

# **T R A N S C R I P T**

## **LEGISLATIVE COUNCIL ECONOMY AND INFRASTRUCTURE COMMITTEE**

### **The Development and Expansion of Waste-to-Energy (WtE) Infrastructure in Victoria**

Melbourne – Tuesday 26 May 2026

#### **MEMBERS**

Georgie Purcell – Chair

Richard Welch – Deputy Chair

John Berger

Gaelle Broad

Katherine Copsey

Moira Deeming

Tom McIntosh

Evan Mulholland

Sonja Terpstra

**WITNESSES**

David Jettner, General Manager, Environment and Sustainability, Opal;

Andrew Short, Director, Project Development, Australia New Zealand, O.C.O. Technology; and

Mark Rodgers Chief Executive Officer, and

Lance Ingrams, Chief Strategy Officer, HiQ.

**The CHAIR:** I declare open the Legislative Council Economy and Infrastructure Committee's public hearing for the Inquiry into the Development and Expansion of Waste-to-Energy Infrastructure in Victoria. Please ensure that mobile phones have been switched to silent and that background noise is minimised.

I would like to begin this hearing by respectfully acknowledging the Aboriginal peoples, the traditional custodians of the various lands we are gathered on today, and pay my respects to their ancestors, elders and families. I particularly welcome any elders or community members who are here today to impart their knowledge of this issue to the committee or who are watching the live broadcast of these proceedings.

I also welcome any other members of the public watching via the live broadcast and in the public gallery today. Like all other sessions, you are very welcome to be here, and we appreciate having a public gallery because we normally do not have this interest in our inquiries, but just a reminder that it is still a formal proceeding of the Parliament and any disruptions could result in the session being stopped.

To kick off we will have committee members introduce themselves to you. We do have one member on the screen, so we will start in the room with Mr Berger and move through.

**John BERGER:** Good morning. My name is John Berger. I am the Member for Southern Metro.

**Richard WELCH:** Richard Welch, Member for North-East Metro.

**The CHAIR:** Georgie Purcell, Member for Northern Victoria.

**David ETTERS HANK:** David Ettershank, Western Metropolitan Region.

**Rachel PAYNE:** I am Rachel Payne from the South-Eastern Metropolitan Region.

**Sarah MANSFIELD:** Sarah Mansfield, Member for Western Victoria Region.

**The CHAIR:** Wonderful. Thank you so much for appearing before us today. All evidence taken is protected by parliamentary privilege as provided by the *Constitution Act* and further subject to the provisions of the Legislative Council standing orders. Therefore the information you provide during this hearing is protected by law. You are protected against any action for what you say during this hearing, but if you go elsewhere and repeat the same things, those comments may not be protected by this privilege. Any deliberately false evidence or misleading of the committee may be considered a contempt of Parliament.

All evidence is being recorded. You will be provided with a proof version of the transcript following the hearing. Transcripts will ultimately be made public and posted on the committee's website.

For the Hansard record, could you each please state your full name and the organisation you are appearing on behalf of. We might start down here with Lance.

**Lance INGRAMS:** Lance Ingrams. I am high-quality group – HiQ group.

**Mark RODGERS:** Good morning. Mark Rodgers. I am the CEO of the HiQ group.

**Andrew SHORT:** Andrew Short. I am the Director of Project Development at O.C.O. Technology.

**David JETTNER:** Hi. I am David Jettner from Opal.

**The CHAIR:** Wonderful. Thank you. We now welcome your opening comments but ask that they are kept to around 10 to 15 minutes maximum. I am not sure if you plan on all doing them together or separately, but I will let you lead with it, and then we will get into the discussion.

**David JETTNER:** I think we represent different organisations.

**The CHAIR:** Yes. Sometimes people will sort of speak collectively, but please feel free to make your own remarks.

**David JETTNER:** If I may. Thank you, Chair and members of the committee, for the opportunity to be here today and represent Opal and the Maryvale energy-from-waste project. I would like to start with an important fact: the Hallam Road landfill, the last major facility servicing south-east Melbourne, is likely to close in the next few years. There is no approved alternative for this facility. Councils and 2 million residents have no confirmed pathway for their residual waste. This is not a planning problem on the horizon; it is a waste crisis that is about to happen in Melbourne.

To understand why the Maryvale energy-from-waste, or EfW, is part of the answer to this emergency, it helps to understand where EfW sits in the waste system. Within the waste hierarchy, EfW sits above landfill and below recycling. It complements material recovery rather than competes with it. Victoria's policy settings broadly align with this hierarchy, but more work is required to provide favourable conditions for project deployment in Victoria. Many other advanced economies have solved this problem. Moving grate combustion is the dominant energy-from-waste technology across the EU, the UK and Japan, with hundreds of facilities operating daily to stringent European emissions standards. Today's modern facilities operate with high levels of performance and reliability, coupled with continuous emissions monitoring covering greenhouse gases, heavy metals and particulates to ensure operations are safe for human health and the environment. These are not experimental facilities; they are sophisticated, proven infrastructure delivering essential waste services at scale. Modern EfW is a proven science, and we should rely on facts and science to help guide us.

Community voices do matter, and we have taken them seriously throughout this process. Ultimately decisions on essential infrastructure to treat the waste that we all create must be guided by the science on emissions, health and amenity. The Maryvale EfW facility is the most advanced project in Victoria. It is designed to divert 715,000 tonnes of residual waste away from landfill every year. It will deliver high energy efficiency, the diversion of more than 99 per cent of residual waste from landfill, the recovery of metals and minerals for recycling and reuse, and service councils and businesses across eastern Melbourne and Gippsland.

We did not arrive at this design quickly. Since 2015 we have conducted extensive local stakeholder engagement, in-depth analysis of available technologies and undertaken multiple fact-finding visits to operating facilities across Europe, the UK, Japan and Singapore. In fact our very early efforts involved running several focus groups in the local community to identify key concerns, which were air emissions, odour, noise, traffic and the risk of undermining recycling. Our investigations confirmed moving grate combustion as a technology that best satisfies the requirements of emissions performance, reliability, energy efficiency and cost competitiveness in Victoria. Our investigation also confirmed that appropriately designed and operated facilities meet stringent EU air emission standards and include online emissions monitoring equipment.

For our EfW project these have also been assessed against the local conditions. Odour for these facilities is controlled by having the waste delivered into a bunker which is enclosed within a building that is under negative pressure, with the air being drawn into the furnace for combustion. Noise will meet the local conditions. The Maryvale EfW is located on an industrial-zoned site with a large buffer of an approximately 2-kilometre radius, with existing paper mill operations operating at similar levels. With the Maryvale site connected to the Monash Highway, there will be no A-double waste trucks travelling through residential areas on the approach to the site. Our comprehensive traffic impact assessment concluded that there will be no detrimental impact to traffic and intersection wait times. The Maryvale EfW is also licensed to only accept residual waste. This is governed by Recycling Victoria's EfW licence regime. In fact Maryvale EfW will also process its solid residues after combustion to recover metals and produce aggregates for reuse. All of these resources are currently being buried in landfills and wasted. By addressing these concerns and sharing our learnings with our local stakeholders, the project secured 84 per cent support as measured through the EPA's public submission process.

