Remarks

by

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at the

Launch of EU REmap study

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Excellency Commissioner Cañete,

Director-General Ristori,

Distinguished Members of the European Parliament,

Ladies and Gentlemen,

It is a great pleasure to be here today. The European Union is a strong supporter of IRENA and I would like, at the outset, to thank Commissioner Cañete and Director General Ristori for their commitment to the Agency's mission and their contribution to its growth and success. Our partnership has grown stronger over the years to advance international cooperation in this fast expanding area, and it reaches today a new milestone with the launch of this study on renewable energy prospects in the EU.

For more than two decades, Europe has been a front-runner in renewables deployment. It is here in Europe that renewable energy moved from the fringes to the mainstream of the energy world thanks to its long-term vision, technological innovation and enabling frameworks. And today, we are in the midst of global energy transformation and a new system is emerging with renewables at its heart.

The European Union is considering the choices that will shape its energy future for the years to come. As a contribution to these discussions, I am delighted to present the main findings of the REmap study prepared by

IRENA, at the request of, and in close cooperation with the European Commission. IRENA has conducted similar studies for more than 70 of its Member countries, including major economies such as the United States, China, India and Germany.

The REmap study identifies cost-effective options for all EU Member States – spanning a wide range of sectors and technologies – to accelerate the deployment of renewables. The key finding of the study is that the EU could double the share of renewables in its energy mix to 34% in 2030, if the right enabling frameworks and energy efficiency measures are in place. In our assessment, this istechnically feasible, economically viable, economically beneficial

Much has changed since 2014, when the current target of at least 27% was set. The business case of renewables today is stronger than ever, with many technologies achieving spectacular cost reductions and reaching parity with their traditional counterparts. The average cost of utility-scale solar PV and onshore wind has fallen by respectively 73% and 23% since 2010. Innovation has accelerated in end-use sectors; electric vehicles are quickly reaching commercial maturity and could play a key role in the deployment of larger shares of renewables in the EU by 2030. Meanwhile, digitalisation and big data are revolutionising the way we design and operate our energy systems and the costs of battery storage technologies are plummeting - according to our estimates, they could fall by an additional 60% in the coming decade.

These trends are opening a range of options that seemed a distant future only a few years ago. As a result, the EU has at its disposal a cost-effective opportunity to meet the climate objectives while boosting economic growth. This is an extraordinary juncture in history where we have always looked at the climate discussion and achieving climate targets as imposing limitations on us economically. The advent of renewables in the economy presents a positive growth scenario for decarbonization. It also enhaces energy security and delivering substantial economic, social and environmental benefits to European citizens.

Deployment of REmap would have considerable implications for the energy sector in the EU. The power sector would be 50% renewable by 2030 compared to 29% in 2015. Almost 30% would be solar PV and wind. Additional infrastructure and cross-border market integration efforts would be required to achieve this.

In end-use sectors, renewable energy would account for 42 per cent of energy in buildings, 36 per cent in industry and 17 per cent in transport. Heating and cooling account for more than one-third of the additional renewable energy potential identified in REmap. And when it comes to the transport sector, REmap sees the potential for 40 million light-duty EVs on EU roads by 2030. However, even with quick adoption of electric vehicles, all renewable options are needed in the transport sector, including both advanced and conventional biofuels, to realise long-term EU decarbonisation objectives. REmap

prioritises second generation, non-food based biofuels, which could account for more than 3% of consumption tor by 2030 in our scenario

Achieving a 34% renewable energy share would require an investment increase in renewable energy that would amount to EUR 368 billion until 2030. These additional investments would represent an estimated averageadditional annual contribution of 0.3% of the current EU-28 gross domestic product.

These additional investments bring multiple benefits. Renewable energy today is one of the fastest growing employment sectors. Worldwide, we estimate that 10 million people worked in the sector in 2016, 1.2. million of which across the EU. Our estimates show that the global number of people employed in renewables globally would increase to 26 million in 2050 if the deployment of renewables and energy efficiency is accelerated to meet the objectives of the Paris Agreement. By raising its renewable ambition, the EU would ensure that a significant share of this employment potential is realized in Europe. This would have important social and economic benefits at a time of economic and industrial transformation, as jobs are lost in traditional economies to automation.

Increasing the share of renewables to 34 percent would reduce emissions by a further 15 per cent in 2030 – about 412 MtCO2 – an amount equivalent to Italy's total emissions. These reductions would bring the EU in line with its 2030 goal to reduce emissions by 40 per cent compared to 1990 levels, and

put it firmly on a pathway to meet the long-term decarbonization objectives of the Paris Agreement.

The increase would also result in savings of between EUR 44 billion and EUR 113 billion per year by 2030, when accounting for savings related to the cost of energy, and avoided environmental and health costs. Avoided health costs alone are estimated at between 16 billion and 60 billion EUR per year by 2030.

There are clearly many compelling reasons why the EU should embrace a renewable-based energy future and maintain its traditional leadership in this field. These reasons expand beyond the EU borders. The global energy landscape ischanging fast. Renewable energy deployment is growing at an unprecedented rate, which no commentator expected only a few years ago. Innovation and technology development in Europe will be essential to maintaining competitiveness at the global level in the future in a competitive marketplace.

Since 2013, more than half of all new annual global power generation capacity came from renewable sources, with a majority in emerging economies and developing countries. In 2016, this also became a benchmark for investment, with more than 50% of investment for the first time being realized in the global South. For instance, China, the largest renewable energy market today, reached its 2020 solar power target three years ahead of schedule, and has added a record 54 GW of solar power capacity in 2017 alone. Sales of in plug-in and hybrid car increased by 53% increase 2017 over 2016, showing seismic

shift in the transport sector. India's target is to produce 40% of its total energy needs through renewable sources by 2030. Closer to Europe, Morocco has set a 52% renewable energy target by 2030. Leading oil-producing countries are also taking notice. Last year, the United Arab Emirates Emirates, where IRENA is headquartered, announced a new energy strategy for 2050 which aims to achieve 70% reduction in carbon emissions and a 44% share of renewable energy in its energy mix. Even in the United States, renewables have continued their growth trajectory fueled by initiatives at the state and city level as well as increasing uptake of renewables by major companies. And such examples can be found in almost each of 180 countries that are part of IRENA's global family.

Ladies and Gentlemen,

Europe has a unique opportunity to lead this global energy transformation by example and its long-term vision. Achieving this transformation is not simply a question of replacing current fuels with renewable energy sources. System design and operation must be moulded to accommodate the rise of renewables, rather than adapting new technologies to the existing system. I am confident that European ingenuity, and excellence in technology, innovation and engineering, underpinned by a common vision and determination, will help it achieve its ambition of making Europe Number One in renewables.

Once again, I would like to thank the European Commission for the trust placed in IRENA for the preparation of this important study. I hope it will

prove a useful input for policy makers and all relevant stakeholders. We stand ready to deepen this cooperation, and we look forward to working closely wtih the Commission in its capacity as the Vice-President of our next Annual Assembly in January 2019.

I look forward to our discussions.

Thank you