

Melbourne Energy & Resource Centre - MERC

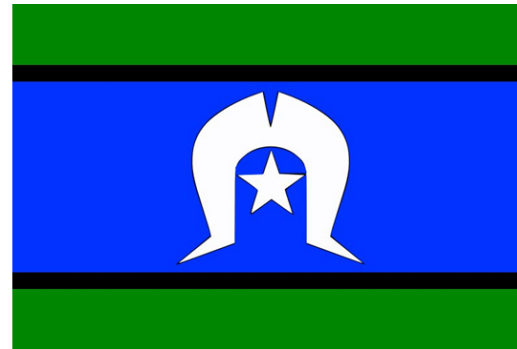
Community Information Sessions – February-March 2024



Welcome & Introductions

Acknowledgement of Country

I begin today by acknowledging the Wurunjderi Woi Wurrung People, Traditional Custodians of the land on which we meet today and pay my respects to their Elders past and present. I extend that respect to Aboriginal and Torres Strait Islander peoples here today.



Welcome & Introductions

Facilitators

- Matthew Gordon – Facilitator - Capire Consulting Group
- Tiffany Tang – Support Facilitator - Capire Consulting Group

Presenters

- Karsten Forsterling – Approvals Lead - Cleanaway
- Marc Revault – Technical Advisor - Ramboll
- Brad O'Meara – Specialist Coordinator – Arup

Specialists

- Katie Murphy – Planning - Tract
- Natalie Shaw – Air Quality - Katestone
- Therese Manning - Human Health - enRiskS

Housekeeping

- Finish on time
- The chat function is closed, please use the Q&A function to ask questions
- You can turn on Close Captioning using the Zoom tool bar
- You can post questions anytime during the presentation
- We will try to answer your questions
- Stay on topic
- Respectful communication

Previous engagement

- Phase 1 (2022) - Online Focus Groups
- Phase 2 (2022) - Web launch and letterbox drop
- Phase 3 (2023) - A series of pop-ups, in-person and online information sessions, one-on-one meetings
- Preparing the DLA and Planning Application

- **Phase 4 (2024) - Public Exhibition**
- **This is a Cleanaway hosted event. There have been EPA-led engagement activities during the Public Exhibition.**

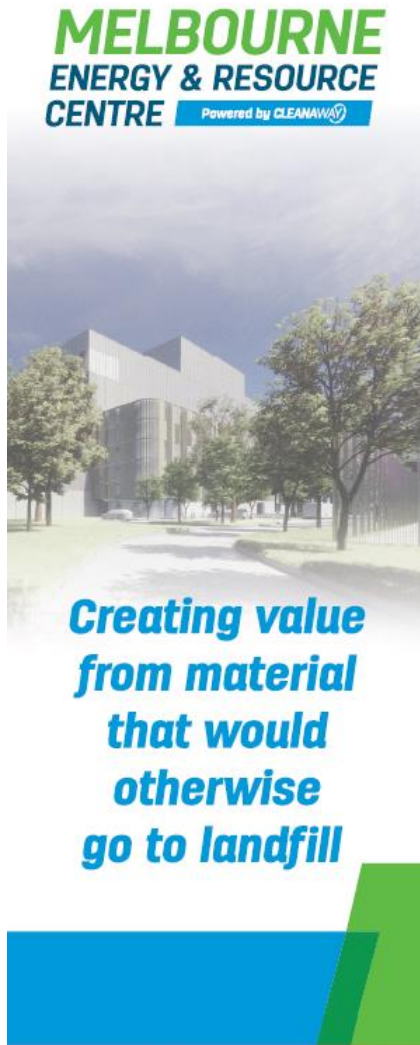
Questions raised throughout consultation

- Will the facility be burning unprocessed Municipal Solid Waste or engineered fuel?
- Understanding fire and emergency risks to the community
- Understanding the full health and environmental impacts of the project
- The location and impact to nearby residents? Why so close to homes?
- General compliance/ Work health and safety compliance of the facility
- Development and operational details
- Where will feedstock come from?
- Has the relevant minister declared an Environmental Effects Statement is required?
- More information around noise, traffic etc.
- Timing of construction



***Karsten Forsterling –
Cleanaway Approvals
Lead***

Today's Presentation



Cleanaway & waste-to-energy

- The Melbourne Energy and Resource Centre (MERC) proposal overview
- Technology
- Specialist Assessments

Making a submission

Q&A

Joint Exhibition / Advertising of two Applications:

- Development License Application (EPA)



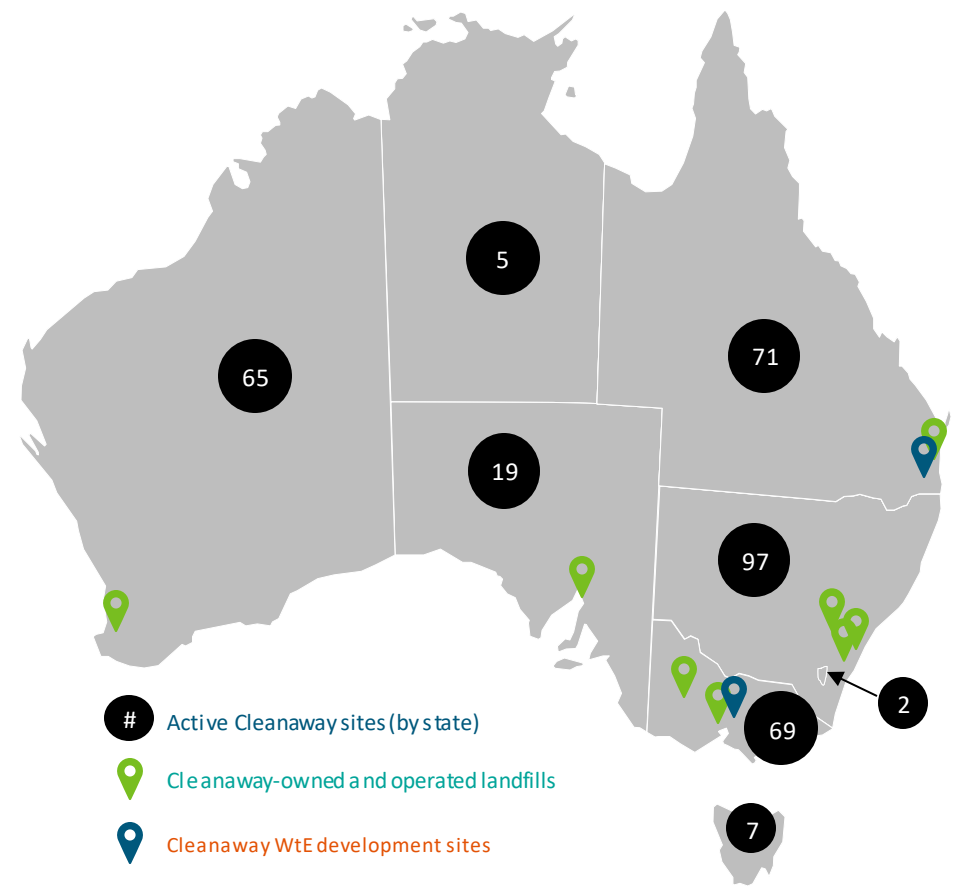
- Planning Permit Application (DTP)



