

ABERDEEN CITY COUNCIL

COMMITTEE	Capital Programme Committee
DATE	9 February 2022
EXEMPT	No
CONFIDENTIAL	No
REPORT TITLE	Ness Energy Project
REPORT NUMBER	RES/22/021
DIRECTOR	Steve Whyte
CHIEF OFFICER	John Wilson
REPORT AUTHOR	Pete Lawrence
TERMS OF REFERENCE	1.1

1. PURPOSE OF REPORT

- 1.1 The purpose of this report is to update the Committee on progress made with regards to the construction of the Ness Energy Project. This requirement was a recommendation approved at Full Council on the 4 March 2019.

2. RECOMMENDATION(S)

That the Committee:

- 2.1 Notes the progress achieved to date; and
- 2.2 Notes the financial position for the project.
- 2.3 Instructs the Project Team to undertake research and prepare responses to the Review of the Role of Incineration in the Waste Hierarchy including an evidence gathering visit to carbon capture utilisation and storage and Energy from Waste efficiency improvement projects in Denmark.

3. BACKGROUND

- 3.1 On 4 March 2019, the Council approved the award of the Ness Energy Project Residual Waste Treatment contract for the implementation of the Project to a consortium led by Acciona Industrial and Acciona Servicios Urbanos and an Inter-Authority Agreement, IAA3. Similar approvals were given by Moray Council and Aberdeenshire Council on 4 March 2019 and 7 March 2019 respectively.
- 3.2 The contract was signed on 8 August 2019 with work starting immediately to prepare the site, activate the planning permission and commence engineering design and procurement.
- 3.3 An update on progress with the project was provided to committee in September 2021.

Update Since September 2021

COVID-19

- 3.4 Since the September committee meeting, the Contractor has maintained operations at the site by following COVID-19 related working practices in line with government and other relevant guidance. There was minor construction workforce impact arising from a number of positive COVID-19 tests in the teams of both the main contractor and its subcontractors in November/early-December 2021. Further positive cases have been reported in January. This has resulted in some disruption to project management processes and the Contractor is reporting that mitigations are being implemented. The Contractor has reported adverse impacts on the overall delivery of the project arising either, in their view, directly from COVID-19 restrictions on staff movements/working arrangements or impacts on the supply chain, with delays in delivery of materials to the site and the ability to recruit suitably trained staff hampering work programmes.

Engineering, Design and Procurement

- 3.5 The large majority of engineering and design work is now successfully concluded and procurement of sub-contractors to undertake the construction, manufacture and installation of plant components is also nearly complete. All significant design elements are reviewed and subject to the approval of the Authority's Technical Advisors. Overall progress in this area is satisfactory.

Off-site Manufacturing/Supply

- 3.6 As detailed in 3.4, the contractor is now reporting that there have been difficulties in sourcing and delivery of supplies in a timely fashion for a range of construction activities.

On Site Works

- 3.7 A significant construction milestone has been achieved since the last report. The assembly of the boiler is complete and the independently verified boiler pressure test has been passed. The turbine and generator set alignment is complete, as is the air-cooled condenser and the flue gas treatment system is approaching completion. Significant progress has been made on the installation of the main building steelwork that surrounds the process plant albeit that progress was delayed as a result of the need to replace faulty bolts. The steelwork for the reception hall, administration, electrical and turbine buildings is largely complete and work progressing on the roof trusses for the main process plant. Some cladding works have been completed with the turbine and electrical building now being weathertight. Progress has been made on the electrical installation, albeit this has been held up by the slow completion of the building steelwork and cladding works. Images included at Appendix A show the current progress of the works.

Pollution Prevention and Control (PPC) Permit

- 3.8 The cyber-attack suffered by SEPA in December 2020 continues to hamper its ability to manage permit applications, however all matters have now been resolved between the contractor and SEPA and the draft permit is anticipated to be published for public consultation at the end of January. The permit is expected to be issued by mid-March. The contractor reports that it is satisfied with the permit conditions and the timing of its issue has no impact on the overall project programme.

Programme

- 3.9 Current indications are that commissioning is anticipated to commence in late-spring/early-summer 2022 with the facility fully operational in winter 2022/23. The date at which the Contractor is obliged to receive and manage the three councils' waste remains 29 October 2022.

