or the regulations that is prescribed to be an infringement offence.
- (2) An authorised officer may issue and serve an infringement notice on a person if the authorised officer reasonably believes that the person has committed an infringement offence.
- (3) An infringement notice is to be in accordance with section 14 of the *Monetary Penalties Enforcement Act 2005*.
- (4) The regulations –
- (a) may prescribe, for infringement offences, the penalties payable under infringement notices; and
- (b) may prescribe different penalties for bodies corporate and individuals.

43. Recovery of debt in court

- (1) The Director may recover any amount payable to the Director under this Act in the Magistrates Court as a debt due and payable.
- (2) The Magistrates Court may make an order for payment under this section even though the amount of the order exceeds the upper monetary limit of the Court's civil jurisdiction.

44. Limitation period for prosecution

Proceedings for an offence against this Act may be brought within 3 years after the date on which the offence is alleged to have occurred.

45. Liability of multiple operators

- (1) If there is more than one operator of a landfill facility, each of the operators is jointly and severally responsible and liable for, and in relation to, a contravention of this Act alleged to have occurred in relation to the landfill facility.
- (2) Proceedings for a contravention alleged to have occurred in relation to a landfill facility may be

Part 5 – Enforcement	
taken against all or any of the persons subsection (1).	liable

- (3) Proceedings for a contravention may be taken against any of the persons liable for the offence
 - (a) regardless of whether or not proceedings have been commenced against any of the other persons liable for the contravention; and
 - (b) if proceedings have been commenced against any of the other persons liable for the contravention, regardless of whether or not the proceedings have been concluded; and
 - (c) if proceedings have been concluded against any of the other persons liable for the contravention, regardless of the outcome of the proceedings.

46. Liability of body corporate

- (1) If a body corporate contravenes a provision of this Act, a person who is concerned in, or takes part in, the management of the body corporate is taken to have contravened that provision.
- (2) It is a defence in proceedings in respect of a contravention referred to in subsection (1) for a person to prove that –

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- (a) the body corporate contravened the provision without the person's knowledge; or
- (b) the person was not in a position to influence the conduct of the body corporate in relation to the contravention; or
- (c) the person, if in a position to influence the conduct of the body corporate in relation to the contravention, attempted to prevent the contravention by the body corporate.
- (3) A person referred to in subsection (1) may be convicted of a contravention of a provision of this Act whether or not the body corporate has been convicted of the contravention.
- (4) Nothing in this section affects the liability of a body corporate for a contravention of a provision of this Act.

47. Presumption in relation to rebate entitlements

In any proceedings brought under this Act, an operator bears the onus of proving, on the balance of probabilities, that the operator is entitled to a resource recovery rebate in accordance with section 31.

48. Evidence

In any proceedings for an offence against a provision of this Act –

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Part 5 – Enforcement (a) a statement made by a person who is concerned in, or takes part in, the management of a body corporate is admissible as evidence against the body

corporate; and

- (b) any record kept in pursuance of this Act is admissible as *prima facie* evidence of the facts stated in the record; and
- (c) a copy of an entry in such a record, being a copy certified by the person by whom the record is required to be kept to be a true copy of the entry, is admissible as *prima facie* evidence of the facts stated in the entry; and
- (d) a document purporting to be a record kept in pursuance of this Act, or purporting to be a certified copy referred to in paragraph (c), is, unless the contrary is proved, to be taken to be such a record or certified copy, as the case may be.

49. Protection from liability

- (1) The Minister, the Director, an authorised officer or any other person does not incur any personal liability for any act done or purported or omitted to be done in good faith in the performance or exercise or purported performance or exercise of any functions or powers under this Act.
- (2) A member of the Board, and the chief executive officer of the Board (if appointed), does not incur any personal liability for any act done or

purported or omitted to be done by the member or chief executive officer in good faith in the performance or exercise or purported performance or exercise of any functions or powers relating to or arising from his or her role as a member or chief executive officer.

(3) Subsections (1) and (2) do not preclude the Crown or the Board from incurring a liability that a person would, but for either of those subsections, incur.

PART 6 – MISCELLANEOUS

50. Orders, notices, &c., not statutory rules

Unless otherwise specified, an order, notice, declaration or other instrument under this Act –

- (a) is not a statutory rule for the purposes of the *Rules Publication Act 1953*; and
- (b) is not subordinate legislation for the purposes of the *Subordinate Legislation Act 1992*.

51. Regulations

- (1) The Governor may make regulations for the purposes of this Act.
- Without limiting the generality of subsection (1), the Governor may make regulations for, or in respect of, the following:
 - (a) the amount of the waste levy and scheduled increases to that amount;
 - (b) any matter relating to the classification of classes or types of waste;
 - (c) any requirements for the infrastructure and operation of a landfill facility;
 - (d) the payment from the Account of specified amounts for specified purposes, including a periodical payment;

- (e) infringement offices and the penalties payable in relation to those offences;
- (f) all other matters that are required, permitted or necessary, to be prescribed or made by regulation under this Act.
- (3) The regulations may
 - (a) provide that a contravention of, or a failure to comply with, any of the regulations is an offence; and
 - (b) in respect of such an offence, provide for the imposition of a fine not exceeding 250 penalty units and, in the case of a continuing offence, a further fine not exceeding 20 penalty units for each day during which the offence continues.
- (4) The regulations may apply, adopt or incorporate all or any of the provisions of a code or guidelines published by any organisation or body for the regulation of any matter to which this Act applies and the provisions may be applied, adopted or incorporated as they currently exist, as amended by the regulations, or as amended from time to time.
- (5) The regulations may
 - (a) be of limited or general application; and
 - (b) be made so as to apply differently according to matters, limitations or restrictions, whether as to time,

circumstance, location or otherwise, specified in the regulations; and

- (c) authorise any matter to be determined, applied or regulated by any specified person or entity.
- (6) The regulations may exempt a person, class of persons, matter or other thing from the operation of this Act or any specified provision of this Act or the regulations including, but not limited to, an exemption from any fee, charge or levy payable under this Act.

52. Ministerial standards

- (1) The Minister may, by notice published in the *Gazette*, issue standards in relation to the operation of landfill facilities and resource recovery facilities for the purposes of this Act, including standards in relation to the stockpiling of waste at such facilities.
- (2) The Minister may
 - (a) amend the standards; or
 - (b) revoke the standards and substitute new standards.
- (3) In issuing standards, amending standards or revoking and substituting standards, the Minister may consult with any person he or she considers appropriate.
- (4) Before issuing standards, amending standards or revoking and substituting standards, the Minister

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is to consult with the Board and the Director in respect of the proposed standards.

- (5) The standards, or an amendment of the standards
 - (a) must specify the day on which the standards are, or the amendment is, to take effect; and
 - (b) may be made so as to apply differently according to such factors as are specified in the standards; and
 - (c) may adopt, either wholly or in part and with or without modification, either specifically or by reference, any standards, rules, codes, guidelines or other documents (whether published or issued before or after the commencement of this section).
- (6) A reference in subsection (5)(c) to standards, rules, codes, guidelines or other documents includes a reference to an amendment of those standards, rules, codes, guidelines or other documents, whether the amendment is published or issued before or after the commencement of this section.
- (7) The Minister is to ensure that the standards, as in force, are published on the website of the Department and made available to the public in any other manner that the Minister considers appropriate.

Part 6 - Miscellaneous

(8) The provisions of sections 47(3), (3A), (4), (5),
(6) and (7) of the *Acts Interpretation Act 1931* apply to a notice under subsection (1) as if the notice were regulations within the meaning of that Act.

53. Director may issue guidelines

- (1) The Director may, by notice published in the *Gazette*, issue guidelines for the purposes of this Act.
- (2) The Director may, by notice published in the *Gazette*, vary or revoke guidelines issued under subsection (1).

54. Administration of Act

Until provision is made in relation to this Act by order under section 4 of the Administrative Arrangements Act 1990 –

- (a) the administration of this Act is assigned to the Minister for Environment and Parks; and
- (b) the department responsible to that Minister in relation to the administration of this Act is the Department of Primary Industries, Parks, Water and Environment.

Part 6 – Miscellaneous

55. Consequential Amendments

The legislation specified in Schedule 3 is amended as specified in that Schedule.

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SCHEDULE 1 – MEMBERSHIP OF TASMANIAN WASTE AND RESOURCE RECOVERY BOARD

Section 11(5)

1. Term of office

- (1) A member is appointed for the period, not exceeding 4 years, as is specified in the member's instrument of appointment and, if eligible, may be reappointed.
- (2) A member may serve any number of terms but not more than 2 terms, of whatever duration, in succession.

2. Holding other office

Unless the contrary intention appears, the holder of an office who is required by the terms of his or her employment to devote the whole of his or her time to the duties of that office is not disqualified from –

- (a) holding that office and also the office of a member; or
- (b) accepting any remuneration payable to a member.

3. State Service employment

A person may hold the office of member in conjunction with State Service employment.

4. Remuneration and conditions of appointment

- (1) A member is entitled to be paid such remuneration and allowances as the Minister determines.
- (2) A member who is a State Service employee or State Service officer is not entitled to remuneration or allowances under this clause except with the approval of the Minister administering the *State Service Act 2000*.
- (3) A member holds office on such conditions in respect of matters not provided for by this Act as are specified in the member's instrument of appointment.

5. Vacation of office

- (1) A member vacates office if he or she
 - (a) dies; or
 - (b) resigns by notice given in writing to the Minister; or
 - (c) is removed from office under subclause (2) or (3).
- (2) The Minister may remove a member from office if the member
 - (a) is absent from 3 consecutive meetings of the Board without the permission of the chairperson; or

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- (b) becomes bankrupt, applies to take the benefit of any law for the relief of bankrupt or insolvent debtors, compounds with the member's creditors or makes an assignment of the member's remuneration or estate for their benefit; or
- (c) is convicted, in Tasmania or elsewhere, of a crime or an indictable offence; or
- (d) fails to disclose a pecuniary interest as required under clause 7 of Schedule 2; or
- (e) has benefited from, or claimed to be entitled to benefit from, a contract made by or on behalf of the Board, other than a contract for a good or service ordinarily supplied by the Board and supplied on the same terms as that good or service is ordinarily supplied to other persons in the same situation.
- (3) The Minister may remove a member from office if the Minister is satisfied that the member is unable to perform adequately or competently the duties of office.
- (4) A member is not to be removed otherwise than in accordance with this clause.

6. Filling of vacancies

If the office of a member becomes vacant, the Minister may appoint a person to the vacant office.

7. Validation of proceedings, &c.

- (1) An act or proceeding of the Board or of a person acting under any direction of the Board is not invalidated by reason only that at the time when the act or proceeding was done, taken or commenced there was a vacancy in the office of a member.
- (2) All acts and proceedings of the Board or of a person acting under a direction of the Board are, despite the subsequent discovery of a defect in the appointment of a member or that any other person was disqualified from acting as, or incapable of being, a member, as valid as if the member had been duly appointed and was qualified to act as, or capable of being, a member, and as if the Board had been fully constituted.

8. Presumptions

In any proceeding by or against the Board, unless evidence is given to the contrary, proof is not required of -

- (a) the constitution of the Board; or
- (b) the appointment of any member.

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SCHEDULE 2 – MEETINGS OF TASMANIAN WASTE AND RESOURCE RECOVERY BOARD

Section 11(6)

1. Convening of meetings

- (1) The chairperson of the Board, after giving each member of the Board reasonable notice of a meeting –
 - (a) may convene a meeting of the Board at any time; and
 - (b) must convene a meeting when requested to do so by 3 or more other members.
- (2) If the chairperson is absent from duty or otherwise unable to perform the duties of the office, a meeting of the Board may be convened, after reasonable notice of the meeting has been given, by
 - (a) 3 or more other members; or
 - (b) a person authorised by the Board to do so.
- (3) For the purposes of subclauses (1) and (2), what constitutes reasonable notice is to be determined by the Board.

2. Presiding at meetings

(1) The chairperson is to preside at all meetings of the Board at which he or she is present.

(2) If the chairperson is not present at a meeting of the Board, a member elected by the members present at the meeting is to preside.

3. Quorum and voting at meetings

- (1) At a meeting of the Board, a quorum is constituted by a majority of the total number of members appointed.
- (2) A meeting of the Board at which a quorum is present is competent to transact any business of the Board.
- (3) At a meeting of the Board
 - (a) the member presiding has a deliberative vote only; and
 - (b) a question is decided
 - (i) by a majority of votes of the members present and voting; or
 - (ii) in the negative if there is an equality of votes of the members present and voting.
- (4) At a meeting of the Board where a member is excluded from being present and taking part in the consideration and decision of the Board in respect of a matter, a quorum for the purposes of considering and making a decision in respect of that matter is constituted by the number of members specified as constituting a quorum in subclause (1) less the number of members so excluded.

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4. Conduct of meetings

- (1) Except as provided by this Act, the Board may regulate the calling of, and the conduct of business at, its meetings as it considers appropriate.
- (2) The Board may permit members to participate in a particular meeting or all meetings by
 - (a) telephone; or
 - (b) video conference; or
 - (c) any other means of communication approved by the Board.
- (3) A member who participates in a meeting under a permission granted under subclause (2) is taken to be present at the meeting.
- (4) Without limiting subclause (1), the Board may allow a person to attend a meeting for the purpose of advising or informing it on any matter.

5. Absences

- A member is to take reasonable steps to inform the chairperson if he or she will, or is likely to, be unable to attend a meeting.
- (2) The chairperson may permit a member to be absent from more than 3 consecutive meetings but such permission is not to be granted retrospectively.

(3) To avoid doubt, a permission under subclause (2) is taken not to be retrospective if it is granted at any time before the third consecutive meeting that the member does not attend.

6. Minutes

The Board is to keep accurate minutes of its meetings.

7. Disclosure of interests

- (1) If a member has a direct or indirect pecuniary interest in a matter being considered, or about to be considered, by the Board, the member must, as soon as practicable after the relevant facts come to the member's knowledge, disclose the nature of the interest to the Board.
 - Penalty: Fine not exceeding 500 penalty units or imprisonment for a term not exceeding one month, or both.
- (2) Unless the Board otherwise determines, a member who has made a disclosure under subclause (1) in respect of a matter must not
 - (a) be present during any deliberation of the Board in respect of the matter; or
 - (b) take part in any decision of the Board in respect of the matter.

sch. 2

- (3) For the purpose of the making of a determination by the Board under subclause (2), the member to whom the determination is to relate must not
 - (a) be present during any deliberation of the Board for the purpose of making the determination; or
 - (b) take part in making the determination.
- (4) Subclause (1) does not apply
 - (a) in respect of a contract for goods or services supplied by the Board if those goods or services are ordinarily supplied by the Board and are supplied on the same terms as they are ordinarily supplied to other persons in the same situation; or
 - (b) in respect of an interest that arises only because the member is also a State Service officer or State Service employee.

8. General procedure

Except as provided by this Act, the Board may regulate its own proceedings.

9. Presumptions

In any proceeding by or against the Board, unless evidence is given to the contrary, proof is not required of -

- (a) any resolution of the Board; or
- (b) the presence of a quorum at any meeting of the Board.

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SCHEDULE 3 – CONSEQUENTIAL AMENDMENTS Section 55

Environmental Management and Pollution Control (Waste Management) Regulations 2020

1. Regulation 18(2) is amended by omitting paragraph (a).

Environmental Management and Pollution Control Act 1994

- **1.** Section 3 is amended as follows:
 - (a) by omitting the definition of *clean fill* from subsection (1) and substituting the following definitions:

clean fill type 1 means a mixture –

- (a) containing natural materials, such as soil, rock, crushed rock, gravel, clay or sand, that are in a raw, unaltered form and that have been excavated from an area of land; and
- (b) that does not contain
 - (i) an amount, of a pollutant, or pollutants, that is above a level, of the pollutant or pollutants,

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	declared under subsection (3)(a); and
(ii)	a proportion, of a substance, or substances, that are not within paragraph (a), that is greater than the proportion of the substance, or substances, declared under subsection (3)(b); and
(iii)	pieces of material that are of dimensions greater than the dimensions declared under subsection (3)(c);
<i>clean fill type 2</i> me	ans a mixture –
(c) contair more o	ning any one or of the following:
(i)	bricks, masonry or paving blocks;

(ii) concrete or mortar;

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- (iii) bituminised or rubble pavement; and
- (d) that does not contain
 - (i) an amount, of a pollutant, or pollutants, that is above a level, of the pollutant, or pollutants, declared under subsection (3)(a); and
 - a proportion, of a (ii) substance, or substances, that are within not paragraph (c), that is greater than the proportion of the substance. or substances, declared under subsection (3)(b); and
 - (iii) pieces of material that are of dimensions greater than the dimensions declared under subsection (3)(c);

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- (b) by inserting the following subsections after subsection (2):
 - (3) The Director may declare
 - (a) a level of a pollutant, or pollutants, for the purposes of paragraph (b)(i) of the definition of *clean* fill type 1 in subsection (1) or paragraph (d)(i) of the definition of *clean* fill type 2 in subsection (1), or both; and
 - (b) proportion, a of a substance, or substances, the purposes for of paragraph (b)(ii) of the definition of *clean* fill *type 1* in subsection (1) or paragraph (d)(ii) of the definition of *clean* fill type 2 in subsection (1), or both; and
 - (c) the dimensions of pieces of material for the purposes of paragraph (b)(iii) of the definition of *clean fill type 1* in subsection (1) or paragraph (d)(iii) of the definition of *clean fill*

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type 2 in subsection (1), or both.

- (4) The Director is to ensure that a copy of a declaration under subsection (3) that is in force is published on a website of the Department.
- 2. Clause 3(b)(ia) of Schedule 2 is amended by omitting "clean fill" and substituting "clean fill type 1 or clean fill type 2".



Tasmanian waste levy impact study

Final report

Prepared for

Department of Primary Industries, Parks, Water & Environment

September 2020





Tasmanian waste levy impact study

Project: UEP104

Client: Department of Primary Industries, Parks, Water & Environment (DPIPWE)

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Abbreviations and acronyms used in this report

ACCU	Australian Carbon Credit Unit
AWP	Advanced Waste Processing (technology)
C&D waste	Construction and Demolition Waste
C&I waste	Commercial and Industrial Waste
CCWMG	Cradle Coast Waste Management Group
CRS	Container Refund Scheme
DES	(Queensland Government) Department of Environment & Science
DPIPWE	Department of Primary Industries, Parks, Water & Environment
DWER	(Western Australian Government) Department of Water and Environmental Regulation
DWM	Dulverton Waste Management
EPA	Environment Protection Authority
ERU	(Department of Treasury & Finance) Economic Reform Unit
FOGO	Food organics and garden organics (collection and/or processing services)
GHG	Greenhouse gas
GSP	Gross State Product
HDPE	High density poly(ethylene) (plastic)
MRF	Materials Recovery Facility
MSW	Municipal Solid Waste
NPV	Net Present Value
NTWMG	Northern Tasmania Waste Management Group
PET	Poly(ethylene) terephthalate (plastic)
PVC	Poly(vinyl chloride) (plastic)
QWDS	Queensland Waste Data System
RIS	Regulatory Impact Statement
TMMEC	Tasmanian Minerals, Manufacturing & Energy Council
VENM	Virgin excavated natural material



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- Department of Primary Industries, Parks, Water and Environment
- EPA Tasmania
- Queensland Department of Environment and Science
- South Australian EPA
- Tasmanian Minerals, Manufacturing and Energy Council
- Western Australian Department of Water and Environmental Regulation
- Stakeholders engaged with as set out in Appendix 1



Executive summary

Key points

- 1. This Regulatory Impact Statement report was prepared to support compliance with the Tasmanian Government's *Legislative Impact Guidelines* in introducing legislation for a statewide waste levy, as committed to in the draft Waste Action Plan.
- 2. The waste levy is a charge placed on waste materials being sent to landfill for disposal (i.e. burial as a waste). The objective in applying this waste levy is to drive a reduction in waste going to landfill and encourage the recovery of valuable resources.
- 3. The waste levy was found to bring public benefits tied to lowering environmental impacts; fostering innovation; and stimulating the shift to a circular economy.
- 4. Competition impacts are neutral in some aspects and positive in others, delivering a price signal to encourage resource recovery services with lower societal costs compared with landfill disposal; and fostering the competitive standing of recovered resources relative to virgin materials.
- 5. This study conducted a Cost Benefit Analysis to determine a preferred option for the waste levy, examining a range of waste levy rates (i.e. different charges per tonne). Of the six options tested, the preferred version involves:
 - Application of a \$20 per tonne levy in 2021, held for two years
 - Increase of the levy to \$40 per tonne, held for two years
 - Final increase of the levy to \$60 per tonne.
- 6. The preferred option optimises across contributing to Waste Action Plan targets, generating value for the Tasmanian community (as reflected in a positive Net Present Value), and involving modest cost impacts on sectors that will pay the waste levy.
- 7. The current treatment of construction and demolition waste as clean fill may warrant review, to ensure this material is being turned towards its highest potential value.
- 8. In projecting government revenues associated with the waste levy, it was determined that the state government will be in a position to implement the levy at no net cost while delivering on commitments to provide a funding allocation for regional bodies delivering on waste management and resource recovery needs of their communities.
- 9. Stakeholder engagement suggests the need to consider support for remote and sensitive communities with limited access to regional services and infrastructure, and who have symbolic and societal roles as custodians of important natural assets. Such communities could become leaders in the shift to a circular economy.
- 10. In applying the waste levy as a price signal in the waste and resource recovery market and adopting a 'full hypothecation' model, the Tasmanian Government has the opportunity to address long standing illegal dumping issues that impact the community and are at odds with the image Tasmania seeks to foster.
- 11. While the focus of this study is on the waste levy as a market instrument, the state government can adopt a disciplined investment mindset to derive the best value from levy revenues and form strong partnerships with the Commonwealth Government, industry, non-profit organisations, regional bodies and the local government sector.



This study sets out the policy rationale and impacts of introducing legislation for a waste levy in Tasmania, as committed to in the Tasmanian Government's draft Waste Action Plan. For the purposes of this work, a waste levy is defined as a government charge applied to waste disposed to landfill for burial (expressed as a charge per tonne), with the intent of driving competition for alternative services that incur lower costs to society and that align with state policy.

Undertaken on behalf of the Department of Primary Industries, Parks, Water and Environment (DPIPWE), it determines the competition impacts, public benefits, effects on different sectors and achievement of policy objectives for a range of waste levy options. In doing so, a preferred waste levy model is identified while satisfying the Tasmanian Government's requirements for drafting legislation as set out in the *Legislative Impact Guidelines*.

Potentially adverse consequences associated with the introduction of a waste levy are also explored, to inform deliberations on the need for additional measures to optimise outcomes and reduce potential harms to the environment and the Tasmanian community.

Methods used in this study

This study was delivered through a structured approach, involving a number of stages to satisfy the *Legislative Impact Guidelines* and to build a foundation for public discourse concerning the waste levy. Components of this study include:

- 1. Preparation of a clear policy objective driving the need for a waste levy
- 2. Description of anticipated public benefits and competition impacts
- 3. Determination of a preferred option and confirmation of net benefits to the community
- 4. Detailed characterisation of the preferred option and its impacts
- 5. Consideration of potential adverse consequences and the need for responding measures

In relation to step 3 above, the study employed a Cost Benefit Analysis consistent with guidance issued by with the Commonwealth Government Office of Best Practice Regulation. A Net Present Value model was constructed to compare options against a base case (i.e. wherein no waste levy legislation is passed), with outputs adapted to generate insights on policy outcomes and impacts on selected sectors. The team engaged at length with stakeholders, regulatory bodies (EPA) and officers in other jurisdictions to understand the standards, key tasks, resources and potential investments necessary for administration and compliance.

Consultation undertaken with stakeholders

The study team engaged with stakeholders to ensure analytical methods used in this study were grounded in an empirical understanding of the Tasmanian waste and resource recovery markets, and accounted for potential impacts on and responses from sectors targeted by the waste levy.

Given the role of the waste levy to alter preferences expressed through the waste and resource recovery market, it was critical to build a picture of how different commercial service providers and other market participants would act in response to different waste levy settings. Appendix 1 to the report details stakeholders involved in consultation, including local governments, state bodies, regional organisations, industry bodies, waste and resource recovery operators (including landfill operators and other service providers) and commercial waste generators.



Policy objective behind introducing a waste levy

The study team worked with DPIPWE to derive a practical expression of the objective behind introducing legislation for a waste levy, using terms to allow for a clear sense of purpose and a means to compare waste levy options (including the base case, where no waste levy is adopted).

Guided by policy interests and commitments set out in the draft Waste Action Plan, a policy objective statement was prepared as set out below. This statement underlines the intent of the waste levy to support delivery of and meaningfully contribute to two Waste Action Plan targets:

Target 3: Achieve a 40 % recovery rate from all waste streams by 2025 and 80 % by 2030.

Target 6: Reduce organic waste volumes sent to landfill by 25 % by 2025 and 50 % by 2030.

Policy objectives in legislating for a statewide waste levy

The interventions tested in this impact study will carry the objective to directly stimulate:

i) an ongoing reduction in volumes of discarded material (waste) disposed of in landfills in Tasmania

ii) an ongoing increase in the volumes of resources recovered in preference to being sent to landfill, on the basis of their potential economic value.

In exploring the policy space surrounding a waste levy, the study was able to identify potential trade offs to manage in the use of a waste levy, to guide subsequent analyses. The waste levy was additionally recognised as an instrument to underpin Tasmania's ambitions in moving towards a circular economy model, and build consonance with Brand Tasmania's strategic plan.

Waste levy options examined in this study

DPIPWE requested that the following waste levy settings specifically be tested in this study:

- 1. Fixed rate of \$10 per tonne
- 2. Fixed rate of \$20 per tonne
- 3. Fixed rate of \$60 per tonne
- 4. Fixed rate of \$120 per tonne
- 5. Stepped rate, increasing as follows:
 - \$20 per tonne for first two years
 - \$40 per tonne for two years thereafter
 - \$60 per tonne from fifth year onwards.

The team was additionally directed to consider other waste levy options that may deliver a preferred balance of outcomes, should the above prove unsuitable. Each of the waste levy options would be indexed to inflation, and would uniformly apply to all waste sent to landfills across Tasmania for burial (i.e. it would not apply to materials recovered on landfill sites or at other locations designated for resource recovery activities).



Benefits in introducing a waste levy

An array of public benefits are associated with introducing a waste levy for Tasmania. The table below sets out these benefits, following the areas listed in the *Legislative Impact Guidelines*.

Area of benefit	Rationale
Promotion of competition	The introduction of a waste levy supports competition by assisting services (e.g. recycling and organics processing services) that have a lower social cost and fewer externalities competing with landfills.
Address externalities that affect community welfare	Landfills are associated with a range of negative impacts that may be incompletely addressed via regulation (variously due to the cost burden of regulation or the inability to precisely predict future costs and risks).
	In positioning alternative services to compete with landfills, the levy provides a means for waste generators to select options that entail lower risks to the environment (particularly relevant for diverting organic and putrescible materials; heavy metals; halogenated compounds; etc.).
Encourage the development of	A waste levy will support the capacity for products and commodities recovered from waste to compete with imported virgin materials.
import replacements	The Commonwealth, state and territory governments committed to a ban on exporting recycled materials including tyres, paper and cardboard, plastics and glass unless they have been processed into a value-added material. In restricting this free trade, there is a need to ensure recycled products can compete against virgin material substitutes.
Foster innovation and business efficiency, especially where this results in improved competitiveness	The introduction of a waste levy is anticipated to stimulate improved business efficiency, particularly from councils and their recycling service providers. The introduction of a waste levy in Tasmania is expected to drive councils and their service providers to become more focused on seeking the best deal for their communities, and to place greater competitive pressure on the recycling and organics processing market.
	Similarly, any landfills that are able to introduce business efficiencies and innovation by virtue of diverting materials received at the gate towards resource recovery processes will gain a competitive advantage via reduced exposure to waste levy liabilities, providing the means for proactive and innovative landfill operators to lower costs while diversifying their business.
Improve the protection of the environment	A driver to adopt a waste levy is to reorient the balance of services away from landfill disposal, towards services incurring lesser impacts.
	The shift towards recycling and organics processing has the added environmental benefit of substituting for virgin materials whose extraction may involve environmental damage or the draw down of finite resources.
Implement desirable community standards	Across businesses and communities engaged with during this study, there was a strong supporting consensus for the introduction of a waste levy. This support was aligned with a desire to derive greater value from the materials produced and shipped to Tasmania's shores, including the pursuit of local end markets.



Impacts on competition in waste and other markets

The waste levy as proposed by the Tasmanian Government is anticipated to have both neutral and positive competition impacts.

The geographic coverage, inclusion of all landfill types, and uniform treatment across source sectors, waste types and landfills helps ensure competitive neutrality across operating landfills. The adoption of an indexed waste levy helps ensure that competitors that face higher capital costs involving longer payback periods are not disadvantaged relative to other market participants that have less capital-intensive business models.

The intended use of the waste levy is to stimulate innovation and address the market disadvantage of more socially beneficial waste management solutions. It is anticipated that this will have a positive influence on competition, provided that the waste levy works as a price mechanism to shift preferences in the waste and resource recovery market.

In granting resource recovery operators greater flexibility in setting their gate fees, it also means that the waste levy may enhance the competitive position of recovered resources, compared with virgin materials whose production may involve a greater impact on the environment.

The introduction of a waste levy is intended to shift waste management practices away from landfills in a way that accords with Tasmanian Government waste policy as set out in the draft Waste Action Plan (to be finalised). Landfill operators do not face inherent and insurmountable obstacles in shifting their business model to become part of this transition, should they wish to. That is, there are no intractable barriers to landfill operators that seek to revise their balance of activities and compete with other entities involved in resource recovery services.

Determination of a preferred waste levy option

During this study, each of the above-mentioned waste levy options was analysed with respect to the policy objective, costs on different sectors (with a focus on households and businesses that generate waste) and on net costs to the community (as expressed in terms of a Net Present Value or NPV result).

The table overleaf summarises the results of this analysis, with the NPV result, the mean annual cost per capita, and the cost per \$1,000 GSP all representing outcomes *relative to the base case* (i.e. in comparison to the scenario in which a waste levy is not introduced).

For the purposes of assisting interpretation:

- The **NPV result** is a measure of how much 'better off' or 'worse off' the Tasmanian community is in introducing a waste levy, compared with the base case. In the first instance, it is preferable that the NPV result be positive in order to justify the legislation. Options with higher positive NPV results suggest that, on balance, those options deliver greater benefits to society than options with a lower positive NPV result.
- The **mean annual cost per capita** represents the change in municipal solid waste (MSW) management costs, averaged over ten years and across the Tasmanian population, relative to the base case. A lower value indicates a lower cost to the community.
- The **cost per \$1,000 GSP** is a reflection of the cost for commercial and industrial waste (C&I waste) management to Tasmanian industry, in terms of overall economic activity across the state. Again, a lower value indicates a lower cost to the community (for


comparison purposes, the overall Tasmanian state tax base is presently equivalent to about \$38 per \$1,000 GSP).

• The **2030 recovery rate** is a measure of the extent that the introduction of a waste levy (in itself) delivers on the stated policy objective. For comparison purposes, the draft Waste Action Plan sets a target of an 80 % recovery rate by 2030.

Waste levy rate per tonne	NPV result	Mean annual cost per capita	Cost per \$1,000 GSP	2030 recovery rate
\$10	\$20,798,496	\$1.40	\$0.06	47.7 %
\$20	\$28,753,129	\$3.47	\$0.14	50.7 %
\$40	\$77,017,830	\$7.60	\$0.27	59.3 %
\$60	\$144,487,316	\$10.14	\$0.37	68.9 %
\$120	\$146,963,337	\$18.59	\$0.68	70.0 %
\$20-\$40-\$60	\$121,889,177	\$7.67	\$0.29	68.9 %

Key findings in determining a preferred waste levy option are as follows:

 Regarding each option's performance against the policy objectives, three waste levy settings stand out as likely to be most successful - \$60 per tonne; \$120 per tonne; and the ramped rate of \$20 to \$40 to \$60 per tonne (over four years). The \$40 per tonne option is predicted to have intermediate performance levels while the \$10 per tonne and \$20 per tonne are relative weak performers. The figure below depicts these results.

The waste levy rates of \$60 per tonne, \$120 per tonne and using the ramped rate are preferred options for meeting the policy objective.



Figure: Recovery rate trend for each waste levy option, 2021/22 to 2030/31. Note the line for the \$60 per tonne waste levy rate (purple) is partially obscured, by the \$120 per tonne waste levy rate (green) and the \$20-\$40-\$60 per tonne waste levy rate (dark blue).

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2. Commensurate with driving more material from landfills and recovering them as useful goods, the waste levy options that performed better in meeting the policy objective also generate greater net benefits for society over the ten year study period. All options returned a net positive NPV result relative to the base case. The \$60 per tonne and \$120 per tonne, and to a lesser extent, the ramped rate option delivered superior results.

The introduction of a waste levy will not incur a net welfare cost for society, i.e. there is no trade off between welfare outcomes and the policy objective.

The waste levy rates of \$60 per tonne, \$120 per tonne and using the ramped rate are preferred options for delivering a net benefit to society.

3. The waste levy will incur costs to different segments of society. An analysis of household and commercial and industrial waste generator costs suggests these costs, on average, will be modest compared to income. Of the options seen as preferable from a welfare and policy objective viewpoint (above), the \$120 per tonne levy involves substantially higher costs without a proportionate improvement in performance. The \$60 per tonne waste levy involves about 25 % higher costs compared to the ramped rate option.

In examining costs for waste generating entities (households, businesses and other sources), the preferred waste levy options are the \$60 per tonne and the ramped rate option, with the latter involving somewhat lower costs.

In delineating the two leading options further, some additional considerations are useful:

- There is no compelling reason to bring forward diversion outcomes from a policy standpoint, given that both the \$60 per tonne and the ramped rate option are both predicted to meet the 2025 resource recovery and organic volume diversion objectives set out in the draft Waste Action Plan.
- The introduction of a \$60 per tonne waste levy from 2021 onwards is almost certain to introduce a price shock for some sectors, for which they are unlikely to be prepared for.
- Even if some businesses and councils sought to be proactive in managing the impacts of a waste levy early in its introduction, it is not clear that the resource recovery sector has adequate capacity to meet their needs in the short term. Similarly, existing contractual obligations may prevent some waste generators from responding in the short term, such that an immediate \$60 per tonne waste levy represents significant added costs that are unavoidable in the short term. The ramped rate option diminishes this exposure.
- Finally, while the two preferred waste levy options generate net benefits to society, the direct costs of the instrument are diffuse while the direct benefits mainly accrue to the waste and resource recovery sector. For the \$60 per tonne option, it may be difficult to justify the potential upheaval in the council sector and other areas of the productive economy while the gains are largely concentrated to one sector. In contrast for the ramped rate option, the earlier years could be used to focus on supporting councils and businesses to minimise their exposure to the waste levy, which will help ensure that the waste levy works as an efficient policy measure.



Given these points, the ramped rate waste levy (rising from \$20 per tonne for two years; to \$40 per tonne for two years; and then rising to \$60 per tonne onwards) is recommended as the preferred policy option.

This option will delivery on the policy objective without introducing net costs to society. On average, business and household costs are projected to be modest in light of the policy outcomes and net benefits achieved, although limited attention may be needed to assist some sectors. Competition impacts are expected to be either neutral or positive through driving innovation and supporting socially preferred business models.

Preferred waste levy option - benefits and impacts

Notable characteristics of the preferred waste levy (i.e. commencing with a \$20 per tonne levy, which is then adjusted to \$40 per tonne after two years, and which is then adjusted to \$60 per tonne after a further two years) include:

Waste levy charges and revenues

• Total waste levy collections are projected to reach \$8.3 million in the first year (i.e. annualised, assuming a 1 July 2021 start), rising to \$17.1 million by 2030/31. Most of this rise occurs as the rate is ramping upwards, i.e. from 2021/22 through to 2025/26.



Figure: Projected waste levy collections, in 2021 Australian dollars (without discounting). Each year is broken into waste levies paid from disposal of municipal solid waste (blue); commercial and industrial waste (orange); construction and demolition waste (grey).

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Displacement of landfills by resource recovery operators

• The application of a waste levy is projected to deliver an intended decline in demand for landfill disposal of up to around 210,000 tonnes per annum by 2030/31, with most of this fall in demand occurring while the rate is being increased.



Figure: Annual volumes of waste projected to be sent to landfill (in tonnes).

- This fall in tonnages is delivered through the displacement of landfills by recycling operators (delivering up to 120,000 tonnes in additional recovery) and organics processing operators (delivering up to 90,000 tonnes in additional recovery).
- The additional revenue for recycling operators is mainly led through the sale of recovered materials (worth an additional \$165 million over ten years), followed by recycling gate fees (worth an additional \$86 million over ten years).



Figure: Projected ten-year recycling sector revenue by source as modelled in this study (with projections based on assumed volumes and price points), figures in 2021 Australian dollars, undiscounted.

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• Actual growth in business opportunities for organics processing is technology and end market dependent (as there is a range of alternative products that may be produced from organics, requiring different technologies). This study estimates that the waste levy may stimulate an added \$86 million in organics processing gate fees over ten years; and an added \$33 million in the sale of recovered organic products.



Figure: Projected ten-year organics processing sector revenue by source as modelled in this study (with projections based on assumed volumes and price points), figures in 2021 Australian dollars, undiscounted.

- Based on a net employment effect of an additional 6.4 full time positions for every 10,000 tonnes diverted from landfill to recycling, the legislation may support around 130 new full time ongoing positions in the waste and resource recovery sector. The majority of these positions would emerge over the transition towards a \$60 per tonne waste levy.
- The level of capital investment in resource recovery needed to divert 210,000 tonnes each year will depend on a range of factors including operating technologies, scale of production, and specifications imposed on recovery services and products they recover. As a very general estimate, the additional 120,000 tonnes' recycling may drive more than \$10 million in investment in new sorting facilities, separate to investment in network infrastructure. The additional 90,000 tonnes' organics processing capacity may call for a similar level of capital, depending on technologies, operating scales and target markets.

Impacts on waste generating households and businesses

- Assuming households are positioned to recycle more and participate in organics collection services, annual MSW waste disposal and resource recovery services are projected to increase in cost to just under \$40 million by 2030/31. Under the base case, these same services currently cost in the order of \$30 million per year across Tasmania.
- On a per household basis, under the base case, average disposal and resource recovery services come to \$88.40 each year (not including regional levies). With the recommended waste levy in place, it is projected that these costs would rise to \$115.34 each year by 2030/31, adjusted for greater diversion from landfills to resource recovery.
- For comparison, a household with the same landfill disposal fees without access to recycling and resource recovery would see these annual costs rise from \$78.40 to \$126.40 (assuming no difference in volumes). This may lend weight to the consideration of measures to support more options to divert waste from landfill, in those areas that are presently underserviced with resource recovery operations.





Figure: Projected changes in household waste management costs (limited to gate fees and waste levy components, figures in 2021 Australian dollars) for an example household. The blue line describes the trend where the household does not engage in additional recycling and organics recovery activities; the green line describes the cost where the household is able to increase recycling levels and use organics collection services. For comparison, the red line describes the situation where the household sends all of its waste to landfill.

- It is more challenging to provide an estimate of 'average' waste management costs for businesses on introduction of a waste levy, owing to the diversity of businesses and their waste profiles across Tasmania. The introduction of the preferred waste levy is projected to increase C&I waste disposal and resource recovery costs by \$4 million above the base case in 2021/22 (to \$64 million per year); and by \$14 million above the base case in 2030/31 (to \$86 million).
- Rather than perceiving these added costs as an undue burden on the business community, as set out in Section 2, it would be more appropriate to consider historic waste management costs as involving an incomplete accounting for the social harms (and misallocated resources) from waste disposal that the waste levy aims to correct.
- Although only limited engagement with manufacturers and other businesses took place over the course of the study, commercial and industrial generators of waste voiced an interest in being involved in a range of circular economy activities to lower their waste disposal volumes, and were open to engaging further with the Tasmanian Government.
- The construction sector, in contrast to other sectors and households, are anticipated to be driven towards using clean fill services on introduction of a waste levy. This would involve a reduction in costs for C&D waste generators and increased uptake of using inert aggregate as clean fill for an uncertain benefit. This outcome may be seen as inconsistent with the contribution made by other businesses and households, and an imprecise alignment with the intent of the draft Waste Action Plan.



Diversion of valuable materials from landfill

- In aggregate across the three sectors (MSW, C&I waste and C&D waste), the recycling rate is projected to rise from 34.9 % to 45.8 %. The organics recovery rate is projected to rise from 13.3 % to 23.1 %. In combination, the waste levy is anticipated to contribute to a combined resource recovery rate of 68.9 % by 2030/31, in the absence of introducing other measures (see table overleaf).
- Other measures may be effective, both in terms of lowering uncertainties and market inefficiencies that could hinder the waste levy in achieving the expected impact at least cost to society, and in helping Tasmania obtain the target 80 % recovery rate for 2030.

Summarising the above, this study identifies a range of longer term benefits in introducing the preferred waste levy, spanning business expansion and job creation, environmental benefits and the opportunity to reward investment and innovation.

As is intrinsic to the introduction of a levy instrument, there is an inevitable cost burden associated with the waste levy. However, these direct costs are suggested as being manageable in light of the benefits introduced and in recognition that the cost profile will ramp up from a lower initial base over a number of years, allowing the opportunity for different stakeholders to explore options to divert waste from landfill and engage in other activities to reduce their exposure.

The landfill sector will also face incrementing impacts due to the waste levy, as an intentional feature of an instrument designed to work as a price signal to tilt market preferences towards competing practices that involve lower costs to society. This is a necessary part of delivering the Waste Action Plan and stimulating the shift to a circular economy.



Year	2021/22	2022/23	2023/24	2024/25	2025/26	2026/27	2027/28	2028/29	2029/30	2030/31
Landfill (tonnes)	414,540	385,357	346,918	316,899	279,214	274,353	273,719	277,568	281,399	285,272
Recycling (tonnes)	279,654	299,896	325,855	349,744	379,870	391,422	400,564	407,062	413,643	420,249
Organics recovery (tonnes)	106,278	127,777	152,817	171,657	192,032	198,161	202,724	205,551	208,465	211,413
% recycling	34.9 %	36.9 %	39.5 %	41.7 %	44.6 %	45.3 %	45.7 %	45.7 %	45.8 %	45.8 %
% organics recovery	13.3 %	15.7 %	18.5 %	20.5 %	22.6 %	22.9 %	23.1 %	23.1 %	23.1 %	23.1 %
% total recovery	48.2 %	52.6 %	58.0 %	62.2 %	67.2 %	68.2 %	68.8 %	68.8 %	68.9 %	68.9 %

Table: Overview of total recovery rate projected for each year, 2021/22 to 2030/31, including contributions from recycling and organics processing activities.



The need to address potentially adverse impacts & deliver complementary measures

In broad terms, realisation of the ten year waste levy revenue projection (see figure below) should allow the state government to:

- Efficiently administer the levy (at no net cost to government)
- Reduce, mitigate or manage any adverse impacts consequent to introducing a levy
- Support measures set out in the draft Waste Action Plan, including commitments to support regional bodies to maintain a revenue stream and continue operations.¹



Figure: Projected allocation envelope to mitigate unintended impacts and support complementary measures

The study was informed of and considered a number of potentially adverse impacts surrounding the introduction of a waste levy, with the following presenting as highest priority to outline.

Potential to exacerbate illegal dumping activity

• Engagement with regional stakeholders generally supports the view that illegal dumping is predominantly based on a cultural disposition among some parts of the community. There is a significant yet poorly understood level of illegal dumping that is not anticipated to appreciably change on introduction of the levy (i.e. irrespective of levy quantum). In Tasmania, illegal dumping is widely viewed as an issue that needs to be resolved, yet has not been historically resourced or prioritised to the extent necessary to materially address the challenge. Additional investment into a *Clean-up and Prevention Program* (leveraging intelligence from similar programs running in NSW) may provide a strong complement to current efforts to identify hotspots through Report Rubbish and Litter and Dumping Management System, improving stakeholder confidence in options to respond.

¹ This regional support may be interpreted to include equivalent arrangements for council areas not presently represented or supported by a regional body.

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Addressing impacts on charity organisations

- Charity shops are exposed to people dumping unwanted goods in their charity bins or outside their premises. A waste levy increases their costs in disposing of this material.
- In general, charities believe about 50 % of charity bin dumping arises from confused and unintentional practices and about 50 % arises from intentional 'dodgy' practices.
- While difficult to attribute, increased cost for waste disposal (via a levy) may encourage dumping of more material on charities, driven by convenience and cost avoidance.
- Financial rebate models for charities exist in Victoria and Western Australia. Further engagement by DPIPWE with Victoria, Western Australia and Charitable Recycling Australia is suggested to develop a best practice rebate scheme for Tasmania.
- A rebate program would allow general tracking of how much material the sector has been able to recover over a given period. The program could serve as a basis to enter into an information exchange agreement (and further down the line, a co-investment model) with the Tasmanian Government around reuse.
- In this way, the charitable recycling sector (including Tip Shops) may transition from a notional partner in shifting to the circular economy to a formal co-deliverer with the means to further quantify and substantiate its contribution via reuse.

Exclusion of selected industries or practices

- Consultation did not uncover compelling evidence that the preferred levy scenario warrants waste levy exemptions for any particular industry segment.
- Engagement with remote communities, charities, generators and the resource recovery and recycling sector based in Tasmania showed those groups to generally be receptive towards the waste levy as a driver in Tasmania's shift to a circular economy.
- Stakeholders have expressed notional alignment with minimising market distortions that would otherwise impact the positive competition impacts of the proposed levy.
 Specifically, this includes geographic consistency, sectoral consistency and minimal support for exemptions.

Clean fill and moving resources up the value chain

- Stakeholders suggested a pressing need to review the definition and regulation of clean fill to more accurately track and account for C&D waste volumes. Working to current market conditions, the introduction of a levy will see C&D material destined for landfill diverted to clean fill.
- The typical composition of C&D waste material, and experience in other jurisdictions would suggest there are higher order uses for this C&D material in the Tasmanian economy, and additional environmental benefits to capture.
- The preferred waste levy would only deliver \$6.2 million in projected revenues to third party operators willing to take C&D waste as clean fill, over the ten year timeframe. While recovery of C&D waste as a saleable product delivers a potential \$26 million revenue improvement.
- Tightening the definition and regulation of clean fill (discouraging recyclable C&D material use as fill) should:



- If implemented on the introduction of a levy, cause more C&D material to present at landfill in the short term (given any lag in development of viable recycling options and/or stockpiling)
- Subsequently see more C&D material recycled through new investment in recycling operations, enabling an appropriate contribution to Tasmania's recovery rate to be achieved.
- With little to no understanding of current C&D use as clean fill, a proxy estimate of C&D waste material being generated in Tasmania was derived by jurisdictional comparisons of C&D data within the Australian National Waste Report (2016).² This revised figure suggests a potential seven fold increase in revenue to the economy (\$224 million over ten years) and a lift to projected recovery rate from all streams from 68.9 % to 73 %.
- Avoiding leakage of C&D material (for zero to low economic or negative environmental value) provides the opportunity to initiate higher value recycling of particular materials within the C&D stream.

Bolstering regional and remote initiatives

- Projected estimates for landfill levy revenue would suggest regional allocations³ can be accommodated from year one.
- One model for regional allocation articulated that regions should be funded on an equivalent basis, enabling a consistent proportional allocation. For example, noting the predominant levy rate of \$10 per tonne used in the base case, the preference would be that all regions receive an equivalent allocation, based on tonnages sent to landfill within each region during the first year of any statewide waste levy introduction.
- It may be prudent to use regional-state negotiations both to settle near term needs for funding stability; and sketch out a framework to establish future arrangements for how state and regional bodies can best support, add value to and invest in each other's circular economy agendas.
- Given the worthy intent for the waste levy to apply to all landfills across the state, the inclusion of a levy revenue disbursement for remote (and sensitive) communities is an important additional consideration.
- The opportunity to work with these dispersed communities as an incentivised network pursuing local circular economy ambitions and innovations presents as an opportunity aligned to Tasmania's unique brand.

² 2016 National Waste Report, p. 16 provides waste generation by stream for each state for 2014-15. Later reports do not provide total tonnages generated for C&I, C&D and MSW. See https://www.environment.gov.au/system/files/resources/d075c9bc-45b3-4ac0-a8f2-6494c7d1fa0d/files/national-waste-report-2016.pdf

³ Draft Waste Action Plan, p. 9.

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Framing the levy to back the circular economy & align with Brand Tasmania

Engagement with a range of stakeholders (as listed in Appendix 1 to the main report) identified several perspectives to inform how the waste levy may have a wide and sustained value, and ensure its benefits are shared across the Tasmanian community. Some of these approaches, if adopted, would allow a close kinship between the waste levy and broader waste management arrangements, and the practices and approaches being explored by Brand Tasmania. These perspectives and their implications are summarised below.

Supporting stronger industry engagement with a circular economy levy

While engagement with the wider productive economy was limited during this study. The feedback from manufacturing and minerals sector businesses revealed a clear interest in being involved in a number of activities associated with the shift to a circular economy. Referring to the levy as a waste levy risks mis-framing the instrument in a way that limits engagement with industries who do not have waste management front and centre in their business model. Instead, it is likely to reinforce the view that the waste levy and related investments are only focused on one sector (i.e. the waste sector) that is already likely to benefit substantially on the introduction of an instrument designed to alter the competitive landscape.

There may be merit in describing the instrument as a 'circular economy levy' or similar to gain stronger traction with a wider set of industries who may have a role in delivering on the final Waste Action Plan targets. However, in order to maintain public confidence and avoid claims of 'green washing', there is a need to back this naming approach with actions that have a credible link to environmental outcomes.

Reinvestment of the levy to secure public returns for the community

To the study team's knowledge, the current preference concerning levy revenues is to adopt a full hypothecation model. This intent, if realised, distinguishes the Tasmanian approach from measures on the mainland where, in many cases, the use of levy revenues is somewhat obscure and at least partly detached from the public drivers behind the decision to adopt the instrument.

The study team posits that the state government could further set itself apart from mainland approaches by adopting a model for levy revenue allocation that borrows from the financial investment sector.⁴ In such a model, allocation decisions, public reporting, and the setting of terms and conditions with recipients would apply governance and disclosure standards that carry some resemblance to the fiduciary measures applied in the investment industry.

However, rather than focus on private returns, the adopted procedures and practices would focus on driving, delivering and communicating public returns based on delivery of, for example:

1. Delivery of final Waste Action Plan targets and objectives through investing in different classes of assets⁵ that are synchronous in effect

⁴ Other states have, in the past, exercised less clarity and strategic thinking in their allocation arrangements, leading to criticisms regarding their efficiency and capacity to deliver on stated strategic goals.

⁵ While in the private investment sector, 'classes of assets' is a specific term of art relating to assets that share broadly similar performance characteristics, in a circular economy setting these classes may involve different Waste levy impact study – EXECUTIVE SUMMARY

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- 2. Measures that strengthen the waste levy as an efficient, effective and stabilising market instrument while lowering residual distortions in the waste and resource recovery market and deferring the need to revise waste levy rates outside the recommended option
- 3. Other activities that deliver on circular economy outcomes and benefits shared with the Tasmanian community.

