Exeter Energy Network

Statement of Community Involvement

August 2024

Prepared by Coast Communications on behalf of Exeter Energy Limited.

Coast Communications

Unit 5, Briston Orchard

St Mellion

Saltash

PL12 6RQ

Tel: 01579 352600

Email: info@coastmarcoms.co.uk

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Executive Summary

Exeter Energy Limited is developing a heat network in Exeter, allowing businesses and organisations to decarbonise their heating systems.

Part of the project includes an energy centre which will provide the heat for the network. A public consultation on the Energy Centre took place between July 11th and August 1st 2024 offering opportunities for the local community to discover more about the proposals for the energy centre and provide feedback to the project team. This report provides information on the public consultation exercise relating to the energy centre.

A detailed stakeholder mapping exercise identified potential interested parties, including those who could be impacted by the proposals such as local residents and businesses. By understanding each stakeholder group, engagement activities and communication channels were developed to provide a variety of ways for everyone to access and take part in the consultation.

A preview session was offered to local councillors, prospective customers, stakeholders representing the River Exe, nearby businesses and media stakeholders. The preview was followed by public exhibition sessions that were open to all, including local residents. The events were held at relevant locations across Exeter at times that allowed visitors to attend around employment and personal commitments.

The preview sessions were by invitation only. Door drops, newspaper advertorial, digital media advertorial, press releases, and the project website were all used to promote the public sessions and overarching consultation.

During the public sessions, all visitors were able to view the plans across a series of display boards, ask questions from a range of technical consultants and the project team, as well as provide written and verbal feedback on the project.

The project website – www.exeter.energy – hosted an online consultation space and provided detailed information about the plans including a full set of Frequently Asked Questions (FAQs) and the display boards from the exhibition events.

Interested parties had the opportunity to feedback on the Energy Centre plans in a variety of ways including paper feedback forms at the events, emails into a dedicated mailbox – exeter@1energy.co.uk – as well as a dedicated PO Box.

The comments received on the plans through feedback forms were predominantly positive, highlighting several key benefits. Respondents appreciated the heat network as a whole, praising its potential environmental benefits, including carbon reductions and improvements to river and aquatic life. The project was seen as innovative and exciting, with potential to enhance energy security and reduce dependence on external sources. Job creation was also mentioned as a positive outcome. However, some practical queries were raised regarding the cost of the energy. There were also requests for additional information.

The public exhibition comments were widely positive on the plans and covered several key areas:

- **Financial viability:** questions arose about project funding, return on investment, and heat pricing mechanisms.
- **Technology:** questions arose about the system's reliability, comparisons with other UK schemes, and potential alternatives like solar or air source heat pumps. There was interest in residential heat supply and future hydrogen uses. Concerns raised were about system resilience during peak demand or outages.

- **Infrastructure:** questions arose about pipework installation, network coverage area, and potential routes through new playing fields. Heat loss in the network was a concern.
- **Decarbonisation:** the project received positive feedback for its potential to reduce Exeter's carbon emissions. Questions about expanding to private homes and minimising construction related carbon were raised.
- **Biodiversity:** while some had worries about short and long-term biodiversity impacts, the 20% net gain commitment was well-received.
- **Water source heat pump:** questions arose on the water source, heat extraction methods, river impacts, fish protection, tidal and seasonal considerations, and water return temperature and quality.

The project did receive a letter by email from Exeter Civic Society which expressed objection to the plans due to the energy centre being positioned within a valley park.

Overall, the public consultation on the Energy Centre revealed a widely positive reception, with feedback coming through various channels. The feedback and comments reflect an enthusiasm for the project including the environmental benefits along with practical concerns about implementation and impacts.

Outside of the energy centre consultation, an extensive stakeholder engagement programme, on the project as a whole, has been ongoing.

Overview of engagement

From the outset, Exeter Energy has been committed to engaging and communicating comprehensively with the local community and stakeholders on its plans for the Energy Centre. A public consultation on the energy centre took place between July 11th and August 1st 2024.

Developing and delivering a thorough consultation programme, using appropriate and accessible communications to reach all audiences in a timely manner, has allowed everyone the opportunity to contribute to the consultation process.

The aim of all engagement activity was to provide clear and proactive communications, which showcased the plans and enabled easy feedback routes. To minimise any potential for confusion around the plans, all communications used plain English, and concise language as much as possible. Information was available electronically, verbally and in hard copy and large-scale format to ensure that interested parties could view the plans in ways best suited to their needs. Different language options were available but not accessed.

A range of feedback channels were also put in place to allow interested parties to feedback on the plans according to personal preference. Mechanisms included paper feedback forms at the events, verbal feedback at the events, an online feedback form on the Exeter Energy website, emails into a dedicated mailbox – exeter@1energy.co.uk – as well as a dedicated PO Box.

Exeter Energy noted and fully supports Exeter City Council's approach to community involvement as set out in the Exeter Statement of Community Involvement. Exeter Energy took on board the importance of public and community engagement during the pre-application stage of a submissions.

"We encourage pre-application discussions for all application types to confirm whether the principle of development is acceptable and to clarify what supporting information and level of detail is required for us to make a decision on a subsequent application. Due to their sensitive nature, these early discussions will usually be confidential. However, developers and applicants are encouraged to engage as appropriate with statutory consultees (such as Natural England, Historic England and the Environment

Agency) and the broader community, as early as possible in developing their proposals. For example, a developer might hold a public meeting or exhibition to seek local people's views before applying. Such engagement is not arranged by us."

A consultation programme was developed, recognising the importance and value of community and stakeholder involvement within the planning process. The public consultation on the energy centre took place between July 11th and August 1st 2024, and was centred around public exhibition events held on July 11th and 13th, including a media and stakeholder preview held on July 11th.

Promotion and materials

Promotion began on June 24th 2024, and continued until 13th July. A range of channels and materials were used as set out below.

A pre-consultation webpage advertising the event on www.exeter.energy was made live on June 24th. The consultation webpage was launched on July 11th and served as a key hub for communications and engagement. The webspace included a full set of FAQs for the project as well as the exhibition display board and digital feedback form. The webspace remained in place until August 1st. A copy of the webspace can be found in **Appendix A**. A copy of the project FAQs can be found in **Appendix B**.

The stakeholder preview was invitation-only to over 70 individuals representing a range of organisations including neighbouring businesses, Exeter City Council members, Devon County Council Cabinet members, officers from both local authorities as well as local groups. The exhibitions were also promoted via email to key community networks. Copies of the invitations can be found in **Appendix C**. The invitation was supplemented with a digital flyer which stakeholders could use with their own networks to promote the consultation. A copy of the flyer can be found in **Appendix E**.

The consultation and the public exhibition events were advertised in a range of ways, both in print and digitally. A leaflet was delivered to nearby business and residential properties. 13,000 leaflets were deliveries to properties covering all of Alphington and St Davids, part of Priory (river side of the Topsham Road) and part of St Thomas (east of Buddle Lane) as well as the Marsh Barton trading estate. A copy of the leaflet can be found in **Appendix D**.

Newspaper adverts were placed in the Express and Echo on 27 June and 4 July, supplemented with a two-week digital campaign on DevonLive.com with an Exeter focus. Adverts were also placed in the local Reach social media platform, In Your Area. Copies of adverts can be found in **Appendix E**.

Media coverage included:

- BBC News, Low carbon energy centre proposed for city (11th July) https://www.bbc.co.uk/news/articles/c99wg4zz705o
- Devon Live, Exeter unveils plans for a greener future with low carbon energy centre (10th July) https://www.devonlive.com/news/devon-news/exeter-unveils-plans-greener-future-9399673

Public exhibition events

Public exhibition events were held on July 11th and 13th, including a media and stakeholder preview held on July 11th. During the public sessions, all visitors were able to view the plans across a series of display boards, ask questions from a range of technical consultants and the project team, as well as provide written and verbal feedback on the project. A copy of the feedback form can be found in **Appendix F**.

Exhibitions panels set out a series of details on the plans, locations, benefits, construction, environmental considerations as well as visuals. The full set of panels can be found here in **Appendix G**.

Event 1

Date:	Thursday 11th July 2024
Timings:	Stakeholder preview 10am to 10:30am
	Media preview: 10:30am to 11am
	Public session: 11am to 7pm
Location:	Exeter Community Centre, 17 St David's Hill, Exeter EX4 3RG
Attendance:	Nine individuals attended the stakeholder preview session and 28 people visited the public session.

Event 2

Date:	Saturday 13th July 2024
Timings:	Public session: 10am to 2pm
Location:	Haven Banks Outdoor Education Centre, Haven Road, Exeter, EX2 8DP
Attendance:	19 individuals attended this session.

Feedback

The public consultation on the district heating network project demonstrated a positive reception. Feedback came through various channels. Feedback forms highlighted appreciation for the carbon-neutral, efficient energy solution, its long-term vision, and potential environmental benefits. Respondents viewed the project as innovative, with potential to boost energy security and create jobs. Although attendee numbers at the consultation were perhaps lower than hoped, due to the ability to talk to experts one to one, people tended to stay for a longer length of time that reflects an intense interest and often specialist knowledge of aspects of the project. The public exhibition allowed for more detailed inquiries, covering financial viability, technology specifics, infrastructure concerns, decarbonisation capability, biodiversity impacts, and water source heat pump operations. While enthusiasm for environmental benefits was evident, practical concerns emerged, and were addressed about implementation and costs. The consultation also captured a specific objection, with a local group opposed to the Energy Centre's proposed location within a valley park.

