### **History**

The non-domestic Renewable Heat Incentive (RHI) Scheme was introduced in Northern Ireland in November 2012. The Northern Ireland Scheme was based on the Renewable Heat Incentive Scheme introduced previously in the rest of the UK but with different tariff rates and the absence of important cost control measures, including a tiered tariff structure.

Although budget concerns led to the introduction of tiering for new participants in November 2015, the Northern Ireland Scheme was still expected to breach the available budget, even after the Scheme was suspended to new applicants on 29 February 2016.

In response, the Renewable Heat Incentive Scheme (Amendment) Regulations 2017 were introduced as an interim measure, which extended the tiered tariff to all participants with small and medium biomass installations. In particular, while the previous single tier tariff (6.7p/kWh in 2017-18 prices) was applied to all heat generated by an installation, under a tiered approach only the heat generated (calculated as the first 1,314 hours of operation each year times the capacity of the boiler) is eligible for payment at this rate. Any additional heat generated receives payment at a lower Tier 2 rate (1.5p/kWh in 2017-18 prices) up to an annual heat usage limit of 400,000kWh for all small and medium sized biomass installations. Once this limit is reached, no further payments are made until the next anniversary of the installation being accredited on the Scheme.

The Department for the Economy (DfE) extended the tariffs introduced under the 2017 Regulations for a further 12 months through the Northern Ireland (Regional Rates and Energy) Act 2018.

This public consultation is a key element of DfE's consideration of the long-term future of the NIRHI. Its findings, together with the judgement in the judicial review of the 2017 Regulations will inform the future Scheme policy with any new legislation expected to be in place by 1 April 2019.

#### State aid

The NIRHI Scheme is a Notified Scheme in terms of State aid. This means that the European Commission has to approve the Scheme and any changes to it that impact on the level of subsidy provided by the Department to businesses.

#### **Judicial Review**

On the 21 December, the High Court issued a judgment on the Judicial Review of the 2017 Regulations. This legal challenge taken by the Renewable Heat Association Northern Ireland (RHANI), which represents a number of installation owners, questioned whether DfE had the powers to apply the new tiered tariff to previously accredited installations. The High Court judgment of 21 December 2017 found that the 2017 Regulations were necessary to achieve the following legitimate aims:

- Ensuring that the RHI Scheme was operating in accordance with the UK's obligations under the Renewable Energy Directive;
- Ensuring that the Scheme operated in a manner consistent with the objectives of the Scheme;
- Ensuring that the Scheme operated in a manner consistent with State aid approval; and
- Protecting the Northern Ireland budget.

While the judgment confirmed that DfE has the legal authority to change the tariffs, the judge stated that he considered there to be exceptional circumstances with the outcome was balanced between the participants' expectation for reasonable compensation and the public interest with respect to the budget for other public services such as education and health.

#### **Tariff review**

DfE commissioned an independent consultant, Ricardo Energy and Environment ('Ricardo'), to undertake a review of all the main elements of the tariff for small and medium sized biomass boilers and Combined Heat and Power (CHP) plants.

Ricardo examined the approach and evidence base adopted by the consultants who advised on the original tariff structure. It obtained a range of data from ongoing inspections, data held by DfE on capital costs, boiler size, heat generation and payments to date, empirical research on the latest market data on fuel costs and industry benchmarks on costs and engagement with technical expertise on CHP.

### Reduction in heat generation

The ongoing impact of the 2017 Regulations on heat being generated is being analysed on an ongoing basis as meter readings are received. In the first year (2017-18) the total heat generated has reduced by around 20% compared to previous years.

#### **Future of the NIRHI Scheme**

The Department has considered a range of tariff options in relation to the future of the Scheme. The following summarises the eight options under consideration. The tariff options set out below are all based on 2017 prices.

# Tariff Option 1: Tariff structure under the 2017 and 2018 legislation not continued

If the Department is unable to put in place a replacement tariff structure for the period commencing 1 April 2019, there would be no legislative payment mechanism for small and medium biomass boilers that were accredited before 18 November 2015. Payments to this group of participants, covering over 1,700 installations, would cease.

Bands	Tier 1 (p/kWh)	Tier 2 (p/kWh)	Tier 1 Threshold	Usage Limit (kWh)	Voluntary Buy-Out	Typical Rate of Return over 20 years	Total Cost to end of Scheme <sup>1</sup>
0-19kW	0.0	0.0	-	-	-	0.1%	£0m
20-199kW	0.0		-			011,0	20

# Tariff Option 2: Retain tariff structure under the 2017 and 2018 legislation Tariff Option 2 would continue the current tariff structure.

Bands	Tier 1 (p/kWh)	Tier 2 (p/kWh)	Tier 1 Threshold	Usage Limit (kWh)	Voluntary Buy-Out	Typical Rate of Return over 20 years	Total Cost to end of Scheme
0-19kW	7.5	1.6	1,314 hours	400.000	No	50%	£480m <sup>2</sup>
20-199kW	7.2		1,517 110013	400,000	1.10	3370	2400111

<sup>&</sup>lt;sup>1</sup> Cost from 1 April 2019 to the final NIRHI payment for each installation

<sup>&</sup>lt;sup>2</sup> Total cost is in current prices and has been calculated by applying the tariff structure for each option to the average annual usage to date for each installation. The one exception is Option 3 where the average annual usage to the end of 2016-17 has been used. Calculations only include installations which have not been excluded, withdrawn or rejected from the Scheme.

