

GREEN GROWTH AND ENERGY SECURITY IN INDIA POLITICAL ECONOMY TRANSFORMATION AND CHALLENGES

Kolkata | August 29, 2015

EVENT REPORT

BACKGROUND

Consumer Unity & Trust Society (CUTS) has taken up the initiative to reconnoiter clean energy strategies to ensure energy security in India, thereby deliberating on opportunities and political economy challenges. The purpose is to analyse key drivers of growth and development, so that state of its availability and barriers related to energy security can be identified and rectified. As part of this initiative, CUTS with support from the Friedrich-Ebert-Stiftung (FES, India) would organise three national conferences at Jaipur, Kolkata and Delhi and parliamentary forums at Delhi to build consensus for the energy security through green growth in India. Towards the end of this initiative, CUTS would prepare a policy paper on the issues related to the green growth, which would highlight key policy recommendations to address India's energy security challenges.

About the Conference

Given this backdrop, CUTS had organised a National Conference on "Green Growth and Energy Security in India: Political Economy Transformation and Challenges" in Jaipur on 19th June, 2015. The second one took place in Kolkata on Saturday, August 29, 2015. The purpose of the conference was to sensitise the germane stakeholders on the need for a green growth approach thereby identifying a coherent strategy towards achieving the shared goal of sustainable energy development and green growth in India. The conference comprised of National and State level representatives from government, regulatory agencies, media, industry, civil society organisations etc.

Inaugural Session

Pradeep S Mehta, Secretary General, CUTS International welcomed the dignitaries and subject experts to deliberate on the mentioned topic. He initiated the discussion by defining energy as the key driver of growth in a developing country like India. However, owing to limited availability and access issues and population explosion in last few decades, there is growing incongruity between demand and supply of clean energy. Despite its thriving economic growth and the projected idea of becoming the global super power in near term, India has remained vulnerable to environment degradation. He said policy making regarding energy issues need to be done sensibly in order to maintain equilibrium between developmental and environmental actions of the state. Further, he explained that we need to understand whether India is equipped for an energy transformation. Moreover, the political economy dimension associated with the energy debate needs to be understood by all the stakeholders. Last but not the least, in a cooperative yet competitive federal structure, the responsibility of translating central mandate is a concern that lies with the states. Therefore, a rational political mandate with the involvement of States is necessary to fuel the transformation that India has been envisaging.

Rabindranath Sen, Chairman, West Bengal Electricity Regulatory Commission acknowledged that green energy has been a major focus of their state electricity regulations. He mentioned that WBERC has been making endeavours to address ongoing energy debate in a threefold way – accelerating green growth, promoting energy conservation (through the introduction of rating based appliances, LED lighting system) and encouraging energy efficient practices. Balancing energy demand in a commercially viable way in order to reduce greenhouse gas emission is required. To eliminate gap between demand and supply of power, agricultural load and industrial load needs to be managed more efficiently. He revealed that the 900 MW Pumped Storage project in Purulia has been a landmark success to address storage issues associated with

renewable energy (RE). Further, directives have been given to all the licensees by WBERC to promote solar energy in West Bengal. Among other concerns, availability of land and grid connectivity are critical issues to be resolved. He concluded by indicating that investments once made in the field of green energy, can yield for a long period, hence, mass awareness in this direction is important.

Umesh Narayan Panjari, Chairman Bihar Electricity Regulatory Commission, stated that green growth indicates maximum growth achieved through minimum resource utilization resulting in minimum environmental degradation. Energy security has a direct impact on national security, failure on the part of the government to ensure energy security may result in inefficiency in defense activities exposing India to compromising situations. He stated that hydro potential of 50,000 Mw that has been lying unused in non-renewable energy needs immediate attention of the government. India's high growth has so far been based on irrational depletion of natural resources, therefore, India must minimise the wasteful usage of land, water and forest and reduce the energy intensity of our economy. He emphasised on the roles and responsibilities of the Ministry of New and Renewable Energy, an institution first of its kind in the whole world. To name a few the initiatives taken up by the Bihar Electricity Regulatory Commission (BERC), he mentioned that a RPO has been specified at 5.5 per cent in Bihar, net metering has been notified, billing and banking of solar power has been permitted. He concluded on a positive note by encouraging construction of green building, creating a green corridor and making interstate RE transmission charges nil etc.

