

Managing energy

Conserving energy during any construction activity is an ideal way to cut costs and save money.

The main areas for consideration are on-site construction (energy use, plant and equipment) and site accommodation, transport associated with delivery of materials, removal of waste, business travel and corporate offices.



Meter for monitoring electricity use and cost.

Before any work starts on site

Before the site is established, stakeholders should specify and set measurable, achievable and realistic energy use objectives and targets for the timeframe of the project, by:

- discussing needs with energy suppliers, to ensure that electrical supplies are connected at the earliest opportunity to avoid using generators.
- sourcing materials, goods and services from local suppliers and specifying the use of low carbon concrete.
- specifying the use of eco-friendly site cabins and renewable energy to contribute to powering the site accommodation.
- recommending the use of electric or dual fuel vehicles and plant, and providing charging points for electric cars or vehicles that are used on site.

When work has started on site

Considerations for when the site is being set up and during works include:

- making sure that the site induction covers the main energy efficiency issues (such as maintaining plant and switching it off when not in use).
- implementing a monitoring process to monitor and report energy consumption and carbon emissions, including business travel and transport.
- fitting site offices with practical, energy-saving devices, including low-energy lighting (such as LEDs), passive infrared sensors for lighting, timer switches and thermostats for heating and hot water, and setting up office equipment to print efficiently (such as double-sided) and to a central location rather than to individual printers.
- following a logistics/transport plan that considers efficient transport arrangements (such as the use of consolidation centres or just-in-time delivery) and green travel initiatives to reduce staff travel to site (such as car share and cycle schemes).
- placing signs around the site advising site personnel to switch equipment off when it is not required, and making sure that the engines of delivery vehicles are switched off when being loaded and unloaded (unless needed to operate a lorry loader or similar).

When work has been completed on site

Handover points and considerations for inclusion in the health and safety file:

- Quality checks must have been completed on installed fabric insulation and targeted air-tightness level test-results met.
- Testing and commissioning documentation for renewable energy systems are in place, and all building services, meters and control systems have been fully commissioned and tested.
- Plans are in place for monitoring and maintenance during occupancy and seasonal commissioning.

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