Department for Energy Security & Net Zero

Renewable Heat Incentive (RHI) financial commitment & budget caps

Contents

In this document, we provide estimated in-year expenditure for plants that are supported by the RHI, as well as information on budget caps and budget allocations that were applied whilst the scheme was open. The scheme has now closed to new applicants, and we expect this financial commitment and budget cap publication, updated using March 2024 data, to be the final version of this document. This is in line with the publication timelines of the RHI official statistics. Any further enquiries on the information in this document can be sent to rhi@energysecurity.gov.uk.

Committed spend

Financial commitment assessment tables below show estimated spend we have committed to for each year from 2011/12 to 2023/24 based on applications received and accreditations. These assessments take account of the potential for individual installations to incur a different level of financial commitment in different years – for instance, a plant accredited part way through a financial year will represent less expenditure in that year than it will in future years.

The Domestic RHI closed to new applications in March 2022 and since then only receives 'transfers of ownership' applications.

The Non-Domestic RHI closed for applications for new installations in March 2021, though it remained open for certain accreditation and capacity modification applications:

- An extension was provided to 31 March 2023 for accreditation applications for plants already granted a Tariff Guarantee (TG) prior to 31 March 2021.
- An extension was also provided to 31 March 2023 for accreditation applications to those who: were not eligible for a TG, were impacted by COVID-19 related delays, had invested resource into project development prior to 17 August 2020, and successfully applied for a COVID-19 extension by 31 March 2021.
- Participants with accredited Shared Ground Loops could apply to modify installation capacity until 31 March 2023.

This publication is in addition to our publications on RHI deployment statistics, to provide data on estimated in-year expenditure for plants supported by the scheme up to March 2024 and to provide an overview of RHI budget caps, which were applied whilst the scheme was

open. The appendix sets out key elements of the methodology used in these forecasts. The deployment statistics published in April 2024 is intended to be the final official statistics publication.

Table 1a: Total RHI committed spend, 2011/12 to 2015/16 (prior to the introduction of budget caps)

	11/12	12/13	13/14	14/15	15/16
Current estimate of committed spend	**£1m**	**£16m**	**£53m**	**£169m**	**£366m**
Non-domestic	£1m	£16m	£53m	£145m	£289m
Domestic	NA	NA	NA	£23m	£77m
Cumulative committed spend	£1m	£17m	£70m	£239m	£604m

Figures may not sum due to rounding

Table 1b: Total RHI committed spend and budget cap, 2016/17 to 2020/21

	16/17	17/18	18/19	19/20	20/21
Budget cap	**£640m**	**£780m**	**£900m**	**£1010m**	**£1150m**
Current estimate of committed spend	**£521m**	**£684m**	**£775m**	**£855m**	**£922m**
Non-domestic	£430m	£579m	£657m	£722m	£774m
Domestic	£91m	£105m	£118m	£132m	£148m
Cumulative committed spend	**£1125m**	**£1810m**	**£2584m**	**£3439m**	**£4361m**

Table 1c gives the estimated committed spend for domestic as well as non-domestic RHI for 2021/22 as at March 2024. There was only a budget cap for the Domestic RHI in 2021/22, as the Non-Domestic RHI closed to new applicants on the 31 March 2021. The Domestic RHI budget cap for 2021/22 was **£155m**.

Table 1c: Total RHI committed spend 2021/22

	21/22
Current estimate of committed spend	**£974m**
Non-domestic	£830m
Domestic	£143m
Cumulative committed spend	**£5335m**

Table 1d gives the estimated committed spend for domestic and non-domestic RHI for 2022/23 and 2023/24 as at March 2024. Overall scheme budget caps are not required for 2022/23 or 2023/24 as both RHI schemes have closed to new applicants.

Table 1d: Total RHI committed spend 2022/23 and 2023/24

	22/23	23/24
Current estimate of committed spend	**£1023m**	**£1155m**
Non-domestic	£901m	£1041m
Domestic	£122m	£114m
Cumulative committed spend	**£6357m**	**£7512m**

Previous estimates of committed spend

The table below provides a summary of the previous published estimates to show how the estimates of committed spend are changing over time.