It is suggested that adopting a disciplined approach to investment and disclosure will reinforce public trust in the levy instrument; will position the Tasmanian Government to attract diverse coinvestment from regions, the Commonwealth Government and the private sector; and will help set expectations with funding recipients as to the quality and standard of information to be shared with the funding body.

In effect, while third parties funded from a waste levy allocation may own an asset, they sign on as custodians of an associated public benefit. The agency's role in this relationship is to monitor the performance of that asset (and other assets) on the public's behalf, and accumulate a configuration of assets that take the Tasmanian economy (and regional and sectoral sub-economies) in a preferred direction. In time, this approach could position Tasmania as a regional leader in sustainable, ethical investment in the circular economy in balance with its status as the national front runner in renewable energy.⁶

features of that economy, e.g. infrastructure; services; education delivery; etc. The key point being that each class has a defined role to play in the circular economy and clear basis for delivering or supporting public returns. ⁶ The development of circular economy as an investment target may be reflected in the entry of institutional fund managers into this space. In October 2019, the world's largest asset management firm, BlackRock, launched its first investment fund dedicated to accelerating the global development of a circular economy. Waste levy impact study – EXECUTIVE SUMMARY



Modelling engagement and narrative building on approaches explored by Brand Tasmania

The draft Waste Action Plan makes reference to recognition and branding benefits in moving to a circular economy model.⁷ The Minister for Environment directly drew attention to the benefit of maintaining Brand Tasmania in the opening line of her media release, concerning the introduction of a Container Refund Scheme for Tasmania.⁸ These references mark out some natural links between the circular economy, the waste levy and Brand Tasmania's mission.

Brand Tasmania's mission

'Our mission is to inspire and encourage Tasmanians, and those who want to be Tasmanian, to quietly pursue the extraordinary.

Quiet: Tasmanians are humble, quietly confident, and cool while the rest of the world is increasingly loud and hot.

Pursuit: We're isolated, so we've had to be inventive. We were underestimated, so nothing is ever 'good enough.' We've had to work harder together, to make determination a core of our culture. The Bass Strait means everything from here is more expensive, so we have learned to focus on the boutique, the bespoke, on 'better, not more.'

The extraordinary: This is about quality taking precedence over quantity, on privileging the unusual, and on our choice to protect the wilderness and our environment.

Brand Tasmania is industry and community led, and government enabled.'

https://www.brandtasmania.com/what-we-do

There is merit in exploring the way a waste levy may re-orient how Tasmania manages waste, uses resources, and adjust Tasmania's relationship to its natural settings, while mirroring Brand Tasmania's mission. Additional to valuing and protecting the state's environmental assets, some of the recognisable themes arising from stakeholder engagement that have a commonality with Brand Tasmania's language include:

- The intent to adopt approaches that suit Tasmania's natural advantages and define a way of doing things that Tasmanians can identify with
- The willingness to surpass expectations of what can be achieved in a smaller and more remote part of the country
- The recognised value in working together and achieving more through collaboration, and creating the space to allow all Tasmanians the opportunity to contribute.

Stakeholders have expressed a clear interest in having the waste levy underpin an inclusive and broader scale interpretation of the circular economy for Tasmania. Community and industry stakeholders were willing to accept the waste levy's full application, but in doing so, expected reasonable support for each to play their part in the transition to the circular economy. They saw

⁸ <u>http://www.premier.tas.gov.au/releases/container_refund_scheme_for_tasmania</u> Waste levy impact study – EXECUTIVE SUMMARY

⁷ Figure 1 on p. 12 of the *draft Waste Action Plan* recognises Tasmania's tourism brand as a beneficiary from moving to the circular economy.

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and accepted the need for a waste levy to shift the state in a direction that accords with collective values. Brand Tasmania's mission (above) can similarly be interpreted as an attempt to render common Tasmanian values into a recognisable form that enables focused action.

Stakeholders were less inclined to accept the role of passive price takers whose singular response to the levy is to shift from purchasing disposal services to purchasing resource recovery services. There was a consistent desire towards becoming active partners – committing to new directions, accepting reciprocal responsibilities, and sharing in achievements. There is an opportunity, similar to that of Brand Tasmania, to invite a wider set of stakeholders to help shape Tasmania's circular economy narrative.

If the Tasmanian Government is able to establish a collaborative model for the circular economy that brings together the strengths of different partners, this could become a new point of distinction for the Tasmanian community to take pride in. Just as every Tasmanian should seek to own the Tasmanian brand, the governance model and approach to relationships should help all Tasmanians to actively own, in some fashion, the transition to the circular economy.

Given these points, it may be suitable for the Tasmanian Government's approach to moving to the circular economy, in part founded on the waste levy as a market lever, to involve a level of engagement with Brand Tasmania to potentially integrate participation methods and narratives.



1. Introduction

In June 2019, the Tasmanian Government released its draft Waste Action Plan,⁹ setting out a broad framework for waste management and resource recovery in Tasmania, underpinned by a set of tangible actions. A cornerstone of the Waste Action Plan involves the commitment to implement a statewide waste levy in 2021.

'A waste levy is a financial contribution typically paid to the State Government by a landfill or other licensed waste facility operator (usually a local council) for each tonne of waste received. Levies provide an important funding source to invest in waste and resource recovery initiatives and infrastructure and over time achieve an increase in the diversion of waste away from landfill.

'The absence of a waste levy, along with the transport challenges from being an island state, means that resource recovery businesses in Tasmania may struggle, particularly during times of market disruption, although there are already some Tasmanian industries focusing on reducing, recycling or repurposing waste material.'

– Draft Waste Action Plan, p.7

As set out in the text box below, the statewide waste levy is seen as a necessary instrument to provide a price signal to shift waste management practices away from the disposal of waste in landfills and towards services involving the recovery of resources. The waste levy will also provide ongoing revenue to enable the Tasmanian Government and other parties to deliver on regional, statewide and national resource recovery and circular economy priorities as respectively set out in regional strategies, a final Waste Action Plan and the National Waste Policy.

⁹ DPIPWE, 2019, *Draft Waste Action Plan: Consultation Draft*, p. 3. Hereafter, *Draft Waste Action Plan*. Waste levy impact study – FINAL REPORT September 2020

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'In collaboration with the local government and regional waste authorities, industry and the community, the Tasmanian Government will introduce a statewide legislated waste levy by 2021. It is proposed that the new legislated statewide waste levy would replace any existing council levies. The design (including cost) of the statewide waste levy will be developed in consultation with local government, industry, businesses and the wider community with the modelling and analysis, taking into account the potential impact of the proposed levy on households and businesses. The Tasmanian Government will also develop legislation that indicates how the revenue collected from the levy will be directed to waste management and resource recovery initiatives, while ensuring regional authorities continue to derive a revenue stream from the new levy.

'Through time, this will provide a pricing signal to waste generators and create an income stream to reinvest in business growth and the planning and development of waste management and resource recovery infrastructure, and other waste management programs, such as initiatives or grants to promote alternatives to landfilling. It will also provide a revenue stream to assist councils with legacy issues associated with old refuse sites. Maximising the value of our products and materials – and what we may have formerly thought of as "waste" – is not only the key to achieving parts of a CE, but also brings employment opportunities.'

- Draft Waste Action Plan, p.4

1.1. Consideration of impacts to satisfy legislative processes

In committing to introducing a waste levy via new primary and subordinate legislation, the Tasmanian Government is required to follow prescribed steps as set out in the *Legislative Impact Guidelines* ('the guidelines'). One such step involves the preparation of a Regulatory Impact Statement, which will be fulfilled via the completion and public release of this report. It is generally necessary to prepare a Regulatory Impact Statement (RIS) in cases where proposed primary legislation imposes a restriction on competition and costs on businesses.

The agency (DPIPWE) must prepare and make a draft RIS public, and seek endorsement of the final RIS by the Economic Reform Unit of the Department of Treasury and Finance (ERU).

Engagement with ERU confirmed the need for this study to satisfy primary legislation and subordinate legislation compliance requirements set out in the *Legislative Impact Guidelines*. This requirement is based on the recognition that a waste levy framework is likely to be implemented via primary legislation, while the scheduled quantum for the waste levy will be codified via subordinate measures.

The study will therefore subject the waste levy options of interest to a number of tests including:

- Its validity in meeting a stated policy objective, expressed where relevant in terms of a Public Benefit Test that drives the case for government intervention
- Its effect on competition relative to the base case, noting that inhibitory effects on competition have a range of negative public welfare effects
- The extent of (negative) impacts on selected sectors, primarily based on the possible introduction of undue and/or unavoidable costs associated with the intervention



• Net impacts (costs and benefits) upon the Tasmanian community as a whole, and the magnitude of these impacts in relation to meeting the policy objective.

In conducting these analyses, the study will report on how the waste levy performs with respect to the guiding principle for primary legislation as set out in the *Legislative Impact Guidelines*, i.e.:

Legislation should not restrict competition or impose a significant impact on business unless it can be demonstrated that:

- a) The benefits to the community as a whole outweigh the costs
- b) The objectives of the legislation can only be achieved by restricting competition or imposing a significant impact on business.

With respect to subordinate legislation, the study must satisfy a key requirement to inform Tasmanian Government whether the proposed waste levy will impose a significant burden, cost or disadvantage on any sector of the public.

1.2. Scope and purpose of the study

This waste levy impact study has been undertaken to meet the requirements of a regulatory impact analysis, including the requirement for a public release to inform community discussion on the issues.

The sectoral impact analysis will:

- Assess the levy's impact on various sectors and its effectiveness at achieving a price signal to promote resource recovery activity as a more competitive alternative, and increase the diversion of waste from landfill
- Consider options of fixed levy rates of \$10, \$20, \$60 and \$120 per tonne; and a stepped rise in levy rates from \$20 to \$40 to \$60 per tonne over a four year period
- Consider the impacts of the current voluntary levy regimes as within the 'base case'
- Suggest a target rate that would most likely achieve an optimal balance between the objectives and cost impacts on the community as a whole.

Additional to the impact analysis, the study will include **situational analysis** and report on:

- How state, national and international policy changes in recent years have impacted the situation in Tasmania since the 2015 study
- Existing regulatory barriers, gaps or deficiencies that may impede implementation of a statewide waste levy
- Opportunities to leverage existing structures / systems to enable efficient implementation
- Key areas for potential intervention to address adverse impacts of the levy, such as:
 - unauthorised dumping
 - dumping on the charity sector



- undue and avoidable costs on some sectors
- the potential loss of revenue for existing organisations (such as regional waste management authorities), potentially necessitating funding to ensure that they are able to continue their programs and other activities.

1.3. Stakeholder engagement

Broad based stakeholder engagement has been conducted to serve a number of project critical needs, as numbered below.

- 1. Gather credible reference data to inform sectoral impact analysis and situational analysis – particularly base case data to allow precise modelling of impacts and existing settings
- 2. Gain understanding of likely responses to different intervention scenarios, relative to the base case, to incorporate into the analysis
- 3. Gain understanding of perverse or unintended consequences of a waste levy and the underlying drivers of those consequences, to inform the need for and design of additional measures (i.e. a means to 'ground truth' narratives surrounding what the waste levies may or may not induce)
- 4. To listen to stakeholders, regarding what they need in order to constructively and promptly transition into new arrangements with a waste levy in place
- 5. Build buy in across a range of affected stakeholders, achieved through active listening and incorporation of perspectives into the study.

Given the limited timeframe for this study, the primary driver for stakeholder engagement has been to ensure that relevant and accurate information, reflective of Tasmania's market and policy landscapes, is incorporated.

A list of stakeholder organisations engaged by the project team is included at Appendix 1.

1.4. Structure of this report

This report has been prepared using a structure that steps through the requirements set out in the *Legislative Impact Guidelines* while providing a logical frame to support public discussion and engagement with the Tasmanian community. The report is structured as follows:

- 1. Introduction
- 2. Objectives in setting a statewide waste levy via legislation
- 3. Competition impacts
- 4. Establishing the base case for waste management in Tasmania
- 5. Assessment of options
- 6. Preferred option
- 7. Mitigating unintended impacts and supporting complementary measures

Supporting these sections of the main report, appendices are included and provide an overview of stakeholder consultation processes and analytical methods used across the study. Numerical values used to generate graphs throughout the report are also provided in tabular form.



2. Objectives in setting a statewide waste levy via legislation

2.1. The need to define a policy objective for the waste levy

A clear statement of the policy objective satisfies the following needs:

- Provision of a consistent yardstick by which to evaluate the efficacy and materiality of different interventions under study, in achieving an appropriately defined public benefit
- Definition of a set of intended outcomes (benefits) against which competition impacts, sectoral impacts and net costs to the community may be weighed against in determining whether to proceed with a preferred intervention
- A frame of logic allowing for the predicted outcomes of each intervention scenario to be rendered in a consistent form, suitable for quantitative (cost-benefit) analysis
- Provision of a means to clearly and consistently communicate what the intervention is there to achieve (and conversely, not achieve) to stakeholders and decision makers.

More generally, a clear policy objective is necessary in establishing the design of a waste levy to avoid confusion with and among stakeholders and delivery partners as to the role the instrument plays in delivering on the final Waste Action Plan. In the absence of an objective statement, there is the risk that the waste levy will be expected to perform functions to which it is poorly suited, or that primary and secondary outcomes of the waste levy will be conflated.

2.2. The waste levy as a driver to transform waste and resource recovery markets

In reviewing a set of relevant Tasmanian Government sources including the draft *Waste Action Plan*, a number of potential drivers for installing a waste levy emerge. These include:

- a. **The need to achieve a price signal** to promote resource recovery activity as a more competitive alternative to landfilling waste, and increase the diversion of waste from landfill
- b. **The intent to counter market failures** stemming from the impacts (externalities) arising from prevailing landfill disposal measures that are not accounted for through internal cost structures and commercial relationships with customers
- c. **The aspiration to correct for an imbalance in intergenerational impacts** where future generations bear the cumulative social costs of current waste disposal practices under a regulatory framework which may or may not entirely anticipate longer term, latent impacts of disposal via landfills
- d. **The ambition to fund additional measures** deemed necessary to account for adverse consequences and barriers to achieving a circular economy transition, that are not addressed via a price signal in isolation, including the continued funding of regional waste management programs (as set out in Sections 4 and 7).

While the above may be relevant drivers framed in somewhat intangible form, it is of more practical use for the study to define policy objectives in a way that precisely depicts intended changes in economic activities as expressed through the waste and resource recovery market.



To this end, and in consultation with DPIPWE and the Department of Treasury and Finance, Economic Policy Branch, the following statement of objectives will be used throughout this study:

Policy objectives in legislating for a statewide waste levy

The interventions tested in this impact study will carry the objective to directly stimulate:

i) an ongoing reduction in volumes of discarded material (waste) disposed of in landfills in Tasmania

ii) an ongoing increase in the volumes of resources recovered in preference to being sent to landfill, on the basis of their potential economic value.

This statement incorporates the first three drivers above, while providing a clear interpretation of expected behavioural and economic outcomes to adopt as metrics for testing and predicting the costs and benefits of the instrument. The fourth driver – i.e. to provide a means to fund additional measures – is considered important but secondary to the other three.

2.2.1 Treatment of levy revenue allocation decisions in this study

As implied above and following guidance from DPIPWE, the primary focus of this study is not in terms of the role of the waste levy in generating and apportioning revenue to fund programs and other commitments flagged in the draft Waste Action Plan and elsewhere. Yet this revenue generation needs to be acknowledged as a necessary and positive aspect of the instrument, that may be used to ensure the public value from legislating a waste levy is optimised, and to support the delivery of other commitments set out in the draft Waste Action Plan.

In examining a range of potential levy settings as options to meet the stated policy objective in this study, it is clear that net revenue outcomes will be somewhat proportional to the levy rate in question. That is, different levies (ranging, for example, from \$10 per tonne up to \$120 per tonne) can be associated with different levels of revenue generation and conversely, different costs incurred by waste generators as waste levy payers across Tasmania.

As such, there is a need to recognise trade-offs and compatibilities between waste levy decisions and settings that:

- 1. Provide for a waste levy rate that functions effectively as a price signal (i.e. the policy objective) in line with the Tasmanian Government's policy commitments.
- 2. Avoid undue costs to the community and to sectors that are sensitive and exposed to the levy as a significant cost burden, and minimise unwanted impacts on competition.
- 3. Grant confidence that revenues in question will allow the state government to:
 - Efficiently administer the levy (at no net cost to government)
 - Reduce, mitigate or manage any adverse impacts consequent to introducing a levy



• Support measures set out in the draft Waste Action Plan, including commitments to support regional bodies in maintaining a revenue stream and continuing operations.¹⁰

This study will closely examine the interplay between these three performance considerations for the waste levy, with a view to recommending a preferred waste levy setting (or settings) that achieves the policy objective (point 1 above) with minimal unwanted consequences for the community (point 2) and adverse budgetary impacts (point 3).

In doing so, a number of assumptions may be taken in relation to waste levy administration overheads and government funding allocations (including funding arrangements struck between regional bodies and the Tasmanian Government). The study authors highlight that the use of these assumptions is necessary to derive practical and useful findings that will guide decisions and inform public comment. These assumptions are not intended nor are they to be taken to pre-empt or replace consultation and decision-making processes that need to take place via separate measures.

2.3. Objectives of a waste levy in terms of the Waste Action Plan

2.3.1 The waste levy as a market enabler to deliver on state targets

The Tasmanian Government first announced its commitment to a waste levy in relation to its draft Waste Action Plan. Understanding that the state government remains committed to releasing a final Waste Action Plan this current calendar year, it is suitable to further specify the waste levy in relation to the draft plan's policy targets. These targets are replicated in the text box below, with minor amendments to the fifth target following advice from DPIPWE.

Draft Waste Action Plan targets

- 1. Reduce waste generated in Tasmania by 5 % per person by 2025 and 10 % by 2030
- 2. Ensure 100 % of packaging is reusable, recyclable or compostable by 2025
- 3. Achieve a 40 % av. recovery rate from all waste streams by 2025 and 80 % by 2030
- 4. Have the lowest incidence of littering in the country by 2023
- 5. Work at the national level and with local government and businesses in Tasmania to help phase out problematic and unnecessary plastics by 2030^{*}
- 6. Reduce the organic waste volume sent to landfill by 25 % by 2025 and 50 % by 2030.

 $[\]ast$ Note that the 2030 date was changed to 2025 in the COAG Waste Bans Response Strategy.

¹⁰ This regional support may be interpreted to include equivalent arrangements for council areas not presently represented or supported by a regional body.

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For the purposes of this study, it is posited that the predominant and direct influence of a waste levy in achieving the draft targets will be to stimulate greater recovery and reduce the volume of waste to landfill.

That is, a waste levy is proposed to contribute to:

Target 3: Achieve an average 40 % recovery rate from all waste streams by 2025 and 80 % by 2030.

Target 6: Reduce organic waste volumes sent to landfill by 25 % by 2025 and 50 % by 2030.

The study team has not received set directions on the extent that these targets are to be exclusively or partially met by a waste levy. However, it is assumed that the waste levy is intended to stimulate changes in waste management practices over the long term, such that there will be material progress on these two targets.

The waste levy is not assumed to be the sole policy measure that the Tasmanian Government may direct towards achieving these goals, as it is likely that a combination of influences are needed to drive the wide scale market transformations articulated in the draft Waste Action Plan. Further, in the case of Target 6, organic waste volumes sent to landfill may be achieved via action on several fronts – not just through shifting preferences within the waste and resource recovery market.

Where a waste levy option is projected to only marginally contribute to the two targets, it is unlikely to meet the policy objective and will be noted accordingly. On the other hand, waste levy options that are predicted to make a substantial contribution to the two targets will be clearly identified, with a view to isolate a preferred option consistent with the guidelines.

2.3.2 The waste levy as a mechanism to drive waste reduction and minimisation

While there may be an argument that the waste levy directly engenders a reduction in waste generated (relating to target 1, involving a reduction in total volumes of discarded material), it is suggested that for most waste generators (i.e. businesses and households) the price signal is likely to be modest and possibly masked or distorted. This masking is due to a number of transactions and aggregation points lying between generation and disposal that inhibit the extent that waste generators are aware of and likely to respond to changes in waste disposal costs.

Engagement with other jurisdictions (South Australia and Western Australia) confirms this assumption – officers interviewed during this study agreed that there was not strong evidence that the introduction of or substantial increase in their waste levies had driven a measurable change in the amount of waste generated.



2.3.3 The waste levy as a driver in Tasmania's shift to a circular economy

Beyond the targets set out in the text box above, the draft Waste Action Plan makes clear that the Tasmanian Government is committed to driving lasting change in waste management across the state, to place the community on a circular economy pathway. So while the waste levy will mainly be interpreted in relation to targets 3 and 6 above, there is merit in considering how the waste levy is placed to deliver in a more transformative sense.

The sustained capital investment in competitive resource recovery technologies and business models as are needed to achieve the stated circular economy outcomes¹¹ require that the waste levy and any additional policy measures provide a stable, consistent, and credible long-term signal to the community and associated markets for waste and resource recovery. This may be a key consideration in the evaluation of levy options, and in how the state government might explore governance arrangements used to administer the waste levy and related measures.

Placing the waste levy in the context of driving a more systemic and sustained economic transformation across Tasmania suggests a deliberative consideration of how it would best work with the other measures and stimuli put forward in the draft Waste Action Plan and arising from the National Waste Policy Action Plan.

Rather than treating the waste levy as a policy device that works in isolation, it may be useful to consider how it alleviates risk, builds resilience and reinforces and engenders a consistent narrative alongside other actions taken by the Commonwealth, Tasmanian Government, regional bodies, councils, businesses and their supply chains, and waste and resource recovery sector.

Some thematic principles that may be brought together and put into practice when applying the waste levy in a broader policy mix are set out in the text box below. However, applying these thematic principles should not be seen as an accountability that rests entirely with the Tasmanian Government – a circular economy transformation will require each sector to play its part according to its capacity to contribute and share in the benefits that may emerge.

¹¹ Draft Waste Action Plan, p. 7-8.

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Thematic principles for applying the waste levy in a Circular Economy policy mix

- Contribute to a stable investment environment The waste levy is a market instrument applied at a tonnage scale, but its repercussions need to be considered at the capital investment scale if it is to attract new market entrants and their commercial capabilities. Waste levy settings including the way that the instrument works with and reinforces other measures, will be more efficient if they support a stable investment environment over multiple decades.
- 2. Enable support for innovative responses from business The waste levy will work more efficiently as a price signal if other barriers to the desired economic transformation are confronted in a coordinated fashion. There is a prime opportunity to coordinate closely between policy and strategy development arms and local service delivery arms through integrated planning, program co-delivery, and shared investment models facilitated by regional bodies. Ideally this approach will involve waste and resource recovery sector partners, and but will also drive innovation in industry clusters that may need support and guidance on the roles and opportunities at hand. While the waste industry is a major conduit for recovery outcomes, the wider productive economy ultimately carries the cost of the waste levy and will need to spearhead waste avoidance and the creation of new markets.
- 3. Enable support for sustainable procurement and consumption The shift to the circular economy requires each link of the supply chain and consumer sectors to play their part, as the options available to each link for using materials more efficiently will in part depend on the decisions made further up and down the chain. Given that consumers are less likely to be responsive to the waste levy as a price signal, other measures are needed to bring them on the journey to the circular economy. This may involve a willingness to cultivate norms, mindsets and behaviours that align with the vision set out in the draft Waste Action Plan.
- 4. Improve data quality for better decision making Evaluating the effectiveness of the waste levy and gauging the need to revise its settings rests upon a better quality of data than is currently being captured. While acknowledging the need to protect private and commercially sensitive data, all stakeholders seeking to drive the circular economy stand to benefit from an environment that fosters the sharing of relevant information. 'Good faith' information sharing is itself a public good that can help each party understand and act on their accountabilities and opportunities, and build greater resilience and efficiency into waste and resource recovery markets.
- 5. Deliver an inclusive circular economy transition The shift to the circular economy presents the opportunity to unite Tasmania under a common cause aligned with environmentally sensitive development, through the judicious investment of waste levy revenue across the community. While other states have chosen to exempt remote and marginal settlements from the waste levy, the current model for Tasmania is more inclusive. Granted the acceptance by remote locales to play a role in contributing waste levy payments, there is a reciprocal onus to ensure those communities are not disadvantaged or left behind in the transformation to an economic model with a lower resource footprint. Ensuring these settlements are assisted via appropriate investment will help bring all Tasmanians together under the Waste Action Plan, consistent with themes of unity set out in Brand Tasmania's *Strategic Plan.* * It will also help avoid any regressive outcomes that may arise from applying the waste levy across all populations and businesses.

^{*} Brand Tasmania, *Strategic Plan 2019 – 2024*, p. 5, 8.



2.4. A summary of public benefits intended in introducing the waste levy

In committing to introducing a waste levy, the Tasmanian Government seeks to realise a number of benefits on behalf of its community. These benefits are designed to improve the way the waste and resource recovery sector operates, extend the value of resources and materials circulating through the economy, support innovation, and help protect the environment and the community from the adverse effects of prevailing waste management practices.

These benefits align with the drivers set out in the draft Waste Action Plan, but can also be framed against areas listed in the Public Benefit Test section of the guidelines as set out below.

Area of benefit	Rationale
Promotion of competition	The introduction of a waste levy supports competition by assisting services (e.g. recycling and organics processing services) that have a lower social cost and fewer externalities to compete with landfills.
Address externalities that affect community welfare (e.g. noise levels or risks of motor accidents)	Landfills are associated with a range of impacts – local gas and leachate emissions; greenhouse gases; odour; vermin and litter; diminished amenity – that may be incompletely addressed via regulation (variously due to the cost burden of regulation or the inability to precisely predict future costs and risks).
	In positioning alternative services to directly compete with landfills, it provides a means for waste generators to select options that entail lower risks to the environment. This may be particularly relevant for diverting organic and putrescible materials; heavy metals; halogenated compounds; and other known environmental contaminants.
Encourage the development of import replacements	A waste levy will also support the improved capacity for products and commodities recovered from the waste stream to compete with imported virgin materials.
	Through the National Waste Policy Action Plan (2019), ¹³ the Commonwealth, state and territory governments (including Tasmania) committed to a ban on exporting recycled materials including tyres, paper and cardboard, plastics and glass unless they have been processed into a value-added material. In restricting this free trade, there is a need to ensure recycled products can compete against virgin material substitutes.
	A waste levy can fill this role in part by allowing recyclers to set a higher gate fee to cover a greater proportion of their operating costs. This then allows the recycler to lower prices for its recovered commodities or invest in equipment to produce more refined products.

2.4.1 Public Benefits in introducing a waste levy¹²

¹² The benefits listed here are a subset of public benefits set out in *Legislative Impact Guidelines*, p. 21, chosen for their relevance to a waste levy.

¹³ Commonwealth Government, 2019, National Waste Policy Action Plan, p. 6.

https://www.environment.gov.au/protection/waste-resource-recovery/publications/national-waste-policy-actionplan

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Foster innovation and business efficiency, especially where this results in improved competitiveness	The introduction of a waste levy is anticipated to stimulate improved business efficiency, particularly from councils and their recycling service providers. In recent years, elevating waste management costs and the need to drive their recycling service providers towards improved outcomes has led interstate councils to undertake grouped (collective) procurement of recycling services. This approach has meant that councils can offer a volume in waste material and business turnover to recyclers and organics processors at a scale that accords with investing in better technologies and outcomes. (Prior to these price shifts, many councils were relatively apathetic towards the quality of and outcomes from recycling.) The introduction of a waste levy in Tasmania is similarly expected to drive councils and their service providers to become more focused on seeking the best deal for their communities, and to place greater competitive pressure on the recycling and organics processing market. Similarly, any landfills that are able to introduce business efficiencies and innovation by virtue of diverting materials received at the gate towards resource recovery processes will gain a competitive advantage via reduced exposure to waste levy liabilities, providing the means for proactive and innovative landfill operators to lower costs while diversifying their business.
Improve the protection of the environment	 As a general principle, a foremost driver for introducing a waste levy is to reorient the balance of waste management practices away from disposal to landfill and towards other activities that are seen as involving lesser environmental harms. Most directly, this comes in the form of reducing the impacts from disposal, with recent examples of such harms including: The lateral permeation of landfill gas from the closed Cranbourne landfill¹⁴ across south eastern Melbourne suburbs in 2009, triggering widespread evacuations and a class action valued at \$23.5 m, awarded against Casey Council and the Victorian EPA The coastal erosion of a landfill at Moyne Shire Victoria, closed in 1998, leading to waste disinterred and polluting landscapes and marine ecosystems, and anticipated to cost \$20 m to resolve.¹⁵ These impacts are despite the placement of environmental permits and regulatory frameworks deemed adequate at the time of operation. Today, there are aspects of landfill management that remain only partially understood (such as the impacts of per- and poly-fluoro alkyl substances or PFAS leaching)¹⁶, carrying a potential environmental risk into the future. Less directly but of no less importance, the shift towards recycling and organics processing has the added environmental benefit of substituting for virgin materials whose extraction may involve environmental damage or the draw down of finite resources.

¹⁴ Victorian Auditor-General's Office, 2009, *Brookland Greens Estate – Investigation into methane gas leaks*.

¹⁵ <u>https://www.abc.net.au/news/2019-05-31/port-fairy-takes-steps-to-fix-old-tip-site/11159736</u>

¹⁶ <u>https://wastemanagementreview.com.au/sleeper-issue-pfas/</u>

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Implement desirable community standards	Across businesses and communities engaged with during this study, there was a strong supporting consensus for the introduction of a waste levy, notwithstanding some differences in view concerning design and implementation settings. This support was strongly aligned with a desire to derive greater value from the materials produced and shipped to Tasmania's shores, including the pursuit of local end markets. Similarly, a waste levy was seen as an appropriate means to fund a number of related priorities, such as the need to address illegal dumping. These views suggest that the waste levy accords with a shared set of standards.

2.4.2 Aligning waste management practices with Brand Tasmania

Tasmanian Government waste policy makes a limited yet pointed reference to Brand Tasmania in the draft Waste Action Plan, noting the strong recognition benefits in moving to a circular economy model.¹⁷ It is also observed that the Minister for Environment directly referenced the benefit of maintaining Brand Tasmania in the opening line of her media release, concerning the introduction of a Container Refund Scheme for Tasmania.¹⁸

In the intent to recognise and leverage the state's unique features, its industrious outlook, and the environmental values of its people, the draft Waste Action Plan and Brand Tasmania's *Strategic Plan*¹⁹ manifest a shared lineage.

There is merit in exploring these shared themes, i.e. in the way a waste levy may re-orient how Tasmania manages waste, uses resources, and relates to its natural settings, while synchronising with Brand Tasmania's mission. Some of the recognisable themes in common include:

- The intent to adopt approaches that suit Tasmania's natural advantages rather than blindly following developments on the mainland, and in doing so, underscore a Tasmanian way of doing things
- The willingness to surpass expectations of what can be achieved in a smaller and more remote part of the country with the goal to become the renewable energy 'battery of the nation' an emblematic example referenced in both plans
- The prominence of working together and achieving more through collaboration particularly at local and regional scales and across sectors (echoing the opportunity for the community to unite under common interests as noted in Section 2.3).

In speaking with stakeholders while preparing this study, there was a clear interest in having the waste levy (both as a market adjustment and as a source of stimulus funding) underpin an inclusive and broader scale interpretation of the circular economy for Tasmania. Community and industry stakeholders were willing to accept the waste levy's full application to their waste materials, but in doing so, expected reasonable support for each to play their part in the transition to the circular economy. Specific examples raised during consultation include:

¹⁷ Figure 1 on p. 12 of the *draft Waste Action Plan* recognises Tasmania's tourism brand as a beneficiary from moving to the circular economy.

¹⁸ <u>http://www.premier.tas.gov.au/releases/container_refund_scheme_for_tasmania</u>

¹⁹ Brand Tasmania, 2019, *Strategic Plan 2019 – 2024*.

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- An acceptance from more remote communities to bear the full waste levy rate on the expectation that they would have fair access to support that addresses their inherent disadvantages in accessing affordable resource recovery solutions
- A willingness from goods manufacturers to alter production methods and supply chains to lower their resource footprint and generate less waste
- An enthusiasm from the resource recovery sector to return fully usable, higher grade products back to the Tasmanian economy where possible rather than resorting to sending material outside the state to complete the recovery process
- A strong interest from regional bodies and the council sector to foster co-investment in better waste management approaches (including the cessation of illegal dumping practices) and more sustainable production models appropriate to their part of the state.

The common vein of these expressions is that, across Tasmania, stakeholders see and accept the need for a waste levy to shift the state in a direction that accords with collective, yet often unstated, values. The formation of Brand Tasmania can similarly be interpreted as an attempt to render common Tasmanian values into a recognisable form that enables focused action.

Yet along with acceptance of a waste levy, stakeholders were less inclined to accept the role of passive price takers whose singular response to the waste levy is to shift from purchasing disposal services to purchasing resource recovery services. There was a consistent interest in becoming active partners – committing to new directions, accepting reciprocal responsibilities, and sharing in achievements. Arguably, if the Tasmanian Government is able to establish a collaborative model for the circular economy that brings together the strengths of different partners (similar to the aspirations voiced in Brand Tasmania's 2019 Annual Report below) this will become a new point of distinction for the Tasmanian community to extol.

'While it is not wrong to describe Tasmania as "clean and green", it is a motto we share with other places such as New Zealand, Iceland and Costa Rica, along with businesses and city councils all over the world.

'Evolving our place-brand in this new statutory authority has meant adding important missing elements: the Tasmanian people and their values, what makes them different, and what they want to achieve together.

'But this is not about relentlessly driving uniformity either. Rather, the Tasmanian brand accommodates different expressions, while advocating for a unifying sense of purpose that can be shared by all – an overarching narrative developed through focused cooperation between the community, businesses and government.'

- Brand Tasmania, Annual Report 2019, p.9



3. Competition impacts

As set out in the introduction, in fulfilling Regulatory Impact Statement requirements, this report examines the competition impacts associated with the Tasmanian Government's decision to legislate for a waste levy. In doing so, the study helps ensure that this new legislation does not impose unnecessary restrictions on competition and complies with the principle below.

Legislation should not restrict competition or impose a significant impact on business unless it can be demonstrated that:

- c) The benefits to the community as a whole outweigh the costs
- d) The objectives of the legislation can only be achieved by restricting competition or imposing a significant impact on business.

As will be explained within this section, impacts on competition are an unavoidable aspect of a waste levy designed to embed a price signal to favour alternative waste management methods in preference to landfills. This section provides a comprehensive analysis of how a waste levy might be designed to deliver optimal competition impacts while minimising the risk of unwanted consequences, and while accounting for features particular to the Tasmanian waste market and wider economy.

Competition impacts are a requisite feature of the waste levy

The fundamental premise behind the introduction of a waste levy as a price signal, is to alter competition between landfills and other waste management options that are deemed preferable for society and more aligned to government policy.

In this light, a key decision in implementing the waste levy rests on determining a rate that achieves the desired impacts on competition at least cost to society and minimal impacts on business and community sectors. Ideally, impacts on competition will take the form of delivering public benefits as set out in the previous section as reframed as positive competition impacts in the text box below.



Competition impacts as set out in the *Legislative Impact Guidelines*

The *Legislative Impact Guidelines* provides a list of potential competition effects to assess prospective legislation against. This list is not exhaustive and a more detailed picture of competition impacts is laid out across Section 3, reflecting the intent for the waste levy's positive influence on competition in the waste and resource recovery markets.

In the interests of completeness, those competition impacts put forward in the guidelines that have most relevance to the waste levy are briefly summarised below. In each case, it is argued that a neutral or positive effect is the more likely outcome, due to features inherent to or designed into the levy instrument.

- **Restrictions to market entry** the waste levy will lower barriers to market entry by granting greater certainty in the return on investment for providing new resource recovery services to Tasmanian businesses and councils.
- Restrictions on competitive conduct the waste levy will not materially affect landfill operators', their competitors' or their customers' freedom to conduct trade on a competitive basis, nor is it anticipated to drive or influence the market towards anticompetitive practices. The main impact will be to raise prices at the landfill gate, and drive customers to freely choose alternative options according to their preferences.
- Restrictions on product or service innovation the waste levy will favour newer technologies and business models that are able to lower the amount of waste sent to landfill (e.g. through upgrades to resource recovery services or more efficient processes to procure such services and manage contracts). Landfills that are willing to expand into resource recovery will similarly benefit compared to a 'business as usual' service model (as confirmed by landfill operator stakeholders).
- Restrictions on the entry of goods and services while market entry and service innovation in the waste and resource recovery sector is addressed above, the waste levy will lower restrictions impeding the ability of recovered products to compete with equivalent virgin materials, mainly through allowing resource recovery operators to use gate fees to balance a greater share of their operating costs.
- Administrative discretion as set out in the text below this box, the Tasmanian Government intends to apply the waste levy on a uniform basis across all landfills, with limited to no capacity to exercise discretion, bias or prejudiced judgement in how it is applied and enforced. Any compliance measures will fit within the Tasmanian Government's existing legislative framework for environmental protection.



Additional to these positive competition impacts, the proposed waste levy carries the following properties in a bid to minimise negative impacts that would otherwise take the form of an uneven market landscape:

- **Geographic consistency** It is proposed that the levy will be applied to all landfills in which waste is disposed, at a uniform rate across the state.
- Sectoral consistency It is proposed that the levy will be applied at a uniform rate across municipal and industrial sources and types of waste,²⁰ to prevent relative advantage between those that use a kerbside collection system and those that use private waste contracting services.
- Minimal use of exemptions Other Australian jurisdictions with a waste levy in place have advised that exemptions are a less preferred way of dealing with industries that may be unduly exposed to waste costs, by virtue of distortions they potentially introduce and the dampening influence they have on incentives to reduce waste disposal to landfill. The Tasmanian Government's approach is to therefore avoid the use of exemptions except where strongly justified as a necessary response to undue impacts of a levy.
- Acknowledgement of scaling impacts it is proposed that some compliance requirements (e.g. methods deemed acceptable to estimate waste volumes) will make allowances for smaller landfill operations that may be unduly impacted by compliance costs, where these allowances are unlikely to incur significant market distortions.
- **In-built indexation** The incorporation of indexation (by tethering the levy rate to fee units) is an important feature to support technology neutrality in the waste and resource recovery sector. Through indexation, newer facilities that are capital intensive and involve longer payback periods are not disadvantaged by a waste levy that would otherwise weaken as a price signal over the long term. This feature is additionally important to stabilise and maintain the levy as a working price signal.

Further to the above points, Tasmania can take advantage of the fact that it is separated from the mainland by Bass Strait, and is therefore less exposed to transboundary waste movements that may be triggered by a differential in levy settings between Tasmania and other states.

In the paragraphs below, this section deals with how a waste levy interacts with the supply and demand for different waste services in Tasmania. It is informed by extensive stakeholder consultation and examination of the use of similar levy instruments in mainland Australian jurisdictions.

Recognising three distinct waste market streams and sectors that generate waste – municipal solid waste (MSW), commercial and industrial waste (C&I waste), and construction and demolition waste (C&D waste) – this section explores the role and necessary design features of a waste levy for each sector in turn. This structured approach coincides with how waste data is typically captured and recorded across Australia, and is therefore amenable to modelling presented later in this report.

²⁰ With the exception of asbestos waste, in recognition of the absence of recovery options and the need to avoid introducing barriers to correct asbestos waste disposal practices.

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The role of effective waste regulation in supporting the waste levy

Ahead of stepping into this discussion on competition and market impacts of a waste levy, it is useful to note the importance of effective regulation in ensuring a waste levy works as intended. By design, the waste levy is proposed to be applied as a charge per tonne of waste disposed of in landfills, so that all other waste management options will become more attractive for those parties looking to discard unwanted materials.

In the absence of appropriate regulation, this will include illegal waste management practices that involve minimal private costs yet high social costs, and may therefore drive waste generators to a less optimal social outcome. For this reason, effectively legislated and enforced regulation is an absolute requirement for the introduction of a waste levy, and is an assumed condition in subsequent analyses. The text box below provides more detail on the important relationship between environmental regulation and the functioning of waste markets.

Regulation and the efficient functioning of waste markets

Appropriate environmental regulation is both an enabler of and driver of efficiency in waste and resource recovery markets. Well-crafted and applied regulation provides a number of essential functions for waste and resource recovery markets as follows:

- By forbidding uncontrolled disposal, burning, discharge into waterways, and other harmful management practices as pollution, environmental regulation mandates an appropriate level of scarcity to the activities and sites involved in legal waste management. Regulation allows a market to emerge and mature over time.
- In compelling the prevention and reduction of a range of social harms arising from waste operations, environmental permits and standards require operators to account for their market externalities. (Although past experience suggests a mixed record in balancing this burden of regulation against community safety.)
- Provided that the regulator enforces consistently and fairly and with sufficient prior notice for revision and reform cycles (in line with social norms and improving levels of knowledge), regulation can stabilise the market to grant operators confidence to invest in better processes and practices without incurring competitive disadvantages.
- Consultative and well communicated regulation may confer a more robust social licence for waste operators, supporting the political acceptance of the industry and diminishing public opposition.

Granted that favourable conditions may come through well designed and evenly delivered regulation, a waste levy relies on sound regulation for it to work as a competitive driver to improve the sector while minimising inefficiencies, distortions and adverse consequences.

Areas within the waste market that are inefficiently, ineffectively or unevenly regulated represent a weak point when overlaying a waste levy and may invite exploitation at the cost of legitimate competitors and the wider community. Environmental regulation needs to be informed by and take input from legitimate market participants, to help ensure its settings are effective without introducing unnecessary burdens.



3.1. Municipal solid waste services in Tasmania

3.1.1 An overview of municipal solid waste management practices

Municipal solid waste typically includes household and council waste and is managed by each Tasmanian council within its local government area. This responsibility typically encompasses the following services, undertaken directly by those councils or via contracting a third party:

- Provision of kerbside waste bins and collection services to council residents (typically including garbage collection, recycling collection, and depending on the council, food organics and garden organics (FOGO) collection)
- Landfill disposal services
- Sorting of recycled material into separated materials for later value-added processing or use as a commercial (manufacturing) input
- Processing of recovered organic materials into one or more useful products
- Hard waste, green waste and problem waste (e.g. hazardous household chemicals) collection services, using a booking system or on scheduled days throughout the year
- Operation of drop off centres (transfer stations, resource recovery centres and 'Tip Shops') for waste and recyclable items that are impractical to collect via kerbside collection services (with some 'Tip Shops' managed separately by charities, non-profit organisations and private enterprise)
- Services to prevent, investigate and enforce the law with respect to illegal dumping and littering activities, working in conjunction with the EPA and other authorised partners
- Management and permitting of events organisers with respect to permitted waste management activities within events held inside the council area
- Management of wastes generated by council assets (offices, parks, streetscapes etc.).

Councils also perform a wide range of supporting activities – education, engagement, auditing and data management and so on – to ensure these services are delivered efficiently and to a consistent standard. There is some potential overlap with commercial and industrial waste (C&I waste, discussed below), with respect to kerbside collection services that may be used by smaller businesses; and to kerbside collection services delivered to larger apartment blocks (in which the responsibility for waste management may fall to the body corporate rather than to the council).

In other jurisdictions, some council kerbside collection may involve the use of Advanced Waste Processing (AWP) technologies rather than landfills, although this technology is not actively referenced in the Tasmanian draft Waste Action Plan. Some AWP technologies may be considered a subset of bioenergy, which is featured as a priority in Tasmania's energy strategy,²¹ although this bioenergy focus points towards the use of wood waste, forest residues and agricultural by-products rather than the use of municipal (and commercial) wastes as feedstocks. AWP technologies are typically less preferred as a waste management option relative to recycling and organics processing by virtue of their relative position in the waste management hierarchy. The draft Waste Action Plan makes clear that there are more gains to be made in the areas of recycling and organics processing before resorting to AWP technologies that involve higher capital outlays and potentially higher operating costs.

²¹ Department of State Growth, 2015, *Tasmanian Energy Strategy: Restoring Tasmania's energy advantage*. Waste levy impact study – FINAL REPORT

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In performing the municipal waste services, councils will typically recover costs via their rates base²² with limited capacity to differentiate the liability allocated to each resident in accordance with their share of council's waste costs. For example, at best, councils may charge based on the size of bin used at each premises or in accordance with whether the ratepayer has 'opted in' to one or more voluntary services. But at present, there is no efficient and convenient means to more precisely charge individual ratepayers based on the overall volume (tonnage) of waste they generate nor their relative demand for recycling and organics processing services. For these reasons, household waste generators are relatively price insensitive in response to waste costs.

For councils, waste management is a core duty that represents a significant component of their annual operating budget. As such and confirmed during council engagement across this study, councils seek to deliver these activities efficiently on behalf of their communities. Within their waste management budgets, the provision of kerbside services typically represents the largest volumes of waste under local governments' custody (i.e. managed on behalf of residents and ratepayers) and overall costs. The introduction of a waste levy, if applied at a rate that drives councils to adopt other options competing against landfill disposal, will most keenly drive councils to review the balance of waste managed through kerbside services. Other services listed on the previous page may also be under consideration as candidates to lower costs, depending on their relative role and placement in each local government's waste management strategy.

3.1.2 Implications of a waste levy on municipal solid waste

As indicated above, the introduction of an appropriate waste levy is anticipated to drive a reexamination of kerbside disposal, recycling and organics processing services that councils deliver on behalf of their communities, in response to a change in the competitive standing of each service. For MSW, a waste levy that aims to drive kerbside recycling and organics processing in preference to landfills may drive these outcomes via two separate mechanisms:

- Where residential recycling and organics diversion already exists if the waste levy pushes the landfill gate fee to equal or surpass recycling and organics processing gate fees, councils (and regional bodies) will be driven to foster greater residential recycling and organics diversion, to lower overall waste management costs for that council.
- Where residential recycling or organics diversion does not already exist if the waste levy pushes the landfill gate fee to equal or surpass recycling and organics processing gate fees, councils will be driven to introduce recycling and organics recovery services, i.e. the levy works as a tipping point to drive councils to bring new recovery services to their communities (where such services are practical, available and affordable).

²² In some Australian jurisdictions, there has been a shift towards councils charging ratepayers a separate 'waste management charge' or similar. This serves two main purposes for councils. Firstly, it allows councils to be more explicit to ratepayers regarding the fraction of local costs that waste management contributes, including separate cost items imposed by state governments (including a waste levy). Secondly, in jurisdictions where a rate cap applies, it provides the means to reset the charge applied to ratepayers without exceeding the rate cap. This derisks council budgets during periods where waste management costs are highly volatile and uncertain, and where they lack the means to pass this volatility through to ratepayers via a capped rates framework. Waste levy impact study – FINAL REPORT



Interactions with MSW recycling services

In Tasmania, the majority of councils already have recycling services in place, so any changes in diversion of recyclable material will be achieved through the first mechanism listed above, i.e. via the greater encouragement of residents to use recycling services and reduce their reliance on garbage disposal. In principle, the greater the price differential achieved by a waste levy, the more greatly a council will be incentivised to promote and encourage recycling by its residents.

Over the medium to longer term, councils may supplement this by being more attentive in their procurement of recycling services, i.e. by pursuing better quality and/or lower risk services to mitigate against the potential of commercial failure of recycling service providers that may then lead councils to send recyclable material to landfill as a last resort. This process may introduce greater competition and innovation within the waste sector, while serving as a basis for councils to aggregate their demand as a means to apply greater competitive pressure on recycling businesses. While it is understood that collaborative procurement is practised in Tasmania, there may be increased interest in exercising this option as a device to collectively reduce risks.

Together, these influences are anticipated to drive an ongoing and moderate improvement in recycling rate across councils over successive years, with the scale and rate of improvement linked to the difference between landfill and recycling gate fees. However, this improvement will level off over time, as the effort of local and regional education and encouragement deliver diminishing returns.

Interactions with MSW organics processing services

In the case of MSW organics processing in Tasmania, stakeholder engagement reveals that a significant minority of councils presently have or are strongly considering offering FOGO collection services to their communities, either on a compulsory or on an 'opt in' basis. By the time of the planned introduction of a waste levy in 2021, up to 40 % of Tasmanian households that are practical and feasible to deliver FOGO services to, may have this service in place.²³

Depending on the levy rate adopted by the Tasmanian Government, if the waste levy pushes the landfill gate fee to exceed the cost of organics processing, this price imperative may:

- Push councils with 'opt in' FOGO services in place to switch to compulsory services representing a rapid shift in uptake of FOGO services at the local level
- Pressure councils with no FOGO services in place to adopt this service on a compulsory basis (or adopt an equivalent drop off service where kerbside collection is impractical) – representing a rapid shift in uptake of FOGO services across the state
- Drive councils to more heavily promote and encourage households to divert more organic materials into their organics collection bin in preference to their garbage bin (akin to the responses discussed above for MSW recycling) – representing a more gradual and moderate increase in FOGO collection utilisation at the household level.

²³ This estimate is based on engagement with council representatives, regional bodies, and organics processors, complemented with an analysis of kerbside service data provided by the EPA.

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Taking MSW recycling and organics processing together, the ideal levy setting would drive the competitive position of these two alternatives relative to landfill disposal such that the economically sound response from councils involves the efficient uptake and promotion of each service. However, there is also a need to avoid setting a waste levy higher than is absolutely necessary to achieve this outcome, given the potential to impose undue costs on some households – particularly those that have limited options to access resource recovery services (such as residents in remote communities or those that live on rural tenements).

Figuratively, the combination of the above MSW recycling and organics processing responses to a waste levy may be depicted as set out below (Figure 1). As can be shown in the diagram, it is anticipated that there will be clear 'tipping point' levy rates where the economically rational response of councils will be to switch to organics processing and more strongly push the use of kerbside organics and recycling collection services. Based on stakeholder views, this tipping point is expected to occur over a relatively narrow band of waste levy rates.



Figure 1: Conceptual depiction of the municipal waste sector response to a waste levy.



3.2. Commercial and industrial waste

Commercial and industrial waste (C&I waste) refers to waste materials originating from private business, non-profit, and public service activities across the state. It includes materials discarded and recovered from offices, manufacturing, factories, schools, universities, government, small to medium enterprises (SMEs) and other places of commerce, economic activity and public service delivery. Waste generated by housing, commercial development and infrastructure construction projects are treated as a separate stream in its own right, described further below (see 'Construction and demolition waste').

Based on figures supplied by DPIPWE, the C&I waste sector contributes the largest fraction of solid waste generated in Tasmania each year. The text box below provides a measure of the diversity of economic activities and points of origin for C&I waste.

C&I waste comes from a range of activities and sources

Consistent with Tasmania's diverse economy, businesses, public bodies and other organisations work with and discard materials in a variety of ways. Some indicative examples of different activities and their materials use are given below.

- **Manufacturing and supply chains** process raw inputs into intermediate and final goods, discarding offcuts, by-product, surplus goods, industrial packaging, end-of-life equipment and so on.
- **Finished goods retail and point of sale** receive finished goods, both perishable and non-perishable, then sell them with minimal additional processing, beyond item packaging. Waste may be driven due to e.g. spoilage, re-packaging, or in freeing up limited storage and sales room space for newer or in-season items.
- Manufactured on site / made to order sale of goods that receive raw materials and perform final production steps, ahead of on site sales activities. Their waste may arise from a mixture of manufacturing and retail activities (as above).
- Administration and office-based services procure and use stationery and other administration consumables and equipment to support office activities, with waste streams characterised by those consumables and end-of-life equipment, and incidental items disposed of after office workers' personal use (e.g. food waste).
- **The service economy** businesses that deliver services at various scales, wherein the purchase and use of materials is integral to that service. Their waste streams may be highly particular to each service sector (e.g. medical, fitness, tourism, etc.).