Many of the building blocks for the Maryvale EfW are now in place. We hold regulatory approvals from EPA Victoria, Recycling Victoria and the Latrobe City Council. We have waste commitments from over 13 councils. We have energy offtake to the paper mill confirmed. The federal and Victorian governments have both provided financial support to our project. The EPA recognised our community engagement efforts as the gold standard for Victoria. The local community and industrial workforce in the Latrobe Valley are strongly supportive of our project, and in 2026 we received a binding turnkey construction cost. This project is not an engineering study. The Maryvale EfW is a project nearing the end of its development runway and has almost reached ready-to-build status.

This committee has a choice to help create and encourage the conditions for appropriately governed and regulated EfW in Victoria. Two million residents across south-east Melbourne and the workers and communities of the Latrobe Valley need decisive action. We urge the committee to support energy from waste. Thank you.

**The CHAIR:** Thank you.

**Andrew SHORT:** Good morning. My name is Andrew Short. I am the Director of Project Development at O.C.O., responsible for developing our business activities in Australia as well as obtaining the relevant regulatory approvals that are necessary to operate. I have been at O.C.O. for over four years. I was previously estates director at Grundon Waste Management, the owners of O.C.O. I have been involved with the company almost since it started in 2010. I have a BSc in surveying resource development, and I am a chartered mineral surveyor with over 30 years experience working on regulatory approvals for a wide range of mineral and waste management facilities and their development.

O.C.O. treat around 35 per cent of the APCr created in the UK. We have just opened our first plant in mainland Europe and licensed our technology in Japan. We are currently developing a pilot plant in the USA, due to be operational at the end of the year. We have a processing capacity in the UK of some 300,000 tonnes of APCr per year, allowing some 750,000 of carbon negative aggregate to be manufactured and sold to a variety of construction uses. The carbon dioxide is permanently captured through the injection of CO<sub>2</sub> and through direct air capture as the aggregate cures. The company started commercial operation in 2011 and was born from research undertaken in the University of Greenwich. Growth in the UK continues as more EfW operators look to recover their residues, with a fourth operating site in early stages of planning.

I would like to thank you for inviting me here today and look forward to helping you where I can. O.C.O. decided to make a submission to the inquiry for the following reasons: first, our general support for EfW technology as an important tool for residual waste management; second, to illustrate that under the right regulatory and market conditions, technology does exist that can commercially treat and recover using carbon dioxide air pollution control residues, creating a carbon negative aggregate for use in the construction industry; and third, to encourage a reassessment of the waste framework, regulations and legislations on reuse of products made from waste – the development of an end-to-waste framework. Once again, thank you for inviting me. I hope to be of assistance to the inquiry into the use of energy from waste in the state of Victoria as part of an integrated waste management structure.

**The CHAIR:** Great. Thank you.

**Mark RODGERS:** Thank you, Andrew. Good morning. Mark Rodgers – I am the CEO of HiQ. Again, like the other gentlemen, I thank you for the opportunity to speak. I am the CEO of this group. I am also a proud family member of the business, which started 65 years ago. It is an honour that I stand here and lead that business, so I think it is important I make that clear up-front. As a business, we operate along the east coast of Australia, so we are a kind of a 60-plus year business. We have been operating across resource recovery, waste management, a circular economy. We have been in Victoria since 2001, so we are proud members of the Victorian community down there. I am ably led today by my colleague Lance Ingrams. He is our Chief Strategy Officer. He has been running point for us on all our EfW projects for the last four or five years, Lance, so an important constituent to have with me here today.

We come here today, and I think Lance and I have three outcomes that we would like to achieve through our dialogue here. First of all, we would like to have open and frank discussion. I think that is really important. I think none of this can go forward without continued open dialogue, so that is one of the things I would like to

leave here thinking that we have given. Second of all, I would like to reiterate, as we have in our written statement, that we see energy from waste as one part of the solution, not the solution. Although it might be a critical piece, we see energy from waste as a part of a larger waste mix. Thirdly, we would like to reconfirm our commitment to community consultation. It is something I think we have been doing for many years, and I think we have been doing it well. I am happy to take feedback on that point, but we are here to stand tall to say we will continue to do that.

I will give a quick opening statement about our submission. Lance and I are then happy to answer questions on our feet today here. If we are unable to, I will take those on notice, and I am happy to come back to the committee with detailed information. I know it is a complicated issue at times, so I want to make sure that we are frank, transparent and give the details required.

If I take a bit of a step back from us as a proponent for a moment, I look at the Victorian government's circular economy targets and they are very noble, they are very relevant and they are very ambitious: 15 per cent reduction on waste generation, landfill diversion by 80 per cent, halving organics to landfill – again, the right numbers there. If I look at another perspective, the VRIP shows that by 2053, there will be 9 million tonnes of residual waste in Victoria to be processed. It is not necessarily easy to wrap your head around what 9 million tonnes of waste looks like. Lance, have we thought about conceptualising that?

**Lance INGRAMS:** This morning I walked past the MCG, and I know everyone likes to use the MCG for comparisons. 8.2 MCGs per year of waste is produced at that volume.

**Mark RODGERS:** So eight MCGs a year of waste is today going to landfills. It is important for everyone to understand that when waste goes to landfills, that is a legacy issue we bring with us. It is not solved; it is an issue that we will continue to have to deal with for many years to come. That is an infrastructure scale problem. That is not a problem for a couple of companies here and there, that is a statewide issue that I think we are all in agreement we are here to address.

If I look at it from the HiQ point of view, there is no single solution to that eight-MCG problem. If I think about how we break that down or how we address our 9-million-tonne residual issue, I think first and foremost it is us. We as the community need to focus on waste avoidance, reuse, recycling and source separation. We as industry need to also focus on better technology, better management and more efficiency. It is a dual-focus problem, and I think community and industry have to work together. Our experience as a waste operator – and as I said, we are 50 or 60 years into this – shows us that no matter how much time, how much effort and how much technology you can throw at waste, there is always going to be a residual fraction. That residual fraction is forecast to be 9 million tonnes – eight MCGs a year. For us the solution to that residual problem – and I think it is fair to say this is an issue that is shared across industry – is that energy from waste is one of the solutions to that residual problem. It is by no means a single solution to all our waste issues, it is a solution to our residual waste problem.

If I think about HiQ as a proponent and our Sunbury site, our Sunbury site has been in existence for 25 years, operating as a waste precinct. We see the best way for energy from waste to assist – to manage the waste issue that we are having – is as part of an integrated precinct, and that is what we are proposing. We have a facility in Sunbury that is currently operating as a landfill and a resource recovery facility. We are proposing that we will integrate energy-from-waste technology into that site, where waste will be managed across the waste hierarchy in one location. From our perspective that is a very efficient and effective way to manage it. We see energy from waste as viable and proven and that its dual benefit of addressing our residual waste issue is complemented with energy production, which is also a society problem at the moment. We see both the benefits from energy from waste – managing waste residuals and energy production – are at an infrastructure scale. I think it is important to pause there because if we think about our eight MCGs a year, that is an infrastructure scale problem. Energy from waste gives an infrastructure scale solution.

While we remain optimistic about this technology, we also acknowledge that we need to be led by international best practice. We need to be led by strong regulatory oversight. We applaud the work by the Victorian government and the committee here in vigorously prosecuting that framework. We think this is a necessary step. We are going to continue to commit to in-depth community engagement, which I am sure we will talk about shortly. We are very happy to stand by the development of this project, and we see it will be a long-running part of our Sunbury eco-hub. Again, I take this moment to thank you for the opportunity to speak.

