

From Mediterranean Plans to RE Power Plants

REWP / IEA low-Carbon Technology Platform Workshop

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Opening Remarks

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Mr Pasquali, State Secretary Mr. Fanelli, Hans Jorgen Koch, Ladies and Gentlemen

It gives me great pleasure to provide some opening remarks for this important event. I'd like to start by thanking GSE, OME, Res4Med and the Italian Ministries of Environment and of Foreign Affairs along with Hans Jorgen, as Chair of our Renewable Energy Working Party, for their assistance in pulling together and hosting this important and timely event.

I'd like to start by explaining **why the IEA has such an interest in renewable energy in the Mediterranean region?**

First let me put the discussion into the global context by looking at recent history. The story is very clear. **Globally our energy demand and the related CO2 emissions have more than doubled in the past 40 years**, and we have observed strong growth especially in the non-OECD world in the past 10-15 years. Our energy modelling also shows that even if all the announced energy policy actions by a large number of governments are implemented, **our energy demand will continue to grow**. These trends threaten both energy security and our environment, so we are truly facing very challenging times.

Our IEA modelling shows that while renewables will continue to grow rapidly in all our future energy scenarios, they will have a key role in any world energy mix where emissions are constrained, in particular in the power sector. For example in our recent Energy Technology Perspectives publication, electricity consumption doubles in the 2 degree scenario (in which emissions are constrained to restrict global temperature rise to around 2 degrees), but its production is largely decarbonised. **Renewables** play a key role in this transition, **passing from today's share of 20% on global electricity generation to 57% in 2050**. But the challenge is huge - in absolute numbers, electricity generation from renewables will need to increase by around 20 000 TWh – this is roughly equivalent to the entire world electricity generation today!

In recognition of the growing importance of renewable energy in the global power mix, the IEA recently published its **first medium-term market report** focused on renewable energy – complementing those we have traditionally produced for oil, gas and coal. This new report provides a bottom-up, global renewable energy forecast – projecting renewable electricity capacity and generation over the next 5 years.

The **first message** in the report is that despite the difficult overall economic climate which is inhibiting investment in some parts of the world and rapidly changing policy frameworks, **the overall rate of deployment is continuing to accelerate**. Global renewable power generation will increase by 40% between 2011-17. This equals roughly one-and-a-half times the current electricity production of the United States. Hydropower will remain the main renewable power source, and continues to grow, but the **non-hydropower sources are expected to grow rapidly – at over 14% per year** annually, and are projected to account for 60% of the overall growth between 2011 and 2017.

The **second message is the shift in geographical focus**. Non-OECD countries account for two-thirds of the overall growth. China alone accounts for 40% of global growth. China, Brazil, India expand strongly...but other non-OECD countries are also growing significantly.

Why is this geographical shift happening? In the past, most investment in renewables occurred in fossil fuel importing countries with high GDP which could afford for RE deployment aiming at achieving energy diversification, climate change mitigation, economic development and other environmental protection. But recent trends in fossil fuel prices coupled with dramatic reductions in the costs of some RE technologies are **opening up new opportunities**. The situation is changing for two groups of countries in particular.

Fossil fuel importers with lower GDP are now finding RE as a more cost effective option to reduce their import dependency so improving their energy security.

Fossil fuel exporters with high GDP which see the opportunity costs and the benefits of diversifying the energy mix at home while selling fossil fuels at high prices in international markets.

We can see this in terms of deployment patterns, but also in terms of the countries introducing ambitious renewable energy targets coupled to serious measures to encourage deployment.

The signs are good – with many more countries adopting targets and policies. The important thing is that these countries **benefit from the extensive policy experience** – some good and some less so – that has been accumulated and there is a major need for propagation of Best Practice and capacity building to assist in this process.

The Mediterranean region is one of those that hold **tremendous potential** for the deployment of renewable energy technologies. The region has enormous solar potential coupled with the necessary available land to exploit this to produce electricity, as well as hot water. It also has very good wind potential in a number of regions. The southern countries have a growing appetite for energy and particularly for electricity which is absolutely necessary to enable economic development, and now with reducing costs of renewable technologies there is a golden opportunity to use the local renewable resources to meet local needs and aspirations. There is also of course the potential for North Africa to become a major exporter of renewable energy to Europe which has ambitious energy security and climate goals, but which is less endowed with solar resources in particular.

However, despite this potential and all the efforts conducted by individual Mediterranean countries, **progress is still slow and uncertain. Many reasons** for this slow progress come to mind. We are still enduring the volatile aftermath of the deepest economic storm of a lifetime and the economies of southern Europe are facing major economic issues and need for budget reform. Countries in the Southern part of the Mediterranean region have gone through a series of political changes. To realise the export potential, electricity grids require greater interconnection so to optimise the sharing of valuable renewable energy flows.

However realising the opportunities could have **major economic benefits on both sides of the Mediterranean**, with improved energy supplies and employment opportunities. My view is that the Mediterranean region should be at the forefront of the green growth efforts and this can be supported by more interconnected and mutually supportive Governments and industries.

The importance of international and regional collaboration along these lines in delivering shared goals is clear, and was central to IEA and G8 minister's decision in 2009 to establish the **International Low Carbon Energy Technology Platform** (or Technology Platform for short). Through this mechanism together with international partners from Government, Industry, and fellow international organisations, the IEA is accelerating shared learning, catalysing commitment to joint action, and supporting Governments and industry in their development efforts to deploy renewable energy technologies. For many months now, the Technology Platform has worked closely with countries of the Mediterranean, in particular Italy and Morocco, building momentum to support efforts to deploy renewable energy technologies.

In this context, our hope is that today's workshop will help identify and understand regional specific barriers to the deployment of renewable energy technologies, and explore how Mediterranean and industry initiatives can actually support the countries' plans to deploy these technologies. The IEA stands ready to help facilitate this process and help the government and industry players in the region unlock the huge potential.