



Energy Statistics for Scotland

Q4 2019 Figures

March 2020

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We have recently launched a Scottish energy statistics hub, which 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>

Key Points:

- **2019** was a **record year** for **renewable electricity generation** in Scotland with **30.5 TWh** generated, **15.3% up** on 2018. This is the equivalent of powering all households in Scotland for over three years, or charging almost 6.7 billion mobile phones for a year.
- Renewable electricity generation in between **October** and **December 2019** was in fact **down** by **2%** on **Q4 2018**. Even though **capacity** increased from **11.0 GW** in **December 2018** to **11.8 GW** in **December 2019**, **lower wind speeds** may have contributed to the lower generation.
- Record renewable electricity generation meant that significant progress was made towards Scotland's **renewable electricity target** in **2019**; now an estimated **90.0%** of gross electricity consumption came renewable sources, up from **76.2%** in **2018**.
- The record generation also meant that Scotland's **net exports** of electricity (exports minus imports) in **2019** was its highest to date at **15.9 TWh**. Scotland's electricity exports had an estimated **wholesale market value** of almost **£745 million**.
- The majority of Scotland's renewable electricity generation continues to come from **wind (22.4 TWh)**. **Offshore wind** grew substantially in **2019**; **3.3 TWh** was generated last year via offshore wind, up from **1.3 TWh** in **2018**. This is due to the Beatrice wind farm off the Caithness coast becoming fully operational in May 2019.
- However, Scotland's renewable electricity **capacity** levelled off at **11.8 GW** since June 2019.
- **13.0 GW** of renewable electricity projects are consented and in the pipeline for development. **1.2 GW** on these are **under construction**, most of which are **offshore wind** farms off the Moray Firth.

Targets:

These targets track progress towards the future of energy in Scotland in line with the **Scottish Energy Strategy**.

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

Revisions:

Energy productivity was revised to **0.4%** from 0.3%.

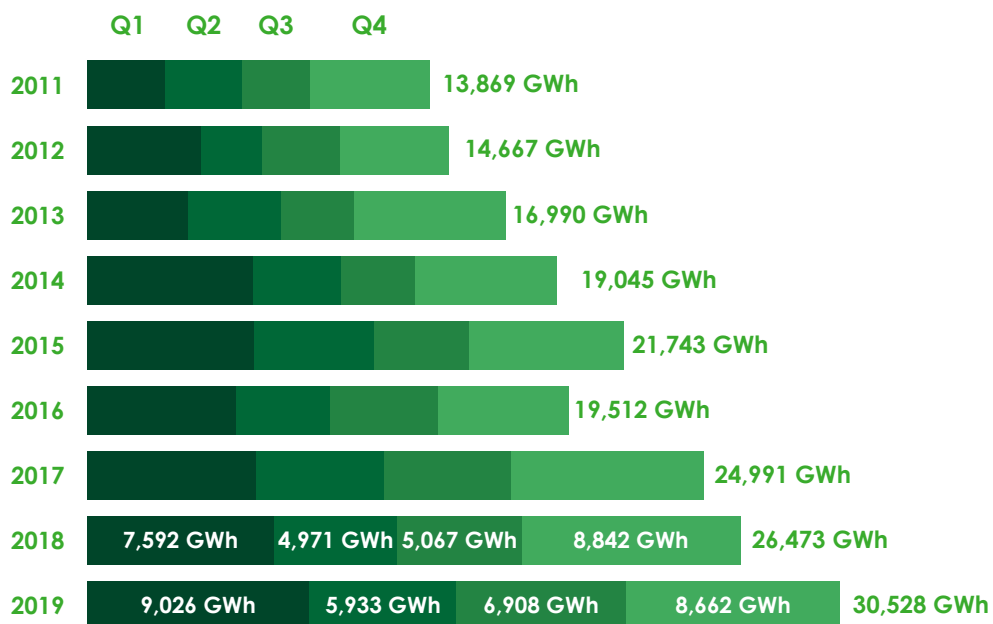
Energy Targets:

	Latest	Target
Overall renewable energy target Total Scottish energy consumption from renewables	20.9% in 2018	50% by 2030
Renewable electricity target Gross electricity consumption from renewables	90.0% in 2019	100% by 2020
Renewable heat target Non-electrical heat demand from renewables	6.3% in 2018	11% by 2020
Energy consumption target Reduction in total energy consumption from 2005-07	↓ 12.1% in 2018	↓ 12% by 2020
Energy productivity target % change in gross value added achieved from the input of one gigawatt hour of energy from 2015.	↑ 0.4% in 2018	↑ 30% in 2030

2019 was a **record year** for **renewable electricity generation** in Scotland with **30.5 TWh** generated, **15.3% up** on **2018**.