Public exhibition events

The project team representatives addressed questions and comments during the exhibition. The public exhibition comments were widely positive on the plans and during these conversations, key topics of conversation were noted by 1Energy and are summarised below, in no particular order:

Financial viability of the project

- Queries around funding of the project
- Questions around the return on investment
- Questions on the price of heat and mechanisms around fixing of rates

Technology

- Queries on the technology, is it tried and tested and what other areas of the UK have similar systems in schemes
- Questions around alternative technology such as solar or air source heat pumps in use
- Questions about the possibility of heat supply to homes
- Interest in whether the EEN could be powered by hydrogen in the future
- Concerns around resilience and what happens in peak demand or if there is an outage

Pipework routes

- Questions about the pipework, how it will be laid and routes
- Interest in the geographical area of the heat network
- Questions around whether the pipework will need to go through the new playing fields
- Concern around heat loss in the pipework.

Decarbonisation

- Positive comments around decarbonising Exeter
- Comments about importance of reducing carbon emissions from the gas boilers
- A number of questions around if the network could connect to private homes to help decarbonise the city further
- Questions on the embedded carbon in the construction and how is this will be minimised

Biodiversity

- Concern about the biodiversity impact both during the build and longer term
- Positive comments around the biodiversity net gain investment at 20% and showing commitment to nature investment

Water source heat pump

- Questions about where the water will come from
- Questions about how to get heat from water
- Questions on the impact of the project on the River Exe
- Questions on how to stop fish getting caught in the extraction of water
- Questions about extraction and how it works with the tidal range plus also seasonal water levels
- Questions on the temperature of the water returning to the river and any potential contamination

Community

- Concerns were raised about the continuation of pathways for dog walkers
- One respondent observed that an outline of the disadvantages would have been helpful

Feedback forms

Hard copies of the feedback forms were available at each of the events and the same form was digitally available on the project website. Six feedback forms were received in total.

When respondents were asked to what extent do you agree or disagree with the Energy Centre proposal:

- Four individuals strongly agreed
- One individual agreed
- One individual was neutral

Further comments included:

"We need more carbon neutral and efficient energy options, this looks lovely, well thought-out, long-term thinking. I love that it will benefit the river and aquatic life."

"Energy security - helps reduce dependence on other states. Clean source of energy. Jobs"

"I think the prospect of having a zero carbon solution for the supply of heat and hot water across the city is something quite exciting and innovative."

"Harnesses energy. But how much will it cost per KW/H? It will need to be a near equivalent to gas."

One response requested a copy of the exhibition panels.

Mailbox

The mailbox had two direct emails during the consultation period. One was a request for information as the individual lived within the local area and suggested that the housing there would benefit from the network. Another email was received from an individual living locally who requested pipework plans. The project also received an email outside of the consultation before any of the plans were published. The individual requested more information on various elements of the project including the technology, viability of the project, pipework route, and heat sources.

The project also received a letter by email from Exeter Civic Society which expressed objection to the plans due to the energy centre being positioned within a valley park, citing *"the ever increasing development of more homes, particularly in the Marsh Barton area where high density housing is proposed"* and that *"green infrastructure, such as at Grace Road playing fields, is essential to support people's lives."*

Conclusions

Exeter Energy's aim throughout the consultation process was to engage as many people as possible in its plans for an Energy Centre to provide power to a heat network for Exeter. Every opportunity was maximised to inform stakeholders and the local communities about the plans as well as providing opportunities to access further information and participate in consultation activities.

As well as face to face opportunities, information was provided directly to local homes and businesses via a leaflet drop; online information was provided through a dedicated online space and local media provided a conduit for information sharing.

Overall, the public consultation on the Energy Centre returned a widely positive reception, with feedback coming through various channels. The feedback and comments reflect an enthusiasm for the project including the environmental benefits along with practical concerns about implementation and impacts.

APPENDIX A - PROJECT WEBSPACE

Exeter Energy Ltd is developing a commercial heat network for the city centre of Exeter.

The Exeter Energy Network is a vital project which will provide low-to-zero carbon heating to large consumers of heat in the city. Exeter Energy are holding a set of public exhibitions in July 2024 to showcase the plans for the proposed Energy Centre.

By connecting to a centralised energy centre, buildings can remove the need for individual gas boilers, with their associated impacts on air quality. It's 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 other cities in the UK.

The public consultation on the Energy Centre is open from 11th July to 1st August 2024. Two public exhibitions are taking place on Thursday 11th July and Saturday 13th July 2024:

Thursday 11 July, 11am to 7pm
at Exeter Community Centre,
17 St David's Hill, Exeter, EX4 3RG

Saturday 13 July, 10am to 2pm
at Exeter College Haven Banks,
Haven Road, Exeter, EX2 8DP

Drop in any time during the sessions to find out more about the Energy Centre. The exhibition will provide an opportunity for the local community to find out more about the project, meet the team and provide feedback. Alternatively, the designs and information about the proposals can be [illegible].

You can give us feedback on the Energy Centre proposals by using the form below, emailing us at [illegible] or by writing to us at **PO Box 359, Saltash PL12 9AS**.

Energy Centre - feedback form

To provide feedback on our plans for the Energy Centre which will provide heat to the Exeter Energy Network, please fill out this form. Alternatively, you can email [illegible], fill out the online feedback form on our website [illegible] or write to us at [illegible]. The deadline for feedback is **Thursday 1 August 2024**.

First Name

Last Name

Email

Street address

City

Postal code

How did you hear about us?

- Leaflet
- Newspaper
- Online
- Social media
- Word of Mouth
- Other

Please state to what extent do you agree or disagree with the Energy Centre proposal?*

- Strongly agree
- Agree
- Neutral
- Disagree
- Strongly disagree

Please give us your reasons

1Energy is committed to protecting and respecting your privacy, and we'll only use your personal information to administer your account and to provide the service you requested from us. From time to time, we would like to contact you about our service. If you consent to us contacting you for this purpose, please tick below to say how you would like us to contact you

- I agree to receive other communications from 1Energy.

You can unsubscribe from these communications at any time. For more information on how to unsubscribe, our privacy practices, and how we are committed to protecting and respecting your privacy, please review our Privacy Policy at www.1energy.uk.

By clicking submit below, you consent to allow 1Energy to store and process the personal information submitted above to provide you the content requested.

Submit

Exeter Energy Network – Energy Centre consultation FAQs

- How can I find out more about the proposals?
- How can I provide feedback on the proposals?
- How long have I got to give feedback?
- Where is the site?
- Why are you consulting the public?
- How are you telling people about the consultation?

Exeter Energy Network is a planned Low-to-Zero Carbon (LZC) heat network being developed for the city centre, allowing businesses and organisations to decarbonise their heating systems, along with delivering a number of other benefits to the city of Exeter.

Overview

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Business Info

Exeter Energy Limited
Company Number: 14497051

Exeter@1energy.uk

APPENDIX B - FAQS

WHO ARE WE?

What is the Exeter Energy Network?

The Exeter Energy Network is the name of the heat network being developed within Exeter and is operated by Exeter Energy Ltd.

Who is Exeter Energy Ltd?

Exeter Energy Ltd is the company developing the Exeter heat network and is managed by 1Energy Group Ltd, an experienced independent UK developer at the forefront of Low-to-Zero-Carbon heat networks.

Team members at 1Energy collectively have decades of experience of delivering and operating over 50 heat network projects in the UK.

Exeter Energy Network will sit alongside a 1Energy portfolio of projects currently including Bradford, Rotherham and Milton Keynes.

TECHNOLOGY

What is a heat network?

A heat network is a system of insulated pipes that connect to buildings to provide heat from a central source. By connecting to a centralised energy centre, buildings can remove the need for individual gas boilers, with their associated impacts on air quality. Heat networks are the most cost-effective and simple way to decarbonise heat at scale in a city centre because they:

- Can simply replace the gas boiler in the plant room
- Once the pipes are in the ground they can connect to any low/zero carbon heating solution – buildings are not locked in to any one technology
- Have the lowest cost per kW to install for a commercial building, compared to other low carbon heating options such as individual air source or ground source heat pumps
- A large network with numerous users is more efficient and results in competitive pricing for users
- All maintenance and replacement costs are included in the energy price, so there are no unforeseen costs

Where will the heat for the EEN come from?

We will use a Water Source Heat Pump to take heat from water and boost it to the required temperature.

We have contingency measures in place for particularly cold days, or if there's some reason we can't supply heat from the heat pumps (such as maintenance). Our Energy Centre will also have gas boilers that will automatically kick in so there is no loss of heat to connected buildings.

Currently, gas boilers are the most cost-effective way of providing this backup, but our intention is to move away from the use of gas as early as feasible.

We're investigating other opportunities for heat generation. We have committed to the Exeter Energy Network being Net Zero by 2030, so we're also considering other sources of heat such as geothermal, renewable gas, hydrogen and electro-boilers.

What is a Water Source heat pump?

A Water Source Heat Pump (WSHP) is like the heat pump in your fridge. It is designed to extract heat from one place (inside the fridge) and move it elsewhere (usually out the back of the unit). A heat pump, whether air or water, uses the principle of moving heat from one place to another, where the heat is concentrated and turned into useable heating which is transferred via insulated pipes around the network.

Whilst this process uses some electricity, the amount used is far less than using electricity as a direct source of heating. Consequently, as a heat pump uses energy that is already present in the environment (water, heated by the sun and earth in this case), the system itself does not burn any fuel and therefore emits no carbon dioxide.

