



High-Level India-EU Seminar in Delhi 3-4 February 2009

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Co-Chairs of the High-Level India-EU Seminar in Delhi: Nitin Desai & Sir Crispin Tickell

Patrons of Action for a Global Climate Community include: Sir Crispin Tickell, Sir John Houghton, Suresh Prabhu (former Indian Environment and Energy Minister), Fabio Feldman (Executive Secretary of Brazilian Climate Change Forum), Grace Akumu (Director of Climate Network Africa), Professor John Schellnhuber (Director of the Potsdam Institute for Climate Impact Research), Ambassador Raul Estrada-Oyuela, Ambassador Chandrashekhar Dasgupta, Professor Margaret Kamar (Vice Chancellor, University of Nairobi).



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For research papers and presentations for the seminar and details of follow-up work, please visit the organisers' website:

Action for a Global Climate Community www.climatecommunity.org

Editorial note:

The report aims to summarise the main points from the presentations and discussion, not to provide a detailed record of the event. Some points have been moved into another session, where relevant.

Keynote Address

By Dr Rajendra Pachauri, Chair, Intergovernmental Panel on Climate Change; Director, The Energy and Resources Institute

Dr Pachauri began by saluting Sir Crispin Tickell for bringing climate change on the political agenda and Peter Luff for bringing together such an impressive group.

He expressed his concern that the negotiations towards Copenhagen could lose sight of the science and that negotiators needed to go beyond fixed positions. There was a danger that countries might go to Copenhagen with frozen positions and not face up fully to what is happening to the climate.

One of the major findings of the 4th IPCC report was that extreme precipitation events are on the increase and will increase further: for example, the huge floods in Mumbai will become more frequent, for which solutions, particularly domestic solutions, would need to be found. More specific assessments of likely impacts on the ground in every state needed to be undertaken, so that local politicians could have specific information on the possible impact on their people, which would enable them to take action.

Dr Pachauri referred to President Obama's pronouncements about investing in green jobs and bringing about green recovery. For this more specific research and analysis into what investments have most potential will be required. For example, islands of ecological efficiency can be created through investment in construction industry.

The economic crisis presented an opportunity for investing in green jobs, which can lead to rapid benefits in terms of jobs as well as sustainable development. It also requires new jobs and professions.

Bringing India and Europe together should be on the basis of shared identity and problems. They have the ability to develop new technology together. It is necessary to look beyond the current low prices of oil to identify technologic cooperation that will have long term benefits that can help to deal with the economic crisis.

Policy cooperation will be necessary to develop collaborative projects for sharing policies and lessons from different countries; policies that have shown they can demonstrate results in different countries are very much more persuasive.

Dr Pachauri concluded by saying that this dialogue between India and the EU should have the power to influence governments by example and practical cooperation.

High Level India-EU Dialogue High-Level India-EU Seminar in Delhi The India Habitat Centre, New Delhi, 3rd – 4th February 2009

Concluding Statement

By Co-Chairs Nitin Desai and Sir Crispin Tickell

We are brought together by our shared concern over the dangers of climate destabilisation and the many opportunities for enhanced cooperation between India and Europe.

The EU and India are Strategic Partners with regular Summits and a wide ranging Joint Action Plan agreed in 2005. The EU and India recognize progress towards a low carbon economy must go hand in hand with improving conditions for the poorest. To this end, in 2008 the EU and India established a joint work programme on energy, clean development and climate change.

We are encouraged by progress in the many strands of cooperation between India and the EU since our first meeting in Potsdam in May 2008 and by the high quality of contributions and outcomes from these two days in Delhi.

We heard about many initiatives in India and the EU to improve living standards and curb carbon emissions. We also learnt that reductions in Black Carbon and the use of biochar sequestration can make rapid contributions to global cooling, as well as major improvements to health and agriculture respectively.

We heard forceful evidence, however, that the pace of climate mitigation and adaptation, as well as poverty reduction and sustainable development, on both our continents, is still far short of what is needed. New findings in science and changes in the global economy and the political situation mean that fresh thinking is needed.

We also heard examples of how the institutional links between the EU, member states and India could be much more effective.

We therefore welcome the invitation by the EU Commission to bring forward suggestions on institutional links that might lead to long term enhanced cooperation and on practical projects for consideration by the EU-India Summit later this year.