Anindya Narayan Biswas, Joint Secretary, Department of Power, Government of West Bengal, visualised the whole issue as having good energy mix to address the energy demand of any economy. Focusing on the real challenges of renewable energy, he mentioned that solar power is a source of intermittent power, however, lacks reliable supply. Although energy from sun can be stored, India lacks proper storage facilities. He emphasised on the need for innovation in this sector for optimum utilisation of such resources. He provided example regarding the 1000 MW project which is coming up in Purulia based on pumped storage technology where solar energy is going to be used to pump the water up at the reservoir level. He also emphasised on localised solutions to energy crisis such as solar rooftop. He also informed about a separate policy for promoting rooftop solar technology which has been drafted in this regard and is awaiting implementation. The idea of creating Solar Parks is also being debated and discussed where the first phase 200 MW solar energy facility will be providing electricity in such parks and it may go up to 500 MW. He concluded by emphasizing the need for political support from the government for these projects to be successful.

Narayan Swarup Nigam, Chairman, West Bengal State Electricity Distribution Company emphasised on the need for huge political support from the ruling government for successful energy sector initiatives. He indicated that 24*7 power is a reality in the state which has been possible due to the state mandate on elimination of power cuts. He stressed on the issue of economic resources in the economy to finance all such initiatives for the benefit of the state. However, he mentioned that there should not be over reliance on government subsidy which at times leads to distortion in the market and the commercial outlook of the company. Distinguishing between politics and societal benefit, he said one must look at politics as a separate stream of affairs that facilitate economic growth and should not hamper it. Mr Nigam concluded the session by mentioning proper infrastructure, market mechanisms and a strong political mandate are the key elements to ensure green growth.

Marc Saxer, Residential Representative, Friedrich-Ebert-Stiftung stated that there are several challenges related to energy sector in India. The geo-politics is equally important with third industrial revolution taking place in the backdrop. Change in the world politics is leading more number of people to believe on RE as the future. Indian Prime Minister, Narendra Modi is also hopeful about the RE and has been emphasising on its huge potential that will help the country in becoming a global leader. In 2015, the cost of generating power from RE has already reached the levels of fossil fuel. Transformation into clean energy will have positive reaction on Global Renewable Energy research and implementation work. To conclude, Marc encouraged the need to

derive green solutions taking into consideration all political, technical, social and economic challenges.

Session I: Economic Growth, Energy Security & Environmental Protection in India

Ashwini K Swain, Director, CUTS Institute for Regulation and Competition in his presentation ‘Energy Transformation for Green Growth: Pathways for Sustainable Energy Security to Power India’s Economic Growth’ stated that India was already the third largest electricity market and we still have a huge amount of untapped potential and it was projected that the country would grow fastest in the coming decade amongst the top 10 countries’. Further, in 2014-15 Indian electricity was the second most carbon intensive among the top 20 nations. He said that in order to cater to the ever increasing demand and to make the power sector sustainable, India needs a transformation in the way electricity is being produced, delivered and consumed.

He emphasised the need for an improved infrastructure based system as well clarity in the upcoming National Renewable Energy Act; doing so will facilitate investment and innovation in the green energy sector along with creation of huge employment opportunities. Between 2011 and 2014, full time job creation in the Solar PV sector was around 24000 as compared to about 70000 full time jobs in RE in the market. Provided India achieves the target of reaching 100 GW power from Solar Energy by 2022, employment for about 1 million people will be created. The goal of providing access to energy to all along with reducing carbon footprints would be achieved by undertaking the programme on green growth and energy security. This would thus definitely improve the quality of life.

