EXECUTIVE MANAGEMENT TEAM

Date: 26 April 2023  
Location: Wallingford/Zoom Meeting  
Agenda item: 7.1  
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For: Information

CARBON REPORTING

Executive Summary

The 2023 Carbon Report (please see below) reports that CABI is showing an overall carbon decrease of 46% per capita 2022 when compared to the 2016 baseline.

The Carbon Trust has identified that “Setting ambitious but realistic corporate targets is a key part of developing a business strategy (to achieve carbon reduction)”. We have taken a number of initiatives to achieve carbon reductions. The biggest of these initiatives was to construct a new environmentally friendly headquarters in the UK. This project is now completed and CABI occupied its new HQ during Q3 2020. The property strategy for CABI Egham means it requires an approach similar to the former Wallingford HQ site regarding carbon reduction investment where any new investment in carbon reduction would only be considered if it could achieve economic payback within an agreed timeframe.

In 2022 we developed and published a new climate conscious travel Travel Policy. The new policy will help to guide CABI on its own journey towards more climate conscious travel as part of our commitment to achieve Net Zero by 2050.

Baseline Changes from previous report:

This report is against 2016 baseline data which we used to set a short-term target reduction in our carbon footprint for the period 2016-2019 of 10% per capita for CABI worldwide. The 2016 baseline is also used in our annual report to FCDO. The conversion factors used in this report have been updated to the January 2022 version.
CABI Annual Carbon Footprint Report 2022

Carbon Footprint Summary

This document reports annual progress on how CABI is recording its carbon footprint worldwide and the results of actions to reduce its greenhouse gas emissions and energy consumption. It reviews CABI’s performance against targets for carbon reduction regarding scopes 1-3 and business travel worldwide and the next steps to be taken to reduce CABI’s carbon footprint.

Performance (worldwide) against target: Scopes 1-3

Using 2016 baseline data, CABI set a short-term target reduction in our carbon footprint for the period 2016-2019 of 10% per capita for CABI worldwide on Scopes 1-3 with an annual milestone progress report. This linked the target with our medium-term strategy, 2017-2019. The target is predicated on the opening of our new Wallingford office in the reporting period.

Scope 1 (Gas, LPG, Fuel Oil, and owned transport)
Shows a decrease of 44% in CO₂e when compared to 2016 but due to an increase in staff numbers CABI is showing a per capita decrease of 52%.

Scope 2 (Electric)
Shows a decrease of 12% in CO₂e when compared to 2016 but due to an increase in staff numbers CABI is showing a per capita decrease of 24%.

Scope 3 (Water, Waste, Business Travel, and other indirect emissions)
Shows a decrease of 41% in CO₂e when compared to 2016 but due to an increase in staff numbers when compared to 2016 CABI is showing a per capita decrease of 49%.

CABI Worldwide is showing an overall decrease in carbon of 46% per capita 2022 when compared to 2016 baseline.

CO₂e per capita scopes 1-3

2022 Summary

COVID-19 continued to have an impact on CABI worldwide Scope 3 emissions at the beginning of 2023 but business travel has started to increase during Q2-4 but still at a reduced level. As business travel was contributing an average of approximately 60% of CABI’s overall carbon emissions this was the main contributor to the decrease in our carbon footprint over baseline.
CABI Wallingford has exceeded the 2020-2025 target set by The UK Green Building Council and on its way towards the 2025-2030 interim targets with energy usage of 115kWh/m² GIA.

<table>
<thead>
<tr>
<th>Scope</th>
<th>Metric</th>
<th>Interim Targets</th>
<th>Part Proof Target</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td>2020-2025</td>
<td>2025-2030</td>
</tr>
<tr>
<td>Whole building energy</td>
<td>kWh/m² (NL/A) / year</td>
<td>160</td>
<td>115</td>
</tr>
<tr>
<td></td>
<td>kWh/m² (GIA) / year</td>
<td>130</td>
<td>90</td>
</tr>
<tr>
<td></td>
<td>DEC rating</td>
<td>D90</td>
<td>G65</td>
</tr>
<tr>
<td></td>
<td></td>
<td>850</td>
<td>840</td>
</tr>
<tr>
<td>Base building energy</td>
<td>kWh/m² (NL/A) / year</td>
<td>90</td>
<td>70</td>
</tr>
<tr>
<td></td>
<td>kWh/m² (GIA) / year</td>
<td>70</td>
<td>55</td>
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<tr>
<td></td>
<td>NABERS UK star rating</td>
<td>4.5</td>
<td>45</td>
</tr>
<tr>
<td>Tenant energy</td>
<td>kWh/m² (NL/A) / year</td>
<td>70</td>
<td>45</td>
</tr>
</tbody>
</table>

NLA = net lettable area GIA = gross internal area

The use intensity values represent the net import of energy (i.e. net of on-site renewables) and assume an all-electric office. For buildings where other fuel types are used, the weighting factors in BREEAM’s Real Estate Environmental Benchmark should be applied to convert to kWh electricity equivalent (kWh_e).

Please note, the energy use intensity targets are indicative as they are based on standard hours of use and operation, with kWh_e values rounded. The DEC and NABERS UK ratings would allow for extended hours of use and for special uses, offering a more tailored approach to individual offices.

CABI Wallingford moved electric to renewable tariff in April 2022.

CABI has initiated a fund for carbon reduction innovation within the organisation.

**Recommended next steps in 2023**

Agreeing an organisational Net Zero 2050 Policy and Plan which would influence and inform CABI’s decision making and any other policies that can have an impact on CABI’s Greenhouse Gas (GHG) emissions. Some examples of this are:

- Promoting our climate conscious travel Travel Policy;
- Sustainable Laptop Computing
- Implementing a Purchasing Policy where when purchasing equipment energy usage and product “fixability” would be major factors used in decision making;
- Including carbon emissions when formulating project proposals;
- Taking a ‘One CABI’ approach to carbon reduction projects with a centralised budget – even relatively modest budget of say £10k pa, would add up to over £250k over 25 years etc. (this has been included in the 2023 budget).
- Coordinate any carbon initiatives and environmental statements to ensure we are presenting a consistent message throughout the organisation to our stakeholders, donors and partners.
- Move electricity (where possible) to renewable/zero carbon tariffs.
- Continue to raise staff awareness regarding green issues through CABI Staff Council.

**Assurance and Data**

Energy and water data are primarily taken from meter readings and invoices. In most cases, the data in these invoices is informed by manual meter readings or half hourly smart meter readings.

Waste data is derived from a calculation using a metric based on the number of bins emptied. This estimation methodology will result in a small margin of error. It is not currently cost effective to weigh all waste streams.

Business travel is derived from information provided by CABI travel suppliers and manual reports. CABI does not report RF conversion factors.
CABI commissioned an independent audit by BDO in 2015 which concluded that the design and operational effectiveness of the report was classed as “Good” with only low risk measures suggested.

Rest of World (ROW) figures for centres and home workers that are not presently able to collect data are derived by using an average calculation discussed with BDO. This estimation methodology will result in a small margin of error, but it is not currently cost effective or possible to collect all data.