Variations in estimated spend from previous publications can be due to a variety of factors. There may be revisions to load factor estimates based on new information being received, applications that have become inactive and therefore no longer counted towards committed spend, or delays to the expected commissioning dates of Tariff Guarantee applications. From March 2023, following the final closure of the NDRHI, any accrued spend associated with Tariff Guarantee applications that never progressed to Stage 3, or COVID-19 extension applications, is subtracted from the total committed spend. Additionally, large individual plants can have significant impacts on the spend for current year estimates if, for example, a quarterly meter reading is much higher or lower than expected.

Table 2: Total RHI committed spend updates for the 2023/24 financial year

Estimates of committed spend	16/17	17/18	18/19	19/20	20/21	21/22	22/23	23/24
Data to end of March 2024	£521m	£684m	£775m	£855m	£922m	£974m	£1,023m	£1,155m
Data to end of June 2023	£521m	£684m	£774m	£855m	£921m	£983m	£1,048m	£1,166m
Data to end of March 2023	£521m	£684m	£764m	£843m	£910m	£973m	£1,033m	-

Note: all estimates use the same, most current methodology

Budget allocations

In the 2015 Autumn Statement the Government announced the continuation of the RHI for the 2016-21 Spending Review period with the introduction of a budget cap, which allowed it to close the scheme to new applications at short notice if it determined that there was a risk of the scheme overspending. The budget cap was introduced from 1 April 2016 and covered the combined expenditure from both the Non-domestic and Domestic schemes. Further details were set out in the RHI consultation and in the Government response.

As the Non-domestic RHI scheme closed to new applicants on 31 March 2021 it was removed from the budget cap, and after the Domestic RHI scheme also closed to new applicants on 31 March 2022, it is also no longer subject to the budget cap. Subsequent budget caps were introduced to cover COVID-19 extensions and Shared Ground Loop Modified Capacity. These too are now closed to new applications and are, therefore, no longer subject to a budget cap.

Tariff Guarantees

A Tariff Guarantee provides investment certainty to larger projects which are crucial to delivering the Net Zero target. In accordance with regulation 35(14) of the RHI scheme Regulations 2018, The Department for Energy Security and Net Zero[1] were required to publish the budget allocation for Tariff Guarantees (TG) and estimates of inflation for future financial years until 2023. These figures can be found in Tables 3a and 3b. There is no requirement for publication beyond 2023.

Please note that the Tariff Guarantees budget allocation for 2021/22 and 2022/23:

[1] Formerly the Department for Business, Energy and Industrial Strategy

- will not include applications made before 20th July 2020.
- is technology specific as set out in the Notice on Changes to RHI Support and COVID-19 Response.

COVID-19 Extension

In November 2020, the Government announced that it would provide an extension for non-TG eligible projects impacted by COVID-19 related delays, which had invested resource into project development prior to 17 August 2020 (the date of the Notice that initially announced these proposals). In accordance with regulation 3C(1) and 3C(2) of the RHI scheme Regulations 2021, the Department for Energy Security and Net Zero is required to publish the budget allocation for this mechanism, covering extension applications for the 2022/23 financial year. These figures are in Table 3c.

Shared Ground Loop Modified Capacity

In accordance with regulation 52B(2) of the RHI scheme Regulations 2021, The Department for Energy Security and Net Zero has determined and published a budget allocation, an estimate of inflation and load factors for shared ground loop modification of installation capacity for 2021/22 and 2022/23.

Budgets for 2022/23 were on a sectoral basis, with one budget for 'domestic' applications and one for 'other' applications. The 2022/23 budget allocation is also set based on the expected total value of the additional capacity from modifications. The 2021/22 budget allocation of £15m covered all applications and covered the total expected expenditure on overall post-modification capacity of installations, including the capacity before increase.

Shared Ground Loop Modified Capacity budget cap figures can be found in Tables 3d and 3e.

