

IRENA Policy Talks 2021

Renewable Energy Policies for the Energy Transitions: Focus on Heating and Cooling

13:00-13:50 (GST), 27 April 2021

Despite clear evidence of human-caused climate change, widespread support for the Paris Agreement, and the prevalence of clean, economical and sustainable energy options, energy related carbon dioxide (CO₂) emissions increased 1.3% annually, on average, over the period 2014 to 2019 (while the year 2020 was an outlier due to the pandemic, as emissions declined 7%, a rebound looks very likely, at least in the short term). Although the energy sector has begun to change in promising ways in the last few years, enabled by supporting policy and innovations in technologies and systems, progress has mainly focused on the power sector. End-uses such as heating and cooling and transport which account for almost 80% of global energy consumption remain heavily reliant on fossil fuels.

Electrification of end-use sectors in buildings, industry and transport, is one of the key solutions prioritised in IRENA's 1.5°C Scenario (1.5-S)¹, along with energy efficiency and renewable energy, including the targeted use of sustainably sourced biomass. Together with the expanded production and use of green hydrogen, synthetic fuels and feedstocks, these solutions are readily available to decarbonise end-uses. But policies and measures are still required to enable their development and deployment.

Countries and regions are increasingly making ambitious and far-reaching commitments to climate action, with almost 30 already set to achieve net zero in the coming decades. This is creating a new political momentum and fertile ground for an ambitious energy transition pace. The way forward requires deployment, integrating and enabling policies and relies on the development of key enabling infrastructure (e.g., gas grids, district heating and cooling networks).

These policies were analysed in the joint IRENA, IEA and REN21 report *Renewable Energy Policies in a Time of Transition (2018)*, followed by a second edition published in 2020 that focuses on heating and cooling. The key findings of this report will be presented in the first session of Policy Talks 2021 on the 6th of April 2021. Presentations will be delivered by IRENA staff to introduce the global policy landscape, policies to support the various transformative pathways for the energy transition for heating and cooling, and the measures to develop the key enabling infrastructure needed. A Q&A session will follow.

¹ IRENA's 1.5°C Scenario (1.5-S) presented in the World Energy Transitions Outlook describes an energy transition pathway that is needed to limit global average temperature increase to 1.5°C relative to preindustrial levels by the end of the century.

Tentative agenda

13:00 - 13:05 (GST)	Welcoming Remarks Rabia Ferroukhi, Director of Knowledge, Policy and Finance Centre, IRENA
13:05 - 13:35 (GST)	IRENA Presentations: <ul style="list-style-type: none">- Energy transition in heating and cooling: Global landscape, benefits and barriers By Diala Hawila, Programme Officer, KPFC- Policies to support the energy transition in heating and cooling: Focus on renewables-based electrification and green gases By Emanuele Bianco, Programme Officer, KPFC- Policies to support the energy transition in heating and cooling: Focus on sustainable use of biomass, direct use of solar thermal and geothermal, and district heating and cooling By Jinlei Feng, Programme Officer, KPFC
13:35 - 13:50 (GST)	Q&A