



**Glasgow City Council**

**Environment, Sustainability and Carbon Reduction City Policy Committee**

**Report by Executive Director of Neighbourhoods and Sustainability**

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**GLASGOW RECYCLING AND RENEWABLE ENERGY CENTRE (GRREC) UPDATE**

**Purpose of Report:**

To provide Committee with an update on the key project milestones achieved by the GRREC.

**Recommendations:**

The Committee is asked to note the contents of the Report.

Ward No(s): All

Citywide: ✓

Local member(s) advised: No

Consulted: No

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## **1 Introduction**

- 1.1 At the last meeting of the Environment, Sustainability and Carbon Reduction City Policy Committee on 5<sup>th</sup> February 2019, members requested an update on the GRREC and it was agreed that a report would be provided to a future Committee meeting (see undernoted link).

<https://www.glasgow.gov.uk/councillorsandcommittees/agenda.asp?meetingid=16022>

- 1.2 The purpose of this report is to provide an update on the progress of the GRREC.

## **2 Background**

- 2.1 The GRREC is a state of-the-art residual waste treatment facility designed to process the majority of residual waste managed by the council, which is currently landfilled. This material predominantly comprises waste of domestic origin and smaller quantities of commercial waste.
- 2.2 The GRREC was in response to the Scottish Government's emerging zero waste policy which was later enacted into law on 9<sup>th</sup> May 2012 as The Waste (Scotland) Regulations 2012. Most significantly, the Regulations strictly prohibits the disposal of biodegradable waste at landfill from 1<sup>st</sup> January 2021. Therefore, the council's historic approach to the disposal of residual waste is not a viable long-term solution and a treatment facility such as GRREC is required to satisfy the above Regulations.
- 2.3 The GRREC uses a range of mechanical and biological processes to extract valuable recyclables in the form of metals and plastics and generate renewable electricity from food waste and residual materials. The GRREC is not a replacement to the frontline recycling services provided by the council; these initiatives remain pivotal to the council's waste strategy and will continue to be operated and improved in the years to come.
- 2.4 The GRREC is designed to process residual waste which would otherwise be disposed at landfill and the facility was never intended to process other separately collected materials such as food waste, glass, bulky or dry mixed recyclables. The Waste (Scotland) Regulations 2012 strictly prohibits the mixing of separately collected materials.
- 2.5 The facility is being delivered as part of a 25-year partnership with Viridor, one of the largest waste management operators within the United Kingdom. The contractual relationship is such that Viridor is responsible for the design, construction, commissioning and operation of the facility. The Council pays Viridor a fee to operate the facility and process residual waste which the council will continue to collect and deliver to the facility.
- 2.6 The GRREC comprises three main technologies:

- A Smart Materials Recycling Facility (S-MRF) which extracts recyclables and organic fines material to prepare a Refuse Derived Fuel (RDF) from remaining material;
- An Anaerobic Digestion (AD) facility then processes the organic material to produce a biogas which is captured and used to generate renewable energy in the form of electricity with heat being re-used within the process;
- An Advanced Conversion Facility (ACF) which uses gasification technology to thermally treat RDF and synthesise a gas which is then captured and fully combusted to raise steam and drive a turbine to generate electricity which is distributed to the national electrical grid, as with electricity from the AD process.

2.7 The contract was awarded to Viridor in January 2012 and the GRREC began processing the council's residual waste on 14 July 2016 in preparation of commissioning and full service.

2.8 The GRREC achieved full services on 28 January 2019.

### **3 Strategic Context**

3.1 The GRREC will process material previously sent to landfill and achieve a recycling rate of approximately 10% and landfill diversion rate of circa 90% for all material processed by the facility. This will positively contribute towards the council's overall environmental performance.

3.2 The GRREC is part of a wider council strategy to divert waste from landfill, encourage kerbside recycling and drive behavioral change across the city.

### **4 Key Milestones achieved to Date**

4.1 There are a number of significant project milestones which have been achieved to date, detailed as follows:

<b>Key Milestone</b>	<b>Date Achieved</b>
Contract award	January 2012
Planning permission	January 2013
Site establishment and commencement of site clearance	May 2013
Construction commencement	October 2013
Pollution Prevention and Control (PPC) permit issued by SEPA	August 2014
Certificate to receive waste within the S-MRF and AD	July 2016
Commencement of waste deliveries	July 2016

Certificate to receive waste within the ACF	July 2018
First gasification of waste within the ACF	October 2018
Achievement of full services	January 2019
Processed approximately 142,353 tonnes of residual waste in total to the beginning of February 2019	February 2019

