



EUROPE

March 2026



# **Powering Europe: Security, Competitiveness Through Energy Transition**

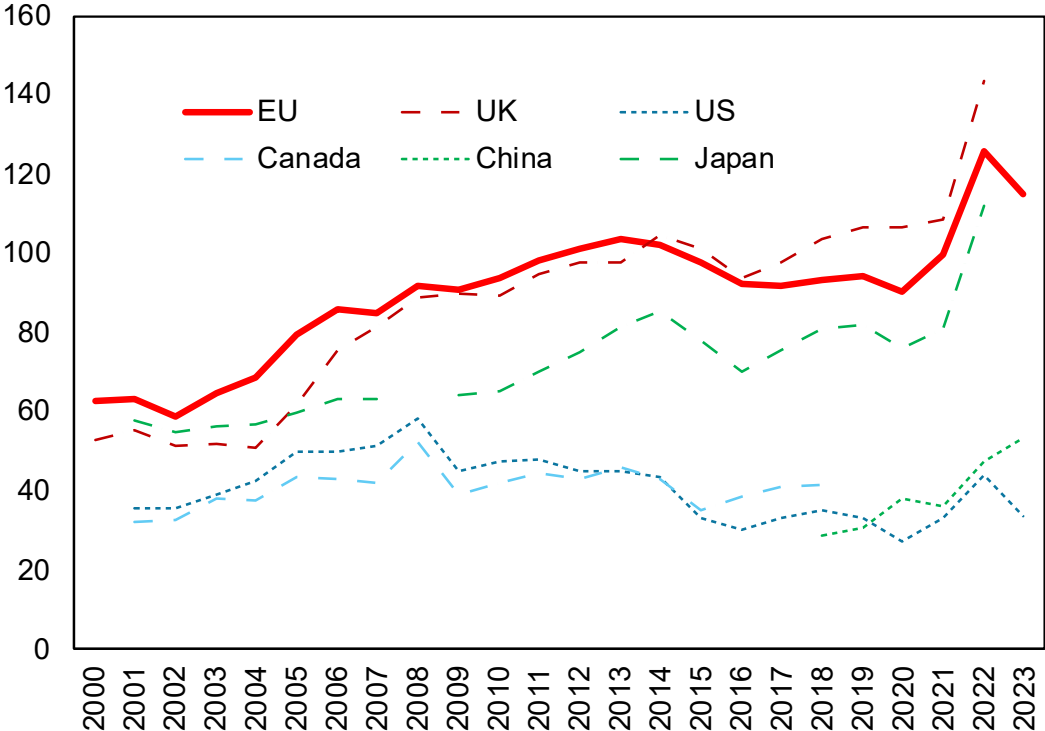
**MARCH 23, 2026**

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Department

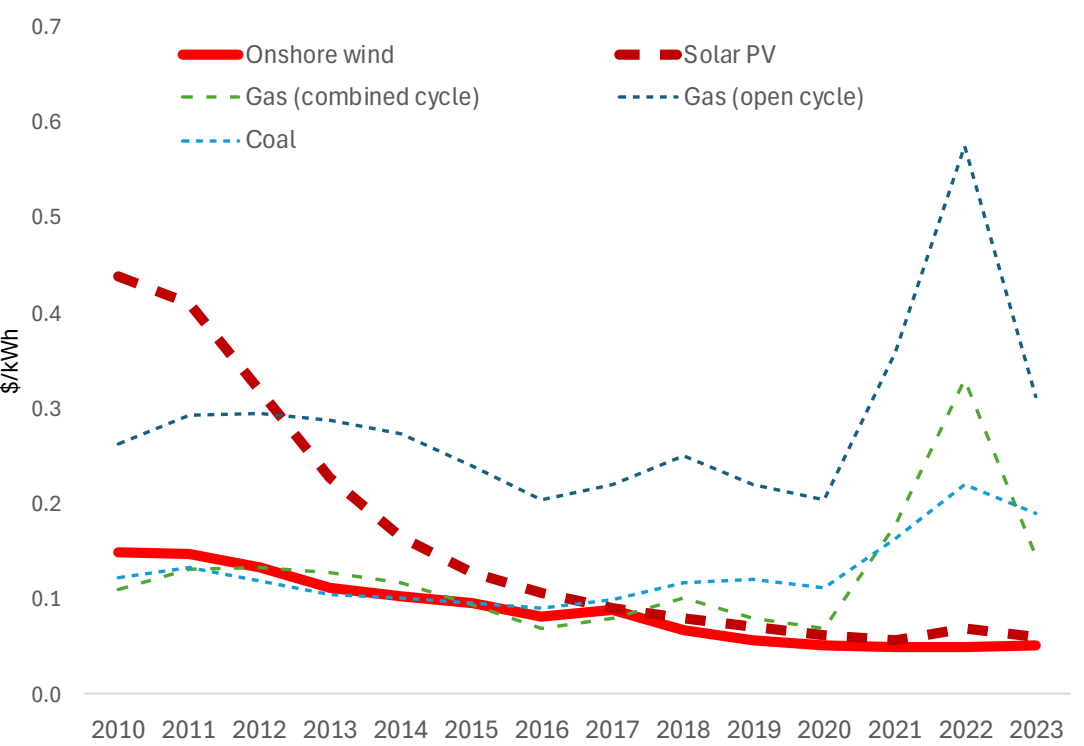
# EU industry energy prices are high—renewables are a competitive solution

