Nominated Electricity Market Operator
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Monthly European Energy Market Trends

January-2026

Note: This is a new report that is intended to be issued monthly. The format and content may change slightly over the coming months, based on feedback from readers. Please feel free to send in any comments or suggestions for improvements to info@semopx.com

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1. Introduction

The retail cost of electricity in Ireland – the price paid by households and businesses – consists of several key cost components. These reflect not just the cost of generating electricity but delivering it to where it is needed, managing the electricity system and government charges.

The wholesale electricity price relates to the cost of generating electricity and, typically, accounts for 30-40% of the retail cost of electricity. The wholesale electricity price is the price that electricity is bought and sold in bulk, typically by electricity generators, retailers and large energy consumers.

This report provides a summary of the latest trends in the factors influencing Western Europe and neighbouring countries wholesale electricity prices with a particular focus on the Single Electricity Market (SEM).

Section 2 provides a summary of the key trends seen in January 2026.

Section 3 compares wholesale electricity prices across key European jurisdictions over January 2026.

Sections 4, 5 and 6 provide further detail on the main drivers for the wholesale electricity prices namely gas prices, generation mix and interconnection.

Section 7 provides a glossary of some of the more technical terms used in this report.

2. Summary of Trends

In January 2026, wholesale electricity prices across Europe were 14% lower year-on-year, aligned by a 28% drop in gas prices and an 18% rise in renewable generation. Compared with December 2025, prices increased 20%, reflecting a 25% rise in gas prices, alongside higher thermal output (gas +23%, coal +40%) and an 8% increase in demand.

The SEM remained the highest-priced market at €127/MWh, 17% above December levels but 24% below January 2025. Germany followed at €110/MWh, France recorded the strongest monthly increase (+46%), Spain was the only system with declining prices (–8% month-on-month

Gas markets were highly volatile. Closing January about 1% above the 2025 average and roughly 25% higher than in December 2025.

Renewable output increased overall: solar rose 2% year-on-year and 4% month-on-month, while wind generation increased 15% year-on-year and 7% month-on-month. Regional patterns diverged: SEM wind output fell 8% month-on-month, whereas GB saw a 4% rise. Year-on-year, wind increased 10% in SEM and 40% in GB. France's generation mix shifted significantly, with gas output rising 26% year-on-year and 58% month-on-month, while nuclear output fell 6% (~2 TWh). In Belgium, reduced nuclear availability (from 3.9 GW to 2.1 GW) led to a 46% decline in nuclear generation, offset by 48% more gas-fired output (+0.73 TWh) and a 38% increase in renewable output (+0.49 TWh).

Interconnector flows. France shifted into net-import mode relative to Spain, while Belgium increased imports from the Netherlands. SEM's imports fell 19% and exports 17%, though it remained a net importer. Since Greenlink's commissioning in February 2025, SEM's net flows have been 28% higher than in the pre-Greenlink period. Price convergence between SEM and GB reached 48% of periods (up from 25%), with spreads averaging €2.66/MWh during convergence and €30.77/MWh otherwise.

3. Wholesale Electricity Prices

Wholesale electricity prices fluctuate over time in Western Europe and neighboring regions based on several factors, including gas prices, renewable generation, interconnection, and seasonal demand.

In January 2025, average wholesale electricity prices in the region were 14% lower year-on-year compared to January 2025. This decline was primarily driven by a 28% reduction in gas prices and a 18% increase in renewable generation.

Month-on-month, prices rose by 20% compared to December 2026, aligned to 25% increase in gas prices. This increase was also correlated with a 23% rise in gas-fired generation, a 40% surge in coal generation, and an average 8% growth in demand.

Among the jurisdictions observed, SEM recorded the highest average price, at €127/MWh, recovering from the decline observed in December 2025, standing 17% above the prices for that month and 24% below the prices for January 2025.

Germany maintained its position as the second most expensive since September 2025 reaching €110/MWh.

France was one of the systems with the largest month-to-month increase in prices, recording a 46% rise. This was accompanied by a 58% increase in gas-fired generation, a doubling of coal generation, and a 6% decrease in nuclear output.

