Appendix 7

Glossary of Terms

Term	Definition
Accreditation	In the context of the NI RHI scheme, "accreditation" is defined in regulation 2 of the Renewable Heat Incentive Scheme Regulations (Northern Ireland) 2012. It is the term used to denote the admission of an installation to the NI RHI Scheme under regulation 22 of those Regulations.
Annually Managed Expenditure	Government spending is typically through one of two forms of budgetary mechanism: Departmental Expenditure Limits (DEL) or Annually Managed Expenditure (AME). AME is generally used for programmes which are large, unpredictable and demand-led such as welfare, tax credits or public sector pensions. All spending programmes are in DEL unless Her Majesty's Treasury (HMT) determines they should be AME. Unlike DEL programmes, which will have set annual budgets, programmes in AME, because of issues such as them being demand-led or volatile, use budgetary forecasting across a number of years to try to predict and manage spending. The NI RHI funding, which was classified as AME but with annual expenditure limits and potential penalties for overspending, was not a typical form of AME. Further information about AME can be found in HMT publications such as the Consolidated Budgeting Guidance, which is published annually.
Annuitised Capital Cost	This can also be described as the annual equivalent cost of one-off costs like investment capital. It is calculated based on the lifespan of the asset and the applicable interest rate. It can be used to compare capital investments in assets with unequal lifespans and/or to assess capital investment alongside annual costs or cost savings. In the context of the RHI, it was a helpful means of setting annual payments to compensate adequately for the up-front investment cost.
Barnett Formula	Devolved administrations in Northern Ireland, Scotland and Wales receive grants from the UK Government which fund most of their spending. The largest such grant is known as the "block grant". The mechanism used by HMT to determine the annual change in the block grant is the Barnett Formula. For devolved services, the Barnett formula aims to give each country the same pounds-per-person change in funding. There are three factors that determine changes to each devolved administration's block grant under the Barnett Formula: the quantity of the change in planned spending in UK government departments; the extent to which the relevant UK government department's spending is comparable with the services provided by each devolved administration; and each country's population as a proportion of England, England and Wales or Great Britain, as appropriate. More information about the Barnett formula may be found in HMT's Statement of Funding Policy and/or the House of Commons Library Briefing Paper Number 7386 (23 January 2020).

Term	Definition
Block Grant	The UK Government provides funding to devolved administrations by way of grants. The largest such grant is the "block grant". The block grant provides funding to the devolved administrations in relation to departmental spending within Departmental Expenditure Limits (DEL). Annual changes in the Block Grant are generally determined by the Barnett Formula. AME spending is not part of the block grant, although if devolved administrations have to find funds to cover any overspending on AME projects it may impact on the block grant.
Capital Costs	Capital costs are fixed, one-time expenses incurred on the purchase of land, buildings, construction, and equipment used in the production of goods or in the rendering of services. In other words, it is the total cost needed to bring a project to a commercially operable status. An example of a capital cost under the RHI is the investment cost to buy and install a biomass boiler.
Challenge Fund	This is a particular form of grant scheme. It was an alternative option to an ongoing or lifetime subsidy scheme (such as the RHI scheme ultimately adopted by DETI) and was considered when DETI was deciding what form of incentive scheme to introduce. A 'Renewable Heat Challenge Fund' would have involved capital grants being awarded on a competitive, rather than 'first come, first served', basis. The body awarding the grants would set the rules for the competition, e.g. regarding eligibility, ranking of bids and maximum permissible grant levels. Interested parties would then apply for funding and provide information on the intended installation, expected heat output and required funding. Applications would then be ranked in line with the competition rules (e.g. on a metric such as subsidy cost per kWh of output) and grants awarded according to rank until the available budget was exhausted. One or more such competitions could be run during each year for which funding for a renewable heat incentive scheme was available.
Combined Heat and Power (CHP) plant	CHP is an energy efficient technology that generates electricity and captures the heat that would otherwise be wasted to provide useful thermal energy, such as steam or hot water, that can be used for space heating, cooling, hot water and industrial processes. CHP installations that were eligible for the NI RHI scheme were defined in regulation 9 of the Renewable Heat Incentive Regulations (Northern Ireland) 2012.
Consumer Prices Index (CPI)	The Consumer Prices Index is the main UK domestic measure of inflation. It measures the average change from month to month in the prices of consumer goods and services purchased in the UK, similar to the Retail Prices Index (RPI); but there are differences in coverage and methodology (CPI excludes mortgage interest payments and housing depreciation). Since December 2003, the inflation target for the UK is defined in terms of the CPI measure of inflation.

