



# Energy Statistics for Scotland

## Q2 2021 Figures

September 2021

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Update expected: 23<sup>rd</sup> December 2021  
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The Scottish energy statistics hub is a 'one-stop shop' for all Scottish energy data. It will be updated as new data is available.

### Scottish Energy Statistics Hub:

<https://scotland.shinyapps.io/sg-energy>

### Scottish Energy Strategy.

<https://www.gov.scot/publications/scottish-energy-strategy-future-energy-scotland-9781788515276/>

### Revisions:

Renewable energy target was revised to **23.8%** from 23.9%.

Renewable heat target was revised to **6.6%** from 6.5%.

Energy consumption relative to the baseline was revised to **-14.1%** from -13.8%.

Change in energy productivity relative to the baseline was revised to **4.6%** from 3.7%.

### Key Points

- Scotland's **renewable electricity generation** in **2021** in **quarter 2** was **5,301 GWh** – a **decrease** from the **5,893 GWh** generated in the same quarter in 2020.
- In the **first half** of **2021**, Scotland generated **14,115 GWh** of **renewable electricity**, **down 18.7%** on the same point in **2020**. This fall is likely explained by **lower wind speeds** and **lower rainfall** affecting wind and hydro generation in the first half of 2021.
- **Renewable electricity capacity** increased by **2.2%** from **June 2020** to **12.0 GW** in **June 2021**. This is more than double the increase in capacity seen between June 2019 and June 2020 where renewable electricity capacity increased by just 0.9%.
- Scotland's **energy consumption** dropped by **2.3%** from **2018** to **2019**, driven by a **6.2% decrease** in **industrial consumption**.
- This means that overall **energy consumption** is **14.1% lower** than **2005-2007**, and once again below the 2020 target of a reduction of 12% below the baseline.
- Final data for 2019 revised the **renewable energy target** down to **23.8%** from 23.9%, the **renewable heat target** up to **6.6%** from 6.5% and shows that **Energy productivity** was **4.6% greater** than the 2015 benchmark as outlined in Scotland's Energy Strategy, up from 3.7%.

### Energy Targets:

	Latest	Target
<b>Overall renewable energy target</b> Total Scottish energy consumption from renewables	<b>23.8%</b> <small>Final in 2019</small>	<b>50%</b> <small>by 2030</small>
<b>Renewable electricity target</b> Gross electricity consumption from renewables	<b>95.9%</b> <small>Provisional* in 2020</small>	<b>100%</b> <small>by 2020</small>
<b>Renewable heat target</b> Non-electrical heat demand from renewables	<b>6.6%</b> <small>Final in 2019</small>	<b>11%</b> <small>by 2020</small>
<b>Energy consumption target</b> Reduction in total energy consumption from 2005-07	<b>↓ 14.1%</b> <small>Final in 2019</small>	<b>↓ 12%</b> <small>by 2020</small>
<b>Energy productivity target</b> % change in gross value added achieved from the input of one gigawatt hour of energy from 2015.	<b>↑ 4.6%</b> <small>Final in 2019</small>	<b>↑ 30%</b> <small>in 2030</small>

\*Final figures for the **Renewable Electricity Target** will be published in **December 2021**

### Sources

Renewable energy target: <https://scotland.shinyapps.io/Energy/?Section=WholeSystem&Chart=RenEnTgt>  
 Renewable electricity target: <https://scotland.shinyapps.io/Energy/?Section=RenLowCarbon&Subsection=RenElec&Chart=RenElecTarget>  
 Renewable heat target: <https://scotland.shinyapps.io/Energy/?Section=RenLowCarbon&Subsection=RenHeat&Chart=RenHeat>  
 Energy Consumption target: <https://scotland.shinyapps.io/Energy/?Section=EnergyEfficiency&Subsection=DemandReduction&Chart=EnConsumptionTgt>  
 Energy productivity target: <https://scotland.shinyapps.io/Energy/?Section=WholeSystem&Chart=EnProd>

Scotland has a target to reduce final energy consumption by 12% by 2020 from a 2005 to 2007 baseline.

Final 2019 data shows that consumption **remains below 12%**, 14.1% lower than the baseline.