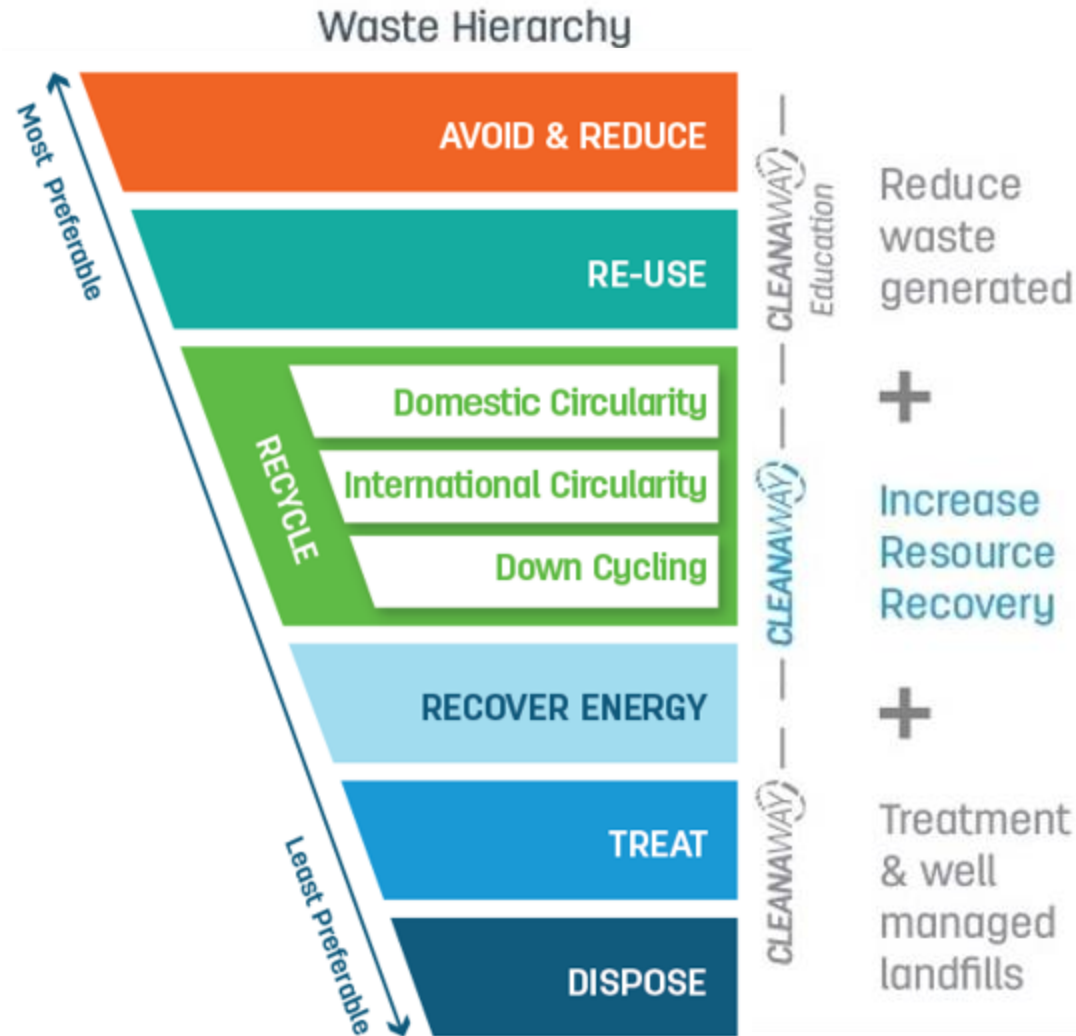
- EPA and DTP have made applications accessible from 20th February to 14th April 2024 at engage.vic.gov.au
- Make a submission to EPA or DTP to help their review of the applications.

Cleanaway is Australia's largest vertically-integrated waste management services provider

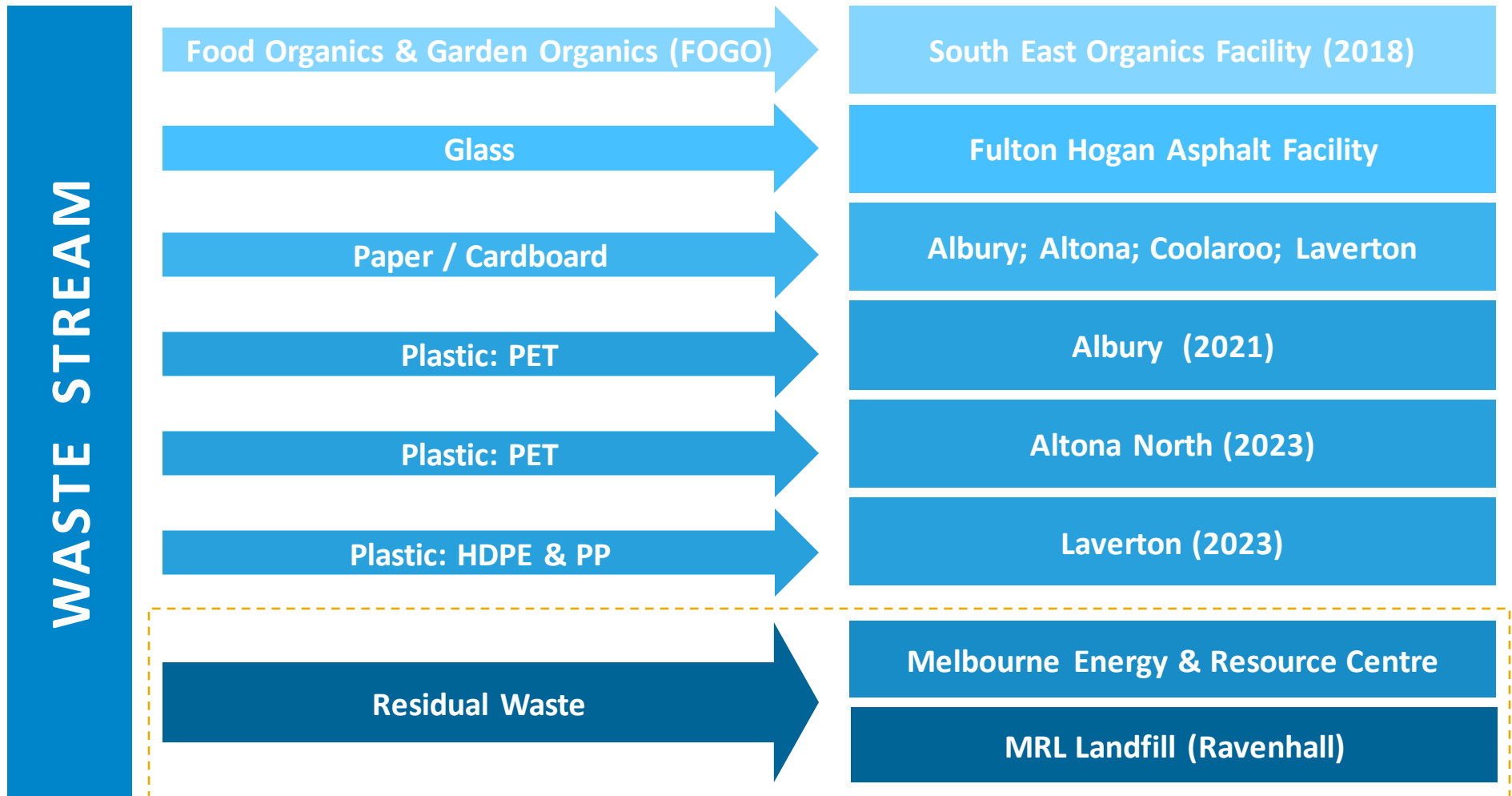
 7,500+ employees	 Living across ~1,200 postcodes	 >75 Nationalities
 A\$6bn market capitalisation	 140+ council relationships	 132K+ business customers
 335 active sites	 5,900+ vehicles in the fleet	 135+ licensed infrastructure assets



