

Enhancing Action & International Cooperation for the Tripling of Renewable Energy Capacity Globally by 2030

Discussion paper

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Center for Climate and Energy Solutions

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A. Summary

1. The period from the end of the global stocktake (GST) at COP28 (2023) through to COP30 (2025) is critical. During this time period we will learn the collective level of ambition of new climate targets, whether countries have taken into account the outcomes of COP28 in formulating them, and whether countries have put in place the domestic plans, legislation, finance, and investment needed to implement those new targets. In the context of the Paris Agreement’s ambition cycle, 2024 is a crucial year for preparation, action, and enhanced international cooperation.
2. The GST decision from COP28 sets out a number of key, transformational global targets and signals to Parties to: (i) inform their next nationally determined contributions (NDCs); and (ii) enhance implementation and international cooperation.¹ Parties are expected to communicate their NDCs by February 10, 2025, with an end date of 2035.² The GST targets and signals form part of the guidance and requirements that have been set out from Paris to date,³ including that:
 - Each Party’s successive NDC will represent a “progression” beyond its previous NDC and reflect its “highest possible ambition,” reflecting its common but differentiated responsibilities and respective capabilities (CBDR-RC), in the light of different national circumstances.⁴

- Parties “shall pursue domestic mitigation measures, with the aim of achieving the objectives” of their NDCs.⁵
 - Parties include, as part of the information to facilitate clarity, transparency, and understanding of NDCs:
 - how the Party considers that its NDC is fair and ambitious in the light of its national circumstances⁶
 - how the NDC contributes towards achieving the objective of the UN Framework Convention on Climate Change, as set out in its Article 2⁷
 - how the NDC is informed by the outcomes of the GST, in accordance with Article 4, paragraph 9, of the Paris Agreement.⁸
 - Parties come forward with ambitious, economy-wide emission reduction targets, covering all greenhouse gases, sectors, and categories and aligned with limiting global warming to 1.5 degree C, as informed by the latest science, in the light of different national circumstances.⁹
 - Parties commit to accelerate action in this critical decade on the basis of the best available science, reflecting equity and the principle of CBDR-RC in the light of different national circumstances and in the context of sustainable development and efforts to eradicate poverty.¹⁰
 - Parties put in place new or intensify existing domestic arrangements for preparing and implementing successive NDCs.¹¹
 - Parties present their next NDCs at a special event to be held under the auspices of the United Nations Secretary-General.¹²
3. The Presidencies’ Troika letter from March 21, 2024 recognizes the need for leadership among an apparent wealth of actors, events, and pathways for Parties to avail themselves in their efforts to take forward the GST targets and signals.¹³ Their second letter from July 23, 2024 further elaborates their Mission 1.5 work plan to engage Parties in a targeted set of activities for the remainder of 2024 to enhance ambition and enable action toward COP29.¹⁴ While this establishes a welcome platform, Parties and non-Party stakeholders (NPS) may find a more elaborated vision helpful in guiding them to effectively action each of the GST targets and signals, reflect them in new NDCs, and achieve them.
 4. In order to implement the GST targets and signals through enhanced NDC ambition and implementation, major barriers must be meaningfully addressed, turned into opportunities for enhanced international cooperation, and translated into development priorities and domestic policies. In the context of making the case for clear leadership to enable such action, this paper:
 - focuses on the GST decision’s call to Parties to contribute to, in a nationally determined manner, the **tripling of renewable energy capacity globally by 2030**¹⁵
 - sets out barriers and solutions, as identified by our work and others, that must be addressed and implemented to enable real action in 2024,¹⁶ and
 - sets out key leadership considerations, how such a leadership role can be effectively utilized, and key priorities for 2024-26.
 5. Parties have nevertheless not yet accelerated the energy transition to the global pace and scale necessary to achieve the goals of the Paris Agreement, despite repeated observations that the shift to renewable energy is “rational,” the “right economic choice,” “easy,” or “obvious.”¹⁷ It is essential to understanding the reasons for this and address them.
 6. Many of the **obstacles to the renewable energy transition can largely be boiled down to four main, immediate challenges**: the **lack of relevant finance**; the **cost of capital**, which continues to increase, especially in developing countries; **supply chain constraints**, including those driven by geopolitics and friend-shoring;¹⁸ and **long lead times to obtain permits** and to build the grid.

7. Parties must respond quickly and tangibly to the call to triple renewable energy capacity globally by 2030. A number of solutions and opportunities exist to help overcome these challenges. At the same time, clear leadership that is inspiring, inclusive, respects the nationally determined nature of NDCs, and meets Parties and NPS where they are in terms of capacity, is essential. Enhanced international cooperation is vital to move from incrementalism to transformative levels of action in 2024 and beyond.

