

**Remarks by Mr. Fabrizio Barbaso, Deputy Director General, DG Energy, European Commission
EU-India Cleantech Workshop, 18 February 2010, Brussels**

Opportunities for EU energy cooperation with India

Ladies and Gentlemen,

It is an honour to be invited to speak at this first workshop setting the stage for what will surely be an extremely productive and pioneering partnership.

In my position as the Deputy Director General in charge of energy, I have been involved in a number of dialogues with the EU's partner countries. But we are acutely aware that such policy dialogues between governments are just one small part of the story.

Particularly in the energy field, the crucial cooperation is the one that takes place between our businesses, scientists and researchers. As we continue to work toward a global climate agreement, it is becoming clear that our industries will be one of the engines of change on the road towards a low carbon economy. To make the transition to the low-carbon and sustainable economy of the future, we need all the innovation, skills and determination the private sector companies can bring.

For this reason, I am extremely grateful for the opportunity to contribute to your work and to share with you the opportunities that we see for the EU and India cooperation in the energy field.

Fundamentally, the EU and India are tied by shared concerns: How to ensure energy security while tackling climate change and maintaining economic growth and competitiveness? Even without climate change, the current structure of our energy world is raising serious concerns. A complete overhaul of the structure of energy supplies and indigenous generation facilities will be necessary in both European countries and in India in order to secure a more sustainable energy future. This means above all, the development of low carbon technologies and energy efficiency.

But it is clear that these challenges are so fundamental that even with a comprehensive approach and political resolve, such as the one we have in the EU, international cooperation is an indispensable element.

This was precisely the logic that led to the development of a structured partnership on energy issues between the EU and India in 2005. Tackling the challenges I have mentioned is a not an easy task for any country or region and the policy responses must be comprehensive. The broad-based engagement on the multitude of energy topics was seen as a win-win situation for both India and the EU.

This argument still remains valid! The leaders of the EU and India have repeatedly emphasized the importance they attach to this cooperation. The most recent EU-India Summit, held in New Delhi last November, has once again accorded high priority to tackling the energy and climate change challenges I have outlined earlier, in a joint way.

We have moved some way from the early days of our partnership. The EU-India Energy Panel, our main instrument of cooperation, has created and maintained a structured dialogue and provided an open channel of communication on topics of mutual interest. Our sectoral working groups have tackled issues ranging from energy efficiency to underground coal gasification. They combine site visits and hands-on learning experiences with close dialogue on policy, where experiences are shared.

On more concrete actions, we are now evaluating proposals received in the framework of the EU-India joint research call on solar energy, also highlighted at the recent Summit. And we are developing cooperation projects on renewable energy, and on energy efficiency and eco-business development in India. The Global Energy Efficiency and Renewable Energy Fund (GEEREF), proposed by the Commission, made its first investment in Asia in 2009, focused primarily on India. GEEREF is an innovative global risk capital fund, which uses public and private money to investment in small-scale energy efficiency and renewable energy projects. These are examples of the type of concrete cooperation activities that can emerge from our policy dialogue. We hope that these actions will build on our exchanges to date and will give more visibility to our bilateral cooperation.

But there is no denying that more can and should be done. There is no lack of areas where the cooperation could be expanded. Let me highlight just a couple that I see as particularly relevant for the purposes of this initiative.

Technology is obviously going to lie at the heart of a successful global response to climate change. Neither market forces nor public opinion will be enough to develop and deploy these technologies sufficiently quickly.

As you know, in the EU we have put forward the Strategic Energy Technology Plan with the intent to change "bottom-up" ideas-driven R&D funding to a more guided strategic approach. Above all, our 20-20-20 by 2020 targets have made this approach necessary. Its goal is for Europe to work in a focused and result-oriented manner in several industrial initiatives.

I see that that your initiative will examine closely solar energy technologies. This is an area we are very keen on furthering, at home (one of the industrial initiatives under the SET-Plan) and abroad. Solar, as you know, is also of a particular interest for the Indian government, especially since the launch of the National Solar Mission, which sets the goal of achieving 20 GW of solar generation capacity by 2020 and 100 GW by 2030 (10-12% of estimated total generation capacity for that year).