Sunil Mitra, Director, IPE Global, stated that the country has to relook its approaches and redefine its strategies to avoid major hurdles coming the way to achieve green growth. He further specified that the Central Government should have placed the same thrust on energy security as they are placing on financial inclusion. Unfortunately, around 19per cent of the Global Population still lack access to electricity and around 39per cent still rely on traditional practices. Thus, it is important to strive for better economic growth, however, for that to happen energy security must be achieved. Citing Kirit Parikh Report of 2006, he predicted that 20per cent growth in the RE sector there will be an over whelming amount of population who will still be dependent on fossil fuels for electricity in 2021. He welcomed the idea of India putting greater emphasis on renewable and is looking forward to the new legislation which focuses on exploiting the RE resources. He stressed on focusing on the land-water & land-energy issues. His prediction is that water might be the next big threat for India. According to him the major issue is not the policies, but the proper implementation of these national policies by individual states. He said that a strong activism to make this happen is highly required. Towards the end, he mentioned that although power is now being shared within the states, but still the country faces a major threat of power deficit. Financial deficit is another potential danger that the distribution utilities will now have to combat with. In 2013, a strong financial restructuring had to be undertaken to bring back viability to the sector after the initial framing of the Electricity Act in the year 2003.

S P Gon Choudhuri, President, NB Institute for Rural Technology said that although India is almost nearing the per capita electricity consumption of 1000 units, the rural areas still lag far behind at about 200 units per capita consumption. He said that while addressing the issue it is inevitable to address the question of whether India has adequate energy resources at present to attain energy security for the entire nation. He urged upon the policy makers not to get influenced by the rich urban people while drafting the policies, but to device it keeping in mind that a large section of India that lives in the rural areas. Due to uncertainty and the poor quality of the power

being supplied to most of the rural areas, people living in those areas tend to rely more on candles and lanterns. He cited the example of Sunderbans where the per capita consumption of electricity is mere 44 units. He said that the political willingness is also dictated by the available technology. Twenty years back when the city was facing major power crisis the politicians used to back the RE technologies and the alternative methods of generation of electricity. However, with the evolution of time as the quality and reliability of the supplied power of Kolkata got better, the politicians started backing these power plants as they believe that the conventional based power plants are more reliable. He urged the scientists and policy makers to device better technologies and policies which might facilitate the greater uptake of RE in the country.

He stressed on good, reliable renewable energy which is grid compatible. Innovation in technology and dynamism in the policy sector can solve a lot of issues in the energy sector, he said. The challenge is that while Kolkata enjoys almost uninterrupted power supply, many villages get power for only 18 per cent of the time in a day. Therefore, it is important to ensure that the people who have electricity connections in their house do not need to rely on kerosene or candles. The biggest challenge now, according to him is to integrate the off-grid small RE plants with the grid when it reaches the place. Energy security of a village will be only achieved when the villages are able to ensure that they are able to exploit their natural resources and have their solar or other RE based power plants. He cited the example of Sunderbans where about 5 million people reside, but not a single power plant has been constructed there. He was of the opinion that the policy should change or be upgraded after every two-three years to keep up with the new technologies. He urged upon CUTS to undertake advocacy on these issue.

Duke Ghosh, Partner & Researcher, Global Change Research, Jadavpur University said that the change India is eyeing now is not incremental but it is transformative. He raised a pertinent question - ‘The big question is will technologies be embedded in the society?’. When this happens then only a transformative change will take place. The strategies should not be only about technological development but they should also be directed to alter the social systems, cultural habit so that the technologies find a right place in society. The supply and demand of technology is crucial for the market. He mentioned that the investors will invest only when their returns are assured and moreover putting technologies in place will not serve the purpose unless the value chains are properly created. He cited the example of a Solar Home Lighting system where though the life of the panel and the light are almost 20 years and 7-10 years respectively, the life of the battery is only 2-3 years. The process of collecting back these batteries remains a weak link in the overall supply chain. Thus, to make the technology enabling and effective, relevant stakeholders must be involved.

