

Net Zero Carbon Workstream 1 Report

Scrutiny Review

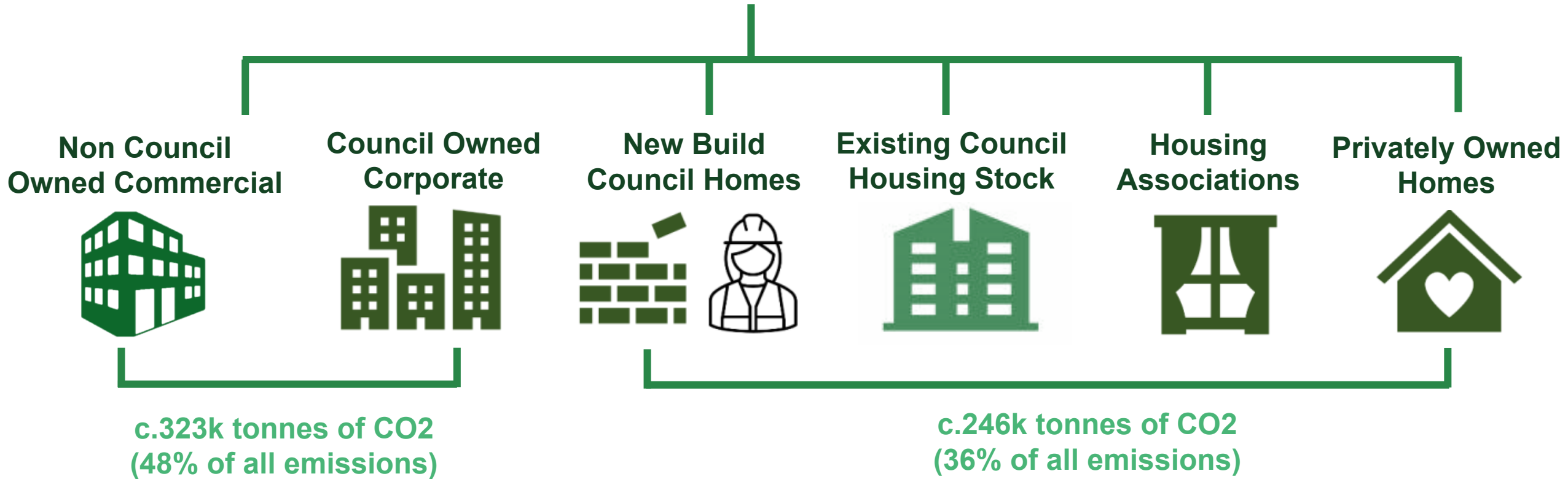
3 October 2022

Sections

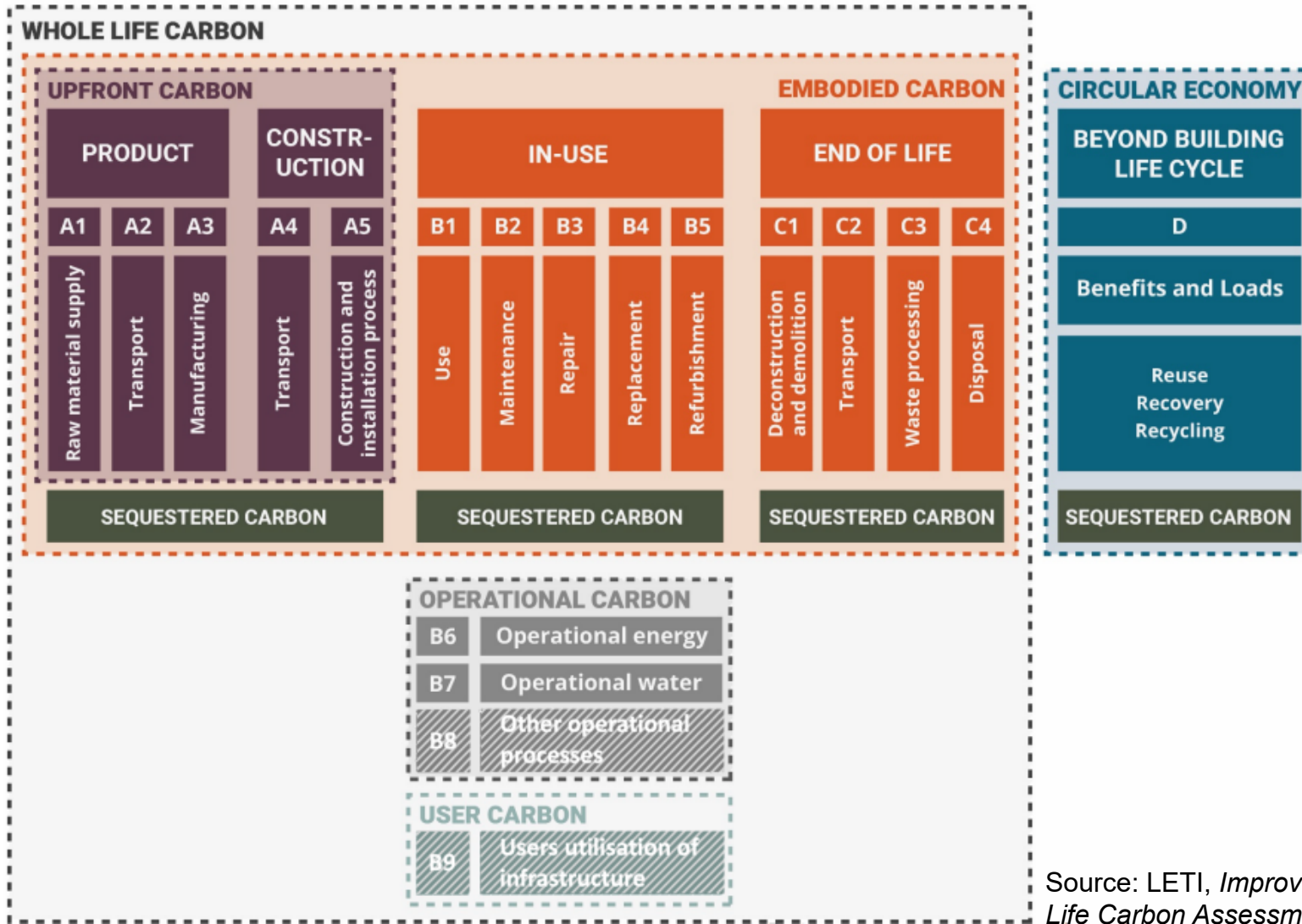
- **The challenge** – what we are trying to address
- **Our objectives** – how we are addressing the challenge
- **Circular Economy** – how we are embedding circular economy principles in our work
- **Green Jobs** – how our work will support and sustain local green jobs and skills
- **Deliverables** – what we have achieved so far, and what we want to achieve in the next 12 months