We conclude these two days with a strong sense of common purpose in a shared journey towards a low carbon, environmentally sustainable and equitable world.

In the light of our deliberations, it was agreed that

- 1. We will prepare a report on high-level institutional mechanisms for more effective cooperation on climate and sustainable development, in consultation with the Governments of India and Europe, the European Commission, parliamentarians, bilateral organisations and civil society in time for consideration at the next EU-India Summit in Delhi in the autumn of 2009.
- 2. We call on the meetings of the G20 in April and G8 in June to take account of climate change as the greatest threat to humanity in their deliberations on the economy, and to channel investment towards measures for climate mitigation, adaptation and restoration in a 'Global Green New Deal'.

- 3. We urge the governments of Europe and India to:
- a) Expedite the flagship joint EU-India Solar Programme in line with India's National Climate Change Action Plan and the EU package on climate and energy. We can learn from each other and global experience jointly to:
 - develop Concentrated Solar Power (CSP) and storage capacity;
 - research and develop HVDC transmission grids and smart grids;
 - promote large scale application of decentralised photovoltaic solar power to Indian villages
 - develop financial mechanisms which provide grid parity for solar and other renewable energies.
- b) Recognise Black Carbon as a significant climate driver and develop a joint programme to:
 - build international support for mitigation of the threat of Black Carbon to the glaciers of the Hindu Kush-Himalaya-Tibet area;
 - support a major clean cook stove initiative, including Project Surya and the application of pyrolysis and biochar;
- c) Develop the potential of biochar as a method of carbon bio-sequestration and soil improvement.
- 4. The following areas of potential future collaboration were noted:
 - a) strategic dialogue on security issues raised by climate destabilisation;
 - b) studies of the impact of climate change at sub-national levels, including potential costs of adaptation, to inform local opinion and action;
 - c) the potential of low carbon zones as a mechanism for accelerating practical action on the ground;
 - d) arrangements to facilitate linkages of carbon markets;
 - e) enhanced cooperation on climate and clean development through trilateral cooperation between the EU. India and other countries:
 - f) practical steps to promote, facilitate and finance technology transfer of environmentally sound technology and know-how, including community-based technical diffusion programmes;
 - g) a joint initiative for innovation and assessment of energy efficiency.

We thank the participants and partners in this High Level Dialogue, initiated in Potsdam in May 2008, and all those who contributed generously to this meeting in Delhi: TERI, PIK, GTZ, the Heinrich Böll Foundation, the European Environmental Agency, the European Commission, the British Foreign & Commonwealth Office, the Khemka Foundation and the Esmée Fairbairn Foundation.

Nitin Desai and Sir Crispin Tickell Co-Chairs, High Level India-EU Dialogue The India Habitat Centre, New Delhi, 4 February 2009

For further details of our deliberations in Potsdam and New Delhi, go to www.climatecommunity.org or contact: info@climatecommunity.org

Seminar Programme

Welcome

Nitin Desai, Co-Chairman, India-UK Round Table; former UN Under-Secretary General for Economic and Social Affairs

Keynote Address

Dr Rajendra Pachauri, Chair, Intergovernmental Panel on Climate Change; Director, The Energy and Resources Institute

Response – **Sir Crispin Tickell**, Director of the Policy Foresight Programme, The James Martin Institute, Oxford University

Session I

Chair Nitin Desai

In the light of recent developments, to consider the adequacy of existing global and regional institutions for climate change and clean development, with respect to science, equitable mitigation and adaptation, technology, private and public investment, technology transfer, modelling and the establishment and management of carbon markets and to make proposals for action or further study.

Introductory remarks:

Peter Luff, Raj Chengappa, Brice Lalonde, Chandrashekhar Dasgupta, Rosario Bento Pais

Dinner Speakers:

Ajay Mathur, Director General, Bureau of Energy Efficiency

Tom Spencer, Director, AGCC; Vice Chairman, the Institute for Environmental Security; Formerly President, European Parliament Committee on Foreign Affairs

Session II

Chair Sir Crispin Tickell

To identify priority initiatives based on Working Group reports on:

- A defined programme of action for the EU to support solar solutions for electrification in India in line with India's National Climate Change Action Plan, including (a) the large scale application of decentralised photovoltaic solar power to Indian villages (b) a study to apply Concentrated Solar Power (CSP) through mirror arrays in the Indian power sector;
- 2 Reduction of the threat to the Himalayan glaciers from the emission of black carbon.

