



Ministry of Environment, Forest and Climate Change
Government of India



giz Deutsche Gesellschaft
für Internationale
Zusammenarbeit (GIZ) GmbH

On behalf of:



of the Federal Republic of Germany

Proceedings of the Workshop on Market mechanisms as a means to effectively implement India's climate mitigation objectives

Date: 27 June 2017 **Venue:** Jacaranda Hall, India Habitat Centre, New Delhi, India





Background and context

The Indian NDC has set a target of reducing the emission intensity of India's GDP by 33-35 per cent until 2030, compared to 2005 levels, and of achieving 40 percent cumulative electric power installed capacity from non-fossil fuel-based energy resources by 2030. It also has a target of creating additional carbon sink of 2.5 to 3 billion tCO₂e from additional forest and tree cover by 2030. Within the suite of choices that India has for implementing its mitigation targets, the role of market mechanisms will be critical. The Clean Development Mechanism, one of the innovative market mechanisms under the Kyoto Protocol, had facilitated investments of about INR 1.6 trillion (US\$ 24.6 billion) in the country through climate mitigation projects in different sectors (GIZ, 2014). The Paris Agreement has given a fillip to market mechanisms in the post-2020 scenario.

India has also been implementing a number of domestic market-based mechanisms that act as the major vehicles for achieving our climate mitigation and renewable energy targets. The two most prominent are the Perform, Achieve and Trade (PAT) scheme and the Renewable Energy Certificate (REC) trading scheme. Energy saving target for the first cycle of PAT ending in 2015 was 6.686 mtoe or 22 mtCO₂e of emission reductions. The REC mechanism works with a moving target with a 1% increase every year from the baseline year of 2009-10. The target in 2009-10 was 5% electricity procurement from renewable energy sources. This target translates to an emission reduction potential of 32 MtCO₂ in 2009-10 and 190 MtCO₂ by 2020. Will the PAT and REC targets be revised in line with India's NDC targets? Is there merit in bringing these two schemes under a common "carbon currency" and perhaps expanding it to other sectors such as forestry? What kind of institutional preparedness is required for such a domestic ETS? How will it interact with existing sectoral approaches for climate mitigation?

Simultaneously, Article 6 of the Paris Agreement proposes a number of concepts related to market mechanisms, including "cooperative approaches" (Paragraph 6.1), "internationally transferred mitigation outcomes" (Paragraphs 6.2) and "mitigation and sustainable development mechanism" (Paragraphs 6.4). What are the details of these provisions? When will they come into effect? Can existing certified emission reductions (CERs) be sold under the new market mechanisms? How should India prepare itself and engage in order to benefit from the provisions of Article 6? Does it have any implications for a domestic emissions trading system (ETS)? There may not be clear answers to some of these questions, but it is important to have an informed discussion and to develop clear strategies.



Workshop Minutes

Ministry of Environment, Forest and Climate Change (MoEFCC), Government of India and the German Federal Ministry for the Environment, Nature Conservation, Building and Nuclear Safety (BMUB) jointly with German Development Cooperation (GIZ) organised a one-day workshop on 27th June 2017 at India Habitat Centre, New Delhi on 'Market mechanisms as a means to effectively implement India's climate mitigation objectives' with the objectives of

- ✓ Informing relevant stakeholders on the provisions of market mechanisms under the Paris Agreement; and
- ✓ Discuss strategies on how India can effectively utilise market mechanisms (both domestic as well as upcoming global markets) to achieve its climate mitigation objectives.

There were 3 sessions viz. the Inaugural Session; Session II on Domestic market mechanisms and their role in achieving India's climate mitigation targets; and Session III on International market mechanisms, Article 6 of the Paris Agreement and how India can benefit from the upcoming carbon markets.

