

Environment and Regeneration Scrutiny Committee

Net Zero Carbon Programme

Workstream 3 – Sustainable and affordable energy

March 2022



Sections

- 1. Scope** – What we are focusing on today
- 2. The challenge** – What we are trying to address
- 3. Our objectives** – How we will address the challenge
- 4. Deliverables** – What we have achieved so far, and what we want to achieve in the next 12 months

1. Scope

There are two main areas of work within the scope of WS3:

1. Sustainable energy
 - Heat networks
 - Adding new connections to existing networks
 - Decarbonising existing networks
 - Building new zero carbon networks
 - Ground Source Heat Pumps
 - Renewable electricity
 - In-borough generation
 - Out-of-borough generation for self-supply
 - Tariffs
 - Council
 - Residents and businesses
2. Affordable energy
 - SHINE
 - ECO / Warmer Homes schemes

This workstream has a significant crossover with WS1 (Buildings)



2. The Challenge – Why is this important?

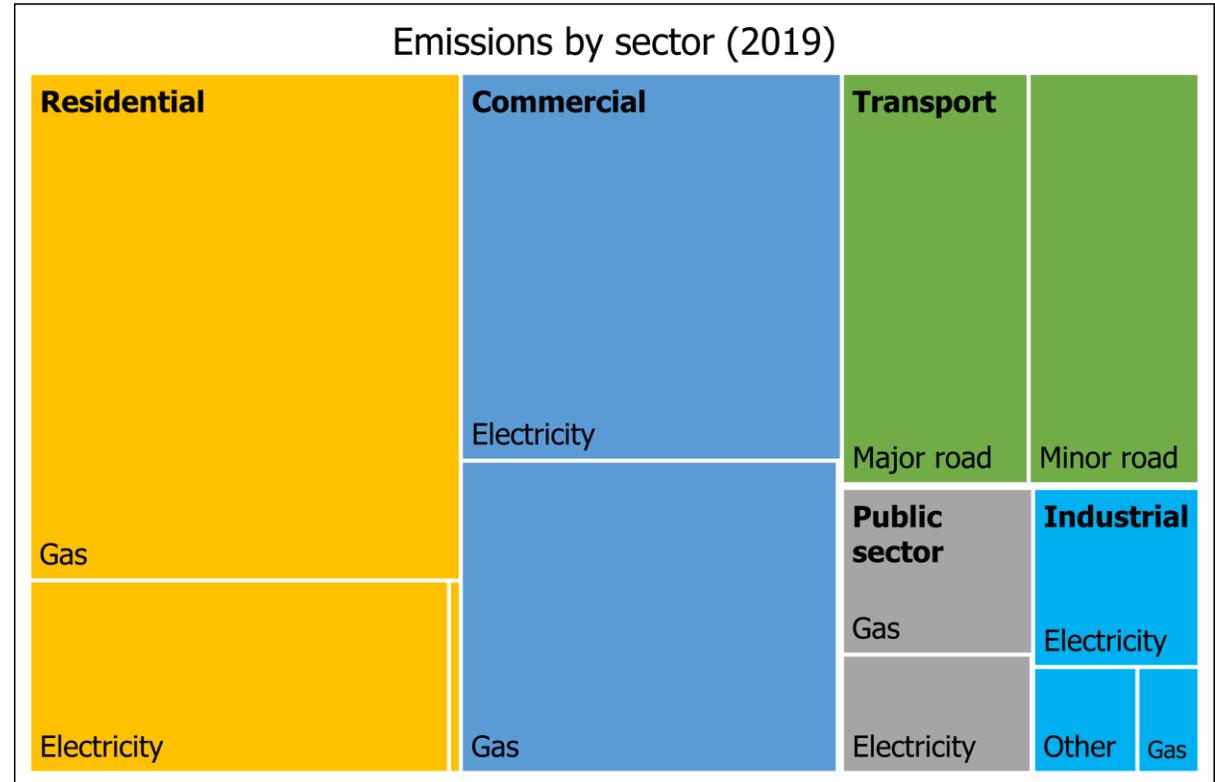
Energy use in buildings accounts for around 82% of direct carbon emissions in Islington - 533,000 tonnes per annum

Within buildings, carbon emissions come from gas (56%), electricity (42%) and other fuels (2%).

