



Energy Efficient Homes

Net Zero Carbon Toolkit Information Sheets

Sheet no 3:

The Energy Pyramid: The Principle behind the Whole Building Plan

The 'energy hierarchy' illustrated by the pyramid ranks the stages on the way to using less energy in the home – sometimes referred to by the motto 'educate, insulate, generate.'

First, reduce consumption

Short-term fixes which save energy, cut your bills and reduce carbon emissions.

The first step in reducing the need for energy in the home (energy conservation) is to look at how you use your home and the appliances within it. Many small actions can make a significant impact on your annual fuel bill. ***These are in addition to the vitally important task of carrying out regular maintenance.***

Examples of quick fixes include simple things like:

- closing curtains to retain heat
- draught proofing
- using the heating controls efficiently
- running the washing machine on a low temperature.

See Stretton Climate Care's "Top Energy Saving Tips"

<https://strettonclimatecare.org.uk/wp-content/uploads/2021/11/No.-19-Top-energy-saving-tips-Nov-2021.pdf>

<https://energysavingtrust.org.uk/hub/quick-tips-to-save-energy>

Second, improve efficiency

Long-term reductions in energy consumption require improvements to the fabric.

Serious inroads into cutting our energy needs and CO2 emissions can only be made by improving the energy efficiency of our homes. To achieve this we must tackle the problem of heat losses from the housing fabric, and this is the first priority of the Whole House Retrofit plan.

The details are set out in Information Sheets 5 to 12.





Third, install renewables

Reduce your energy costs further by generating your own.

The final stage is to install renewable energy measures. By reducing your energy consumption through the first two stages, you should have cut down on how much energy you use and therefore need to produce. This means the size of energy system you require may be smaller and cheaper than had you installed it without considering the other two factors.

For information about installing renewables, see Information Sheet 13.

Other sheets available in this series

1. Fabric First: Planning changes to your home?
2. Preparing for Retrofit: Resources on your doorstep
- 3. The Energy Pyramid: The Principle behind the Whole Building Plan**
4. Opportunities to Begin the Journey
5. First Retrofit Priorities
6. Insulation: Roof & Attic
7. Insulation: Walls
8. Insulation: Windows & Ventilation
9. Insulation: Floors
10. Water Efficiency
11. Heating systems
12. Lighting
13. Renewables
14. Costs & Grants