February 25th 2025

Thanks for joining the webinar

Industrial Energy Costs in France and Germany

It will begin at 11 am

Moderator
Céline Pizzotti
Deputy Managing Director
OFATE | DFBEW

Speaker
Johannes Trüby
Partner
Deloitte France

Speaker
Markus Böhme
Partner
Taylor Wessing Germany

Avec le soutien du
Ministère fédéral de l'Économie et de la Protection du Climat
en vertu d'une décision du Bundestag allemand
MINISTÈRE DE L'ÉCONOMIE, DES FINANCES ET DE LA SOUVERAINETÉ INDUSTRIELLE ET NUMÉRIQUE

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WEBINAR

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Deloitte.

Perspectives on electricity prices for industry in the EU

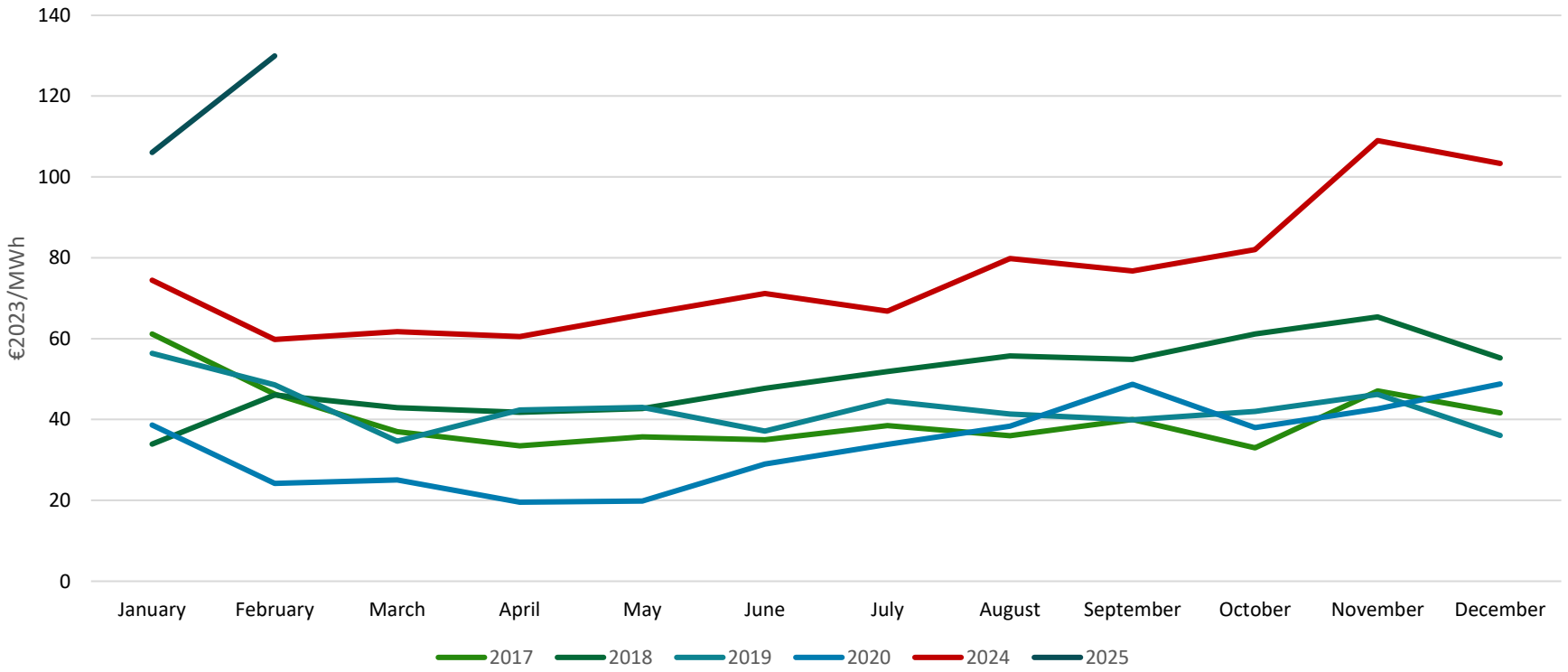
Dr. Johannes Trüby, Partner
Deloitte Economic Advisory

25/02/2025

Is there a real trade off between climate policy and competitiveness?

- All credible net-zero scenarios envisage two core elements of the energy transition:
  - → A massive electrification of end-use energy consumption (industry, transport, buildings…)
  - → Rapid expansion of low-carbon power generation combined with a phase out of fossil fuels
- Rising energy prices have become a hot topic in Europe due to fears of degrading competitiveness
- Electricity prices have been at the heart of the debate in the last couple of months
- Some political movements claim that the energy transition is responsible for the power price increase
- It is critical to understand what has been driving power price hikes
- Based on this, reflect what needs to be fixed in EU power markets

Wholesale electricity price evolution – Germany

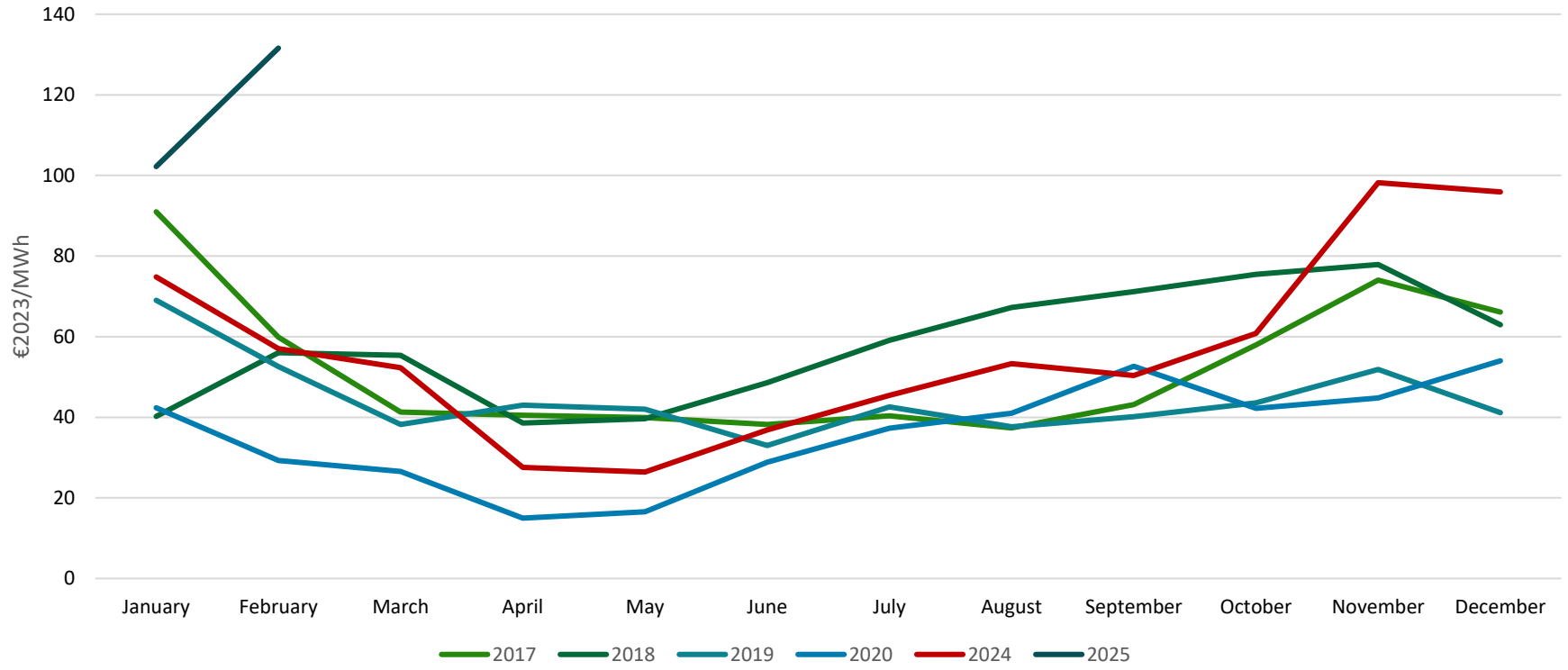


	2015	2016	2017	2018	2019	2020	2021	2022	2023	2024	2025
Average €2023/MWh	37	34	40	50	43	34	108	255	95	76	118

