

**Messaging Document - The role of renewables to achieve commitments set out by the Paris Agreement
For IRENA Coalition for Action Communication – As of 30 October 2017**

Renewable energy combined with energy efficiency can bring down emissions in the energy sector sufficiently to achieve the objectives of the Paris Agreement

- By 2050, the accelerated deployment of renewables and energy efficiency can achieve around 90% of carbon emissions reductions in the energy sector necessary to keep the global average temperature rise to well below 2°C above pre-industrial levels – in line with the Paris Agreement (IRENA, 2017b).
- To achieve this, countries must increase their efforts: current renewable energy ambitions in the NDCs are insufficient. With more ambitious yet credible commitments, by 2030, renewables have the potential to achieve up to five times the CO₂ mitigation reflected in current NDCs (IRENA, 2016a).
- We need greater investment in renewable energy to decarbonise the energy sector and tackle climate change. To put the world on a pathway to limiting global warming to well below 2 °C, investment in renewables needs to reach on average USD 790 billion per year between 2017 and 2030 (IRENA, 2016a). (In 2016, roughly USD 270 billion was invested in renewable energy (Frankfurt School and UNEP, 2017)).
- The cost of wind turbines has fallen by nearly a third since 2009 and that of solar PV modules by 80%. Renewable energy is now the most affordable source of power in many parts of the world, offering reliable opportunities for countries to decarbonise their energy sector and reach climate objectives (IRENA, 2016b).
- Pricing mechanisms and tariffs to incentivise renewable energy investments are crucial, including the phasing-out of fossil-fuel and nuclear subsidies, as well as implementing robust carbon pricing (Mexirec Declaration, 2017).
- Early action is critical to limit the planet's temperature rise to well below 2°C and to maximise the benefits of the energy transition, while reducing the risk of stranded assets. Acting early is also critical for feasibly maintaining the option of limiting the global temperature rise to 1.5 C (IRENA, 2017b).

The decarbonisation of the global economy is a win-win scenario that creates jobs, economic growth and other socio-economic benefits.

- More new jobs are being created in renewables than in all fossil fuel technologies combined. 9.8 million people work in renewable energy today. This number is expected to double in the next ten years (IRENA, 2017a).

- Under a decarbonisation scenario, global GDP can be boosted by roughly 0.8% in 2050 (additional USD 19 trillion of cumulative economic activity between today and 2050) (compared to a reference case based on current and planned policies and expected market developments for each country's energy sector) (IRENA, 2017b).
- Improvements in welfare, including economic, social and environmental aspects will generate benefits far beyond those captured by GDP (IRENA, 2017b).

Renewable energy offers the prospect of safe, affordable power to small island developing states as well as the 1.2 billion people who currently lack access to electricity.

- For small island developing states (SIDS), energy infrastructure costs are high, and the severe impact of oil price and supply volatility is exacerbated by the small size of local markets. Renewable energy technologies can have a transformational impact on their economies (IRENA, 2014b).
- Thanks to dramatic cost reductions in recent years, renewable technologies are now the most economic option for off-grid electrification. They can be significantly cheaper than diesel-fired generation or kerosene-based conventional lighting (IRENA, 2014a).
- Almost 300 million people now have electricity access through off-grid renewables (IRENA, 2017c).

While the decarbonisation of the power sector is well under way, more efforts are needed in the end-use sectors (buildings, industry and transport), including their electrification.

- While the transformation of the power sector is well under way, more efforts are needed in the end-use sectors (buildings, industry and transport) which currently accounts for approximately 80% of the global energy demand (IRENA, 2017b).
- Renewable energy is a prerequisite for the next phase of electrification of the transport sector.
- Sector coupling, together with advances in energy efficiency, is key to realising the full potential of renewable energy in the overall energy system (IRENA, 2017b).
- Investment in renewable energy innovation needs to start now to accelerate solutions necessary for the energy transformation (IRENA, 2017b).

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MEXIREC Declaration 2017

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