Again, if I go back to my first point, today is about being open and transparent, because this development – this industry – is going nowhere without open and transparent communication, and I hope that is what we are giving today. Thank you. We look forward to some questions.

**The CHAIR:** Wonderful. Thank you. Our members will now move to questions. We have up till 12:30 with these witnesses. I might have to duck off slightly earlier, and in that event Mr Welch is going to take over, but we will just play it by ear and see how everyone is going. I am going to leave 7 minutes on the clock. We have been joined by Mrs Deeming in that time as well. There is plenty to go through. I might start with you, Mr Ettershank, since I almost forgot you last time.

**David ETTERS HANK:** Thank you, Chair. Thank you very much for coming in today. Thank you for the very thoughtful submissions that we have received. I am going to focus on HiQ, if I may.

**Mark RODGERS:** Yes, you may, David.

**David ETTERS HANK:** It is close to my heart.

**Mark RODGERS:** We understand that.

**David ETTERS HANK:** We were briefed by you, very kindly, I think about a year ago, and that was much appreciated. At that time you were talking about 400,000 or 450,000 tonnes a year. How did it come to pass that you got a cap for 750,000 tonnes? Did you ask for that, or was that offered?

**Mark RODGERS:** No, of course we asked for it. That was part of our submission. A lot of the waste infrastructure is about economies of scale. It is as simple as that.

**David ETTERS HANK:** Okay. Fair enough. Thanks. So at 750,000 tonnes, we are talking about an investment of, what, \$1 billion? What sort of money are we talking about?

**Mark RODGERS:** Circa \$2 billion –

**David ETTERS HANK:** \$2 billion? Okay.

**Mark RODGERS:** into the Sunbury community.

**David ETTERS HANK:** Into the Sunbury community. We will come to what you are sharing with the Sunbury community in a minute. In that context, I presume you do not have 2 billion in your back pocket, so it is going to be bank finance and whatever else and institutional investors.

**Mark RODGERS:** Correct.

**David ETTERS HANK:** How do you guarantee the sorts of cash flows that are going to be necessary to service that sort of debt?

**Mark RODGERS:** You and I help that by producing waste, and that is taxes and waste – two things you can depend on. But we are very confident that contracted waste will continue to come across the gate in any waste facility across the country. We as an industry and we as a community need to manage that waste down. But I think it is a simple fact of life. The bankability of these assets is contracted waste. That coffee cup is going to end up in a landfill.

**David ETTERS HANK:** I think it is paper.

**Mark RODGERS:** Well, that is a good one.

**David ETTERS HANK:** But is it waxed? It's a good question.

**Mark RODGERS:** So, David, that is the answer.

**David ETTERS HANK:** In that context, then, what sorts of assumptions are you making about this being residual red bin waste versus other sources of waste for you to achieve whatever is your sort of break-even or profit margin?

**Mark RODGERS:** It is predominantly red bin waste, David. That is the Victorian – and I always forget which policy this is in. The *Victorian Waste to Energy Framework* has designated red bins as a permissible waste stock for energy from waste. And that is what we are banking our feedstock on.

**David ETTERS SHANK:** I think we have had different numbers, but somewhere between 14,000 and 20,000 tonnes a year is coming out of Hume.

**Mark RODGERS:** I am not an expert on that number, but you might be, Lance.

**David ETTERS SHANK:** Yes, I am sort of wondering how many councils you are going to need to sign up and for how long.

**Lance INGRAMS:** Hume City Council produces, we have roughly calculated, about 60,000 tonnes of MSW a year.

**David ETTERS SHANK:** Right. That is not what actually they said to the committee. They said, I think, 18, but anyway –

**Lance INGRAMS:** I think Sunbury produces around about 10 to 15 on its own merits. C&I, which is the other waste stream – that is the one you go to shopping centres for or big infrastructure places like Crown Casino and the MCG – produce probably another 100,000 tonnes of that in Hume. When you calculate those two together, they are kind of residual waste streams.

**David ETTERS SHANK:** So you are up to about a couple of hundred thousand tonnes there – 550 to go.

**Mark RODGERS:** We do have some work to do, David, and there is no doubt about that. I guess part of the challenge with that is that we need to bring the community on the journey. The community needs to bring councils on the journey, and we need to bring the regulator on the journey. It is not something that we are shying away from. We have many hurdles to jump on this development, but we are standing ready and able.

**David ETTERS SHANK:** Can I say there is no debate that there are big questions about what we do with waste. No-one here is that deluded.

**Mark RODGERS:** And that is good; I think we all agree there is.

**David ETTERS SHANK:** The question is: what is the answer?

**Mark RODGERS:** Just one more point on that –

**David ETTERS SHANK:** I just want to keep moving because obviously time is of the essence in this sort of session.

**Mark RODGERS:** Sure.

**David ETTERS SHANK:** The infrastructure that will be required around the waste stream – how do you deal with that? Are you imagining when you talk about your integrated precinct that everything will already have been sorted before it gets to you? Or is that going to happen in situ on Bulla Road there?

**Mark RODGERS:** Where, sorry?

**David ETTERS SHANK:** At your site on Bulla Road.

**Lance INGRAMS:** Sunbury Road.

**David ETTERS SHANK:** Sunbury Road. Okay.

**Mark RODGERS:** Red bin waste is also separated at the location.

**David ETTERS SHANK:** Right. Okay. And then other waste will be from shopping centres and whatever, and you are assuming that will also be equally sorted when it arrives.

**Mark RODGERS:** Correct.

**David ETTERSHANK:** Okay. Thanks. In terms of the standards that will apply to your incinerator, are you assuming that it will be a condition on licence that you will have to comply with EU standards?

**Mark RODGERS:** Absolutely, at a minimum. But we are prepared for our development licence to hold very stringent standards that we must meet. Quite frankly, we will need to meet them ahead of time for this project to even stand up.

**David ETTERSHANK:** Right. Is it a sort of condition of going in for the licence cap that you would be doing that sort of compliance when you went with Recycling Victoria for your application for a cap?

**Mark RODGERS:** Yes.

**David ETTERSHANK:** Was that a component there in terms of a requirement that you would be able to comply with European standards.

**Mark RODGERS:** Not necessarily European standards, but we would need to comply with the relevant Victorian standards. We are modelling the EU standard at the moment, which we see as best in class. But to be frank, David, if the Victorian government puts higher standards, we have to meet those.

**David ETTERSHANK:** Actually, in terms of specific waste-to-energy standards in Victoria, there is nothing in the environmental protection regulations that specifically addresses waste-to-energy, so I am sorry, I am having trouble understanding what that means.

**Lance INGRAMS:** My understanding of the conditions in the licence that is endorsed by the EPA, not RV – we will have those strict conditions to stay within the framework of the –

**David ETTERSHANK:** I am going to come to the EPA, but yes, absolutely. I just wanted to check whether the RV component had included that. Talking about the EPA – that is a good segue – when do you anticipate lodging for Sunbury?

**Mark RODGERS:** June. We will be lodging our assessment reports to the EPA in June.

**David ETTERSHANK:** How much of that documentation will be in the public arena?

**Mark RODGERS:** Hopefully all of it.

**David ETTERSHANK:** Right. So you will be perfectly happy for the community to see, for example, the environmental impact statements and suchlike?

