

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

Background Note High-Level Panel on Energy Transition for Sustainable Post-COVID Recovery

1. The year 2020 was extraordinary by all accounts. It was a year of tragedy and hardship, but also a year of resilience and resolve. In the face of incredible adversity, countries, business, scientists, and communities came together to protect and prevail. In many ways, the year provided a mirror to face up to some of the greatest challenges of the 21st century.
2. Amidst these, we have experienced the best and worst of our relationship with energy. The crisis highlighted the cost of tying economies to the fate of fuels prone to price shocks. The very real challenges facing healthcare systems with unreliable energy access were magnified. The difficulties people faced continuing work or schooling, with many frozen out of remote access were amplified. The energy system – along with the rest of economy – has been shaken to the core. Amidst this, renewables have shown remarkable resilience. Renewable power was a preferred option early on for several reasons, notably its abundance and low operating costs. The crisis was also a test case for renewables-based electricity, debunking myths around reliability of systems with high shares of wind and solar. The economic, social and environmental case for a new energy system has become abundantly clear.
3. How the world emerges from this crisis will determine our shared future. The ongoing energy transition is already reshaping economies and societies, creating new linkages between sectors and redefining the relationships between energy producers, consumers, networks and markets. A strong – and continuously improving – business case for renewables offers an economically attractive response to multiple priorities. The new paradigm addresses energy security, sustainable growth and employment, accompanied by substantial payoffs for countries and communities in the medium term.
4. Energy transitions are already being used to help countries achieve multiple objectives, most readily seen in the 2050 net-zero commitments and energy is central to these. IRENA estimates that renewable energy and energy efficiency solutions together offer over 90% of the mitigation measures needed to reduce energy-related emissions. Despite the current difficulties, countries are increasingly setting legally-binding targets towards net-zero emissions, and 452 cities, 22 regions, 1,101 businesses, 45 of the most prominent investors, and 549 universities have committed to net-zero through the Climate Champions' Race to Zero Campaign. This reflects a new movement, one that needs to be accompanied by a new narrative that highlights the benefits of the energy transition and how to make it just and orderly.

5. The shift in the energy mix necessary for achieving objectives set out in the Agenda 2060 on Sustainable Development and the Paris Agreement on climate change is not an accomplished fact. Renewable energy has yet to make sufficient inroads into the so-called end-use sectors, such as direct heat, buildings and transport. The next wave of cost reductions in renewable energy technologies, along with further technological breakthroughs, may well determine whether the shift occurs in time to stay on a 1.5°C pathway. Ultimately, investment in a comprehensive transformation— involving not just a mix of technologies but also the policy package to put them in place and optimise their economic and social impact – will be the key to the common ability to achieve development and climate objectives.
6. Stimulus and recovery measures can accelerate and amplify the last decade's positive trends while instigating a structural change with people, planet, and prosperity at the centre. IRENA's *Post-COVID Recovery: An Agenda for Resilience, Development and Equality* report clarifies the connection between the short-term and mid-and long-term priorities. It points out how and where investments and policy measures focused on energy transitions can strengthen the economic recovery, bolster sustainable development, and set the course for a fully decarbonised system by the middle of this century.
7. This new global outlook must harness 2021 as a turning point towards resilience. The technology solutions to enable resilient energy transitions exist already. Which way the world will go depends on policy-making and investments, particularly through COVID-19 recovery packages. In 2019, renewables and other transition-related technologies attracted investments worth USD 824 billion. In the 2021-2023-recovery phase, IRENA shows that such investments should more than double to nearly USD 2 trillion. Every million dollars invested in renewables would create at least 25 jobs; while every million dollars invested in efficiency solutions or energy flexibility would create about ten jobs. The transition could also boost GDP by an average of 1% over three years. Therefore, investing in energy transitions represent a long-term investment for a just, fair, and resilient future. Government funds can leverage private investments by a factor of 3-4 and should be used strategically to nudge investment decisions and financing in the right direction.
8. That energy transitions are needed is not in question; 2020 has shown that beyond doubt. The question now is *how* to transition. It is incumbent on all to ensure the global community moves now and moves quickly. Delaying the transition will only make this job harder later on and bring unnecessary hardship to those already struggling. Crucially, for the transitions to truly have a positive impact, justice and fairness must be at the heart of planning and action. Energy that is unreliable causes uncertainty; energy that pollutes incapacitates and kills; energy that is too costly alienates and isolates. In all cases, poor energy choices mean slower economic growth and potentially irreparable damage to the very ecosystems that sustain all.
9. The health and economic crisis also crystalised the potential blind spots of the energy transitions, exposing gaps and vulnerabilities in provisions of essential services across the world. It is for these reasons that energy has risen to the forefront of the global agenda. Notably, the United Nations High-level Dialogue on Energy will take place in September 2021. Under the United Nations General Assembly's auspices, the Dialogue is aimed at providing transformational action in the first years of the SDG Decade of Action and support the implementation of the Paris Agreement. It will also be an important milestone on the road to COP26 in Glasgow, which will bring parties together to accelerate action towards the Paris Agreement's goals and the UN Framework Convention on Climate Change.

10. The current crisis has provided insights into the consequences of the climate crisis. The impacts of both know no borders; both put the poor and vulnerable at greater risk than the wealthy; and both demand government action on an unprecedented scale. Yet the response has also shown the feasibility of conducting decisive interventions to safeguard the public interest. Policy makers now have a unique chance to align short-term investments, regulations and policies with the long-term need for decarbonised and resilient economies and societies.

Objective of the session

This session's objective is to take stock of the ongoing trends in energy transitions and recovery, with the view to drawing out the strategies to advance economic, social and climate priorities simultaneously. The session will seek to highlight experiences and concrete actions that can accelerate the energy transitions in support of the Agenda 2030 on Sustainable Development and the Paris Agreement on Climate Change.

Guiding questions

- How can countries translate the compelling case for energy transitions into the short-term green recovery efforts? Where are the main opportunities and challenges?
- What measures and policies can encourage investment where it will have the most positive socio-economic impact? How do we bring those working in traditional energy industries along with us on this energy transition?
- What tools and processes can help countries accelerate energy transitions and promote global solidarity to leave no one behind?
- How can we leverage IRENA's global membership and clarity of purpose to instigate a decisive shift toward decarbonised energy future?

Associated Publications

- [IRENA, 2020. Post-COVID recovery: An agenda for resilience, development and equality](#)
- [IRENA, 2020. Global Renewables Outlook: Energy transformation 2050](#)