BEYOND FOSSIL FUELS

Q3 2025 report on coal, fossil gas and European power trends

October 2025

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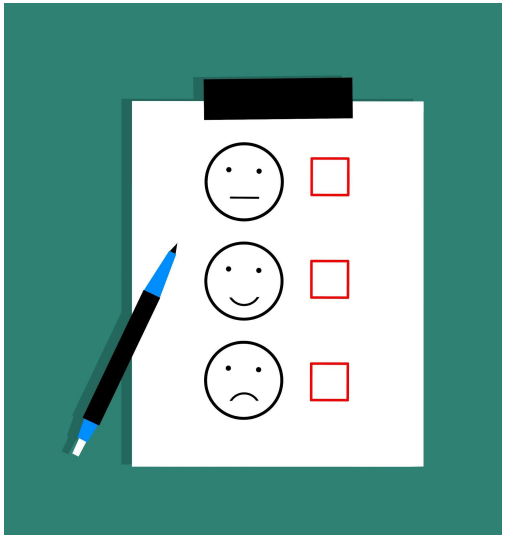


Key facts of Q3 2025: Wind and solar are pushing coal away, but gas stands its ground

Wind

After the wind drought in the first months of 2025, **wind power is again on a rising trend** (+7 TWh, +6% year-on-year), for the second consecutive quarter. Wind generation even reached an **all-time record for a third quarter**. But the increase in Q2 and Q3 will not be be enough to make up for the poor start of the year. For the first time ever, **annual wind generation in Europe is expected to fall below its previous year's level.**

Solar

Solar power once again made its **best third quarter** ever, and its second best quarter of all time, only second to Q2 2025. Solar generation **increased by 17% y-o-y (+21 TWh)**, despite July's below-average solar irradiation.
All in all, **solar met 18% of Europe's demand in Q3 2025.**

Coal

For the second quarter in a row, **coal generation dropped in Europe** (-8 TWh, -8%), amid better wind production. Poland again led the decrease cutting 1.8 TWh of coal generation (-9% y-o-y), and **Spain and Slovenia ran almost coal-free** during the quarter.
Conversely, the Netherlands, Serbia and, to a lower extent, Italy, increased their coal generation.

Gas

For the fourth consecutive quarter, gas generation increased in Europe, though at a slower pace **(**+6 TWh, +4% y-o-y). The increase was partially offset by **Italy, which cut 4.6 TWh** of gas generation amid lower electricity demand.
Nonetheless, 14 countries increased their gas generation, **and gas accounted for 19% of Europe's demand**. This underscores that **reliance on gas remains strong, with no clear signs of structural decline yet.**

As 2025 draws to a close, three clear lessons emerge for European leaders in 2026.

With three-quarters of the year now behind us, key lessons are already coming into focus - challenges that European leaders must urgently address in 2026 to stay on track for a clean power future.

1. Fix wind! 2025 may go down as the first year in European history where wind power generation declines compared to the previous year. Onshore wind is stalling and offshore wind is expanding far too slowly, with the risk that the European wind industry ultimately disappear leaving Europe with little alternatives to coal and gas.

2. Ensure sustainable demand rise. While Big Tech is increasing pressure on European countries to welcome fast expansion of gas supplied data centers, the example of Ireland comes as a reality check: rapid demand rise for data centers outside of sustainable limits quickly leads to derailing a whole country from its transition to clean power and clean economy.

3. Time to move flexibility from the margins to the mainstream. Germany, Italy, and the UK have made strides in rolling out batteries, but clean flexibility - including demand-side solutions - remains the tail of the power sector transition despite its clear role to reduce reliance on imported, costly fossil gas.

Key facts of Q3 2025: Wind and solar are pushing coal away, but gas stands its ground

Hydro

2025 has been a weak year for hydro power so far and showed little improvement in Q3. **Hydro generation remained below average in almost all countries**, and **decreased by -9% y-o-y (-13 TWh)** overall in Europe.

Coal exit status

Europe's left-to-go coal power capacity stands at 86 GW, with no change since the previous quarter and no announcements of retirement in Q3 2025. The decisions on closures that would guarantee a coal phase out in peninsular Spain and mainland Italy this year are still pending.

Demand

Demand continued to grow slowly in Europe (+0.4%, +3 TWh y-o-y), for the eighth consecutive quarter, though unevenly across countries. **Italy saw the largest decrease** (-4.9 TWh) due to a mild summer and lower industrial electricity demand, while **Türkiye posted the biggest increase** (+4.5 TWh) driven by higher cooling needs.

Gas tracker status

As of Q3 2025, **Europe's installed gas capacity stands at 252 GW**, an increase of 0.6 GW compared to Q2 2025. The retired and planned-to-retire capacity is 6.1 GW. Planned projects (i.e., before construction) now add up to 60.4 GW, an increase of 8.5 GW compared to the previous quarter, part of which relates to an update of plant status definition.

Zoom in on... Ireland

Ireland's **energy transition**, that was fast-tracking at the beginning of the century, has **been losing momentum since 2020.**

Onshore wind is not deployed as fast as it used to. **Offshore** projects, which are facing delays linked to permitting and policy uncertainty, remain distant, and clean flexibility solutions are still insufficient to relieve grid congestion.

Meanwhile, **electricity demand is dramatically increasing,** primarily driven by the rapid expansion of **data centres**.

Solar power is experiencing rapid growth, but on its own it cannot meet the growing demand.

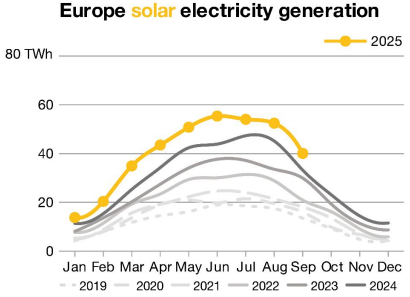
As a result, **the decarbonisation of the power sector and of the overall Irish economy is slowing**. Without a renewed policy push, faster project delivery and sustainable limits applied to data centre demand, Ireland's early transition gains risk being reversed.

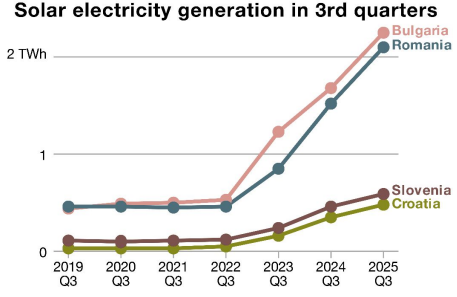
Topics covered - Q3 2025

1. Europe's electricity generation
2. Zoom in on :
    a. Battery storage deployment in the UK, Germany and Italy
    b. Ireland power sector transition
3. Europe's coal exit status
4. Europe's gas power plant tracker status
5. Beyond Fossil Fuels' and members' publications

***New**: access and explore the electricity data for this and previous quarters here on Google Sheet.*

Electricity generation in Europe in Q3 2025: Solar and wind continue to gain ground on fossil fuels





Solar power maintains its steady rise in Europe

Solar continued what seems to be an unstoppable growth across Europe, up by 16% (+21 TWh) year-on-year. It was the slowest growth since Q1 2023, partly due to **below-average solar conditions in July** and partly August. Still, Q3 2025 was the second-best quarter on record after Q2 2025. Ember noted that EU countries produced more solar electricity from January to September than in all of 2024.

Of all countries, **Türkiye saw the largest absolute increase** in solar generation this quarter (+44%, +3.8 TWh y-o-y).

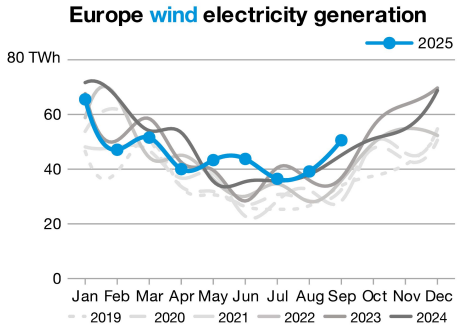
Since Q3 2022, **Bulgaria, Romania, Slovenia and Croatia** have seen a major shift in their solar generation. In just three years, it rose ten-fold in Croatia (from 0.05 in Q3 2022 to 0.5 TWh in Q3 2025), and almost five-fold in Bulgaria (0.5 to 2.3 TWh), Romania (0.4 to 2.1 TWh), and Slovenia (0.1 to 0.6 TWh).

Solar transition is also very visible in **Central Europe**: Ember reported that annual solar generation growth in Czechia, Hungary, Poland, Slovakia is twice the EU average since 2019.