**Fig.1 Industrial Energy Prices**  
(USD/MWh, constant price)



Sources: IEA, Eurostat, CEIC, National Statistics Institutes  
 Note: Blue indicates Europe, green indicates Asia, red indicates Americas, the country energy price index is calculated taking the sumproduct of industry energy prices fuel type (natural gas, coal, electricity, oil, other) and energy consumption shares. The line for the EU is calculated by using country shares in EU industrial VA.

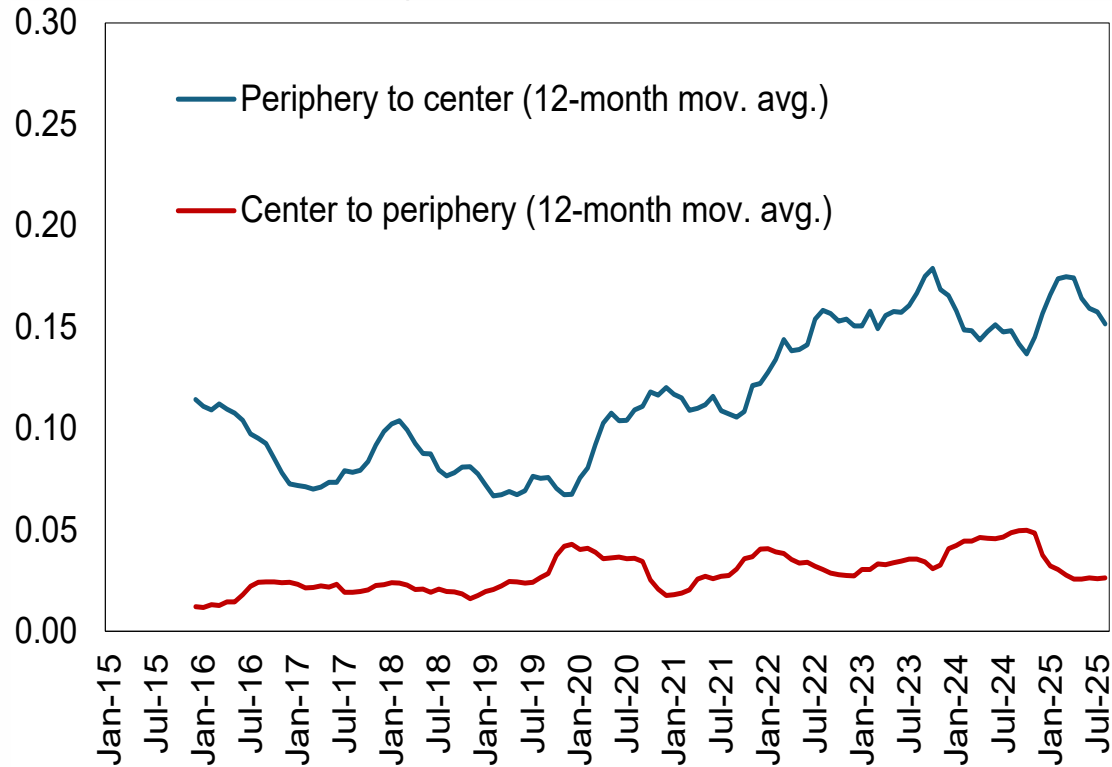
**Fig.2 Levelized Cost of Energy (LCOE) by Source**  
(\$/kWh. Average of France, Italy and Germany)



Sources: IRENA, Renewable Power Generation Costs in 2023. IMF staff calculations.  
 Note: Arithmetic mean of LCOE of France, Germany, Italy. Gas (combined cycle) refers to efficient gas-fired power plants, combining gas and steam turbines; gas (open cycle) refers to less efficient legacy gas-fired power plants. The levelized costs of electricity (LCOE) is a method for comparing the average cost of generating one unit electricity (kWh) over the entire lifespan of a power-generating asset or project, taking into account all costs associated with building and operating the power plant (capital expenditures, operating and maintenance costs, fuel costs, financing costs, and decommissioning costs). Assumed weighted cost of capital (WACC) is 7 percent.