WS1 looks at eliminating gas use (shifting to electrical heating) and reducing overall energy consumption in buildings through retrofit.

WS3 looks at how the remaining electricity needs can be met via renewable sources (but also contains some gas-eliminating actions).

Fuel poverty is also a significant priority, with 14.8% of residents classed as in fuel poverty in 2019. Current price rises are likely to significantly increase this figure.



3. Our objectives

The Sustainable and Affordable Energy Workstream Plan has the following priorities:

1. Rolling out, expanding and decarbonising energy networks
2. Maximising solar power generation
3. Increasing access to fairer energy tariffs
4. Purchasing renewable energy for the council and related organisations
5. Supporting residents in fuel poverty
6. Lobbying and marketing

A cross-cutting theme (within and beyond this workstream) is seeking funding.



4. Deliverables

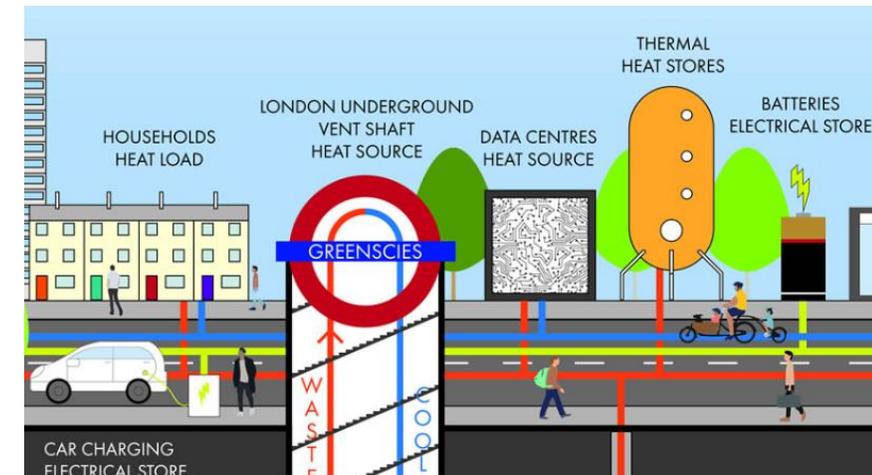
Objective 1 : Energy Networks

Key priorities

- Complete the GreenSCIES design
- Develop other smart energy network projects
- Add new connections to the Bunhill heat network
- Look at how the Bunhill heat network can be made zero emissions
- Connect communally-heated buildings to DH networks where possible
- Look at opportunities for GSHPs in parks and estates

Progress to date:

- GreenSCIES PM appointed and design underway
- Working to connect City Forum development and Telfer House to Bunhill
- Feasibility study proposed for options for replacing Bunhill 1 gas CHP with zero emission heat source as part of wider Finsbury Leisure Centre redevelopment
- GSHPs considered for estates as part of UCL study in WS1



