

# Unlocking the Potential of Demand-Side Management for Doubling Energy Efficiency improvements by 2030

14 May 2024, 9:00-16:30

Le Cirque, The Leela Palace, New Delhi

## Background

India's electricity landscape is rapidly evolving, driven by the need for sustainable and resilient power systems amidst growing demand. With the increasing penetration of renewable energy sources and the rise of electrification of energy use in demand sectors, such as electric mobility, the concept of demand flexibility has emerged as a crucial strategy for balancing supply and demand in the grid. Demand flexibility (DF) is increasingly becoming an important demand-side management (DSM) intervention that encompasses the ability of consumers to adjust their electricity usage in response to price signals, grid conditions, or environmental factors, thus optimizing resource utilization and enhancing grid stability. Leveraging demand-side resources such as smart appliances, energy storage systems, and demand response programs can not only enhance grid reliability but also empower consumers to manage their energy consumption more intelligently.

In India, electricity generation from renewable sources is on the rise, with a target to install 500 GW of non-fossil energy capacity by 2030. It is expected that the share of variable renewable energy (solar and wind) will be 430 GW by 2030. Achieving this ambitious target requires electricity grids with sufficient flexibility to sustain the variability of renewable electricity production. DISCOMs in Indian States are increasingly recognizing demand flexibility potential, developing programs, and working with authorities to implement necessary regulatory changes. National stakeholders have previously worked on a methodology for the estimation of demand flexibility potential, demonstrating a business case and model for DISCOMs.

This discussion focuses on the role of demand flexibility to unlock the demand side manage potential in India. The brainstorming workshop will convene stakeholders from government, industry and think tank to explore strategies, technologies, and policies for unlocking the full potential of demand flexibility in the country's energy transition journey and contributing towards doubling energy efficiency ambition.

## Objectives

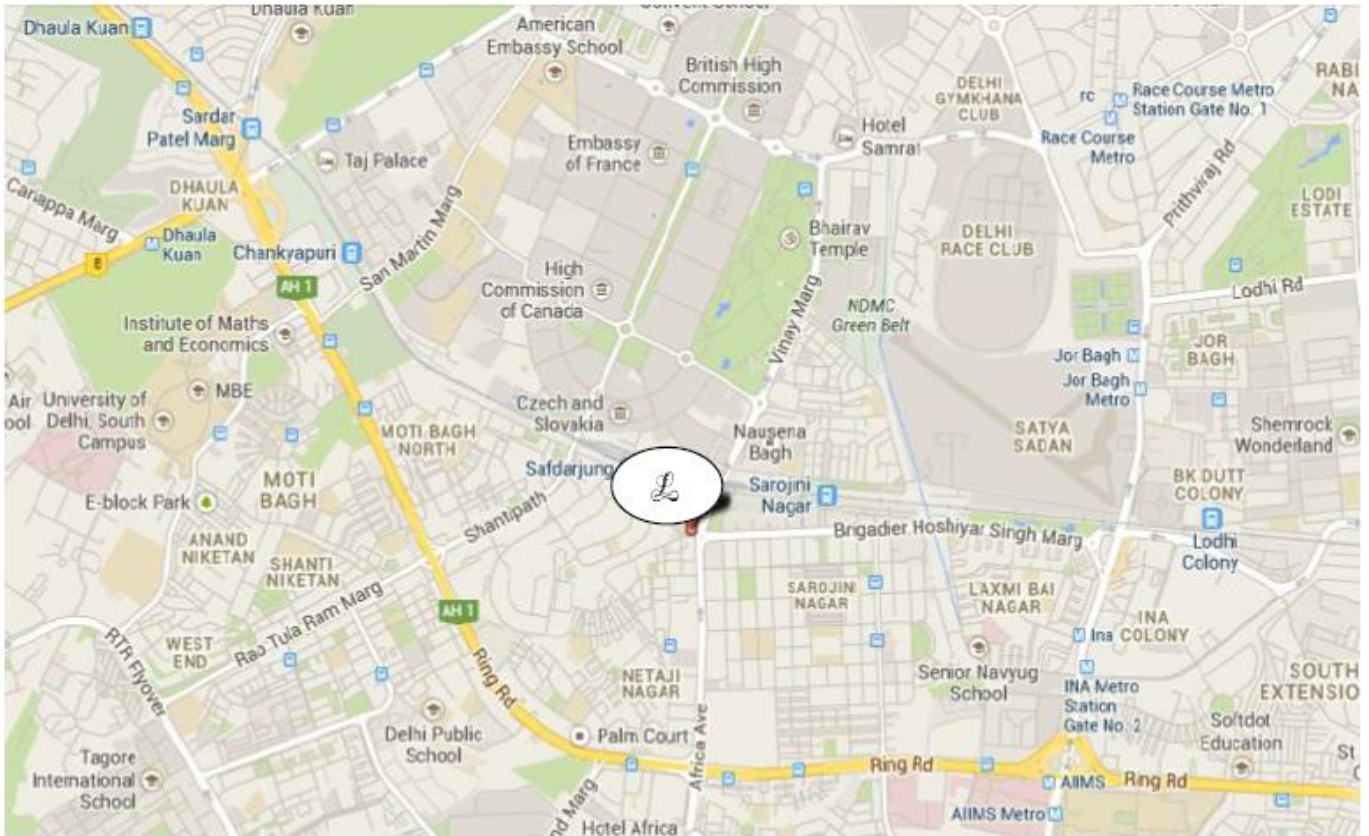
- Fostering a common understanding of opportunities for demand flexibility and building consensus among partners and DSM cells toward newer frameworks.
- Forging working relationships through a community of practice between the DSM cell consultants and the partners' community to support future collaboration and exchanges on data, tools and demand flexibility.
- Sharing opportunities and challenges on demand flexibility with BEE and EESL.
- Planning for a market-based national program on demand flexibility.