This diversity is important with respect to a waste levy, as it cannot be assumed that a given waste levy rate will carry the same commercial ramifications for different C&I waste generators. At a lower waste levy rate, a large proportion of generators may be insensitive to the intended price signal; yet at a higher levy rate, this may induce the desired response from a larger proportion of generators, with a fraction of generators critically affected in terms of the overall business cost structure.



Aside from a small proportion of C&I waste managed through the kerbside collection system (which from a data management perspective, is not easily distinguishable from MSW), businesses and other entities that generate C&I waste will either directly manage their waste or have their waste managed via a third party collection contractor.

3.2.1 Implications of a waste levy on commercial and industrial waste

C&I waste may be characterised as being generated by a wide range of sectors, with a variety of different materials presenting to landfills and other management facilities. Each business within each source sector will have its own sensitivity to waste pricing signals; its own waste composition profile exhibiting different opportunities for recycling; and its own internal and external barriers to adopting recycling practices even when economical to do so.

Further, the shift to greater recycling on the basis of its relative cost may or may not be encouraged through parties such as waste management contractors and agents. For example, proactive waste managers may seek out and propose recycling opportunities to their clients as part of their commercial duties; while others are relatively passive due to a lack of client pressure and/or an absence of viable management options to explore with their clients.

For these reasons, it may not be accurate to project a 'sharp' C&I sector response to the imposition of a waste levy, and it may be suitable to anticipate diversion triggered by a waste levy as a more gradual process that tapers off once a majority of generators are able to divert a fraction of the waste they generate to alternative solutions (see Figure 2 below).

That is, rather than expecting a widely applicable 'tipping point' levy rate to drive C&I waste diversion, a wide range of waste levy settings may stimulate greater diversion across the economy, and the challenge will be to set a levy rate that incentivises diversion across a majority of C&I waste generators without causing undue commercial distress.

Interviews with waste management companies indicate that a range of suitable waste levy rates exist, whereby recycling and organics processing will be encouraged at scale without imposing onerous hardships on the majority of businesses. This engagement additionally clarified that the rate of diversion response will broadly correlate with levy rate (up to a point) – as landfill costs escalate, the priority and urgency attached to finding a competitive alternative will rise in kind.

Related to the above, C&I waste management companies acknowledged that customers were generally price aware, and would be responsive to opportunities to save money when this is brought to their attention. Given this, there is no reason to anticipate significant delays to the commencement of C&I diversion on the introduction of a waste levy, although the scale of transition in response to a given levy setting may take place over a number of years (e.g. one to two years) as a reflection of the relative gap between landfill gate fees and alternative management costs, and potentially in acknowledgement of the time taken for the resource recovery sector to expand capacity. As a whole, the population of C&I waste generators will include earlier responders and laggards, which need to be accounted for in projecting the outcomes of a waste levy on businesses and other commercially active entities.

Finally, recovery rates from South Australia are instructive from the view that C&I waste is banned from being sent to landfill in the absence of prior separation at source. In that state, the C&I recovery rate is in the order of 85 %, which may be indicative of what could be recovered from C&I waste in South Australia via an enforcement measure. In the absence of C&I waste compositional data specific to Tasmania, this level may inform expectations of what diversion may be achieved from the C&I waste sector via material recovery in this state.





Figure 2: Conceptual depiction of the C&I waste sector response to a waste levy.

3.3. Construction and demolition waste

Construction and demolition waste (C&D waste) is a subset of commercial and industrial wastes originating from development projects including, for example, residential construction and major renovations; commercial development activity; and large infrastructure projects. Typical materials that arise from these activities include masonry (asphalt, bricks, concrete, tiles, ceramics); insulation; glazing; metals; timber; plastics, paper and cardboard; and fill material. Many of these materials are amenable to being recovered as a commercial input for future construction and landscaping projects, through relatively mature and affordable technologies.

As expected, C&D waste levels rise and fall in line with the extent of construction sector activity. It is understood that, in recent years, Tasmania has been subject to a significant construction boom in its urban centres; and is in the midst of a number of large infrastructure projects. (However, most recent waste data for Tasmania is likely to precede this construction activity.)

3.3.1 Implications of a waste levy on construction and demolition waste

In principle, many of the above materials may be handled as uniform aggregate materials, but may be commingled during on site waste management practices (e.g. handled and stored in a single skip bin), particularly where storage space is limited. Coupled to the relative homogeneity of the construction sector compared with the wide range of activities that generate C&I waste, it is reasonable to expect C&D waste to be responsive to a waste levy as a price signal.

This view is backed by C&D material recycling rates on the mainland, where C&D waste is typically a leading sector in terms of recycling rate and has been an early responder when a waste levy is introduced or significantly increased.²⁴ NSW, Victoria and South Australia data analysis and stakeholder engagement suggest price sensitive behaviours across their C&D waste sectors, based on their history of waste levy rates and their corresponding C&D diversion levels.

Granted the above, once a given landfill price threshold is reached through the introduction of a waste levy, the majority of industry is expected to transition to competitive alternatives in a short period (e.g. two years) while leaving some generators (such as small or remote operators that

²⁴ Based on an analysis of C&D waste recycling levels as reported in periodic national waste reports. Waste levy impact study – FINAL REPORT

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²⁵



face specific barriers to adjusting) continuing to rely on disposal. Thus, a waste levy is expected to be effective as a driver for lifting the competitive position of services that align with the draft Waste Action Plan targets (see Figure 3 below).



Figure 3: Conceptual depiction of the C&D waste sector response to a waste levy.

Recovery via clean fill versus reprocessed construction inputs

In engaging with industry stakeholders and the EPA, it was revealed that Tasmanian C&D waste is often diverted from being disposed of in landfill through its use as a landscaping or contouring material. In doing so, the C&D waste is no longer allocated the status of a waste material but falls under the regulatory definition of clean fill.

Unlike in other Australian states where clean fill typically refers to unprocessed materials excavated from the ground (e.g. soil; bed rock; overburden; unrefined sands and clays; or other 'virgin excavated natural material' or VENM), it is understood that in Tasmania, clean fill may also refer to inert processed aggregates including bricks, rubble, concrete and other materials generated by the construction sector. This definition introduces some unique features to the regulatory landscape for waste management in Tasmania, with implications for a waste levy.

Implications for data and waste tracking

C&D waste volumes recorded in Tasmania are considerably lower than in other states, as a proportion of overall waste volumes within the state.²⁵ While C&D waste is the largest stream in Victoria and New South Wales, the recorded C&D waste volume in Tasmania is roughly one-tenth of the recorded landfilled volume of Tasmanian C&I waste. If this differential is an artefact of data gathering methods and definitions rather than an indicator of the relative quantities of material produced, it tells us that a vast majority of C&D waste is not being picked up in standard reporting methods.

This has a bearing on any findings with respect to the impact of a waste levy on the C&D waste sector, because the diversion of C&D waste from landfill to clean fill will result in a drop in total volumes recorded, rather than displacement from disposal tonnages to recycling tonnages. It also has implications for the expedient performance against Waste Action Plan targets, given

²⁵ 2016 National Waste Report. https://www.environment.gov.au/system/files/resources/d075c9bc-45b3-4ac0-a8f2-6494c7d1fa0d/files/national-waste-report-2016.pdf

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that in other jurisdictions, the C&D sector has been an early driver of diversion activity and major contributor of performance outcomes. This impact was confirmed by stakeholders during consultation and was previously raised in earlier research.²⁶

Clean fill and illegal waste dumping practices

Clean fill is allowed to be used for landscaping or contouring purposes, so in cases where a land owner permits an owner of clean fill to spread material across their land for a cheaper price than landfilling, it would be the most economically rational course of action. According to stakeholders, this is a prevailing waste management approach for C&D waste although precise quantities relating to this practice are unknown.

As discussed with DPIPWE, it is somewhat difficult in the current regulatory landscape, except in the more egregious and obvious examples (such as where public land or third party land is involved), to distinguish the legitimate use of clean fill for landscaping purposes from the illegal dumping of inert waste. So the low volumes of C&D waste recorded may largely be explained in terms of the volumes that are diverted to various clean fill usages and possibly illegal dumping activities, both of which fall outside the reporting system used by waste depots.

If there was a commitment to effectively regulate the practice of illegal dumping in future (i.e. as part of the 'base case' conditions), then it may be assumed that a waste levy will have the effect of increasing clean fill applications without an increase in illegal dumping practices. This study proceeds with the assumption that such effective regulation is in place, as the alternative (i.e. that illegal waste disposal practices are poorly regulated) is fundamentally at odds with how a waste levy works to encourage environmentally beneficial recycling as the most economically rational response. The study team understands that there is an intent to improve the regulatory framework and enforcement of waste disposal practices in line with introducing a waste levy.

Clean fill usages as an opportunity cost for higher value reprocessing

At present, it would be difficult to quantify the economic value of clean fill, depending on the stated and actual intents of the land owner and whether the practice constitutes any tangible benefit. As such, the shift towards clean fill applications as encouraged by a waste levy will likely involve a significant loss of landfill operator revenue and foregone waste levy revenue for the state, for a limited and uncertain economic and environmental outcome.

States with a tighter regulatory definition of clean fill have been able to encourage the development of markets for recovered C&D material (i.e. to be used in future construction projects, substitutable for virgin material). In Victoria, New South Wales and the ACT, the C&D waste stream has been the earliest and best performing sector in terms of increased recycling in response to rising waste levies (with 75 to 81 % recovered). In South Australia, C&D recovery has reached 91 %, driven by a ban on unseparated C&D waste going to landfill. There is no incentive for similar businesses to set up in Tasmania while the most economical diversion or disposal option for C&D waste generators is to pay a third party to manage it as clean fill.

While Hyder Consulting²⁷ noted that some C&D recycling took place (i.e. in the form of recovery of bricks and aggregate from larger projects) in Tasmania, it was not able to provide a

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 ²⁶ Hyder Consulting, 2011, *Construction and demolition waste status report*, p. 154-158.
 ²⁷ *ibid*.

²⁷



quantitative estimate of activity levels. The report suggests that, for reasons explained above, recovery beyond clean fill applications were likely to be modest.

An additional complicating factor raised in that report, related to the above lack of competitiveness against landfilling and clean fill applications, is that recovered products are typically priced higher than virgin material (being constrained from recovering operating costs from the gate fee) and therefore lack a foothold in the Tasmanian construction sector.

Recovered C&D products will not be able to compete with virgin materials until C&D recovery operators are able to lift their gate fees, which would require both higher landfill costs and reduced competition from operators willing to accept recoverable C&D materials as clean fill. As such, the higher value products from C&D recovery are, for the most part, locked out of the Tasmanian market and are inhibited from fully contributing to the Tasmanian economy.

Separate to decisions pertaining to a waste levy, it may be valuable for the state government to gain a better knowledge of C&D waste management activities (both legitimate and otherwise) to understand the extent that regulatory action is required to deter illegal dumping (discussed further in Section 7), and to determine a suitable level and type of supporting measures to ensure that C&D waste makes an appropriate contribution to the Waste Action Plan targets while demonstrating consistency with other Tasmanian community values.

This future work would support an understanding of the opportunity cost of using C&D material as clean fill, when a large fraction of this material may be suitable to reprocess into end products that carry higher commercial utility. This accords with a stated intent of the waste levy, to maximise the value of products and materials.²⁸

3.4. Findings with regard to competition impacts

Based on the analysis set out in this section, the waste levy as proposed by the Tasmanian Government is anticipated to have both neutral and positive competition impacts.

The geographic coverage, inclusion of all landfill types, and uniform treatment across source sectors, waste types and landfills helps ensure competitive neutrality across operating landfills. The adoption of an indexed waste levy helps ensure that competitors that face higher capital costs involving longer payback periods are not disadvantaged relative to other market participants that have less capital-intensive business models.

The intended use of the waste levy is to stimulate innovation and address the market disadvantage of more socially beneficial waste management solutions. It is anticipated that this will have a positive influence on competition, provided that the waste levy works as a price mechanism to shift preferences in the waste and resource recovery market. In granting resource recovery operators greater flexibility in setting their gate fees, it also means that the waste levy may enhance the competitive position of recovered resources, compared with virgin materials whose production processes may involve a greater impact on the environment.

The introduction of a waste levy is intended to shift waste management practices away from landfills in a way that accords with Tasmanian Government waste policy as set out in the draft Waste Action Plan (to be finalised). Landfill operators do not face inherent and insurmountable obstacles in shifting their business model to become part of this transition, should they wish to.

²⁸ Draft Waste Action Plan, p. 4.

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²⁸



4. Establishing the base case for waste management in Tasmania

As set out in the introduction, part of the sectoral impact analysis component of this study requires an understanding of how the costs and benefits of introducing a waste levy compare against those of maintaining the status quo. Following standard methods recommended by the Commonwealth Government, this quantitative comparison will be achieved using Cost Benefit Analysis, with Net Present Value (NPV) serving as the principal metric for comparing the costs and benefits of each scenario.

Alongside this estimation of costs and benefits, the method used in this study will allow for a comparison of outcomes with respect to meeting the stated policy objective. Recalling from Section 2, this objective revolves achieving higher diversion rates and organics recovery rates in coming years, with a view to applying a waste levy that makes a substantial contribution to draft Waste Action Plan targets through to 2030.

Finally, the impact analysis needs to consider potential impacts on sectors that may be adversely exposed to the introduction of a waste levy. The Cost Benefit method used will lay a useful foundation to undertake this selective analysis of relevant sectors.

This quantitative method is described in more detail in Section 5 and Appendix 2. An essential starting point for the method is to adequately characterise the status quo or 'base case' for the waste and resource recovery sector, including an explicit statement of assumptions that are held constant over the analysis period (in this case, the ten year period from 1 July 2021 through to 30 June 2031. A key component of this base case is an understanding of business as usual material flows to various waste management options across the Tasmanian waste and resource recovery market, that may then be influenced through the application of a waste levy.

Data used in this analysis

In describing the base case, this study has made use of a wide range of data sources made available by the state government (DPIPWE and the EPA), regional bodies (CCWMG and NTWMG), and local government sources (mainly in the form of publicly available waste strategy documents and service pricing available online). National Waste Reports as published by the Commonwealth Government have also been used.

The primary purpose in accessing and using this data has been to prepare a statewide profile of waste management across Tasmania, such that the analysis and its outputs reasonably resemble the current state of waste management and a forward projection of this base case over ten years. However, in undertaking this stage of the study, it is clear that no definitive state scale data set for waste management presently exists, reaffirming the need for better waste data management highlighted in the draft Waste Action Plan.

The study team has resorted to constructing a Tasmanian waste management profile 'from the ground up', using state level data where it exists (as provided by DPIPWE and EPA) and supplementing with regional and local data where there is confidence that this gives a reasonable representation of the wider state geography.

National Waste Report data for Tasmania has been used only where necessary or to validate the picture generated from more localised data sources. This is because the National Waste Report has typically used information from mainland jurisdictions as a proxy for Tasmanian data where



there would otherwise be gaps – this is particularly the case for MSW, C&I and C&D compositional profiles. In the authors' view, a distinctive feature of Tasmania's waste management is that its diversion rate is significantly lower than that of the larger mainland states, such that the composition of the residual garbage component for each major stream may significantly differ between Tasmania and the mainland (i.e. all else being equal, there should be more recoverable material yet to be recycled from the garbage component in Tasmania, compared to mainland states). Tasmania is also a less urbanised state than the mainland states and has a different industrial make up, again potentially affecting the reliability in using National Waste Report data that uses other sources as a stand in for Tasmania waste data.

On the presumption that a waste levy will be legislated by the Tasmanian Government, it is likely that this will drive the need to improve data collection and reporting as part of the standard operations in administering this instrument and monitoring its effectiveness. This will provide opportunity to evaluate the effectiveness of the waste levy in future years, using a higher quality and more complete set of data assets.

4.1. Key assumptions for the base case

In setting out a base case for waste management in Tasmania, it is necessary to adopt a number of assumptions both to compensate for gaps in the data, and to simplify the analysis to a degree that makes it practical without undue loss of fidelity, relevance or meaning. These assumptions are set out in Table 1 below.

Thematic area	Assumption
Volumes of waste generated	 MSW volumes generated each year are assumed to hold steady, adjusted for population growth C&I volumes generated each year are assumed to hold steady, adjusted for growth in state product (GSP) C&D volumes generated each year are assumed to hold steady, adjusted for growth in state product (in the absence of accurate data on construction activity across the state) Note: For each of the above, the Tasmanian Government does not
	hold waste generation data to a high degree of accuracy. However, estimated generation volumes can be back calculated using data on volumes sent to landfill, and estimated recycling and organics processing rates.
Recycling and resource recovery rates	 MSW dry recycling rates from recent years assumed to be approximated from MSW recycling rates made available from a subset of councils and regions, held steady in the base case in the absence of a change in any price signals.
	 MSW recycling service uptake levels assumed to be stabilised across councils (i.e. no additional councils considering the introduction of kerbside recycling, based on high existing uptake).
	 MSW organics recovery from recent years can be derived from information shared by those councils with FOGO systems in place base case assumed to include these councils and others where

Table 1: Assumptions used in characterising the base case for waste management and resource recovery in Tasmania, including assumed drivers that influence a ten year trajectory of market characteristics.



Thematic area	Assumption
	 FOGO is under consideration to adopt in the coming year (assumed to shift to compulsory services by FY2022). C&I recycling rates are not presently recorded at a state scale, but may be derived from total recycling volumes (collated by EPA) and adjusted to reflect MSW recycling levels. C&I recycling rates assumed to hold steady in the base case. C&I organics recovery assumed to comprise the majority of organics processing volumes in 2017/18 (prior to establishment of most council FOGO services), then projected forward at a steady rate into future years, in the absence of more direct sources. C&D recycling for the base case is presently indeterminate due to a lack of data, assigned a value of 'nil' in the base case and consistent with National Waste Report. (This is discussed further in this report in Section 3). C&D organics processing for the base case assumed to be nil based on limited volumes and likely preference towards clean fill.
Composition profile of waste streams, driving potential for future diversion of different commodities	 Composition of MSW disposed to landfill derived from regional and local MSW disposal profile, and used to estimate recyclable content; FOGO-suitable content; and 'unrecoverable' content (i.e. content unlikely to be recovered in response to a levy). Composition of MSW recycling assumed to be approximate to recyclable fraction of MSW disposed in landfill. Due to absence of C&I compositional data at state and regional levels, C&I compositional data will use estimates from National Waste Report data sets. C&D compositional data assumed to be roughly approximated by C&D compositional profile set out in Hobart Waste Strategy (with minor alterations).
Value of recovered materials	 Organics processing products assumed to be valued according to current market rates for MSW derived organic product. MSW recycled products assumed to involve separation into constituent materials (i.e. plastics separated by resin code; paper and cardboard into separate fibre products) – while this may not reflect current practice it is assumed that recyclers will move to this model, driven by commercial necessity and potential funding from Commonwealth Government. Plastics, paper, tyres and glass assumed to be sold into Australian markets (consistent with National Waste Policy Action Plan) across the study timeframe. NB: While assumed pricing will reflect current prices issued in market bulletins, this is an area of considerable uncertainty. C&I recycled product assumed to be similarly separated into constituent materials, but able to attract higher prices by virtue of being cleaner and higher grade materials.
Regulation	 As stated in Section 3, regulation is assumed to be adequate to allow for the waste levy to work as a price signal to favour legitimate alternatives to landfill rather than illegal activities. No other changes to regulation or standards assumed to be in place, that would otherwise alter the relative costs of services. This includes legislation to introduce a Container Refund Scheme

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Thematic area	Assumption
	 while the Tasmanian Government commits to introduce a scheme by 2022, there is presently insufficient detail to accurately predict its impacts on a waste levy (see Section 6.6 for a high level discussion of potential interactions).
Other assumptions	• Collection costs between landfills, MRF processing and organics processing facilities assumed to be of a similar level and priced into existing service arrangements.
	All other financial costs assumed to remain stable in the absence of information to the contrary.

4.1.1 Impact of Covid-19 outbreak and consequent impacts on economic activity and waste management practices

The timing of this study during the Covid-19 pandemic presents a number of challenges and uncertainties with respect to the projection and modelling of waste generation practices.

In a typical setting, past waste generation rates and recovery rates are examined and used as a basis to develop trendlines spanning the period of study (in the current case, from 2021/22 to 2030/31). In the absence of unusual events, upheavals and technological and economic change, historic waste data is a reasonable indicator of future waste volumes and management patterns.

The Covid-19 outbreak disrupts this stable link between past and future. Its most general effect will be to depress economic activity across the state in the near term, potentially involving a protracted (i.e. multi-year) period of recovery. This will affect total waste generation, particularly C&I waste and C&D waste levels. MSW levels are also likely to be impacted through altered population levels (due to Covid-19 tourism impacts) and deferred household consumption.

However, some other effects may be particular to waste management patterns across the state, with both short and long term repercussions that lack sufficient precedents to allow their confident inclusion in modelling efforts. Some effects may include (although are not limited to):

- Depressed volumes of C&I office waste, due to work from home arrangements (which may potentially increase MSW levels)
- Depressed volumes of hospitality and accommodation related waste, due to restrictions on trade imposed to lower the spread of contagion
- Deferred purchasing of equipment and consumables business equipment, vehicle tyres and so on leading to an inadvertent extension of operating life for some items
- Elevated levels of hospital clinical waste due to Covid-19 testing and treatment practice
- Altered patterns in generating packaging waste due to the shift towards online purchasing.

At the present point in time, it is impractical to understand and incorporate the extent that the above (and other) effects of Covid-19 on waste management have a longer term legacy, involving a permanent shift in domestic and/or commercial activities across Tasmania.

The study team acknowledges that there is limited recourse other than to rely on past waste management data sets and accept that the Covid-19 outbreak may affect the extent that its projections will represent future waste patterns. The team additionally cautions the Tasmanian



Government and stakeholders to monitor Covid-19 impacts on waste management over the coming years and adjust policy and business decisions as necessary.

One area where the Tasmanian Government has announced a likely adjustment to state forecasts relates to the projected growth in economic activity for FY2020.²⁹ In line with this recognition, the study team has made minor adjustments to economic growth rates used as a factor for projecting waste volumes from 2020/21 onwards (i.e. accounting for a period of decline and recovery in economic activity levels over the ten year study timeframe).

4.2. Annual volumes of waste generated in Tasmania

Based on information supplied by the Tasmanian Government on wastes sent to landfill, recycled and processed for organics recovery in previous years, the study team was able to derive figures for total waste generation across the state. Further analyses allowed for an estimate of total waste generation across MSW, C&I waste and C&D waste (Figure 4).



Figure 4: Projected 'base case' volumes of waste generated from 2021/22 to 2030/31 (as tonnes per annum). Figures for C&D waste may involve an element of under reporting (discussed elsewhere in this report, Section 3).

These figures are somewhat crude estimates due to the source data available but are deemed adequate for the needs of this study. In particular, because this process involved simple projections based on population and state economic activity data, it is reasonable to expect a degree of inter-year variation in future actual data, relative to this more stable projection model.

²⁹ On 15 May 2020, Premier Gutwein released a media statement noting that, while Tasmania's GSP had grown by 3.6 % in 2018/19, a decline of 1.75 % was forecast for 2019/20. No projections were given of future years. <u>https://www.coronavirus.tas.gov.au/media-releases/tasmanias-economic-and-fiscal-update-report-may-2020</u> Waste levy impact study – FINAL REPORT September 2020



4.3. Base case recycling and recovery rates

4.3.1 Municipal solid waste recycling, organics processing, and disposal

Drawing on waste generation figures as set out above and on recent recycling rates published at regional and local levels, the study team applied an estimated recovery rate of 30 % aggregated across all Tasmanian municipalities. Based on historic and projected uptakes of FOGO collection (or garden organics only) systems across a number of councils, a model of base case FOGO adoption was also prepared.³⁰

It is estimated that this FOGO collection service uptake comprises up to 40 % of all premises that are practically able to access kerbside organics collection, recovering organics at a rate of 60 % of the available organic material. (Note that this does not presume these organics collection systems to be in place, but rather proposes that this is a reasonable base case scenario for the 2021/22 - 2030/31 period.)

The projected trajectory for MSW recycling, organics processing and disposal to landfill is shown below (Figure 5). The organics processing component is estimated as accounting for just under 10 % of the total MSW volumes, bringing the overall recovery rate to just under 40 %.



Figure 5: Projected 'base case' volumes of MSW sent to landfill, recycled and recovered as processed organic material from 2021/22 to 2030/31 (as tonnes per annum).

There was not sufficient data to determine an underlying trend in municipal recycling and organics processing rates. While in many cases, the year on year trajectory tends towards improvements in recycling rates, recent commercial difficulties in the recycling sector (most vividly exemplified by the recent commercial failure of SKM Recycling) may reverse this trend in the short term. Owing to this lack of finer detail applicable at the state scale, the study has necessarily assumed stable recycling and organics recovery rates in the base case.

³⁰ Councils included in this assumption are: Hobart, Glenorchy, Clancy, Meander Valley, Central Coast, West Tamar, Kingborough and Launceston. While this comprises a minority of councils, this grouping leans towards the higher population councils of Tasmania.

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4.3.2 Commercial and industrial waste recycling, organics recovery and disposal

Compared to MSW in Tasmania, there is less data available on C&I waste. To an extent, this owes to the commercial in confidence nature of C&I waste management practices. Any data made available to the Tasmanian Government is on a voluntary basis, and may be hindered by the degree that collection services commingle wastes from various sources.³¹

However, in accessing total recycling volumes, landfill volumes (broken into MSW, C&I waste and C&D waste) and organics processing volumes for Tasmania in recent years and deducting estimates for MSW and C&D disposal, recycling and organics recovery from this data, an understanding of C&I waste tonnages could be generated. While this is not a preferred approach (as any errors and uncertainties may propagate and magnify with each set of calculations), the study team has limited recourse to other options.

The estimates suggest that 51.5 % of the C&I waste generated in Tasmania is being recycled, with this fraction comprising just over two-thirds as recycled material (i.e. 36 % of the total C&I waste stream) and just under one-third as recovered organic material (i.e. 15.5 % of the total C&I waste stream). As in the case for MSW, a lack of historic diversion rates precludes this study from incorporating any trend signifying a change in C&I recycling and organics processing through to 2030/31. A static diversion rate of 51.5 % has therefore been applied (Figure 6) across the ten-year projection. An assumed growth in economic activity of 2 % (as a change in GSP) has been applied, year on year.



Figure 6: Projected 'base case' volumes of C&I waste sent to landfill, recycled and recovered as processed organic material from 2021/22 to 2030/31 (as tonnes per annum).

³¹ Municipal waste may itself be reported on a voluntary basis as well, and it is generally understood by councils that it is in the broader public interest for the Tasmanian Government to have a relatively clear understanding of waste volumes generated across the state.



4.3.3 Construction and demolition waste recycling and disposal

Of the three major waste streams in Tasmania, C&D waste is least well understood. This arises from the status of inert construction and demolition aggregates as clean fill, including various masonry materials. Once treated as clean fill (for regulatory purposes), the material is no longer systematically tracked and reported as waste, except where a permitted waste depot elects to do so. Third parties that take and use this clean fill for landscaping and other purposes do not report their volume of clean fill intake as a normal procedure. Further, it is difficult to gauge the extent that the use of C&D waste as clean fill comprises a beneficial reuse, an entirely neutral activity, or a means to avoid landfill costs that despoils the Tasmanian landscape. These concerns regarding the treatment of C&D waste are discussed further in Section 3.

For these reasons, the recycling rate of C&D waste may best be described as 'indeterminate'. In the National Waste Report, Tasmanian C&D waste recycling is typically attributed a nil, negligible or 'unknown' sum.³² For pragmatic modelling purposes, this study applies a zero tonne diversion rate in the base case for C&D waste through to 2030/31 (Figure 7). As stated elsewhere in this report, there is a need for the Tasmanian Government to better understand and track the extent of C&D waste recycling, and take consideration of the present value of recovery practices relative to potential alternatives.



Figure 7: Projected 'base case' volumes of C&D waste sent to landfill from 2021/22 to 2030/31 (as tonnes per annum).

³² 2010 National Waste Report, p. 27. Tasmania's C&D recycling rate was reported as 'unknown'. In the 2013 report (state and territory fact sheet p. 2), the C&D recycling rate was reported as 2 %. In the 2016 report, the C&D recycling rate was reported as nil (p. 16).

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4.4. Compositional profiles and upper limits to materials recovery

As stated in the commencement of this section, this study makes use of compositional estimates for the waste generated, recovered and landfilled in Tasmania. Compositional information is useful in two regards in particular:

- Compositional information provides a means to estimate the value of end products recovered from the stream in question, by aggregating the value of constituent materials according to their weight.³³
- Compositional information provides an upper bound of what may be recovered from each stream both as a total potential and as additional resources whose recovery may be stimulated by appropriate waste levy settings.

With these interests in focus, the sections below grant an indication of the compositional characteristics of the waste generated and available to be additionally recovered in Tasmania. This indication is approximate due to the shortage of compositional studies that could be drawn upon for this work. Nonetheless, it will serve as a useful base to perform analyses presented in ensuing chapters.

³³ This method is suitable for a statewide net benefit calculation, and may be improved with sensitivity analysis. In a commercial setting, the value derived from a given intake of commingled recyclate (for example) will rest on a range of more complex and shifting variables including contamination levels; proximity to end markets; the degree of separation achieved by the processor (and other operating settings); and intermittent demand levels. Waste levy impact study – FINAL REPORT



4.4.1 The composition of municipal solid waste in Tasmania

In an effort to gain a sense of the valuable resources available in the MSW stream,³⁴ the study team examined a limited set of compositional data sets of MSW being sent to landfill. These data sets covered a large urban municipality and a region of councils (i.e. analysed in the aggregate). Deriving a composition from the two sets of figures allowed for the following break down as a reference composition used for MSW in this study (Table 2).

Table 2: Compositional figures used as a reference for the make-up of MSW streams sent to landfill across Tasmania (i.e. this study does not take account of regional variation).

Constituent	Proportion
Recyclable materials	20 %
	Composed of:
	Paper & cardboard – 38.5 %
	Aluminium – 3.5 %
	Steel – 5.9 %
	Plastic packaging & containers [*] – 38.8 %
	Glass packaging – 12.1 %
	Glass fines – 1.3 %
Food organic and garden organic materials	50 %
Materials not readily recovered via kerbside	30%
* Plastic packaging & containers assumed to includ	le commercially recyclable plastics only (i.e.
excludes thin films, plastic laminates and low grad	e plastic items)

While a more detailed analysis of the opportunity to extract valuable resources from MSW being sent to landfill could be useful to inform regional and local waste management strategies, it is believed that this analysis is sufficiently representative for a regulatory impact analysis. In this study, without the benefit of any longitudinal composition analyses (i.e. performed over time), it is assumed that this composition will remain largely unchanged over a ten year projection.

Combined with landfill, recycling and organics processing numbers used in Figure 5, it may be assumed that the recyclable fraction of MSW in Tasmania is in the order of 45 % of the total MSW volume, while FOGO suitable material accounts for around 35 % of the total MSW volume.³⁵ A residual 20 % covers materials that are not presently recoverable via the kerbside collection system (some of which may be recovered via other pathways that are not necessarily sensitive to landfill pricing).

³⁴ The study did not present an opportunity to perform a similar examination of a MSW recycling stream, so the recycling fraction composition was derived from the same analyses.

³⁵ The two compositional analyses were taken before an appreciable level of FOGO collection, so this has been accounted for when determining overall fractions of recyclable, FOGO suitable and 'unrecoverable' material. Waste levy impact study – FINAL REPORT

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4.4.2 The composition of commercial and industrial waste in Tasmania

As the study team was unable to draw on compositional analyses of waste from the C&I sector at the local or regional level, the study has resorted to C&I material compositions as set out in the most recent National Waste Report data made available via the EPA. Unfortunately, this profile uses national data in the absence of Tasmania-specific information, but must be used in the absence of more representative figures.

Table 3 below summarises the C&I waste composition that will be used in this report. In this table, 'unrecoverable industrial waste materials' refers to materials identified in the waste stream that are not readily recovered using mainstream commercial recycling and recovery processes found in the waste industry in Australia. At an industry level, some of these items may be readily conducive to recovery in response to an appropriate stimulus, although this deeper analysis cannot be undertaken within the scope and limits of a study taking an overview of the Tasmanian economy.

Constituent	Proportion
Recyclable materials	40.4 %
	Composed of:
	Paper & cardboard – 38.4 %
	Metal (assumed to mainly include iron and
	steel) – 8.2 %
	Plastics (of assorted types) – 48.0 %
	Glass – 5.4 %
Recoverable organic materials	25.5 %
'Unrecoverable' industrial waste materials	34.0 %
* In the absence of further detail, plastic is assumed to include commercially recyclable plastics only	

Table 3: Compositional figures used as a reference for the make-up of C&I waste streams sent to landfill across Tasmania (i.e. this study does not take account of regional or industry-based variation).

Taking a similar approach to that used for MSW, this compositional profile can combine with base case C&I waste recovery rates to estimate that the recyclable materials fraction of the overall C&I waste stream is in the order of 56 % while the recoverable organic fraction is in the order of 28 %. Thus, the total recoverable fraction is around 84 % of the annual waste generated from commercial and industrial activities.



4.4.3 The composition of construction and demolition waste in Tasmania

Similar to Tasmanian C&I waste, there is not an abundance of compositional analyses for C&D waste generated in Tasmania and this is further compounded by the information gaps relating to the composition of C&I waste being used as clean fill. (The balance between 'natural material' clean fill versus 'building aggregate' clean fill would be a useful detail for this report.)

The two sources identified in exploring the available data include the National Waste Report data sets and a composition of construction waste and other masonry items discarded in the McRobies Gully landfill operated by the City of Hobart.³⁶ The data sets were used to derive an indicative composition profile of C&D waste in Tasmania as set out below (Table 4).

In this table, the determination of what is recoverable versus unrecoverable is based on what may readily be reprocessed by the waste and resource recovery sector. However, as stated elsewhere, the predominant pathway for diverting C&D waste from landfill in Tasmania may be to use it as clean fill. Presumably, this practice faces fewer obstacles for commercial recovery than reprocessing to recover construction materials for future use. In subsequent parts of this report, where clean fill is assumed to be the main way of diverting C&D waste, the recoverable fraction is assumed to be 90 % (i.e. higher than the case where clean fill is disallowed).

Table 4: Compositional figures used as a reference for the make-up of C&D waste streams a	across Tasmania (i.e	
this study does not take account of regional or sectoral variation).		

Constituent	Proportion
Recyclable materials	85 %
	Composed of:
	Masonry (concrete and bricks) – 75 %
	Timber – 20 %
	Metal – 3 %
	Glass – 2 %
'Unrecoverable' waste materials	15 %

³⁶ City of Hobart, 2015, *Waste Management Strategy 2015 – 2030*, p. 40-41.

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4.5. Other base case attributes

4.5.1 Regional waste levy rates and volumes

As set out in the draft Waste Action Plan³⁷ and recounted in the introduction of this report, the Tasmanian Government is interested in providing for a level of continuity in regional programs and activities through an allocation from waste levy revenues. At present, there are two active regions held by and supporting local councils³⁸ – in the north and the north west of Tasmania – that draw revenue from voluntary waste levies charged at various landfill gates in their regions. It is understood that, from an efficiency and equity perspective, the government prefers for these voluntary regional levies to be discontinued in the transition to a statewide levy.

While the state government intends for this funding to continue in some form, the details of a funding agreement between the regional bodies (or potentially, constituent local governments) are yet to be substantially progressed at the time of writing.

A funding arrangement is presumed to be under consideration for other local governments that are not presently served or represented by regional bodies funded by voluntary waste levies, again with details yet to be progressed. These councils may include, for instance, those located in the south of Tasmania³⁹ and some councils that, due to remoteness or other barriers, are not able to fully draw benefit from the two regional bodies in the north and north west.

In the case of the southern councils, there are instances where some or all of those councils collectively invest in a range of initiatives and projects, with funding ultimately drawn from their standing budgets rather than a separate levy mechanism. This project by project approach represents a less formal approach to regional activity that indicates a track record of investment across southern councils, and bears some resemblance to some of the outcomes achieved in the north and north west.

The study team understands that Tasmanian Government prefers a model in which regional funding is, on an as yet unstated basis, equitable across the state. At some point, an acceptable accommodation will therefore need to be made across the various historic regional models and a future model involving an allocation out of state waste levy revenues.

Considering this commitment to regional funding, it is necessary to account for base case regional funding over the ten year study period. In engaging with regional bodies on their forward outlooks for levy-derived funding, the following 'base case' regional funding sums have been adopted in the Cost Benefit model. The combined annual sums (Figure 8) account for projected regional waste volumes and planned levy increments (with planned increases towards \$10 per tonne over the ten year timeframe) as disclosed by regional representatives. But because the southern councils' more project-oriented funding model does not involve an annual allocation from regional levies, they cannot be readily incorporated into this forward estimate.

These sums are additionally important in the model, for estimating the net cost of introducing a statewide waste levy on waste generators (i.e. accounting for the removal of voluntary regional waste levies as the statewide waste levy comes into effect).

³⁷ Draft Waste Action Plan, p. 8.

³⁸ These regional bodies – the Cradle Coast Waste Management Group and the Northern Tasmania Waste Management Group – are managed as a joint authority and as a committee under a joint authority respectively.³⁹ At present, a set of southern Tasmania councils have come together under a regional Memorandum of Understanding to collaborate on waste related issues, although they do not derive revenues from a regional levy. Waste levy impact study – FINAL REPORT

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Figure 8: Projected regional levy revenues, 2021/22 to 2030/31. This projection represents the combined sums of regional levies planned for the north and north west regional waste management bodies. The study team is not in a position to confirm or validate the basis or authority of these projections and has accepted regional funding outlooks (as stated) at face value.

Owing to the intent to expand regional funding to councils outside the two regions with a voluntary levy in place, the introduction of a waste levy will involve substantial expansion of the regional funding outlay compared with the base case funding levels depicted above. This study does not presume to replace or pre-empt a negotiation and decision making process to resolve precise arrangements and terms between regional entities and the Tasmanian Government. However, it will examine the compatibility between annual waste levy revenues and a set of potential regional and remote community funding scenarios to inform future decisions. Relevant discussions can be found in Section 7.



4.5.2 End markets for recovered materials

The current state of the global, national and state economies with respect to the Covid-19 outbreak and measures to limit its spread, combined with recent shifts in national policies that relate to the trade in recycled material, present significant challenges in estimating the value of materials that may be recycled from Tasmanian waste streams.

As stated in Section 4.1, it is difficult to anticipate the wider economic impacts of the Covid-19 virus over the next ten years, and the implications for waste and resource recovery sectors and the end markets for recovered resources. This may be a factor to accept in this study for the time being, and for future policy makers to monitor and make adjustments to in coming months and years.

Concerning policies that impact the trade in recycled material, international trade restrictions (such as the Chinese Government's National Sword Policy and others potentially enacted by other countries) and commitments to halt the export of recycled materials in the National Waste Policy Action Plan are both relevant. Together they signify a current transition point for the end markets for recycled materials, such that historic end products and end markets may be an inaccurate indicator of the base case for recycled material end markets for the next ten years.

This inflection point is widely echoed by the views shared by stakeholders during this study. There was a broad view that the preferred future for recycled materials was that they would be used in Tasmania where possible, and would involve the shift from lower grade products to higher grade products. In the first instance, this would involve incorporation of materials into existing supply chains, and the incorporation of additional refinement and recovery processes into local recycling operations.

The recently announced \$190 million Recycling Modernisation Fund suggests that the Commonwealth Government is acting on these collective aspirations.⁴⁰ Providing that Tasmanian waste and resource recovery industry operators and partners are able to capitalise on this fund, it may be reasonable to expect a shift towards higher end materials within the coming years.

This study deals with this challenge by applying projections that rely on the assumptions below:

- It is assumed that recycled materials produced by Tasmanian Materials Recovery Facility (MRF) operators will shift towards the recovery of more refined and separated products (e.g. plastics decontaminated and separated by resin code; paper and cardboard products separated by product subcategory, i.e. newsprint, magazine print, old corrugated cardboard etc.)
- It is assumed that recent and current prices for these separated materials will apply for these materials, while acknowledging that prices for recycled commodities are at an interim low point and demonstrate significant volatility
- It is assumed that the coming years will provide strong demand to use recycled materials in local (Tasmanian) and mainland Australian markets, due to demand stimuli offered by the Commonwealth Government and other Australian governments.

The impacts of introducing a waste levy in Tasmania are assumed to not significantly alter these settings, apart from driving volumes to recycling facilities on the basis of its competition effects.

⁴⁰ <u>https://www.environment.gov.au/protection/waste-resource-recovery/recycling-modernisation-fund</u> [Accessed August 2020].

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5. Assessment of options

This study is required to examine a range of waste levy settings in relation to a number of requirements that together, will help ensure a socially optimal design and implementation of the instrument. As a recap, these requirements cover:

- The need to meet the policy objective of reducing waste to landfill and increasing the amount of resources recovered (and contributing to the Waste Action Plan outcomes)
- The need for the instrument to avoid an undue cost burden across the Tasmanian economy as a whole
- The need to incur minimal adverse impacts on exposed sectors of the economy

An additional requirement for this study, namely to examine competition impacts and determine whether the legislation had an adverse impact on market competitiveness, was addressed in Section 3. In that section, it was found that the introduction of a waste levy would not adversely impact competition in the waste and resource recovery market (or other markets), based on the present design. The section noted that the power of the waste levy as a price signal ultimately rests on its ability to shift the competitive position of landfills relative to other legitimate waste management activities. This current section aims to identify settings that can fulfil that function.

Waste levy options under consideration

As set out in the introduction, DPIPWE has requested that the following waste levy settings be tested in this study:⁴¹

- 6. Fixed rate of \$10 per tonne
- 7. Fixed rate of \$20 per tonne
- 8. Fixed rate of \$60 per tonne
- 9. Fixed rate of \$120 per tonne
- 10. Stepped rate, increasing as follows:
 - \$20 per tonne for first two years
 - \$40 per tonne for two years thereafter
 - \$60 per tonne from fifth year onwards.

An additional setting of \$40 per tonne was also examined, given the need to consider \$40 per tonne as an interim step for one of the above options. In conducting comparative research for this study, these options fall within a range of waste levies that have historically been applied or are currently under consideration by mainland jurisdictions, allowing the study to draw limited lessons from elsewhere when relevant.

Engagement with stakeholders confirmed that the set of waste levy rate options under consideration also spanned a range within stakeholder expectations, allowing that different stakeholders held separate views on the suitability and effectiveness of these options.

⁴¹ These settings should be interpreted as indexed waste levy rates, expressed in 2021 Australian dollars. As the Tasmanian Government intends to legislate the waste levy with reference to standard Tasmanian Government fee units, an indexation mechanism will be hard wired into the waste levy instrument.

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5.1. Approach to options assessment

In line with requirements set out in the *Legislative Impact Guidelines*, waste levy options have been assessed in response to the requirements set out in the beginning of this section. The method adopted to perform this assessment is Cost Benefit Analysis, with outputs adapted to generate insights on policy outcomes and impacts on selected sectors arising from each option.

More specifically, a Net Present Value approach was adopted, following guidance provided by the Commonwealth Government⁴² (see Appendix 2 for an overview of the steps taken) and consistent with standard practice in determining the societal costs and benefits of legislation in development. This model was built upon three layers, i.e.:

Layer 1 – Material flows model

- Layer 2 Financial flows model
- Layer 3 Non-financial impacts model

The tri-partite model used in this study was confined to direct impacts to landfill operators and other actors participating in the market such as: competing waste management operators; C&I waste generators; C&D waste generators; and MSW generators (i.e. households). At a conceptual level, this model can be described according to the elements and relationships set out in Figure 9. In building the model, it was judged that non-financial impacts involved features that were poorly suited to the NPV method and were dealt with separately (see Section 5.3).

Where these market participants acted through one or more intermediaries (e.g. councils on behalf of households; commercial collection contractors and waste management agents on behalf of businesses), it was assumed that costs were passed through to the generator in full. These intermediaries were assumed to have a role in facilitating market efficiencies and reducing transaction costs as would be expected of an agent paid to act on behalf of the generators.

'Second order' impacts on the wider economy (e.g. changes in household income levels and their net effect on consumption) have not been factored into the analysis, to maintain simplicity and accuracy. Should these indirect impacts be of interest, previous studies have attempted to apply a range of methods to the waste and resource recovery sector.⁴³

This approach was coupled to research and stakeholder engagement processes designed to understand how different waste levy settings would influence material flows within the waste and resource recovery sector (that is, the volumes of different materials flowing to landfill, organics processing and recycling facilities). These material flows were modelled according to predicted shifts in the management of recyclable materials and organic materials suitable for recovery (relative to the base case described in Section 4), in response to different waste levy scenarios. (Section 3 sets out, at a conceptual level, how MSW, C&D waste and C&I waste streams are predicted to respond to an appropriate waste levy instrument, while the research and engagement described here sought to identify levy rates that would elicit such responses.)

Due to the different factors impacting how MSW, C&D waste and C&I waste may respond, these streams were modelled and analysed separately and then aggregated to determine the overall impacts of each option. Appendix 2 sets out further details for how each stream was treated.

⁴³ Access Economics, 2009, *Employment in waste management and recycling*.

⁴² Office of Best Practice Regulation (OBPR), 2020, *Guidance note: Cost benefit analysis*.

CIE, 2017, Headline economic value for waste and materials efficiency in Australia.

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Base case model - material & financial flows

Waste levy model - material & financial flows



Figure 9: System model used to guide development of Cost Benefit Analysis model and other methods used to compare the policy, welfare impact and sectoral cost outcomes of the different waste levy options under study. In this model, unbroken lines represent material flows while dashed blue lines denote financial flows. The top half of this figure represents the business as usual or 'base case' scenario, involving larger material flows to landfills. On introduction of a levy ('waste levy model' below), material flows, financial flows and externalities can be revised to reflect the impact of various waste levy options on the waste market and wider society.

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5.2. Administration of waste levy

DPIPWE has confirmed EPA Tasmania will administer the waste levy, including collection of landfill fees and related audit, enforcement, financial and reporting functions. In keeping with the situational analysis component of this study, the project team:

- Engaged relevant personnel within South Australian (SA) and Western Australian (WA) government departments to inform an understanding of waste levy administrative functions, tools (i.e. software) and design impacts on associated overheads.
- Engaged representatives of a prominent weighbridge software company in Tasmania (iWeigh) and Queensland Government (Department of Environment and Science, DES) personnel to further inform data and reporting options.
- Sought preliminary understanding of EPA's current landfill compliance and data capacity and forward planning around levy administration.

In keeping with the scope of this study, the estimate of annual overhead associated with levy administration excludes any consideration or estimate of costs associated with establishment and functions of a statewide governance arrangement and/or redistribution of hypothecated funds to pursue waste and circular economy programs under any finalised Waste Action plan. These additional matters are discussed briefly in section 7.6.

5.2.1 Functions to be undertaken in levy administration

Table 5 outlines the range of levy administrative functions and key tasks to be undertaken, as informed by discussions with South Australian and Western Australian jurisdictions.

Functional area	Key tasks
Administration and audit	 Track landfill volume receival data and payments from landfills Issue guidance to landfill operators Manage and administer exemptions – applications, assessments, approvals/refusals, and claims Liaise with finance and levy compliance team members Package and report landfill data for policy and program utilisation and to support public disclosures Track issuance and payment of penalties (as required) Review volumetric audits (if and as required)
Compliance	 Assess and apply risk ratings to all landfills – lower risk sites visited less often Conduct site visits to each landfill (once per quarter) Verify performance against standards, guidelines, exemptions, conditions (on case by case) Liaise with administration and audit team – follow up data anomalies / abnormalities to inform any additional actions

Table 5: Functions and tasks required in administering a waste levy instrument in Tasmania.



Functional area	Key tasks
Finance	Liaise with administration and audit team members
	 Issue monthly invoices and track payment
	 Issue invoices and track payment of penalties for non-payment in line with set penalties under regulation
	 Issue invoices and track payment of other penalties (i.e. mis- reporting) in line with set penalties under regulation
	 Report monthly revenue to Department and Treasury
	 Annual reporting (data compilation and review) to inform Department and Treasury

In keeping with DPIPWE's stated preference, current voluntary data provision (from some landfills) and the South Australian and Queensland approach, the waste levy is proposed to be collected on a monthly basis (rather than quarterly, as is the case in Western Australia).

The time lag between the end of a levy period, submission of landfill weighbridge (or similar) data to the EPA and eventual receipt of payment into a relevant account held by the EPA is expected to be up to two months. Typically (based on SA and WA practice) landfill operators have up to 28 days to report waste volumes to the EPA, and would then have a thirty day payment transfer period following issuance of a waste levy invoice by the EPA. Following an almost identical timeline, the Queensland (DES) provides some useful information on the reporting process and associated responsibilities of landfill operators subject to a waste levy.⁴⁴

WA, SA and Queensland all utilise dedicated software systems to minimise any internal manual handling of information provided by individual landfills on waste volumes. A best case scenario for Tasmania is to adopt a consistent interface between landfill weighbridge systems⁴⁵ and internal EPA client / data management systems to reduce administrative overheads and reporting errors for operators and government. The text box below provides additional information on the Queensland approach to reporting via a dedicated, centralised data portal.

On 1 July 2019, Queensland's waste levy commenced. To provide a central focal point for levy and data reporting, the Department of Environment and Science (DES) upgraded its Queensland Waste Data System (QWDS) into a web-based reporting system with a user-friendly secure portal.

QWDS provides the portal for operators to submit their monthly summary and detailed data returns and monitor their levy liabilities and payments, among other functions. Engagement with iWeigh, a weighbridge software provider utilised by the majority of large landfills in Tasmania, suggested that iWeigh was capable of aligning with reporting categories and requirements and providing detailed data returns through CSV file uploads.

The QWDS User Guide provides a useful reference to how individual landfills might navigate a centralised portal system.

See: <u>https://www.qld.gov.au/environment/pollution/management/waste/recovery/data-reports/qwds</u>

⁴⁴ See guidance on requirement for operators in the levy zone, last accessed 30 August 2020: <u>https://www.qld.gov.au/environment/pollution/management/waste/recovery/disposal-levy/operators/levy-zone</u>

⁴⁵ A number of larger landfills in Tasmania already utilise iWeigh weighbridge software to voluntarily report. The system appears to have strong integration options <u>http://www.iweigh.com.au/iweigh/</u>

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Benefits of minimal levy exemptions on administration overheads

Overheads associated with the management of exemptions to the waste levy are a key consideration around administration cost. Experiences in other jurisdictions suggest exemptions create reporting, audit and enforcement complexities which can distort the influence of the waste levy, and encourage 'grey areas' with unintended consequences. Managing exemption related processes has translated to significant administrative burdens (costs) in SA and WA.