Cleanaway is investing up the waste hierarchy



Cleanaway waste management streams in Victoria



Benefits of the MERC to the community

GENERATING 41MW OF
ELECTRICITY TO POWER
>60,000
HOMES

CREATING OVER
800
JOBS DURING
CONSTRUCTION

PLUS
50
LOCAL HIGHLY SKILLED
JOBS DURING OPERATION

GREENHOUSE GAS SAVINGS
EQUIVALENT TO
50,000
CARS OFF THE ROAD

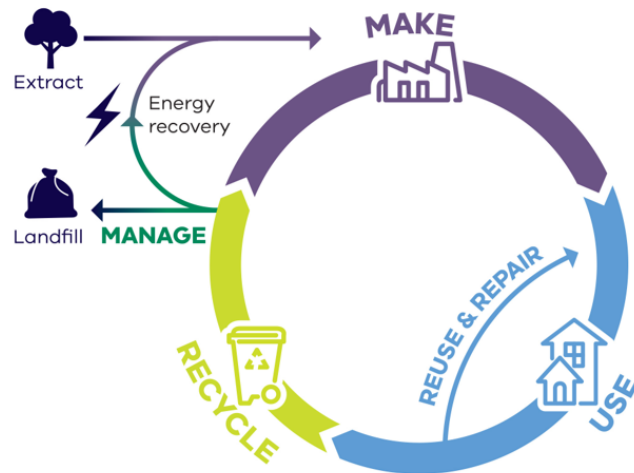
RECOVER AN ESTIMATED
13,000 TONNES
OF RECYCLABLE METALS
PER ANNUM



Victorian Government Circular Economy Plan

Dedicated teams and Strategies

- A new economy 2020, Victoria's Circular Economy Plan
- 80% diversions from landfill by 2030
- Established Recycling Victoria mid-2022
- State-wide waste and resource recovery infrastructure plan (2022) to be replaced by Victorian recycling infrastructure plan in 2024.

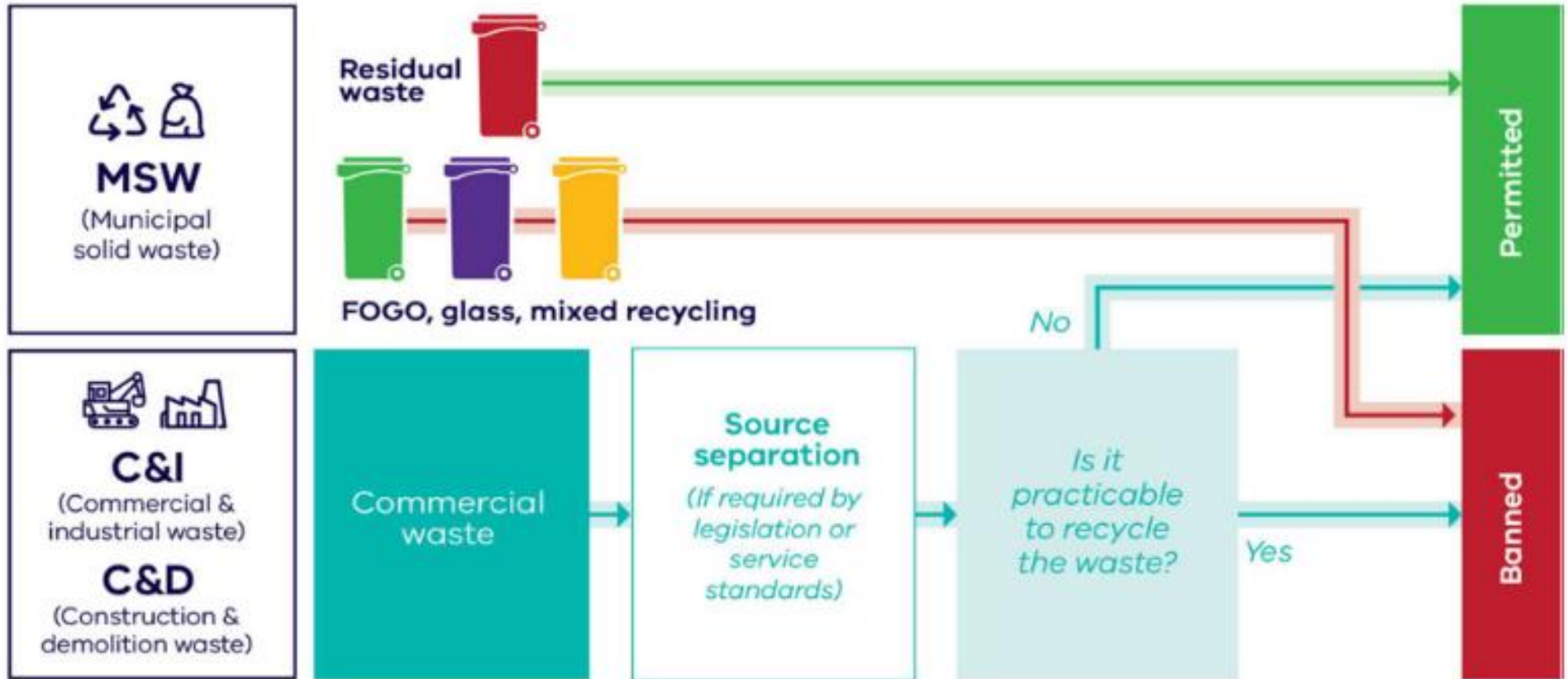


State Government Actions

- New recycling laws and regulations (Circular Economy (Waste Reduction and Recycling) Act 2021)
- Kerbside bin standardization (4-bins: combined food & organics; glass; combined paper, plastic and metals; residual)
- Single use plastic ban, Container Deposit Scheme
- *Waste to Energy Framework & WtE Cap*



What waste will be eligible for the MERC to process?