Can I connect to the Exeter Energy Network?
We're currently focusing on large consumers of heat in the city and we are interested in talking to owners of commercial premises and blocks of flats. If you would like to register your interest in a potential connection, please contact Exeter@1energy.uk
In time we will be investigating the potential to connect to individual homes but this isn't happening at present.

What are the requirements for connecting a building to the EEN?
A building will need to have a "wet" heating system, i.e. heat emitters such as radiators throughout the building connected by pipes to a central plant room, typically housing a gas boiler. However, while this is the main requirement for connecting to the heat network, we would need to carry out a survey to understand if any further changes to a building's heating system are required.

As a rule of thumb, newer buildings will be simpler to connect as the systems are already set up to run at the kind of temperatures served by the network. However, each building will vary so we would need to carry out a survey to understand what changes would be required in your building to make a connection.

What if you can't produce heat? What is the back up?
If the weather is particularly cold or there is a long term interruption to the electricity supply to the heat pumps, then we have back up heat. We will have back-up gas boilers which can take over the water heating if necessary as well as three thermal heat stores – big bodies of hot water – that can supply additional heat capacity. These will be on site at the Exeter Energy Centre.
Environment

What are the benefits of using Water Source Heat Pumps (WSHPs) for heat networks?
In 2010, the Environmental Audit Committee said the cost of health problems linked to air pollution was likely to exceed £8 to £20 billion. Using heat pumps to generate heat for the EEN will make a significant contribution to improving local air quality in Exeter. By avoiding the need for individual fossil fuel use in each building we can significantly reduce the gases and particles that are harming our health.
And let's not forget the climate crisis – buildings which are connected to our network will initially reduce their carbon emissions by 80% in comparison to using conventional heating sources such as gas boilers. The network offers a great way for organisations in Exeter to reduce the carbon emissions of their heating significantly, to help meet their net zero targets.

CONSTRUCTION AND HIGHWAYS
When will the heat network be up and running?
The network will start supplying heat to buildings in 2026. Phased construction is expected to begin in 2024.

How will the installation of the network affect traffic in the city?
During the installation phase we will be working in parts of the highways network to install our underground pipes. We recognise any roadworks can be unwelcome so we're working closely with the Devon County Council Highways team to identify the best routes to minimise disruption. Once we have agreed the route we'll publish details of any works well in advance and we will be engaging with local residents and businesses to make sure they understand potential impacts and alternative routes.
Once the network is installed someone walking or driving through the city won't even notice it, and it will go on serving the city with low carbon heat for many years to come.

Which routes might you take for the pipes?
The exact routes are still under consideration but we are looking to minimise disruption and hold ups as far as possible. The process involves trenching insulated pipes in the road which will require some traffic management but this will be set out in a formal traffic management plan nearer the time.

I have a business in Exeter – will you be digging up the roads?

Yes, see above – but again, we are seeking to minimise any impact to local businesses and residents. The programme is at the exploratory stage, and we will liaise extensively with communities and commercial premises in advance. When we have more information we will let people know as soon as possible.

Will you employ local people to construct the heat network?
We hope so and recognise the importance of local skills and training in the project. We will soon be holding supply chain events and we are exploring job fairs. In the meantime, if you're interested in supplying services you can let us know about them via email Exeter@1energy.uk.
We will publicise the construction and procurement programme once more details are finalised.

Are there any apprenticeship opportunities?
Yes. At the moment we are actively talking with Exeter College about how apprentices could be involved. More information should be available shortly so please do check back regularly.

FUNDING
Where's the money coming from?
The heat network in Exeter will be developed with a mix of private and public funds. Approximately a third of the investment will be from grant funding through the Government backed Green Heat Network Fund (GHNF), and two-thirds from private investment, through our partners Asper Investment Management.

Asper has supported businesses across Europe to build sustainable infrastructure. It has invested in several heat network businesses like the Bradford Energy Network, and in the development of heat networks in both Sweden and the Netherlands. Asper plans to invest several hundred million pounds into heat network projects in the UK over the next 5-10 years, including more than £70 million into the initial phase of the Exeter Energy Network.

BENEFITS
How will the Exeter Energy Network benefit Exeter?
The Exeter Energy Network (EEN) will create a range of benefits across employment and training, health and the environment. It will also help Exeter achieve its carbon reduction ambitions.

Skills and training
Up to ten apprenticeships will be created each year during the construction phase to deliver new skills into Exeter, and it is also intended that local jobs would be created during the operation phase. We are working closely with Exeter College and other stakeholders to ensure we maximise opportunities for local job creation.

Supply chain
The project has a focus on local employment and local services where possible. Using local service suppliers helps us reduce our own carbon footprint for the project. It enables resilience and ensures we get the best value for money, as we are not paying for transport and accommodation for companies outside the area. We will need to deploy some specialist technical support but where possible the project commits to local suppliers.

Air quality
Fossil fuels are a significant contributor to poor air quality. Every time they are used for heat and transport, their combustion produces fine particulates that can affect air quality. So by removing the need for individual gas boilers in commercial buildings in the city centre we'll be avoiding the localised burning of fossil fuels for heating, and this will improve air quality in the city.

Net zero
The proposed heat network would make a significant contribution to the achievement of net zero for Exeter. The EEN will reduce emissions in Exeter by approximately 13,000 tonnes of carbon dioxide equivalent (tCO_2e) per year in phase one.
A heating network provides the most economical option available for decarbonising heating in Exeter, for both the public and the private sector, with costs being around 30% cheaper than the most economical alternative zero-carbon heating option available.

Inward investment
The drive towards low carbon is impacting all aspects of business and commercial development. By providing this alternative heating method, and by offering a secure, local, heating source, Exeter can improve its competitiveness. It will make the city more attractive to inward investment, employers and companies – boosting clean growth.

The EEN will speed up the pace of decarbonisation as the simplest method of securing low carbon heating for buildings. We do almost all the work to connect the buildings to the EEN, and the method of connection is a simple replacement of the boiler with a heat network connection (other methods require each building owner to figure out how to decarbonise their building themselves).

The EEN will enable developers to meet the building regulations and local planning conditions at a lower cost, making it more attractive to build developments in Exeter than in other cities that do not have a heat network.

The network would become a major pillar of Exeter as a leading city in the battle against climate change, engaging developers and demonstrating Exeter's credentials as the country's leading clean growth district. The benefits of the EEN are also likely to prove attractive to potential new employers looking for an effective way to procure clean, reliable and cost-effective heating.

CONSULTATION
How can I find out more about the proposals?
Exeter Energy Ltd is holding two exhibition events to share more details about the project and our plans for the Energy Centre, which will provide the heat for the network. The exhibitions will include display boards, plans, artists' impressions and maps. Members of the project team will also be on hand to answer any questions you may have. If you are unable to attend, all the information available at the exhibition will also be online on our website www.exeter.energy
The exhibition events are being held at two locations in Exeter:
Thursday 11th July 11am – 7pm, Exeter Community Centre, 17 St David's Hill Exeter, EX4 3RG
Saturday 13 July 10am – 2pm, Exeter College Haven Banks, Haven Road, Exeter, EX2 8DP

How can I provide feedback on the proposals?
You will be able to leave feedback by:
Visiting one of the events we are holding in Exeter.
Using our online feedback form.
Emailing exeter@1Energy.uk.
Writing to us at PO Box 359, Saltash PL12 9AS.

How long have I got to give feedback?
The consultation will be open from 11th July until 1st August (inclusive).

Where is the site?
The site is next to Marsh Barton railway station and near the Water Lane Solar Farm on the edge of the Marsh Barton trading estate.

Why are you consulting the public?
The project will be applying to Exeter City Council later this summer for planning permission to build the Energy Centre which will provide heat to the network. We are gathering feedback and making sure we take into account the views of the local community before finalising our plans. We will share any feedback we receive with the council.

How are you telling people about the consultation?
We are advertising the consultation in local newspapers, online and via leaflets which are being distributed to households and businesses near the energy centre site.

APPENDIX C – STAKEHOLDER INVITATIONS

COPY A: invitation to preview for stakeholders

Subject: Invitation | Exeter Energy Network, Energy Centre | public exhibition preview event

Dear XX,

We are contacting you on behalf of the Exeter Energy Network project to let you know about the public exhibitions events we are holding on Thursday 11th July and Saturday 13th July 2024.

Exeter Energy Ltd is developing a heat network for the city centre of Exeter. The Exeter Energy Network is a vital project which will provide low-carbon heating to large consumers of heat in the city. The project is holding a set of public exhibitions in July 2024 to showcase the plans for the proposed Energy Centre which will supply the heat to the network.

The proposed energy centre will take heat from the River Exe and use it to boost a heat network to temperature using state of the art water source heat pump. It is also intended to take heat from a decarbonised data centre on the site.

The public exhibition is an opportunity for the local community to find out more about the Energy Centre, meet the project team and provide feedback in advance of finalising the plans for a planning application.

The events are free, drop-in sessions:

- **Thursday 11 July, 11am to 7pm** Exeter Community Centre 17 St David's Hill Exeter EX4 3RG
- **Saturday 13 July, 10am to 2pm** Exeter College Haven Banks Haven Road Exeter EX2 8DP

We would like to invite you to attend a preview session at 10am to 10:30am on Thursday 11 July at Exeter Community Centre, ahead of the event opening to the general public.

It would be appreciated if you could let us know if you are able to attend by emailing EEN@coastmarcoms.co.uk. In the meantime, you can find out more by visiting the project website www.exeter.energy

Best wishes

XX
Coast Communications on behalf of Exeter Energy

COPY B: invitation to preview for potential customers

Subject: Invitation | Exeter Energy Network, Energy Centre | public exhibition preview event

Dear XX,

We are contacting you on behalf of the Exeter Energy Network project to let you know about the public exhibitions events we are holding on Thursday 11th July and Saturday 13th July 2024.

