## DIRECTOR-GENERAL



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Keynote Speech by

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to the

The European Wind Energy Association (EWEA) Annual Event 2013

Vienna, Austria, 4 February 2013

## Excellencies,

Ladies and gentlemen,

It is a great pleasure to be here, especially to be sitting alongside such a stellar group of leaders in the world of clean energy.

This event sends a powerful message that, whatever the short-term difficulties that beset us from day to day, the long-term fundamentals of wind remain strong, and are growing stronger. I am confident that the best days for the wind industry lie ahead.

The planet is hungry for energy. Global energy demand is predicted to rise by a third by 2035<sup>1</sup>. To meet this demand, governments are facing investment and infrastructure decisions on a scale that will define the development of generations to come. And with concerns about the environmental and economic sustainability of hydrocarbons growing, and the cost of renewable energy technologies falling, the world faces a historic choice. Your contributions are making a sustainable future possible.

Most countries are fossil fuel importers. Being dependant on fuel imports exposes economies to substantial supply insecurity and price volatility, and the cruel truth about this is that it is the economies and the people who can least afford it who end up paying the cost.

As the world proceeds on our current 4 degree temperature-increase trajectory, we face severe impacts of climate change and the prospect of a global population reaching 8 billion by 2030, with a rapidly increasing energy demand. Meanwhile, the prospect of indigenous renewable resources capable of producing secure and sustainable energy is technically possible and economically feasible today. In the face of global economic uncertainty, investment in a new industry generating new employment and income, while creating the new economic infrastructure of the 21<sup>st</sup> century, has become increasingly an idea whose time has come.

<sup>&</sup>lt;sup>1</sup> WEO, 2012.

The renewable energy revolution is happening, and is here to stay: over 120 countries have set renewable energy targets, 5 million people already work in the sector, and annual investment in renewables is predicted to range between USD 300 billion and 1 trillion by 2020. But to achieve the 'Sustainable Energy for All' objective of doubling the share of renewable energy in the global energy mix by 2030, we need to accelerate the momentum of this paradigm shift.

IRENA, the international agency I head, was born two years ago to be the global voice for renewable energy, a centre of excellence and a hub for cooperation using best practice and sound policy.

It was a visionary decision, backed by committed people, but as with all great endeavours it has taken a couple of years to realise its potential. I know that many have been watching and waiting to see if it can play the role that we all hope for.

Today, in 2013, I can say with confidence that IRENA has come of age. Our membership has grown beyond all expectations, to include 160 countries. Near-universality is within reach, as demonstrated by the exciting announcement from China of their intention to join IRENA in our mission.

The ingredients are now there and I am convinced that with broad engagement and with positive political will, we can make this happen.

So how can IRENA support the case for wind?

The growth of wind power over the past 15 years has matched that of telecoms and IT, with wind becoming a mainstream generation technology around the world. Wind power is one of the great success stories of renewable energy, and proves that renewables are no longer a niche option.

At the same time, we are all keenly aware of the challenges the industry has faced since 2009, when annual market growth dropped from the 15-year average of about 28% into the single digits.

This partly came about due to one of the sector's main challenges: high market concentration, in a period of economic uncertainty and fiscal challenges.

75 per cent of the annual onshore wind market is based in only 4 regions of the world: China, India, the USA, and Europe. Offshore wind is even more concentrated. Any regulatory uncertainty affecting one of these major markets can have a dramatic effect upon the entire global supply chain.

This is where IRENA comes in. We can help the industry to diversify geographically – by identifying new opportunities emerging in other parts of the world, explaining why wind energy makes sound economic sense, and helping governments put in place the policies needed to attract investors.

We see enormous potential in Africa, Asia, and Latin America, in markets hungry for energy, with growing populations, high economic growth, expensive electricity and widespread shortages.

The spread of wind to new markets is already starting to take place: 68 countries now boast above 10MW in wind capacity.

But large areas of the globe remain unexplored and untapped. By offering the information and assistance necessary to create enabling environments for renewable energy, IRENA can help change this.