Wind power rebounded in Q3, but won't save the year

After a weak first half of 2025, Europe's wind generation is back to its **upward trend (+7 TWh, +6% y-o-y).** Performance varied: in Central and Northern Europe and the UK, wind generation was sluggish in July and August, but September made up for it. Germany's wind generation increased by 2.3 TWh (+10% y-o-y), the UK by 1 TWh (+6% y-o-y) and **Türkiye led** with +2.5TWh (+26% y-o-y). Italy recovered from a weak Q3 last year (+0.9 TWh, +25% y-o-y). In September, UK solar and wind together produced over 50% of the country's electricity for the first time, as Ember pointed out. In contrast, Sweden's wind generation fell by 1 TWh in Q3 (-13% y-o-y) and Spain by 0.8 % (-6% y-o-y).

Although wind broke its record for Q3 this year, Europe's wind generation reached only 417 TWh for the first three quarters of 2025, well below 2024 levels (435 TWh). This winter wind speed are expected to be slightly below average, and WindEurope warned that current pace of capacity additions is insufficient to meet the EU's 2030 objective of 425 GW.



Together, solar and wind continued to expand in the Europe, meeting 33% of electricity demand in Q3 2025, outpacing fossil fuels, which covered 29%. However, for the first time ever, annual wind generation is expected to fall below its previous year's level.

Source: BFF elaboration based on Ember monthly electricity data (more information on the data in the Annex)

Electricity generation in Europe in Q3 2025: Hydro generation low as electricity demand holds steady

Electricity demand is overall stable in Europe

In Q3 2025, **Europe's electricity demand increased for the eighth consecutive quarter, but marginally** (+0.4% y-o-y). In the EU, it even slightly declined (-0.3%), for the first time in two years. This modest overall demand growth in Europe reflects competing forces: ongoing electrification and new usage (as noted for Austria by its TSO) on one hand, and somewhat sluggish economic activity (as highlighted by the IEA, and for instance for Belgium) on the other hand.

July was the fourth-warmest July on record, but cooler than July 2024, reducing cooling demand in southern Europe. Electricity demand fell in Italy, Greece and the western Balkans, though it peaked during the late-July heatwave.

Italy's demand alone decreased by -1.8 TWh y-o-y in July and -3 TWh in August, amid mild temperatures and lower industrial demand. **Türkiye, by contrast, saw strong demand increase** (+4.5TWh, +5% y-o-y over the quarter). Ember analyses that this is driven by **cooling needs**. Cooling now accounts for 8% of Türkiye's summer electricity consumption

The Nordic region's demand rose by 2.1 TWh (+2.5% y-o-y), primarily due to **data centers**, while industry and electrification also contribute, according to a 2024 Montel study. Montel forecasts continued demand growth in the Nordic region.

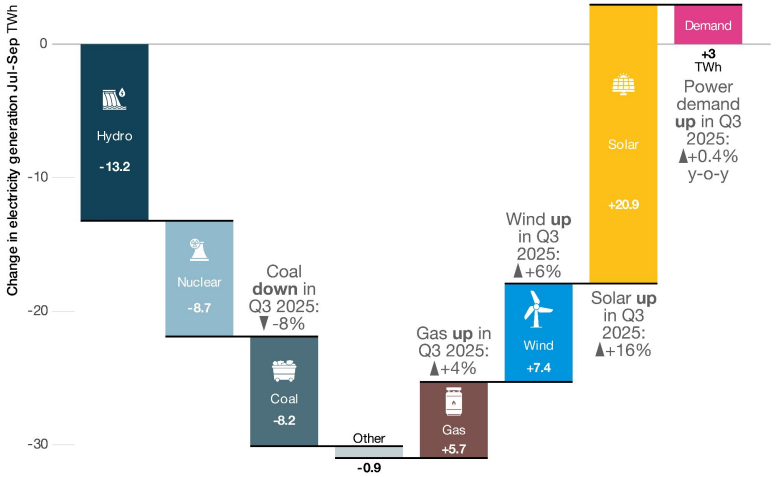
Weather continues to weigh on hydro generation

Hydro generation declined in Europe (-13 TWh, -9% y-o-y) **for the fourth consecutive quarter**. Summer 2025 was predominantly drier-than-average in almost all Europe and did not bring relief to the already exceptionally dry winter and spring 2025, leaving tight water reserves. Despite increased rainfall in September, the JRC reported mid-September, that several parts of Europe continue to *"face drought conditions"*.

The Alpine countries (**France, Italy, Switzerland and Austria) produced 11 TWh less hydro power, and Türkiye 3 TWh less** than in Q3 2024. The year-on-year difference is all the more striking that 2024 was favorable to hydro power. Only Sweden notably increased hydro generation in Q3 (+2.6 TWh, +19%), recovering from a weaker 2024.

EUROPE: year-on-year change in electricity generation by fuel in the third quarter

Jul 2025 — Sep 2025 versus Jul 2024 — Sep 2024



Source: BFF elaboration based on Ember monthly electricity data (more information on the data in the Annex)
The category "Other" includes bioenergy, other renewables, other fossil fuels and net imports.

Nuclear generation weakened by incidents and weather events

Nuclear generation decreased for the second consecutive quarter (-5%, -8.7 TWh y-o-y), principally due to the UK (-3 TWh, related to incidents and maintenance), Switzerland (-2.8 TWh, probably due to the outage in Gösgen) and Belgium (-2.8 TWh, with Doel 1 permanently shut down in February). France's nuclear fleet did not run to full speed because of high temperature of rivers in southern France.

Electricity generation in Europe in Q3 2025: Coal declines, gas keeps up

Coal generation fell almost everywhere in Europe

Almost all European countries **cut coal generation in Q3 2025, totaling -8 TWh** (-8% y-o-y). **Poland championed the decline**, removing 1.8 TWh (-9% y-o-y) and coal accounted for less than half of its electricity for the second consecutive quarter. Meanwhile, **Türkiye's coal generation fell** for the first time in six quarters, by 1.2 TWh (-4% y-o-y). Germany also decreased it coal generation by 1.2 TWh (-6% y-o-y).

Spain was nearly coal-free in the last quarter: coal contributed just 0.03% of the demand, by far the lowest ever, hinting that Spain is ready to **phase out coal** on its mainland by the end of the year. **Slovenia** has similarly been virtually coal-free for the past five months, supported by solar power.

Only three countries **increased coal generation**: the **Netherlands** (+0.7 TWh, +80% y-o-y), **Serbia** (+0.6 TWh, +13%) and **Italy** (0.2 TWh, +25%). In the Netherlands, coal's share increased from 3% (Q3 2024) to 5.2% (Q3 2025). Netherlands have greatly reduced coal generation from 39 TWh in 2015 to 8 TWh in 2024 but expanding renewable energy and green flexibility is needed to permanently scrap coal.

Gas generation continues to rise, but at a lower pace

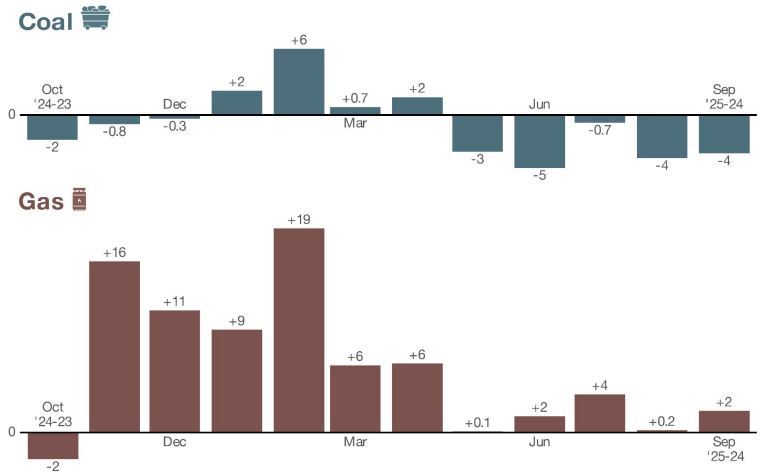
Gas generation rose for the fourth quarter in a row (+6 TWh, +4% y-o-y), though the pace of growth eased down compared to Q1 and Q2. In fact, August marked the first monthly decline in EU gas generation since October 2024.

This slower growth in gas generation coincides with the **return of wind power**to normal levels. But **Italy** also contributed largely to limiting the increase: **its gas generation fell by 4.6 TWh y-o-y**, closely matching the 4.9 TWh drop in electricity demand.

