



Colchester



# A HOUSEHOLDERS GUIDE TO **SUSTAINABILITY AND ENERGY EFFICIENCY IMPROVEMENTS**

If you are having an extension or other external alteration works carried out to your home, why not consider opportunities to improve its overall sustainability?

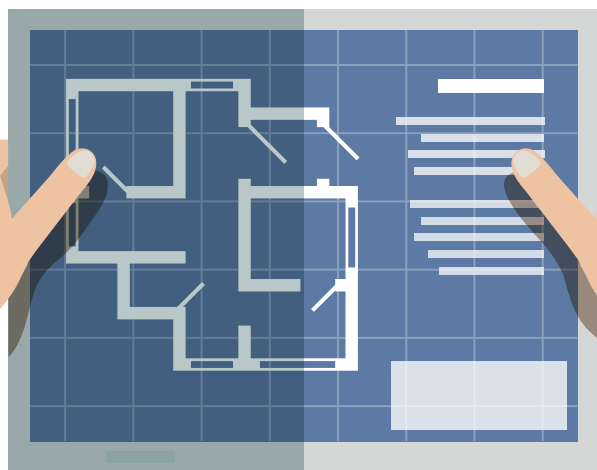
The cost of energy is likely to continue to rise. The less energy we use the more money we save as well as reducing our impact on the environment and making our homes more comfortable.

The aim of this leaflet is to provide high level guidance on the numerous sustainability improvement measures that can be applied when building an extension or carrying out other alterations to your home.

Building Regulations stipulate various requirements for when work is carried out, including for energy efficiency and water use. However, we encourage you to go further than this and also consider making energy and water efficiency improvements to your entire home at the same time, not just the extension.

Most measures would benefit from being designed into the extension/ alteration plans rather than added at a later stage, although this can be successfully achieved.

While this leaflet is aimed at householders extending or altering their home, others may find it informative. Some measures will be low cost, but others may initially be more expensive but could provide savings over time in addition to the other benefits improved sustainability brings.



## CLIMATE EMERGENCY

Colchester Borough Council has declared a Climate Emergency with the ambition to become a carbon neutral organisation by 2030. We want to work with other organisations and the community to reduce greenhouse gas emissions across Colchester for the benefit of us all. If all households improved the energy efficiency of their homes as part of extensions/ alterations, it would contribute to reducing greenhouse gas emissions.

## GREEN HOMES GRANT

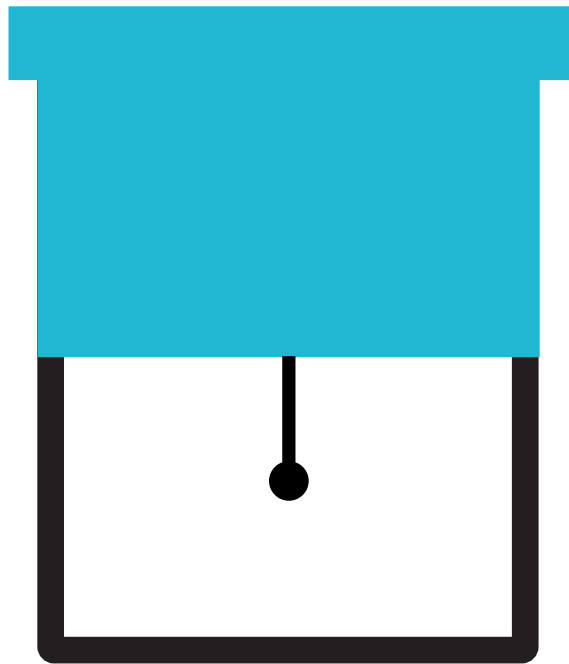
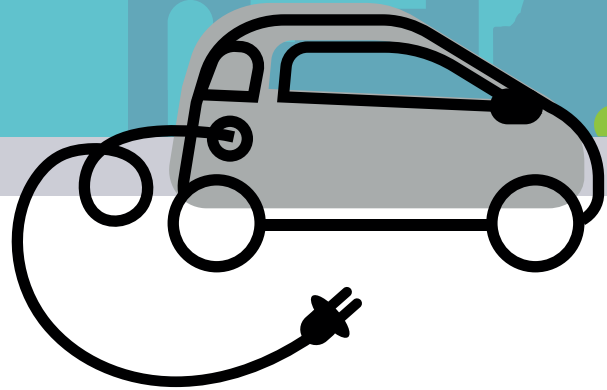
In September 2020 the government launched the Green Homes Grant. This provides grants for householders to improve the energy efficiency of their homes. Some of the measures listed in this leaflet are included.

## ENERGY SAVING TRUST

The Energy Saving Trust website includes details of energy saving home improvements and is kept up to date with details of any grants available.

We have listed some measures you should consider as part of your extension/ alteration plans. You could use this as a checklist and discuss with your architect and builder.