Subhrankar Mukherjee, Advisor, Development Alternatives Mr Mukherjee said that the global society should reduce the ecological footprint. The focus should be on reforestation, food, energy and governance to solve a lot of challenges that the society is facing currently. Special thrust should be put on reforestation of the forests that have been depleted. The main advantages that would be obtained are prohibiting the climate change to an extent, reduced carbon emission and ensuring the bio-diversity. It also naturally ensures food and energy security for the human society. Economic growth, energy security and environmental protection are all too closely linked. None of the factors can be overlooked in the growth process. The challenge for India lies towards providing electricity to all but at affordable prices. The quality of power supplied should be good and there should be a fixed minimum hours of power that needs to be supplied to each household. The RE sector can only get a boom provided the value chain acts maturely and when the returns are guaranteed. Policies should act as the guiding force towards this and they need to evolve over time and it is important that a review of the policies and regulations are made at constant intervals.

Knowledge sharing, awareness generation and willingness to grow along with technological advancement can be the key to the success.

Session II: Political Economy Challenges and Opportunities for Clean Energy Transformations

Ramprasad Sengupta, Professor Emeritus, Centre for Economic, Studies and Planning, School of Social Sciences, Jawaharlal Nehru University mentioned that enormous resource rent is generated when non-RE is produced. The state should mobilize that rent to develop a capital to invest in research on replacing fossil fuel based technology with new Re (excluding hydro) technology. Making investments in developing technology and implementing them through various strategies will be fruitful. He mentioned that presently, the ecological footprint exceeds the existing land and water area of the world by one fourth as per the study done by Global Network Footprint. Also, more than the half of ecological footprint of the world is carbon footprint, which is caused by the unscientific use of fossil fuel. Reduction in fossil fuel use in electricity and transport would result in reduction of carbon footprint significantly. Capacity utilization factor needs to be taken into consideration while promoting RE. Energy conservation measures should also get due policy attention. Dr Sengupta defined green growth as minimizing the environmental risk by diversifying energy portfolio while aiming at poverty reduction and minimization of the gap between rich and poor. Technical, managerial and organisational mandates are required. Along with political will and good governance, financing new RE projects is a big challenge. Dr Sengupta pointed out that a concept of moral political leadership needs to be developed.

Samujjal Ganguly, Vice President, Projects, Vikram Solar said that it is difficult for RE to replace the base load from fossil fuel. However, RE can certainly complement fossil fuel reserve up to 10-15. He raised an important point about the enormous subsidies being provided by the Central Government which are no more required for bulk power production. Rather, availability of soft loan may prove to be a good alternative. Subsidies can be channelized to the remote rural areas that lack proper infrastructure for RE. He informed the audience about the recent initiative taken up by the Kolkata International Airport to install a 2 MW solar rooftop system. There is already more than 2 gigawatt solar grid connected projects in India. However, effective policy framework is required. According to Mr Ganguly, fund is not an issue at this point of time as consumers are willing to invest and install RE systems. He also referred to the integration of the southern grid to the central grid that made uninterrupted power feed in a reality.

Piyush Jaju, Chief Executive Officer and Co-Founder ONergy pointed out that though the RE market in India is presently witnessing an unprecedented transformation and production and supply of clean energy is considered as one of the prime responsibilities of the government. However, according to him, there are two major issues that the RE sector is grappling with. One is the extreme lack of mass awareness on RE options and technologies among consumers. On the other hand, lack of commitment on government's part to provide good service and right technology to its population jeopardizes the objective of making access to and affordability of clean energy sources a universal reality. RE providers must acknowledge the fact that any average citizen of a developing nation like India is primarily interested about a more comfortable lifestyle with maximum savings. A number of economic studies reveal that owing to lack of infrastructure and awareness, the poor end up paying the most for basic/essential services. The one time capital investment for Solar being pretty high often forces the customer to rely on conventional (thermal/ kerosene / diesel) energy resources. Mr Jaju also mentioned that there is a need for an enabling policy framework not only to ensure easy financing of RE projects but also encouraging entrepreneurship is crucial for

Indian economy. The government should focus on reaching out to the last mile and promoting good business models with emphasis on after-sale-services. The proposed target of producing 100 gigawatt of RE by 2022 would also require a clear roadmap constructed with the involvement of the stakeholders.

