

DIRECTOR-GENERAL

Check against delivery

Remarks
by

Mr. Adnan Z. Amin
Director-General
International Renewable Energy Agency

to the

African Union (AU) Conference of Energy Ministers of Africa (CEMA)

Addis Ababa, Ethiopia, 16 November 2012

H.E. Erastus Mwenga, Deputy Chairperson, African Union Commission;
H.E. Salvador Namburete, Minister of Energy of Mozambique, Chair of the CEMA Bureau,
and President of the IRENA General Assembly;
H.E. Dr Elham M.A. Ibrahim, Commissioner for Infrastructure and Energy, African Union
Commission;
Dr. Kandeh Yumkella, Director-General of UNIDO, Co-Chair of UN Sustainable Energy for
All;
Distinguished Ministers, Excellencies, Ladies and Gentlemen,

Thank you for the opportunity to speak at this essential meeting, at a time of such great
optimism for our continent.

Africa is going through a transformation. Last year six of the world's ten fastest growing
economies were in sub-Saharan Africa – a continent that was not long ago suffering from
economic stagnation and written off by investors. We are seeing GDP growth rates of 6, 7 per
cent or more, outperforming most of the world.

Growing up in Kenya, I had grown tired of the constant portrayal of Africa in negative terms.
Today we see a stream of positive stories, from Addis to Dakar, from Cairo to the Cape. It's
exciting.

Poverty is falling, and the middle class is rising. According to the African Development
Bank, One in three Africans - 315 million people – are now middle class, with all that entails,
and their proportion continues to grow.

This is not to downplay the challenges, of which there are many. But the narrative has
changed. And people are taking note.

So what does this mean for us, in the energy sector?

The answer is clear. If we wish to continue this growth, and pull even more people out of
poverty, we need to fuel it. We need to power our industries, and drive our cars. Cook our
food, heat or cool our homes and offices.

And that will be no simple matter.

Let us look at a couple of numbers. Africa's total electricity consumption increased from 170
billion kWh in 1980, to 600 billion kWh in 2010.

This represented not just an absolute rise, but a rise per person. Electricity consumption per
household has risen by 63 per cent - and is likely to continue growing.

With fast-rising populations living more energy-intensive lives we will need massive new
investment. We need to invest an additional USD 400 billion between now and 2030, if we
want to give every African access to electricity.

There could be as many as 2 billion people in Africa by 2050 – twice as many as today - one
half in the countryside, and one half in the cities. That's another whole Africa we have to
power.

In the space of a generation, we need to build a new energy infrastructure, for a billion more people.

How will we do this? Can we power this new Africa in a way which fosters equitable human development, which is sustainable, secure and protects livelihoods and the environment?

These are questions that you as Ministers deal with every day. But increasingly, these are questions that concern the rest of the world also. The decisions we make in Africa will have a profound impact not only on our citizens, but on the future of the planet.

Now here's the good news about this challenge.

Africa, if it wished, could fuel all its power needs with renewable energy. In fact, Africa has enough renewable energy potential to be entirely self-sufficient.

And it could do so in a way that, for the hundreds of millions Africans who currently live without electricity, is more cost effective than any of the alternatives.

In a way that is also more cost effective for hundreds of millions who already have access to electricity, in places with plentiful resources.

That alone is a compelling argument. Added to that - renewable energy is healthier, promotes more equitable growth and development, and protects the planet.

I accept that it's one thing to say what is possible, and entirely another to make it happen.

Energy infrastructure is expensive. It needs finance, and finely-tuned policies to attract investors. A few years ago, I might have concluded the challenges were too great and the barriers too high.

But something has changed. Prices in renewable energy have fallen, dramatically. Over the past two to three years, governments and businesses have done the maths, and concluded that renewable energy is a sound investment – not even including the hidden costs of hydrocarbons.

They are putting their money where their mouth is.

In 2011, global investment in all additional renewables capacity grew to a record USD 262.5 billion. New capacity in renewable power generation is matching that of non-renewable competitors.

Political commitment is growing at a similar pace. Last year, the international community established a new intergovernmental organisation – the first time in a decade – dedicated to promoting renewable energy. That agency is IRENA.

It sent a powerful political message - one which an increasing number of governments are aligning behind.

I have just come from the fourth meeting of IRENA's council, attended by delegates from almost 80 countries. The Council itself only has 21 members.

In the two years since I became Director-General, IRENA's overall membership has risen, and we have 160 countries participating as members or signatories.

So what can IRENA do for you, as you take decisions about the future of energy in Africa?