WA personnel suggested that administration of exemptions represented 50 % of their ongoing workload, representing approximately forty exemptions across seventeen active landfills and other premises actively transitioning to resource recovery. The SA experience was similar, with particular issues around tracking and accounting for resource recovery activities occurring on landfill sites (seeing a push toward the introduction of mass balance reporting); and issues surrounding the mixing of non-metropolitan and metropolitan sourced waste at large sites outside the metropolitan area (given differential levy settings).

Benefits of maximising automated weighbridge reporting

Information provided by EPA and stakeholders suggest eight Tasmanian landfills operate a weighbridge. These are the larger landfills and include the recent investment made by West Coast Council to install a weighbridge at their landfill. This should enable efficient accurate reporting for approximately 80 % of the material currently reported as disposed to landfill.

A number of stakeholders put forward the view that a weighbridge should be a key requirement for an operating landfill in 2020, while others, including representatives of EPA Tasmania, have suggested alternate measurement and reporting methods may need to be employed (at least initially) at sites operating without a weighbridge. Suggestions for alternate methods include:

- Development of standard 'waste density' values which allow estimated volumes of each waste type (determined at the landfill gate) to be converted to weight for charging
- Investment in and utilisation of mobile weighing systems
- Population based estimates (as used in SA) for small landfills serving a local community.

By way of contrast, the introduction of a waste levy in Queensland on 1 July 2019 also established transitional requirements for weighbridges to be installed at waste disposal sites by:

- 1 July 2019, for sites disposing of more than 10,000 tonnes per annum
- 1 July 2021, for sites disposing between 5,000 and 10,000 tonnes per annum
- 1 July 2024, for any other operator, with sites receiving less than 2,000 tonnes per annum able to apply for exemptions until 1 July 2029.

DPIPWE and EPA will need to work through a preferred approach, following stakeholder feedback, to strike the right balance to achieve reporting accuracy and efficiency, and to manage cost impact. DPIPWE may also wish to follow the lead of SA and Queensland in requiring annual volumetric surveys to be undertaken and submitted by landfill operators to provide an additional reporting reference around landfill cell and stockpile volumes.⁴⁶

⁴⁶ Queensland list their requirements for annual volumetric surveys noting smaller sites (less than 2,000 tonnes) are exempt. See <u>https://www.qld.gov.au/environment/pollution/management/waste/recovery/disposal-levy/operators/levy-zone/survey</u>

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5.2.2 Resourcing

Based on a preliminary understanding of current EPA interactions with the landfill sector and a review of team structures supporting waste levy administration in SA and WA, this study has assumed an additional levy administration overhead to meet the follow requirements:

- 1 x Coordinator and 1 x Officer roles across Administration, Audit and Finance tasks (see Table 5)
- 1.5 x Senior Officers across Compliance tasks (see Table 5)
- New client / data management and reporting portal system to efficiently leverage weighbridge reporting software (where available) and enable streamlined (volume) data to assist invoice and payment management and reporting functions.⁴⁷

The estimated cost of administration of the waste levy is \$0.5 million per annum, applied consistently across all options.

In comparison to SA and WA this study has assumed a relatively streamlined administrative overhead in keeping with previously discussed design principles and stakeholder feedback supporting:

- Application of a consistent levy rate across streams with minimal exemptions
- Consistent application to all landfills throughout Tasmania.

Notwithstanding the estimate provided above, given the timing and scope of this study there was limited opportunity to work with EPA and undertake a capacity and capability assessment to further refine resourcing needs.

Further work may be warranted over the coming months following additional consultation on the proposed waste levy and its implementation. While not included at this stage, further change management support may be needed to support the landfill sector and waste generators leading up to and during the first twelve months of implementation.

⁴⁷ This includes an estimated development and maintenance cost spread across the ten year projection. Further investigation of the Queensland QWDS system is suggested to further inform service needs and refine costs. Waste levy impact study – FINAL REPORT September 2020

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5.3. Results

5.3.1 Performance against policy objective – resource recovery rates

Recalling from Section 2, the waste levy is to be assessed in its achievement in relation to two targets set out in the draft Waste Action Plan. While it is not required that the waste levy single-handedly achieve these targets, it is reasonable to expect that substantial progress be made towards these targets through the introduction of a waste levy.

The first of these aims, target 3, is that Tasmania *achieve a 40 % average recovery rate from all waste streams by 2025 and 80 % by 2030*.

Using the methods set out in Appendix 2, material flows and (by extension) recovery rates were estimated for the base case and each of the waste levy options from 2021/22 through to 2030/31. This process began with projecting recycling rates and organics processing rates for MSW, C&I waste and C&D waste streams and then aggregating accordingly. Figure 10 sets out the projected trends for each waste levy and the base case.



Figure 10: Recovery rate trend for each waste levy option, 2021/22 to 2030/31. Note the line for the \$60 per tonne waste levy rate (purple) is partially obscured, by the \$120 per tonne waste levy rate (green) and the \$20-\$40-\$60 per tonne waste levy rate (dark blue).



General observations from these projections include:

- All scenarios, including the base case, meet the 40 % recovery target for 2025. This is consistent with recent National Waste Report data that presented Tasmania as having a recovery rate of 49 % in 2016/17.⁴⁸ However, this data (and reference data used for the projections in this analysis) were prior to international trade decisions that have since negatively impacted the recycling sector. The current recovery rate, which does not yet have data collected and processed, could possibly be less than 40 %.
- Of the different scenarios, the \$40, \$60 and \$120 per tonne fixed rate and the ramped rate options significantly lift above the 40 % target for 2025.
- In relation to the 80 % target set for 2030, no scenario tested is projected to meet that target. This suggests that, applying a waste levy as the only variation on the base case, will not be a sufficient policy intervention to attain this draft Waste Action Plan target. Other measures are likely to be necessary.
- Of the waste levy options tested, the \$60 and \$120 per tonne fixed rate waste levies and the ramped rate (i.e. \$20-\$40-\$60 per tonne) waste levy place the Tasmanian Government in the best position to attain the 2030 recovery rate target, falling short by up to 11 % of the target recovery rate.
- All scenarios indicate a gradual flattening of resource recovery rate improvement over time, as 'early wins' become exhausted and the price signal no longer draws additional material from landfill disposal to diversion activities.
- There are diminishing returns with respect to increasing the waste levy from \$60 per tonne to \$120 per tonne, under the present assumptions which do not entail other interventions that may address barriers unrelated to a price signal. This parallels trends observed in the National Waste Report series (2010 – 2018) for other jurisdictions.

Findings in relation to impacts on resource recovery rate

To summarise the above analysis in relation to the resource recovery component of the policy objective (i.e. relating to target 3 of the draft Waste Action Plan):

- 1. All waste levy rate options (and the base case) indicate their potential to significantly contribute to the 2025 recovery target of 40 % recovery.
- 2. The \$60 per tonne, \$120 per tonne and ramped rate (\$20-\$40-\$60) per tonne waste levy rate indicate potential to significantly contribute to the 2030 target of 80 % recovery, although additional measures are likely to be warranted.
- 3. Other scenarios (including the base case of no waste levy) predict a moderate or weak performance with respect to positioning Tasmania to reach the 2030 recovery target.

⁴⁸ *2018 National Waste Report*, p. xii. This report uses data from 2016/17. No attempt has been made to reconcile this published recycling rate with the analysis performed in this study.

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5.3.2 Performance against policy objectives – organics diversion results

Additional to the recovery rate targets discussed above, the waste levy was assigned the policy objective of contributing to target 6 of the draft Waste Action Plan. Target 6 aims for Tasmania to *reduce the organic waste volume sent to landfill by 25 % by 2025 and 50 % by 2030.*

Recalling from Section 4, the method used in this study allowed an estimate of the processible organic fraction of MSW, C&I waste and C&D waste, both in terms of total volumes of each stream and as a fraction of each stream being sent to landfill. Using the material flows method as set out in Appendix 2, the model was used to track decreases in volume of the organic fraction being sent to landfill for each waste levy scenario relative to the base case. The results of this procedure are set out in Figure 11 below.

(Note, for the above target, the 'reduction by 25 %... and 50 %...' is interpreted in this study to be with reference to a baseline projection for years 2025 and 2030, not with reference to the organic waste volume being sent to landfill at the time the Waste Action Plan was drafted.)



Figure 11: Reduction in organics to landfill, 2021/22 to 2030/31. Note the line for the \$60 per tonne waste levy rate (purple) is partially obscured, by the \$120 per tonne waste levy rate (green) and the \$20-\$40-\$60 per tonne waste levy rate (dark blue).

General observations from these projections include:

- The 2025 target of achieving a 25 % reduction in organic waste volume sent to landfill is not predicted to be met for scenarios involving a waste levy rate of \$10 per tonne, \$20 per tonne or \$40 per tonne. These same scenarios also predict that those levy rates will not meet the 50 % reduction target set for 2030. Each scenario indicates a quite weak response in terms of organic waste diversion, and it is not clear that additional measures would be adequate to make up the shortfall of 25 % to 40 % below the 2030 target.
- Theoretically, there may be a basis for additional organic material diversion with these lower waste levy scenarios in place, however this diversion may be driven by other factors (e.g. corporate citizenship or council waste management goals) that are



independent of the introduction of a waste levy as a price signal (and are therefore not amenable to modelling of the levy as an economic stimulus).

- The other three scenarios involving fixed waste levy rates of \$60 per tonne and \$120 per tonne, and a stepped rate (\$20-\$40-\$60) are projected to meet both the 2025 and 2030 targets. Modelling suggests that the three scenarios could involve achievement of a reduction in organic waste volume to landfill towards 60 % by 2025, driven by urgent council progress towards compulsory FOGO collection systems and industrial organics processing from material diverted from the commercial and industrial sectors.
- Granted that this projection relies on industrial waste composition data derived from national data sets, it would be appropriate to confirm that a sizeable organic material volume is present in the C&I waste stream that presently goes to landfill.

The draft Waste Action Plan commits the Tasmanian Government to develop an Organic Waste and Resource Recovery Strategy, under a broader intent to support resource recovery from industry.⁴⁹ Similarly, the same section identifies the opportunity to implement FOGO collection across the state. These may provide suitable settings to ensure that the waste levy is best placed to contribute to Target 6, by addressing the separate obstacles that remain.

Findings in relation to impacts in reducing organic material sent to landfill

To summarise the analysis in relation to the reduced organic materials to landfill component of the policy objective (i.e. relating to target 6 of the draft Waste Action Plan):

- The \$60 per tonne, \$120 per tonne and ramped rate (\$20-\$40-\$60) per tonne waste levy rate indicate potential to significantly contribute to and exceed both the 2025 and the 2030 targets for reducing the volume of organic material sent to landfill by 25 % and 50 % respectively.
- The other scenarios with waste levies at \$10 per tonne, \$20 per tonne and \$40 per tonne do not appear to set a strong enough price signal to meet either the 2025 and 2030 targets.

Findings in relation to the stated policy objective

- Waste levy rates of \$10 per tonne, \$20 per tonne and \$40 per tonne are, based on the modelling and projections conducted, poorly placed with respect to meeting the policy objective and driving positive competition in the waste and resource recovery sector.
- Fixed waste levy rates of \$60 per tonne and \$120 per tonne, and a ramped waste levy rate lifting from \$20 to \$40 to \$60 per tonne are, based on the modelling and projections conducted, well placed with respect to meeting the policy objective. The analysis suggests that these options are effective drivers of competition aligned to Tasmanian Government policy.

⁴⁹ Draft Waste Action Plan, p. 15-16.

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5.3.3 Net costs and benefits across Tasmanian society

The second requirement of the waste levy to test through the Cost Benefit Analysis relates to its net costs and benefits across the Tasmanian economy. These net costs and benefits are to account for all of the significant effects arising from the introduction of the waste levy, including diversion of waste from landfill to various alternatives, that have a wellbeing impact.

In simple terms, this process involves tallying up the extent that the Tasmanian community is 'better off' due to the introduction of the waste levy legislation over a given period (i.e. nominally ten years after its introduction, as is standard for the method), expressing this result in monetary terms. This figure is then altered to subtract a tally of the extent that the community is 'worse off' due to the introduction of the legislation over that same period. This tallying up of costs and benefits can include all aspects of public wellbeing – not just financial aspects such as changes in the prices of goods and services. These costs and benefits are discounted (in the sense that they are reduced in value), according to the extent that they occur further into the future.

In the first instance, it is preferred that the net effect of the legislated waste levy across the state be positive, i.e. on balance, the community is better off (i.e. in net terms) in introducing the legislation compared with the situation of leaving things as they are ('the base case').

If the net effect on the economy is negative, this may also be deemed acceptable in light of any public benefits that arise from the legislation, although this determination requires that the Tasmanian Government navigate through and account for significant public welfare trade-offs.

The Net Present Value method, as used in this study and applied as set out in Appendix 2, is an accepted method for characterising the predicted costs and benefits of a policy intervention, including a legislated waste levy mechanism. In applying this method over the 2021/22 to 2030/31 period and using an appropriate discount rate,⁵⁰ the results in running this method on the waste levy options are set out below (Figure 12).

In this figure, NPV values as expressed in 2021 Australian dollars, are relative to the base case – that is, base case NPV values have been subtracted from the NPV calculated for each waste levy scenario. Recalling from the paragraphs above, it is desirable that scenarios involving the introduction of legislation return a positive NPV value, to have confidence there is a greater benefit to the community (i.e. the community is 'better off') in adopting the waste levy compared with not adopting the levy.

It is also useful to understand, albeit of secondary interest, which options generate the highest positive NPV results. In very generalist terms, a higher NPV result reflects a greater overall benefit across the community. However, there may be distributional effects (e.g. some sectors greatly benefit while involving unacceptable and inequitable costs to other sectors), that need to be taken into account to ensure this is the preferred option. These distributional effects are explored later in this section.

⁵⁰ A standard discount rate of 7 % per annum was applied in all NPV calculations unless where otherwise stated (e.g. when undertaking discount rate sensitivity analyses as set out in the next section of this report). Waste levy impact study – FINAL REPORT

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Figure 12: Net Present Value results for each waste levy scenario, relative to the base case (no statewide waste levy introduced). Monetary value (y axis) uses 2021 Australian dollars as the unit of value. A higher value reflects a greater net benefit for society over the ten-year period.

Notable findings from this analysis include:

- All of the waste levy options generated positive NPV results relative to the base case, suggesting that the overall effect on Tasmanian society will be beneficial (subject to impacts that may play out at lower societal scales, to be examined in later sections).
- Waste levy rates set at \$60 per tonne and \$120 per tonne generate the highest NPV scores, although the impost on waste generators (to be explored below) when using the \$120 per tonne will clearly be greater than for the \$60 per tonne waste levy.
- The NPV score for the ramped rate waste levy scenario is somewhat less than the scores for the \$60 per tonne and \$120 per tonne scenarios. This is because i) less material is being diverted from landfills and converted into useful resources; and ii) this difference in diversion takes place earlier in the analysis, when the levy sits at \$20 or \$40 per tonne.⁵¹
- The NPV score for the \$40 per tonne waste levy occupies an intermediate range, which is
 reflective of the finding that this levy rate is expected to marginally introduce changes in
 waste management practices in the MSW and C&I waste sectors.
- The NPV scores for the waste levy options set at \$10 per tonne and \$20 per tonne, while
 positive compared to the base case, are modest. They amount to about one-quarter of
 the NPV scores generated for the \$60 per tonne and \$120 per tonne waste levies. In the
 absence of other drivers, they could be interpreted as waste levy settings with significant
 benefits foregone compared to the higher waste levy rate scenarios.

In constructing the NPV model, the scoring factors are significantly weighted towards economic rather than environmental and social variables. This is not because economic costs and benefits are the most significant with respect to the impacts of a waste levy, but because they are most readily numerated and rendered into a monetary value. With this in mind, the results indicate

⁵¹ To expand on this point, if the differential between the ramped rate and the \$60 per tonne and \$120 per tonne waste levy outcomes occurred later in the ten year analysis period, the cumulative effect of the discount rate would have significantly eroded this difference.

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that the introduction of a waste levy will have a stimulatory effect on the economy, in net terms. Environmental impacts of the different waste levy options are discussed as a separate matter under the heading of 'Non-financial impacts' later in this section.

The net positive NPV scores in the figure above are mainly driven by the recovery of materials from the C&I waste sector, which are expected to comprise the largest proportion of material diverted from landfills, and attract the highest commodity values (per tonne recovered) by virtue of their relative uniformity and purity. Materials recovery from the municipal sector is also a significant driver. These two benefits of diversion mean that NPV scores have correlated with performances against policy objectives.

Under default assumptions, the C&D waste sector is projected to undergo diversion from landfills to clean fill usages, pending a suitably stimulating waste levy. The net value of this change is difficult to determine. As mentioned in Section 3, some of the clean fill practices may involve negative or nil societal benefit, and others are likely to involve modest societal benefit relative to the recovery of resources as is predicted for the MSW and C&I waste streams.

Recounting the key finding from the above bullet points, the introduction of a waste levy has generated positive NPV results using a model that is balanced towards economic factors. Granted that the public benefits of a legislated waste levy are anticipated to include positive environmental and social outcomes (see Section 2) even if these are not readily and precisely quantified to a level that commands broad consensus, the overall costs and benefits in introducing a waste levy are predicted to be positive.

Findings in relation to net costs and benefits to Tasmanian society

- The NPV method is a means to weigh up the overall costs and benefits in introducing the waste levy, compared to the case where a waste levy is not adopted. It is desirable that the selected waste levy option has a positive NPV result, and options that generate a higher NPV result denote instances where society stands to benefit to a greater extent.
- The introduction of a waste levy is predicted to generate net benefits to Tasmania, based on positive NPV results using a model that is balanced towards economic factors, complemented by public benefits that include clear environmental and social gains (as set out in Section 2) that are more challenging to quantify.
- Of the waste levy scenarios examined, waste levy rates of \$60 per tonne, \$120 per tonne and a ramped rate of \$20 per tonne to \$40 per tonne to \$60 per tonne are associated with the greatest net benefits for Tasmania over the ten year study period. The benefits predicted for waste levy rates set at \$10 per tonne, \$20 per tonne and \$40 per tonne are substantially lower in magnitude.


5.3.4 Impacts on selected sectors

In line with the *Legislative Impact Guidelines*, there is a need to make sense of the extent of impacts incident to sectors that may be exposed to the waste levy legislation. This follows from the guiding principle that legislation should not impose a significant impact on business unless community benefits outweigh the costs; or if the policy objective can only be achieved by imposing a significant impact.

Noting that the waste levy is a measure that needs to alter the competitive dynamic between landfills and legitimate alternatives in order to serve its objective, some business impacts are requisite to its success. This section examines the pattern of business impacts introduced by a waste levy of different magnitudes, with a view to understanding their relative effect.

In completing this aspect of the study, financial flows associated with different sectors involved in the waste and resource recovery sector (i.e. landfill operators, recovery operators, and their waste generating customers) are aggregated for each waste levy scenario. These aggregated economic impacts are adjusted by the deduction of base case financial flows to arrive at a net economic impact for each sector. Standard discount rates are applied to each calculation to reflect a time value of money, although it is recognised that different sectors and their participants will each have their own time preferences (which have not been adjusted for here).

Landfill operators

Landfills are directly impacted by the waste levy through having to comply with the relevant legislation, and this will potentially take a number of forms. Engagement with the sector and discussions with other jurisdictions suggest that key requirements for compliance – estimating tonnages of waste received for landfilling; and reporting volumes on a periodic basis – need not incur substantial operating costs beyond business as usual operations.

A growing majority of landfill operators have measurement systems in place (e.g. weighbridges or a means to estimate the weight of a typical truckload of waste), and presently report to EPA on a voluntary basis. Further discussion of compliance needs are set out in Section 5.2.

It is not anticipated that the additional compliance costs across the sector as a whole will be significant, but smaller and lower turnover landfills may face some adjustment costs that may warrant consideration for support or the option to use less technologically-driven reporting methods⁵² to ensure that they are not materially disadvantaged. While this study engaged with the landfill sector, it has not completed a full analysis of the compliance-readiness of each operator. In progressing towards waste levy implementation and the preparation of compliance guidelines, it may be suitable for the Tasmanian Government to undertake such an analysis.

Similarly, planning over the finer details of a waste levy will need to consider cashflow impacts on landfills, based on differences in timing between landfill invoice payments and the requirement to acquit waste levy liabilities. These matters are not fundamental to the waste levy as an instrument, but have a bearing on design considerations to minimise the disruption and inefficiencies of implementation.

⁵² Section 5.2 sets out a range of volume estimation options that may be suitable to smaller landfill operators. Waste levy impact study – FINAL REPORT September 2020

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Landfills will pay the cost of a waste levy but the expectation is that this cost be passed on to customers, with the net effect being a lesser demand for landfill services relative to the base case. Figure 13 presents the results of modelling the change in demand for landfill services over the study period, rendered as loss in turnover relative to the base case over ten years (i.e. a higher figure represents a greater *negative* impact on landfill business activity levels).



Figure 13: Projected decrease in ten-year turnover for Tasmanian landfills on introduction of a waste levy at various rates (x-axis). Financial figures (y-axis) are in 2021 Australian dollars, discounted at 7 % p.a.

Key findings from this analysis are:

- As should be expected, where the waste levy is higher (and has been more effective in driving diversion away from landfills), the foregone landfill turnover is greater.
- Waste levy scenarios that project a more significant drop in landfill turnover at \$60 per tonne, \$120 per tonne and with the ramped waste levy rate increase – are emblematic of the waste levy working as intended.
- While such results could be seen as incurring unnecessary business impacts on landfill operators, the impacts are essential to meeting the policy objective. An alternative perspective is that landfills have historically benefited from demand levels that are higher than what is socially optimal, and an appropriate waste levy helps to recalibrate this demand for society's greater benefit.
- Landfill operators can, if they choose, reorient their business models to involve a higher capacity for resource recovery to align with the draft Waste Action Plan and the competitive pressure applied through the waste levy. This decision to innovate in line with policy may help landfill operators offset the projected decline in demand.



Recycling and organics processing operators

Recycling and organics processing operators are in the opposite position to landfills, with respect to the competition effects of a waste levy. They stand to benefit through increased demand at the expense of landfills. They also benefit through the sale of recovered and processed materials to various end markets. As they are not directly responsible for reporting and paying for the waste levy, they do not incur administration costs associated with the waste levy.

Figure 14 below sets out the impacts on the recycling and organics processing sectors on introduction of a waste levy. In this figure, a positive value represents increased revenue across the two sectors. In the modelling method, no distinction is made between the various actors that may be involved between the intake of material at a recovery facility (e.g. a Materials Recovery Facility or MRF), and the final production of a recovered commodity – these are viewed as internal transactions that may take a number of configurations that are independent of the value available to the sector as a function of volumes received and processed, gate fees and commodity pricing, as is appropriate to a sector-level impact study.



Figure 14: Projected increase in ten-year turnover for Tasmanian recovery operators on introduction of a waste levy at various rates (x-axis). Financial figures (y-axis) are in 2021 Australian dollars, discounted at 7 % p.a.

Key findings from this analysis are:

- Echoing the findings from the above analysis of landfill sector impacts, the largest changes in turnover accord with waste levy rates that deliver on the highest recovery rates – relating to \$60 per tonne, \$120 per tonne and the ramped waste levy rate. However, this sector experiences an upshift in revenue across the ten years. These waste levy rates are therefore indicative of the waste levy working as intended.
- The change (increase) in revenue for the resource recovery sector is valued at about 2.5 times the change (decrease) in revenue for the landfill sector, driven by a difference in private gate fees and by the sale of commodities recovered from waste. Thus, the benefits accruing to this sector involve both the transfer in value from landfills (via diversion) and waste generators (via higher gate fees paid relative to landfill gate fees); and the creation of new wealth through recovered valuable resources.



Councils and households

Households are the ultimate points of origin for the largest fraction of municipal waste and will ultimately pay any costs for managing municipal wastes in Tasmania. It is therefore important to understand the aggregated impacts of waste levy charges passed through to them via council rates (and other fees and charges that may apply).

Figure 15 below presents the discounted ten year household costs for each scenario modelled for this study, and incorporates landfill gate fees, recycling and organics processing fees and statewide waste levies (net of regional levies, assumed to be removed). Collection costs are not included on the basis that alterations in collection arrangements will not substantially affect overall costs, as confirmed by some stakeholders.

In this figure, the base case cost of \$219,000,000 across the ten years is not shown, to better illustrate comparisons between the different statewide waste levy rates. Table 6 represents the same results, expressed in terms of additional costs per capita each year, associated with introducing the waste levy.



Figure 15: Projected increase in ten-year costs for Tasmanian households, on introduction of a waste levy at various rates (x-axis). Financial figures (y-axis) are in 2021 Australian dollars, discounted at 7 % p.a.

Table 6: Net impacts on MSW management, presented in terms of annual costs per capita (2021 Australian dollars, discounted).

Waste levy rate	Added cost over ten years	Added cost per capita per year
\$10 per tonne	\$7,749,931	\$1.40
\$20 per tonne	\$19,276,198	\$3.47
\$40 per tonne	\$42,222,262	\$7.60
\$60 per tonne	\$56,290,858	\$10.14
\$120 per tonne	\$103,234,992	\$18.59
Ramped rate (\$20 to \$40 to \$60 per tonne)	\$42,612,848	\$7.67



Key findings from this analysis are:

- Depending on the option at hand, it is expected that households will be encouraged to
 participate in organics collection services and increase their recycling levels by their
 councils (and regional bodies) as a means to reduce the costs of managing household.
 This encouragement will be greatest where the waste levy pushes the cost of landfill
 disposal to exceed the cost of recycling and organics processing services.
- The \$120 per tonne levy rate incurs conspicuously larger costs on households than other waste levy options, with a significant fraction being the waste levy itself. It may be recalled that the performance of this waste levy with respect to the policy objective is on par with the \$60 per tonne waste levy and the ramped rate waste levy. On an annual per capita basis, the \$120 per tonne waste levy is projected to incur a cost of \$18.59.
- The \$60 per tonne waste levy, \$40 per tonne waste levy and the ramped rate waste levy options incur similar cost impacts on households, with annual per capita costs projected as \$10.14, \$7.60 and \$7.67 respectively. The \$40 per tonne waste levy is expected to be markedly less effective than these other options in meeting the policy objectives.
- The \$20 per tonne and \$10 per tonne waste levies incur relatively modest additional costs on households projected at \$3.47 and \$1.40 per capita per year respectively. However, they also represent only modest potency as a price signal mechanism.

Commercial and industrial waste generators

Businesses, institutions and other incorporated entities (including non-profit organisations and public bodies) will bear the cost of a waste levy along with their other waste costs. This is a necessary feature to stimulate the shift from landfills and towards resource recovery practices.

Figure 16 presents the discounted ten year C&I waste generator costs for each scenario, incorporating landfill and resource recovery gate fees and statewide waste levies (net of regional levies, assumed to be removed). In this figure, the base cost of \$457,000,000 across ten years is not shown, to better illustrate comparisons between the different statewide waste levy rates.



Figure 16: Projected increase in ten-year costs for Tasmanian C&I waste generators, on introduction of a waste levy at various rates (x-axis). Financial figures (y-axis) are in 2021 Australian dollars, discounted at 7 % p.a. Waste levy impact study – FINAL REPORT September 2020

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Key findings from this analysis are:

- As with the case for households, the \$120 per tonne waste levy option may impact businesses and other C&I waste generators to a degree that may be out of proportion to its performance against the policy objectives. This observation is in light of the anticipated performances of the \$60 per tonne and ramped rate options, which are of a similar order, without nearly as large an impost on the productive economy.
- The fixed rate waste levy at \$60 per tonne introduces substantially more costs to businesses and other C&I waste generators than either the \$40 per tonne waste levy or the ramped rate waste levy, which are roughly equivalent in terms of their cost impacts to generators.
- The ramped rate may also be advantageous in introducing waste levy costs as a more gradual process, avoiding an initial price shock while delivering policy objective outcomes that exceed the \$40 per tonne waste levy and are on par with the \$60 per tonne option.
- The two lower options at \$20 per tonne and \$10 per tonne involve lower costs than the other options, but as shown previously, are expected to be largely ineffective as price signals. That is, they incur business costs without the desired policy results.

Bringing the above points together, some additional costs are inevitable in introducing a levy instrument whose purpose is to drive businesses and other C&I waste generators to seek preferred alternatives that are more expensive in the absence of the levy. A key question is whether the costs are justified given the societal benefits at hand.

Earlier in this section, positive net benefits were demonstrated for all levy scenarios compared with the base case. To help in gaining a sense of scale of the impacts depicted in Figure 16, Table 7 below frames those same costs as a proportion of Gross State Product (GSP) projected for the next ten years. GSP is a measure of the overall level of economic activity across the state in a given year – in effect it represents the sum of all sectors' incomes across the state economy.

As an example, the introduction of the \$120 per tonne waste levy is projected to involve a direct impact on the economy of \$0.68 for every \$1,000 generated in economic activity across the state. Other impacts are as presented, showing a lessening impact as the waste levy rate diminishes in scale.

For comparison, the total state tax base for Tasmania is about 3.8 % of GSP which would equate to a cost of \$38 per \$1,000 in GSP. Each of the waste levy options is a very small fraction of this current tax base, as well as being an even smaller proportion of overall activity.

Waste levy rate	Added cost over ten years	Cost per \$1,000 in GSP
\$10 per tonne	\$15,550,006	\$0.06
\$20 per tonne	\$33,601,271	\$0.14
\$40 per tonne	\$67,287,867	\$0.27
\$60 per tonne	\$92,506,490	\$0.37
\$120 per tonne	\$168,777,579	\$0.68
Ramped rate (\$20-\$40-\$60 per tonne)	\$70,967,015	\$0.29

Table 7: Waste levy impacts on business, represented as a cost per \$1,000 in gross state product projected over 2021/22 to 2030/31, net of base case. Costs and GSP discounted at a rate of 7 % p.a.

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It is suggested that, based on these figures, the introduction of a waste levy involves a modest business impact as a proportion of the levels of business activity across the state. Nonetheless, for options that display equivalent or near equivalent outcomes in terms of societal benefit and delivery of policy objectives, there is merit in selecting whichever option involves the least costs to waste generating businesses and other organisations.

Equally, it should be realised that this analysis is not refined with respect to which sectors of the economy generate the highest waste volumes and will carry the greatest waste levy liabilities. Should the state government elect to introduce a waste levy, there may be merit in analysing which sectors are particularly exposed to new costs while having limited opportunities to divert waste from landfills, and then determining whether additional measures are justified.

Construction and demolition waste generators

As discussed earlier in this report, the C&D waste sector is somewhat different to the MSW and C&I sectors. In particular, some C&D volume may already be diverted from landfills to clean fill (i.e. contouring, landscaping and similar) activities, although the volume is not formally tracked as waste and the societal benefit associated with this practice is ambiguous – particularly when the clean fill is composed of masonry and other engineered materials rather than materials excavated and used in an unprocessed state (e.g. soils). As informed by stakeholders, the principal driver for this current diversion is that C&D waste generators are able to pay lower fees for having the material taken as clean fill, compared with disposal to landfill.

Taking this into account, it may explain why C&D waste volumes sent to landfill are low, compared to other states (correcting for population levels and economic activity levels). The C&D waste volumes that are sent to landfill may reflect the activity of waste generators that are more indifferent to the current price differential between clean fill (being cheaper) and landfill (being more expensive). However, with the imposition of a waste levy, the number of C&D waste generators who are indifferent to the price disparity is assumed to diminish as the savings in adopting clean fill practices will rise accordingly.

This behaviour has been modelled with the inference that as the waste levy increases, the volume of C&D waste sent to landfill will progressively decrease by being diverted to clean fill practices. It is assumed that there remains a residual fraction of C&D waste that will not be used for clean fill purposes due to a variety of barriers – e.g. unsuitable composition; inconvenience; uncertainty of outcome and associated liabilities; and so on.

Figure 17 below sets out the projected net cost increases for C&D waste generators in introducing a waste levy in accordance with the options under consideration. Note that, apart from the \$10 per tonne waste levy scenario, all scenarios involve a net saving for C&D waste generators. This is because, as explained above, the most likely outcome is that construction and demolition companies will be more motivated (less indifferent) to pursuing cheaper clean fill usages of their waste as the waste levy increases. This driver is less pronounced at the lower waste levy rates of \$10 per tonne and \$20 per tonne, so the transition to clean fill is only partial.





Figure 17: Projected increase in ten-year costs for Tasmanian C&D waste generators, on introduction of a waste levy at various rates (x-axis). Financial figures (y-axis) are in 2021 Australian dollars, discounted at 7 % p.a. It can be observed that the majority of scenarios introduce a net savings (i.e. a *negative* cost increase).

From a rate of \$40 per tonne upwards, it is assumed that all C&D operators that are able to or inclined to divert C&D waste to clean fill operations have done so. Costs for the sector as a whole rise (i.e. net savings across the sector will diminish) in rising from \$40 per tonne to higher waste levy rates (\$60 per tonne; \$120 per tonne; and the ramped rate option), due to the increased cost of disposing of a residual volume of C&D waste in landfills (about 10 % of the base case volume).

The key message from this analysis is that many construction and demolition firms, should they be sufficiently interested, presently have access to alternatives to landfill that are more affordable than landfills. The only segments of this sector that will be adversely affected are those companies unable to or disinclined to engage with parties willing to take their waste as clean fill rather than send their waste to landfills for disposal.⁵³ This is expected to be a minority of the C&D waste generators across Tasmania. Waste sector stakeholders generally advised the study team that the practice of using C&D waste as clean fill is widespread today, and the introduction of a waste levy was seen to only promote this practice further.

⁵³ In some cases, landfill operators themselves will take clean fill as a daily cover material or will use the material for other on site purposes, and will charge the customer a substantially discounted rate. However, landfills will use soils and other excavated materials for this purpose, rather than masonry and other processed aggregates. Waste levy impact study – FINAL REPORT

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Combined levy collection – costs incurred across the Tasmanian economy

A final sector to consider in terms of waste levy impacts is the Tasmanian Government. The waste levy will accumulate funds to the Tasmanian Government, in approximate correlation to the waste levy rate, allowing for changes in the amount of waste going to landfill as waste generators respond by seeking competitive alternatives.

It is understood that there is no pre-determined target with respect to state revenue other than an intent for the implementation of the waste levy – including administration costs, payments to regional bodies and other allocations deemed necessary in introducing the levy – to come at no net cost to the Tasmanian Government. At the time of writing, the scale and timeframe of some of these related outlays is not fully transparent, as they depend on government decisions that are yet to take place. A discussion of interactions between potential outlays and revenues associated with a preferred waste levy rate is provided in Section 7, with a view to exploring the extent that financial inflows and outflows are broadly compatible, pending future allocation decisions.

Given these decision dependencies and the absence of a specific (i.e. quantitative) revenue target, the figures below are for information purposes only. They describe projected revenue impacts for the state government in the aggregate, ten years on from the introduction of each waste levy option. Figure 18 sets out expected revenues using real dollars, undiscounted. Figure 19 sets out the same data using discounted sums (and therefore accounts for the time value of money in each aggregated sum). Each numerical value is a gross sum, i.e. provided without subtracting levy administration costs and other outlays.



Figure 18: Projected gross waste levy revenues for each waste levy option over 2021/22 to 2031/31, undiscounted (y-axis denotes 2021 Australian dollars).





Figure 19: Projected gross waste levy revenues for each waste levy option over 2021/22 to 2031/31, discounted at a rate of 7 % p.a. (y-axis denotes 2021 Australian dollars).

While these figures represent significant sums over the ten year time horizon, they do not involve a net withdrawal of funds from the Tasmanian economy. It is understood that the state's intention is to reinvest back into waste and resource recovery initiatives including areas listed in the introduction.⁵⁴

⁵⁴ This intent was carried into the method that was used to calculate Net Present Value results earlier in this section, with adjustments to account for administrative overheads.

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Findings in relation to impacts incurred on selected sectors

- Consistent with the introduction of a levy instrument, costs will be incurred on some segments of the community, based on the volume of waste they generate and send to landfills. The diversion of materials to other management solutions will generally involve higher costs than sending waste to landfill (prior to a waste levy) as well.
- Additional costs faced by the main sources of waste households in the case of MSW and business and other organisations in the case of C&I waste and C&D waste – are anticipated to be minor, relative to the societal benefits gained, and relative to typical annual household incomes and the size of the Tasmanian economy.
- In the worst case (in terms of costs) of the options examined, 68 cents per thousand dollars in GSP may be incurred to C&I waste generators, although the preferred waste levy may involve costs lower than this.
- In the worst case (in terms of costs), \$18.59 per person may be incurred to cover the waste levy's impacts on municipal waste each year. But the preferred waste levy may involve lower costs each year.
- Most waste levy options will involve a net saving for many construction and demolition companies that gain greater awareness of lower cost options such as using their waste as clean fill, driving C&D waste away from landfill disposal.
- Should there be sectors of the community or parts of the community that face unnecessary and unavoidable costs in introducing the waste levy, the Tasmanian Government may be in a position to address their particular circumstances through separate measures. This is likely to be more efficient than granting levy exemptions.



Non-financial impacts

In Appendix 2, the method used to quantify and monetise impacts associated with the introduction of a waste levy is described. This model predominantly quantifies material flows and their monetary implications on different sectors and the overall Tasmanian economy. However, there are significant impacts, particularly those that are environmental in nature, that fall outside the economic domain and need to be taken into consideration. These impacts are not formally contained within the Net Present Value calculations, based on several factors:

- They are neither straightforward in quantifying or in monetising their values, such that it may be somewhat misleading to suggest a 'dollar value' to these impacts
- A number of these impacts and risks will mainly occur at a point outside the ten year projection timeframe and geographies outside Tasmania, such that they fall outside the boundaries of the analysis even though they may be material in scale
- The inclusion of some identified environmental impacts in a Net Present Value is not consistent with the standard approach adopted by the Tasmanian Government
- Some stakeholders and members of the community may prefer to see an explicit treatment of environmental impacts, rather than have them consolidated with and hidden among other impacts.

This section will provide an overview of anticipated environmental impacts in introducing a waste levy, and provide commentary around the relative effects of the different waste levy options. For most impacts, the discussion will be qualitative in nature. However, granted the relevance of climate change policy to a range of public and private organisations, the analysis of greenhouse gas emissions impacts will be based on a quantitative comparison of projected impacts.

Direct impacts of disposing of waste to landfill

In general terms, landfills are implicated in a range of potential environmental harms, as has been previously recognised by the Tasmanian Government:⁵⁵

- Surface water and ground water quality impacts, as caused by the percolation of leachate from landfill cells into surface and groundwater systems
- Land contamination due to the accumulation of toxins (heavy metals, persistent organic pollutants and other contaminants) in soils surrounding a landfill environment
- Deterioration in land quality and visual amenity, as caused by a multitude of factors including potential increases in vermin populations, litter, despoiled landscapes due to erosion of historic landfills, and the opportunity cost of other land uses
- Air quality impacts, as caused by potential increases in dust levels, odour emissions and the release of landfill gas⁵⁶

While modern landfills are subject to regulatory settings designed to reduce or minimise these impacts, different landfill operators may carry varying capacities to comply or to pursue practices beyond compliance. Further, the state of knowledge regarding what constitutes safe levels of

⁵⁵ Department of Primary Industries, Water and Environment (precursor to DPIPWE), 2004, *Landfill Sustainability Guide*, p. 4-6.

⁵⁶ Landfill gas is the general term used for a mixture of methane and carbon dioxide in an approximately equal quantities by volume, that can act as both a greenhouse gas and an explosion risk.

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contaminant loading in air, land and water compartments is being revised on a continual basis, driven by a changing base of evidence and scientific research. Thus, it cannot be assumed that the standards applied to landfills today accurately reflect the needs of future generations.

Alternatives to landfill are not without environmental impacts in their own right. For example, organic processing facilities may produce odour emissions, water quality impacts and air emissions (including methane gas), depending on the technology.⁵⁷ In recent years, materials recovery facilities have stockpiled flammable materials and have been the site of major fire incidents.⁵⁸ However, there are some points of difference between recovery facilities and landfills with respect to their direct impacts.

- Assuming the facility is operated and then decommissioned to a high standard, the major impacts of recycling and organics processing activities occur only while the facility is in operation. The impacts of landfills, in contrast, may persist over a longer time horizon, as the material is bound into the environment over the long term with some uncertainty as to the effectiveness of the control systems in place.
- Prevailing control systems used by landfills are, in some cases, some distance from being fully effective. For example, landfill gas capture systems are not yet proven to capture 100 per cent of gases released, with the residual emissions entering the atmosphere.
- The primary purpose of organics processing and recycling facilities is to return valuable materials to productive use and, in doing so, diminish the environmental impacts from the production and use of virgin materials that the recovered materials substitute for. (This is discussed further below.)

For these reasons, it is suggested that from an environmental perspective, recycling and organics processing activities are preferable to disposing materials to landfill. Waste levy options that deliver a greater volume of material to these activities instead of landfilling are therefore of greater benefit from an environmental standpoint. Recalling Figure 10, the waste levy rates of \$60 per tonne and \$120 per tonne and the ramped rate option are shown to be the most effective in diverting materials from landfill to recovery operations and, in doing so, will be the most effective in preventing the multiple environmental harms described earlier in this section.

Impacts from the substitution of virgin materials

A recognised benefit of recycling is that, where recycling substitutes for the production of a similar good produced from virgin material, the environmental costs associated with some or all of that production are avoided. In most cases, recycling a given volume of a particular material will entail lower impacts than producing the same volume of that material from virgin sources.

⁵⁷ NSW Department of Environment and Conservation, 2004, *Environmental guidelines: Composting and related organics processing facilities*.

⁵⁸ The practice of stockpiling on the one hand is a necessary aspect of managing materials sent to and recovered from recycling facilities. However, excessive stockpiling becomes problematic both as a fire risk and as a symptom of poor stock management and unsustainable commercial practice. An appropriate waste levy, combined with suitable regulation of recovery facilities and the development of end markets all have a role in diminishing the risk of materials stockpiling while stimulating the transition to a circular economy.

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However, the scale of these costs depends on a range of factors including:

- The extent that recovery of a commodity via recycling offsets the production of a similar number of units of that same commodity via virgin sources⁵⁹
- The factors of production associated with producing the commodity via virgin sources, and the environmental impacts of that production (for example, net greenhouse gas emissions reductions may depend on the energy mix at the point of production and the existence of any policy mechanisms that cap emissions)
- The direct environmental impacts associated with local recycling operations, which need to be weighed against the reduced impacts from replacing the use of virgin materials.

The scope of this study does not include a detailed analysis of the above factors, such that the environmental impacts of substituting virgin materials will not be quantified here. However, as an indicator of the scale of benefits, Table 8 sets out typical energy and water savings for some materials that may be recycled in higher quantities in response to a waste levy.⁶⁰ Figures in this table are drawn from a New South Wales study, although may serve as reasonable approximates for the benefits of recycling in Tasmania.

Table 8: Energy and water savings derived from recycling one tonne of a given material (as specified). This table uses figures derived from LCA studies commissioned by NSW Government. Source: NSW Government Department of Environment, Climate Change & Water, *Environmental benefits of recycling* (2010).

Material	Energy savings (GJ/tonne)	Water savings (kL/tonne)				
Aluminium	191	202				
Steel	8	-2.4				
Used tyres	64	52				
Paper and cardboard	11	28				
Newsprint / magazines	6.4	12				
Glass	6.8	2.4				
Plastics (PET)	55	-22				
Plastics (HDPE)	58	-3.6				
Plastics (PVC)	49	71				
Plasterboard	0.55	0				
Concrete	0.35	1.3				
Bricks	0.28	1.3				

One difference between New South Wales and Tasmania recycling benefits may lie in the water and energy savings associated with diverting concrete, bricks and plasterboard. Unless a significant fraction of concrete, bricks and plasterboard is recycled to produce substitutes for virgin materials, the benefits for those materials as stated in the table will not be realised. If, for

https://apps.epa.nsw.gov.au/recyculatorapp/recycling.aspx

⁵⁹ Depending on the supply and demand curves of different materials and the production models of the main manufacturers, it cannot be assumed that the introduction of an extra tonne of a material into the market by recycling will lead to the reduction of an equivalent tonne of that material being produced from virgin sources. ⁶⁰ Figures used in this table derived from the NSW Government Recyculator online tool:

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example, the majority of these materials is diverted for use as clean fill, the energy savings and water savings may not apply.

Greenhouse gas emissions

As set out earlier in this section, an understanding of the direct greenhouse gas emissions impacts from the waste levy may be of interest to the Tasmanian community. While these impacts have not been included in the Net Present Value calculations for reasons explained above, the model does provide the means to predict impacts on greenhouse gas emissions.

To clarify, the greenhouse gas impacts set out below are limited to *direct* impacts comprising reduced greenhouse gas emissions from landfills due to the diversion of biodegradable materials⁶¹ from a landfill environment occurring over the next ten years (i.e. within the model's specified time scale). Owing to the time lag between waste entering landfills and their decomposition and formation of landfill gas, a large fraction of the reduced greenhouse gas emissions arising from diversion from waste to landfill will take place over a later time period.

As was shown in Figure 10, the waste levy options examined in this study involve, to varying degrees, diversion of MSW, C&I and C&D waste volumes from landfill. Using compositional data as set out in Section 4 of this report, Figure 20 below projects the diversion of biodegradable materials from landfill for each waste levy option from 2021/22 to 2030/31.



Figure 20: Projected diversion of biodegradable materials from landfill for each waste levy option, from 2021/22 to 2030/31, as tonnes per annum relative to the base case.

The projection indicates that the waste levy options of \$60 per tonne, \$120 per tonne and the ramped rate option involve significant diversion of biodegradable material (up to 140,000 tonnes annually diverted by 2030), which is likely to lead to significant reductions in greenhouse gas emissions from the waste sector over the longer term. The \$40 per tonne waste levy option is

⁶¹ These biodegradable materials include materials listed in Australian Government Clean Energy Regulator, 2019, *Guideline: Estimating emissions and energy from solid waste and landfill biogas management*, which are likely to be diverted to recycling and organics processing services in response to a waste levy.



associated with an intermediate level of diversion of biodegradable materials while the \$10 per tonne and \$20 per tonne waste levies are projected to deliver modest greenhouse gas emissions abatement outcomes over the longer term.

The overall greenhouse gas emissions reduction achieved by diverting biodegradable waste from landfill can be estimated for each of the waste levy options. In Table 9 below, the projected diversions from Figure 20 are aggregated into ten year total tonnages. Using Commonwealth Government emissions factors⁶² and adjusting for average landfill gas capture rates across Tasmania,⁶³ each waste levy option can be represented in terms of the overall greenhouse gas emissions avoided through diverting biodegradable wastes from landfill.

The figures presented in the table do not attempt to model emissions reductions at the facility scale given the range of landfill gas capture methods that may be used, but are useful as a first order estimate of the greenhouse savings that may be achieved through the biodegradable waste diversion projected to occur in the first ten years of introducing a waste levy.

Waste levy	10 year diversion (c.f. base case)	Total GHG reduction	Equivalent in annual car use*			
\$10 per tonne	101,609 tonnes	131,555 tonnes CO ₂ -e	38,690			
\$20 per tonne	171,724 tonnes	191,269 tonnes CO ₂ -e	56,255			
\$40 per tonne	447,319 tonnes	515,354 tonnes CO2-e	151,575			
\$60 per tonne	1,056,992 tonnes	1,210,789 tonnes CO ₂ -e	356,115			
\$120 per tonne	1,081,449 tonnes	1,237,939 tonnes CO2-e	364,100			
Ramped rate	945,847 tonnes	1,079,182 tonnes CO2-e	317,406			
* This column sets out an equivalent estimate of emissions reduction, based on the removal of an equivalent						

Table 9: Estimated greenhouse gas emissions reductions achieved through introduction of a waste levy.

* This column sets out an equivalent estimate of emissions reduction, based on the removal of an equivalent number of cars off the road for one year (assuming an average car produces 3.4 tonnes CO₂-e each year). For example, for the \$60 per tonne levy, by 2030/31 the levy is projected to have diverted 1,056,992 tonnes of biodegradable material from landfills in total, which accounts for a total avoidance of greenhouse gas emissions of 1,210,789 tonnes CO₂-e. This amount equates to taking 356,115 cars off the road for one year. (Source for annual care equivalent: City of Hobart, *Managing Hobart's Carbon Footprint*, (2017).)

These figures show that, although emissions reductions are achieved with each waste levy scenario studied, a much fuller reduction is achieved through introduction of a waste levy rate of \$60 per tonne or \$120 per tonne; or in ramping a waste levy from \$20 per tonne to \$60 per tonne over several years.

As a side note, through the Emissions Reduction Fund, some landfill operators have partnered with private companies to capture and flare (or in some cases, produce energy from) landfill gas. In doing so, they voluntarily contribute to emissions reduction and receive Australian Carbon Credit Units (ACCUs). These credits are a tradable commodity. While the diversion of biodegradable waste from landfill may lower the amount of credits they may earn via landfill gas destruction, the Emissions Reduction Fund also counts source separation of biodegradable waste to avoid landfill emissions as an eligible activity. It is likely that the increased diversion

⁶² Commonwealth Government Department of Environment and Energy, 2019, *National Greenhouse Account Factors*.

⁶³ Carbon Credits (Carbon Farming Initiative – Source Separated Organic Waste) Methodology Determination 2016 (Commonwealth Government).

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stimulated by a waste levy will open up a similar or greater scale of commercial opportunity to acquire carbon credits, for those parties that are positioned to do so, compared to landfill gas flaring activities.⁶⁴

5.4. Combined findings

Waste levy rate per tonne	NPV result	Mean annual cost per capita	Cost per \$1,000 GSP	2030 recovery rate
\$10	\$20,798,496	\$1.40	\$0.06	47.7 %
\$20	\$28,753,129	\$3.47	\$0.14	50.7 %
\$40	\$77,017,830	\$7.60	\$0.27	59.3 %
\$60	\$144,487,316	\$10.14	\$0.37	68.9 %
\$120	\$146,963,337	\$18.59	\$0.68	70.0 %
\$20-\$40-\$60	\$121,889,177	\$7.67	\$0.29	68.9 %

Table 10: Summary of main comparison findings from Section 5.

Bringing together findings from earlier in this section (summarised in Table 10 above), a preferred waste levy arrangement may be uncovered:

 From the study of each option's performance against the policy objectives, three waste levy settings stand out as likely to be most successful - \$60 per tonne; \$120 per tonne; and the ramped rate of \$20 to \$40 to \$60 per tonne (over four years). The \$40 per tonne option is predicted to have intermediate performance levels while the \$10 per tonne and \$20 per tonne are relative weak performers. Setting aside the above comparative summary, there is a need to provide additional measures to meet the 2030 resource recovery target of 80 %.

The waste levy rates of \$60 per tonne, \$120 per tonne and using the ramped rate are preferred options for meeting the policy objective.

2. Commensurate with driving more material from landfills (point 1 above) and recovering them as useful goods, the waste levy options that performed better in meeting the policy objective are also predicted to generate greater net benefits for society over the ten year study period. All options returned a net positive result relative to the base case, but the \$60 per tonne and \$120 per tonne, and to a somewhat lesser extent, the ramped rate option delivered superior results. The marginally lower NPV score for the ramped rate is attributable to weaker diversion potency in the earlier years, but this performance difference is neutralised by the fifth year onwards.

