



Decarbonising on site – helping to achieve net zero

The UK's ambitious net zero targets, 2050 for the UK and 2045 for Scotland, have a major impact on the construction industry and its operations. To support decarbonisation, it is essential for companies to tackle their direct on site emissions.

This guidance note explores key actions that can be taken to reduce carbon emissions within the construction sector.

Site set up

- Connect to the electrical grid as early as possible to reduce the use of diesel fuelled generators
- Where unable to connect to the grid consider efficient or hybrid generators
- Use energy efficient site accommodation
- Install meters to enable monitoring of energy and water use

Site processes and procedures

- Ensure no plant or equipment is running unnecessarily throughout the day – use an end-of-day checklist to verify all necessary plant or equipment are shut down
- Plan site development so that plant and equipment doesn't need to be moved around site unnecessarily
- Have conversations with staff around carbon reduction and climate change – use the information contained in this guidance note as a starting point
- Consider the use of recycled, reused or re-purposed building materials
- Consider packaging for materials and choose materials/suppliers that minimise this
- Avoid waste on site – it is a significant contributor to emissions

Plant, machinery and equipment

- Specify the latest Euro standards for plant or equipment on site, and ensure that it is regularly serviced
- Use telematics where appropriate on machinery to analyse the data
- Assess/resize generators as required on site, considering the change in demand between summer and winter months





Plant, machinery and equipment (continued)

- Consider use of low carbon fuels where possible and practical (e.g. HVO (Hydrotreated Vegetable Oil or hydrogen) as a replacement for diesel
- Consider electric plant, machinery and equipment where appropriate
- Consider battery packs instead of small scale/portable generators

Travel, transport and deliveries

- Consider the use of local sub-contractors and suppliers to minimise transport emissions
- Combine orders where possible to reduce the number of deliveries to site
- Avoid deliveries from vehicles that aren't full and explore the possibility of using them to take any materials off site as well as onto site
- Ensure a 'No Idling' policy is in place and communicated to everyone who comes on site
- Develop a green travel plan for construction workers to encourage the use of sustainable transportation methods such as walking, cycling, public transport and car sharing to travel to and from site

Monitoring and reporting

- Share data and best practice with the project team on site
- Have conversations with the supply chain partners (on and off site) around innovative product offerings, net zero targets and environmental performance

Other guidance notes within this series:

- Silt management
- Surface water management
- Cement, concrete and grout
- Waste duty of care
- Fuels and oils
- Air quality and nuisance
- Ecology and biodiversity
- Materials sourcing and management

Scan the QR code to view the guidance notes and associated animations on the NetRegs website



Further information

Decarbonisation guidance on NetRegs



Scan (or click) the QR code to view the carbon reduction and efficiency guidance on the NetRegs website.

These guidance notes have been developed by NetRegs in partnership with: