WELCOME

Welcome to Aberdeen's District Heating Transmission Pipeline Project

Aberdeen City Council and Aberdeen Heat and Power are working together on plans to develop a major new district heating transmission pipeline for the city.

The key objectives for this project are:

- heat decarbonisation in support of net zero objectives
- alleviation of fuel poverty
- security of a low-cost, resilient heat supply
- create opportunities for future expansion of the network

We are committed to engaging openly with local communities and stakeholders throughout the project, keeping residents informed and allowing opportunities to ask your questions.

ABERDEEN CITY COUNCIL (ACC)

ACC is leading the development of the District HeatingTransmission Pipeline as part of its commitment to a low-carbon, resilient energy future for Aberdeen.Through investment in district heating infrastructure, ACC helps provide affordable, reliable warmth to homes, business and public buildings, supporting efforts to reduce carbon emissions and tackle fuel poverty across Aberdeen.

ABERDEEN HEAT AND POWER (AHP)

AHP was founded in 2002 as an arm's-length organisation wholly owned by ACC, and was established to reduce fuel poverty and provide affordable, reliable heating. Initially focused on council-owned high-rise blocks, it has helped thousands of households cut heating costs by up to 40%.Today, its district heating networks supply homes, schools, student residences, health facilities, sports venues, and offices.Through efficient, low-carbon systems, AHP reduces emissions and drives Aberdeen's journey toward net zero, earning recognition as an award-winning leader in sustainable energy solutions.

Project timeline

RIBA Stage 3 Design and Outline Business Case: September 2023 - January 2026

Feasibility study, network design to RIBA Stage 3, and outline business case for the district heating transmission pipeline and Seaton to Tillydrone interconnector.

RIBA Stage 4 Design and Final Business Case: February 2026 - December 2027

Stakeholder engagement and planning application. Procurement exercise to invite tenders for a design and build framework contract and upon completion, to issue a call off order for the technical design of the district heating transmission pipeline and Seaton to Tillydrone interconnector to RIBA Stage 4. Final business case preparation.

Final Business Case Approval: January 2028 - Onwards

Final business case submitted for approval. Indicative construction timeline (subject to outcomes of final business case, Committee decision and funding availability): July 2028 through July 2030.

PURPOSE AND BENEFITS OF THE SCHEME

The development of district heating networks to reduce carbon emissions are a key part of Aberdeen City Council's Net Zero Routemap and play a pivotal role in the reduction of fuel poverty.

To support these aims, the Council is proposing to construct a district heating transmission pipeline to distribute low carbon heat from the Energy-from-Waste plant at East Tullos, to the existing Aberdeen Heat and Power City Centre and Seaton heat network, and Tillydrone heat network.

Benefits of the project

This project is driven by and aligned with four key ACC strategic priorities:



Heat decarbonisation in support of net zero objectives

ACC aims for net zero emissions by 2045. Expanding district heating networks helps support this ambition, aligning with the Aberdeen Climate Change Plan, Net Zero Aberdeen Route Map, and the Scottish Government's Heat in Buildings Strategy. The project has the potential to save 74% in carbon emissions over 40 years compared with gas boilers.



Alleviation of fuel poverty

Fuel poverty affects thousands of households in Aberdeen. By expanding the district heating network and connecting to a low-carbon heat source, this project will help contribute to the delivery of providing affordable warmth and support efforts to reduce fuel poverty.



Security of low-cost heat supply

The project will help deliver a reliable and resilient heat for Aberdeen, reducing dependence on imported fuels and offering protection against volatile energy markets.



Enable heat network expansion

The project creates opportunities to expand the heat network to additional customers, continuing ACC's goal to decarbonise buildings and heat and alleviate fuel poverty.

ROUTE SOUTH OF HARBOUR

ABERDEEN CITY COUNCIL

How energy is generated and enters the pipeline

Heat from the Energy-from-Waste (EfW) facility is produced by converting non-recyclable waste into energy, which is then piped into the existing Torry heat network. The District Heating Transmission Pipeline project will allow the transfer of heat from the EfW facility to the AHP City Centre and Seaton network.

East Tullos to St Fittick's Road

The pipeline connects into the Torry Heat Network north of the railway line at Tullos Playing Fields and crosses the recreation ground to a Heat Transfer Station at Balnagask Circle. This provides hydraulic separation between the Torry Heat Network and the Transmission Pipeline.

The Transmission Pipeline then crosses St Fittick's Park and then onto St Fittick's Road.

St Fittick's Road to Harbour Tunnel

The pipeline continues along St Fittick's Road, then across the northern edge of the golf course to the southern tunnel shaft.



