MERC Webinar 18 September 2025: Questions and Answers

Technical question, what are all the products of the recovery process, and where can I learn about how they work, and how we can use it?

The products of the recovery process are:

- Metals - The Melbourne Energy & Resource Centre (MERC) facility will recover ferrous and non-ferrous metals from Incinerator Bottom Ash (IBA) for recycling.
- IBAA - The remaining IBA will be processed to produce Incinerator Bottom Ash Aggregate (IBAA), which can be reused in construction applications, subject to regulatory approvals.
- Electricity - The facility will also generate electricity, with an estimated output sufficient to power approximately 120,000 homes and businesses.

Additional information on how these recovery processes work and their applications can be found at:

- https://www.cleanaway.com.au/location/melbourne-energy-and-resource-centre/
- https://www.bluephoenix-group.com/aggregates/
- https://www.wasteauthority.wa.gov.au/publications/view/miscellaneous/waste-to-energy

Will the general public be able to purchase materials produced by the plant?
Generally, no — not directly. Incinerator Bottom Ash Aggregate (IBAA) is typically not sold directly to the general public, but it is used commercially in the construction and civil engineering industries.

Where will the ash be sent to?
Incinerator Bottom Ash (IBA) (approximately 20 % of what is processed): It is intended that IBA will be processed on-site to recover metals for recycling. The remaining ash will be treated to produce Incinerator Bottom Ash Aggregate (IBAA), for reuse in construction applications, subject to regulatory approvals.

Who would want to purchase toxic ash???
Incinerator Bottom Ash (IBA) and Air Pollution Control Residue (APCr) are different streams.

For MERC it is proposed that:

- IBA will be processed on-site to recover metals for recycling. The remaining ash will be treated to produce Incinerator Bottom Ash Aggregate (IBAA) for reuse in construction applications, subject to regulatory approvals.

- APCr will be landfilled after stabilisation on site. In the UK, APCr is already being processed for reuse as light weight aggregate, to create blocks for use in construction applications.

Research and Development is underway in other countries and universities (including local universities in Australia) to explore reuse opportunities including its use in secondary aggregates, cementitious materials and metal / salt recovery.

How will you manage the Brominate Dioxins in the bottom ash? What standards will Cleanaway be required to apply to these persistent organic pollutants?
The boiler will be designed with high temperatures and residence times after the last injection of combustion air to destroy residual dioxins. Fast cooling in the boiler economiser reduces the chance of dioxins and furans reforming through chemical reactions.

Boiler ash from the convective section of the boiler may be considered hazardous. To be conservative and align with precedents set for other Waste-to-Energy (WtE) facilities currently at the development phase in Australia, this boiler ash will be mixed with Air Pollution Control Residue (APCr).

APCr will be immobilised to avoid the leaching of heavy metals and other hazardous compounds into the environment. This will be achieved through blending with cement and water, which cures to form a solid concrete, immobilising the hazardous elements. Once fully cured, APCr will be transported to and disposed of in an appropriately classed landfill.

There is no safe level of exposure to Dioxin. This pollutant is the subject of the UN Stockholm Convention…Australia is a signatory to this convention….will the Vic government abide by Australia's obligations under this convention?
The World Health Organisation provides a range of guidance about the group of chemicals known as dioxins and it is this guidance that will be followed in assessing risks for this project. These chemicals are formed naturally every time any materials are burnt – i.e. cooking with gas, vehicle emissions, cigarettes, open fires, fire pits, slow combustion heaters as well as large industrial facilities like coal fired power stations. These chemicals are always in our environment. The WHO indicates that there is a threshold dose for this group of chemicals. Below this dose, not enough of the molecules get inside a person to cause damage. The existence of this threshold makes sense given we are always exposed to low levels of this group of chemicals.

The Stockholm Convention does require that this group of chemicals should be well controlled. However, because these chemicals are naturally produced, they are listed on Annex C of the Convention – the annex related to minimising unintentional production. This means these chemicals can't be completely avoided, but the Convention requires that efforts

be made to reduce their production as much as possible wherever human activities might create them.

It is this goal that drives the engineering of the pollution control technologies used in plants like this. It is noted that emissions of this group of chemicals from Waste-to-Energy (WtE) facilities have been reduced by more than 95% since the early 1990s.

Dioxins accumulate in the environment and poison the food chain. Will the Vic EPA undertake baseline monitoring prior to operations and followed by biomonitoring of the environment should the project be approved?
The assessment of risks for this facility will include consideration of the potential for dioxin-like chemicals to be attached to particles being emitted from the facility. The calculations will assume that these particles could be deposited on soil in the area surrounding this proposed facility for 70 years (i.e. longer than the life of the plant). Once the modelled concentrations in soil after 70 years of operation have been determined, uptake into fruit, vegetables, eggs, meat or milk will be assessed.

For previous assessments of similar facilities such calculations show that the potential for home grown produce to be impacted by this group of chemicals is very small. The risks from eating such produce grown in the vicinity of a facility like this one are so small as to be indistinguishable from the current situation. Due to the small/negligible change that could occur due to operation of this facility, it would not be possible to see a change after the plant is constructed.

If the plant fails to meet environmental or emission standards, will operations be suspended immediately, and who has the authority to enforce this?
The facility must comply with strict conditions set by the Victorian Environmental Protection Authority (EPA). The EPA regulates air quality and emissions and has enforcement powers to ensure compliance.

Each grate line will be equipped with a Continuous Emissions Monitoring System (CEMS) upon commissioning and, thereafter, in operation to allow for continuous monitoring of the flue gas to ensure the facility is compliant with future operating licence limits. This also assists in providing real time feedback to the control systems to make automatic adjustments to the injection rates for the flue gas cleaning system process.

If emissions remain elevated and approach licence limits for more than a 30-minute average period, response protocols will be instigated to address the specific issue. This may include shutdown procedures if necessary.