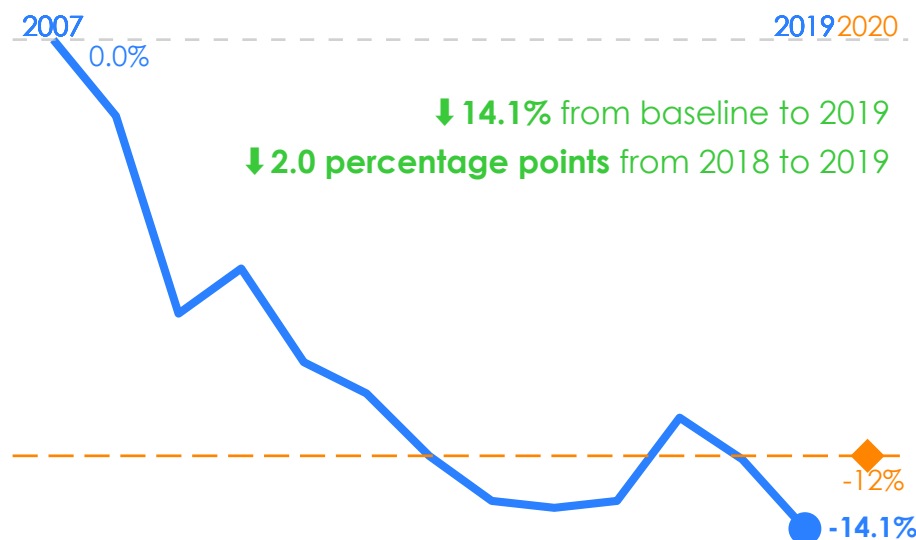
Total energy consumption in Scotland dropped by **2.3%** from 2018 to 2019, driven by a **6.2% decrease in industrial consumption**.

The drop in consumption and a **0.8% increase** in gross value added (GVA) between 2018 and 2019 means that energy productivity increased by **3.2 percentage points**. It is now **4.6%** greater than the 2015 benchmark as outlined in Scotland's Energy Strategy.

Energy productivity is GVA from the input of one gigawatt hour consumed. Higher energy productivity means "squeezing" more out of every unit of energy consumed.

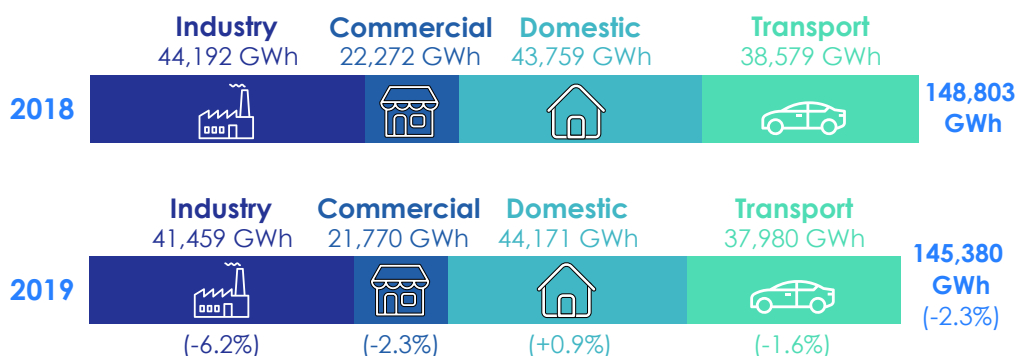
## Final energy consumption

2007 - 2019



## Energy consumption by sector

2018 - 2019



## Energy Productivity

2015 - 2019

↑ 4.6% from 2015 to 2019  
 ↑ 3.2 percentage points from 2018 to 2019

30%



Renewable electricity generation in **2021 Q2** has **fallen** compared to the same quarter in the previous two years, with **5,301 GWh** of renewable electricity generated. This means renewable electricity generation in the **first half of 2021** is **18.7% lower** than at the same point in 2020.

This fall is likely explained by the weather.

**Lower wind speeds** have resulted in **wind generation** being **17.6% lower** in the **first half of 2021** compared to the same period in 2020.

**Rainfall** has also reduced, leading to a **29.8% fall** in **renewable hydro generation** from the first half of 2020 to the first half of 2021.

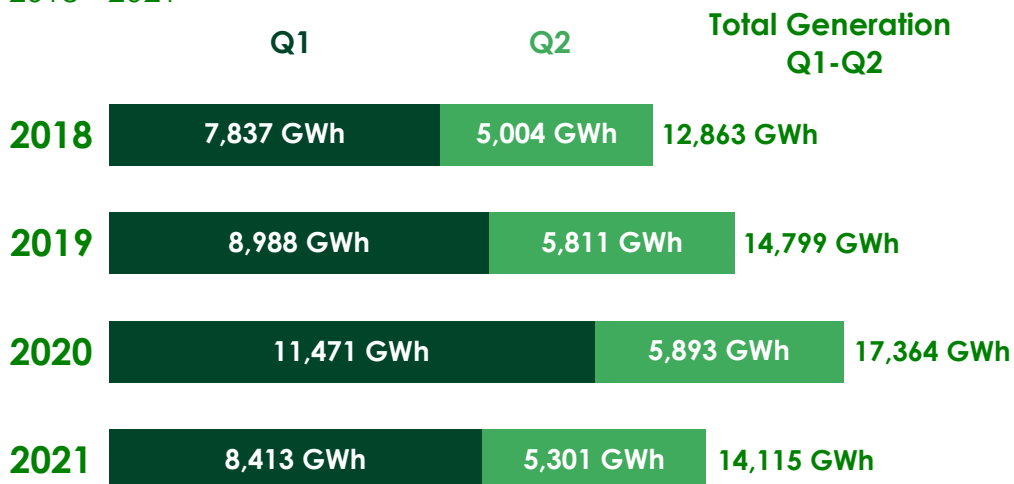
This trend is expected to continue into the third quarter of 2021