Term	Definition
Degression	In the context of RHI, degression is a mechanism to automatically and predictably reduce the payable tariff in certain defined circumstances, principally if forecast expenditure reaches a certain trigger point. It was introduced by amendment to the GB RHI scheme in April 2013 to protect against budget overspend. The NI RHI scheme did not have a degression mechanism.
Departmental Expenditure Limit	Departmental Expenditure Limit, or DEL, is one of the two broad categories of public spending in the United Kingdom (the other being Annually Managed Expenditure/AME). Budgets for UK government departments, and the block grants to devolved administrations, are DEL. The DEL limits are set in HMT's Spending Review. Department's receiving DEL funding will do so in the form of annual budgets which cannot be exceeded.
Eligible heat	Eligible heat under the NI RHI scheme was heat generated by installations accredited under the NI RHI scheme, and which qualified for the periodic support payments that DETI/DfE was obliged to pay in line with the terms of the Renewable Heat Incentive Regulations (Northern Ireland) 2012.
Gaming	"Gaming" was a term often used in the context of the NI and GB RHI schemes to describe various forms of scheme exploitation, through which accredited installations were designed and/or operated in order to receive subsidy payments in circumstances where the departments which created the schemes may not have intended that the installations in question to receive such levels of, or indeed any, subsidy payments.
Grandfathering	Energy investments tend to be in long-term assets. In a drive to reduce greenhouse gas emissions Governments across the world have introduced subsidy mechanisms to provide investors in renewable and low-carbon energy with compensation for the extra costs incurred when compared to conventional, fossil-fuel alternatives. When this has been through regular payments over a long period of time as opposed to using up-front grants or loans, they have tended to adopt the principle of 'grandfathering' to provide assurance to investors that their investment returns will be protected over time and not eroded by future changes. This was also the case in the UK e.g. for the Renewables Obligation (including the Northern Ireland version, the NIRO) where grandfathering was defined as a means to protect investment decisions made on information available at the time of investment. In the Government Response to the Statutory Consultation on the Renewables Obligation Order 2009 in December 2008, it confirmed the approach which in practice meant that to protect the rate of return for technologies with predominantly fixed, up-front capital costs (e.g. solar installations), fixed ongoing payments were needed and would not be changed for existing investors by future reviews. However, for technologies with significant variable ongoing costs (e.g. biomass installations), the part of the payment covering this element would have to able to rise (or fall) over time to effectively grandfather the rate of return.

Term	Definition
Heating System	This was a term used, but not defined, in the Renewable Heat Incentive Regulations (Northern Ireland) 2012. It was a key determinant in relation to whether a number of heat generating plants (such as biomass boilers) were treated as a single installation under the Regulations, the tariff payable for which was based upon their accumulated capacity in kW, or as a number of individual installations receiving a tariff based on their individual capacities. This whole issue is addressed in detail at chapter 48 of this Report.
Installation	For a heat generating technology, such as a biomass boiler, to be entitled to accreditation under the NI RHI scheme, it had to be an "eligible installation" under the Renewable Heat Incentive Regulations (Northern Ireland) 2012. The eligibility criteria for what could constitute an "eligible installation" for RHI purposes were also set out in the Regulations.
Internal Rate of Return (IRR)	The Internal Rate of Return is a discount rate that makes the net present value of an investment over a specified number of years equal to zero. It is commonly used as a measure of return on an investment. In commercial organisations the IRR is used to evaluate the attractiveness of a project or investment. If the IRR of a new project exceeds a company's required rate of return, that project is desirable. If IRR falls below the required rate of return, the project is likely to be rejected unless there are suitably convincing non-financial benefits to justify proceeding.
Kilowatt (kW)	A kilowatt is a measure of power, i.e. the rate at which an installation can convert energy/fuel into heat. It is equivalent to one thousand Watts. Other derived units used to measure power include megawatt (MW) and gigawatt (GW) equivalent to one million and one billion Watts, respectively.
Kilowatt-hour (kWh)	A kilowatt hour is a measure of energy converted over a period of time. A kilowatt-hour is equal, for example, to the amount of energy generated by an installation with a capacity of 1 kW in an hour or an installation with a capacity of 2 kW in a half-hour and so on (with all installations running at full capacity). Other derived units used to measure energy include MWh and GWh, one million and one billion Watt-hours, respectively.
Legislative Consent Motion	In the United Kingdom, Parliament remains sovereign, notwithstanding that many powers have been transferred to devolved administrations in Scotland, Wales and Northern Ireland. However a Memorandum of Understanding between the United Kingdom Government and the devolved administrations records "that the UK Parliament would not normally legislate with regard to devolved matters except with the agreement of the devolved legislature". The means by which the relevant devolved administration provides such agreement, should it choose to do so, is by the relevant devolved institution passing a legislative consent motion.