Increase compared to before the crisis (Before 2020): **+86%**

Source: EMBER, "Monthly European Wholesale Electricity Price Data", 2025

Wholesale electricity price evolution – France

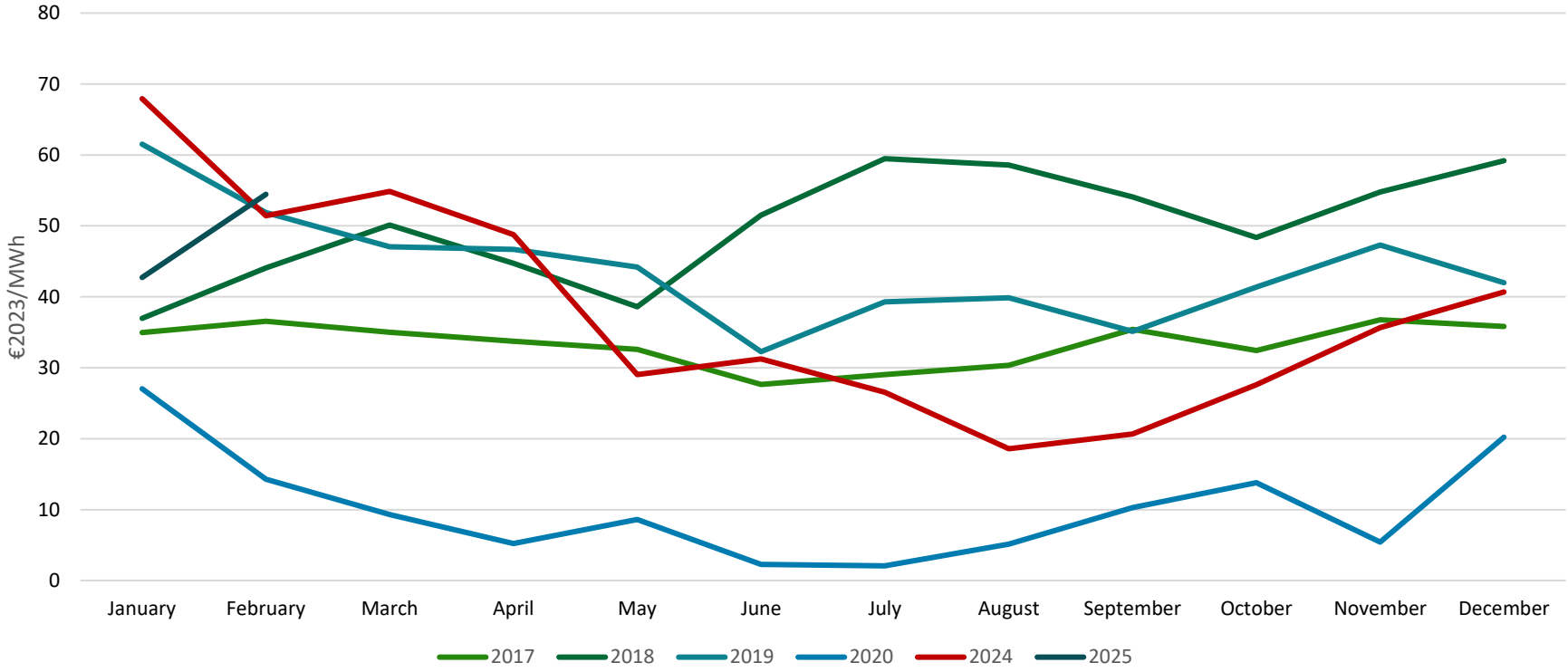


	2015	*2016*	*2017*	*2018*	*2019*	*2020*	*2021*	*2022*	*2023*	*2024*	*2025*
Average €2023/MWh	45	43	52	58	45	36	121	298	97	57	117

Increase compared to before the crisis (Before 2020): **+17%**

Source: EMBER, "Monthly European Wholesale Electricity Price Data", 2025

Wholesale electricity price evolution – Norway

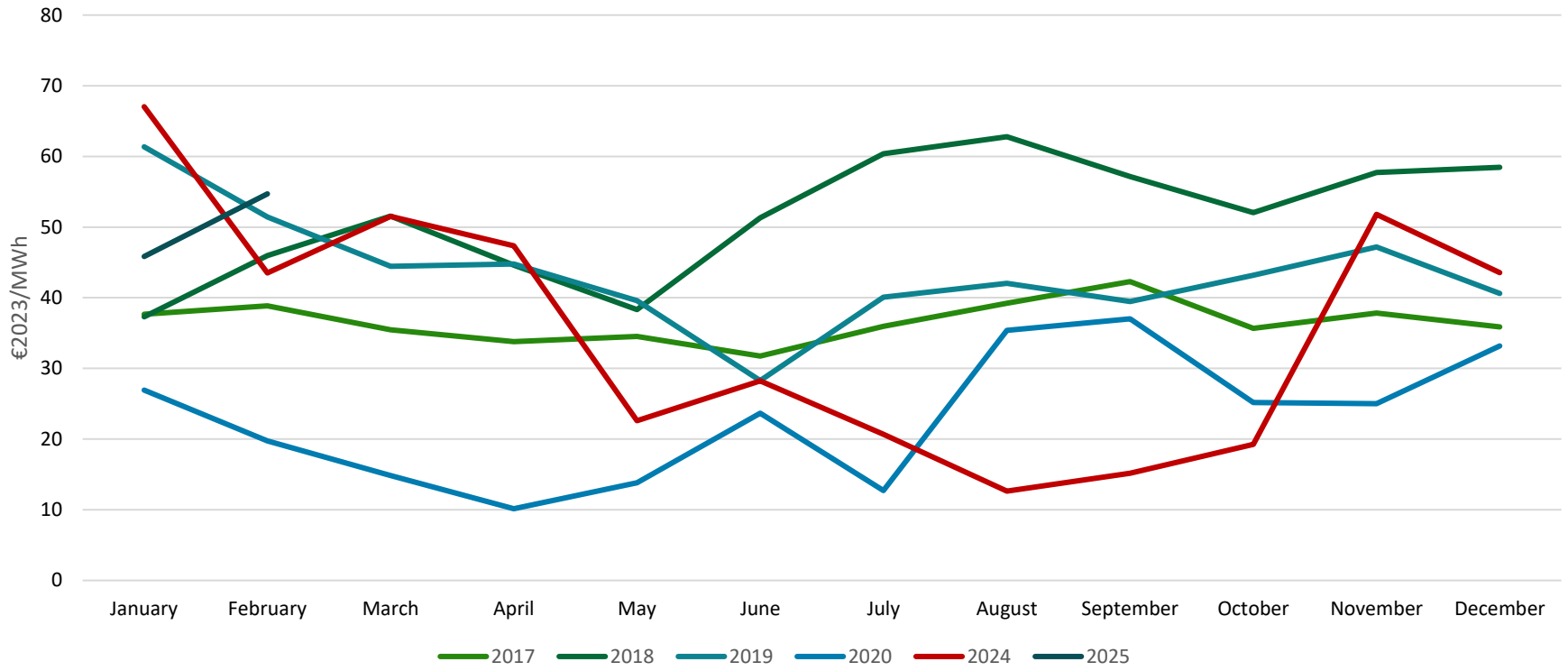


	2015	*2016*	*2017*	*2018*	*2019*	*2020*	*2021*	*2022*	*2023*	*2024*	*2025*
Average €2023/MWh	24	31	33	50	44	10	69	150	59	38	49