⁶⁴ As a related point, some of the landfills with landfill gas flaring technology in place also receive significant volumes of municipal solid waste from councils that have moved to or are planning to move to kerbside organics services. Thus, a trend towards reduced landfill gas volumes and diminishing capacity to earn carbon credits is, to some extent, factored into the base case without the introduction of a waste levy.



The Cost Benefit Analysis projects that the introduction of a waste levy will not come at a welfare cost for society, i.e. there is no trade off between net welfare outcomes and meeting the policy objective via a waste levy.

The waste levy rates of \$60 per tonne, \$120 per tonne and using the ramped rate are preferred options for delivering a net benefit to society.

3. As a levy instrument, the waste levy will inevitably introduce costs to different segments of society. The cost analysis for households and commercial and industrial waste generators suggests that the costs, on average, will be modest compared to overall income levels. However, individual sectors and communities may be more adversely affected than others, such that limited transition support could be warranted. Of the waste levy options considered preferable from a welfare and policy objective standpoint, the \$120 per tonne levy involves substantially higher costs for waste generators without a proportionate improvement in performance – it is therefore less preferred. The \$60 per tonne waste levy involves about 25 % higher costs compared to the ramped rate option.

In examining costs for waste generating entities (households, businesses and other sources), the preferred waste levy options are the \$60 per tonne and the ramped rate option, with the latter involving somewhat lower costs.

In conclusion, the two preferred options are the \$60 per tonne waste levy and the ramped rate waste levy option. The \$60 per tonne option will yield earlier diversion outcomes and a greater net benefit to society, but comes with substantially higher overall costs for households and businesses. The ramped rate option – commencing at \$20 per tonne and rising through \$40 per tonne to sit at \$60 per tonne – yields slightly lower diversion outcomes (particularly early in the ten year period) and generates less overall benefit to society. However, its costs to waste generators who ultimately pay the levy is lower.

In delineating these differences further, some additional considerations are useful:

- There is no compelling reason to bring forward diversion outcomes from a policy standpoint, given that both the \$60 per tonne and the ramped rate option are both predicted to meet the 2025 resource recovery objective (target 3 of the draft Waste Action Plan) and the 2025 organic volume diversion objective (target 6 of the draft Waste Action Plan).
- The introduction of a \$60 per tonne waste levy from 2021 onwards is almost certain to introduce a price shock for some sectors, for which they are unlikely to be prepared for. Further, it would possibly be a destabilising influence at a point when many businesses are seeking to recover from a downturn in activity caused by the covid-19 outbreak and governmental responses used to minimise the spread of this contagion.
- Even if some businesses and councils sought to be proactive in managing the impacts of a waste levy early in its introduction, it is not clear that the resource recovery sector has adequate capacity to meet their needs in the short term. Similarly, existing contractual obligations may prevent some waste generators from responding in the short term, such that an immediate \$60 per tonne waste levy represents significant added costs that are unavoidable in the short term. The ramped rate option diminishes this exposure.
- Finally, while the two preferred waste levy options generate net benefits to society, the direct costs of the instrument are diffuse while the direct benefits mainly accrue to the



waste and resource recovery sector. For the \$60 per tonne option, it may be difficult to justify the potential upheaval in the council sector and other areas of the productive economy while the gains are largely concentrated to one sector. In contrast for the ramped rate option, the earlier years could be used to focus on supporting councils and businesses to minimise their exposure to the waste levy, which will help ensure that the waste levy works as an efficient policy measure.

Given these additional points, the ramped rate waste levy (rising from \$20 per tonne for two years; to \$40 per tonne for two years; and then rising to \$60 per tonne onwards) is recommended as the preferred policy option.

This option will delivery on the policy objective without introducing net costs to society. On average, business and household costs are projected to be modest in light of the policy outcomes and net benefits achieved, although limited attention may be needed to assist some sectors. Competition impacts (see Section 3) are expected to be either neutral or positive through driving innovation and supporting socially preferred business models.



6. Preferred option

To recap from the previous section, a number of waste levy options were evaluated from a range of perspectives as set out in Section 1. This comparative study tested whether there exists a preferred waste levy option that delivers on the policy objective without causing undue impacts on the competition, on exposed sectors, and on the welfare of the Tasmanian community.

The analysis determined that the preferred waste levy option will commence with a levy rate of \$20 per tonne to be held for two years, which will then rise to \$40 per tonne and be held for two years, and then finally be set at \$60 per tonne. These rates will be indexed in line with inflation.

Several advantages of this model include:

- 1. Substantial contribution to the stated policy objectives, based on supporting resource recovery and organic waste diversion outcomes in 2025 and 2030, as set out in the draft Waste Action Plan
- 2. Net positive outcomes on the Tasmanian economy over the next ten years, as indicated by a positive Cost Benefit Analysis result
- 3. Relatively modest cost impacts on sectors that pay the levy, relative to typical income levels and overall economic activity levels across the state
- 4. Significant environmental benefits, including reductions in localised environmental impacts of landfill operation and reduced greenhouse gas emissions compared to a 'base case' with no waste levy introduced.

While there were some other waste levy options (i.e. using flat rates of \$60 per tonne and \$120 per tonne) that performed marginally better with respect to delivery on policy objectives, economic benefit and environmental benefit, those options involved significantly higher cost impacts to affected sectors. The additional cost to businesses and households – including the potential for an initial price shock – is not justified by the slight gains in those other areas.

This section examines the preferred waste levy option in more detail, to allow the Tasmanian Government and stakeholders a clearer picture of the potential impacts that may arise.

6.1. Waste levy collections by stream and by year

Recognising that the recommended waste levy will be altered via a series of step changes that are designed to stimulate diversion of waste away from landfill, it is useful to clarify projected waste levy collections over the coming years according to the different sectors that generate waste. Figure 21 depicts projected collections from 2021/22 to 2030/31 (without applying a discount rate), based on a combination of waste levy rates and predicted volumes going to landfill. The figure indicates state waste levies without accounting for the removal of regional waste levies. That is, the state waste levy collection for each year has not been offset by the absence of other waste levies, relative to the base case.





Figure 21: Projected waste levy collections, in 2021 Australian dollars without discounting.

Key points to observe from this figure include:

- Overall waste levy collections in the first two years are in the order of \$8 million each year (at \$20 per tonne), followed by an average yearly collection of around \$13 million each year for two years (at \$40 per tonne). From 2025/26 onwards, waste levy collections average \$17.6 million per year over the remaining years projected.
- As each step change in waste levy rate is activated, there is a rise in waste levy collections which is substantially offset by increased diversion in the years that follow. This reflects the waste levy functioning as a price signal to reduce volumes to landfill.
- The largest fraction of waste levy collections is drawn from the C&I waste sector (accounting for 61.2 % of projected revenues); followed by the MSW sector (accounting for 37.2 % of projected revenues) and the C&D sector (accounting for 1.6 % of the projected revenues).
- As raised elsewhere in this report, the lower collections from the C&D waste stream may
 partially be an artefact of how C&D waste and clean fill are regulated in Tasmania. In
 other states, the C&D waste volume sent to landfill is of a similar order of magnitude as
 the MSW and C&I waste volumes sent to landfill.

As shown in Figure 21, by 2028/29, the power of the waste levy as a price signal set at \$60 per tonne is likely to have fully permeated across waste markets. The dominant drivers for volumes being sent to landfill from this point are population growth and economic activity.

Should there be an interest in accelerating diversion as this point approaches, there may be a need to review market settings including the role and effectiveness of the waste levy in conjunction with other market drivers and policy instruments. This need not singularly involve a revision to the waste levy rate, but may uncover ways in which the waste levy could be made more efficient through other actions that seek to address any newly uncovered market failures or distortions.



6.2. Cost incurred by selected sectors by year

In Section 5, each waste levy option was compared in terms of the cost impacts on different sectors. These impacts include the direct cost of the waste levy itself (transferred to waste generators) as well as the costs associated in shifting a portion of waste generated from the landfill sector to the resource recovery sector.

In this section, more detail is provided by setting out cost impacts over time, and in the case of households, presenting data relating to more familiar waste management situations.

6.2.1 Reduction in landfill revenues

On introduction of the recommended waste levy, landfills are projected to face diminished demand relative to the base case in accordance with the stated policy intent. While landfill gate fees (i.e. net of the waste levy) are expected to remain unchanged, the gradual increase in landfill charges caused by an incrementing waste levy will successively reduce demand for landfill services.

Figure 22 below projects a trend of diminishing turnover for the landfill sector, relative to the base case. By 2030/31, the annual demand for landfill services will have dropped by \$20.7 million. That is, the base case for landfill services estimated a turnover of \$48.6 million in 2030/31, whereas the preferred waste levy scenario would involve a turnover of \$27.9 million in the same year (using 2021 Australian dollars, not shown in Figure 22 which presents the annual reduction in revenue relative to the base case).



Figure 22: Projected reduction in landfill sector turnover on introduction of the recommended waste levy option (figures in 2021 Australian dollars).

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In noting this significant contraction in landfill demand, it does not necessarily follow that all operators will face a decline in business opportunity. There are no inherent barriers to landfill operators re-balancing their business model to deliver a higher level of resource recovery services. In fact, business model transitions of this nature are consistent with the introduction of a waste levy. During stakeholder engagement, landfill operators confirmed active participation in resource recovery and/or acknowledged an interest in exploring such options at a point in future.

6.2.2 Impacts on municipal solid waste and resource recovery services

In Section 5.3, the study presented findings on comparative costs incurred by the MSW sector on introduction of each waste levy option. Those costs were relative to the base case and aggregated over ten years. In Figure 23 below, the change in costs relative to the base case is presented for the recommended waste levy option, showing the change in cost for each year. As expected with a rise in waste levy over time, the change in MSW management costs increases markedly in the early years from around \$3 million to around \$8 million before stabilising through to 2030/31.



Figure 23: Change in MSW management costs relative to the base case (figures in 2021 Australian dollars).

In Figure 24 below, combined disposal, recycling and organics processing costs for MSW as modelled in this study are set out (i.e. in absolute terms, rather than being presented as a change compared to the base case). In the first year of introduction, these combined costs come to \$33 million. By 2030/31, these costs are projected to equate to just under \$40 million. These costs incorporate the waste levy as a price signal necessary to drive diversion from landfill, as well as gate fees for landfills, recycling and organics processing operations.





Figure 24: Combined gate fees (for landfilling, recycling and organics processing) and waste levy costs for managing MSW from 2021/22 to 2031/31 (figures in 2021 Australian dollars). These projections do not include fees for collection services and other costs.

Example – waste levy to encourage diversion of municipal solid waste

The example set out below is intended to present a clearer picture of how the recommended waste levy will work at the household scale. In this example, a household is assumed to have current access to kerbside garbage collection and recycling services, but does not yet have kerbside food organics and garden organics (FOGO) collection offered by its council.

The household is assumed to produce 800 kilograms of waste each year, of which 238 kilograms is recycled and 562 kilograms is sent to landfill for disposal. The kerbside recycling rate is 30 %. Using current price estimates for landfill disposal and recycling (excluding any regional levies) used in this study, annual disposal and recycling costs would come to \$88.40 without including collection costs or accounting for council decisions on how to distribute costs.

Figure 25 below sets out projected cost increases (comprising levy and gate fees) associated with the introduction of the recommended waste levy option. The blue line denotes cost increases associated with the ramping up of the levy rate, without increased diversion in place. By 2026, the household costs have risen from an initial cost of \$99.60 to \$122.10, with the recycling rate unchanged at 30 %. The green line depicts the case where the council undertakes education and promotion to ensure the household puts more resources in the recycling bin and rolls out a FOGO collection service on the community's behalf. In doing so, the council helps keep the annual household costs to \$115.30 while achieving a kerbside diversion rate of 62 %, effectively doubling the resource recovery outcomes at the household (and council) scale.





Figure 25: Projected changes in household waste management costs (limited to gate fees and waste levy components, figures in 2021 Australian dollars) for an example household. The blue line describes the trend where the household does not engage in additional recycling and organics recovery activities; the green line describes the cost where the household is able to increase recycling levels and use organics collection services. For comparison, the red line describes the situation where the household sends all of its waste to landfill.

Also shown on the figure is the case where a household does not have access to affordable recycling or organics recovery, with no option but to send waste to landfill. For these households, represented by the red line, annual disposal costs⁶⁵ are projected to rise from \$78.40 (i.e. with no levy, not shown in the figure) to \$126.40 by 2025/26.

This potential for higher waste management costs for those households with fewer diversion options may lead to less equitable outcomes across the Tasmanian community. Where this outcome coincides with locations of lower socioeconomic status (e.g. communities with limited or tenuous employment prospects), there may be regressive cost impacts. As explored further in Section 7.5, there may be a need for the state government to consider measures to support efficient and practical diversion options for such communities.

A separate household scenario may involve situations where a Tasmanian resident seeks to dispose of a trailer load of waste at a local transfer station. Assuming general waste fees of \$100 per tonne, a 100 kilogram trailer of waste could see a rise in costs from \$10 (assuming no minimum charge) to up to \$16 from 2025/26 onwards (i.e. occurring via \$2 increments every two years from 2021/22 onwards). However, transfer station and local tip shop upgrades and education measures may help the visitor to separate half of this material for resource recovery beforehand, helping to reduce their overall fees while supporting recycling activities.

⁶⁵ These costs assume landfill gate fees are equivalent across all households used in this example. Waste levy impact study – FINAL REPORT

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6.2.3 Impacts on commercial and industrial waste management

In Tasmania, industrial and commercial generators of waste contribute both the largest volumes of waste generated in the state and the largest volumes disposed of to landfill. The sector faces the most significant burden with respect to waste levy costs and offers some of the largest opportunities to divert waste from landfill in contribution to the Waste Action Plan targets.

Figure 26 below describes the projected additional costs incurred by C&I waste generators in introducing the recommended waste levy, including the switch from landfills to other solutions. In relative terms, by 2025/26, the sector is paying 19 % more in waste disposal and processing costs (including the waste levy), relative to the base case.

However, it may be appropriate to view the base case as a situation where businesses have historically underpaid for waste management, by way of their landfill costs failing to account for environmental risks and harms imposed on future generations, and by way of the resulting misallocation of resources into landfills rather than the recovery sector. The introduction of a waste levy is a means to correct this historic deficiency in waste management decisions.





Given this share of the costs, it is useful to recognise that while the policy objective attached to the waste levy concerns achieving an increase in diversion via recovery processes in line with targets 3 and 6 of the draft Waste Action Plan, Tasmanian industry presents an opportunity to deliver on Waste Action Plan targets while lessening the burden of the levy. In particular, industry may be well positioned to contribute to the phase out of problematic and unnecessary plastics (Target 5); and commit to the shift towards reusable, recyclable or compostable packaging (Target 2).

Moreover, while Target 6 has (in the context of a waste levy) mainly been discussed here in terms of lowering organic material to landfill via diversion, Tasmanian food businesses may also be positioned to help lower this volume through changes in their production systems and supply chains. This organic waste reduction pathway may more directly involve cost savings for



businesses rather than simply shifting waste management costs from landfills to organics processing services.

In conducting this study and with the assistance of the Tasmanian Minerals, Manufacturing and Energy Council (TMMEC), some limited engagement with C&I waste generators was undertaken. This engagement sought to understand likely responses to the introduction of a waste levy, and to test interests from Tasmania's wider industry base (i.e. beyond the waste and resource recovery sector) in adopting different roles in support of the Waste Action Plan.

The engagement revealed that a number of businesses would be open to:

- Changing on site procedures and operations to better separate and manage wastes, and to lower waste generation
- Increasing the use of recycling, treatment and processing services in place of disposal
- Exploring waste reduction and resource efficiency solutions with supply chains and distribution networks, potentially supported via guidance and funding
- Investing in waste reduction technologies and product redesign where appropriately supported
- Receiving guidance on waste management and recycling services suitable to their sector and location

In short, C&I waste generating businesses are open to playing a range of roles beyond passively accepting the introduction of a waste levy and responding through a shift in balance between landfill services and other waste management services. This presents an opportunity for the Tasmanian Government to further explore business changes that the Tasmanian industrial sector is willing to pursue while contributing to a circular economy.



6.2.4 Impacts on construction and demolition waste management

Compared with the MSW and C&I waste generating sectors, impacts on generators of C&D waste are modest. Owing to the smaller volumes of waste tracked and recorded from this sector, the direct burden of the waste levy is relatively modest (see Figure 21). This smaller quantity of levies collected from the C&D waste sector is also attributed to the absence of significant barriers to divert C&D waste from landfills to other solutions.

In particular, the current option to divert C&D waste as clean fill is understood to involve lower costs compared to landfills. From an economic perspective, it is reasonable to expect that all C&D waste generators that could divert their material from landfill will do so, on the point of being made aware of the waste levy and its influence in magnifying the disparity in landfill and clean fill fees. The projected effect of these market dynamics is set out in Figure 27 below, showing a *reduction* in waste management costs for the C&D sector, relative to the base case.



Figure 27: Change in C&D waste management costs relative to the base case (figures in 2021 Australian dollars). Note that C&D waste generator costs are projected to decrease, owing to the lower fees for accepting material as clean fill compared with landfill gate fees.

While this may be a positive outcome for C&D waste generators (i.e. the construction industry) and those willing to accept clean fill, the wider community benefits are less certain. It is not clear that the use of C&D waste as clean fill involves an improved environmental outcome in the majority of cases, and the practice may carry an opportunity cost through the failure to use the material to substitute for higher value construction sector inputs. There is also an equity principle at stake – while other sectors are asked to pay higher charges for waste management to deliver better outcomes for society, generators of C&D waste may readily avoid these charges.



6.3. Competitive benefits on selected sectors

Section 5 projected that the recovery rate associated with introducing the ramped rate waste levy would grow slowly over its first few years before stabilising at around 68 % to 69 % recovery. This recovery profile is an indicator of the potential growth in market share for recycling operators and organic material processors, both in Tasmanian waste markets and in the end markets for the respective commodities that they produce.⁶⁶

6.3.1 Recycling operators

Recycling operators, along with organics processing operators, are anticipated to be direct beneficiaries from the introduction of the waste levy. The positive Net Present Value result for this waste levy option in Section 5 can largely be attributed to the recovery of valuable materials.

Figure 28 below shows the projected split in new recycling revenue projected for 2021/22 through to 2030/31 over the ten year period, based on sector and the balance between gate fees and sale of products. The recovery of different materials is expected to generally follow the assumed composition profile for material presently being sent to landfill (see Section 4).

- The modelling suggests that the C&I waste sector holds significant growth prospects, both due to the large volumes generated and potential to source clean and homogenous feedstocks. However, it will require active market engagement to ensure commercial waste generators are aware of the lift in landfill costs and improved competitive standing of recycling services, and are prepared to make the necessary changes to waste management practices to access the lower cost of recycling relative to disposal.
- The MSW stream is anticipated to deliver a moderate expansion opportunity compared with the C&I stream. In part, this may be attributable to the fact that kerbside recycling arrives at a recycling facility in commingled form and can be relatively contaminated, lowering the value of end products (and requiring higher operating costs to meet a given market standard). With the majority of councils offering kerbside recycling collection, growth in volumes will be driven through marginal gains – e.g. by expansion of the kerbside service into less densely populated areas; promotion and encouragement of households to use their recycling bin more often; and population growth.
- There is some chance that councils may specify a higher quality of recycling service (e.g. better quality of end products, lower risks of service discontinuity etc.) both in response to the waste levy and recent recycling sector challenges. These factors are not included within the model and the projections.
- The C&D stream, under the present regulatory environment, is projected to offer only
 minimal growth opportunities with the introduction of the recommended waste levy.
 From the economically rationalist assumptions used in this study, an increase in landfill
 costs is most likely to trigger a shift to using C&D waste as clean fill where this is a viable
 option for the waste generator. Granted that C&D waste volumes recorded for Tasmania
 are much smaller than volumes for MSW and C&I waste, clean fill gate fee revenue
 projection is much lower than those for MSW and C&I waste.
- Because the value of clean fill to the buyer is largely indeterminate (i.e. in the aggregate, it is not clear that this is substituting for a useful material or carries any benefit beyond

⁶⁶ The new opportunities for recycling and organics processing will partly rest on the composition of volumes that are presently going to landfill. While this study used Tasmanian data for MSW and C&D waste, there was a need to rely on national data for C&I waste composition. This will affect the accuracy of the projections below. Waste levy impact study – FINAL REPORT



the gate fee), it cannot be assumed that clean fill has a sale value or some other economic value.

- For comparison, modelling of the recovery of C&D waste as a saleable product was also undertaken. Assuming an average gate fee of \$120 per tonne for C&D material, and an average sale value of \$22 per tonne, gate fee takings over ten years would be in the order of \$27 million and product sales revenue would in the order of \$5 million.
- This is in contrast to the \$6.2 million in projected revenue from use as clean fill. As raised earlier in this report, a revised approach to the regulation of C&D waste as clean fill may lead to much larger volumes of C&D waste tracked and recorded, consistent with the contribution of C&D waste to overall volumes observed in other states.



Figure 28: Projected ten-year recycling sector revenue by source as modelled in this study (with projections based on assumed volumes and price points), figures in 2021 Australian dollars, undiscounted.

In setting out these estimates, it is acknowledged that the value to the sector will ultimately depend on market conditions over this period, and that the value of end market materials is especially challenging to predict over the current time (owing to, for example, uncertainty in economic activity due to the Covid-19 outbreak and recent contractions in historic recycling markets). Similarly, the draft Waste Action Plan signals an interest from the Tasmanian Government in fostering competition and innovation in the waste market, which may lead to more competitive pricing strategies across the recycling sector.



6.3.2 Organics processing operators

In Figure 29, results of a similar process as used above for the recycling sector are presented. The projections account for a rise in demand for organics processing services from the MSW and C&I sectors (assuming that all recovery from the C&D sector takes the form of clean fill and recycling rather than organic material processing).

In the case of organics processing, the introduction of a waste levy may stimulate the introduction of different solutions such as in vessel composting and other processing technologies, and measures to screen out contaminants to provide for a more controlled environment and saleable end product.

- MSW and C&I sectors as sources of new opportunity are projected to be of a similar order of magnitude over the coming ten years, driven by an interest in lowering costs after the introduction of a waste levy.
- There appears to be a slightly larger volume of new organics processing volumes at stake from the MSW sector. This is likely to be driven by councils newly introducing kerbside food organics and garden organics collection services and by councils more strongly promoting the use of this collection. (This is in contrast to the recycling business activity arising from MSW, where the vast majority of councils already have kerbside collection services in place.)
- In both sectors, the gate fee is the predominant driver of additional turnover for the ten year projection. This is driven by the relative unit price (per tonne) of organics processing services compared to the assumed unit price (per tonne) of products sold from organics processing facilities.



Figure 29: Projected ten-year organics processing sector revenue by source as modelled in this study (with projections based on assumed volumes and price points), figures in 2021 Australian dollars, undiscounted.



6.3.3 Capital investment and employment aspects

The drive towards greater recycling and organics processing across Tasmania will inevitably call upon new infrastructure capital and an expanded labour force. This upshift in investment and employment will be more prominent in the earlier years as the waste levy is ramped up over time, although the labour outcomes will be sustained over the longer term in line with increased resource recovery activity.

While this employment estimate is now somewhat dated and has not been verified in more recent years, Access Economics attributed an employment factor of 9.2 full time positions needed for every 10,000 tonnes being recovered each year, replacing 2.8 full time positions in the landfill sector for the disposal of that same mass of material.⁶⁷ Thus, the net employment effect of shifting 10,000 tonnes from disposal to recovery equates to 6.4 full time positions.

Granted that, by 2030, the waste levy is projected to drive the diversion of 210,000 tonnes to recycling and organics processing, the legislation may support the creation of around 130 full time positions in the resource recovery sector. The majority of these positions are projected to emerge in the earlier years, i.e. during the transition towards a \$60 per tonne waste levy.

The level of capital investment in resource recovery needed to divert 210,000 tonnes each year will depend on a range of factors including operating technologies, scale of production, and specifications imposed on recovery services and products recovered. However, it may be reasonable to assume that the additional recycling of 120,000 tonnes of material may drive more than \$10 million in investment in Materials Recycling Facilities (MRFs), separate to investment in network infrastructure (transfer stations and similar) across Tasmania. The additional 90,000 tonnes of organics processing may call for a similar order of magnitude in capital investment, again depending on the preferred technologies, scales of operation and target markets.

 ⁶⁷ Access Economics, 2009, *Employment in waste management and recycling*.
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⁸⁹



6.3.4 Summary of recovery sector outcomes

The figures above show that, assuming that councils and businesses are responsive to the waste levy as a price signal, recycling operators and organics processing facilities are major beneficiaries from the new legislation. However, there is a need for the waste sector to more generally represent a stable and efficient market landscape to encourage recycling and organics processing businesses to allocate capital into new productive capacity and innovative services that may involve a decades-long time scale to generate profitable returns.

This stabilising environment may be enabled by appropriate regulation (as explained in Section 3), yet there may be a need for other measures to lower transaction costs, address barriers to market entry (for both waste related services and end products), and support efficient decision making. There may be avenues for Tasmanian Government to commit to such measures in a final Waste Action Plan.

Finally, the status of the recovery sector as a market segment that inherently stands to benefit from the waste levy may be drawn in contrast to waste generators (businesses and households, with councils acting on behalf of the latter) who ultimately carry the cost burden of a new levy instrument. This differential in economic outcome may be useful to bear in mind, should there be a need to manage trade offs in allocating support to different sectors in transitioning to the application of a waste levy.

If it works according to the policy objective, the waste levy will innately create business opportunity for recyclers and organics processors across Tasmania; yet the only way for businesses and households to come to a net benefit position is to reduce their overall demand for disposal and resource recovery services. This would involve a shift in productive systems and consumption practices in line with a widely encompassing interpretation of the circular economy.



6.4. Environmental benefits from introducing the waste levy

6.4.1 Annual volumes of waste diverted from landfill

In setting a price signal to favour recycling and organics processing in place of landfill disposal, the recommended waste levy is anticipated to drive an increasing annual volume of material away from landfills. Annual volumes disposed of to landfill under base case and recommended waste levy projection scenarios are set out in Figure 30 and Figure 31, with the latter broken into MSW, C&I waste and C&D waste streams that contribute to the overall picture (in Figure 30).

Figure 30 shows a widening gap between the base case and the waste levy scenario, in terms of waste sent to landfill each year, through to 2025/26. This gap stabilises to a difference of over 200,000 tonnes for each year thereafter, as the market shifting potential of the waste levy has largely played out by this time. Over ten years, diversion is estimated to total 1.5 million tonnes.



Figure 30: Annual volumes of waste projected to be sent to landfill (in tonnes).



Figure 31: Annual volumes of waste projected to be sent to landfill (in tonnes), by source sector.

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Given the observed flattening out from 2025/26, there may be merit in exploring future increases in the waste levy (i.e. from 2026/27 onwards) to drive diversion further. Yet it is likely to be more useful to comprehensively evaluate the effect of the waste levy on waste and resource recovery markets as the 2025/26 date approaches, and ascertain whether additional diversion could be driven by addressing other aspects of market failure and through measures other than price signal adjustments.

6.4.2 Additional recovery of recyclable and organic material

The above landfill diversion trends will be achieved through the greater uptake of recycling and organics processing services, which accounts for the revenue growth in these two sectors (as described earlier in this section). Figure 32 sets out the growing volumes of materials diverted to the recycling (green lines, with dashed line representing the base case) and organics processing (blue lines, with dashed line representing the base case) market segments.



Figure 32: Annual volumes of waste projected to be diverted to recycling and organics processing operations to recover resources (in tonnes).

On Table 11 (overleaf) estimated recovery rates for the state are set out, derived from the projected volumes as set out in Figure 30 and Figure 32. Over the ten year projection, overall recovery is anticipated to rise from 48 % to 69 %, with the majority of this improvement occurring over the first five years. While the contribution of recycling to this recovery rate is greater than the contribution made by organics processing (46 % versus 23 % respectively), the *growth* in recovery rate from the starting point of 48 % is roughly equally attributed to recycling and organics processing. The recycling rate rises from 35 % to 46 % while the organics recovery rate lifts from 13 % to 23 %.

While the waste levy is projected to be a driving factor for lifting resource recovery over the coming years, as observed in Section 5, the 69 % projection is somewhat less than the recovery target of 80 % which was set out in the draft Waste Action Plan. Other measures, including those presented in the draft Waste Action Plan and a focus on revisiting the definition and regulation of clean fill (see Section 7.4), may be needed to close the gap. In doing so, these measures may support the efficient functioning of the waste levy as a price signal.



Year	2021/22	2022/23	2023/24	2024/25	2025/26	2026/27	2027/28	2028/29	2029/30	2030/31
Landfill (tonnes)	414,540	385,357	346,918	316,899	279,214	274,353	273,719	277,568	281,399	285,272
Recycling (tonnes)	279,654	299,896	325,855	349,744	379,870	391,422	400,564	407,062	413,643	420,249
Organics recovery (tonnes)	106,278	127,777	152,817	171,657	192,032	198,161	202,724	205,551	208,465	211,413
% recycling	34.9 %	36.9 %	39.5 %	41.7 %	44.6 %	45.3 %	45.7 %	45.7 %	45.8 %	45.8 %
% organics recovery	13.3 %	15.7 %	18.5 %	20.5 %	22.6 %	22.9 %	23.1 %	23.1 %	23.1 %	23.1 %
% total recovery	48.2 %	52.6 %	58.0 %	62.2 %	67.2 %	68.2 %	68.8 %	68.8 %	68.9 %	68.9 %

Table 11: Overview of total recovery rate projected for each year, 2021/22 to 2030/31, including contributions from recycling and organics processing activities.


6.5. Harmonisation with other jurisdictions

In the National Waste Policy Action Plan, the Commonwealth and state and territory governments committed to investigate options to harmonise waste levies across Australia through government treasuries.⁶⁸ It is understood that the Tasmanian Government interprets harmonisation as involving waste levy settings that place Tasmanian levies in a similar order of magnitude as regional waste levies used in mainland jurisdictions.

Given Tasmania's position as an island state involving high costs in shipping materials to and from the mainland, there is unlikely to be a material risk of transboundary transport of solid wastes between Tasmania and other states in response to a significant differential in waste levy settings. Nonetheless, harmonisation may be appealing from the perspective of lowering business costs for nationally active waste management firms and businesses with high waste management costs; and to avoid unduly distorting business decisions regarding where to locate future operations where waste management costs are a factor.

For reference, Table 12 below sets out current and planned waste levy rates as publicly announced by different state governments at the time of writing. (Note, ACT has been omitted on the basis of not having a regional levy rate; and Northern Territory has been omitted on the basis of having no known plan to introduce a waste levy at the time of writing.)

State	Current levies	Future levy changes
New South Wales	\$146 per tonne in metropolitan areas\$84.10 per tonne in regional areas(coastal LGAs north of Sydney	No published plans to revise levy settings
Victoria	 \$65.90 per tonne in metropolitan region \$33.03 per tonne for municipal waste in regional locations \$57.76 per tonne for industrial waste in regional locations 	Stepped changes from 1 January 2021 to 1 July 2022 Finishing at (on 1 July 2022): \$125.90 per tonne in metropolitan areas \$62.95 per tonne for municipal waste in rural locations \$110.79 per tonne for industrial waste in rural locations
Queensland	\$75 per tonne in metropolitan and densely populated regions (i.e. LGAs along coastline south of Cook Shire, and Mt Isa) No levy in remote locations	To \$80 from 1 January 2021; and \$5 increase on 1 July 2021 and each year thereafter
Western Australia	\$70 per tonne Perth metropolitan region No levy in more remote locations	No published plans to revise levy settings Waste levy presently under review
South Australia	\$143 per tonne for metropolitanAdelaide\$71.50 per tonne for non- metropolitan locations	No published plans to revise levy settings

Table 12: Waste levy rates in other Australian states (in current Australian dollars). The list of future levy changes does not include changes that only reflect inflation-based indexation.

⁶⁸ Commonwealth Government, 2019, National Waste Policy Action Plan, p. 14.

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6.6. Sensitivity analysis

To verify the conclusions set out in this section, a limited set of sensitivity analyses were conducted. Key findings are set out in the paragraphs below, focusing on those modelling results that are sensitive to each variable in which adjustments were made. (That is, this section does not seek to comprehensively report on all results of the sensitivity analysis – only those outputs that are materially affected in conducting the sensitivity analysis.)

The sensitivity analysis results are not intended to re-open the question of which waste levy option is recommended,⁶⁹ but will assist the Tasmanian Government to make more informed decisions regarding the waste levy and related activities and investments. Thus, each section below is restricted to analysing the recommended waste levy only (relative to the base case).

6.6.1 Discount rate

The default discount rate used in the Net Present Value calculations was 7 % per annum. The discount rate is a parameter used to variously reflect the time value of money or alternatively, the opportunity cost of allocating funds to a given purpose while forsaking opportunities elsewhere. A 7 % discount rate is recommended by the Commonwealth Government when undertaking Cost Benefit Analysis calculations on behalf of public sector investments.

Changing the discount rate has the effect of lowering or raising the value of costs and benefits determined in a cost benefit calculation, depending on the point in time in which they occur. In effect, a higher discount rate indicates a scenario in which the community places an increasing value on costs and benefits occurring today relative to some point in future. The Commonwealth Government recommends using a 3 % discount rate and a 10 % discount rate during sensitivity analyses, and the Net Present Value result from adopting these values are set out below.

Sensitivity analysis – discount rate impacts on NPV results			
	Lower value	Default value	Upper value
Discount rate	3 %	7 %	10 %
NPV (recommended option, relative to base case)	\$157,211,498	\$121,889,177	\$101,814,439

Table 13: Sensitivity analysis - effect of discount rate on NPV results.

The key concern with respect to Net Present Value calculations (relative to the base case) is that they return a positive result, indicating that in overall terms, the community is better off with the introduction of the waste levy legislation compared to not introducing the legislation. As the results show, both the 3 % and the 10 % discount rate sensitivity tests return positive values of an order of magnitude similar to the 7 % discount rate. That is, the results do not call into question the net value to the community in introducing the recommended waste levy.⁷⁰

⁶⁹ Because the waste levy options all involve the same instrument being applied, with the only points of difference being the levy rate, it is not expected that the sensitivity analysis will affect the ranking of one waste levy option relative to another.

⁷⁰ As a side note, this outcome should be expected, because the costs and benefits associated with introducing the waste levy occur at a similar point in time, i.e. any effect that diminishes (or elevates) the value of societal costs into the future will have an equivalent effect on the value of societal benefits into the future.

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6.6.2 Change in commodity value for recovered resources

In order to assess the value of introducing a waste levy, a key determinant is the revenue that may be earned through the sale of additional resources diverted in response to higher landfill gate fees. This response is integral to the functioning of the waste levy as a price signal that generates benefits for the Tasmanian community.

At present, there are several uncertainties that affect an understanding of the revenue that may be generated from the sale of recovered materials – these involve the average market value of materials sold; and the total volume of materials generated. The sensitivity analysis looks at both of these sources of uncertainty in turn, commencing with the question of average value.

The average value of recovered resources may differ from the assumed estimates used in this study by way of two main factors:

- The composition of materials diverted from municipal and industrial sources, affecting the balance of commodities sold after sorting and removing contaminants
- The unit prices for those materials sold into various markets.

As a means to account for these factors (without seeking to differentiate between each), a sensitivity test that raises and lowers all recovered commodity values by 20 % has been undertaken. The results of this test are set out below. Table 14 presents the default values in bold, with lower and higher alternatives on either side. A number of relevant modelling outputs are also shown, including NPV results and recycling and organics processing revenue outcomes (aggregated across the ten year study period). (Note: C&D recycling is not included as the economic value of clean fill is highly uncertain in the current regulatory environment.)

Sensitivity analysis – commodity value impact on selected outputs			
	Lower value	Default value	Upper value
Commodity value adjustment factor	- 20 %	Nil	+ 20 %
Value of MSW recycling (weighted) / tonne	\$100	\$125	\$150
Value of C&I recycling / tonne	\$261	\$327	\$392
Value of organic products / tonne	\$39	\$49	\$59
NPV result	\$96,808,983	\$121,889,177	\$146,969,370
Recycling sales revenue (relative to base)	\$131,958,880	\$164,948,600	\$197,938,321
Organics processing sales value (relative to base case)	\$26,046,439	\$32,558,048	\$39,069,658

Table 14: Sensitivity analysis - effect of recycling and organic products commodity value on NPV results and operator revenues (i.e. across ten year study period, figures are in 2021 Australian dollars).

The table reveals that, when lowering assumed commodity values by 20 % across the board, a positive NPV result is retained and is within a similar scale to the NPV result generated using default model values. Revenue outcomes from the sale of recycled material and organics processing products rise and fall in response to commodity values, as is to be expected.

While these results are a positive indicator for decision makers seeking to introduce a waste levy, there may still be a need to cautiously monitor the market value of recovered materials in future. This is particularly the case for materials whose markets have been shown to grow precarious in recent years, due to a range of factors affecting demand and price levels. Depending on the



strength of end markets over the Waste Action Plan time period, there may be a need to develop new markets for recovered materials, and incentivise the recovery sector to invest in technologies and processes that allow them to delivery products that are higher up the value chain. Other measures – for example, the adoption of revised municipal recycling collection models that diminish contamination rates – may also have a role in supporting higher value recovery and maximising the economic and environmental benefit for Tasmania.

6.6.3 Change in volume of materials recovered in response to a waste levy

In undertaking this study, it was assumed that the introduction of an appropriate waste levy would encourage waste generators to divert waste from landfills to other services and would signal the resource recovery sector to invest in new services and assets. For the MSW, C&I waste and C&D waste streams, it was assumed that a significant proportion of the recoverable material going to landfill would be diverted while leaving a minor fraction along with materials that are presently commercially uninteresting to recover due to a multitude of factors. The estimated extent that a waste levy would stimulate this increased diversion was informed by stakeholder perceptions of opportunity, an examination of compositional data, and a consideration of outcomes achieved from different waste levy settings used on the mainland.

It would be appropriate to test the results of this study by examining the impact of raising and lowering the proportion of recoverable material that is diverted in response to the waste levy. Table 15 below sets out the default results generated, along with some variants caused by altering the extent that the recommended waste levy stimulates greater recovery. In doing so, the assumed total diversion achieved (i.e. of the recoverable fraction within each stream) is altered by 10 % in each direction.⁷¹ (To be clear, this percentage is in terms of the *estimated recoverable fraction*, not in terms of the *total volume of material generated* in each stream.)

Sensitivity analysis – impact of the recoverable material diverted on selected outputs			
	Lower value	Default value	Upper value
Additional diversion adjustment factor	- 10 %	Nil	+ 10 %
MSW recyclables diversion	70 %	80 %	90 %
MSW organic materials diversion	66 %	76 %	86 %
C&I recyclables diversion	76 %	86 %	96 %
C&I organic materials diversion	72 %	82 %	92 %
C&D recyclables diversion	90 %	100 %	100 %
NPV result	\$66,100,333	\$121,889,177	\$180,021,603
2025 recovery rate	59.8 %	67.2 %	74.3 %
2030 recovery rate	60.9 %	68.9 %	76.7 %
Average annual levy revenue	\$15.0 million	\$13.1 million	\$10.1 million
Total material recovered per year	490,600 tonnes	544,500 tonnes	593,400 tonnes
Value of additional resources	\$11 million/year	\$20 million/year	\$29 million/year

Table 15: Sensitivity analysis - effect of recycling and organic products commodity value on selected results.

 $^{^{71}}$ For example, if the default model setting shows that 80 % of the recyclable material in the MSW stream is recovered due to the introduction of a waste levy, the sensitivity analysis considers scenarios where this percentage is lowered by 10 % (i.e. 70 % of the recyclable MSW content is instead recovered) and raised by 10 % (i.e. 90 % of the recyclable MSW content is instead recovered).



For comparison, the base case scenario involved a baseline diversion of:

- 67 % of the recyclable content available from MSW stream
- 27 % of the recoverable organic material available from MSW stream
- 65 % of the recyclable content available from the C&I waste stream
- 55 % of the recoverable organic material available from the C&I waste stream
- 0 % of the recyclable content available from the C&D waste stream

It should be noted that, in the case for C&D recycling, 100 % of the recoverable material was assumed to be diverted in response to a waste levy on the basis that there are no significant barriers to recovering material deemed as suitable for clean fill. In effect, the present regulatory framework allows inert C&D material to be taken as clean fill for landscaping purposes with minimal need for processing, sorting, or other preparatory measures. However, the present amount of C&D waste diversion is not tracked (see Section 4), and was assumed to be zero in the base case. Challenges and opportunities associated with C&D waste recovery are discussed further in Section 7.

The results in Table 15 show a number of results are sensitive to the degree that material diversion responds to the introduction of a waste levy, although the results all continue to lend support to the introduction of a waste levy. In particular, the Net Present Value result remains positive and the indicated recovery rates represent significant improvements on the assumed base case recovery rate of 45 %. The imposition of the waste levy, under the lower diversion scenario, generates significant volumes of material diversion and recovered value. This analysis does not count against the introduction of a waste levy but instead suggests that it would be prudent to closely monitor the outcomes of the waste levy through a number of metrics. These metrics may be additionally useful in understanding the viability of the resource recovery sector, and in diagnosing and addressing potential areas of risk to Waste Action Plan outcomes.

6.6.4 Other sources of uncertainty and their impacts on this study

Container deposit legislation

It is understood that the Tasmanian Government intends to introduce a Container Refund Scheme (CRS) by 2022, to drive the increased recycling of beverage containers and reduce littering. The study team understands that the planning of this scheme is in its earlier design stages, prior to development of a final governance model, assignment of performance targets, preparation of the necessary legislation, and appointment of a delivery organisation.

Because the scheme is in its early development phases and because design decisions will have a significant bearing on outcomes achieved through the intended CRS, it would be speculative and not consistent with the present state of development of the CRS to presume material flow impacts from the scheme and how these flows interact with the waste levy.

As such, no attempt had been made to incorporate CRS settings into the quantitative model used in this study. Instead, some provisional and high level analysis and commentary is provided here, which may be useful in considering the design and governance model of a CRS. This commentary is restricted to the CRS' possible influence on the effects of a waste levy – it does not aim to explore other direct effects of a CRS on waste management and recycling, which is outside the scope of this work and somewhat difficult given the present knowledge available.



Impacts of a CRS on the direct cost of a waste levy to MSW and C&I waste generators

Granted that the CRS is likely to divert beverage container materials away from the kerbside garbage collection services, the scheme is expected to lower the costs faced by councils in their kerbside services – including costs associated with a waste levy, achieved via the likely reduction of waste going to landfill. A CRS will potentially lower the cost impact of the waste levy on councils, and by association, their communities. However, the extent that costs are lowered depends on how effectively the CRS diverts material from the kerbside garbage bin.

The same influence is likely to occur for C&I waste generators – by providing a separate incentive to draw beverage containers out of the C&I waste stream (i.e. independent of the waste levy), C&I waste generators will put less waste in their disposal bins than would otherwise be the case so that the waste levy will apply to a smaller quantum of discarded material.

Impacts of a CRS on the additional recyclable material diverted due to a waste levy

A CRS will have the effect of lowering the volume and altering the composition of materials placed in kerbside recycling and C&I recycling streams (e.g. source separated recycling bins) by removing beverage containers from that system. Those recyclers that are contracted to manage beverage containers under a CRS will benefit, although that is largely peripheral to the influence of the waste levy.

Because the CRS will draw material away from kerbside recycling and contracted C&I recycling services, where the waste levy encourages greater recycling, the application of a CRS is likely to cause the amount that is diverted into the recycling stream to be smaller. In other words, the recycling levels that may be directly and solely attributed to a waste levy will be lower because some of that recycling will instead be driven by the CRS as a separate intervention. Those recycling operators contracted to councils and businesses for recycling services will therefore not receive as much material compared to the case in the absence of a CRS. However, the materials may be of higher value due to less contamination with glass and metal fines, although there may be other compositional factors that impact the value of the material recovered.

Effect of a CRS on the recovery rate achieved via the introduction of a waste levy

On balance and in considering the combination of a CRS and the waste levy acting together, there is not likely to be a reduction in the recovery rates modelled and set out elsewhere in this section. The overall recovery rate may in fact be higher, by virtue of the CRS achieving diversion of beverage containers that may otherwise persist in the landfill disposal stream (even in the presence of the waste levy). Attribution of impact between one intervention and the other will in part depend on CRS design features and performance levels that, as yet, have not been worked through.

Possibly the key message to take is that the CRS and the waste levy can complement each other, although there may be some overlap in effect such that part of the (both positive and negative) impacts attributed to a waste levy acting in isolation may instead be attributed to a CRS. However, even allowing for some transfer of attribution, the net impact of the preferred waste levy option is likely to involve a strong contribution to the draft Waste Action Plan targets.



Gate fees sought by new resource recovery market entrants

In conducting this study, emphasis was placed on determining an estimate on the relative pricing of services (expressed as gate fees) that may expand and emerge as an alternative to sending waste to landfill. The study used a combination of methods including comparison with mainland markets and engagement with Tasmanian stakeholders to arrive at a set of estimates for use in a range of modelling processes. However, because the recycling sector is going through a period of change and because Tasmania is in the early stages of some markets developing (such as the market for kerbside organics collection and processing), there is considerable uncertainty on the services and prices that may evolve over the coming years.

These complicating factors have been dealt with in the following ways:

- Cross-referencing multiple sources to provide an estimate of future gate fees for MSW, C&I waste and C&D waste recovery services as applicable in Tasmania
- Where disparities persist, selecting an estimate towards the upper end of a range, to avoid overstating the effect of a waste levy option in shifting market preferences
- Reviewing responses to a given waste levy step change as observed in mainland states (using the National Waste Reports and other sources) to confirm the existence of precedent relationships between a given waste levy rate and market preferences (in effect, signifying that competition from alternatives to landfill has been stimulated).⁷²

The combined effect of these methodological decisions is both to improve the robustness of the waste market model used in this study; and to present results that would tend towards conservative (rather than optimistic) effects from introducing a waste levy at various rates.

This is suitable given that new entrants will face a degree of market uncertainty over the coming years, and are presumed to be risk averse – erring towards a higher waste levy may somewhat counteract this risk aversion. This feature is important given the level of capital investment required to accommodate the shift in demand needed to meet the Waste Action Plan targets, and to introduce greater innovation in line with the transition to a circular economy.

⁷² As a general rule, for example, those jurisdictions that introduced and maintained a waste levy typically saw greater improvements in resource recovery outcomes for each stream, in raising a waste levy of \$5 - \$20 per tonne towards \$60 - \$80 per tonne. Levy increases beyond \$60 - \$80 per tonne have been more marginal in their effects. However, there needs to be caution in unduly relying on these correlations given a range in other policy settings and market dynamics that may be in play for each jurisdiction at a given point in time. For example, while South Australia increased its levy, it also introduced rules to require businesses to source separate commonly recyclable items.



6.7. Preferred waste levy option – key characteristics

Following on from an analysis of different waste levy options and determination of the preferred options (Section 5), this current section sets out a more detailed impacts projected from that preferred option.

A limited sensitivity analysis was also undertaken, with the finding that, in making some model adjustments to account for some potential sources of uncertainty, the preferred waste levy option was still likely to generate benefits and outcomes that were largely consistent with the default assumptions. However, owing to some of the larger unknowns faced by the waste and resource recovery market over the coming years, it would be prudent to set up a monitoring regime to track impacts of the waste levy as well as gather data that is indicative of the efficient functioning of the waste market and progress in meeting Waste Action Plan targets.

Notable characteristics of the preferred waste levy (i.e. commencing with a \$20 per tonne levy, which is then adjusted to \$40 per tonne after two years, and which is then adjusted to \$60 per tonne after a further two years) include:

Waste levy charges and revenues

• Total waste levy collections are projected to come to \$8.3 million in its first year (i.e. annualised, assuming a 1 July 2021 commencement), rising to \$17.1 million by 2030/31. Most of the rise in this sum takes place while the waste levy rate is ramping upwards, i.e. from 2021/22 through to 2025/26.

Displacement of landfills by resource recovery operators

- The application of a waste levy is projected to deliver an intended decline in demand for landfill disposal services of up to around 210,000 tonnes per annum by 2030/31, with most of this fall in demand occurring while the waste levy rate is being increased. Landfill operators do not face insurmountable barriers for re-orienting their business model to participate in the circular economy in various ways.
- This fall in tonnages is delivered through the displacement of landfills by recycling operators (delivering up to 120,000 tonnes in additional recovery) and organics processing operators (delivering up to 90,000 tonnes in additional recovery).
- The additional revenue for recycling operators is mainly led through the sale of recovered materials (worth an additional \$165 million over ten years), followed by recycling gate fees (worth an additional \$86 million over ten years). Recovered materials from the C&I sector are projected to hold the greater economic opportunity, requiring that C&I generators are sensitive to the opportunity to reduce costs by recycling instead of disposing to landfill.
- There is also a need for recycling operators to recover higher grade materials and deliver to viable end markets, to diminish their exposure to demand risk. A key issue will be to manage contamination of materials inbound to and outbound from their facilities.
- The greater opportunity for organics processing operators driven through the waste levy is likely to be more evenly split between serving households and businesses, given that municipalities are still in the earlier years of emplacing FOGO collection services.
- Actual growth in business opportunities for organics processing is technology and end market dependent (as there is a range of alternative products that may be produced from organics, requiring different technologies). This study estimates that the waste levy



may stimulate an added \$86 million in organics processing gate fees over ten years; and an added \$33 million in the sale of recovered organic products.

- Based on a *net* employment effect of an additional 6.4 full time positions for every 10,000 tonnes diverted from landfill to recycling, the legislation may support the creation of around 130 full time ongoing positions in the resource recovery sector. The majority of these positions are projected to emerge in the earlier years, i.e. during the transition towards a \$60 per tonne waste levy.
- The level of capital investment in resource recovery needed to divert 210,000 tonnes each year will depend on a range of factors including operating technologies, scale of production, and specifications imposed on recovery services and products recovered. The additional 120,000 tonnes' recycling may drive more than \$10 million in investment in new sorting facilities, separate to investment in network infrastructure. The additional 90,000 tonnes' organics processing capacity may call for a similar amount of capital, again depending on the preferred technologies, scales of operation and target markets.