# Tariff Option 3: Revert to original tariff structure under 2012 Regulations (including post 18 November 2015 installations)

Tariff Option 3 would re-introduce an incentive to produce excess heat (as the incentive being paid would be higher than the cost of producing the heat). The projected level of payment to end of Scheme is significantly more than the expected budget.

Bands	Tier 1 (p/kWh)	Tier 1 Threshold	Usage Limit (kWh)	Voluntary Buy-Out	Typical Rate of Return over 20 years	Total Cost to end of Scheme <sup>3</sup>	
0-19kW	7.5	None	None	No	100%	£1040m	
20-199kW	7.2				1.1070	2.310111	

# Tariff Option 4: Adopt the base case tariff structure proposed in the Ricardo Tariff Review (the 'Tariff Review)

Based on the findings of the Ricardo Tariff Review, Tariff Option 4 splits the 20-199kW size band into 20-99kW and 100-199kW to reflect differences in the capital cost of boilers. This option includes a negative Tier 2 tariff to reflect the current market position where the price of biomass is below the price of oil. Tariff Option 4 would be expected to be within the budget made available for the Scheme.

Bands	Tier 1 (p/kWh)	Tier 2 (p/kWh)	Tier 1 Threshold	Usage Limit (kWh)	Voluntary Buy-Out	Typical Rate of Return over 20 years	Total Cost to end of Scheme
0-19kW	7.4	1.8					
20-99kW	2.3	-0.4	1,314 hours	None	Yes	12%	£75m
100-199kW	1.2	-0.7					

## Tariff Option 5: Adopt the tariff structure from the Tariff Review excluding fuel costs

Tariff Option 5 is broadly similar to Tariff Option 4 but removes the fuel price differential between biomass and the alternative fossil fuel (biomass being lower cost therefore increasing the incentive being paid). The ongoing cost of this option is also expected to be within the Scheme budget.

Bands	Tier 1 (p/kWh)	Tier 2 (p/kWh)	Tier 1 Threshold	Usage Limit (kWh)	Voluntary Buy-Out	Typical Rate of Return over 20 years	Total Cost to end of Scheme
0-19kW	7.5	1.9					
20-99kW	3.4	0.5	1,314 hours	300,000	Yes	25%	£185m
100-199kW	2.1	0.3					

<sup>&</sup>lt;sup>3</sup> This excludes the cost of the Non-Domestic Scheme to the end of 2018-19, the cost of the Domestic Scheme and the cost of other technologies which would increase the lifetime cost of the Scheme to £1.3 billion.

### Tariff Option 6: Adopt the hybrid tariff structure from the Tariff Review

Tariff Option 6 is a hybrid option based on the recommendations in the Ricardo Tariff Review. Tariff Option 6 seeks to find a middle ground between these Tariff Options 4 and 5. The ongoing cost of this option is expected to be within Scheme budget.

Bands	Tier 1 (p/kWh)	Tier 2 (p/kWh)	Tier 1 Threshold	Usage Limit (kWh)	Voluntary Buy-Out	Typical Rate of Return over 20 years	Total Cost to end of Scheme
0-19kW	7.4	1.9					
20-99kW	2.8	0	1,314 hours	None	Yes	19%	£140m
100-199kW	1.8	0					

### **Tariff Option 7: Adopt current GB tariff structure**

Tariff Option 7 would apply the current tariff structure available for new applicants to the RHI Scheme operating in the rest of the UK. The ongoing cost of this option is expected to be within the Scheme budget.

	Bands	Tier 1 (p/kWh)	Tier 2 (p/kWh)	Tier 1 Threshold	Usage Limit (kWh)	Voluntary Buy-Out	Typical Rate of Return over 20 years	Total Cost to end of Scheme
(	0-199kW	3.14	2.20	3,066 hours	None	Yes	40%	£390m

## Tariff Option 8: Adopt the tariff structure for entrants to the GB Scheme in autumn 2015

Tariff Option 8 would apply the GB tariff structure in place in the autumn of 2015 when the majority of accredited installations applied to the Northern Ireland Scheme. The ongoing cost of this option is expected to be within the Scheme budget.

Bands	Tier 1 (p/kWh)	Tier 2 (p/kWh)	Tier 1 Threshold	Usage Limit (kWh)	Voluntary Buy-Out	Typical Rate of Return over 20 years	Total Cost to end of Scheme
0-199kW	4.66	1.24	1,314 hours	None	Yes	35%	£345m

### Other technologies

The Ricardo analysis suggests that no public subsidy is required in respect of CHP installations as the overall life cycle cost of the renewable heat technology is lower than the fossil fuel alternative.

There are only a small number of installations on the NIRHI Scheme that are based on other technologies or are large (200kW+) biomass boilers. It is not proposed that there are any changes to the tariffs for these installations.