

What's new with national renewable targets? Not much!

Tripling global renewable capacity is the biggest action the world can take for climate this decade. While 133 countries agreed to a global tripling pledge at COP28, increased ambition in 2030 national renewables targets has not yet followed.

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About

This report presents Ember's analysis of national 2030 renewable capacity targets, covering 96 countries and the EU as a bloc. Together, these represent 97% of the global renewable capacity, 96% of electricity sector demand and 96% of power sector emissions as of 2024. National targets are sourced from official strategies, plans, executive orders, official projections and credible third-party studies, and can be found in Ember's 2030 Global Renewable Target Tracker. National targets are up to date as of 15 July 2025. To calculate an estimated global target, we have adjusted the sum of national targets to account for the missing 3% of global renewable capacity.

Summary

Nearly two years after the COP28 agreement to triple renewable energy capacity by 2030, most countries have yet to reflect this ambition in their own national targets. Tripling global renewables capacity by 2030 is the single biggest action this decade to stay on track for the 1.5C climate pathway. Yet, despite the landmark COP28 agreement to reach 11,000 GW of renewables by 2030, national targets remain largely unchanged and fall short of what is needed.

- As of July 2025, only seven countries outside of the EU have updated their 2030 national targets. In total, 22 countries updated their targets 16 raised their ambition, while six lowered it. Within the EU, 15 countries revised targets as part of finalising their National Energy and Climate Plans (NECPs). Most other updates came through routine planning cycles, rather than as a direct response to the COP28 pledge.
- The current global sum of national targets is just 2% higher than at COP28. Updated national targets now collectively amount to 7.4 TW, just 2% higher than Ember's first assessment of targets in November 2023, and still well below the 11 TW needed to meet the tripling goal. This means global renewables targets still currently add up to a doubling of 2022 capacity by 2030, leaving a 3.7 TW gap to the tripling pledged.
- Nine of the top 20 world's largest power sectors are yet to update targets. Among the top 20 electricity producers, only China and South Africa are expected to update their targets in 2025. Others, including Canada, Russia, Türkiye and the US have yet to set and/or revise targets and are unlikely to do so this year.



Increases in national commitments, followed by swift implementation, can help bring the global tripling goal within reach. The COP28 global tripling agreement is crucial to drive global progress on climate, energy security and economic opportunity. Clear, ambitious national targets are essential to guide investment, plan for system flexibility, and deliver on global climate promises.

Nearly two years after the COP28 agreement, many countries have yet to reflect the tripling ambition in their national plans. The purpose of a national renewables target is less-so to force more renewables to be built, but rather to make sure they are built smarter. A target can help the government plan for the best place to build renewables and plan for grid and flexibility to integrate the renewables, and also to help companies invest in supply chains, making for a cheaper and more secure electricity system.

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Where do national targets stand in 2025?

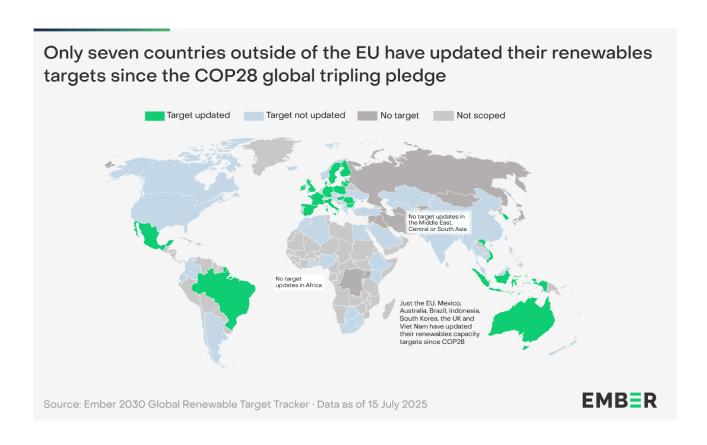
Tripling renewables capacity to at least 11,000 GW by 2030 is optimal for a 1.5C pathway according to the International Renewable Energy Agency (IRENA) and the International Energy Agency (IEA) models. In December 2023, 133 countries signed a global pledge to triple the world's installed renewable energy capacity by 2030 — an agreement formally included in the final COP28 text adopted by all 198 parties. This was followed up by the Global Energy Storage and Grids Pledge, signed by 65 countries at COP29 in November 2024.