Will the capacity of the incinerator be in excess of anticipated waste production? Will we be able to dig up and recover materials from our landfills?

MERC is licensed to process up to 760,000 tons of residual waste per year, representing about 13% of Victoria's waste. Feedstock modelling shows that there is sufficient eligible residual waste available to support the facility's operation, even with expected improvements in recycling and source separation.

MERC is designed specifically to process non-recyclable waste before it reaches landfill. It is not designed for landfill mining or recovering materials from existing landfills.

How can you keep feeding the incinerator profitably for your shareholders while also ensuring Victorians reduce their waste production?

MERC is licensed to only process residual waste that cannot be recycled, consistent with Victoria's Recycling Victoria policy. Recycling and waste reduction remain the priority, with the Waste-to-Energy (WtE) facility designed to complement, not replace, those efforts. Importantly, the Waste-to-Energy Cap, the upper limit of Waste-to-Energy capacity that will be established in Victoria, is for 2.5 million tons. By the 2050s, it is estimated that Victorians will send 8.9 million tons of waste to landfill. This means it is incumbent on all Victorians to avoid, reuse and recycle as much waste as possible.

We need to address how much waste people are consuming, how much we are throwing out as a society. Addressing this issue at the source. Not finding ways to burn rubbish will impact people's health?

Cleanaway agrees that the most effective way to reduce landfill is to avoid and reduce waste at its source. However, despite improvements in recycling, total waste generation continues to grow due to population increases. Landfill alone is not a sustainable solution. Victoria has introduced a Waste-to-Energy (WtE) Cap of 2.5 million tonnes, but by the 2050s, Victorians are projected to send 8.9 million tonnes to landfill each year. This gap highlights the continued need for all Victorians to reduce, reuse, and recycle, while responsibly managing the unavoidable residual waste through alternatives like WtE.

Does Cleanaway have an existing waste to energy incinerator currently operating and can you prove compliance with any regulatory standards?

No. However, Cleanaway has deep expertise in the operation of similar complex infrastructure such as Medical Waste Incineration Facilities, Treatment Facilities for Hazardous Waste and Advanced Material Recycling Facilities across Australia. Cleanaway's Waste-to-Energy (WtE) operations will be supported by experienced partners with deep expertise in operating and maintaining WtE plants in UK and Europe.

Why is the Victorian government even considering allowing a waste incinerator when they are being phased out in Europe?

There are over 500 Waste-to-Energy (WtE) facilities operating in Europe. While old incinerators are closing, they are being replaced by larger, more advanced versions of waste-to-energy that comply with the latest EU standards.

Tolvik Consulting's eleventh annual report on the United Kingdom's Energy from Waste sector *UK Energy from Waste Statistics - 2024*[1] provided the following information, as of 2024:

- 63 **fully operational** WtE facilities (page 1 and 2)
- 13 WtE facilities **under construction** at the end of 2024 (page 2)
- 4 **decommissioned** WtE facilities and thus "excluded from future analysis) (page 2)

Are incinerators being phased out in Europe? if so, why?

No. While some European countries are reassessing their reliance on Waste-to-Energy (WtE) incineration in light of evolving climate and circular economy policies, WtE remains a key part of integrated waste management systems in many regions. Refer above for information on development across Europe.

How much will Cleanaway charge per tonne for waste to be incinerated?

Cleanaway has not yet finalised the gate fee per tonne for MERC. However, by scaling the facility to 760,000 tonnes per year, we can achieve greater efficiency and lower per-tonne processing costs. This ensures the facility remains economically competitive with landfill.

Cleanaway is being sneaky by leaving open their licence application - so they can DOUBLE the capacity of the incinerator. What is the Victorian government doing to invest more in recycling (i.e. so that Cleanaway doesn't have to apply for double the capacity, let alone build an incinerator at all)!

Cleanaway has withdrawn the Development License application from the EPA and will seek the necessary approvals for the revised design of the facility afresh.

Recycling Victoria granted Cleanaway a cap licence of up to 760,000 tonnes per year. This is to ensure that recycling and waste reduction remain priorities, and that Waste-to-Energy (WtE) facilities only process residual waste. The Victorian Government's priorities to support investment in recycling are detailed in the *Victorian Recycling Infrastructure Plan* which was released in 2024.

Filters that capture 100% of pollutants does not yet exist. Your BAT technologies do not capture 100%. At 1% of pollutants that WILL escape these filters, that still equates to 1000s of tonnes per year. How will you protect people from these pollutants?

[1] https://www.tolvik.com/published-reports/view/uk-energy-from-waste-statistics-2024/, Tolvik Consulting, 2024

The facility will use advanced air pollution control systems including filters and scrubbers to meet strict EPA Victoria standards. Continuous emissions monitoring will be in place, and data will be made publicly available.

Independent air quality and health risk assessments for MERC are being undertaken to ensure that risks to human health and the environment are appropriately managed and are considered acceptable. These assessments will be provided to the EPA and made publicly available as part of the Development License application process.

Kwinana is not yet operational...it is still in its commissioning phase....the fly ash is being trucked 630 km to Kalgoorlie, WA's only hazardous waste facility. Why is Cleanaway being allowed to mislead the public here? Bottom ash is full of Brominate Dioxins...completely unsuitable for road base or any reuse.
Blue Phoenix operates Australia's first incinerator bottom ash (IBA) processing facility in Hope Valley, Kwinana, Western Australia. The plant processes approximately 80,000 tonnes of IBA annually, recovering metals and producing Incinerator Bottom Ash Aggregate (IBAA) for use in civil construction applications

The Western Australian Department of Water and Environmental Regulation (DWER) issued Works Approval W6510/2021/1 to Blue Phoenix for the Hope Valley facility. This approval allows the facility to receive and process IBA from the Kwinana Waste-to-Energy plant, transforming it into IBAA and recovering recyclable metals.