Introductory remarks:

Dr Kirit Parikh, Ajit K Gupta, Robert Whitfield, Prof Veerabhadran Ramanathan, Air Marshal A K Singh, Prof Sugata Hazra

Session III

Chair Sir Crispin Tickell

To advance the Working Group proposal for stronger institutional structures between the EU and India, capable of implementing joint programmes, including:

- 1 Building democratic legitimacy for enhanced co-operation on climate change and sustainable development;
- 2 Facilitating private sector engagement including the trading of energy efficiency certificates as a new initiative and the linking of Indian carbon markets with other carbon trading schemes, such as the EU-ETS and the emerging US Cap and Trade system;
- 3 EU-Indian enhanced co-operation to serve as a model for other countries willing to accept similar responsibilities and structures.

Introductory remarks:

Prof Viriato Soromenho-Marques, Anil Patni, Titus Alexander, Rt Hon Suresh Prabhu, Ritu Kumar

Conclusions by Co-chairs

The Co-chairs will consider (inter alia):

- 1 What concrete steps should be taken:
- 2 Who will undertake what specific tasks;
- 3 Where the next meeting should take place;
- 4 What initial arrangements are needed to sustain the initiatives.

Contributions and dialogue

Session 1: Where are we now on climate, the EU and India

Chair

Nitin Desai, former UN Under-Secretary General for Economic and Social Affairs

Summary of presentations and following discussion

Following the Chatham House Rule, comments are listed without attribution to the speakers. Presentations agreed for publication can be found on the AGCC website www.climatecommunity.org

- 1. The science has become clearer and more alarming, suggesting risks of rapid, sudden climate destabilisation. India has published its Climate Plan; the British Government has set up an independent body with power to enforce compliance with domestic targets aimed at achieving 80% cuts in C02 emissions by 2050; the EU approved its energy and climate package; and the new US Presidency marks a dramatic change in policy, although it is still too early to say what this means for the agreement in Copenhagen.
- 2. There is a need for new thinking taking account of related difficult issues, such as population growth, resource depletion and biodiversity. There is a need to change economic thinking and create better instruments of economic measurement than GDP as the French President has urged to take account of these issues.
- 3. There is a need to recognise the proper role of government to create a framework within which markets can operate effectively and, above all, a need to create a positive vision of what a low carbon society is like, to inspire people to work for it and not be motivated by fear of climate change.
- 4. While the economic crisis dominates the headlines it is difficult to get attention for climate change, but the increased spending to stimulate the economy should be used to invest in a new green, clean infrastructure. We should not wait for the climate crisis to strike before we act. Measures to prevent terrorism were proposed in a White Paper before the attack in Mumbai, but were not implemented. There is a similar issue with climate change, where we know what should be done but are too slow to act. What is needed now are signature campaigns in line with India's National Plan, which can bring about rapid and significant change on the ground.
- 5. Unfortunately, people appear to be more afraid of measures to mitigate climate change than of climate change itself. Climate change makes the future seem worse than the past. What we need is a positive vision of what a low carbon society is like.
- 6. We need ambitious emission reduction targets, of up to 90%, for which a wide range of measures are required, including nuclear.
- 7. The EU's Energy and Climate Package is the result of difficult negotiations between 27 countries which are at very different levels of development. The package showed Europe's commitment to tackling climate change and offers models which may be used elsewhere, such as the EU-ETS and carbon markets. The EU's experience of partnership and burden sharing within a group of countries

