Chapter 6

Engagement

6 Engagement

One of the objectives of this proposal is to:

'Build trust with the community through ongoing engagement in the planning, design, construction and operation of the EfW facility.'

As a result, the development of the WSERRC proposal has been informed by a comprehensive approach to community and stakeholder engagement based on a commitment to building long-term and respectful relationships.

If the proposal is approved, engagement will continue throughout construction and the operational life of the proposal. The visitor and education centre will play a vital role in offering information on the role of EfW in managing waste as part of an integrated waste management strategy.

This chapter summarises the community and stakeholder engagement that has been conducted to date. The Community and Stakeholder Engagement Report is included as **Appendix F**.

This chapter includes:

- A summary of the community and stakeholder engagement strategy
- A description of the form of engagement activities conducted to date
- A summary of the issues raised in the engagement, and how and where in the EIS they have been discussed
- Details of the proposed approach to future community and stakeholder engagement.

6.1 Community and stakeholder engagement strategy

6.1.1 Engagement approach

The approach to community and stakeholder engagement included the following:

- Early community research and consultation to identify issues of interest to the community and stakeholders and preferences for how they wish to be engaged, including the types of information which they find credible and trustworthy
- Applying the International Association of Public Participation (IAP2) framework
- Developing clear objectives to underpin the community and stakeholder engagement strategy
- Decide on key stakeholder groups to engage with
- Mapping the communications and engagement process.

6.1.2 Community research and consultation

Both qualitative and quantitative research was undertaken to gauge the community's understanding and perception of waste management and EfW technology generally and more specifically an EfW facility in Western Sydney. This research also sought to understand the community's communication preferences which shaped the community and stakeholder engagement strategy used in the EIS process.

The qualitative research found that the community:

- Generally, has a low level of awareness and understanding about waste management processes and issues
- Had an initial positive response to the idea of EfW as a waste management solution. However, questions were raised about potential impacts to the community.
- Had concerns that EfW would cause negative impacts such as: health, emissions and odour, traffic congestion, affecting property values, impacting recycling habits, and increasing council rates. When given examples of welldesigned EfW facilities in Europe, this softened the assumption that these facilities would have negative health and environment risks.
- Recognised the benefits of EfW, including local jobs, energy production, proven approach in other cities and countries, and an alternative to landfill.

 Found trustworthy sources of information to come from: testimonies of communities living near EfW facilities, scientific bodies (like CSIRO), universities, the EPA, international experts, those currently running similar EfW facilities, and health experts (NSW Department of Health and Westmead Hospital).

The quantitative research found that:

- The level of information offered to the community increased their acceptance of an EfW facility.
- There is a need to build education and awareness of EfW and its benefits in response to a low level of understanding among research participants.
- There is strong support for recycling.
- Credible communication about health and safety is critical.
- Images and videos help with communicating complex projects.
- There is a relatively high demand for engagement in relation to an EfW proposal.

In response to questions about engagement preferences, the research found that most respondents would like to be informed about plans for any local EfW facility and with a preference for engagement that offers:

- Representative community engagement with options for different engagement tools (in person, online surveys)
- Readily accessible, clear information without jargon
- Absolute transparency.

6.1.3 International Association of Public Participation

The International Association of Public Participation (IAP2) gives guidance on good practice for community and stakeholder engagement and public participation. The IAP2 is a generally accepted methodology and used by local and state government and Australian Government agencies. IAP2 conducts nationwide training for engagement, including Government staff, on a regular basis.

One of the tools used by practitioners is called the 'public participation spectrum', which is designed to help inform selection of the level of participation for any community engagement program (see **Table 6.1**). The different levels of participation categorised in the spectrum are inform, consult, collaborate, involve and empower.

The engagement level for this proposal is 'consult', which is defined in the spectrum as 'to obtain public feedback on analysis, alternatives and/or decisions.' This level of engagement involves meaningful and informed discussions with local residents, businesses and Government agencies. In a complex, highly engineered proposal, which relies on scientific and technical evidence to commit to global best practice, 'consult' is seen as an appropriate level of engagement.

INFORM	CONSULT	INVOLVE	COLLABORATE	EMPOWER
To provide the public with balanced and objective information to assist them in understanding the problem, alternatives, opportunities and/or solutions.	To obtain public feedback on analysis, alternatives and/or decisions.	To work directly with the public throughout the process to ensure that public concerns and aspirations are consistently understood and considered.	To partner with the public in each aspect of the decision including the development of alternatives and the identification of the preferred solution.	To place final decision making in the hands of the public.
We will keep you informed.	We will keep you informed, listen to and acknowledge concerns and aspirations, and provide feedback on how public input influenced the decision.	We will work with you to ensure that your concerns and aspirations are directly reflected in the alternatives developed and provide feedback on how public input influenced the decision.	We will look to you for advice and innovation in formulating solutions and incorporate your advice and recommendations into the decisions to the maximum extent possible.	We will implement what you decide.

Figure 6.1: IAP2s Public Participation Spectrum (IAP2, 2014)

6.1.4 Engagement objectives

The objectives of the community and stakeholder engagement strategy were developed through feedback from the early community research and to align with the IAP2 'consult' level.

The objectives of the communication and stakeholder engagement strategy include:

- **Information**: offer information about the Western Sydney Energy and Resource Recovery Centre (WSERRC) that is comprehensive, accessible and trustworthy.
- Feedback: actively seek and respond to community and stakeholder views.
- **EIS process**: clearly explain the EIS process and opportunities for community and stakeholder engagement throughout the process.
- **Two-way consultation**: exchange detailed information from technical investigations through discussions with community and stakeholders.

6.1.5 Identifying key stakeholder groups

To help design the engagement strategy and the tools that should be used, it is important to broadly classify the different stakeholder groups who may need information in different formats or through different channels.

As a result, five key stakeholder groups were selected for engagement, including:

- Group 1: residents, businesses and community stakeholders closest to the proposal site
- **Group 2**: residents, businesses and community stakeholders within an 8km radius of the proposal site
- **Group 3**: residents, businesses and community stakeholders in the wider (Western Sydney) region
- **Group 4**: Australian Government agencies (local, State and Federal)
- **Group 5**: people who, following the proposal announcement, subsequently registered their interest.

6.2 Engagement activities and tools

Various engagement tools were used to give different mediums of engagement. Employing a wide range of engagement tools (that span different mediums for sharing information) maximises accessibility of this information and the ability of various stakeholders to engage with the proposal and enables genuine discussions with the community, businesses and government agencies.

The engagement tools used were chosen for the following purposes:

- To offer information to the community and stakeholders
- To receive information from the community and stakeholders
- To have two-way information exchange.

Table 6.1 outlines the engagement tools employed and provides a summary of how these tools were used in the engagement to date.

Table 6.2 indicates what tools were used for each stakeholder group. The engagement tools were considered to make sure that all identified stakeholder groups where responded to. The tools were designed so that different groups could engage over the proposal and different tools have a different focus. For example, whilst government agencies could use the 1800 line, it is unlikely they would use this tool.

Section 3.4.3 of the Community and Stakeholder Engagement Report (**Appendix F**) provides a detailed timeline of when these engagement tools were used.

Table 6.1: Engagement activities and tools

Engagement tool	Description
Community start-up workshop	On Saturday, 9 November 2019, a community workshop was held with community members and stakeholders in attendance. The aim of the start-up workshop was to consult with a diverse cross-section of the local Western Sydney community. The workshop was held in an interactive manner, with whole-group discussions and break-out group discussion sessions. The workshop objectives were to: Understand the key issues from a recruited broad cross-section of the local community Seek feedback on the best channels to communicate with the community and priority content
D 1 1:	 Further refine the community and stakeholder engagement strategy Use the output to inform the EIS.
Door knocking	Door knocking is a simple yet effective way of contacting the community, understanding on-the-ground sentiment, and helping with raising awareness.
	If someone was not home when door knocking took place, a proposal brochure was left to encourage them to give feedback to the team by the proposal email address or toll-free phone number. Between October 2019 and February 2020, 3061 doors were knocked, resulting in 789 interactions with community members located in:
	Horsley Park, Erskine Park, St Clair, Wetherill Park and Minchinbury.
Postcard mailbox drop	Postcards were distributed to around 11,000 households in the Erskine Park, Minchinbury, Horsley Park, Bossley Park, Cecil Park, Mount Vernon, Prospect and Abbotsbury areas. The postcards have summary information about the proposal, with details of how to access further information.
Air and Health Citizens Panel	In consultation with the community, comments were received around the impact of the proposal on air quality and human health, including requests for additional information. This led to the establishment of an Air and Health Citizens Panel with four sessions held.
	The Air and Health Citizens Panel sessions created an opportunity to engage with the community on an issue that requires a lengthy and detailed conversation and studied the community's response to the air quality and health assessment methodology (did they feel it was enough?). Further details on the Air and Health Citizens Panel sessions can be found in Section 3.5.6 of Appendix F Community and Stakeholder Engagement Report.
Meetings	Extensive meetings and briefings took place with a range of stakeholders, including government agencies, businesses and residents and other various stakeholders within the community. Further information about the meetings that took place can be found in Section 3.5 of Appendix F.
Pop-up information stands at markets and shopping centres	Community information stands were located at local shopping centres and highly populated events in the Western Sydney area, to offer the community an informal two-way information exchange opportunity.
Proposal brochure	The proposal brochure was an 8-page colour brochure in plain English with images and infographics to help a wide range of readers. The brochure was handed to residents while doorknocking (if further information was requested, or if the resident was not home at the time), at shopping centre pop-up stalls, community workshops and stakeholder meetings.

