

Keynote Remarks

by

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at the

2017 Assembly of the Arctic Circle

“The Way Forward in Global Climate Cooperation”

Reykjavik, Iceland

13 October 2017

Your Excellencies, Bjarni Benediktsson, Prime Minister of Iceland,

Olafur Grimsson, Chairman of the Arctic Circle,

Patricia Espinosa, Executive Secretary of the United Nations Framework Convention on Climate Change (UNFCCC),

Ossuur Skarphedinsson, Former Icelandic Minister of Foreign Affairs, Energy and Environment,

Your Excellencies,

Distinguished guests, Ladies and Gentlemen,

I am particularly delighted to attend this year's Assembly meeting of the Arctic Circle and this important Session on the future of global climate cooperation. We all know that the Arctic region is in the frontlines of climate change, as its fragile ecosystem is disrupted by global warming which also threatens the lifestyle of its indigenous communities. It is thus not surprising that countries in this region, such as Iceland, have also played a key role in global efforts to address climate change. The Arctic Circle Assembly has been an important voice in this context, and I feel privileged to be here.

I would also like to express my appreciation to my good friend, former President Olafur Grimsson, for the invitation. I just met Olafur in Florence, on the occasion of a high-level meeting of the Global Geothermal Alliance which he was instrumental in establishing. He told us the exciting story of how Iceland used geothermal energy over the past decades to bring power, heat and economic prosperity in a spirit of environmental sustainability. For us at IRENA, Iceland is not only one of our Member Countries, but also an example that many are seeking to emulate.

Before coming here, I attended a high-level meeting in the Maldives, where Ministers from Small Island Developing States launched an initiative to underpin their efforts to combat climate change. Like the Arctic Region, small islands around the world are facing the most direct, brutal effects of global warming. Today's meeting is taking place on the other side of the world, but I sense the same spirit of urgency, unity and determination in this room. So leaders from vastly different areas of the world are uniting to transform threat and challenge into opportunity and

growth. Climate change has the potential to transform our world for the worst, but it has also galvanised an unprecedented level of cooperation and commitment.

Patricia Espinosa, Executive Secretary of the United Nations Framework Convention on Climate Change (UNFCCC), has just reminded us of the historic role of the Paris Agreement and how the nations of the world rallied around it to take decisive actions against climate change. The real success of the Agreement is that we moved away from a top-down, normative approach that everybody would have to sign up to, to one in which everybody is a part of this solution. We have a practical agenda that different countries can implement in different ways to achieve a common objective. The Nationally Determined Contributions are at the heart of this agenda. Today, 165 countries from around the world have submitted these plans to reduce greenhouse gas emissions; out of these, 144 have referred specifically to the need to increase renewable energy deployment to mitigate climate change.

This shows a wide recognition that renewables will be essential in implementing the Paris Agreement, given that the energy sector accounts for two thirds of greenhouse gas emissions. Earlier this year, we released a new study, under the auspices of the G20 and in collaboration with the IEA, which outlines how a

decarbonisation of the energy sector by 2050, in line with the ‘below 2 °C’ objective of the Paris Agreement, is both technically feasible and economically attractive. Renewable energy and energy efficiency would meet 90% of emissions reductions needed. This energy transition will fuel economic growth and create new employment opportunities. Global GDP will be boosted by around 0.8% in 2050, the equivalent of almost USD 19 trillion in increased economic activity between today and 2050. Renewable energy jobs would reach 26 million by 2050 from 9.4 million today. So, we now have a long-term vision of the immense socio-economic benefits that renewables can bring. We are transforming the fight against climate change from a narrative of constraints to one of opportunity and growth.

In light of this, the countries that have submitted their Nationally Determined Contributions will take stock of their initial progress and begin working on an updated version of their plans to be submitted by 2020. This revision process will be essential to keep pace with the impressive changes that are under way in the world of renewable energy, and will present countries with the opportunity to increase the ambition of their renewable energy pledges which do not as a matter of fact fully capture its potential in light of technology improvements and cost reductions. For

example, around 160 gigawatts of new renewable power capacity came online in both 2015 and 2016 – twice as much as the amount foreseen in the NDCs.