Source: Extract from Victorian WtE Framework

State government projection: Available, suitable waste for WtE

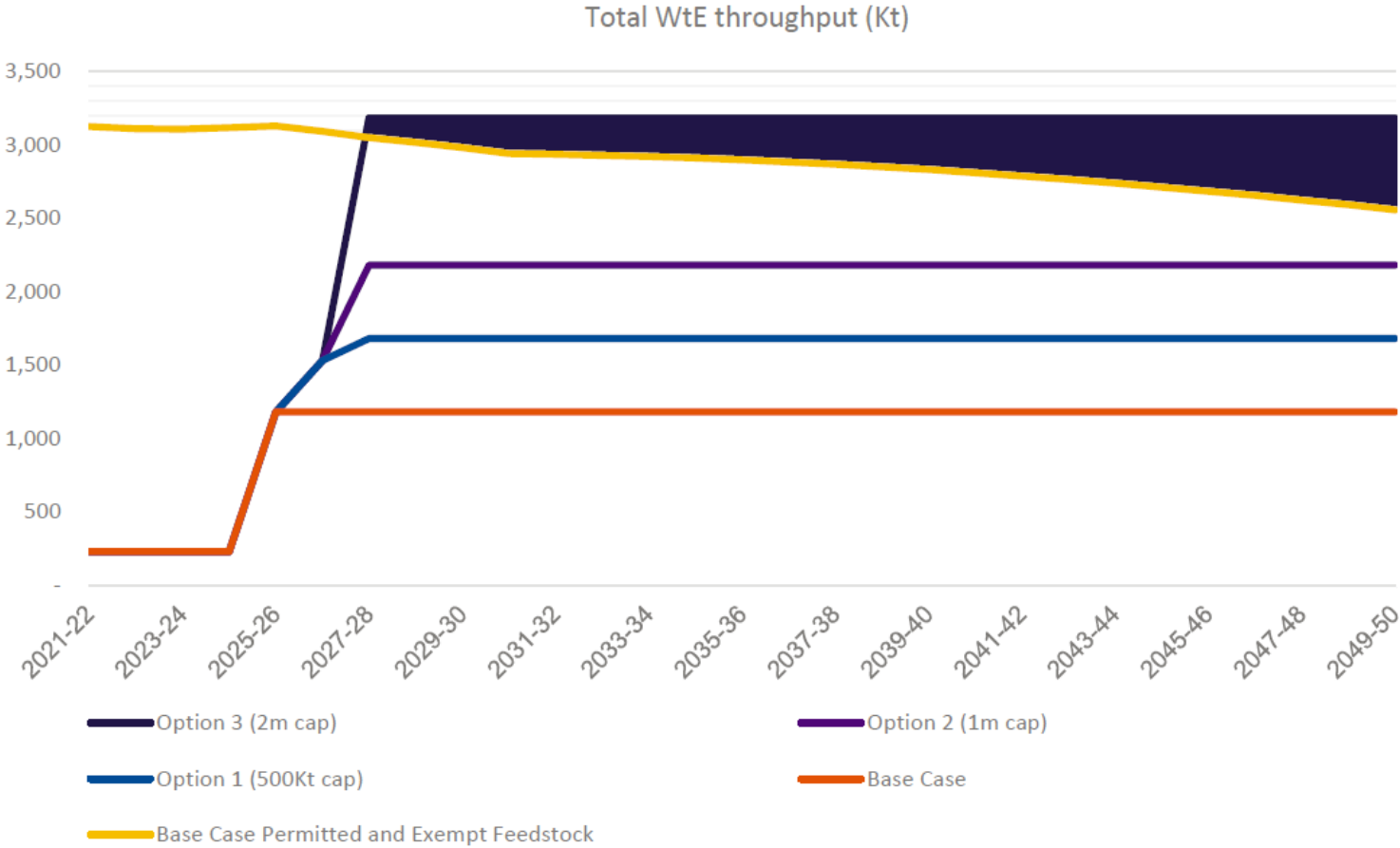
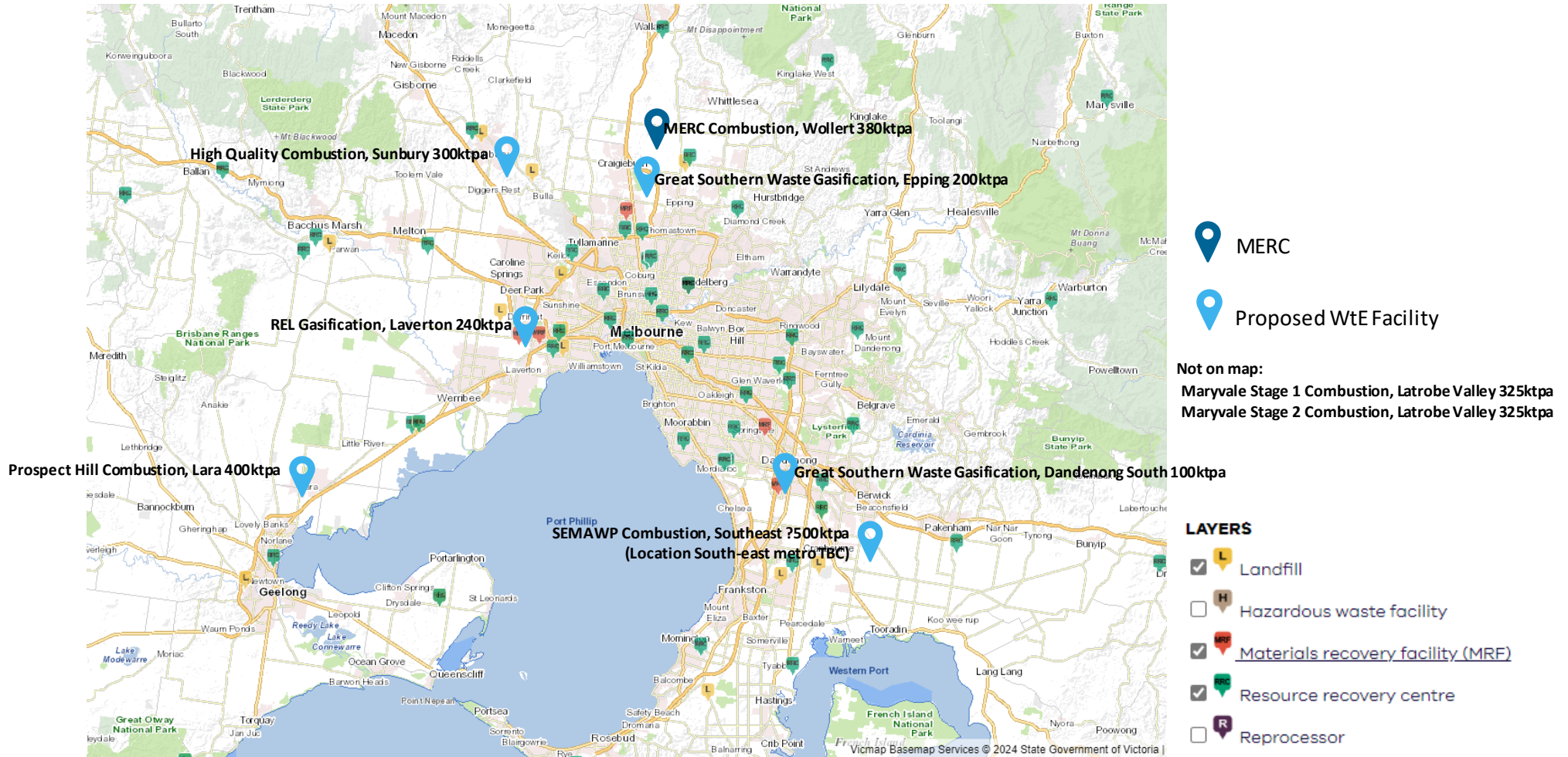


Figure EA: Available, suitable waste feedstocks for thermal WtE facilities compared to total Victorian thermal waste to energy processing capacity under the three cap options until 2050

