

Frequently Asked Questions

Why are we talking about a Waste to Energy incinerator at Casino when the General Manager of Richmond Valley Council has said that there is no proposal before the Council? Shouldn't we wait until there is?

Definitely not! Whilst the General Manager may be technically correct in that there has not been a potential business selected to install the incinerator or a Development Application lodged before it, don't think that the Council isn't doing anything about it, because:

1. There is an established Regional Waste Management Committee with 13 Councils from Central Coast to the Queensland border involved which has been investigating options for waste management into the future for several years. Unfortunately, that Committee appears to have only considered Waste to Energy Incineration rather than the far safer and more sustainable options that could have been considered. More on these later.
2. In 2019 seven Richmond Valley Councillors and staff went to Japan, funded by the Japanese Government, to explore Waste to Energy facilities in Japan, as reported in their briefing to the Council at the Council's March 2019 meeting and also to the Regional Waste Management Committee.
3. Behind the scenes, as contained in a variety of documents, the Council has been consulting with various State Government Departments on a range of issues including the required planning issues that have to be explored before a tender is advertised for a Waste to Energy incinerator located at Casino in the Regional Jobs Precinct.
4. The Regional Jobs Precinct Management Plan will be released fairly soon - maybe in August 2023 - and this will include the Waste to Energy incinerator unless something changes. This will probably be the first opportunity residents of those Councils supporting the incinerator will have to express their opinions on such an important matter.
5. **Now is the time** to educate yourself about this issue, let others in your communities know about it and let your elected Councillors know how you feel about it. The time to make submissions will be limited, and whilst we will help you in many ways, you'll help us by being well-prepared, firstly by reading the rest of these FAQs and checking out other documents we'll be adding progressively to our website and FB pages.

Aren't waste-to-energy (WTE) incinerators a sustainable idea? Won't it reduce carbon emissions?

Unfortunately, no! Waste incinerators emit more ghg's than coal, oil and gas per unit of energy produced.¹ This makes waste incineration as an industry sector one of the most climate polluting technologies globally. This is the reason the European Commission removed all renewable energy subsidies for waste incinerators as the sector not only threatens our climate, but is also a major

¹ U.S. EPA eGRID 2012 Database. Analysis by Energy Justice Network. www.EnergyJustice.net

impediment to progressing a circular economy². In addition, waste incinerators *emit* large volumes of toxic air pollutants such as acid gases, fine particulates and persistent organic pollutants.³

Waste incinerators rely on the high calorific value of plastic to create energy. Plastic is a fossil fuel, so in effect waste incinerators are merely using a dirty fuel in the form of waste plastic to create small amounts of energy. Australia now has a national policy for the separate collection and treatment of Food and Green Organic waste otherwise known as FOGO programmes. Composting organic waste is a far more climate friendly approach to managing this waste stream than burning it. Creating compost from our organic waste allows this carbon rich compost to sequester carbon back into our biosphere where it is desperately needed as opposed to burning it and releasing it into our atmosphere forever as carbon emissions.⁴ In addition, reusing and recycling waste materials as recovered resources saves much more energy than what can be created by burning these finite resources (glass, cardboard, metals and plastics) in waste incinerators.⁵ Recycling also creates many more jobs than waste incineration.⁶

A sustainable circular economy focuses on designing out waste and creating products that can become a new product at the end of its lifespan. Reducing raw materials extraction through reuse and recycling schemes provides a backbone for the Circular Economy. NSW is currently introducing circular economy principles.⁷

But what about air quality? It's said that an incinerator will operate to the world's most stringent air quality standards. Surely nothing toxic will be emitted, right?

