



Bristol City Leap

Unlocking Investment and Delivering Citywide decarbonisation

Councillor Kye Dudd

Cabinet Member for Waste, Energy, Climate Change and Ecology

Bristol City Council

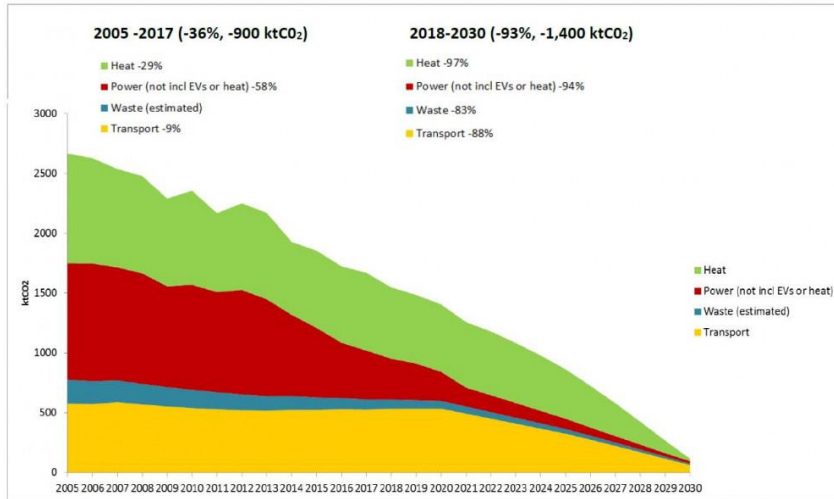
Cllr.Kye.Dudd@bristol.gov.uk



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Bristol's leadership



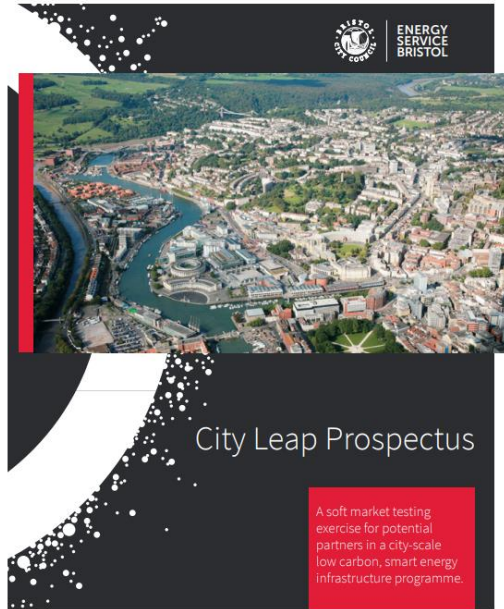
- Bristol has reduced emissions by 42% since 2005 and has the lowest emissions per capita of Core Cities.
- Bristol City Council has reduced its own direct emissions by 50% since 2015 and aims to achieve net zero by 2025 (Scope 1&2).
- In November 2018, the council became the first UK local authority to declare a Climate Emergency and set a goal for the city to be net zero by 2030.
- There is an urgent need to accelerate the pace of delivery in Bristol if the city and the council are to achieve these targets.

The council's delivery to 2023

Over £92m invested in low-carbon projects over the years including:

- £7m in the installation of two 2.5MW wind turbines;
- £42m in energy efficiency for 10,000 social homes;
- £15m in low carbon heat networks and the first commercial connections secured;
- £5m in 4MW of solar PV on council-owned buildings and land;
- projects to deliver 120 new public EV charging points in the West of England region by 2021;
- facilitating the delivery of a 4.2MW community-owned solar farm;
- supporting 52 local community energy projects with £250k of grant funding; and
- launching the South West Energy Unit to deliver £38m of investment in low carbon energy infrastructure across three local authorities.

The City Leap Prospectus



A slender document with unparalleled opportunities for our city...

- A soft market testing exercise launched on 9 May 2018.
- Our expression of interest window closed on 31 August 2018.