Engagement tool	Description
Question and answer documents	Question and answer documents were used to provide the community with written responses to questions raised at meetings. A frequently asked questions and answer document was also prepared before the announcement of the proposal and can be accessed on the website.
Advertising in local newspapers	Advertisements were placed in the following local publications: Blacktown Advocate, Blacktown Advertiser and Fairfield Advance from 3 October 2019 to 31 March 2020. Each advertisement featured the website and phone number to help the community with the opportunity to ask a question or submit feedback. Print newspaper advertisements were used to reach and inform an audience that may not be digitally capable.
Proposal website	The proposal's website (www.energyandresourcecentre.com.au) was launched on 3 October 2019. It contains images and videos to help with communicating the proposal and some of the complex issues involved in designing an EfW facility. It has best practice usability and accessibility standards.
	The website includes content about proposal milestones, resources, the proposal's Scoping Report and the SEARs. The website was established to provide the largest possible audience (including those who avoid or are unable to attend face-to-face interactions) with information about the proposal, and how to submit their feedback.
	The website was promoted in the proposal brochure, media releases, local newspapers, doorknocking slips, newsletters and social media posts.
Media releases (radio, TV, and social	Media releases help with communicating information about the WSERRC to the largest possible audience.
media posts)	Social media posts (Facebook, LinkedIn, Twitter) were made to increase awareness among a broader audience and redirect traffic to the proposal website.
Videos	The website includes animated videos to help with explaining the proposal. Videos providing information from overseas experts (Herman Huisman virtual tour) was also presented at meetings as a source of information likely to be trusted by community and stakeholders.
Email updates to the proposal stakeholder	Email updates aligned to proposal milestones as follows:
database	 Scoping Report released: 247 emails sent on 25 November 2019 SEARs released: 233 emails sent on 17 December 2019
	 Call for information to be thought about in the preparation of the EIS and updated website: 233 emails sent on 9 March 2020.
Toll-free 1800	The proposal email address is:
information line and proposal email	energyandresourcecentre@cleanaway.com.au
address	and the toll-free phone number is:
	1800 97 37 72 The email and toll-free phone number enable accessible, two-way
	information exchange opportunities for everyone, including those who
	could not access the proposal sponsors in person or online. The proposal email and toll-free phone number are promoted on the proposal's website, brochure, media releases, advertising materials, doorknocking slips and the newsletter.
	Between October 2019 and March 2020, 13 emails and 20 phone calls were received. All queries needing a response were resolved.

Table 6.2: The engagement tools employed for each stakeholder group

	Sto	keholder Gro	uns		
Engagement tools	Group 1: Residents, businesses, community stakeholders closest to the proposal site	Group 2: Residents, businesses, community stakeholders within an 8km radius of the proposal site	Group 3: Residents, businesses, community stakeholders in the wider (Western Sydney) region	Group 4: Government agencies (local, state and Australian Government)	Group 5: People who, following the proposal announcement subsequently registered their interest
Community research		✓	✓		
Postcard mailbox drop	✓	✓			
Proposal brochure	✓	✓			
Videos	✓	✓	✓	✓	✓
Proposal website	✓	✓	✓	✓	✓
Question and answer documents	✓	✓	✓	✓	✓
Media releases (radio, print) and social media posts)	√	✓	✓		
Advertising in local newspapers	✓	✓	✓		
Email updates to the stakeholder database				✓	✓
Air and Health Citizens Panel	✓	✓		✓	
Toll-free 1800 information line and proposal email address	✓	✓	✓		✓
Community start-up workshop	✓	✓		✓	
Pop-up information stands at markets and shopping centres	√	√	√		
Door knocking	✓				
Meetings	✓	✓		✓	

6.2.1 Impact of COVID-19 on engagement activities

Because of the 2020 COVID-19 pandemic and associated government restrictions, the online engagement tools listed above became more needed to continue to meet the engagement objectives of the proposal. For example, the third and fourth Air and Health Citizens Panel sessions were changed from a face-to-face interaction to an online environment. Online and virtual interactions are currently being discussed to continue engagement with stakeholders following lodgement of the EIS.

6.3 Issues raised during consultation

The Community and Stakeholder Engagement Report (**Appendix F**) presents a detailed description of the key questions and issues raised throughout the engagement process to date. These questions have been responded to as part of ongoing communication between the engagement team and the stakeholders. Extensive written responses were made available on the proposal website, via email, in response to the community start-up workshop, by social media posts and as part of the Air and Health Citizens Panel.

The following sections summarise the key issues raised by government agencies, businesses, residents and other community stakeholders and an explanation of where these issues have been discussed in the EIS.

Specific Aboriginal community consultation has also been conducted and is summarised in **Chapter 19 Heritage** and **Technical report O Aboriginal Cultural Heritage Assessment Report**.

6.3.1 Stakeholder feedback

6.3.1.1 Stakeholders identified in the SEARs

In preparation of the EIS, engagement with the relevant local and state authorities or Australian Government, service providers, community groups and affected landowners has been conducted. A list of specific stakeholders the proposal must consult with was included in the SEARs and these are listed below in **Table 6.3** with a summary of the key issues raised and how and where the EIS responds to these issues. Several other stakeholders were engaged beyond the list mentioned in the SEARs and the table below, which are included in **Appendix F**Community and Stakeholder Engagement Report.

Table 6.3: Stakeholders identified in the SEARs

Issues raised How and wh

Blacktown City Council (BCC)

Feedstock management

Council emphasised the need for good waste management and recycling practices as well as protocols to prevent contaminated waste entering the combustion process.

How and where this is addressed in the EIS

EfW is complementary, rather than an alternative to other steps in waste hierarchy when thought of as part of an integrated waste management strategy. On the waste hierarchy, energy recovery of residual waste is preferable to landfill because it recovers some value from the waste, requires less land, lessens the legacy impacts of landfills such as soil and water contamination from leachate as well as reducing odour impacts.

Before arriving at the EfW facility, waste will be either processed to recover valuable materials to be recycled and reused or collected as source-separated waste streams.

Materials will be recovered through the EfW process onsite, including metals which will be sold to metal recyclers and IBA. It is the intention that IBA will be transferred offsite to a separate facility, subject to a separate planning approval process as described in **Chapter 22 Related development**, where further metals recovery will take place. Options for the reuse of IBA in construction products replacing virgin materials are being investigated, which would allow these materials to be returned to productive use in line with practice in other jurisdictions.

The EfW facility will apply procedures for the inspection, quarantine and rejection of unacceptable waste. This is outlined in **Section 5.8** of **Chapter 5 EfW policy**.

Section 5.4 of Chapter 5 EfW policy describes the proposed feedstock strategy for the proposal.

Section 2.2 of Chapter 2 Strategic context describes the role of recycling and the EfW process in the waste hierarchy.

Good quality architecture and landscape design

How has the proposal sought to achieve a good quality design in the approach to architecture and landscape design? One of the objectives of this proposal is to 'Develop a facility which integrates the built form into the existing context, including adopting architecture which minimises visual bulk, and provides opportunities to enhance the appearance of the building'. To make sure that high-quality architecture and landscape design is achieved, key design aspirations were used to underpin the

approach. Some of these included:

- Become a catalyst for high-quality design and innovation in Western Sydney
 Create an exemplar facility
- Shape the built form to mitigate visual impact
- Select materials which complement and align with the local environment
- Be honest and transparent about the purpose of the facility
- Carefully think about the building's appearance from key public viewing points
- Offer an excellent visitor experience to educate and inspire.

Issues raised	How and where this is addressed in the EIS
	The physical bulk of the building was broken down by using vertical blades. The use of the 'blades' interrupts the large façades, so they are more visually interesting and less bulky as well as breaking up the mass from main viewing corridors on the M7 in the north and south directions. To further soften the building's appearance from the road and connect it to the landscape, the northern and southern ends of the building will be covered in living green walls to help blend the proposal into the vegetated backdrop. The landscape design also included screening around the perimeter of the site to block direct views and increase density of roadside vegetation. The design tightly wraps the building, eliminating any wasted space. The areas in-between the blades are to be clad in materials which become increasingly transparent as you move along the building.
	Alternative architecture design options were considered for the proposal (see Section 2.6.8 of Chapter 2 Strategic context). The architecture design was influenced through engagement with stakeholders, such as architectural staff from Blacktown City Council.
	The approach to architecture and landscape design is described in Section 3.3.1 of Chapter 3 Proposal description and Appendix B Architecture and Landscape Design Strategy Report.
Artwork Interested to know if there are opportunities for artwork to be incorporated into the design.	EIS has responded to this query raised by Council. The EIS has committed to selecting a local artist to contribute to specific design elements where appropriate. See Appendix B Architecture and Landscape Design Strategy Report .
Visual impacts Visual impacts of the proposal on	The proposal includes large visual elements, such as the stack and plume, which would result in a noticeable change for several viewpoints.
viewpoints, including the M7 and visual impacts of the plume	As above, the physical bulk of the building was broken down by using vertical blades. The use of the 'blades' interrupts the large façades, so they are more visually interesting and less bulky as well as breaking up the mass from main viewing corridors on the M7 in the north and south directions. To further soften the building's appearance from the road and connect it to the landscape, the northern and southern ends of the building will be covered in living green walls to help blend the proposal into the vegetated backdrop. The landscape design also included screening around the perimeter of the site to block direct views and increase density of roadside vegetation.
	The impacts on landscape character areas and specific viewpoints are covered in Section 16.3 of Chapter 16 Landscape and visual and Section 5, 6 and 7 of Technical report L Landscape and Visual Impact Assessment.