Paragraph 28 of the GST decision sets out a package of critical mitigation targets and signals.¹⁹ The achievement of no one signal or target alone will result in the deep, rapid, and sustained reductions in greenhouse gas emissions in line with 1.5°C pathways.

However, to drive the achievement of the tripling of renewable energy capacity globally, **Parties should include specific targets for total renewable power capacity for 2030 as part of their planning processes and domestic arrangements identified in their NDCs and long-term low emission development strategies (LT-LEDS).**

For instance, the domestic goals of nearly 150 governments go further than commitments indicated in their NDCs, corresponding to almost 8,000 gigawatts (GW) of installed renewable capacity by 2030. If governments were to include all their existing policies, plans, and estimates in their new NDCs, they would reflect 70 percent of what is needed by 2030 to reach tripling of global renewable energy capacity by 2030, although the world would still be 30 percent short of the goal.²⁰

The COP Presidency Troika’s leadership approach, including Mission 1.5 and Brazil’s Presidency of the of the G20, provides a unique opportunity to set out a new model for collaborative leadership. Building on the GST targets and signals from the UAE Consensus, COP29 must give Parties assurance that climate finance—drawn from a variety of sources—will be available such that: (i) Parties can come forward with ambitious NDCs and (ii) subsequently implement those NDCs. COP30 in Belém must reflect on the level of ambition presented by the NDCs and set the new direction as we head toward the end of this critical decade.

Questions for consideration

- How are Parties planning to take forward in 2024 the signal to triple global renewable energy capacity by 2030? How will this be reflected in new NDCs in 2025?
- How can Parties be supported in setting out renewable energy capacity targets in their NDCs?
- What is the plan to enhance international cooperation toward tripling global renewable energy capacity by 2030?

B. Context

8. The GST is a key part of the Paris Agreement’s “ambition cycle.”²¹ Parties to the Paris Agreement are required to undertake a GST every five years “to take stock of the implementation of this Agreement to assess the collective progress towards achieving the purpose of this Agreement and its long-term

goals...It shall do so in a comprehensive and facilitative manner, considering mitigation, adaptation and means of implementation and support, and in light of equity and the best available science.”²²

9. The outcome of the GST shall inform Parties in: (i) updating and enhancing, in a nationally determined manner, their actions and support (including their NDCs); and (ii) enhancing international cooperation for climate action.²³ The GST outcome also reaffirms sustainable and just solutions founded on meaningful, inclusive participation of all stakeholders and underlines that just transitions can support more robust and equitable mitigation outcomes.²⁴
10. Parties are encouraged to communicate their NDCs by February 10, 2025, with an end date of 2035.²⁵ There are guidance and requirements for their NDCs that have been set out by Parties from Paris through to COP28 (see “[Summary](#)” above).
11. The year 2024 is a crucial year to take forward the GST targets and signals, translating them into effective domestic policies and measures as well as enhancing international cooperation on climate action. The moment of truth as to whether the GST, in the wider context of the Paris Agreement’s ambition cycle, will have succeeded in increasing ambition will be February 10, 2025 when new NDCs must be tabled by all Parties. The collective impact of these will be set out in a synthesis report to be made available ahead of COP30.²⁶ Furthermore, COP30 in Belém should not be seen as a cliff edge; it will need to set out the world’s response to level of ambition that countries have come forward with.

Tripling Renewable Energy Capacity Globally by 2030: From Incremental to Transformational Change

12. According to the IEA, the global renewables power capacity in 2022 was 3,629 GW.²⁷ According to IRENA, some 300 GW of renewables were added globally in 2022, accounting for 83 percent of new capacity compared to a 17 percent share combined for fossil fuel and nuclear additions.²⁸ Under current policies and market conditions, global renewables capacity is forecast to grow to a total of 7,300 GW by 2028.²⁹
13. To achieve net zero by 2050, the IEA indicates that global renewables power capacity would need to be 11,008 GW by 2030—about three times as much as that in 2022.³⁰ IRENA indicates that, to be consistent with a 1.5 degree C scenario, the amount of renewables added to the grid globally needs to reach 1000 GW/year.³¹
14. In recognition of the need for deep, rapid, and sustained reductions in greenhouse gas emissions in line with 1.5 degree C pathways, the GST decision called on Parties to contribute to, in a nationally determined manner, the **tripling of renewable energy capacity globally by 2030**.³²
15. To reach the target, installed renewable energy capacity would need to increase to at least 11,000 GW by the end of the decade, compared to 4,209 GW in 2023.³³ In July 2024, IRENA noted that the world would have to grow renewables capacity at a minimum 16.4 percent rate annually through 2030—compared to an unprecedented 14 percent increase of renewables capacity during 2023 and an historic annual growth rate of 10 percent.³⁴

Barriers and Solutions to the Energy Transformation

16. Despite repeated observations and exhortations by some that a shift to renewable energy is “rational,” the “right economic choice,” “easy,” or “obvious,” Parties have nevertheless not yet accelerated the energy transition to the global pace and scale necessary to achieve the goals of the Paris Agreement.³⁵ It is essential to understand and engage with the reasons for this.



