"Linking Knowledge! Working Together for Sustainable Development: A German-Indian Dialogue between Academia, Economy and Government"

Panel Members:
Her Excellency Mrs. Meera Shankar, Indian Ambassador
Dr. Leena Srivastava, Executive Director of the internationally renowned “The Energy and Resources Institute” in New Delhi.
Prof. Miranda Schreurs, Director of the “Environmental Policy Research Center” at Freie Universität Berlin and member of the Advisory Council on the Environment (SRU).
Mr. Franzjosef Schafhausen, Head of the Department Environment and Energy, German Federal Ministry for the Environment, Mr. Gerhard Stryi-Hipp, Executive Director, German Solar Industry Association.
Chair: Dr. Kirsten Jörgensen, Director of Studies at the Environmental Policy Research Center, Berlin.

During the evening program, which was kindly hosted by the Indian Embassy, representatives from politics, economy and science emphasized the importance of bilateral projects in climate protection and sustainable development; and they called for a closer cooperation between the three sectors. The panel of prominent experts stated where cooperation in the area of climate protections should be heading and where inter-linkages between science, politics and business would be most fruitful.

Her Excellency Mrs. Meera Shankar pointed out that for India the issue of climate change is very important, though it has not contributed to it in a major way. Climate change will have a serious impact on countries like India. As a result, the Indian government has recently announced a policy aimed at dealing with this issue and is participating in discussions. “The prime minister came up with a significant proposal: our per capita GDP emissions will never exceed those of developed countries. This also sets an incentive for developed countries,” Mrs. Shankar stated.

The Indian economy has been growing at a rate of 8 to 9 percent annually, and it would like to sustain that rate to deal with the problem of poverty. The question of energy becomes a key question in this context. The country has to cope with rising demand generated by this growth. There is a shortfall; hence, meeting the requirements in the future in a scenario where it has to expand the capacity is going to be a key challenge for India. Mrs. Shankar underlined: “We have to expand the capacity to 800 megawatts, which is a 7-fold increase. We meet quite a lot of this from thermal, because we have coal reserves. We are also trying to diversify our basket by expanding hydropower, where we have capacity in India and the surrounding countries Renewables account for something like 8 percent of our capacity, and nuclear power accounts for ca. 3 percent.” Mrs. Shankar explained that in terms of opportunities for cooperation, there is a lot that can be done together. “India would like to expand the use of renewables. It now has the fourth largest number of wind energy installations in the world. But the expansion, especially of solar power, has huge potential, because we have a lot of sunshine. The key problem is cost. It is still the technology of choice for remote villages, standalone installations. But expansion can happen if we bring down the cost. We see large opportunities for cooperation with Germany.”

According to Mrs. Shankar India could also work together with Germany with respect to biofuels, albeit in a way that does not endanger agriculture. Almost 30 percent of the energy use is bioenergy. India has to use it in a more efficient way however; and that would be a major step forward. She clarified: “We are looking at using agricultural wastes. We do not want to follow Europe, which is using food products. India has done research on Jatropha (Jatropha Curcas is a biofuel crop, editor’s remark) which it wants to use on degraded land. It doesn’t require a lot of nutrition. How to use cellulose would be one of the key technological challenges, and this is something on which India and Germany could work together.”

Mrs. Shankar also highlighted the importance of energy efficiency, hoping to improve it both in the power stations and in other sectors. She cited policy measures such as the labeling of appliances, as well as the relevance of local technologies whose utilisation is more economical. She also made clear: “Cost-effectiveness is crucial in a developing country like India.” Coal gasification would be an option. In the field of solar energy, India is looking at the possibility of working together on a solar thermal plant. “In areas like waste management, effluent treatment, etc. there is a range of areas where we could work together. The government is looking at providing common effluent treatment to clusters of industries. This is another area where we could work together. I look forward to hearing the experts this evening.”