Increase compared to before the crisis (Before 2020): **+4%**

Source: EMBER, "Monthly European Wholesale Electricity Price Data", 2025

Wholesale electricity price evolution - Sweden

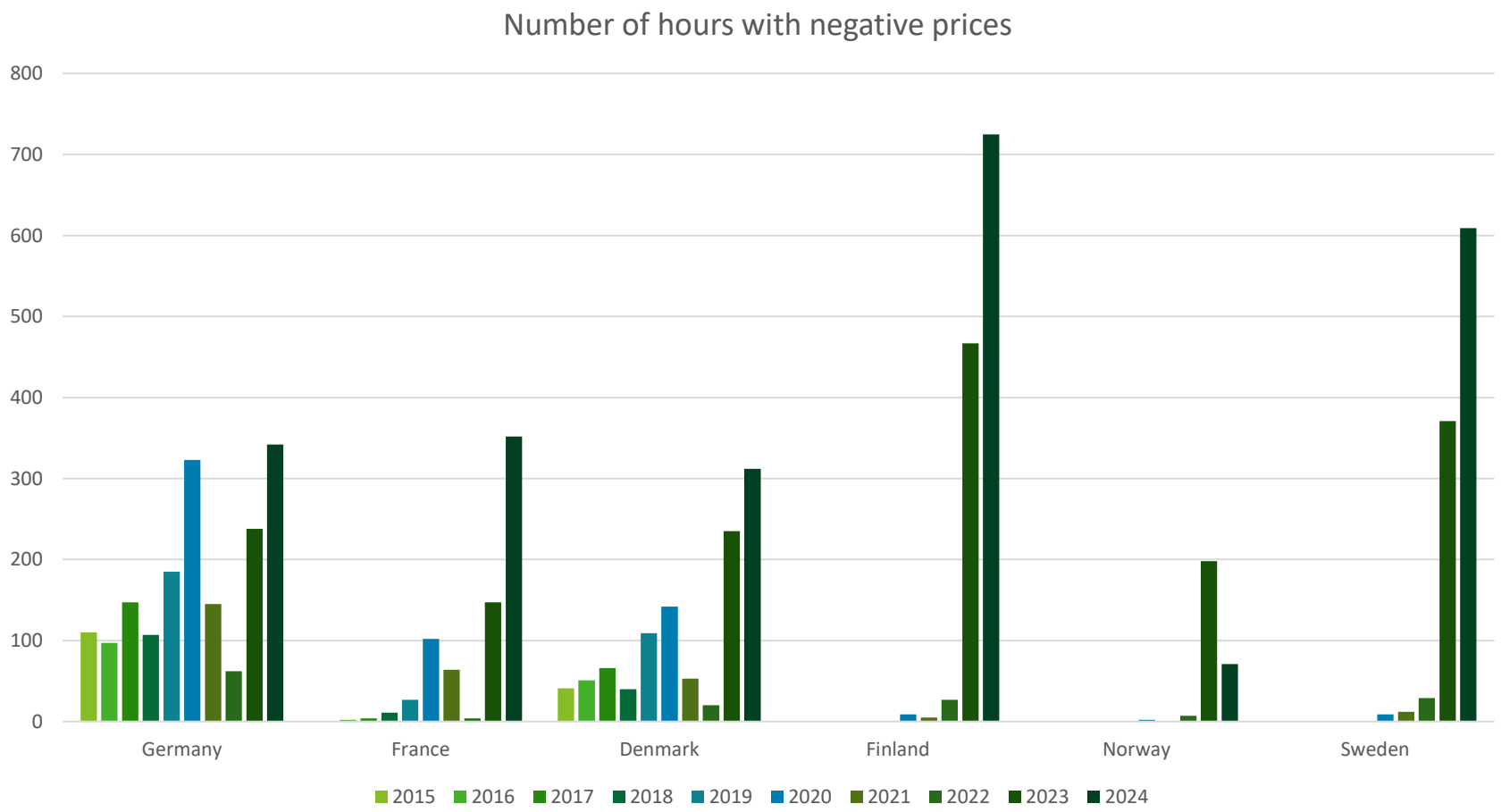


	2015	2016	2017	2018	2019	2020	2021	2022	2023	2024	2025
Average €2023/MWh	26	34	37	51	44	23	71	129	52	35	50

Increase compared to before the crisis (Before 2020): **-8%**

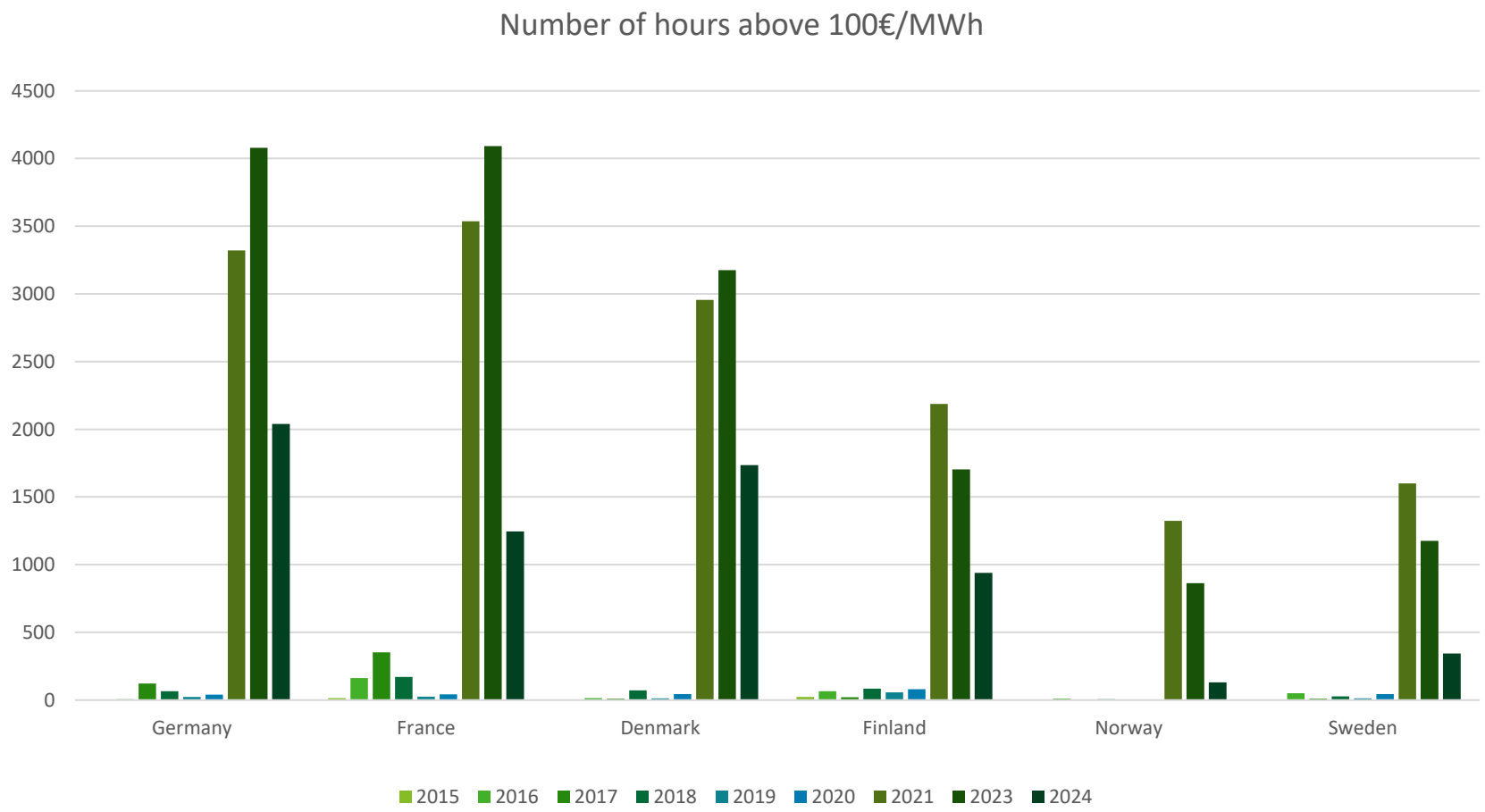
Source: EMBER, "Monthly European Wholesale Electricity Price Data", 2025