Barriers

17. Parties still face a number of regulatory, economic, social, and technological barriers to implement a wide-scale shift to renewable energy away from fossil fuels. As identified by C2ES³⁶ as well as the GST's *Technical Dialogue Synthesis* report,³⁷ these challenges include:
- availability/access to investments
 - lack of accessible support for the electricity sector in developing countries
 - permitting and other regulatory hurdles
 - power market design
 - high upfront capital costs
 - the amount of land required
 - implementing policies
 - complementing large-scale wind and solar resources with clean firm power (i.e., clean power sources that can be dispatched as needed), energy storage, and expanded transmission infrastructure, given due to their variability and location
 - the need for public acceptance
 - negative social impacts of coal-fired power plant shutdowns, such as the loss of jobs and livelihoods
 - economic, institutional, social, and capacity barriers
 - siloed communication and action
 - tradeoffs with the Sustainable Development Goals (SDGs).
18. These obstacles can largely be boiled down to four main, immediate challenges: the lack of relevant finance; the cost of capital continues to increase, especially in developing countries; supply chain constraints, including those driven by geopolitics and friend-shoring; and long lead times to obtain permits and to build the grid.
19. The GST decision notes that developing countries need an estimated U.S. \$5.8–5.9 trillion for their efforts to implement their current NDCs for the pre-2030 period (let alone new and more ambitious ones due by February 10, 2025). Climate finance pledged and provided is nowhere near that scale. In this context, the adoption of a new collective quantified goal (NCQG) at COP29 will be vital for setting out a way forward on the scale and type of finance needed to sustain and augment the climate action needed to achieve the goals of the Paris Agreement and net zero by 2050.³⁸
20. It is also important to keep in mind that while leading companies in green tech may drive down prices, they may also drive competitors out of business. As the growing intersection of climate and trade policies highlight these issues, governments and multilateral development banks must work together to enable industrial strategies that diversify risk globally.

Solutions

21. A number of high-impact solutions and opportunities to address key challenges have been identified through a wealth of efforts across different fora. The following list draws from C2ES's work as well as the High Level Climate Champions' (HLCs) *2030 Climate Solutions*:³⁹

Clean or renewable energy actions, solutions, and enablers
<ul style="list-style-type: none"> • Accelerating the pace of investment in developing countries to guarantee an equitable transition (Source: 2030 Climate Solutions)
<ul style="list-style-type: none"> • Incentivizing the deployment of renewable energy technologies and/or setting renewable energy targets or mandates based on national circumstances (Source: C2ES)
<ul style="list-style-type: none"> • Phasing out inefficient fossil fuel subsidies which distort markets and artificially increase competitiveness of fossil fuels vs renewable energy sources (Source: 2030 Climate Solutions)
<ul style="list-style-type: none"> • Ending investments in new fossil fuel-based generation capacity and accelerating the reduction of the relative share of existing fossil fuel-based energy generation capacity, in a just and equitable manner, including by pricing or capping emissions from the electricity sector (Source: C2ES)
<ul style="list-style-type: none"> • Reducing capital costs, the key enabling factor to unleash the potential of renewables development in developing countries, including de-risking mechanisms, guarantees, concessional loans, and direct investment (Source: 2030 Climate Solutions)
<ul style="list-style-type: none"> • Addressing regulatory barriers to the deployment, scale-up, and use of renewable energy technologies, including grid infrastructure and storage (Source: C2ES)
<ul style="list-style-type: none"> • Increasing mobilization and provision of finance to reduce capital cost and foster renewable energy investment in developing countries, including grid infrastructure, digitalization, and ancillary services (Source: 2030 Climate Solutions)
<ul style="list-style-type: none"> • Expanding and upgrading the electricity grids to enable the integration of increasing amounts of renewable energy sources (Source: C2ES)
<ul style="list-style-type: none"> • Include both mitigation and resilience considerations in decision-making of renewables projects (Source: 2030 Climate Solutions)
<ul style="list-style-type: none"> • Transfer technology to developing countries for grid digitalization and storage/flexibility enhancement (Source: 2030 Climate Solutions)
<ul style="list-style-type: none"> • Implement capacity building for workforce and regulatory/governance bodies (Source: 2030 Climate Solutions)

