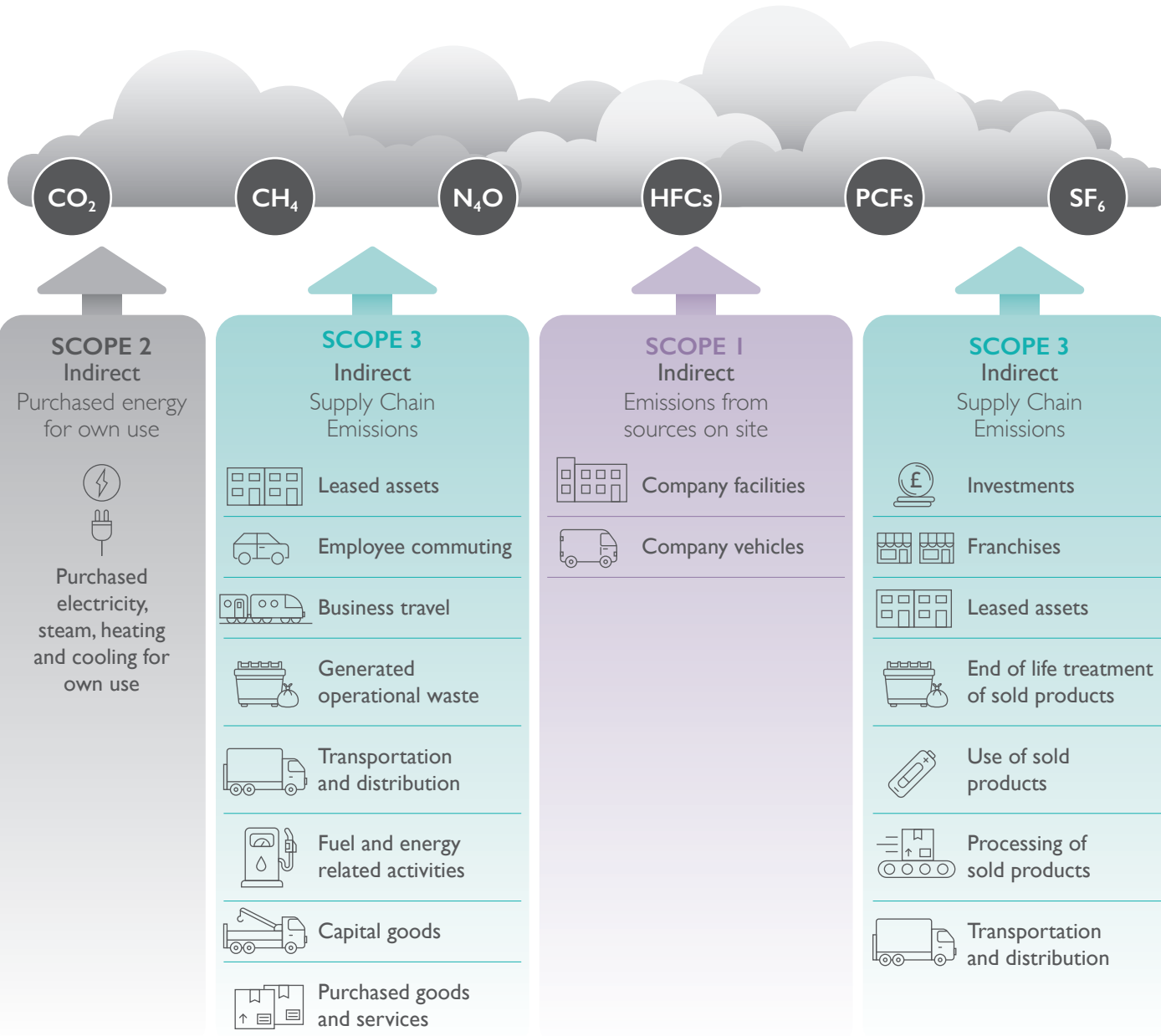
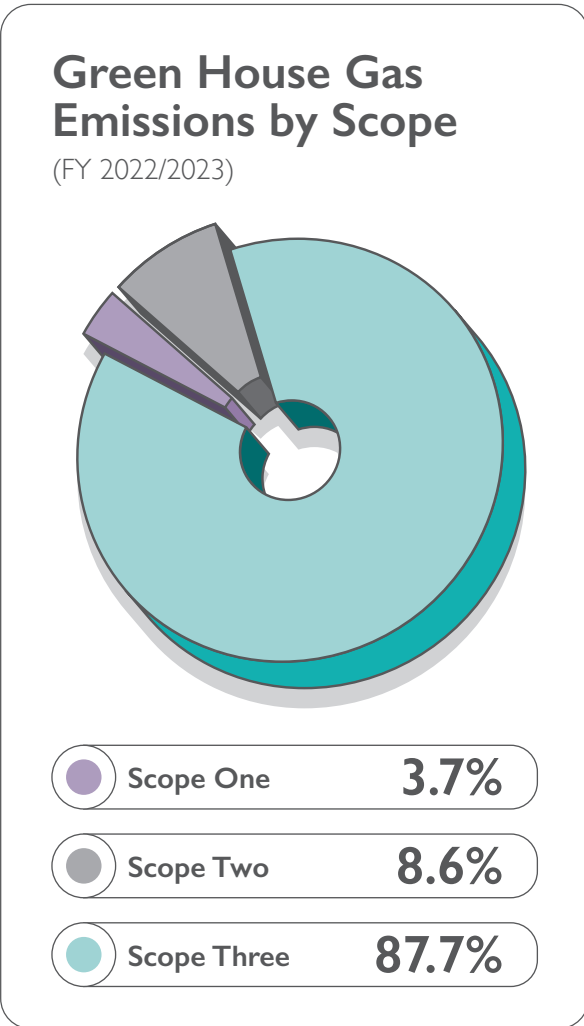