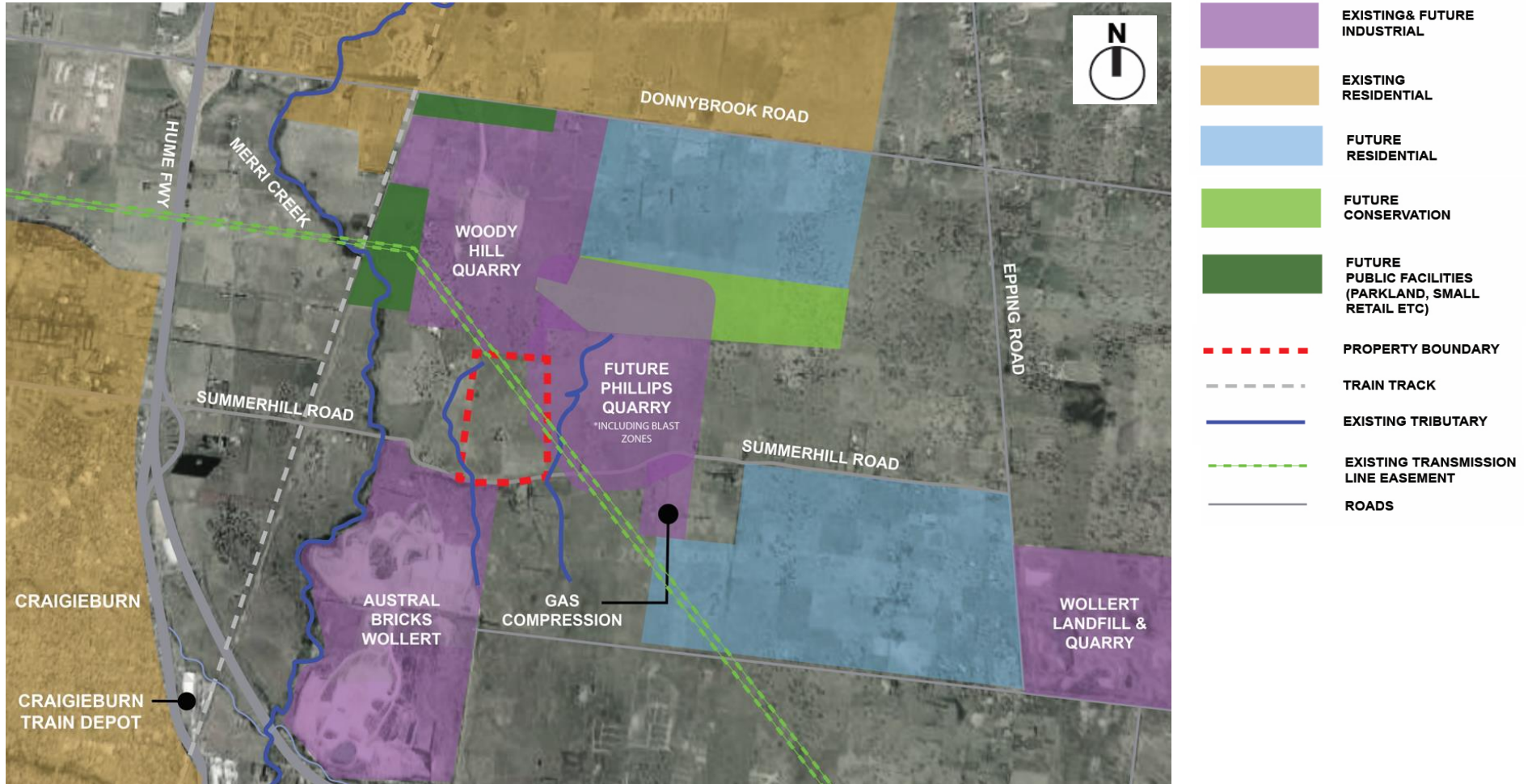
Source: DEECA (2023), Regulatory Impact Statement for Victoria’s waste to energy cap and cap licensing



Existing & Proposed Metropolitan Waste Infrastructure



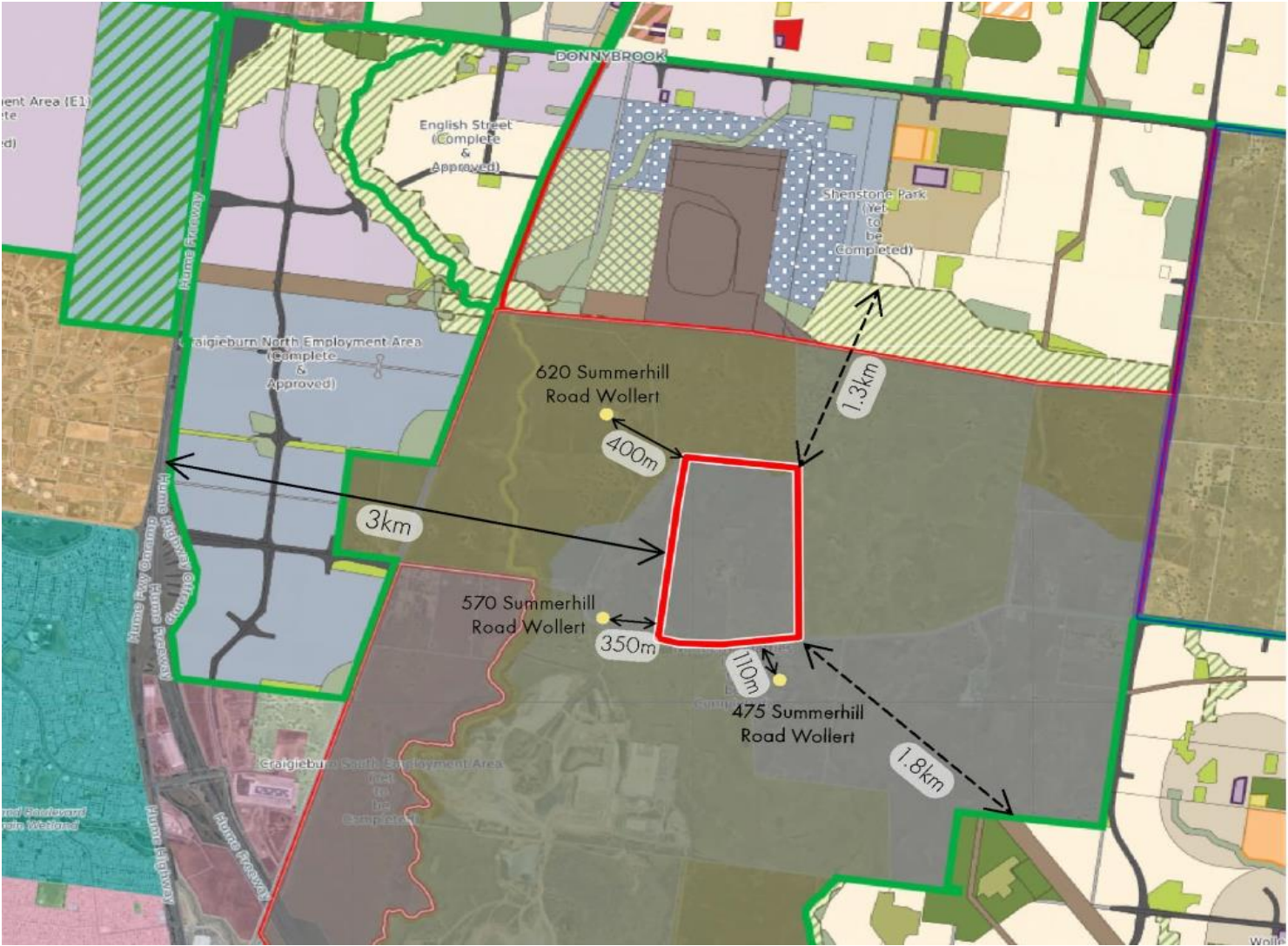
Our site: 510 Summerhill Rd, Wollert



MERC Site Selection Criteria

Key Question	Yes/No
Are the existing site planning controls (i.e. zone and/or overlays) appropriate for Energy from Waste? Is a future rezoning required?	
Is the site greater than 3kms from an airport?	
Does the site have a separation distance of greater than 1km from sensitive receiver locations (e.g. residents, schools etc)?	
Is the site consistent with relevant local planning policies and future strategic planning matters (e.g. Precinct Structure Plans)	
Is the site area greater than 6 hectares?	
Is the shape of the site such that it would preclude a functional facility layout (eg highly linear or irregular)	
Is the site is located within 2km of existing major road network (i.e. freeway and/or arterial road access)?	