Dr. Kirsten Jörgensen, Environmental Policy Research Centre Berlin, initially expressed her gratitude to the conference organisers, then to her Excellency, Indian Ambassador Shankar, for kindly hosting the panel discussion of the German-Indian Sustainability and Climate Change Workshop at the Indian Embassy. She respectfully noted: “Ambassador, Mrs. Shankar, it is a fact that you are very supportive of bilateral cooperation between German and Indian firms and that you particularly engage in, and promote, activities related to climate protection and sustainable energy policy.” Ms. Jörgensen referred to the mission of the German-Indian Sustainability Dialogue, one that brings together decision-makers, scholars and future environmental leaders from Germany and India. She added: “We seek to build a platform for exchange, linking knowledge and developing approaches to cross-national lesson-drawing as well as bilateral cooperation at the interface of politics, business and academia.” Following this brief introduction, Ms. Jörgensen introduced the panellists: “We are happy to welcome Dr. Leena Srivastava, Executive Director of the internationally renowned The Energy and Resources Institute in New Delhi. Leena Srivastava is a prominent scholar in her field and an acknowledged policy consultant in energy policy and climate protection. Prof. Miranda Schreurs, Director of the Environmental Policy Research Center at Freie Universität Berlin and member of the Advisory Council on the Environment (SRU) and an internationally acknowledged EU and Asian expert who will plea for a strengthening of German-Indian scientific collaboration in both research and teaching.
On the other side of the table, we welcome Franjosef Schafhausen, a widely recognised representative of the German Federal Environmental Ministry, who will talk about the tremendous potential as well as the mutual benefits of a closer cooperation in climate protection and energy policy. Last but not least, we are happy to have a representative from the corporate sector; we look forward to an interesting and inspiring contribution from Mr. Gerhard Stryi-Hipp, Executive Director of the German Solar Industry Association.”

Mr. Gerhard Stryi-Hipp, Executive Director, German Solar Industry Association stressed: “We see great potential in cooperation between Germany and India. We see, firstly, that there is a great interest in India in solar energy.” He singled out India’s awareness of the energy problem and the fact that renewable energy will play a larger role in the future: “We know that India has been active in the area for a long time and that India even has a renewable energy ministry. We know that they are doing a good job to increase the overall level of activity.” Mr. Stryi-Hipp referred to the Indian support programme for larger photovoltaics established in 2008 and added that there is a huge demand for electricity and great interest in cooperation.

He compared Germany and India, relaying that Germany started with the support system for RE in the 1990s, for PV since 2000. By 1998, Germany had installed 10 megawatts. Last year 1100 MW were installed. The turnover amounted to more than 5 billion Euros. Mr. Stryi-Hipp clarified: “We know that PV is more expensive today, but in the long run we can only cover the energy demand if there is solar energy. Becoming cost competitive will depend upon scale effects.” Significant investment is taking place in Germany; the country is home to more than 70 companies involved in PV. The production cost is decreasing by 5% annually. And Mr. Stryi-Hipp concluded: “The message I can give from what we have experienced is that, in order to make PV cheaper, it is necessary to use it. This is the way to drive the technology. Rich countries like Germany have an easier time investing in this technology. However, other countries should also invest, thus being able to use it when it becomes cheaper. We see positive developments in India, lots of investments in factories to produce PV. I would be very thankful if it were to be supported by the government. In that sense I am very optimistic that we can develop the technology more quickly within the framework of a cooperation.”

Mr. Franzjosef Schafhausen, Head of the Department of Environment and Energy, German Federal Ministry for the Environment first described his primary responsibility – that being energy and the environment, including the national Climate Protection programme. In addition, his responsibilities include developing cooperation programmes with other regions and countries in the world. Mr. Schafhausen stressed that “Germany is not only experienced in developing programmes, but also in driving new future oriented technologies and bringing them to the market.” He emphasised that there is a very close cooperation between Germany and India, one based on the bilateral energy agreement. Three working groups were established for this means in December of 2007: WG 1 is power generation, not only encompassing new power, but also restructuring existing systems; WG2 is decentralized energy and renewables. The third group is the CDM, and, in fact, Mr. Schafhausen heads the 2nd and 3rd working groups. These will soon have meetings in India. Mr. Schafhausen said “We are trying to get in touch with all the ministries and relevant authorities, in order to exchange experiences we have made in Germany. We are looking at what might be done in closer cooperation.” He underlined that there is large interest in the use of renewables and promoting energy efficiency in rural areas. Renewable energy can play a role in providing access, and there is also a role for education and information in this setting, not just technologies. The Federal Environmental Ministry just started a new initiative for CDM. One of the major countries involved happens to be India. “We are looking at China, India, Brazil, and the North Africa region. We are helping our business sector in getting access,” stated Mr. Schafhausen. He continued: “We have a very good structure for working together. What is needed is simply increasing the amount of cooperation.” At the moment, one can speak of the third period of the Emission Trading Scheme, and combining the Emission Trading Scheme with Clean Development Mechanism and Joint Implementation. He

