VISION OR DIVISION?

What do National Energy and Climate Plans tell us about the EU power sector in 2030?





Italy: Falling Behind in the Electricity Transition

EU-wide analysis of National Climate and Energy Plans reveals that Italy is one of seven EU countries falling furthest behind in decarbonising its electricity by 2030.

Why is Italy falling behind?

- In 2030, Italy will be one of the EU countries most reliant on fossil fuels for electricity.
- Between 2018 and 2025, Italy is planning the largest expansion of fossil gas use in the electricity sector in the EU, primarily driven by a switch from coal to fossil gas-fired electricity as coal power plants are closed.
- Italy's deployment of renewable electricity between 2018 and 2030 is below the EU-27 average and is insufficient to make significant progress on its current high share of fossil fuels in the electricity mix.
- By 2030 Italy will be responsible for around 10% of the EU-27's power sector emissions and will be the third biggest power sector emitter.



Ember's European Programme Lead, Charles Moore, said

"Italy is blocking the EU electricity transition. Government plans show the largest increase in fossil gas in the whole of the EU in the next five years, together with below-average levels of renewables deployment. By 2030 Italy will be the EU's third biggest power sector emitter. As the EU increases its 2030 emissions reduction target to 55%, Italy urgently needs to change course by unblocking the renewables development pipeline to avoid being locked-in to new fossil gas infrastructure in the next five years."

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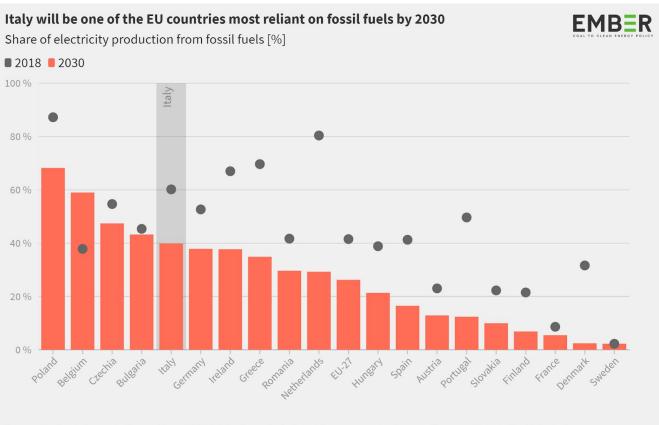
Methodology

Ember published a <u>report</u> analysing the National Energy and Climate Plans of all EU countries. This analysis revealed seven countries that are falling behind in decarbonising the electricity sector: Belgium, Bulgaria, Czechia, Germany, Italy, Romania and Poland.

Key findings in Italy

Fossil fuels

By 2030, Italy will be one of the EU countries most reliant on fossil fuels for electricity production. Italy's share of fossil fuels will be \sim 40% vs. an EU-27 average of about 25%.



Source: National Energy & Climate Plans (NECPs), Ember calculations. The 19 countries displayed account for > 97% of EU-27 electricity consumption

Italy plans the largest increase in electricity generation from fossil gas in the EU between 2018 and 2025. This is primarily driven by a switch from coal to gas-fired power stations as coal is phased-out in Italy. The reduction in fossil gas between 2025 and 2030 is reliant on the successful delivery of a planned expansion of renewable electricity - especially solar.

Italy plans the largest increase in electricity generation from fossil gas in the EU to 2025

Electricity generation from gas [TWh]



Italy Germany Belgium Spain Netherlands Other EU-27

Source: National Energy & Climate Plans (NECPs), Ember calculations.