Inaugural Session

The Inaugural Session included the following dignitaries:

- ✓ **Shri Ravi S Prasad**, Joint Secretary, Climate Change Division, at the MoEFCC
- ✓ **Mr. Rajesh K Sethi**, Manager, Sustainable Development Mechanisms at the UNFCCC Secretariat
- ✓ **Mrs. Sabine Preuss**, Programme Director for NRM, Environment and Climate Change at GIZ India
- ✓ **Mr. Thomas Hagbeck**, Counsellor for Economics, Environment and Urban Development at the Embassy of the Federal Republic of Germany

1. The workshop was inaugurated by Mr. Ravi Shankar Prasad. He set the context of the day by speaking about India's plan to develop a voluntary carbon market with the grant support received from World Bank under the World Bank's *Partnership for Market Readiness* Initiative. The preparation phase will formulate the guidelines/operating principles of a voluntary carbon market which is expected to be piloted post-2020.
2. Mr. Prasad said that market mechanism could help in the advancement of the Government's 'Make in India' campaign. He highlighted that although the Indian NDCs doesn't mention using market mechanisms, they could be worthwhile for the future.
3. He also said that rules of Article 6 under the Paris Agreement are being defined taking into consideration the issues around double counting, environmental integrity, governance and sustainable development. Suggestions produced from this workshop could inform India's position on Article 6.
4. Mr. R.K. Sethi said that with current policies in place India might surpass the NDC target. He highlighted that Article 6 has mainly 3 sub-items: i) transfer of emission-credits under Article 6.2 and 6.3, which may be similar to Joint Crediting Mechanisms of Japan; ii) Article 6.4 to 6.7 includes may be similar to CDM in terms of participation, rules, governance, infrastructure, financing, accounting, iii) adaptation, mitigation, technology transfer (Article 6.8 and 6.9)
5. Mr. Sethi also highlighted that almost 64% of NDCs mention or show the intention of using market mechanism through unilateral, bi or multilateral cooperation. Hence, the role of market mechanisms will be advantageous in meeting NDC targets laid down by individual countries. At SBSTA 47 in November 2017 the next decision



text on Article 6 will be developed and discussed over the course of 2018. Open issues on Article 6 concern which parties are allowed to participate, the share of proceeds, the institutional infrastructure, transparency and accounting, as well as the transition from the CDM to the new mechanism.

6. Mrs. Sabine Preuss highlighted that market-based approaches are one of the most efficient ways of achieving emission reductions through the implementation of carbon pricing mechanisms that can attract investment and lead to broad based change across the economy. She emphasised on the long standing cooperation with MoEFCC on carbon markets through the BMUB funded 'Global Carbon Markets' Project which has not only supported the development of Clean Development Mechanism projects, development of management information system for tracking the lifecycle of CDM projects but have also actively supported National Clean Development Mechanism Authority. Much has been invested in mechanisms like CDM and JI over the years, which calls for a smooth transition from the Kyoto Protocol to a rulebook for the implementation of the Paris Agreement, failing which, unnecessary trust issues can crop up on the carbon markets.
7. Mr. Thomas Hagbeck said that the government of Germany is committed to continue their action on climate change and pointed out the importance of the event, highlighting the necessity to discuss instruments to implement the commitments communicated ahead of COP21.
8. Mr. Hagbeck said that the Climate Action Plan 2050 by the German government seeks to bring the national economy onto an emissions reduction pathway with a final target of 80 to 95 percent lower greenhouse gas emissions compared to 1990 by 2050, and the Plan proposes measures to achieve this target. He also highlighted that the German government recognises effective emissions trading as a key climate action instrument of the EU for the energy sector and (some areas of) industry.
9. Mr. Hagbeck proposed 3 points i) Action plans or road maps have to be developed in order to break down the macro NDCs into meso and micro actions; ii) the development of such road maps has to be inclusive and participatory; in Germany, the extensive dialogue with interest groups was key in developing an ambitious Climate Action Plan 2050; and iii) finally, instruments to implement such climate action have to be diverse and cost-efficient for actors to get involved, market-based mechanisms might be on the top of such a list.

