

# Draft NECPs show EU just falling short of REPowerEU

National targets need a final boost to deliver towards the EU's renewable energy targets and emissions reduction commitments.

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## About

This analysis uses draft National Energy and Climate Plans and announced targets to assess whether EU member states are planning sufficient wind and solar build out to meet EU energy targets and climate commitments.

Explore more detailed data in our [Live EU NECP tracker](#) or read our [interim analysis](#) of the power sector in updated draft NECPs, submitted to the European Commission in October.

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# Tracking the EU's national targets

National ambition is nearing what's needed for the EU's energy targets, but a further push is needed to close the remaining gap and accelerate deployment.

National Energy and Climate Plans (NECPs) are the principal documents produced by EU Member States to detail their key climate targets and actions for the next decade and beyond. The previous full set of plans was finalised in 2019, and the next set is due to be completed in 2024. To this end, member states had until June 2023 to submit their draft updated NECPs to the European Commission, but the majority missed this deadline.

22 draft NECPs have so far been submitted, and are considered here alongside nationally announced policies from Belgium, Bulgaria, Ireland, Latvia and Poland which have yet to submit. Together they provide an initial indication of whether the draft targets are sufficient to achieve the EU's own energy goals, set out in the [Fit-for-55 package](#) and [REPowerEU plan](#). Progress in the power sector is critical, as the [IEA finds](#) Europe's power system must be decarbonised in the 2030s on a pathway to net zero compatible with the Paris Agreement.

The EU's progress on power sector targets has global implications. To work towards sufficiently rapid progress towards emission cuts this decade, the EU is championing an initiative at COP28 to [triple global renewable capacity by 2030](#). However, global tripling does not require each country to triple. As the EU already has a large share of renewable capacity, the ambition set out by REPowerEU to double renewable capacity by 2030 and reach a 72% share in generation is [suitably ambitious](#). Sufficient national targets in NECPs and a focus on deployment will be critical in delivering the pathway set out by REPowerEU, and ensuring that the EU delivers necessary progress in the global electricity transition to meet the commitments of the Paris Agreement.

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**With the EU pushing for a global tripling of renewables at COP28, it's vital that the bloc gets its own house in order by delivering ambitious national energy and climate plans.**

**Dr Chris Rosslowe**

Senior Energy & Climate Data Analyst,  
Ember



## Progress towards REPowerEU

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Renewable electricity is set to dominate the EU power sector by 2030. Based on the updated NECPs and other national announcements, we estimate that renewables are on course to generate 66% of EU electricity by 2030, slightly short of the [72% REPowerEU target](#).

