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INTERVIEW ENVIRONMENT

EU, North Africa green energy tie-up draws closer - Claude Ayache

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Collaboration between Europe and North Africa could mean more resources in the Mediterranean region for green energy projects, says InnoEnergy's Claude Ayache. Image credit: Flickr/divivish

An experimental project connecting renewable energy researchers in the EU with colleagues in Morocco and Tunisia could help pave the way for a market in renewable energy and energy efficiency that spans the Mediterranean, according to Claude Ayache, senior advisor for European affairs at the EU's public-private green energy partnership, InnoEnergy.

Why has InnoEnergy focused on a partnership with North Africa in the MAGHRENOV project?

'There have been two decades of effort to develop a European-Mediterranean innovation space in which people can collaborate and bring advances in research to market. But there are still many problems. MAGHRENOV is really a test bed, a way of experimenting with north-south innovation in order to prepare the way for an internal, Euro-Med market in renewable energy and energy efficiency.'

Why do we need a market like this that connects countries across the Mediterranean?

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‘Collaboration with different neighbouring regions is a big EU priority, so it’s an important political goal. It’s in our interests to have thriving economies on our borders. With wealth development comes increased markets, economic prosperity and improved cross-border relationships.

‘Also, when it comes to climate change and clean energy, we are now sharing the same vision. Countries like Morocco and Tunisia are in some ways just facing more extreme versions of problems that are also hitting southern Europe. Take desertification for example. This is already affecting Spain and Greece. If we address these problems as a region, it means there are more intellectual, entrepreneurial and funding resources available for us all. For example, we have a common need to develop photovoltaics in agriculture, to enhance aspects of farming such as giving plants more shade while minimising the use of water. We are all working towards the strategic nexus theme in the region (the idea that water, energy and agriculture are inextricably linked), and this is a good example of that approach.

‘There is plenty of money available for innovation in clean energy – USD 100 billion per year (by 2020) some of which will pass through the (UN’s) [Green Climate Fund](#), a big part of which will go to Africa. But the question is how to coordinate it? It could end up diluted, or not strategically invested. MAGHRENOV addresses some of these issues.’

How does the coordination between regions work in practice?

‘This is not about northern ideas being implemented in the south. If you just transfer the plans of a device from Europe to Morocco it could cost more to build in Morocco than in Europe. There can be real problems making the transfer. This is about ideas, from north or south, being adapted so they will match well in the southern context.

‘This adaptation is a strong driver for innovation – after all, innovation means solving problems. It’s co-development.’

What do you mean exactly by co-development?

‘There are many educated people in the south. For some time they were just thinking of copying the northern technologies. And now they are more minded to develop original technologies. It’s happened by natural maturation.

‘In our (MAGHRENOV) project, we worked with Morocco and Tunisia. Both countries have a very strong will in renewable energy, at a high political level, and have invested a lot in solar energy. Morocco specifically is about to become a leader in renewable energy in general.

‘It has also made a big effort for two decades now in technical education. And it has restructured its research and innovation system so it is more like the European model, which means it’s much easier for us to interact because we have counterparts. Despite the political fluctuations of the recent past, Tunisia is also a good candidate for co-development. It has a traditional concern for higher education, including engineering (and) innovative SMEs.’

How can InnoEnergy projects help out here, what impacts have you seen?

‘MAGHRENOV has done a lot to network different high-level universities under the lead of the Universitat Politècnica de Catalunya in Spain. These groups have devised a master’s programme in innovation, although there is a delay to its implementation because it has not yet received funding.

‘We – InnoEnergy and Morocco’s Institute for Research in Solar Energy and New Energies (IRESEN) – have also held calls for innovation proposals from Euro-Moroccan consortia. As a result we have two successful bids that are going ahead. The Sirocco Project is adapting a Fresnel system (a form of concentrating solar thermal power) to drying in the food industry, replacing fossil fuels currently used for this. Drying is important in other industries too, such as brick-making, so the technology has a lot of potential.

‘The other project – the DrinkingBox project – combines three different ways of using the sun to

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Claude Ayache, Senior Advisor for European

purify water – solar pasteurisation, photolysis and photocatalysis – to improve disinfection.

Affairs, InnoEnergy



What is left to be done?

‘One problem is intellectual property rights (IPR). The culture of IPR in clean-tech is just developing in southern countries and it is very important for start-ups to secure IPR definitively. It’s a big issue.

‘There are also skills gaps and differences in approaches. There are more and more skills in southern countries and we are approaching a state where we can cooperate on new ideas based on highly advanced technology. But there are still differences there. We can’t be too naïve, it will develop at its own pace.’

If MAGHRENOV has been an experiment in making a Euro-Med innovation area, what is your verdict?

‘This experimenting phase was necessary. We are very happy to have done it with some shortcomings linked to a limited budget, but also some success. Now there is better confidence from both sides about the possibilities. We have experimented with how to support trans-Mediterranean innovation projects and we’ve developed a logic about how to scale that support to actual needs and the expected commercial impact. We are ready to work at a significantly larger scale. Now we need to put in place a public-private Euro-Med organic structure that will really drive regional progress in renewable energy and energy efficiency.



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‘Now people involved in clean-tech innovation in Europe recognise that organisations and skills in Morocco and Tunisia are of a high standard and we can really work together on equal footing. And, even if sometimes they lack expertise in innovation methodology, there are entrepreneurs coming from southern countries who are really interesting people with a strong will to develop great new ideas in clean tech – or use them in their business.’

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EU, Mediterranean partnership

The EU’s partnership with Mediterranean countries such as Morocco and Tunisia came into force in 1995, and was given added impetus at the 2008 Paris Summit with the launch of the [Union for the Mediterranean](#).

Research plays a central role in the six main areas covered by this cooperation – pollution, security, civil protection, alternative energies, higher education, and small- and medium-sized enterprises.

In May 2011, the EU published a [joint communication](#) which added to the scope of the partnership, proposing steps towards a common knowledge and innovation area around the Mediterranean, pulling together policy dialogue, national and regional capacity-building, cooperation in research and innovation, and increased mobility of researchers.

More info

[MAGHRENOV](#)