Impacts on waste generating households and businesses

- Assuming most households are in a position to recycle more material and participate in
 organics collection services offered by their councils, annual MSW waste disposal
 (including the waste levy) and resource recovery services are projected to increase to
 just under \$40 million in costs by 2030/31. Under the base case, these same services
 currently cost in the order of \$30 million per year across Tasmania.
- On a per household basis, under the base case, average disposal and resource recovery services come to \$88.40 each year (not including regional levies). With the recommended waste levy in place, it is projected that these costs would rise to \$115.34 each year by 2030/31, adjusted for greater diversion from landfills to resource recovery.
- For comparison, a household with the same landfill disposal fees without access to recycling and resource recovery would see these annual costs rise from \$78.40 to \$126.40 (assuming no difference in volumes generated). This may lend weight to the consideration of measures to support more options to divert waste from landfill in those areas that are presently underserviced with resource recovery operations.
- It is more challenging to provide an estimate of 'average' waste management costs for businesses on introduction of a waste levy, owing to the diversity of businesses and their waste profiles across Tasmania. The introduction of the preferred waste levy is projected to increase C&I waste disposal and resource recovery costs by \$4 million above the base case in 2021/22 (to \$64 million per year); and by \$14 million above the base case in 2030/31 (to \$86 million).
- Rather than perceiving these added costs as an undue burden on the business community, as set out in Section 2, it would be more appropriate to consider historic waste management costs as involving an incomplete accounting for the social harms (and misallocated resources) from waste disposal that the waste levy aims to correct.
- Although only limited engagement with manufacturers and other businesses took place over the course of the study, commercial and industrial generators of waste voiced an interest in being involved in a range of circular economy activities to lower their waste disposal volumes, and were open to engaging further with the Tasmanian Government.
- The construction sector, in contrast to other sectors and households, are anticipated to be driven towards using clean fill services on introduction of a waste levy. This would involve a reduction in costs for C&D waste generators and increased uptake of using



inert aggregate as clean fill for an uncertain benefit. This outcome may be seen as inconsistent with the contribution made by other businesses and households, and an imprecise alignment with the intent of the draft Waste Action Plan.

Diversion of valuable materials from landfill

- In introducing the preferred waste levy, it is projected that an additional 210,000 tonnes of resources will be diverted from landfill by 2030/31 each year, with most of these gains occurring in the earlier years.
- In aggregate across the three sectors (MSW, C&I waste and C&D waste), the recycling rate is projected to rise from 34.9 % to 45.8 %. The organics recovery rate is projected to rise from 13.3 % to 23.1 %. In combination, the waste levy is anticipated to contribute to a combined resource recovery rate of 68.9 % by 2030/31, in the absence of introducing other measures.
- Other measures may be effective, both in terms of lowering uncertainties and market inefficiencies that could hinder the waste levy in achieving the expected impact at least cost to society, and in helping Tasmania obtain the target 80 % recovery rate for 2030.

Summarising the above, this study identifies a range of longer term benefits in introducing the preferred waste levy, spanning business expansion and job creation, environmental benefit and the opportunity to reward investment and innovation. These conclusions rest on an analysis and set of assumptions that draws on the current state of knowledge for waste in Tasmania, which will need to be built on over time to ensure the expected outcomes are realised or (if new information identifies) updated.

In engaging with stakeholders and exploring some of the wider issues associated with introducing a waste levy, there is evidence of a number of other matters to consider and potentially act upon, as set out in the next section.



7. Mitigating unintended impacts and supporting complementary measures

Internal government assessment and initial stakeholder feedback on the draft Waste Action Plan commitment to introduce a levy raised a number of potential unintended impacts that warranted further investigation through this study. With a preferred levy setting proposed and outlined in the preceding sections, this section provides an opportunity to draw further on prior research and findings from stakeholder engagement to outline some additional design considerations.

Figure 33 provides a 10 year projection of the revenue envelope derived for the preferred option, including an allocation for levy administration (defined in Section 5.2). This forward estimate is shown to guide decisions on and planning for potential measures to place alongside a levy.



Figure 33: Projected allocation envelope to mitigate unintended impacts and support complementary measures

As outlined previously in Section 2.2, the primary focus of this study is not the role of the waste levy in generating and dedicating revenue to fund programs and other commitments flagged in the draft Waste Action Plan and elsewhere. This is to be determined through separate processes focused on investigating relative priority, design, phasing and resource requirements as needed to deliver on a final Waste Action Plan.

Having investigated the impact of the levy as a price signal (i.e. the policy objective), its costs to the community and selected sectors, and influence on competition (in preceding sections), this section is mindful of the need to show that revenues in question allow the state government to:

- Efficiently administer the levy (at no net cost to government)
- Reduce, mitigate or manage any adverse impacts consequent to introducing a levy
- Support measures set out in the draft Waste Action Plan, including commitments to support regional bodies to maintain a revenue stream and continue operations.⁷³

⁷³ This regional support may be interpreted to include equivalent arrangements for council areas not presently represented or supported by a regional body.



In doing so, a number of assumptions have been taken in relation to waste levy administration overheads and government funding allocations (including funding arrangements struck between regional bodies and the Tasmanian Government). The study authors highlight that the use of these assumptions is necessary to derive practical and useful findings that will guide decisions and inform public comment. These assumptions are not intended nor are they to be taken to pre-empt, replace or unduly influence consultation and decision-making processes that need to take place separately between the relevant parties.

7.1 Potential to exacerbate illegal dumping activity

Engagement with regional stakeholders generally supports the view that illegal dumping is predominantly based on a cultural disposition among some parts of the community. For some, there appears to be a disinclination to pay for waste services *in principle* (i.e. at any and all price points) and a disregard for community and environmental impacts of dumping. Some councils have gone so far as to set a gate fee of \$0 per tonne for visitor disposals to reduce dumping.

Engagement with state representatives (from WA and SA) raised speculation that there may be a basis for levies to increase the extent of illegal C&D waste disposal due to the increased gains that may be made, although this was not backed by evidence. Other jurisdictions also point to the potential incentive for 'cowboy' operators to pursue more coordinated illegal stockpiling and disposal when levies reach higher rates.

Setting aside causal relationships, there appears to be a significant, yet poorly understood, incidence of illegal dumping that is not anticipated to appreciably change on the introduction of the levy (i.e. irrespective of levy quantum). A waste levy review conducted in NSW⁷⁴ also stated no conclusive evidence linking the NSW waste levy to illegal dumping, while still reflecting illegal dumping as a widespread issue warranting appropriate attention and support. Waste levies at the time of review in NSW were approximately \$80 per tonne in the greater metropolitan zone and \$40 per tonne in relevant regional areas. These rates are generally aligned to the preferred levy arrangement outlined in Section 6.

In Tasmania, illegal dumping is widely viewed as an issue that needs to be resolved, yet has not been historically resourced or prioritised to the extent necessary to materially address the challenge. Even if the levy is unlikely to drive illegal dumping, there is a basis to tackle the issue at multiple scales and to build a better understanding of its nature, extent and impacts.

More recently, the Tasmanian Government has developed the Report Rubbish⁷⁵ online web application to make it easier to report litter and dumping via smartphone, tablet or computer. Data generated through Report Rubbish should help the Tasmanian Government (and stakeholders) to better understand littering and dumping hotspots and inform the development of litter reduction strategies and actions. Figure 34 illustrates, in map form, a number of littering / illegal dumping events currently open for investigation.⁷⁶ EPA Tasmania is engaging with land managers across Tasmania, to utilise the information generated to inform collaboration strategies.

⁷⁴ KPMG, 2012, *Review of the NSW Waste and Environment Levy*, p. 63.

https://www.epa.nsw.gov.au/~/media/EPA/Corporate%20Site/resources/wasteregulation/waste-levy-reviewreport.ashx last accessed 30 August 2020.

⁷⁵ See https://rubbish.epa.tas.gov.au/

⁷⁶ Based on screen capture of online map, accessed early September 2020.

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This approach is positive, given that it starts to build an information base tracking the occurrence of illegal dumping on public land. Notwithstanding the incomplete evidence for linking increased illegal dumping to the introduction of a waste levy, the Tasmanian Government and stakeholders may wish to prioritise reinvestment of levy revenue to support clean up and prevention.



Figure 34: Location of recent rubbish reports open for action

Returning to the previous reference to NSW, the NSW EPA is currently administering its seventh funding round under the *Combating Illegal Dumping: Clean-up and Prevention Program*⁷⁷ (CID). The program invites participation and applications for grant funding from councils; public land managers; and community groups working in partnership with councils and/or public land managers. These grants are to support councils, public land managers and community groups to identify illegal dumping sites, and conduct prevention and clean up action on public land.

It is suggested that, given the CID program is in its seventh funding round, any decision to prioritise the design and roll-out of a similar program in Tasmania may benefit from a targeted engagement with NSW EPA to leverage findings from any internal evaluation of historic program effectiveness. A similar program for Tasmania may provide a strong complement to current efforts to identify hotspots through the Report Rubbish and Litter and Dumping Management System, and grant confidence that the time and effort to report via the tool will deliver the pay off of an appropriate response.

⁷⁷ See <u>https://www.epa.nsw.gov.au/working-together/grants/illegal-dumping/illegal-dumping-clean-prevention</u> last accessed 30 August 2020.



7.2 Impacts on charity organisations

Charitable Recycling Australia (formerly NACRO) is the industry organisation for charitable recyclers across Australia. Its members run 3,000 charity shops (and in Tasmania, tip shops) and raise about \$550 million for social welfare causes each year.

Charitable Recycling Australia sees its members as pioneers of the circular economy transition by virtue of their extending the useful lifespan of consumer items – furniture, clothing, household items, toys, 'bric-a-brac' etc. It also identifies a *social dividend* within its business model by making necessities available at substantially lower prices than would be available for new items (and by using proceeds to support other charitable activities).

Charitable Recycling Australia expressed support for the introduction of a waste levy in Tasmania, given the environmental benefit it seeks to deliver.

7.2.1 Impact of dumped rubbish on charity organisations

Charity shops are currently exposed to people dumping unwanted goods in their charity bins or outside their premises, and are subsequently left with the job of disposing of this unusable material on others' behalf. With the introduction of a waste levy, Charitable Recycling Australia members are exposed to increased waste disposal costs, for items that members ultimately cannot bear responsibility for and for which members have limited means to control or prevent.

Representatives of the charity sector engaged with for this study were not in a position to numerically quantify potential cost impacts of a waste levy in Tasmania. Yet the Charitable Recycling Australia submission (submitted as NACRO) to the draft Waste Action Plan made the following statement surrounding the base case for Tasmania:

'NACRO estimates that charitable recycling organisations in Tasmanian are forced to send around 2,340 tonnes of waste to landfill each year, from illegal dumping and unusable donations at charities. Annual store donations are estimated (includes projections and modelling) at around 24,000 tonnes a year, plus 6,500 tonnes collected through the Tasmanian charitable donation bin network...Illegal dumping at charities is the greatest burden on charitable recycling organisations, causing them to spend over \$13 million on waste management each year... In Tasmania, NACRO estimates charitable recycling organisations spend over \$500,000 a year on waste management.'

Some charitable recyclers have historically been able to access discounted waste disposal costs (i.e. landfill gate fees), with around 75 % of costs reduced. However, there has been a trend toward landfill-owning councils withdrawing these discounts over recent years, meaning that charitable recyclers are already seeing a rise in waste disposal expenses in Tasmania. This trend, coupled with the introduction of a waste levy would divert limited funds away from investment into a range of core social welfare and employment programs supported by charities.

Charitable Recycling Australia holds the view that, in general, about 50 % of charity bin dumping arises from confused and unintentional practices (i.e. people are depositing materials with the honest intent and expectation that the goods can be resold at charity shops); and about 50 % arises from intentional 'dodgy' practices. Similar to illegal dumping (see Section 7.1), it is difficult to directly attribute an increase in charity dumping to the introduction of a waste levy, however the imposition of an additional cost for waste disposal (via a levy) may encourage dumping of more material on charities out of a desire for convenience and cost avoidance.



Charitable Recycling Australia also expressed the view that, in Tasmania, the current legal framework gave limited recourse for charitable recyclers to prosecute negligent or criminal dumping behaviours.

7.2.2 Stakeholder and jurisdictional support for reducing levy impact

Given the above, Charitable Recycling Australia believes its members should attract relief from the cost of a waste levy. In different states, the prevailing models have been to grant exemptions or to pay rebates to the charity organisation. In general, and in Tasmania's situation, a rebate program is preferred compared to an exemption (which would necessarily be applied at the landfill, with cost reductions passed through to the charity) due to a number of reasons:

- Exemptions typically involve higher, non-scaling overheads for the charity organisation and the administration agency – given the smaller volumes in Tasmania, this would be an inordinately inefficient model
- Waste contractors have been known to increase their fees when acting on behalf of charity organisations (on the basis of a need to recover administrative costs associated with an exemption), which may partially neutralise the benefit gained from an exemption
- In implementing an exemption, there are some challenges in establishing proof that the material received by a landfill is actually from a charity organisation, opening the risk of abuse by landfill operators, a potential occurrence noted by South Australia's EPA.

In contrast, it was viewed that a rebate is much easier for charitable organisations to apply for (e.g. through submission of invoicing data to the administration body), with less involvement of any third party who may seek to recover administration costs or apply the instrument less appropriately. A rebate scheme also aligns with advice from Western Australia's DWER, to the effect that, in principle, as few exemptions should be introduced into the system as possible.

As a point of clarification, the charitable recycling sector is in an atypical situation compared to other parts of the resource recovery sector by way of receiving donated items and seeking to sell those items (reconditioned and cleaned as necessary) to lower income members of the community. As such, it has limited means to pass on the costs for receiving and disposing of unwanted materials, without incurring welfare impacts on lower income Tasmanians. In contrast, commercial recycling operations are, in general terms, in a better position to internalise or pass their waste management costs (e.g. through their gate fees) onto a paying customer base.

A review of mainland jurisdictions suggests financial rebate and relief models exist in Victoria and Western Australia. Further engagement by DPIPWE with Victoria, Western Australia and Charitable Recycling Australia is suggested to develop a best practice rebate scheme for introduction in line with any waste levy in Tasmania.

Hypothecation

In engaging with the study team, Charitable Recycling Australia strongly advocated a full hypothecation model, given the additional measures perceived as necessary beyond the introduction of a waste levy. In particular, education campaigns were cited as an important area for state governments to invest in, including measures to help prevent the community from wrongfully leaving material outside of charitable recyclers' premises and charity bins.

While an effective rebate scheme should reduce the cost of any levy on charity waste, it will not cover all costs associated with disposal of dumped rubbish (only the levy component). Additional



measures, including improved education, will help ensure the Tasmanian community is better informed as to which items charities are best able to accept for reuse and recirculation.

7.2.3 Recognising the charity sector role and contribution to the Circular Economy

Engagement with stakeholders noted that the charity sector is seldom reported on or recognised for their contribution to diversion from landfill. Interviewees explained that with contributions generally not tracked, under current arrangements waste strategy delivery was largely blind to the role the charity sector played in meeting formal objectives and targets.

Charitable recycling organisations track invoices and revenues as a matter of standard financial responsibility, but do not typically weigh the items received and sold (although some charitable tip shops have the means to do so, using on site weighbridges) in a way that accords with the standard metrics used in public waste authorities' oversight of their waste strategies.

Discussion with stakeholders noted that, if the extent of charity bin dumping was relatively stable as a proportion of overall activities, the use of a rebate system (see above) would allow a general tracking of how much material the sector has been able to recover over a given period (i.e. by back calculating total volumes received as a multiple of the waste fraction). The charity sector and government would potentially need to conduct some material audits on a periodic basis, to ascertain the extent to which a given amount of donated material represents a given amount of recovered material sold at charity shops.

If this arrangement was in place, the government could track the benefit from the charity sector and better quantify the value in investing in the charitable recycling sector as a means to deliver on circular economy objectives. Designing this intention into a rebate program would mean that the program could serve as a basis to enter into an information exchange agreement (and further down the line, a co-investment model) with the Tasmanian Government. In this way, the charitable recycling sector may transition from a notional partner in shifting to the circular economy to a formal co-deliverer with the means to quantify and substantiate its contribution.

With Charitable Recycling Australia and charity sector support in Tasmania, this could provide a means to track and deliver additional positive outcomes and benefits through reuse. The prevalence of tip shops within Tasmania suggests there is already strong groundswell of support for reuse. Complementary measures are needed to ensure the introduction of a waste levy strengthens rather than detracts from reuse as a preferred option sitting above recycling within the waste management hierarchy.



7.3 Considering exclusion of selected industries or practices

Notwithstanding the focus on objectives (Section 2) and competition impacts (Section 3) and the intention to introduce a waste levy with minimal distortion, the scope of the study requested some investigation of the relative merit and/or demand for exemptions or rebates.

7.3.1 Remote communities and charities focused on responding

As outlined earlier in this report, a range of stakeholders from charity organisations (Section 7.2) to remote communities (Section 7.5) have expressed support for the introduction of the waste levy across Tasmania, provided there is a pathway available to work toward improving waste management practices. Overwhelmingly, the preference has been for dedicated programs of support to incentivise engagement with stakeholders, local communities and patrons, and drive toward local innovations that work within their settings.

While further work is needed to negotiate targeted programs in support of these improvements and protect against potentially regressive impacts of the levy, the response from these stakeholders to work within the levy framework (rather than seek exemption) is positive.

7.3.2 Waste generators prioritise improved practice and recycling

A short survey facilitated by the Tasmanian Minerals, Manufacturing and Energy Council (TMMEC) targeting Environment and Advance Manufacturing Committee members has provided some initial insight into industrial waste generator preferences. Representatives of six manufacturing and mineral processing companies, currently generating and disposing of over 3,100 tonnes of waste per annum to landfill, provided responses.

When considering the imposition of a waste levy, respondents prioritised further investigation of the following measures to improve resource use and business efficiency:

- Changes to onsite procedures and operations to better separate and manage waste
 materials
- Increased use of recycling, treatment and processing services (through a third party)
- Changes to onsite procedures and operations to lower waste generation
- Exploration of waste reduction solutions within supply chains and distribution networks.

In considering complementary measures to help reduce waste to landfill, respondents prioritised:

- Support for the recycling sector to invest in recycling technologies relevant to their sector
- Support for businesses to invest in waste reduction technologies and product redesign (including research, development and demonstration support)
- Guidance for identifying waste management and recycling services in their area
- Support for resource efficiency programs to coordinate waste reduction within their industry or supply chain.

While the sample size was small, this positive response provides an opening for further engagement via the TMMEC and other organisations in line with a finalised Waste Action Plan.



7.3.3 Targeted incentive programs to assist transition to Circular Economy

Based on the consultation undertaken to date, the study team did not find compelling evidence that the preferred levy scenario (as outlined in Section 6) warrants inclusion of exemptions from the levy for any particular industry segment. Impacts on remote businesses were raised, i.e. King Island dairy and remote tourism businesses, however there may be options to offset impacts through other points of focus on remote communities (see Section 7.5).

In short, engagement with remote communities, charities, generators and the resource recovery and recycling sector based in Tasmania showed those groups to generally be receptive towards the waste levy as a driver in Tasmania's shift to a circular economy (as discussed in Section 2.3). This was both in principle and in terms of its introduction as a factor to directly account for in their ongoing waste management practices.

Further, and in keeping with the focus on competition impacts (Section 3), stakeholders have expressed notional alignment with minimising market distortions that would otherwise impact the positive competition impacts of the proposed levy. Specifically, this includes geographic consistency, sectoral consistency and minimal support for exemptions.

The Tasmanian Government appears well positioned to conduct separate processes to engage with these actors on the design and implementation of complementary programs that strengthen the waste levy signal, and foster opportunities in the circular economy.



7.4 Spotlight on clean fill and moving resources up the value chain

A number of stakeholders suggested there is a need to review the definition and regulation of clean fill to more accurately track and account for C&D waste volumes. Moreover, working to current market conditions, the introduction of a levy will only see C&D material diverted from landfill to clean fill. The typical composition of C&D waste material, and experience in other jurisdictions would suggest there are higher order uses for this C&D material in the Tasmanian economy, and additional environmental benefits to capture.

The analysis undertaken in Sections 5 and 6 for C&D waste incorporated the following assumptions:

- The practice of illegal dumping of inert (C&D) waste will be effectively regulated into the future
- On introduction of a waste levy, up to 90 % of the C&D material disposed to landfill in the base case will be diverted to clean fill applications given the current definition, the lower price point relative to landfills (both now and on introduction of a waste levy), and the abundance of clean fill opportunities in Tasmania.

Based on these assumptions, as outlined in Section 6, the introduction of the preferred waste levy arrangement delivers \$6.2 million in projected revenues to third party operators willing to take C&D waste as clean fill, over the ten year timeframe.

For comparison, modelling of the recovery of C&D waste as a saleable product was also undertaken. Assuming an average gate fee of \$120 per tonne for C&D material, and an average sale value of \$22 per tonne, gate fee takings over ten years would be in the order of \$27 million and product sales revenue would in the order of \$5 million. This represents a potential \$26 million revenue improvement when compared with the projected clean fill outcome.

It is suggested a revised approach to the regulation of C&D waste as clean fill may also lead to much larger volumes of C&D waste tracked and recorded, consistent with the contribution of C&D waste to overall volumes observed in other states.

Tightening the definition and regulation of clean fill (discouraging recyclable C&D material use as fill) should:

- If implemented on the introduction of a levy, cause more C&D material to present at landfill in the short term (given any lag in development of viable recycling options and/or stockpiling)
- Subsequently see more C&D material recycled (such as bricks and concrete) through new investment in recycling operations, enabling an appropriate contribution to Tasmania's recovery rate to be achieved.

Given there is limited to no data around current use of discarded C&D material as clean fill, an eventual outcome along the lines of the second point above will be to have a greater contribution of C&D material recorded against the proposed Waste Action Plan target 3, i.e. achieve a 40 % average recovery rate from all waste streams by 2025 and 80 % by 2030.

To establish a proxy estimate of C&D waste material being generated in Tasmania, the study team reviewed figures for waste generation by stream within the Australian National Waste



Report (2016).⁷⁸ Assuming Tasmania was generating the same amount of C&D waste (tonnage) as other states per unit of construction income and used similar reporting methods as other states, it would be expected to have generated between 300,000 and 400,000 tonnes of C&D waste in 2014-15. This expectation is based on comparing the ratio of per capita C&D generation to C&I generation for each state, and then adjusting for construction as a proportion of GSP. The estimated generation of C&D waste in 2014-15 for Tasmania was 43,775 tonnes.

Taking the exercise further, if we extend modelling of the recovery of C&D waste as a saleable product for a revised C&D generation of 344,000 tonnes per annum, there is a seven fold increase in revenue to the economy (\$224 million over ten years) and potential to lift the projected recovery rate from all streams from 68.9 % to 73 %. In other Australian jurisdictions, the C&D waste sector is one of the more responsive sectors to the introduction of an appropriate waste levy, and has been a driver of resource recovery outcomes for those states.

Further engagement with C&D generators is suggested to improve knowledge of market dynamics and propensity to seek alternatives to landfill (and clean fill) for C&D material, if not a broader appetite to incorporate recycled material within projects across various construction and infrastructure segments. As previously mentioned, this study benefited from TMMEC members and representatives of six manufacturing and mineral processing companies, currently generating and disposing of over 3,100 tonnes of waste per annum to landfill. While not strictly embedded solely within the C&D sector, four of the six representatives listed finding alternative solutions for masonry, timber, concrete and other C&D material as a high priority.

Lastly, it is also worth highlighting that the introduction of the levy (in and of itself) will not be enough to encourage similar levels of new investment (\$10 to \$20 million) into C&D recovery infrastructure, and potential cross-benefits for other complementary streams such as glass,⁷⁹ without broader attention to tightening leakage of materials from the productive economy. Private stakeholders engaged through this study are wary of associated risks undermining the business case for investment into C&D recovery, including risks associated with an uneven or unreliable regulatory landscape.

To summarise, avoiding leakage of C&D material (for zero to low economic or negative environmental value) provides the opportunity to initiate higher value recycling of particular materials within the C&D stream. Stakeholder feedback and subsequent analysis suggests C&D waste cannot be responsive to a levy (with respect to meeting policy objectives) unless the definition of clean fill is tightened up, such that generators are not able to avoid the levy by nominally applying the material for landscaping or contouring purposes. The waste levy can then encourage the necessary demand for and investment in C&D recovery infrastructure and enable a contribution from the C&D stream toward meeting the 80 % target by 2030.

As noted above, C&D materials and responsible actors and supply chains are typically early movers in transition to the circular economy elsewhere. There appear to be strong opportunities for this to be the case in Tasmania, provided the introduction of a levy is complemented by actions taken to avoid material leakage.

⁷⁸ 2016 National Waste Report, p. 16 provides waste generation by stream for each state for 2014-15. Later reports do not provide total tonnages generated for C&I, C&D and MSW. See https://www.environment.gov.au/system/files/resources/d075c9bc-45b3-4ac0-a8f2-6494c7d1fa0d/files/national-waste-report-2016.pdf

⁷⁹ Alex Fraser provide an example of industry investment in new recovery infrastructure in Victoria with crossbenefits <u>https://wastemanagementreview.com.au/alex-fraser-asphalt-plant/</u>

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7.5 Bolstering regional and remote initiatives

'In collaboration with the local government and regional waste authorities, industry and the community, the Tasmanian Government will introduce a statewide legislated waste levy by 2021. It is proposed that the new legislated statewide waste levy would replace any existing council levies. The design (including cost) of the statewide waste levy will be developed in consultation with local government, industry, businesses and the wider community with the modelling and analysis, taking into account the potential impact of the proposed levy on households and businesses. The Tasmanian Government will also develop legislation that indicates how the revenue collected from the levy will be directed to waste management and resource recovery initiatives, while ensuring regional authorities continue to derive a revenue stream from the new levy.

- Draft Waste Action Plan, p.4

In keeping with the intent outlined in the text box above, this study is tasked with demonstrating that existing regional waste organisations are able to continue to pursue regional programs in the event a statewide waste levy is introduced. In addition to regional body engagement, the study team was also able to engage with a subset of remote 'regional' communities (local governments) who provide local waste management services (including landfill operations) separate to any interaction with existing regional waste organisations or arrangements in Tasmania. While they may exist within one of the three regions, distance and associated logistical costs limit opportunities for remote communities and businesses to leverage benefits from current regional programs or related infrastructure benefits.

Building on stakeholder feedback, this section outlines the unique effects of the introduction of a state wide levy on existing regions and remote communities. The intention here is to start to frame the provision of a revenue stream from a statewide levy to regional and remote communities to inform further engagement on a preferred model for redistribution with stakeholders.

7.5.1 Continuity of regional waste activity

The projected estimates for landfill levy revenue, both for the first year and across the subsequent years to 2031 (as shown in the introduction to Section 7 – see Figure 33 above) suggest that the intention to provide regional allocations⁸⁰ can be met, even allowing for a range of unknowns to be resolved with respect to how those allocations are to be determined over coming years.

In the event that the new legislated statewide waste levy (as per Section 6) is introduced and replaces any existing regional levies, the estimated revenue from the levy (less administration costs) would be sufficient to accommodate a revenue stream for regional organisations to continue providing programs into the future.

⁸⁰ Draft Waste Action Plan, p. 9.

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This finding is based on the study team's understanding of how voluntary levies (ranging up to \$10 per tonne planned for over the approaching years) are applied; and how their funding is subsequently hypothecated and distributed by the NTWMG and CCWMG through current and forward programs. It is also based on the team's understanding of southern councils' agreed allocations and co-investment into 'regional' initiatives in the south which may be delivered on a common needs' basis, rather than using a more structured and less fluid program delivered via a joint authority body.

While the southern region does not apply a 'voluntary waste levy' as such, councils have still shown a willingness to allocate and pool contributions through a Memorandum of Understanding (MoU) arrangement, and through additional funds from southern councils to pursue collective initiatives and programs involving multiple councils. Ultimately, their communities may pay for these endeavours in a manner that carries broad similarities to the waste levy arrangements used in the north and north west of the state (although via budgetary rather than levy-based mechanisms). In this regard, any replacement of formal voluntary waste levy arrangements in the north and northwest with allocations from a state waste levy would, for the purposes of delivering equivalent treatment, need to involve similar outcomes for southern councils.

Engagement with representatives of all three regional organisations did not yield ten year work plans or a clear picture of confirmed voluntary levy escalation or introduction (in the case of southern MoU signatories) across the study timeline (2021 to 2031). As such, an unambiguous template or blueprint for forward funding needs could not be prepared and set out in this report.

This is understandable, given:

- Current strategic plans for the NTWMG and CCWMG run to 2022. Discussion with Cradle Coast Waste Solutions (CCWS), a subsidiary of Dulverton Waste Management, outlined current work towards a ten year program of action (in draft form).
- The previous Strategic Plan for Waste Strategy South (a precursor to the southern MoU arrangement) expired in 2019, and work is currently underway to inform strategic planning and prioritisation of actions.
- Key stakeholders from each region expressed a need for further detail and sought engagement on: the proposed levy; the finalisation of the Waste Action Plan; and the design of governance arrangements for re-distribution of associated state waste levy revenue. These were seen as important factors for consideration in their business planning processes.

The last point is instructive. Some regional stakeholders were optimistic yet cautious in their support for a statewide levy, with caution mainly centred around a preference for more clarity around how governance of levy redistribution would occur. There was a call to 'get the governance right, right from the start' to clarify joined interactions and co-investments across regional and state initiatives. Such governance arrangements would grant an ability (and set guiding terms) to balance regional initiatives and accountabilities with those of the state.

Discussions with regional stakeholders were therefore instructive in helping to shape in broad brushstrokes, some of the dependencies that regional bodies seek transparency on in parallel to refining the details of regional allocations committed to in the draft Waste Action Plan.

While negotiations between regions and the state government may need to commence with an intent to provide funding stability (as reflected in the draft Waste Action Plan) in the near term, the reality is that the welcome arrival of the state government across a number of fronts will possibly bring a shift in scope, ambition and need for resources at the regional level, along with



further discussion on the boundaries between state, regional and local accountabilities. It may be prudent to use regional-state negotiations both to settle near term needs for funding stability; and sketch out a framework to establish future arrangements for how state and regional bodies can best support, add value to and invest in each other's circular economy agendas.

7.5.2 Remote council, business and community led improvements

Engagement with officers from councils⁸¹ servicing relatively small and remote communities and businesses provided useful and unique insights around potential impacts of a landfill levy. These stakeholders are examples of select communities which currently own and operate the vast majority of their waste services largely out of necessity, given distance and cost barriers to accessing larger scale regional services sited in more central locations, and disinterest from commercial operators to offer a cost competitive, profitable and value for money service.

Strategic and operational perspectives provided by these remote location stakeholders were instructive in that they:

- Expressed cautious support for a consistent landfill levy application (over exemption from the landfill levy), coupled with opportunities to access reinvestment into localised solutions
- Illustrated a willingness to pursue recycling and diversion improvements, embracing local innovation and partnerships, to build on their existing environmental brand
- Highlighted the potential for adverse consequences around cost impacts and related burdens on remote and sensitive communities, i.e. as a special case separate to more general household and community impacts.

The acceptance of the merits of an 'all-in' waste levy, while noting associated issues is important to reflect on. It suggests that stakeholders are generally focused on an inclusive approach (rather than seeking exclusion or exemption) while noting there will be cases where disproportionate impacts will need to be addressed.

Remote councils (and businesses) in locations such as West Coast, Waratah-Wynyard, Circular Head and King Island trade from their environmental identity and derive tourism revenue such that it would be discordant for the local government area to lag behind other parts of the state regarding its waste management and circular economy status. Stakeholders subsequently expressed a desire to explore and test localised circular economy solutions working in partnership with their communities and businesses.

It was noted that King Island is a recognised leader in remote hybrid energy generation, and so it stands to reason King Island stakeholders would see similar and complementary opportunities to pursue in the material use and resource recovery space.

The key concern around the levy impact revolved around how and to what extent levy revenue might be re-invested back into remote communities to pursue localised circular economy solutions. It was suggested that, if the waste levy took income out of remote communities and was only then available to large scale projects in more centralised or more densely populated parts of the state (e.g. in the central north or in the south), this would disadvantage remote communities.

⁸¹ It was suggested the study team engage with King Island, Waratah-Wynyard and West Coast councils to gain broader perspective of landfill levy impacts on more isolated communities in Tasmania.

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Put another way and noting the socioeconomic profile of some remote communities, if the levy and its reinvestment model drew income out of these communities on an equal basis to other communities without providing a proportionate opportunity to benefit from levy reinvestment, this would make the waste levy a regressive tax. While there is provision to fund regional bodies to deliver on localised or regional priorities, stakeholders (particularly West Coast and King Island) suggested they currently derive limited to no benefit from their closest regional body. Due to travel costs and distances they were not able to draw on existing regional infrastructure as the most efficient waste management option.

Stakeholders suggested that they were already working on localised initiatives, with scope to build partnerships across businesses, community and council to get diversion outcomes that are scaled to their unique circumstances.

The study team suggests, given the worthy intent for the waste levy to apply to all landfills across the state, there is potential to consider a program of funding and/or support for a 'remote and sensitive' grouping of communities which enables remote communities to pursue localised service improvements. To be clear, the intention is not to provide levy revenue back to each and every council to pursue local solutions. Rather the focus is to investigate and identify a key group of 'remote or sensitive' locations that exhibit a combination of socioeconomic profile, remoteness and smaller scale which place them in a separate category to other council areas. Conceptually, this could take the form of a 'fourth region' or a network of dispersed communities incentivised to pursue circular economy ambitions rather than being on the distant periphery of this transition.

The inclusion of these communities is a strength of the proposed levy model and is a unique feature not shared on the mainland. The community know how, business resilience and innovation that occurs in those communities may well spark solutions that not only work in remote locations but may also translate at scale. This model is notable in harking to the images invoked by Brand Tasmania – to unite around common notions of what Tasmania should represent, and allow space for all Tasmanians to be an active part of this common narrative in line with their own aspirations and interpretations of that narrative.



7.5.3 Investing in regional and remote initiatives

As noted previously, regional stakeholders did not provide ten year regional projections linked to regional work plans to inform this study. Ten year projections aligning strategic plans, action and business plans and/or voluntary levy escalation have not historically been undertaken by regional waste organisations. The release of the draft ten year Tasmanian Waste Action Plan has encouraged longer term considerations by some organisations (in draft), with regional stakeholders looking to engage further with the state around potential governance and co-investment arrangements.

One model for regional allocation articulated that regions should be funded on an equivalent basis, enabling a consistent proportional allocation. For example, noting the predominant levy rate of \$10 per tonne used in the base case (itself a reflection of regional funding outlooks shared by stakeholders), the preference would be that all regions receive an equivalent allocation, based on tonnages sent to landfill within each region during the first year of any statewide waste levy introduction.

Presumably, year one of a statewide levy system would provide improved data on waste disposal throughout the state, enabling improved accuracy and transparency around waste disposal and waste levy revenue. Decisions around holding reallocations constant (with indexations) or to some other escalation measure (i.e. population) will need to be outlined and agreed, with options for review.

The inclusion of a levy revenue disbursement for remote (and sensitive) communities is an important additional consideration. Information provided by EPA would suggest landfill disposal of approximately 55,000 to 60,000 tonnes per annum in aggregate for remote communities listed in Section 7.5.2. While there are questions around the accuracy of associated data, this provides a starting point in considering potential impacts and options for co-investment models.

The approach to recycling funding back into remote communities will need consideration. Rather than default to competitive grant schemes, the opportunity to work with these dispersed communities as an incentivised network pursuing local circular economy ambitions and innovations presents as an opportunity aligned to Tasmania's unique brand.

While it may be tempting to see investment into a 'local circular economy network' of communities as removed from similar interactions with regional groups, the project team suggests the state could facilitate stronger partnerships, co-investment and shared outcomes if investment into regions and remote communities retains or fosters connection. An inclusive approach should encourage remote communities to drive local, innovative responses (not unlike King Island's support for hybrid renewable energy through necessity) that also inform circular economy solutions in other parts of the region, state and beyond.



7.6 Investing in complementary measures

As noted previously in the report and within the preceding sections, the introduction of the proposed waste levy aligns with contributions to certain objectives and targets (specifically Targets 3 and 6) of the draft WAP, over others. Investment into complementary and additional measures is needed to ensure all targets are progressed and met (including Targets 3 and 6).

Typically, investment into these measures is initiated through provision of hypothecated funding from waste levy revenue. Hypothecated funds are directed to priority actions and programs which leverage co-investment (both cash and in-kind), from federal, state, local government, non-profit and private sector sources, to achieve shared benefits. While re-investment is important as a catalyst, the function is not to distort markets through over-investment of public funds and/or to crowd out investment from the private sector (and elsewhere).

While the introduction of a statewide waste levy, aligned to a ten year waste action plan for investment is front of mind, stakeholders should also give some consideration to ensure any governance model is robust enough to ensure effective partnership and co-investment occurs. Moreover, while an ambition to transition to a circular economy in Tasmania is enabled in part by a waste levy, it has its limitations as a mechanism to influence price points or as a revenue source. An effective transition to the circular economy in Tasmania over the next ten years should see a diminished reliance on the landfill levy as a price signal and see alternative options for ongoing circular economy revenue realised.

An efficient governance model for distribution

Consideration of governance and associated costs within scope of this study has been focused on estimating the overheads for the EPA in administering the levy (as outlined in Section 5.2). An estimate of \$0.5 million per annum was informed by other jurisdictions and preliminary engagement with EPA for modelling purposes only. Further internal government consideration of costs will follow further consultation on the levy and its design through to legislation.

While outside of the current scope, the structure and administrative costs associated with efficient governance and distribution of levy revenue to pursue measures under a finalised Waste Action Plan will also need to be determined. Presumably, these costs will need to be incorporated within the revenue envelope to achieve the current principle of cost neutrality associated with introduction of the levy (and redistribution of levy revenue) for the state government.

As noted in Section 7.5, further discussion and engagement around a governance model, incorporating redistribution of levy funds and (state, regional, local) role clarity was raised by regional stakeholders as an important aspect tied to the introduction of a new waste levy.

The LGAT submission⁸² to the draft Waste Action Plan also reflected on the importance of governance and particular models supported by the local government sector for consideration by state government. Co-investment and co-ownership were important themes informing the potential design of a governance arrangement that works to leverage involvement and support from all levels of government and business.



As mentioned in the draft WAP (see text box below), work commissioned by LGAT on a potential state governance arrangement included an initial estimate of operating costs.⁸³ This work may prove useful in working through a preferred statewide governance model and associated resourcing requirements.

'The introduction of a waste levy will require the establishment of an administrative structure. The Local Government Association of Tasmania (LGAT) with support from the Tasmanian Government is currently investigating the feasibility of establishing waste management arrangements to help coordinate and deliver statewide waste policies, strategies, programs and services. A range of models may be considered by State and local government, but the LGAT study will provide an important contribution to the Government's deliberations on governance requirements.'

ACTIONS

- Investigate and discuss models for waste management governance with local government.
- Establish a relevant administrative structure.

– Draft Waste Action Plan, p.4

As noted in Section 7.5, further discussion and engagement around a governance model, incorporating redistribution of levy funds and (state, regional, local) role clarity was raised by regional stakeholders as an important aspect tied to the introduction of a new waste levy. The LGAT submission⁸⁴ to the draft Waste Action Plan also reflected on the importance of governance and particular models supported by the local government sector for consideration at the state scale. Co-investment and co-ownership were important themes informing the potential design of a government arrangement that works to leverage involvement and support from all levels of government and business.

Additionally, work commissioned by LGAT on a potential state arrangement included an initial estimate of operating costs⁸⁵ which may be instructive in working through a preferred statewide governance model.

⁸³ See Section 5.2, and particularly page 55 at:

https://www.lgat.tas.gov.au/__data/assets/pdf_file/0015/323502/LGAT-SWMA-FS-Part-B-Report-FINAL.pdf ⁸⁴ See section titled Governance and Statewide Waste Arrangements Feasibility Study at: <u>https://www.lgat.tas.gov.au/__data/assets/pdf_file/0028/380269/LGAT-Submission-Waste-Action-Plan-with-Attachment-1.pdf</u>

⁸⁵ See Section 5.2, and particularly page 55 at:

https://www.lgat.tas.gov.au/__data/assets/pdf_file/0015/323502/LGAT-SWMA-FS-Part-B-Report-FINAL.pdf Waste levy impact study – FINAL REPORT

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Resourcing priority actions to meet circular economy ambitions

Previous sections have established the waste levy mechanism and a preferred setting (Section 6) as enabling delivery of the focused objective to reduce volumes to landfill and increase volumes to recycling within Tasmania. The landfill levy will encourage a shift a quantity of material away from landfill but cannot in and of itself ensure *quality driven* outcomes in recycling, let alone encourage waste avoidance.

To ensure improved recycling performance over time, other measures are needed to ensure supply chain pressure, innovation, new market discovery, and performance outcomes are met.

All stakeholders across engagements with remote communities, charities, generators and the resource recovery and recycling sector based in Tasmania showed those groups to generally be receptive towards the waste levy as a driver in Tasmania's shift to a circular economy. A key component of this support was linked to a fully hypothecated funding arrangement to enable a finalised Waste Action Plan and support to pursue circular economy opportunities.

In moving to support circular economy opportunities the state government could set itself apart from mainland approaches by adopting a model for levy revenue allocation that borrows from the financial investment sector.⁸⁶ In such a model, allocation decisions, public reporting, and the setting of terms and conditions with recipients would apply governance and disclosure standards that carry some resemblance to the fiduciary measures applied in the investment industry.

However, rather than focus on private returns, the adopted procedures and practices would focus on driving, delivering and communicating public returns based on delivery of, for example:

- 1. Final Waste Action Plan targets and objectives through investing in different classes of assets⁸⁷ that are synchronous in effect
- 2. Measures that strengthen the waste levy as an efficient, effective and stabilising market instrument while lowering residual distortions in the waste and resource recovery market and deferring the need to revise waste levy rates outside the recommended option
- 3. Other activities that deliver on circular economy outcomes and benefits shared with the Tasmanian community.

It is suggested that adopting a disciplined approach to investment and disclosure will reinforce public trust in the levy instrument; will position the Tasmanian Government to attract diverse coinvestment from regions, the Commonwealth Government and the private sector; and will help set expectations with funding recipients as to the quality and standard of information to be shared with the funding body.

⁸⁶ Other states have, in the past, exercised less clarity and strategic thinking in their allocation arrangements, leading to criticisms regarding their efficiency and capacity to deliver on stated strategic goals.

⁸⁷ While in the private investment sector, 'classes of assets' is a specific term of art relating to assets that share broadly similar performance characteristics, in a circular economy setting these classes may involve different features of that economy, e.g. infrastructure; services; education delivery; etc. The key point being that each class has a defined role to play in the circular economy and clear basis for delivering or supporting public returns. Waste levy impact study – FINAL REPORT



Appendix 1 – Stakeholder consultation

Over the course of this study a number of stakeholders were engaged with to better understand the issues pertaining to waste management and resource recovery in Tasmania. These issues include market, regulatory and administrative settings, and the extent of both favoured and disfavoured practices that may be influenced by the introduction of a waste levy.

The table below summarises the stakeholders engaged with over the lifespan of the study.

Sector	Organisation
Waste & resource recovery sector Not including facilities directly owned and operated by individual councils	Dulverton Waste Management J J Richards & Sons Southern Waste Solutions Veolia Waste Management
Councils	Central Coast Circular Head Glenorchy Hobart King Island Launceston Meander Valley Waratah-Wynyard West Coast
Regional bodies	Cradle Coast Waste Management Group (council representatives) Northern Tasmania Waste Management Group Southern Councils MOU
Industry organisations	Charitable Recyclers Australia (formerly NACRO) Local Government Association of Tasmania National Waste and Recycling Industry Council Tasmanian Minerals, Manufacturing and Energy Council Waste Management and Resource Recovery Association of Australia
Tasmanian state bodies	Climate Change Office Environment Protection Authority

Additional to engaging with stakeholders, the study team spoke with representatives with other Australian jurisdictions, in a bid to understand the prevailing issues, design considerations and administrative settings that were deployed in applying a waste levy. These included:

- South Australian Environment Protection Authority
- Western Australian Department of Water and Environmental Regulation
- Queensland Department of Environment and Science



Appendix 2 – Cost Benefit Analysis method details

As set out in Section 5, this study employed a Cost Benefit Analysis method to understand and report on key performance results for a selected set of waste levy options.

This method is consistent with guidance set out by the Commonwealth Government's Office of Best Practice Regulation and is considered a standard approach to estimating the costs and benefits associated with the introduction of primary and subordinate legislation (relative to a decision not to introduce such legislation, i.e. the 'base case').

In preparing the Cost Benefit Analysis tool, a model of the Tasmanian waste and resource recovery sector was planned around the construction of three layers:

Layer 1 – material flows model

Layer 2 – financial flows model

Layer 3 – non-financial impacts model

In progressing this construction, it became evident that Layer 3 – non-financial impacts (largely seeking to quantify environmental impacts) did not fully align with the standard NPV methods in a way that supported robustly defensible quantitative findings. For this reason, these impacts were dealt with in a separate analysis, as explained in Section 5.3 of the main report. The box below provides general overviews of the two layers ahead of going into further detail.

Layer 1 – modelling of waste and resource recovery material flows

In this component of the NPV model, rules and variables governing the change in flow of waste and resource volumes relative to the base case are established, informed by research on market responses triggered by different levy rates. It is comprised of two areas:

- Current landfill and recovery material flows, projected to form the base case
- Competition analysis and stakeholder input to determine (i.e. set rules for) waste levy rates that act as tipping points to drive diversion and adverse responses

During analysis, the above rules will then be applied to prepare adjusted material flows stimulated by the different waste levy options.

Layer 2 – financial flows model

In this component of the NPV model, rules and variables governing changes in transactions (incorporating pricing changes and volumes relating to different transactions) relative to the base case are established, informed by assumed price points and changes in material flows in response to different levy rates.

It seeks to apply base case and scenario price points (capturing gate fees, offtake revenues, waste levies, and other units of economic value as relevant) multiplied across different material flows pertaining to each waste levy option (relative to base case).



Material flow modelling in detail (Layer 1)

The text below sets out how literature review and stakeholder engagement were used to understand how material flows from points of generation to points of disposal and recovery will alter in response to different waste levy settings, to then allow incorporation into the NPV model. In effect, the process characterised how the demand for waste services (landfills, recycling, organics processing, and illegal dumping if applicable) will shift in response to different waste levy rates, while accounting for potential timing effects (i.e. time lags between levy stimulus and responding market shifts) over a ten year horizon.

Treatment of municipal solid waste material flows

- The approach for MSW primarily accounts for kerbside collections, being the most substantial fraction of MSW generated in Tasmania. Where deemed useful and likely to be responsive to a waste levy, other MSW services may be later included in the model.
- Each levy option is assumed to drive MSW diversion at the kerbside via two mechanisms:
 - a. Where residential recycling and organics diversion already exists if the waste levy pushes the landfill gate fee to equal or surpass recycling and organics processing gate fees, councils (and regional bodies) will be driven to foster greater residential recycling and organics diversion, to lower overall waste management costs for that council.
 - b. Where residential recycling or organics diversion does not already exist if the waste levy pushes the landfill gate fee to equal or surpass recycling and organics processing gate fees, councils will be driven to introduce recycling and organics recovery services, i.e. the levy works as a tipping point to drive councils to bring new recovery services to their communities (where such services are practical, available and affordable).
- For a above, local and regional community programs e.g. education and advocacy activities are assumed as retained in the base case and in waste levy scenarios. The introduction of a waste levy will, depending on the rate, affect the extent that local and regional entities focus their engagement on encouraging diversion in their communities. So, for example, the base case may show a flat diversion rate per year as households are encouraged to maintain recycling levels, but the introduction of a moderate to high levy could see this migrate towards elevated recycling each year until an upper limit is achieved, driven by councils' greater desire to achieve lower waste management costs. In other words, introducing a moderate to high levy triggers an inflection point in the underlying promotion of and shift towards MSW recovery.
- For **b** above, where a waste levy induces or surpasses parity between landfill and recycling gate fees, it is assumed that this serves as a tipping point to drive new recovery services. This will involve a step change in levy rate, rather than a gradual increment. It cannot be assumed that the full diversion will be achieved immediately for a given material. For example, if the waste levy stimulated the widespread uptake of FOGO services, it may (by itself) initially drive only 50% of the FOGO material from waste to organics bins. But from then on, ongoing local and regional education (see **a** above) stimulates a further lift in diversion each year until an upper limit is achieved.
- Recycling operators are assumed to maintain existing standards, rather than improved standards, except where driven by obligations imposed by customers or through external stimulus such as grants programs or regulatory standards, independent of a waste levy. Thus, the model does not predict reduced residual waste disposal from operators or



similar effects, as a direct response to introduction of a waste levy. This assumption is based on the long establishment of higher levies in Victoria and elsewhere, which have not shown strong evidence of fostering better recycling operator practices in themselves.

Inputs to MSW material flow modelling (sourced via state and regional contacts)

- Presence of and planning for kerbside waste, recycling and organics services across Tasmania's councils, including number of premises where available
- Current diversion rates for an indicative range of councils (mainly through kerbside collection, and other measures where the data is obtainable)
- `Model' household kerbside waste composition using, e.g. weighted composition analysis or similar methods
- 10 year population projections for each council (via ABS or Tasmanian Government)
- Assumed upper limits to diversion in direct response on introduction of a waste levy (see b above) for kerbside recycling and organics (FOGO) collection
- Assumed tipping point waste levy rates to drive new uptake of kerbside recycling and organics (FOGO) collection (see **b** above)
- Assumed base case diversion improvements, year on year (see a above), up to a maximum diversion (e.g. 80-90 % of recycling; 80-90 % of organics) where such data exists otherwise assume stable recycling and organics recovery per premises
- Assumed elevated diversion levels, year on year (see **a** above) in response to a waste levy, up to a maximum diversion (e.g. 90 % of recycling; 90 % of organics)

Treatment of C&I waste:

- C&I waste may be viewed as being generated by a wide range of sectors, with a variety
 of different materials present. Each business within each source sector will have its own
 sensitivity to waste pricing signals; its own waste composition profile exhibiting different
 opportunities for recycling; and its own internal and external barriers to adopting
 recycling practices even when economical to do so.
- Further, the shift to greater recycling on the basis of its relative cost may or may not be encouraged through parties such as waste management contractors and agents. For example, proactive waste managers may seek out and propose recycling opportunities to their clients, while others are relatively passive due to a lack of client pressure.
- For these reasons, it may not be reasonable to project a 'sharp' C&I sector response to the imposition of a waste levy, and it may be suitable to project diversion triggered by a waste levy as a more gradual process. This may be modelled as one or more diversion gradients, influenced by the levy rate introduced and by any trend towards C&I diversion observable in the base case.
- This overall approach was tested with stakeholders (e.g. regional body perspectives on how voluntary levies may have affected C&I waste disposal, if at all) and validated against historic C&I data for Tasmania. The model also accounted for the forward outlook of economic activity at a state scale.
- This approach was compared against inter-jurisdictional data and discussed with state representatives to ensure the pricing and material flow relationships were suitable. Waste levy impact study – FINAL REPORT



Inputs to C&I material flow modelling (sourced via state and regional contacts, using national waste report data as a fall back option)

- Extent of C&I waste generation, recycling rate and disposal volumes based on statewide data sets (or derived from other data sets at the state scale)
- Growth trends in Tasmania GSP (via ABS or Tasmanian Government)
- Aggregated C&I waste composition using, e.g. weighted composition analysis or similar methods for the purposes of identifying upper limits to recoverable fractions and the level of different recoverable resources that may be sold into end markets
- Assumed upper limits to diversion in direct response to a waste levy
- Assumed tipping point waste levy rates to drive transition to recycling and organics processing (in the aggregate, given heterogenous profile of C&I waste) and assumed time lags between levy introduction / step change and change in material flows
- Assumed base case diversion improvements, year on year, up to a maximum diversion where such data exists – otherwise assume stable recycling and organics recovery across the C&I waste sector

Treatment of C&D waste:

- To model the response of C&D waste, the team needed to confirm or otherwise, the extent that C&D waste disposal is price responsive, on introduction of an appropriately high waste levy. NSW, Victoria and South Australia data analysis and stakeholder engagement suggested price sensitive behaviours, based on their history of waste levy rates and the responding C&D diversion levels.
- There is an argument to suggest that a majority of C&D waste (i.e. factored by scale of development project and/or proximity to recovery infrastructure) will be price responsive such that they will recycle when economical to do so, with diversion mediated through C&D waste contractors and price sensitive construction firms. Relative homogeneity (compared with generalised C&I) means that, once a given price threshold is reached, the majority of industry will transition in a short period (e.g. two to three years) while leaving some generators (such as small, remote or less organised operators) continuing to rely on disposal.
- In terms of modelling details, the following rules were applied:
 - Assume that developers, demolition crews and building companies are able to recycle an agreed proportion (e.g. 90 % of materials if going to clean fill, slightly reduced on this if going to recycling operators), based on type of material (i.e. independent of scale of operation and proximity to recycling operators)
 - Assume that all C&D aggregates that become economical to recycle, do so within a narrow band of levy rates
 - Assume once a C&D recycling price threshold is tripped via introduction of a waste levy, a majority of businesses shift to C&D recycling for an agreed fraction of materials over two to three years, with an ongoing modest improvement thereafter until an assumed maximum is reached. This may be shortened to one year if prior notice of a ramp rate is used (i.e. giving generators the opportunity to internalise price changes into their planning).