Our site: Proximity to sensitive land use



Specialist Consultant Team



Environmental (Lead) & non-process engineering



Town planning & approvals



Cultural heritage



ecSustainable
waste • recycling • sustainability
Waste Auditing

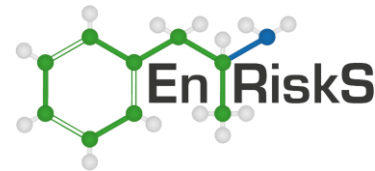


Waste-to-energy technology & engineering



katestone
www.katestone.global

Air quality



Human health



Waste flow



Community engagement



Douglas Partners
Geotechnics | Environment | Groundwater

Land & groundwater



Waste sampling

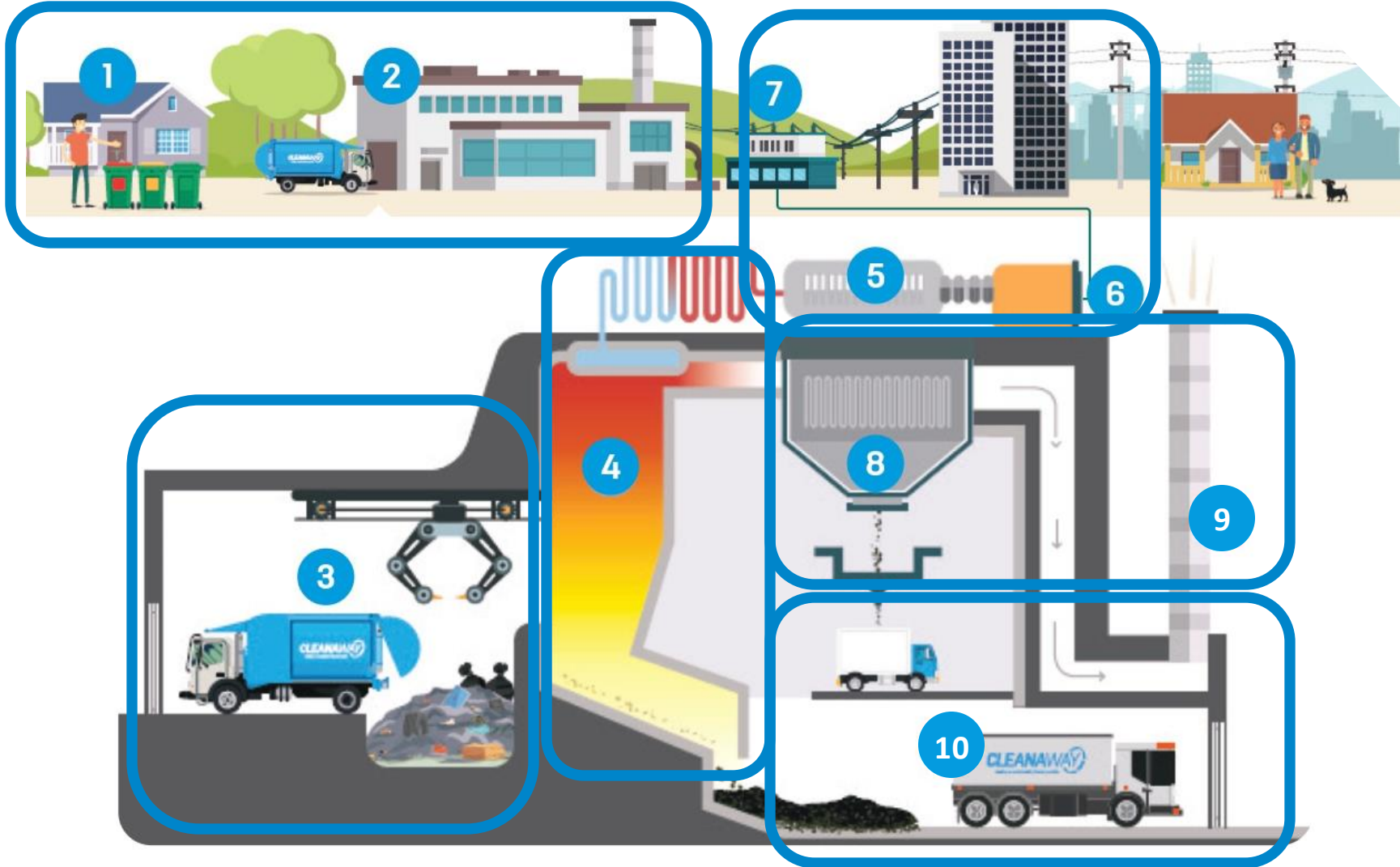


Survey



***Marc Revault –
Technical Advisor -
Ramboll***

How does the MERC process waste?



Key inputs and outputs from the MERC



Are WtE facilities used elsewhere?

- The MERC uses modern technology that is used in hundreds of facilities in Denmark, Germany, UK, USA, Singapore and Japan.
- Facilities in Europe and Japan are often located less than 400m from the local community.