22. The **HLCs and the Marrakech Partnership for Global Climate Action** identify impactful climate solutions and opportunities for international cooperation.⁴⁰ At COP28, in the context of the conclusion of the GST and building on prior work, the HLCs presented the *2030 Climate Solutions*—an Implementation Roadmap that sets out solutions framed in specific actions, with insights from a wide range of NPS on effective measures being undertaken that need to be scaled up and replicated as well as current gaps that need to be bridged.⁴¹ The Climate Solutions recommend key actions and means of implementation, which seek to achieve key targets for clean power by 2030.⁴² These recommendations for actions and support overlap with high-impact opportunities and solutions to address barriers to renewable energy, as also identified in work by C2ES.

C. Leadership for Tripling Global Renewable Energy Capacity by 2030

The Troika, G7, G20, the IEA, and IRENA

23. As an outcome of the UAE Consensus, the COP28 Presidency (UAE) will work together with the incoming Presidencies—Azerbaijan (COP29) and Brazil (COP30)—to drive ambitious collective action, including through the Roadmap to Mission 1.5C, an initiative to significantly enhance international cooperation and the international enabling environment to stimulate ambition in the next round of NDCs. This configuration has been called “the Troika.” The Troika, together with the G7 and G20 and

including through the Roadmap to Mission 1.5C, broadly seek to drive ambition and enhanced international cooperation.

24. At COP28, the UAE Presidency encouraged Heads of State and Government to sign the COP28 Global Renewables and Energy Efficiency Pledge. The Pledge commits governments to work together to triple the world's installed renewable energy generation capacity to at least 11,000 GW by 2030, taking into consideration different starting points and national circumstances. 133 Parties have signed.⁴³
25. Brazil, in its role as 2024 G20 President, plans to make recommendations on enhancing international cooperation to:⁴⁴
 - support developing countries in building institutional capacity to design and implement country platforms, focusing on greenhouse gas emission reductions, resilience-building, and achievement of the SDGs
 - address associated resource-mobilization challenges, with a view to equipping those plans and platforms with financial means, mechanisms, and solutions
 - guided by the principles of equity and justice, tackle negative externalities and spillover effects of just transition plans, at the national and international levels.
26. In 2023, the IEA updated its *Net Zero Roadmaps* report and convened five High-Level Dialogues with the COP28 Presidency that were instrumental in building the global consensus needed for the outcomes in Dubai.⁴⁵ In February 2024, IEA Executive Director Dr. Fatih Birol stated that, in response to a call by IEA member country ministers, the IEA was prepared to help lead the implementation of the GST outcomes.⁴⁶ As indicated in their press release, these efforts include:
 - tracking and reporting on the COP28 commitments, in collaboration with UNFCCC
 - supporting countries as they develop the next round of NDCs
 - helping develop solutions to deliver greater financing for clean energy transitions, particularly in emerging and developing economies.⁴⁷
27. Dr. Birol also announced that the IEA will launch a new roundtable series in partnership with the COP29 Presidency. These roundtables will provide an important venue for countries to share experiences and expertise as they navigate the complexities of developing new NDCs and transition plans, and to establish priorities ahead of COP29 in November 2024.
28. The IEA has established a website to track progress towards the energy targets set out in paragraph 28 of the GST decision.^{48,49} The tracker, based on the IEA's *Net Zero Emissions by 2050 Scenario* and latest data analysis, shows where the world currently stands in relation to these objectives, as well as where it would need to be in 2030 to meet them—and be on a pathway to the COP28 target of net-zero energy sector emissions by mid-century.
29. In June 2024, IEA published a report analyzing recent trends in the deployment of renewables, providing regional insights, identifying key challenges for advanced and emerging economies, and suggesting priority areas for policy makers to close the implementation gap.⁵⁰ IEA also published updates to its Renewable Energy Progress Tracker, a dynamic data dashboard which enables users to explore historical data and forecasts for all sectors and technologies.⁵¹
30. In its April 2024 communique, the G7 Climate, Energy and Environment Ministers further called upon the IRENA and IEA to monitor and report on the G7's progress by 2025 in reaching their collective contribution to the global renewable tripling target and annually thereafter.⁵²

