## Glossary

## Glossary

Glossary	Definition
Baseload energy	A continuous, stable demand on an electrical grid or continuous, stable operation of a power plant over a span of time.
Best Available Techniques Reference Document	European Commission, Best Available Techniques (BAT) Reference Document for Waste Incineration adopted under both the European Integrated Pollution Prevention and Control (IPPC) Directive (2008/1EC) and the Industrial Emissions Directive (IED 2010/75/EU) to guide the development of industrial facilities covered by the Industrial Emissions Directive (IED) in the European Union (EU).
	The BAT reference document (BREF) informs the relevant decision makers about what may be technically and economically available to industry in order to improve environmental performance. The latest version published in December 2019 has been used.
Boiler fly ash	Ash from boiler hoppers. Fine granular material; typically, agglomerations of particles.
Calorific value	The energy contained in a fuel, determined by measuring the heat produced by the complete combustion of a specified quantity of the fuel.
Commercial and industrial (C&I) waste	Solid waste (putrescible and non-putrescible) generated by businesses, industries (including shopping centres, restaurants and offices) and institutions (such as schools, hospitals and government offices).
Community Reference Group	A Community Reference Group (CRG) will be established during construction and function across the life of the proposal. The purpose of the CRG will be to facilitate long-term relationships with the community, providing a forum for genuine discussion of construction and operation of the facility, community concerns, information requests, and local initiatives and partnerships. In addition to general CRG duties, it is anticipated that the CRG will also manage the allocation of the community funding package in line with an agreed governance framework. The CRG will be made up of community representatives, local stakeholders and council representatives, and meetings will be facilitated independently. It is likely that this group will be refreshed every two years to ensure that a variety of community and other stakeholders are given the opportunity to participate.
Detailed Design	This proposal has commented in places that future work will be done during detailed design. Detailed design will be conducted by the chosen contractor and adds the relevant engineering detail that cannot be finalised at this stage of the proposal. The detailed design will and must adhere to the principles set forth in this EIS, so the detailed design process cannot and will not change the conclusions reached in this EIS.
Eligible waste fuels	Waste or waste-derived materials considered by the Environmental Protection Authority (EPA) to pose a low risk of harm to the environment and human health due to their origin, low levels of contaminants and consistency over time.
Energy from waste (EfW)	The process of generating energy in the form of electricity and/or heat from the treatment or processing of waste into a fuel source. EfW is a form of resource recovery.

Arup Page xlvi

Glossary	Definition
Energy Recovery Facility	Defined in the NSW Energy from Waste Policy Statement as: 'a facility that thermally treats a waste or waste-derived material that does not meet the definition of an eligible waste fuel.' These facilities must be able to demonstrate that they will be using current international best practice techniques.
Flue gas	Flue gas (sometimes called exhaust gas or stack gas) is the gas that emanates from combustion plants and which contains the reaction products of fuel and combustion air and residual substances.
Flue gas treatment residues (FGTr)	A fine-grained powder known as one of the residual products from EfW facilities.
	Flue gas treatment is one of the main steps in the EfW process.  The cooled flue gases leaving the boiler pass through a series of scrubbing and cleaning processes, which comprise the Flue Gas  Treatment (FGT) system and are designed to meet best available technology emissions standards. The FGT system produces FGTr at the end of this process which is formed of a mixture of entrained ash and spent treatment consumables (lime and activated carbon).
Incinerator Bottom Ash (IBA)	Ash from the end of the grate and from the incombustible siftings that pass through the gate. Granular material; typically contains glass, ceramics, silicates, rocks, masonry products and carbon/organics. Typically contains some ferrous and non-ferrous metals, which can be extracted for recycling.
Industrial Emissions Directive	European Parliament and Council, Directive 2010/75/EU of the European Parliament and of the Council of 24 November 2010 on industrial emissions (integrated pollution prevention and control). The Industrial Emissions Directive is a European Union Directive which commits European Union member states to control and reduce the impact of industrial emissions on the environment.
Metropolitan Levy Area	Metropolitan Levy Area comprises the Sydney metropolitan area, the Illawarra region and Hunter region.
Minister	Minister for Planning and Public Spaces.
Moving grate	Moving grate is a common form of EfW combustion technology where the waste is fed through the combustion chamber by a travelling grate. The main function of the moving grate is the controlled transport of the waste through the combustion chamber to ensure efficient combustion of the waste at the optimum rate of combustion.
Municipal Solid Waste (MSW)	Solid waste (putrescible and non-putrescible) from households and local government operations, including waste placed at the kerbside for local council collection and waste collected by councils from municipal parks and gardens, street sweepings and public council bins.
Putrescible waste	Solid waste that contains organic material capable of being decomposed by micro-organisms and cause odours.

Arup Page xlvii

Glossary	Definition
Renewable energy	Energy collected from naturally replenishing resources such as sunlight, wind, rain, tides, waves, and geothermal heat.  Under the Small-scale Renewable Energy Scheme, eligible small-scale renewable energy systems may be entitled to small-scale technology certificates, which can be sold to recoup a portion of the cost of purchasing and installing the system. Small-scale renewable systems which may be eligible for certificates include:  Solar photovoltaic (PV) panels  Wind turbines  Hydro systems  Solar water heaters, and  Air source heat pumps.
Residual C&I	Waste that is left over following the recycling and recovery of resources from the C&I waste stream. Residual C&I is a feedstock for the EfW facility.
Residual MSW	Waste that is left over following the recycling and recovery of resources from the MSW waste stream. Residual MSW is a feedstock for the EfW facility.
Secretary's Environmental Assessment Requirements (SEARs)	The issues to be discussed and the information to be provided in an EIS. SEARs are prepared by the Planning Secretary in consultation with public authorities.
Selective Non- Catalytic Reduction (SNCR)	SNCR is a method to reduce nitrogen oxide emissions in the combustion process. It involves injecting either ammonia or urea into the boiler to react with the nitrogen oxides formed in the combustion process.
Source separated collections	Source separation involves separating waste into common material streams or categories for separate collection.
The proposal	The Western Sydney Energy & Resource Recovery Centre

Arup Page xlviii