

MOBILE HEAT STORAGE SCHEME (INITIAL PHASE OF DISTRICT HEATING SYSTEM)	1st March 2016
TO: ENVIRONMENTAL SERVICES COMMITTEE	
FOR DECISION	

Linkage to Council Strategy (2015-19)	
Strategic Theme	Sustainability and Efficiency
Outcome	Using our resources as efficiently as possible to deliver value for money for our ratepayers.
Lead Officer	John Richardson (Head of Capital Works, Energy and Infrastructure) Patricia O'Brien (Funding Unit Manager)
Cost: (If applicable)	TBA

Purpose

The purpose of this report is to provide information to Council on a new European Union Funding Opportunity and to seek Councils approval to submit an application to the fund.

Background

The European Commission recently announced a new competitive fund – the Urban Innovative Actions Programme. This fund has been established to test new innovative approaches to the challenges faced by urban areas / cities. Whilst research on urban issues is well developed, the potential solutions are not always put into practice, one of the reasons being that a reluctance to use taxpayer's money to fund ideas that are totally new and innovative.

The aim of the fund is to generate knowledge of what works in addressing urban problems so as to upscale solutions across the EU. The total budget available over the period 2015-2020 is €372m with a maximum award of €5m per project, a co-financing rate of 80% and a maximum project duration of 3 years.

The four topics of the call are:

- Jobs and skills in the local economy
- Urban poverty with a focus on deprived neighbourhoods
- Integration of migrants and refugees
- Energy transition (our interest for Council)

The eligible authorities are urban authorities belonging to an urban area of more than 50,000 inhabitants.

Causeway Coast and Glens Borough Council has renewable energy as one of its core economic drivers. The strategic context is to create a new sustainable energy framework and investment platform. Council understand the significance of energy supply and costs to local businesses as well as the significance of Energy to attracting Investment into the region. Our Infrastructure Team have a well-developed Energy Management Strategy that aligns renewable and innovative energy projects with delivering sustainable solutions for the Council over the medium to long term. This is a great opportunity for funding that is aligned with Council Strategy.

Council are already engaged in developing a Strategic Business Case for a SMART Grid and have already completed a robust study thoroughly researching and identifying a commercially viable Renewable Energy Hub Project. This also included involvement of Energy Storage Solutions culminating in the future establishment of a specific Localised Microgrid.

Project Proposal

The project is designed as a first step in moving towards a large demonstrator project in the future. It is a pilot district energy system utilising heat trucks delivering heat from the Craigahullier landfill gas engine to Council leisure centres and some large industrial customers and possibly one of the large housing estates in Coleraine. This would be a transitional step to those heat customers switching over to a district heating pipe if one is constructed in the future as part of Councils Microgrid / Smartgrid proposition).

Main Challenges to be addressed

Industry in Northern Ireland simultaneously suffers from the second highest electricity prices in Europe and excessive grid connection costs, which put the Province at an economic disadvantage relative to the competing regions of GB and the Republic of Ireland.

- The concept of Micro-Grid is unproven in the UK.
- Initial Capital Costs are high
- State Aid considerations
- Large scale efficient energy storage is emerging but as yet unproven at scale
- Co-ordination of a critical mass of medium and large private and public electricity and heat users
- Complexity and lack of experience operating the Single Electricity Market
- Lack of a Change Champion

Outcomes

If successful, subject to business case, the initiative would provide the Causeway area with cheaper heat and power and thereby help to attract new businesses to locate in the borough. As a pilot the District Heating Trucks Project will help test the feasibility for the larger scale project whilst at the same time generate local interest and support in a larger scale demonstration project for the linking of housing estates, industrial estates and commercial / public sector sites.

The project will be able to provide many benefits which are not presently available to the energy customer base in the area.

Sufficient data is not currently available to produce a benefit cost ratio and business case. When details become available, the proposal will be scrutinised by our Energy Officer and then be presented to Council for recommendation to take the proposal to the next stage.

Recommendation

It is recommended that Council approve the application to the European Commission under the Urban Innovative Actions Programme for a pilot District Energy Project utilising gas from the Craighullier landfill gas engine.