In partnership with:



May 2018 : Version 1.0

EOIs received

181

Website hits

4,465

Downloads

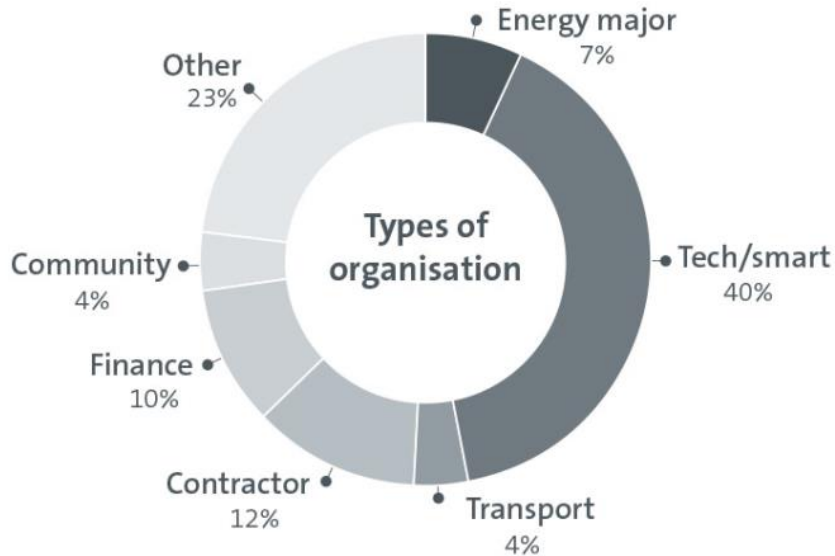
2,627

Media coverage

42

Events

30



The winning bidder

AMERESCO 

with...

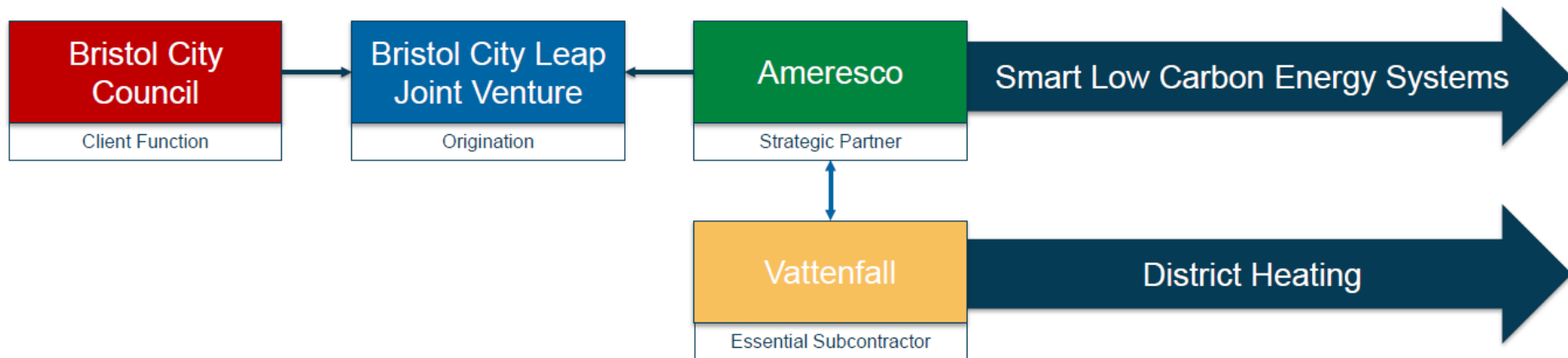
VATTENFALL 

(essential sub-contractor)

What has the council procured?

- The council has let a **20-year concession** to a City Leap Strategic Partner, Ameresco Ltd, to deliver and fund low carbon energy projects across the council's estate via the City Leap joint venture.
- The council has a pre-procured partner that has the **right of first refusal** to deliver and fund all low carbon energy projects on the council's estate, including its social housing.
- City Leap will want to work in collaboration with services across the council, facilitated by a **new City Leap Client Function** within BCC, to develop low carbon energy projects.
- These projects will need to meet a number of **pre-set Project Acceptance Criteria** – if they do so, they will be approved by the council.

How City Leap works



The ethos of partners



A Carbon Neutral and Climate Resilient City by 2030



Clean • Green • Sustainable



Fossil Free in One Generation

About Ameresco



Comprehensive Portfolio

Objective approach and in-house technical expertise delivers the most advanced technologies to meet the unique needs of each customer. Majority of projects are budget-neutral, funded by energy cost savings.

Customer Driven

Federal and Municipal Governments, Commercial and Industrial, Higher Ed, K12, Public Housing, Healthcare, Airports. Market reputation across North America & Europe for excellence in customer satisfaction.



