

WE MO 2019

World Energy Markets Observatory: Europe

Leading the world on climate change and clean energy

Europe, the long-time global leader on climate change and clean energy, emerges as a rare bright spot in this year's World Energy Markets Observatory. However, the region is far from reaching long-term targets.

Deep transformation of the energy, transport and manufacturing sectors will be necessary for continued and meaningful progress.

Region: **Europe**
Population: **513 million**
GDP: **US\$18,756,500 million**

"Europe is the world's region that is the most serious in trying to combat climate change and implement energy transition."

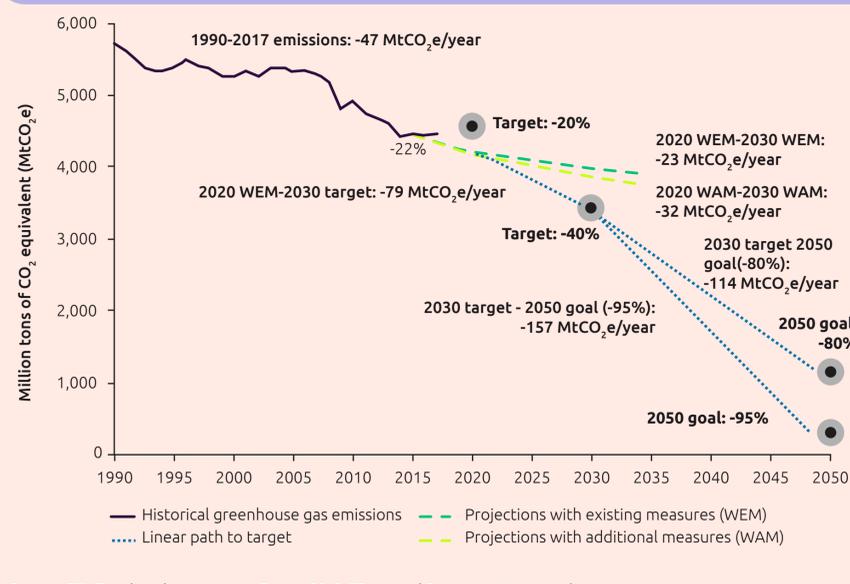
Colette Lewiner
Senior Energy Adviser to Capgemini Chairman

1 At a Glance: Renewables & Environment

Share of renewables: **17.5%**
Total clean energy investments: **\$51B**
Total CO2 emissions: **3,148Mt**
CO2 emission growth: **-2.5%**

2 Although 2020 GHG emissions reduction targets have been met, current policies and measures will not be enough to reach 2030 & 2050 goals

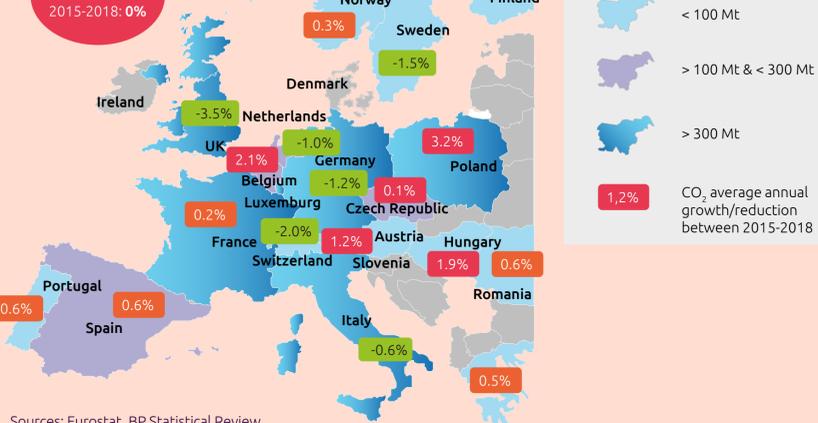
Greenhouse gas emission trends, projections and targets in the EU, 1990-2050



Sources: EEA Trends and projections in Europe 2018, EEA Annual European Union greenhouse gas inventory 1990-2017 and inventory report 2019

3 Despite overall progress, not all EU countries are evolving at the same pace. Eastern European countries are facing major difficulties in cutting CO₂ emissions

2018 CO₂ emissions in Europe and associated CAGR 2015-2018



Sources: Eurostat, BP Statistical Review

4 Electricity consumption declines as spot prices reach their highest levels since 2011

0.4% Decrease in EU electricity consumption for the first time in years due to warmer winter temperatures and lower industrial activity

€53.69 average EU electricity spot price, the highest recorded since 2011, partly a result of higher CO₂ prices

5 After reaching a five-year high, European gas spot prices fell sharply, alongside other global benchmarks

Abundance of supply and low demand made European prices take a dive over Q4 2018 and Q1 2019, nearly halving during that period

6 Alternative energy suppliers are slowly taking traditional players' market share in the EU's highly competitive retail energy market

Electricity suppliers
11% Increase across Europe between 2016 and 2017

Gas suppliers
27% Increase across Europe between 2016 and 2017

Nevertheless, new players have not turned the market upside down. Established suppliers still hold the biggest market shares.

7 EU utilities' financials slightly improved in 2018

3.8% Average revenues increase

3.2x to **2.9x** Decrease in the average leverage ratio (2017-2018)

8 Disruption will come from the combination of digital and sector technologies

AI will play a key role in smart grid emergence

Increasing number of prosumers

Demand response on the rise

Blurring borders between players

About WEMO

The World Energy Markets Observatory (WEMO) is Capgemini's annual thought leadership and research report that tracks the development and transformation of electricity and gas markets in Europe, North America, Australia, Southeast Asia, India and China. Now in its 21st year, WEMO examines the following topics: climate change & regulatory policies; energy transition; infrastructure & adequacy of supply; supply & final customer; technology; and financials.

For more information, please visit:

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