

# Solar and ground source heat pump systems from Worcester



Dedicated to heating comfort

## Worcester Greenskies and Worcester Greenstore

### Harnessing energy from the sun to bring you heating and hot water comfort for your home

Part of the worldwide Bosch Group, and one of the UK's leading manufacturers of high-efficiency gas-fired and oil-fired boilers, Worcester has led the way in innovative energy-saving heating and hot water systems for more than 40 years.

Faced with today's tough challenges, not least global warming, Worcester is more committed than ever to developing solutions which utilise sustainable energy in order to conserve our planet's non-renewable reserves of fossil fuels.

And the good news is that the future is already here – in the form of Worcester Greenskies solar water heating and Worcester Greenstore ground source heat pumps.

Both systems are designed and manufactured to the highest quality, reflecting the impeccable no-compromise standards for which Worcester and Bosch are renowned.

#### Help towards installation costs

Installing a Worcester Greenskies or Greenstore system (or both) could entitle you to a grant under the Government's Low Carbon Buildings Programme:\* £400 for Greenskies and up to £1,200 for Greenstore. To find out more about grants and the special promotional offers which Worcester runs on these products from time to time, visit [www.worcester-bosch.co.uk](http://www.worcester-bosch.co.uk)

To qualify, you must have the work carried out by an approved professional installer. For details of installers who have been fully trained by Worcester, visit [www.worcester-bosch.co.uk](http://www.worcester-bosch.co.uk)



*Greenskies solar water heating and Greenstore ground source heat pump*

\*Correct at time of printing

## What is sustainable energy?

*Sustainable energy is best thought of as energy which can be replenished within a human lifetime and which causes no long-term damage to the environment. Solar energy, wind energy, and geothermal energy, amongst others, are all self-sustaining. They all have sources that cannot be depleted. Extended use of these energy sources aids the conservation of other non-renewable energy sources such as fossil fuels.*



## Greenskies solar water heating



It is a popular misconception that utilising solar energy is only possible in hot, sunny climates. The reality is that it is daylight and not just direct sunshine which is the important factor – which is why Worcester Greenskies solar water heating uses specially coated panels developed to collect as much energy as possible, even on the duller days. During the course of a year you are likely to get 50-70% of your hot water provided by solar.

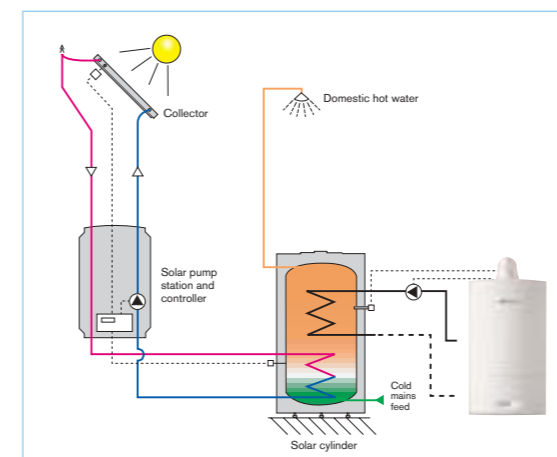
Greenskies is designed to work in conjunction with your current central heating system, providing you have stored hot water in a twin-coil cylinder (usually located in the airing cupboard).

If you're thinking of installing a brand new heating system or replacing an old boiler, the ideal partner for Greenskies solar water heating is a Worcester Greenstar high-efficiency condensing regular or system boiler.

By using them in tandem you will reap the maximum cost-saving and energy-saving benefits of advanced Worcester technology.

Another possibility is that your current priority is for a new high-efficiency boiler and the idea of installing solar water heating is something for the future. In this case, you can prepare for it now by selecting a Greenstar condensing regular or system boiler with a Greenskies twin-coil hot water cylinder. This will save you money and inconvenience when you make the eventual switch from hot water produced by your Greenstar boiler to hot water produced by Greenskies solar panels.

A recent market research from Ipsos MORI stated that making environmental improvements to your property could raise the value of your home by up to £10,000.



### Greenskies benefits and features

- Apart from the cost of the electricity required to run the pump – solar energy is free! And as the energy consumed to provide a household's hot water accounts for a large proportion of the total annual bill, you'll make big savings.
- Greenskies panels can be installed on a sloping or flat roof, or on a wall.
- Choice of landscape or portrait panels.
- Greenskies is great for the environment.
- 5-year guarantee and low maintenance.



**A Greenskies solar water heating system can be used in conjunction with a Worcester Greenstar regular or system central heating boiler**



Ground source heat collectors being installed in the ground

## Greenstore ground source heat pumps



Worcester Greenstore works by utilising the solar energy in the ground to provide all the heating and hot water your home requires – at low cost and with absolutely no emissions on-site or other adverse effects on the environment.

In fact, for every single kilowatt of electricity used to power the heat pumps, the Greenstore system can generate up to 4kW in heat for your home!

What's more, Worcester Greenstore heat pumps are extremely reliable and long-lasting.

### So how does the system work?

In simple terms, a collector is buried and energy extracted from the ground raises the temperature of the liquid circulating in the

collector by several degrees. The pump increases the temperature and delivers it into your home.

The Greenstore system can satisfy your total heating requirements and in most cases there is no need for a boiler. You can choose a heating only System heat pump or a heating and hot water Combination unit, with an output to suit your needs and size of property.

Ideally, for maximum benefit and efficiency, Greenstore is best used with underfloor heating, but radiators are also a practical option. Greenstore can use oversized radiators which have a large surface area to deliver heat more efficiently.

## Different types of collector



Horizontal collector



Compact collector



Bore hole collector

## Greenstore benefits and features

- Renewable energy – environmentally-friendly
- Ground source heat pumps can replace the need for a boiler
- Significantly reduce your heating and hot water bills
- Energy efficient – for every 1kW of electrical energy to the pump – 3-4kW comes free from the ground
- Ideal for use with underfloor heating



*Greenskies solar water heating can work in tandem with Greenstore ground source heat pumps to provide you with maximum energy savings*

## Useful numbers

### Consumer Helpline (Pre- & Post-Sales)

Tel: 08705 266241  
Fax: 01905 752741

### Service

Tel: 08457 256206  
Fax: 01905 757536

### Literature

Tel: 01905 752556  
or download instantly  
from our website

[www.worcester-bosch.co.uk](http://www.worcester-bosch.co.uk)



The Council for  
Registered Gas  
Installers



In partnership with



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The mark of quality for domestic heating

Worcester, Bosch Group is a brand name of BBT Thermotechnology UK Ltd.

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