Scope

Homes, Buildings and Infrastructure



Widened Remit to Consider Embodied Carbon and Emissions



Carbon Types of a Building:

Upfront Carbon = Carbon emissions released before the building or infrastructure begins to be used

Embodied Carbon = All carbon emissions associated with materials and the construction processes of a building, before it becomes operational

Operational Carbon = The amount of carbon emitted during the operational or in-use phase of a building

Source: LETI, *Improving Consistency in Whole Life Carbon Assessment and Reporting* (2021)

The challenge – why is this important for a low carbon Islington?

The buildings, homes and infrastructure work stream is responsible for **560,000 tonnes of CO2 emissions** of a total 679,600 tonnes in Islington

Commercial, industrial and public sector buildings represent around **323,000 tonnes** of CO2 emissions:

- 188,400 tonnes from electricity (58%)
- 129,600 tonnes from gas (40%)
- 8,000 tonnes from 'other' fuels (2%)

There are over 105,000 homes in Islington, with the domestic buildings sector representing **246,00 tonnes** of carbon emissions (2019, BEIS), this is made up of:

- 172,300 tonnes from gas (70%),
- 72,400 tonnes from electricity (29%)
- 1,726 tonnes from 'other' fuels (1%)

As per a commissioned report by UCL, it will cost approximately £1.5 billion to retrofit the entirety of Islington's social housing stock alone.

Our Objectives

We will:

- Complete feasibility studies at priority pilot estates and progress schemes where viable, establish an approach to programming works to implement low carbon communal heating solutions
- Continue to prioritise fuel poverty and fabric improvements to our worst performing housing stock by using the data from our housing stock model, and learning from the UCL project to direct investment to homes below a SAP category C
- Deliver the first new build scheme to meet Passivhaus level performance, and incorporate methodology and best practice into the council's new build programme
- Work with housing associations operating in the borough to understand their Net Zero Carbon ambitions, and increase their awareness of the range of opportunities to improve energy efficiency available
- Work with owner occupiers, landlords and tenants to increase capabilities and opportunities to maximise energy efficiency in their properties
- Replace gas boilers in council buildings with low carbon energy heating sources or connections to heat networks, and improve energy efficiency through insulation, solar technology and lighting replacements

Embedding Circular Economy Principles

- Circular Economy can be hard to embed in this workstream because of quality standards, but we are assessing where it can be applied, primarily in New Build and capital works
- We are exploring how we can include Circular Economy principles in procurement processes and contracts
- We will endeavour to protect the heritage of sites where works are proposed, such as with Bevin Court
- We will explore how we can reduce our embodied carbon, with a focus on construction
- We will assess policy and funding decisions and maximise how we work alongside the community
- We will ensure that recruitment and training in the borough is maximised

Supporting Green Jobs

- Currently, if we had the finances to deliver a full-scale decarbonisation of the borough's buildings, we would not have the workforce to enact it
- Decarbonising buildings will require a substantial workforce who are skilled in green jobs and can undertake works required at the pace needed. In order to do this we will endeavour to upskill our current workforce and provide necessary training as we transition to a high-skill, low carbon economy
- The size of the additional workforce related to size of retrofit programme
- We are considering new procurements to ensure upskilling of local residents and workforce
- PAS2035 issues and opportunities
- We will offer more training opportunities at local colleges with the offer of work experience
- We will offer more apprenticeships focusing on green jobs

Things to focus on in 2023-24

- Continue sourcing funding to speed up retrofit process
- Increase communications with residents and stakeholders
- Ensure capital programme adopts and embeds NZC principles in pipeline of work and in delivery policy.
- Get internal and external PAS2035 training running
- Seek more ways to engage and influence buildings not directly owned
- Start viewing NZC work through lens of fuel poverty prevention and energy security.

Thank you for your time and attention