

European electricity market summary Q3 2026

July to September

Generation and contribution by fuel type

Renewables: 361.6TWh **Fossil fuels:** 174.0TWh **Nuclear:** 142.0TWh

MONTEL

Contents

Quarterly Review of European Electricity Market Q3 2026	3
European Power Market Outlook: Q4 2026	5
Day-ahead price trends	10
Generation activity overview	11
Notes on the report	13

Quarterly Review of European Electricity Market Q3 2026

A summary of the key points of this quarter is given below:

Q3 2026 saw the following key trends:

- An extremely hot summer caused demand to spike across the continent
- Unusually low rainfall caused hydro output to decline to the lowest quarterly total in our dataset
- Low river levels and high water temperatures also constrained nuclear generation, with several units forced to reduce output because of cooling-water restrictions.
- Renewable generation increased despite weak hydro output, as record solar generation lifted the renewable share to 53.4%, although lower nuclear output reduced the overall clean-power share.
- Continued fighting around the Strait of Hormuz kept gas prices elevated, with TTF prices spiking above €80/MWh in September.
- Despite Q3 typically being a lower-price quarter, partly due to high solar output, elevated gas prices and stronger demand pushed average power prices to their highest levels since the 2022 gas crisis.

While winter has traditionally been seen as the time of year with the most stress on the system, a warming climate is causing summer to become an increasingly tight time for energy markets as well, while geopolitics continue to dominate the price of natural gas, a crucial determinant of the power price in most countries.

Scorching summer stresses the system: following an unusually hot start to the summer, Europe experienced multiple heat events throughout July and August, with temperatures exceeding 40°C across Spain, France, Italy,

Germany and parts of Central Europe.

These heatwaves caused cooling demand to jump, with systems often coming under particular strain during the latter part of the day, when solar output declines while temperatures and cooling demand remain high. Although high solar output keeps the system well supplied during the middle of the day, it also displaces both gas and coal-fired generation. As solar output declines later in the day, thermal generation must ramp up quickly to meet residual demand, contributing to high electricity prices.

Dry conditions drive down hydro output: as well as heat, much of Europe also suffered very low rainfall, causing river and reservoir levels to fall to very low levels. Hydro output declined to a total of only 84.8TWh across Q3 2026, the lowest in our dataset (dating back to 2015) and 13% below Q3 2025. Even as rainfall returned closer to normal levels in September, reservoirs remain depleted, suggesting that output could remain subdued compared with previous years. Drops were particularly pronounced in run-of-river hydro, with France, Italy, and Austria seeing declines of 31%, 30%, and 71% respectively against Q3 2025.

Nuclear output curtailed by high river temperatures and low water levels: many nuclear power plants are reliant on nearby rivers for cooling. That water often dropped too low or became too hot during the heatwave period, restricting output or even causing them to completely curtail. France was the most affected market. During the June heatwave in Q2, EDF shut down the second unit at the Golfech Nuclear Power Plant and reduced output at several other reactors.

At one point, French nuclear output was reduced by around 4.1 GW, equivalent to roughly 7% of electricity demand at the time.

As summer progressed, the situation worsened. By late July, reports indicated that at least 10 nuclear reactors across Europe had either been shut down or had their output curtailed, while around 15 reactors were affected by cooling-water restrictions. In France alone, reactors at Golfech, Bugey, Nogent-sur-Seine, Saint Alban, and Blayais experienced temporary shutdowns or deratings.

The challenges extended beyond France. Low water levels on the Danube River impacted nuclear facilities in Hungary and Romania. The Paks Nuclear Power Plant in Hungary reduced output, while Cernavodă Unit 1 was disconnected from the grid in late July due to insufficient cooling-water availability. Unit 2 remained online initially, but was subsequently shut down on 13 August as Danube levels continued to fall.

Renewable generation rises despite weak hydro output: solar generation reached a new record high of 135.0 TWh in Q3 2026, 5% higher than Q2 2026 and 24% higher than Q3 2025, driven by continued growth in installed capacity. This more than offset the year-on-year decline in hydro generation, helping total renewable generation rise to 361.6 TWh, up 6% from Q3 2025. Renewables consequently accounted for 53.4% of total generation, compared with 52.4% a year earlier. However, lower nuclear output meant the overall clean-power share fell to 74%, from 76% in Q3 2025.