Renewables

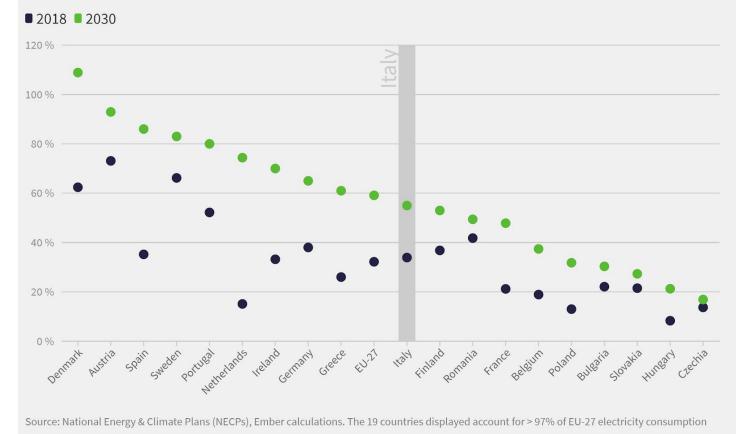
By 2030 Italy will have approximately average levels of renewable electricity. New renewable electricity deployment between 2018 and 2030 is below average and significantly below that of Germany, Spain and the Netherlands.

Italy will have a below-average share of renewable electricity by 2030



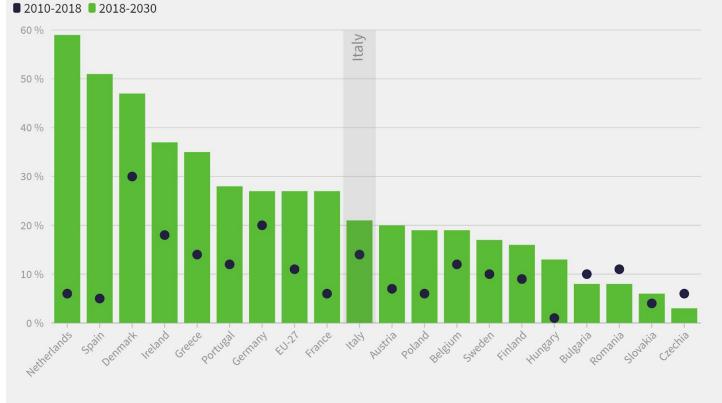
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Renewable energy sources (RES) share of electricity consumption [%]



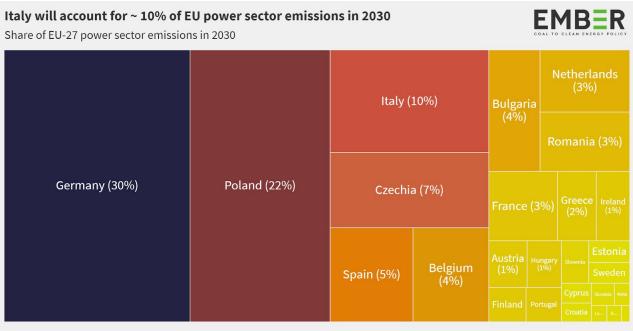
Italy's planned deployment of renewable electricity is below the EU average

Percentage point change in the renewable share of electricity consumption



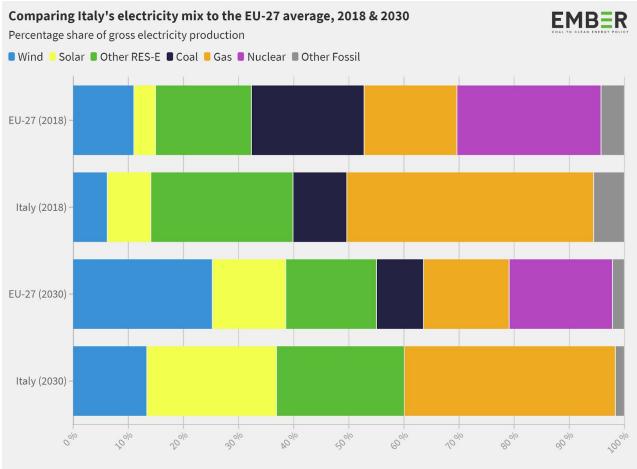
Source: National Energy & Climate Plans (NECPs), Ember calculations. The 19 countries displayed account for > 97% of EU-27 electricity consumption

By 2030 Italy will be responsible for 10% of the EU-27's power sector emissions and will be the third biggest power sector emitter.



Source: National Energy & Climate Plans (NECPs), Ember calculations. The same emissions factors by fuel are used for all countries.

Electricity Mix



Source: Eurostat, Ember analysis of National Energy & Climate Plans