CLIFFORD CHANCE

Client briefing
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Further Changes to UK Renewables Incentives

Key Issues | Page

Following the Government's Energy Market Reform package in December 2010[1], there have been a number of proposals and announced changes that will have an impact on financial incentives and funding to encourage renewable energy generation. This briefing digests the principal changes, focusing on the Renewable Heat Incentive and we also look at the final proposals on carbon floor pricing, the Feed-in Tariff review and the latest on the Green Investment Bank.

New Renewable Heat Incentive

In March 2011, details were announced of the Renewable Heat Incentive (RHI), a scheme aimed at achieving the Government's target for 12% of heating to come from renewables by 2020[2]. Ofgem will regulate the scheme which is divided into two phases:

- Phase 1: From 2011, the RHI will apply to non-domestic heat generation from a limited list of technologies[3].
- Phase 2: From 2012, subject to affordability, different technologies and fuels will be incorporated.

RHI will apply in England, Wales and Scotland and the Government has confirmed that it will be paid for out of general public spending rather than the previously proposed RHI levy. The commentary below discusses the Phase 1 RHI for non-domestic installations.

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[1] See our briefing: "Energy Market Reforms - A major new consultation package" – December 2010

[2] See: "Renewable Heat Incentive – March 2011 (DECC)". Draft regulations have also been published.

[3] A direct "Renewable Heat Premium Payments" scheme will also apply for domestic households.

Technologies / fuel types supported
In Phase 1 the scheme will concentrate on the quick wins – technologies / fuels that are in commercial use, that are eligible towards meeting the UK's Renewable Energy Directive 2020 target, and where the heat produced is easily measurable, as set out in the table below.

Eligible	**Not Eligible Initially (potentially eligible in Phase 2)**
Biomass Boilers	Air Source Heat Pumps
Energy from Waste Combustion (biomass proportion)	Direct Air Heating
Ground or Water Source Heat Pumps (at least 2.9 co-efficient of performance)	Bioliquids
Deep Geothermal	Landfill gas
Solar Thermal (below 200 kWth)	**Excluded From Scheme**
Heating from Biogas Combustion (up to 200kWth)	Co-firing of biomass with fossil fuel
Biomethane injection into the grid	Exhaust air heat pumps
Renewable District or Community Heating (treated as per relevant technology)	Transpired solar thermal panels
Renewable Combined Heat and Power (treated as per relevant technology, CHPQA not needed)	Fossil fuel fired CHP
	Waste heat from fossil fuel

Heat produced can be used on-site or off-site. However, only eligible uses of heat will qualify; a number of criteria will apply - for example, there must be an economically justifiable heating requirement which would otherwise need to be met from another source (e.g. a standalone boiler). In particular, heat used for generation of electricity will be excluded. Ofgem will be responsible for approving uses.

Domestic generators are excluded from this phase; otherwise industrial, commercial, community and not-for-profit sectors can all benefit from RHI.

Installations will need to be accredited in order to qualify. Given the potential for complex and bespoke installations, the RHI scheme offers the possibility of preliminary accreditation so that Ofgem approval can be gained before a commitment to install is made.

RHI Payments and Eligibility
RHI payments will be made by Ofgem quarterly for a period of 20 years in respect of the heat actually produced by the installation. Varying tariffs (adjusted annually for inflation) will apply depending on the type of technology / fuel and will apply from the date of accreditation. The applicable tariffs are reproduced in the appendix to this briefing.

Similarly to the Feed-in Tariff for microgeneration (FIT), defining the installation will be important to determining the applicable tariff. Essentially, a single installation will be comprised of "*one or multiple units of the same heating technology connected to a common heating system*". Further rules are established to deal with how add-on capacity is treated.

The payment will be calculated on the basis of: Applicable tariff X amount of eligible heat (in kWh based on meter readings)[4].

Installations will only be eligible if they are completed and first commissioned on or after 15 July 2009.