Conversely, **14 countries increased their gas generation** in the last quarter. The top contributors were Germany (+3.5 TWh, +25% y-o-y), Spain (+2.1 TWh, +19% y-o-y), Türkiye (+1.9 TWh, +9% y-o-y), the UK (+1.5 TWh, +11% y-o-y), Portugal (+1 TWh, +86% y-o-y) and the Netherlands (+0.8 TWh, +9% y-o-y). In Spain and Portugal, this partly reflects a voluntary increase in gas used for grid stabilisation, as analysed by Ember for Spain.

EUROPE: year-on-year change in electricity generation by fuel in the last 12 months (TWh)

Oct 2024 — Sep 2025 versus Oct 2023 — Sep 2024



Source: BFF elaboration based on Ember monthly electricity data (more information on the data in the Annex)

Coal fell, gas increased… and fossil fuels slightly decreased overall, albeit slowly

Despite lower hydro generation and slightly higher demand, **Europe's fossil fuel generation slightly fell in Q3 2025**. Added wind and solar generation contributed to offset the shortfall, and fossil fuels generation was cut to 244 TWh (meeting 29% of the demand) down from 248 TWh in Q3 2024 (30% fo the demand), while wind and solar generation reached 273 TWh (33% of the demand).

Battery storage deployment in the UK, Germany and Italy

Europe needs more storage

Storage has been long-used in Europe, primarily through pumped storage hydropower. With the rise of wind and solar generation, both inherently variable across hours, days, and seasons, the **need for additional flexible storage is indisputable**, alongside demand flexibility and interconnections. Storage ensures that excess renewable energy is not wasted and can replace fossil fuels even during periods of lower renewable generation.

Batteries generally fall into two categories:

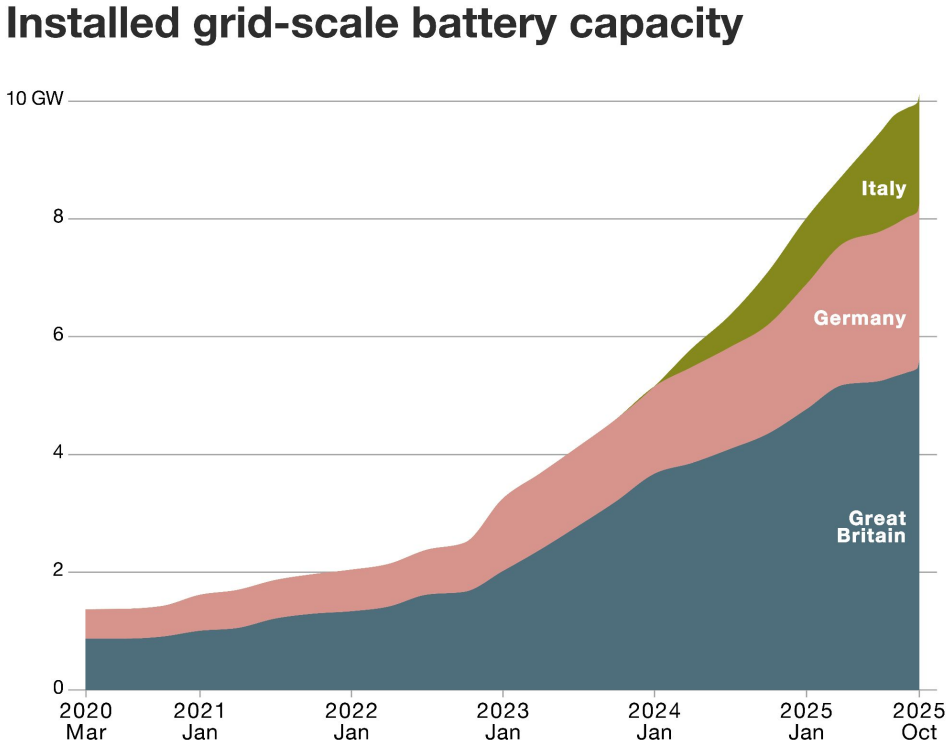
- Behind-the-meter batteries, installed by consumers or businesses for their own use,
- Grid-scale batteries, directly connected to the transmission operator's network to support the electric system.

In Europe, three countries are leading battery development

Battery storage has grown rapidly over the last 5 years. Yet, its development must accelerate to meet decarbonisation goals. The EU plan aims to add "*an additional 128GW/300GWh of electrochemical storage*" to European grids by 2030, compared to 2024.

In Europe, three countries stand out in battery development: **Great Britain, Germany and the UK**. **Since the beginning of the year, they have installed more than 2 GW of grid-scale battery capacity together.**

Data on battery storage, for utility scale and behind the meter capacities, are available on BFF Power Sector Metrics Dashboard, covering these three countries and others across Europe. BFF will continue to track and report on the evolution of battery capacity, to help monitor progress toward a fully decarbonised European power sector.



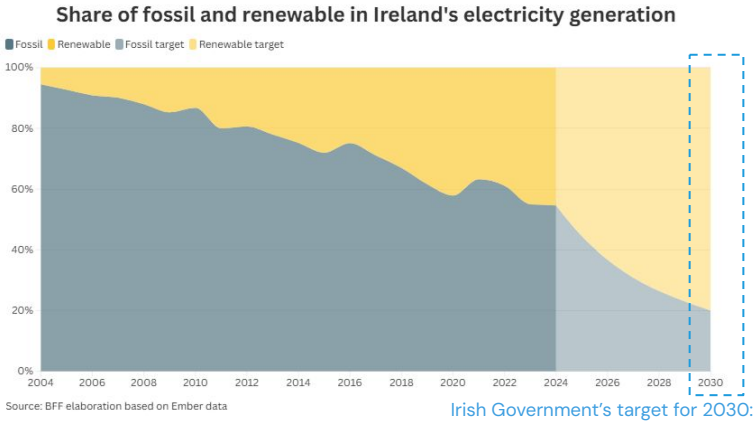
Zoom in on … Ireland, drifting from the green track 1/3

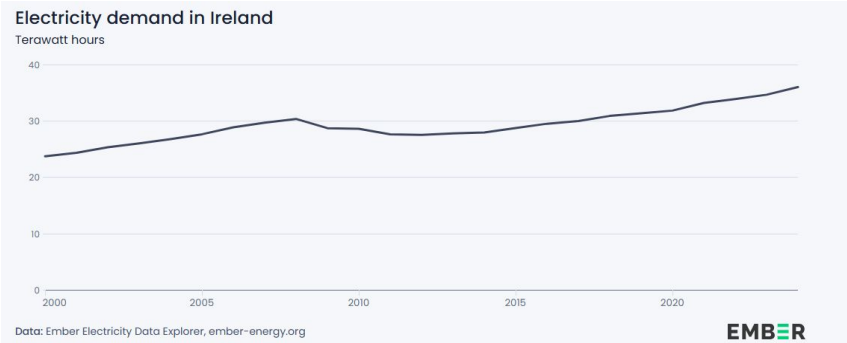
Ireland's energy transition was on the right track, driven by its long term expansion of wind and more recently by the uptake in solar power, that led to its coal phase-out

20 June 2025 marked an historic moment for Ireland: the closure of Moneypoint's coal operations made Ireland the 15th **coal-free country in Europe**.

This was made possible largely by the **rapid growth of wind energy,** during the first two decades of the century and the more recent spike of solar PV. Subsequently, from 2004 to 2024, the share of fossil fuels in electricity generation fell from 94% to 55%. Over the same period, the share of wind and solar jumped from just 3% to 41%.

Ireland still has **significant work ahead to reach its goal of generating 80% of electricity from renewable sources by 2030 and still doesn't have a plan to fully decarbonise its power sector** (for details, see BFF's government commitment tracker).





But Ireland's electricity demand is rising fast, pulled by power-hungry data centers

Electricity demand in Ireland has been rising steadily since 2012. **While population growth and electrification play a role - heat-pumps now represent 3% of electricity demand and EVs 1%** (source: Eirgrid) **- the main driver is the growing number of data centers, which are responsible for 88% of the demand increase since 2015.** According to the Irish Central Statistics Office, **data centers used 21% of Ireland's electricity demand in 2023**, a dramatic rise from 5% in 2015. **Their consumption jumped by 20% between 2022 and 2023 alone**. For the first time in 2023, **data centers used more electricity than all Irish homes combined**, and demand will keep rising as more data centers are built (for more information on how data centres could throw Europe's energy transition off course, see BFF's report)

Overall the Irish system operator Eirgrid expects electricity demand to grow 45% between 2023 and 2034.