Aloke Mookherjea, Chairman, Flakt India Ltd, Enviro-care group said that we must adopt a holistic perspective comprising of social, economic and political dimensions to be able to comprehend the ongoing energy debate. While deliberating on a growing RE sector in India, he also urged upon clubbing this inclination towards RE sources with focus on energy conservation and energy efficiency – which can be done in a much easier way than changing energy portfolio of the consumers. To achieve energy security, government must provide due importance to all three components of green growth i.e. promoting RE, developing a market for energy efficient and appliances and encouraging energy conservation by the mass. Mr Mookherjea also mentioned that in the near terms, it is virtually impossible for growing global super power like India and China to completely abandon their reliance on coal and switch to RE. It is also debated in the academia that deriving clean power from coal is impossible. However, Mr Mookherjea said that we must try to make coal energy as cleaner as possible. The requirement of any consumer is good quality power at right quantity and at a reasonable cost. Although the Indian RE sector is flourishing, supply of RE remains a major concern. He referred to the famous Italian saying “If we want the things to remain as they are, then we must change”. Methods of production of energy, pattern of utilization and the lifestyle of the end user – all these interlinked factors should be taken into consideration while exploring different dimensions of green growth. He further pointed out that CESC has been successful in taking simple steps like shifting the peak load can from one corner to another within the city to ensure viability of their business model and wellbeing of the consumers. There should also be a stronger societal will to make green growth a reality in near future.

In conclusion during the floor discussion, as pointed out by the chair Dr Ajay Mathur, the instruments of green growth must be adopted and exercised in the right way. It is quite unfortunate that the quality of life of the Indian citizens is amazingly poor which is well reflected in the Human development index of India as well. The average energy consumption per individual is one sixth of the global average. Therefore, along with boosting up energy production through diversifying resource base, a proper management of energy demand is crucial to ensure least amount of energy is used with maximum efficiency especially in the transport and electricity sectors. There are three tools to ensure that the required policy framework is in place namely, Regulations, Fiscal and Financial Signals and Business Models. Both the opportunities and limits of institutions and technologies should be assessed. The recent 25per cent price reduction of LED bulbs over a very short span of few years indicates the necessity of a good business model in the system. As mentioned by the Hon’ble Chair, policing is important but may not feasible always. It was also pointed out that public shaming can be a better way of policing than financial penalty. Incentives for commodities consumed by the upper bandwidth of population are unnecessary and should cease to exist.

Session III: Politics Matters: How to Create a Political Mandate?

The session was conducted in a ‘Town Hall Way’ of conducting a session, which is more interactive than a normal session. In this session the floor was first opened for the participants who voiced their issues and raised their questions with the panel and the panelists responded to the questions and also shared their knowledge on the topic with the participants. The Chair requested the audience to raise their questions on how to create a political mandate for Green Growth and

Energy Security in India. He also specifically requested the floor to discuss on the larger aspects of energy and not to limit their discussions within the electricity sector.