Gas prices remain elevated amid tensions around the Strait of Hormuz: the outbreak of war between the United States, Israel and Iran in early 2026 initially caused gas prices to surge, disrupting LNG flows that normally account for approximately 20% of global LNG supply. TTF gas prices remained elevated and volatile throughout Q3 2026. The average price across Q3 2026 was €63.56/MWh, 28% higher than

Q2 2026 and 49% above Q3 2025.

Prices were initially supported by ongoing uncertainty surrounding LNG supply disruptions following the Middle East conflict, before moderating as LNG flows gradually recovered. However, strong summer cooling demand, lower hydro and nuclear availability and below-average European gas storage levels kept TTF prices significantly above 2025 levels. As of early October, German gas storage remained low, at around 59% full. This was approximately 17 percentage points below the level a year earlier and well below the five-year average. Persistently high prices combined with low storage levels have therefore created difficult decisions over how aggressively stocks should be replenished ahead of winter.

Heatwaves drive higher and more extreme prices: the heatwaves had a significant impact on European energy demand. Air conditioning and cooling requirements increased sharply, driving higher electricity consumption across residential, commercial, and industrial sectors. Peak power demand rose during prolonged periods of extreme temperatures, particularly in Southern Europe and major urban centres. Overall demand across the quarter totalled 694.2 TWh, the highest Q3 total since 2022 and a further indication of the recovery in European electricity demand following the demand destruction seen during the energy crisis. Day-ahead prices are usually lower in Q3 than colder quarters, with mild temperatures keeping demand lower, and high solar output reducing the need for gas and coal generation. Q3 2026 saw average day-ahead prices rise to the highest levels seen since 2022, with most countries seeing their averages exceed €100/MWh.



European Power Market Outlook: Q4 2026

Geopolitical risks remain a major source of uncertainty for gas prices: the outlook for European gas prices remains highly sensitive to developments in the Middle East. LNG traffic through the Strait of Hormuz increased during September but remained exposed to security risks and uncertainty over whether higher flows can be sustained through the winter. With Gulf LNG exports remaining well below pre-conflict levels, any renewed escalation or reversal of the recent recovery in shipping activity could further tighten global LNG supply just as European heating demand rises. Conversely, a durable easing of tensions and a more complete normalisation of Gulf exports would remove some of the geopolitical risk premium currently embedded in prices. With Europe increasingly dependent on globally traded LNG, developments far beyond the continent are therefore likely to remain an important source of gas and power-market volatility through the winter.

Unusually low gas stocks and high prices create difficult winter trade-offs: gas injections into storage facilities have remained relatively subdued, as elevated prices and an unfavourable market structure have reduced the incentive to replenish stocks aggressively. With no clear end to the disruption in sight and winter approaching, policymakers and market participants face a difficult trade-off between replenishing stocks at high prices now or waiting in the hope that cheaper supply becomes available later. Gas-fired generation remains especially important during moments of high demand and low wind and solar output. Lower storage levels therefore increase the sensitivity of both gas and power prices to prolonged cold spells or periods of weak renewable generation. A particularly cold winter, especially if combined with repeated *Dunkelflaute* events, could draw stocks down rapidly and trigger renewed volatility across European gas and electricity markets.

Hydro output likely to remain below seasonal norms: even as rainfall has returned closer to normal levels in some areas, depleted reservoir and river levels mean hydro output could remain subdued for several months without a sustained period of above-average precipitation. Drought conditions remained widespread across much of Europe at the end of Q3, particularly in France, Germany, northern Italy and parts of the Danube basin. While a strengthening El Niño could influence European weather patterns over the coming winter, its regional impacts are uncertain and a sustained recovery in hydro availability will ultimately depend on precipitation during the autumn and winter months.

As the heat dies down, worries turn to winter: European power markets typically become calmer during the September–October “shoulder months”, as cooling demand falls while heating demand has yet to pick up materially. However, attention is increasingly shifting toward winter, when periods of cold weather can coincide with low wind and solar generation. These so-called *Dunkelflaute* events can rapidly tighten the supply-demand balance, particularly in markets with high shares of weather-dependent renewables, forcing greater reliance on gas-fired generation, imports and other dispatchable capacity. Previous low-wind episodes have produced sharp increases in wholesale power prices, especially when accompanied by elevated heating demand.