Wrong. All incinerators emit toxic air pollutants and fine particulate matter into the atmosphere in amounts that are recognised as hazardous to human health. For example, dioxins are recognised by the World Health Organisation (WHO) as 'highly toxic to humans, and the cause of reproductive and developmental problems, immune system damage, hormone interference, and cancer. The WHO advises that the only safe way to manage dioxins is to eliminate them from our environment and prevent them from infiltrating our food chain. An incinerator will emit dioxins every time it burns plastic, which is a main source of incinerator fuel. There is no continuous emissions monitoring requirement for dioxins, and waste-to-energy incinerator planning demonstrates that the amount of dioxin production and leachate into surrounding areas is hugely underestimated.⁸

² EU Technical Expert Group on Sustainable Finance: *Taxonomy: Final report of the Technical Expert Group on Sustainable Finance*, March 2020.

³ USEPA (2005) The Inventory of Sources and Environmental Releases of Dioxin-Like compounds in the United States: The Year 2000 Update. March 2005 External Review Draft.

⁴ Morris, J. (2008) Recycling and Composting Saves Money, Energy & Pollution Compared to Disposal Via Waste-to-Energy (WTE) Conversion. Montreal Video Conference - October 21, 2008.

⁵ Energy Comparison: Recycling versus Incineration (ICF Consulting, 2005)

⁶ More Jobs, Less Pollution: Growing the Recycling Economy in the U.S. Prepared by: Tellus Institute with Sound Resource Management 2011; More jobs, less waste. Potential for job creation through higher rates of recycling in the UK and EU. Friends of the Earth UK, September 2010

⁷ <https://www.epa.nsw.gov.au/your-environment/recycling-and-reuse/response-to-china-national-sword/circular-economy-policy>

⁸ ToxicoWatch, *Hidden Emissions: A Story from the Netherlands*, Zero Waste Europe 2018.

Waste incinerator air pollution containing persistent organic pollutants such as Dioxin, can travel long distances (at least 10km) and remain in the environment bio-accumulating up the food chain. This is a major risk to the cattle and food growing businesses in the Northern Rivers Region.⁹ Biomonitoring around waste incinerators in the Netherlands at plants that already operate to internationally recognised *Best Practice Operating Standards*, have demonstrated that dioxins are found in eggs, grass, moss and the general environment at levels harmful to human health.¹⁰

Below is a list of some of the air pollutants that will be emitted into the air should an incinerator be built in the Casino area. Many of these air pollutants are dangerous to human health in minuscule amounts. Nano-particles are not effectively captured by any waste incinerator air pollution control systems (APC) travelling long distances by air and penetrating deep into our lungs. In addition, incinerators are known to emit PFAS¹¹ and microplastics¹² which are highly hazardous and harmful to human health and the environment.

- Nitrogen oxides (NOx)
- acid gases (HCl, HF, SO₂)
- particulate matter (TSP, PM₁₀, PM_{2.5} and nano-particles including neurotoxic metals, PCBs, dioxins, furans)
- Carbon Monoxide (CO)
- Cadmium
- volatile organic compounds
- Sulfur Dioxide (SO₂)
- volatile metals (As, Sb, Co, Cr, Cu, Pb, Mn, Ni, V)
- Mercury
- polycyclic aromatic hydrocarbons (PAHs)

⁹ IPEN, *Toxic Ash Poisons our Food Chain*, Jindrich Petrlík and Lee Bell, 2017.

¹⁰ ToxicWatch, *The True Toxic Toll - Biomonitoring research on dioxins (PCDD/F and DL-PCB), PFAS and PAH in relation to waste incineration in Kaunas, Madrid and Pilsen*, Zero Waste Europe, 2022.

11. Johan Strandberg, Raed Awad, Damien Johann Bolinius, Jing-Jing Yang, Jasmin Sandberg, Musbau Adeoye Bello, Laura Gobelius, Liselott Egelrud, Eva-Lena Harnwall, *PFAS in waste residuals from Swedish incineration plants, a systemic investigation*, IVL Swedish Environmental Institute, 2021.

¹² **Journal of Hazardous Materials**, Volume 401, 5 January 2021, 123429, Zhan Yanga,c, Fan L0a,b,c, Hua Zhanga,b,c, Wei Wanga,b, Liming, Shaoc, Jianfeng Yed, Pinjing Hea, *Is incineration the terminator of plastics and microplastics?*, 2020.