Issues raised	How and where this is addressed in the EIS
Heavy vehicle impacts Heavy vehicle impacts on the surrounding residences and adjoining businesses	The proposal will generate additional heavy vehicle trips for feedstock and waste removal. The proposed routes comply with the requirements for heavy vehicle routes under the NSW Heavy Vehicle Access Policy Framework. See Section 15.2 of Chapter 14 Traffic and transport and Section 4.5 of Technical report K Traffic and Transport Assessment. The nearest residential area is around 1km to the south of the site in Horsley Park with the Minchinbury residential area is located
adjoining businesses	around 3km to the north-west.
Community investment Describe the proposed approach to	A Community Reference Group (CRG) will be created in construction and function across the life of the proposal. The CRG will be responsible for administering a community funding package among other duties.
community investment.	Funding contributions would total \$150,000 per year and, subject to consultation and a decision by the community reference group (CRG), could be made towards community-based initiatives, development of local sporting infrastructure, community facilities and environmental areas such as tree plantings.
	See Section 6.6.3 of this chapter and Appendix C of the Community and Stakeholder Engagement Report.
Fairfield City Council	
Appropriate residual ash	The proposal will produce three types of ash:
management	1. Incinerator Bottom Ash (IBA)
The EIS should clearly outline how ash is managed.	2. Boiler Fly Ash
asii is manageu.	3. Flue Gas Treatment residues (FGTr).
	Section 3.4.16 of Chapter 3 Proposal description explains how these ash residues are to be managed.
Waste feedstock and contaminated bins	The EfW facility will apply procedures for the inspection, quarantine and rejection of unacceptable waste. This is outlined in Section 3.4.6 of Chapter 3 Proposal description .
Describe the feedstock strategy for	Section 5.4 of Chapter 5 EfW policy describes the feedstock strategy for the proposal.
the proposal and how contamination of waste will be managed.	WSERRC and Cleanaway will actively support the transition to FOGO with Councils, including through the education of the community which is critical to a successful transition and achieving low contamination rates.
Circular economy	Section 2.5 of Chapter 2 Strategic context assesses how the proposal will support Australia's transition to a circular economy in
Think about how local government can support a transition to a circular economy.	line with the NSW Circular Economy Policy Statement 2019. The proposal will actively support the transition to FOGO with Councils, including through the education of the community which is critical to a successful transition and achieving low contamination rates. This will support Councils on their journey to a circular economy.

Issues raised	How and where this is addressed in the EIS		
Environment Protection Authority (EPA)			
Process water management Interested in understanding if process water is reused or if wastewater is generated.	The main objective regarding water use is to reuse as much water as possible in the EfW process. No wastewater generated onsite will need treatment offsite in normal operation. See Section 3.4.17 of Chapter 3 Proposal description.		
Flue gas treatment system Interested in understanding how the	The EfW facility will apply procedures for the inspection, quarantine and rejection of unacceptable waste. This is outlined in Section 5.8 of Chapter 5 EfW policy.		
flue gas treatment system can deal with hazardous waste.	The NSW EfW policy states that 'to ensure emissions are below levels that may pose a risk of harm to the community, facilities proposing to recover energy from waste will need to meet current international best practice techniques.' This proposal will use advanced flue gas treatment technology as the means to manage air emissions and has been designed to meet the European Industrial Emissions Directive (IED) (directive 2010/75/EU of the European Parliament) ¹ and the associated Best Available Techniques Reference ² (BREF) document which sets the European Union environmental standards for waste incineration as published on 3 December 2019. The EU Commission Implementing Decision (2019/2010) on the 12 November 2019 states the best available techniques (BAT) conclusions as the key element of the BREF and prescribes them to be adopted by Member States. Additionally, the facility will comply with the technical criteria set out in the NSW Energy from Waste Policy Statement (refer to Chapter 5 EfW policy).		
	A Continuous Emissions Monitoring System (CEMS) will also be employed to continually monitor flue gases to make sure the plant is compliant with statutory emissions limits as set out in this document.		
Control of fuel rates Interested to understand how variable fuel rates are controlled.	The composition of waste feedstock is variable compared to traditional fuels such as coal and gas. Waste composition audits of MSW and C&I waste streams have been done to understand the calorific value, or energy content, of the waste feedstock and the variability over time.		
	This has allowed a calorific value to be nominated as the design point for the facility with the thermal treatment technology capable of managing variation in the energy content either side of this design point.		
	Section 3.4.3 of Chapter 3 Proposal description describes the feedstock throughput strategy for the proposal and how the feedstock is controlled.		

¹ https://eur-lex.europa.eu/legal-content/EN/TXT/?uri=CELEX:32010L0075
2 https://eippcb.jrc.ec.europa.eu/sites/default/files/2020-01/JRC118637 WI Bref 2019 published 0.pdf

Issues raised	How and where this is addressed in the EIS		
Department of Primary Industries (DPI)			
Biosecurity issues to do with the handling of incoming waste feedstock Address potential biosecurity risks (weed, pest and pathogen) and management measures arising from the import and handling of the residual waste feedstock for the	Waste will be delivered to the site by enclosed waste delivery vehicles and will not be uncovered until the contents is tipped into the waste bunker. Because the standard operating procedures to be applied for the proposal and the nature of both the waste stream being processed and the way it is being processed (combustion in an enclosed facility), the BC Act is unlikely to apply to site operations. See Section 4.4.2 of Chapter 4 Statutory context. Section 5.8 of Chapter 5 EfW policy describes the waste inspection, quarantine and rejection process that will occur in the waste receival hall.		
Salmonella contamination on site Presence of salmonella onsite was discussed with DPI to remediate the site.	The applicant worked closely with DPI to render the site safe and suitable and has since received a letter from the DPI which confirms that the Individual Biosecurity Direction has been revoked on the proposal site. See Section 2.5 of Chapter 2 Strategic context.		
Biosecurity issues to do with vegetation clearing The approach proposed to manage biosecurity issues associated with the clearing of vegetation on the site.	Appropriate weed control and weed disposal will be carried out in line with Biosecurity protocols. Biosecurity measures are listed in Section 8 of the Vegetation Management Plan included as Appendix G of Technical report Q Biodiversity Development Assessment Report.		
Environment, Energy and Science (DPIE)			
Information requirements for the BDAR Requested that BDAR calculations and shapefiles are included in the EIS.	All shapefiles and calculations are included in Technical report Q Biodiversity Development Assessment Report.		

Issues raised	How and where this is addressed in the EIS		
Offset requirements for State Significant Developments	The proposal doesn't need offsets as outlined in Section 21.3.5 of Chapter 21 Biodiversity and Section 8.1 of Technical report Q Biodiversity Development Assessment Report.		
The interpretation of section 7.14 (3) of the <i>Biodiversity Conservation Act 2016</i> (BC Act) was discussed and whether there is a mandatory offset requirement for State Significant Development.			
Transport for NSW (TfNSW)			
Swept path analysis Requested swept path analysis of the intersection movements.	The swept path analysis of the intersection movements is included in Appendix B of Technical report K Traffic and Transport Assessment Report.		
Site access consultation Requested consultation with landowners regarding access to the site.	The site access carriageway is partially owned by TfNSW and partially owned by WaterNSW. Consultation is ongoing with WaterNSW and TfNSW in finalising site access arrangements. See Section 22.7 of Chapter 22 Related development.		
NSW Ministry of Health	NSW Ministry of Health		
Potential human health impact receivers Describe the approach taken to assessing human health risks	There are three main exposure pathways by which a person may be exposed to a chemical substance emitted from the proposal: (1) inhalation, (2) ingestion, or (3) dermally (through the skin). The human health risk assessment looks at the possible exposure pathways for all pollutants likely to be emitted by the proposal and compared these to the relevant guidelines. The assessment concluded that there would be no unacceptable risks to human health.		
	Chapter 9 Human health risk and Technical report B Human Health Risk Assessment Report outline the potential human health risk receivers.		
	Note that the approach to the overall design of the WSERRC has been underpinned by the objective to mitigate impacts on the community.		

