

SFT OUTCOMES

2023

Innovative public/private joint venture to deliver energy projects in Midlothian

PRIMARY OUTCOME

10

INFRASTRUCTURE-RELATED CARBON DIOXIDE EMISSIONS ARE REDUCED

SECONDARY

03

04

05

OUR CORPORATE PRIORITIES



NET ZERO



SUSTAINABLE PLACES



INCLUSIVE GROWTH

While Scotland has set itself an ambitious goal of becoming net zero by 2045, there are other public sector organisations across Scotland that are working towards a much earlier target.

One such public body is Midlothian Council, which declared a 'climate emergency' in 2019 and has committed to making the Council's activities net zero by 2030.

To achieve that bold objective, Midlothian Council, supported by Scottish Government's Low Carbon Infrastructure Transition Programme (LCITP), developed a business case for distributing waste heat from FCC Environment's recycling and energy recovery centre (RERC) at Millerhill to the nearby new town of Shawfair via a district heating network.

While the business case concluded the RERC could provide a cost-competitive, low carbon heat supply to Shawfair, it predicted that financial returns would be too low to support a fully private sector solution. Midlothian Council did not believe it had the required skill and capacity to deliver the project by itself.

In seeking an alternative way forward, Midlothian Council worked with its advisors and our Net Zero Buildings team to develop a delivery model based on a joint venture energy partnership.

With support from our Net Zero Buildings team, Midlothian Council engaged with the market to test the idea, then ran a competitive procurement exercise for a joint venture energy partner. Vattenfall Heat UK was subsequently appointed and Midlothian Energy Limited (MEL) established as a 50/50 joint venture.

Through the LCITP, our team provided Midlothian Council with an expert 'critical friend' to support it throughout the business case development, including input to the innovative delivery model based on a public-private joint venture, and subsequent procurement.

The 'energy partnership' joint venture is the first of its kind in Scotland, and one of the first in the UK. A number of other public bodies were named on the Contract Notice, including neighbouring local authorities, educational establishments and NHS Lothian. This allows MEL to secure additional 'anchor loads' in the area, which will underpin further investments in the expansion of the heat network.

MEL is now fully operational and construction of the heat network to serve Shawfair is well underway. The energy centre for the heat network is being built, and the first tranche of 4km of underground pipes is now being installed. MEL will also deliver additional low carbon energy projects across Midlothian and surrounding areas, with plans to invest £100m in the first five years of its operation.

The heat network will provide low-carbon heat to a minimum of 3,000 new homes and the town centre buildings at Shawfair, with scope to expand the network in future.

This initial phase is expected to reduce emissions by up to 90%, saving over 2,500 tonnes of CO2 per year, when compared with individual gas boilers - the equivalent of taking 1,200 cars off the road.



The pipeline of projects in development will allow MEL to deliver significant additional carbon savings over time, all working towards Midlothian Council reaching its 2030 net zero pledge.

Gordon Pollock, Project Director at Midlothian Council, who led the business case and procurement, said: *"It was the exceptionally positive response to the detailed and extensive market sounding that gave me the confidence to recommend a joint venture as preferred option to the Council.*

"With advice from the Scottish Futures Trust and Brodies in particular, the procurement process was tailored to suit the joint venture option. The 50/50 joint venture between Midlothian Council and Vattenfall, Midlothian Energy Limited (MEL), was set up in 2020. This innovative approach means that the Council, through MEL, is better able to progress energy projects on multiple fronts without internal resource constraints."