The first step is to identify where the potential exists. IRENA recently launched the Global Atlas – this is an open-access online platform to prospect new markets in wind and solar. To date 39 countries have joined this effort, making it the largest initiative ever undertaken to assess global renewable energy potentials. By sharing information, expertise, capacity

building and financing, these countries will develop a clear understanding of the global opportunities for renewable energy. As more countries join, and more technical institutions share their data, the global perception of the large potential for renewables will grow.

The next step is to spread impartial information on the economic case for exploiting wind. IRENA is doing this through a series of costing studies based on 8000 projects, which recently showed that wind power in many parts of the world is now competitive with conventional generation technologies, including natural gas – even without subsidies.

It is also working to establish which policies work, under what conditions. The recently released IRENA/GWEC publication '30 years of Policies for Wind Energy' is a landmark study charting the experience of 12 leading markets, underlining the importance of clear targets, stable policy frameworks, and intelligent grid planning, and providing clear lessons for the future.

The third step is to work with governments to put the right policies in place, and to foster the expertise to make them work. We are contributing to this through our Renewables Readiness Assessments – collaborative efforts, which build stakeholder networks – and subsequent training and capacity-building programmes.

And where we see particular opportunity, we are focusing-in our efforts even more. In the course of 2011 and 2012, IRENA undertook analyses with a special focus on Africa and the Pacific; this work will continue in 2013 and will expand into Latin America and the Caribbean, and Asia.

The preliminary results from our work in Africa have outlined the tremendous strength of the economic case for creating an East African renewable energy corridor, connecting the East and South African power pools, from Ethiopia to South Africa – an idea that was backed by a meeting of African energy ministers I attended last year.

This initiative could unleash massive economies of scale, bringing cheap wind, geothermal and hydro from the north to the energy hungry markets of the south. The region as a whole is experiencing some of the highest economic and demographic growth in the world, including electricity demand growth rates over 7%.

The potential to meet this demand with renewables is huge. Kenya and Ethiopia, for example, have world-class wind resources. One project in Kenya's Turkana region, for example, is looking at 300 MW of wind capacity, while Ethiopia has plans to develop 7,000 MW by 2030.

If we can match this supply to Africa's burgeoning centres of industry, we could see a genuine transformation of the energy landscape, every bit as dramatic as the continent's recent leapfrog to mobile telecommunications.

The same opportunity exists for South-East Asia, where currently 28% of the population has no access to electricity<sup>2</sup>, electricity demand is projected to grow by 6-7% per year, and may triple by 2030<sup>3</sup>. Preliminary studies show that a visionary ASEAN power grid with a larger interconnection capacity and stronger market integration would increase the competitiveness of renewable energy against conventional sources, and could reduce the cost of meeting energy demand by USD 29 billion.

The LAC (Latin America and the Caribbean) region also has some of the best wind resources in the world, and a number of markets, such as Brazil, Chile and Uruguay, are emerging strongly.<sup>4</sup> And the continent has sleeping giants like Argentina, whose wind potential could supply the Latin American electricity demand several times over.

The message we are conveying is clear. IRENA is not just here to debate renewable energy; it's here to help make it happen, to kick start the sector in fast-growing markets, which are

<sup>&</sup>lt;sup>2</sup> Source: Copper institute.

<sup>&</sup>lt;sup>3</sup> Source: ERIA. Quoting the Japan Institute of Economics 2009 in 'Power Generation and Cross-border Grid Planning for the Integrated ASEAN Electricity Market: A Dynamic Linear Programming Model'. September 2012.

<sup>&</sup>lt;sup>4</sup> Brazil is a market of 2 GW/year until 2016. Chile has a potential of 40 GW. Uruguay may install 2 GW by 2020.

only just waking up to its potential. As a genuinely global organisation, backed by governments around the world, we are uniquely placed to do so.

To make this happen, your involvement will be instrumental. That is why we are developing a business forum: as an active advisor to IRENA on our work programme; a strategic ally for deploying our activities; and a partner to streamline our communications to become a truly global voice for renewables.

The business forum will play a crucial role in ensuring major areas of IRENA's work programme are aligned to the reality of the markets.

I don't think I am exaggerating when I say we have an exciting opportunity ahead to put the world on a sustainable path while generating growth and prosperity. I invite you to contribute to our work, to help transform this vision we all share into a living reality.

Thank you.

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