Issues raised	How and where this is addressed in the EIS
Best Available Techniques Interested in understanding old vs. new EfW technologies.	Moving grate is a recognised and proven EfW technology that has been used globally for over 50 years. In that time the technology has been continually improved responding to regulatory, industry and public demands. Over 95% of facilities that thermally treat MSW and C&I waste to produce electricity worldwide use moving grate technology. A summary of the EfW technologies considered for this proposal is available in Section 2.6.4 of Chapter 2 Strategic context. Chapter 5 EfW policy and Technical report D Best Available Techniques Assessment Report outlines the BAT techniques and how they are adopted by the proposal.
Feedstock proposed, compared to other EfW proposals	The proposal will be designed to thermally treat up to 500,000tpa of residual Municipal Solid Waste (MSW) and residual Commercial and Industrial (C&I) waste streams. Section 5.4 of Chapter 5 EfW policy outlines the feedstock strategy.
Interested in understanding the nature of the waste streams to be used as a fuel for this EfW proposal compared to issues raised for previous EfW proposals.	There are several other EfW facilities proposed to service the Sydney Basin and include the proposed Dial a Dump Industries (DADI) Next Generation facility in Eastern Creek and the proposed SUEZ Botany Cogeneration facility in Matraville. The Next Generation facility EIS states that it will process and thermally treat up to 552,000t of non-putrescible residual waste sourced from construction and demolition (C&D), commercial and industrial (C&I) sources as well as shredder floc. The Botany Cogeneration facility scoping report states that it will process and thermally treat up to 165,000t of feedstock made up of processed engineering fuel (PEF) and residuals from the Orora recycled paper mill.
	The WSERRC proposal will need to operate within emission limit values set in the EPL. These values set the limits on concentrations of pollutants in the stack before discharge and have been used in the air quality assessment to demonstrate that impacts at receptors are within criteria. The EfW process is designed to operate within these emission limit values (ELVs) while thinking about variations in the composition of waste feedstock. The CEMS will make sure that any exceedances of the ELVs will either be immediately corrected or will result in an automatic shutdown of the operating line.
Engagement conducted to date Interested in understanding the types of consultation that has been conducted by the proposal.	The engagement conducted to date is detailed in Section 6.1 of this chapter and Section 3 and 4 of Appendix F Community and Stakeholder Engagement Report . In response to requests for more information on potential air quality and human health impacts, an Air and Health Citizens Panel was set up, with four sessions.

Issues raised

How and where this is addressed in the EIS

Western Sydney Local Health District

Feedstock and health impacts

Discussions focussed on the feedstock for the proposal, the reference facilities and the health impact assessment approach The waste feedstock received at the facility will include residual waste that is left over from offsite recycling and resource recovery operations and waste from source-separated collections. The waste feedstock strategy and the reference facilities used in this proposal are detailed in **Chapter 5 EfW policy**.

There are three main exposure pathways by which a person may be exposed to a chemical substance emitted from the proposal as a result of thermally treating waste: (1) inhalation, (2) ingestion, or (3) dermally (through the skin). The human health risk assessment looked at the possible exposure pathways for all pollutants likely to be emitted by the proposal and compared these to the relevant guidelines. The assessment concluded that there would be no unacceptable risks to human health.

Note that the approach to the overall design of the WSERRC has been underpinned by the objective to mitigate impacts on the community.

Chapter 9 Human health risk and Technical report B Human Health Risk Assessment Report look at the potential impacts of the proposal on human health.

Fire and Rescue NSW (FRNSW)

No issues raised. FRNSW were satisfied that the information provided to them by email on 6 April 2020 was enough in answering agency thoughts at this time.

FRNSW may provide a submission following public exhibition of the EIS.

Natural Resources Access Regulator (NRAR) (DPIE)

No response received.

Not applicable.

Sydney Water

Water demand and capacity Consultation with SW took place to understand if the Sydney Water network could meet potable water demands for the proposal.

The consultation with Sydney Water confirmed there is enough capacity to cater for the proposal peak potable water demand and to supply all fire tanks within the site. Similarly, the proposed connection point on Roussell Road can take the sewer demand generated by the proposal. See Section 20.3.2 of Chapter 20 Utilities and services and Section 4 of Technical report P Utilities and Services.

Issues raised	How and where this is addressed in the EIS		
Water quality impacts on Prospect Reservoir Assessment needs to think about water quality impacts on Prospect Reservoir.	Chapter 9 Human health risk and Technical report B Human Health Risk Assessment conclude that there will be no unacceptable risks for rainwater tanks or Prospect Reservoir. There is no downgradient flow path from groundwater beneath the site to Prospect Reservoir. See Section 4.9 of Technical report F Soils and Water.		
Recycled water Interested to know if the option of supplying the site with recycled water to service the process water demand has been thought about.	The possibility to supply the facility with recycled water to meet the water process demand was thought about in consultation with Sydney Water. The supply of recycled water to the site was not thought feasible because of the lack of existing recycled water infrastructure in the surrounding area. See Section 4 of Technical report P Utilities and Services .		
Endeavour Energy			
Grid connection Ongoing discussions were had to understand the options for the proposal to connect to the electricity grid.	The WSERRC proposal will be designed to generate up to 58MW of base load electricity some of which would be used to power the facility itself with up to 55MW exported to the grid. To export energy to the grid, the proposal will need a new connection to the electricity grid. These connection works are related development (see Chapter 22 Related development). Different options for connection have been discussed with network operators. Three feasible route options to connect WSERRC to the grid have been presented by Endeavour Energy (see Appendix D of Technical report P Utilities and Services).		
SafeWork NSW			
Dangerous goods stored on site SafeWork NSW was advised of the proposal and the dangerous goods and quantities to be stored onsite.	The types of dangerous goods and quantities to be stored on site are covered in Section 14.3 of Chapter 14 Hazard and risk and Section 2.3 of Technical report J Preliminary Hazard Analysis.		
Western Sydney Airport Corporation (WSA Co)			
Obstacle Limitation Surface (OLS) and Procedures for Air Navigation Services – Aircraft Operations (PAN-OPS)	The site was selected so that the stack and plume will not intrude into the protected airspace of Western Sydney Airport. See Section 3.2.14 and Appendix G of Technical report J Preliminary Hazard Analysis. WSACo has consulted about the OLS and PANS-OPS. WSACo noted that there is no PANS-OPS designed yet for WSA, and while WSACo thinks it is likely that that the PANS-OPS surface will be at or higher than the OLS levels, this won't be known until the detailed airspace design is completed by the Commonwealth. The currently declared protected airspace for WSA is the OLS.		

Issues raised	How and where this is addressed in the EIS			
Civil Aviation Safety Authority (CASA)				
Plume rise assessment As part of the EIS, a preliminary plume rise assessment needed to be completed which CASA developed. CASA recommended that the plume be modelled for environmental reasons.	CASA made a plume rise assessment which stated that there will not be an infringement of an OLS for Western Sydney Airport. See Section 3.2.14 of Technical report J Preliminary Hazard Analysis .			
Lighting of the stack CASA noted that lighting and marking of the stack will be in line with Federal Aviation Administration's (FAA) AC 70/7460-1 See Section 3.2.14 of Technical report J Preliminary Hazard Analysis. Lighting and marking of the stack will be in line with Federal Aviation Administration's (FAA) AC 70/7460-1 See Section 3.2.14 of Technical report J Preliminary Hazard Analysis. AC 70/7460-1L.				
Bird hazards to aircraft CASA noted that a Bird Hazard Assessment should be completed if the waste material is not contained within a building. The waste is contained within a building, so no Bird Hazard Assessment is needed.				
Department of Agriculture, wat	Department of Agriculture, water and environment (DAWE)			
Matters of national environmental significance (MNES) The EIS should detail all surveys and methods used in reaching conclusion for MNES.	An assessment of whether the proposal may have a significant impact on any MNES or on the environment of Commonwealth land was completed in the preparation of this EIS. This included a search using the Protected Matters Search Tool (PMST) and conclusions from various technical reports, including the findings from the Biodiversity Development Assessment Report (BDAR) (See Technical report Q). The assessment determined that the proposal is unlikely to impact any MNES, so a referral will not be made to the Commonwealth Minister for the Environment.			
	Refer to Technical report Q Biodiversity Development Assessment Report for the MNES methodology and survey results.			

Issues raised	How and where this is addressed in the EIS
NSW Department of Planning,	Industry and Environment (DPIE)
Community engagement during COVID-19 The Department was interested to understand how best to engage the community in COVID19.	Because of the 2020 COVID-19 pandemic and government restrictions, the approach to engagement was modified to rely more on online engagement tools to continue to meet the engagement objectives of the proposal. For example, the third and fourth Air and Health Citizens Panel sessions were changed from a face-to-face interaction to an online environment. Participants and panel members were invited to continue with a new format in an online space, and this move was willingly accepted. Online and virtual interactions are currently being discussed to make sure engagement with stakeholders continues following lodgement of the EIS. Engagement activities have and will take place online as necessary through COVID-19.
EfW in a circular economy Explain the role of EfW in the transition to a circular economy.	EfW has a role to play in the transition to a circular economy. As recycling rates increase over time in line with NSW WARR strategy targets, circular economy principles and through market development, EfW operations will need flexibility to accommodate changes in waste feedstock to continue to allow landfill diversion of residual waste. Modelling completed for the proposal indicates that even with the introduction of additional source separation and maximised resource recovery within the Sydney region, there would still be sufficient residual waste feedstock for the proposal. Cleanaway supports increased source separation for high-quality recovery and recycling. The WSERRC feedstock strategy and process design accommodates increased source separation over time, particularly of organics. In this way, the WSERRC proposal expects to accommodate improvements in both recycling and landfill diversion.
	Materials will be recovered through the EfW process onsite, including metals, which will be sold to metal recyclers, and IBA. IBA will be transferred offsite to a separate facility (to be developed) where further metals recovery is currently intended to take place. Options for the reuse of IBA in construction products replacing virgin materials are being investigated, which would allow these materials to be returned to productive use.
	In addition, the renewable component of the energy generated by the proposal will displace carbon emissions from fossil fuel sources.
	The proposal will include the construction of a visitor and education centre to help educate and inform the community on the principles of waste management, waste avoidance, the circular economy, recycling, resource recovery and EfW.
	Section 2.5 of Chapter 2 Strategic context assesses how the proposal will support Australia's transition to a circular economy in line with the NSW Circular Economy Policy Statement 2019.
Management of the Western Sydney Parklands and planning for the proposal	The vision and future land use for the Western Sydney Parklands is described in the Western Sydney Parklands Plan of Management 2030 which includes plans for each of the 16 precincts. The proposal is consistent with the objectives and future land uses for the Wallgrove Precinct as described in the Chapter 2 Strategic context .