Our former Energy Commissioner Andris Piebalgs recently participated in the opening of a new solar thermal power plant in Spain with an installed capacity of 20 MW. The plant will produce enough clean electricity to supply 10,000 homes, and will prevent the emission of approximately 12,000 tons of CO₂ per year into the atmosphere. This plant is an example of the multiplying effect that public programmes can have, as this plant built on the success of the neighbouring plant – the first Concentrating Solar Power demonstration plant co-financed by the European Research programme

But even with such positive examples, it remains the case that solar energy technologies have to become more competitive to gain mass market appeal, whether we are talking about in the EU or India. This means maintaining political support and funding programmes. In the EU, we have assessed that an adequately funded research programme costing in the region of €16

billion over the next 10 years could, if coupled with the right market-based incentives to encourage deployment, result in up to 15% of EU electricity being generated by solar power in 2020.

India's government in its Solar Mission is tackling some of the same issues that we face. Which is the right mix of regulatory measures, financial incentives and research funding to give the necessary boost to the solar industry? How to lower costs and boost manufacturing capacity and ensure that the impact of the approximately €13 billion the Indian government intends to channel to the implementation of the Solar Mission produces the necessary results?

Another key area where cooperation is indispensable both on regulatory approaches and on technology development and deployment is energy efficiency. The energy efficiency has an enormous potential! The IEA estimates that end-use efficiency can account for more than half of total global CO₂ emissions savings by 2030. Additionally, the energy security and economic benefits are significant.

The EU is according the highest priority to this area and is taking a number of steps to implement our goal of 20% energy savings. We are developing a revised Energy Efficiency Action Plan which will, I hope, offer still more impetus. Effort will concentrate on refurbishment of the existing building stock. But we will also give a new emphasis to the concept of Smart Cities. After all, four-fifths of people live in cities, and this is where most energy is consumed. Clearly, all of these areas are also the ones that the Indian government should and is indeed tackling.

I cannot avoid mentioning clean coal technologies. Clearly coal is and will remain an important energy source, particularly for fast-growing and coal-reliant economies such as India's. But carbon capture and storage is among the opportunities that we see in this field. Application of CCS in power generation and in energy intensive industries can provide a crucial contribution to the reduction of CO₂ emissions associated with the use of fossil fuels (20-28% of the achievable global CO₂ emission reductions by 2050 according to the IEA).

In the EU, we have put forward a regulatory framework on CCS and set out on the road of stimulating the construction and operation by 2015 of up to 12 demonstration plants applying the technologies for CO₂ capture and storage (CCS). We stand ready to share our experience and cooperate further with India in this field.

Finally, I would also like to very quickly mention nuclear energy. Until recently, this topic was largely off the table between the EU and India. But we have seen the signature of bilateral agreement in the field of fusion energy last year. And we are now negotiating a EURATOM research agreement.

I regard nuclear energy as a "bridging technology" that will give us the time we need to decarbonise the electricity sector. At the same time, we have to respond to serious public concerns on nuclear energy. We have to ensure that the development of nuclear energy globally meets the highest standards of safety, security and non-proliferation. In this area too, I see ample room for future work between the EU and India.

Ladies and Gentlemen,

I have tried to show you that there is no lack of areas where the EU and India can and should cooperate closer. But we also look to you, the business sector, to measure whether the political attention is focused on the right issues. In essence, our role is to share experience and opinions on the best and most stable regulatory framework that can foster investments and trade. We also work on building administrative capacity within governments as well as on specific energy policy measures. But at the end of the day we hope that this policy discussion leads to the *real* cooperation between India and the EU, that is to say, vibrant and dynamic commercial exchange.

The EU-India Cleantech initiative is exactly the type of cooperation between European and Indian business that we are happy to see emerging.

I wish you every success with your work and I look forward to your recommendations as to what and how this still young cooperation can be taken forward.

Thank you for your attention.