HARBOUR TUNNEL CONNECTION

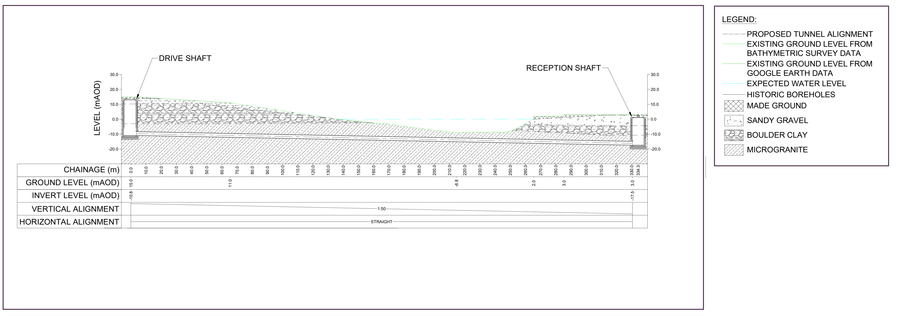
ABERDEEN CITY COUNCIL

How the tunnel connection will be built

A tunnel will be constructed beneath the harbour to allow the District Heating Transmission Pipeline to cross the River Dee. It will start from a shaft on the south side of the harbour located on the northern edge of the golf course near Greyhope Road and extend to a shaft on the northern side at Footdee play area. As the shafts and tunnel are formed, concrete lining will be installed to ensure strength and durability. Once built, the shafts will be covered at ground level.



Map showing the entry and exit points for the tunnel



Map showing the depth of the pipeline under the Harbour

ROUTE NORTH OF THE HARBOUR

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Route North of the Harbour

This section connects the northern tunnel shaft to the Beach Energy Centre, creating a vital link to the City Centre and Seaton heat network. It will strengthen Aberdeen's low-carbon energy system and ensure reliable heat for homes, businesses and public facilities.

The District Heating Transmission Pipeline will emerge at Footdee Recreation Ground, then travel through Pocra Quay. It will follow the Esplanade past Queens Links, cross Beach Boulevard and continue along Links Road to the Beach Energy Centre at Loverose Way.

Beach Energy Centre

The Beach Energy Centre will house pumps to move heat through the District Heating Transmission Pipeline and inject it into the City Centre and Seaton network.

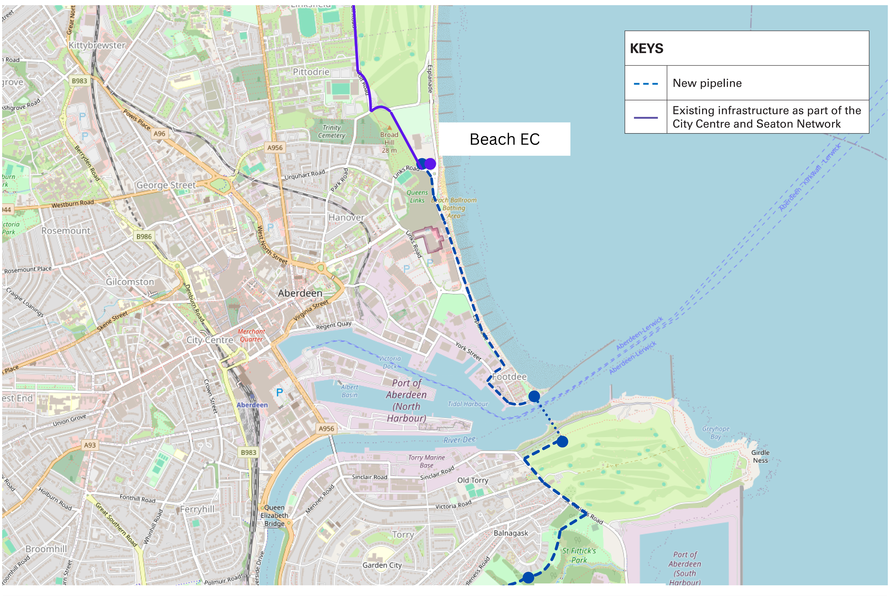
Benefits

Lower carbon emissions: Supports Aberdeen's net-zero goals by reducing reliance on fossil fuels.

Energy efficiency: Makes use of waste heat and optimises energy distribution.

Reducing fuel poverty: Provides affordable, stable heating for homes and businesses, helping lower energy bills.

Future resilience: Creates a flexible network that can integrate new heat sources and expand to more areas.



Map showing the pipeline route north of the harbour

SEATON TO TILLYDRONE INTERCONNECTOR

ABERDEEN CITY COUNCIL

Connecting Seaton and Tillydrone for reliable, low-carbon heat

The Seaton heat network and the Tillydrone heat network are to be connected through a new piped interconnector as part of the District Heating Transmission Pipeline project. The Tillydrone network serves domestic properties in high-rise blocks and community buildings to the west of Seaton. This connection will provide low-carbon heat via the transmission pipeline and provide opportunities for future expansion of the network.

Benefits

Energy security:
Reduces exposure to volatile energy markets by using locally recovered heat.

Reliable supply:
Strengthens resilience by linking two networks for consistent heat delivery.

Future integration:
Creates capacity for expansion of the existing heat networks, supporting long-term low-carbon goals.



Route of the Seaton–Tillydrone piped interconnector with provision for future expansion

Delivered in partnership with ACC and AHP as part of Aberdeen's District Heating Transmission Pipeline project.