Over £7.7 Billion in energy solution projects, 280+ MWe of Owned Assets in Operation



1,250+ Employees throughout North America and the United Kingdom



60+ Offices providing local expertise in markets served



8,000+ Customers benefiting from energy efficiency measures and renewable energy generation



Up to 45% Energy cost savings with comprehensive, audit-based improvements



In 2020, our renewable energy assets and customer projects delivered a carbon offset equivalent to approx. **12.6M Tonnes of CO₂**

About Vattenfall



Vattenfall...

- Is one of Europe's largest producers of electricity and heat
- Is 100% owned by the Swedish state
- Has its main markets in Sweden, Germany, the Netherlands, Denmark and the U.K
- Has 2 million customers on heat networks

Ameresco's winning bid commitments

- Accelerating the council's drive to make its **operations carbon neutral by 2025**
 - covering its direct energy and transport emissions.
- **Retrofitting the council's social housing by 2030**
 - achieving minimum EPC Band C.
- Meeting the following contractually binding Key Performance Indicators (KPIs) over the first five years of the partnership:
 - a) Delivering **c140,000 tonnes of carbon savings**;
 - b) Installing **c182MW of zero carbon energy generation**; and
 - c) Delivering **c£61m of social value**, including c£50m of contracts to be delivered by the local supply chain.

In its winning tender, Ameresco estimated that an investment of **£424m** would be required over the five-year period of the business plan to deliver the above.



Social value highlights



- **£61.5m of social value** including c£50m of expenditure with local supply chain.
- **100% of people working on City Leap** paid at least the **Real Living Wage**.
- A **£1.5m Community Energy Development Fund**.
- A **£500,000 R&D Fund** to support Bristol's innovation sector.
- Create a **Community Benefit Fund** estimated at **£2.8m** over 20 years.
- **Crowd funding** of up to 10% of the capital investment requirements of non-heat network projects.
- Production of **Bristol City Leap Equalities Diversity and Inclusivity (EDI) Strategy**.
- Working with the Centre for Sustainable Energy (CSE) and other partners to support the development and finalisation of the **No Cold Homes strategy**.
- Create **over 1,000 new jobs, apprenticeships and work placements**.

Skills and employment



- Of the **1,000 jobs** committed to through the Social Value Portal, **410 jobs will be City of Bristol-based** (within BS1-BS16 postcodes).
- Bristol City Leap will work with higher and further education colleges, plus partners like Building Bristol, YTKO, Business West and Bristol Works.
- The 20-year partnership will allow for a long-term strategy, giving the local supply chain **confidence in the pipeline of work**.
- **School/college outreach programme and recruitment events** to highlight the range of employment opportunities in the green economy.

Supporting community energy



- **Continued collaboration with Community Energy** stakeholders through Bristol Energy Network, BGCP, the Community Energy Propagator and other key networks.
- **Community funding** to support feasibility, innovation and delivery of grass roots projects.
- Community-led input into future projects through a **community forum** and **heat network advisory panel**.
- **Crowdfunding platform** to be launched to support funding of local projects – free at the point of use to community groups.
- An **open-door-policy** to enable groups and networks to share ideas and opportunities for community projects with Bristol City Leap.



Initial Business Plan



In partnership with
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Initial Business Plan highlights

- Bristol City Leap has published a summary of the 'Initial Business Plan' which covers the time period: **4 January 2023 to 31 March 2028**.
- This plan will be reviewed, consulted on, updated and **published annually**.

		Bid Plan	Int Bus Plan	Int Bus Plan - Bid Plan
Development KPIs	Unit	Contracted	IBP Forecast	Positive KPI variance
Zero carbon generation assets deployed	MW	181.6	194.5	12.9
Zero carbon energy generated	GWh	327.3	376.1	48.8
Energy efficiency measures deployed	£m	22.1	77.1	55.0
Carbon KPI	Unit	Contracted	IBP Forecast	Positive KPI variance
Carbon KPI	tCO ₂ e	139,120	152,881	13,762