hopes that an agreement will be reached by the Council and the Parliament for the period extending beyond the Kyoto. Mr. Schafhausen concluded: “We are specialised in the field of renewable energy and energy efficiency, and it would be a pleasure for us to provide all our experience and know-how for improved cooperation.”

Dr. Leena Srivastava, The Energy and Resources Institute, New Delhi, began by clarifying that the focus of a presentation on India needs to extend beyond climate change to sustainable development. The IPCC too, she reminded, has recognized the close interlinkages between climate change and sustainability. Dr. Srivastava stressed that “Mitigation of the impacts of climate change must cover both reduction of GHG emissions as well as adaptation.” Recognising the inevitability of certain committed climate impacts arising out of historic emissions, she underscored the importance of development for a country like India so as to build its adaptive capacity.

Dr. Srivastava, in reference to criticisms of the CDM mechanism, contended that much of this criticism emanates from looking at CDM only as a tool to reduce emissions. Dr. Srivastava addressed the role of CDM: “It is not just a mechanism for reducing GHG – it is primarily a mechanism that recognizes the need for development.” As such she emphasized the need to strengthen this mechanism to make it more responsive to needs on the basis of gathered experience rather than experiment with new approaches – the world cannot afford the luxury of going through a new learning phase! She agreed with the point that, in its own long-term interests, India needs to see how it can invest in solar as well – that is, not only in terms of climate change, but also in terms of energy security. “India needs to find a balance between short term compulsions and longer term desired development paths and we need to discuss where the balance is”, said Dr. Srivastava. She pointed out: “The challenges that India is facing are enormous. For setting the development on the right path we are competing for the same limited material and managerial resources that the country has.”

She then referred to the severe water problems India will be facing. She called attention to the impacts of climate change on this issue and pointed to the fact that the Himalayan glaciers are already under threat. “50 percent of our population is dependant, directly or indirectly, on water from the Himalayas,” Dr. Srivastava said. She went on, stating clearly: “When we talk about linking knowledge, this is one key area where the research community has to come forward.” She continued by arguing that the amount of data is very scarce and that planning in the context of climate change (e.g. the entire approach that has been taken) will need to change. In terms of national resources management, far greater use of science needs to be made. Lastly, Dr. Srivastava cited mobility as a major area where energy use will increase. Most of the infrastructure still has to be built; which is an indicator that India can still make a choice with respect to which direction it develops. The government of India has a major programme for urban regeneration, which also looks at sustainable transport. Therein lies one significant problem: a lack of human capital. Dr. Srivastava concluded: “We need to develop skills. There are not enough courses at universities. There is a huge opportunity for collaboration.”

The closing remarks by Prof. Miranda Schreurs on the German-Indian Sustainability and Climate Chance Workshop emphasized the progress made thus far in the global sustainability dialogue:

“If you think about where some developing countries were a few years back, the talk was just about development. Now we are talking about sustainable development.” She suggested that one of the things we have learned from India is the need to think about issues like equity. She continued by raising the issue of the Kuznets curve - how it was developed many years ago. However, she goes on to say: “But India shows that the K curve does not have it all right. You don’t have to be rich to start thinking about the environment, or caring about it. This is very exciting and encouraging.” Prof. Schreurs acknowledged that we perceive a rather bleak picture when we think about environmental and resource issues, including severe water shortages. At the same time, she was encouraging though: “As an American working in Germany, I think that the cooperation between India and Germany is an obvious win-win relationship. There is a debate in Germany about development. Should it continue to build coal-fired power plants; or should it try to transform the modern society through a third industrial revolution. I am awestruck every time I think about what developing countries have to achieve. There’s a lot of potential to combine the goodwill that exists on the side of the Indians with that of the Germans.”