French nuclear availability remains an important winter market risk: the cooling-water constraints that affected French reactors during the summer should ease as temperatures fall, but nuclear availability will remain an important driver of Q4 power prices. A substantial programme of planned maintenance and periodic safety inspections continues across the fleet, including the start of fourth ten-year inspections on France’s 1,300 MW reactors. Flamanville 3 also entered its first major inspection at the end of September, removing around 1.6 GW of capacity heading into Q4. While French nuclear output has performed relatively strongly so far in 2026 and there is currently no indication of a repeat of the widespread stress-corrosion problems seen earlier in the decade, delays to planned outages or unexpected technical faults could still remove several gigawatts at short notice. This would be particularly significant during cold, low-wind periods, when France and neighbouring markets are most reliant on firm generation.

Other notable Q3 headlines: security and market structure risks added to the quarter’s drivers. Montel reported a series of sabotage/hybrid threat incidents against energy infrastructure and growing calls to harden grids, while utilities and analysts publicly warned about low storage and tight winter supply.

Exchanges and market participants adjusted too: EEX announced new daily physically settled gas futures to help manage short term exposure, and major firms (eg. Naturgy, Equinor) issued warnings on stock rebuild incentives and resilient demand despite high prices. Together these stories underline that, besides weather and geopolitics, security incidents and changes in market tools/behaviour are now material contributors to price volatility.

Summary: Q4 2026 is expected to be characterised by:

- Elevated geopolitical risk, particularly around the Strait of Hormuz, with Gulf LNG exports remaining well below pre-conflict levels. Any renewed escalation or reversal of the recent recovery in shipping activity could further tighten global LNG supply and feed through into European gas and power prices.
- Continued sensitivity to gas prices, with unusually low storage levels increasing the risk of tighter supply and renewed price volatility during prolonged cold spells.
- Periods of cold weather combined with low wind and solar generation (Dunkelflaute events) could sharply tighten the supply-demand balance, increasing reliance on gas-fired generation, imports and other dispatchable capacity.
- Hydro availability remaining constrained in parts of Europe, with depleted reservoir and river levels limiting the contribution of hydro generation unless autumn and winter precipitation is sufficiently strong.
- French nuclear availability remaining an important source of uncertainty as the fleet moves through a heavy maintenance and inspection programme. While summer cooling-water restrictions should ease, extended planned outages or unexpected technical issues could tighten regional supply during periods of high winter demand.

Together, these dynamics point to a volatile Q4, with very low prices during periods of renewable surplus but sharp peaks when cold weather and weak renewable output tighten supply.