Renewable electricity generation

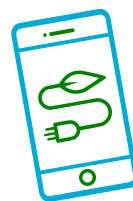
2011-2019



In **2019**, renewable generation was the **equivalent to...**



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



Charging almost **6.7 billion phones** for a **year**.



Running **all Scottish fridges** for close to **8 years**.

In 2019, **90.0%** of gross electricity consumption came from renewable sources, up **13.8 percentage points** from 2018.

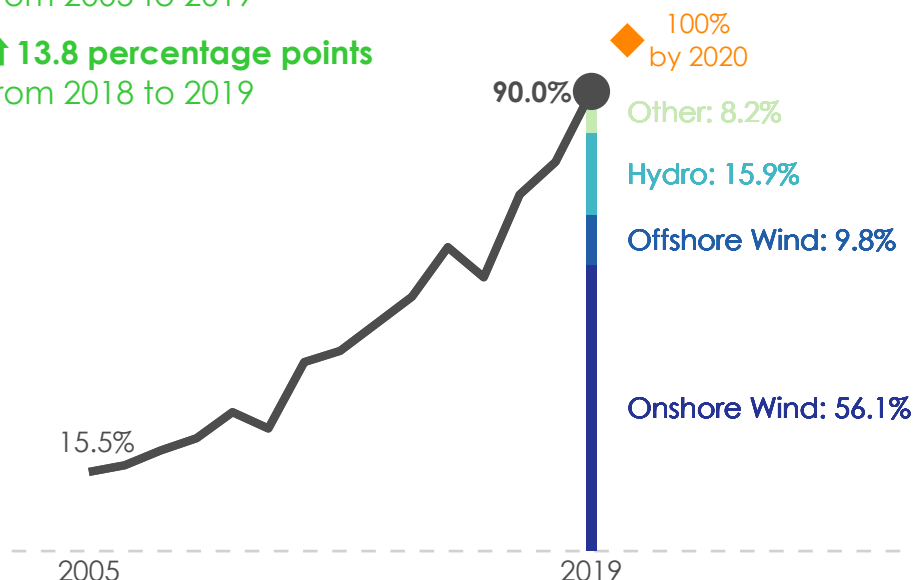
Scotland has a target to deliver the equivalent of **100%** of gross electricity consumption from renewables by **2020**.

Renewable electricity target

2005-2019

↑ 74.5 percentage points from 2005 to 2019

↑ 13.8 percentage points from 2018 to 2019



Record renewable electricity generation in 2019 meant that Scotland's **net exports** of electricity was its highest to date at **15.9 TWh**.

The majority of Scotland's renewable electricity generation continues to come from **wind (22.4 TWh)**.

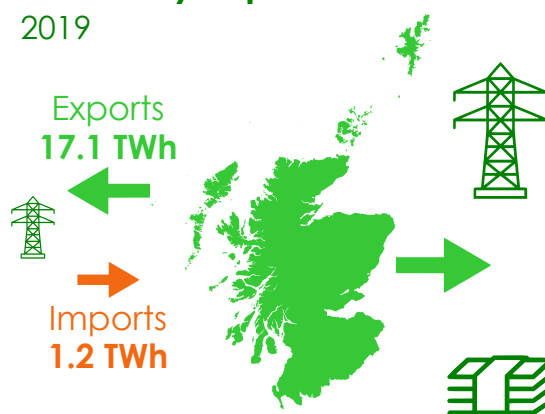
Offshore wind grew substantially in **2019; 3.3 TWh** was generated last year via offshore wind, up from **1.3 TWh** in 2018.

Despite rapid growth in renewable electricity generation, **capacity** remains at **11.8 GW** in **December 2019**, unchanged since June.