**Mark RODGERS:** We would recommend that the community review those.

**David ETTERSHANK:** Right. So can I just clarify that: you are happy to put those documents into the public arena?

**Mark RODGERS:** First they are going to the EPA for us to go through a process with them. I was able to catch the end of Gayle Sloan's comments, and I think industry in general needs to be in violent agreement that this needs to be open and transparent.

**David ETTERSHANK:** For example, you are probably aware we asked for the submissions associated with the Recycling Victoria cap licences and also how they were evaluated. The government declined to release that, which probably does not help your admirable spirit of transparency.

**Mark RODGERS:** It does not, but I guess we are all subject to the regulator.

**David ETTERSHANK:** If I can just finish, can I just clarify then, in terms of assuming that the government's current approach to transparency continues, which I think very effectively undermines your social licence: are you saying that you are happy to release those documents at the front of the process to the community, so that they can understand exactly what it is that you are proposing in real time as it goes to the EPA?

**Mark RODGERS:** We are going to advocate that the regulator does that.

**David ETTERSHANK:** Right. And if the regulator does not agree to do that?

**Mark RODGERS:** We will cross that bridge when we come to it, David, but I hope we do not have to.

**David ETTERSHANK:** I would hope we would not too, but I am keen to try and get some comfort to obviously a very disturbed local community.

**Mark RODGERS:** I am happy to continue the consultation. I think we as a business have, for three to four years, been talking about this project and I understand the concern from the community. We want to have these conversations, David, and we will. My first case is to work with the regulator, and then we will see where that goes. I am very happy to be transparent to the community.

**David ETTERSHANK:** Okay. Well, if I get some more time, we will pick up the conversation there. Thank you very much. Thank you, Chair.

**Mark RODGERS:** Thank you for the questions, David. It is good we are having the conversation.

**The CHAIR:** Thanks, Mr Ettershank. We will go to Mr Berger.

**John BERGER:** Thank you, Chair. Thank you all for your appearance this morning. Andrew, I might start with you. In your submission you went to quite a bit of detail about the misinformation that surrounds this whole issue. What would you like to see in the report that might dispel a lot of that misinformation?

**Andrew SHORT:** I suppose the first state would be the wording used. There is a lot of wording used in terms of APCr being toxic. It is hazardous, I accept that, but I think the phrasing of that information would be useful. But I think my main thrust on this would be that there needs to be a look at the framework under which it is assessed. We currently have a three-tier assessment for looking at the recovery of wastes and including IBAA and APCr. One is a determination, which crushed concrete comes under and things like that, one is a designation and one is an A16 permit. We applied for a designation, taking advice from the EPA. After 12 months they were going to refuse it and were saying it was not the right route down. They pushed us towards the A16 permit. Just to briefly describe the A16 permit, it allows you to treat and process and sell hazardous waste or reportable priority waste. No-one is going to buy reportable priority waste from anyone. So that was a big barrier to us, the fact that we were being asked by the EPA to sell our aggregate as hazardous waste, when we can quite easily show that once we have treated the APCr, once we have made our pellet, it certainly is not hazardous waste.

I would like the report to recommend an end-of-waste process. Now, there are various processes in Australia depending on what state you are in. Queensland has an end-of-waste process. WA has a self-certification process. I think Victoria needs to look at and come up with an end-of-waste process so that companies like us with innovative solutions to waste, to create a product, have a process to go through with the regulators so that at the end of that process we are able to say, 'We have end of waste. We're no longer a waste.' We have got it in the UK and we have got it in Spain, and it is that, I think, from my point of view, that would be the best outcome from our company point of view from this inquiry.

**John BERGER:** How do you think through community consultation you would be able to break down all those classifications that you have just spoken about? I have no idea what you are talking about. How would you expect that a community group would think what you are saying is okay?

**Andrew SHORT:** To be honest, we are going to be going for regulatory approvals soon. We will set out within those what we do, how we do it, the chemistry behind it. We have got nothing to hide in terms of what we do and how we get from hazardous waste to a material that is suitable for use in the construction market. We have human health ecological risk assessments undertaken on our material, so they will be part of that application process as well. Regulation is always a confusing barrier to a community coming in thinking, 'Well, what the hell is going on? What does all this mean?' But I think it is down to us to try and explain it and also down to the EPA to try and explain it as well. When I first came to Victoria three years ago, I had no idea what all that meant. It is only because I have been involved in that process that I understand it. Absolutely, we need to do that as part of our application process.

**John BERGER:** I suppose my next question is to you, Mark. We are talking about red bin contents. What is in the red bin that is going to be the usable part for you if you take out all of the recyclable bits and pieces, the green waste and the compostable stuff? What is left in the bin that is going to go in the burner, if you like?

**Mark RODGERS:** I am not sure I am following your question, sorry, John.

**John BERGER:** In a red bin, from all the waste that is the household waste, what are the parts that are usable for you to operate your equipment?

**Mark RODGERS:** The entire contents of the red bin are available for the thermal treatment – the entire contents.

**John BERGER:** The entire contents. Okay. How is it that the general community would know what is going in there and not other bits and pieces that might end up in the bin inadvertently, like paint tins? I have seen a MRF facility in use, and some of the things that I have seen go in there are quite scary.

**Mark RODGERS:** Fantastic. I did not understand the question. Now I do. Lance, you might be able to talk to some of the technology and the ability of the technology to identify non-conforming waste.

**Lance INGRAMS:** Yes. The system itself is moving grate, and it is actually quite robust. It can actually handle quite a lot of different types of variables. Technology is moving quite quickly. AI is getting very smart. There are AI cameras these days that can pick out a gas bottle or a paint tin of that nature, but the system can actually handle the paint too. It has got those fail-safe safeguards built within the system. We know the red bin is made up of all sorts. People throw all sorts away in the bin. That is the hardest challenge we have got. The segregation that needs to happen at home and in the community is the key area. But the technology of moving grate and what it has done for EfWs is that it is robust enough that it can handle what we do throw in the red bin.

**John BERGER:** Okay. The likes of aerosol cans and all that, they all get –

**Lance INGRAMS:** It can handle it. It is not ideal, but it can handle it, yes. That is why moving grate is the technology that has been established in the EU and in Europe, and it has handled those waste streams for 20, 30 years. When I first started in the industry, I went to a waste-to-energy, and I could see what it performed like. These are fantastic facilities – world class.

**John BERGER:** I think that is my time, Chair.

**The CHAIR:** Great. Thanks, Mr Berger. We will go to Dr Mansfield.

**Sarah MANSFIELD:** Thank you. And thank you for appearing today and for your submission. I am interested in the statement you made, which is similar to what we heard from the previous witness, about the role of waste incineration and the argument that it does not undermine other waste recovery efforts or higher order waste recovery efforts. One of the consistent arguments we have heard from other witnesses throughout this inquiry is that it does in fact do that because of the large volumes of waste that are required over the long term to ensure that waste incinerators operate efficiently and profitably. I am just wanting to understand from your perspective what your counterargument to that is, about how waste incineration does not undermine the incentives to invest in other forms of waste recovery.

**Mark RODGERS:** Is that a question to me, Sarah?

**Sarah MANSFIELD:** Yes.

**Mark RODGERS:** Thank you. Fair question. I would say we need to be doing all those things. We have a 9-million-tonne residual issue that we are trying to address. If an energy-from-waste cap is to address 2.5 million of those 9 million – that is, circa 30 per cent – there is plenty of waste left for us to focus on higher order outcomes, and it is a mixed approach that is going to get us to where we need to go.