- also offers valuable lessons. EU-India cooperation is needed for the parties to learn from each other and assist each other in implementing objectives.
- 8. The main three themes of the EU position for Copenhagen are about a division of efforts. Developed countries have the primary responsibility for mitigation and emissions reductions, as under the Kyoto Protocol, but should be expanded to all OECD countries, with an overall target of 30% by 2020 by developed countries. It does not propose targets for developing countries, but suggests limitations of 15-20% from BAU, as a contribution to the overall objective of no more than 2 degrees. It also proposes help for developing countries to achieve low carbon development.
- 9. There is a view in developing countries that existing institutions for financing climate adaptation and mitigation lack accountability and transparency.
- 10. Technology transfer can be two ways. There are many areas where India is ahead of the world. By working well together, we can achieve much more than by working separately.
- 11. The publication of the EC's position on Copenhagen last week was not helpful in relation to developing countries. A more constructive, cooperative basis for working together is required.
- 12. The EU-India relationship does not work well, for historical, cultural and other reasons. When the UK joined the EU there was much debate about how to resolve the relationship, which has not yet been resolved. We need to recognise that these are two complex federal democracies which are both changing rapidly. Of all the major power centres, India has the least clear understanding of and relationship with the EU. This is complicated by the EU revolving presidency; by the lack of coordination between Directorates; by the different roles of the Commission, Council of Ministers and Parliament; and by the proliferation of bilateral relationships with EU member countries. The current EU institutions are very confusing for India to deal with.
- 13. Having a single Solar Mission in India will make it much easier for India to deal with the EU, but the EU needs to streamline its relationship with India, so that it also has a single channel of cooperation over solar power and other issues.
- 14. It is very difficult for India to know who to deal with in Europe. In commercial policy Indians tend to go first to Brussels, then to the capitals. On other issues it is the other way round. But even when you start with Brussels, it is difficult to know which of the many different EU institutions and directorates you need to deal with. At a practical level, it is necessary to deal with the EU on the basis of specific projects with the relevant bit of the EU, but this means cooperation is very diffuse and invisible.
- 15. A strong mechanism to support joint ownership and institutional memory for enhanced cooperation between India and Europe is important. The EU could set up Task Forces to deal with specific issues with India.
- 16. The United States is now ready to go, with strong bottom-up momentum from industry and civil society for action on climate change. The new administration has indicated it will incentivise this process, and people will go out to India to collaborate and expand the markets for their inventions. The question is, how can India work better with the EU before the US really gets going, because otherwise the EU will be left behind.
- 17. The change of administration in the US is looking to change the US attitude to climate change: the language being used is about transformation.

- 18. There is a need to examine trilateral cooperation, between the EU, India and Africa or other parts of the world. For example, Indian experience could help Africa develop more efficient cooking stoves, financed by the EU. India has a lot more experience of development that could be relevant to Africa and other developing countries.
- 19. There is a need to remember that we are looking for a ten-fold increase in carbon productivity by 2050. This is equivalent to the transformation of labour productivity which took place over 150 years.
- 20. Energy for poverty reduction is a powerful concept. We need to pick on one or two themes for action, including both low hanging fruit and also a longer term goal. Food security and adaptation should also be taken into account. Poverty, justice and equality should be our guiding lights.
- 21. It was suggested that the world is facing a global carbon war. We need to know how to position ourselves, not just at Copenhagen, but also in the WTO and Doha, and other global negotiations. We need a permanent secretariat and a mechanism for constant dialogue between India and the EU, to hold hands together and work together.
- 22. There is a need to separate the dialogue about global negotiations and what needs to be done to tackle climate change through other bilateral dialogue.
- 23. The EU has a target of 20% GHG reductions rising to 30% if other countries are prepared to make commitments to reductions. No other country has taken equivalent targets to the EU, but the higher the target the greater the amount that must be met through commitments elsewhere, outside the EU. Developing countries are less likely to accept CDM or other measures if their National Climate Plans are to be scrutinised and approved internationally, as proposed by the EU paper, because this means internationalising their domestic development policy. A substantial part of CDM costs must be met by developing countries, who will be compensated in part.
- 24. It was suggested that the real reason countries work together on climate change is less their concern for the public good but rather concern as to the effect on their own people and that cooperation is the only way of preventing dangerous climate destabilisation at home

Conclusions

Key issues to emerge were

- 1. The need to identify areas of cooperation between the EU and India, such as food security, solar power, technology assessment etc;
- 2. The importance of a process which allows us to communicate more effectively, beyond the formal negotiation forums;
- 3. The need to develop a vision for a low carbon society and technology that is ten times more carbon efficient than we have at present.

More effective, streamlined institutions of enhanced cooperation between the EU and India will make existing cooperation more effective and take the relationship to a new level.