Specifically, what are the technological differences between the 80s and your one. MERC will use modern European-standard waste-to-energy technology with advanced air pollution controls, real-time emissions monitoring, and strict EPA compliance requirements. Are you open to have community appointed inspectors to monitor your sensor data, Looking at VW diesel gate scandal, whats checks and balances you have in place from fooling the sensor as it is quite simple to fool the sensor with another chip.
Waste-to-Energy (WtE) facilities in the 1980s primarily used basic mass-burn incineration with limited emissions controls and low energy efficiency. Modern WtE plants use advanced technologies like moving grate, with high-efficiency energy recovery and sophisticated emissions treatment (e.g. SCR, activated carbon and emissions monitoring).

Pollutants that can be monitored continuously in real-time to enable both process control and compliance reporting, in accordance with the future Operating Licence conditions for the MERC. Pollutants that cannot be monitored continuously will be monitored periodically by independent specialist stack testing contractors, in accordance with EU best practice monitoring requirements (i.e. Guidelines on the best techniques for waste incineration to reduce environmental impact (BREF-WI 2019)).

Emission and Facility performance data will be made available via the Facility website and via regular reporting to the EPA.

Continuous emissions monitoring systems (CEMS) that are professionally calibrated, independently verified, and rigorously tested prior to commissioning to ensure accurate, real-time data. On-going automated daily and independent periodic calibration checks are used to verify the integrity of the measurement results against calibration gases or stack testing to approved standards.

It is proposed that the MERC Stakeholder Reference Group will continue into the operational phase of the facility, providing a forum for community representatives to engage with Cleanaway staff and discuss performance data and other relevant issues.

Are you open to go back to the planning minister and ask their department that due to the community outrage you would like an independent government appointed Environmental Impact Study.
Cleanaway will refer the project to DTP Impact Assessment Unit to assess if an Environmental Effects Statement (EES) is required to be undertaken for the Project. The Minister will then determine whether an EES is required and if there is the need for an inquiry and/or an advisory committee or panel.

All your sites are located near freeways and in low socio economic areas.
Cleanaway selects facility locations based on a wide range of environmental, planning and logistical considerations. The proposed site in Wollert, was chosen because:

- The use is permissible in the zone.
- It is unencumbered by planning overlays that pose constraints.
- It is sufficiently sized to accommodate the facility.
- It is further than 1 km from most residences and planned residential areas.
- It has excellent access to the Hume Freeway and can access the major road network without using residential roads.
- It is located close to Melbourne's waste sources, reducing transport impacts.
- It is within a precinct that has been identified for future employment and industrial purposes since 2012.
- There is potential for by-products from the facility to directly support adjoining industries within the adjoining industrial precinct.

Over 6000 people have signed the petition against MERC. I urge cleanaway to listen to residents who refuse to have a dirty polluting chimney for a neighbour. What is your comment to this statement?

We respect the views expressed in the petition and acknowledge that projects of this scale can generate strong feelings in the community. That is why, since 2021, Cleanaway has been actively consulting with residents, receiving over 760 submissions, and continuing to provide transparent information.

We encourage the community to remain engaged with an open mind as the proposal progresses through rigorous independent assessment by EPA Victoria and the Department of Transport and Planning. We see MERC not simply as a facility, but as an opportunity to set a new benchmark for circular precincts in Australia – where waste is transformed into energy and resources, and local communities benefit from cleaner, more sustainable infrastructure for the long term.

Will there be collaboration with PT/council/roads to ensure there are transport options for workers and visitors?

We are actively working with key transport stakeholders including the Department of Transport and Planning (DTP), VicRoads, and the local Council to ensure the site is accessible for both workers and visitors. This includes exploring enhancements to public transport services, road infrastructure, and active transport links such as walking and cycling paths.

Our goal is to support safe, efficient, and sustainable travel options that align with broader regional planning and community needs. We're also considering future growth and how transport connectivity can evolve with the project over time.

How many trucks per day are expected, and what impact will this have on already congested roads in Craigieburn and Wollert?

The Project has not yet completed the traffic assessment for the updated waste processing capacity; however, there will likely be around 200 truck arrivals and departures per day from MERC. We estimate that around 20% of these will be smaller compactor-type vehicles. A Traffic Impact Assessment will be undertaken to understand impact and inform mitigation measures.

I'm unfamiliar with the air pollution scrubbing, but if I'm on the right page, is the leechate from disposed air pollutants safer than that which would have been produced by the landfill that has been processed?

While air pollution control residues (APCR) facilities can be hazardous, they are typically smaller in volume, more predictable in composition, and managed within controlled environments.

In contrast, landfill leachate is generated over decades, varies widely in composition, and poses a greater long-term risk to soil and groundwater due to its potential for leakage.

Asia can't build them quick enough? Everyone knows that Asia is the least likely to care about air pollution. China is a very potent example (hardly a good comparison)!
Many Asian countries are rapidly expanding their waste-to-energy infrastructure to manage increasing urban waste challenges. These new facilities are being built to high international standards, emphasising emissions reduction, energy efficiency, and resource recovery.

Is there an acknowledgement here that these presentations are from the very industry who has a direct interest in the project...and not independent public interest advice? Industry PR is no substitute for critical public interest information about a highly controversial industry that currently have no social license to operate in Vic? The amount of greenwashing being allowed here is deeply concerning and frankly outrageous!!! No air quality impacts? ...you can't be serious! How on earth can the Vic EPA/gov allow this?
Independent health and air quality risk assessments have been completed for the original MERC proposal and found the risk to human health to be low to negligible if the facility operates within future Operating Licence conditions. The EPA regulates air quality and emissions and has enforcement powers. The original air quality assessment was conducted in accordance with the assessment guidelines required by the EPA. The health risk assessment is conducted based on Environmental Health Risk Assessment guidelines published by enhealth standing committee.