Session II: Domestic market mechanisms and their role in achieving India's climate mitigation targets

The session built up from the discussion on policy to actual implementation of market based instruments in the Indian context. This session highlighted the work in India around PAT, REC, PMR (Partnership for Market Readiness), and private sector action on internal carbon pricing. It had the following speakers:

- ✓ **Mr. Vivek Adhia**, Director Climate & Head Business Engagement World Resources Institute (WRI) India
- ✓ **Dr. Ashoka Kumar**, Bureau of Energy Efficiency (BEE)
- ✓ **Ms. Minaxi Garg**, AGM at National Load Despatch Centre, Power System Operation Corporation Ltd.
- ✓ **Mr. Konrad Raeschke-Kessler**, Policy Officer, German Emission Trading Authority (DEHSt)
- ✓ **Mr. Anirban Ghosh**, Chief Sustainability Officer at the Mahindra Group
- ✓ **Ms. Sandhya Srinivasan**, Climate Change and Energy Consultant, World Bank Group
- ✓ **Ms. Neha Pahuja**, Fellow and Area Convenor at TERI



1. The session chair Mr. Vivek Adhia had set the context by emphasising that the main aim of Article 6 is that countries can go beyond their bare minimum; market mechanisms are an important tool that can help increase ambition. He showed existing carbon trading mechanisms in the world and talked about existing domestic mechanisms which could be leveraged to feed into an all-inclusive market-based mechanism.
2. Dr. Ashok Kumar presented the experiences of the PAT (Perform, Achieve, and Trade) scheme from the first cycle, shared the progress of the second PAT cycle (2016-2019), and informed about their plans for a third cycle (2017 – 2020). He threw light on the trading aspects and informed that in the case of compliance, an entity could receive an Energy Saving Certificate; upon third party validation/verification. However, if an entity did not comply, then either they have to buy the credits or face penalty. Until today PAT reduced India's emissions by 1.93%.
3. Ms. Minaxi Garg explained the REC (Renewable Energy Certificate) scheme, market based instrument to promote renewable energy generation in India. She then went on to how the scheme is aligned to and embedded in the national policies and NDC targets. She also highlighted the objectives of REC mechanism, enabling conditions, current status, and divergence between REC and PAT.
4. Mr. Konrad Raeschke-Kessler showed the German perspective in this area and seeded a graph that showed that 30% of the annual electricity in Germany was generated from solar. He spoke about unilateral approaches and sector actions in Germany and then collectively under the European Union in addressing N2O emissions. He also highlighted what lessons were learned from the Joint Implementation experiences that could inform the development of the rulebook of Article 6 under the Paris Agreement.
5. Ms. Sandhya Srinivasan briefed on the World Bank's initiative on Partnership for Market Readiness (PMR) in India. India's project proposal, which got accepted, included 3 elements: This first component is policy analysis and possible upscaling of the existing schemes (e.g., PAT and REC). The second component is the creation of a national registry that is adaptable to all mechanisms. The third component of India's PMR programme is the design of market based mechanisms in an untapped sector while avoiding the pitfalls of existing mechanisms. She said it will be interesting to see how different schemes could be linked in the future and look into fungibility aspects.
6. Mr. Anirban Ghosh, mentioned that the private sector expects clarity from the government on the provisions of the Article 6 in terms of using market mechanisms to meet India climate mitigation objectives and said that Mahindra Group is at the forefront with internal carbon pricing and will participate in ETS simulation actively whenever it is carried out. However, he also said that sound policies or regulations can help build demand and set up a market in absence of which the market will fail, for e.g., the cement industry got a large number of CERs but there was no demand for them. He also said that technological innovation would be highly relevant for market mechanisms in future. Mr Gosh argued that the private sector actually does not need strong incentives for ramping up RE investments anymore. Thus, any new carbon mechanisms should switch focus from requiring compliance to actually enabling deployment of low-carbon technologies.
7. Ms. Neha Pahuja from TERI spoke about the trade-off between domestic emission reduction and selling them off. She highlighted the importance of linking of schemes and said a lot of work needs to be done in the coming COPs to operationalise Article 6 of the Paris Agreement.