Session 2: Priority initiatives based on Working Group reports

Chair

Sir Crispin Tickell, Director of the Policy Foresight Programme in the James Martin Institute, Oxford University, Oxford, UK

Summary of presentations and following discussion

Available on AGCC website:

Why Black Carbon?, by Veerabhadran Ramanathan

Impact of climate change on India, by Air Marshal AK Singh

Sundarban: Climate Change: Adaptation & mitigation efforts, by Dr Sugata Hazra

- 1. There is a strong view in India that the polluter must pay for adaptation costs in developing countries.
- 2. On the other hand, many want to get away from the stalemate politics of climate change to find solutions, particularly through solar energy. India has had a Ministry for Renewable Energy for 25 years. India has installed a renewable energy capacity of 14GW and aims to increase that capacity to about 100-120 GW by 2020, not counting private provision. The Indian Nation Action Plan on Climate Change has 8 Missions, including one for solar power. Concentrated Solar Power (CSP) has enormous potential for economic development of rural areas.
- 3. The EU and India have a common objective to develop renewable and solar energy. India is already working with the EU under Framework 7, on thin film PV.
- 4. An ambitious joint solar initiative between the EU and India would therefore be welcome and timely. Together, we could create demonstration projects in CSP. India has comparative advantages for developing CSP the geographical areas, scale and technological capacity. We are looking at the potential of 20GW by 2020 and 100 GW by 2050. But this requires a package of financial and fiscal incentives, quotas and tradable certificates to be viable. Subsidies will be required, either towards capital costs or in relation to the tariff, of up to \$10 12bn (45% of capital cost).
- 5. The EU could help to leverage financing and jointly develop a distribution structure from North East India to develop large scale plants of 100 or 500MW.
- 6. This could take rural households off kerosene and replace it with solar lighting. A cluster approach to 1,000 rural villages and 100k households would be very efficient and cost-effective.
- 7. This would need new instruments in the EU, since existing EU instruments are inward looking and not suited to developing countries. The Commission will need to create a new focal point among its directorates (energy, development, etc) to coordinate work with the Indian Solar Mission. The EU budget will also need to be enhanced, bringing in the European Investment Bank and private investment as well.
- 8. Such an initiative could also address issues of technology transfer and intellectual property rights.
- 9. Black Carbon and Biochar were raised at Potsdam as important issues for which practical solutions along with further discussions are needed.

- 10. Black Carbon can be produced from diesel trucks, smoke from stoves or burning stubble after the harvest. It is black because it absorbs sunlight. It is a major health hazard, particularly indoor smoke, as well as an environmental pollutant and source of climate change by heating the air and blanketing the earth. China is the main Black Carbon polluter, but US is largest per capita polluter.
- 11. Black Carbon is of concern to most parts of the world, causing adverse health effects and serious impacts on climate. Creating improved stoves would have enormous health benefits as well as energy efficiency.
- 12. CO2 is most potent and important greenhouse gas, but Black Carbon has a potency of 40 60% of CO2.
- 13. We have not yet seen 25% of the impact of global warming due to masking of the impact of greenhouse gases by sulphate particles, which cool the blanket and reflect sunlight 45% masked. This masking is now being removed through measures to clean the atmosphere.
- 14. So far none of the policies we have seen are sufficient. Even if we reduce global emissions by 50% by 2030, we will still add 81GT as a result of increasing population to 8.5bn people.
- 15. Black Carbon has a life time of two years in the atmosphere, so action now brings immediate results. It is removed by rain and snow, but it causes snow to warm. 50% of the loss of arctic sea ice is due to BC and there is a similar impact on the glaciers of the Himalaya.
- 16. Project Surya is a significant initiative designed to monitor the emissions of BC from selected communities before and after the adoption of efficient clean energy cooking stoves.
- 17. Biochar is produced by pyrolysis, heating biomass with little or no air. The result is a char that can be put on the land with two distinct benefits. It can significantly improve the productivity of the land. At the same time it is a means of long term (1000 years) sequestration of carbon.
- 18. Biochar can be produced on a variety of scales, at large industrial plants, in mobile pyrolysis units or at a small household scale. There is significant scope for further research in India as to how it can best be applied in India. One promising area is the deployment and use of efficient clean energy pyrolysis cooking stoves for use in the rural areas.
- 19. Climate change is producing a resources crunch, over water, land and food. There have already been conflicts over water between Karnataka and Tamil Nadu, in which people have been killed, with loses of \$30bn. Changes in rainfall patterns are already affecting food production. Most people do not perceive the environment as a threat, but it is likely to be a major source of conflict between people over the coming decades.
- 20. Sea rise in the Sundarbans delta already shows the effects of climate change. As people leave their islands, there is a question about who will compensate them for their loss of homelands as islands erode or even disappear. Raising embankments to protect the islands will only work for so long, as the sea level rises over them and inundates crops with sea water. 3,500km of embankment are required, but who will fund them? People in the Sundarbans are installing off-grid solar power and biomass gasification plants, but they cannot halt the damage.
- 21. Cooperation between the EU and India over solar power and other technologies needs to be aware of past experience. For example, in the wind sector some joint ventures and technical agreements with European countries started in the mid-80s.