13.0 GW of projects are in the **pipeline** for development. **1.2 GW** on these are **under construction**, mainly **offshore wind**

Electricity Exports

2019

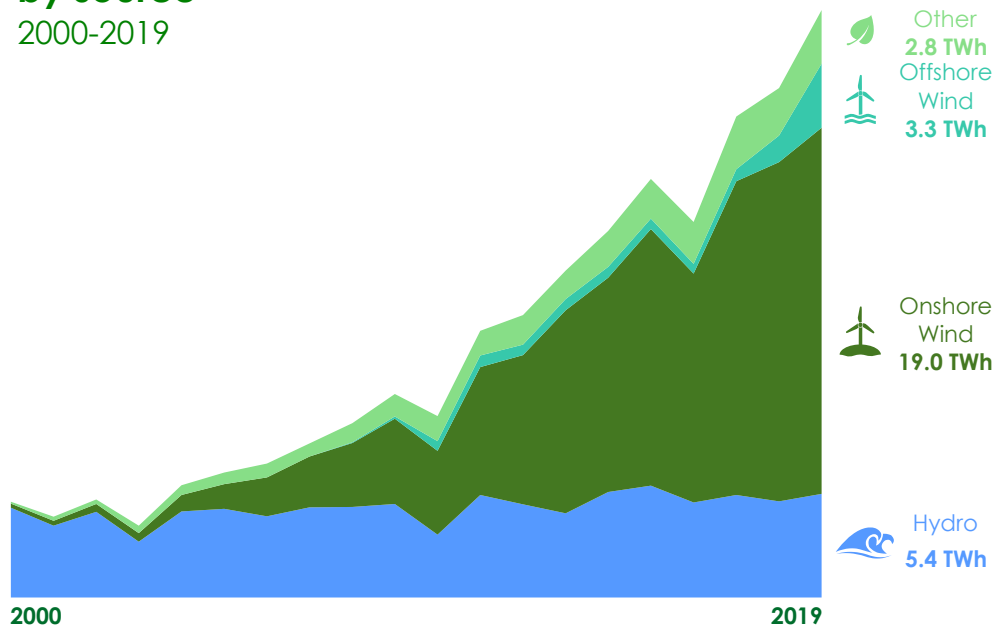


In 2019, there was a **net export** of **15.9 TWh** of electricity.

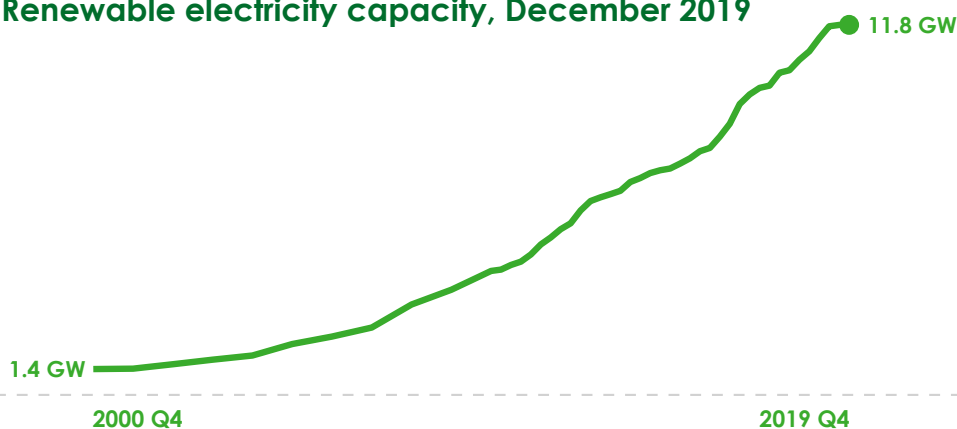
This had an estimated **wholesale market value** of **£0.74 billion**

Renewable electricity generation by source

2000-2019



Renewable electricity capacity, December 2019



Pipeline Capacity - December 2019



Sources Electricity imports and exports: <https://scotland.shinyapps.io/Energy/?Section=SystemSecurity&Chart=ElecImportsExports>

Renewable electricity generation: <https://scotland.shinyapps.io/Energy/?Section=RenLowCarbon&Subsection=RenElec&Chart=RenElecGen>

Renewable electricity capacity: <https://scotland.shinyapps.io/Energy/?Section=RenLowCarbon&Subsection=RenElec&Chart=RenElecCapacity>