Lakeside Energy from Waste, UK

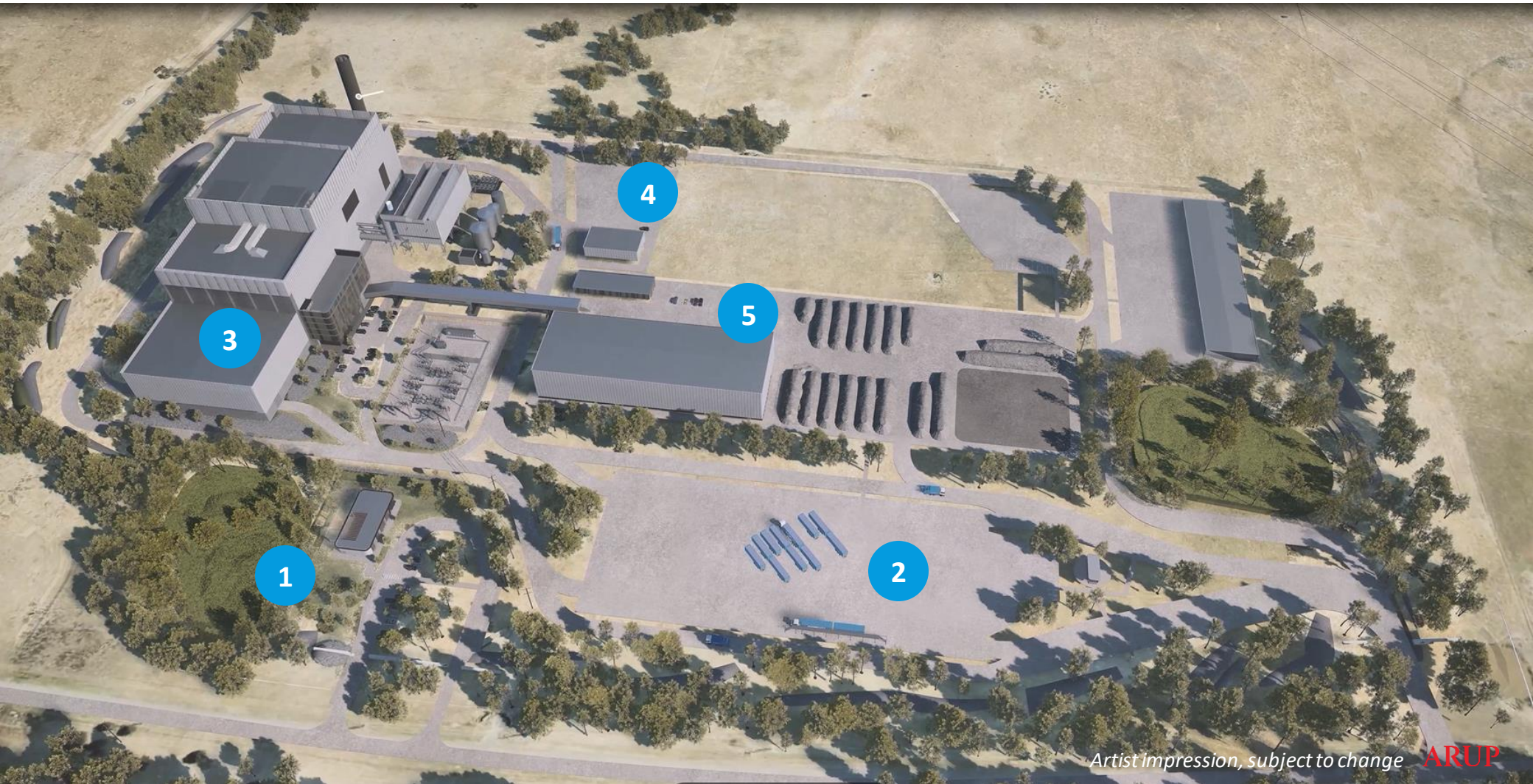


Amager Bakke, Denmark



Kwinana Waste to Energy, Perth (in Commissioning)

MERC views - aerial



Artist impression, subject to change **ARUP**

MERC views – WtE facility



Artist impression, subject to change **ARUP**

MERC views – tipping hall



Artist impression, subject to change **ARUP**



***Brad O'Meara –
Specialist Coordinator –
Arup***

Technical environmental assessments to inform the design

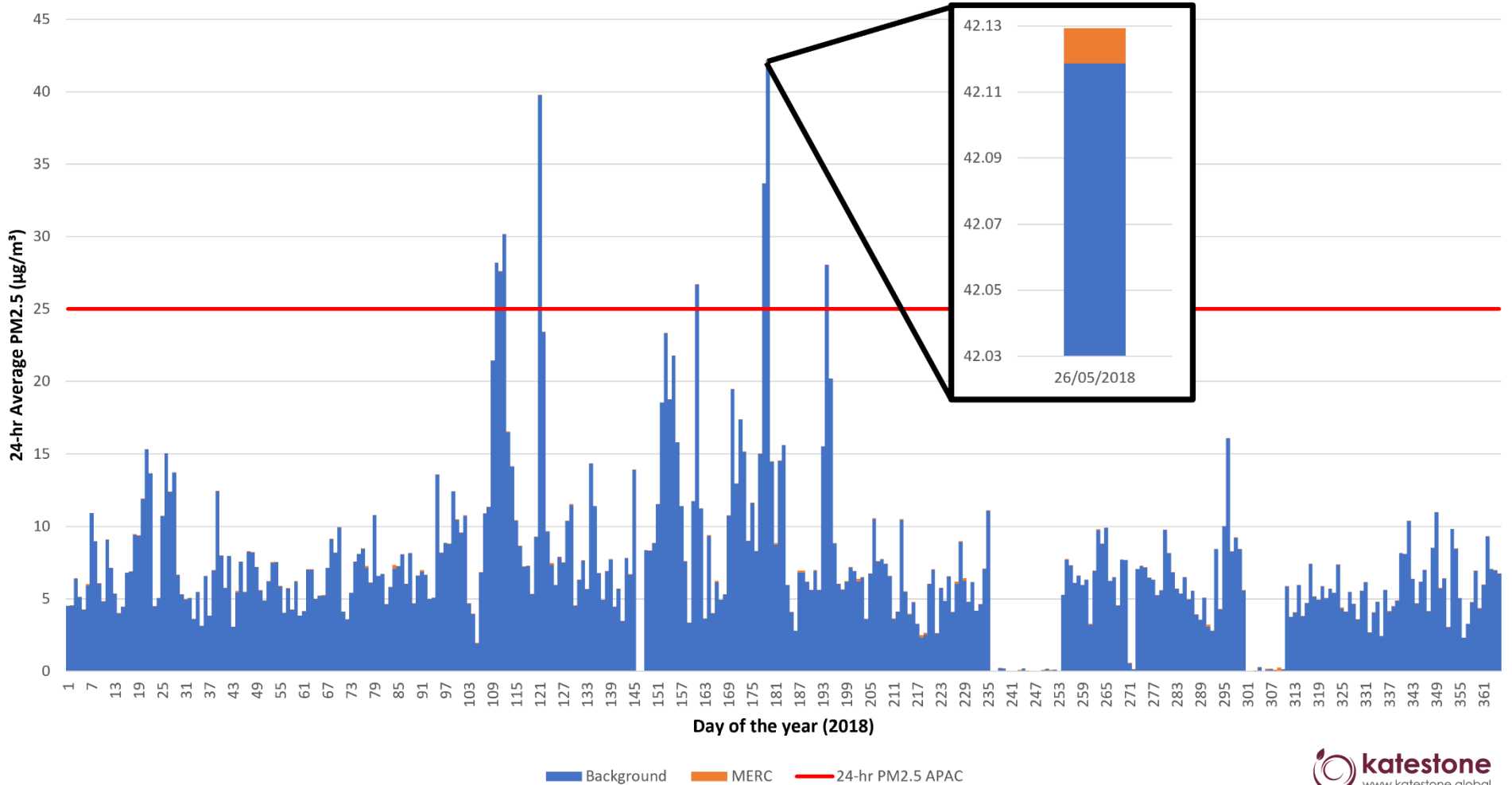
- Air Quality & Odour
- Biodiversity
- Cultural Heritage
- Greenhouse Gas Emissions
- Climate change
- Hazard and Risk
- Human Health
- Hydrology and Flooding
- Land and Groundwater
- Landscape and Visual
- Noise and Vibration
- Socioeconomic
- Town Planning
- Traffic and Transport
- Waste Management
- Waste Flow and Feedstock

Air Quality

- Assessment conducted to satisfy a Level 2 Assessment under EPA Vic Guidelines
- The Proposal is predicted to have an **insignificant** impact on air quality
 - Predicted ground-level concentrations of all air pollutants from the Proposal (in isolation and cumulatively) **comply** with assessment criteria
 - The facility will make an **insignificant** contribution to local air quality
 - Different calorific values of waste do not significantly affect the emissions due to the Proposal
- Risk of adverse odour impacts due to the Proposal is **low**