One would have hoped that Indian companies would acquire the technology and start producing their own products, but instead the European companies gained understanding of the Indian markets and sought to set up their own subsidiaries in India. By contrast, an Indian company hired European technologists to develop its products, which are now being produced in India and sold all over the world.

- 22. Developed country governments have a role to secure technology transfer to developing countries, without this kind of market colonisation.
- 23. Awareness of Black Carbon as an issue has grown in the past 3 5 years, when most of the important work has been done.
- 24. Reducing CO2 is the first priority in reducing dangers of abrupt climate change, but cutting Black Carbon would have rapid benefits.
- 25. Biochar is also a means of going carbon negative, which can remove carbon rapidly and effectively from the atmosphere.

Conclusion

Participants recommended several measures, including

- A joint EU-India solar initiative, including research and development of Concentrated Solar Power and an access programme of renewable energy for rural areas;
- 2. A joint EU-India Black Carbon initiative, including investment and promotion of clean stoves, project Surya, and a holistic solution to burning corn stubble after the harvest;
- 3. A joint EU-India initiative relating to the potential for the use of pyrolysis to produce energy and biochar for soil improvement and carbon sequestration.
- 4. Recognition of climate change as a security threat, not just an environmental one;
- 5. A clear channel for communication for the many EU agencies to work with India to accelerate cooperation for mutual benefit.

Session 3: Strengthening institutional structures for EU – Indian cooperation

Chair

Sir Crispin Tickell, Director of the Policy Foresight Programme in the James Martin Institute, Oxford University, Oxford, UK

Summary of presentations and following discussion

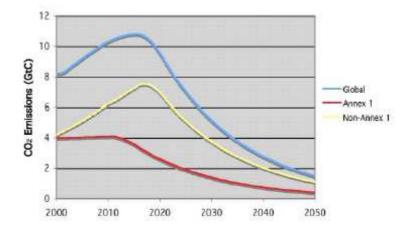
Available on AGCC website:

<u>Fighting climate change beyond 2012, EU perspectives to change threat into opportunity,</u> by Professor Viriato Soromenho-Marques

Arunodaya, let's wake up to the sun!, by Anil Patni

Proposals for stronger institutional structures between the EU and India, by Titus Alexander

- 1. The global threat presented by climate change was presented and the need to change danger into opportunity was stressed. If the GHG concentration is to be reduced in a timely manner, before attaining no-return "tipping-point" situations, we need to rethink cooperation between Developed and Developing countries both in mitigation and adaptation strategies.
- 2. New proposals by the European Commission were outlined and reasons for taking a benevolent view of them were presented. There could be new global burdensharing, with developed countries reducing their GHG emissions by 25-40% by 2020 whilst developing countries limit their GHG emissions to 15-30% below baseline by 2020. This would herald a second generation of Joint Implementation. Fighting climate change should be the underlying basis for building a new world order, and at the centre of economic recovery policies. There is a need to rebuild the international system with a common purpose and avoid major pitfalls such nationalistic ideology and trade protectionism.
- 3. The EU and India need to give substance to their 2004 Strategic Partnership and give room for multi layer climate partnerships in GHG reduction (universities, industry sectors etc). The EU and India have three essential reasons to combine energy with climate change policies: environmental, strategic and security. They need to abide by shared and accepted principles and work together towards a common goal.
- 4. While 72% of the population in India lives in the rural areas, there are still 80 000 villages and 42 million people without electricity. Solar energy could be the solution to this. The National Solar Mission needs to guide the way to solving this problem, to redirect the kerosene subsidy and to introduce effective feed-in tariffs. This will help the price come down by 2020-2021, "when solar will really take off."
- 5. The nature of the challenge, described as the Carbon Crunch, was recalled. Even if Annex 1 countries pursue a highly ambitious carbon reduction path, the emissions from non-Annex 1 countries will have to be reduced (after a short further period of increase) if dangerous climate change is to be avoided.