We estimate that almost USD 1.7 trillion will be required globally for the implementation of power sector renewable energy targets in the NDCs. Of this, USD 1.2 trillion (or more than 70% of the total) will be required to implement unconditional renewable energy targets. A further USD 500 billion will have to come from international sources to advance towards renewable energy conditional targets; this represents more than a third of the USD 100 billion per year by 2020 that developed countries have pledged to jointly mobilise for climate action in developing countries. With limited public resources, it is clear that we must focus on leveraging additional private capital to unlock investments in renewables.

Everywhere, countries are raising their ambitions. Earlier this year, China announced its intention to invest USD 361 billion in renewable power generation by 2020, and that it was cancelling plans to build more than 100 coal plants. Earlier this month, at an ASEAN-IRENA Dialogue in Manila, ASEAN Secretary-General Le Luong Minh reiterated the organisation's commitment to an ambitious target of 23% of total energy supply coming from renewables by 2025. Last January, the UAE –

where IRENA is headquartered – announced that it would cut carbon emissions by 70% and have 44% of power generation from renewables by 2050. Earlier this year, I had the opportunity to visit Saudi Arabia to take part in the launch of its National Renewable Energy Programme that aims to deploy 9.5 GW of renewables by 2023 and attract up to USD 50 billion in investments. News from a few weeks ago tell us that the first solar power project in that country has attracted a record-low bid of 1.79 US cents per kilowatt hour, which would shatter all previous records if awarded. Another oil-and-gas exporter like Russia, on the other hand, is moving ahead with the country’s largest-ever renewable energy auction of almost 2 GW. The increasing participation of the largest oil and gas producing countries is a testament that the transition to a sustainable energy future is truly now global in nature. These are remarkable developments.

While however the pace of the energy transition is growing stronger every year, it needs to be accelerated to meet the objectives of the Paris Agreement. A seven-fold growth acceleration in renewables deployment compared to recent years is needed. Energy intensity improvement rate needs to increase by one and a half times. This cannot be achieved through a piecemeal approach. A system-wide

transformation is needed that calls for a broad range of solutions and actions. For instance, boosting innovation is critical to accelerating the energy transition, as investment in R&D for renewables is not currently growing, and remains miniscule for end-use sectors. In this Iceland has recently been showing the way – its share of new electric and hybrid cars is now the second-highest in Europe, with one in six new cars sold in 2016 being electric, while more than half of the country’s population is served by geothermal district heating.

But innovation is also needed in policy, business models and market design so that power systems can adapt in the long run to high penetration of variable and distributed renewable energy generation over a sustained period of time. Innovative solutions and approaches can help integrate higher shares of variable renewable energy in power systems, and innovative policy frameworks can attract investments, drive cost reductions, and provide incentives to enhance system flexibility. In this regard, I am happy to note the high level of focus awarded to innovation and innovators in the programme of the Arctic Circle Assembly.

Ladies and Gentlemen,

Our efforts to accelerate the uptake of renewable energy will only reach their full potential if we involve all the crucial stakeholders of the global energy system, in addition to countries, and the Paris Agreement has recognised their role. Cities already account for nearly two thirds of global energy use and an even larger share of energy-related carbon dioxide emissions. As the urban population grows to a projected two thirds of the world's total by 2030, that demand is reaching enormous proportions. At the same time, cities are leading the charge towards decarbonising energy consumption. Nowadays, 40 cities in the United States have committed to moving to 100% renewable energy sources. The private sector is also becoming an active player in the energy transition. Major global businesses are increasingly procuring renewable energy to power their operations in a sustainable manner, with corporate sourcing accounting for USD 25 billion of new utility-scale renewable energy since 2010. Microsoft, for example, has directly purchased more than 500 MW of wind and solar energy in the US. At the same time, conventional energy companies like Statoil and Engie are ramping up their investments to diversify and grow their renewables portfolios. In fact, Engie has reached financial close on its 55

MW Sainshand wind farm in the Gobi Desert, which will generate enough energy to serve the needs of 130,000 Mongolians.

Ladies and gentlemen,

We live in a time of great opportunity and exciting change. The Arctic Circle can be a strong catalyst to encourage actors to accelerate the momentum behind the global energy transition and take decisive action in the fight against climate change, in the same spirit of unity and purpose that is now guiding efforts from all around the world.

Thank you.