Rahul Tongia, Fellow, The Brookings Institution, India while responding to a question from Mr Suvra Majumdar (Vice President, CTRAN Consulting Limited) on what should be India's stand on the Intended Nationally Determined Contribution (INDC) said that India's challenge to quote an appropriate figure would be her heterogeneity. Mr Majumdar wanted to know about India's stand as he said that many countries have already declared their goals to reduce the emissions of greenhouse gases and also the peaking year in doing so. Mr Tongia pointed out that a percentage of India's population consumes more than what the western world consumes and he cited the example of certain segments of New Delhi where the electricity consumption is much higher than many of the rich and affluent cities of this globe. On the contrary in several places of the country there are numerous people who have no electricity connections. The challenge lies to overcome this situation. He also mentioned that since technology is getting better it might also happen that the values of emission might start reducing henceforth. Later on Mr Tongia also said that for India local air pollution might be an important issue to address to rather than concentrating on the national carbon emission and there is where the importance of technologies like electric vehicles would come into play. The catch also lies in the fact that coal is cheaper when compared to petroleum and thus the transformation is bound happen.

Bipul Chatterjee, Executive Director, CUTS International as the Chair of the session, mentioned that one should consider India's growth aspirations while speaking on political economy of green growth and energy security. He said that if India, a lower middle income country in terms of per capita income, wants to increase the size of the economy and wishes to be as big as the Chinese economy then it needs to grow at a much faster rate. His observations are that the difference in growth between India and that of China on an average is about 3per cent to 3.5per cent. The Chinese economy in the next 30-40 years, on an average, is expected to grow by 6per cent to 6.5per cent and consequently India needs to grow by 10per cent to 10.5per cent over the next 30-40 years in order to match the Chinese economy.

Asok Dasgupta, President, Independent Power Producers Association of India at the start remarked that the Agenda of the session says 'Politics Matters; of course it matters'. It matters for us in our daily lives, in almost everything we do'. He said that unlike in the European nations, politics matters a lot in India where a major portion of our daily lives are spent discussing politics. His views were that, although India have improved a lot from the situation from where she was when she gained Independence and have now a per capita electricity consumption of about 1000 units compared to the 14 units per year of 1947, it is still much below the world average of 2500 units. The figure though looks better when compared with the neighbouring South Asian countries like Pakistan, Nepal, Bhutan and Bangladesh. Nevertheless there is a huge scope for India to improve. Efforts should be put on to produce more energy, try to conserve energy by reducing the losses and by sharing the surplus energy. One of his suggestions included having a Hydro Power Purchase Obligation (HPO) in line with the Renewable Purchase Obligation (RPO). Speaking towards getting back returns from investments he suggested the investors, who set up Decentralized Distributed Power Plants in the remote areas, to get electricity credit notes from the state utilities in lieu of the power supplied and get the money from the bank. Thus, the collection will be the responsibility of the state utilities that definitely have stronger networks than the private investors. He said that one of the major reasons of some of the state owned utilities towards incurring losses is that they have to act at the whim of the politicians. He strongly recommended having autonomous utilities, free from the clutches of the political parties, which will boost the power sector and help India progress towards attaining Energy Security.

Abhijit Chatterjee, Climate Change Policy Specialist, United Nations Development Program said ‘Every day in the newspaper we find new power plants being commissioned, new solar plants being commissioned.’ As, he said, most political leaders prefer cutting ribbons and inaugurating new power plants which makes good voting sense rather than laying new smart grid lines. This is despite the challenge to have last mile connectivity and provide a good quality of power to the remote rural areas. He said that even if all the power from the power surplus zones is fed into the deficit zones, it would not be possible to overcome the cumulative shortage that the country faces right now. The reason behind is a large section of the rural population are not connected. According to him supplying power to all the citizens of India might take 12 to 15 years from now. The major reasons are the very poor distribution networks that India have now and the awful last mile connectivity. Herein the importance of political will comes into play. He quoted the famous Greek philosopher and scientist, Aristotle, who had said that a democracy which is illiterate is worse than any other forms of Government. He said that the politicians are born out of the same society as to which we belong. The only difference is that they chose politics as a career for them.