Independent air quality and health risk assessments for MERC are currently in progress for the 760,000 tonnes per year MERC proposal, to ensure that risks to human health and the environment are appropriately managed and are considered acceptable. These assessments will be provided to the EPA and made publicly available as part of the Development License application process.

Cleanaway is supportive of the Victorian Government's policy to reduce reliance on landfill and achieve 80% diversion from landfill by 2030. MERC has been designed to contribute to that outcome, helping create a more sustainable and resilient circular economy for the state.

Will there be 24/7 live monitoring from the flue on site, that the public has access to by an independent body? And what continuous checks will there be to ensure that this live monitoring is not malfunctioning?
Pollutants that can be monitored continuously in real-time will be monitored continuously to enable both process control and compliance reporting, in accordance with the future Operating Licence conditions for the MERC. Emission and Facility performance data will be made available via the Facility website and via regular reporting to the EPA.

Continuous emissions monitoring systems (CEMS) are routinely calibrated and independently verified by independent and accredited stack testing specialists, and accredited test laboratories, to ensure accuracy.

Sample reporting and assurance regime:

Calibration & Quality Assurance:

- **Initial calibration** required at commissioning against reference methods by independent and accredited stack testing specialists and National Association of Testing Authorities (NATA) accredited labs.
- **Annual independent checks** (performance audit, calibration verification) by independent and accredited stack testing specialists and NATA-accredited labs.
- **Routine operator checks** (zero/span drift, functionality) **daily/weekly** depending on the parameter.

Reporting:

- Continuous data logging for reporting to EPA Victoria.
- Exceedances trigger **mandatory incident notification**.

The Croydon incinerator in London is only six years old, but they had over 900 pollution breaches in two years. It's not just the old incinerators that are problematic?
The Croydon Waste-to-Energy (WtE) facility in London reported over 900 pollution breaches in a two-year period. These breaches were largely attributed to incorrectly calibrated monitoring systems. It is also worth noting that there are 63 WtE plants operating in UK alone with a totalled installed capacity of approximately 19,313 Kilotonnes Per Annum (KtPA). The Croydon plant represents 2% of the totalled installed capacity in UK.

Cleanaway's MERC will have all emissions monitoring systems professionally calibrated in accordance with applicable Australian and internationally recognised standards, independently verified, and rigorously tested before commissioning.

Ongoing maintenance and validation protocols and procedures will be developed in accordance with internationally recognised standards to ensure continuous and accurate monitoring of compliance throughout the facility's operation.

What concrete emergency response plans, safety protocols, and safeguards will be in place to immediately protect residents from injury, toxic exposure or fatalities in the event of a fire explosion or any other critical event?
The facility will be designed with safety systems, including fire detection and suppression, emergency response plans, and will operate under EPA Victoria and WorkSafe Victoria requirements.

The facility will be designed with a comprehensive suite of safety systems and emergency protocols, including:

- Advanced fire detection and suppression systems throughout all operational zones, including waste storage, processing, and energy recovery areas.
- A fully developed Emergency Response Plan (ERP) aligned with EPA Victoria and WorkSafe Victoria requirements, covering scenarios such as fire, explosion, chemical release, and natural disasters with individual UEPs (unit emergency procedures) to manage a range of scenarios.
- Automated shutdown and isolation systems to prevent escalation in the event of a critical failure.
- Regular emergency drills and training for all staff, including coordination with local emergency services.
- Continuous monitoring and control systems with real-time alerts and remote access capabilities to ensure rapid response to abnormal conditions.
- Site design features such as containment zones, fire-rated construction, and dedicated emergency access routes to support safe evacuation and emergency service access.

Are you going to inform residents immediately after an accident or excess pollution emitted?

Emissions data will be publicly available. EPA Victoria also requires incident notification and community communication in the event of significant issues.

Who is going to pay for the road upgrade?

Amaroo Rd. is currently a mess due to Amazon building in the area. Summerhill Rd is little more than a narrow bitumen strip. It does not connect directly to the Hume Highway. How is this going to be linked to the Hume Highway in such a way that the current 'bumper to bumper' traffic every single morning and afternoon, on the Hume is not made worse?

As part of the MERC, Cleanaway will explore ways we can fund upgrades to Summerhill Road to support safe and efficient truck access to the Hume Freeway. Importantly, planned truck routes will avoid current and future residential areas, minimising community impact.

What is your comment about Incinerators in California, which have all shut down because of environmental and health concerns? Why are you so confident that MERC will be any different?

Modern energy-from-waste facilities such as the proposed MERC project are designed with state-of-the-art emissions control systems, continuous monitoring, and compliance with some of the strictest environmental standards in the world, including those set by EPA Victoria.

The project will only proceed if it is assessed and approved by independent regulators, including EPA Victoria and the Department of Transport and Planning, who will ensure that community health and environmental protection remain the priority.

Cleanaway is confident in MERC's design because it is based on proven international technology currently operating safely across Europe, Japan and parts of North America, where facilities coexist with communities, schools and businesses while contributing to landfill diversion and energy recovery.

We remain committed to working transparently with the community to explain these differences and to listen to ongoing feedback.

Cleanaway has a poor record internationally with health and safety. What compensation was provided to the family of the UK worker who was killed due to Cleanaway's negligence? Feeling that a better name would be DirtyUnsafeWay (nothing clean about incinerating waste)?

We acknowledge there has been confusion with a company once operating in the UK under the Cleanaway name. Cleanaway Waste Management Limited is an Australian company with no connection to that former UK entity. Cleanaway UK was originally part of Brambles Industries (an Australian-listed company). In 2006, Brambles sold its European waste management operations (trading as Cleanaway in the UK and continental Europe) to Veolia Environnement. That transaction meant the "Cleanaway" brand in the UK/Europe passed into Veolia's hands. Eventually, the Cleanaway name disappeared from the UK market entirely as Veolia rebranded the assets.