Investment within the Initial Business Plan

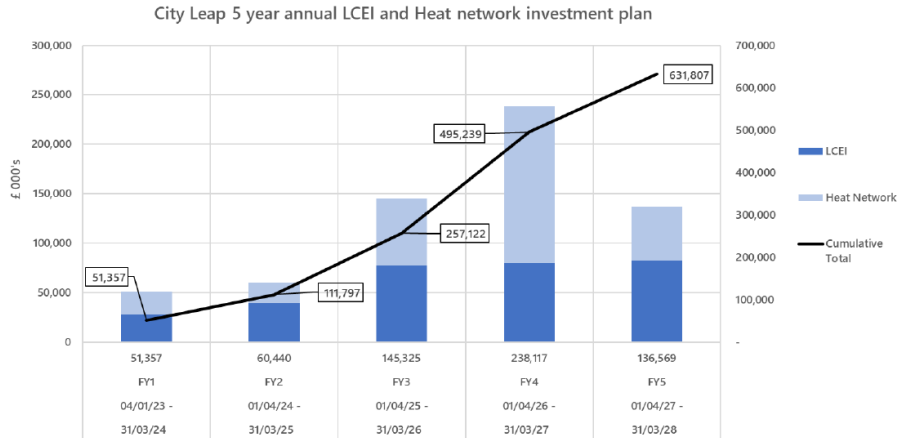


Figure 1. Bristol City Leap IBP Low Carbon Energy Infrastructure (LCEI) investment plan profile aligned to a community centric delivery

- Focus on the council operational buildings to achieve 2025 neutrality target.
- Deliver decarbonisation programmes in the council's social housing to the maximum extent possible.
- Enable local supply chain development to deliver ambitious year 3, 4 and 5 capital investment plans.
- Complete necessary consultations and planning for strategic heat main.
- Complete necessary consultations and planning for large scale renewables.

Investment by technology

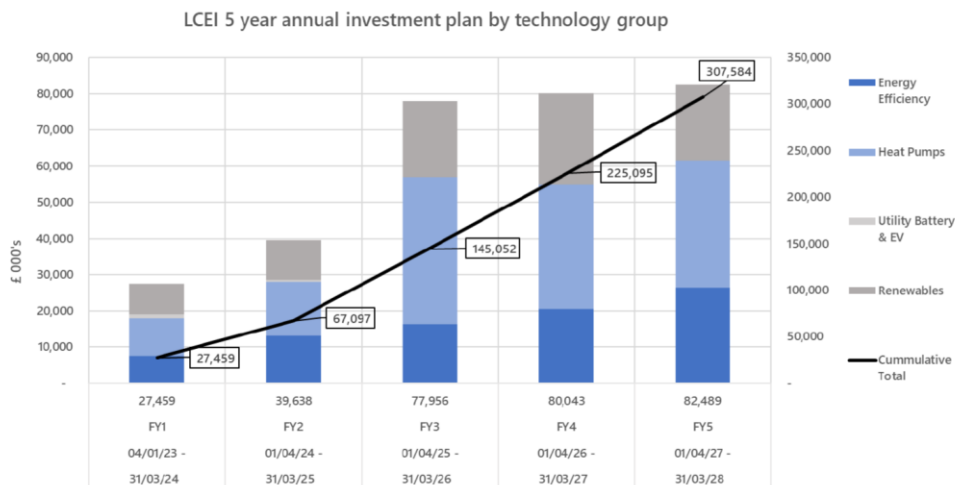
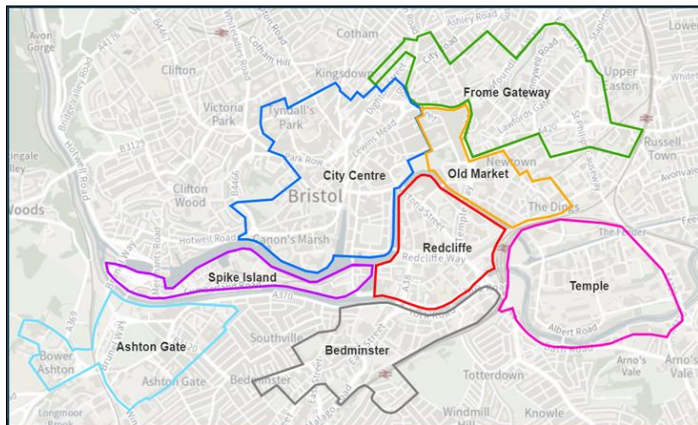


Figure 4. LCEI IBP annual investment plan by technology group annual profile - £307.5m LCEI investment in 5 years

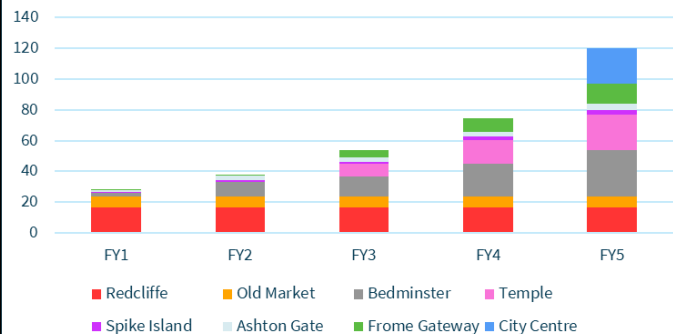
In summary

- c£135.5m heat pump investment for heat decarbonisation outside heat network zone.
- c£83.7m energy efficiency investment to reduce demand and optimise electrification of heat solutions.
- c£86.7m investment developing 164MW of renewable generation in the LCEI plan.
- c158GWh of energy generated from renewable assets during the initial business plan period.
- Campaign of key investment awareness to catalyse local green economy and resources.

