

# Planning permission and making the most of your solar hot water system

You don't need planning permission for most home solar water heating systems, as long as they're below a certain size - but you should check with your local planning officer, especially if your home is a listed building, or in a conservation area or World Heritage Site - we can only give general guidance here.

## Issues and opportunities

Permitted unless:

- ✔ installed on any part of the external walls of the building if the building contains a flat
- ✔ panels when installed on a flat roof are situated within 1 metre from the edge of the roof or protrude more than one metre above the plane of the roof
- ✔ panels when installed project higher than the highest point of the roof (excluding the chimney)
- ✔ the building is within a conservation area or World Heritage Site and the solar PV or solar thermal equipment is installed on a roof which forms the front of the building and is visible from the road.

The solar thermal equipment must, as far as is reasonably practical, minimise its effect on the amenity of the area and be removed when it is no longer needed or used for domestic microgeneration.

## What to ask an installer

The Energy Saving Trust recommends you choose a solar water heating product that is certified under the Microgeneration Certification Scheme (MCS) or Solar Keymark. You can [find certified products at the MCS website](#).

Check our general advice about finding an installer, as well as these specific questions for installers of solar water heating systems:

- ✔ Ask if they are a member of a trade organisation such as the Solar Trade Association.
- ✔ Ask for details on available options such as size, panel type, hot water storage.
- ✔ Ask about the type of collector – flat plate panels can be less efficient but may be cheaper. Evacuated tube systems can be more efficient and take up less room.
- ✔ Ask about independent testing of collectors – they should comply to BS EN 12975 or BS EN 12976 and the supplier should be willing to provide a copy of the full test report so you can compare different collectors.
- ✔ Ask for information on applicable regulations, including health and safety guidelines – for example, safe roof access – and how they will address them.
- ✔ Ask them to confirm that the system will be eligible for any future Renewable Heat Incentive payments.

- ✔ Ask what is included in the price you have been quoted – prices should cover safe removal and disposal of any existing equipment such as hot water cylinders as well as safe access to the roof.

### **What you can expect to achieve**

Regeneration schemes which create new buildings or bring buildings back into use are likely to cause an increase in emissions, which will need be managed and minimised. Taking steps to minimise emissions will help keep your authority on track on NI 186.

### **Making the most of a solar hot water system**

You should do what you can to minimise hot water use before considering solar water heating. [Check out our water-saving tips.](#)

If you do install solar water heating, make sure that as much of your hot water as possible is taken from the solar supply, rather than heated electrically in an appliance. This can include fitting a mixer shower rather than an electric shower (check with your plumber that the water pressure is sufficient). If you have any 'hot fill' appliances, make sure they are connected as close to the hot water cylinder as possible so that they can make use of the solar hot water before the cold fill takes over.

You may get more out of your system if you use more of your hot water in the evening, after the solar has had time to heat it up. However, it is more important to make sure that your back up heating system is set up to come on at the right time. Before you installed the solar panels, your boiler or immersion heater was probably set to give you a full tank of hot water in the morning. If you leave it like this, your system will always start the day with a hot tank and there will be nothing for the solar panels to heat during the day.

Your installer should advise you on how to set your hot water controls to get the most out of your new system, whatever time of day you use hot water. Make sure you follow this guidance - it is the most important part of the installation.

### **Our field trials**

Solar water heating systems are typically designed to provide half of the average home's hot water needs. But our 2011 study of 88 sites found systems providing as much as 60 per cent of homes' hot water – and one example providing just 9 per cent.