At COP28 in 2023, Ember's <u>analysis</u> of 2030 national renewable targets showed that governments were collectively aiming for a doubling of renewable capacity — from 3.4 TW in 2022 to 7.3 TW in 2030. A year later in 2024, updated Ember <u>analysis</u> highlighted that global renewable markets are moving fast, but national targets have not caught up with the momentum, showing a modest increase in the sum of national targets to 7.4 TW in 2030. No country outside the EU updated its 2030 renewables target between October 2023 and October 2024, according to the analysis.



Two years after COP28: Few countries have updated national targets

Two years after COP28, only a handful of countries have made changes to their national renewable targets. This analysis finds that 22 countries have updated 2030 national renewable targets. Only seven countries outside of the EU have made updates – Australia, Brazil, Indonesia, Mexico, South Korea, the UK and Viet Nam.



EU countries revised their targets though the <u>National Energy and Climate Plan</u> (NECP) process, which is explicitly focused on meeting EU-wide energy and climate targets. Fifteen EU countries had draft <u>NECPs</u> at the time of COP28 and submitted <u>final NECPs</u> with updated 2030 values in 2024, for a net change of +41



GW. Among major EU electricity markets, France and Spain increased their targets by 5 GW and 19 GW, respectively, while Germany and Italy made no changes. EU countries are unlikely to update national targets before the next NECP deadline in 2029, which will shift focus to 2040.

The seven non-EU countries that updated targets did so through routine national energy planning cycles. Of the seven, five increased 2030 ambition, while two lowered it. None of the updates were tied to revised Nationally Determined Contributions (NDCs), further suggesting that COP agreements so far have had limited impact in driving stronger national targets.

Country	Policy Document	Update Frequency	Update Year	Change in 2030 National Target
Australia	Integrated System Plan	Every 2 years	2024	+18 GW
Brazil	Ten-Year Energy Expansion Plan	Annually	2024	+15 GW
Indonesia	Electricity Supply Business Plan (RUPTL)	Every 1-3 years	2025	-31 GW
Mexico	National Electric System Development Program	Annually	2024	-3 GW
South Korea	Basic Electricity Supply and Demand Plan	Every 2 years	2025	+9 GW
UK	Clean Power 2030 Action Plan: A new era of clean electricity	Periodically	2024	+7 GW
Viet Nam	Power Development Plan	Every 10 years	2025	+86 GW

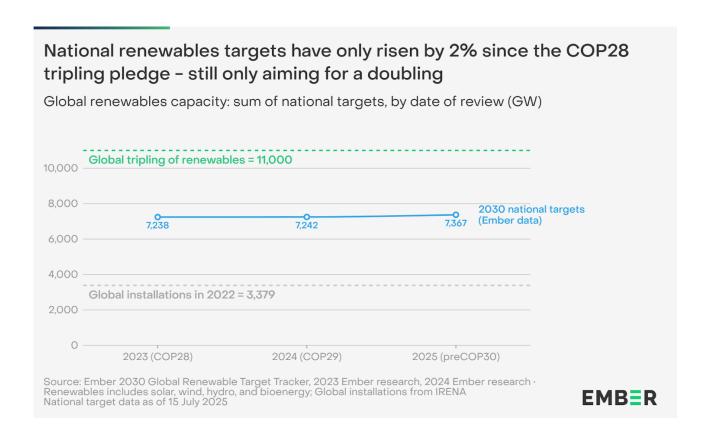


National targets globally still sum to a doubling, and not a tripling

Since COP28, our analysis shows that aggregate 2030 renewables capacity targets have increased marginally — from 7,238 GW to 7,380 GW — a rise of just 2%. This represents a 2.2-fold increase from 2022 levels, which served as the baseline for the tripling agreement. Therefore, national ambition remains aligned with a doubling, rather than a tripling of renewable capacity.