- Assume total C&D waste generation will follow historic trends (with some qualitative validation undertaken using economic growth and housing and construction projections, if data allows for this).
- Note South Australia is instructive, by virtue of the ban on sending C&D waste to landfill in the absence of prior sorting (from 2010 onwards). In 2016-17, SA achieved 91 % recycling of C&D waste. This may be indicative of an 'upper bound' for C&D recycling.

Inputs to C&D material flow modelling (sourced via state and regional contacts)

- Extent of C&D waste generation, recycling rate and disposal volumes based on statewide data sets (or derived from other data sets at the state scale)
- Growth trends in Tasmania GSP (via ABS or Tasmanian Government)
- Aggregated C&D waste composition using, e.g. weighted composition analysis or similar methods for the purposes of identifying upper limits to recoverable fractions and the level of different recoverable resources that may be sold into end markets
- Assumed upper limits to diversion in direct response to a waste levy
- Assumed tipping point waste levy rates to drive transition to recycling (in the aggregate) and assumed time lags between levy introduction / step change and change in material flows
- Assumed base case diversion improvements, year on year, up to a maximum diversion where such data exists – otherwise assume stable recycling and organics recovery across the C&D waste sector



Financial flow modelling in detail (Layer 2)

- For each waste levy option, the process for Layer 1 was to develop projected changes in material flows (relative to the base case). In turn, these material flows could be assigned to different transactions involving waste generators and waste service providers as in the table below, providing a means to track income effects across various entities.
- This table is restricted to the levy impact (i.e. imposed on landfilling activities) and direct market responses as characterised by changes in material flows induced by the levy. More indirect and pervasive impacts across the economy have not been explored (e.g. impacts of increases and decreases in household consumption level), yet could be estimated through the use of economic multipliers and other methods out of scope.

Material flow	Monetary impact on generators	Monetary impact on service providers	Monetary impact on third parties
Decrease in volume to landfill	Reduced landfill volume Increased gate fee (unit price) due to levy Removal of regional waste levy costs as applicable	Landfills – Reduced landfill volume Reduced revenue from energy generation and/or carbon credits (if directly applicable over model timescale)	State government – levy revenues (with allocations to be directed to state and regional actions)
Increase in volume to recovery	Increased recovery volume applied at a constant gate fee (unit price)	Recyclers / recovery operators – Increased inflows net of residue to landfill Increased revenue from sale of recovered resources	Producers of virgin commodities – Reduced volume of material, where applicable NB: Impacts assumed as out of scope.
Change in illegal disposal practices (if shown to be driven by a waste levy)	N/A	N/A	Local and state authorities – Increased clean up (cost) Increased enforcement (cost) Increased penalty (revenue)

- For each year and across the ten year modelling timeframe, each of these monetary impacts was aggregated to set out net economic impacts on individual sectors including landfill operators; recycling / recovery operators; waste generators (both in a whole-of-state and sectors-of-interest sense) and councils; and state government (notwithstanding the need to account for a number of public distributions).
- A number of derived economic parameters were generated from a combination of Layer 1 (material flow) and Layer 2 (monetary flow) results, which are understood to be of interest to the Tasmanian Government. Their derivation has been restricted to the recommended waste levy option only, including:
 - Stimulation of new productive capacity, based on increased demand for recycling and organics recovery
 - Potential direct employment impacts, noting the general recognition that a given volume of recycling activity is associated with more employment that an equivalent volume of landfill activity (although the original research for waste sector employment estimates is now somewhat dated)



Allocation of non-financial impacts (Layer 3)

- For this impact study, non-financial impact allocations span impacts that directly arise from the change in level of different waste management activities associated with Layer 1 material flow changes. They include impacts that can be distinguished from monetary impacts which can be quantified through the existence of direct market activity or other financial transactions (e.g. between public bodies and private businesses or individuals). These externalities are not just associated with landfill activities, and can include recycling sector impacts and the impacts from illegal waste disposal activities.
- In order to incorporate externalities into the NPV model, impacts must both be:
 i) confirmed as falling within system boundaries and quantified with some level of confidence; and

ii) able to be converted into a monetary expression.

Both of these steps are challenging for waste sector impacts due to the nature of sectoral activities. Waste sector impacts take place over a wide range of timeframes and geographic scales, and involve events that can be low probability and high impact. Assigning an economic value to these impacts is non-trivial as there are limited examples of preferences that are known to correlate with waste related impacts, that could serve as a proxy for the impact in question. Similarly, there are few studies that attempt to robustly value waste externalities within a similar socioeconomic environment to the location at hand (i.e. Tasmania).

- Further, some of these impacts are, to some extent, accounted for in existing waste sector regulations. However, recent history (of lateral landfill gas emissions; leaching incidents; and recycling stockpile fires) elsewhere in Australia suggests a residual risk remains, despite the imposition of regulations that were otherwise assumed to be adequate at a given point in time. That is, regulation partially internalises some externalities although any residual 'gap' remains challenging to quantify until after an unanticipated event unfolds.
- For these reasons, it is determined that it would not be suitable to include Layer 3 impacts within the ten year NPV model, but should instead be treated separately within the study. Findings in relation to environmental impacts informed the discussion of and recommendations toward a preferred waste levy alongside findings from the NPV method and its outputs (as set out in Section 5.3).


Breakdown into a step-by-step method

Define the base case

- 1. Construct a base case volumetric and composition description of material flows for the base year, covering:
 - a. Total volumes of each stream of interest across the state
 - b. 'Model' compositions of MSW, C&D and C&I streams, ideally:
 - i. Current levels of recycling, organics recovery and residual waste
 - ii. Compositions particularly pertaining to residual waste and recycling fractions
 - c. In the case of MSW, incorporate the extent of kerbside general waste, recycling and organics services across LGAs, noting the two mechanisms of increased diversion set out under Layer 1 modelling above.
- Project volumes a through c above over a ten year timeframe. Ideally, this extrapolation should cover total volume trends over time and underlying trends towards (or away from) recovery services relative to landfill services, but may be hindered by data gaps.

Note: Using a material flows model, the foundational data set is the total annual volume of material generated for each sector – broken into different components representing recyclable, organics recoverable, and 'non-recoverable' fractions (non-recoverable being within the context of the base case and levy options under consideration). In this model, the role of the waste levy is to stimulate market preferences that re-balances the flow of materials from points of generation to different end points (landfills for disposal, and end markets via recycling and organics processing intermediaries).

Construct material flows for each waste levy scenario

- 3. Determine and apply tipping point rules for different material categories (i.e. recycling and organics) and generation sectors. Include upper limits to diversion and time lags as applicable.
- 4. Determine and apply diversion improvement rules that account for an accelerated shift from landfills to recycling/recovery operations, which is driven by councils and regions encouraging greater use of existing recycling / organics bins. Apply a similar trend for C&I, C&D waste driven by proactive waste generators and third party contractors. Draw on stakeholder engagement and the history of other jurisdictions to confirm that the proposed relationships adequately reflect market dynamics.
- 5. Apply 3 and 4 to each levy scenario to determine material flows for each option over a ten year timeframe.

Incorporate monetary impacts at the sectoral and whole-of-community scales

6. Apply monetary flows as set out in Section 2 (Layer 2) methods, and apply relevant discount rates.



Incorporate and monetise non-monetary impacts at the sectoral and whole-ofcommunity scales

7. Apply non-monetary impacts as set out in Section 2 (Layer 3) methods.

Generate performance results

- 8. Prepare results for each waste levy scenario in line with the scope of the study, providing discussion and offering recommendations of preferred waste levy settings.
- 9. Apply sensitivity analyses as agreed with DPIPWE, restricted to the preferred option.



Appendix 3 – Reference tables used to generate graphs

Section 4

Figure 4

Financial year	2021/22	2022/23	2023/24	2024/25	2025/26	2026/27	2027/28	2028/29	2029/2030	2030/31
MSW	264,472	266,229	267,889	269,500	270,915	272,136	273,307	274,381	275,406	276,334
C&I waste	502,100	512,100	522,300	532,800	543,400	554,200	565,300	576,600	588,200	599,900
C&D waste	34,000	34,700	35,400	36,100	36,800	37,500	38,300	39,100	39,900	40,700
Total	800,572	813,029	825,589	838,400	851,115	863,836	876,907	890,081	903,506	916,934

Figure 5

Financial year	2021/22	2022/23	2023/24	2024/25	2025/26	2026/27	2027/28	2028/29	2029/2030	2030/31
MSW landfilled	160,555	161,622	162,629	163,607	164,467	165,208	165,919	166,571	167,193	167,756
MSW recycled	78,644	79,166	79,660	80,139	80,560	80,923	81,271	81,590	81,895	82,171
MSW FOGO processed	25,273	25,441	25,600	25,753	25,889	26,005	26,117	26,220	26,318	26,407

Figure 6

Financial year	2021/22	2022/23	2023/24	2024/25	2025/26	2026/27	2027/28	2028/29	2029/2030	2030/31
C&I waste landfilled	243,300	248,200	253,100	258,100	263,300	268,500	273,900	279,400	284,900	290,600
C&I waste recycled	180,800	184,400	188,100	191,900	195,700	199,600	203,600	207,700	211,900	216,100
C&I organics processed	77,900	79,500	81,100	82,700	84,400	86,100	87,800	89,500	91,300	93,100

Figure 7

Financial year	2021/22	2022/23	2023/24	2024/25	2025/26	2026/27	2027/28	2028/29	2029/2030	2030/31
C&D waste landfilled	34,000	34,700	35,400	36,100	36,800	37,500	38,300	39,100	39,900	40,700

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Financial year	2021/22	2022/23	2023/24	2024/25	2025/26	2026/27	2027/28	2028/29	2029/30	2030/31
Regional levy projection (combined)	\$1,352,700	\$1,392,600	\$1,469,600	\$1,506,000	\$1,542,400	\$1,578,800	\$1,615,200	\$1,651,600	\$1,651,600	\$1,669,072

Section 5

Figure 10

Levy rate	2021/22	2022/23	2023/24	2024/25	2025/26	2026/27	2027/28	2028/29	2029/2030	2030/31
base case	45.3%	45.3%	45.4%	45.4%	45.4%	45.5%	45.5%	45.5%	45.5%	45.6%
10	46.3%	46.8%	47.4%	47.4%	47.5%	47.5%	47.5%	47.6%	47.6%	47.7%
20	48.2%	48.8%	49.3%	49.9%	50.4%	50.5%	50.5%	50.6%	50.6%	50.7%
40	50.6%	52.5%	54.2%	56.0%	56.7%	57.5%	58.1%	59.0%	59.1%	59.3%
60	54.4%	59.8%	63.5%	65.0%	67.2%	68.2%	68.8%	68.8%	68.9%	68.9%
120	54.4%	60.0%	63.7%	65.2%	67.2%	68.3%	68.9%	69.7%	70.0%	70.0%
20-40-60	48.2%	52.6%	58.0%	62.2%	67.2%	68.2%	68.8%	68.8%	68.9%	68.9%

Figure 11

Levy rate	2021/22	2022/23	2023/24	2024/25	2025/26	2026/27	2027/28	2028/29	2029/2030	2030/31
10	2.4%	3.6%	4.9%	4.9%	4.9%	5.0%	5.0%	5.0%	5.1%	5.1%
20	2.4%	3.6%	4.9%	6.1%	7.4%	7.5%	7.5%	7.6%	7.6%	7.7%
40	3.6%	8.2%	11.9%	16.6%	17.9%	20.2%	21.6%	23.9%	24.0%	24.2%
60	18.9%	38.7%	49.6%	52.9%	60.1%	62.5%	63.7%	63.7%	63.7%	63.6%
120	18.9%	39.7%	50.5%	53.9%	60.1%	62.5%	63.7%	67.2%	68.0%	67.9%
20-40-60	2.4%	17.4%	34.8%	47.0%	60.1%	62.5%	63.7%	63.7%	63.7%	63.6%



Levy rate	NPV result
10	\$20,798,496.35
20	\$28,753,129.74
40	\$77,017,830.86
60	\$144,487,316.11
120	\$146,963,337.94
20-40-60	\$121,889,177.31

Figure 13

Levy rate	Decrease in turnover			
10	\$10,858,360			
20	\$24,868,639			
40	\$59,437,564			
60	\$111,200,244			
120	\$113,150,738			
20-40-60	\$96,401,561			

Figure 14

Levy rate	Increase in turnover
10	\$39,393,410
20	\$54,607,063
40	\$138,665,705
60	\$276,681,776
120	\$281,819,061
20-40-60	\$235,898,323

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Levy rate	Increase in household costs
10	\$7,749,931
20	\$19,276,198
40	\$42,222,262
60	\$56,290,858
120	\$103,234,992
20-40-60	\$42,612,848

Figure 16

Levy rate	Increase in C&I generator costs
10	\$15,550,006
20	\$33,601,271
40	\$67,287,867
60	\$92,506,490
120	\$168,777,579
20-40-60	\$70,967,015

Figure 17

Levy rate	Increase in C&D generator costs
10	\$1,740,703
20	-\$6,126,376
40	-\$16,050,822
60	-\$15,517,788
120	-\$13,918,684
20-40-60	-\$13,982,330

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Levy rate	Increase in C&D generator costs
10	\$45,185,186
20	\$85,846,772
40	\$149,582,494
60	\$177,469,881
120	\$350,802,274
20-40-60	\$142,842,061

Figure 19

Levy rate	Increase in C&D generator costs
10	\$31,510,659
20	\$59,972,372
40	\$105,455,570
60	\$126,491,918
120	\$250,595,475
20-40-60	\$96,196,521

Figure 20

Financial year	2021/22	2022/23	2023/24	2024/25	2025/26	2026/27	2027/28	2028/29	2029/2030	2030/31
10	4,989	7,631	10,371	10,578	10,788	10,999	11,223	11,448	11,672	11,910
20	8,049	10,751	13,551	16,462	19,483	19,868	20,275	20,682	21,088	21,516
40	13,603	23,334	31,820	41,923	45,676	50,854	54,897	60,364	61,719	63,129
60	37,332	70,742	92,145	101,105	115,454	122,434	126,896	128,589	130,273	132,021
120	37,332	72,014	93,425	102,392	115,454	122,434	126,896	134,234	137,717	139,550
20-40-60	8,049	32,480	62,573	87,078	115,454	122,434	126,896	128,589	130,273	132,021



Section 6

Figure 21

Financial year	2021/22	2022/23	2023/24	2024/25	2025/26	2026/27	2027/28	2028/29	2029/30	2030/31
MSW	\$3,211,101	\$2,844,139	\$4,942,301	\$4,597,103	\$6,188,919	\$6,216,797	\$6,243,560	\$6,268,093	\$6,291,510	\$6,312,698
C&I	\$4,705,700	\$4,637,000	\$8,790,400	\$7,930,840	\$10,335,900	\$10,010,400	\$9,939,600	\$10,140,000	\$10,340,400	\$10,545,600
C&D	\$374,000	\$226,000	\$144,000	\$148,000	\$228,000	\$234,000	\$240,000	\$246,000	\$252,000	\$258,000
Total	\$8,290,801	\$7,707,139	\$13,876,701	\$12,675,943	\$16,752,819	\$16,461,197	\$16,423,160	\$16,654,093	\$16,883,910	\$17,116,298

Figure 22

Financial year	2021/22	2022/23	2023/24	2024/25	2025/26	2026/27	2027/28	2028/29	2029/30	2030/31
Reduced turnover	\$2,162,470	\$5,610,960	\$9,958,363	\$13,549,854	\$17,900,596	\$19,031,914	\$19,765,740	\$20,064,240	\$20,361,657	\$20,668,669

Figure 23

Financial year	2021/22	2022/23	2023/24	2024/25	2025/26	2026/27	2027/28	2028/29	2029/30	2030/31
MSW cost increase	\$2,715,085	\$2,988,179	\$5,721,367	\$5,705,002	\$7,753,076	\$7,783,085	\$7,811,994	\$7,838,254	\$7,875,544	\$7,904,161

Figure 24

Financial year	2021/22	2022/23	2023/24	2024/25	2025/26	2026/27	2027/28	2028/29	2029/30	2030/31
Combined MSW costs	\$33,241,124	\$33,724,066	\$36,669,156	\$36,844,119	\$39,060,770	\$39,236,720	\$39,405,631	\$39,560,467	\$39,708,264	\$39,841,986

Figure 25

Financial year	2021/22	2022/23	2023/24	2024/25	2025/26	2026/27	2027/28	2028/29	2029/30	2030/31
Household cost – no diversion (red)	\$94.40	\$94.40	\$110.40	\$110.40	\$126.40	\$126.40	\$126.40	\$126.40	\$126.40	\$126.40
Household cost – baseline diversion (blue)	\$99.63	\$99.63	\$110.88	\$110.88	\$122.12	\$122.12	\$122.12	\$122.12	\$122.12	\$122.12
Household cost – additional diversion (green	\$99.63	\$100.48	\$110.05	\$109.64	\$115.34	\$115.34	\$115.34	\$115.34	\$115.34	\$115.34

Waste levy impact study – FINAL REPORT

September 2020



Financial year	2021/22	2022/23	2023/24	2024/25	2025/26	2026/27	2027/28	2028/29	2029/30	2030/31
C&D waste cost impact	\$4,259,634	\$4,482,838	\$9,237,181	\$9,361,024	\$12,932,917	\$12,987,391	\$13,141,773	\$13,398,477	\$13,676,117	\$13,952,575

Figure 27

Financial year	2021/22	2022/23	2023/24	2024/25	2025/26	2026/27	2027/28	2028/29	2029/30	2030/31
C&D waste cost impact	-\$802,039	-\$1,520,708	-\$2,197,319	-\$2,238,754	-\$2,204,179	-\$2,250,954	-\$2,297,697	-\$2,344,443	-\$2,388,251	-\$2,433,427

Figure 28

Stream	Gate fees	Sale of product
MSW	\$15,027,732	\$13,417,618
C&I	\$64,875,650.00	\$151,530,982.50
C&D	\$6,228,000	\$0

Figure 29

Stream	Gate fees	Sale of product
MSW	\$48,305,201	\$18,207,345
C&I	\$38,073,295	\$14,350,704
C&D	0	0

Figure 30

Financial year	2021/22	2022/23	2023/24	2024/25	2025/26	2026/27	2027/28	2028/29	2029/30	2030/31
Base case	437,855	444,522	451,129	457,807	464,567	471,308	478,219	485,171	492,093	499,156
Waste levy	414,540	385,357	346,918	316,899	279,214	274,353	273,719	277,568	281,399	285,272



Financial year	2021/22	2022/23	2023/24	2024/25	2025/26	2026/27	2027/28	2028/29	2029/30	2030/31
Base case MSW	160,555	161,622	162,629	163,607	164,467	165,208	165,919	166,571	167,193	167,756
Waste levy MSW	160,555	142,207	123,558	114,928	103,149	103,613	104,059	104,468	104,859	105,212
Base case C&I	243,300	248,200	253,100	258,100	263,300	268,500	273,900	279,400	284,900	290,600
Waste levy C&I	235,285	231,850	219,760	198,271	172,265	166,840	165,660	169,000	172,340	175,760
Base case C&D	34,000	34,700	35,400	36,100	36,800	37,600	38,400	39,200	40,000	40,800
Waste levy C&D	18,700	11,300	3,600	3,700	3,800	3,900	4,000	4,100	4,200	4,300

Figure 32

Financial year	2021/22	2022/23	2023/24	2024/25	2025/26	2026/27	2027/28	2028/29	2029/30	2030/31
Base case recycling	259,444	263,566	267,760	272,039	276,260	280,523	284,871	289,290	293,795	298,271
Waste levy recycling	279,654	299,896	325,855	349,744	379,870	391,422	400,564	407,062	413,643	420,249
Base case organics	103,173	104,941	106,700	108,453	110,289	112,105	113,917	115,720	117,618	119,507
Waste levy organics	106,278	127,777	152,817	171,657	192,032	198,161	202,724	205,551	208,465	211,413

Section 7

Figure 33

Financial year	2021/22	2022/23	2023/24	2024/25	2025/26	2026/27	2027/28	2028/29	2029/30	2030/31
Waste levy revenue	\$8,290,801	\$7,707,139	\$13,876,701	\$12,675,943	\$16,752,819	\$16,461,197	\$16,423,160	\$16,654,093	\$16,883,910	\$17,116,298
Admin overheads	\$500,000	\$500,000	\$500,000	\$500,000	\$500,000	\$500,000	\$500,000	\$500,000	\$500,000	\$500,000
Revenue less overheads	\$7,790,801	\$7,207,139	\$13,376,701	\$12,175,943	\$16,252,819	\$15,961,197	\$15,923,160	\$16,154,093	\$16,383,910	\$16,616,298

Waste and Resource Recovery Bill 2021

Explanatory Paper



Department of Primary Industries, Park 263 Vater and Environment

Author: Department of Primary Industries, Parks, Water and Environment

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Date: February 2021

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Introduction

WHY DO WE NEED A WASTE LEVY IN TASMANIA?

The past few years have seen what could be called the perfect storm for waste management and resource recovery in Australia and Tasmania. In 2018 China changed its import regime for recycled materials and introduced a number of restrictions on what it would allow into the country. This led to a substantial decrease in the value of recycled materials exported from Australia, particularly those collected at the kerbside by councils.

The impact on the waste sector and on local government due to the downturn in global markets was soon apparent: stockpiles of materials grew, along with public concern, and the financial impacts filtered down to companies, councils and the wider community.

As part of responding to these changing markets, the Tasmanian Government worked with the Commonwealth, States and Territories, industry and the community to update the national waste policy. Through the Council of Australian Governments (COAG), the Government also supported introduction of export bans for unprocessed plastic, glass, paper, cardboard, and tyres.

As other Australian trading partners in Southeast Asia began to emulate China's import policies, it became even more apparent that we could no longer ship our unprocessed waste overseas. Instead, we need to have in place policies that recognise the value of this waste as a resource for creating more valuable materials, new products, and new jobs.

This aligns with a global trend that is seeing numerous countries pursue a circular economy, which avoids the traditional linear model of "take" (resources), "make" (products), and "dispose" (waste). Instead, it aims to maximise the value and the use of materials and resources at every stage of the life of a product or material. There is a growing body of evidence that a more circular economy supports increased innovation and a more creative, robust and productive economy.

A number of commitments to help respond to the rapidly changing markets and to promote a circular economy are outlined in the Government's draft *Waste Action Plan 2019¹*. This includes the planned introduction in 2022 of a Container Refund Scheme that will help achieve the Government's litter reduction targets and also help to generate cleaner streams of recyclable material with greater value. The *Waste Action Plan* was the result of discussions with local government, industry and the community about the best way to tackle our waste and recycling challenges.

One of the most effective ways to build markets for the recycling and reuse of materials is to have price signals or similar policy mechanisms that provide a disincentive to send waste to landfill. This has been achieved in many Australian and international jurisdictions through the introduction of a waste levy.

Typically, these levies involve a fee paid to the government by a landfill or other licensed waste facility operator for each tonne of waste received. This fee is on top of the current service fee which covers landfill management. As levies make it more expensive to dispose of waste to landfill, they stimulate the market to reduce waste generation and find more valuable uses for the waste. The Government has committed to introducing a waste levy in the *Waste Action Plan*.

¹ DPIPWE, Draft Waste Action Plan - Consultation Draft (June 2019) <u>https://dpipwe.tas.gov.au/environmental-management/waste-action-plan</u>

There are numerous examples of how waste levies have helped to achieve these outcomes. For example, in South Australia, Green Industries SA, which is funded through a waste levy, provides support for local government, businesses and the community to move to a circular economy, to build the infrastructure to process waste and make new products, and helps to fund the development of innovative new technologies and commercialisation of related research. This includes programs such as the Circular Economy Market Development Grants, Council Modernisation Grants, and the REAP (Resource Efficiency and Productivity Grants) program for businesses and non-profit organisations.²

HOW WILL THE LEVY WORK AND WHERE WILL THE MONEY GO?

The Waste and Resource Recovery Bill 2021 (the Bill) will introduce a statewide waste levy in Tasmania to encourage the diversion of waste from landfill and increase the recovery of resources from waste. It will provide for standards and guidelines to be made in relation to landfills and resource recovery facilities.

It will also establish the Tasmanian Waste and Resource Recovery Board (the Board) to administer grants programs with the levy funds and to provide strategic review and planning for waste management practices in Tasmania.

To encourage maximum waste diversion, landfill operators will be entitled to claim a rebate for each tonne of waste that they remove from landfill and take to a resource recovery facility.

Levy monies will be collected by the Environment Protection Authority (EPA) Tasmania, which will be responsible for ensuring compliance with the waste levy scheme and enforcing the requirements of the Bill.

A dedicated waste and resource recovery reinvestment fund will be established through the Bill that will help grow Tasmania's circular economy and increase our resource recovery rate to the 80% target from both the Tasmanian *Waste Action Plan* and the national waste policy. All levy monies will be deposited into the Waste and Resource Recovery Account (the Account) The money in the Account must be used as legislated in the Bill.

Money deposited into the Account will be managed by the Board and can only be used:

- I. By the Board for the application of its Waste Strategy; or
- 2. By the Board for costs associated with its functions; or
- 3. By the EPA for levy payment adjustments; or
- 4. For a purpose prescribed in the regulations.

Therefore, the levy will enable the Government to raise revenue that can be directly reinvested into waste and resource recovery activities. The regulations will set an allocation of levy funds for the EPA for its waste levy administration and enforcement costs, ensuring that collection of the waste levy and related compliance activities are self-funded.

A number of councils currently have a voluntary waste 'levy' that is applied at the landfill gate. This fee is diverted to help support resource recovery efforts in the regions (e.g. education, small grants). In some areas similar activities are supported through an equivalent regional contribution from councils. The levy will replace these voluntary fees. To ensure that the resource recovery efforts that have been supported by these levies and council contributions can continue, the Government has committed to a special disbursement of levy funds (referred to as a Regional Distribution in Figure 1).

The distribution of funds – based on indicative expectations of revenue - in year two (first full financial year) and year five of the levy are shown at Figure 1. The Waste Fund segments of the charts are directly

² <u>https://www.greenindustries.sa.gov.au/about-us</u>

related to implementation of the Board's Waste Strategy. The WRR Board segments relate to costs associated with the Board's administration. The remaining segments: EPA Regulation, Compliance, and Regional Distribution (payments to local government regional waste groups to replace existing voluntary levies) relate to purposes that will be prescribed in the regulations.

The levy payment adjustments are not separately identified in the charts, but they are not expected to be significant. The provision for payment adjustments is required so funds can be repaid in the case of an overpayment to the EPA.

The residual amount that the Board will have for its Waste Strategy will proportionally increase over time with each staged increase of the waste levy rate (The Waste Fund – see Figure 1).

The rates or percentages of disbursement will be set in the regulations.







Revenue is based on estimates of solid waste generation and disposal from Urban EP, 2020, Tasmanian Waste Levy Impact Study Final Report.

Have your say

Written submissions are now invited on the Waste and Resource Recovery Bill 2021.

Appendix 1 to this paper provides a summary of the Bill and some additional notes to assist with understanding the intent of each clause.

Additional information is available at <u>www.dpipwe.tas.gov.au/environmental-management</u>

Consultation closes on Friday 12 March 2021.

Email: wis.enquiries@dpipwe.tas.gov.au

Mail: Policy and Business Branch, Department of Primary Industries, Parks, Water and Environment, GPO Box 1550, HOBART TAS 7001.

Key Parts of the Bill

THE TASMANIAN WASTE AND RESOURCE RECOVERY BOARD

The Tasmanian Waste and Resource Recovery Board (the Board) is expected to drive improvement in resource recovery and waste management practices in Tasmania and to show leadership on waste issues. The Board must promote waste related state policy and can provide advice and recommendations to the Minister on waste issues.

The Board will not be managing projects or initiatives itself, rather it will encourage innovation and investment in better waste management practices by strategic application of waste levy funds. This may include grants programs, industry loan schemes, community or infrastructure funds or other programs that promote the purposes of this Bill.

The Board will be established as an incorporated body of between 5-7 members who are appointed by the Minister. Members must have relevant skill, experience and knowledge as listed in the Bill. One of the members must be a representative from local government.

The functions of the Board are to provide advice to the Minister; to prepare, review and assess an effective Waste Strategy and Operational Plan; to audit and report on the use of levy funds; to promote waste reduction and resource recovery; to support State waste policies; to coordinate with local authorities and industries; to promote market development and local infrastructure for resource recovery; and to administer an assistance program for charitable recyclers to mitigate the costs arising from the Bill.

The Board must prepare a 3-yearly Waste Strategy which will require the Board to identify long and shortterm objectives to maximise resource recovery and improve waste management practices, identify programs and projects to achieve those objectives, and establish criteria for reviewing the effectiveness of the Waste Strategy.

The Board must consult with industry stakeholders and local government and obtain an analysis on waste disposal, resource recovery and waste management practices in Tasmania which will ensure that it is has the most current information in the development of its Waste Strategy.

The Board will also prepare a yearly Operational Plan to meet its business and financial goals under the current Waste Strategy. Both the Waste Strategy and Operational Plan must be approved by the Minister and comply with any Ministerial directions given.

The Board will prepare an annual report for each financial year on its activities and performance. The annual report will incorporate the financial statements of the Board, and it will be provided to the Minister to be Tabled in Parliament.

THE WASTE LEVY

The Bill intentionally makes it more expensive to dispose of waste to landfill. This sends a strong signal to the market to find other solutions for waste disposal: such as reducing the amount of waste produced, reusing or repurposing waste, or diverting waste for recycling, organic composting or bio-energy production.

The waste levy will apply statewide at all landfill facilities at a single fixed rate per tonne of waste received. It applies to all waste unless that waste is specifically exempted.

The operator of a landfill facility is responsible for paying the levy. It is assumed that the operator will pass on the costs of the levy in their gate fees to the waste disposer.

A landfill facility is a facility where waste is lawfully disposed of into or onto land pursuant to a required permit, authority, order, notice, approval or licence that may be issued under Tasmania's Resource Management and Planning System or the *Environmental Management and Pollution Control Act 1994*.

This is a broad definition of landfill, intended to capture as much waste disposal activity as possible while, out of practicality, limiting it to facilities that are or may be regulated under our current environment and planning laws. If you do not require any permit, licence or similar, to dispose of waste then the levy does not apply to your activity.

What facilities are exempted from the levy?

Most major waste disposal sites in Tasmania are either run by local government or are commercial waste businesses that are obviously intended to be included in this Bill. However, the definition of landfill may capture facilities that we do not intend to apply the levy and its obligations to. To address this, the Bill allows a specified facility or a class of facility to be made exempt from the waste levy and its obligations by prescribing it in the regulations.

The list of facilities or activities to be exempted is still being developed, but types that are being looked at are those that are too small to warrant the levy being applied, or where the waste disposal is incidental to the primary business of the facility, or where the waste disposal provides a benefit. For example, the mining and extractive industries often involve the movement of large amounts of overburden and it is not intended to include this kind of activity in the regulations.

What wastes are exempted from the levy?

The Bill specifies some wastes as exempt from the levy on the basis that it is in the public interest to dispose of those wastes correctly and the levy would be an inhibition or unfair burden on the person responsible for it.

The waste types included in the Bill as exemptions are asbestos and illegally discarded waste that has been collected by a public authority (i.e. the clean-up of litter or illegal dumping). Further exempted waste types may be prescribed in the regulations if needed.

A type of waste that will need to be included as an exemption in the regulations is waste brought into landfill sites for use in the operation of the landfill. Waste such as gravel for roads, construction materials and any material required to meet licencing requirements (such as day or intermediate cover) should not be charged the levy because they are being used for a purpose, not being disposed of.

The Bill also has provision for the Minister to exempt waste from the levy by order published in the Gazette. This order is a disallowable instrument that must be Tabled in Parliament. It is intended to cover urgent or emergency situations, such as clean-up from a flood or bushfire.

THE WASTE LEVY RATE

The rate itself is not contained in the Bill. The Bill allows for the levy rate to be prescribed in regulations, which will be passed once the Bill is enacted.

The waste levy will be introduced in a staged manner, with the intention to start in November 2021.

The broad objective is to work towards a levy rate comparable to the average of regional waste levy rates across mainland Australia. At present that is about \$60 per tonne. However, jumping straight to that rate could be a price shock that would be difficult for Tasmanians coming on the back of the business constriction caused by COVID-19.

The proposal is that the Government will introduce the levy in three steps over four years.

The levy is intended to:

- a) Commence on I November 2021 at \$20 per tonne of waste received at landfill;
- b) Increase to \$40 per tonne in November 2023; and
- c) Increase to \$60 per tonne in November 2025.

Taking a staged approach will allow time for businesses and local government to plan and budget for the changes and provide certainty to businesses to invest in waste reduction, and resource recovery activities.

The rates in the regulations will be expressed in terms of Fee Units so that there is an ongoing mechanism for indexation. The fee units used will be calculated to set the rate as close as possible to the dollar expressed above.

We welcome feedback on ways to transition the start of the levy to assist councils.

Impact of the waste levy

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A detailed analysis of the waste levy rate is contained in the *Tasmanian Waste Levy Impact Study* produced by consultants Urban EP³. This thorough analysis considered key parts of the Tasmanian economy, and the impacts on communities across the State (including small and remote communities) to evaluate the best option in setting a levy rate.

A Cost Benefit Analysis (CBA) was conducted to work out a preferred option for the levy rate, including consideration of competition impacts, public benefits, effects on different sectors and achievement of policy outcomes (i.e. achieving 80% resource recovery for all waste streams in Tasmania by 2030).

Of the six options analysed the \$20-\$40-\$60 stepped approach was determined to be the preferred policy option. This option not only avoided price impacts in the introductory years, but delivered significant positive public benefits such as stimulating new and expanded business activity, lowering environmental impacts, fostering innovation, and helping Tasmania shift to a circular economy.

The CBA found that the levy would only have a modest cost impact on businesses and households (Figure 2).

The CBA also found that the Government could implement the levy at no net cost and also deliver on its commitment to use levy funds to support councils, regional waste bodies, the waste and resource sector and the community to achieve priority waste objectives.

³ Urban EP, 2020, Tasmanian Waste Levy Impact Study Final Report. <u>https://dpipwe.tas.gov.au/Documents/Waste Levy Impact Study - UrbanEP.pdf</u>

	Figure 2.	Costs an	d benefits	of six lev	y rate options
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Waste levy rate per tonne	NPV result	Mean annual cost per capita	Cost per \$1,000 GSP	2030 recovery rate
\$10	\$20,798,496	\$1.40	\$0.06	47.7%
\$20	\$28,753,129	\$3.47	\$0.14	50.7%
\$40	\$77,017,830	\$7.60	\$0.27	59.3%
\$60	\$144,487,316	\$10.14	\$0.37	68.9%
\$120	\$146,963,337	\$18.59	\$0.68	70.0%
\$20-\$40-\$60	\$122,889,177	\$7.67	\$0.29	68.9%

NPV: A higher NPV indicates that those options deliver greater benefits to society. *Mean annual cost per capita*: represents the change in municipal waste management costs averaged over 10 years across the Tasmanian population. Cost per \$1,000 GSP reflects the cost for commercial and industrial waste management to Tasmanian industry, in terms of overall economic activity across the state (Urban EP, 2020, p. vi).

RESOURCE RECOVERY REBATE

By diverting waste prior to landfill the disposer saves the cost of the levy and landfill gate fees. The landfill operator may also set up their facility to divert waste before it gets to the landfill to reduce their levy liability. However, there will still be some recoverable waste that is sent to landfill.

The Resource Recovery Rebate allows landfill operators to claim back the levy on waste that they remove from landfill. It creates a financial incentive for operators to maximise the waste that is recovered.

The Resource Recovery Rebate can be claimed upon providing proof to the EPA Director that the waste was removed from the landfill and taken to a resource recovery facility. The rebate amount is set at the current levy rate, meaning the levy can be claimed back dollar-for-dollar.

The Resource Recovery Rebate is paid as an offset to the landfill operator's levy liability. In this way, operators can reduce their levy liability by both diverting waste prior to landfill and recovering waste from the landfill.

OBLIGATIONS OF LANDFILL OPERATORS

The main obligations for landfill operators under the Bill will be keeping records for calculating the levy amount and payment of the levy.

Within 10 days of the end of each calendar month landfill operators must provide a waste levy return to the EPA. The waste levy return will show the volume of waste that has been deposited at the landfill and any Resource Recovery Rebate claimed to calculate the amount of waste levy that the operator is required to pay.

The waste levy return must be submitted in a form approved by the EPA Director and contain any information prescribed in the regulations. For example, landfill operators may be required to supply information about the volume of exempt waste received for auditing purposes.

When submitting the waste levy return the landfill operator must also pay any levy that is owing.

Landfill operators will be required to conduct yearly volumetric surveys of the landfill. Volumetric surveys are a common feature of levy schemes across Australia and are a useful tool to investigate the quantity of waste that has been disposed of compared with the quantity of waste that has been reported in the waste levy return. There are no offences under the Bill for a discrepancy between the return and the survey, however if there were a significant variance the EPA would investigate whether there has been sufficient levies paid or if some other offence has occurred.

Obligations to be prescribed in the regulations:

The Bill has provision for prescribing further requirements for landfill facilities in the regulations. These regulations will be aimed at ensuring that the data reported is accurate, allowing the waste levy to be equitably enforced across all liable facilities.

The regulations will prescribe that facilities should have a weighbridge to quantify the waste that enters or is removed from the landfill facility. This requirement will be phased in over time to allow smaller facilities that don't already have a weighbridge to obtain this infrastructure. The EPA will work with operators to find the best solution.

Until the weighbridge regulations can be fully implemented, guidelines for converting volume to weight will be issued so that waste levy returns for all landfills can still be submitted. Volume to weight conversion guidelines can provide a good estimate of waste received, but they are only a temporary measure as weighbridges are far more accurate.

The regulations will include requirements for the operation and maintenance of weighbridges.

The regulations will also cover requirements for separating landfill operations from any resource recovery works that might occur at the same premises. This is to ensure there is a clear distinction between leviable waste and any waste where a rebate may be claimed.

ENFORCEMENT OF THE WASTE LEVY

This Bill will be enforced by the EPA; who have powers under the Bill to collect the levy, assess the accuracy of the waste levy return, issue default notices if insufficient levies have been paid, conduct inspections of landfill facilities and require an additional volumetric survey or a waste audit be conducted to ensure compliance with the legislation.

As well as court proceedings and infringement notices, the EPA Director has the power to suspend operations at a landfill facility if the landfill operator does not meet their requirements under this Bill. Figure 3 outlines the enforcement powers and steps that may be taken.

Figure 3: Waste Levy Enforcement Action

	•An authorised officer may require the landfill operator to provide any relevant records, returns or information.
	 An authorised officer can enter a landfill facility to inspect any plant, equipment or records.
Investigation	 An authorised officer may direct the landfill operator to conduct an additional volumetric survey or a waste audit by a qualified and independent surveyor or auditor.
	•The EPA Director may issue the landfill operator with a notice of demand if satisfied that levies are owing.
Response	•The EPA Director may suspend operations at a landfill site until any overdue levy is paid or any requirements under the Bill are complied with. If disputed, an operator can seek to have the notice of suspension reviewed by appeal to the Resource Management Planning Appeal Tribunal.
	•An authorised officer may issue the landfill operator with an infringement notice for any offence under the Bill.
Penalties	•Overdue levy payments attract a default penalty that accrues daily until the levy is paid.
	•Offences can be persued as a complaint in court. Penalties are generally a maxiumum fine of 200 penalty units (\$34,400 as at 2020-2021). There is also a penalty of imprisonment available for fraudulent conduct.
Court proceedings	•Overdue levies and default penalties can be recovered in the Magistrates' Court as a debt due.

REBATES FOR CHARITABLE ORGANISATIONS

It is acknowledged that the charitable recycling sector will be disproportionately impacted by the imposition of the waste levy due to the nature of their work. Organisations that accept donations from the public already face considerable waste disposal costs due to the high rate of unusable donations and dumping of rubbish at collection sites. Increasing the cost of waste disposal will mean these organisations will have less money to put towards their charity services.

To address this the Bill makes it a function of the Board to administer an assistance program to ameliorate the costs of the levy for charitable recyclers.

Included organisations are ones that:

- I. Operate a recycling program or collect public donations for repurposing or reselling; and
- 2. Are established solely for charitable purposes and are not for profit; and
- 3. Are approved under section 5 of the Collections for Charities Act 2001; and
- 4. Are a deductable gift recipient under the Income Tax Assessment Act 1997 (Cth).

Charities will still be encouraged and assisted to reduce their waste and to divert as much as possible from landfill.

The Board may also include other entities within their assistance program as directed by the Minister.

OTHER MATTERS

The Bill does not contain all the requirements for an effective waste levy. In some regards the Bill provides only a framework with further legislative development required. Some important parts will need to be prescribed in the regulations once the Bill has been enacted.

These include the waste levy rate, exemptions for certain wastes and facilities where appropriate, reporting requirements for the waste levy return and further obligations for landfill operators.

The Bill also allows for the development of Standards and Guidelines for landfills and resource recovery facilities, including around stockpiling of wastes, to avoid potential adverse outcomes from the imposition of the levy.

This Bill will commence on the day it receives Royal Assent, except for the levy liability provisions (Part 3) which will commence on Proclamation. This is to allow key parts of the Bill (such as the Board and levy guidelines) to be developed and operational prior to the levy commencing.

Appendix I Description of Bill Clauses

The descriptions below should be read in conjunction with the Bill itself.

PART I -	PRELIMINARY
Clause I	Short title
	This clause sets out how the Act may be cited.
Clause 2	Commencement
	The Act will commence on Royal Assent, except for Part 3 (levy liability) which will commence on a day to be Proclaimed.
Clause 3	Interpretation
	Subclause I defines how particular terms and phrases used in the Act are to be interpreted and applied.
	Subclause 2 specifies that the definitions used in the Environmental Management and Pollution Control Act 1994 apply in this Act.
Clause 4	Meaning of landfill facility
	Subclause I defines the meaning of "land" and "lawfully disposed of" for the purpose of this section.
	Subclause 2 defines a landfill facility as a facility where waste is lawfully disposed of into or onto land.
	Subclause 3 permits exemptions to this definition to be prescribed in the regulations.
Clause 5	Meaning of resource recovery facility
	Defines the meaning of "resource recovery facility".
Clause 6	Ministerial order
	Subclause I allows the Minister to declare that certain matter will be excluded from the operation of this Act.
	Subclause 2 requires the Minister to consult with the Board about a proposed order.
	Subclause 3 requires the order to be Gazetted and makes it a disallowable instrument to be Tabled in Parliament by adopting those provisions of the Acts Interpretation Act 1931.
Clause 7	Application of Act
	Clarifies that the provisions of this Act are in addition to any other law of the State.

Clause 8	Delegation			
	Allows the Director, the Board or the Secretary of the Department to delegate any of their powers or functions under this Act.			
Clause 9	Authorised officers			
	Declares the Director an authorised officer under this Act; and allows the Director to appoint authorised officers.			
PART 2	ADMINISTRATION			
Division I	Tasmanian Waste and Resource Recovery Board			
Clause 10	Establishment of the Tasmanian Waste and Resource Recovery Board			
	The Board is established as a body corporate with perpetual succession that may sue or be sued in its corporate name.			
Clause	Membership of the Board			
	Subclause I allows the Board to have 5-7 members.			
	Subclause 2 specifies that appointments will be by the Minister who must also appoint one of the members as the chairman of the Board.			
	Subclause 3 requires that one of the members must be a representative of local government nominated by the Local Government Association of Tasmania.			
	Subclause 4 sets the requirements to be a member of the Board.			
	Subclauses 5 and 6 enacts Schedules 1 and 2 of the Act with their respective rules regarding Board membership and meetings.			
Clause 12	Name of Board			
	Allows the Board to be renamed as approved by the Minister.			
Clause 13	Functions of the Board			
	Subclause I defines the meaning of "charitable recycler" for the purpose of this section.			
	Subclause 2 specifies the functions of the Board.			
	Subclause 3 requires the Board to perform its functions in a way that advances improvements in waste and resource recovery and is consistent with the objectives of the State's resource management and planning system (RMPS).			
Clause 14	Powers of the Board			
	Gives the Board the power to do all the things necessary and convenient to be done in connection with the performance of its functions; including requesting information, entering agreements and publishing information.			

Clause 15

Ministerial directions

Allows the Minister to give directions to the Board regarding the discharge of its responsibilities under this Act. Directions must be in writing and must be Tabled in Parliament.

Division 2 Staff of the Tasmanian Waste and Resource Recovery Board

Clause 16 **Chief executive officer**

Allows a person to be appointed CEO if requested by the Board.

Clause 17 **Responsibilities of chief executive officer**

The CEO is to perform any functions delegated by the Board or required under this or any other Act.

Subclause 2 requires the CEO to declare any conflict of interest.

Clause 18 Staff

Subclause I allows persons to be appointed under the State Service Act 2000 for the purposes of this Act.

Subclause 2 allows the Board to enter into arrangements with the Secretary of the Department for state service employees to be made available to perform functions under this Act.

Subclause 3 allows the Secretary of the Department to enter into arrangements with the Head of a State Service Agency for state service employees in other Agencies to be made available to perform functions under this Act.

Division 3 Planning and reporting by Board

Clause 19 Waste strategy

Requires the Board to prepare a 3-yearly waste strategy. Requirements of the strategy are specified, including an analysis of current waste management practices. The strategy is to be consistent with the objectives of the RMPS and any applicable Ministerial direction.

Clause 20 Preparation, approval and amendment of waste strategy

Subclause I lists the persons the Board is to consult with in preparing the waste strategy.

Subclauses 2-5 sets the requirements for approval of the waste strategy by the Minister.

Subclauses 6-7 allows the Board to amend the waste strategy with the same consultation and approval process.

Subclause 8 requires the Board to make the waste strategy available for public inspection.

Clause 21	Operational Plan
	Requires the Board to prepare a yearly operational plan. Requirements of the plan are specified, including how the Board is to meet the business and financial goals of the current waste strategy. The plan is to be approved by the Minister and available for public inspection.
Clause 22	Annual Report
	Requires the Board to prepare an annual report and specifies the requirements of that report which is to be Tabled in Parliament.
Clause 23	Minister may request information
	Allows the Minister to request information from the Board relating to its powers and functions under this Act.
Division 4	Finance
Clause 24	Waste and Resource Recovery Account
	Creates an account, to be administered by the Secretary of the Department, and specifies the purposes that the funds in the account can be used for.
Clause 25	Accounts
	Allows the Board to open bank accounts if necessary.
Clause 26	Funds
	Allows the Board to receive funds from other sources, including as allocated by the State.
Clause 27	Investment
	The Board may invest any funds held by it, subject to the <i>Tasmanian Public Finance Corporation Act 1985</i> .
Clause 28	Accounting Records
	Requires the Board to keep accounting records that correctly record and explain its transactions and financial position; and specifies the requirements for keeping and retaining those records.
PART 3	WASTE LEVY
Clause 29	Application of Part
	Creates a number of exemptions by defining the meaning of "waste" when used in this Part of the Act to exclude:
	a) Asbestos

- b) Illegally discarded waste collected by a public authority
- c) Matter declared excluded by Ministerial order (clause 6)
- d) Any prescribed matter in the regulations

Clause 30 Prescribed Levy

The amount of the levy is the amount prescribed in the regulations.

Clause 31 Resource recovery rebate

Entitles an operator to a rebate of the levy per tonne of waste that is removed from landfill in a calendar month, provided the operator provides proof to the Director that the waste was received at a resource recovery facility.

Clause 32 Payable levy amount for landfill facility

The amount of levy payable in a calendar month is the prescribed levy less any entitled resource recovery rebate.

If this results in a negative amount, then that amount is deducted from the levy payable in the next calendar month.

Clause 33 Waste levy return

A waste levy return is due within 10 days of the end of each calendar month and must be submitted to the Director in an approved form, include any prescribed information, and is to be accompanied by the payable levy amount.

Subclause 3 requires the payable levy amount to be deposited into the Waste and Resource Recovery Account.

PART 4 OBLIGATIONS OF OPERATOR

Clause 34 Landfill facility requirements

Subclause I makes it an offence for an operator to fail to comply with any requirements prescribed in the regulations.

Subclause 2 makes it an offence for an operator to fail to comply with any Ministerial Standards in force (under clause 51)

Subclause 3 requires the operator to comply with any guidelines issued by the Director (under clause 52).

Clause 35 Volumetric surveys

Requires an operator to conduct a volumetric survey of their landfill within 28 days of the Act commencing and then yearly thereafter. Creates an offence for failing to do so. Allows an authorised officer to require that an additional volumetric survey be carried out. Sets requirements for surveys.

Clause 36 Records

Requires operators to retain records relating to the Act for 5 years.

Clause 37 Offences

Creates an offence for knowingly evading or attempting to evade payment of the levy, and for giving false or misleading statements in a record or return required under this Act.

PART 5 ENFORCEMENT

Division I Powers and procedures

Clause 38 Payment of overdue levy

Allows the Director to issue a notice requiring payment for any unpaid levy amount. In considering whether any levy is owing the Director is entitled to make presumptions (subject to the operator establishing to the contrary) about the amount of waste received at the landfill.

An operator failing to pay in compliance with the notice is subject to a fine and a continuing penalty.

Clause 39 Audit

Allows the Director to issue a notice requiring a waste audit of the landfill facility and sets out the requirements for the notice and audit.

Clause 40 Powers of authorised officers

Lists the actions that authorised officers may undertake in the enforcement of this Act; including powers to enter facilities, inspect and test plant and equipment, and require the production of records. Creates an offence to refuse an authorised officer entry or to hinder or obstruct them in the exercise of their powers.

Clause 41 Suspension of operations

Subclause I gives the Director the power to suspend some or all of the operations at a landfill should the operator fail to comply with a requirement of this Act that is punishable as an offence.