During the discussion various questions were raised, such as the suitability of a carbon tax in India. It was pointed out that markets may be the better option for India because unlike a



carbon tax where all money goes to a central entity and thus prone to inefficiencies, an individual stakeholder can decide for themselves what to do with the proceeds. Another question was about the existence of schemes on inclusion of MSMEs in the voluntary carbon market framework. Also Dr. Ashish Chaturvedi asked about the compatibility problems between PAT and REC, and commented that market mechanisms have synergistic affects between national commitments and selling to other countries and not a constraint.

Session III on International market mechanisms, Article 6 of the Paris Agreement and how India can benefit from the upcoming carbon markets

The third session brought together the Indian experience and how that could inform the negotiations on Article 6. It focused on both expectations of the Indian side from the negotiations and the expectation from the Indian side on taking a stronger role in shaping the negotiations. The panel consisted of:

- ✓ **Dr. Ashish Chaturvedi**, Director Climate Change at GIZ India
- ✓ **Dr. PC Maithani**, Scientist G, Ministry of New and Renewable Energy (MNRE),
- ✓ **Mr. Rajesh K Sethi**, Manager, Sustainable Development Mechanisms Unit at the UNFCCC Secretariat
- ✓ **Mr. Thomas Forth**, Senior Expert and Advisor to the German Ministry for the Environment, Nature Conservation, Building and Nuclear Safety (BMUB)
- ✓ **Dr. Vaibhav Chaturvedi**, Research Fellow, Council on Energy, Environment and Water (CEEW)

1. Dr. Ashish Chaturvedi moderated Session III. After the second session, which focused on the national carbon market of India with PAT, REC and the World Bank interventions, this last session brought the discussion back to the international sphere and how India can benefit from the emerging new international mechanisms.
2. Dr. PC Maithani said that Article 6 is to be seen together with other Articles, for e.g., 4, 7, 10, 13 and cannot be dealt with in isolation. He argued that the experiences India made with market mechanisms have not been very positive. Most CDM projects were unilateral and were reduced to carbon money and IRR (Internal Rate of Return)- a low one for DM Executive Board and a high IRR for the bank to receive credit.. Additionality was always a concern. There were CDM 1700-1800 projects in India, many of which were renewable projects. Projects were getting feed-in tariff and CDM credits both and were questioned in terms of additionality. HFCs- small investment and big returns – questions again around additionality. External unilateral markets created havoc- e.g., low demand, the embargo of EU on Indian CERs. The lack of demand was another problem for both CDM and the domestic REC scheme. The Renewable Purchase Obligation Targets set by states were low and many didn't comply.
3. The ratification of the Paris Agreement and existence of objectives for countries is good for the market since it builds confidence. However, only time will tell the seriousness and ambitiousness of these objectives. He highlighted that with the existing policies India can reach its NDC targets. The new mechanism proposed (SDM) should be built from experiences of the previous mechanisms like CDM, especially issues on baselines, unilateral measures, and additionality components. Article 6.8 is a work programme- countries shouldn't be subjected to global governance.



