

Eleventh session of the Assembly
Abu Dhabi, 18-21 January 2021

Background Note

Ministerial Plenary Meeting

National Energy Planning and Implementation for Fostering Energy Transition

1. Energy accounts for approximately two-thirds of global GHG emissions. In order to ensure a sustainable and secure future for the planet, it is vital to foster an energy transition through robust energy planning and implementation at the national level. Energy planning attributes include national and sub-national targets, policies and investment strategies derived from a quantitative analysis of the energy sector as well as various socio-economic aspects.
2. Energy transition towards a decarbonised global energy system becomes essential to meet the climate change mitigation objectives, as described by the Paris Agreement on Climate Change. The “Transforming Energy Scenario” of IRENA’s Global Renewables Outlook: Energy Transformation 2050 shows that emissions can fall to 70% less than today’s level, keeping expected temperature rise well below 2°C, while the “Deeper Decarbonisation Perspective” would further reduce emissions to zero latest by 2060, consistent with the below-1.5°C ambition.
3. Energy planning, supplemented with quantified renewable energy targets and backed with enabling policies and regulatory frameworks, serves as a foundation to countries’ commitment through Nationally Determined Contributions (NDCs), and consequently, to a climate safe future. IRENA’s analysis of [renewable energy NDC components](#) revealed that of the total 187 countries plus the European Union that had submitted NDCs as of early December 2020, 170 mentioned renewables, while 134 included quantified renewable energy targets. While all 134 Parties included renewable energy targets for the electricity sector, only 56 included targets for end uses such as direct heat and transport in their NDCs. To bring about change at scale, energy planning and implementation needs to be more ambitious, reaching the level necessary to meet climate goals and covering all end-use sectors including transport, industry, and buildings.
4. The upcoming COP 26 represents a significant milestone in reducing energy related emissions through enhanced and updated national pledges in the form of NDCs, providing a comprehensive framework for improved national energy planning and implementation. But in many countries, the COVID-19 pandemic slowed down NDC review processes, and only 18 Parties submitted new NDCs as of early December 2020. Of these, 10 included quantified renewable energy targets, though only five of these targets were found to be more ambitious than in previous NDCs.
5. IRENA has a vast body of knowledge and expertise in different facets of the energy transition that can provide substantive inputs to the NDC revision processes. The offering could be through IRENA’s on-going support to countries in enhancing and implementing their climate objectives with a focus on increasing the share of renewables in national pledges. The requests received from countries through bilateral engagement with IRENA or through IRENA’s broader institutional partnerships including with the United Nations Development Programme under the umbrella of the Climate Promise initiative, along with the United Nations Framework Convention on Climate Change and the NDC Partnership, cover a wide range of policy, regulatory, finance and technology areas.

6. More specifically, IRENA collaborates with countries in the areas of renewable energy resource assessment, data and statistics, policy advice and capacity building on data collection and management and on the design of renewable energy targets and policies to de-risk investments. Renewable Energy Roadmaps offer a long-term perspective on country-specific decarbonisation options. IRENA's work on Long-term Planning for power systems helps countries raise renewable energy ambitions in their national plans. IRENA's Renewables Readiness Assessments as well as capacity building support in various policy and technology areas help create environments more conducive to renewable energy investments. IRENA also contributes to the development of NDC implementation plans and investment frameworks as well as facilitation of the realisation of projects and monitoring of implementation.
7. IRENA has been pursuing a progressive outreach with the countries around the globe with current NDC engagement standing at 66 countries and among these are 20 Small Island Developing States and 17 Least Developed Countries.

Objective of the session

8. This virtual ministerial plenary session will provide an opportunity to showcase the emerging experience in reinforcing energy planning and implementation at the national level and aligning that to global climate action and goals through NDCs. The session will facilitate a dialogue among IRENA's Membership and international partners on climate action from the perspective of accelerated energy transition and faster deployment of renewable energy. The session will also allow Ministers to illustrate national priorities in terms of energy transition and climate action in their respective countries, while sharing national experiences and best practices in the context of energy component of NDCs to inform the way forward.

Guiding questions

- How can Members ensure that their energy plan is comprehensive and robust and fits well with the countries' commitments in NDCs? What steps can Members take to ensure that national plans are aligned with the global ambitions framed by the 2030 Agenda for Sustainable Development and the Paris Agreement on Climate Change?
- Electricity, though one of the major sub-sectors, does not fully reflect the decarbonisation and energy transition opportunities. What steps can Members take to equally represent different end-use sectors including transport, industry, buildings etc. in their climate and energy plans and targets?
- What are the key driving policies, institutional structures, regulatory frameworks, finance and business models and investment strategies that can help increase the share of renewable energy in the energy mix and advance climate actions?
- Although energy transition can significantly reduce emissions to meet climate goals, there are several socio-economics benefits associated with a clean and just energy transition. How do Members see renewable energy as a driver of socio-economic growth in their countries and how to consider these benefits as part of the country's energy planning practices?

Associated Publications

1. [NDCs in 2020](#) (2020)
2. [Reaching Zero with Renewables](#) (2020)
3. [Renewable energy and climate pledges: Five years after the Paris Agreement](#) (2020)