**Sarah MANSFIELD:** Okay. There are many people that would argue that once we have set up these waste incineration facilities, that does reduce that incentive to invest in those other forms of technology that we need to deal with, with those other waste streams, accepting that there is a very large volume of waste that needs to

be managed. One of the things that drives that I think is the fact that the waste incineration facilities depend on contracts with councils to provide an agreed volume of waste over, again, often a significant period of time. I mean, how does that then affect the incentives of those municipalities to direct their residual waste to other ways or other types of waste management?

**Mark RODGERS:** I understand, Sarah. I guess I am looking at it from a different perspective, because today that waste is going to landfill. Landfill is a legacy issue that obviously carries with it ongoing environmental management. We all know landfills are scarce resources that we, let us be frank, are not very enthusiastic about having more of in the future. So energy from waste should not be viewed as taking away an incentive to do better recycling; there are still 6.5 million reasons we should. It also needs to be viewed in the fact that today red bin waste is being put in a hole. We are trying to address that issue.

**David JETTNER:** Excuse me, Chair. May I help with some answers around this space? There are a couple of things I would just like to mention. Under Recycling Victoria's regulatory framework and licensing process, there is actually a requirement that only residual waste is allowed to be treated in these facilities. That is also backed up with the EPA licensing process, which requires ongoing auditing and reporting of the waste supply. So there will be a reporting, an auditing and a demonstration of that process built into the regulatory reform processes in Victoria.

The second point I would like to discuss is around waste contracts with councils. For us at the Maryvale energy-from-waste process, our contracts are predominantly what is called waste arising. What that means is councils commit to providing their red bin waste but not with a volume. So they commit to: 'All the red bin waste we have, we'll provide to you.' We do not set a floor in that waste-arising structure so that councils are free to drive initiatives around other recycling or waste reduction opportunities. In fact if a particular council reduces its residual waste volume, then there is no penalty for those councils under a waste-arising contract scheme. And both those things work to support improved recycling from councils.

**Sarah MANSFIELD:** In the event that all the councils you have contracts with significantly reduce their red bin waste, where do you foresee waste coming from?

**David JETTNER:** If I may continue –

**Mark RODGERS:** No, please. It is a great conversation, David.

**David JETTNER:** The waste volumes coming to energy-from-waste facilities typically involve a component of council waste and a component of industrial waste coming from businesses, casinos or supermarkets – those sorts of facilities. The impact on council waste is balanced out as society grows with waste coming from industrial sources or commercial sources. That is the principle. We have visited energy-from-waste facilities across Europe – Italy, Germany, France, Switzerland, Denmark and Sweden – and what we know is that as society grows, as the population grows, the residual waste continues to actually increase. Despite substantial initiatives to divert part of the stream for recycling, we know that as society becomes more consumption based, where we buy things and dispose of them, we actually see volumes going up. We might see on a per capita basis, per person, the actual volume of residual waste falling, but as you have population growth the most common outcome is MSW remaining static or increasing over time, despite all the initiatives.

**Sarah MANSFIELD:** You were talking before about audits that will be done. I am keen to understand if you are just accepting what is in the red bin, or is there any kind of pre-sorting or assessment of that waste once it arrives at the waste incineration facility?

**David JETTNER:** It does depend on the waste stream. MSW, or red-lidded bin, is called source separated, and so that will typically arrive at the facility and go directly to the bunker.

**Sarah MANSFIELD:** So there is no examination of what is in there?

**David JETTNER:** Periodically a sample delivery will be put onto the floor and inspected and audited. The auditing is not of 100 per cent of every tonne of waste coming in, it is a periodic process to regularly check what is in that stream. That is the MSW component. On the commercial–industrial side, it is more important to regularly check that process because it is typically where nonconformities or contaminants can enter the process. For example, whilst an EfW can address things like small batteries or aerosol cans, we definitely do

not want to see things like LPG gas bottles from barbecues. Those are the sorts of things that we need to be vigilant for. Some of the technology that we are seeing today is also incorporating artificial intelligence to identify nonconforming products in material flows. Even if it is directly delivered into the bunker, there are also camera systems helping us identify those items that need to be removed in that process.

**Sarah MANSFIELD:** Do you already have any contracts with some of those commercial sources of waste that you mentioned before?

**David JETTNER:** Yes, we do. In fact Opal, as a partner within the Maryvale energy-from-waste project, is a commercial supplier of waste. Our paper recycling processes remove rejects, plastics, staples and those sorts of things. Those materials will be going to the EfW at Maryvale as well, so it will help support our paper recycling process.

**The CHAIR:** Apologies, Dr Mansfield. I am not sure if you heard the timer there. Sorry to interrupt you.

**Sarah MANSFIELD:** No, you cannot hear the timer online.

**The CHAIR:** I am so sorry. You were pretty close. I am going to hand over to my very competent Deputy Chair because I need to duck out. I might submit some questions on notice given I did not get my opportunity. Mr Welch will lead with his questions and then do the half-hour left.

**David JETTNER:** Thank you, Chair.

**Mark RODGERS:** Thank you, Chair.

**The DEPUTY CHAIR:** Thank you, Chair. I am going to try and get through one question to each of you in my 7 minutes. Mr Jettner, I will start with you. I would like to just break down the commerciality of waste-to-energy centres. I will give you a shopping list and you can augment it as required. I would say that the components that makes it commercial are its location, supply of materials, the cost of transport of that supply, the regulation burden cost, and I guess also social licence. Would you want to add anything to that or talk to any of that?

**David JETTNER:** Yes. I agree, those are all valid items and definitely part of the financial modelling we do. I would add maybe a couple of components. The cost of construction is a substantial item. We heard potentially \$2 billion for another facility, and certainly that is in the realm of what we are talking about for our facility as well. So the construction cost is a critical item. In terms of the cash flows, probably the other item that is worth mentioning is the energy component. What we are trying to do here is provide a solution for society to deal with its waste at a higher order outcome than currently landfilling, and so there are costs associated with that but also revenue. Ultimately, these projects need to be viable to support their ongoing operations and so I would consider energy as a very important component, particularly for us at Merivale. We are looking to move away from the rising costs of fossil fuels, and this is a solution for us.

**The DEPUTY CHAIR:** In your submission you say that Victoria's policy settings constrain commercial viability. Which of those components then are the ones being constrained?

**David JETTNER:** Well, there are probably a few. I think the way that we go through the regulatory approvals process demands substantial investment up-front with no certainty of the outcome. We are talking typically multimillion-dollar expenditure for all of the analysis and to work through those processes. For facilities that ultimately do not get approved, and we are very fortunate that we have had strong community support and been able to work through that process, that can be a significant barrier to people putting forward solutions. There is a particular nuance as well with the Recycling Victoria regulatory process. They talk about the potential to charge fees, but that process has not identified what those fees could be. They could be small fees or they could be quite substantial fees. So if you are a developer, you look at that and go, 'Well, how much do I need to allocate to that because –

**The DEPUTY CHAIR:** That is not a happy investment environment, is it?

**David JETTNER:** That is right, yes. They are probably two examples.

**The DEPUTY CHAIR:** Thank you. If I may, for HiQ –

**Mark RODGERS:** Please.

**The DEPUTY CHAIR:** In your application – and you had to go through regulatory hoops with the EPA – I am curious to know what part of your company's historical performance was a consideration in that application?