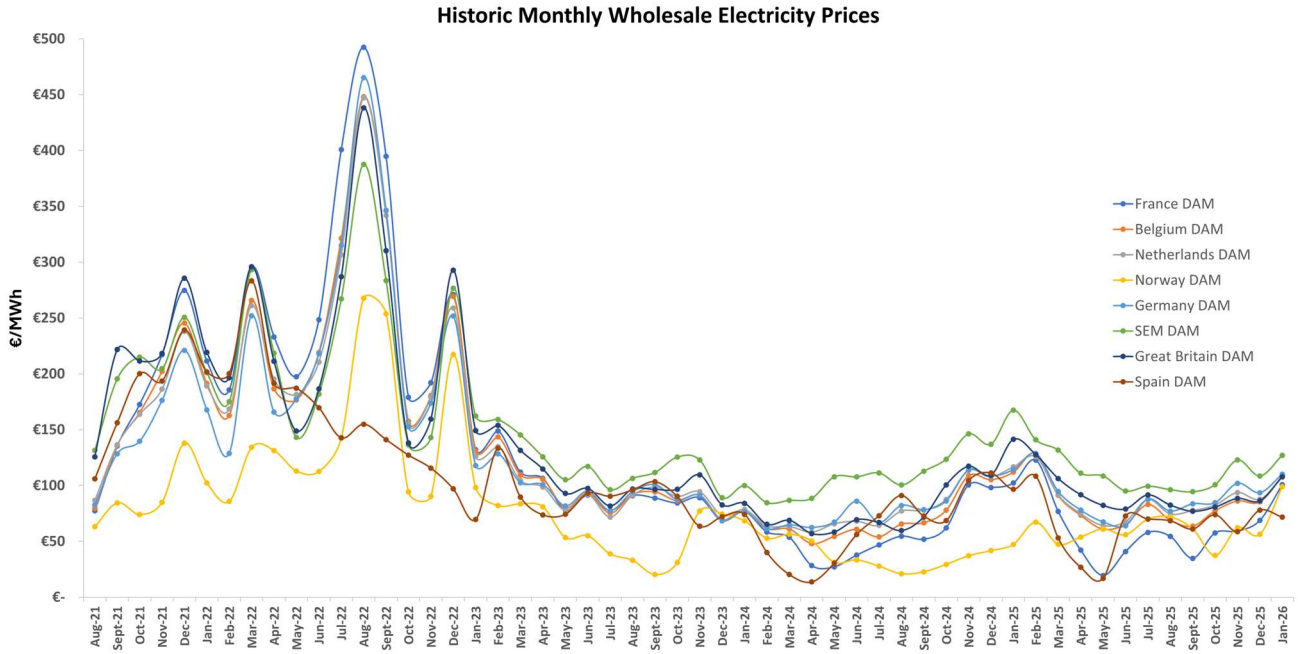

Figure 1: Historical Average Monthly Wholesale Prices in European Jurisdictions

Data source: Montel EnAppSys [BE, FR, GB, NO, NE], ENTSO-E transparency platform [DE, SP], SEMOpx [SEM]

