

RES-H Regulation in the UK: The Renewable Heat Incentive

Final Conference of the *RES-H Policy* Project
Brussels, 14th April 2011

Dr Peter Connor
University of Exeter



The Renewable Heat Incentive: Details published March 2011 following a consultation.

- Considerable simplification from initial proposal
- A tariff based mechanism. Tariffs vary with:
 - Technology
 - Size of installation
- Tariffs generally metered with some capacity payments
- Installation capacity will be the total installed peak heat output of the installation
- Funded by tax payer not energy consumer
- Adoption in two phases
 - Phase 1: Non-domestic - July 2011
 - Phase 2: Domestic - October 2012

The Renewable Heat Incentive: Details published March 2011 following a consultation.

- Tariffs will not initially degress, but degression will be considered in review and probably set to cut in when particular capacities are achieved.
- First review to take place in 2014, then every 4 years.
- No additional funding will be made available to support the expansion of district heating networks.
- Oversight by the UK energy regulator, OFGEM
- Agents, such as installers, suppliers or other third parties, will not be allowed to apply for support from the scheme on an applicant's behalf.

Technologies without dedicated tariffs at the start of the RHI

Air source heat pumps	Not eligible at the start of the RHI
Biogas combustion	Eligible under the biomethane tariff below 200 kWth, not eligible at or above 200 kWth at the start of the RHI
Bioliquids	Not eligible at the start of the RHI
Biogas or biomethane from landfill gas	Not eligible at the start of the RHI
Deep geothermal	Eligible under the ground source heat pump tariffs
Municipal solid waste	Eligible under the biomass tariffs
Solar thermal	Eligible below 200kWth,
Waste other than municipal solid waste	Not eligible at the start of the RHI
Water source heat pumps	Eligible under the ground source heat pump tariffs

RHI Tariffs: Biomass installations

Tariff name	Eligible technology	Eligible sizes	Tariff rate (pence/kWh)	Tariff duration (Years)	Support calculation
Small biomass	Solid biomass; Municipal Solid Waste (incl. CHP)	Less than 200 kWth	Tier 1: 7.6	20	Metering Tier 1 applies annually up to the Tier Break, Tier 2 above the Tier Break. The Tier Break is: installed capacity x 1,314 peak load hours, i.e.: kWth x 1,314
Tier 2: 1.9					
Medium biomass		200 kWth and above; less than 1,000 kWth	Tier 1: 4.7		Tier 2: 1.9
Large biomass		1,000 kWth and above	2.6		Metering

RHI Tariffs: GSHP, Solar Thermal and Biomethane

Small ground source	Ground-source heat pumps; Water-source heat pumps; deep geothermal	Less than 100 kWth	4.3	20	Metering
Large ground source		100 kWth and above	3		
Solar thermal	Solar thermal	Less than 200 kWth	8.5	20	Metering
Biomethane	Biomethane injection and biogas combustion, except from landfill gas	Biomethane all scales, biogas combustion less than 200 kWth	6.5	20	Metering

Basis for Calculating Tariff Rates

- The tariffs are calculated to compensate for the additional cost of renewable heat. This means that they do not compensate for the *'full cost either of the renewable heat equipment or any fuel used by the renewable heat equipment, but only for the additional cost of such equipment and fuel above that of the fossil fuel alternative'*.
- Solar thermal is exempted from this and the tariff is intended to meet the full cost of solar thermal systems.

Rate of Return

- The aim is to give a return of 12% on all technologies, with the exception of solar thermal.
- Solar Thermal: The Government has concluded that the tariff for solar thermal installations will be set at a level which is roughly equivalent, in terms of financial support per unit of energy output, to the level allocated to what is currently considered to be the marginal cost effective technology required to deliver the UK's 15 per cent renewable target, offshore wind. This results in a support level of 8.5p/KWh for solar thermal.

RHI: Deemed and Metered Output

- Deeming is out in favour of metering
- Exception: Small & medium commercial biomass: Tiered capacity payments
- Small-scale technology: Microgeneration Certification Scheme (MCS) required for technology and installer.

RHI: Transition arrangements

- Support for domestic installation begins in October 2012.
- Domestic installations after July 15h 2009 eligible for payment from October 2012.
- Domestic installations eligible for Renewable Heat Premium Payments from July 2011 as intermediate measure (£15m pot).
- Domestic users must submit operational info to government in exchange for payment.
- Developers currently holding grants will have to return the grant funding to access the RHI tariffs.
- Any RES-H technology which has received previous public support will not be eligible for the RHI

RHI: Regulatory oversight

- Office of Gas and Electricity Markets (OFGEM) will have oversight responsibilities. OFGEM already oversees the Renewables Obligation, and the gas sector which provides 85% of UK domestic heating and 55% of commercial sector heating.
- Responsibilities include:
 - Accreditation: Ofgem determines eligibility
 - Registration of owners (via submission of proof of installation)
 - Changes in ownership
 - Making payments
 - Monitoring the operation of the mechanism
 - Enforcement
 - Data collection to be used in assessing RHI effectiveness