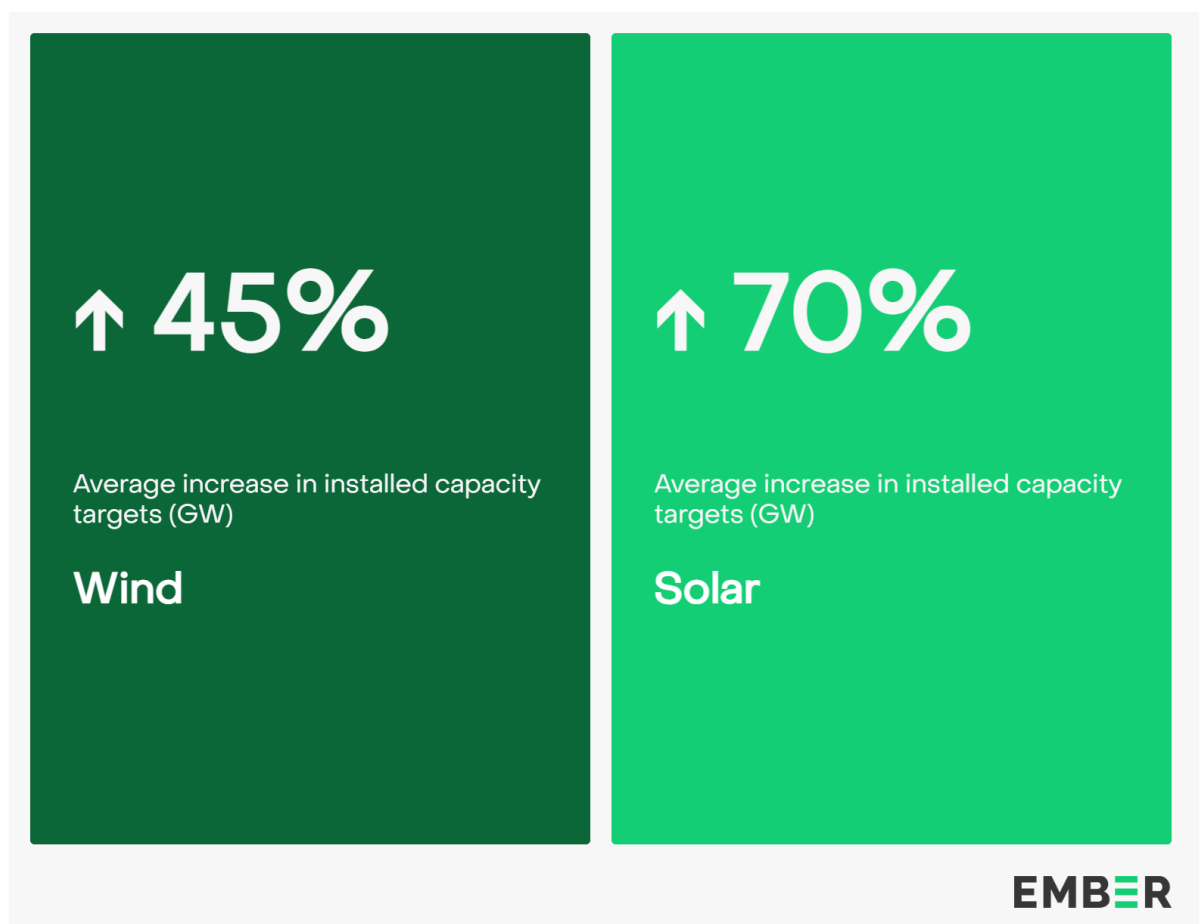
Almost all member states see an expanded role for renewable power compared to targets set in 2019. (See a breakdown by member state in our [live EU NECP tracker](#).) However, more ambitious targets are needed to put the EU on track for a predominantly decarbonised power system in the mid 2030s, as required by global climate commitments.

## Soaring capacity targets

Wind and solar targets have been dramatically elevated in the past four years as [growth has defied expectations](#).

Reflecting the [shockwaves of the energy crisis](#), 16 out of 19 EU countries (where data is available) have used their draft NECPs to raise wind capacity targets for 2030, while 17 out of 19 countries have raised solar ambition. Compared to the 2019 NECPs, national targets have been increased by an average of 45% for wind installed capacity and around 70% for solar.

Current ambitions, if delivered, would see the EU solar fleet more than triple and the EU wind fleet more than double by 2030.



This updated ambition puts the EU on course for between 623 - 672 GW solar by 2030, more than triple the 2022 capacity of 195 GW. Wind is set to more than double, going from 204 GW capacity in 2022 to 450 GW by 2030. However, this is still short of the fleet of 740 GW solar and 500 GW wind power by 2030 that is needed to meet the goals of the EU Green Deal and the REPowerEU plan.

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Among member states NECPs, Germany has among the most ambitious increases in solar targets, adding a huge 93 GW, or 76% to its 2030 target since 2019. Several countries with previously very low solar targets are now planning for a more significant role for solar by 2030, such as Lithuania and Czechia (5.1 and 10.1 GW). The Netherlands, currently a solar leader, is the only member not to increase its solar target at all compared with 2019, reflecting challenges with integrating solar into the grid.