Issues raised	How and where this is addressed in the EIS	
Nearby landowners, businesses	Nearby landowners, businesses and occupiers that may be affected by the proposal	
Western Sydney Parklands Tru	st (WSPT)	
Community engagement responses	For further details about engagement responses see Section 4 of Appendix F Community and stakeholder engagement report.	
Interested in understanding the feedback from the community (both positive and negative).		
Community Funding Package and Community Reference Group Interested in understanding what the community funding package is, who could access it and what the Community Reference Group is.	A Community Reference Group (CRG) will be formed in construction and function across the life of the proposal. The CRG will be responsible for administering a community funding package, among other duties.	
	If the proposal is approved, a community funding package for Western Sydney is proposed, with the purpose of giving back to the community. Funding contributions would total \$150,000 per year and, subject to consultation and a decision by the community reference group (CRG), could be made towards community-based initiatives, development of local sporting infrastructure, community facilities and environmental areas such as tree plantings.	
Land use zoning in the WSP and alignment with the WSP Plan of Management	All land in the Parklands is unzoned. All forms of private development other than residential or exempt development are permitted with consent. The vision and future land use for the Western Sydney Parklands is described in the Western Sydney Parklands Plan of Management 2030 which includes plans for each of the sixteen precincts. The proposal is consistent with the objectives and future land uses for the Wallgrove Precinct, including recycling and renewable energy as described in Chapter 2 Strategic context.	
	The proposal would be consistent with the Plan of Management by utilising land of low environmental or recreational value for services infrastructure and by providing employment. Refer to Table 2.3 in Section 2.5 of Chapter 2 Strategic Context for further details of how this proposal meets the objectives of the WSP Plan of Management.	

Issues raised	How and where this is addressed in the EIS
WaterNSW	
Risks to the Warragamba pipelines corridor	WaterNSW was consulted to demonstrate how the proposal aligns to the Guidelines for Development Adjacent to the Upper Canal and Warragamba Pipelines.
WaterNSW stated that the proposal must minimise risk to the Warragamba pipelines. WaterNSW need access to the Pipelines 24 hours a day, 7 days a week.	Consultation with WaterNSW regarding access to the proposal site over the Warragamba pipelines is ongoing. A Risk Assessment of the Warragamba pipelines has been prepared and is included as Appendix A of Technical report P Utilities and Services.
Site access Site access crossing over the Warragamba pipelines corridor.	Consultation with WaterNSW regarding access to the proposal site over the Warragamba pipelines is ongoing.
Neutral or Beneficial Impact (NorBI) WaterNSW was consulted about the proposed approach to assessing NorBI at Prospect Reservoir.	The proposed approach to assessing NorBI involved the Human Health Risk Assessment (HHRA), including an assessment of deposition of particles from the air emissions of the facility onto the surface of Prospect Reservoir. WaterNSW stated via email dated 12 May 2020 that WaterNSW does not object to the approach but would expect to review the modelling when completed.
Gazcorp	
Planning Gazcorp sought information on the site zoning, if EfW fits within the zoning, who the relevant local government authority is and adjoining sites and land uses.	The State Environmental Planning Policy Western Sydney Parklands 2009 (WSP SEPP) is the principal environmental planning instrument (EPI) controlling development and land use planning in the Parklands. Its aim is to put in place development controls that would enable the Western Sydney Parklands Trust (WSPT) to develop a multi-use urban parkland for Western Sydney. All land in the Parklands is unzoned. All forms of private development other than residential or exempt development are permitted with consent. The provisions of specific Local Environmental Plans (LEPs), including the Blacktown LEP 2015, do not apply to the WSP as per Clause 6 (1) of the WSP SEPP. The WSERRC can be characterised as electricity generating works (EGW), defined in the dictionary to the Standard Instrument Principal Local Environmental Plan (SIPLEP) as 'a building or place used formaking or generating electricity'. As above, the proposal is consistent with the objectives and future land uses for the Wallgrove Precinct as described in the Chapter 2 Strategic context.

Issues raised	How and where this is addressed in the EIS	
	The site is bounded by the Westlink M7 Motorway to the west with the Eastern Creek industrial area located farther west. The SUEZ Eastern Creek Waste Management Centre, comprising the now-closed landfill site and operational organics recycling facility is located to the north and north-east, with the operational Global Renewables waste management facility located immediately to the east. To the south, the site is bounded by the Warragamba Pipeline Corridor, with the Austral Bricks facility located farther south.	
Synergies with nearby industries	The sites location is favourable because of the industrial nature of the surrounding land uses, creating the potential for synergies	
Explain the opportunties for power and heat offtake from the proposal.	with surrounding industry.	
Wallgrove Road intersection Gazcorp advised that a detailed design is underway for an upgraded intersection on Wallgrove Road.	The traffic assessment modelled the proposed construction traffic against the Gazcorp Industrial Estate proposed intersection upgrades at Wallgrove Road and Austral Bricks Road intersection. The results showed that even with the proposal's construction traffic, the same level of service would be maintained for the intersection. All construction vehicles would be able to park onsite, so avoiding offsite parking impacts on the road network.	
	Refer to Technical report K Traffic and Transport Assessment Report.	
Austral Bricks		
Road upgrades Options to upgrade a section of Austral Bricks access road were discussed to connect to a new crossing location, further east of Wallgrove Road.	Alternative site access arrangements were thought about as part of the site layout, this is discussed in Section 2.6.7 of Chapter 2 Strategic context.	
SUEZ		
Right of carriageway The strip of land dividing the site is owned by SUEZ and includes a right of carraigeway, benefitting the proposal site.	The 8.23ha site is divided by a small strip of land not part of the proposal site, resulting in a 2.04ha northern section and a 6.19ha southern section (Figure 1.3 of Chapter 1 Introduction). This dividing strip is part of the adjacent lot owned by SUEZ and includes a right of carriageway, benefitting the proposal site, allowing vehicles to move between the two parts of the site.	

Issues raised	How and where this is addressed in the EIS		
Global Renewables Limited (GI	Global Renewables Limited (GRL)		
Overland flow path A site walkover on the GRL site found the existing drainage regime.	The overland flow path is discussed in detail in Chapter 12 Hydrology and flooding.		
Other stakeholders (not specifically mentioned in the SEARs)			
Airservices Australia			
Plume rise Airservices undertook an Airservices assessment and had no objections to the proposed plume rise and exhaust stack.	Airservices Australia has taken on an Airservices assessment and concluded that it has no objections to the proposed plume rise and exhaust stack. See Section 14.3 of Chapter 14 Hazard and risk and Section 3 of Technical report J Preliminary Hazard Analysis.		
NBN			
Fibre to the premises (FTTP) connection NBN confirmed that a FTTP connection is feasible.	Consultation with NBN has confirmed that an FTTP connection is feasible. See Section 4 Technical report P Utilities and Services.		

6.3.2 Community stakeholder feedback

Engagement with the community discovered issues of interest and concern to the community. **Table 6.4** below summarises the key issues raised by the community stakeholders and how and where these issues have been discussed in the EIS.

Additional information about the proposal is available to the community and other interested stakeholders at www.energyandresourcecentre.com.au.

Table 6.4:Community stakeholder issues raised and where this is addressed in the EIS

Issue, concerns and questions raised	How and where this is addressed in the EIS
Project need and location	
The need for the proposal Explain the need for the proposal and how it compares to landfill.	The NSW Waste Avoidance and Resource Recovery Strategy 2014–2021 sets a target to increase waste diversion from landfill to 75% and to increase recycling of MSW and C&I waste by 70% by 2021–2022. It notes that reuse and recycling will remain the main avenues for diverting waste from landfill, supplemented by energy recovery. Actual recycling rates for MSW in the Sydney Metropolitan Levy Area (MLA) are currently short of this target, declining from 52% in 2010–2011 to 42% in 2017–2018. Initiatives to increase recycling in the long-term through better source separation of waste and embedding circular economy principles in
	the design of products and materials will increase diversion from landfill. EfW facilities such as WSERRC will play a main role in diverting waste from landfill in this transition. Even as recycling increases in response to the functioning of circular economy principles, EfW will need to manage the residual waste that remains.
	Energy recovery is a higher order use of resources on the waste hierarchy compared to landfilling, reflecting the environmental and amenity impacts of landfill. As landfill airspace declines and with limited opportunities to expand existing or develop new landfills, existing landfill airspace should be used for residual waste that cannot be used as a higher order use in the waste hierarchy. More information can be found in Chapter 2 Strategic context .
The need for the proposal If the Next Generation EfW proposal proceeds (currently before the NSW Land and Environment Court), will this remove the need for WSERRC?	An analysis of the waste tonnes currently disposed to landfill is given in Chapter 2 Strategic context. WSERRC is targeting about 15% of the available (or currently landfilled) waste tonnes, confirming that there are enough available tonnes for other EfW proposals, should they proceed.
Site selection Explain the site selection process and how this site was selected	A site screening analysis was done between July 2018 and October 2019. Main reasons in selecting an EfW site include proximity to waste sources, separation distances to existing and future residential areas, access to transport and power infrastructure and compatibility with surrounding land uses. The site is in a region that is expected to accommodate most of the population growth forecast for Sydney, driven in part by the
	development opportunities created by the Western Sydney Airport and Western Sydney Aerotropolis.