Exeter Energy Ltd is developing a heat network for the city centre of Exeter. The Exeter Energy Network is a vital project which will provide low-carbon heating to large consumers of heat in the city. The project is holding a set of public exhibitions in July 2024 to showcase the plans for the proposed Energy Centre which will supply the heat to the network.

The proposed energy centre will take heat from the River Exe and use it to boost a heat network to temperature using state of the art water source heat pump. It is also intended to take heat from a decarbonised data centre on the site.

The public exhibition is an opportunity for the local community to find out more about the Energy Centre, meet the project team and provide feedback in advance of finalising the plans for a planning application.

The events are free, drop-in sessions:

- **Thursday 11 July, 11am to 7pm** Exeter Community Centre 17 St David's Hill Exeter EX4 3RG
- **Saturday 13 July, 10am to 2pm** Exeter College Haven Banks Haven Road Exeter EX2 8DP

We would like to invite you to attend a preview session at 10am to 10:30am on Thursday 11 July at Exeter Community Centre, ahead of the event opening to the general public.

It would be appreciated if you could let us know if you are able to attend by emailing EEN@coastmarcoms.co.uk. In addition, if there are members of your senior management that you would like to invite please let us know and we'd be delighted to extend the invite to them.

In the meantime, you can find out more by visiting the project website www.exeter.energy

Best wishes

XX
Coast Communications on behalf of Exeter Energy

COPY C: general awareness of public sessions for wider stakeholder

Subject: Invitation | Exeter Energy Network, Energy Centre | public exhibition

Dear stakeholder,

We are contacting you on behalf of the Exeter Energy Network project to let you know about the public exhibitions events we are holding on Thursday 11th July and Saturday 13th July 2024.

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We will be advertising the event in the local press, in the local community as well as on social media but we would be grateful if you could share these details within your networks, we have attached a flyer which can be used if needed.

In the meantime, you can find out more by visiting the project website www.exeter.energy

Best wishes

XX
Coast Communications on behalf of Exeter Energy

Come and meet our team to find out more at the following public exhibitions:

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Exeter Community Centre
17 St David's Hill
Exeter EX4 3RG

Saturday 13 July, 10am to 2pm
Exeter College Haven Banks
Haven Road
Exeter EX2 8DP

Drop in any time during the event to find out more about the Energy Centre. The exhibition will provide a range of information about the project, as well as offer an opportunity to ask questions.

For more information please visit our website:

www.exeter.energy

EXETER energy NETWORK

EXETER energy NETWORK

Creating a low-carbon heat network in Exeter

Find out more

If you are unable to come to the exhibition sessions, you can visit exeter.energy where you will be able to find further information on the project and have the opportunity to give feedback on the Energy Centre plans.

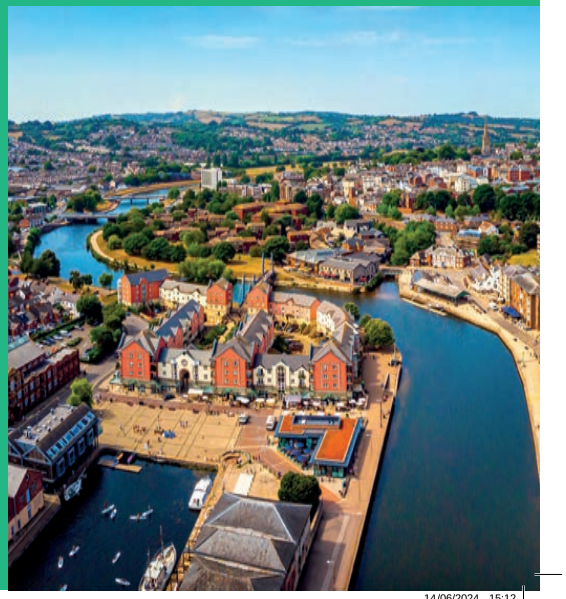
Contact us

Website: www.exeter.energy

Email: Exeter@1energy.uk

Write to us: PO Box 359
Saltash
PL12 9AS

Have your say



EXETER energy NETWORK

Creating a low-carbon heat network in Exeter

Exeter Energy Ltd is developing a heat network for the city centre of Exeter.

The Exeter Energy Network (EEN) is a vital project which will provide low-carbon heating to large consumers of heat in the city. We are holding a set of public exhibitions in July 2024 to showcase the plans for the proposed Energy Centre.

By connecting to a centralised energy centre, buildings can remove the need for individual gas boilers, with their associated impacts on air quality. It's 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 other cities in the UK.

Heat networks are the most cost-effective and simple way to decarbonise heat at scale in a city centre. In Exeter's case, the network will:

- Save over 13,000 tonnes of carbon emissions a year
- Reduce the use of fossil fuels and reduce emissions, which means cleaner air for everyone in Exeter
- It will serve to inspire the next generation through educational outreach programmes and placement opportunities
- Enrich biodiversity – the project is committed to improving the biodiversity of the riverbank and the area surrounding the Energy Centre by 20% – that's twice the amount legally required
- Represent a £110m investment into the city with low-carbon heating, making Exeter a more attractive site for further investment

The proposed energy centre will take heat from the River Exe and use it to boost a heat network to temperature using state of the art water source heat pumps. It is also intended to take heat from a decarbonised data centre on the site. The heat network will be designed to provide low-to-zero-carbon heat to buildings across the centre of Exeter in the form of hot water through highly insulated underground pipes linked into buildings.

The Energy Centre is proposed to be sited next to the Marsh Barton station, near the Water Lane Solar Park. In the future, there may be potential to use waste heat from other nearby industries.

Exeter Express and Echo
URN: 226428724-01 Date: 2024-06-27 Section: Main
Advertiser: COAST COMMUNICATIONS LTD Page: 29/40

Motors


The new 2-series

BMW'S NEW 2

It seems just months since BMW launched the latest 2-Series, but already the car has been facelifted.

The radiator grille gets a chrome surround, there are new headlamps and paint finishes, and some new alloy wheel designs. Inside there's a new steering wheel, upholstery and trim.

There's some action in the electronics department, too, as all models get BMW's latest version of its iDrive infotainment system with OS 8.5 operating system.

The entry level model is the 220i at £36,865 but if you're after more bang, you'll want the M20is xDrive with 374bhp and a price tag of £46,045.

■ The electric Alfa Romeo Junior, right, the car Alfa was going to call the Milano until the Italian government said no, because it wasn't made in the city, will be available to order in the UK from the end of this month, priced from £33,895.

This will bag you the 155bhp with a 250-mile range, while the Veloce with 238bhp costs £42,295.

There'll be a mild hybrid along later, which stands a better chance of being a sales success.

BYD'S SEAL IS A WHOLE NEW ANIMAL

BYD, the Chinese giant EV maker that launched its Dolphin Atto 3 and Seal EVs last year, has also built a plug-in hybrid. It's called the Seal U DM-i and is an SUV that combines a 1.5-litre petrol engine (made by BYD) and either a single or dual electric motors.

There are two versions: the Boost, which has a single electric motor driving the front wheels, and the Design, which has a motor driving each axle. Both incorporate an 18.3kWh battery that gives an electric range in the Boost of 50 miles and 43 miles in the Design, with a total range in the former of 671 miles when the battery is fully charged and the tank full of petrol.

Good timing by BYD because sales of PHEVs are on the up. Coming in at £33,205 for the Boost and £39,905 for the Design, they're very well priced.


The Seal U DM-i

■ It's not the best-looking Mini, but the five door is certainly one of the most practical.

Mini has just put the latest generation of the car on sale with the Cooper C costing from £24,050 and the Mini S from £28,495. Fortunately the new Mini five door has bucked the trend and is no bigger than its predecessor. It is, however, 172mm longer than the three-door Mini, which gives rear seat passengers lots more legroom.

The C comes with a three-cylinder 154bhp engine and the S, a four-cylinder producing 201bhp. The order books are open now.


New generation: The five-door Mini

■ The Captur (above) has been given a new front end that shows off Renault's new design language.

Priced from £21,095, it is available with a 1.0-litre three-cylinder engine and also the company's hybrid 145bhp powertrain. There are three trim levels: Evolution, Techno and Esprit Alpine and six body colours are available.

Pick of the bunch from the model line-up is the Evolution E-Tech hybrid, which can manage 60.1mpg on the official WLTP test, yet is reasonably priced at £23,655.

Edited by Colin Goodwin

Exeter Express and Echo
URN: 226428724-02 Date: 2024-07-04 Section: Main
Advertiser: COAST COMMUNICATIONS LTD Page: 11/40

School goes from being 'inadequate' to a 'good' rating

by ANITA MERRITT
anita.merritt@reachplc.com
@DevonLiveNews

AN Exeter secondary school that was put in special measures five years ago after being rated 'inadequate' by Ofsted is celebrating being rated 'good' after being taken over by the Ted Wragg Multi-Academy Trust.

Serious concerns at St Luke's Church of England School were documented in 2019 because teaching was deemed not good enough and inspectors found bullying was not dealt with effectively.

A return visit was made by Ofsted in May and the outcome of the inspection, published last week, stated it has been rated 'good' in all areas.

It is the school's second big achievement recently, having previously received an above-average Progress 8 score, placing it among the top five schools in Devon last year. Progress 8 measures the academic progress pupils make from the end of primary school to the end of secondary school.

