



# EEAP WEBINAR 4: SUMMARY NOTE EVALUATION OF ENERGY POLICIES AND PROGRAMS IN INDIA

On August 30, 2023, Energy Evaluation Asia Pacific (EEAP) conducted the fourth installment of its Webinar Series. The webinar, titled 'Evaluation of Energy Policies and Programs in India,' featured presentations from three distinguished speakers hailing from India: Balawant Joshi, Managing Director of Idam Infrastructure Advisory Private Limited; Soumya Prasad Garnaik, Specialist & Communities of Practice Lead at the Global Green Growth Institute (GGGI); and Aditya Chunekar, Fellow at Prayas (Energy Group). The engaging discussions centered on the evaluation of India's Renewable and Energy Efficiency Policies and Programs, providing valuable insights into the nation's energy landscape.

### **SPEAKERS**



Soumya Prasad Garnaik

Specialist Global Green Growth Institute



Balawant Joshi

Managing Director Idam Infrastructure Advisory Private Limited



Aditya Chunekar

Felllow Prayas (Energy Group)



**Edward Vine** 

Member Steering Committee Energy Evaluation Asia



### **Webinar Agenda**

Time (IST)	Sessions/Speakers
9:00-9:05 am	Welcome Remarks & Context Setting  Edward Vine, Affiliate, Lawrence Berkeley National Laboratory (LBNL) and Steering  Committee Member, Energy Evaluation Asia Pacific (EEAP)
9:00-9:50 am	<ol> <li>Balawant Joshi, Managing Director, Idam Infrastructure Advisory Private Limited, India "Evaluation of Renewable Energy Policies in India"</li> <li>Soumya Prasad Garnaik, Specialist &amp; Communities of Practice Lead (Green Building, Industry and Energy Efficiency) in Global Green Growth Institute (GGGI) "Perform, Achieve &amp; Trade (PAT) Program: A Market Transformation initiative for Industrial Sector under India's Energy Conservation Act"</li> <li>Aditya Chunekar, Fellow, Prayas (Energy Group) "Evaluation of Energy Efficiency Policies and Programs in India"</li> </ol>
9:50- 10:00 am	Moderated Audience Q&A  Moderated by Edward Vine, Affiliate, Lawrence Berkeley National Laboratory (LBNL) and Steering Committee Member, Energy Evaluation Asia Pacific (EEAP)
10:00 am	Concluding Comments & Vote of thanks  Edward Vine , Affiliate, Lawrence Berkeley National Laboratory (LBNL) and Steering  Committee Member, Energy Evaluation Asia Pacific (EEAP)

### **Introduction and Context Setting**

Edward Vine, Affiliate, Lawrence Berkeley National Laboratory (LBNL) and Steering Committee Member, Energy Evaluation Asia Pacific (EEAP)

Edward Vine, a member of the Steering Committee for EEAP, extended a warm welcome to participants and speakers and provided an introduction to EEAP. Established as a non-profit organization in 2018, EEAP is driven by a clear mission: to take a leadership role in advancing the practice and capacity for objective evaluation within the energy efficiency and renewable energy program and policy sphere.

EEAP actively pursues its mission by organizing a range of initiatives, including workshops, conferences, webinars, websites, and other web-based tools. These efforts are strategically designed to nurture the growth of self-sustaining evaluation communities throughout the Asia-Pacific region.



At the helm of EEAP's leadership are two distinguished committees: a nine-member strong Steering Committee and a robust Advisory Committee comprising 25 members representing 18 countries. This collaborative structure ensures that EEAP effectively fulfills its mission and promotes the widespread adoption of rigorous evaluation practices in the energy efficiency and renewable energy sectors.

Additionally, Ed shared an exciting lineup of upcoming webinars organized by EEAP and encouraged participants to stay informed about these events by following EEAP's website and social media channels.

#### **List of Upcoming Webinars**

Evaluation of Energy Programs in Australia

Evaluation of Energy Programs in Chile

Evaluation of Energy Programs in New Zealand

Evaluation of SDG 7- Affordable, reliable, sustainable and and modern energy for all

Ed also provided valuable context for the webinar, underscoring India's significance as a major player in energy consumption and its active engagement in energy efficiency and renewable energy initiatives. He highlighted India's ambitious goals for greenhouse gas emission reduction and the growing interest in assessing India's progress toward these targets. This webinar aims to shed light on the experiences and insights garnered from existing energy evaluations, particularly their influence on energy policies within India.

