



Energy Statistics for Scotland

Q4 2021 Figures

March 2022

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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/>

Key Points:

- In **2021, 27.2 TWh of renewable electricity** was generated in Scotland. This is a **15.1% decrease** compared to **2020**, which is likely due to milder weather throughout the year.
- The amount of **renewable electricity generated** in Scotland in **2021** is the equivalent of **powering all households** in Scotland for almost **three years**.
- **Renewable electricity generation** between **October and December 2021** was up by **6.4%** on **Q4 2020**. This is the most renewable electricity generated in the final quarter of a year in Scotland.
- **Capacity** has grown slightly from **12.2 GW** in **September 2021** to **12.3 GW** in **December 2021**.
- Scotland's **net exports** of electricity (exports minus imports) in **2021** was **16.0 TWh**, a **17% decrease** compared to **2020**. However the value of Scotland's electricity exports had an estimated wholesale market value of **£2.4 billion**, which is more than **three times** the estimated wholesale market value of electricity exports in **2020**. This is due to large increases in the average price of electricity in 2021, particularly in the latter half of the year.
- The majority of Scotland's renewable electricity generation continues to come from **wind (19.9 TWh)**. In **2021, 2.7 TWh** was generated via **offshore wind**, and **17.2 TWh** was generated by onshore wind.

Revisions:

Final figures for the heat and electricity target years have been reported previously, so they will no longer be reported here. We will continue to update figures on the energy statistics hub going forward.

Change in energy productivity relative to the baseline was revised to 6.2% from 5.9%

Energy Targets:

	Latest	Target
Overall renewable energy target Total Scottish energy consumption from renewables	Provisional 25.4% in 2020	50% by 2030
Energy consumption target Reduction in total energy consumption from 2005-07	Provisional ↓ 14.4% in 2020	↓ 12% by 2020
Energy productivity target % change in gross value added achieved from the input of one gigawatt hour of energy from 2015.	Provisional ↓ 6.2% in 2020	↑ 30% in 2030

Sources

Renewable energy target: <https://scotland.shinyapps.io/Energy/?Section=WholeSystem&Chart=RenEnTgt>
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>

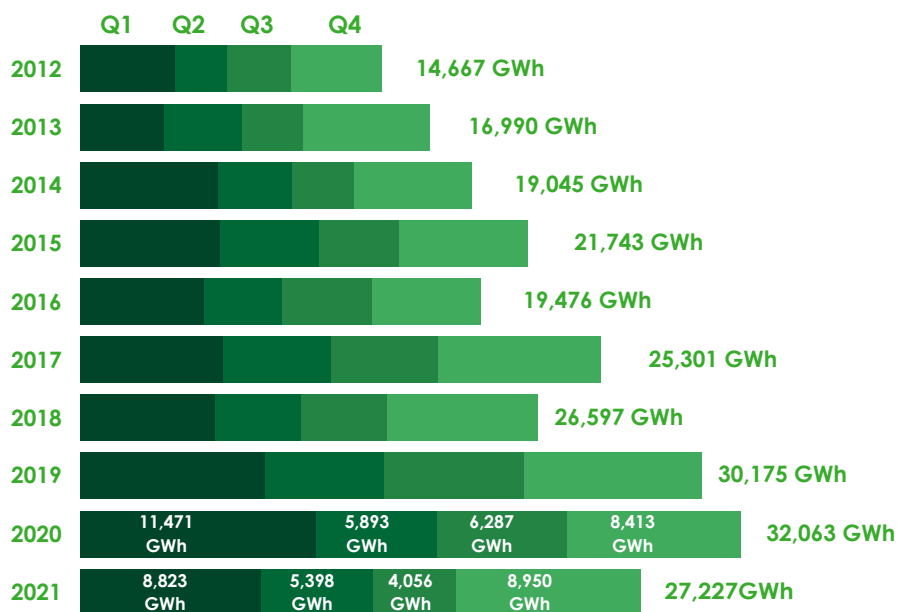
2021 saw a decrease in **renewable electricity generation** in Scotland with **27.2 TWh** generated, down **15.1%** on **2020**.

The majority of Scotland's renewable electricity generation continues to come from **wind (19.9 TWh)**.

Renewable electricity generation from **all fuels** fell in 2021. Likely due to the milder weather throughout the year.