Heat Network projects



Annual Heat Demand (GWh)



Our plan for Heat Networks will:

- Provide excellent services to existing customers at an affordable price.
- Decarbonise and grow the existing networks established by BCC.
- Establish and grow new networks across the city.
- Develop the market conditions for transformative growth in the market.
- Ensure that the Heat Networks contribute to broader City Leap objectives.

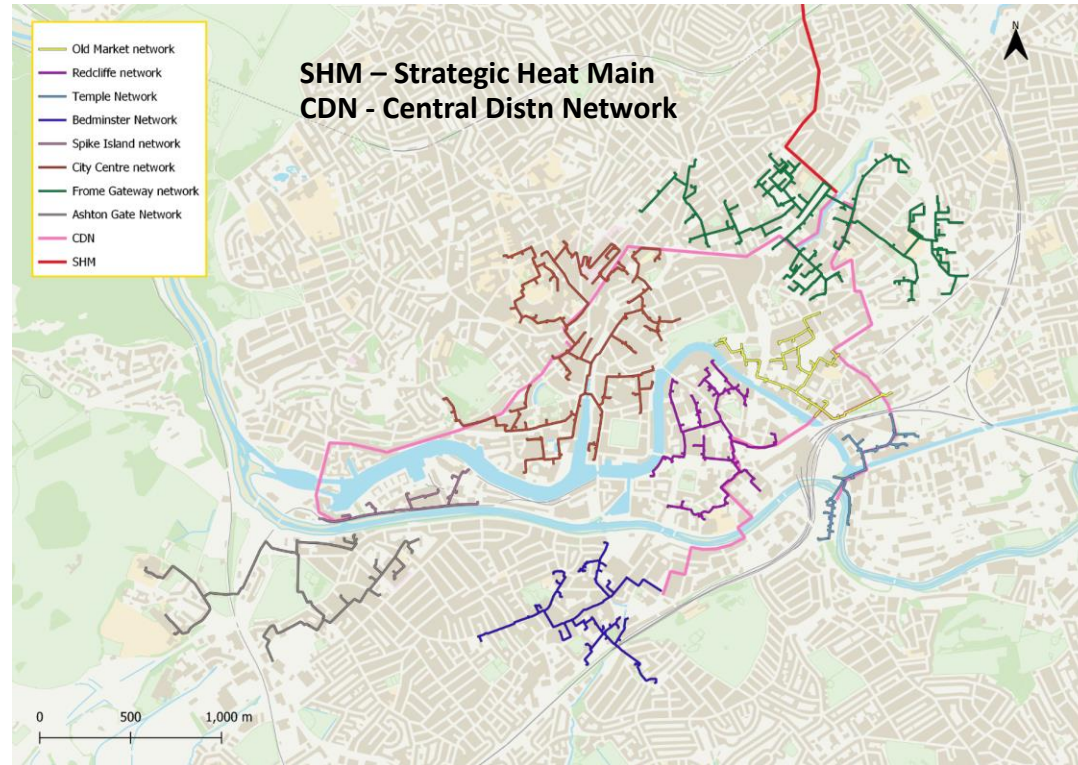
Indicative Heat Network Phasing

By 2028

279
GWh PA

Equivalent to
27,900 homes *

*OFGEM TDCV 12,500 KWh for
gas x 0.8 for losses =10,000 KWh
per home.



Help to reduce household energy bills



Bright Green Homes

- Over 200 households have already benefited from the first phase of the scheme.
- Secured additional funding from the government's Home Upgrade Grant to help eligible households in Bristol to install energy saving measures in their homes.
- Eligible residents may be entitled to receive up to £25,000 for a huge range of energy saving technologies including external and cavity wall insulation, air source heat pump installation and solar panels.
- To be eligible for the funding residents must not use gas central heating, have an annual household income under £30,000, have an EPC certificate of D, E, F or G, live in Bristol and be the owner, landlord or private rented tenant of the property.