Zoom in on … Ireland, drifting from the green track 2/3

Yet, despite growing electricity demand, wind generation is flatlining

The period 2004–2020 saw strong growth in wind generation, particularly between 2016 and 2020, with an average increase of 1.35 TWh per year. While 2021 was an unusually low year for wind, the subsequent years have shown a concerning slowdown in wind generation, with current levels barely exceeding those of 2020. Worryingly, **the growth in data center power demand is outpacing the growth in wind generation**, while wind capacity deployment is slower than pre-pandemic.

Wind Energy Ireland largely attributes the stalling of wind power to "*wind farms being shut down because the electricity grid is not strong enough*". Montel reports that 9% of available wind power was curtailed in the first half of 2025, and curtailment is slightly on the rise.

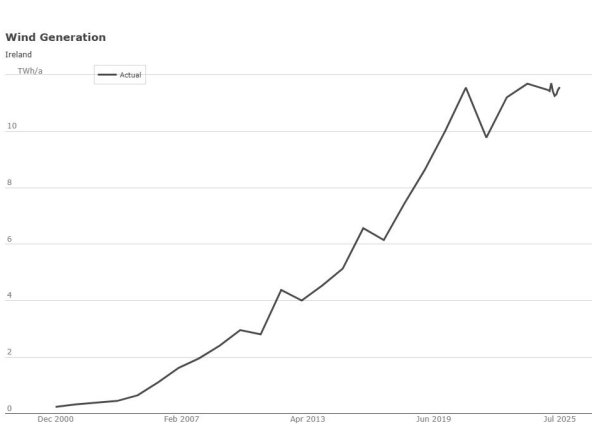
Solar PV and offshore wind offer opportunities, but they are developing too slowly to meet Ireland's decarbonization goals

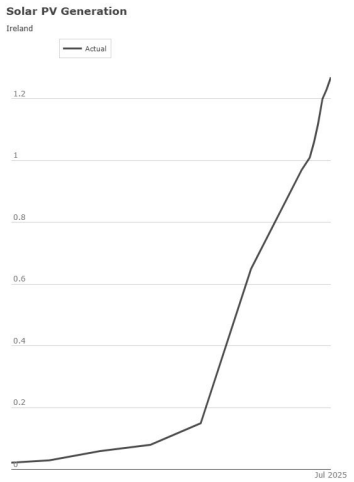
Currently, most of Ireland's renewable energy comes from onshore wind.

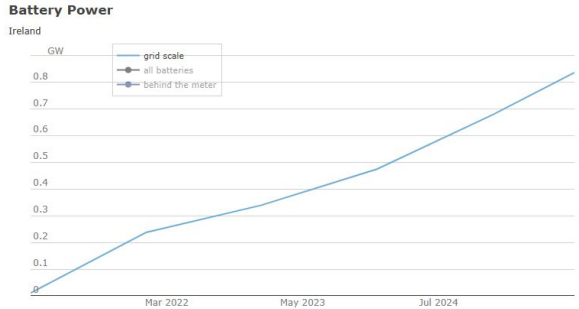
Since 2022, Ireland has begun **developing solar power, which is now showing strong growth**: Ireland quadrupled its solar capacity between 2022 and 2024, from 0.34 GW to 1.34 GW. This development is welcome and helps diversify renewable generation and make it more accessible to households and communities. Still, it comes rather late compared to most European countries, and **the current share of solar generation (4% in the last 12 months) remains minor.**

The Irish Government also **plans to develop offshore wind capacity** to 5 GW by 2030, 20 GW by 2040 and 37 GW by 2050. Although these targets are ambitious, Wind Europe predicts that **only 1 GW** could be operational by 2030, as "*offshore wind development is held back by various permitting delays and policy uncertainty*".

Finally, grid-scale batteries are also emerging in Ireland and could increase five-fold, from 1 GW to 5 GW, by 2030.







*Those charts are extracted from the **BFF Power Sector Metrics Dashboard***

*This tool **tracks key metrics** to measure progress toward a coal-free (by 2030) and fossil-free, renewable-based power system (by 2035) across Europe.*

*This tool, **still in development**, is meant to support the BFF coalition in analysing trends, gaps and progress in the power sector, that will feed our strategic planning, communications and advocacy.*

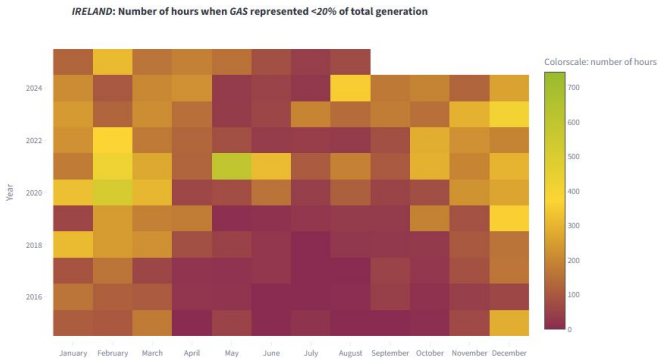
Source: BFF Power Sector Metrics Dashboard

Zoom in on … Ireland, drifting from the green track 3/3

To compensate for insufficient renewable development, Ireland plans to strengthen its fossil gas fleet

Since June 2024, Ireland has successfully kept its power system running without coal. Nonetheless, as shown in the heat map below, **gas remains an important part of Ireland's generation**, especially during summer months, when wind generation is lower.

Even more worrying, Ireland is moving towards more gas. The country has **1.3 GW gas in construction, and another 2.2 GW planned** (source: BFF gas plant tracker). Bloomberg reports that Ireland recently "*set to green-light policies that allow data centers to use fossil fuels to power their operations*", opening the door for even **more gas plants dedicated to powering data centers**.

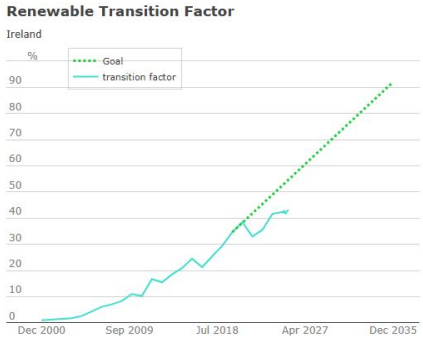


Source: BFF fossil fuel generation heat map

All in all, Ireland is not installing renewables fast enough nor setting sustainable limits to rising demand and is, therefore, derailing from clean power trajectory

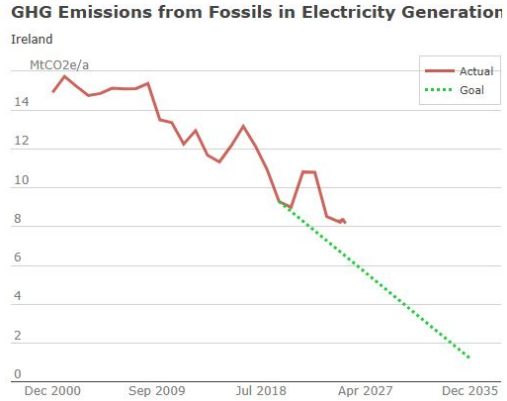
While Ireland's GHG emissions from electricity generation are decreasing, the pace is too slow to realistically achieve clean power system by 2035.

The installation rate of renewables cannot keep up with increased electricity demand, as shown below by the renewable transition factor.



The Renewable Transition Factor (RTF), a metrics tracked in the BFF Metrics Dashboard, tells how much of the electricity demand is met by wind and solar instead of fossil fuels. When the RTF is not growing, it means increasing renewable production only covers the additional demand.

Source: BFF Power Sector Metrics Dashboard



In conclusion, Ireland's early success in energy transition is now at risk. Renewable development has slowed and power-intensive data centers are expanding rapidly. The threat of filling the gaps with fossil gas plants is becoming a reality.

Unless Ireland turns swiftly its back to new gas and embraces again fast deployment of wind, solar and clean flexibility, its energy transition will fully derail, leading the country far away from its climate targets.

Europe coal plant countdown: Q3 2025 status

In **Italy**, the government plans to move **Brindisi Sud** (1320 MW) and **Civitavecchia** (1980 MW) to cold reserve instead of shutting them down completely, as originally planned. However, mainland Italy has been de facto coal-free since the beginning of the year because these plants have not been operating.

Spain registered 0 MWh of coal-fired generation in August. However, tangible measures to confirm the closure of the three remaining mainland coal plants this year are still pending. This includes the **Abono** unit I (360 MW), for which the government's shutdown decision is expected, after unit II was converted to gas on July 29.