Meanwhile, Cleanaway Waste Management Limited in Australia (formerly Transpacific Industries Group, rebranded as Cleanaway in 2016) is a separate, ASX-listed company, with no corporate link to the former UK business.

We recognise that safety is not something that can be assumed, it must be continuously earned through our actions. Cleanaway has made significant investments in improving health and safety systems across all our operations across Australia, and we remain committed to continuous improvement.

For the proposed MERC facility, safety will be built into the design and operations from the outset and will be subject to strict regulatory oversight by EPA Victoria and WorkSafe Victoria. This includes:

- Implementation of ISO 45001 certified safety management systems.
- Real-time monitoring and automated controls to prevent incidents.
- Comprehensive emergency response plans developed with regulators and local agencies.

- Independent audits and transparent reporting to ensure accountability.

Our goal is to set a new benchmark for safety, environmental performance, and community trust in Australia's waste-to-energy sector.

Who is legally and financially responsible for injuries, illnesses or fatalities resulting from proven long-term exposure to pollutants?
EPA Victoria regulates environmental compliance, and Cleanaway is legally responsible for ensuring MERC meets licence requirements, including ensuring the facility does not adversely impact environmental quality and human health in the area.

What happens when something goes wrong? What backup mechanisms are there to prevent environmental and air pollution if something breaks down?
The facility will be equipped with backup systems and safety mechanisms to shut down if pollution control equipment fails, ensuring emissions remain compliant.

The South London waste incinerator in Croydon recently paid 1Million pounds in compensation to residents for breaching pollution limits, but required people to sign non-disclosure agreements before being paid. Will Cleanaway require NDAs for people to receive compensation for damage done by the Wollert incinerator?
Cleanaway cannot comment on the compensation arrangements related to the South London facility.

A nice distribution of facilities close to urban centres?

Does the Vic planning department acknowledge the persistent organic pollutants and associated contamination that Best Practice EU incinerators are causing in the EU? Why would the Vic Planning Dep consider this appropriate or acceptable...or a "nice distribution of facilities"? These are hazardous waste-generating industries that emit a range of deadly pollution.

How can hazardous waste industries be considered acceptable in greenfields?

The distribution of waste management facilities (including waste-to-energy facilities) across metropolitan areas and close to waste sources is important because it will reduce the impacts of truck travel, including vehicle emissions. This is an important consideration given that the facility is expected to operate for approximately 30 years.

Independent air quality and health risk assessments for MERC are being undertaken to ensure that risks to human health and the environment are appropriately managed and are considered acceptable. These assessments will be provided to the EPA and made publicly available as part of the Development Licence application process.

The state government is responsible for the planning of 'greenfield' areas. Some of these areas are designated for future residential use, some are identified for employment / industrial uses, and others are planned to comprise a mix of both. The site is within a 'greenfield' area that has been earmarked for future industrial and employment development.

How much diesel will be used to keep the rubbish burning? Is MERC designed to run on residual waste as fuel?
Auxiliary fuels, such as diesel, are only required during plant startup and shutdown. Once the plant is operating on waste, the burners will not be in service, and no diesel will be used.

Will you be accepting waste from New South Wales or country Victoria?
The facility is intended to process residual waste from Victoria, particularly metropolitan Melbourne.

What about all the damage you are doing regarding people's property values, after working hard to purchase homes in these areas? Will you be providing compensation for this?
The site and its immediate precinct are not suitable for ongoing productive agricultural purposes. It has been identified as a precinct that will transition to an urban industrial/ employment purpose over time.

This will be supported by necessary infrastructure through the Precinct Structure Planning process to ensure the precinct is well connected to services, access, customers and suppliers. This will ensure that the precinct flourishes as a desirable location for businesses to establish and grow. As this transition occurs, the MERC will be one of many commercial and industrial buildings in a location that is appropriately connected to residential areas.

Delivering an employment precinct in this location will ensure that the new communities being established in Melbourne's north have convenient access to jobs. This, in turn, may ultimately positively impact the value of residential land located outside the Northern Quarries PSP area.

Why has Wollert been chosen when this is such a new and untested project for Victoria? Why not start with a pilot in a heavy industrial zone, away from growing communities?
The site in Wollert will transition to an industrial / employment precinct. It was selected because it satisfies several strategic requirements, including:

- The use is permissible in the zone.
- It is unencumbered by planning overlays that pose constraints.
- It is sufficiently sized to accommodate the facility.
- It is further than 1 km from most residences and planned residential areas.
- It has excellent access to the Hume Freeway and can access the major road network without using residential roads.

- It is located close to Melbourne's waste sources, reducing transport impacts.
- It is within a precinct that has been identified for future employment and industrial purposes since 2012.
- There is potential for byproducts from the facility to directly support adjoining industries within the adjoining industrial precinct.

It is important to consider that the facility will serve the community for decades. If it were located in an area remote from urban development, this would result in extended truck journeys for every vehicle delivering waste to the facility, creating increased truck emissions and ultimately adding to the cost of responsible waste management.

Are you going to inform the people of Donnybrook of your proposal? As they are downwind and will be most affected.
Cleanaway has undertaken community consultation since 2021, including opportunities for feedback from residents in surrounding areas such as Wollert and Donnybrook.