At the time of the latest Ofsted inspection, the school had 829 pupils. It was praised for its "robust and ambitious curriculum", support for pupils with special educational needs and/or disabilities (SEND), its "ambitious" careers programme and zero tolerance to bullying.

However, it was noted "too many" pupils do not attend school regularly, but added that "robust processes" had been put in place to improve attendance.

The report stated: "The school has high expectations of the pupils. Pupils know staff are ambitious for them. Pupils are well prepared for their future choices as a result.

"Pupils follow the school routines and are ready for their learning. As a result, the school is calm. Lessons are respectful. Pupils learn without disruption.

"The school provides support and adjustments for pupils to meet different needs. For example, the chat room provides a space to help pupils when they need it. Pupils who go to the behaviour support room continue with their curriculum learning.

» St Luke's Church of England School, Exeter, has been rated 'good' by Ofsted Ted Wragg Trust

"The school actively works to ensure bullying is not tolerated. Pupils train as anti-bullying ambassadors through a national award scheme. They take these roles seriously.

"When pupils report bullying to the school, the school acts on it. The school plans a range of clubs and enrichment for pupils."

Head teacher Harrison Littler said: "This good Ofsted rating is a whole school achievement, and I am immensely proud of the staff and students at St Luke's.

"We are, of course, committed to continuous improvement in all areas, in our efforts to maintain our place as one of the highest-performing schools in the region and help our students achieve their best.

"We will be looking to continue to build a sense of pride and belonging among our student community to ensure they love coming to school every day.

"I am also eager to continue strengthening our relationships with families and the local community."

Trust chief executive Moira Marder added: "The commitment of Harrison and his team shines through in this Ofsted report and I am delighted for the whole school community."

EXETER energy NETWORK

Creating a low-carbon heat network in Exeter

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Exeter Energy Ltd is developing a heat network for the city centre of Exeter. **The Exeter Energy Network** (EEN) is a vital project which will provide low-carbon heating to large consumers of heat in the city.

Exeter Energy is holding public exhibitions in July to showcase plans for the Energy Centre that will provide heat to the network. Drop in any time during the event to find out more about the Energy Centre, which is proposed to be sited next to the Marsh Barton station, near the Water Lane Solar Park. The exhibition will provide a range of information about the project, as well as offer an opportunity to ask questions.

For more information please visit:

www.exeter.energy

APPENDIX F – FEEDBACK FORM

Energy Centre - feedback form

To provide feedback on our plans for the Energy Centre which will provide heat to the Exeter Energy Network, please fill out this form. Alternatively you can email Exeter@1energy.uk, fill out the online feedback form on our website exeter.energy/consultation/ or write to us at PO Box 359, Saltash, PL12 9AS. The deadline for feedback is **Thursday 1 August 2024**.

Name (optional)
Email (optional)
Address (optional)

How did you hear about us? Please circle

Leaflet	Online	Word of mouth
Newspaper	Social media	Other

To what extent do you agree or disagree with the Energy Centre proposal? Please circle

Strongly agree	Agree	Neutral	Disagree	Strongly disagree

Please give us your reasons (continue overleaf if necessary)

Appendix G – Exhibition panels

See overleaf.

EXETER energy NETWORK

Project overview

The Exeter Energy Network is a planned low-to-zero carbon heat network being developed for the city centre, allowing businesses and organisations to decarbonise their heating systems, along with delivering other benefits to Exeter.

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 fossil fuels
- We can 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 the UK.

The Energy Centre is proposed to be sited next to Marsh Barton station, near the Water Lane Solar Park and will connect businesses around the city to a centralised heat source.

The first customers are likely to be public sector. These customers have some of the biggest heating requirements in the city, concentrated in a relatively small area which makes them economical to connect to the network. Once the heat network is built, we will be able to serve many smaller buildings across the city.

Ofgem is set to become the regulator for heat networks across England, Scotland, and Wales. This role, facilitated by the Energy Act 2023, is expected to begin in spring 2025 and will ensure all customers receive a fair price and reliable supply of heat and hot water.

Creating a low-carbon heat network in Exeter

EXETER energy NETWORK

Inside the Exeter Energy Network

A heat network is a big, communal heating system that heats multiple buildings. Instead of each building having its own gas or oil boiler, there is one central source that creates heat. There are three distinct parts to the Exeter Energy Network:

The Energy Centre – creating the low-carbon heat

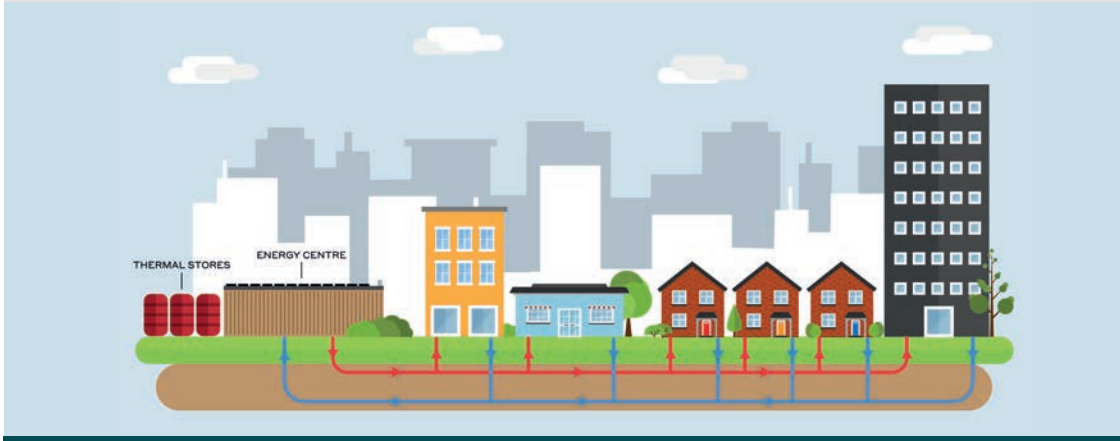
- A water source heat pump will take heat from the River Exe
- The heat pump is similar to a fridge: it cools in one place and heats another
- The water is returned to the River Exe, slightly cooler but otherwise untouched
- The network is also intended to take heat from other low-carbon sources such as an air source heat pump on the site, a decarbonised data centre, and in the future potentially using waste heat from other nearby industries
- The extracted heat is then used to heat up the water to 80°C within the Exeter Energy Network

Distributing the heat

- The heated water is pumped through the city via a network of highly insulated buried pipes
- All buildings connected to the network can take as much or as little heat as they need through a "plate heat exchanger". This connects into the customer's existing heating system and replaces the boiler in each building

Storing the heat

- Any excess heat extracted will be used to heat up a thermal store; this is a large tank of water that acts as a reserve
- If there is more demand than what the network can provide through the heat pump and thermal store, a top-up system will kick in to make sure customer's heating needs are always met, even on the coldest winter days
- This top-up system currently runs on gas, but the intention is to completely remove the use of gas in the coming years so the heat network can provide zero carbon heat



Creating a low-carbon heat network in Exeter

EXETER energy NETWORK

Heat networks in use

Across the world

While large-scale heat networks, also known as district heating, are relatively new to the UK, they are common in other parts of Europe. For example, 98% of the heat demand in Copenhagen is served by heat networks.

UK ambitions

The UK Climate Change Committee wants to expand heat networks across the country. They envisage that:

- By 2030, 32% of all public and commercial heat demand is met by district heating rising to 42% by 2050

Currently, there are over 2,000 large-scale heat networks operating in the country with many more in development.

UK success stories

There are many large-scale heat networks being built across the country. 1Energy is currently constructing a £50m network in Bradford that will heat thousands of homes and businesses across the city.

Heat pumps are becoming more common in heat networks. Most extract energy from ground or air. However, there are already successful large-scale water source heat pumps in operation:

- The Bristol Heat Network: is a £200m project which aims to deliver low-carbon heat to 12,000 homes and businesses across the city. The Castle Park phase of the work is now complete, which takes water from the local harbour to deliver heat to over 1,000 properties.
- Queens Quay in Clydebank: this network was Scotland's first major water source heat pump and the first of its type in the UK. It takes energy from the river and once fully connected it will service over 1,200 homes across the entire 23-hectare site.

Creating a low-carbon heat network in Exeter

EXETER energy NETWORK

Project benefits

The Exeter Energy Network will bring a range of benefits to Exeter including:

Environment

- Saving over 13,000 tonnes of carbon emissions a year
- Committed to improving the biodiversity of the riverbank and the area surrounding the Energy Centre by 20% – twice the legal requirement
- Reducing emissions and the use of fossil fuels, meaning cleaner air for everyone in Exeter

Economy

- A £110m investment into the city with low-carbon heating making Exeter a more attractive site for further investment
- 1Energy will use local suppliers where possible. Already over £1.7m of work is committed to businesses in Exeter alone and a further £70m in the South West
- Providing businesses with a cost-effective way to decarbonise heat

Education

- 1Energy will create an educational room in the Energy Centre and will proactively organise student visits as well as undertaking an outreach programme to young people in the city
- 1Energy will also offer opportunities for collaboration with University of Exeter academics and student placements

Employment

- 1Energy is a member of the 5% Club – a commitment to ensure 5% of the workforce are deployed on apprenticeships, sponsorship or graduate training schemes
- The project is expected to create 4-10 apprenticeships per year during the network installation
- 90 people will be employed in the construction of the Energy Centre, and a further 60+ people to deliver the installation of the buried network
- Four new high quality technical jobs will be created in Exeter to run the Energy Centre and ensure customers are served with heat once the network is built

Community

- 1Energy is hoping to sponsor training of 25 energy champion volunteers through Exeter Community Energy to help promote sustainable heating and reduce energy use
- When carrying out any road works, 1Energy will work with Devon County Council to undertake any feasible improvements to the area as works progress

If you have any other ideas of community schemes you think the team could be involved in, please contact **Exeter@1energy.uk**

Creating a low-carbon heat network in Exeter

EXETER energy NETWORK

About Exeter Energy

EXETER energy NETWORK

Exeter Energy Limited has been established to construct and operate the Exeter Energy Network.