- 6. To have a hope of achieving this, we need better mechanisms. These discussions are not part of the formal negotiation process, but instead are focussed on action. The slowness of existing projects EU-India cooperation processes had already been highlighted. Though a joint summit and many working groups already exist, the reality is that for the moment, action at the ground level is small. We need to find out what existing co-operations work well, where are the blockages and what are the opportunities.
- 7. It was suggested that the India EU dialogue was reaching a phase where we now understand each other, and is looking at concrete action on the ground. There is a huge potential for solar power in India, but it should not just mirror that in EU. The challenge in India will be: who will pay for 'feed-in tariffs'? It was proposed that there should be a study of the impacts of climate change in all of the different 28 states. The EU was praised for putting adaptation back on the table and suggested that the EU could help with technology for adaptation.
- 8. In terms of institutions, it was suggested that the newly formed all-party group on climate change could be a counterpart for the EU-India dialogue.
- 9. The upcoming Parliamentary election offers potential for all parties to make climate change the centre of their campaigns.
- 10. The central role of the private sector in terms of both mitigation and adaptation was emphasised.
- 11. If a 'new green deal' is in the making, it cannot be made without private sector investment and any mechanism must allow for private sector involvement. The private sector can move fast to make these ideas a reality.
- 12. The European Commission's paper Energy and Climate Change Package setting out the European position ahead of Copenhagen was discussed. By mid March, it should evolve into a formal EU position.
- 13. There was a broad agreement that the private sector in India is engaged in green issues and climate change with many entrepreneurs addressing the climate challenge. There is an appetite for leadership.
- 14. There is great potential for an EU India relationship. There needs to be a focus on solutions rather than on technology or products. The EU and India have a fantastic opportunity to demonstrate Low Carbon Growth. At a practical level, we need to invest in formulating solutions, capacity building, research and learning.
- 15. At a time of economic stimulus packages around the world, it is crucial not to miss the opportunity of including a strong green element in the stimulus, as part of a Green New Deal.

- 16. One institutional concept that could be employed on a regional scale is that of 'Low Carbon Zones'. They can be effective and do not need a national agreement. Within the EU, there has been discussion in Parliament about establishing a New European Community for Renewable Energy, similar to Nuclear Community Euratom.
- 17. Institutional collaboration is needed to facilitate development of carbon markets.
- 18. Already a trading exists within the power sector in India and 17 states have renewable policies. Such developments would benefit from institutional support.
- 19. India is unique in its very low level of emissions per capita and high level of renewable energy.
- 20. Are there some steps that the EU can take internally rather than adding a duplicate India-EU effort? Should a pattern be imposed on EU India dialogues?
- 21. All too often, good ideas are put forward, but they slip into thin air. This is why the focus of the discussion needs to be on mechanisms. There needs to be a joint owned process of developing ideas to take to the current institutions.
- 22. Whilst it is important to address bilateral EU-India institutions, it might also be useful to talk about trilateral institutions, particularly involving Africa.
- 23. A key question for the US Senate is what is happening in India and China. There is a clear need to record and present the actions that are going on in India to combat climate change, as well as the EU showing what is already happening between EU and India. This is a story that needs to be known much more widely in the US.
- 24. There are so many existing uncoordinated initiatives. There seems to be little desire to get all the different missions and organisations together around a table. There is no point in establishing new institutions if there is no coordination of the existing institutions.
- 25. We do need further EU-India institutional development, whilst being sure to avoid duplication. We need it to increase consensus, to identify cross-cutting issues on which to focus, to foster a feeling of belonging.

Conclusion

A wide range of views were expressed, both on institutions and on the topics that need to be addressed by those institutions. Discussion has highlighted how much political work is needed to spread the ideas, and how to implement the ideas. The importance of communicating the good things that are happening in India within the realm of climate change, to the US especially, was stressed. The need to coordinate existing EU India institutions and initiatives more effectively, that is both meetings between the EU and India, and also bilateral meetings between India and the individual EU member states, was highlighted. There needs to be a joint owned process of developing ideas to take to the current institutions. Furthermore, there is some potential for exploring trilateral relationships, such as the EU, India and Africa.

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