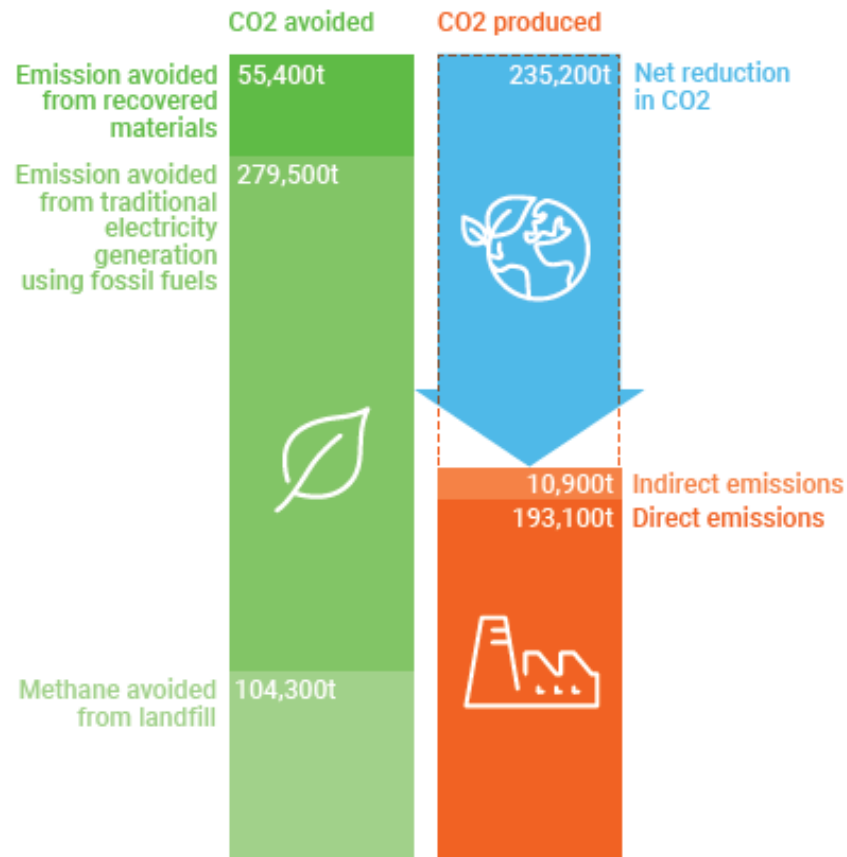
Air Quality

Source contribution at worst-affected residential receptor



Greenhouse Gas Emissions

Annual Net Reduction in CO₂ Emission (tonnes of CO₂ equivalent per year tCO₂-e/y)



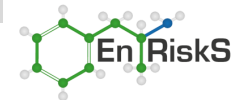
Human Health

- For all pollutants:
 - Cumulative levels (including background) are **below** relevant national guidelines
 - For short-term exposure (via inhalation) ground level concentrations are well **below** public health guidelines
 - For long-term exposure (via inhalation, ingestion or deposition) ground level concentrations are well **below** public health guidelines
- **No unacceptable** risks for rainwater tanks

Human Health

- Contribution of the project compared to the National Environment Protection Measures (NEPM).

SCENARIO	SULFUR DIOXIDE	NITROGEN DIOXIDE	CARBON MONOXIDE	PM _{2.5}	PM ₁₀
NEPM Guideline	52	28	10,000	8	25 [^]
Averaging period	24 hour average	Annual average	8 hour average	Annual average	Annual average
Contribution from project (isolation)	2.7	0.3	13.4	0.01	0.01
% contribution from project (compared to NEPM guideline value)	5.2%	1.1%	0.1%	0.1%	0.04%
Cumulative case	6.5	15.7	388	5.9	20



- Results for the criteria pollutants show **small or negligible** change compared to existing air quality and overall risks within acceptable levels for short- and long-term exposures

Traffic & Transport

- The existing Summerhill Road (west of Merri Creek) and Amaroo Road configurations can accommodate anticipated traffic
- Truck travel route to the site will be via Hume Freeway (Amaroo Road interchange) – Amaroo Road – Summerhill Road
- Delivery hours 6am-6pm, 6 days / week
- 300 vehicle movements: 150 vehicles per day (approx. 100 trucks, 50 cars)

Expected Peak Trucks	Truck movements (arr & dep)
AM Peak (8-9am)	25
PM Peak (5-6pm)	11

- Hume Freeway has 54,000 vehicle movements per day; 7,400 are trucks.

Traffic & Transport

- Existing unsealed section of Summerhill Road (between Merri Creek and eastern site access) is recommended to be upgraded
- Widening required at Amaroo Road and Summerhill Road T-intersection for A-Doubles
- Projected peak hour traffic can be absorbed by existing road network / intersections, subject to upgrade works
- Reduced speed and traffic management required for Merri Creek bridge crossing.

Landscape & Visual

- Physical impact to landscape character during construction would be concentrated to immediate site extents
- Impacts not considered to be incongruous with the surrounding landscape character (existing quarry and industrial land uses)
- Visual impacts during construction expected to be temporary in nature (presence of machinery)
- Operational impacts expected to be consistent with construction
- Vegetation screening will assist in mitigating visual impact
- Choice of colour and materials to mitigate impacts

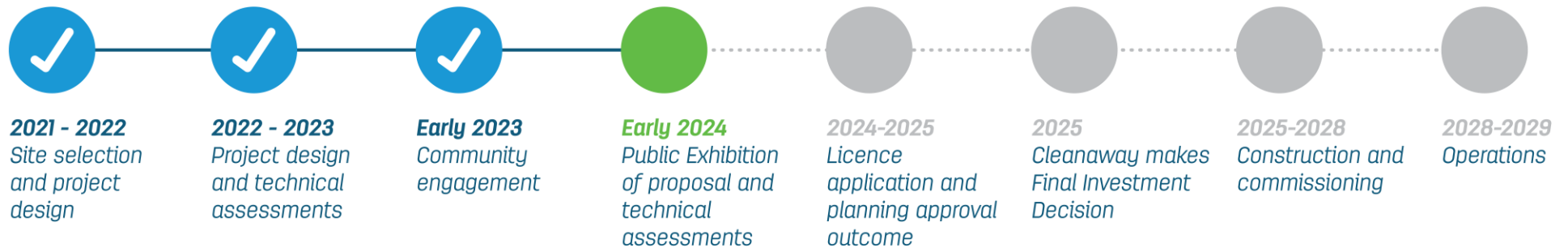
What will the MERC look like from surrounds?

570 Summerhill Road, ~330m away, looking east



ARUP Artist impression, subject to change

Where are we at in the process?



Key Approvals and Assessment pathways:



Department of Transport and Planning

EES Referral (DTP): Minister determines no EES required – October 2023

Planning Permit Application (DTP) – Advertising current



Development License Application (EPA) – Exhibition current



Cap License Application (RV) – RV expect to issue licenses 2025

Cultural Heritage Management Plan (CHMP) – approved by Wurundjeri

Indicative dates, subject to change

Cultural Heritage – Complex Assessment

- 75 test pits completed by Traditional Owner representatives



Wurundjeri
Woi-wurrung
Cultural Heritage
Aboriginal Corporation


ecology & heritage
partners

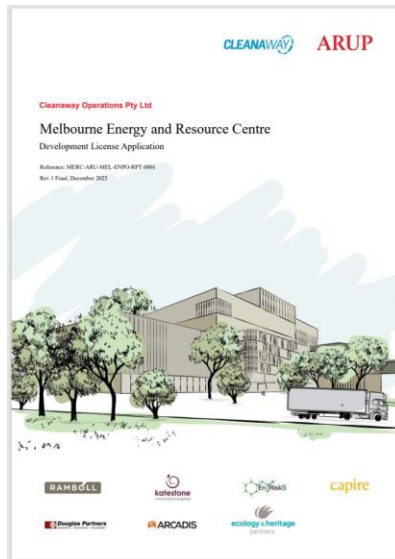


Q&A

To make a submission to EPA or
DTP (by 14th April 2024):
engage.vic.gov.au

Applications

- Development License Application (EPA)



- Planning Permit Application (DTP)



- EPA and DTP will make applications accessible from 20th February to 14th April 2024 at engage.vic.gov.au
- Make a submission to EPA or DTP to help their review of the applications.

Need more information?

- View the Applications (from 20th February) engage.vic.gov.au
- Visit our project website:

<https://www.cleanaway.com.au/location/melbourne-energy-and-resource-centre/>

- Flythrough the virtual tour of the facility
- Interact with MERC virtual room





Thank you

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DTP (by 14th April 2024):
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CLEANAWAY 