Exeter Energy is a joint venture between the 1Energy Group and Asper.

Asper is an investment company with over 100 renewable projects to its name with plans to invest £220m into heat network projects in the UK over the next 5-10 years, including more than £70 million in the initial phase of the Exeter Energy Network.

1Energy has brought together the most experienced people in the UK and beyond with collective experience of developing more than 50 heat networks. Staff include:

- The commercial advisor and project director for Bristol's Heat Network – using a large water source heat pump, similar to Exeter
- The founder of the Heat Trust, the voluntary regulatory body for heat networks
- The former head of the Government's heat networks delivery unit

1Energy are currently developing large-scale heat networks in Milton Keynes, Bradford, Rotherham and of course Exeter.

Creating a low-carbon heat network in Exeter

EXETER energy NETWORK

Energy Centre: Building and layout overview

The Energy Centre will be sited near the Water Lane Solar Park next to Marsh Barton railway station.

The main building will house the heat pumps and boilers. This building will be connected to two pipes that lead down to the River Exe. One will take water from the Exe, and the other will discharge the water, slightly cooler, back into the Exe. Rivers are tending to overheat so a very slight cooling is beneficial to fish in the Exe.

The site includes six thermal heat stores; large water containers that store excess heat, acting like batteries for the heat that the network does not use right away. There will also be space for more thermal stores in the future to store more low-carbon heat and reduce the need for gas boilers.

A data centre is also proposed on site as part of the plans. Data centres produce a lot of waste heat so instead of the heat going into the atmosphere it will be injected into the heat network. Using waste heat is a very efficient way to decarbonise the network.

The Energy Centre building at the highest point is 13m high and there will be 3m flues for when the back-up gas boilers are in use. The adjacent Viridor Energy Recovery Facility is 27m high and its chimney is 65m.

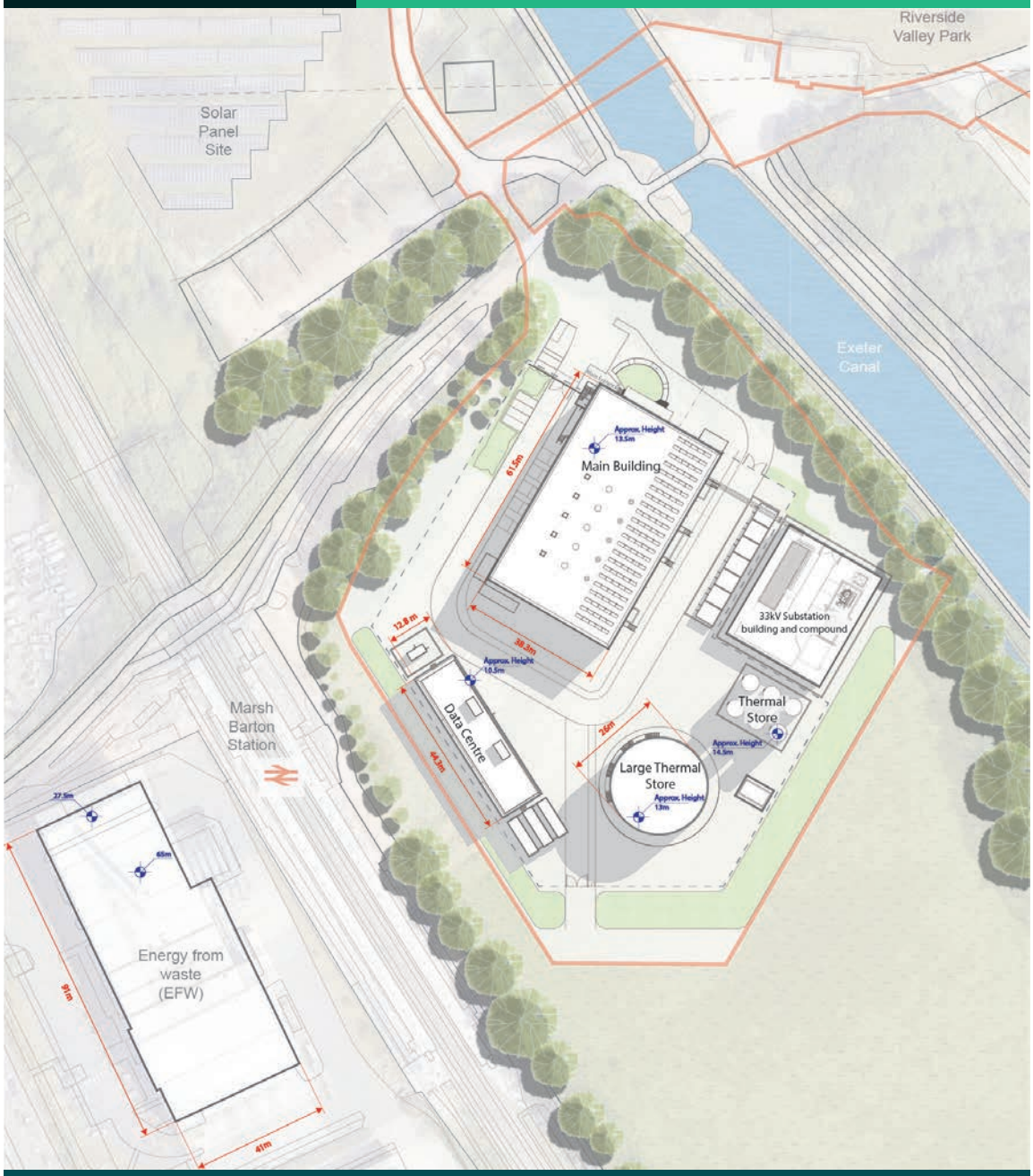
The site will be suitably screened and views of the site will be assessed through a Landscape and Visual Impact Assessment.

There is potential to enhance the capacity of the Energy Centre in future, but this would not increase the building size. Any further development would require planning consents from the local authority.