We can help African countries assess the resources they have available for renewable power generation, heat and transport. Next month we are launching the IRENA Global Atlas, which will chart the world's renewable resources with one simple, accessible tool for the first time.

We can help design policies which encourage investment in renewable energy, and share best practice. We can help identify priority actions to deploy renewable energy and assess their attractiveness to investors and operators, through our pioneering programme of Renewable Readiness Assessments

RRAs are a country-driven tool to help scale up the renewable energy sector with the consensus of national stakeholders. By next January, we will have completed the final report on assessments for Mozambique and Senegal.

We can help develop the financial models, build the capacity, and identify the technologies needed to make renewables a reality.

And we can help spread the message that Africa is growing, and open for business, to the rest of the world.

We are already doing this. Two of our three most popular publications are reports on Africa – Prospects for the African Power Sector, and our Africa Country Profiles - which have been downloaded more than 60,000 times.

Analysis carried out by IRENA found that to meet the growing demand of Africa around 250 GW of capacity will need to be added between now and 2030. Currently, total installed capacity is around 147 GW, which is less than what China installs every two years.

With the support of the Abu Dhabi Fund for Development, we will direct \$350m dollars to renewable energy projects in the developing world. Applications for the first tranche of funding are open until January 12.

Our report on Renewable Energy Jobs and Access – our most popular product – has shown how renewable energy technologies can create almost 4 million direct jobs by 2030 in the off-grid electricity sector alone, while bringing electricity to all globally.

This November, we jointly organized, with the ECOWAS Centre for Renewable Energy and Energy Efficiency and the Alliance for Rural Electrification, the International Off-grid Renewable Energy Conference in Accra – which was attended by over 300 delegates from 80 countries.

What are the main takeaways from this work?

First, that Africa's renewable energy resources can cover the majority of the continent's demand by 2050, in a way that makes good business sense

It has also taught us that we need to consider two different Africas: one rural, spread out and energy poor, the other urban, concentrated and energy hungry.

Renewable energy offers an answer for both.

In rural Africa, hundreds of millions of people do not have access to electricity. At the present rate of grid extension we will need 70 years to provide full access to Africa. This is not an option. Off grid renewable energy is the solution.

Off-grid solar PV systems are already cost-effective, compared to diesel generators. Mini-grids involving small hydropower, solar PV and/or biomass plants offer a stepping stone towards rural electrification, followed by integration with the grid at a later stage.

Africa's growing cities and industrial centres have more options, but we can see the prospect of a network of large sustainable hydropower and geothermal and wind power projects; interconnected in regional grids, creating a renewable energy backbone across the continent.

This is not to hide from reality.

There are significant barriers to a renewable future: an inefficient and under-financed power sector, distorted prices, a lack of local access to finance. These barriers are different for the two Africas, and require different but parallel solutions.

IRENA's job is to help Africa overcome these obstacles.

To develop effective policies and regulations that enable investors and entrepreneurs, and unleash the creativity of local businesses. To share technical know-how, and foster planning skills.

To turn market opportunity into bankable business plans and strong organizations.

Take a minute now to imagine what that future might look like.

A continent-wide system, which links markets and connects resources with demand, unlocking massive economies of scale.

Which integrates regional and local grids in a coherent whole; based on harmonized standards and regulations. A clean energy corridor from Cairo to the Cape, powered by geothermal, hydro and wind.

This is no pipe dream. The West African Power Pool Master plan is already planning to install an additional 10 GW from renewable sources between 2017 and 2019.

The Southern African Power Pool– another regional grid - plans to increase the share of hydro from 17 per cent in 2008 to 25 per cent by 2020.

East Africa also has enormous renewable energy potential. Ethiopia alone – which at present has just 2 GW of hydropower in operation – has some 5 GW of geothermal power potential, along with as much as 45 GW of hydro and over 1000 GW of wind.

The challenge is to develop this potential in tandem with a strong transmission corridor that can move electricity towards large and growing demand centres - north towards Egypt and south toward South Africa. An IRENA conference in 2013 will work with partners to explore the steps that can be taken to finance and build it.

This very institution, CEMA [the Conference of Energy Ministers of Africa], has already taken a crucial step towards this future – with its affirmation, in November 2010 in Maputo, of its will to promote renewable energy.

Africa has proved it can leapfrog to a new technology before - with its widespread and rapid adoption of mobile communications. We can do the same for renewable energy.

Renewable energy is a possibility, today, that can put Africa at the forefront of a new global energy infrastructure, while enhancing the continent's economic development.

IRENA stands ready to work with you as a reliable partner in that journey.

Thank you.
