Northern Ireland Renewable Heat Incentive

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Background

- EU Renewable Energy Directive
  - Renewable Energy Directive (RED) set target of 20% of EU's energy consumption from renewable sources by 2020
  - UK share of target is 15% by 2020. This requirement extends beyond electricity to heating and cooling and to transport
- Strategic Energy Framework
  - Includes a target of 10% renewable heat by 2020.

Background

- GB Renewable Heat Incentive
  - In GB, renewable heat levels of around 12%, with 30% renewable electricity consumption, are needed to comply the RED.
  - GB RHI to be by end November.
  - Domestic sector eligible from October 2012.
  - Budget of £860m investment in GB
  - Investment will go beyond 2015/2016 as new installations are supported for 20 years under fixed tariffs
  - Tariffs designed to provide a rate of return of 12%, except for solar thermal with rate of return around 6%

Background

- Northern Ireland is not included as part of the GB RHI. There are many differences between the heat and renewable heat markets in GB and Northern Ireland
  - Oil vs. Gas
  - Plans for Gas extension
  - Prices = Fuel Poverty
  - Lower Heat Density

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Northern Ireland Heat Market

Fuel/ Energy	Total GWh	% of Total
Oil	13,344	77%
Gas	2,964	17%
E7	217	1.2%
Renewables	290	1.7%
Coal	547	3.1%
Total	17,362	

- 61% in domestic sector
- 22 % across 17 large industrial users
- 12 % and 4% in commercial and public sectors respectively.

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CEPA Economic Appraisal

- Several options considered for supporting the development of renewable heat, including:
  - Do nothing
  - A Renewable Heat Challenge Fund
  - 50% capital grant support
  - Implementing the GB RHI
  - A Northern Ireland RHI

- Options involving capital grant assistance considered not to offer long term support

CEPA Economic Appraisal

- Proposed option is a NI tailored RHI
- Long term stable support for those wishing to install renewable heat technologies
- Tariffs designed to be appropriate for the local heat market
- As the market grows, technologies should be more accessible to all
- Designed as an incentive to increase the uptake of renewable heat in Northern Ireland

Northern Ireland RHI

- Three elements in proposal to support the renewable heat market:
  - **A NI specific RHI:** Open to all non-domestic customers from 1 April 2012 (barring heavy industrial sites). Domestic sector to enter the NI RHI no later than October 2012
  - **Support for the heavy industrial sector**, through regular incentive payments with differences in eligibility and accessibility
  - **Interim support for the domestic sector** available until a longer term scheme is introduced for this market, in October 2012

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Eligibility

- Installations commissioned from 1 Sept 2010 will be eligible
- Support only available from the outset of the scheme and not back-dated
- Proposed NI RHI scheme will support
  - Useful heat otherwise met by fossil fuels
  - Renewable space/process heating and hot water
  - New renewable heat systems, replacing existing heat systems
  - Additional renewable heating capacity
- Biomass boilers, heat pumps and solar thermal with capacity of 45kWth or less must be certified under the Microgeneration Certification Scheme (MCS)

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NI Tariffs

Tariff Name	Eligible Technologies	Size (kWth)	Tariff duration (years)	NI levels (pence per kWh)
ASHP		< 45	20	3.3
GSHP	Including water source heat pumps and deep geothermal	< 45 / > 45 excluding large industrial sites	20	4.0 / 0.9
Bioliquids		< 45	20	1.5
Biomass	Solid biomass; municipal solid waste (inc. CHP)	< 45 / > 45 excluding large industrial sites	20	4.5 / 1.3
Biomethane	Biomethane injection and biogas combustion, except from landfill gas	All scales biomethane, biogas combustion < 200	20	2.5
Solar Thermal		< 200	20	8.5

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GB Tariffs

Tariff Name	Eligible Technologies	Size (kWth)	Tariff duration (years)	GB levels (pence per kWh)
Small biomass		< 200	20	7.6 / 1.9
Medium biomass	Solid biomass; municipal solid waste (inc. CHP)	> 200 / < 1,000	20	4.7 / 1.9
Large biomass		> 1,000	20	2.6 (now 1.0)
Ground Source	GSHP; water source heat pumps and deep geothermal	< 100 / >100	20	4.3 / 3.0
Biomethane	Biomethane injection and biogas combustion, except from landfill gas	All scales biomethane, biogas combustion < 200	20	6.5
Solar Thermal		< 200	20	8.5

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Administration

- Ofgem proposed to have overall responsibility for the administration of the NI RHI
- Experience in other large scale energy incentive schemes
- Responsibilities will include:
  - Applications
  - Accreditation
  - Payments
  - Adherence to conditions of scheme

Biomass Sustainability

- Sustainability built into scheme for technologies requiring a fuel source.
- Focus on larger installations (1MW)
- Quarterly reporting to Ofgem on origin of fuel/feedstock, source materials and other relevant information.
- DETI to work with DECC, Ofgem and DARD to develop criteria.

Domestic Market

- As the sector with the largest heat demand, the domestic sector is vital in achieving the target of 10% renewable heat by 2020
- Domestic sector eligible from October 2012
- In the interim, DETI proposes to introduce *Renewable Heat Premium Payments* for the domestic market available for eligible installations commissioned after 1 September 2010

Domestic Market

- Renewable Heat Premium Payments

Technology	Support per unit (£) in a detached dwelling	Support per unit (£) in any other dwelling
Air Source Heat Pump	1860	1170
Biomass boiler	2580	1620
Ground Source Heat Pump	2250	1410
Solar Thermal	480	480

- Installations required to be certified under MCS
- Required to provide routine information on the technology installed
- Eligible for a longer term tariff when domestic scheme introduced in October 2012
- Excluding existing gas customers

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Heavy Industry

- 17 large industrial sites in Northern Ireland account for 22% of the total heat demand defined by the European Union Emissions Trading Scheme (EU-ETS)
- In supporting the heavy industrial sector it is important that the existing or future gas network is not affected
- NIRO available to encourage the development of renewable fuelled CHP systems through support of renewable electricity generation

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Other issues

- Deep Geothermal energy
- Cross-departmental working
  - Supply chain
  - Planning
  - Fuel Poverty
  - Green new deal
  - Skills and jobs
  - Role of public sector

Consultation issues

- Tariffs / Banding / Technologies
- AD and linkages to NIRO
- Industry and domestics
- Renewable Heat v Gas

Next Steps

- Consultation and Consideration
- Policy
- Legislation and implementation