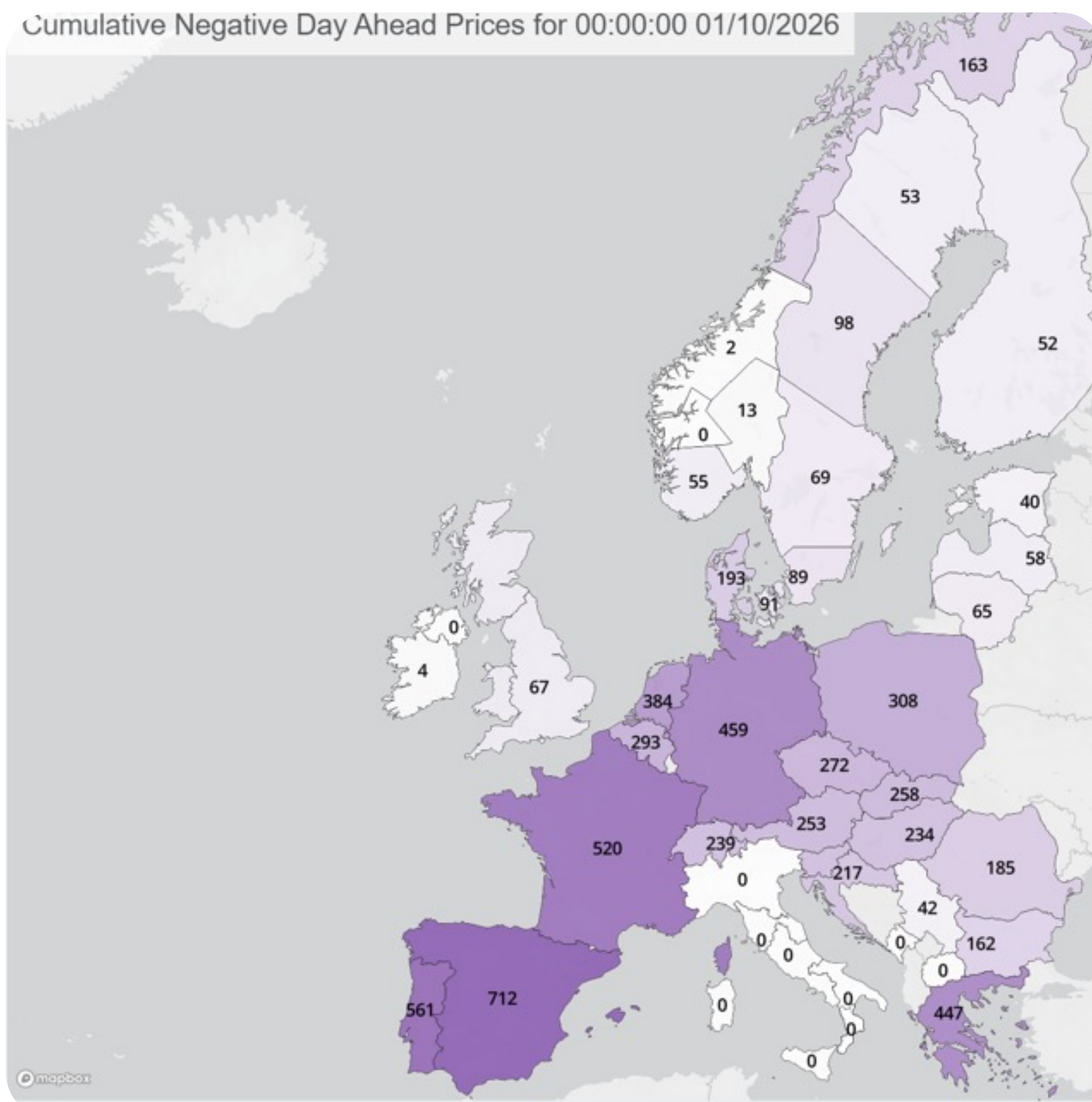


Figure 1: Cumulative negative day-ahead prices across Europe for first half of 2026