**Mark RODGERS:** I would assume all of it.

**The DEPUTY CHAIR:** Your company has been subject to breaches in the past?

**Mark RODGERS:** Yes, it has.

**The DEPUTY CHAIR:** A number?

**Mark RODGERS:** It has.

**The DEPUTY CHAIR:** Did you have to put those forward, and were you questioned about those?

**Mark RODGERS:** No, we were not questioned. But we have a very open and frank dialogue with the EPA across our entire group, so I am sure that it is a well-known fact.

**The DEPUTY CHAIR:** Particularly given the sensitivity to the community, right, on these issues and in Sunbury in particular?

**Mark RODGERS:** I agree.

**The DEPUTY CHAIR:** Mr Short, I will come to you then on the point, because in your submission you say and a number of other industry members will say misinformation is a big problem. A first question to you is: what is the misinformation and who is spreading it?

**Andrew SHORT:** I think from my point of view, as I said it earlier, it is the use of words that is inflammatory and it exaggerates the situation. We deal with a hazardous waste. As I said, if it is deemed toxic, and that is the word used, that has a fear factor up here. If we use the word 'hazardous', the fear factor is down here. I come back to our UK –

**The DEPUTY CHAIR:** But is it inaccurate to say 'toxic'?

**Andrew SHORT:** I think it is inaccurate to say 'toxic'. It has a label within the regulatory regime as 'reportable priority waste – hazardous'.

**The DEPUTY CHAIR:** But the industry is making an effort to communicate that. I am sure in your public consultations you have all been at it and have gone to lengths –

**Andrew SHORT:** I was going to give you an example.

**The DEPUTY CHAIR:** Well, I am going to put something else to you in the time I have got available. I would be interested in your views. Are you conflating misinformation with reputation? It is not a question of whether you are putting out the correct facts and whether you are doing it; they do not trust you, because companies like HiQ, something that you yourself admit has a track record, are being given permits. Now, that is not an environment for creating high levels of trust. You could be giving very good information out and high-quality information out, but the fact that people are not accepting it is actually about a reputational risk that your industry has.

**Andrew SHORT:** I will address that by giving two examples in the UK. There is no difference in terms of social licence requirements and how you address communication with the residents locally and the wider community if it is done correctly. With one of our facilities, we went to the local community and said, 'We are going to be processing hazardous waste to create an aggregate.' Nobody wants a hazardous waste facility next to them. So we had two years build-up explaining what 'hazardous' means and what it is equivalent to. For example, APCr is very much like cement. Once you start explaining that and you are doing it up-front, people will accept it. We had local support. We had councils –

**The DEPUTY CHAIR:** In the case of your particular project, but we have got many projects now where there is resistance. I am a believer in the technology, but we have now got multiple cases of local resistance, despite the good information and despite the excellent consultation, as you said. What is the barrier to accepting that information?

**Andrew SHORT:** I think it is a difficult one to say, 'There's the solution.' The barrier is having that communication and having communication that is open and honest. I know HiQ have done it. They have gone to the shopping centre, opened up and said, 'This is what we're doing, and this is how we're doing it.' It comes down again to, again, to some degree, science versus emotion. We have our own human health and ecological risk assessments being undertaken. That is the science. You have got to have that presented in a way that the emotion comes down.

**The DEPUTY CHAIR:** Yes, and they trust the information coming.

**Andrew SHORT:** And they trust – yes.

**The DEPUTY CHAIR:** Okay. Thank you, gentlemen. Rachel.

**Rachel PAYNE:** Thank you, Deputy Chair. Hello. How are you? Thank you for presenting before us today. David, I have just got some questions for you. In particular, we heard from the South East Metropolitan Advanced Waste Processing consortium in previous hearings. The issue with obviously nine councils signing on is, for the consortium, the Hampton Park waste transfer station being found by the EPA – and that decision being upheld – not fit for purpose where it was proposed. Is there any concern around contracts falling over?

**David JETTNER:** I think that is a process that we are working through with that consortium. We do need to provide a solution where waste can be viably aggregated and transported to our facility, and we are actively working through that process at the moment. Our ongoing belief is that that will be successful and we will identify another solution within that broad south-eastern Melbourne region where there is some acceptance of the facility. Ultimately, there is substantial waste being generated across that region. It comes back to my original point: with the closure of Hallam Road landfill, we do need to find some solutions for that region. We remain optimistic. Yes, it definitely is a challenge, but we are committed to, intent on and hopeful of finding another solution.

**Rachel PAYNE:** Okay. Great. Also, in your presentation you referred to no impact on traffic. This is something I have asked lots of questions in Parliament to the minister around what particular routes were proposed for trucks to be moving waste from the transfer station through to Maryvale. I could not actually get a clear answer, because according to planning it was not actually finalised. With your statement around no impact to traffic, are you proposing, much like New South Wales do, that the transfer station may be accessible on a train line and that waste could be transferred on a train line, rather than by trucks going through several suburbs in the south-east to get to the facility?

**David JETTNER:** I might just pull that apart a little bit. For us, we actually have a freight train that runs between the Port of Melbourne and our facility six days a week, and so we would love to be able to utilise that logistics route. Unfortunately, the councils that we have secured contracts with do not have access into that facility, which is in Dynon Road. Our councils are in the south-eastern part of Melbourne, out through Gippsland, and so for them it does not make sense to take it back into the city to then ship it on rail freight out to the mill. We do have that solution available, but we just do not have any councils that can leverage that solution. In terms of the approvals, with our project in its planning process and the EPA approvals process, we had to talk about the freight and the logistics around our facility. Ultimately when we get to the specific transfer station locations – and there will be more than one – that piece of work needs to be conducted at that site. The work that I was referring to was the work that we did at the Maryvale facility, where we actually do have direct access onto the Monash highway. That required a traffic impact assessment and quite a lot of detailed work that went into it, and that was part of our application through that process.

**Rachel PAYNE:** I see. Thank you. I have quite a few technical questions around CO<sub>2</sub> data and emissions and the like, so I might actually submit them to you all on notice, because they are quite technical questions. But in particular – and this might be something that you all may want to reflect on, as you have all made reference to the UK and the regulations there – the UK regulators now require incinerators to report CO<sub>2</sub> data from continuous emissions monitoring systems. Will there be any commitment to make this information

publicly accessible around carbon emissions, the reporting of your facilities, so that Victorians can verify emissions rather than it just being periodically reported?

**David JETTNER:** Maybe I will start with that, given that we have got some existing licence approvals. Under our EPA licence we are required to report publicly around the emissions. Those emissions include a range of chemical constituents, including carbon monoxide and nitrous oxide. These are all considered pollutants, and they apply to the BREF 2019 standard, which Europe uses and which we have introduced in Victoria. So those things are required to be reported publicly under our licence. CO<sub>2</sub> itself, that specific molecule, is not actually captured as a pollutant in that space, so under the EPA's regulations and licensing to us it was not specifically captured. I am sure that the EPA will be thinking about how they do that, but it is not currently in the list. Things like carbon monoxide, nitrous oxide and sulphurous materials are all currently covered, just not specifically CO<sub>2</sub>. I do not see any barrier to reporting that. For us major facilities, we are actually required to report CO<sub>2</sub> under the NGER, the national greenhouse emissions reporting, standards. So it is a separate process run out by the federal government as opposed to the Victorian EPA.