Some delays in the closure of coal plants were announced in **Poland**, most of which are related to capacity payment auctions held in September. The 306 MW **Siersza** coal plant will remain online in 2026 after securing capacity payments. The plant was originally supposed to close in 2025, but the owner, Tauron, plans to seek further payments until 2028 - the final year such support is available - suggesting the plant could operate until then. Similarly, four units of the **Kozienice** plant that were scheduled to close at the end of 2025 will receive capacity payments and remain online through 2026. Two units of the **Dolna Odra** plant will close as planned this year, but two others will remain online until August 2026. Their closure is linked to the construction of a new fossil gas-fired unit on the site.

In **Türkiye** – where Afşin-Elbistan A coal power plant project (with a proposed capacity of 688 MW) is the only one remaining, and where there is an ongoing litigation, the Ministry of Energy announced a bill to support domestic coal. It includes financial incentives for new coal power units.

As planned, one coal power plant in Finland was shut down during the last quarter, and converted to biomass. There was no change to the countdown of coal power plants in Q3.

New Q3 retirement announcements 0	Retirements in Q3 +1	New coal projects (change) 0
	Announced to retire, now retired: • **FI Martinlaakso** (80 MW)	

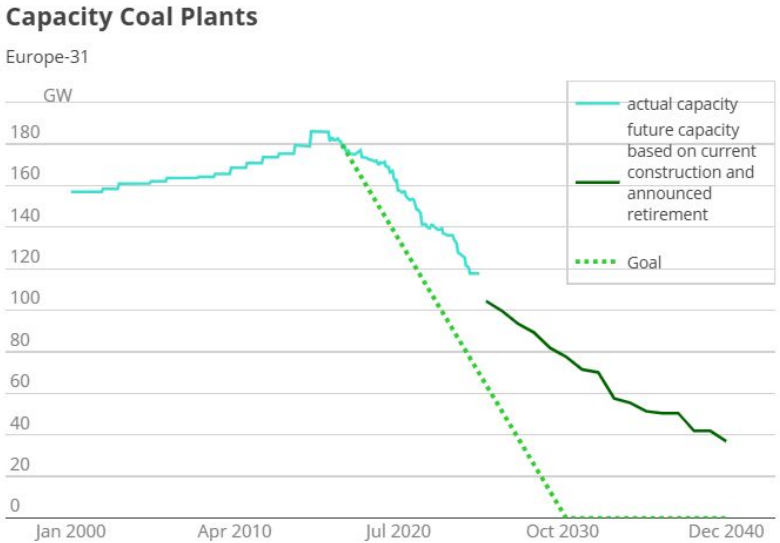
Database update note: 2024 ETS emissions have now been integrated into Beyond Fossil Fuels coal database.

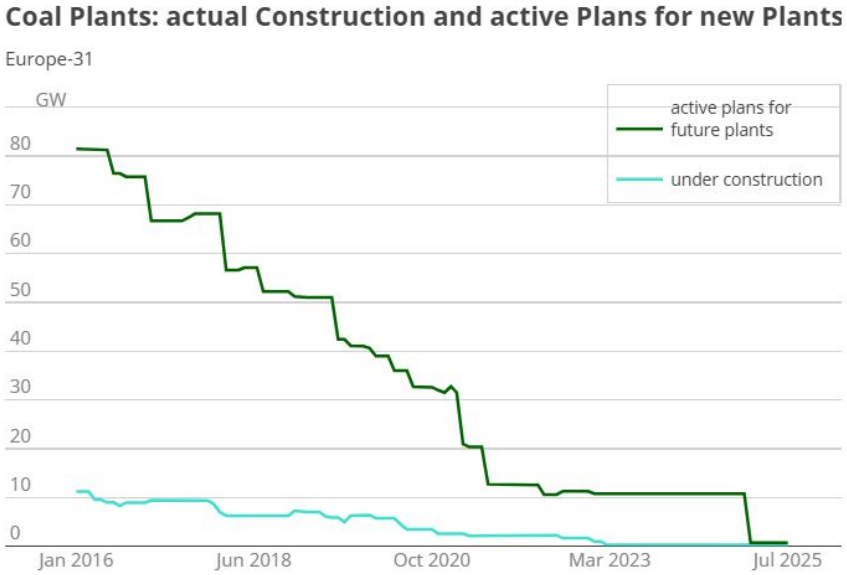
Source: Beyond Fossil Fuels coal database; status: October 2025

The phase out of coal in Europe: a look back at changes in coal capacity and coal projects since 2016

From the beginning of 2016 to Q3 2025, **Europe's operating coal-fired capacity decreased by 36%, from 195 GW to 124 GW**. In the EU and UK alone, capacity dropped by 45%, falling from 170 GW to 93 GW. A third of the 124 GW currently operating across Europe (38 GW) will retire by 2030. The remaining 86 GW is either scheduled to retire after 2030 or does not yet have a retirement date. Three-quarters of this remaining capacity is concentrated in three countries: Türkiye (22 GW), Poland (21 GW) and Germany (21 GW).

Although there is still a long way to go before all coal plants in Europe are closed, the progress that has already been made is momentous. **From 195 GW of operational plants at the beginning of the campaign with virtually no retirement dates, only 86 GW with no or post-2030 retirement dates remain today** – a 56% reduction.





At the beginning of 2016, a total of 88 GW of new coal power units were planned across Europe, spread out over 104 projects, most of which were located in Türkiye. Since then, only three projects remain, amounting to 1.7 GW – a 98% decrease. Two are located in Bosnia and Herzegovina: Gacko (350 MW) and Ugljevik-3 (two 350 MW units). The last project is located in Türkiye: Afşin-Elbistan A (two 344 MW units).

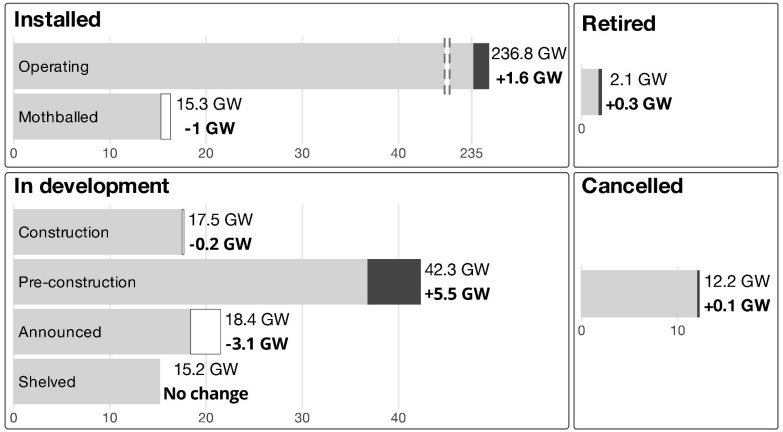
Source of both charts: BFF Power Sector Metrics Dashboard and Beyond Fossil Fuels coal database. Europe-31 refers to the EU, Türkiye and the UK (plus Norway and Switzerland, both coal-free). The Western Balkans are not included on the chart.

Europe gas plant tracker: Q3 2025 status

From now on, plant statuses will be further separated into operating and mothballed (previously "installed") and announced and pre-construction (previously "planned"), to align with units' statuses. This change in methodology impacts the gas plant counts, though minimally. A plant's status is now determined according to the following order of priority: operating; construction; pre-construction; announced; shelved; mothballed (only if all of a plant's units are mothballed); cancelled; retired (only if all of a plant's units are retired).

Capacity of gas power plant by status

Quarterly changes in Q3 2025 are shown as either increases or decreases
Note: the operating capacity bar uses a scale break.



Source: Beyond Fossil Fuels gas database; status: October 2025

As of Q3 2025, the installed gas capacity in Europe stands at 252.1 GW, an increase of 640 MW compared to Q2 2025. Capacities retired and planned to retire changed slightly adding up to 6.1 GW, with 16 plants (+1 plant), 10 of which have a retirement date before 2035. Planned projects now consist of 99 plants (60.4 GW), an increase of 7 plants under the new plant status definition (from previously 92 plants, or 87 under the former plant status definition).

Notable changes in Q3 2025:

Cancellations, retirements and retirement announcements

- Hagen-Kabel power station (Germany, 247 MW) retired in Q1 2025.
- Morava power station (Serbia, 120 MW) is deemed as cancelled due to no updates

Commissioning

- Abono (Spain, 494 MW), Gek-Terna Komotini (Greece, 877 MW), Bydgoszcz (Poland, 53 MW), and Petromidia Refinery power stations (Romania, 80 MW) were commissioned.

