From February 18-20th 2019, Shakti hosted the fifth edition of our annual convening, the Shakti Dialogues, bringing together donors, grantees and partners, private players, and policy makers to exchange perspectives on critical and emerging issues in clean energy and climate action in India. The Dialogues build upon insights gained from Shakti’s on-going work as well inform our future work plans. Our goal is also to create opportunities for collaboration among stakeholders and to identify solutions that will help India in its goal to provide cleaner, sustainable, and more efficient energy to a growing population.

This year we convened over 120 representatives from organizations across India to deliberate on:

- Developing financial frameworks for accelerating clean energy solutions
- Catalyzing climate action through corporate leadership
- Addressing challenges related to energy efficient and clean cold chains
- Addressing climate change mitigation through sub-national actions
- Realizing the goal of universal energy access
- Improving the regulatory environment for urban transport

The sessions were introduced by Mr. Krishan Dhawan, CEO of Shakti and chaired by distinguished members of the Shakti Board and Advisory Board including Mr. Nitin Desai (Former Under Secretary General, United Nations) and Mr. Suman Bery (former Director General of the National Council of Applied Economic Research), and Mr. Harish Hande (Managing Director of SELCO), as well as Mr. Arunabha Ghosh (CEO of the Council on Energy, Environment and Water).

A number of actionable and practical ideas emerged from the dialogues and we look forward to following up on them. We invite you to follow the conversation on social media using #shaktidialogues2019

A summary of the recommendations from the Shakti Dialogues 2019 are presented in the sections that follow.
Addressing clean energy investment needs through financial markets

Shakti’s Clean Energy Finance programme is working with key stakeholders to create a commonly accepted definition of ‘green finance’ or ‘climate finance’, which can be adopted by the Government and the financial community in India. A clear articulation of green finance modalities can help demonstrate the viability of climate friendly infrastructure to investors.

No doubt, such a definition by itself is not enough. The demand for investment opportunities must be created by engaging with investors, regulators and ratings agencies. With a robust primary and secondary financial market, projects can be pooled and financed through both debt and equity securities. This will allow clean energy developers to tap into a larger quantum of finance. This kick-off session of the Shakti Dialogues 2019 tackled an important theme in this context—how can we build a more efficient financial market to fund climate mitigation efforts in India?

Mr. Suman Bery, Shakti Board Member, chaired an informative session on this theme. Some of the key takeaways were:

- A few green finance definitions already exist but their guidelines largely remain high-level. Any new definition should be deep and clearly demarcate ‘green’
and ‘climate’ finance as working towards commonly accepted principles (such as the NDCs) in a way that will attract both domestic as well as international finance.

- Establishing a definition requires a pivotal group of stakeholders to champion it. Financial sector regulators such as IRDA and/or PFRDA could assume this responsibility as they are most appropriately placed to do so. Ratings agencies may also follow suit to allow for the creation of a ‘green rating’ that supplements (or is integrated into) credit ratings.

- India has a strong pipeline of investable renewable energy projects, but international financiers are hesitant to provide finance due to the lack of evidence-based decision-making within the sector. Furthermore, counterparty risks, currency risk, legacy issues, and policy uncertainty exacerbate the issue and should be addressed through longer-term solutions as well as short-term risk absorption mechanisms. Here, there is great scope for public money to leverage in private sector investment by capitalizing first-loss funding pools or providing insurance products to protect investors against offtake risks. Securitization too can help spread and mitigate risks—which is where subnational government actors can step in and raise finances through debt securities such as municipal bonds.
Catalyzing climate action through corporate leadership

The strategic relevance of meaningful corporate climate action is steadily increasing in India. More and more corporates are acknowledging that addressing climate change is key to managing business risks and ensuring long-term returns on investment. But given the speed and scale required for this transition, they must collectively and proactively engage to address climate change.