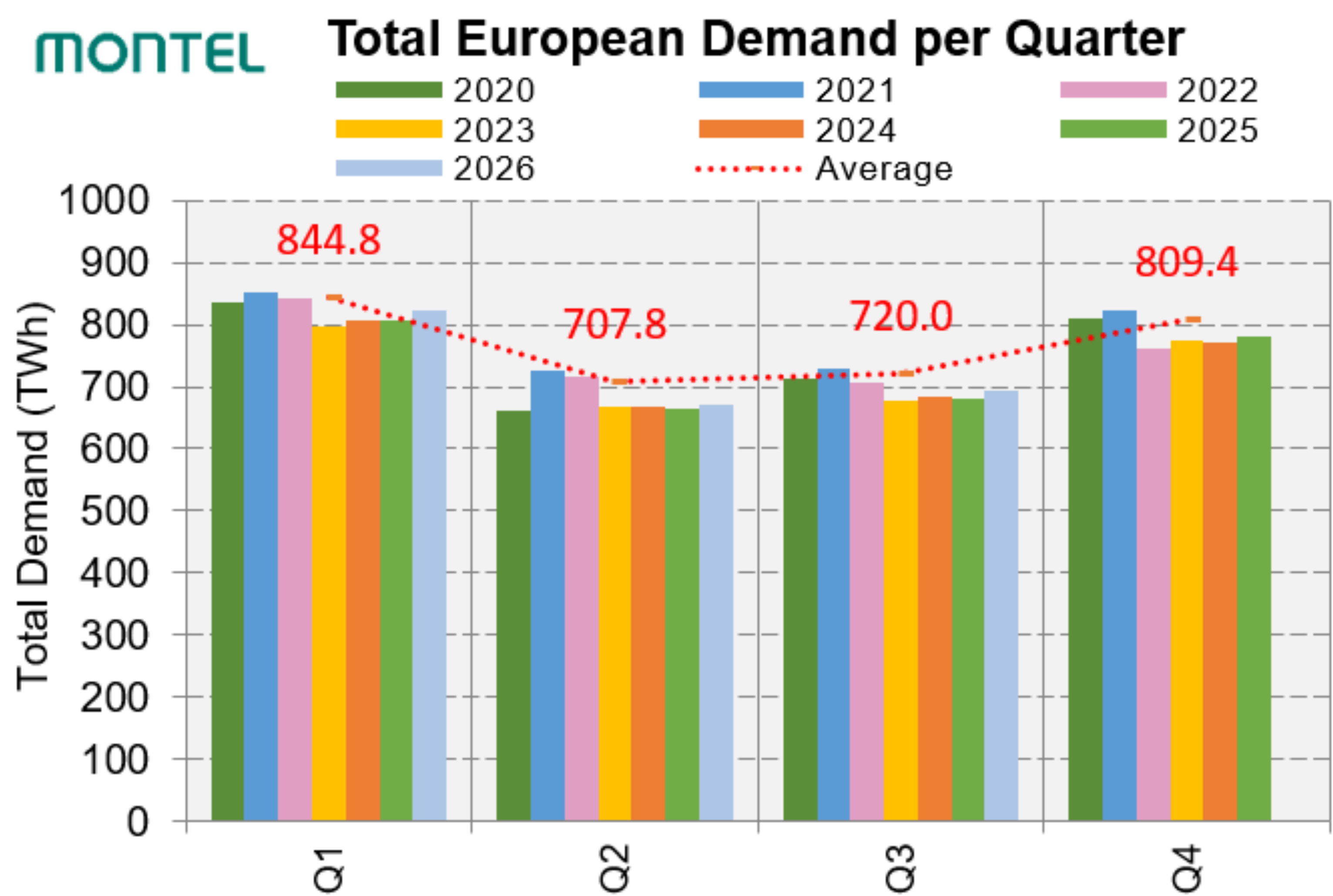


Figure 2: Total european demand per quarter

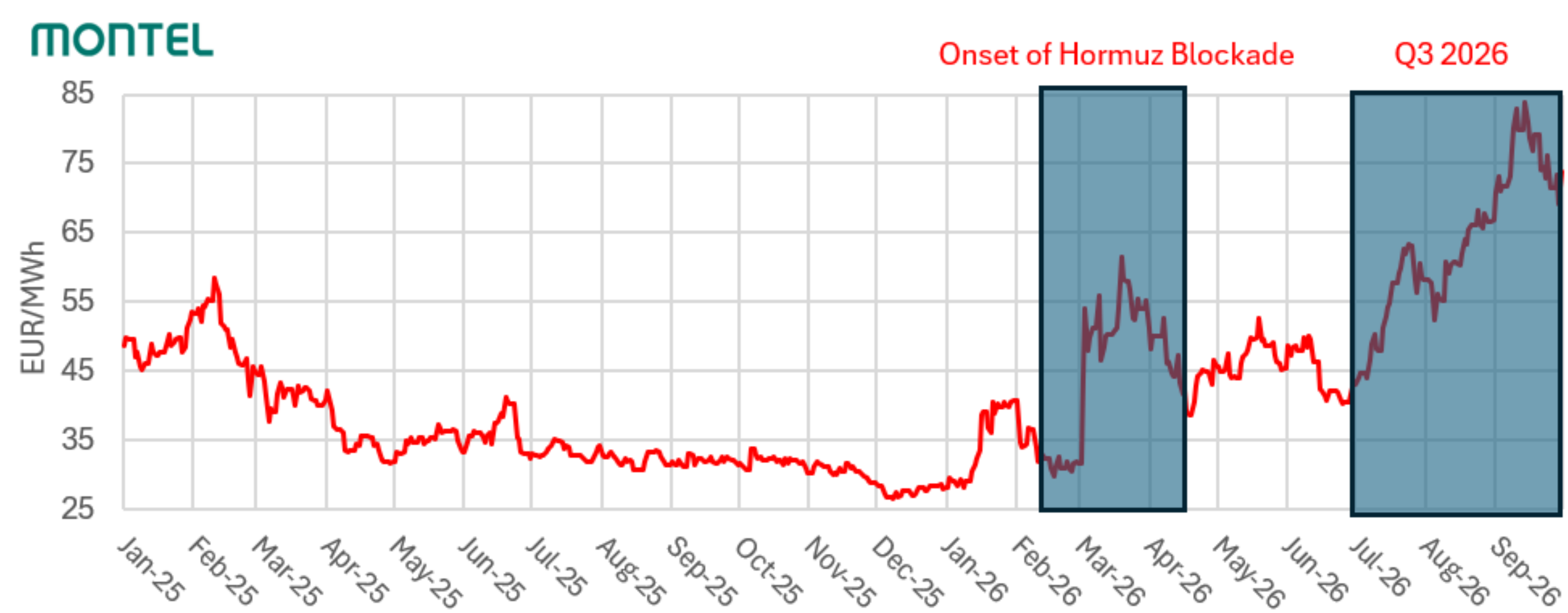


Figure 3: TTF gas prices 2025-present (EUR/MWh)