Firstly, Victoria has a legislated goal to achieve net zero greenhouse gas emissions by 2045 under section 6 of the Climate Change Act 2017. I do not oppose the MERC Waste-to-Energy (WtE) facility being situated near residential areas. In fact, I support its placement in high-density zones—similar to facilities I have personally observed in London and Zurich. My predominant concern is greenhouse gas (GHG) emissions. Based on the Greenhouse Gas Assessment Report prepared by Katestone Environment (November 2023), the project could achieve net emissions ranging from -251,988 to -601,512 tonnes CO_2-equivalent per year, assuming a cap licence of 380,000 tonnes per annum of permitted waste. Organics constituted approximately 49.9% of Victorian household waste (municipal solid waste) in 2022–2023 [source: Victorian Auditor-General's Office, 2025 https://www.audit.vic.gov.au/sites/default/files/2025-04/20250403_Recycling-Resources-from-Waste.pdf]. As you are aware, the Victorian Government introduced Recycling Victoria: A New Economy in February 2020, which includes a target to halve the volume of organic material going to landfill between 2020 and 2030. As less organic waste enters landfill—and with improved landfill gas capture—methane emissions (which have 28 times the Global Warming Potential of CO_2) will decline. Consequently, the volume of GHG emissions that could be abated by MERC operations will also reduce. Victoria's electricity grid is undergoing rapid decarbonisation. As fossil fuel generation is displaced, the potential for MERC to offset grid emissions will diminish. To future-proof its climate benefit, MERC should be co-located with industrial or high-density residential/commercial areas with substantial heating and cooling demand. This would enable efficient waste heat recovery via district energy systems (e.g. absorption refrigeration), mitigating the risk of MERC becoming a net GHG emitter. Secondly, waste sorting practices among Australian households and

businesses remain inconsistent. Recyclables are frequently disposed of in general waste bins. Enforcement efforts by some local councils tend to focus on contamination in yellow-lid commingled recycling bins, with limited scrutiny of red-lid general waste bins.

Given this context, will MERC operations include any pre-treatment or sorting of incoming feedstock to recover recyclables or remove contaminants prior to incineration?
MERC will process only non-recyclable residual waste from households, businesses and industry, material that would otherwise go to landfill. The facility will not accept hazardous waste, recyclable materials, asbestos, or food and garden organics that should go to composting facilities.

MERC will incorporate mechanical systems, including waste cranes, to remove large non-combustible items and screen out unsuitable materials prior to incineration. Additionally, metals will be recovered from the ash post-combustion for recycling.

A Waste Acceptance Protocol will be in place to help ensure that only suitable residual waste is received and processed at the facility. This protocol will define acceptable waste types, outline inspection procedures, and establish criteria for rejecting loads that contain hazardous or otherwise non-compliant materials.

Cleanaway is committed to working with councils and commercial clients to improve upstream sorting and reduce contamination, ensuring that only non-recyclable waste is processed at MERC.

We welcome the recognition that Victoria's net zero target and the changing dynamics of waste streams and the energy grid require future-proofed infrastructure. MERC has been conceived not just as a waste-to-energy facility, but as the anchor of a broader circular economy precinct that enables industrial symbiosis.

1. Precinct Integration and Industrial Symbiosis
MERC will be developed as part of a co-located industrial precinct, where energy, heat, water, and materials circulate between neighbouring industries and communities. This model—successfully demonstrated in places like Kalundborg in Denmark—ensures that:

- Waste heat from MERC is captured and supplied to adjacent industry or future district energy systems, providing low-carbon heating and cooling.
- Recovered materials (e.g. ferrous and non-ferrous metals from bottom ash) are returned into manufacturing supply chains.
- Process water can be recycled within the precinct, reducing reliance on potable supplies.
- Logistics hubs for waste transfer and recycling can be integrated to reduce transport emissions and congestion.

2. Greenhouse Gas and Energy Transition Alignment

We recognise that Victoria's electricity grid is decarbonising and that organic waste diversion will reduce the landfill methane abatement opportunity over time. MERC addresses this by:

- Positioning itself to supply reliable low-carbon baseload energy to industrial partners, even as the grid evolves.
- Designing for future district energy connections so that waste heat recovery maximises the facility's climate benefit and avoids the risk of net emissions creep.
- Ensuring emissions abatement remains robust through stringent EPA licence conditions, continuous monitoring, and adaptive management.
- Designing the plant to be 'Carbon Capture Ready' to activate solutions as carbon capture, storage and utilisation (CCUS) becomes commercially viable.

3. Feedstock Quality and Waste Acceptance

MERC will only process residual, non-recyclable waste. To reinforce that commitment:

- A Waste Acceptance Protocol will strictly exclude recyclables, food organics, hazardous waste, and asbestos.
- Visual and CCTV observation of waste deliveries and mechanical pre-treatment systems (e.g., cranes) to pre-mix the waste in the waste bunker and provide the capability to remove unsuitable materials before incineration.
- Metals recovery from ash ensures that value is extracted even post-combustion.
- Cleanaway will work with councils and businesses to improve upstream sorting, so MERC works actively to complement recycling and composting.

4. Enabling Victoria's Circular Economy Goals

Victoria has legislated a 2045 net zero target and a 2030 80% landfill diversion goal. MERC, as part of a circular precinct, is designed to directly support these ambitions by:

- Displacing landfill for materials that cannot be recycled or composted.
- Reducing methane risk from residual organics, consistent with the Auditor-General's findings.
- Creating a platform for precinct-scale innovation, where waste, energy, and water systems are integrated for maximum resource efficiency

Will Cleanaway inspect waste deliveries for asbestos?

A Waste Acceptance Protocol will be in place to help ensure that only suitable residual waste is received and processed at the facility. This protocol will define acceptable waste types, outline inspection procedures, and establish criteria for rejecting loads that contain hazardous or otherwise non-compliant materials.

Cleanaway is committed to working with councils and commercial clients to improve upstream sorting and reduce contamination, ensuring that only non-recyclable waste is processed at MERC.

