

# WORLD ENERGY MARKETS OBSERVATORY

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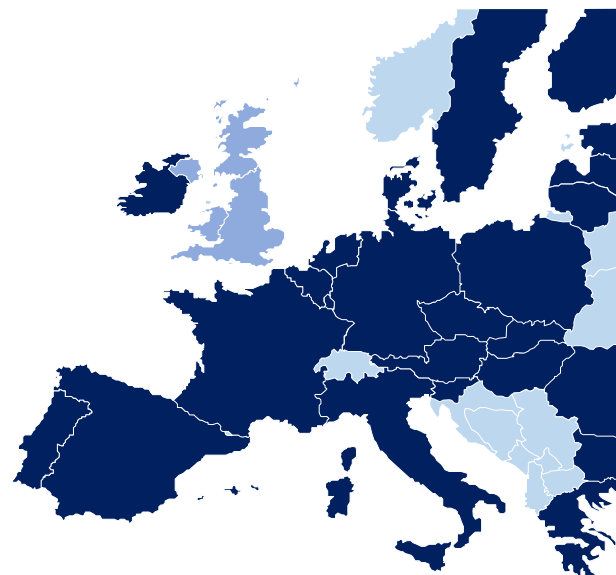
# Europe ID Card

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## Country Description

### Quick introduction



**Region:** European Union

All data is for EU27 (unless otherwise specified)

**Population:** 447 million

**GDP:** USD \$15.75 trillion

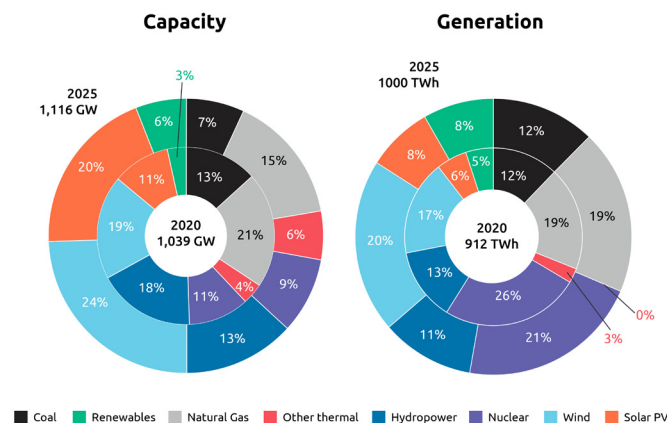
### Energy

2020 Total energy consumption: 1307 Mtoe

-7% from 2015

### Electricity

Average 2020 electricity price: **€29.3/MWh**



### Gas

Total gas production: **54.58 bcm**

Total gas consumption: **396.7 bcm**

### Renewable energy

Share of renewables in final energy consumption: **8%** (Enerdata)

2020 added wind capacity: **10GW**

2020 added solar capacity: **19GW**

### Environment

Total CO2 emissions: **2,470 MtCO2**

GHG emissions growth rate: **-3.7% (EU27+UK)**

55% GHG reduction objective compared to 1990 by 2030

### Electric vehicles

Number of electric vehicles: **3.2 million**

**+10%** EV registration in 2020

**286,000** charging stations



## Network

**USD \$51 billion** in grid investments in 2020 (IEA)

Age: **1/3** of the electricity grid exceeds 40 years old

In 2020, Spain was the only country not to meet its **10%** interconnection target

In 2030, the interconnection target is **15%**  
Nordstream 2 completed in September 2021

## Energy Players

**Power:** Centrica, CEZ, E.ON, EDF, EDP, Enel, ENBW, Engie, Fortum, Iberdrola, Naturgy, Ørsted, RWE, SSE, Uniper, Vattenfall

**Oil and Gas:** BP, Eni, Equinor, Repsol, Shell, TotalEnergies

## Region Highlights

- Adopted in June 2020, the €750 billion European recovery plan will allocate 30% of funds to climate change issues.
- The Fit for 55 package, signed in July 2021, aims for a 55% reduction in emissions by 2030 compared to 1990 and net-zero emissions by 2050. The package also raised the idea of a Carbon Border Adjustment Mechanism (CBAM).
- The European energy market is characterized by a robust carbon emission trading system (ETS) that reached prices over €60/tonnes in August 2021.
- 21 countries are expected to be coal free by 2030.
- Electricity wholesale prices reached lows in 2020H1 at less than €5/MWh but have been rising steadily since to peaks above €195/MWh in September 2021. This is due to high demand, low wind speeds, and rising prices for CO2 and natural gas.
- European utilities were resilient during the pandemic, increasing their average EBITDA margin to 21.7%.

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