Payments will be grandfathered, so that once eligible for RHI at a particular tariff, the installation would keep that tariff for the full 20 year period. However, the Government will reduce payments for installations commissioned / accredited in

[4] Unlike the FIT, there is only a tariff for generation, and no export tariff.

future years starting in 2012 (details of the "degression" proposals will be consulted upon at a later date). There will also be periodical reviews starting in 2014. Perhaps burned by criticism of its approach to the Feed-in Tariff review (see below), DECC has made it quite clear that where there is significant take up of RHI for a particular technology / fuel, an early review may take place. This will serve as a warning to investors that Government policy in this arena is not set in stone, and to tread carefully on large scale heat projects reliant on RHI.

Payments made to Owners
Payments are made to the owner of the equipment installation[5], although where there is a hire purchase agreement or conditional sale arrangement in place, the person in control of the equipment will receive the payments, even if they are not the legal owner. Unlike FIT payments, RHI payments cannot be assigned to third parties. Lenders will need to consider appropriate contractual and security arrangements to ensure they secure rights over RHI payments.

Interaction with other policies

- Public funding: RHI will not be available where installations benefit from other sources of public funding (e.g. grants).
- CHP: Given that heat from CHP already benefits from the Renewables Obligation (RO), no installation will be able to benefit from both the RO CHP uplift and RHI support[6]. Furthermore, installations will not initially be able to swap from RO to RHI support when RHI is introduced. The issue of transition between schemes will be considered at the time of the next RO banding review in 2012.
- CRC Energy Efficiency Scheme: Supply of heat is zero-rated under CRC irrespective of whether RHI is claimed in respect of the heat.

Review of Feed-in Tariffs for Microgeneration

A comprehensive review of the FIT regime was launched in February 2011 following the Government's Spending Review commitment to make a 10% reduction in scheme costs in 2014 – 2015[7]. The Government became concerned over the significant number of large scheme commercial solar projects in the pipeline and the impact such projects would have on the cost of running the FIT regime. A separate fast-track review was therefore commenced in March 2011 with proposals to reduce the FIT tariffs for installations above 50 kW. Changes would be made to the generation tariff element as follows and is intended to apply to installations commissioned from 1 August 2011[8]:

Current Rates (installations registered from 1 April 2011)	Proposed Rates
>10kW – ≤ 100kW TIC*: 32.9 p/kWh	>50kW – ≤ 150kW TIC: 19.0p/kWh
>100kW - ≤ 5MW TIC and stand-alone installations: 30.7 p/kWh	>150kW – ≤ 250kW TIC: 15.0p/kWh
	>250kW - ≤ 5MW TIC and stand-alone installations: 8.5p/kWh

*TIC: Total Installed Capacity

The reduction proposals have been criticised for effectively wasting the considerable investment made in a number of larger schemes which may no longer be viable, as well as for demonstrating a more general lack of ambition for solar in the UK. Given the original inclusion of specific tariffs for large scale projects, the lack of foresight that such schemes would come forward does seem surprising. The change is likely to result in a move toward smaller projects (e.g. rooftop solar schemes) and some developers may seek to aggregate a series of smaller projects (under 50 kW to form a fundable portfolio, although care will be needed to ensure that the projects still qualify for FITs at the modelled rate and

[5] Or to producers of biomethane injected into the grid.

[6] However, the installation would be able to obtain basic RO support + RHI.

[7] See: "Consultation on fast-track review of Feed-in Tariffs for small scale low carbon electricity – March 2011 (DECC)"

[8] DECC is also proposing to increases tariffs for deployment of farm-scale anaerobic digestion, following lower than expected deployment.

that larger projects are not simply "salami-sliced" into smaller schemes. The consultation on these changes is open until 6 May 2011.

The comprehensive review will cover all aspects of the regime including tariff levels, degression rates and methods, and eligible technologies. A consultation will take place in summer 2011 and the Government has confirmed that tariffs will not change until April 2012 as a result unless urgent changes are identified as necessary.