## 5 Community Benefits

- 5.1 Community Benefits are a contractual requirement of the GRREC contract and formed a significant element of the overall tender evaluation. Viridor fully embraced the concept of Community Benefits and developed a comprehensive package of commitments across the core themes of Education and Awareness, Recruitment and Training and Small Medium Enterprises/Social Enterprises support.
- 5.2 In order to ensure the successful delivery of the Community Benefit outcomes across the entire life of the contract, Interserve employed a dedicated Community Benefits Officer during construction and Viridor employed their own Officer for both the construction and operational phases of the contract.
- 5.3 A summary of the notable Community Benefits delivered to date include:
- Delivery of the annual Go4SET programme from 2012 in conjunction with the Engineering Development Trust. This 10-week educational programme encourages secondary school pupils in Glasgow to pursue further study and career opportunities within Science, Technology, Engineering and Mathematics (STEM) subjects;
  - Approximately £46.2m of contracts awarded to businesses in Glasgow during the construction phase of the contract up to 31<sup>st</sup> August 2018, including catering, cleaning and trades contracts;
  - Recruitment of 103 new entrants to the workforce;
  - Appointment of 17 apprenticeships, 183 work experience placements and 5 Year-in-Industry appointments;
  - 148 free workshops/classroom-based training to upskill local businesses across a range of business topics, including procurement strategy, human resources and programme management.

## 6 Progress Update

- 6.1 The Independent Certifier, AECOM, certified the GRREC as achieving full service on 28 January 2019. This signified that all parts of the GRREC process were working safely together and that the facility was capable of meeting the key performance obligations of the contract. Final test reports

relating to the turbine will be provided by the end of February 2019; however, no issues are anticipated and the turbine is currently operating as intended.

- 6.2 Most importantly for a development of this scale and complexity, Viridor have demonstrated their ability to build and commission the facility safely and have completed over 1.65 million hours of work as main contractor without a RIDDOR reportable incident.
- 6.3 Over the next few weeks until the end of the financial year on 31 March 2019, the council will optimise delivery arrangements to the GRREC and Viridor will improve their front-end reception arrangements to make the flow of delivery vehicles throughout the site more efficient.
- 6.4 It is anticipated that the pro-rata equivalent of 175k tonnes per annum of residual waste will be processed between 28 January 2019–31 March 2019. In 2019/20 the council expects to deliver the full 200k tonnes per annum to the GRREC. The area surrounding the GRREC will feature as one of the prioritised zones within the forthcoming Local Heat and Energy Efficiency Strategy.

## **7 Policy and Resource Implications**

### **Resource Implications:**

<i>Financial:</i>	The GRREC is one of the largest and most complex contracts ever managed by the council and carries a significant annual expenditure and commercial risk profile. A dedicated contract management team has now been appointed to protect the council's financial position.
<i>Legal:</i>	The GRREC contract is a complex document which consists of many interrelated legal clauses and risk positions. The contract management team has the full support of the council's Legal Services and external legal experts to reduce the council's exposure to legal risk.
<i>Personnel:</i>	The GRREC will be operated by a team of staff appointed by Viridor. A team has been established within the council to manage the contract.
<i>Procurement:</i>	Any goods and services required to operate the GRREC will be procured by Viridor.
<b>Council Strategic Plan:</b>	The GRREC supports several themes of the council's Strategic Plan. The Community Benefits embedded within the contract supports the theme of 'A Thriving Economy' by stimulating investment in the city economy and also providing training and upskilling of

local businesses (Priority 4).

A further priority of GRREC is to provide educational benefits to the people of Glasgow, directly supporting the theme of 'Excellent and Inclusive Education.'

Finally, the GRREC will contribute significantly towards improving the environmental credentials of Glasgow in the theme of creating 'A Sustainable and Low Carbon City' (Priority 64).

### **Equality and Socio-Economic impacts:**

*Does the proposal support the Council's Equality Outcomes 2017-22*

The GRREC is designed, built and operated by Viridor. As one of the largest waste management operators within the United Kingdom, Viridor operate their own Human Resources policy to ensure they are an inclusive and fair employer.

*What are the potential equality impacts as a result of this report?*

An EQIA screening was undertaken and can be viewed via the following link:  
<https://www.glasgow.gov.uk/CHttpHandler.ashx?id=44576&p=0>

*Please highlight if the policy proposal will help address socio economic disadvantage?*

The GRREC provides a number of socio-economic benefits including, recruitment of 103 new entrants to the workforce, appointment of 17 apprenticeships, 183 work experience placements and 5 Year-in-Industry appointments.

### **Sustainability Impacts:**

*Environmental:*

The GRREC will significantly improve the council's environmental performance and is expected to achieve a 10% recycling rate and 90% landfill diversion rate for all material processed. The GRREC is also expected to generate enough electricity to power around 22k homes and also reduce carbon emissions by around 90k tonnes per annum of Carbon Dioxide.

*Social (including Article 19 opportunities):*

Community Benefits is at the heart of the GRREC contract; a comprehensive package of benefits is being delivered to improve education and awareness, provide recruitment and training opportunities for the people of Glasgow and stimulate investment in the City economy.

*Economic:*

The GRREC is a large and complex contract with a significant annual expenditure and potential for

additional income to be shared with the council. The project has already invested significantly in the local economy with around £46.2m of expenditure on contracts within Glasgow.

**Privacy and Data  
Protection impacts:**

Viridor will operate the GRREC in full compliance with all relevant legislation relating to privacy and data protection. The council's contract management team will further adhere to all guidance and rules issued at the corporate level.

## **8 Recommendations**

The Committee is asked to note the contents of the Report.