## AGENDA

9:30-9:35	<b>Introduction:</b> Mr. Brian Dean, Director Energy Transition, Sustainable Energy for All
9:35-9:45	<b>Keynote Remarks:</b> Shri Milind Deore, Secretary, Bureau of Energy Efficiency
9:45-10:15	<b>Special Opening Remarks:</b> <ul style="list-style-type: none"> <li>Shri S. C. Saxena, Executive Director &amp; Head, National Load Despatch Center, Grid-India</li> <li>Shri Abhishek Gupta, Head of International, Solar, Strategy &amp; Appliance, Energy Efficiency Services Limited</li> <li>Shri Satyendra R. Pandey, Member, Gujarat Electricity Regulatory Commission</li> </ul>
10:15 -11:10	<b>Deep Dive: Demand-side management and demand flexibility (part 1)</b> <ul style="list-style-type: none"> <li>Presentation: <ul style="list-style-type: none"> <li><i>Integrated supply and demand modelling, regulations and policy</i> (Mr. Mahesh Patankar, Founder and Managing Director; Mr. Kaustubh Arekar, Project Coordinator, MP Ensystems)</li> </ul> </li> <li>Reflections and experiences: <ul style="list-style-type: none"> <li>Mr. Jagabanta Ningthoujam, Principal; Mr. Arjun Gupta, Manager, RMI India</li> <li>Ms. Shalu Agarwal, Senior Programme Lead, CEEW</li> </ul> </li> <li>Open discussion</li> </ul>
11:10-11:30	<b>Tea Break and Networking</b>
11:30-12:15	<b>Deep Dive: Demand-side management and demand flexibility (part 2)</b> <ul style="list-style-type: none"> <li>Presentation: <ul style="list-style-type: none"> <li><i>End-use modelling for potential estimation, players in the market</i> (Mr. Pramod Singh, Director, Research and Programmes; Dr Brijesh Pandey, Senior Research Associate, AEEE)</li> </ul> </li> <li>Open discussion</li> </ul>
12:15-13:15	<b>DSM and Demand Flexibility Initiatives</b> DISCOMs present their work on DSM /DF, key challenges and learnings: <ul style="list-style-type: none"> <li>Dr Meenu Mishra, General manager, BSES Yamuna Power Ltd (BYPL)</li> <li>Mr. Syed Hasan Imam, Head of Group -Energy-as-a-Service (Marketing and Implementation), Tata Power Delhi Distribution Limited (TPDDL)</li> <li>Mr. Avinash Kumar, Assistant Vice President, BSES Rajdhani Power Limited (BRPL)</li> <li>Q&amp;A</li> </ul>
13:15-14:30	<b>Lunch</b>
14:30-15:00	<b>Reflections and experiences</b> <ul style="list-style-type: none"> <li>Pradeep Kumar, Principal Advisor, GreenTree</li> <li>Shweta Kulkarni, Researcher, Prayas (Energy Group)</li> <li>Abhishek Ranjan, Partner, EY Promethan</li> <li>Open discussion</li> </ul>
15:00-16:20	<b>Breakout Groups</b> Participants split into three groups and discuss: <ul style="list-style-type: none"> <li>Step 1 (40 min): Policy and regulatory imperatives in support of demand flexibility.</li> <li>Step 2 (40 min): Programme designs to hasten implementation</li> </ul>
16:20-16:40	<b>The Way Forward</b> <ul style="list-style-type: none"> <li>Open discussion on market opportunities for national program on demand flexibility</li> <li>Closing remarks: Brian Dean, Director, Energy Transitions, SEforALL</li> </ul>
16:40-18:00	<b>Networking Social</b>

## Venue

The workshop takes place in Le Cirque venue at The Leela Palace, Africa Ave, Diplomatic Enclave, Chanakyapuri, New Delhi, Delhi 110023.



In case of any questions, please contact:

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