



16 November 2020

SUBMISSION RE WESTERN SYDNEY ENERGY AND RESOURCE RECOVERY CENTRE

Infrastructure Partnerships Australia welcomes the opportunity to make this submission in response to the Development Application for the Western Sydney Energy and Resource Centre (SSD-10395).

Infrastructure Partnerships Australia is the nation's infrastructure think tank, providing independent policy research focused on excellence in social and economic infrastructure.

Energy from Waste can and should play a greater role in addressing Australia's waste challenges

Infrastructure Partnerships Australia is a strong advocate for establishing a role for Energy from Waste (EfW) as part of the solution to Australia's growing waste challenges.

In July of this year, Infrastructure Partnerships Australia released research to guide the development of EfW in Australia. The report, *Putting waste to work: Developing a role for Energy From Waste*, highlights the crisis in waste management in Australia, caused by a combination of policy, planning and economic factors. This is exacerbated in fast-growing areas, such as Western Sydney, where the default solution of sending all red-bin, residual waste to landfill is no longer environmentally appropriate or economically sustainable.

Appetite among community and industry stakeholders to reform the waste sector is growing in response to decreasing tolerance for landfill. As a nation, we need to reconsider how we generate and use waste.

Waste should be treated as a valuable resource that can be put to further use. EfW is not a form of waste disposal, but an opportunity to extract value from waste through energy recovery.

As the report shows, EfW is a missing piece of the waste management puzzle in Australia. Australia lags many parts of the world in its integration of EfW as part of the waste management hierarchy, and as an effective means of diverting residual waste from landfill. The report includes case studies on facilities such as the Copenhill in Denmark, which illustrates the potential for safely integrating facilities within urban centres and supporting a transition to a sustainable waste management system, which is aligned circular economy principles.

The report also provides a series of recommendations required to support the roll out of energy recovery facilities and systems and unlock greater private investment and innovation in EfW. This report is **attached** to this submission.

Emissions are an important consideration, but we can leverage progress in the EU

Emissions standards are a key component of the regulatory framework for EfW facilities. In the European Union, there are currently over 450 EfW facilities in operation, and emissions are tightly regulated through the EU Industrial Emissions Directive (IED).

Research by the World Energy Council found that combustion facilities are not a significant source of



emissions where the IED has been applied, with dioxin emissions reduced by 99.9 per cent. Noting that Victoria and Western Australia have already implemented the EU standards, adoption across all states and territories should be applied through nationally consistent regulation.

Adopting EU emissions standards for Energy from Waste will provide transparent regulatory settings which can help to establish safeguards concerning the environmental and health impacts of EfW facilities. Management of emissions from EfW facilities is closely tied to their social licence to operate.

Research undertaken for Infrastructure Partnerships Australia has shown that, with the right incentives in place to level the playing field between landfill and resource recovery, EfW could divert 13.7 million tonnes of waste from landfill each year in Australia by 2030. This has the potential to reduce emissions by up to 5.2 million tonnes of CO₂-e each year, which is the equivalent amount of emissions produced from 1.14 million cars each year.

The NSW Government should continue its push towards a circular economy

Over recent years, it has been encouraging to see Australia's governments initiate steps to incorporate EfW within waste strategies and take active steps to support investment in EfW facilities.

In New South Wales, the Issues Paper *Cleaning Up Our Act: The Future for Waste and Resource Recovery in NSW Issues Paper*, released in March of this year, provided some encouraging signals for support of EfW, which the industry expects will be built upon through the final *20-Year Waste Strategy*. The NSW Government's support of EfW as a key component of the Parkes Special Activation Precinct has also provided much-needed direction and transparency – key ingredients of the social licence required to support EfW developments.

NSW Government planning support for EfW, including this project and other proposals, would provide an important continuation of the government's push to circular economy principles.

Thank you for your consideration of this submission. Should you require further information please contact Mr Jon Frazer, Director of Policy and Research on (02) 9152 6017 or jon.frazer@infrastructure.org.au.



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Attachment: Putting waste to work: Developing a role for Energy From Waste