Day-ahead price trends

Table 1 below shows key statistics on pricing in the quarter and all previous quarters since 2019. The EPEX day-ahead prices shown are averages across the quarter

	BE	DE	DK (Ave)	ES	FR	GB	IT (Ave)	NL	NO 1-2-5	NO 3-4	SE 3-4	SE 1-2
Q1 2019	48.6	40.9	43.0	55.0	47.2	59.3	59.3	48.6	48.0	46.1	46.7	46.0
Q2 2019	34.5	35.8	36.9	48.7	34.9	47.1	52.3	39.1	37.0	35.3	33.8	33.0
Q3 2019	35.0	37.4	38.0	46.2	35.5	42.7	52.9	37.9	33.2	34.7	36.6	35.3
Q4 2019	39.4	36.6	38.9	41.0	40.3	46.7	48.5	39.3	39.0	37.7	39.4	37.5
Q1 2020	30.1	26.6	21.2	34.9	29.4	38.0	40.4	30.5	15.1	15.4	19.5	15.6
Q2 2020	18.5	20.3	20.5	23.2	18.0	27.3	25.2	20.9	4.5	5.6	16.2	8.2
Q3 2020	36.5	36.1	33.9	37.5	39.0	40.2	43.9	35.3	4.8	5.7	29.1	18.6
Q4 2020	42.3	38.8	31.0	40.1	42.2	52.6	49.5	42.1	12.6	10.0	29.2	15.1
Q1 2021	51.0	49.6	49.1	45.2	53.0	72.5	58.8	50.6	46.8	35.5	47.6	37.5
Q2 2021	62.3	60.3	58.7	71.8	63.9	83.8	77.2	62.1	47.2	30.0	46.5	33.1
Q3 2021	97.3	97.1	96.0	117.8	96.6	150.3	126.2	101.5	77.8	45.1	80.8	54.8
Q4 2021	204.3	178.9	147.1	211.0	221.4	241.9	237.4	196.0	126.4	41.5	117.3	44.5
Q1 2022	208.0	184.6	152.6	229.4	232.2	240.1	246.0	207.5	151.4	20.1	105.6	24.8
Q2 2022	193.9	187.0	179.6	182.8	226.0	183.4	247.0	195.5	167.1	18.6	119.4	51.7
Q3 2022	372.3	375.8	347.9	146.3	429.7	344.9	461.6	365.4	309.7	22.4	188.8	49.0
Q4 2022	202.6	192.8	176.5	113.2	214.1	197.3	236.3	198.0	164.8	71.3	147.8	115.6
Q1 2023	127.4	115.8	103.1	96.4	130.4	144.5	158.3	121.4	107.8	47.4	82.5	53.4
Q2 2023	92.8	92.3	83.8	80.3	91.6	101.9	114.8	89.4	77.9	30.0	59.7	42.3
Q3 2023	87.1	90.8	78.7	96.5	85.7	90.8	113.2	87.1	30.8	16.1	34.1	20.5
Q4 2023	82.3	82.2	71.0	75.4	80.5	95.0	123.4	85.9	69.0	43.8	57.4	44.0
Q1 2024	67.2	67.7	64.9	44.9	63.0	75.4	91.1	68.7	65.8	46.4	58.3	48.2
Q2 2024	54.4	67.5	61.1	33.4	31.0	77.6	95.0	64.0	41.4	29.0	40.9	26.6
Q3 2024	62.2	76.0	68.7	78.8	51.2	80.8	121.8	73.3	24.5	15.6	24.1	11.5
Q4 2024	97.3	102.6	88.1	94.7	87.1	108.1	128.1	102.9	46.1	12.2	47.8	13.4
Q1 2025	110.1	111.9	98.8	85.3	99.9	125.0	136.6	110.9	61.5	15.2	63.3	15.2
Q2 2025	66.5	69.7	65.6	38.5	33.9	84.3	101.4	68.9	50.2	8.1	40.1	10.0
Q3 2025	72.0	83.3	77.9	66.6	49.2	83.5	110.7	79.9	49.8	6.1	49.2	16.5
Q4 2025	82.2	93.7	85.2	70.9	62.2	84.9	112.9	87.9	66.1	30.2	60.9	24.7
Q1 2026	95.8	102.2	103.2	44.2	71.0	103.2	128.3	100.0	106.4	74.6	91.3	66.2
Q2 2026	94.3	95.2	96.9	55.3	52.7	110.8	120.9	96.5	93.2	49.3	72.9	37.6
Q3 2026	132.1	125.5	123.3	121.9	120.2	143.2	182.5	127.6	115.8	53.5	73.9	31.8