31. In 2023, IRENA published two key reports: *Global Landscape of Renewable Energy Finance 2023*, which provided recommendations to scale up public funds and channel global investment in renewables more towards developing economies in order to meet climate and development goals;⁵³ and *NDCs and Renewable Energy Targets in 2023: Tripling Renewable Power by 2030*, that provided a review of renewable energy targets in NDCs and assessed their level of ambition against IRENA's 1.5°C scenario and the goal of tripling renewables in the power sector by 2030.⁵⁴
32. Since January 2024, IRENA has been hosting policy talks following up on the outcome of COP28. Its first session delved into insights from its *NDCs and Renewable Energy Targets in 2023: Tripling Renewable Power by 2030* report, with special attention to the financing needs of developing countries.⁵⁵ A second policy talk focused on translating renewable energy pledges into action in Gulf Cooperation Council (GCC) countries and opportunities for the energy transition in the region.⁵⁶
33. The second part of IRENA's 14th Assembly in Abu Dhabi in April 2024 continued exploring the outcomes from COP28, with a focus on "Infrastructure, Policies and Skills for Tripling Renewables and Accelerating the Energy Transition."⁵⁷ A key outcome was the Utilities for Net Zero Alliance (UNEZA)'s adoption of the UNEZA Roadmap to 2030.⁵⁸ Announced April 17, 2024 at a ministerial roundtable along with a grid infrastructure action plan, the alliance members' Roadmap targets a total increase of renewable energy capacity within their portfolios to 749GW by 2030, an increase of 2.5 times relative to 2023.⁵⁹ The Roadmap focuses on de-risking supply chains, facilitating policy and regulatory support, and mobilizing capital in support of the achievement of the tripling of renewable energy capacity target.
34. In June 2024, the COP29 Presidency announced it will partner with IRENA on the monitoring of progress towards tripling renewable energy capacity and doubling energy efficiency by 2030. In May 2024, the COP28 Presidency tasked IRENA with the establishment of a special annual report series dedicated to monitoring progress and providing recommendations on achieving key energy goals of GST outcome.⁶⁰
35. These efforts reflect the need for focused leadership to specifically drive progress on each of the GST targets and signals.

2024 Energy-related Events, with a Focus on Renewable Energy

36. Energy-related organizations, coalitions, and initiatives may meet or engage at a number of high-level clean energy or energy innovation-related events for the remainder of 2024.
37. Ideally, IEA and IRENA could begin to thread a coherent narrative on progress toward and implementation of the global goal of tripling renewable energy through these events. Such guidance could take Parties and NPS from COP28 through the calendar of energy events and moments in such a way that they can build capacity and momentum toward the development and enactment of needed policy changes throughout 2024, building a strong platform for enhanced NDC ambition and subsequent implementation. A coherent thread through these events, focusing on the exchange of lessons learned and best practices for increasing energy efficiency between Parties and NPS can raise opportunities for enhanced international cooperation.

38. These events include:

JANUARY
13-14 January, IRENA General Assembly (Abu Dhabi, UAE)
15 January, Fourteenth Session of the IRENA Assembly, Part 1 (virtual)
FEBRUARY
14-15 February, IEA 2024 Ministerial Meeting (Paris, France)
MARCH
5-6 March, Powering Africa Summit (Washington, DC)
21-22 March, Copenhagen Climate Ministerial (Copenhagen, Denmark) <i>Presentation of the Troika vision and approach and official launch of its work for the year</i>
APRIL
16-18 April, Fourteenth Session of the IRENA Assembly, Part 2 (Abu Dhabi, UAE)
22-25 April, World Energy Congress (Rotterdam, Netherlands)
25-26 April, Petersberg Climate Dialogue (Berlin, Germany) <i>Troika's first majlis with a focus on enabling the implementation of the energy transition outcomes from the first GST</i>
26 April, IEA Global Summit on People-Centered Clean Energy Transitions (Paris, France)
28-30 April, G7 Ministerial Meeting on Climate, Energy, and Environment (Torino, Italy)
MAY
14 May, IEA Summit on Clean Cooking in Africa (Paris, France)
15 May, First COP29-IEA High-Level Energy Transition Dialogue (Paris, France)
21-23 May, IEA 9 th Annual Global Conference on Energy Efficiency (Nairobi, Kenya)
27-29 May, The Mitigation Work Programme's Third Global Dialogue and Investment-Focused Event (Bonn, Germany)
JUNE
3-13 June, SB60 (Bonn, Germany)
14 June, Second COP29-IEA High-Level Energy Transition Dialogue (London, UK)
17-19 June, G7 Summit (Putignano, Puglia, Italy)
26-28 June, IRENA International Energy Workshop (IEW) 2024 (Bonn, Germany)
JULY
22-23 July, Ministerial on Climate Action (Wuhan, China) <i>Troika's second majlis with a focus on supporting the conservation, protection and restoration of forests, sinks and reservoirs, including through synergies between biodiversity and climate</i>
26-27 July, Presidency Heads of Delegation retreat (Shamakhi, Azerbaijan)
AUGUST
12-16 August, NDCs 3.0 Regional Forum for the Pacific (Apia, Samoa)
27-29 August, NDCs 3.0 Regional Forum for Latin America and the Caribbean (Bogota, Colombia)
SEPTEMBER
3-5 September, NDCs 3.0 Regional Forum for Eastern Europe and Central Asia (Istanbul, Türkiye)
5-6 September, Fifth Global Conference on Strengthening Synergies between the Paris Agreement and the 2030 Agenda for Sustainable Development (Rio de Janeiro, Brazil) <i>Troika's third majlis with a focus on galvanizing political momentum to enhance adaptation action and global resilience by 2030, including by addressing the adaptation finance gap</i>
TBD September, Presidency High-Level Energy Dialogue co-hosted with IEA (New York, New York)
10-24 September, UN General Assembly (New York, NY) A high-level Troika event to showcase the leadership of early movers of 1.5 aligned NDCs
22-23 September, Summit of the Future (New York, NY)