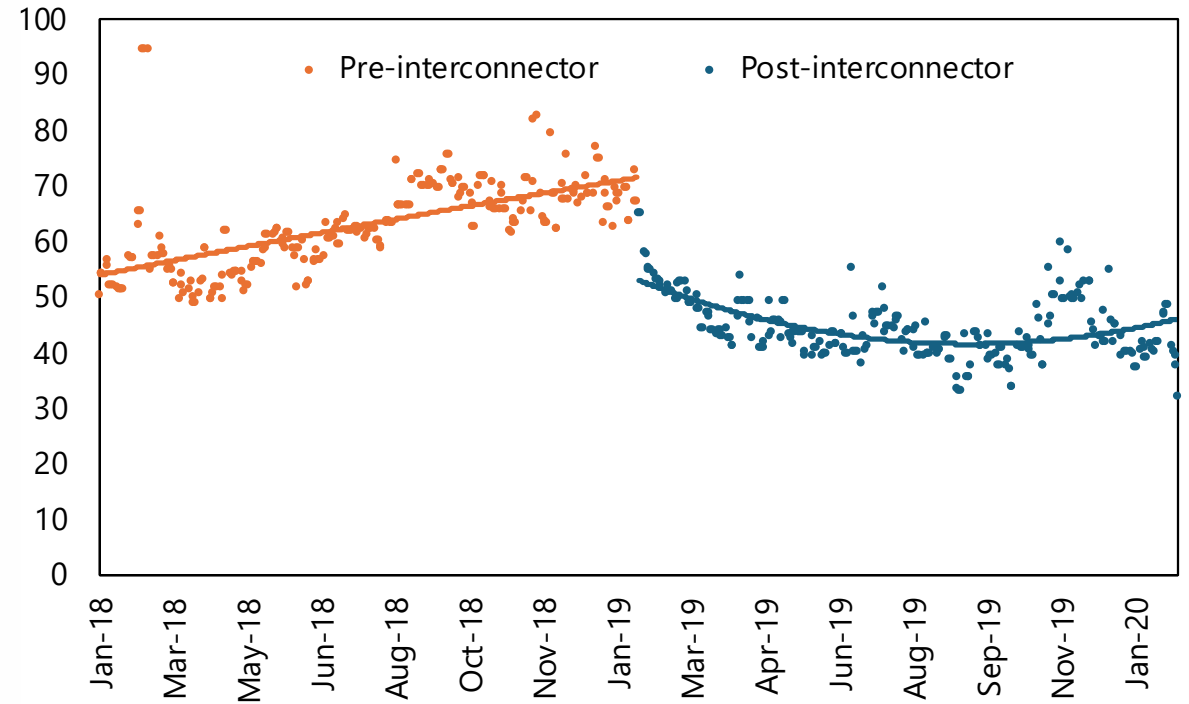
# The EU's electricity grid is congested—interconnectors lower prices

**Fig.3 Electricity Congestion Directional Trends**  
(Monthly average share of hours with utilization rate above 90 percent)



Sources: IMF staff estimates based on Bloomberg and ENTSO-E data.  
Note: Center = DE and core neighbors; Periphery = Nordics and Southern Europe. Direction defined by origin-destination country groups.

**Fig.4 United Kingdom Wholesale Prices around interconnector investment**  
(EUR/MWh)

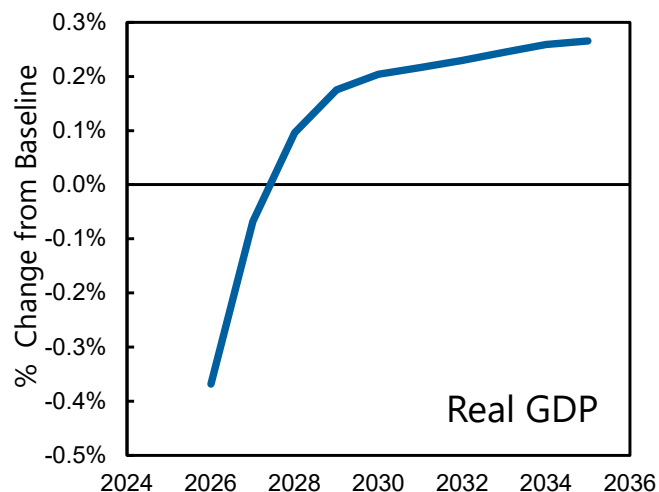


Source: IMF staff calculations based on Bloomberg data.  
Note: HDVC refers to the Nemo Linkinterconnector (UK-BE) commercial date of operation.

