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COMPLETE ESG REPORTING

# What will a Future Net-Zero Construction Project look like?

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The Built Environment accounts for of the UK's Total Carbon Footprint

The Construction and Built Environment Sectors will play a critical role in helping achieve the UK's Net-Zero Objectives.

But what might a **future net-zero construction**project look like?

#### Renewable Energy Infrastructure

- Solar PV arrays on temporary offices or fencing.
- Small wind turbines for supplementary power.
- Use of hydrogen fuel cells where grid connection is unavailable.



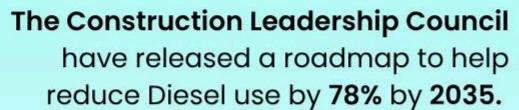
#### Electric and Hydrogen-Powered Machinery

- Excavators, cranes, dumpers, & generators are fully electric or hydrogen-powered.
- Charging stations powered by on-site renewables (solar/wind).
- Battery storage units for load balancing.

#### **Zero Diesel Policy**

- No fossil fuels used for heating, lighting, or power generation.
- Use of HVO (Hydrotreated Vegetable Oil) in legacy machinery (transitional phase).

78%



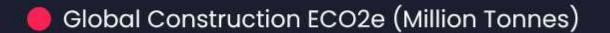


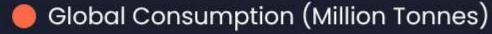
## 72%

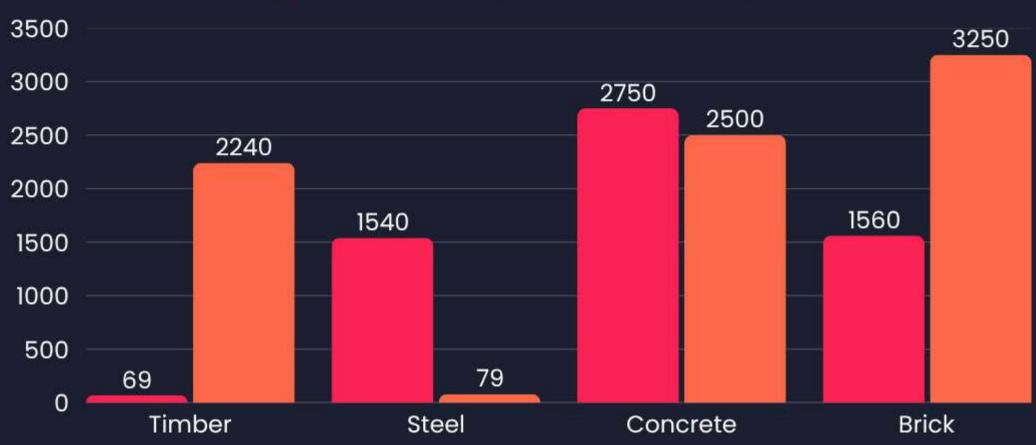
Steel and concrete can account for as much as 72% of the embodied carbon of a construction project.

#### Material Efficiency and Circular Economy

- Design and build to achieve Net-zero targets
- Include Net-zero T&Cs in subcontractor work packages & supplier orders
- Digital material tracking (e.g., via BIM) to reduce waste.
- On-site material sorting and recycling stations.
- Preference for low-carbon concrete, recycled steel, and timber.







#### **Green Logistics**

- Deliveries scheduled to reduce traffic and emissions (just-in-time).
- Use of EV lorries and vans for local transport.
- Construction consolidation centers to minimize on-site deliveries.

#### **Environmental Controls**

- Dust and noise monitored in real-time with IoT sensors.
- Water use is minimized and recycled where possible.
- Green hoardings to offset carbon and improve air quality.

#### **Smart Site Cabins and Welfare Units**

- Modular cabins with high insulation (passivhaus standard).
- Powered by solar panels or connected to battery storage.
- Smart meters and HVAC systems to optimize energy use.



#### **Digital Tools & Automation**

- Al-powered site management platforms to optimize logistics and energy use.
- Drones for site surveys and progress tracking.
- Augmented Reality (AR) for clash detection and safety planning.

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#### Worker Engagement and Training

- On-site carbon literacy training.
- Digital kiosks with real-time energy and emissions data.
- Incentives for green travel (bike schemes, EV parking).

#### **ARRANGE A DEMO**

To learn more about SustainIQ and to arrange demo, visit sustainiq.com or scan the QR code.