### Presentation by Speakers

**Evaluation of Renewable Energy Policies in India**Balawant Joshi, Managing Director, Idam Infrastructure Advisory
Private Limited, India

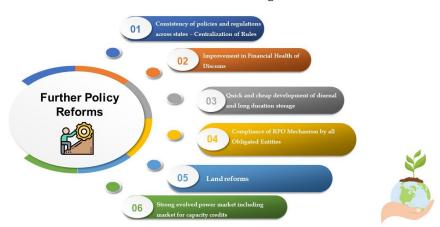
Mr. Joshi began his presentation by highlighting the relatively nascent state of evaluation practices in India and that policies are rarely evaluated in an objective manner. Drawing upon his extensive



experience in the renewable energy sector, Balawant shared that renewable energy in India is considered as one of the success stories with renewable energy accounting for a substantial 20% of the energy mix. Recounting the historical development of the renewable energy sector in India, he explained that the biggest policy reforms took place in India in 2003 with the *Electricity Act*, which considered renewable energy as a specific



energy resource for the first time and provided specific provisions to promote renewable energy. However, he noted that the true catalyst for change came with the Paris Agreement, wherein India committed to achieving a renewable energy capacity of 175 gigawatts by 2022. While significant progress has been achieved, India fell short of this target by 32%. Balawant identified various factors contributing to this shortfall, including regional disparities, diverse state priorities, sector-specific challenges, land acquisition issues, competitive bidding dynamics, and policy inconsistencies. Furthermore, Balawant delved into the policy reforms essential to meeting India's ambitious commitment of adding 500 gigawatts of non-fossil capacity by 2030, a pledge made during COP26.



What is further needed to ensure success of 500GW target?

## Perform, Achieve & Trade (PAT) Program : A Market Transformation initiative for Industrial Sector under India's Energy Conservation Act

Soumya Prasad Garnaik, Specialist & Communities of Practice Lead (Green Building, Industry and Energy Efficiency) in Global Green Growth Institute (GGGI)

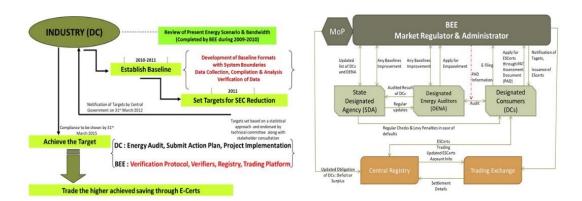
Mr. Garnaik's presentation centered on the "Perform, Achieve & Trade" (PAT) program, a flagship initiative of the Government of India. This program serves as a market-based regulatory



instrument aimed at reducing specific energy consumption in industries while enhancing cost-effectiveness through the trade of energy-saving certificates. During his presentation, Soumya explained the program's framework and overarching objective: to transform the energy-intensive industrial sector into a more energy-efficient one.



### **Program Framework & Institutional Structure**



He also outlined the evolution of India's journey towards energy efficiency, citing the pivotal Energy Efficiency Act of 2001 as a catalyst for change. This act, enacted in 2001, progressively influenced energy intensity, with significant strides made since 2008, primarily facilitated by the implementation of the PAT program.

Furthermore, Soumya underlined the program's notable achievements across two cycles, which included substantial energy savings, emissions reduction, skill development, increased investment, and financial savings. He also highlighted the concerns identified during the program's evaluation, touching on issues related to scheme administration, data quality, methodological intricacies, as well as the quantity and quality of verifiers.

In conclusion, Soumya emphasized that the lessons gleaned from this experience could inform more effective planning for subsequent cycles of the PAT program and serve as a valuable reference for other countries contemplating the design and execution of market-based approaches to bolster emission reduction initiatives.

### **Evaluation of Energy Efficiency Policies Programs in India**

Aditya Chunekar, Fellow, Prayas (Energy Group)

Mr. Chunekar's presentation delved into the broader landscape of energy efficiency, encompassing policy, regulatory frameworks, and institutional structures, while highlighting their role in leveraging evaluation for energy efficiency enhancement. He began by introducing the Bureau of Energy Efficiency (BEE), the pivotal agency overseeing Energy Efficiency and

Conservation policies and regulations in India, which was established in 2002 under the Energy Conservation Act.

During his presentation, Aditya highlighted that while the Energy Conservation Act doesn't explicitly mention evaluation, it places emphasis on monitoring and verification. He further noted that BEE issues an annual report titled "Impact of Energy Efficiency Measures" and that the focus on process evaluation remains relatively limited.



Aditya went on to share valuable insights gathered from an independent assessment of the Unnat Jyoti by Affordable Led for All (UJALA) Program, which centers around LED bulbs

and is implemented by the Energy Efficiency Services Ltd. This assessment played a pivotal role in identifying critical findings and lessons for enhancing the program, exemplified by issues like bulb failure and exchange rates brought to light by the evaluation.

Evaluation of UJALA (example of process improvement)

Bulb Failure Rate

16%

14%

14%

10%

8%

6%

4%

2%

10%

Pune

Lucknow Puducherry

10%

Pune

Lucknow Puducherry

Some bulbs failed but very few got replaced

Moreover, he highlighted the notable dearth of evaluation in utility Demand

Side Management (DSM) programs, even in the case of pilot initiatives. In conclusion, Aditya advocated for the inclusion of evaluation as an integral component of policy and program design. He suggested that State Electricity Regulatory Commissions (SERCs) should consider issuing regulations pertaining to evaluation for utility DSM programs, thereby fostering a culture of systematic assessment and improvement within the energy efficiency landscape.



### **FOLLOW US:**

Click the icons below to be taken to our social media pages - make sure to 'follow' or 'subscribe'!







### SUBSCRIBE TO OUR MAILING LIST:

Click the icon below to subscribe to the EEAP newsletter. We will email you with events and opportunities for the energy evaluation community!