**Rachel PAYNE:** Okay. Thank you. Just in relation to what is actually being incinerated, we understand that quite a large fraction of that red bin waste is soft plastics. We know that that does increase greenhouse gas emissions. How do we reconcile, for the advice back to the committee, such an increase in plastics and particularly soft plastics being referred to as 'red bin waste to incineration' with some of the emissions targets that are required? Can waste-to-energy then still be considered as a sustainable move forward?

**David JETTNER:** I think there are a couple of things going on there. The first I would like to record is that in Victoria we have had a failure around the diversion of soft plastics. We have been through that whole process, and I am sure you are familiar with that. And that ultimately became a viability issue where those processes started to lose money. So there are changes coming, and I would expect those changes to be implemented, and hopefully for Victoria we will see much more diversion of plastics out of the red bins, so that up-front avoidance is the key issue. In terms of greenhouse gas emissions for these facilities, we actually need to think a little bit wider than just what happens on that specific site, so we should think about the system impacts. What we are actually doing here is, instead of putting materials into landfill that produce methane, which contributes 28 times as much impact on climate change as straight CO<sub>2</sub>, we are taking that process and we are producing some emissions over at the EfW. We also need to account for things like logistics et cetera. So when we look at the whole system benefits we see a substantial reduction in greenhouse gases by taking it from landfill and putting it into an EfW, so it is a system-wide approach.

**Rachel PAYNE:** Thank you. Thanks for your time today.

**The DEPUTY CHAIR:** Thank you, Rachel. We will go to Mrs Deeming online now. Thank you.

**Moirá DEEMING:** So many of my questions were already answered throughout that process. One of the things that I would like to touch on with you all is the issue of social licence. Obviously we have been talking about issues surrounding information not being released. You seem to be fully in support of complete and utter transparency and yet also worried about misinformation. And obviously it is an election year and other things are playing into this whole entire situation. But in terms of HiQ in Sunbury, would you mind speaking to what the facts are when it comes to the nature and management of emissions waste and ash by-products, if you have any, and the impact on residential communities and transport infrastructure – so what the community is worried about. They are worried about all the trucks. They are worried about what is going to happen to their health. We have seen entire campaigns launched around this, parties being pressured to take a position one way or the other and, as has been covered, an incredible lack of trust from the locals. I am not blaming any companies in particular, but as a system-wide issue I think there is shared blame there when it comes to a lack of social licence and a lack of trust.

**Mark RODGERS:** Yes. Thank you, Moira. Maybe it is best to address that from a system-wide perspective first and foremost, because I think that we have been working quite hard on social licence issues as an industry. What I hear is much more work needs to be done. So first and foremost, I think we need to acknowledge those concerns are valid. Those concerns need to be addressed. Part of the system-wide process is that proponents need to put forward detailed and thorough assessment of traffic, noise, human health and emissions. That data needs to be provided to the EPA, and that data will be prosecuted against relevant standards that the EPA determines. That, for me, is a process that needs to be made transparent to the community so factual dialogue

can be had and we can, as you said, Richard, continue to rebuild that trust, because this requires a trusting environment, and if we hear that community does not have that trust, it is contingent on us to build that. But when I say 'us', from a system perspective that is also the regulator. We the proponents have to do work, but the regulator also has to do work. We as proponents will be led by the regulator. Any industry should be led by its regulator. I think we can all agree that we do not want unregulated waste industries. We want a strong regulator to address these social concerns standing beside us. So Moira, I am in complete agreement with your comments.

**Moira DEEMING:** I am not sure if you are aware that in terms of sharing the blame, there have been VAGO reports talking about EPA failures and pressure from the government on the EPA basically to act politically rather than in the interests of the environment and all their other responsibilities. So I do think there is lots that can be improved.

**Mark RODGERS:** And sorry to jump in, Moira. I am certainly not blaming the EPA for where we are. I am just acknowledging more work needs to be done.

**Moira DEEMING:** I think the EPA has a bit to answer for. That was more of a statement. No worries. The other thing I wanted to just ask you – I am hearing this comparison between emissions and dealing with waste from landfill versus waste-to-energy – everyone seems to be trying to constrict waste-to-energy, but our only other viable option at the moment is landfill; is that correct? What are the other technologies in the middle, and how close are they? Like, if we are thinking of this as a transition or something that is going to be built into the system, as we have a population that grows, we cannot just stop using things and we cannot get rid of chemicals, so what does that middle ground look like in your industry?

**Mark RODGERS:** That middle ground is inappropriate to be used at an infrastructure scale. If I refer back to my initial comment, Moira, 9 million tonnes of residual waste is an infrastructure-scale problem. So for it to be managed efficiently, safely and economically, it needs to be at an infrastructure scale because waste is coming to the industry at an infrastructure scale. Energy-from-waste is best placed to address that today. I think Gayle Sloan mentioned it earlier this morning. There is no scorched earth solution here where we just start again. We need to fly the plane and build it at the same time, and energy-from-waste is a very good way for us to start doing that.

**Moira DEEMING:** In terms of emissions and contamination, can you compare the two for us – landfill and waste-to-energy?

**Mark RODGERS:** Moira, if that is okay, I am happy to share that particular data because I would hate to give you misleading stats. We have it and can share that, but is it okay if I take that on notice and come back?

**Moira DEEMING:** Yes. But in general, would you say that even on those measures waste-to-energy ends up being cleaner and safer?

**Mark RODGERS:** Yes, it does.

**Moira DEEMING:** Thank you.

**The DEPUTY CHAIR:** Thank you, Mrs Deeming. Mr Ettershank, I think you had one more question.

**David ETTERS HANK:** I have got a couple of questions, Chair, if that is doable. Could I ask HiQ, Mark: the precinct plan for your area has a new town centre on your boundary and housing wrapping around at least two sides.

**Mark RODGERS:** Correct.

**David ETTERS HANK:** How do you deal with that? I guess the other question is: did you object to that precinct plan?

**Lance INGRAMS:** No.

**Mark RODGERS:** No, we did not object to that precinct plan. I think the underlying fact is, David, that we have an existing operational waste facility there today, so that interrelationship is a reality that we are going to

work through and with. Having an energy-from-waste plant there, for me, does not change the overall aspect of what we are trying to propose in our precinct solution. It is that there needs to be a co-location of these assets to make a whole-of-waste solution viable. With or without an energy-from-waste plant, that waste precinct will continue to be there for many years to come, so it is a reality we are trying to work through with the community.

**David ETTERS SHANK:** Okay. Thank you. David, could I ask you: in terms of the existing licence you have, I think from 24 March, there were conditions applied by the EPA. Did that include compliance with the BAT or BREF standards from the EU?

**David JETTNER:** Yes.

**David ETTERS SHANK:** It does?

**David JETTNER:** Yes, and in fact in our process when the standards were updated, it specifically called out that we would need to apply the updated standards.

**David ETTERS SHANK:** Okay. That was also 2024, wasn't it? I think that was the last lot of new standards on BAT.

**David JETTNER:** Yes. We have had a few amendments through the process. The 2019 standards were a process worked through Europe, and they then came into force later on, so maybe 2024, I think. But they originally started being developed in Europe in 2019, so they refer to them as the BREF 2019.