Inter-Authority activity

- 3.10 The Project Board continues to meet in accordance with the Inter-Authority Agreement. The three-authority Officer Working Group also meets monthly and is currently establishing arrangements for delivery of commissioning waste, haulage of waste from Aberdeenshire and Moray Councils and the handling of bulky waste that, untreated, is outwith the dimensions defined in the Waste Acceptance Criteria for the facility. Large suites, carpets and mattresses are the most common items that will require pre-treatment.

Community Liaison

- 3.11 The contractor managed Community Liaison Group which includes south of the River Dee Community Councils and elected representatives continues to meet virtually on a quarterly basis. COVID-19 restrictions continue to prevent in-person meetings. The contractor updates the project website with construction related matters that have the potential to impact on neighbours and the wider community. The only complaints received since the last meeting relate to parking close to the site adversely affecting local businesses. The contractor has liaised with the businesses concerned and is managing its subcontractors accordingly.

Community Benefits

- 3.12 The contractor has made good progress in achieving Community Benefits commitments incorporated in the contract. The number of site visits is still restricted however the contractor has hosted higher education students and made online presentations as circumstances allow.

The following is a summary of the contractor's performance against its community benefits obligations in the contract year to October 2022.

Specific Commitment	Target	Actual (Year 2)
SVQ3 apprentices hired	1	7
Industry certification achieved	3	20+
Achievement of level 2 qualification or above	1	16+
Higher & Further Education Work placement	1	1

Volunteer Ambassador	1	2
Graduate recruitment (min of 28 weeks)	1	1
New entrants employed	2	4
Case Study	1	1
Timebank hours	8	4
Donations	£0	Over £55,000

Review of the Role of Incineration in the Waste Hierarchy

- 3.13 In November 2021, the Scottish Government appointed waste and sustainability expert Dr Colin Church as the independent chair of a review into the role of incineration in the waste hierarchy in Scotland.

The review will focus on 5 topic areas:

1. Given Scotland's waste management ambitions and current progress towards these, what capacity is required to manage residual waste in Scotland?
2. What are the options for managing residual waste?
3. What are the economic, environmental and social trade-offs of those residual waste management options?
4. How do we decide where capacity should be located, and in what form?
5. What can be done to improve existing residual waste treatment facilities in terms of carbon performance and societal impact?

The review will be undertaken in two parts with Topics 1-4 being the initial focus. In respect of implications for the Ness Energy Project, there is no indication that existing facilities or those in construction will be at risk as a result of the review; the focus is on what, if any, additional capacity is required and how this will be managed.

The final topic, which will be addressed late in 2022, is directly relevant to the Ness Energy Project and relates closely to the city's Net Zero ambitions. By comparison to landfill, the only indigenous alternative for managing non-recyclable waste, Energy from Waste delivers a significant carbon impact reduction and generates valuable base load electricity and heat. The Ness Energy facility will still be a carbon dioxide emitter, however, and the Project Team is aware that there are emerging technologies both in the UK and Europe that, if applied to the Ness Energy facility could result in the plant becoming a carbon negative process. Carbon Capture Utilisation and Storage and refinements in energy capture systems could improve the overall efficiency of

EfW facilities, albeit they require significant investment and/or supportive fiscal instruments to be viable.

The Ness Energy Project Team will undertake research into these opportunities with the intention of making a strong case to the Review that carbon reduction solutions are available and that governmental support is essential in achieving their delivery. The Ness Energy Project's Technical Advisor, Ramboll, is well positioned to support this work and is involved in relevant projects in Denmark. It is proposed that the Project Team undertakes an evidence gathering visit to these projects in order to strengthen the submission to the Review. This activity can be undertaken within existing resources and budget allocated to the Ness Energy Project.

4. FINANCIAL IMPLICATIONS

4.1 Payments are being made to the contractor in line with Milestones set out in the contract. The Contractor has indicated to the Authority that it believes its costs for completing the construction works have increased as a result of Covid-19 beyond what was anticipated when the parties reached an agreement on Covid-19 impacts in 2020.