Joyashree Roy, Professor, Climate Change and Energy, Department of Economics, Jadavpur University said ‘There are few terms which are either less understood and/or miss-understood. She emphasised that when we debate about Energy Security there are two things which one can think of i.e. are we talking of self-reliance or are we talking of diversity in the supply system? She said that several empirical studies have shown that it is very difficult to match self-reliance and diversity. She cited the example of Bihar, where self-reliance for electricity consumption in the state is 3per cent of the total consumption and the remaining 97per cent is drawn from the grid. Thus, in order to become self-reliant the state needs to generate more power. She also said that the politicians usually have a mandate of 5 years time before they go for the next election, however, the mandate of green growth might take thirty/forty or even more numbers of years. Her opinion was to think beyond politics and think about the policy framework or the policy domain, where the politicians have a great role to play along with others. Her research findings suggest that the industrial activity growth is largely inter-linked with the growth in energy consumption. She claimed that the industries are now spending about 100 US Dollars per tonne of carbon reduction to ensure that their products are offered at the best competitive cost in the international markets. She cited her findings which suggest that almost all the Energy Intensive Sectors (Designated Consumers) are using the best globally available technologies. The challenge is to identify the potential of each sector and effectively utilize that potential. ‘There is no chance that in India the demand will reduce in the next 50 years’, she claimed. The way out can be the greener growth. Talking about INDC commitments, she suggested, that it should not be appropriate for India to commit on the reduction in energy consumption. She suggested exploring the options of waste reduction and its effective utilization. Her opinion was that the politics is not the actual barrier, but the barriers lie in technology, finance and the policies. This involves the bigger roles of the academia, NGOs, industries apart from the politics

In conclusion, it was emphasized that political will and the populism that the politicians bank on have always been on the questioning radar. However, it is not the politicians who need to be blamed always. Their populism is hugely dependent on the bankable technologies and the returns on investment that are involved in the process. It is thus important to innovate and showcase the best available technologies to them. The solution can be to think differently and act promptly. It is important that the politicians are aware and remain updated of all the latest developments and innovations. A low carbon trajectory path needs to be obtained for a sustainable growth. Cost effective solutions need to be devised and sustainable technological options should be banked upon. The challenge should not be limited to providing electricity connections to all the households but ensuring that the future is secure and enough locally available resources are explored. In the process

greater involvement of the society, which includes politicians, industrialists, academia, sociologists, activists and the NGOs should be ensured. Energy security and green growth can be achieved when a collective effort from all the stakeholders are obtained.

Closing Remarks

Marc Saxer, Resident Representative, Friedrich-Ebert-Stiftung, India in his presentation 'How to create political will for change' stated that there is lack of convergence of ideas as India has multiple parties having various aims and objectives due to which it is getting difficult to get consensus among such groups. Existing policies are hard to shift paradigm due to which there is struggle for innovation, consensus and prevention of corruption. Also, there are those who resist this shift including elites that fear loss of status and privilege, middle class people that fear abuse of power and resent corruption and socially conservatives fear loss of identity and moral decay. Therefore, there is a demand for defining interest which cannot be done in isolation but within the framework of their discourse communities. Hence, social sanctions have to come along with legal sanctions so as to be accepted. Presently, green new deal occupies the centre and changes the paradigm by providing green growth that is technology driven. German scholars are presently concerned with over evaluation of fossil fuel stock. If this so called 'Carbon Bubble' bursts, there may be another financial crisis. It also encourages sustainable development and environmental protection

Keya Ghosh, Advisor, CUTS Calcutta Resource Centre in her presentation provided for a sustainable mechanism where the civil society institutions and regulatory bodies work together to obtain energy security in India. She mentioned that actors i.e., legislators along with agents such as academicians, think tans can work together which will end the communication gap and catalyse the process of achieving green growth in the country. There is also a need for political education and understand the implications of such proposals to fulfill such goals.

Udai S Mehta, Director, CUTS International thanked all the participants and speakers and accentuated on the need for India to grow in the green path. The ultimate aim has to be providing last mile connectivity to large masses by not only making electricity accessible but also obtainable and affordable to everyone. He concluded the evening by encouraging political heads to work towards the benefit of greater good.