Issue, concerns and questions raised	How and where this is addressed in the EIS
	The location of the site in this growth region and close to existing waste management infrastructure such as the Erskine Park Waste Transfer Station will minimise the transport distances between the sources of waste, waste processing facilities and the proposal.
	Mainly, the location of the site avoids impacts on the protected airspace of the Western Sydney Airport.
	The proposal site is located around 1km from the nearest residential areas. The risk of future encroachment is reduced by its location in the Western Sydney Parklands and adjacent to the Western Sydney Employment Area, both of which prohibit residential development.
	The site is immediately adjacent to the M7 and close to power supply infrastructure and is in an area that has and continues to be used for waste management facilities. It is consistent with the Wallgrove Precinct Plan, part of the Western Sydney Plan of Management, which classifies recycling and renewable energy as future land use opportunities in the Precinct.
	More information is available in Chapter 2 Strategic context
Waste management	
Best practice in waste management How does the proposal fit within a context of best practice in waste management?	Chapter 2 Strategic context explains the role of EfW as part of an integrated waste management strategy, both internationally and within Australia. It describes how the proposal contributes to the objectives and targets of the NSW EPA's Waste Avoidance and Resource Recovery Strategy for landfill diversion and recycling by introducing a new technology that recovers valuable energy, while reducing landfill disposal. Chapter 5 EfW policy describes the EU framework for Best Available Techniques (BAT) and how the proposal aligns with this framework. It also describes the operating procedures to control the type of waste feedstock that enters the combustion process, including compliance with the resource recovery criteria of the NSW Energy from Waste Policy Statement which requires the waste feedstock to be residual from higher order resource recovery activities.
	The EfW technology was chosen because of its ability to deal with changes to feedstock. As recycling rates increase over time in response to greater source separation and functioning of circular economy principles in the design of products and materials, the proposal will continue to play a role in the management of residual waste.
	More information is available in Chapter 2 Strategic context and Chapter 5 EfW policy.
Recycling Will EfW remove the need for recycling?	Section 2.2 of Chapter 2 Strategic context describes the role of recycling and the EfW processes in the waste hierarchy. The WSERRC proposal is not an alternative to recycling. Rather, it is part of an integrated waste management strategy for New South Wales, complementary to the other steps in the waste hierarchy and contributing to the <i>Waste Avoidance and Resource Recovery Act 2001</i> targets. For materials that are unsuitable for recycling, energy recovery is the preferred option.

Issue, concerns and questions raised	How and where this is addressed in the EIS
	Long-term moves to increase recycling through better source separation of waste and embedding circular economy principles in the design of products and materials will increase diversion from landfill. EfW facilities such as WSERRC will play a main role in diverting waste from landfill in this transition. Even as recycling increases in response to the functioning of circular economy principles, EfW will be needed to manage the residual waste that remains.
	Cleanaway is committed to increasing recycling and resource recovery. In 2018, it recycled more than 380,000t of paper and cardboard, 15,500t of plastic, and 25,000t of steel and aluminium. Cleanaway captured more than 115Mm ³ of landfill gas and generated over 135GWh of renewable energy, enough to power more than 27,000 homes.
	The proposal will include building a visitor and education centre, to help educate and inform the community on the principles of waste management, waste avoidance, the circular economy, recycling, resource recovery and EfW.
	More information is available in Chapter 1 Introduction and Chapter 2 Strategic context.
Resource recovery before combustion Describe the waste	Waste feedstock delivered to the facility will be residual from a waste processing facility that recovers material from the waste stream for recycling. Where waste streams are separated at source in line with the EfW Policy Statement, this waste may be sent directly to the facility without the need for further processing.
feedstock and what level of pre-sorting and recycling takes places before being sent to the facility? If materials are combusted that are not meant to be in the red bin, what happens to air quality?	Section 3.4.6 of Chapter 3 Proposal Description describes the waste delivery process and section 5.8 of Chapter 5 EfW policy outlines the process for inspection, quarantine and rejection procedures for unacceptable waste. All waste deliveries will come from suppliers approved by the proposal. This means that all suppliers will have to pre-qualify before they can enter the site. Pre-qualification will include steps so that the waste being delivered is suitable for combustion within the facility and complies with the NSW Energy from Waste Policy Statement and other licence and legislation conditions.
	Section 5.4 of Chapter 5 EfW policy describes the feedstock strategy for the proposal. The proposal will use waste from residual Municipal Solid Waste (MSW) and residual Commercial and Industrial (C&I) waste streams that would otherwise be sent to landfill.
	The flue gas system has been designed to incorporate a wet scrubber and other measures, to achieve current international BAT. The flue gas treatment process is designed to manage instances where small quantities of unacceptable waste enter the process. With these systems in place, it is still unlikely that hazardous waste will enter the combustion process, and if they did, the EfW process can treat this waste while maintaining licensed emission limits.

Issue, concerns and questions raised	How and where this is addressed in the EIS
Reducing waste There should be a focus on reducing waste and encouraging recycling, not creating EfW.	The WSERRC proposal is not an alternative to recycling. Rather, it is part of an integrated waste management strategy for New South Wales, complementary to the other steps in the waste hierarchy and contributing to the <i>Waste Avoidance and Resource Recovery Act 2001</i> targets. Cleanaway is committed to increasing recycling and resource recovery through education on waste avoidance, reuse and best practice recycling. In 2018, it recycled more than 380,000t of paper and cardboard, 15,500t of plastic, and 25,000t of steel and aluminium. Cleanaway captured more than 115Mm³ of landfill gas and generated over 135GWh of renewable energy, enough to power more than 27,000 homes. The visitor and education centres purpose is to help educate and inform the community on the principles of waste management, waste avoidance, the circular economy, recycling, resource recovery and EfW. For materials that are unsuitable for recycling, energy recovery is the preferred option.
	The EfW process typically leads to about a 90% reduction in the volume (or 80% reduction in mass (tonnes)) of waste that would otherwise go to landfill. If Incinerator Bottom Ash is reused into construction products, this number increases further to about 95% reduction in volume and mass of waste that would otherwise go to landfill.
	More information is available in Chapter 2 Strategic context.
Operational	
Electrical generation process What is the process of energy generation at the facility?	Electricity is generated by creating heat through the thermal treatment of waste feedstock. The heat is used to generate steam from a boiler which is used to drive a turbine. The turbine generates electricity, most of which is exported to the grid with a small amount used to power the facility. More information is available in Chapter 3 Proposal description
Heat Will the proposal emit heat and if so, will it impact surrounding communities?	As with all buildings, heat will be emitted into the air from the ventilation system. Additionally, the air-cooled condenser will emit heat. However, any heat added will be negligible, quickly dissipating and will not cause a temperature increase in the surrounding communities. More information is available in Chapter 3 Proposal description .
Heat and steam Can the heat and steam that is produced also be reused?	The facility has been designed to allow heat or steam to be exported directly to nearby industrial users, with further work underway to assess potential users.

Issue, concerns and questions raised	How and where this is addressed in the EIS
Residual ash management What are the by-products of the EfW process, how are they managed and can the by reused?	The thermal treatment of waste creates certain by-products, including: 1. Incinerator Bottom Ash (IBA) 2. Boiler Fly Ash 3. Flue Gas Treatment residues (FGTr). It is the intention that IBA will be transported offsite to an ash management facility which is not part of the scope of the WSERRC proposal and will be subject to a separate planning approval process as described in Chapter 22 Related development. Some metals recovery from the ash will be carried out onsite (at WSERRC), with additional metals recovery carried out at the offsite ash management facility. A portion of the boiler fly ash will be managed with the IBA. Options are also being investigated to reuse the IBA in construction products in line with practices in other countries. In the worst case, if a suitable reuse route cannot be found in Australia, IBA will be disposed of at a licensed landfill in New South Wales. FGTr and the remaining portion of the boiler fly ash will be treated at an existing offsite waste treatment facility before disposed to a licensed landfill. About 80,000tpa of IBA will be generated and about 20,000tpa of FGTr and boiler fly ash. More information is available in Chapter 3 Proposal description and Chapter 22 Related development.
Water use in the EfW facility What is the role of water in the EfW process and how it is managed to avoid any offsite impacts?	Water uses include boiler make up-water, flue gas conditioning pre-treatment and IBA quenching. The main objective regarding water use is to reuse as much water as possible. Water from the wet scrubber outlet will be captured and used within the flue gas conditioning stage. Rejected water from the make-up plant and from boiler blow-down will be used within the IBA quench. This means that no wastewater generated onsite will need treatment outside of the facility in normal operation. A small water treatment plant will be installed so that the water quality of feedwater is suitable for use within the boiler. More information is available in Chapter 3 Proposal description .
Timeframe for operations	The facility is intended to operate 24 hours a day, 7 days a week but will include downtime periods for maintenance as described in Chapter 3 Proposal description .