4.2 The table below shows the project budget share for the Aberdeen City Council.

Gross Budget	Spend to date
£70.0m	£ 48.3m

5. LEGAL IMPLICATIONS

5.1 There are no significant legal issues to report.

6. MANAGEMENT OF RISK

Category	Risk	Low (L) Medium (M) High (H)	Mitigation
Strategic Risk	Contractor termination	L	Extensive procurement work undertaken to select proven and financially stable contractor. Strong contractual controls in place
Compliance	Health and Safety breaches during construction	L	Strong contractual obligations to use best Health and Safety practice monitored on site daily by Authority Technical representative
	Failure to obtain Permit to operate from SEPA	L	Proven technology already consented elsewhere in Scotland
Operational	Delay in Construction Programme	M	Consequences of delay managed through contract

			conditions. Effective communication with three authorities' waste teams to manage consequences should they arise
Financial	Project costs increase as a result of Contractor Claims	M	Contract conditions define claims management processes
Reputational	Construction delay and cost overspend	L	Contract obligations deemed sufficient to minimise risk to the Authority
Environment / Climate	Failure to operate facility within authorised emission levels	L	EfW is best available technology for management of mixed municipal waste. Established and proven process selected during procurement provides strong confidence that plant will operate well within acceptable standards. Low carbon heat and power from this facility will displace fossil fuel thereby reducing net carbon emissions

7. OUTCOMES

<u>COUNCIL DELIVERY PLAN</u>	
	Impact of Report
Aberdeen City Council Policy Statement	<p>Unleashing the non-oil and gas economic potential of the city: The construction of the energy from waste facility will create over 200 jobs many using skills transferable from the oil and gas sector. Furthermore, during the 20 years of operation, highly skilled, engineering-based staff will be required, again utilising skills common in the oil and gas sector.</p> <p>Maximising community benefit from major developments: There are numerous community benefit obligations built into the contract including the establishment of apprenticeships, placements and training. Links are being established with schools in the region to support environmental education.</p>
Aberdeen City Local Outcome Improvement Plan	
Prosperous Economy Stretch Outcomes	The proposals within this report support the delivery of LOIP Stretch Outcome 1 – 10% increase in employment across priority and volume growth

	<p>sectors by 2026. The construction of the energy from waste facility will create over 200 jobs. Furthermore, during the 20 years of operation, highly skilled, engineering-based staff will be required.</p> <p>The Contractor has obtained Real Living Wage accreditation and this applies to all sub-contracts.</p>
Prosperous People Stretch Outcomes	2.1 Promoting inclusive economic growth for our most disadvantaged communities. There are numerous community benefit obligations built into the contract including the establishment of apprenticeships, placements and training. Links are being established with schools in the region to support environmental education. The facility is being developed close to one of the disadvantaged areas of the city.
Prosperous Place Stretch Outcomes	14.1 Reducing emissions across the city through delivery of Aberdeen's Sustainable Energy Action Plan 'Powering Aberdeen'. Construction of the Ness Energy EfW facility will significantly reduce carbon impact from the disposal of non-recyclable waste. The facility also provides the opportunity to develop low carbon heat supplies to local housing and businesses thereby offsetting fuel poverty.
Regional and City Strategies	Strategic Development Plan: Sustainable Development and Climate Change. This facility will increase the supply of renewable energy in the region and diversify the mix of renewable sources. The facility enables the objective to meet our waste management needs locally and promote the development of the Circular Economy. The facility is specifically identified at paragraph 6.18 as an objective of the Plan.
UK and Scottish Legislative and Policy Programmes	The Waste (Scotland) Regulations 2012 introduced a ban on the landfilling of biodegradable waste. This ban will now come into force in 2025. The facility enables the three authorities in the Northeast to comply with that regulation 3 years in advance.

8. IMPACT ASSESSMENTS

Assessment	Outcome
Equality & Human Rights Impact Assessment	Full EHRIA not required. Evidence submitted to Equalities Team.

Data Protection Impact Assessment	Screening questions completed – not required
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9. BACKGROUND PAPERS

Appendix A. Images of Construction Works

10. REPORT AUTHOR CONTACT DETAILS

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Appendix A. Images of Construction Works



View from West of Facility: Note Bunker complete and Cladding commencing



View from SW: Note Air Cooled Condenser and Fire Water Tank in Foreground



View from Northeast: Main Building Steelwork shape becoming apparent