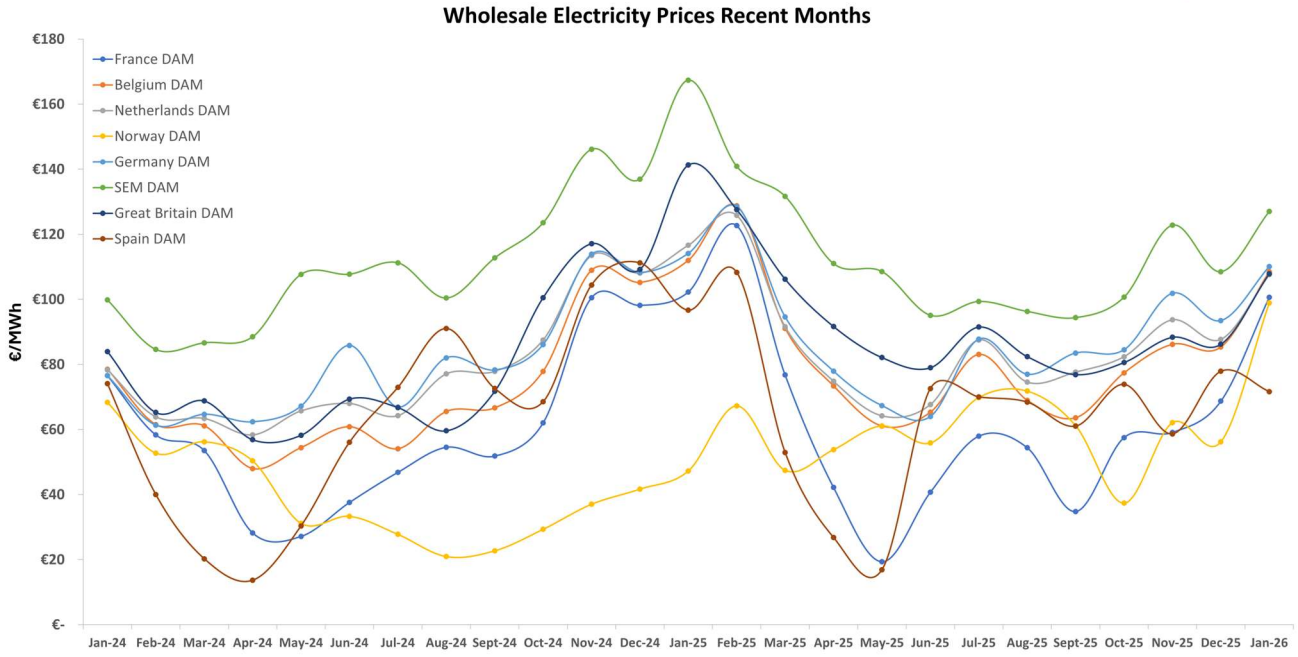

Figure 2: Average Wholesale Prices Recent Months - Jan 2024 to Jan. 2026

Data source: Montel EnAppSys [BE, FR, GB, NO, NE], ENTSO-E transparency platform [DE, SP], SEMOpx [SEM]

4. Gas Prices

Gas prices have a substantial impact on wholesale electricity costs across Western Europe and neighboring regions. Markets with a high dependence on gas-fired generation, such as SEM, are particularly affected.

Market conditions remained tight overall, with an increase in gas price volatility. Weather patterns, storage levels, and supply factors kept the market highly reactive throughout the month. Prices closed January about 1% above the 2025 average and roughly 25% higher than in December 2025, showing a clear upward trend.

