Sustainability at Dane



Operational Carbon

Since 2012, Dane have held the ISO 14001 accreditation for their environmental procedures and practices. Dane built on that accreditation by improving the employees' and the business' understanding of environmental issues; for example, all project and site managers are now trained to a SEATS level in terms of their environmental awareness. Following on from achieving these accreditations and developing in that area, Dane noticed that the industry was beginning to focus on sustainability specifically, rather than general environmental issues.

In 2021, Dane committed to achieving the ISO 14064-1:2015 accreditation to better reflect the company's historical sustainability initiatives. This accreditation requires us to annually report and monitor our operational carbon emissions if we are to maintain the accreditation. We have decided to set ourselves the target of reducing our emissions intensity, meaning our 'emissions per million-pound turnover', by 2.5% annually. Knowing that we had invested in more sustainable infrastructure in 2018, we decided to set our baseline year as 2017, to reflect the progress that we had made over the previous 5 years.

In late 2018, Dane began investing in renewables and more sustainable transport alternatives to address the company's operational carbon. Hybrids have become the standard for company cars, and several fully electric cars have also been purchased. There are also 8 EV charging points at the company headquarters, and we are looking to install more. The below graphic details how these shifts have improved Dane's performance in terms of business travel, as well as highlighting the shift and improvement in terms of our carbon reporting, using more accurate CO_2e -based calculations rather than fuel reports.



Emissions (tCO2e) (location-based method) by year

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The company has also adopted more sustainable lighting options in both the works and office spaces. LED lighting is used in all works areas, and we are in the process of renovating the lighting in the offices. On top of this, we have installed many solar panels to the roofs. These initiatives combined mean that our electricity



consumption has decreased dramatically, as the below graphic shows. We are looking to further reduce our reliance on the grid by investigating other renewables opportunities.



These reductions have helped us achieve our target for these audited carbon emissions accounts. Now, in order to maintain our accreditation, we are having to explore new projects for reductions; we are currently investigating ways to improve our heating systems to become less reliant on natural gas and are looking to invest in more renewable office solutions. Sustainability is a major focus here at Dane and we are taking full responsibility for our impact, so we are also investigating socio-economic offsets to combat any remaining emissions.

Embodied Carbon & Procurement

With a good grip on our operational carbon and a clear strategy on how we are going to control our carbon footprint going forward, we have turned our attention to the embodied carbon of our facades. We have already reduced our contribution to the embodied carbon of our facades through our more energy efficient factories here at Dane but are working with our supply chain to deliver more sustainable products as well, therefore reducing the overall embodied carbon of each façade we manufacture. We are actively promoting these more sustainable products as options in our tenders to reduce the embodied carbon, and this helps projects achieve the targets for their completed builds such as BREEAM and more specific carbon targets.

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We have begun working with Schueco's low carbon solutions on two projects after seeing estimated reductions of around 10% in the embodied carbon of the façade.

FIFTY YEARS OF INNOVATION, QUALITY AND INTEGRITY

This is due to a combination of the product's post-consumer recycled AND content and the green energy used in the manufacturing process. Schueco offer:

- Standard aluminium Using an unspecified mixture of recycled and primary aluminium which has an estimated GWP of 4.3kgCO₂e/kg of aluminium billet, and 4.9kgCO₂e/kg of profile.
- Low Carbon Which is also made using an unspecified amount of recycled and primary aluminium but with green energy, leading to a GWP of 4.1kgCO₂e/kg of aluminium billet and 4.6kgCO₂e/kg of profile. This is set to improve in 2024 when Schuco improve their renewable energy sources further and lead to figures of 3kgCO₂e/kg and 3.5kgCO₂e/kg for billet and profiles respectively.
- Ultra Low Carbon 'Ultra Low Carbon (ULC)' is made using a minimum of 75% postconsumer recycled content as well as green energy. This use of recycled content means that ULC has a GWP of 2kgCO₂e/kg of billet and 2.5kgCO₂e/kg of profile. Much like 'Low Carbon', this is set to improve in 2024 to 1.2kgCO₂e/kg and 1.7kgCO₂e/kg for billet and profiles respectively.

We can also offer Hydro's low carbon options: Reduxa, Circal 75R, and Circal 100R.

- Reduxa Hydro's 'Reduxa' system involves using renewable energy during the manufacturing process to reduce the associated emissions with the product; the billet is estimated to have a GWP factor of 4.0kgCO₂e/kg of aluminium.
- Circal 75R 'Circal 75R' products are made from a billet with a minimum of 75% postconsumer recycled content. By reducing the amount of virgin raw materials that need to be extracted to make the product, there is a marked decrease in the A1-A3 life cycle stages. It is estimated that the billet has a GWP factor of 2.3kgCO₂e/kg of aluminium.
- Circal 100R 'Circal 100R' is similar to 'Circal 75R' in that it involves using post-consumer recycled content, however, 'Circal 100R' is a billet comprised solely of post-consumer recycled content, greatly reducing the contribution to the A1-A3 life cycle stage. This leads to a billet GWP of 0.5kgCO₂e/kg of aluminium.

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Net Zero & offsetting

Dane have been reluctant as a company to begin offsetting so soon in our journey to being a more sustainable business due to the issues we have seen about some offsets being ingenuine and greenwashing more generally. However, after further researching our offsetting options we have discovered that there is an opportunity to invest in genuine offsets that have socioeconomic benefits as well. Due to the nature of these offsets we plan on investing to account for our remaining operational carbon whilst we continue our work to reduce our emissions at source.

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