Term	Definition
Load factor	In the context of the RHI scheme, and in simple terms, load factor refers to the level of use of a piece of renewable heating technology. It is usually expressed as an annual percentage figure. For example, in respect of its tariff calculation for medium biomass boilers in the RHI scheme, CEPA used a reference boiler with a load factor of 17.1%. This is equivalent to the extreme case in which a boiler is operated at full capacity for 17.1% of the available hours in a year and is completely inactive for the remainder of the year. The figure was actually based on the national statistics for an average commercial boiler running across the year with heavy use in the winter and little, part load or no use in the other seasons. The relationship between load factor, capacity and annual energy production can be seen as follows: Multiplying the capacity of the boiler (e.g. 99kW) by 17.1% of the hours in a year (99 x 365 x 24 x 0.171 produces 148,298kWh). The same load factor and heat output could be achieved by running the boiler at half capacity for 34.2% of the hours in a year (49.5 x 365 x 24 x 0.342 = 148,298) and so on.
Medium Biomass	This is the capacity band of biomass boilers which attracted the most applications for accreditation under the NI RHI scheme. The "medium biomass" tariff was set out in Schedule 3 to the Renewable Heat Incentive Regulations (Northern Ireland) 2012 and initially applied to accredited biomass boiler installations that had a capacity of 20kW and above, up to but not including 100kW. In November 2015, at the same time as tiering was introduced to the small and medium biomass tariffs on the NI RHI, the medium biomass tariff was extended to installations with a capacity of 20kW and above up to but not including 200kW. The tariff bandings for the GB RHI were not the same as for the NI RHI.
Ministerial Direction	Ministerial directions are formal instructions from Ministers telling their department to proceed with a spending proposal, despite an objection from their Permanent Secretary. As a result of this direction, the Minister, not the Permanent Secretary, is now accountable for the decision.

Term	Definition
Net Present Values (NPVs)	Economic appraisals are conducted by commercial organisations and government departments of the various options being considered for a project or scheme. The appraisal should generally include, for each option being considered, a calculation of that option's Net Present Value (NPV). This provides a method for evaluating and comparing capital projects or financial products with cash flows spread over time, as in loans or investments. NPV takes into account the effect of time on the value of money based on a chosen rate of return (or discount rate) and recognises that money received in the future is not as valuable as it is today. Where the sum of discounted costs exceeds that of the discounted benefits, the net figure may be referred to as the Net Present Cost (NPC). Alternatively, the term 'negative NPV' may be used. The Northern Ireland Guide to Expenditure Appraisal and Evaluation (NIGEAE) defines the NPV as the key summary indicator of the comparative value of an option. It not only takes account of social time preference through discounting, but also, by combining capital and recurrent cost and benefits in a single present-day value indicator, enables direct comparison of options with very different patterns of costs and benefits over time. For instance, it solves the problem of how to compare a low capital cost/high running cost option with that of a high capital cost/low running cost alternative.
Northern Ireland Guide to Expenditure Appraisal and Evaluation (NIGEAE)	The primary guide for Northern Ireland departments on the economic appraisal, evaluation, approval and management of policies, programs and projects – the essential elements in the cycle of expenditure planning and service delivery. It aims to ensure that public expenditure delivers the maximum benefit to the people of Northern Ireland.
Northern Ireland Renewables Obligation Scheme (NIRO)	The Northern Ireland Renewables Obligation (NIRO) was the main government support mechanism for encouraging increased renewable electricity generation in Northern Ireland. It operated in tandem with the Renewables Obligations in Great Britain – the 'ROS' in Scotland and the 'RO' in England & Wales – in a UK-wide market for Renewables Obligation Certificates (ROCs) which were issued to generators under the Obligations. The NIRO scheme is now closed to new entrants.
Ofgem	The Office of Gas and Electricity Markets (Ofgem) is a non-ministerial government department operating on behalf of the Gas and Electricity Markets Authority (GEMA). GEMA, through Ofgem, regulates the gas and electricity markets in Great Britain. In addition, separate from its regulatory role, Ofgem also administers renewable energy and social programmes through its delivery arm, E-Serve. Ofgem administers the non-domestic NI RHI scheme on behalf of the Department for the Economy.