4. Mr. R.K. Sethi said that there are clear linkages of Article 6 with NDC implementation. NDC is the backbone of Paris Agreement. Article 6.1 is about increasing ambition and supporting NDC implementation. Indian perspective about Article 6.2 and 6.4 will be important. Using market mechanisms will be advantageous as it will help in achieving NDC at lowest cost, resulting economic efficiency which in turn could help increase India's ambition over a period of time. Also help to bring private sector into the process, mainly for finance which till now is far short of the \$100 billion as was committed to GCF.
5. Mr. Thomas Forth spoke primarily about Environmental Integrity as an important part of Article 6.2. Broad list of topics for the further negotiations have been identified, which will be useful for SBSTA 47 meeting. However, he expressed scepticism regarding the timeline of the negotiation as the list of issues that needs to be negotiated is long. As India has been a pioneer during the early years of the CDM he recommended India to become a pioneer of the new Paris mechanisms again.
6. Environmental integrity, mentioned in Article 6.2, is of high importance because there will be a wide variety of selling and acquiring countries/activities that are jointly implemented under the new system. The first question one needs to ask is for which reason the respective activities are accounted. The second question is how to ensure that the accounting system works and has no loopholes. The registries are the basis for this work. If registries are transparent double counting can easily be avoided. This transparency will also help in increasing ambition. He said that India could contribute by developing standardized baselines which can be featured in national policy programs and domestic policy instruments reflecting the NDC.
7. Dr. Vaibhav Chaturvedi said that SD is and will be the driving force behind mitigation outcomes and not all stakeholders, mutually agree that carbon markets would effectively support SD. This is due to two reasons: First he argued that compared to developed nations electricity markets in India are not well-functioning. Placing the carbon market established by Article 6 on top of it is not easy and may slow down development of the sector. The same is true for the industrial sector. Secondly, there is already a multiplicity of existing market-based instruments and the proposal of a new mechanism under Article could over-burden the industry and energy sectors. Instead, India could consider having only one instrument in place, even though it will not be easy to step back from the REC and PAT schemes considering the huge amount resources that have been spent to set them up. They, however, have already done lot of groundwork like making emission inventories.
8. Several questions were raised at the Q&A session. One participant questioned the effectiveness of carbon markets, highlighting the collapse of the CDM. Especially, the goal to link different markets makes the final size and demand for credits very unclear. Moreover, wind and solar costs are viable in many cases without external support and will continue to decrease. The question is why India should go down a road that exposes it again to unknown and volatile carbon price instead of spending resources on further lowering the price of renewable energy. The panel addressed the question by highlighting that if demand can sufficiently be generated, as it was the case during the first commitment period of the Kyoto Protocol, markets can be a huge driver of renewable energy technologies. Moreover,



even the CDM is still supporting the development today and is not as unsuccessful as often claimed. Especially in the last year CDM activity – although limited compared to earlier years – is rising again due to CER cancellations, domestic schemes and international buying initiatives. Financial resources for capacity building and technology transfer to lower the prices of renewable energies further are addressed by Article 6.8.

Other questions concerned accounting under the PA and the unit of measurement. The panellists highlighted that accounting is an issue that needs to be treated consistently throughout the entire Agreement. It will be the backbone of the environmental integrity of the future agreement and should be a focus topic of future negotiations. Some questions also concerned relevance of the Japanese bilateral Joint Crediting Mechanism (JCM). Mr. Forth pointed out that the JCM has the potential to become more relevant in the future and Germany is observing its development in order to scope which approaches work and which do not. Until today, however, only a small number of projects with very low emission reductions have been approved, questioning the impact of the JCM.

The event was attended by more than 85 participants. Please see Annex 1 for list of Participants.



ANNEX 1: Glimpses from the Workshop



Inaugural Session: Mrs. Sabine Preuss, Programme Director, GIZ; Mr. RS Prasad, JS, MoEFCC, GOI; Mr. RK Sethi, Manager SDM Unit, UNFCCC, Mr. Mr. Thomas Hagbeck, Counsellor for Economics, Environment and Urban Development, Embassy of Germany



Session II – Dr. Ashok Kumar, Economist, BEE; Ms. Minaxi Garg, AGM, National Load Despatch Centre, POSCO.; Mr. Konrad Raeschke-Kessler, Policy Officer, German Emission Trading Authority (DEHSt); Mr. Anirban Ghosh, CSO, Mahindra Group; Ms. Sandhya Srinivasan, Climate Change and Energy Consultant WBG; Mr. Vivek Adhia, Director Climate & Head Business Engagement WRI India; Ms. Neha Pahuja, Fellow and Area Convenor at TERI



Session III – Panel Discussion: Dr. Ashish Chaturvedi, Director Climate Change, GIZ; Mr. RK Sethi, Manager SDM Unit, UNFCCC, Mr. Mr. Thomas Forth, Senior Expert and Advisor, BMUB; Dr. PC Maithani, Scientist G, MNRE; Dr. Vaibhav Chaturvedi, Research Fellow, CEEW



Participants and Stakeholders from Government ministries, line departments, multilateral and bilateral funding organizations, think tanks, academia, project developers, consultants, NGOs, etc.