But wouldn't the Richmond Valley Council and the NSW Government examine a proposal and make sure it was safe before allowing it to be built?

Yes and no. Both the Council and the government would look at a proposal and consider community submissions. Such proposals would be subject to a NSW EPA Environmental Impact Assessment BUT the NSW Government and the NSW EPA both report that there are significant health risks associated with living near an incinerator **AND** that agriculture should not be conducted near an incinerator.¹³ As many residents of Casino and surrounding areas rely on tank water, toxic particulate matter entering water tanks and waterways would accelerate the health risks associated with an incinerator. It would also be absorbed in the region's agricultural production as dams and waterways are used to irrigate crops and water livestock, and as the land itself is cropped. Toxic matter could enter the food chain in this way and be spread to wider regions as farmers sell their products to supermarkets and produce suppliers.¹⁴

Why would the Councils and the State government allow this when it's not safe?

With landfill sites in Sydney and many of the local government areas supporting this Casino incinerator set to reach capacity over the next 10 years, Councils and the State Government are looking for a quick and easy way to fix waste problems (see below for the list of supporting Councils). There are much smaller populations in regional areas where incinerators have been proposed, and as far as the State Government is concerned, far fewer people who might oppose a plan for a waste incinerator, which makes it an easier option. The NSW Government determined that a waste-to-energy incinerator was not permissible in Western Sydney because of the risk to human health.¹⁵

- Ballina
- Byron
- Clarence Valley
- Coffs Harbour
- Kempsey
- Kyogle
- Lismore
- Richmond Valley
- Tweed

We're all human - so what's not safe for Sydney, isn't safe for anybody in NSW, and it's especially not safe for our homes, families, farms and businesses.

¹³ Aust NZJ Public Health. 2020; 44:40-8; doi: 10.1111/1753-6405.12939, Australian National University Medical School, Australian Capital Territory, Public Health Association of Australia, Australian Capital Territory, Council of Academic Public Health Institutions Australasia, Australian Capital Territory, *The health impacts of waste incineration: a systematic review*, 2020.

¹⁴ ToxicWatch, *The True Toxic Toll - Biomonitoring research on dioxins (PCDD/F and DL-PCB), PFAS and PAH in relation to waste incineration in Kaunas, Madrid and Pilsen*, Zero Waste Europe, 2022.

¹⁵ <https://www.epa.nsw.gov.au/publications/waste/energy-from-waste-infrastructure-plan>

It's said that incinerators would generate hundreds of jobs for our region. Isn't that important?

Yes and no

Jobs are always important in any Regional area, and Richmond Valley Council argues that the incinerator would generate many jobs when the incinerator is operational. But most of those jobs would be in temporary construction roles during the two years that it would take to construct the incinerator. Even if many jobs are created, local communities would risk losing far more if the incinerator were to be built.¹⁶

Case study of potential losses caused by a Waste to Energy incinerator

When Farmer Sam and his wife Sue and their three kids are no longer able to work on their farm because the government says it's too close to the incinerator for safety, they have to move. That means the 5 other farmhands also lose their jobs. Mike's produce store supplied Sam with feed, equipment and supplies and he now has to lay off staff. Sue ran a farm-stay program on the farm, and Betty's business provided food and wine packages. Amanda and Tim cleaned the accommodation, Kylie did transport and tours to local attractions, and Tim ran a shop in the village that sold to the tourists. Fred and George ran the local pub and referred people to Sue for accommodation for special events.

All of their businesses are affected and staffing cuts are made. People now start moving away from Casino to find work. The number of kids at the local schools drops, so teacher and support staff jobs get cut. The local cafe can't make ends meet because people in town don't have money to spend and tourists don't want to visit a town with a toxic incinerator.

This is a simplified story to demonstrate the type of flow-on effects we can predict if the incinerator is built in Casino. It will impact everyone in town and the flow-on effects will be felt throughout the entire region and beyond.

¹⁶ <https://www.no-burn.org/zerowastejobs/>