Transforming Energy Foundation

Energy Management for Fossil Fuel Free Buildings







Modules

- Introduction to Energy Management
- Policy commitments
- Understanding energy needs & use
- Identifying opportunities
- Implementing projects & processes
- Communications







What is Energy Management?

Embedding thinking about energy into your everyday practices and building use, and proactively planning to retrofit your building to be fossil fuel free.

Good energy management will achieve these 3 objectives:

- 1. Reduce energy use
- 2. Reduce energy costs
- 3. Reduce carbon emissions

What Does Energy Management Involve?

Working with existing and new buildings and equipment to make proactive decisions and investments to achieve a fossil fuel free future. This process involves the following:

- Collecting data on your energy consumption
- Finding opportunities and taking action to save energy
- Shifting away from fossil fuels
- Tracking your progress by monitoring data

Net Zero and Carbon Neutral

- Net Zero means cutting greenhouse gas emissions to as close to zero as possible, with any remaining emissions re-absorbed from the atmosphere, by oceans and forests for instance.
- Race to Zero is a global campaign to rally leadership and support from businesses, cities, regions, investors for a healthy, resilient, zero carbon recovery that prevents future threats, creates decent jobs, and unlocks inclusive, sustainable growth.
- Net zero differs from <u>carbon neutrality</u>, which places a greater emphasis on carbon offsets, and means that an organisation is offsetting as many emissions as they are emitting.
- <u>The Science Based Targets initiative</u> (SBTi) provides a clearly-defined pathway for companies to reduce greenhouse gas (GHG) emissions, helping prevent the worst impacts of climate change and future-proof business growth. Offsets and avoided emissions should not count towards SBT.
- For more information read Julie's Bicycle Net Zero Resource

Hierarchy of Good Energy Management

Avoid

Avoid activities that generate emissions in the first instance

Reduce

Reduce energy use through efficiency measures

Replace

Replace high-carbon energy sources with renewables or other low-carbon options

Invest

Invest in climate solutions

Investing in a clean and just climate transition

- For many organisations the largest part of their greenhouse gas emissions are in their supply chain and value chain (i.e. scope 3 emissions).
- Organisations to compensate for these emissions have sometimes purchased voluntary carbon offsets from third parties typically not related to their activities. However, there is growing momentum by organisations to apply an internal carbon price and use this sum to invest in projects either within their own operations or support the transition to a clean and just climate transition. This evolution of carbon offsets is called insetting.
- Additional resources: Gallery Climate Coalition Strategic Climate Fund and the International Platform for Insetting.

Electrification

In order for the UK to achieve net zero emissions, energy needs to come from carbon free energy sources.

At an organisational level this means your organisation should focus efforts energy reduction and investing in the electrification of your building.

Methods to do so include:

- Moving away from all fossil fuels: e.g., oil and gas
- Installing heat pumps or where available connecting to district heat network for heating
- Purchasing 100% renewable electricity, e.g. wind and solar
- If your property allows for it, installing onsite renewable energy generation (e.g. PV solar panels).

Components of Good Energy Management