Issue, concerns and questions raised	How and where this is addressed in the EIS		
Timeframe for construction What is the timeframe from approval to operation?	Pending approval, detailed design and construction activities are expected to take about 39 months, subject to any external unforeseen delays.		
How long will the plant operate for? How long is the approval for the proposal, and what happens to the facility after that period?	EfW facilities have typical operational lives of about 30 years. Towards the end of the operational life of the proposal, the facility will be evaluated in terms of its need and ongoing role in the waste management industry.		
Environmental	Environmental		
Air quality assessment and compliance with international best practice/regulations in relation to air quality and health How does the proposal meet international standards for EfW technology, air quality and health? Explain the approach to and outcomes of the air quality assessment and how it performs against impact assessment criteria and international standards.	The proposal has been designed to meet the European Industrial Emissions Directive (IED) and the associated Best Available Techniques Reference (BREF) document which sets the European Union environmental standards for waste incineration as published on 3 December 2019. The EU Commission Implementing Decision (2019/2010) on the 12 November 2019 states the best available techniques (BAT) conclusions as the main element of the BREF and prescribes them to be adopted by Member States. Additionally, the facility will comply with the technical criteria set out in the NSW EfW policy – refer to Chapter 5 EfW policy. The emissions standards and the BAT that can achieve these standards, as described in the BREF, are recognised as current international best practice. The Air Quality and Odour Impact Assessment has analysed how the proposal performs against the BREF and NSW Protection of the Environment Operations Act 1997 requirements and demonstrates that under every operating scenario, the facility complies with relevant criteria. The odour assessment indicates that odour levels because of the proposal will be at or below the applied odour assessment criteria at all assessed receptors. More information is available in Chapter 5 EfW policy, Chapter 8 Air quality and odour and Chapter 9 Human health risk.		

Issue, concerns and questions raised	How and where this is addressed in the EIS
Carbon emissions and climate change What are the CO ₂ reduction benefits?	It is estimated that the proposal would result in a net reduction in greenhouse gas emissions of around 390,000t CO ₂ -e in its first year of operation. This covers the greenhouse gas emissions generated by the facility and the greenhouse gas savings which result from the diversion of waste from landfill and the export of electricity, part of which is categorised as renewable, back to the grid. More information is available in Chapter 18 Greenhouse gas and energy efficiency .
Hazardous materials How are dangerous goods managed on site?	Chapter 14 Hazard and risk lists the dangerous goods to be used and stored onsite and the management measures proposed to mitigate and avoid any hazards and risks. This includes the separation of storage areas for hazardous and dangerous goods that should not be mixed, as well as bunding of storage areas to contain any leaks. The site managers will develop a response plan which includes coordination with local response organisations, such as Fire and Rescue NSW and NSW Ambulance services.
	Section 3.4.6 of Chapter 3 Proposal description describes the waste delivery process and section 5.8 of Chapter 5 EfW policy outlines the process for inspection, quarantine and rejection procedures for unapproved waste, including hazardous waste. All waste deliveries will come from suppliers approved by the proposal. This means that all suppliers will have to pre-qualify before they can enter the site. Pre-qualification will include steps to make sure that the waste being delivered is suitable for combustion within the facility and complies with the NSW Energy from Waste Policy Statement and other licence and legislation conditions.
	More information is available in Chapter 14 Hazard and risk and Chapter 3 Proposal description.
Fire How is fire risk managed onsite?	Fire risk will be managed through various fire and emergency measures, including thermal imaging cameras to detect hotspots in the waste bunker; strategically located fire suppression at key points around the facility, including fire hydrants, fire extinguishers, water cannons and sprinkler systems; facility-wide vacuum cleaning system to reduce the likelihood of dust build-up; sufficient ventilation of the IBA building and gas sensors and alarms; real-time monitoring to detect leaks, and fire detection systems throughout the facility. These measures will be further developed in the detailed design and in consultation with FRNSW.
	More information is available in Chapter 3 Proposal description.
Fire Is the facility at risk from a bush fire?	The site is not mapped as being at risk of bushfire – it is not mapped as Bush Fire Prone Land (BFPL).

Issue, concerns and How and where this is addressed in the EIS questions raised **Cumulative impacts** A detailed and quantitative cumulative air quality impact assessment was done to assess the air quality impacts of the proposal with The Next Generation EfW facility, currently before the NSW Land and Environment Court. This was done by incorporating the expected Has the proposal assessed emissions from The Next Generation proposal to the background air quality levels for the purposes of the air quality assessment of the potential cumulative proposal. Predicted maximum cumulative concentrations are below the relevant criteria, except for annual average PM2.5 concentrations impacts with other and 24-hour average PM2.5 and PM10 concentrations. In these cases, the exceedance is because the existing background level is above the proposals? criteria already. The existing exceedances trigger the application of an alternative EPA assessment method referred to as 'Level 2 assessment - Contemporaneous impact and background' as explained further in Technical report A Air Quality and Odour Impact Assessment. This method thinks about the change in the number of days which experience an exceedance of criteria as a result of the proposal. The results of this assessment indicate that the proposal does not increase the number of days above the 24-hour average criterion at the assessed receptors for PM2.5 and PM10. The incremental results show that the maximum 24-hour average PM2.5 and 24-hour average PM10 concentrations are small. As such, the proposal is expected to have a small influence at the assessed receptor locations which in most cases would be difficult to notice beyond the expected background level. In addition, a qualitative cumulative impact assessment of the proposal with other confirmed projects within a 3km radius of the proposal was done. Impacts from other projects have been found that have the potential to overlap with impacts from the proposal, and where possible, measures to mitigate those impacts have been developed. More information is available in Chapter 8 Air quality and odour and Chapter 22 Cumulative impacts. Potential interference with Details of the proposal were provided to the Civil Aviation Safety Authority (CASA), to allow an assessment of the potential impact on the plume risk from the stack on aviation operations. A summary of the CASA Plume Rise Assessment was received on 28 April 2020 and aviation can be found in Appendix D to Technical report J Preliminary Hazard Analysis. The summary states that 'based on the information How was potential impact presented and assumed, there will not be an infringement of an Obstacle Limitation Surface for Western Sydney Airport (WSA). CASA on the protected airspace of recommends that an Acceptable Level of Safety will be achieved'. Western Sydney Airport assessed? An assessment against the National Airport Safeguarding Framework (NASF) was also done and concluded that the proposal did not pose any unacceptable risks to aviation operations. More information is available in Chapter 14 Hazards and risks.

Issue, concerns and questions raised	How and where this is addressed in the EIS
Air quality impact in combination with WSA	Western Sydney Airport (WSA) is at least 15km away from the proposal, so potential cumulative impacts were not considered with this proposal. A review of the WSA impact assessment shows that it would not affect the background concentration levels for air quality near the proposal as noted in Technical report A Air Quality and Odour Impact Assessment .
Air quality during a bush fire? What impact does the proposal have on air quality in a bushfire?	The air quality and odour impact assessment has analysed the potential impact of the proposal on existing air quality and found the impacts to be within all applicable criteria. The main air quality impacts associated with a bushfire event is an increase in particulates. The contribution of the proposal to particulates would be negligible in the context of particulate emissions from a bushfire. So, the facility will continue to operate in a bushfire.
Impacts on biodiversity How will the flora and fauna be impacted by the proposal?	The proposal will involve clearing of around 0.45ha of native vegetation. An assessment of the proposal's impact on nearby flora and fauna was completed. The overall landscaping plans for the proposal site will see the replacement of poor-quality vegetation with new native planting, expanding the urban tree canopy and restoration of Cumberland Plains Woodland species. The proposal will also rehabilitate the overland flow path, with beneficial impacts on water quality discharging to Reedy Creek and Eastern Creek. More information is available in Chapter 18 Biodiversity .
Meteorology How is data on meteorological conditions used in the air quality assessment?	The air quality assessment uses meteorological data from the Horsley Park Equestrian Centre Automatic Weather Station, to understand how emissions from the facility would disperse in the Western Sydney air shed. More information is available in Technical report A Air Quality and Odour Impact Assessment .
Landfill emissions comparison What is the equivalent amount of emissions and pollutants compared to landfill?	The diversion of waste which would otherwise be disposed to landfill will result in the reduction of methane gases produced in the decomposition process of landfilled waste. Calculations have been made to determine the comparable emissions generated from disposal of the same volume of waste to landfill, these are presented in Chapter 18 Greenhouse gas and energy efficiency and Technical report N Greenhouse Gas and Energy Efficiency .

Issue, concerns and questions raised	How and where this is addressed in the EIS
Emissions monitoring and testing How will emissions from the facility be monitored?	Each line will be equipped with a Continuous Emissions Monitoring System (CEMS) for continuous monitoring of the flue gas. CEMS will feed real time data to the control systems which will automatically adjust the combustion system and the injection rates for the flue gas cleaning system process, keeping the proposal compliant with its licence emission limit values. Before starting operations, Proof of Performance trials will be done in line with an agreed plan, to test all major process components, including emission controls, and demonstrate compliance with approved criteria. More information is available in Chapter 3 Proposal description .
Flue Gas Treatment What is the emissions treatment process, including back-up procedures if any part of the process fails?	The EfW facility will be capable of managing the flue gases in line with the emissions limits as set out in the Industrial Emissions Directive (IED) and the associated BREF and the <i>Protection of the Environment Operations Act 1997</i> . Emission Limit Values (ELVs) can be found in Technical report A Air Quality and Odour Assessment Report . The flue gas treatment system as described in Chapter 3 Proposal description is made up of several discreet parts. The facility has been designed such that enough redundancy is in place for continuous flue gas monitoring and cleaning. In the extremely unlikely event of a failure that leads to the monitoring system recording a consistent increase in emissions towards the ELV, the facility will be shut down until the issue can be rectified.
Human health impact What community health data is available?	Community health data for the Western Sydney Local Health District is available from NSW Health and is presented in the Technical report B Human health risk assessment . The original data is available at http://www.healthstats.nsw.gov.au/ Regular (usually fortnightly) updates to the website occur, to add new indicators and to update data on existing indicators.
What is the human health impact of the proposal?	 Chapter 9 Human health risk and Technical report B Human Health Risk Assessment assess the potential impacts of the proposal on human health. The impact assessment has concluded the following: No unacceptable risks for criteria pollutants (NO_x, SO_x, CO, PM_{2.5} and PM₁₀) – from the facility alone or in changing the background/existing levels No unacceptable risks for short-term or long-term exposures from the proposed facility No unacceptable risks for rainwater tanks or Prospect Reservoir The transport of waste will have minimal changes to the existing situation along the proposed route, so no change in health impacts is expected.