# Treveth – Emissions by Scope



**Total GHG Emissions**  
(FY 2022/2023) **1,326 tCO<sub>2</sub>e**



Upstream Activities | Reporting Company | Downstream Activities

# Treveth – Emissions by Category

## Embodied

Carbon Emissions  
Related to Construction

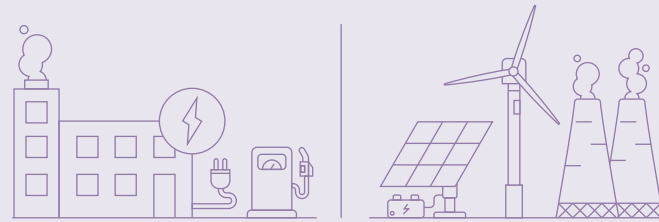


## Operational Carbon Emissions

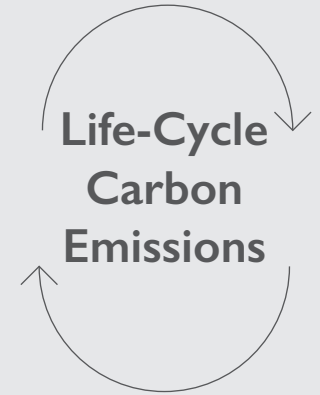
Energy use  
intensity



Energy  
Source



Life-Cycle  
Carbon  
Emissions

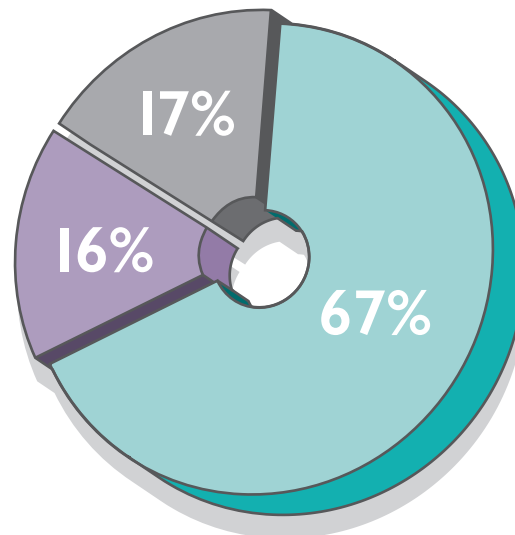


## Green House Gas Emissions by Category

Embodied Carbon of properties

Operational Carbon of properties

Own Operations

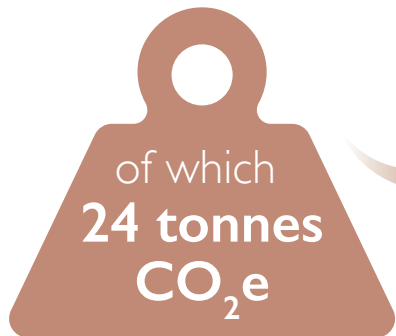


- Residential is (currently) mainly embodied emissions whereas
- Commercial is (currently) mainly operational emissions
- This will change over time with more developments