Creating a low-carbon heat network in Exeter

EXETER energy NETWORK

Site layout diagram



Creating a low-carbon heat network in Exeter

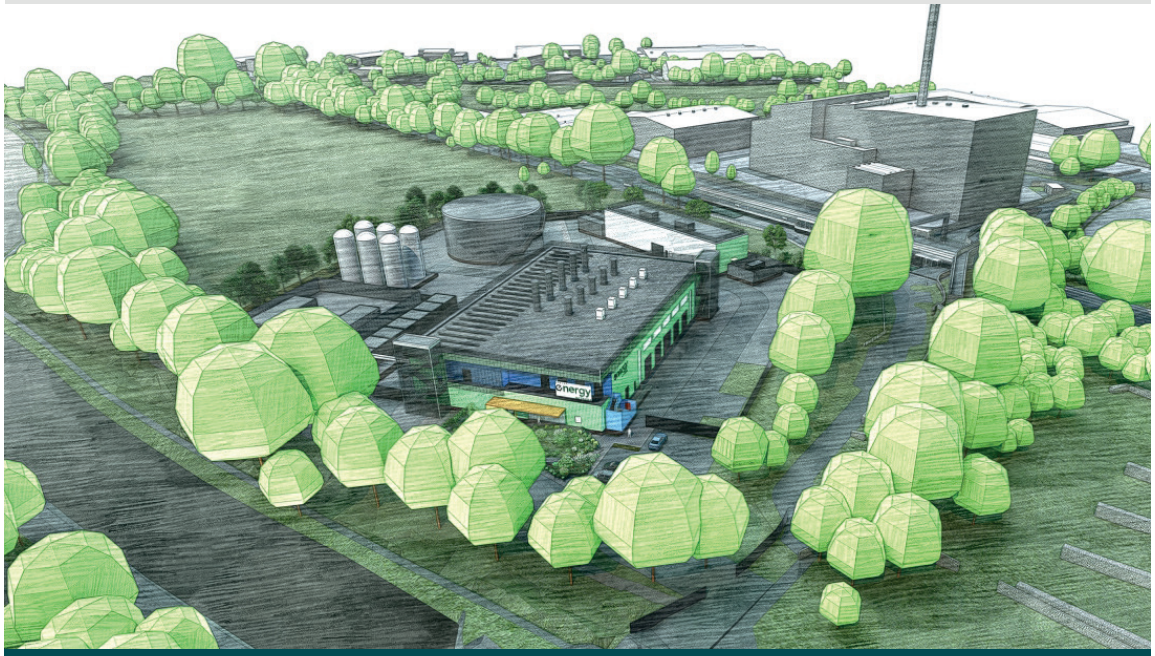
EXETER energy NETWORK

Site location map

Creating a low-carbon heat network in Exeter

EXETER energy NETWORK

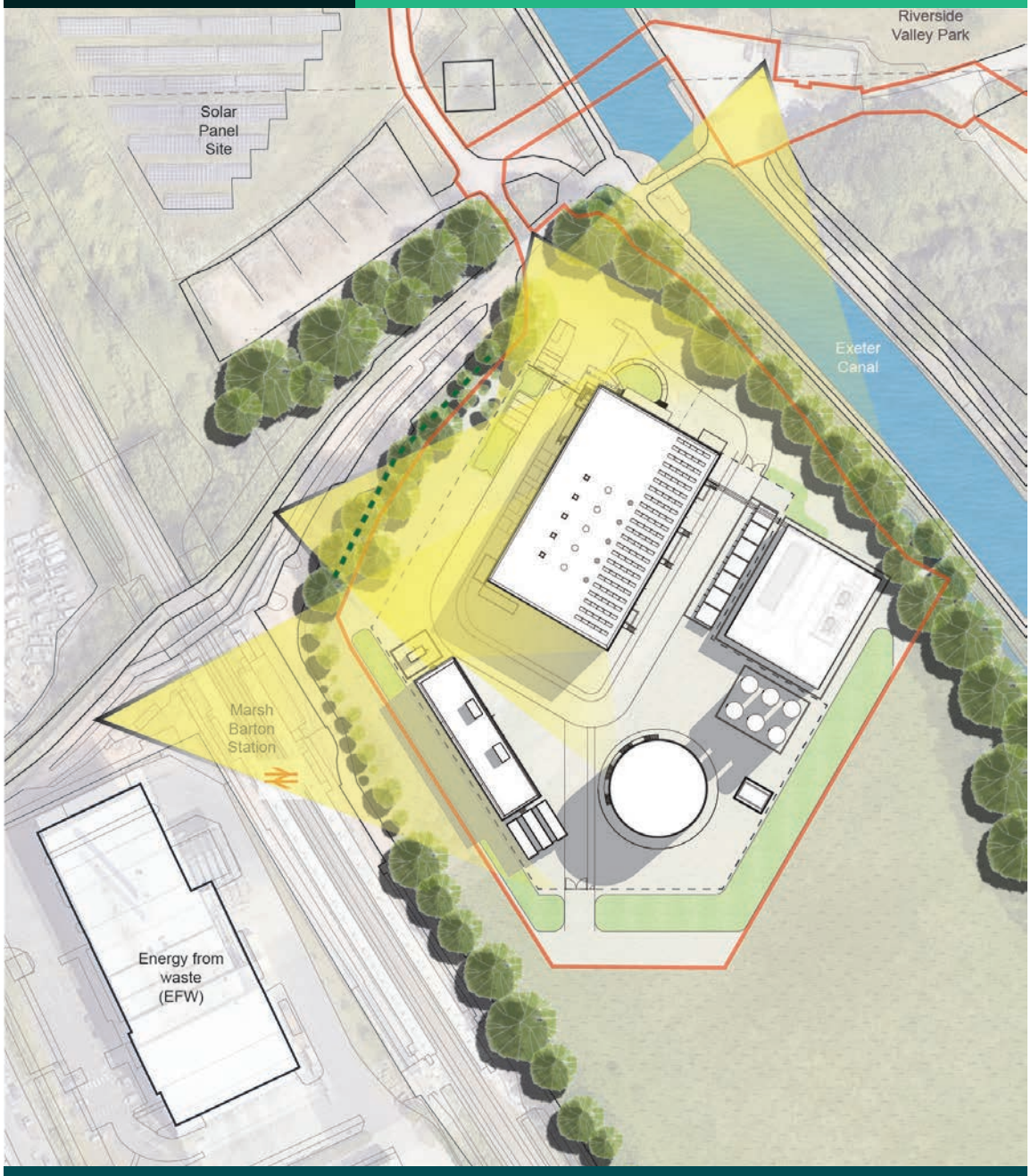
Artist's impressions of the energy centre



Creating a low-carbon heat network in Exeter

EXETER energy NETWORK

Public visual links



Creating a low-carbon heat network in Exeter

EXETER energy NETWORK

Energy Centre construction management

Subject to planning permission being granted, it is expected that construction works for the Energy Centre will start in spring 2025 and are expected to take approximately 18 months to complete.

A Construction Environment Management Plan will be in place to ensure that any impacts of construction are minimised. This plan will be backed by localised studies and will include:

- Construction traffic management
- Dust and noise management
- Ecological management
- Permitted working hours
- Pollution prevention and control

The management plan will be developed in consultation with Exeter City Council and Devon County Council. There may be times where deviations are needed, for example when delivering large equipment to site. Any deviation will be discussed and agreed with the local authority to ensure it is managed in the best possible way.

Construction works along the river are expected to last around six months, with works sited south of the Duckes Marsh Cycle and Footbridge on the River Exe. During these works, part of the riverbank will be fenced off but returned to normal use once completed. River users will still be able to pass freely along the Exe as the works will be screened behind a temporary dam. 1Energy will work closely with Devon Wildlife Trust to ensure that the work aligns with their requirements and to identify additional opportunities to help improve existing habitats.

Creating a low-carbon heat network in Exeter

EXETER energy NETWORK

Traffic management

A traffic assessment has been undertaken and will be submitted as part of the planning application for the Energy Centre. During construction:

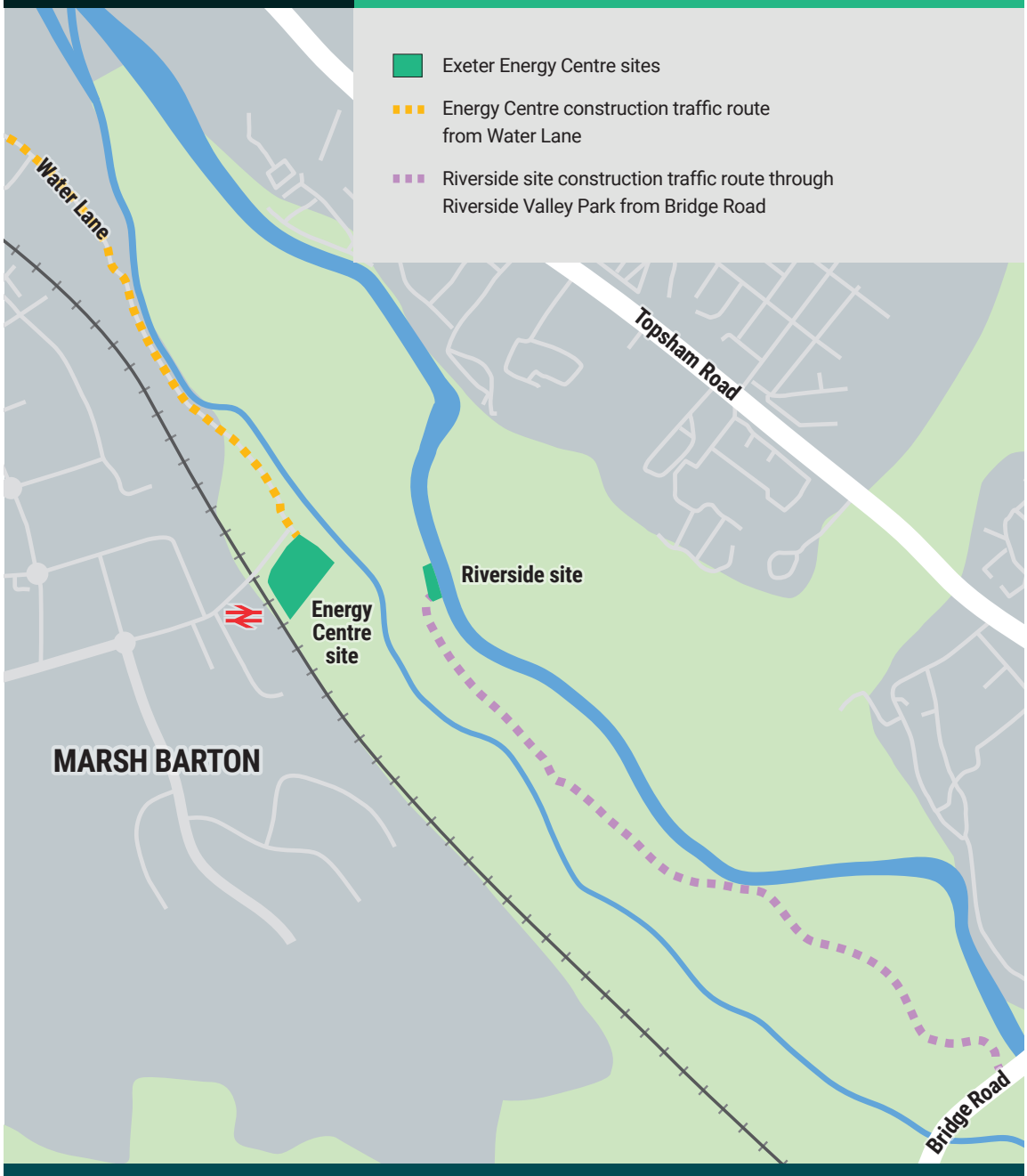
- The main access to the site will be along Water Lane from the north. There will also be some access along the track through Riverside Valley Park from Bridge Road for the riverside construction works
- Vehicle numbers will be managed carefully through a construction traffic management plan. This is to ensure that there is minimal impact on nearby communities and businesses and includes the safe separation of pedestrians and cyclists from any construction vehicles
- It's estimated that 25 HGVs will come and go from the main Energy Centre site each day for the first six months of construction, reducing to five HGV deliveries each day for the rest of the construction period. Up to 25 cars or vans will visit the site each day.
- For the riverside works, it is estimated that five HGVs will come and go from the site each day. There will also be up to five car or van deliveries visiting this site each day
- Large deliveries will be planned and coordinated with the local highways authority to reduce disruption
- The pedestrian and wildlife crossings during the works on the river will be carefully managed

Once the energy centre is operational, traffic will be minimal, with one or two small vehicles visiting the site each day for maintenance.