In the last twelve months, renewable electricity capacity has risen slightly, **up 2.2%** from June 2020 to **12.0 GW** in June 2021.

This is due to increases in onshore and offshore wind capacity.

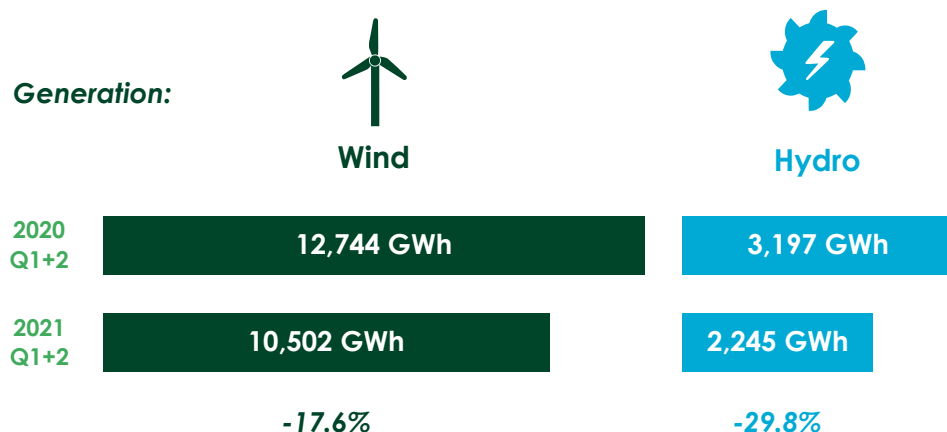
### Renewable electricity generation

2018 - 2021

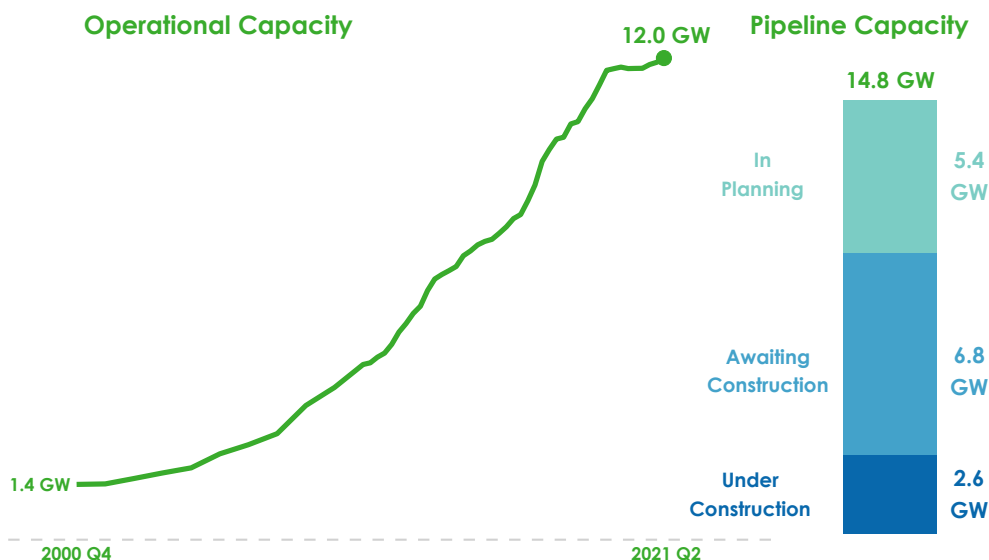


### Wind and Hydro generation

First half of year, 2020 & 2021



### Renewable electricity capacity, June 2021



#### Sources

Renewable electricity generation: <https://scotland.shinyapps.io/sg-energy/?Section=RenLowCarbon&Subsection=RenElec&Chart=RenElecGen>  
 Renewable electricity capacity: <https://scotland.shinyapps.io/sg-energy/?Section=RenLowCarbon&Subsection=RenElec&Chart=RenElecCapacity>  
 Renewable electricity pipeline: <https://scotland.shinyapps.io/sg-energy/?Section=RenLowCarbon&Subsection=RenElec&Chart=RenElecPipeline>