***Projects** (new or expanded gas power plants)*

- Matra power station (Hungary, 540 MW) recently started construction. Additionally, new units at Elblag (Poland, 30 MW), Kirklareli (Türkiye, 890 MW), Deeside (UK, 49 MW), and Hanau (Germany, 31 MW) power stations had also already started construction.
- New projects announced include Câmpia Turzii (Romania, 150 MW), Turek (Poland, 164 MW), and Ursus power stations (Poland, 110 MW). New units announced at existing plants include two units at Pocerady (Czech Republic, 1 GW) and a CCGT unit at Chisinau Thermoelectric (Moldova, 250 MW).
- Three projects recently advanced to pre-construction: Keadby Hydrogen (UK, 900 MW), Ferrybridge-C (UK, 1.2 GW), and Rybnik II (Poland, 600 MW). Additionally, Lippendorf and Bergkamen power stations (Germany, 1.8 GW total), that advanced to pre-construction in previous quarters, have now been included.
- Projects across Germany (2 GW), Ireland (350 MW), and Moldova (55 MW) that entered planning stages in previous quarters have been added to the database.
- In Poland, six projects totaling over 2.5 GW secured 17-year capacity market contracts in July: Gdansk, Grudziądz II, two units at Kozienice, Turek, and Ursus. All except Ursus have since announced their construction contractors.

Recent Beyond Fossil Fuels' and members' publications 1/2

Dead End Ahead: How gas plans are distracting the Western Balkans from the energy transition

The briefing by **CEE Bankwatch** and **Beyond Fossil Fuels** examines the **gas build-out plans of Western Balkan governments.**

With the region using the equivalent of just one percent of the EU's total gas consumption, they have the **opportunity to skip fossil gas** altogether and leapfrog straight to building a renewable energy system. But despite this advantage, almost every government in the region, except for Kosovo, is **planning a massive gas expansion.** It remains as high as two years ago despite increasing risks of failure or stranded assets.

Read the briefing

Banking on Business as Usual: the energy finance imbalance

Reclaim Finance and partners find that between 2021 and 2024, **the 65 biggest banks globally allocated to fossil fuels more than twice the amount of money allocated to sustainable power supply**. This is **nowhere near the 6:1 ratio** by 2030 indicated by the International Energy Agency (IEA) in its Net Zero Emissions scenario. This raises **serious doubts about the ability of banks to align their activity with a decarbonization trajectory**, and to reach net zero by 2050.

Read the briefing

> To access all Beyond Fossil Fuels' publications, visit our website

Recent Beyond Fossil Fuels' and members' publications 2/2

Decoupled: How Spain cut the link between gas and power prices using renewables

The report by **Ember** analyses the **influence of coal and gas generators on wholesale electricity prices in Spain** compared to the four other major gas power countries in EU+UK (Germany, Italy, United Kingdom, Netherlands) in the first half of 2025 and 2019.

The analysis discusses **Spain's reliance on gas for grid stabilisation** and the impact on renewable curtailment and costs.

Read the report

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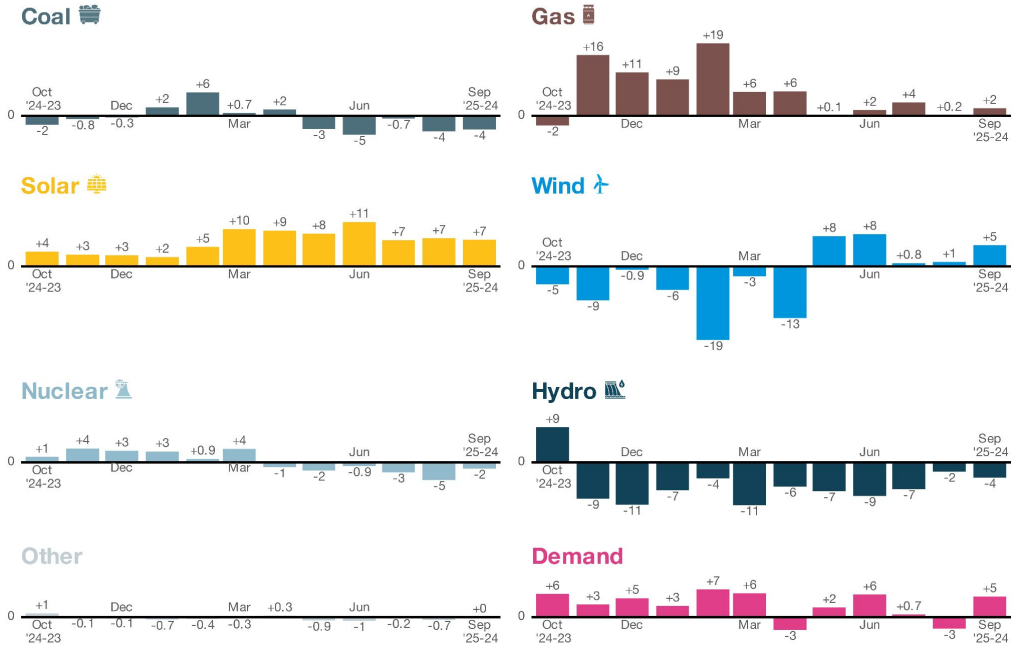
Annex – Europe monthly year-on-year changes in electricity generation

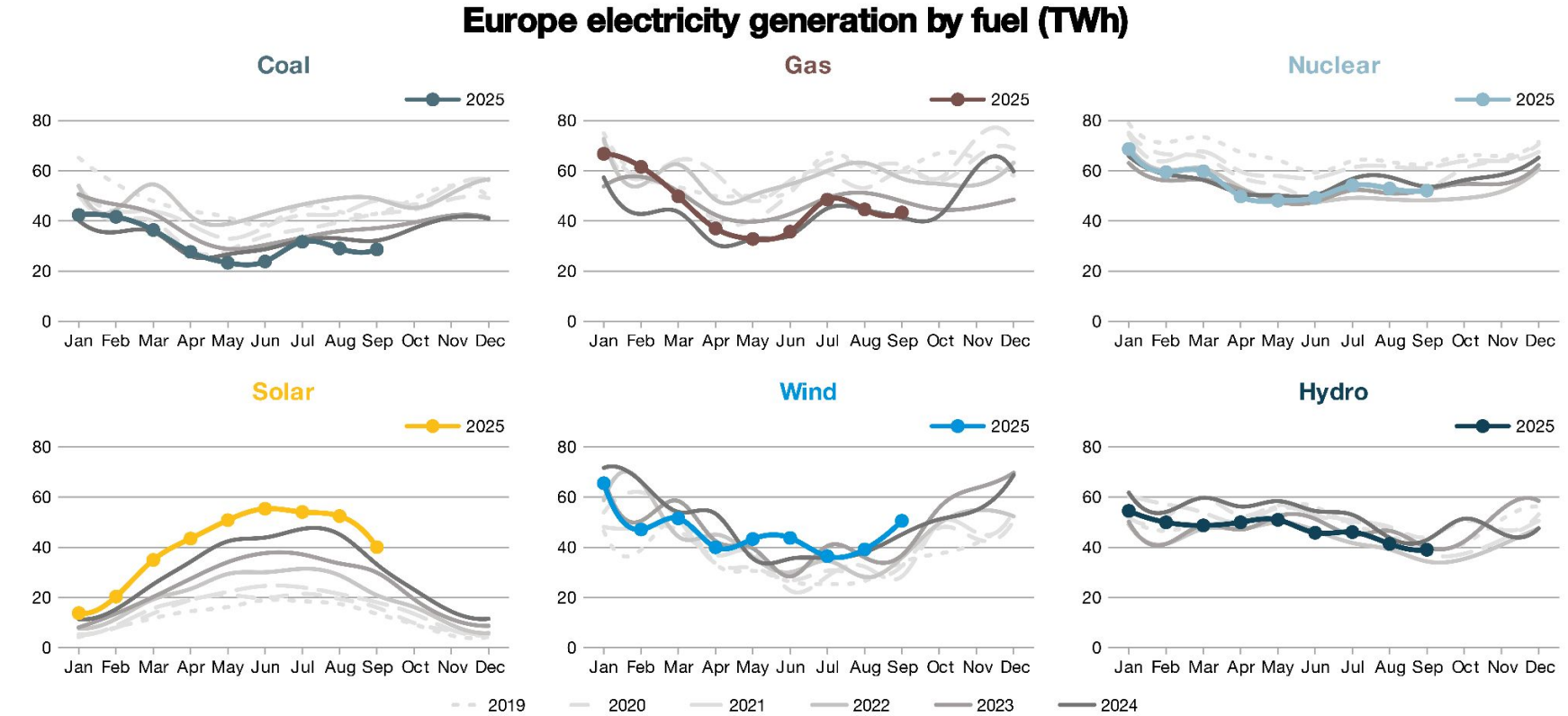
EUROPE: year-on-year change in electricity generation by fuel in the last 12 months (TWh)

Oct 2024 — Sep 2025 versus Oct 2023 — Sep 2024



Source: BFF elaboration based Ember monthly electricity data (more information on the data in Annex)
The category "Other" includes bioenergy, other renewables, other fossil fuels and net imports.