Research in Europe has shown that waste emitted in the air from a waste incinerator plant has caused negative effects on chicken farms - including malformed eggs and sick chickens. Children living within 10 km of waste incinerator plants have been reported to have developed increased incidences of asthma and other respiratory illnesses. Why isn't Cleanaway looking to build this plant at least 50 km away from the city and any other residential areas? The Hume Highway stretches all the way to Sydney - why choose Summerhill Road? I live @5 km away on Mt. Ridley. I am NOT in favour of this plant being built anywhere near housing areas. There are housing estates in Wollert and Donnybrook who will also be affected.

The site at 510 Summerhill Road, Wollert, was chosen because it is set aside for industrial and employment uses, has good access to the Hume Freeway, and is over 1 km from most residences. Locating the facility close to waste sources reduces truck travel and emissions.

Independent air quality and health risk assessments for MERC are being undertaken to ensure that risks to human health and the environment are appropriately managed and are considered acceptable. These assessments will be provided to the EPA and made publicly available as part of the Development Licence application process.

Will you be giving support to people who get health issues, eg, asthma, cancer, like the English incinerator? Were residents given a cash payment?

Independent air quality and health risk assessments for MERC are being undertaken to ensure that risks to human health and the environment are appropriately managed and are considered acceptable. These assessments will be provided to the EPA and made publicly available as part of the Development Licence application process.

Who gave consent to Cleanaway to even consider building a waste incinerator in Wollert? (someone who lives comfortably in an Eastern suburb miles away?)
Why isn't a country/rural site being selected - well away from any residential areas, schools, child care centres or aged care homes?

Cleanaway has received an allocation under the Waste-to-Energy Cap; however, planning and EPA approvals are required for the MERC. The project is in the process of applying for the necessary approvals and has not received consent for the project at this stage.

The State Government has made several policy and legislative reforms that recognise that waste-to-energy has a role to play in responsibly managing the waste Victorians generate.

The location at Wollert was selected because it is identified for future employment/industrial use and has the infrastructure to support the facility.

It is important to consider that the facility will serve the community for decades. If it were located in an area remote from urban development, this would result in extended truck journeys for every vehicle delivering waste to the facility, creating increased truck emissions and ultimately adding to the cost of responsible waste management.

Why so close to houses and child care, primary schools and secondary schools? There is already a rise in the asthmatic children. Have you conducted a study on how this smoke coming out impacts them?
Moreover, in the UK, a sensor malfunctioned and wasn't picked up for ages, and it took them months to replace them and all that time it was polluting the environment.
Australian health authorities and environmental regulators provide detailed guidance on how to undertake risk assessments for industrial facilities like MERC. This includes assessing existing air quality in the area and predicting any changes that may occur as a result of the proposed plant.

The types of potential chemicals are already present in the air due to a range of sources, including natural ones like windblown dust, as well as human activities such as vehicle emissions, gas heating, cooking, and even burning candles or using air fresheners.

The key focus of the air quality and health risk assessments is to determine whether the facility would significantly alter air quality, either at the site or several kilometres away. Due to the size and movement of the atmosphere, emissions from a single facility typically disperse quickly and are often not measurable beyond very short distances (less than 100 metres in many cases).

Independent air quality and health risk assessments for MERC are being undertaken to ensure that risks to human health and the environment are appropriately managed and are considered acceptable. These assessments will be provided to the EPA and made publicly available as part of the Development Licence application process.

Cleanaway are aware of past incidents overseas, such as the UK case. MERC will have ongoing automated daily and independent periodic calibration checks to verify the integrity of the CEMS measurement results against calibration gases or stack testing to approved standards.

Would you, the people who work for Cleanaway, move to the Wollert/Donnybrook Craigieburn North area so you're closer to the facility and can experience the consequences?
Cleanaway employees come from a wide range of communities, including areas near our facilities, and we take our responsibility to protect the health and well-being of both our staff

and local residents very seriously. The MERC will be designed and operated to the highest safety and environmental standards, with robust monitoring, strict regulatory oversight, and transparent reporting.

Our commitment is to ensure that MERC is a safe and responsible neighbour and one that we would be confident for our own families to live near.

1 km is a stone's throw! When the wind blows, it blows polluted waste up to 20 km in any direction. I live up on Mt. Ridley. We do NOT want this incinerator to be built and to spoil our lovely fresh air.
Independent air quality and health risk assessments for MERC are being undertaken to ensure that risks to human health and the environment are appropriately managed and are considered acceptable. These assessments will be provided to the EPA and made publicly available as part of the Development Licence application process.

Waste-to-energy incinerators are well documented to cause impacts within a 10km radius....how does Vic EPA justify a 1km buffer?
EPA Victoria sets conditions for air quality and health protection.

Independent air quality and health risk assessments for MERC are being undertaken to ensure that risks to human health and the environment are appropriately managed and are considered acceptable. These assessments will be provided to the EPA and made publicly available as part of the Development Licence application process.

Studies in Europe have not found that changes in air quality are measurable within 10 km of such a facility. For modern plants that are constructed in compliance with the most recent best practice guidance, it is difficult to be able to measure any difference in air quality due to the facility within less than 1 km (usually within less than 0.1 km). EPA Victoria guidance is very detailed and requires a sophisticated assessment of such facilities before they can be considered for approval.

The reason why I moved to Craigieburn 20 years ago was because of the fresh air and the lack of industrial areas. What gives Cleanaway the right to spoil our fresh air paradise?
Cleanaway must comply with strict environmental standards and gain approval from EPA Victoria and the Department of Transport and Planning before MERC can operate.

Independent air quality and health risk assessments for MERC are being undertaken to ensure that risks to human health and the environment are appropriately managed and are considered acceptable. These assessments will be provided to the EPA and made publicly available as part of the Development Licence application process.

Australia is a large country with plenty of land — why has this facility been planned so close to existing and future residential areas in Wollert, instead of being located further away from people?
The Wollert site was chosen because it is sufficiently separated from residential areas, whilst being located near major waste sources. Locating waste management facilities (including waste-to-energy facilities) proximate to urban areas is important because it reduces transport emissions and costs. This is an important consideration given that the facility is expected to operate for approximately 30 years.