Table 1: EPEX day-ahead quarterly average prices (EUR/MWh)

Generation activity overview

	Q3 2024	Q4 2024	Q1 2025	Q2 2025	Q3 2025	Q4 2025	Q1 2026	Q2 2026	Q3 2026
TOTAL GENERATION BY FUEL (TWh)									
Biomass	21.7	24.8	24.1	21.5	22.2	25.6	25.9	22.6	23.4
Coal/Lignite	65.7	90.5	95.3	52.5	59.8	79.1	89.2	57.7	67.1
Gas	86.3	127.0	145.2	72.2	93.6	135.1	138.4	82.6	104.7
Hydro	103.5	117.8	119.5	101.5	97.1	112.6	128.6	103.1	84.8
Nuclear	163.6	174.8	176.0	137.5	153.8	169.9	174.3	142.5	142.0
Oil	2.2	1.9	1.9	1.4	1.7	2.0	1.7	1.5	2.1
Peat	0.1	0.4	0.5	0.2	0.1	0.5	0.8	0.2	0.1
Solar	94.0	35.3	45.9	104.9	109.1	41.8	52.6	129.0	135.0
Waste	4.3	4.6	4.7	3.8	3.5	4.1	4.0	4.1	4.4
Wind	104.7	158.3	141.9	107.0	108.9	170.6	173.7	111.7	114.0
FOSSIL FUELS	154.3	219.8	242.9	126.2	155.2	216.7	230.2	142.1	174.0
NUCLEAR	163.6	174.8	176.0	137.5	153.8	169.9	174.3	142.5	142.0
RENEWABLE (INCLUDES WASTE)	328.1	340.9	336.1	338.7	340.7	354.7	384.9	370.5	361.6
TOTAL	646.0	735.5	755.0	602.4	649.8	741.3	789.4	655.2	677.6
Fossil Fuel Percentage	24%	30%	32%	21%	24%	29%	29%	22%	26%
Clean Percentage	76%	70%	68%	79%	76%	71%	71%	78%	74%
Renewable Share of Clean Power	67%	66%	66%	71%	69%	68%	69%	72%	72%
SHARE OF GENERATION (%)									
Biomass	3.4%	3.4%	3.2%	3.6%	3.4%	3.4%	3.3%	3.5%	3.5%
Coal/Lignite	10.2%	12.3%	12.6%	8.7%	9.2%	10.7%	11.3%	8.8%	9.9%
Gas	13.4%	17.3%	19.2%	12.0%	14.4%	18.2%	17.5%	12.6%	15.4%
Hydro	16.0%	16.0%	15.8%	16.9%	14.9%	15.2%	16.3%	15.7%	12.5%
Nuclear	25.3%	23.8%	23.3%	22.8%	23.7%	22.9%	22.1%	21.8%	21.0%
Oil	0.3%	0.3%	0.2%	0.2%	0.3%	0.3%	0.2%	0.2%	0.3%
Peat	0.0%	0.1%	0.1%	0.0%	0.0%	0.1%	0.1%	0.0%	0.0%
Solar	14.5%	4.8%	6.1%	17.4%	16.8%	5.6%	6.7%	19.7%	19.9%
Waste	0.7%	0.6%	0.6%	0.6%	0.5%	0.6%	0.5%	0.6%	0.7%
Wind	16.2%	21.5%	18.8%	17.8%	16.8%	23.0%	22.0%	17.0%	16.8%
FOSSIL FUELS	23.9%	29.8%	32.1%	20.9%	23.9%	29.2%	29.1%	21.7%	25.7%
NUCLEAR	25.3%	23.8%	23.3%	22.8%	23.7%	22.9%	22.1%	21.8%	21.0%
RENEWABLE (INCLUDES WASTE)	50.8%	46.4%	44.5%	56.2%	52.4%	47.9%	48.8%	56.6%	53.4%