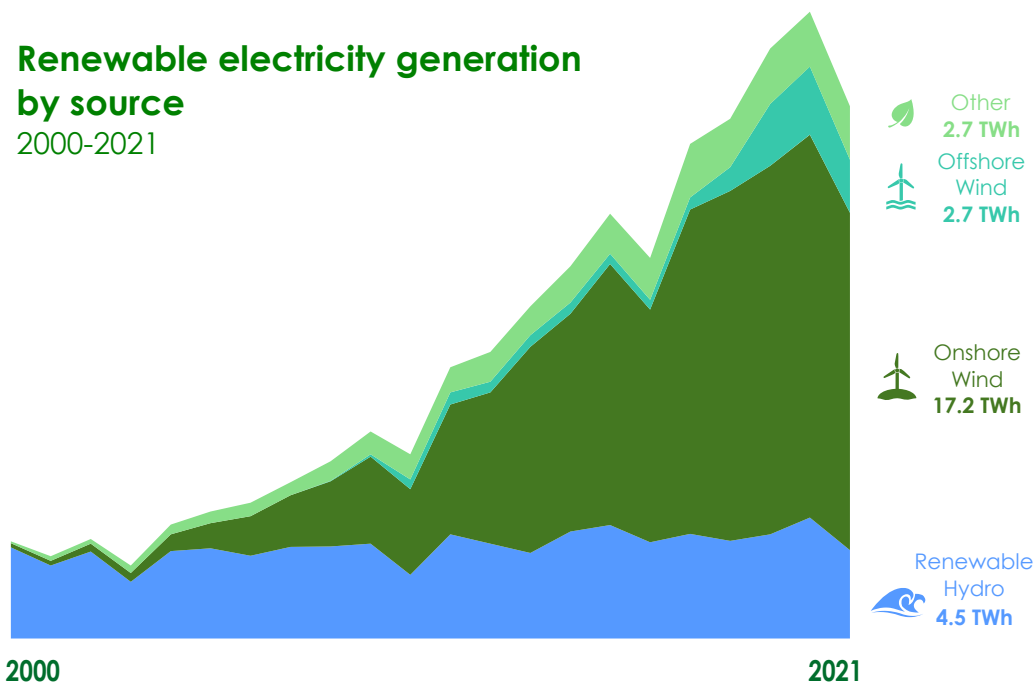
Renewable electricity generation

2012-2021



Renewable electricity generation by source

2000-2021



In **2021**, renewable generation was the **equivalent to...**



Powering **all households** in Scotland for around **three years**.



Charging almost **6 billion phones** for a **year**.



Running **all Scottish fridges** for around **7 years**.

Scotland's **net exports** of electricity saw a decrease in **2021** at **16.0 TWh** compared to 19.3 in 2020.

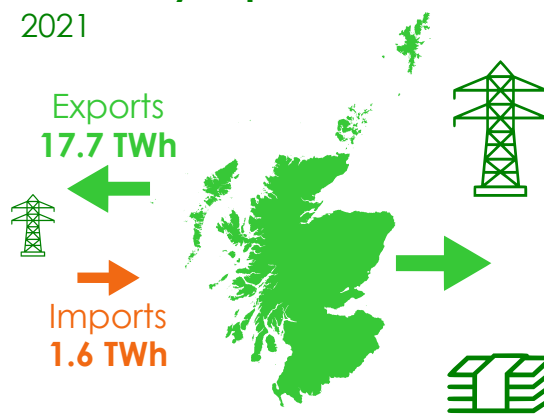
Estimated wholesale market value of electricity exports tripled compared to 2020, due to large increases in average electricity price in 2021.

Capacity has grown slightly, **12.3 GW** in **December 2021**, up **0.1 GW** since September 2021.

15.2 GW of projects are in the **pipeline** for development. **2.9 GW** on these are **under construction**, mainly **offshore wind**

Electricity Exports

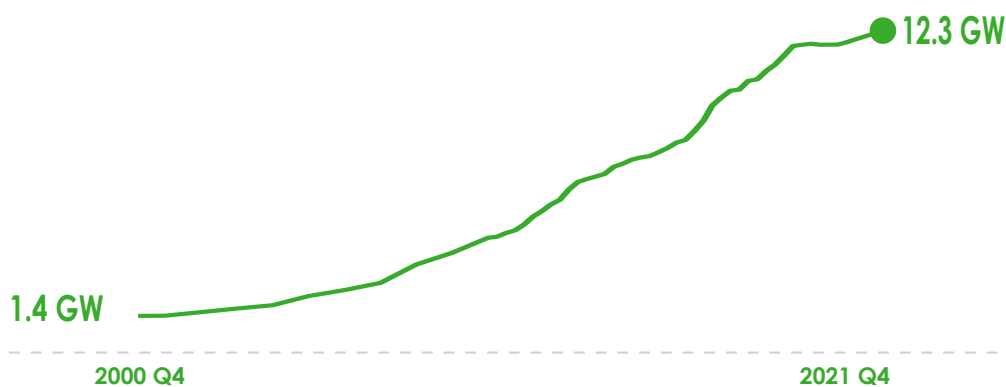
2021



In 2021, there was a **net export** of **16.0 TWh** of electricity.

This had an **estimated wholesale market value** of **£2.4 billion**

Renewable electricity capacity, December 2021



Pipeline Capacity - December 2021