**David ETTERS SHANK:** All right. Can I just ask in terms of the standards – if you look on the EPA register, it is pretty patchy as to what conditions were applied – I am wondering if you can provide the committee with an overview of what environmental conditions were applied to your licence. I am happy for you to take that on notice.

**David JETTNER:** Yes. At a high level, the EPA requires us to manage emissions to air, water and land. Our licence addresses all of those items. It sets standards relevant to the stack emissions, which is where the BREF standards apply. It also required us to do extensive modelling about air emissions and in relation to those emissions when they get down to ground-level concentration. So Victoria has a two-system approach. The first is what is the impact on the community – which is more about ground-level emissions – and what is the impact out of the stack, which is based on the BREF standard. So, happy to provide more detail, but in general it is those three aspects: air, water and land.

**David ETTERS SHANK:** I think the devil would be in the detail, so if you could provide us with a comprehensive response, that would be fabulous. Thank you, Deputy Chair.

**The DEPUTY CHAIR:** Thank you, Mr Ettershank. Ms Payne.

**Rachel PAYNE:** Thank you. I have a question in regard to financial support. In particular one of the recommendations made in your submission, David, from Opal, was that financial support be provided via the landfill levy revenues and Victoria's Sustainability Fund. The EPA collects that revenue – is that correct? My understanding is that revenue is collected by the EPA.

**David JETTNER:** I would have to take that on notice. I know that the Treasury department sets the amount of the levy. It is collected and the funds go into the Sustainability Fund.

**Rachel PAYNE:** Yes, and councils pay into that or the commercial operators pay into that. Obviously the cost is then transferred off to us as residents or ratepayers. I am just trying to reconcile: waste-to-energy or waste management more broadly is a highly lucrative business. Where you are asking essentially for taxpayer funds to be appropriated into investment by the regulator, I think there might be a conflict there. That would be my concern.

**David JETTNER:** Perhaps I can share a little bit more context around that. The landfill levy is collected in Victoria and put into the Sustainability Fund. The goal of that is to actually drive better waste management solutions. In a situation where we are sending 5.5 million tonnes, I think it was, of MSW into landfill, we have got here a situation where landfill at the bottom of the waste hierarchy is the worst order outcome. We are

trying to develop the next step up, which is energy from waste. We have none operating in Victoria. We have a number of hurdles to overcome. I think that the reapplication of some of the Sustainability Fund to help establish best practice energy-from-waste facilities in Victoria so that we can all go and actually see them would be a good investment for the state. In particular I would like to mention that councils often say that to us. They say, 'We're paying this for our residents and that money's being collected. We actually would like to see some of it come back and be invested into these higher order solutions.'

**Rachel PAYNE:** Okay. Thank you. Thank you, Deputy Chair.

**The DEPUTY CHAIR:** Thank you. Dr Mansfield, do you have any other questions? No. I will sneak in one last one then to you, Mark. I think there is a wide consensus about the importance of this being a solution and an alternative to landfill, but the regulatory framework, or whatever the strategic framework is, I do not think is working smoothly. We are not getting a rapid transition. In fact we are getting resistance across the board. What should the frameworks be doing differently? You can be as broad or as precise as you want in terms of EPA or the laws or contradictory messaging from the government et cetera.

**Mark RODGERS:** I think from a very simplistic point of view, and if I talk about a system-wide approach, the regulator needs to have consistent, frank dialogue with the community and with proponents like us. We need to be sharing the same information and we need to be singing from the same hymn sheet. I think fundamentally that is the starting place of any new industry, and I think that is where we need to continue to focus. This conversation is good, but I think we need to continue having more dialogue, and the regulator needs to lead that.

**The DEPUTY CHAIR:** Would you agree with my earlier characterisation that it is as much about trust as it is about information?

**Mark RODGERS:** Correct. I do agree.

**The DEPUTY CHAIR:** How would you remedy that?

**Mark RODGERS:** Trust is built by open and frank communication – acknowledging when things are working, acknowledging when things are wrong. Communication is the baseline for this industry.

**The DEPUTY CHAIR:** Have we got time for one more?

**David ETTERSHANK:** If we have still got a couple of minutes.

**The DEPUTY CHAIR:** Yes, go for it.

**David ETTERSHANK:** Thank you. I was fascinated by your suggestion that this was a bit like needing to build a plane while flying it.

**Mark RODGERS:** I think that was Gayle Sloan's comment that I was just reiterating – it is a good one.

**David ETTERSHANK:** Okay. Well, you say it, you own it in this place, irrespective of attribution. I guess where there is clearly so much concern, and I am not arguing against the problem, about these technologies, is that really a good analogy to say, 'We're flying; we're going to have to do it anyway,' as opposed to perhaps stepping back, because quite clearly multiple proponents have come forward both from industry and others who are saying there are gaps in the regulation, there are gaps in the communications, there are gaps in the infrastructure, there is dissatisfaction with levies and clearly there are major problems at the local government level in terms of being able to segregate waste and whatever. With all of those things, is the alternative not so much to try and build a plane while you are at 10,000 metres but perhaps to step back, actually take a considered view and look at how you get those things right first?

**Mark RODGERS:** That comment was not in relation to energy from waste, that comment was in relation to the broad residual issue we have. We are continuing to make waste today, and that is the continuing of flying the plane. It is not to do with energy from waste. We need to, while we continue to create waste, in parallel find new solutions. That analogy was misconstrued. That is in relation to a systemwide issue of us as consumers, us as society, continuing to make more waste every day. That is the fundamental issue we are trying to address

here. Energy from waste is proven. It is not a test, it is proven. I agree that we need to work to build more trust and transparency around it, but this is not a test. This is applying viable, tested technology here in Victoria.

**David ETTERSHANK:** Yes, but it is obviously contested fairly extensively, and I am wondering as an industry how you try and fill that gap. I know others have spoken about this, but clearly there are deep concerns within the community. We have the industry itself pointing to a whole lot of deficiencies in the system, in the infrastructure and whatever else, and you do in your own submission point out some issues around regulatory problems and suchlike. I guess the question becomes one of: should we as a committee be looking at going, 'Here's hoping,' or should we be saying, 'No, we need to step back and we need to address these concerns,' both of the public and of the industry as to what is not in place now?

**Mark RODGERS:** Nothing should be done on hope. It should be done on facts, and I believe that is the process we are going through. In fairness to the Victorian government, this is the process we are going through. We are refining the concerns. We are building facts to articulate the issues in more granular detail. I think these two gentlemen did an excellent job of articulating that at a granular level, so there is no hoping here. We have a long journey ahead of us in terms of getting these developments out of the ground, and we need to ground-truth all these topics as we go through the development journey. We are not about to start building one until all this is clarified, so it is important to understand that from my perspective this is a great discussion. If we were not having this discussion, that would be the problem. We need to make sure that these conversations are had frequently and that the data tells the story. What does the science say? We have international expertise to rely on. We have submissions that we have put to the regulator. They should start to inform the conversation moving forward. I think this is exactly what we need to be doing, and I am not upset about the framework. I think that we just need to continue walking through it with community and regulators together.

**David ETTERSHANK:** Thank you, Deputy Chair.

**The DEPUTY CHAIR:** Thank you, Mr Ettershank. I think that is a good spot to stop. I thank all the witnesses for coming in today, and we will conclude there.

**Witnesses withdrew.**