

Exeter Energy Network

Energy Centre site – land off Clapperbrook Lane

A new heating system for Exeter

Heating the UK's properties and industry accounts for 37% of the UK's carbon emissions. Most of this heat comes from fossil fuels, so developing more sustainable heating systems in our cities is a priority to meeting the UK's legally binding 2050 net-zero target.

The Exeter Energy Network is a heat network that will supply low carbon heat to buildings in central Exeter from a centralised Energy Centre, allowing them to make significant strides in helping Exeter do its part in meeting this common goal.

By connecting to a centralised energy centre:

- Buildings can remove the need for individual gas boilers
- Exeter will enjoy cleaner air with less reliance on imported fossil fuels
- Will help Exeter meet its commitment of becoming net zero by 2030

It is a more efficient, and eco-friendly way of heating buildings and it is already used successfully in many countries around the world, as well as across the UK.

The Energy Centre will generate low carbon heat from a variety of sources including air source heat pumps and utilising waste heat from the adjacent Energy Recovery Facility. The Energy Centre is also future proofed with space ready for a future phase to house Water Source Heat Pumps that would take heat from the River or Canal.

Where is the proposed energy centre site for the Exeter Energy Network?

1Energy are planning to build the energy centre on land between Marsh Barton railway station and the Exeter Ship Canal, known as the Grace Road site. Part of this site was used as a laydown area when the railway station was being constructed. The Grace Road Energy Centre received outline planning consent at planning committee on 4th August 2025.

Why has this site been chosen?

An assessment of 20 potential energy centre sites across the city was carried out, by 1Energy, with the proposed location found to be the most suitable for several reasons. The most important of these is the proximity of the site to a number of potential sources of low-carbon energy: an energy from waste facility which currently produces significant amounts of waste heat; a council-owned solar farm; and the River Exe – latent heat from the river could be used as a source of renewable energy for the project. Connecting to at least one of these sources of low carbon energy will reduce the emissions associated with the Exeter Energy Network, whilst potentially reducing the cost of heat for our customers.

Other reasons for choosing the site include:

- The proposed site is adjacent to the Marsh Barton Trading Estate, so the Energy Centre will sit alongside the existing light-industrial context.
- it is land that has been designated for strategic mixed-use allocation by Exeter City Council in the emerging Local Plan.
- the site allows a practical route to connect the Energy Centre to the city via a network of underground hot water pipes; and,
- it is close to proposed housing developments west of the River Exe which will all require low-carbon heating systems to meet building regulations.

How will the energy centre affect the Riverside Valley Park?

Views into the site from the Riverside Valley Park will be obscured by the line of mature trees which stand along the canal towpath, and there will be further tree planting as part of the development.

Working in collaboration with ECC we are planning to increase the biodiversity of the field ("Biodiversity Net Gain") by at least 50%, as well as including walking trails to improve access to the site.

The project will also help improve air quality right across Exeter by enabling organisations with large buildings to decommission their gas boilers and replacing them with low carbon heat from our network of pipes. Exeter Energy estimate the heat network will save over 13,000 tonnes of carbon emissions a year, helping Exeter build on its reputation as a city which is playing a leading role in tackling the climate emergency.

Is this site in a flood zone?

The Energy Centre site is within a category 3 flood zone. As such special measures need to be taken to ensure that the Energy Centre would not increase flood risk elsewhere during a flood event. Exeter Energy has therefore designed a scheme that meets the Environment Agency's requirement for this.

The site will also need to be able to continue to operate in a flood event. All critical elements of the Energy Centre will be raised above flood levels, and the Energy Centre will be able to continue to operate unstaffed to provide heat to customers across Exeter.

Provided by 1Energy (August 2025)