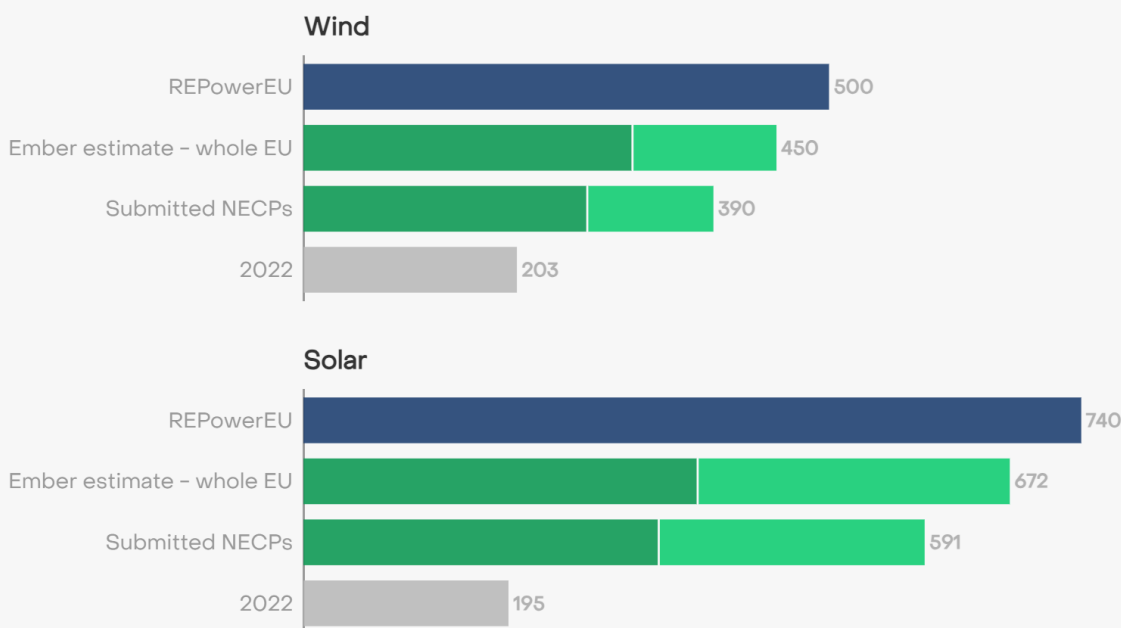
For wind, Estonia, Lithuania, and Denmark all announced major increases in ambition, all doubling targets set in 2019. However, three member states (France, Slovenia and Cyprus) have not increased wind targets since 2019. Lithuania and Portugal show the fastest acceleration in average annual deployment rate, with both over a factor of ten higher in the next eight years compared to the past five. Italy, Germany, Denmark, and Spain are also planning a significant (three times or more) faster delivery of wind in the coming years.

Despite these improvements, planned wind and solar deployment remains insufficient to achieve the goals of the EU Green Deal and REPowerEU plan. Member states must be bolder in order to further cut dependence on fossil fuels in the power sector.

## Upgraded wind and solar ambitions fall just short of REPowerEU

Installed capacities of wind and solar in 2030 (GW)

2019 NECPs 2023 NECP additions REPowerEU 2022



Source: European Commission (REPowerEU and NECP data), IRENA (2022 capacities)  
Solar capacities range from 623-672 GW for the whole EU and 549-591 GW for the submitted NECPs