The number of hours with negative prices has been increasing



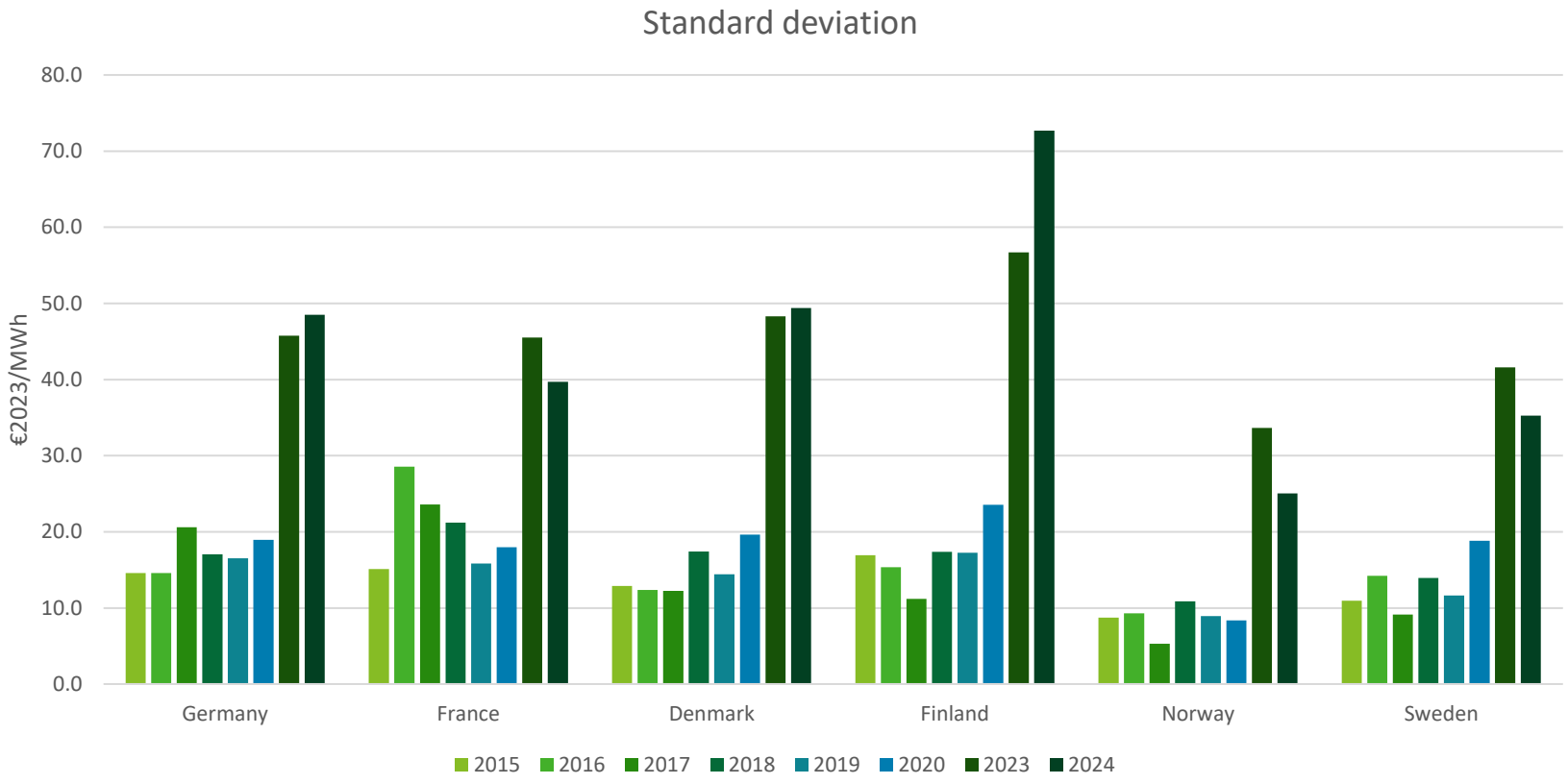
Source: EMBER, "Hourly European Wholesale Electricity Price Data", 2025

The number of high hourly prices has been increasing too



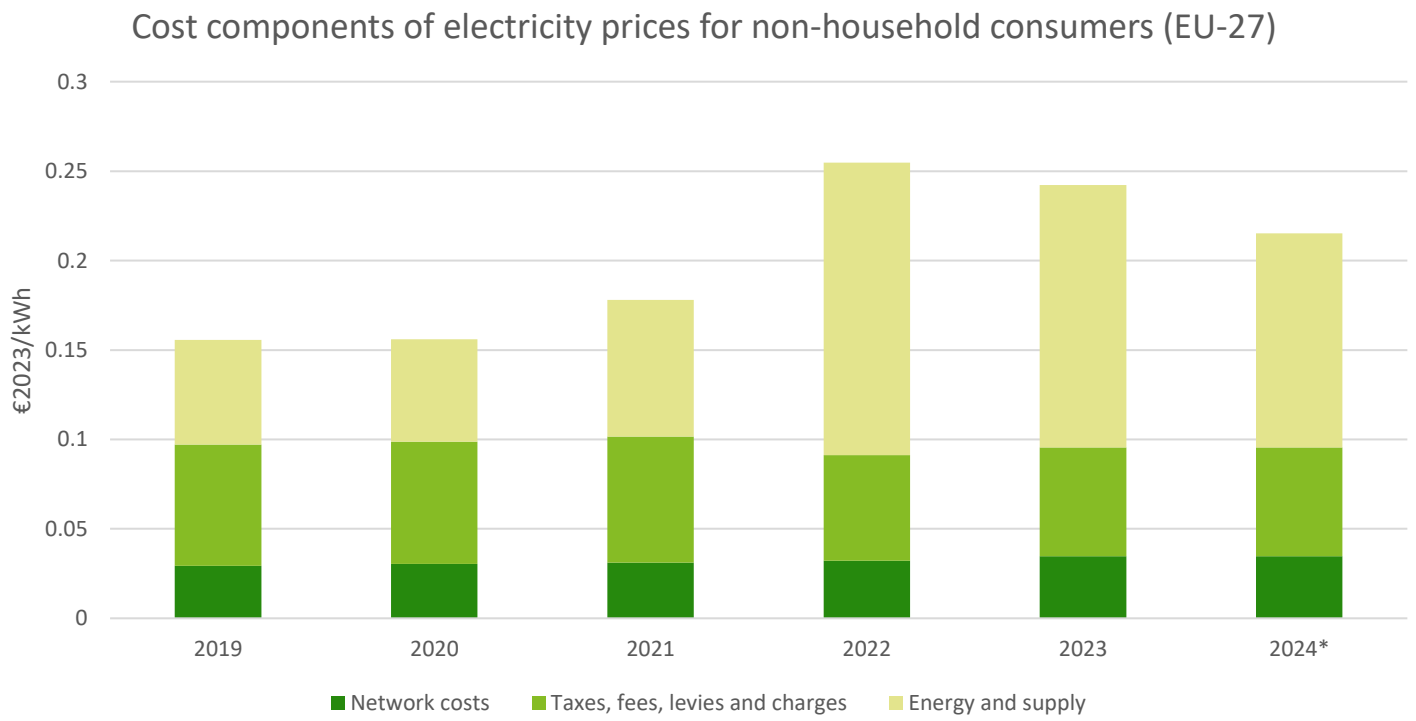
Source: EMBER, "Hourly European Wholesale Electricity Price Data", 2025