Term	Definition
Overcompensation	Overcompensation can have several different meanings. In the context of the NI RHI scheme, the word is generally used to refer to the situation where the tariff payments generated by an accredited installation provide a rate of return that is significantly greater than the 12% return which the scheme was designed to provide and which was approved by the European Commission.
Participant	Regulation 2 of the Renewable Heat Incentive Scheme Regulations (Northern Ireland) 2012 defines "participant" for the purposes of the NI RHI scheme. It is essentially the owner of an accredited NI RHI installation.
Periodic (support) payments	This is the term for the payments that DETI/DfE, pursuant to regulation 3 of the Renewable Heat Incentive Scheme Regulations (Northern Ireland) 2012, is obliged to make for eligible heat generated by accredited installations on the NI RHI scheme.
Practical On-Farm Renewable Energy (POFRE)	Northern Ireland's College of Agriculture, Food and Rural Enterprise (CAFRE) organised a series of events under the POFRE label. The events included presentations on various forms of renewable energy, tours of the College's renewable energy installations, and trade exhibitors of renewable energy products and services. DETI officials gave presentations at the events on the NI RHI.
PRINCE2	This is a project management methodology. The acronym PRINCE stands for PRojects IN Controlled Environments, and it is a process-based method for effective project management.
Reconnect Scheme	A grant scheme operated by DETI between 2006 and 2008, prior to the NI RHI. Reconnect provided capital payment support for domestic users to install various forms of renewable energy technology.
Regulatory Impact Assessment (RIA)	In government policy making a Regulatory Impact Assessment (RIA) is one of the key impact assessment tools which are an integral part of the policy cycle and effective policy making. It is to be utilised where policies have a potential regulatory impact on the wider business community. It is designed to assist with consideration of potential economic impacts and would therefore be considered with other tools utilised to assess social and environmental impacts on policy development. The NI Executive requires an RIA to be considered and applied and used to support policy development for any new, or amendments to existing, policy proposals. It should therefore be considered for every policy and strategy; although it may well be appropriate to screen it out at the impact assessment screening stage in the policy development process. It is important to bear in mind that if a policy has an impact (positive or negative) on the wider business community (or section thereof) in Northern Ireland then an RIA must be considered as part of policy development. Where regulations or alternative measures are introduced an RIA should be used to make informed decisions. An RIA is an assessment of the impact of policy options in terms of the costs, benefits and risks of a proposal. The RIA process is used widely across EU Member States, the UK and Republic of Ireland.

Term	Definition
Renewable heat and renewable heat technologies	Renewable heat is heat derived from one of three basic energy sources, each of which is considered to be renewable: solar radiation, biomass materials (derived from grown sources, either directly for energy such as energy crops, or through indirect means, such as bio-based waste streams) or deep geothermal energy. Renewable heat technologies include heat pumps, solar thermal systems, and biomass systems. The biomass boilers that were the predominant technology accredited under the NI RHI scheme burned wood pellets or wood chips to generate heat.
Risk Sharing	In the context of the GB RHI, Her Majesty's Treasury (HMT) entered into a risk sharing arrangement when agreeing to provide the Department of Energy and Climate Change (DECC) with AME funding. Traditionally the risk associated with AME funding (which was for schemes that were demand-led and potentially volatile, and where it was difficult to predict the level of funding that would be required) rested with HMT: whatever AME spending was incurred would be met by HMT. The financial arrangement for the GB RHI was different. Annual limits were set for RHI AME funding and, if DECC spent more than the annual limit, then it would have to take steps to recoup the excess and potentially pay a penalty to HMT for having exceeded the limit. This was a means used by HMT to ensure that DECC was incentivised to keep a very close eye on RHI spending. A similar approach was intended to apply to NI RHI AME funding.
SL1	Paragraph 9 of Strand One to the 1998 Belfast Agreement set out the role that committees of the Northern Ireland Assembly were to have in connection with the departments of the Northern Ireland Executive. This was to include a scrutiny, policy development and consultation role. Section 29 of the Northern Ireland Act 1998 set out that standing orders (which were to regulate the proceedings of the Northern Ireland Assembly by virtue of section 41 of the Northern Ireland Act 1998) had to make provision for conferring the powers on the committees. Standing order 48 of the Northern Ireland Assembly Standing Orders made such provision. The scrutiny role of committees is set out in Standing Order 43 of the Northern Ireland Assembly Standing Orders. An SL1 is the name given to the communication from a department to the relevant committee where the department is proposing to make or introduce subordinate legislation which the committee has the task of scrutinising.