Annex – Europe monthly power generation in 2025 and previous years

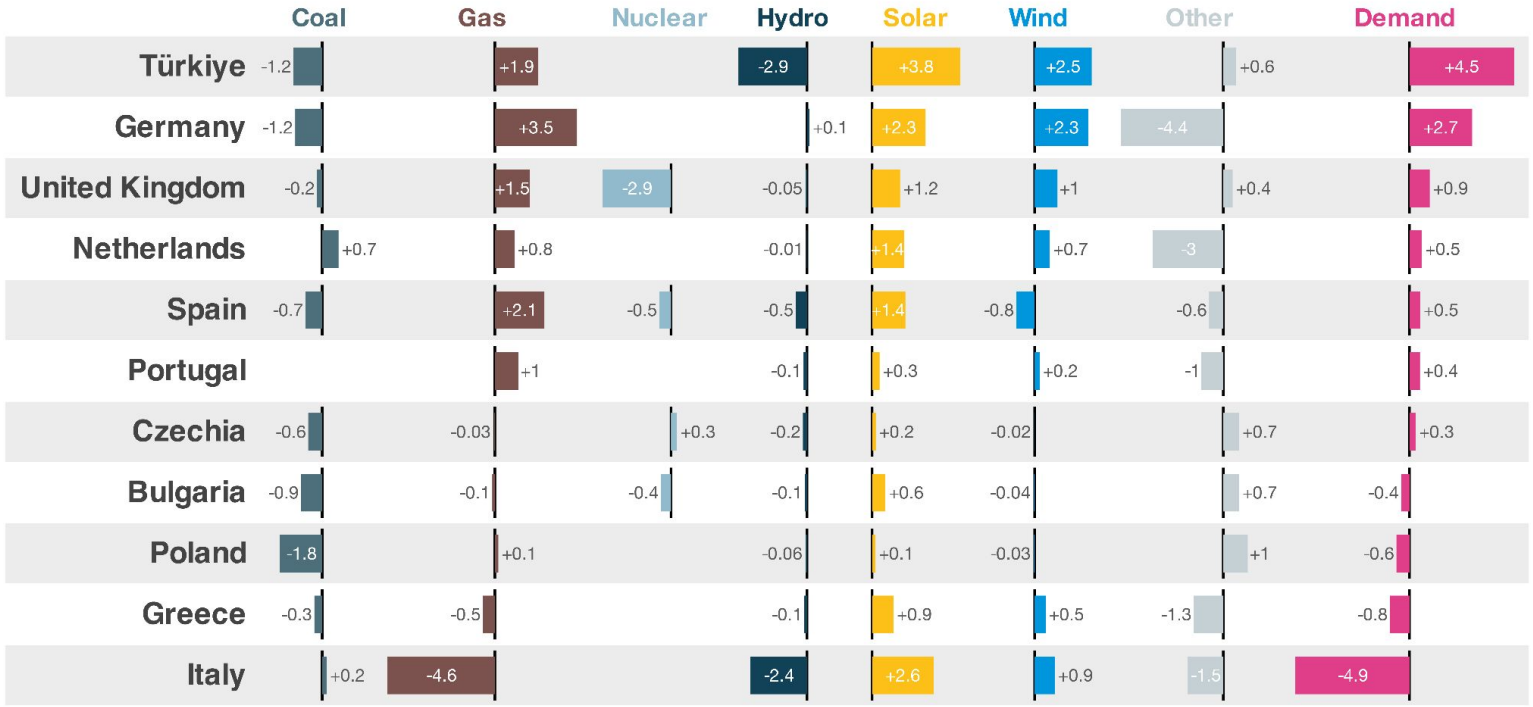


Source: BFF elaboration based Ember monthly electricity data (more information on the data in Annex)

Annex – Year-on-year changes in electricity generation in selected European countries, in Q3 2025

Third quarter year-on-year changes in electricity generation and and demand in selected countries (TWh)

Jul 2025 — Sep 2025 versus Jul 2024 — Sep 2024



Source: BFF elaboration based Ember monthly electricity data (more information on the data in Annex)
The category "Other" includes bioenergy, other renewables, other fossil fuels and net imports.

Annex – Summary tables of electricity generation and demand in Q3 2025

EUROPE: electricity generation and demand in Q3 2025

Electricity generation	Q3 2025 value (TWh)	Q3 2025 year-on-year change (TWh)	Q3 2025 year-on-year change (%)	Share of total generation in Q3 2025 (%)	Share of total generation in Q3 2024 (%)
Coal	89.4	-8.2	-8.4%	10.7%	11.7%
Gas	136.5	5.7	4.4%	16.3%	15.7%
Coal and gas	225.9	-2.5	-1.1%	27.0%	27.3%
Other fossil	17.9	-1.3	-7.0%	2.1%	2.3%
Fossil	243.7	-3.9	-1.6%	29.1%	29.6%
Wind	126.2	7.4	6.2%	15.1%	14.2%
Solar	146.6	20.9	16.6%	17.5%	15.0%
Wind and solar	272.8	28.3	11.6%	32.6%	29.3%
Hydro	126.5	-13.2	-9.5%	15.1%	16.7%
Bioenergy	29.5	-0.3	-0.9%	3.5%	3.6%
Other renewables	6.2	0.0	-0.2%	0.7%	0.8%
Nuclear	159.2	-8.7	-5.2%	19.0%	20.1%
Total generation	838.0	2.2	0.3%		

Electricity demand	Q3 2025 value (TWh)	Q3 2025 year-on-year change (TWh)	Q3 2025 year-on-year change (%)
Demand	835.5	3.0	0.4%

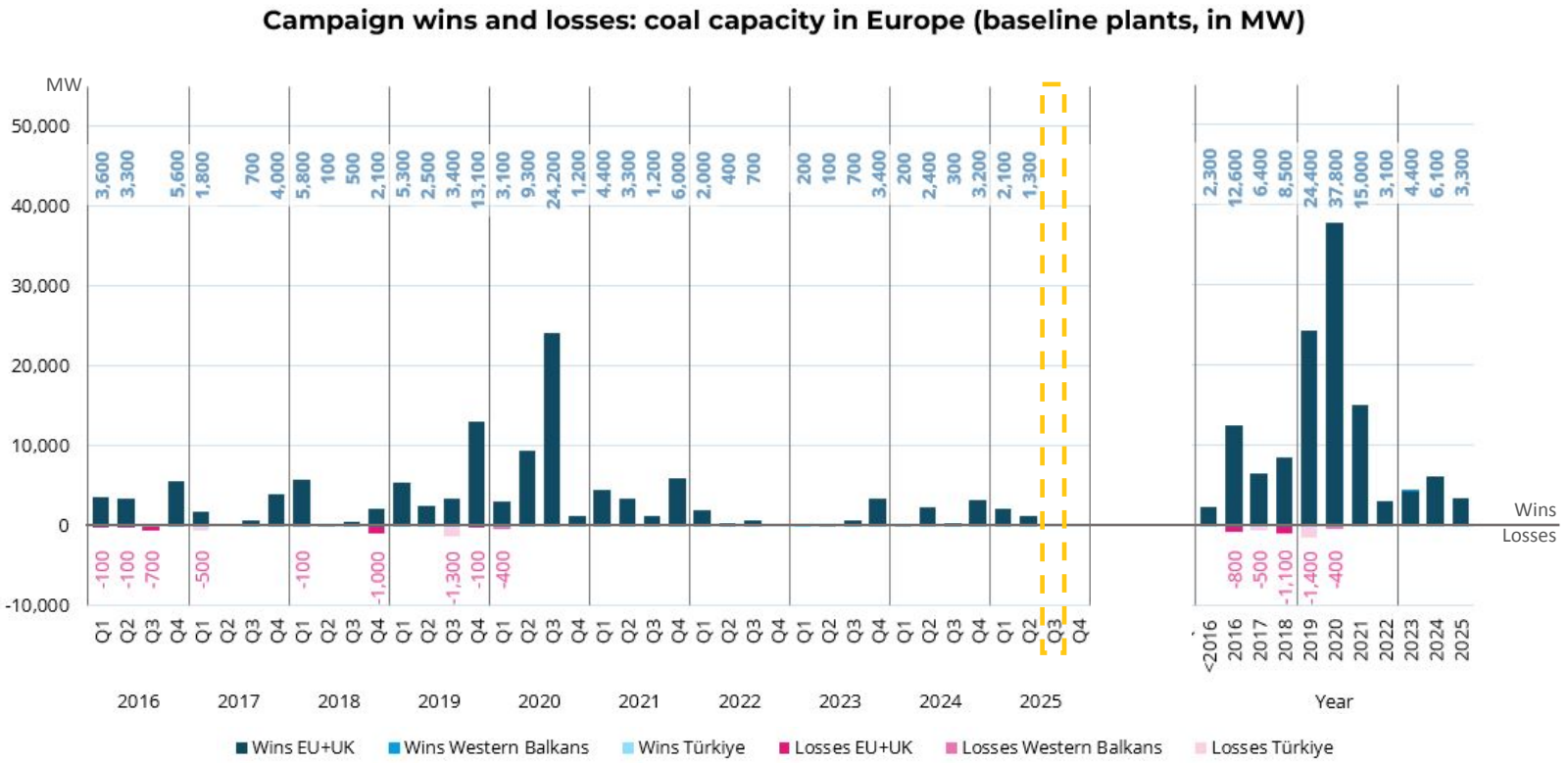
EU-27: electricity generation and demand in Q3 2025