4. Deliverables

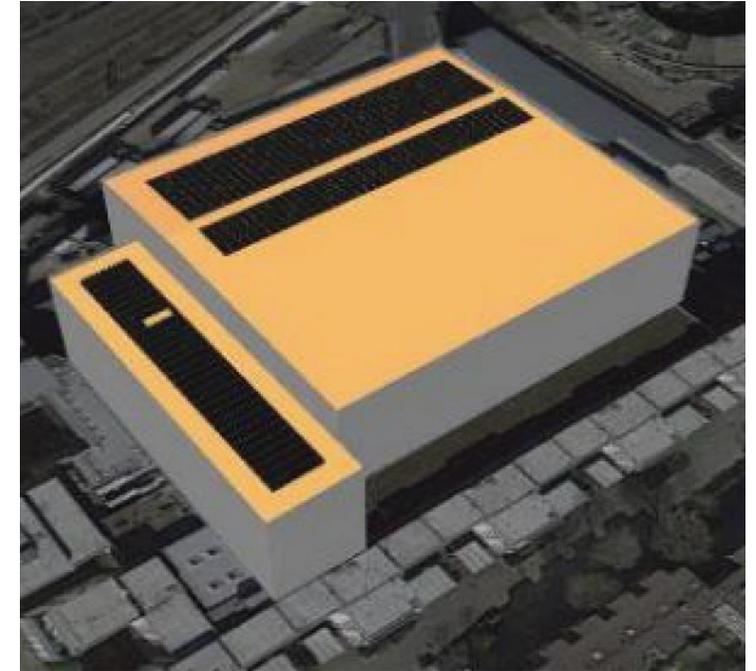
Objective 2 : Maximise solar power generation

Key priorities

- Maximise solar power generation on LBI sites
- Maximise solar power generation at non-LBI sites

Progress to date:

- Existing arrays on 10 corporate buildings
- Feasibility studies underway for 20 primary schools, which includes assessing maximum potential for solar PV installation
- Feasibility studies being procured for 60+ council buildings, which will include assessing maximum potential for solar PV installation
- PV to be installed on four council sites as part of a carbon offset-funded project
- PV to be installed on two council sites as part of PSDS-funded project (including an additional 425kWp at the Waste Recycling Centre)
- Solar Together group buying scheme round currently running for residents and local organisations



4. Deliverables

Objective 3 : Increase access to fairer energy tariffs

Key priorities

- Residents and businesses on the best tariffs
- Council self-supply through out-of-borough generation

Progress to date:

- Work on tariffs and encouraging residents and local businesses to switch is currently on hold due to energy market situation which means switching is likely to result in a worse tariff than staying on the standard variable rate (which is price capped)
- Two-stage feasibility study planned to look at best self-supply options for the council



4. Deliverables

Objective 4 : Purchase remaining electricity needs from renewable sources

Progress to date:

- Council's corporate buildings switched to renewable tariff in April 2021
- Leisure centres will switch in April 2022
- Offer schools opportunity to switch from April 2023, following consultation
- Consultation with Housing aimed at switch in 2023
- Islington is the lead borough for the Renewable Power for London, one of seven London Councils Climate Change programmes. This has three workstreams:
 - Decentralised energy: Maximise local innovative energy generation and storage projects to meet zero carbon energy demand
 - Renewable energy: Procure energy for London public sector bodies that is 100% renewable, through collaboration
 - Energy advice: Support and influence residents to reduce energy consumption, move to renewables and save money



4. Deliverables

Objective 5 : Supporting residents in fuel poverty

Key priorities

- Support residents to access WHD and Water Sure
- Secure ECO and Warmer Homes funding

Progress to date:

- Between April 2020 and January 2022 we secured over £860,000 for residents through 2,403 Warm Home Discounts, 2,671 water discounts and 33 ECO/ECOflex grant applications resulting in more than £115,500 grant funding spent on energy efficiency measures in fuel poor households
- We were successfully re-appointed to deliver the Mayor of London's Warmer Homes Advice Service in 2018, have on-boarded dozens of contractors fulfilling ECO funding works independently, and successfully partnered with several ECO schemes like the Emergency Central Heating Offer (ECHO).



4. Deliverables

Funding

Progress to date:

- The Energy Services team has secured significant external funding to deliver several of these projects, including:
 - £1.097m from the Public Sector Decarbonisation Scheme for corporate building works including PV installation
 - £830k for GreenSCIES from Innovate UK, Local Energy Accelerator and Green Heat Network Transition Fund
 - £120k from Low Carbon Skills Fund for school feasibility studies
- A bid of £792k has been made to HNIP for new Bunhill connections
- The school and corporate building feasibility studies will enable further applications to the PSDS.
- £1m of council capital budgeted for PV installation in next three years

Thank you and questions