Term	Definition
Special Adviser (SpAd)	Special advisers are a particular form of temporary civil servant employed to advise Ministers, including on political matters where it would be inappropriate for permanent civil servants to become involved. They are a personal appointment of the Minister and are not appointed in the same way as regular civil servants. The appointment and role of SpAds in Northern Ireland is presently governed by a combination of the Civil Service Commissioners (Northern Ireland) Order 1999 and the Civil Service (Special Advisers) Act 2013. Pursuant to the 2013 Act, there is also a statutory code governing the appointment of special advisers, and a model contract for special advisers which includes a specific code of conduct.
Statement of Funding Policy from HMT	In addition to regular HMT UK wide publications, such as Spending Reviews (normally published every 5 years) and Consolidated Budgeting Guidance (normally published annually), HMT also issues a Statement of Funding Policy in respect of funding for the devolved institutions in Scotland, Wales and Northern Ireland. The purpose of the Statement of Funding Policy is to set out the policies and procedures which underpin the exercise of determining the UK government's funding of the devolved administrations, to set out the elements of that funding, and to explain the interactions with the resources it is within the devolved administrations' capacity to raise themselves.
Tariffs	On the non-domestic RHI scheme, accredited installations were entitled to be paid in accordance with the applicable tariffs. These varied according to the assumed level of additional costs associated with the technology type and were also banded according to the size of the installed renewable technology. The level was set in relation to the costs of an equivalent oil boiler, the standard, non-renewable technology in Northern Ireland. The RHI tariffs were set out in Schedule 3 to the Renewable Heat Incentive Regulations (Northern Ireland) 2012. Payments were made based on the actual heat output of the installation, on a pence per kWh basis (p/kWh). The tariffs were increased regularly to take account of inflation and the Report uses the level applicable for the relevant period of time. The NI RHI scheme was originally intended to provide periodic payments for up to 20 years from the date an installation was accredited.

Term	Definition
Tiering	Tiering of tariffs was a mechanism that could be used to achieve two aims. First, it could limit how much a technology could be 'over-used' just to receive RHI payments in circumstances where the tariff payable per kWh exceeded the cost of generating a kWh of heat (the so-called 'perverse incentive'). Second, it could reduce the risk of overcompensation occurring in respect of those installations which had load factors that were significantly in excess of the reference load factor used when setting the applicable tariff. One tariff was paid up to a threshold of heat output equivalent to running at full load for 15% of the available hours (1,314 hours multiplied by the installation capacity of the boiler), whilst a much lower tariff was payable for any subsequent hours of use. The higher (Tier 1) tariff was designed primarily to cover the annual equivalent of the additional up-front investment costs and the lower (Tier 2) tariff to cover (any) ongoing additional operating costs, especially fuel. Tiering was introduced in the GB non-domestic RHI scheme from the beginning for some biomass boilers. It was not until November 2015 that the structure of some of the biomass tariffs in Northern Ireland was amended to introduce tiering. The reasons this was not initially included in any tariffs on the NI RHI scheme are addressed in the Report.
Useful Heat	In keeping with a similar approach adopted by DECC for the GB RHI scheme, DETI's policy intent (as set out in its July 2011 RHI consultation document) was that RHI payments would only pay for "useful heat" and, for example, not fund a heating requirement created just to claim RHI payments. An attempt to give effect to this intent is found in regulation 33(p) of the Renewable Heat Incentive Regulations (Northern Ireland) 2012 which stated that a scheme participant was under an obligation not to "generate heat for the predominant purpose of increasing their periodic support payments"; but "useful heat" was not otherwise defined within the Regulations, nor given statutory effect in terms of eligibility for payments.