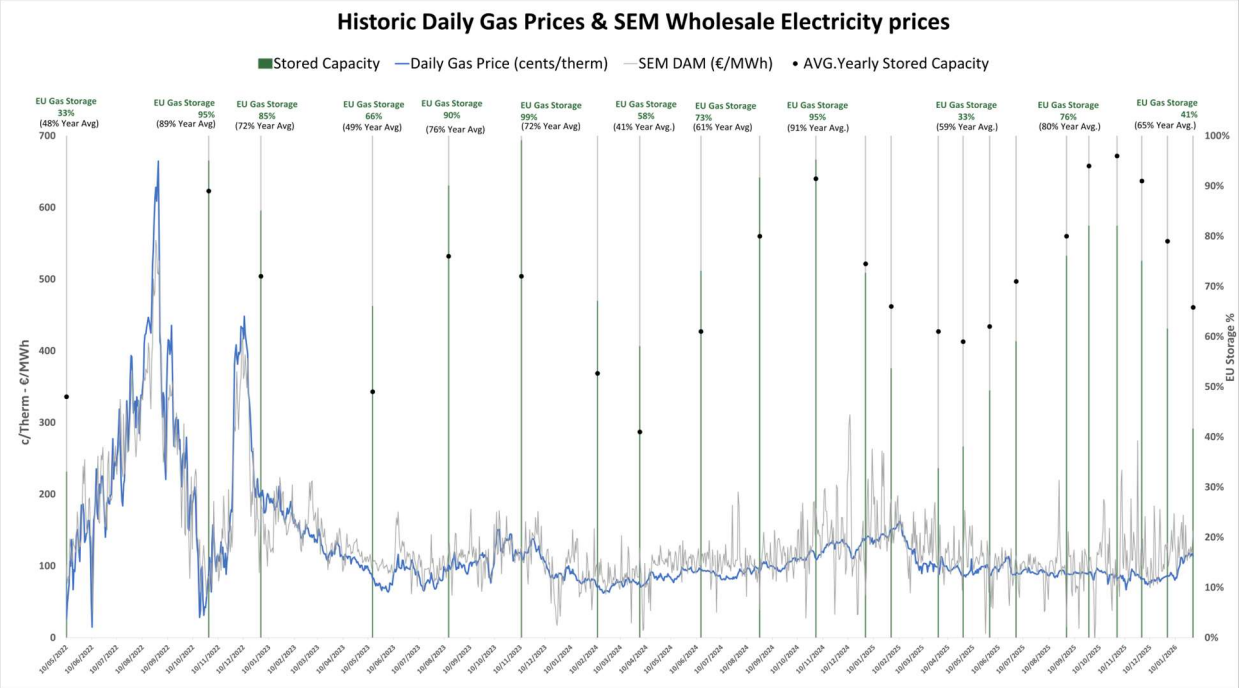

Figure 3: Historical Gas Prices

Data source: GMO operational Data Daily gas price, ENTSO-g Gas dashboard

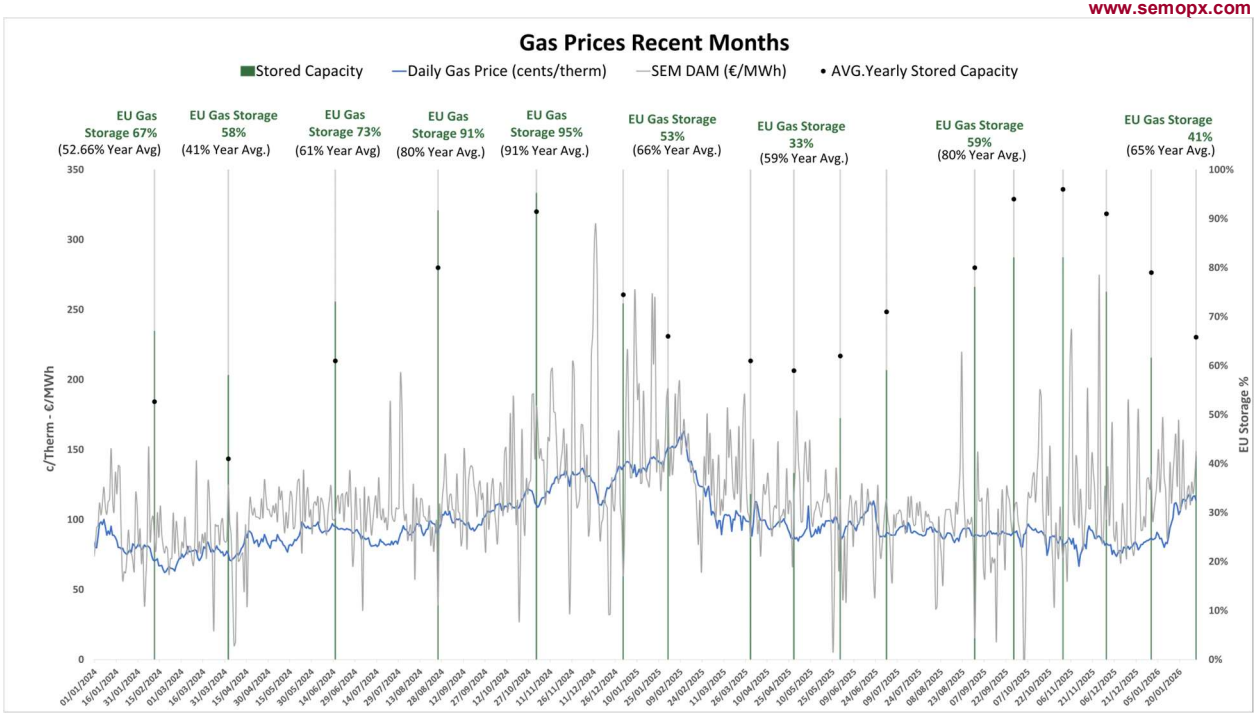

Figure 4: Gas Prices Recent Months - Jan 2024 to January 2026.

Data source: GMO operational Data Daily gas price, ENTSO-g Gas dashboard

5. Generation Mix

The generation mix continues to play a crucial role in shaping wholesale electricity prices across Western Europe and neighboring regions. Generally, a higher share of renewables results in lower prices, while lower renewable output increases reliance on conventional generation.

In January 2025, solar generation increased by 2% year-on-year and 4% compared to December 2025, Wind generation rose 15% year-on-year and 7% month-on-month.

The impact of renewables varied significantly across countries. Although SEM and GB are geographically close and both rely heavily on renewable generation, they experienced different wind-generation patterns. Month to month, SEM recorded an 8% drop in wind generation, while GB saw a slight 4% increase. Despite this, SEM increased its gas-fired generation by only 22%, compared with a 33% rise in GB.

Year on year, both systems showed growth in wind generation, 10% in SEM and 40% in GB. This was reflected in gas-fired generation, with GB reducing gas output by 16%, while SEM remained broadly in line with January 2025 levels.

In January 2026, France experienced notable shifts in its fuel mix. The French system recorded a substantial increase in gas-fired generation, 26% year on year and 58% month on month, alongside a drop in nuclear output, equivalent to roughly 2 TWh.

Spain was the only system among those analysed to record a decline in wholesale prices, with an 8% drop compared to December 2025.

Belgium reduced its available nuclear capacity from approximately 3.9 GW in 2024 to 2.1 GW in 2025. This decrease is reflected in the generation mix at the beginning of 2026, where nuclear output fell by 46% compared with the same period in 2024, equivalent to a reduction of around 1.33 TWh. This decline was offset by a 48% increase in gas-fired generation (0.73 TWh) and a 38% increase in renewable generation (0.49 TWh).

Figure 5: Generation Mix and Prices in Selected European Jurisdictions – January 2025.

