

**INTERNATIONAL RENEWABLE ENERGY AGENCY**

Fifteenth meeting of the Council

Abu Dhabi, 8 – 9 May 2018

**Note of the Director-General****Accelerating renewable energy deployment towards SDG 7 and links to other SDGs**

1. The Sustainable Development Goals (SDGs) embedded in the 2030 Agenda for Sustainable Development provide a universal roadmap for addressing key development and environmental challenges. Recognising the pivotal role of energy in meeting the SDGs, the 2030 Agenda comprises a dedicated goal on energy (SDG 7) targeting universal access to modern energy services (7.1), substantially increasing the share of renewables in the world's energy mix (7.2) and doubling the rate of energy efficiency improvements (7.3).

2. Tracking progress towards the SDGs is key to informing policy-making and to ensuring adjustments to national implementation agendas. IRENA publishes detailed capacity and power generation statistics covering all renewable energy technologies for every country in the world. In addition, renewable energy balances are published for some countries. This data is collected directly from Members using the IRENA Renewable Energy Statistics questionnaire and is supplemented by desk research where official statistics are not available.

3. IRENA, together with the United Nations Statistic Division (UNSD) and the International Energy Agency (IEA), is an official custodian agency for tracking progress towards SDG 7 indicators. To this end, IRENA provides up-to-date data on renewable energy capacity and generation to the SDG 7 review process. In addition to the data reporting, IRENA supports the review process through analytical work, including on actions for accelerating deployment, linkages to other SDGs related to employment, economic growth, climate action and food security.

4. Progress towards SDG 7 will be reviewed in-depth at the UN High-Level Political Forum (HLPF) in July 2018. In preparation for the HLPF, IRENA has been participating as a lead or co-lead in the development of several of the 27 Policy Briefs which analyse progress towards SDG 7 indicators as well as linkages with other SDGs. These Policy Briefs have been developed in close consultation with key stakeholders to inform preparations and intergovernmental discussions on the review of SDG 7 progress<sup>1</sup>.

**Tracking progress towards SDG 7: Need for further action to accelerate deployment**

5. IRENA statistics find that renewable electricity has accounted for well over half of global power capacity additions over the past five years. Biomass for power, hydropower, geothermal, solar PV and onshore wind technologies can all now provide electricity that is competitively priced compared to fossil fuel-fired electricity generation. Rapid growth in the power sector contrasts with a lag in change in end-use sectors. The share of renewable energy in total final energy consumption (TFEC) (indicator 7.2.1) grew from 17.9% in 2012 to 19.3% in 2015. Modern renewables account for 10% of TFEC.

<sup>1</sup> Draft versions of the 27 Policy Briefs are available here:

<https://sustainabledevelopment.un.org/EnergyConference/documentation>

6. Under a business-as-usual progression, the share of modern renewables would grow to a 17% share in 2030. Pushing the share of modern renewables in alignment with the climate and development objectives would require a multi-fold increase in the average annual growth rate in renewable share in TFEC, with a greater focus on the heat and transport sectors. Such acceleration is technically and economically feasible but requires strong and concerted action.

7. Renewable energy solutions will play a crucial role in expanding access to modern energy services to populations currently without electricity and/or relying on traditional biomass for cooking (indicator 7.1.1 and 7.1.2). Off-grid renewable energy solutions, including stand-alone and mini-grid systems, represent cost-effective, environmentally sustainable and adaptable options to complement grid-based solutions. Given the disaggregated and distributed nature of the off-grid sector, the data and information base on deployment and associated impacts is weak and dispersed. IRENA has been working to address the data gap and, in 2017, integrated off-grid statistics into its annual [Renewable Capacity Statistics](#) series.

### Contribution of renewable energy to other SDGs

8. IRENA’s analysis, illustrated in the figure below, finds that the value of renewable energy extends well beyond its role as a competitive energy supply option. Meeting SDG 7 could also contribute directly or indirectly to several other SDGs, including those related to climate, cities, economic growth, jobs, agriculture, water and poverty. Analysis has found that renewable energy, together with energy efficiency, can achieve around 90% of the emissions reductions needed by 2050 in the energy sector to achieve the climate targets under the Paris Agreement (SDG 13).