Subclause 2 sets out the requirements for the notice of suspension – including specifying the conditions that need to be met for the suspension to be lifted.

Subclauses 3 creates an offence for failure to comply with the notice of suspension.

Subclause 4 requires the Director to lift the suspension once the conditions of the suspension are met.

Subclauses 5-7 set out a right of appeal to the Resource Management and Planning Appeal Tribunal and the powers of the Tribunal to determine the matter.

Subclause 8 clarifies that the suspension takes precedence over any authority to carry out landfill activity.

Division 2 Penalties and proceedings

Clause 42 Infringement notices

Allows authorised officers to issue infringement notices for any offence under this Act as prescribed in the regulations.

Clause 43 Recovery of debt in court

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Allows the Director to recover any debt under this Act in the Magistrates' Court.

Clause 44	Limitation period for prosecution
	An offence under this Act must be brought within 3 years.
Clause 45	Liability of multiple operators
	If there is more than one operator of a facility, then each is jointly or severally responsible and liable for any contravention of this Act.
Clause 46	Liability of body corporate
	If a body corporate contravenes this Act, then any person concerned with the management of that body corporate is taken to have contravened that provision. Includes limited personal defences such as proof that the body corporate acted without their knowledge.
Clause 47	Presumptions in relation to rebate entitlements
	In any proceeding brought under this Act the operator bears the onus of proving any rebate entitlement.
Clause 48	Evidence
	Allows records required to be kept by this Act to be tendered as prima facie evidence of the facts stated in the record.
Clause 49	Protection from liability
	Provides protection against personal liability for the Minister, Director, authorised officers, and members of the Board for acts done in good faith in the exercise of their powers under this Act.
PART 6	MISCELLANEOUS
Clause 50	Orders, notices &c., not statutory rules
	Any order, notice or declaration under this Act is not a statutory rule for the purpose of the Rules Publications Act 1953 or Subordinate Legislation Act 1992.
Clause 5 I	Regulations
	Allows the Governor to make regulations for the purposes of this Act.
Clause 52	Ministerial standards
	Allows the Minister to make standards for the operation of landfill facilities and resource recovery facilities for the purpose of this Act, including in relation to stockpiling of waste.
	Subclause 8 requires the standard to be Gazetted and makes it a disallowable instrument to be Tabled in Parliament by adopting those provisions of the <i>Acts Interpretation Act</i> 1931.
Clause 53	Director may issue guidelines
	Allows the Director to make guidelines for the purpose of this Act by publishing them in the Gazette.

Clause 54	Administration of the Act
	The administration of the Act is assigned to the Minister for Environment and Parks, and the Department responsible is the Department of Primary Industries, Parks, Water and Environment (DPIPWE).
Clause 55	Consequential Amendments
	Allows the legislation listed in Schedule 3 to be amended as specified.
Schedule I	MEMBERSHIP OF THE TASMANIAN WASTE AND RESOURCE RECOVERY BOARD
Clause I	Term of office
	An appointment is not to exceed 4 years and a member may not serve more than 2 consecutive terms.
Clause 2	Holding other office
	Unless the contrary intention appears, the holder of an office is not disqualified from being a member of the Board or from accepting any remuneration payable.
Clause 3	State service employment
	A state service employee may be a member of the Board.
Clause 4	Remuneration and conditions of appointment
	Remuneration and allowances of members is as determined by the Minister.
	The conditions of appointment, other than those specified in this Act, are as per the instrument of appointment.
Clause 5	Vacation of office
	Specifies the circumstances for vacation of office and the powers of the Minister to remove a member from office.
Clause 6	Filling of vacancies
	The Minister may appoint a member if an office becomes vacant.
Clause 7	Validation of proceedings, &c.
	Acts or proceedings of the Board are not invalidated because the office of a member is vacant or because a defect in appointment is subsequently discovered.
Clause 8	Presumptions
	In any proceeding, proof is not required (unless there is evidence to the contrary) of the constitution or the Board or appointment of any member.
Schedule 2	MEETINGS OF THE TASMANIAN WASTE AND RESOURCE RECOVERY BOARD

Clause I	Convening of meetings
	Specifies how meetings are to be convened by the chairperson or the process in the chairperson's absence.
Clause 2	Presiding at meetings
	Specifies that the chairperson is to preside over meetings, or a member elected by the members present if the chairperson is absent.
Clause 3	Quorum and voting at meetings
	To conduct business the Board must have a quorum (a majority of members appointed and not excluded from considering a matter due to a conflict). Votes are determined by a majority of members present.
Clause 4	Conduct of meetings
	The Board may regulate the conduct of business at its meetings.
Clause 5	Absences
	A member must take reasonable steps to inform the chairperson if they will be absent from a meeting, and must not be absent from more than 3 consecutive meetings without permission from the chairperson (or they may be removed from office by the Minister – see Schedule 1 Clause 5).
Clause 6	Minutes
	Requires accurate minutes of meetings to be kept.
Clause 7	Disclosure of interests
	Makes it an offence for a member to fail to disclose that they have a direct or indirect pecuniary interest in a matter being discussed.
	Unless the Board otherwise determines, a member with such a pecuniary interest must not be present during the deliberation or take part in a determination of that matter.
Clause 8	General procedure
	The Board may regulate its own proceedings.
Clause 9	Presumptions
	In any proceedings, proof is not required (unless there is evidence to the contrary) of any resolution of the Board or the presence of a quorum at any meeting of the Board.
Schedule 3	CONSEQUENTIAL AMENDMENTS
Environmental	Amends regulation 18(2) by omitting paragraph (a).
Management and Pollution Control (Waste Management	This clause deletes clean fill as an exception to the requirement for an authority or approval to dispose of to land.

Regulations) The rationale for this is that clean fill is a resource and should not be disposed of at all. If you are discarding it, then you must have a permit or authority to do so and it will attract the waste levy.

Environmental Management and Pollution Control Act 1994

Section 3 is amended to substitute a new definition for clean fill – defined as type 1 or type 2 material.

The meaning of clean fill is clarified in two new definitions, "clean fill type 1" and "clean fill type 2". Clean fill type 1 will mean natural materials. Clean fill type 2 will consist of common demolition materials. Provision will be made for the Director to specify maximum levels of chemical contaminants or maximum proportions of other inert materials such as wood, plastics and metals. Provision will also be made for the Director to birector to specify maximum dimensions for pieces of material within clean fill.

The rational for this amendment is to provide a more workable definition of clean fill for regulating how this waste material is recovered.





Department of Primary Industries, Parks, Water and Environment

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INQUIRY INTO RURAL HEALTH SERVICES IN TASMANIA

The Legislative Council Government Administration Committee 'A' has recently resolved to establish a Sub-Committee to inquire into and report on health outcomes and access to community health and hospital services for Tasmanians living in rural and remote Tasmania. The Sub-Committee invites written submissions from interested organisations and individuals,

however, individual health care complaints are unable to be considered.

Electronic submissions are encouraged and all submissions can be provided to: Jenny Mannering, Inquiry Secretary

Parliament House, HOBART 7000

rur@parliament.tas.gov.au

Phone: (03) 6212 2249

The Terms of Reference and other relevant information are available on the inquiry webpage https://www.parliament.tas.gov.au/ctee/Council/GovAdminA_RuralHealth.htm or by contacting the

Submissions become the property of the Committee and are generally made publicly available via the Inquiry webpage prior to the Committee releasing its Final Report. However, authors of submissions should not publish their submission elsewhere until after the Committee has reported.

Submissions should be received by no later than close of business on Friday, 12 March 2021. Members of the Sub-Committee Inquiry:

Ms Forrest - Inquiry Chair

Mr Gaffney

Ms Lovell

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Dr Seidel – Inquiry Deputy Chair Mr Valentine



LEGISLATIVE COUNCIL GOVERNMENT ADMINISTRATION COMMITTEE 'A'

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Inquiry into Rural Health Services

On 21 December 2020, Government Administration Committee 'A' resolved to commence an inquiry into rural health services in Tasmania with the following terms of reference:

To inquire into and report on health outcomes and access to community health and hospital services for Tasmanians living in rural and remote Tasmania, with particular regard to:

- 1. Health outcomes, including comparative health outcomes;
- 2. Availability and timeliness of health services including:
 - a. Ambulance services;
 - b. Primary care, allied health and general practice services;
 - c. Non-GP specialist medical services;
 - d. Hospital services;
 - e. Maternity, maternal and child health services;
 - f. Pain management services;
 - g. Palliative care services;
 - h. Pharmacy services;
 - i. Dental services;
 - j. Patient transport services;
 - *k.* 'After hours' health care;
 - *l.* Indigenous and culturally and linguistically diverse (CALD) communities; and
 - m. Other.
- 3. Barriers to access to:
 - a. Ambulance services;
 - b. Primary care, allied health and general practice services;
 - c. Non-GP specialist medical services;
 - d. Hospital services;
 - e. Maternity, maternal and child health services;
 - f. Pain management services;
 - g. Palliative care services;
 - h. Pharmacy services;
 - i. Dental services;
 - *j.* Patient transport services;
 - *k.* '*After hours' health care;*
 - l. Indigenous and culturally and linguistically diverse (CALD) communities; and
 - m. Other
- 4. Planning systems, projections and outcomes measures used to determine provision of community health and hospital services;
- 5. Staffing of community health and hospital services;
- 6. Capital and recurrent health expenditure;
- 7. Referral to tertiary care including:
 - a. Adequacy of referral pathways;
 - b. Out-of-pocket expenses;
 - c. Wait-times; and
 - d. Health outcome impact of delays accessing care;
- 8. Availability, functionality and use of telehealth services; and
- 9. Any other matters incidental thereto.

^{1.} Regional centres: defined as Modified Monash Model 2 (i.e. outside greater Hobart and greater Launceston)



01 February 2021

Dear, General Manager, Mayor & Councillors

Reptile Rescue Inc. is an incorporated charity that coordinates the removal of errant snakes in every municipality in Tasmania (State wide), relying on a network of trained and approved independent field operatives (rangers).

In order that this service can function, we are asking for financial assistance from every council throughout Tasmania. As Reptile Rescue Inc. is a non for profit organisation it still comes with costs i.e. phone, liability insurance, out of pocket expenses for the rangers use of own vehicles.

Due to Covid 19 our education awareness, events and displays had all be cancelled which has taken great strain on our finances as we rely on these as a source of income to also help with the running costs.

We receive approx. 8,500 calls per year, and the phone is voluntary monitored 24/7.

Reptile Rescue Inc. has served the state for over twenty years on a user pays basis, and has carried the administrative cost for each call over that period. Pressure from ratepayers in many municipalities to have the costs absorbed by councils, has prompted this request.

The 2020 - 2021 annual financial donations would be to meet the running costs of this service, which are quite substantial each year. Payment by clients for service is applied directly by independent rangers trained and equipped at their own expense. Reptile Rescue Inc. has approximately eighty voluntary rangers on record.

In order that we can adequately service the state, we kindly request that you consider assisting in the implementation of this state wide incentive. If you have any enquires with the above contact Chris Daly 0439 066 905.

Yours sincerely,

Chris Daly Chairman Reptile Rescue Inc. Bank Details: Reptile Rescue Inc. My State BSB: 807-009 ACC: 60041811 Email: Remittance advice to jpj7468@bigpond.com



Motions received from Councils -To be Tabled at the LGAT General Meeting 12 March 2021

The three motions below have been received and will be considered at the 12 March 2021 General Meeting. They are being provided in advance of the Agenda papers to allow for council discussion and ensure relevant debate at the Meeting.

Planning Authorities

Council Burnie City

Decision Sought

That the LGAT investigate the level of support among Tasmanian councils and identify the relevant considerations and options to propose an amendment of the *Land Use Planning and Approvals Act 1993* to –

- a) delete the mandatory requirement for a council to act as a planning authority for purposes of determining an application for a permit to use or develop land within its municipal area; and
- b) provide as an alternative, the establishment of an independent development assessment panel to determine a permit application.

Background Comments:

The parliament of Tasmania has legislated in the *Land Use Planning and Approvals Act 1993* that the council elected under the Local Government Act 1993 must also serve as the planning authority for its municipal area.

The requirement is a continuation of a similar arrangement dating from the early 1960's under which a local council had responsibility for how the land within a municipal area is to be used and developed.

The key responsibilities of a planning authority under the Act are to –

a) prepare and maintain a planning scheme for the municipal area; and

b) take all reasonable steps within the ambit of its power to enforce the observance of that planning scheme in respect of all use or development undertaken within the municipal area, including to determine an application to use and develop land if a permit is required.

The planning authority role is mandatory; and is entirely separate from the function of a council under the *Local Government Act 1993*.

While a Council may exercise its authority as a planning authority through a committee of the council, and may delegate powers and functions to an employee, it cannot ignore, abandon or surrender the role, or devolve responsibility in whole or part to any person or body external to the Council.

The powers and functions of a planning authority require actions and decisions with potential to materially affect the rights and interests of others; and which may generate an intersection of conflicting views and opinion.

The requirement on a council to act as a planning authority has long caused conflict and confusion.

There is a general and long-standing disquiet within Tasmanian councils over the confusion, conflict, and complexity of the "two hats" requirement inherent dual statutory functions.

There is an almost irresolvable tension between the general responsibilities of a council as the representatives of community and its role as a planning authority.

The former requires a council is to provide for peace, order and good governance, and to promote and represent the health, safety, welfare and best interests of the community.

The latter imposes considerable limitations on the ability to act as a council because of the duty on a planning authority to remain neutral, and to set aside matters of importance to the community if irrelevant to the considerations and decision instructed by the planning scheme.

As a planning authority, a council is required to -

- a) understand complex issues and to consider the validity of detailed planning applications within the 5-day period following provision of an agenda and a Council meeting
- b) make the decision directed by the planning scheme and explained in the qualified advice provide by Council officers unless there are valid reasons to move for an alternate decision
- c) set aside and have no regard to views and opinions of the community that are not directly relevant to the applicable requirements of the planning scheme

It is appropriate to test the desire of local government to continue in the role of a planning authority with a responsibility to make decisions on permit applications, and to explore use of independent assessment panels to assess and decide permit applications

Other Australian jurisdictions have recognised the struggle experienced by local government when required to separate the role as people's representative from that of an independent arbitrator of compliance to a strict set of planning rules.

Several State jurisdictions currently operate a form of independent assessment panel which act as an alternative to the local council for decisions on land use permits.

There are also many overseas models, including some systems where the local council has no involvement in assessment or determination of a permit application.

While there are variations in administrative arrangements and scope of practice for assessment panels, underlying objectives typically include to increase probity and accountability, safeguard against corruption or misconduct, and to lead to better planning outcomes.

Significantly, the use of an independent panel can free a council to focus on planning strategy, and will provide a freedom to make representations and to advocate for its community on any aspect of a proposal.

Most States where independent panels are available have prescribed the matters that must come before a panel are to include - significant or technically complex permit applications; projects that may have a high economic, environmental and social value or impact; proposals within a specific locality or of a particular kind; public housing and State agency proposals; applications made by the council; and matters likely to attract significant public interest, opposing views and opinions, or controversy.

Some systems allow a council discretion to refer other kinds of application for decision by a panel.

Panels generally comprise a chair with a legal or public administration background and two or more specialist members; and may include a local government and/or community representative to provide local knowledge and perspective.

The use of an assessment panel does not deprive or change a council's responsibility and involvement in land use planning strategy and policy, or in the preparation of a local planning scheme.

The proposed investigation would examine the various models currently used in other jurisdictions; consider the scope of permit matters that must or may be referred; and the necessary membership and administrative arrangements.

A decision by LGAT member councils to support introduction of system of independent assessment and decision panels requires amendment to the *Land Use Planning and Approvals Act 1993*.

A persuasive argument to State government will require support from the local government sector to forego or modify what is currently an almost an exclusive power, and to devolve that power in whole or part to an external body of experts.

The ultimate decision required in this Motion is who do we represent as elected members of a council?

It is relatively easy to appreciate the "2-hat" analogy, but in reality we only wear one – the hat that represents the residents of our municipal area and requires we look after their well-being and to support their right to question, challenge and be championed by their representatives.

This is not always easy or possible when acting as a planning authority.

It is appropriate for the LGAT to investigate the level of support, and to examine options for how a panel would be structured and operate.

The matter should be further considered by LGAT members on completion of the investigation and before any decision to make a formal approach to government.

Decision Sought

That Local Government calls on the Tasmanian Government to honour the commitment (given at the Premier's Local Government Council on 6 November 2019) for a five-week consultation period on the draft legislation to amend the *Gaming Control Act 1993* to give effect to the Future Gaming Market Policy, when released.

Background Comments

In 2018, the Tasmanian Government announced its policy for the future of the Tasmanian gaming market, providing an overview of how the Tasmanian gaming industry will be restructured.

In 2020, the Department of Treasury and Finance released a public consultation paper, the Future of Gaming in Tasmania, which provided detail of the Future Gaming Market regulatory model that will implement this policy from 1 July 2023.

The original timeline was for the exposure draft of the *Gaming Control Amendment (Future Gaming Market) Bill 2020* (draft future gaming bill) to be released on 27 April 2020 with the closing date for comment on the draft on 8 May 2020. The review was deferred due to the impacts of the COVID-19 pandemic. It anticipated that the draft future gaming bill will be now be released for comment in 2021.

Under the new regulatory model, licences for casinos, keno and hotels and clubs would be distributed for up to 20 years, with further changes to the regulatory model unlikely until 2043.

While Glenorchy City Council and other councils and stakeholders have had an opportunity to comment on the public consultation paper, it will be very important for councillors and council officers to have time to fully review the draft future gaming bill when it is released and have enough time to respond.

As noted, the original timetable set for the consultation period for the bill was 10 working days. It is anticipated that this will also be the case when the draft bill is released in 2021.

LGAT previously had a Statewide Partnership Agreement with the Tasmanian Government in relation to timeframes for consultation on issues relevant to local government.

Although the agreement has expired, the issue was discussed at the Premier's Local Government Council meeting on 6 September 2019, with the minutes recording the following:

"The Premier noted that, although the Statewide Partnership Agreement between the State Government and the local government sector has expired, the Government continues, as a matter of protocol, to observe the five-week consultation period contained in that Agreement. This was welcomed by LGAT. The Premier noted he would be asking the Secretary of DPAC to write to other agency heads reminding them of the minimum five-week period."¹

¹ Premier's Local Government Council minutes from 6 September 2019, Department of Premier and Cabinet website

The motion therefore seeks LGAT's support in calling for the State Government to honour the agreement in relation to the consultation period of the draft bill to allow an appropriate time for a detailed review and preparation of submissions.

The proposed changes to the legislation will have an impact on any local government area which has electronic gaming machines, particularly for single operators of hotels and clubs. Regardless of whether councils support or oppose the legislation, it is important to understand the changes and the possible effects on their communities.

Deferral of Draft Future Gaming Bill Council Glenorchy City

Decision Sought

That the Tasmanian Government defers the release of the legislation to amend the *Gaming Control Act 1993* to give effect to the Future Gaming Market Policy for consultation until the latest information relating to gambling in Tasmania is made available, including:

- a) The release of the fifth Social and Economic Impact Study; and
- b) Social and economic modelling used to develop the Future of Gaming in Tasmania policy.

Background Comments

The Future Gaming Market regulatory model proposed by the State Government is a major restructure of the gaming industry. Given its significance, it is important that information used to develop the model, as well as up-to-date information on the sector, is made available to all stakeholders.

The *Gaming Control Act 1993* requires that an independent review of the social and economic impact of gaming in Tasmania be conducted every three years. The Social and Economic Impact Study of Gambling in Tasmania (**SEIS**) provides an analysis of key trends in gambling and a gambling prevalence study. This is a key study that is tabled in each House of Parliament after completion.

The fifth SEIS is currently underway (submissions closed in October 2020) and is expected to be completed by the second quarter of 2021. It is possible that the draft future gaming bill will be released, and a decision made in Parliament, prior to the results of the SEIS being made available.

Given the importance of the SEIS and the fact that the Future Gaming legislation exposure draft was postponed due to the impacts of the COVID-19 pandemic, being able to review the SEIS and any recommendations made in that report prior to commenting on the Future Gaming legislation exposure draft is critical.

Submissions to the Future of Gaming in Tasmania could be made based on the information publicly available at the time in the Tasmanian Government's Future Gaming consultation paper.

The consultation paper provided details of the proposed changes to the regulatory model but did not provide any social or economic modelling used by the State Government to develop its proposal.

It is essential for councils and other stakeholders to have access to this modelling information if they are to add value to the next stage of the consultation process and gain a clearer picture of how changes will impact individual municipalities.

The request to defer the Future Gaming legislation until the release of the SEIS and the provision of the social or economic modelling would not impact the Tasmanian Government's proposed legislation commencement date of July 2023.

Hi Penny

It was lovely to meet you and Peter last week. Thanks for sending through Peter's report with the addendum, showing the alternative treatment for the treatment of the gable walls (to minimise visual impacts to the existing windows). I can confirm that I am supportive in principle of the amended gable wall proposal, in conjunction with the other structural remediation work. If a future building manager or owner were to apply to Heritage Tasmania for approval for this work, it is likely that this would be eligible for a Certificate of Exemption.

I wish you the best of luck in helping to secure a good future for the church and I look forward to hearing of any further developments.

Please let me know if you have any follow up questions.

Kind regards, Deirdre

Deirdre Macdonald I Heritage Advisor I HERITAGE TASMANIA 0419 589 283 (M) I <u>deirdre.macdonald@heritage.tas.gov.au</u> Department of Primary Industries, Parks, Water and the Environment I <u>www.heritage.tas.gov.au</u> 134 Macquarie St, Hobart TAS 7000 I GPO Box 618, Hobart TAS 7001 I 1300 850 332 (local call cost) From: <u>pennysaile335@bigpond.com</u> <<u>pennysaile335@bigpond.com</u>> Sent: Tuesday, 13 October 2020 4:31 PM To: Macdonald, Deirdre <<u>Deirdre.MacDonald@heritage.tas.gov.au</u>> Subject: FW: Gretna Church

Hi Deirdre,

Wonderful to meet with you last week.

Please find attached Peter's amended report and proposed design to remedy the roof problem of St Mary the Virgin at Gretna.

Looking forward to receiving advice confirming Heritage Tasmania's in principle support.

Many thanks Deirdre.

Kind regards, Penny

From: p.spratt@bigpond.net.au <p.spratt@bigpond.net.au> Sent: Monday, 12 October 2020 11:13 AM To: pennysaile335@bigpond.com Subject: Gretna Church

Hi Penny, Report with alternative gable wall installation. Regards Peter



Tuesday, 15 December 2020

Penny Saile Descendant of Edward Terry

By email: pennysaile335@bigpond

Dear Penny

St Mary the Virgin Anglican Church, Gretna

Thank you for your correspondence regarding St Mary's Gretna.

As you are aware, the Diocese is looking to sell this property, and we support the notion of seeing it go into the ownership of the Central Highlands Council. I appreciate your initiative in working with the various parties to facilitate this outcome, noting that the ultimate decision rests with the Council.

The Diocese supports the idea of community ownership for properties such as St Mary's. I have had the opportunity to visit the place and note that the cemetery is well visited and well loved, both by members of the local community and relatives that live elsewhere. Many of these people are not practicing members of the Anglican church. There is also significant history captured within the walls of the church.

The Diocese is aware that repairs and maintenance on the building are required, in order to see it preserved. Unfortunately, our local parish does not have the resources to undertake this work. Whilst it is sad to see its time as a place of Anglican worship come to an end, we are hopeful that it may be well looked after by a new owner, so that its story can continue.

I note your point that the property has limited alternative uses, with the cemetery taking up a significant portion of the property. The government valuation is a rough measure that does not consider factors such as heritage listing, building condition and the cemetery, or the property's marketability.

I am of the view that negotiations regarding the sale price for the property should be held between the vendor and the purchaser. As discussed, I believe that the Diocese is realistic in its assessment of the market value of the property, and should the Central Highlands Council give in principle support to owning the property, the sale price will not be a barrier.

You are welcome to include this response in your submission to Council and I look forward to hearing of the outcome.

A church for Tasmania, making disciples of Jesus.

Should you require any further information from the Diocese, then please contact me on (03) 6220 2032 or at <u>redressproject@anglicantas.org.au</u>. I will be taking some leave over Christmas, returning on 4 Jan 2021.

Yours sincerely

J. Williams

Judson Williams

Project Manager, Redress Scheme

A church for Tasmania, making disciples of Jesus.

PETER SPRATT

CONSULTING CHARTERED ENGINEER

P. Spratt AM M.Env.St . Dip.CE FIEAust . LFAIB MASCE A.I.Arb.A

25 Gourlay Street Blackmans Bay TAS 7052 Ph. 03 6229 7280 Email <u>p.spratt@bigpond.net.au</u> ABN 55 120 015 973

Ref. No.7292

9th. September 2020

Penny Saile 335 Mt Rumney Road Mt Rumney TAS 7170

Anglican Church of St. Mary the Virgin, Gretna Structural and Fabric Assessment

Dear Penny,

I have , to your request, carried out a structural and fabric assessment of the above church. I visited the site on the 2^{nd} September last and carried out a visual inspection externally and internally in your company and that of –

The Rev Ellen Clark, Robin and Helen Terry, Geoff Parsons, Greg Bowerman, Holger Saile

I advise that -

1. Previous Report

I assessed the building on the 16^{th} . June 1997. The Report noted that –

- The gable end walls were not connected to the roof structure and could overturn under wind load.
- The wall stones were bedded in site soil with little quicklime.
- The was some delamination of the wall facing.

The Report Recommendations were-

- Attach the roof structure to the gables
- Make the walls solid
- Stiffen the roof structure.

2. Present Site Observations

Comment

There has been a change in the wind regime and in Australian Wind and Construction Standards in the 23 years since the previous assessment.

Winds in excess of 100 km/hr. are now common.

Observations

The following comments are illustrated by photographs 1-6.

- There are no indications of foundation problems.
- The steel frames attached to the gables have been beneficial in preventing rotation outwards of the walls and in preventing stone delamination.
- Many of the joints in the roof construction of rafters, collar ties and collar tie struts are loose allowing movement and buckling of members under wind load.
- There is shear tear cracking of the side walls where the end gable walls have moved outwards. The cracking is old but clean white extensions of some of the cracks indicate recent minor movements.



- There is shear tear cracking at the top corners of the gable walls indicating roof ridge drop and roof rafter pushout of the side walls. The cracking is old but with cracking of previous crack filling.
- There is minor vertical cracking of both side walls around their centre, characteristic of open butt joints in roof rafter landing plates.
- Both end gables are buckled with some delamination of the outer stones. The movement is old and not reflected internally indicating vertical delamination of the outside stonework. The steel frames have held the delaminated stones in position with no indication of recent movement. Internal cracking, apart from the NE corner, is minor
- There is no detrimental rising dampness in the walls and the timber floor has no appreciable deflection. I note that the aisle is sandstone paved and the floor joists are at right angles to the sidewalls indicating that there are sleeper walls supporting them each side of the aisle.
- The roof structure is not attached to the gable walls and the walls cantilever above the side walls held in position only by the steel frames.
- There is loose stonework internally in the SW corner of the church on the gable wall precariously held in position by a roof rafter. This is a high public safety risk.
- There is defective stonework requiring replacement on the south side of the east gable.
- Both gables have cracked copingstones allowing ready rainwater entry into the erodible stonework bedding in the gable walls below.
- The side walls have the inside stonework enclosing the roof rafters. There is no horizontal cracking of the walls under the rafters indicating no movement of the roof rafter landing plates.
- The electric wiring is a mix of old conduit and modern polyethylene. The wiring to the floor heaters under the seats is old and is likely a hazard. The heating should be disconnected.
- There is no indication of defects or internal leakage in the asbestos roof shingles.

3. Assessment

It is surprising, given the time since my previous inspection and the change in the wind regime, that the building condition has not greatly changed.

There is need to remove the safety risk and to limit roof movements under wind load. The building is presently stable but can be made unstable by strong winds.

The stonework has moved little in the past 23 years and stiffening the roof structure, by limiting roof movement, will reduce movement stresses on the stonework removing the need for stoneworks other than making good the present cracking.

4. Recommended works

Safety Risk

Immediately remove the loose failed internal stones in the SW corner.

- Structural
- 1. Stiffen the roof structure by steel plating all joints to prevent joint movements under wind load.
- 2. Connect the roof structure to the gable walls.
- 3. Install continuous timber plates fixed to the walls as tension tie beams around the interior of the walls at stone course below the level of the roof rafter landing plates. This will control the cracking of all walls. The plates will be across the gable windows but are the least cost structural solution to control masonry cracking.
- 4. Install tie beams centrally on the collar ties and at the understrut junction with the roof rafters to provide lateral restraint to the roof structure.





The roof stiffening works will give structural stability provided that the existing steel frames are left in position.

The frames have limited the delamination of the gable stonework and no present action is required but monitoring of stone movements and of cracking is needed with action warranted if movements or fresh cracking occurs. The extent of bedding washout internally within the walls is unknown and may lead to the need for future stonework.

The evidence over the 23 year time span between assessments is that little stone movement has occurred and the recommended roof stiffening will restrict roof wind movements which have been the cause of the observed wall movements.

Fabric Works

Repoint wall cracks externally and internally. Repair SE Gable coping Flash copings Repoint gables

5. Cost Estimate

	\$42,000
Contingency	\$4000
Fees	\$5000
GST	<u>\$5100</u>
TOTAL	\$56,100

6. Further Comment

The building will be safe for use with the removal of the identified loose stone safety hazard.

Internal cracking is minor and the present defects are due to roof load on the outside edge of the sidewalls and lack of connection of the roof structure to the end gables.

It should be structurally sound on completion of the roof stiffening works, coping flashing and repointing recommended above as stresses on the stonework will be substantially reduced by stiffening the roof to limit wind roof movement.

Monitoring of the results is needed to ascertain if previous unknown bedding washout results in the need for future stone remedial work. If there is no movement there will be no need for stone work.

Yours faithfully,

PETER SPRATT AM

Peter Spratt ABN 55 120 015 973

View of south gable Note the shear cracking at top of both sidewalls and central vertical cracking due to roof spread with rafters pushing out on side walls. Note the failed coping stones.

Repointing needed. There is no structural cracking of the render.

Photograph 1.



View of north gable. Comments as other gable.

Photograph 2.



Loose dangerous stonework on SW corner.

Photograph 3.



Shear tear cracking of north side wall at gable

Photograph 4.



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View of roof structure with rafters and understrutted collar ties. The joints are mortised and tenoned with pegs and many have opened.

Photograph 5.

View of crack near centre of side wall. This occurs on both side walls and is consistent with an open butt joint in the roof rafter landing plates.

Photograph 6.



Anglican Church of St. Mary the Virgin, Gretna Structural and Fabric Assessment Alternative bond beam across gable windows

The timber plate of Figure 1 across the windows in the gable walls is required to connect the roof rafter landing plates on the side walls to prevent them from moving outwards and also to act as a tension tie to prevent cracking of the gable walls.

The plates obscure the windows and an alternative installation is to insert stainless steel tension bars into the walls with a 25mm diameter bar joining them across the windows.

The installation is shown in Figure 2.

The cost is estimated as an extra \$700.

Alternative Cost Estimate

GST TOTAL	\$5190 \$57,090
Contingency	\$42,700 \$4200 \$5000



PROPOSAL TO CENTRAL HIGHLANDS COUNCIL

It is proposed that the Central Highlands Council agree, in principle, to become the owner and manager of St Mary the Virgin church and cemetery in Gretna, provided funds can be raised for purchase and remedial works prior to transfer of ownership from the Anglican Diocese of Tasmania.

This proposal is made following a meeting between the proposer, Penny Saile and supporters Robin Terry and Geoff Parsons, with Mayor Loueen Triffitt and General Manager Lyn Eyles at the Council Chambers in Hamilton on 16 November 2020.

Background:

St Mary the Virgin Anglican church was consecrated in June 1848 and deconsecrated on 10 October 2020. The church and cemetery were established on land donated by my great-great-grandfather, Edward Terry of 'Askrigg', Gretna, who also provided funds, along with others in the district, for the building of the church.

As Councillors are most likely aware, St Mary's is one of a number of Anglican churches around Tasmania listed for sale by the Anglican Diocese of Tasmania to fund the Anglican Church Redress Scheme, for those who are victims of institutional child sexual abuse by the Church.

While the intention to sell St Marys has now been advertised by the Diocese, it is unlikely that it would sell on the open market, due to the structural condition of the building; the need for repairs and maintenance, including to some of the grave monuments in the cemetery; the proximity of the cemetery to the church; limited alternative use options; and lack of water and communications services to the property.

Since the list of Anglican church assets to be sold was announced in May 2018, I have been working on a plan for the future of the church, should it not sell.

By way of a broad summary, I have:

- Researched the background and history of the property
- Procured copies of the title and government valuation of the property
- Sought legal, heritage, survey, engineering and architectural advice
- Actively engaged with Heritage Tasmania officers

- Contracted a heritage engineer to reassess and update an earlier report of the church, and to quote for any remedial works
- Met with officers of the Anglican Diocese the Registrar and the Redress Scheme Project Manager
- Consulted with the Hamilton Parish Priest and Council
- Secured ongoing support from Gretna residents Robin and Helen Terry, Geoff Parsons and Greg and Pat Bowerman, members of the Parish Council, who have a long and active association, interest and connection to St Marys.

What could the future of St Mary's look like?

My belief is that St Marys should have a future, and neither be lost as an important local, community, heritage asset in the Central Highlands municipality, nor fall into disrepair and eventual ruin. Even if it was only to remain as a safe, commemorative heritage site in the community - somewhere that relatives with loved ones and forebears buried in the cemetery could safely visit and reflect, as well a place of history that would be of interest to other visitors. However, I believe there is potential for other use as well.

To make this happen:

- The site needs a new owner, an entity that has the legal capacity to own and manage both the church and the cemetery.
- The church needs immediate work to the roof to further stabilise the building and make it safe for more frequent use: this would cost approximately \$57,000.
- Some of the graves, already identified by the Diocese, also need remediation work. This has not yet been costed.
- Rewiring of the church is also likely to be required. This has also not yet been costed.

Following his reassessment of the building, Heritage Engineer Peter Spratt has provided a design and quote for the roof works. (His report and quote are attached.)

Heritage Tasmania has provided in-principle support for the design. (See email attached.)

Funds would be raised to fund these works, should the Council agree in principle to assume ownership and responsibility for the site.

The Diocese supports the proposal. (See letter attached.)

Why should the Council consider itself as the future owner of St Marys church and cemetery?

The proposal fits with the Council's vision, which is: "To provide residents and visitors opportunities to participate in and enjoy a vibrant local economy, rewarding community life, cultural heritage and a natural environment that is world class."

St Marys is an important religious and cultural heritage site in the Central Highlands municipality.

- A highly respected cultural heritage architect has advised that in his view, St Marys is probably one of the two most important churches in Tasmania, due to the time when it was built and its design.
- Among a number of unmarked graves, there are likely to be a number of convict graves, which would be of archaeological significance.
- Considerable effort and funds from local people have gone into the church over its life.
- Many local families are buried in the cemetery, including the founder Edward Terry, and his descendants to the present generation. Many of these families have served their community in a range of spheres, working hard, bringing innovative ideas and helping to build their district into strong social and economic communities.

The Council is already involved – mowing and spraying the cemetery regularly.

The Council is already a cemetery manager.

The Council is a most appropriate community organisation to take on the role of cemetery owner / manager, given the requirements of the *Burial and Cremation Act 2019*. (The cemetery manager role can be leased to another entity.)

There is some precedent. In the times of the Hamilton Council, a building in Hamilton and another in Ouse was purchased by the Council.

What are the benefits for the Council?

It would take on ownership of a community asset of historical and cultural heritage importance without any immediate financial encumbrance.

Once the remedial roof works are completed, the building has potential for a range of activities, thereby potentially generating an income for the Council to offset any ongoing maintenance and repairs required.

In time, through grants or other funding options, more could be done to improve the asset, thereby potentially creating opportunities for diverse use / greater income generation.

There may also be broader future development and even sale potential, especially in 35 years after the last burial, when grave monuments could be removed to the perimeter of the property, creating park-like surrounds.

There is also history tourism potential.

Where to next?

Should the Council agree in principle, the Diocese would be advised. As noted in the attached letter from the Diocese, it would wish to deal directly with the Council, establishing a vendor/buyer relationship.

A contract of sale, conditional on funds being raised for purchase and remedial works to ensure the building was stable and safe, would then be negotiated.

Funds would need to be raised. I am willing to voluntarily take on this responsibility, seeking only reimbursement for out-of-pocket expenses for travel, admin costs etc. I would write this into grant applications and the like. I would have the support of my Gretna colleagues in these fund-raising endeavours.

I would not however, be prepared to take on the project manager role, but would be happy to participate in a project advisory group or something of that nature, should the Council consider that appropriate.

My interest / credentials:

I am one of Edward Terry's great-great granddaughters.

Every generation on my mother's side of the family are either buried or commemorated in St Mary's cemetery – from Edward Terry down to my great-grandparents, grandparents, nine members of my mother's family (13), and my brother.

Although I am now retired, I still undertake small project and administration jobs. I am registered as a small business owner and operate with an ABN.

I had almost 33 years working in local government, ten of these working at middlemanagement level.

I have grant application and management experience.

Penny Saile 22 December 2020



09 February 2021

Dear General Manager

Pathways Tasmania is a not-for-profit organisation that runs long term drug and alcohol rehabilitation programs (Velocity Transformations) and a homeless youth shelter for vulnerable young men (Launch Youth). More information about our work can be found here: pathwaystas.org.au

One of our major fundraising events in the **Freedom Ride** to be held on 27 March this year. This cycling event has been running for around seven years (we cancelled the ride in 2020) through the beautiful Derwent Valley. This year, there will be 100km, 42km and 20km courses, all departing from The Esplanade in New Norfolk.

We are seeking Council approval to run part of the 100km course on part of the Central Highlands managed roads. It is proposed that the riders will cycle through part of the Lyell Highway and Ellendale Road in Council's jurisdiction. Currently, it is planned that there will be two rider groups:

- Group one will leave The Esplanade at 8am, which will have them enter Council's road via the Lyell Highway at around 9am, departing 3.5 hours later via Westerway.
- Group two will depart The Esplanade at 10am, entering Council's jurisdiction at 10.45am, following the same course as group one with the final rider departing Westerway at approx. 2.15pm.

Attached, you will find our traffic management plan, the Ride's public liability insurance certificate and 100km route details.

Please don't hesitate to contact me should you require further information.

Warm regards

Susan Sussems Fundraising Manager susan@pathways.org.au 0432 618 945

Department of State Growth

Salamanca Building Parliament Square 4 Salamanca Place, Hobart TAS GPO Box 536, Hobart TAS 7001 Australia Ph. 6166 3327 Email donald.howatson@stategrowth.tas.gov.au Web www.stategrowth.tas.gov.au



Susan Sussems 64 Anglesea Street SOUTH HOBART TAS 7004 Email: <u>Susan@pathwaystas.org.au</u>

Dear Ms Sussems

Pathways – community bike ride

I refer to your request to use the following State road(s) for the above event:

Gordon River Road (Lyell Highway – Westerway)	Saturday 27 March 2021
Lyell Highway (Ellendale Road – New Norfolk)	Saturday 27 March 2021

The Department of State Growth has no objection to the use of the above State road(s) as proposed and authority is hereby provided under the *Roads and Jetties Act 1935*, Section 16 for the display of traffic control devices as shown in the traffic management plan submitted with your request, subject to the following conditions:

- The event and relevant traffic management arrangements are to be advertised in the media well in advance of the event. (As a guide, 2 weeks advance notice should be sufficient for most events.)
- Traffic control must be provided by suitably trained, qualified and experienced personnel in accordance with the Traffic Control for Works on Roads Tasmanian Guidelines 2011. The event organiser is responsible for all costs associated with providing appropriate traffic management for the event.
- The event organiser is responsible for the cost of repair of any damage to any State road or related infrastructure, including guide posts and railings, resulting from activities around the event.
- Tasmania Police approval for any road closure is necessary and must be obtained by you.
- The event organiser is responsible for obtaining any other required approvals from relevant authorities.
- This event permit does not include authority to display temporary signs advertising this event on a State road. The application, guidelines and requirements for signs and pre-approved locations for display of signs can be found at http://www.transport.tas.gov.au/road/permits/advertising.

- The event organiser will save and keep indemnified the Crown in the right of the State of Tasmania against all or any costs, claims, proceedings and demands whatsoever and by whomsoever arising out of or in respect of the conduct of the event in the State road reservation.
- The event organiser will consider, and make adequate provision for:
 - Vehicular access and parking
 - Access by pedestrians, public transport and emergency services
 - Consultation with affected stakeholders
 - Consultation with Tasmania Police

If you have any queries in relation to this authority, please contact Donald Howatson on the above number.

Yours sincerely

D. Hubler

Donald Howatson Manager Traffic Engineering

Delegate of **Minister for Infrastructure and Transport** Michael Ferguson MP

15 January 2021

cc: General Manager, Derwent Valley Council and Central Highlands Council



V Insurance Group Pty Ltd ABN 67 160 126 509 Telephone: +61 2 8599 8660 Fax: +61 2 8599 8661 Direct Line: +61 8599 8667 Email: sports@vinsurancegroup.com Address: Level 25, 123 Pitt Street Sydney NSW 2000

5 February 2021

To Whom It May Concern,

CERTIFICATE OF INSURANCE

Dear Sir/Madam,

In our capacity as Insurance Broker to the Named Insured shown below, we confirm having arranged the following insurance, the details of which are correct as at the Issue Date:

Named Insured:	AusCycling Limited and all Affiliated Clubs
Event Name:	Freedom Ride
Event Organiser:	Pathways Tasmania
Event Dates:	27th March 2021
Class of Insurance:	Combined Liability Insurance
Insurer:	Certain Underwriters at Lloyds of London
Policy Number:	09014411
Limit of Liability:	
Professional Indemnity	\$20,000,000 each and every occurrence and in the aggregate
Public Liability	\$20,000,000 each and every occurrence
Products Liability	\$20,000,000 each and every occurrence and in the aggregate
Policy Period:	4.00pm, 31 January 2021 to 31 January 2022
Interested Parties:	

In all instances, cover afforded is subject to the policy terms, conditions and exclusions. Any queries concerning this insurance arrangement should be addressed to this office.

Yours sincerely,

Lucy Willis Senior Account Executive Authorised Representative Number: 001280519

Disclaimer:

This document has been prepared at the request of our client and does not represent an insurance policy, guarantee or warranty and cannot be relied upon as such. All coverage described is subject to the terms, conditions and limitations of the insurance policy and is issued as a matter of record only. This document does not alter or extend the coverage provided or assume continuity beyond the Expiry Date. It does not confer any rights under the insurance policy to any party. V-Insurance Group is under no obligation to inform any party if the insurance policy is cancelled, assigned or changed after the Issue Date.



EVENT

TRAFFIC MANAGEMENT PLAN

ROAD CYCLE EVENT

PATHWAYS TASMANIA INC

27 March 2021

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1. Introduction

1.1 Purpose and Scope

This Traffic Management Plan (TMP) outlines the traffic control and traffic management procedures to be implemented by the Event Organiser, Pathways Tasmania Inc, and Traffic Management Personnel to manage potential hazards associated with the traffic environment during the event activity.

1.2 Traffic Management Objectives and Strategies

The objectives of the Traffic Management Plan are:

- To provide protection to event participants and the general public from traffic hazards that may arise as a result of the event activity.
- To manage potential adverse impacts on traffic flows to ensure network performance is maintained at an acceptable level.
- To minimise adverse impacts on users of the road reserve and adjacent properties and facilities.

1.3 Event Location

There are three routes being used for the event. The 100km ride will start at The Esplanade, New Norfolk. **The 100km Hardcore route is as follows:**

- Riders will start at The Esplanade, New Norfolk and turn right on to the Lyell Highway
- Right turn on to Blair St (Lyell Highway)
- Left turn on to Lyell Highway
- Left turn on to Ellendale Road
- Continue on Ellendale Road onto Gordon River Road
- Turn right on to Glenora Road
- Continue on Glenora Road on to Lyell Highway
- Turn Left into The Esplanade
- Finish at The Esplanade



The second route for the **42km Marathon Ride** will also start at The Esplanade, New Norfolk. The route is as follows:

- Riders will start at The Esplanade, New Norfolk and turn right on to the Lyell Highway
- Right turn on to Blair St (Lyell Highway)
- Left turn on to Lyell Highway
- Left turn on to Gordon River Road
- Left turn on to Glenora Road
- Continue on Glenora Road on to Lyell Highway
- Turn Left into The Esplanade
- Finish at The Esplanade



The third route for the **20km Recreational Ride** will also start at The Esplanade, New Norfolk. The route is as follows:

- Riders will start at The Esplanade, New Norfolk and turn left on to the Lyell Highway
- Right turn on to Glebe Road
- Continue on Glebe Road onto Lachlan Road
- Riders will perform a u-turn on the gravel turning area at 713 Lachlan Road, just prior to the bridge that crosses over the Lachlan River. Riders will then head back in the direction that they came.
- Continue on Lachlan Road Road onto Glebe Road
- Left turn on to Lyell Highway
- Right turn into The Esplanade
- Finish to be at The Esplanade.



2. Activities on Road

2.1 Scope of Activities

Item	Description
Event Scope	The event activities involve on-road cycling events around a circuit of local roads in the New Norfolk Council and Central Highlands Council. The length of the main circuit is approximately 100km, the marathon route 42.2km and the shorter one is approximately 20km.
Event Name	Freedom Ride
Event Category	This event is not classified as being in a race category as it is a cycle event with no race component.
Speed Limits	No changes to signed speed limits will be in place and all riders will be advised to obey posted speed limits at all times.
Local Government	Derwent Valley Council and Central Highlands Council.
Event Organiser	Pathways Tasmania Inc
Details of Activities	The event entails four different groups across three different courses. The routes are specified under item 1.3. The Hardcore 100km ride is expected to split into two groups, with group one expected to take between 5.5 and 6.5 hours, with the second group will be expected to take 3.5 hours The 42km Marathon Ride will take 2.5 hours and the 20km Recreational Ride ride will run for approximately 1.5 hours. All rides will start and finish at The Esplanade.
Date of Event	March 27 2021
Event Start and Finish Time	8:00am to 2:30pm
Event Duration	6.5 hours

2.2 Existing Traffic and Speed Environment

The routes for the event go through a variety of speed limits varying from 50kmh to 100kmh.

For the 100km ride, the traffic levels on the roads are expected to be low. The highest traffic area will be on the Lyell Highway between The Esplanade and Hamilton. However, this part of the route will be traversed first and being early on a Saturday morning it is expected to result in low traffic.

For the marathon 42km section, the traffic levels on the roads are expected to be light, due to similar path as 100km event with the traffic levels on the roads are expected to be low. The highest traffic area will be on the Lyell Highway between The Esplanade and Hamilton. However, this part of the route will be traversed first and being early on a Saturday morning it is expected to result in low traffic.

For the 20km ride the traffic is expected to be light, due to not using major roads and the event being held on a Saturday morning. There is a short stretch on the Lyell Highway (650m) which will have higher levels of traffic, but we anticipate the interruption to traffic flow will be low due to the low amount of time spent on this stretch of road as well as the time of day that the ride will be happening.

2.3 Roles and Responsibilities

The event organiser has the ultimate responsibility and authority to ensure the TMP is implemented for the prevention of property damage and injury to event personnel, participants, road users and all members of the public.

Event Organiser	Pathways Tasmania Inc
Road Authority	Tasmanian Government Derwent Valley Council
Event Marshall	Susan Sussems M: 0432 618 945 E: susan@pathwaystas.org.au
Traffic Management Supervisor and Design	Susan Sussems M: 0432 618 945 E: susan@pathwaystas.org.au

The following outlines the management hierarchy that will apply to the events.

3. Statutory Requirements

3.1 Road Traffic Act and Regulations

All regular cycling road rules will be in effect for this event as per Road Rules 2009 (Tas), with riders briefed at the beginning of the event on the following rules:

- Division 2 Keeping to the Left
- Rule 20 Obeying the speed-limit
- Division 3 Overtaking
- Rule 151 Riding a motor bike or bicycle alongside more than one other rider
- Part 15 Additional rules for bicycle riders

3.2 Responsibilities

The Event Organiser is responsible for:

- Ensure all traffic control measures for this TMP are placed and maintained in accordance with this plan.
- Ensure suitable communication and consultation with the affected stakeholders is maintained.
- Ensure inspections of the Traffic Controls are undertaken in accordance with the TMP, and results recorded. Any variations shall be detailed together with reasons.
- Instruct event personnel on the relevant safety standards, including the correct wearing of high visibility safety vests, and other equipment as required.
- Take appropriate action to correct unsafe conditions, including any necessary modifications to the TMP.

The Traffic Management Marshall is responsible for:

• Ensuring the traffic management devices are set out in accordance with the TMP.

Event Traffic Controllers and Marshals shall:

- Correctly wear high visibility vests, in addition to other protective equipment required (e.g. footwear, sun protection etc), at all times whilst at the event site.
- Comply with the requirements of the TMP and ensure no activity is undertaken in conflict with the TMP.

3.3 Incident/Accident Procedures

In the event of an incident or accident, involving traffic or road users, all event activities in the area shall cease. The event will only resume when safe to do so. First Aid shall be administered where necessary, and medical assistance shall be called for if required. For serious injuries an ambulance will be called on the telephone number 000. The Police shall also be called on 000 for traffic accidents where serious injuries have occured. An Ambulance from St John's Hospital will be on site at the start/finish point of the event. All lead and pursuit cars will be equipped with First Aid kits in case of accidents.

4 Hazard Identification and Risk Assessment

Hazard Identification and Risk Assessment has been done through the separate risk register which should be read in conjunction with the TMP.

5 Traffic control

5.1 Traffic Control Devices

100km Event

The 100km event is split into two groups, demarcated by speed. Each group will have a car leading and trailing the group of cyclists. Each car will be equipped with a standard flashing orange light magnetically mounted to the top of the vehicle. In addition, each car will have a single sign with black text on a yellow background bearing the words 'CAUTION CYCLISTS'. The lead car for each group will have the sign displayed in the front passenger side window and the trailing car will have the sign displayed in the rear window.
42km Event

The 42km event will have a car leading and trailing the group of cyclists. The vehicle will be equipped with a standard flashing orange light magnetically mounted to the top of the car and have a single sign with black text on a yellow background bearing the words 'CAUTION CYCLISTS'. The lead car will have the sign displayed in the front passenger side window and the trailing car will have the sign displayed in the rear window.

20km event

The 20km event will be on roads with low traffic and as a result will have one car trailing the group with no lead car. The follow car will be equipped with a standard flashing orange light magnetically mounted to the top of the vehicle. In addition, the car will have a single sign with black text on a yellow background bearing the words 'CAUTION CYCLISTS'. The car will have the sign displayed in the rear window.

At 713 Lachlan Road, the turnaround point for the 20km ride, an Event Traffic Controller in a high vis vest will be located next to the road to direct riders to do a u turn in the gravel turning point on the road.

5.2 Informing Motorists

Advertisements will be placed in the Derwent Valley Gazette and via promoted Facebook posts leading up to the event to give local residents advance notice that the ride will be occurring so that they will be prepared for possible longer drive times during the event.