…causing greater volatility of electricity prices



Source: EMBER, "Hourly European Wholesale Electricity Price Data", 2025

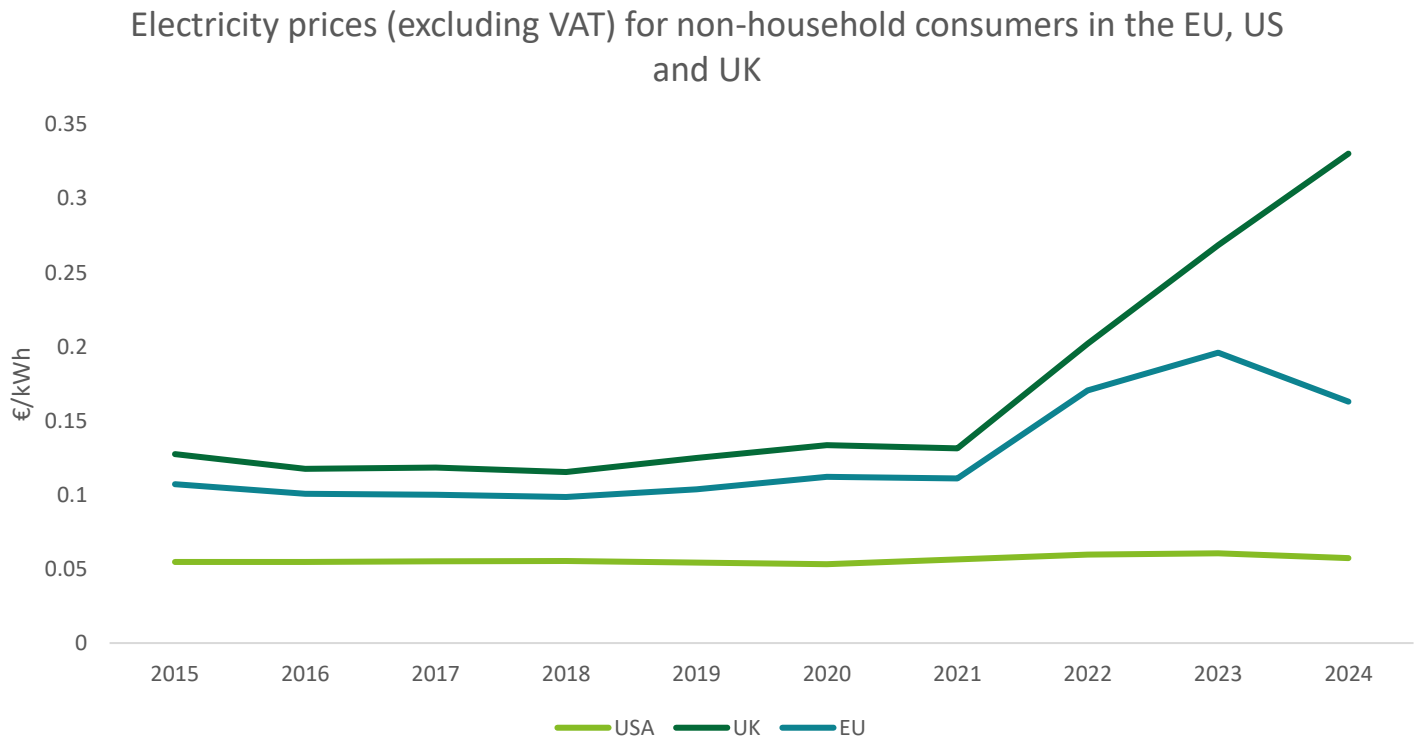
Wholesale electricity prices don’t provide the full picture of energy cost to industry



Source: Eurostat, "Electricity prices for non-household consumers“, 2025

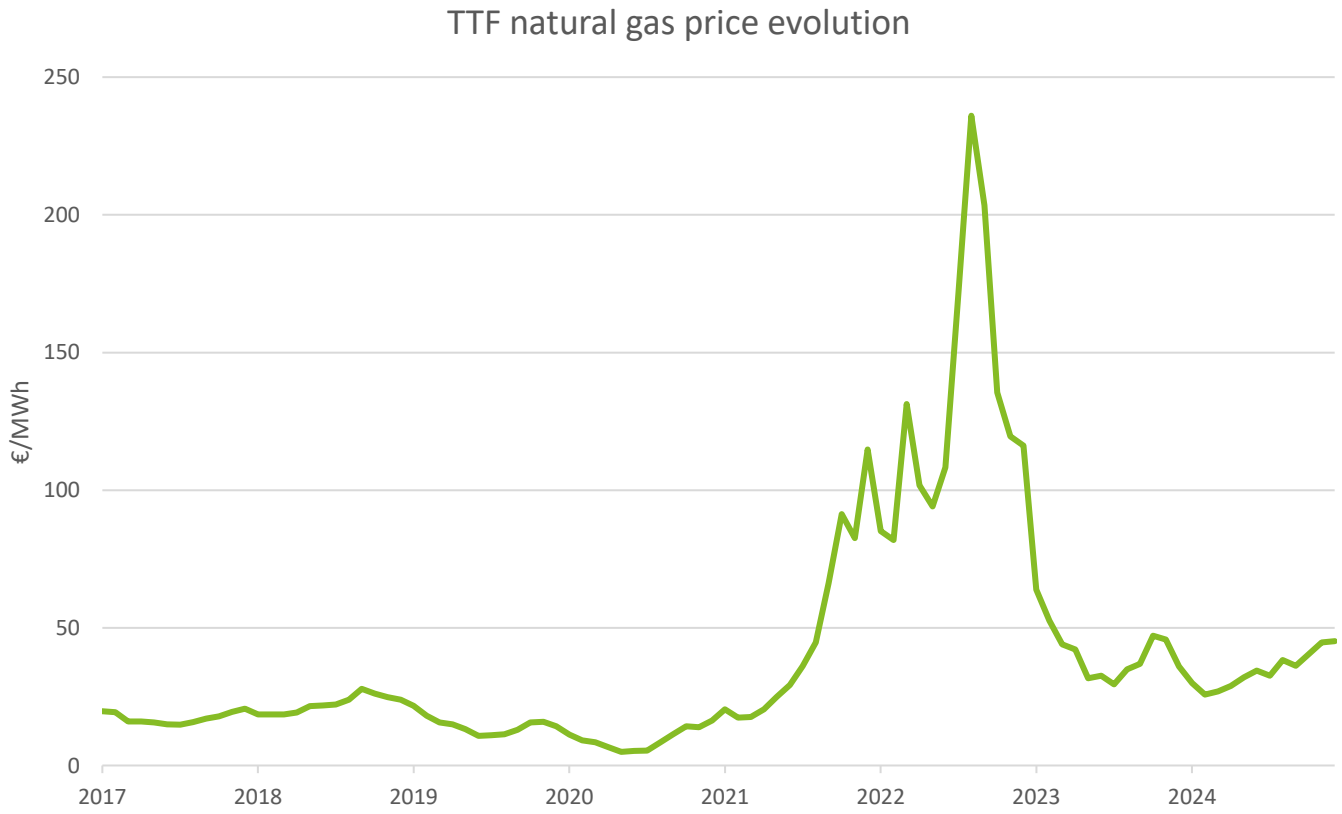
* The values provided are estimations.

Electricity prices in the EU are three times higher than in the US



Source: European Commission, "The 2025 Annual Single Market and Competitiveness Report", 2025

Natural gas remains the primary driver of electricity prices



Source: INSEE, "TTF Natural gas", 2025

What are the key challenges going forward?