Carbon Floor Price

Following consultation, the Government confirmed in March 2011 that its carbon floor price proposal would proceed and will be introduced on 1 April 2013 [9]. A target floor price will be set by the Government and will be the minimum price payable for emitting carbon from fossil fuel use. The Budget 2011 announced that the target floor price will start at around £16 /tCO_2 in 2013 and increase on a linear basis to £30 per tonne in 2020. It is anticipated that it will reach £70 /tCO_2 in 2030. The target floor price will be implemented by the imposition of a special Climate Change Levy (CCL) based on "carbon price support rates" (CPSR) on suppliers of fossil fuel to generators[10]. The CPSR will be calculated as follows:

CPSR = (Target Floor Price - EU ETS Allowance Price) X relevant fuel emission factor

Given that the CPSR will be set two years in advance (with indicative rates provided for a further two years), the government will use the futures contract market price for carbon EU ETS allowances[11] as the EU ETS Allowance Price in its calculation.

The CPSR for 2013-14 will equate to £4.94 / tCO_2[12].

Some additional details announced include:

- **Rate setting:** CPSR will be set two years in advance (with indicative rates provided for a further two years) using the futures contract market price for carbon[13].
- **CHP exemption:** CHP plants registered under the CHP Quality Assurance programme will benefit from relief from the CPSR (in the face of evidence that otherwise there may be financial advantages to stop operating some CHP plant). However, the existing exemption from CCL levy for electricity CHP plants supplying indirectly to an energy consumer will be removed.
- **CCS exemption:** Relief from CPSR would be given in respect of all CO_2 captured and stored.
- **Imports / exports:** Whereas imported fossil fuels used for generation would be subject to CPRS, exports would not.
- **Oil:** A carbon floor price will also apply to oil used for generation through a reduction of the amount of fuel duty from which generators are exempt (currently they are fully exempt).

The Government was not impressed by critics concerned that coal-fired generation will be severely impacted along with the UK's security of energy supply. This measure will, on the other hand, benefit not only renewables but also the nuclear industry.

Green Investment Bank

Since its inception, the Green Investment Bank (GIB) proposal has been held up as a bellweather of the Government's commitment to a green economy. The GIB has huge potential to unlock flows of investment into renewables through different types of funding and investment activity. However, the question of how much government cash would be provided for initial capitalisation, beyond the initially announced £1 billion, has remained uncertain. Naturally, there was speculation over how committed the current government was to the idea. The Budget has now confirmed that the GIB's initial capitalisation will be £3 billion (£1billion to be allocated through the Spending Review and £2 billion from the sale of assets including the sale of the High Speed I rail line). The Government expects £18 billion of investment to be available by 2014-15 from public and private partner funding.

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[9] See: "Carbon price floor consultation: the Government response – March 2011 (HM Treasury / HMRC)"

[10] This assumes that suppliers will pass on the cost of the CCL to generators.

[11] ICE-ECX benchmark end of day settlement price.

[12] Future indicative rates are 2014-15: £7.28 / tCO_2 ; 2015-16: £4.94 / tCO_2.

[13] ICE-ECX benchmark end of day settlement price.

The GIB will also start operating in 2012 / 13, a year earlier than originally planned. However, it will be at least 2015/16 before the GIB will be given borrowing powers and only then if Government debt targets have been achieved. Doubts inevitably remain over the prospects for the organisation.

Climate Change Group

Clifford Chance's Climate Change Group is a multi-disciplinary team specialising in advising on climate change issues and how they may affect our clients. From understanding the regulatory frameworks on carbon emissions to advising on the legal implications of new business opportunities and climate change mitigation strategies, the group is ideally placed to help future-proof our clients' businesses and maximising current opportunities with a wealth of expertise and experience to advise on:

- Regulation, risk assessment and adaptation
- Emissions trading, carbon footprinting and offsetting
- Commercial transactions, funds and supply chain issues
- Renewable energy
- Disputes

For more information about our Climate Change Group, visit: www.cliffordchance.com/climatechange.

Appendix - Table of RHI Tariffs

Extract from "Renewable Heat Incentive – March 2011 (DECC) ":

The tariffs levels that will be available at the introduction of the scheme are set out in the table below.

Levels of support					
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
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

Notes: kWh stands for kilowatt hours (used in relation to heat output) and kWth stands for kilowatt thermal (used in relation to equipment capacity).