The difference between the global sum of national targets at COP28 and today, ahead of COP30, is a net increase of just 142 GW. The gap to reaching the tripling goal remains nearly unchanged at about 3,700 GW, similar to what it was when the pledge was made at COP28.

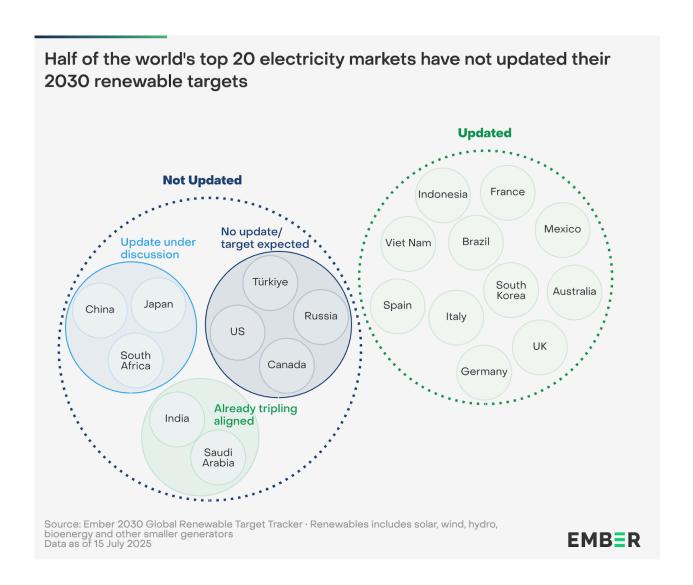




Some major electricity markets have yet to update their targets

Among the world's top 20 electricity markets, only 11 have updated their 2030 national renewable targets since COP28, mostly through regularly scheduled planning processes. While some countries are due to revise energy plans and may set new targets soon, others are unlikely to update or announce national targets.





Below is a brief overview of countries with the largest electricity demand that have not updated targets since COP28.

China: Update expected in upcoming NDC or Five-Year Plan

In 2020, President Xi <u>announced</u> a goal of 1,200 GW of solar and wind capacity by 2030, reaffirmed in the 14th <u>Five-year Plan</u> for Renewable Energy Development in 2022. China <u>surpassed</u> this target in 2024 — six years ahead of schedule. For a



more realistic estimate of where China's renewable capacity will be in 2030, Ember's 2030 Global Renewable Target <u>Tracker</u> uses an implicit target of 2,461 GW, which comes from a <u>projection</u> published in 2021 by the government-affiliated think tank GEIDCO.

United States: No update expected

The US does not enshrine national targets in official policy statements and is not expected to do so in the near future. A 2023 National Renewable Energy Laboratory (NREL) study projected 938 GW of capacity by 2030 under the Biden administration's 2035 clean power plan, forming the implicit target used in Ember's tracker. This 2023 study simulated changes to the US power system through 2030 based on the Inflation Reduction Act (IRA) and Bipartisan Infrastructure Law (BIL). However, the 2035 order was revoked in early 2025 and the new One Big Beautiful Bill Act aims to roll back much of the IRA, including a phasing out of renewable tax credits. The Repeat Project estimates the Act will reduce cumulative new solar capacity additions by around 29 GW and wind capacity by around 43 GW from 2025 to 2030.

India: National plans align with tripling pledge

India's 2023 <u>National Electricity Plan 2022–32 (NEP)</u> sets a 2030 goal of 509 GW of renewable capacity, up from 163 GW in 2022 — more than tripling capacity. The plan projects that renewables will provide 42% of total generation by 2030. This is consistent with Prime Minister Modi's COP26 <u>commitment</u> of 500 GW of non-fossil generation capacity by 2030. The NEP is updated every five years, with the next revision expected in 2028.



Russia: No update expected

Russia does not have a 2030 national renewable energy target and is not expected to publish one. In 2009, the Energy Strategy of the Russian Federation aimed to reach 4.5% renewable generation (excluding large hydropower) by 2020. The target year was later pushed back to 2024, but ultimately was not met. In 2025, the Russian Federation approved the Russian Federation Energy Strategy until 2050. The 2025 Energy Strategy includes no projections for renewable capacity.