Budget cap tables

Table 3a: NDRHI Tariff Guarantee budget allocation – 2020/21 (for all applications)

	2020/21
Budget allocation	**£150m**

Table 3b: NDRHI Tariff Guarantee budget allocation (for applications made from 20th July 2020)[3]

Financial Year	Bio-methane	Ground or Water Source Heat Pumps (updated 01/02/2021)	Other Tariff Guarantee supported tech
2021/22	£5m	£17m	£7m
2022/23	£12m	£28m	£9m

Table 3c: NDRHI Non-Tariff Guarantee Extension Applications budget allocations

Financial Year	Biomass (<1MWth) (updated 5/5/21)	GSHPs (<100kWth)	All other non-TG eligible technologies (updated 1/03/22)	Total
2022/23	£4.9m	£3.6m	£1.3m	£9.8m

Note: Extension applications were submitted in March 2021. The budget caps set to assess them were for estimated spend in 2022/23.

Table 3d: NDRHI Shared Ground Loop Modified Capacity budget allocation 2021/22

Financial Year	Total
2021/22	£15m

Table 3e: NDRHI Shared Ground Loop Modified Capacity budget allocation 2022/23

Financial Year	Domestic	Other	Total
2022/23	£4m	£1m	£5m

Inflation estimates and load/production factor tables

Commitments of spend used to assess applications against budget caps have been calculated using load/production factors for different technologies and forecasts of inflation, which The Department for Energy Security and Net Zero is obliged to publish.

Inflation estimates in Table 4 were used to calculate the affordability of Tariff Guarantee applications made from 20th July 2020. The inflation rates used from 8th February 2021 were also used to calculate the affordability of Non-Tariff Guarantee Extension Applications (after 1 March 2021). Inflation estimates were updated when the OBR or the ONS publish new figures. Earlier inflation rates have been retained in the table for reference.

Table 4: Inflation estimates used to determine Tariff Guarantee, Non-Tariff Guarantee Extension and Modified Capacity Applications affordability – 2021/22 and 2022/23 (for Tariff Guarantees applications made from 20th July 2020, Extension applications from 1st March 2021 and Modified Capacity applications from 1 April 2021).

Financial Year	Estimate of CPI inflation used until 15/12/20[2]	Estimate of CPI inflation used 15/12/20 to 7/2/21[3]	Estimate of CPI inflation used from 8/2/21[4]
2021/22	1.4%	0.5%	0.6%
2022/23	2.0%	1.4%	1.4%

Tables 5 and 6 show the load factors for each relevant Tariff Guarantee technology and quarterly biomethane production factors that were used in the calculation of estimated

[2] Tariff Guarantee applications made between 20th July 2020, when the third allocation of Tariff Guarantees started, but before 15th December 2020 used inflation rates from the OBR forecast made in March 2020 https://obr.uk/efo/economic-and-fiscal-outlook-march-2020/.

[3] The inflation estimates were updated by The Department for Energy Security and Net Zero for the Budget Cap published in December 2020, using the OBR CPI inflation forecast for 2020Q4 (for 2021/22) and 2021Q4 (for 2022/23). The OBR published these updated forecasts in late November 2020. This is the nearest available estimate to the December inflation rate (published by ONS in January) which is used by Ofgem to uprate the tariffs. These inflation figures were used on Tariff Guarantees applications made from the 15th December 2020 until 7th February 2021. https://obr.uk/download/november-2020-economic-and-fiscal-outlook-supplementary-economy-tables/.

[4] In January 2021, ONS published the December inflation rate, which were later used by Ofgem to uprate the tariffs for 2021/22. The OBR estimate for 2021 Q4 from November 2020 remain in use for 2022/23 (see footnote above). The new CPI rate of 0.6% was used from 8/2/21 (Consumer price inflation time series (MM23), https://www.ons.gov.uk/economy/inflationandpriceindices/timeseries/d7g7/mm23

budget commitments for tariff guarantees. These load factors were used from 20th July 2020, when the third allocation of Tariff Guarantees started, and were updated using May 2020 data.

