DIRECTOR-GENERAL



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Keynote Speech by

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to the

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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^{1} . 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. Europe may import as much as 80% of its gas demand by 2035, while global subsidies for fossil fuels increased by 30% last year according to the IEA². Being dependant on fuel imports exposes economies to substantial supply insecurity and price volatility. Blackouts, the use of expensive fossil fuels for stopgap electricity generation, and the volatile prices cut percentage points off the GDP of developed and developing countries across the world every year. 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.

¹ WEO, 2012.

² The WEO 2012 mentions an increase of fossil fuel subsidies up by almost 30% in 2011 (USD 523 bn), while the previous edition forecasted and increase from USD 409 bn in 2010 to USD 660 bn by 2020.

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 realistic prospect of indigenous renewable resources capable of producing secure and sustainable energy is technically possible and economically feasible today, supplying the 1.3 billion people lacking electricity. 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 21st century has become increasingly an idea whose time has come.

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 SE4All 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 renewably 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 realize 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.

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A record number of ministers and heads of state attended our annual Assembly this January in Abu Dhabi, and endorsed our work to date and programme for the coming year. The ingredients are now there and I am convinced that with broad engagement and with positive political will, we can make this happen.

Many delegates told me that they were excited to see the emergence of a new kind of international organisation. Not a bureaucratic and formal committee, but the driver of a dynamic, practical system to provide investors, operators and policy makers with an inclusive platform for cooperation and the tools they need to promote renewable energy.

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; and although I understand market growth is likely to exceed 10% in 2012, 2013 promises another difficult year.

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, 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.

We even see the great fossil fuel exporters of the GCC looking to diversify their energy mix due to: the energy intensive lifestyles of their growing populations and industries³; the opportunity cost of heavily subsidised domestic consumption; and the region's abundance of renewable energy resources. All GCC countries now have renewable energy targets, are making substantial investments across the renewables value chain, and are creating a regional renewable energy industry.

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.

³ KA CARE projections. IRENA/MASDAR GCC workshop 2012, Abu Dhabi. Saudi's internal energy demand could triple by 2030.

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 what 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 Renewable 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 tightly. 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 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 electricity⁴, electricity demand is projected to grow by 6 to 7% per year, and may triple by 2030^5 . Preliminary studies show that a visionary ASEAN power grid with a larger interconnection capacity and stronger market

⁴ Source: Copper institute.

⁵ 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.

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 wind potential for countries like the Philippines, Vietnam or Thailand is extremely high⁶, and potentially represents an unexploited wind power market between 2 and 13 GW/year⁷ up to 2030.

IRENA has marked the start of our work in Latin America, by launching an initiative in partnership with the Latin America Energy Organisation (OLADE) to improve access to the vast geothermal energy potential of the Andean Region. This 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.⁸ Smaller markets are also growing (Costa Rica, Honduras, Nicaragua, Dominican Republic, and the Caribbean), and the continent has sleeping giants like Argentina whose wind potential could supply the Latin American electricity demand several times over. In this region, the integration of the electricity markets will be a critical element for the integration and trade of the wind power capacity, and IRENA's scenario analysis has the potential to provide interesting prospects for the sector.

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 fastgrowing markets, which are 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.

⁶ Technical potentials. Philippines: 55 GW, Vietnam 642 GW, Thailand 190 GW.

⁷ Global Wind Energy Outlook, 2012. GWEC and Greenpeace. Mentions the ASEAN countries, but Pakistan and Taiwan are mentioned in the analysis.

⁸ Brazil is a market of 2 GW/year until 2016. Chile has a potential of 40 GW. Uruguay may install 2 GW by 2020.

To make this happen, your involvement will be instrumental. That is why we are developing a business forum, not as a talk shop, but as an active advisor to IRENA on its work programme, a strategic ally for deploying its activities, and a partner to streamline our communications.

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. For example the forum will act as a reality check and advise on the annual institutional publication's key messages, which will shape the work programme of the agency in the years to come; it will give feedback on the Global Atlas; it will engage in the dialogue with IRENA's Members on domestic manufacturing; and advise on the key advocacy messages to best promote renewable energy globally.

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 join us in our work, to help transform this vision we all share into a living reality.

Thank you.

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