

# Ground Source Heat Pump Association

**GSHPA promotes GSHPs**

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## **GSPHA:**

- promotes the efficient and sustainable use of ground source heat pumps
- raises awareness of the benefits of ground source heat pumps
- develops ground source installation [Standards](#)
- encourages high standards of training for the industry
- provides a forum for information interchange
- liaises with related organisations to benefit the ground source industry
- [Lobbies for Ground Source Energy](#) industry in matters of local, national and international interest to members.

## Dramatic Increase in Commercial RHI tariffs for GSHPs from 2013

Commercial RHI – Paid over 20 years	RHI tariff p/kWh 2013	RHI tariff p/kWh 2014
Ground Source Heat Pumps	<b>3.5</b>	<b>8.7</b>
Air to water heat pumps	0.0	2.5
Solar thermal <200kW	9.2	10.0
Solid biomass <200kW	<b>8.6</b>	<b>8.4</b>
Solid biomass 200-1000kW	5.0	5.1
Solid biomass >1000kW	1.0	2.0

Increased RHI tariffs for GSHPs apply to accreditations since 21 January 2013

Domestic RHI introduced 9 April 2014

Domestic RHI – Paid over 7 years	RHI tariff p/kWh
Solar Thermal	19.2
Ground Source Heat Pumps	18.8
Biomass	12.2
Air Source Heat Pumps	7.3

Domestic RHI tariffs for GSHPs apply to systems commissioned since 15 July 2009

GSPHA needs to convince DECC to recognise **Renewable Cooling**:

- Gas boilers cannot provide any cooling
- Biomass boilers cannot provide any cooling
- ASHPs cannot provide cooling *efficiently* on hot days, because heat exchange with hot air is expensive – CoP less than 2
- GSHPs *can provide efficient cooling* on hot days by heat exchanging with cold ground instead of hot air – CoP more than 20

There is a massive opportunity for UK to save carbon emissions

The screenshot shows a Firefox browser window displaying the GSHP Association website. The address bar shows the URL [www.gshp.org.uk/Standards.html](http://www.gshp.org.uk/Standards.html). The website header features the GSHP Association logo and a navigation menu with the following items: GSHPA, GSHPs, News, RHI, Standards (highlighted), Members, Articles, Conferences, Events, FAQs, Council, and Join us. Below the navigation menu is a large landscape photograph of a dirt path through green hills. The main content area is titled "GSHPA Standards" and contains three paragraphs of text. A left-hand sidebar lists various website sections: GSHP Association, Ground Source Energy, News, Renewable Heat Incentive, Standards, Members, Articles on Ground Energy, Conferences, Events, Code of Practice, and Links. The Windows taskbar at the bottom shows the system tray with a battery level of 98% and the date 27/03/2013 at 13:14.

## GSHP Association

### Ground Source Heat Pump Association

GSHPA GSHPs News RHI **Standards** Members Articles Conferences Events FAQs Council Join us

#### GSHPA Standards

The GSHP Association has recognised that the ground source industry requires installation standards in order to define and maintain a high level of installation quality, protect the environment and maintain the reputation of the industry.

The Standards have been drawn up by the GSHPA to help designers and installers of ground source systems, architects and engineers specifying ground source systems and contractors and sub-contractors employing specialist companies to install ground source systems. The Standards should also prove to be useful for general reference.

The GSHPA Standards provide concise information for the materials and general specification of installations. They are not installation or training manuals. The Standards must be referred to in conjunction with recognised design qualifications and training programmes. The Standards are designed to enable reference to minimum materials specification, techniques and qualification requirements and ensure that installations comply with the Standards or that contractors are employing companies that comply with the Standards.

[GSHP Association](#)  
[Ground Source Energy](#)  
[News](#)  
[Renewable Heat Incentive](#)  
[Standards](#)  
[Members](#)  
[Articles on Ground Energy](#)  
[Conferences](#)  
[Events](#)  
[Code of Practice](#)  
[Links](#)

13:14  
27/03/2013

The GSHPA website explains the merits of ground source energy

Ten key reasons to use GSHPs:

- The most economic route to **on-site renewable energy**
- Very low running costs
- Exploits **Thermal Energy Storage** capacity of the ground
- No problems of “**intermittency**”
- Ground source systems - longer life than other renewable systems
- GSHPs are “good citizens” – silent, reliable, invisible
- GSHPs can recycle heat through the ground from summer to winter
- Can be reversed to provide cooling in summer
- Provides skilled employment in Britain
- Contributes to the energy security of the UK

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Plas Newydd, 18<sup>th</sup> Century National Trust Property, Anglesey will save £40,000 a year on switching to heat pumps from oil.

Heat pumps can be used successfully on old buildings as well as new buildings.

Firefox

Department o... DECC GovUK... GSHPA Sta... Google Maps ThermoMap... ThermoMap... ThermoMap...

www.gshp.org.uk/Standards.html

thermomap

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# Ground Source Heating Cooling

is

Durable Efficient Reliable Invisible Versatile Economic

**Edward Thompson**

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[www.gshp.org.uk](http://www.gshp.org.uk)

