#### ABERDEEN CITY COUNCIL

COMMITTEE Communities Housing and Infrastructure

DATE 24<sup>th</sup> May 2017

REPORT TITLE Second progress report for Heat Network Torry – Phase 1

REPORT NUMBER CHI/17/092

INTERIM DIRECTOR Bernadette Marjoram

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### 1. PURPOSE OF REPORT:-

The report is to update committee on progress on the project for Heat Network in Torry – Phase 1.

## 2. RECOMMENDATION(S)

The committee is recommended to note

a) progress of the project to date as presented in the report and in the Appendix which was approved by Strategic Asset & Capital Board on 19 April 2017.

and to instruct

b) Head of Land and Property Assets to present a full business case to a future meeting of this committee.

## 3. BACKGROUND/MAIN ISSUES

The Energy from Waste Plant (EfW) has been agreed by Council as a preferred requirement going forward to meet the Council's obligations to deal with waste disposal and a Board has been operational since 2011 to deliver its requirements.

At its meeting on 24 October 2016, the Council agreed that

'a heat network is of fundamental importance to this project both in order to meet the permit requirements of SEPA but also to provide low-cost energy to those living in nearby communities' (Recommendation vii)

The closest community to benefit from this scheme will be the community of Torry where it is anticipated that 800 residents will be able to receive low carbon heat from the plant to be delivered in phases from 2017.

Torry is a community of 10,000 people with a high density of council owned houses and where high levels of fuel poverty are evident. It provides a perfect example of matching a modern waste solution providing low cost and energy efficient heat to a community who requires it close by.

To facilitate this, the heat network infrastructure for Phase 1 should be delivered before the completion of the Energy from Waste (EfW) facility at East Tullos, which means that it has to be designed, built and delivered before the EFW plant is in full operation in 2020/21.

Moreover, the delivery of a heat network to a local community is critical for the utilisation of heat from the EfW plant and its positive end usage is an essential permit requirement for its operation. The low carbon heat supply from the EfW to existing properties helps to reduce carbon emissions by displacing existing fossil fuel heat source.

By delivering Phase 1 of the district heating network, this initial project will pave the way for an expansion of the heat network to the wider Torry area and beyond.

### 4. FINANCIAL IMPLICATIONS

The initial feasibility study carried out by the Council's consultants (Ramboll) identified the estimated cost of the proposed design, build and delivery of Phase 1 of the Heat Network to be £9.5 million.

At its meeting of 24 October 2016, Council agreed to commit funding from the Energy from Waste (EfW) Construction budget included in the Non-Housing Capital programme to phase 1 of the Torry Heat Network, and also match fund the Interreg North West Europe HEATNET project The HEATNET project includes the installation of heat pipes, and must be spent before the end of 2018.

The secured amounts above would allow for the introduction of Phase 1 of the Torry Heat network. This is approximately 15% of the potential cost of a Torry-wide scheme. A Project Proposal has been submitted to the Council's Strategic Asset & Capital Board to establish a 'Heat Network Torry Board', to progress with this project to meet its financial and statutory requirements as laid out by the EfW operations permit stipulations.

### 5. LEGAL IMPLICATIONS

There are currently no legal implications at this stage of the project.

## 6. MANAGEMENT OF RISK

The purpose of this report is to provide an update on the identified risk that if a local heat network is not developed from the new Energy from Waste plant, the facility will not meet the permit requirements of SEPA (Scottish Environmental Protection Agency) as reported to committee on 24 October 2016.

To mitigate against this risk, a project proposal has been submitted and approved by the Council's Strategic Asset and Capital Board on 19 April 2017, and a preparation of a full business case has begun. The board also appointed the Head of Land and Property Assets as sponsor of the project and to form a Project Board to oversee its delivery.

The full scope of potential risks to the delivery of the project to include Financial, Employee/ Customer/Citizen, Environmental, Technological, Legal and Reputational Risks and will be developed as part of the business case.

#### 7. IMPACT SECTION

## **Economy**

The EfW plant project provides excess heat as a by-product, and the Council is demonstrating innovation in its heat strategy by using the heat produced from the plant as a low carbon, lower cost of heat supply for local communities in Torry to help alleviate fuel poverty.

The delivery of the heat network project would create job opportunities during the construction and installation of the heat network. The future management and maintenance of the heat network will also create further work opportunities.

Establishing a district heating network in the Torry area, will give the area an advantage in terms of heating supplied by low carbon heat from the EfW plant. Such a network is encouraged by Scottish Government policy.

Adding a secure, long term heat supply to the expanding heat network to the city will also build confidence in local energy resilience for the Torry area and eventually to other areas of the City.

The Torry area will benefit from energy infrastructure which has the potential to expand beyond Torry and into other areas of the city. This will further enhance Aberdeen City's pioneering reputation in district heating and be an exemplar city in Scotland.

## **People**

The staff delivering this project will be involved in engagement and communicating with the local community of Torry and this will give the residents and businesses in Torry the choice and opportunity to get involved in the development of the district heating network. The supply of the heat source from the EfW plant in East Tullos will ensure that heat supply is "locally" sourced and low carbon.

This project will benefit the local residents in Torry by offering a potentially reduced cost of heating, depending on the existing heating fuel source replaced and the comparison heat cost. It will help alleviate fuel poverty in an area designated by the Scottish Index of Multiple Deprivation (SIMD) as one of the most deprived in the City.

### **Place**

The project will develop opportunities for the reduction of carbon emissions from utilising low carbon heat supply from the EfW plant and be a means for displacing the use of fossil fuel or electricity to generate heat. This will help create a more environmentally friendly area in Torry.

### **Technology**

The project will use technology to provide a capacity to monitor the supply and demand of heat /energy in the properties connected to the heat network in the Torry area and this will further ensure that heat is used effectively. The use of advanced technology will also be deployed to profile future demand and will inform potential

network expansion into other areas in the city utilising the heat supply from the EfW plant.

## 8. BACKGROUND PAPERS

Committee: Communities, Housing and Infrastructure

Report title: Progress Report for Heat network Torry - Phase 1

Report No: CHI/16/320 Date: 24 January 2017

Via website:

http://councilcommittees.acc.gov.uk/documents/g4319/%2024th-Jan-2017%2014.00%20Communities%20Housing%20and%20Infrastructure%20Committee.pdf?T=110

# 9. APPENDICES (if applicable)

1. Project Proposal approved by the Strategic Asset and Capital Board on 19 April 2017.

## 10. REPORT AUTHOR DETAILS

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