# ENERGY AND WATER EFFICIENCY MEASURES

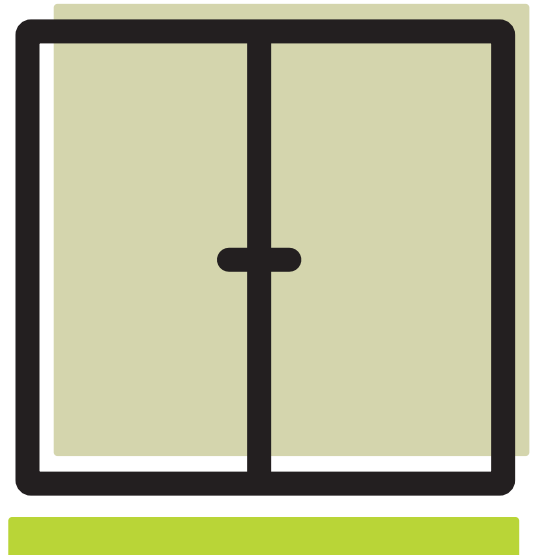


## PASSIVE DAYLIGHTING

This refers to the installation of large windows in roofs such as skylights. These installations enable more natural light and heat to enter your home, saving energy from a reduced need for artificial lighting and heating. The level of passive heating and lighting can be managed by installing windows with blinds incorporated within the design.

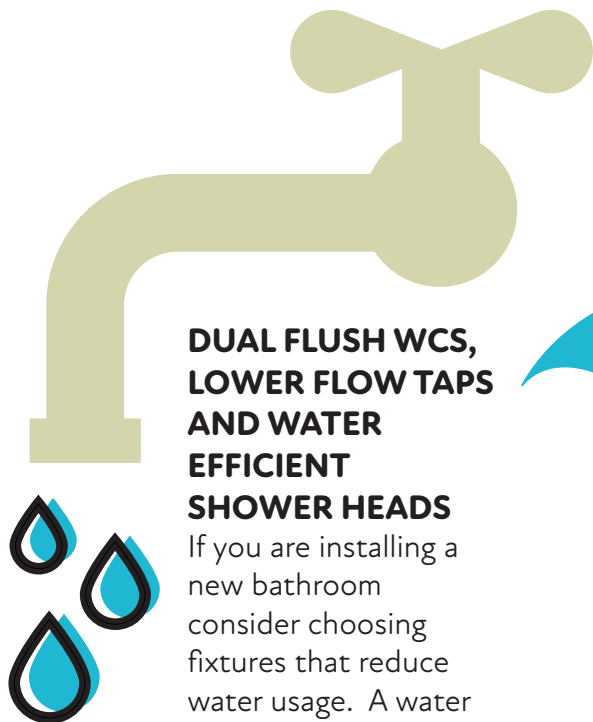
## TRIPLE GLAZED WINDOWS

Consider going beyond minimum Building Regulations requirements and installing triple glazed windows.



## RECLAIMED OR RECYCLED MATERIALS

The use of reclaimed or recycled materials will reduce the environmental impact, could also save you money and result in the extension harmonising with the existing home.



### DUAL FLUSH WCS, LOWER FLOW TAPS AND WATER EFFICIENT SHOWER HEADS

If you are installing a new bathroom consider choosing fixtures that reduce water usage. A water efficient shower head can also save gas for water heating.

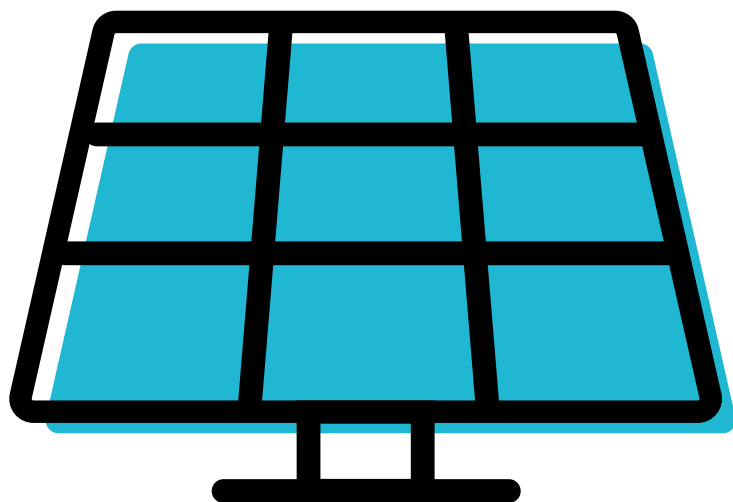
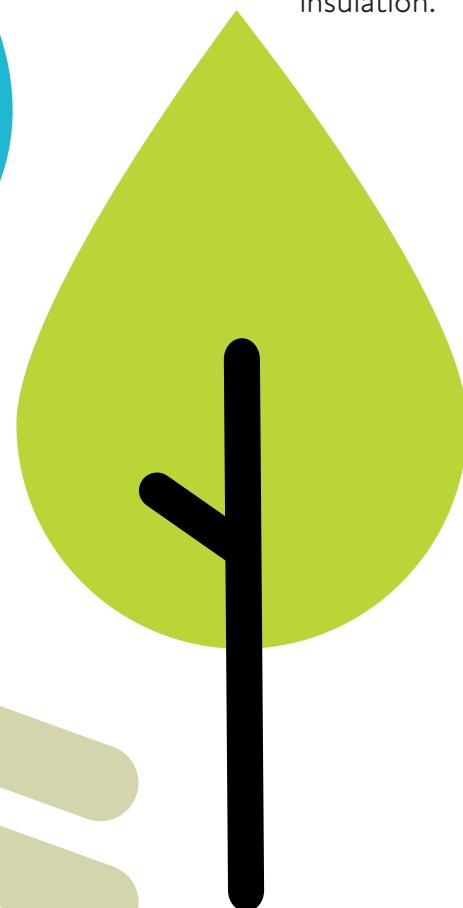