Data source: Montel EnAppSys [Prices - BE, FR, GB, NO, NE], Fraunhofer Energy-Charts [Fuel Mix - BE, FR, GB, NO, NE], ENTSO-E transparency platform [DE, SP], SEMOpx [SEM]

6. Interconnector Flows

Interconnection plays a key role in enhancing the efficiency and stability of the electricity market across Western Europe and neighboring regions by enabling electricity to flow from low-price areas to high-price areas.

In January 2026, interconnector flows broadly followed market price signals. France's export pattern was mixed: the increase in French power prices during the month might led to more frequent periods of energy imports from neighbouring systems, and France ultimately became a net importer from Spain.

SEM, in turn, showed a 19% decrease in imports and a 17% decrease in exports during January. This can be linked to the reduction in price differentials between systems, which have dropped by 46% since November.

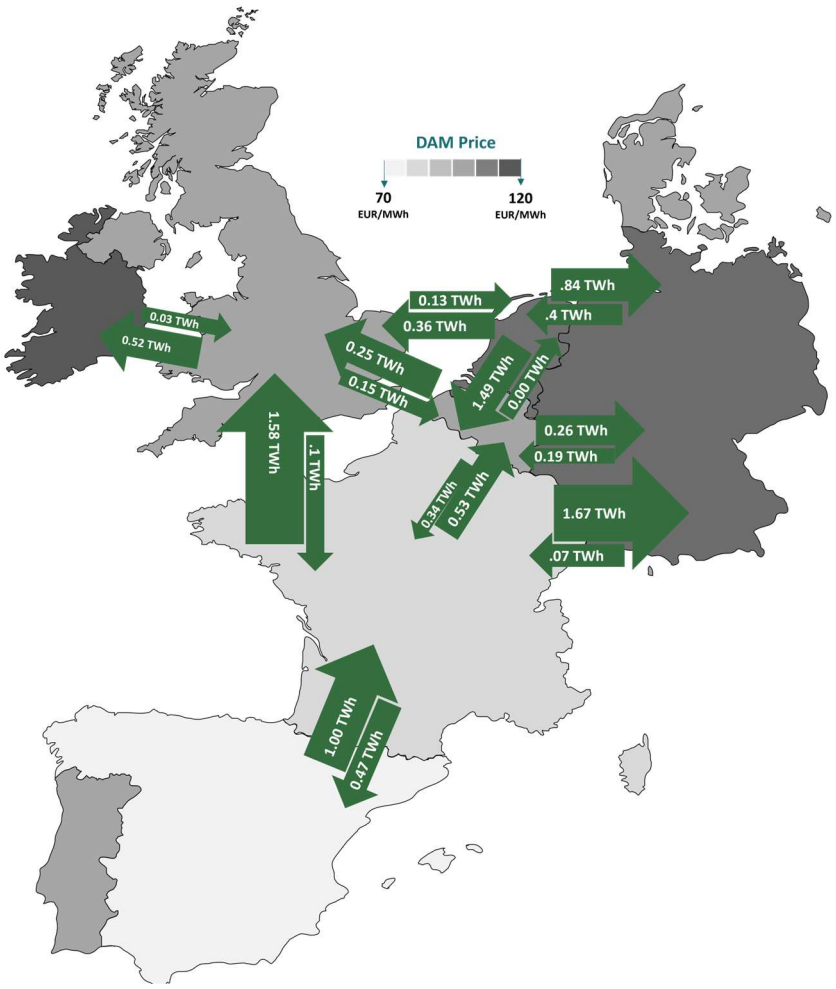

Figure 6: Europe Interconnector Physical Flows – January. 2025.

Data source: Fraunhofer Energy-Charts, ENTSO-e transparency platform, SEMOpx

7. Glossary

The glossary provides a description of the key terms used in the report.

Term	Definition
Average Monthly Wholesale Prices	Refers to the average of the hourly day-ahead wholesale electricity prices for a given month.
Capacity Factor	Is a measure of how much energy a generator produces relative to its technical maximum energy output. It is especially relevant for renewable sources like wind or solar where generation levels are variable dependent on the wind or solar intensity.
Day-Ahead Market (DAM)	The Day-Ahead Market is the forward electricity market where electricity is bought and sold one day in advance of the actual delivery. It is the key index for wholesale electricity prices.
Wholesale Electricity Price	Refers to the prices for which electricity is bought and sold in bulk, typically by electricity generators, retailers and large energy consumers. It is a key component of the cost electricity but represents only part of the total cost of electricity supply.
SEM	The Single Electricity Market is the electricity market arrangements that cover the island of Ireland namely Ireland and Northern Ireland.