This session of the Shakti Dialogues saw Mr. Suman Beri, Shakti Board member facilitate an insightful discussion on the role of a multi-sectoral corporate platform to aid partnerships and solutions for climate change. Some of the key takeaways were:

- Many corporates are willing and able to undertake positive climate action but do not have the information and awareness to begin doing so. A platform such as this could therefore maintain continual contact with corporates to keep them abreast of opportunities to grow sustainably.
- Foundations/ non-profits have, in the past, conducted overlapping and parallel work, inadvertently duplicating each other’s efforts in trying to generate corporate action. Now, there are efforts to avoid such duplication, but the emphasis has been on collaborating on a specific agenda or thematic area, rather than general coordination and communication to collectively set (and work towards) a broader agenda.
- A theory of change approach, which involves the mapping of such efforts and corporate organizations against a broader goal based on need and specialization, is a prudent way to begin. Donors can be included to promote alignment along similar lines.
- A platform such as this should place a clear and continued emphasis on action over discussion, and any exercise in aligning agendas must include establishing quantifiable goals. This may include setting timelines in which goals should be achieved, ideally in alignment with those recognized by the government, such as the NDCs.
- Most of the climate action is undertaken by larger corporations. Now the emphasis must shift downwards to Small & Medium Enterprises (SMEs) and corporate supply chains to directly involve a larger number of organizations. While engaging with and targeting such audiences, the platform must make a clear business case for motivating them to climate action.
Addressing challenges related to energy efficient and clean cold chains

Cold chains are fundamental to increasing farmer incomes. Around 40% of perishable food in India is lost between the farm gate and retail outlet due to inefficiencies in the cold chain. Cleaner and more efficient cold chains are important in light of India’s climate commitments and also because of India’s target of doubling farmers’ income by 2022 through productivity gains.

Under a business-as-usual scenario, most cold chains will run on diesel and adopt carbon intensive cooling and refrigeration technologies. A better understanding is needed of how India can transition to cleaner and or efficient cold chains, in order to tackle climate change and to achieve wider socio-economic benefits? Mr. Arunabha Ghose, (CEO of the Council on Energy, Environment and Water), facilitated a comprehensive discussion on these issues. Some of the key takeaways were:

- Robust data, change in behaviour and sustainable infrastructure are the critical foundations of building a more sustainable cold chain.
- There is a need to think about a ‘fork to farm’ (demand driven) model solution and not ‘farm to fork’ (supply driven).
- The Government of India has decided to upgrade 22,000 rural haats into Gramin Agricultural Markets (GrAMs) with better infrastructure and the facility for farmers to sell directly to consumers and bulk purchasers. Building pack houses in these village markets can benefit farmers.
- Pack houses are one of the most critical components of the cold chain and their development should be based on extensive mapping exercises
- There is a need to view and provide ‘cooling as a service’. This can be facilitated by developing cold chain components for first and last-mile transportation, cold-rooms with energy efficient and low-GWP based systems.
- Clean and energy efficient cold chain technologies are available in India. However, for most smaller facilities, these are at the experimental stage, and require adaptation to local conditions, cultures and practices.
- Awareness levels among the Farmer Producer Organizations (FPOs) must be improved.
- The current subsidy model incentivises the lopsided development of cold chain with states like Uttar Pradesh and West Bengal having the maximum number of cold storage facilities. Therefore, there is a need to look at subsidy rationalization and link existing policies to the state rural livelihood missions.
- The shift from economic to business models can be achieved by leveraging FPOs, comprehending the role of aggregators, encouraging Public Private Partnerships (PPPs) and seeing cooling as a service.
Addressing climate change mitigation through sub-national actions

States and other sub-national actors like city and district administrations can play an extremely active role in helping India meet its NDCs. In 2008, states were directed to develop State Action Plans on Climate Change (SAPCCs). More recently, the Ministry of Environment, Forest and Climate Change directed all states to revise their SAPCCs towards achieving the NDCs.

This session of the Shakti Dialogues saw Mr. Nitin Desai, Shakti Board member facilitate an insightful discussion on how states can mainstream climate action. How can some of the barriers relating to data, institutional capacity etc. be addressed? Some of the key takeaways were:

- For many key emission intensive sectors, the quality and the quantity of data available is adequate. But for sectors like agriculture, forestry and land-use and the unorganised sector, the lack of data presents a serious challenge. Further, it

Cities need to develop GHG emission inventories and district level climate action plans.
would be useful for states to explore ways to integrate big data analytical approaches for climate-related databases.

- Each state has unique socio-economic factors governing its development agenda. Therefore, it is important to identify drivers that will galvanise state governments to mainstream climate change issues in development planning.

- Each state has varying emission sources and profiles as well as vulnerability to climate change, therefore states must identify incentives (and disincentives) to prioritise climate change action. A benchmarking exercise can identify states with maximum potential to reduce emissions.