### RAINWATER HARVESTING

Rainwater harvesting can be as simple as a water butt to collect rainwater to use for watering the garden and washing the car.

### SOFT LANDSCAPING, E.G. TREE PLANTING AND GREEN ROOFS

Tree planting can provide shade in summer and increase biodiversity in your garden. Green roofs can also increase biodiversity, reduce surface water run-off and act as a form of insulation.



### RENEWABLE ENERGY

Instead of buying energy from suppliers you could install renewable technologies to generate your own energy. There are a variety of renewable energy technologies available, all with different requirements so it is important that you research the most suitable technology for your home.

A large part of the cost of installing solar panels is the cost of scaffolding, if you are paying for scaffolding as part of your extension you may want to explore the potential and suitability for solar panels.

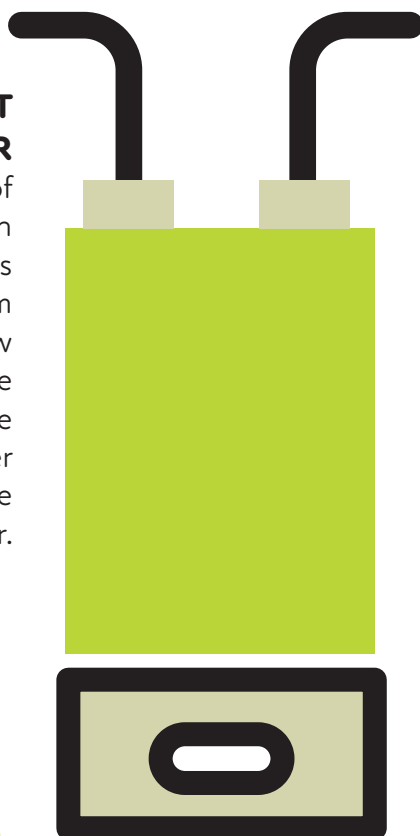


### HIGHLY EFFICIENT LIGHTING SCHEMES

LEDs are the most efficient light bulb on the market.

## HIGHLY EFFICIENT NEW BOILER

Extending the size of your home often requires improvements to your heating system and installation of new radiators. A more powerful boiler may be required so consider upgrading to a more efficient boiler.



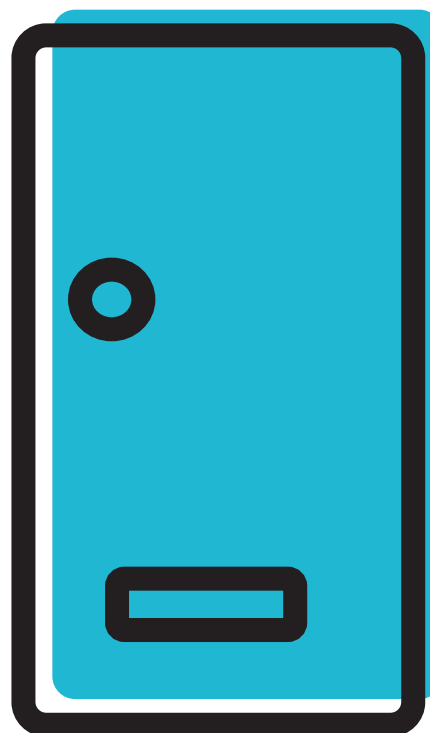
## APPLIANCES

If you are having a kitchen installed, consider choosing the most energy efficient appliances.



## INSULATION

Your extension should be insulated to the standards stipulated by Building Regulations, but the rest of your home can also be insulated. If your home has cavity walls a layer of insulation can be blown into the cavity. If you have solid walls applying external insulation at the same time as your extension will ensure the exterior finish to the original building matches the extension.



## DRAUGHT PROOFING OF WINDOWS AND DOORS

Draught proofing is one of the simplest and cheapest ways to save money and energy. To draught proof your home block up unwanted gaps that let cold air in and warm air out.

For more information about energy efficiency, and home upgrades or extensions, please email [climate.change@colchester.gov.uk](mailto:climate.change@colchester.gov.uk)

For more information about planning please email [duty.planner@colchester.gov.uk](mailto:duty.planner@colchester.gov.uk)

Listed Buildings and buildings within conservation areas need extra thought about how to improve their energy performance without compromising their special interest. Please contact Planning Services, [planning.services@colchester.gov.uk](mailto:planning.services@colchester.gov.uk) to discuss a bespoke solution.