ANNEX 2: List of Participants

S.No.	Organisation, Designation	Name
1	MoEFCC, Joint Secretary	Shri Ravi S Prasad
2	UNFCCC	Mr. Sethi
3	German Embassy	Mr. Hagbeck
4	Acting Secretary BEE	Dr. Saurabh Diddi
5	GIZ India	Mrs. Sabine Preuss
6	DEHSt	Mr. Konrad Raeschke-Kessler
7	World Bank	Ms. Sandhya Srinivasan
8	Mahindra	Mr. Anirban Ghosh
9	TERI	Ms. Neha Pahuja
10	GIZ India	Mr. Ashish Chaturvedi
11	BMUB	Mr. Thomas Forth
12	MNRE	Mr. PC Maithani
13	POSOCO	Ms. Minaxi Garg
14	Perspectives Climate Change	Mr. Axel Michaelowa
15	WRI	Mr. Vivek Adhia
16	CEEW	Vaibhav Chaturvedi
17	MoEFCC, Scientist-D (CC)	Shard Sapra
18	MoEFCC, Deputy Director	Shoyabahmed Kalal
19	IRADe	Dr. Jyoti Parikh
20	IRADe	Dr. Kirit Parikh
21	IGREC	Dr. Promode Kant
22	CSE	Dr. (Ms) Vijeta Rattani
23	WRI	Apurba Mitra
24	WRI	Chirag Gajjar
25	IEG	Purnamita Dasgupta
26	IFMR	Vivek Venkataramani
27	CDP India	Mr. Damandeep Singh
28	EU Delegation	Anne-Laure Pilat
29	Shakti Foundation	Kunal Sharma
30	AETS	Sanjay Dhawan
31	KPMG	Manpreet Singh
32	IORA Ecological Solutions	Swapan Mehra
33	Deloitte India	Singh, Gagan
34	Adelphi	Jai Gaurav Kumar
35	TTC	Dipankar Ghosh
36	TTC	Tania Ray
37	Deloitte India	Inderjeet Singh
38	South Pole Carbon	Rohit Garg
39	South Pole Carbon	Tanushree Bagh
40	EKI International	Manish Dabkara
41	Gold Standard	Neha Rao
42	The Climate Group	Jarnail Singh



43	EVI	jatin kapoor
44	NABCB	Mr. V. K. Mediratta
45	ToxicsWatch Alliance (TWA)	Dr Gopal Krishna
46	IORA Ecological Solutions	Ms. Shruti Mittal
47	Tata Steel	Manish Mishra
48	Godrej	Vikas Goswami
49	JSW Steel	S. Majumdar
50	Associate VP Coca Cola Beverages	Surojit Bose
51	EVI	Vijay Raj
52	TERI	Gopalkrishna Sarangi
53	GIZ	Mr. Santosh Kumar Singh
54	GIZ	Mr. Tobias Dorr
55	GIZ	Mr. Kundan Burnwal
56	GIZ	Ms. Kamna Swami
57	GIZ	Mr. Sunil Sharma
58	GIZ	Awasthi, Kirtiman
59	GIZ	Aman Malik
60	GIZ	Piyush Dhawan
61	GIZ	Piyush Sharma
62	GIZ	Somya Bhatt
63	GIZ	Nidhi Madan
64	GIZ	Hemant Bhatnagar
65	GIZ / IGEF	B. Anil Kumar
66	GIZ	Sashi Kumar
67	GIZ	Nidhi Sarin
68	GIZ	Ms. Meghana Kshirsagar
69	GIZ	Rita Acharya
70	Enviro-Legal Defence Firm	Eeshan Chaturvedi
71	Core Consultants Private Limited	Umang Jalan
72	GORD	Kishor Rajhansa
73	Tetra Tech	Ben Caldwell
74	Tata Power	Saxena Taruna
75	ISHRAE Gurgaon	Kapil Singhal
76	ISHRAE Gurgaon	Narender Gandhi
77	Shakti Foundation	Aman Gupta
78	Ambuja Cement Limited	Sandeep Shrivastava
79	ITC	Mr Ankush Jain
80	Harvard University	Zerin Osho
81	National Maritime Foundation	Dr. Kapil Narula
82	Wind World India Limited	Puneet Katyal
83	LOTUS	Mr. Abhinav Avery
84	LOTUS	Mr. Anand