In Europe and Japan, it is common practice to build Waste-to-Energy (WtE) facilities close to the communities that they serve. For example, there are multiple WtE facilities within Greater London and Paris, and 21 are situated within Tokyo city alone (19 are operating, two are undergoing refurbishment), without the requirement for significant buffer zones.

Can you comment on whether there will be an Environmental Effects assessment in the process this time (now with DOUBLE the quantity proposed to be burnt)? - It was outrageous with the last application that an EES was not conducted or required.
Cleanaway will refer the revised project to the Department of Transport and Planning (DTP) Impact Assessment Unit to assess if an Environmental Effects Statement (EES) is required to be undertaken. This is the prescribed process under the Environmental Effects Act 1978 and allows the Minister of Planning to determine whether the project is likely to cause significant impacts and if the project warrants assessment through an EES or related process. Cleanaway will comply with the outcomes of this process.

Notwithstanding the outcome of the Minister's determination regarding an EES, Cleanaway is required to obtain a development licence from EPA Victoria and a planning permit from the DTP (Planning unit).

These approval processes require Cleanaway to undertake rigorous environmental impact assessments of all key matters and undertake community consultation and public exhibition of the assessments and applications.

According to the ATO, Cleanaway did not pay tax for the FN 2022-23. Does Cleanaway commit to paying tax in future?
Cleanaway complies with all Australian tax laws and reporting obligations.

Cleanaway's most recent financials showed that liquidity is worse than in previous years. How do you plan to finance this incinerator?
The MERC facility will be privately funded by Cleanaway. Waste suppliers (councils, businesses, and waste companies) will pay processing fees, similar to landfill disposal arrangements. The project is not funded by ratepayers. Cleanaway expect the project will

require a $1.5 billion investment. A final investment decision will be made should the project receive a Development Licence.

In 2024, the Australian Financial Review said that Cleanaway was the ASX large company most likely to be taken over. If Cleanaway is taken over, who will be responsible for any damage that the incinerator does?
Cleanaway, or any future operator of the facility, will be subject to EPA Victoria licence requirements and enforcement powers, regardless of ownership.

Industry and residences would be better serviced by renewable energy sourced from solar and wind, as we all know.
Waste-to-Energy (WtE) is not a replacement for wind/solar renewable energy; it provides dispatchable, baseload energy from unavoidable waste. It complements renewables by stabilising the grid and helping decarbonise hard-to-replace baseload.

The EU Commission Directive on the role of waste to energy in a Circular Economy to member states concludes ..."Decommission old incinerators and not build new ones". In addition, the EU Taxonomy has removed all funds for this industry, putting them in the same category as coal and nuclear. You can find this here - https://eur-lex.europa.eu/legal-content/EN/TXT/HTML/?uri=CELEX%3A52017DC0034
The Directive does not say all Waste-to-Energy (WtE) facilities must be decommissioned. However, it does explicitly recommend decommissioning older, less efficient ones in situations where there is overcapacity.

EU taxonomy and fund eligibility vary, and it's not accurate to say all funds have been removed for this industry. It depends on the criteria (e.g. how clean/efficient the facility is, whether emissions control meets certain standards).

There is no requirement in Australia or Europe for continuous emissions monitoring for Dioxin...they are measured twice a year for compliance monitoring and averaged to be massaged into compliance as is BAU. Dioxin is also formed outside the stack via the De Novo Synthesis...so no amount of stack emissions monitoring will capture this...how will Cleanaway address this? After all, it is the very reason Europe has a major dioxin contamination issue now.
It is correct that dioxins and furans are technically challenging to monitor continuously. In Europe and Australia, regulatory frameworks typically require periodic sampling rather than continuous real-time monitoring.

MERC will comply with EPA Victoria licence conditions, which will include monitoring and strict limits on dioxins and furans.

In addition to stack testing, MERC will operate Continuous Emissions Monitoring Systems (CEMS) for key pollutants and use modern combustion controls and flue gas treatment designed to minimise dioxin formation, including during de novo synthesis. Independent health and air quality risk assessments, which included an assessment of dioxin emissions, have been completed for the original MERC proposal (380,000 tonnes per year) and found the risk to human health to be low to negligible if the facility operates within future Operating Licence conditions. Cleanaway will undertake a second round of health and environmental risk assessments as part of a new development licence submission.

Dioxin contamination in Europe is a serious concern, but it stems from many historic and ongoing sources, not just modern, well-controlled Waste-to-Energy (WtE) plants. Regulations and technology have dramatically reduced stack emissions from contemporary facilities.

Where will all the additional questions be answered?
Cleanaway provides updates and answers to community questions through its MERC webpage, public consultation sessions, and formal regulatory processes with EPA Victoria and the Department of Transport and Planning.

We will also be hosting information sessions in person.

Please make contact if you would like to ask a specific question or speak to someone from the team.

In a climate emergency, how can creating massive emissions be justified? It would be a step backwards for sure, and hard to shut down if these plants are built?
Australia's electricity generation sector is subject to emissions caps under the National Greenhouse and Energy Reporting (NGER) Safeguard Mechanism, which supports the country's commitment to the Paris Agreement and its Net Zero Plan. Waste-to-Energy (WtE) facilities generally produce lower emissions intensity than coal-fired power plants, especially when modern technologies and proper waste sorting are used.

How do incinerator emissions compare to long-term leechate and offgassing from a landfill equivalent?
Waste-to-energy facilities such as MERC avoid methane emissions from landfills and reduce the need for long-term leachate management. Every tonne of landfill methane avoided from decomposing organic matter is 28 tonnes of CO2-e avoided (applying the 100-year global warming potential, GWP) or ~88 tonnes of CO2-e avoided (applying the 20-year GWP).