- Renewables (+ supporting technologies) have the potential to substantially lower power prices
    - Coal phase-out risks to create a gap, especially in Germany. Will gas fill it?
- Countries with nuclear ambitions need to find a way to finance non-market based investments
    - French nuclear fleet requires investment. Will post-ARENH help?
- Expanding interconnectors brings down costs but beware of the distribution effects!
    - Will the expansion of the integrated EU power system grind to a halt?
- Industry, especially small companies, need to learn how to handle price volatility
- Rapid shift to (domestic) low-carbon electricity enhances resilience and lowers cost

For more information

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Industrial energy costs in Germany and France

Focus on Germany

25.2.2025 | Dr. Markus Böhme, LL.M.

Agenda

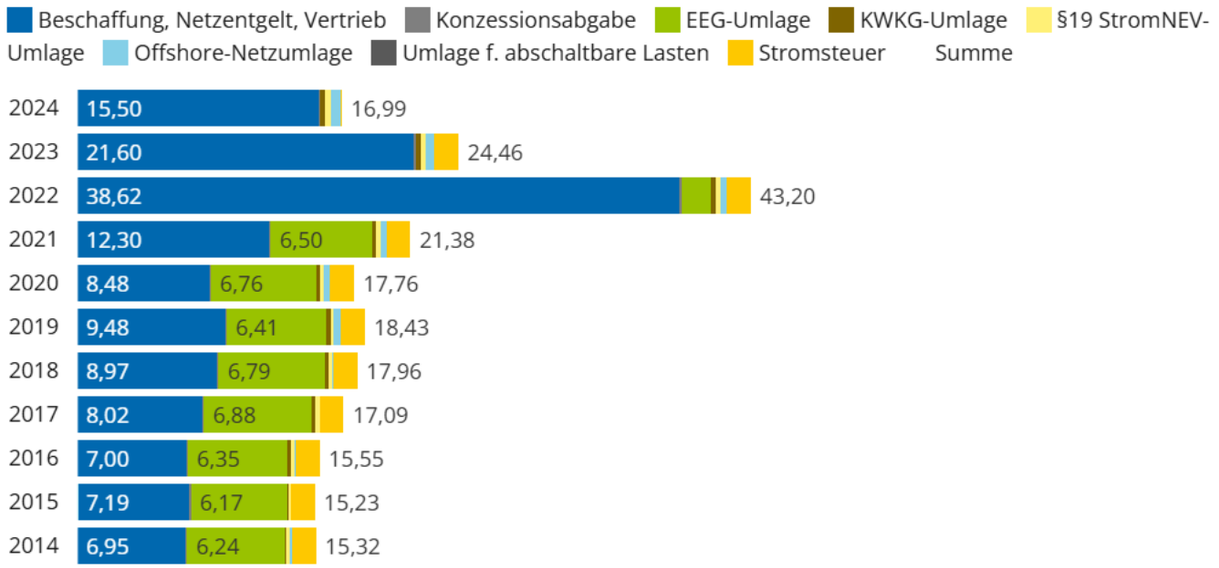
1 Current energy costs for electricity and gas in Germany

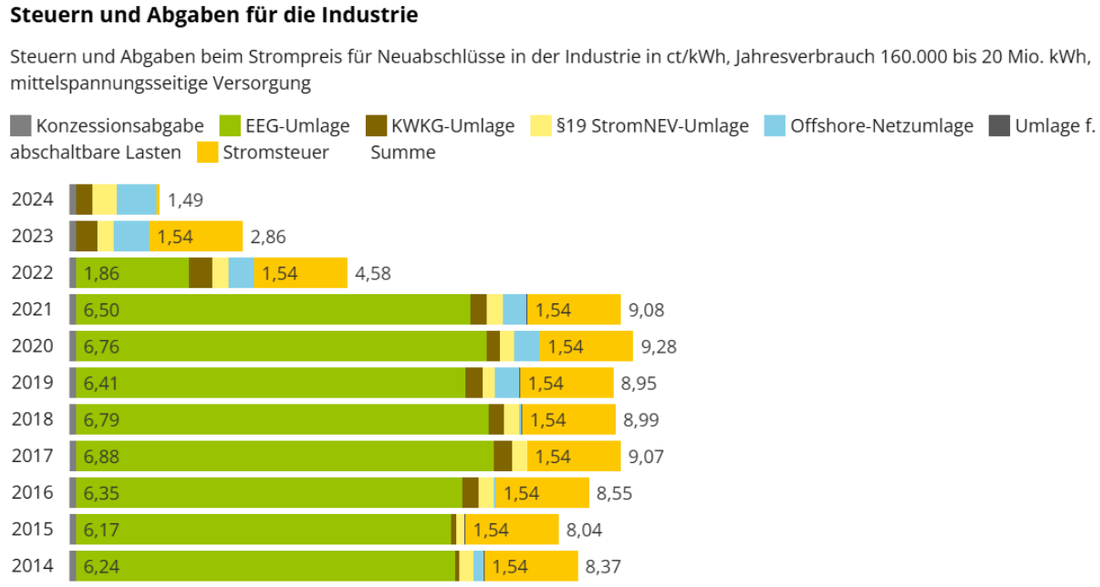
TaylorWessing

Current energy costs for electricity

Prices as of December 2024 (source VEA and BDEW) based on the following assumptions:

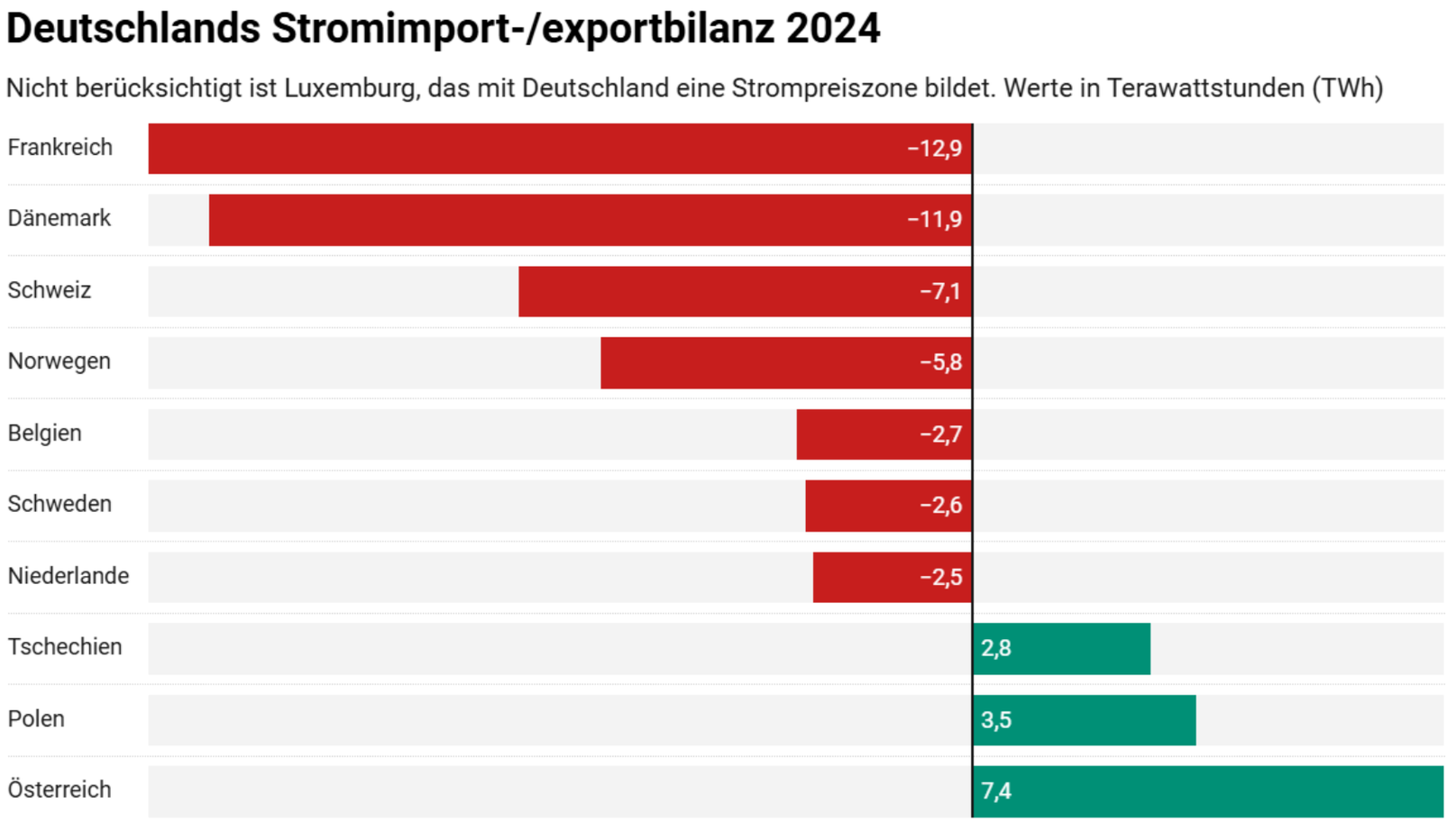
- Average prices for newly concluded industry supply contracts in ct/kWh
- Consumption between 160.000 to 20 Mio. kWh on medium voltage level