23-25 September, First Global Renewables Summit (New York, NY)
23-25 September, NDCs 3.0 Regional Forum for the Middle East and North Africa (Tunis, Tunisia)
30 September to 2 October, NDCs 3.0 Regional Forum for Asia (Bangkok, Thailand)
OCTOBER
1-3 October, Joint Ministerial for Clean Energy Ministerial and Mission Innovation (CEM15 and MI-9) (Foz do Iguaçu, Brazil)
4-5 October, Fourth Global Dialogue and Fourth Investment-Focused Event under the Sharm el-Sheikh Mitigation Ambition and Implementation Work Programme (Sharm el-Sheikh, Egypt)
7-9 October, NDCs 3.0 Regional Forum for Africa (Kigali, Rwanda)
10-11, Pre-COP (Baku, Azerbaijan) <i>Troika High-level Dialogue to focus on NDC ambition and implementation to date</i>
23-25 October, G20 Joint Meeting of Climate Change and Finance Ministers (Washington, DC) <i>High-level Troika even on climate finance and investment frameworks to enhance ambition and enable implementation of NDCs</i>
22-27 October, Annual Meetings of the World Bank Group and the International Monetary Fund (IMF) (Washington, DC)
NOVEMBER
11-24 November, COP29 (Baku, Azerbaijan) <ul style="list-style-type: none"> • <i>A leaders-level event to focus on taking stock of the Troika's work and opportunities for strengthened ambition in 2025</i> • <i>High-level ministerial roundtable for the MWP.</i>
18-19 November, G20 Summit (Rio de Janeiro, Brazil)
DECEMBER
10-11 December, 21st Replenishment of the International Development Association (IDA21) Final Pledging and Replenishment Meeting

Capacity Building and Support for the Development of Renewable Energy Policies and NDCs

39. Other initiatives can provide critical capacity-building support for the development of climate policy and NDCs. One key initiative is **UN Development Programme (UNDP)'s Climate Promise**.⁶¹ Climate Promise leverages Parties' NDCs and brings together UNDP's infrastructure, networks and breadth of substantive offers to provide comprehensive support on NDC implementation. UNDP provides support to help countries take bold action to reduce their emissions, increase their resilience to climate impacts and support sustainable development priorities.
40. In April 2024, UNDP unveiled the next stage of Climate Promise, Climate Promise 2025, which will support countries in developing and delivering their pledges and draws on UNDP's newly established Climate Hub.⁶² Climate Promise 2025 will link climate diplomacy and thought leadership with climate action and sustainable development at national and local levels to align the next generation of NDCs with the Paris Agreement goals.
41. Another key initiative is the **NDC Partnership**.⁶³ Leveraging more than 200 members and more than 80 institutions, the Partnership responds to requests for support needed to translate identified NDC implementation priorities into actionable policies and programs. Based on these requests, the membership offers a tailored package of expertise, technical assistance, and funding. This collaborative response provides developing countries with efficient access to a wide range of resources to adapt to and mitigate climate change and foster more equitable and sustainable development.