Table 5: Heat Load Factors used to estimate budget commitments to Tariff Guarantees

Technology	Load Factor/Injection Rate
Solid biomass (1MW+)	27.35%
Deep geothermal (all capacities)	45.00%
Biogas (600kW+)	24.44%
Ground and water source heat pump (100kW+)	15.71%
Biomass CHP (all capacities)	44.02%

Table 6: Biomethane production factors to be used to estimate budget commitments to Tariff Guarantees

Quarter following registration	Q1	Q2	Q3	Q4	Q5	Q6	Q7	Q8	Q9	Q10 +
Production factor	30%	51%	56%	59%	62%	65%	68%	72%	75%	78%

Table 7 shows the load factors applied for each relevant technology for the calculation of estimated budget commitments for Non-Tariff Guarantee Extension and Modified Capacity applications. These load factors were calculated using January 2021 data.

Table 7: Heat Load Factors to be used to estimate budget commitments to Non-Tariff Guarantee Extension and Modified Capacity Applications

Technology	Load Factor/Injection Rate
Air Source Heat Pump (ASHP)	18.40%
Biogas	43.90%
Ground Source Heat Pump (GSHP)	18.20%
Medium Solid Biomass Boiler	20.20%
Small Solar Thermal	4.50%
Small Solid Biomass Boiler	15.00%

Appendix – notes on methodologies

Differences from degression publication

Tariff rates for both Domestic and Non-Domestic Renewable Heat Incentive schemes were, until closure to new applicants, subject to degression mechanisms which automatically reduced tariffs if expenditure forecasts met pre-set thresholds. Regulations required that The Department for Energy Security and Net Zero published the forecasts of expenditure used in assessing whether a degression would be triggered, which it has done on the Non-domestic RHI mechanism for budget management: estimated commitments and the Domestic RHI mechanism for budget management: estimated commitments pages.

The figures published in this document differ from expenditure commitments provided for the purposes of degression. Degression figures are different because they represent an estimate of full annual commitments of all plants in the scheme. This means degression does not take into account the fact that a plant which is accredited part way through the year will only output a part of its capacity in that financial year. It also assumes immediate production at full capacity, which is not always the case, particularly with biomethane plants. This is in line with the methodology laid out in regulations. In contrast, the estimates in the tables above include the use of production profiles for new installations based on past behaviour within the scheme.

Additionally, these figures do *not* include preliminary applications (which are included in degression) because we have made no commitment to spend on these plants. It is not certain whether a preliminary application will lead to a full application being submitted and accredited, or what tariff the full application would receive.

Domestic degression estimates exclude “legacy” installations (any domestic installation which commissioned prior to 9th April 2014) in accordance with the regulations, whereas the estimates in this document include legacy installations.

In March 2018, to improve accuracy, we changed our assumptions of which installations are included in our non-domestic estimate (for all financial years). Rather than exclude dormant installations (per degression assumptions), we exclude installations based on the length of time (24 months instead of four) from which they have submitted meter readings to Ofgem (or made other contact). This does not change our estimates for biomethane installations or spend from the domestic scheme.

Load factor methodology change for the data up to end of December 2020

The Department for Energy Security and Net Zero’s accrual models are used to prepare the figures in this document. For non-domestic (non-biomethane) applications above a certain size, we previously used data provided in the applications to calculate estimated load factors before these plants had submitted actual meter readings. We have found this assumption over-estimated committed spend, leading to gradual decreases over time in committed spend as the estimated accruals were replaced by actual payments.

From December 2020, we treated plants of most sizes in the same way (i.e., prior to payment we estimated spend using average load factors derived from plants that have been paid) in the non-domestic (non-biomethane) accrual model. For unpaid CHP and large biomass boilers with a capacity of over 10,000 kWtH, the installer estimated load factor was reduced by 0.30 (with a minimum floor set at 0.30). Once a plant has been paid, the averages were, as before, replaced by an actual load factor for that specific plant.

This change, combined with the usual monthly variations in data, led to a large reduction (£14m) in the Committed Spend estimate based on data up to end December 2020, compared to the estimate using data up to end November 2020. Once this change in load factor methodology had been made, smaller revisions in subsequent monthly spend estimates were observed. Other factors, e.g., deployment, delays to commissioning of Tariff Guarantees and changes in actual load factors continued to affect the committed forecasts presented in the budget cap.