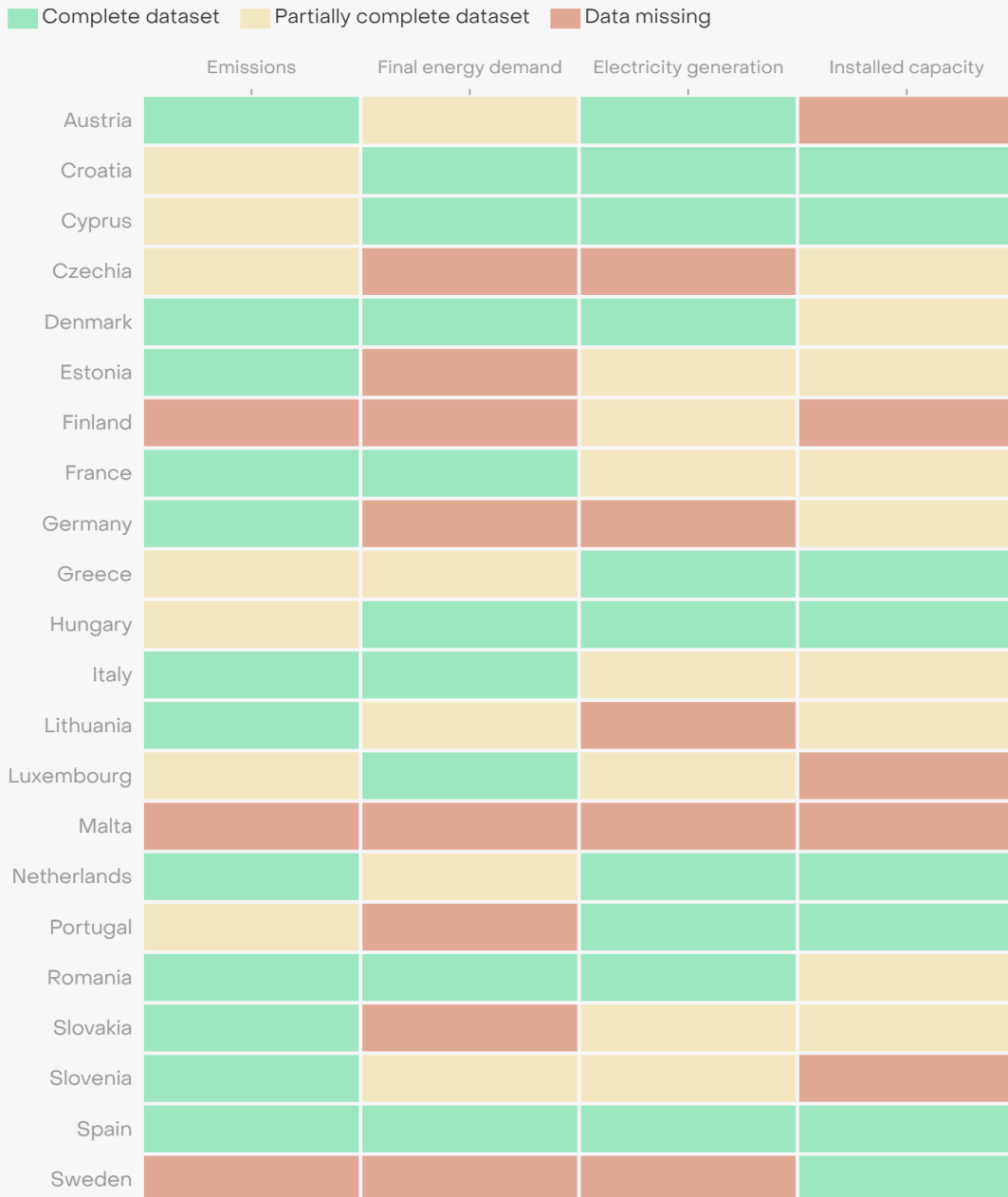
## Data transparency

Of the plans analysed, almost all NECPs provide insufficient data to track key metrics related to the power sector transition. These are, namely: GHG emissions, final energy demand, electricity generation, and installed generation capacity. Beyond power generation, the draft plans also lack sufficient data and details about how power system storage and flexibility will be scaled-up this decade. This will be critical in order to bring the full benefits of clean electricity to consumers.

These issues demonstrate the poor overall quality of the NECPs submitted so far, particularly regarding data transparency. Participation in the process, as well as

accountability and effectiveness of the plans, will suffer if the coverage and accessibility of data is not improved.

### Data quality of NECP 2030 targets



Source: European Commission, Ember analysis



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# Supporting Information

## Methodology

This document reports all solar capacities in units of direct current (DC, gross power). However, it is rarely stated in NECPs whether solar capacity figures are reported in units of alternating current (AC, net output) or direct current (DC, gross output). Therefore the total EU-27 solar capacity could range from 623-672 GW depending on whether uncertain reporting is assumed to be AC or DC.

Data behind these charts, as well as details on the methodology behind this analysis can be found in our [Live EU NECP tracker](#).

In a previous version of this report we stated that the REPowerEU target for renewables share in electricity generation is 69%. This figure in fact refers to share of consumption. REPowerEU actually targets a 72% share of renewables in electricity generation. The text of this page has been updated accordingly

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