42. In June 2024, the NDC Partnership and the UNFCCC secretariat launched the NDC 3.0 Navigator. The NDC 3.0 Navigator is an interactive tool designed to support countries in raising NDC ambition and accelerating the implementation of the next round of NDCs. It brings together expert-created strategies, resources, and country insights to support countries in updating their NDCs.⁶⁴ The NDC Navigator also set out strategies for Parties translating “global efforts” on renewable capacity, energy efficiency improvements, and the low-carbon energy transition from the first GST into national mitigation efforts.⁶⁵
43. In July 2024, UN Environment Programme, the UNDP and the NDC Partnership, in collaboration with the UNFCCC Secretariat announced that they are organizing **NDCs 3.0 Regional Fora**.⁶⁶ The closed-door Fora will use insights from COP28 and the GST to focus on mitigation options, adaptation solutions and inclusion of super pollutants (short-lived non-carbon dioxide pollutants), such as methane and black carbon in the NDCs. Participants, invited from government ministries engaged in NDC development and implementation, will engage in peer-learning, explore innovative financing models and share how to develop policy roadmaps that lead to implementation. The Fora will be places to discuss how ambitious sectoral targets can lead to transformational change and investment plans.
44. Within the UNFCCC, the Technology Executive Committee (TEC), as the policy arm of the Technology Mechanism, also provides important capacity building support. TEC focuses on identifying policies that can accelerate the development and transfer of low-emission and climate resilient technologies. In May 2024, TEC agreed to develop a policy brief to provide concrete policy and technology options to reduce emissions from hard-to-abate industries and will host a Technology Day at COP29 to advance the inclusion of those industries in updated NDCs.⁶⁷
45. Other platforms and bi- or pluri-lateral partnerships offer bespoke approaches or specific finance for the energy transition. For example, **Just Energy Transition Partnerships (JETPs)** are early-stage cooperative finance arrangements, targeted at a small number of heavily coal-dependent emerging economies, with the aim of tailored support to help them achieve a just energy transition.⁶⁸ The **Energy Transition Accelerator Financing (ETAF) platform** is a multistakeholder platform that is dedicated to implementing renewable energy projects to accelerate the energy transition in emerging economies.⁶⁹

Recommendation

46. Paragraph 28 of the GST decision sets out a package of critical mitigation targets and signals. The achievement of no one signal or target alone will result in the deep, rapid, and sustained reductions in greenhouse gas emissions in line with 1.5 degree C pathways.
47. However, to drive the achievement of the tripling of renewable energy capacity globally, **Parties should include specific targets for total renewable power capacity for 2030 as part of their planning processes and domestic arrangements identified in their NDCs and LT-LEDS.**
48. For instance, just 14 out of 194 countries have included specific targets for total renewable power capacity for 2030 in their NDCs. These commitments amount to 1,300 GW, or 12 percent of what is required to meet the tripling of renewable energy goal. But the domestic goals of nearly 150 governments go further than commitments indicated in their NDCs, corresponding to almost 8,000 GW of installed renewable capacity by 2030. If governments were to include all their existing policies, plans, and estimates in their new NDCs, they would reflect 70 percent of what is needed by 2030 to reach tripling of global renewable energy capacity by 2030, although the world would still be 30 percent short of the goal.⁷⁰

49. The Troika, as a leader on ambition, can, in turn, support this and leverage its role by:

- highlighting the HLCs' Clean Power Breakthrough and other relevant work and further empowering the HLCs to enhance NPS support and/or engagement on achieving the renewable energy target
- partnering with energy-focused IGOs
- working with UNDP Climate Promise and the NDC Partnership in building capacity for renewable energy policies and measures undergirding NDCs
- enabling collaboration and sharing best practice on key barriers to progress towards the tripling of global renewable energy by 2030
- exploring with Parties what a 1.5 degree C-aligned, just energy transition that achieves the tripling of renewable energy capacity target looks like and what it may require in various regions
- informing the UNSG's NDC support platform or creating space for feedback between renewable energy target efforts and the support platform.

Ongoing Leadership is Needed

50. The Troika and the Roadmap to Mission 1.5 provide a promising model of collaborative leadership that can provide continuity and a trajectory for enhanced international cooperation across critical years. The Troika's high-level events planned for the latter half of 2024 can be critical for calling upon ministers and government leaders to lead on action to increase renewable energy capacity and invest in developing country efforts to do so. COP29 could be a key moment to review Parties' progress toward achieving achieve the tripling of renewable energy capacity by 2030, after which the Troika could lay out a clear roadmap for events and action for 2025.

51. The near-term goal is action and implementation that inform enhanced NDCs and ambition up to and through the deadline for new NDCs by February 10, 2025. In the longer-term, such leadership will be critical for informing subsequent implementation.

52. The outcome of the negotiations on the NQCG in 2024 and broader financial developments will impact the environment for international cooperation. Once there has been sufficient time to analyze the NDCs in the annual update of the NDC synthesis report that will be made available ahead of COP30, it will become clearer whether the GST will have succeeded.⁷¹ But this also means that Belém will not be the "NDC COP."