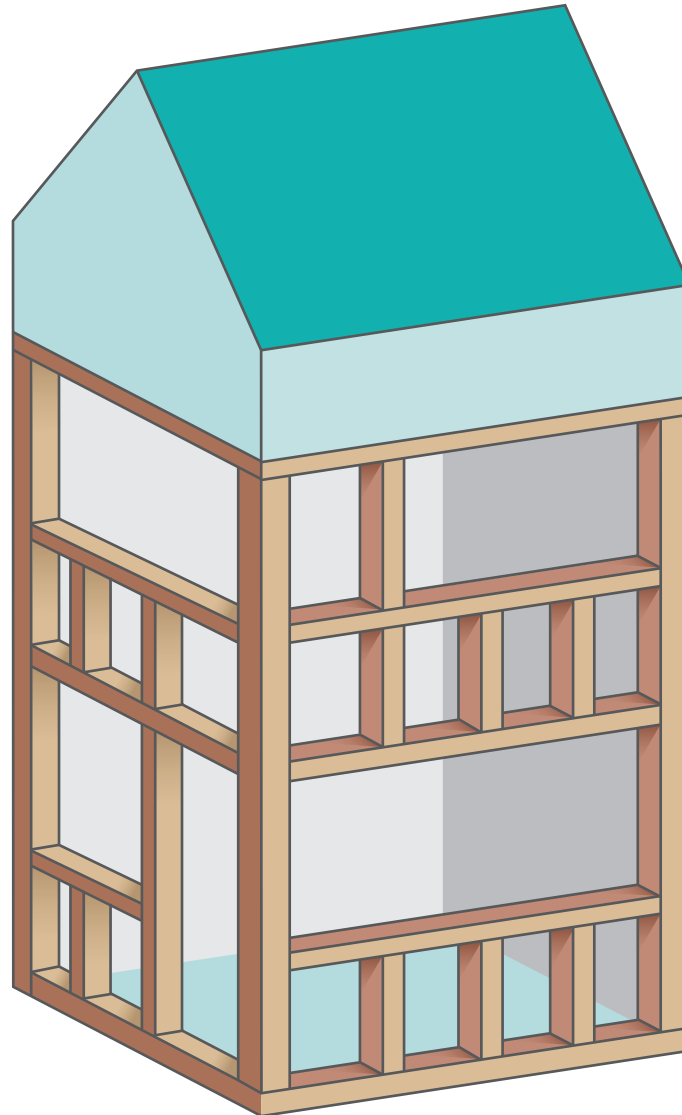
# Embodied Carbon




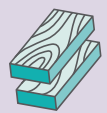


is our current average embodied carbon load per house



is biogenic carbon (locked in from the timber element of the design throughout the lifespan of the building)



embodied carbon per property to reduce through:

1. Careful **site selection** to reduce any demolition or cut and fill requirements along with limiting the removal of any soils off site 
2. House **design manual** to increase the use of biobased materials such as timber and hemp-based products 
3. Strategic **procurement** strategy to prioritise local supply chain and local materials wherever possible 
4. Use of renewable energy on construction sites and biofuel for site plant during **builds** 



## Development Stage

Choice of Sites and Business Cases

At the **site selection** stage, consideration of carbon should be given to each site to include any demolition, site slopes, cut and fill requirements along with any muck away or the need for any off-site contamination remediation, etc.



### Action:

Consideration of likely carbon load (e.g. low/medium/high) to be included within all Business Cases for both Residential and Commercial opportunities in order to inform decisions made.



## Design Stage

Maximise Green Elements in Building Design

Increase the **timber elements** of the build which lock in carbon.

Link in biobased materials where possible which could further increase the biogenic carbon element in each build.



### Action:

Consider and advise on changes, differences and scope for improvements on materials for our building designs in our Housing Manual.



## Construction Stage

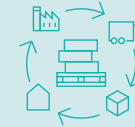
Use of zero carbon energy sources on site

Use of **renewable energy** on construction sites and HVO (hydrogenated vegetable oil/biodiesel) for plant could remove up to 3 tonnes CO<sub>2</sub>e per property.



### Action:

Look into including carbon requirements within PQQ stage to see what contractors can provide; encourage innovative thinking.



## Procurement

Supply Chain Analysis and Management

87% of our overall carbon account is from Scope 3 emissions, i.e. indirect emissions resulting from our **supply chain**.

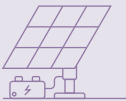
Prioritise the use of local labour and local materials where possible.



### Action:

Look to further analyse our procurement and carbon accounting. Consider managing choice of supply chain to prioritise carbon-neutral/zero carbon suppliers and local suppliers.

## Operational Carbon



### Handover

Renewable Energy as Standard

Operational carbon can be reduced by using a fully **decarbonised electricity provider**.



### Action:

Green electricity provision as standard when the properties are let or sold, for both Residential and Commercial properties.



### Estate Management

Landscape and Maintenance Plans

By including considered planting which benefits wildlife, areas of **green space** can be managed in a less energy intensive way which will also reduce carbon emissions.



### Action:

Landscape and Maintenance Plans for each site to consider opportunities to reduce mowing, to benefit both carbon capture and wildlife.

Link back to the Business Case stage and BNG/carbon capture/wetland habit etc.




## Own Operations

Opportunities for carbon reduction are limited in the areas of our:

-  **General Procurement**
-  **Transport**
-  **Commuting**

Other elements which will help to decarbonise Treveth include the decarbonisation of the concrete and steel industries

## Green House Gas Emissions by Category

-  **Embodied Carbon of Properties**
-  **Operational Carbon of Properties**
-  **Own Operations**