Issue, concerns and questions raised	How and where this is addressed in the EIS
Noise impact What are the potential noise impacts from the proposal?	Chapter 13 Noise and vibration and Technical report I Noise and Vibration Impact Assessment evaluate the potential noise and vibration impacts from the proposal. The operational assessment showed that all plant and equipment can be designed to comply with recognised criteria. The construction assessment showed that while specific activities and work schedules are not yet known, noise management levels might be exceeded, and that mitigation and management measures are expected to be developed further in a Construction Noise and Vibration Management Plan, to be prepared before starting works.
Traffic impact What are the potential traffic impacts from the proposal?	Transport impacts are assessed in Chapter 15 Traffic and transport and Technical report K Traffic and Transport Assessment Report . While there will be additional traffic generated by the proposal, the assessment of the network, including the two nearest intersections to the proposal, indicates the same level of service that currently exists will be maintained.
Visual amenity What will the proposal look like and what are the potential visual impacts?	Details of the proposal, including visual representations, are included in Appendix B Architecture and Landscape Design Strategy Report and Appendix C Drawings . An assessment of landscape character and visual amenity impacts are included in Chapter 16 Landscape and visual . Most impacts are assessed as either negligible, low or moderate to low, with some assessed as high to moderate.
Impacts on Drinking Water What is the potential impact to Sydney's drinking water supply, Prospect Reservoir and domestic water supplies, such as rainwater tanks/dams?	Technical report B Human Health Risk covers the potential impact of the proposal on sources of drinking water, such as the Prospect Reservoir and household rainwater tanks. The assessment concluded that the estimated concentrations in Prospect Reservoir as a result of the proposal are at least 5000 times lower than the individual drinking water guidelines that apply to each pollutant. For rainwater tanks, the total risk related to using water from a rainwater tank is at least 2000-fold lower than the relevant guidelines.
Site licence, measuring and reporting Describe how the environmental performance of the site will be regulated and monitored.	Chapter 4 Statutory context outlines the licences needed for the proposal. <i>The Protection of the Environment Operations Act</i> (POEO) 1997 is the main legislation regulating pollution control and management of waste. Persons carrying out scheduled activities must hold an Environment Protection Licence (EPL) which controls managing and reporting on the environmental performance of an activity.

Issue, concerns and questions raised	How and where this is addressed in the EIS
	 The proposal will be a scheduled activity for the purposes of the Act and will need an EPL. The relevant activities in Schedule 1 of the POEO Act include: Energy recovery from general waste (Clause 18) Thermal treatment of general waste (Clause 40) Waste storage (Clause 42) Operational data from the CEMS will be recorded, stored, reported to the EPA and published in compliance with the facility EPL conditions. Periodic monitoring of additional pollutants not recorded in the CEMS will be conducted and reported in line with the facility EPL conditions. The EPA completes audits to determine if facilities are publishing pollution monitoring data as set out in section 66(6) of the POEO Act.
Site auditing, breaches, incidents	The conditions of consent and EPL will create a framework for auditing of the operations and environmental performance of the facility and reporting of incidents.
Describe the process for detecting and responding to potential exceedances of regulated criteria and how information on exceedances will be reported?	The EPL will oblige the facility to report on the environmental performance of the facility, including through the CEMS. More information is available in Chapter 3 Proposal description.
Community and social is:	sues
Community impacts How have impacts on the community been avoided and what benefits will the community get from the proposal?	The site was carefully selected as the preferred site, following a detailed site selection study. The main aim was to avoid impacts on existing and planned residential areas and rural land uses through physical separation and internal best-practice emission control measures. The site is in a region that is expected to accommodate most of the population growth forecast for Sydney, driven in part by the development opportunities created by the Western Sydney Airport and Western Sydney Aerotropolis. The location of the site in this growth region and close to existing waste management infrastructure such as the Erskine Park Waste Transfer Station will minimise the transport distances between the sources of waste, waste processing facilities and the proposal. The need for EfW as part of an integrated waste management strategy and the associated environmental benefits are described in Chapter 2 Strategic context. Potential positive and negative social impacts of the proposal are described in Chapter 17 Social impacts.

Issue, concerns and questions raised	How and where this is addressed in the EIS
Community benefits What benefits will the community get from the proposal?	Chapter 6 Community engagement (this chapter) describes the approach to engagement, including formation of a community reference group (CRG) as the basis of long-term engagement with the community. The CRG will also be responsible for administering a community funding package. If the proposal is approved, a community funding package for Western Sydney is proposed, with the purpose of giving back to the community. Funding contributions would total \$150,000 per year and, subject to consultation and a decision by the community reference group (CRG), could be made towards community-based initiatives, development of local sporting infrastructure, community facilities and environmental areas such as tree plantings. The applicant has included in the EIS (Appendix G) a letter of offer and draft terms for a Voluntary Planning Agreement (VPA) to be
	entered into with Blacktown City Council under clause 7.4 of the <i>Environment Planning and Assessment Act 1979</i> .
	Should Blacktown City Council wish to pursue the offer for a VPA, the VPA shall be publicly exhibited for 28 days, in line with the <i>Environment Planning and Assessment Act 1979</i> , before determination of the proposal.
Employment What number and type of jobs will be generated by the proposal?	It is estimated that the proposal will create 900 direct construction jobs over the 3-year construction period and additional 700-1200 indirect construction jobs. Further, 50 highly skilled jobs will be created locally in operation.
	The proposal will also need and create new skill sets and employment opportunities in Western Sydney not otherwise currently available in the region.
Community involvement Explain the community consultation process to date, issues raised, how these issues have been addressed, and plans for ongoing consultation.	The community engagement conducted to date is summarised in Chapter 6 Community engagement (this chapter) and Appendix F Community and Stakeholder Engagement Report.
	Future and ongoing engagement is discussed in Section 6.4 of this chapter.

6.4 Ongoing and future consultation

The applicant will continue to seek feedback from businesses, residents, government agencies and other key community stakeholders as the design progresses.

6.4.1 Consultation following lodgement of the EIS

Engagement activities will be held in the public exhibition of the EIS. Following the exhibition period, the Department will collate submissions and pass them to the applicant.

A response to submissions report will then be prepared, setting out the proposal's response to the issues raised, including any changes to the design of the proposal. This report will be published, and the Department will notify those who made submissions.

If necessary, additional environmental assessment will be carried out, either to present more information or in response to design updates. Equally, if the environmental assessment discovers the need to modify the design, this will also be considered in the response to submissions report.

Because of COVID-19, information exchange and engagement with the community is likely to take place virtually. Other forms of digital communication, such as media releases, social media updates and WSERRC website updates will be used to help facilitate community participation.

6.4.2 Consultation during construction and operation

The following engagement tools will be used for ongoing consultation throughout the construction and operation of the proposal:

- A Community Reference Group will be established and will meet while the site is under construction and in the first two years of operation (see more details below)
- A regular email update will be distributed to the database of people interested in the proposal
- The WSERRC website will remain a current source of information
- The onsite visitor and education centre will help with educating and informing the community on the principles of waste management, waste avoidance, the circular economy, recycling, resource recovery and EfW.
- An annual open day at the WSERRC will be held
- Monitoring data from the proposal will be sent to the EPA. A summary of
 continuous monitoring data and compliance with emissions limits will be
 published on the WSERRC website.

6.4.3 Community reference group and funding package

A Community Reference Group (CRG) will be formed during construction and will function across the life of the proposal. The purpose of the CRG will be to help long-term relationships with the community and enable a forum for discussion of community concerns related to construction and operation of the facility, 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 through an independent facilitator. It is likely that this group will be refreshed every two years to give a variety of community and other stakeholders the opportunity to participate.

If the proposal is approved, a community funding package for Western Sydney is proposed, with the intention of giving back to the community. Funding contributions would total \$150,000 per year and, subject to consultation and a decision by the CRG, could be used towards community-based initiatives, such as development of local sporting infrastructure, community facilities and environmental areas such as tree plantings.

6.4.4 Voluntary Planning Agreement

The applicant has included in the EIS (**Appendix G**) a letter of offer and draft terms for a VPA to be entered into with Blacktown City Council (BCC) under clause 7.4 of the *Environment Planning and Assessment Act 1979*.

Should BCC wish to pursue the offer for a VPA, the VPA would be publicly exhibited for 28 days, in line with the *Environment Planning and Assessment Act 1979*, before determination of the proposal.

This is separate to the community funding package referred to above.