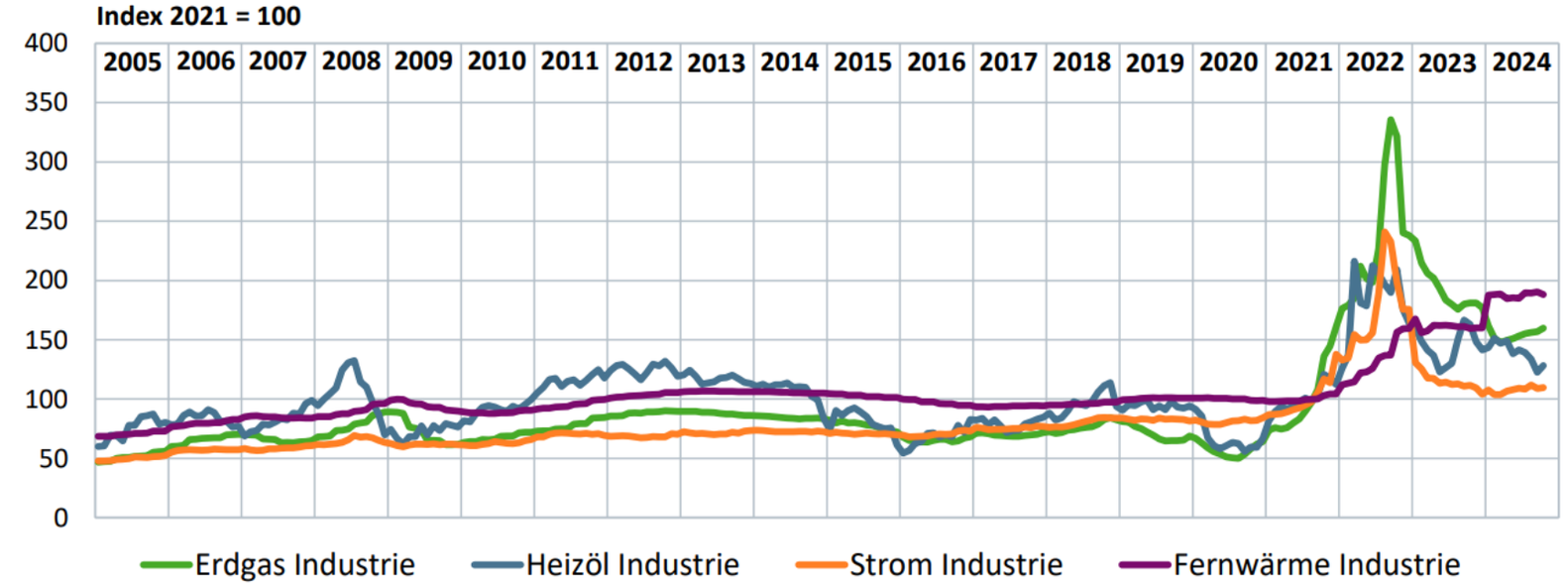
Source (25.02.2025): https://www.bdew.de/service/daten-und-grafiken/bdew-strompreisanalyse/

Germany‘s electricity import statistics 2024 (source ZfK)



Source (24.02.2025): https://www.zfk.de/energie/strom/deutsche-stromimporte-neuer-rekord-und-neues-lieferland-nummer-eins

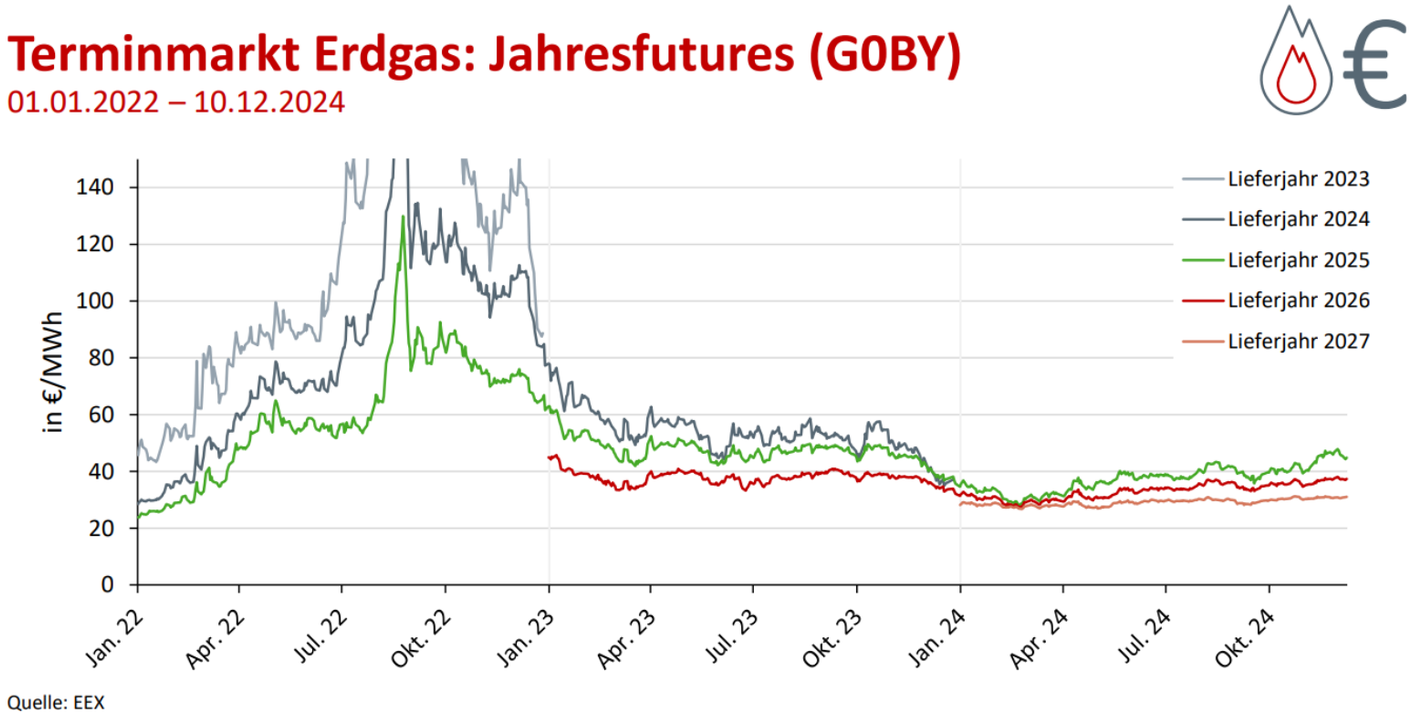
Current energy costs for gas (Source BDEW based on EEX data)