Creating a low-carbon heat network in Exeter

EXETER energy NETWORK

Construction traffic routes



Creating a low-carbon heat network in Exeter

EXETER energy NETWORK

Air quality

Energy production is the second largest producer of nitrogen oxides (after road transport). These are known to contribute towards health issues such as asthma and other breathing difficulties and can exacerbate heart and lung disease.

The Exeter Energy Network will remove the need for gas to be burned in individual buildings throughout the city. This will result in a reduction of nitrogen oxides of over 11 tonnes per year, a 91% reduction compared to individual gas boilers. For context, short-term exposure to concentrations of nitrogen oxides higher than 200 millionths of a gram/m3 can cause inflammation of the airways (WHO, 2013).

Gas boilers will be used in the Energy Centre on the coldest days, but these will be modern ultra-low emission boilers. Our air quality assessment for the Energy Centre found that any changes in air quality due to the sporadic operation of our gas boilers will be insignificant, and will remain within the UK Air Quality Objectives.

The gas boiler use within the Energy Centre will comply with the medium combustion directive which will be regulated by the Environment Agency.

Creating a low-carbon heat network in Exeter

EXETER energy NETWORK

The environment

Extensive studies are being undertaken as part of the planning application process to make sure the Energy Centre proposals to not have any significant adverse impact on the environment.

A noise assessment will establish a baseline acoustic output for the area and the acoustic performance of the plant so that measures such as acoustic insulation and baffles, can be put in place to ensure that it has little impact on noise levels, if required. Lighting will be installed in line with the ecology studies to ensure the best protection for local wildlife and to avoid impacts to neighbouring business.

Noise, dust and any other nuisance during construction will be kept to a minimum and managed through a Construction Environmental Management Plan.

To protect local ecology, a management plan will be in place throughout the lifetime of the Energy Centre. Moreover, the project is committed to a 20% net gain in biodiversity, twice the legal requirement and we will be working closely with the Devon Wildlife Trust and Exeter City Council.

Once the planning application is submitted to Exeter City Council, the local authority will then consult with organisations such as the Environment Agency, local highways authority and Natural England to ensure they are satisfied that the Energy Centre will comply with every appropriate standard.

Creating a low-carbon heat network in Exeter

EXETER energy NETWORK

The River Exe

Renewable, clean energy for the project will come from a Water Source Heat Pump which will draw heat from water withdrawn temporarily from the River Exe. This will be done without disrupting the habitat, fish population and river users.

- During normal operation circa 5% (up to a maximum of 20%) of the total water volume of the Exe is removed from the river and then returned slightly cooler a few minutes later. Water abstraction will naturally be greatest in the coldest months, when river levels tend to be high
- A 2mm fine mesh protects river life preventing fish including juvenile eels (elvers) and salmonids from entering the pipework
- The Energy Centre will extract the heat from the water, but the water will otherwise remain unchanged
- The Energy Centre will return the water on average 2-3°C cooler, but when dispersed across the River Exe, this equates to around a 0.15 °C temperature change. In summer, when river flow is at its lowest, the change in temperature across the river may be up to 0.6 °C. This change is in line with the typical daily variance on the river
- This cooling is expected to provide a net-benefit to aquatic species as the river temperature is slowly rising because of global warming. Some species, such as salmon, are struggling with these higher temperatures in the summer, which the scheme will help to mitigate
- All in-river works will be completed under a construction methodology agreed and consented by the Environment Agency to ensure no disruption to aquatic fauna and flora in the Exe
- Construction is expected to last around six months, with works sited south of the Duckes Marsh Cycle and Footbridge on the River Exe
- During this process, part of the riverbank will be fenced off but returned to normal use once completed
- River users will be able to pass freely along the Exe as the works will be screened behind a temporary dam

The Environment Agency will regulate the abstraction and discharge licences for the Energy Centre.

Creating a low-carbon heat network in Exeter

EXETER energy NETWORK

Safety

Both the Energy Centre, and the network is safe.

- A heat pump relies on a heat exchanger which uses a compressed gas as a refrigerant. In the case of the Exeter Energy Network, ammonia will be used as it is the most effective gas to use in this type of heat pump. It will be handled using the highest safety standards and ammonia levels will be monitored so in the unlikely event of a leak it will be quickly detected and resolved
- The pipes used to deliver heat around the city are highly insulated and run at much lower pressure than the gas network, meaning there is no risk of explosion
- The facility is unmanned but will be constantly monitored by a system of sensors to ensure that the system is running as expected. Any change in operations outside expected parameters will trigger an early warning and engineers will visit the site to rectify these
- The process does not add anything to the river water, this is returned untouched to River Exe other than a slight temperature change which overall is in line with the typical daily variance
- The water used within the heat network does not mix with the water taken from the River Exe. It is a separate, "closed loop" system which will be maintained at the correct water quality to prevent corrosion or inefficiencies
- The waterway will be protected using the best available techniques successfully used in Bristol, Glasgow and across Europe
- 1Energy prioritises the safety of everyone that comes into contact with our projects. We have an exemplary "zero harm" safety record. So far in 2024 1Energy and our contractors have worked over 62,000 hours without a single hour lost to injury

Creating a low-carbon heat network in Exeter

EXETER energy NETWORK

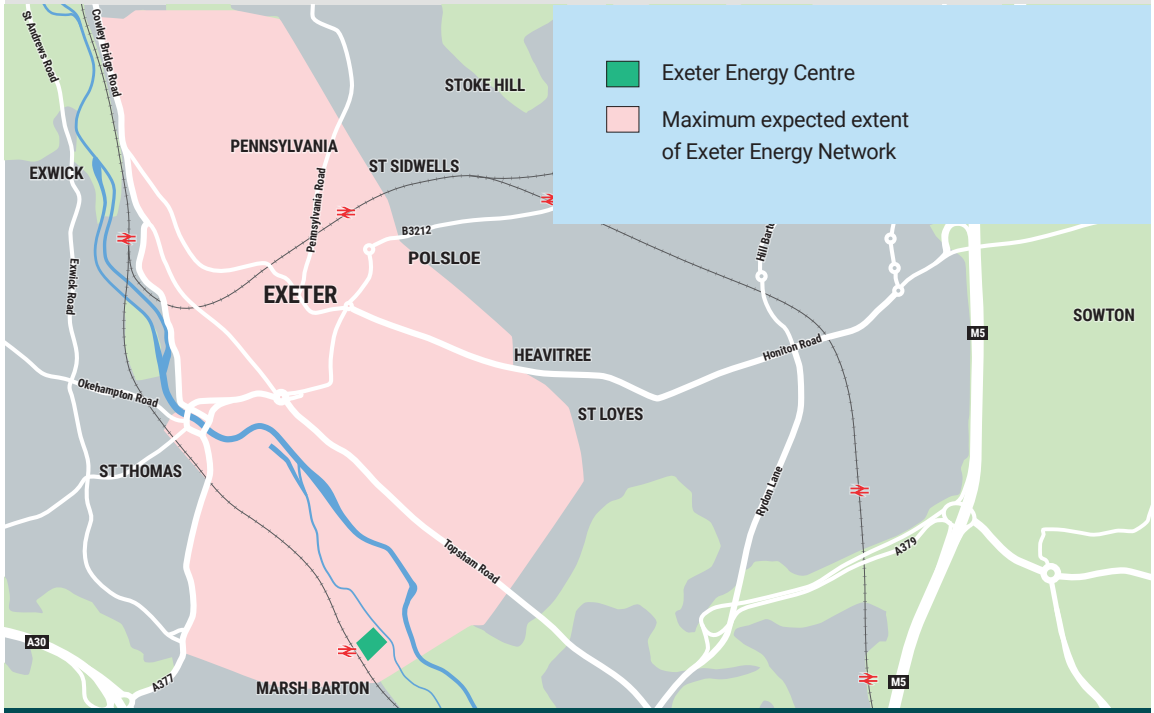
Pipe route

The heat network requires a network of pipes that will be laid underneath verges, footpaths and roads across the city.

While the route for the pipes is not part of this consultation and is managed under a Local Development Order that falls outside of the scope of this event, 1Energy know the local community will be keen to understand where and when the pipes will be laid.

- The chosen network routes will be dependent on which customers connect to the Network
- Specific routes under discussion with landowners and Devon County Council Highways
- The route for the pipes is not yet finalised; however detailed plans will be available in due course
- 1Energy is working closely with the highways team at Devon County Council to ensure the works will be completed as efficiently as possible
- As part of this work, we are committed to an extensive engagement exercise and will publish the planned works widely when available

We're currently scanning the roads with ground penetrating radar to understand what is below the ground, and detailed archaeology and unexploded ordinance studies will be carried out along the final route.



Creating a low-carbon heat network in Exeter

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What happens next and have your say

Indicative project timeline

- **August 2024:** the planning application will submitted with determination expected by the end of 2024
- **Autumn 2024:** first installation of buried network begins in areas where there are time constraints
- **Spring 2025:** construction of the Energy Centre and main work on buried network begins
- **Autumn 2026:** construction of the Energy Centre is completed
- **End 2026:** heating is switched on to first customers

Have your say

We welcome feedback on our proposals and our consultation is open until 1st August.

You can either:

- Fill in a feedback form at this venue
- Visit our website **www.exeter.energy** and fill in the online form
- Write to us at PO Box 359, Saltash, PL12 9AS

You can also subscribe to our newsletter, either by signing up at our website Exeter.energy or by filling in one of the forms at this venue.

If you would like to get in touch on anything other than the consultation, email us at any time at **exeter@1energy.uk**

Creating a low-carbon heat network in Exeter