

**EVENT DAY 3: 14 MARCH 2024 (THURSDAY)**

**SESSION-4**  
**ENERGY POSITIVE SMART BUILDINGS AND CAMPUSES**  
**(In Collaboration with USAID/SAREP)**



**Venue & Time**

Venue	<b>Regency - 1&amp;2, Hotel Lalit New Delhi</b>
Time	<b>India 11:00 ~ 13:00</b>

**Session Background**

Energy Positive Smart Buildings and Campuses integrate energy-efficient building design, seamless smart technology, and renewable energy sources, such as solar panels and wind turbines, to not just curtail energy consumption but also to generate excess energy. These smart buildings and campuses are equipped with renewable energy resources, energy storage systems, and electric vehicles featuring vehicle-to-grid functionalities, enabling them to disconnect from the grid and operate essential systems autonomously using stored energy for extended periods. Additionally, these forward-looking buildings and campuses have the capacity to export surplus electricity to the grid during peak hours and store excess energy when the grid experiences a surplus generation. It is imperative to elevate grid-interactive buildings and campuses to the forefront of sustainable development, emphasizing their pivotal role in demonstrating how living and working spaces can actively contribute to energy generation, thereby promoting a greener future.

In recent years, the paradigm of sustainable development has evolved, leading to groundbreaking concepts such as Energy Positive Smart Buildings and Campuses. The realization that our built environment can actively contribute to both energy reduction and generation has sparked a surge of interest and innovation. However, this transformative vision requires a collaborative effort to bridge the gap between theory and practice.

The workshop, organized by the United States Agency for International Development (USAID), in partnership with India Smart Grid Forum (ISGF), under its South Asia Regional Energy Partnership (SAREP) program, aims to unite thought leaders, architects, technology experts, and policymakers on a common platform. The workshop will explore the intricate web of energy-efficient building design, technology and building integration, and thermal energy storage sources that define energy positive smart buildings. Through engaging discussions and practical insights, the workshop endeavors to not only deepen the understanding of this concept but also to brainstorm on effective strategies for its widespread implementation. The valuable feedback and outcomes generated during the workshop will guide the path towards a future where our buildings actively participate in shaping a more sustainable and resilient world.

**Discussion Points**

1. Design and Architecture of Energy Positive and Grid Interactive Buildings
2. Energy Storage Systems – BESS, District Cooling Systems (DCS) with thermal energy storage
3. Policies and Incentives to promote Smart Grid-Interactive Buildings
4. Energy Positive Buildings and Campuses - Ongoing work under SAREP:
  - Grid Optimal Metrics for Building-Grid Integration
  - Integrated Design for Energy Positive and Grid Interactive Building-A Case Study
  - Enabling Policy - Role of Building Codes to mandate energy positive and grid interactive buildings
  - Emerging Technologies - Integration of RE, Storage, E-mobility in Buildings
  - Utility Perspective- Demand Flexibility Potential from Energy Positive Buildings



<b>11:00 ~ 11:15</b>	<b>Inaugural Session</b> <b>Welcome remarks and context setting: Apurva Chaturvedi</b> , Senior Clean Energy Specialist, Indo-Pacific Office, USAID India  <b>Special Remarks: Atul Kumar Bali</b> , Executive Director, and Director, NSGM-PMU
<b>11:15 ~ 12:15</b>	<b>Panel Discussion</b> <b>Connecting the Dots for Energy Positive Buildings and Campuses. Experience Sharing by Key Stakeholders</b>
<b>Chair</b>	<b>Anand Kumar</b> , Chairperson, Delhi Real Estate Regulatory Authority
<b>Moderator</b>	<b>Tanmay Tathagat</b> , USAID's SAREP
<b>Panellists</b>	<ol style="list-style-type: none"> <li>1. <b>Mili Majumdar</b>, Managing Director, GBCI</li> <li>2. <b>Abhishek Gupta</b>, Head- International, Strategy, Appliances, Rooftop Solar, and PE&amp;A, EESL</li> <li>3. <b>Sujay Saha</b>, Head - ESCO &amp; HA, New Business Services, Tata Power Company Ltd</li> <li>4. <b>Girish Ghatikar</b>, Advisor, ISGF</li> </ol>
<b>12:15 ~ 13:00</b>	<b>Thematic Discussion</b> <b>Elements of Energy Positive Buildings and Campuses</b>
<b>Moderator</b>	<b>Sumedh Agarwal</b> , Deputy Chief of Party, USAID's SAREP
<b>Thematic Presentation</b>	<b>Manoj Kumar</b> , Executive Engineer (Electrical), Nalanda University
<b>Panellists</b>	<ol style="list-style-type: none"> <li>1. <b>Saket Sarraf</b>, Founder and Principal, ps Collective</li> <li>2. <b>Shivali Dwivedi</b>, Energy Technology Specialist, USAID's SAREP</li> <li>3. <b>Munish Sharma</b>, AVP, BSES Rajdhani Power Ltd</li> <li>4. <b>Tarun Garg</b>, Principal, RMI India Foundation</li> <li>5. <b>Manoj Kumar</b>, Executive Engineer (Electrical), Nalanda University</li> </ol>
<b>Key Takeaways by USAID/SAREP</b>	

**Session Coordinator:** Bala Karnam | +91 81212 76498 | bala.k@indiasmartgrid.org