ANNEX 3: Agenda

9:30 – 10:00	Registration with coffee and tea
10:00 – 11:00	Session I: Inaugural
10:00 – 10:20	Shri Ravi S Prasad, Joint Secretary at the MoEFCC , to set the context for the day
10:20 – 10:40	Mr. Rajesh K Sethi, Manager, Sustainable Development Mechanisms at the UNFCCC Secretariat , with a special address on market mechanisms under the Paris Agreement
10:40 – 10:50	Mrs Sabine Preuss, Programme Director for Natural Resource Management, Environment and Climate Change at GIZ India , on the German technical cooperation on climate change
10:50 – 11:00	Mr. Thomas Hagbeck, Counsellor for Economics, Environment and Urban Development at the Embassy of the Federal Republic of Germany , with a special address
11:00 – 11:15	Coffee break
11:15 – 13:15	Session II: Domestic market mechanisms and their role in achieving India's climate mitigation targets
	Chaired by Shri Ravi S Prasad, Joint Secretary at the MoEFCC
	<ul style="list-style-type: none"> • Mr. Saurabh Diddi, Acting Secretary at the Bureau of Energy Efficiency (BEE), on the PAT scheme • Ms. Minaxi Garg, Additional General Manager at National Load Despatch Centre at Power System Operation Corporation Ltd., on experiences with the REC scheme • Mr. Konrad Raeschke-Kessler, Policy Officer at the German Emission Trading Authority (DEHSt), on unilateral approaches and sector actions in Germany • Mr. Anirban Ghosh, Chief Sustainability Officer at the Mahindra Group, on Mahindra's efforts to reduce greenhouse gases and expectations from market mechanisms • Ms. Sandhya Srinivasan, Climate Change and Energy Consultant at the World Bank Group, on India's activities under the Partnership for Market Readiness • Mr. Vivek Adhia, Director Climate & Head Business Engagement at the World Resources Institute (WRI) India, on corporate actions • Ms. Neha Pahuja, Fellow and Area Convenor at TERI, on learning from India's domestic market experiences and post-2020 opportunities
	<i>Discussion and Q&A (min. 30 mins.)</i>
13:15 – 14:15	Lunch
14:15 – 16:30	Session III: International market mechanisms, Article 6 of the Paris Agreement and how India can benefit from the upcoming carbon markets
	Moderated by Dr. Ashish Chaturvedi, Director Climate Change at GIZ India
	<ul style="list-style-type: none"> • Dr. PC Maithani, Scientist G at the Ministry of New and Renewable Energy (MNRE), on the Indian position on and expectations from Article 6 of the Paris Agreement • Mr. Rajesh K Sethi, Manager in the Sustainable Development Mechanisms Unit at the UNFCCC Secretariat, on linkages of Article 6 with NDC implementation • Mr. Thomas Forth, Senior Expert and Advisor to the German Ministry for the Environment, Nature Conservation, Building and Nuclear Safety (BMUB), on the status of negotiations around Article 6 and environmental integrity • Dr. Axel Michaelowa, Managing Director at Perspectives Climate Change, on the potential of upscaled crediting under Article 6 • Dr. Vaibhav Chaturvedi, Research Fellow at the Council on Energy, Environment and Water (CEEW), on pathways for India to use market mechanisms to increase ambition
	<i>Discussion and Q&A (min. 30 mins.)</i>
16:30 – 17:00	Shri Ravi S Prasad, Joint Secretary at the MoEFCC , with conclusions and the way forward