9. An energy sector transformation will also bring a wide range of socio-economic benefits, in terms of incomes, welfare and jobs. IRENA estimates that accelerated renewable energy deployment could boost global GDP by 1.4% in 2050 and create millions of jobs in the process (SDG 8). Meanwhile, decentralised solutions support human development and resilience by facilitating access to basic services, improving human health and supporting income generation (SDG 1, 2, 5 and 6).



10. Contributing to the knowledge base on the linkages between renewable energy other SDGs, IRENA will launch the 2018 edition of the *Renewable Energy and Jobs – Annual Review* series at the fifteenth meeting of the Council. It will provide an update on the status and trends of employment in the renewable energy sector for 2017. IRENA will also launch the third and fourth editions of the *Renewable Energy Benefits: Leveraging Local Capacity* series, focusing on offshore wind and solar water heaters. The series, which also covers onshore wind and large-scale solar PV, provide valuable insights to policy makers and industry stakeholders on the skills, materials and equipment needed across the value chain, with a focus on identifying potential for local value creation.



### Realising the full potential of renewable energy

11. Through its programmatic activities, IRENA supports policy makers in maximising the benefits of the energy transition, helping ensure that it is just and inclusive. As countries design and advance their implementation agenda towards SDG 7, important considerations arise in terms of both the ambition of the energy transition and the ways it can be achieved.

12. Growing competitiveness of renewable energy technologies and their potential needs to be reflected in government national plans, including Nationally Determined Contributions (NDCs) arising from the 2015 Climate agreement. IRENA's analysis of NDCs, in relation to national energy plans and actual deployment trends, finds that in many cases submissions have not kept up with recent, rapid growth in renewables. Given the need to scale-up action towards SDG 7 objectives, as well as alignment towards climate and development imperatives, national and regional renewable energy targets need to reflect the potential and greater ambitions.

13. The energy transition discourse has so far been largely technology-oriented and disconnected from the socio-economic aspects underpinning it and upon which its long-term sustainability depends. To ensure that the energy transition accelerates in a just, timely and equitable way, greater attention is needed to the transformative impacts on society, institutions, financing, ownership structures and the wider economy. The transformation must be aimed at enabling active social involvement in energy system planning and operation, creating new businesses and jobs, pursuing a just transition, and helping citizens and industries to flourish while respecting climate and sustainability constraints.

### Objective of the session

14. As Members prepare for the forthcoming SDG 7 review process at the HLPF, this plenary discussion is organised to facilitate a dialogue on the support that IRENA could provide in advancing national and regional action towards SDG 7. IRENA will set the stage by presenting findings from its analytical work, including from the preparatory analysis conducted for HLPF 2018 and the development of the Policy Briefs.

### Guiding questions

- What are the key barriers inhibiting a further acceleration of renewable energy deployment, especially in end-use sectors?
- What measures are being taken to maximise the co-benefits of renewable energy development (contribution to other SDGs) and ensure that the energy transition is timely, just and inclusive?
- How can IRENA use its analytical (and advisory) work to support decision makers to accelerate progress towards the SDGs?

**List of selected IRENA publications** (available online at [www.irena.org/publications](http://www.irena.org/publications))

- REthinking Energy 2017: Accelerating the global energy transformation (2017)
- Rethinking Energy 2015: Renewable Energy and Climate Change (2015)
- Accelerating Off-grid Renewable Energy: Key Findings and Recommendations from the International Off-grid Renewable Energy Conference (2016, 2014, 2012)
- Renewable Energy Jobs Annual Review <sup>2</sup>(2017, 2016, 2015, 2014)
- Renewable Energy Benefits: Measuring the Economics (2016)
- Renewable Energy and Jobs (2013)
- Renewable energy in the water, energy and food nexus (2015)
- Renewable Energy Benefits: Decentralised solutions in the agri-food chain (2016)
- Renewable Energy in Cities (2016)
- Untapped potential for climate action: Renewable energy in Nationally Determined Contributions (2017)
- Turning to renewables: Climate-safe energy solutions (2017)
- Synergies between renewable energy and energy efficiency (2017)

---

<sup>2</sup> 2018 annual review forthcoming