53. As such, 2025 will demonstrate how much more Parties are willing to commit to achieving the Paris goals. It is also possible that NDCs will reveal themselves to more usefully be investment plans or tools.⁷²

54. The year 2025 will also mark the year that the Paris Agreement's enhanced transparency framework will be fully operational. New processes, like the facilitative multilateral consideration of process, provide opportunities for Parties to share best practices and lessons learned in implementing their NDCs.

55. Troika leadership and the incoming Brazilian Presidency must utilize the Roadmap to 1.5C and the outcomes of COP29 to skillfully build on the picture of progress drawn earlier in 2025 to a successful outcome at COP30 that nevertheless remains critical to ambition and enhanced international cooperation in 2026. COP30 in Belém should not be seen as a cliff edge, but a steppingstone to COP31 and beyond. In 2026, the second GST process begins again.

Conclusion

56. While there is a strong case for clear leadership to respond to the call to triple global renewable energy capacity by 2030, there is also a need to be inclusive. Clearer leadership on implementing and coordination on the renewable energy target, including how efforts are enacted on the ground, may elicit reactions that Parties are “being told what to do.” As such, the national determinedness of NDCs and their domestic implementation must be clearly reiterated and respected.
57. At the same time, the value of clear leadership on the tripling of renewable energy target will enable far greater and faster implementation than would otherwise be the case. In addition, tracking progress towards the achievement of the target at COP29 and COP30 is crucial to generate further momentum. Early action must be captured in the next round of NDCs due by February 10, 2025, laying a strong foundation for further efforts.

Endnotes

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- ⁷ UNFCCC, *Paris Agreement*, Arts. 3, 4.3. UNFCCC, *Further guidance in relation to the mitigation section of decision 1/CP.21*, Decision 4/CMA.1, Annex I, ¶7.
- ⁸ UNFCCC, *Further guidance in relation to the mitigation section of decision 1/CP.21*, Decision 4/CMA.1, Annex I, ¶ 4(c).
- ⁹ UNFCCC, *Outcome of the first global stocktake*, Decision 1/CMA.5, ¶ 39.
- ¹⁰ UNFCCC, *Outcome of the first global stocktake*, Decision 1/CMA.5, ¶ 6.
- ¹¹ UNFCCC, *Outcome of the first global stocktake*, Decision 1/CMA.5, ¶ 171.
- ¹² UNFCCC, *Outcome of the first global stocktake*, Decision 1/CMA.5, ¶ 179.
- ¹³ Sultan al Jaber, Mukhtar Babayev, and Marina Silva, “COP Presidencies Troika Letter to Parties” UNFCCC, March 21, 2024, https://unfccc.int/sites/default/files/resource/presidencies_troika_letter_to_parties.pdf.
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- ¹⁵ Our intention is that future papers will examine the need for leadership across other global stocktake (GST) signals, including in relation to adaptation.
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- ¹⁹ UNFCCC, *Outcome of the first global stocktake*, Decision 1/CMA.5, ¶ 28.
- ²⁰ Nina Chestney, “Countries’ plans not yet aligned with tripling renewables capacity goal,” Reuters, June 4, 2024, <https://www.reuters.com/business/environment/countries-plans-not-yet-aligned-with-tripling-renewables-capacity-goal-2024-06-04/>.
- ²¹ The process of increasing commitment to climate action through the GST to inform climate action—including updating nationally determined contributions (NDCs) and national adaptation plans — is part of what is known as the Paris Agreement’s “ambition cycle.” It also includes the “enhanced transparency framework,” the process for countries to gather and report greenhouse gas inventory data, track their progress against the overarching goals of the Paris Agreement and their own NDCs and deliver updates on the financial support they are providing or receiving. Parties are required to submit their first biennial transparency report (BTR1) and national inventory report by the end of December 2024.
- ²² UNFCCC, *Paris Agreement*, Arts. 14.1, 14.2.
- ²³ UNFCCC, *Paris Agreement*, Art. 14.3.
- ²⁴ UNFCCC, *Outcome of the first global stocktake*, Decision 1/CMA.5, ¶¶ 9-10.
- ²⁵ UNFCCC, *Outcome of the first global stocktake*, Decision 1/CMA.5, ¶ 170. See also, UNFCCC, *Paris Agreement*, Art. 4.9; UNFCCC, *Adoption of the Paris Agreement*, 1/CP.21, ¶¶ 22-25; UNFCCC, *Common time frames for nationally determined contributions referred to in Article 4, paragraph 10, of the Paris Agreement*, Decision 6/CMA.3, ¶ 2 (Encourages Parties to communicate in 2025 a NDC with an end date of 2035, in 2030 a NDC with an end date of 2040, and so forth every five years thereafter).
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