Japan: No change in 2030 target in 2025 energy plan update

Japan's 7th Strategic Energy Plan, released in 2025, retains the 2030 target set in the 6th Strategic Energy Plan from 2021 — a 36–38% share of electricity generation from renewables. In its supplementary document, Japan lays out a capacity development target of 201 GW by 2030, including 118 GW of solar, 24 GW of wind and 60 GW of hydro, bioenergy and other renewables. Strategic Energy Plans are released every three years, so new targets may be set in 2028.

Canada: No explicit 2030 renewables capacity target

The 2023 Canada's Energy Future <u>report</u> presented renewable capacity projections under different scenarios, using assumptions from the 2030 Emissions Reduction Plan, including pending policies. According to <u>Canada's efforts to meet SDG7</u>, it is targeting 90% renewable electricity by 2030, but this document does not provide a detailed implementation plan. The most recent announcements by the Mark Carney government focus on <u>conventional energy</u>, leaving it unclear when, or if, an updated 2030 national renewables target will be presented.



Saudi Arabia: National plans align with tripling pledge

Saudi Arabia aims to generate 50% of its electricity from renewables by 2030, as announced in the 2021 <u>Saudi Green Initiative</u>. The 2019 Renewable Energy Project Development Office <u>target</u> included 59 GW of capacity — 43 GW solar and 16 GW wind — by 2030. Renewables comprised less than 1% of Saudi's electricity mix in 2023, so raising that to 50% by 2030 would represent one of the fastest transitions globally. Given the ambitious scale of the current target, it is unlikely that an updated 2030 target will be presented.

Türkiye: No change in 2030 target in 2024 energy plan

In line with its new 2053 Net Zero target, Türkiye published a <u>National Energy Plan in 2022</u>, outlining energy supply plans through 2035, including renewable capacity targets. While several documents have since been released, including the 2024 <u>Türkiye Long-Term Climate Strategy</u> submitted at COP28, the 2030 targets remain unchanged. The Long-Term Climate Strategy raises 2035 ambitions, but leaves 2030 targets unchanged.

South Africa: No update since 2019, new draft to be finalised this year

South Africa's Department of Energy published an <u>Integrated Resource Plan</u> (IRP) in 2019 to define the country's long-term energy agenda. The <u>2023 Draft</u> <u>Integrated Resource Plan</u> is currently under review and is expected to be finalized in 2025. The current draft differs from the 2019 IRP in that it has less wind capacity in 2030 but more rooftop PV.



Raising national targets is critical

National renewable energy targets can be a strategic tool not only for advancing climate goals but also for <u>enhancing energy security</u> and <u>promoting economic growth</u>. They signal a clear commitment to expanding renewables, creating investment certainty for clean energy and the supporting infrastructure. The targets also help guide supporting policies, incentives and planning — reducing risks like overcapacity or grid congestion.

2030 national renewable targets can be supported by integrating clean flexibility solutions. ACER national flexibility needs assessment indicates that technology-specific national renewable targets are essential for planning future flexibility needs. By setting clear national targets, countries can drive investments in the necessary technologies and infrastructure, ensuring that the transition to a renewable-based electricity system is both reliable and efficient.

Despite the global consensus to triple renewable capacity by 2030 — firmly established through COP28 and COP29 pledges, only a handful of countries, primarily in the EU, have updated their 2030 renewables targets since COP28. Most national planning processes continue on pre-set cycles, with few responding directly to the COP pledges or increasing ambition in response to favourable conditions for renewables deployment. Without near-term action to raise national ambition, the world risks missing a critical opportunity to keep the 1.5°C pathway within reach.



Supporting information

About Ember

Ember is an independent, not-for-profit energy think tank that aims to shift the world to clean electricity using data. It gathers, curates and analyses data on the global power sector and its impact on the climate, using cutting edge technologies and making data and research as open as possible. It uses data-driven insights to shift the conversation towards high impact policies and empower other advocates to do the same. Founded in 2008 as Sandbag, it formerly focused on analysing, monitoring and reforming the EU carbon market, before rebranding as Ember in 2020. Its team of electricity analysts and other support staff are based around the world in the EU, UK, Türkiye, India, China and Indonesia.



Acknowledgements

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