

GROUND & AIR HEAT  
SOURCE PUMPS

# RENEWABLE HEAT INCENTIVE OVERVIEW

## CONTENTS

- 2 Overview
- 3 RHI tariff scheme: industry,  
commercial & public sector
- 4 RHI TARIFF SCHEME:  
Domestic Sectors
- 5 Facts at a Glance



**TOTAL**  
ELECTRICAL  
SOLUTIONS



Telephone 01843 855 019



[www.totalelec.co.uk](http://www.totalelec.co.uk)

# OVERVIEW

## A BIT ABOUT THE SCHEME



On 10 March 2011, the Government announced the details of the Renewable Heat Incentive Scheme, to revolutionise the way heat is generated and used in buildings and homes. This is the first financial support scheme for renewable heat of its kind in the world.

## RENEWABLE HEAT INCENTIVE

- **£860m government scheme expected to increase green capital investment by £4.5 billion up to 2020, stimulating a new market in renewable heat;**
- **Incentive to increase number of industrial, commercial and public sector installations by seven times to 2020;**
- **A full system of RHI payments should be available to eligible households from Spring 2014;**
- **In the interim, more than a quarter of the first year's budget to be proposed for up to 25,000 eligible household installations through a "RHI Premium Payment" to encourage take-up;**
- **Support for a range of technologies and fuel uses including ground and water source heat-pumps.**
- **The RHI will reduce emissions by 44 million tonnes of carbon to 2020, equivalent to the annual carbon emitted by 20 typical new gas power stations.**
- **Over 95% of heat in the UK is currently produced by burning fossil fuel. With North Sea supplies now in decline leading to an increase in imports, low carbon alternatives are needed.**

In the first phase, long-term tariff support will be targeted in the non-domestic sectors, at the big heat users - the industrial, business and public sector – which contribute 38% of the UK's carbon emissions. During phase one, there will also be support of around £15 million for existing domestic households, through the Renewable Heat Premium Payment.

The second phase of the RHI scheme will see households moved to a similar format of long-term support offered to the non-domestic sector in the first phase, although the tariffs are likely to be higher.



# RHI TARIFF SCHEME: INDUSTRY, COMMERCIAL & PUBLIC SECTOR



The running cost of a well designed commercial GSHP system would be around 3.16p/kWh

For the first time, the RHI makes funding available for the privately owned commercial application, such as offices, golf clubs, hotels, farms, care homes, bed & breakfasts, as well as publicly funded buildings including schools, hospitals, community centres and sports centres.

Communal projects will also be eligible, provided a single installation is providing heat to more than one house. The commercial tariffs will be paid for 20 years to eligible technologies that have installed since 15th July 2009 with payments being made for each kWh metered of renewable heat which is produced.

Heat metering will need to be installed to monitor usage, as such bi-valiant systems will be accepted.

Once in the scheme, the level of support an installation will receive is fixed and adjusted annually with inflation. However, as with feed in tariffs, we expect the levels of support available for new entrants to the RHI scheme to decrease over time as the costs of the equipment and installation reduce through economies of scale.

Support for a range of technologies and fuel uses including ground and water source heat-pumps. Air Source Heat Pumps will not be supported by phase one of the RHI.

Support for industrial and the commercial sector; the public sector; not-for-profit organisations and communities in England, Scotland and Wales through the RHI tariffs

The published tariff levels are only for non-residential systems. The tariffs have been designed to give a 12% return on investment, except for solar thermal where the figure is much lower (probably only about 5%). The table below shows the published tariffs for ground source heat pumps.

Level of support			
Tariff Name	Eligible Technology	Eligible sizes	Tariff level
Small ground source	Ground heat pumps; Water source heat pumps; Geothermal.	Less than 100kWth	4.5
Large ground source	Ground heat pumps; Water source heat pumps; Geothermal.	Above 100kWth	3.2



# RHI TARIFF SCHEME: DOMESTIC SECTORS



The second phase of the RHI scheme should see households moved to the same format of long-term support offered to the non-domestic sector in the first phase, although the tariffs are likely to be higher. This is due to begin in Spring 2014.

For the domestic sector, the Government has also introduced Renewable Heat Premium Payments, which will subsidise the cost of installing qualifying renewable heating systems. The Renewable Heat Premium Payment is designed to help you afford renewable technologies for your home.

If you've read about the, you will already be aware that the Renewable Heat Premium Payment is the forerunner of the RHI for domestic customers. Some of the key factors of the RHPP Scheme are below:

- **Between August 1st and Spring 2014, a grant of £1250 will be available for eligible homeowners who install a ground source heat pump.**
- **The property should meet minimum criteria in terms of heat loss, ie. Cavity wall insulation, double glazing and loft insulation.**
- **Beneficiaries of the Premium Payment will be required to provide feedback on the performance of the installation.**
- **The premium payments are available for systems commissioned from 1st August 2011.**
- **£15 million has been allocated to the budget for Premium Payments.**
- **Premium Payments are limited to areas off the main gas grid.**
- **Domestic installations commissioned from July 16th 2009 will be eligible for the RHI tariffs when they are launched.**

APPLY FOR YOUR RHPP VOUCHER VIA THE ENERGY SAVINGS TRUST WEBSITE:

**[WWW.ENERGYSAVINGTRUST.ORG.UK/RHPP](http://WWW.ENERGYSAVINGTRUST.ORG.UK/RHPP)**



# FACTS AT A GLANCE

THE INTERESTING BITS



## COMMERCIAL TARIFFS FOR GROUND SOURCE HEAT PUMPS

Level of support			
Tariff Name	Eligible Technology	Eligible sizes	Tariff level
Small ground source	Ground heat pumps; Water source heat pumps; Geothermal.	Less than 100kWth	4.5
Large ground source	Ground heat pumps; Water source heat pumps; Geothermal.	Above 100kWth	3.2

### PAYMENTS

Payments will be made to the owner of the renewable equipment, and will be paid for 20 years from the date of commissioning the unit. Payments will be inflation linked.

### PHASED APPROACH

The first phase of the RHI tariffs will only support non-domestic sectors.

### DOMESTIC SECTOR SUPPORT

The Government have introduced RHI Premium Payments (RHPP) for the domestic sector. £1250 of financial support will be provided for each GSHP installation which meets the Renewable Heat Premium Payment Criteria.

### EXISTING INSTALLATIONS

Any installation which meets the RHI criteria which was commissioned after 15th July 2009 will be eligible for the RHI scheme.