Electricity generation	Q3 2025 value (TWh)	Q3 2025 year-on-year change (TWh)	Q3 2025 year-on-year change (%)	Share of total generation in Q3 2025 (%)	Share of total generation in 2024 (%)
Coal	49.0	-6.6	-11.9%	7.9%	9.0%
Gas	96.8	2.4	2.5%	15.5%	15.2%
Coal and gas	145.8	-4.2	-2.8%	23.4%	24.2%
Other fossil	15.2	-1.9	-11.2%	2.4%	2.8%
Fossil	161.1	-6.1	-3.7%	25.8%	27.0%
Wind	94.2	4.1	4.5%	15.1%	14.5%
Solar	124.9	15.3	13.9%	20.0%	17.7%
Wind and solar	219.1	19.4	9.7%	35.1%	32.2%
Hydro	69.2	-6.7	-8.9%	11.1%	12.2%
Bioenergy	22.3	-0.5	-2.3%	3.6%	3.7%
Other renewables	3.7	-0.1	-3.1%	0.6%	0.6%
Nuclear	148.1	-2.9	-2.0%	23.8%	24.3%
Total generation	623.4	2.9	0.5%		

Electricity demand	Q3 2025 value (TWh)	Q3 2025 year-on-year change (TWh)	Q3 2025 year-on-year change (%)
Demand	619.4	-1.9	-0.3%

Source: BFF elaboration based on Ember monthly electricity data (more information on the data in the Annex)

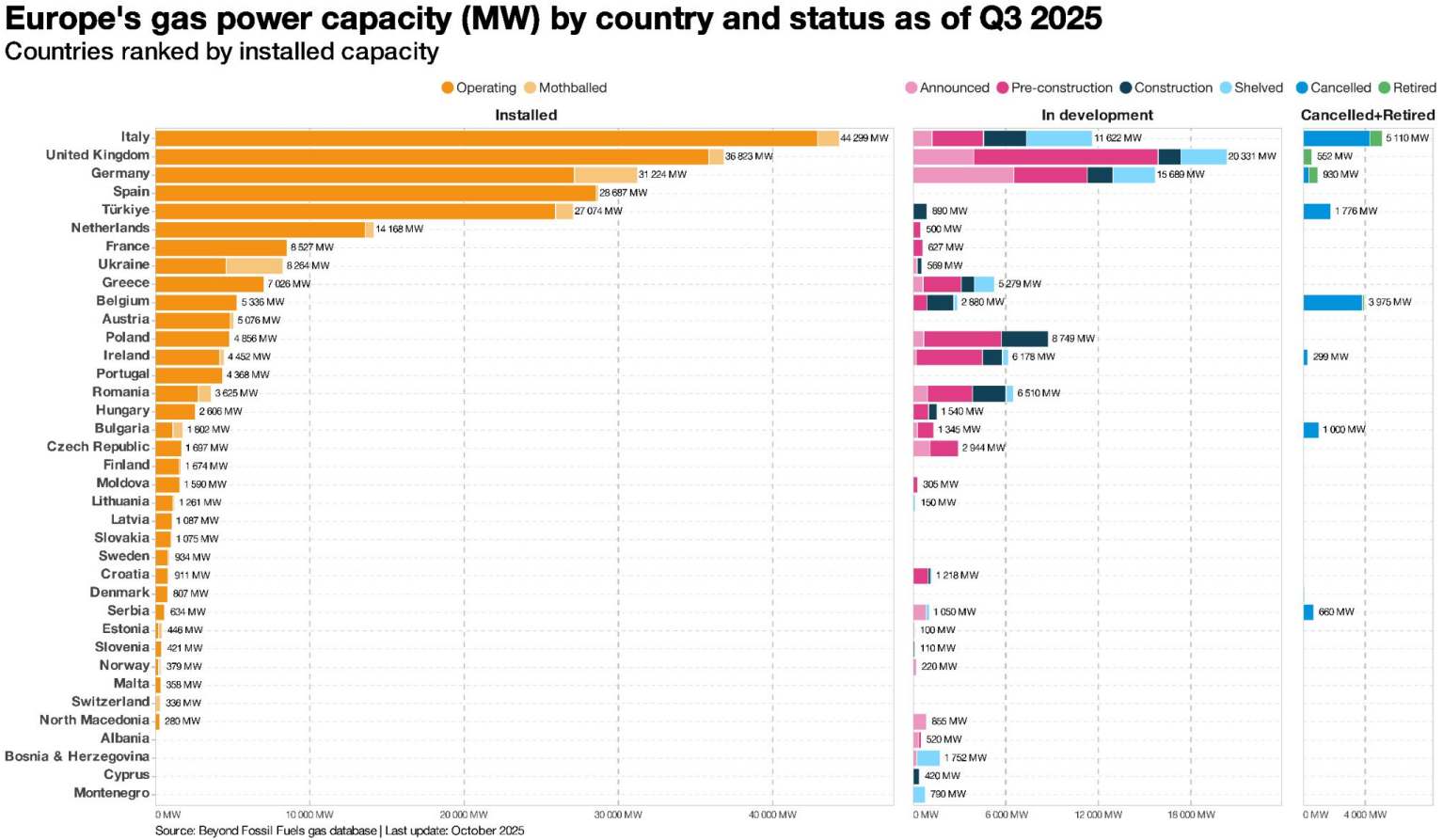
Annex – Quarterly coal campaign baseline log



Campaign wins: retirement announcements + retirements (no double counting)
Campaign loss: planned capacity (coal project pipeline) going into construction.

Source: Beyond Fossil Fuels coal database; status: October 2025

Annex – Breakdown of gas capacity in Europe per country



Annex – Methodology

Coal and gas campaign tracking methodology

CAMPAIGN WINS AND LOSSES

- Win: a unit is retired, or its retirement is announced with certainty by 2030 for coal units and by 2035 for gas units.
- Loss: a unit goes from “planned” to “construction”, after the campaign baseline (31 Dec. 2015 for coal units, 31 Dec. 2022 for gas units).

RETIREMENT ANNOUNCEMENTS

- The retirement of a power plant must be certain (and not only “considered”) to be counted as a win.
- Additionally, coal units under national coal phase-out do not fall under the category of “campaign wins” unless the coal phase-out is enshrined in a law, which outlines a detailed retirement schedule for each coal power plant.

PLANNED PROJECTS

- The planned project countdowns consist of active projects, coal or gas power plants, or new units added to existing plants, at any stage before construction. Projects that have been shelved or cancelled are subtracted from the countdowns, but may be added back if a shelved project is revived.

CONSTRUCTION

- Plants and units entering the construction phase are no longer classified as "Planned projects." Instead, they are added to the other countdown categories, as we expect these plants and units to become operational in the future.

Electricity data used in this report

The analyses and charts throughout the report are based on Ember monthly electricity data, with the following caveats:

- Ember’s data is not available for Albania, Ukraine, Moldova, Kosovo, North Macedonia for the period analysed.
- Europe includes the EU-27, Norway, Switzerland, Türkiye, the UK, and the Western Balkans, except for the countries mentioned above.
- Data for Cyprus for August and September and Malta for July, August and September are not available and assumed to be identical to the same month of the previous year.
- Data for Türkiye for September is missing from Ember’s data and taken from EPIAS.
- Data for August and September for Ireland is from Eirgrid.

The dataset is freely accessible here on Google Sheet.