Table 2: Quarterly generation summary

	Q3 2021	Q3 2022	Q3 2023	Q3 2024	Q3 2025	Q3 2026
TOTAL GENERATION BY FUEL (TWh)						
Biomass	23.0	23.6	19.4	21.7	22.2	23.4
Coal/Lignite	110.8	118.7	76.0	65.7	59.8	67.1
Gas	120.1	139.0	113.1	86.3	93.6	104.7
Hydro	109.8	90.9	103.8	103.5	97.1	84.8
Nuclear	184.1	146.1	151.2	163.6	153.8	142.0
Oil	3.3	2.8	2.5	2.2	1.7	2.1
Peat	0.6	0.5	0.2	0.1	0.1	0.1
Solar	54.3	68.2	80.1	94.0	109.1	135.0
Waste	4.2	3.7	4.4	4.3	3.5	4.4
Wind	80.0	87.1	102.8	104.7	108.9	114.0
FOSSIL FUELS	234.8	260.9	191.8	154.3	155.2	174.0
NUCLEAR	184.1	146.1	151.2	163.6	153.8	142.0
RENEWABLE (INCLUDES WASTE)	271.3	273.5	310.6	328.1	340.7	361.6
TOTAL	690.2	680.6	653.5	646.0	649.8	677.6
Fossil Fuel Percentage	34%	38%	29%	24%	24%	26%
Clean Percentage	66%	62%	71%	76%	76%	74%
Renewable Share of Clean Power	60%	65%	67%	67%	69%	72%
CHANGE SINCE Q1 2019 (%)						
Biomass		2%	-16%	-6%	-4%	2%
Coal/Lignite		7%	-31%	-41%	-46%	-39%
Gas		16%	-6%	-28%	-22%	-13%
Hydro		-17%	-5%	-6%	-12%	-23%
Nuclear		-21%	-18%	-11%	-16%	-23%
Oil		-16%	-23%	-33%	-49%	-37%
Peat		-25%	-65%	-84%	-79%	-84%
Solar		26%	48%	73%	101%	149%
Waste		-11%	6%	3%	-17%	6%
Wind		9%	29%	31%	36%	43%
FOSSIL FUELS		11%	-18%	-34%	-34%	-26%
NUCLEAR		-21%	-18%	-11%	-16%	-23%
RENEWABLE (INCLUDES WASTE)		1%	14%	21%	26%	33%

Table 3: Year-on-year comparison of Q2 generation (TWh and %)



Notes on the report

The figures used in the report refer to data provided through ENTSO-E for the period from 2015 which have been aggregated by EnAppSys into a European total. This data does sometimes suffer from outages or gaps in reporting, but it is considered

generally complete. This report is based on the most recently available data as at quarter and year ends. National Grid data is used for GB demand.

Included Countries:		
Albania	Germany	Norway
Austria	Great Britain	Poland
Belgium	Greece	Portugal
Bosnia & Herzegovina	Hungary	Romania
Bulgaria	I-SEM	Serbia
Croatia	Italy	Slovakia
Czech Republic	Latvia	Slovenia
Denmark	Lithuania	Spain
Estonia	Montenegro	Sweden
Finland	Netherlands	Switzerland
France	North Macedonia	

About Montel

Montel brings together experienced energy sector professionals from across Europe, providing you with everything you need to track energy markets in real-time and assess future developments before they happen.

Our products

Analytics

Analyse the factors driving energy prices.

[Learn more](#)

News

Understand energy market developments in real-time.

[Learn more](#)

Prices

Track the cost of energy as it changes.

[Learn more](#)

Risk

Optimise trading positions, create hedges and maximise profits.

[Learn more](#)

See also

PPA services

Benchmark prices and secure the best PPA for your needs.

[Learn more](#)

Advisory

Get expert guidance on energy related challenges.

[Learn more](#)

Our solutions

Analysis

Simplify your data-sourcing and build models with ease.

[Learn more](#)

Trading

Improve your positions with real-time market information.

[Learn more](#)

Energy Procurement

Track energy prices and learn how to become more sustainable.

[Learn more](#)

Power Production

Assess investment opportunities and optimise existing plants.

[Learn more](#)

Portfolio Management

Maximise profits and manage your risks.

[Learn more](#)

Consultancy

Maintain and build your market knowledge to guide your clients effectively.

[Learn more](#)

Visit montel.energy