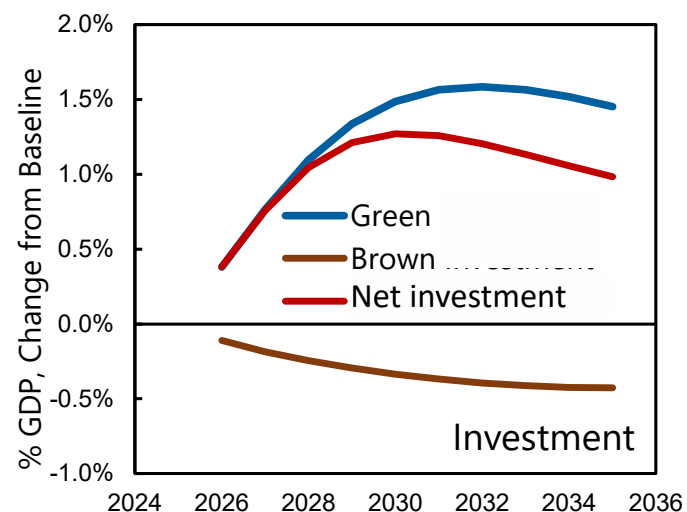
# The EU's energy transition is affordable

Simulations from a multi sector general equilibrium model embedding detailed energy transition technologies

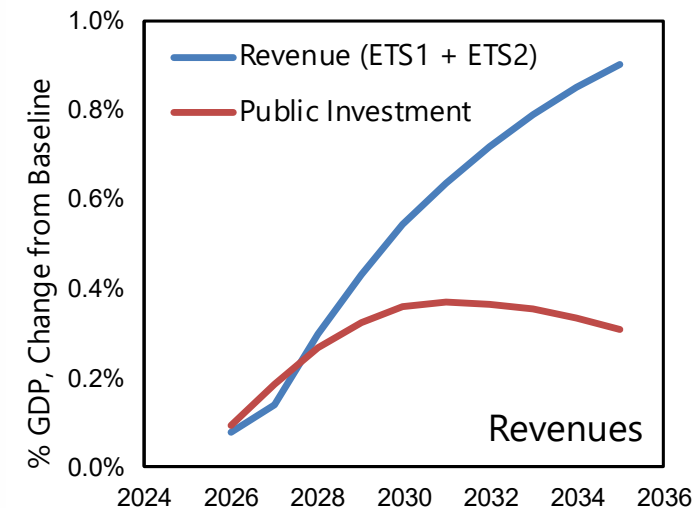
**GDP declines in the short run but increases in the medium term...**



**... Aggregate investment rises moderately...**



**... Revenues from carbon pricing rises to meet targets**



Categorization of "green" and "brown": **Green:** Renewables, energy-efficiency capital in Energy Intensive Tradables and Tradables, insulation, electric heating. **Brown:** coal, gas and oil extraction, gas heating, coal and gas electricity

Source: IMF staff calculations

Note: Simulations from the GMMET-NK general equilibrium macroeconomic model. The model explicitly represents electricity, transport, building heating and insulation, and energy efficiency investment in energy intensive industries. The scenario assumes EU climate targets are met through stronger carbon pricing under ETS1 and ETS2, with part of the revenues recycled to support green investment. The analysis excludes agriculture, waste, some energy infrastructure investments such as interconnectors, and certain regulatory measures.

# Policy agenda

**Faster expansion of grids and interconnections**—the backbone of an integrated electricity system and a prerequisite for large scale renewable deployment.

**More coordinated cross-country planning**—grid expansion, renewable deployment, and storage investments. The **EU “Grids Package”** can help through faster permitting, stronger incentives for cross border investment, and increased funding.

**EU-level blueprint and institutions for energy**—align planning and investment across the continent.

→ **The backbone of an integrated electricity system based on renewables will make Europe more resilient to shocks AND more competitive through lower energy costs.**