Quelle: Destatis (FS 17, R 2); Strom- und Gaspreisbremse im Index berücksichtigt
Die Grafik zeigt die Preisentwicklung (indexierte Preissteigerungsraten, **keine absoluten Brennstoffpreise**) bei Heizöl, Gas, Strom und Fernwärme für Industrie seit Januar 2005 bezogen auf das Basisjahr 2021 (Jahresdurchschnitt); Stand 07/2024 (Daten bis einschl. Mai 2024 verfügbar)

Source (25.02.2025): https://www.bdew.de/media/documents/BDEW-Gaspreisanalyse_12-2024.pdf

Current energy costs for gas (Source BDEW based on EEX data)



Additional price factors for gas:

- Network fees
- Metering fees
- VAT
- Concession levy
- Gas tax
- CO_2-prices
- Gas storage levy
- Balancing levy and fee
- Biogas levy
- Conversion levy and fee
- Market area conversion levy
- VHP fee

Source (25.02.2025): https://www.bdew.de/media/documents/BDEW-Gaspreisanalyse_12-2024.pdf

2 Discounts and privileges for the industry

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Discounts and privileges for the industry

Electricity:

- Individual network fees such as
  - atypical network usage
  - 7.000 hours and at least 10 GWh privilege
  - Network fee for singularly utilised equipment
  - Abovementioned exemptions are currently under review by Federal Network Agency and industry associations heavily fight to retain the current regulations as far as possible
- Electricity tax reductions for companies in the manufacturing industry (currently applicable for 2024 and 2025)
- Electricity price compensation (to avoid carbon leakage regarding CO_2-prices)

Gas:

- Application for energy tax reductions in case of
  - specific production processes such as
    - glas and ceramics
    - metal production
    - chemical reduction processes
  - for generation of electricity or
  - for CHP-facilities.
- Carbon leakage subsidies regarding CO_2-prices

3 Climate protection contracts

TaylorWessing

Climate protection contracts

Funding mechanism, eligibility requirements and current status:

- The contracts are awarded in a competitive bidding process.
- Companies submit bids in which they state the cost of avoiding one tonne of CO_2 per tonne of manufactured product.
- The most favourable bids are awarded a climate protection contract.
- The subsidy is paid as a contractually agreed price per tonne of CO_2 avoided.
- The contract price is adjusted dynamically, depending on factors such as the ETS price or current energy source costs.
- If the difference is positive, companies receive payments; if the difference is negative, they must repay the state.
- Production plants must save at least 10 kilotons of CO_2 equivalents per year compared to the reference plant. From the third year of the contract term, a greenhouse gas reduction of at least 60% must be achieved. At the end of the contract, emissions must be reduced by 90%.
- On 15 October 2024, the first climate protection contracts were awarded to 15 German industrial companies.
- The total volume of these first contracts amounts to around 2.8 billion euros

4 Reform of the European electricity market

TaylorWessing

Reform of the European electricity market

Core elements of the reform for industry customers:

- The reform of the European electricity market, which came into force in July 2024, aims to stabilise energy prices and reduce dependence on fossil fuels.
- The most important aspects and expected effects for the industry are:
  - More stability for industry customers
  - Promotion of renewable energies (RE)
- New contract options: Consumers and companies can choose between fixed-price, dynamic and combined contract models.
- Contracts for difference (CfDs): Introduction for new investments in low-carbon energy generation to reduce price volatility and encourage investment in RE.
- Flexibilisation of electricity consumption: Incentives for industry to adapt their electricity consumption to fluctuations in renewable energies.
- Reform of grid charges: Abolition of reduced grid charges for even electricity consumption, instead rewarding the availability of renewable electricity.
- **Challenges:** pressure to flexibilisation, investment requirements, cost uncertainty if investments are compensated by cost reductions

5 Power plant strategy

Currently failed due to the collapse of the German coalition

TaylorWessing

Power plant strategy

Main goals (currently failed due to collapse of the German coalition):

- The federal government's power plant strategy was intended to incentivise the construction of new hydrogen-capable gas-fired power plants.
- According to the Federal Ministry of Economics, its implementation was governed by a new Power Plant Safety Act. A total of 12.5 gigawatts (GW) of power plant capacity and 500 megawatts (MW) of long-term storage are to be put out to tender - including two GW for comprehensive modernisation of existing gas-fired power plants to make them “hydrogen-ready”.
- The new power plants are to be built at so-called “system-beneficial” locations, i.e. where many interventions to stabilise the electricity grids are currently causing additional costs in the system. The German government has announced that the new power plants will be built “predominantly”’ in the grid-related south of Germany, as this is where the demand for dispatchable, i.e. flexibly available, capacity is greatest.
- Gas fired power plants will be considered a transitional technology with hydrogen readiness to ensure security of supply with their flexibility since they can be ramped up quickly.
- **Additional costs of approx. 15 to 20 billion euros result in increasing prices.**

6 Thank you very much for your attention!

TaylorWessing

Your Contact

Markus Böhme is a sought-after legal expert in the national and international energy industry.

Clients value his advice on regulatory issues in the light of the liberalised energy market. Markus advises on M&A transactions and on the entire field of energy supply (gas, electricity, local and district heating as well as renewable energies). He has in-depth knowledge of the business perspective from his secondment to a major player in the German energy industry. Markus represents clients in court drawing on his experience from various leading decisions on energy law.

Markus Böhme complements the wide range of his advisory practice with his scientific expertise, as evidenced by his numerous publications and commentaries. In addition to nuclear regulatory issues, Markus Böhme focuses in particular on the area of renewable energies and is co-author of several commentaries on the EnWG, WindSeeG and EEG.

Following his studies of law at the Rheinische Friedrich-Wilhelms-Universität Bonn, he received his PhD in 2008. Markus Böhme participated in a Master of Laws program (LL.M.) at Nottingham Trent University.

Languages

- German, English, French, Italian

"Frequently recommended lawyer for the energy sector , JUVE 2024/2025

"Markus Böhme is a very competent and friendly partner specializing in the energy sector.“, Client, The Legal 500 2024

Recommended lawyer industry focus energy, The Legal 500 2024 & 2025

Next Generation Partner for energy law, The Legal 500 2019 – 2025

Rising star in the field of energy regulatory law, JUVE 2023/2024 – 2024/2025

"profound expertise and solution-oriented", Client; "always to the point", competitor, JUVE 2023/2024

"Very detailed knowledge in energy law", Client, JUVE 2022/2023

"Pragmatic and appreciated", "high level of expertise", Competitor, JUVE 2022/2023

Leading lawyer for energy law in Germany, German Institute for Legal Departments and Corporate Lawyers (diruj) – law firm monitor 2021/2022 – 2024/2025

Frequently recommended lawyer for Energy Regulatory, JUVE 2021/2022 – 2024/2025

Best Lawyer for energy law, The Best Lawyers™ in Germany, Handelsblatt 2020 – 2024

Rising star for energy law, Euromoney Expert Guides 2019 – 2020

"… client- and target-orientated in the negotiation of PPAs", Client, JUVE Rechtsmarkt 1/2024

Future Leader, Who is Who Legal 2023 – 2024

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- Renewable Energies
- District heating and contracting solutions

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February 25th 2025

Questions ?

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Coming up next...

March 5th | Conference, Paris
Onshore wind energy: cost evolution, financing and current challenges

March 19th | Conference, Online
Decarbonizing heat supply: heating networks, district heating, decentralized solutions

March 31th | Side event, Hanover
Support mechanisms for the decarbonization of industry in France and Germany

- Registration now open on ofate.eu/dfbew.eu
- Make sure you are on our mailing list!

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Thank you for participating!

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