- The earlier versions of the SAPCCs were largely adaptation focussed. States should now also focus on mitigation efforts to align with the national agenda.

- Cities too need to develop GHG emission inventories and district level climate action plans

- The institutional capacity of state governments must be enhanced. For example, introducing climate change issues into the curriculum of IAS training academies can help sensitise future bureaucrats.

- The public is an important stakeholder when it comes to action on climate change. Given the success of some of the recent public campaigns run by the government like giving up LPG subsidy, policy makers must recognise the importance of behavioural change in advancing climate action.

- Finance, such as green bonds for municipalities, ESG funding and the removal of perverse subsidies will play a major role in tackling climate change.
Improving the regulatory environment for urban transport

The lack of adequate formal transport systems in Indian cities has given rise to alternatives like intermediate para-transit (IPT) modes as well as new mobility solution providers delivering app-based on-demand mobility services. Both private cars and two-wheeler have experienced an ownership boom over the last ten years. No doubt, the resulting congestion, pollution and GHG emissions are impacting the quality of life in many Indian cities. Another challenge is that the sector’s regulatory environment is governed by multiple agencies at the central, state and city-level. While there are policies to promote the mobility of people rather than vehicles, the mandate to promote their implementation may not exist.

Against this backdrop, Mr. Nitin Desai, Shakti Board member facilitated a comprehensive discussion on the role of market regulatory mechanisms in enabling private transport service to meet transport needs in a more sustainable, equitable and accessible manner. Some of the key takeaways were:

- Over 16 lakh buses currently run in the country, of which 10% are owned by State Transport Undertakings and 90% by the private sector. As of now, policy making is geared towards only 10% owned by STUs. Now is the time to examine the remaining majority of the sector as well as the role it can play in enabling people shift to less carbon intensive modes.
- Two forms of IPTs exist in cities - Traditional IPTs i.e. shared autos and new mobility solutions i.e. IT- driven aggregator companies.
  - Traditional IPTs, are classified as an informal mode by transport authorities and are often viewed as a nuisance in the city. But they play a key role in meeting the transport demand, and in some scenarios, also run in direct competition to public transport. Much can be learned from how private modes of transport are servicing passengers better.
  - Looking beyond metropolises, it is important to acknowledge the role of IPT in meeting the transport needs of tier II and tier III cities.
  - It is important to build the capacity of transport departments departments to regulate new mobility solutions providers such as Ola, Uber and the incoming two-wheeler taxis. These modes of transport provide last mile connectivity, cater to demand in off-peak hours, and can usher in a behavioural shift, where people are willing to give up on private vehicles.
- The delivery of urban transport in India is fragmented and divided under various departments at the state and city level. Constituting an umbrella agency, which brings together all mobility issues, is a possible solution. Such an agency can act as a planner, regulator, integrator and facilitator for all modes of transport. Much can be learned from the Transport for London (TfL), a single authority that operates all the transport modes in the city. Such a system allows for comprehensive planning and cross-subsidy, if there is a need.
List of participating organizations

Action on Climate Today (OPM)
Alliance for an Energy Efficient Economy
Asian Development Research Institute
Bask Research Foundation
Bloomberg Philanthropies
C40
Carbon Disclosure Project
Caspian
Center for Study of Science, Technology and Policy
Centre for Budget and Governance Accountability
Centre for Green Mobility
Centre for Policy Research
Centre for Science and Environment
cKinetics
Clean Energy Access Network
Climate Bonds Initiative
Climate Policy Initiative
Confederation of Indian Industry
Council on Energy, Environment and Water
CUTS International - Consumer Unity & Trust Society
Delhi College of Arts & Commerce, University of Delhi
Development Alternatives
Dr BR Ambedkar University
Ernst & Young LLP
Forum for the Future
GIZ
Global Green Growth Institute
GOGLA
H&M
Hexi Mobility
ICLEI – Local Governments for Sustainability (South Asia)
IFC-Sustainable Business Advisory
IKEA Foundation
Indian Council for Research on International Economic Relations
Indian Institute of Technology-Delhi
Indian Institute of Technology-Madras
Indo-German Energy Forum-GIZ
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Pisces Foundation
Pluss Technology
PricewaterhouseCoopers
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Rocky Mountain Institute
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World Wide Fund for Nature