



SUMMARY NOTES

EEAP WEBINAR 22

Advancing Appliance Energy Efficiency Frameworks Across Asia: Evaluation of Policies and Impacts in China, India, and Indonesia

On October 23, 2025, the Energy Evaluation Asia Pacific (EEAP) hosted its 22nd webinar, focusing on the topic of 'Advancing Appliance Energy Efficiency Frameworks Across Asia: Evaluation of Policies and Impacts in China, India, and Indonesia'.

The session featured three speakers from CLASP, an international nonprofit organization and a leading global authority on efficient appliances' role in fighting climate change and improving people's lives.:

- **Hu Bo**, Manager Technical, China, CLASP
- **Kynan Tjandaputra**, Senior Associate Climate, Indonesia, CLASP
- **Kishore Kumar**, Senior Manager, India, CLASP

Energy-efficient appliances play a critical role in reducing energy demand, cutting emissions, and supporting countries in meeting their climate and sustainable development goals. Across Asia, governments are strengthening their policy frameworks, such as standards, labeling, and incentive programs, to promote the adoption of efficient technologies. However, to ensure these efforts deliver the intended benefits, robust evaluation of policies and their impacts is essential. This webinar explored how evidence-based evaluation can enhance the design and implementation of appliance efficiency frameworks, inform policy adjustments, and demonstrate their contribution to national and regional energy transitions. By examining experiences from major Asian economies, the discussion highlighted lessons, challenges, and opportunities for advancing appliance energy efficiency across the region.

This document summarizes the key discussion points from the webinar.

Webinar Agenda

Time (IST)	Sessions/Speakers
8:30-8:35 AM	Welcome Remarks & Context Setting <i>Edward Vine, Affiliate, Lawrence Berkeley National Laboratory (LBNL) and Steering Committee Member, Energy Evaluation Asia Pacific (EEAP)</i>

8:35-9:25 AM	Presenters 1. Hu Bo , Manager Technical, China, CLASP <i>Discussion Topic: “China’s Mandatory Appliance Policies and Their Impact Assessment”</i> 2. Kynan Tjandaputra , Senior Associate Climate, Indonesia, CLASP <i>Discussion Topic: “Evaluating Policy Impacts: Indonesia’s Experience in Energy-Efficient Appliances”</i> 3. Kishore Kumar , Senior Manager, India, CLASP <i>Discussion Topic: “Transforming India’s Appliance Efficiency Landscape to Achieve Climate Goals”</i>
9:25-9:40 AM	Moderated Audience Q&A Moderated by Edward Vine , Affiliate, Lawrence Berkeley National Laboratory (LBNL) and Steering Committee Member, Energy Evaluation Asia Pacific (EEAP)
9:45 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)



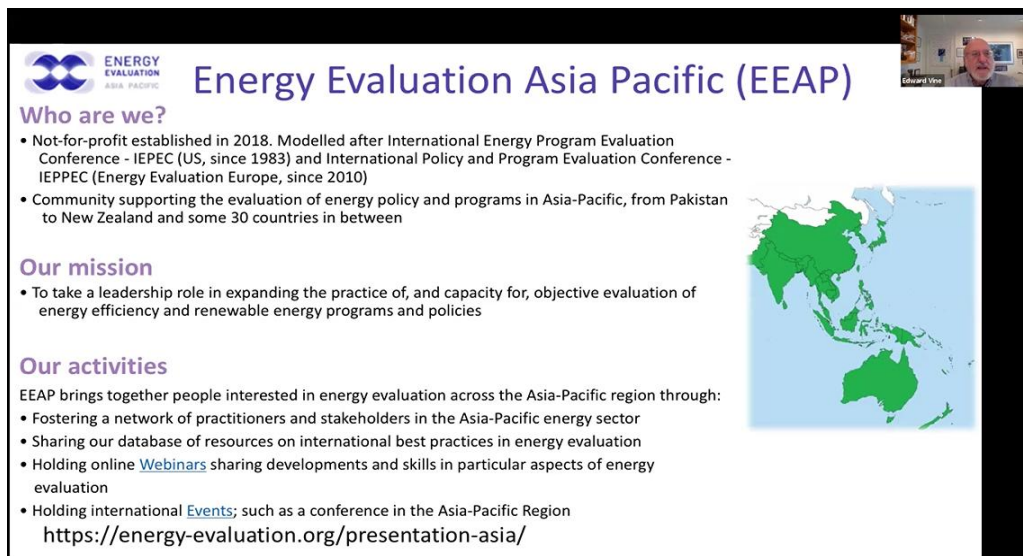
Ed greeted the participants and speakers, introduced EEAP and provided a context for the webinar.

Introduction to Energy Evaluation Asia Pacific (EEAP)

Ed introduced EEAP to the participants. Established as a non-profit organization in 2018, and modelled after IEPEC (US, since 1983) and IEPPEC (Europe, since 2010), EEAP is focused on expanding the practice of objective evaluation in the Asia Pacific region. EEAP's mission is to lead in expanding evaluation practices, building capacity, and understanding the impact of energy efficiency and renewable energy programs and policies, aiming to provide a strong evidence basis for continuous improvement in these areas.

EEAP fosters exchange and interaction among evaluators, NGOs, government agencies, and academics to promote the value of energy evaluation and capacity building. EEAP offers a database of resources on best practices, holds webinars on various topics, and organizes international events and conferences, particularly in relation to the Sustainable Development

Goals (SDGs). EEAP brings stakeholders together to support data-driven decision-making in the energy sector. One of its main objectives is capacity building, especially in the rapidly growing Asia Pacific region.



Energy Evaluation Asia Pacific (EEAP)

Who are we?

- Not-for-profit established in 2018. Modelled after International Energy Program Evaluation Conference - IEPEC (US, since 1983) and International Policy and Program Evaluation Conference - IEPPEC (Energy Evaluation Europe, since 2010)
- Community supporting the evaluation of energy policy and programs in Asia-Pacific, from Pakistan to New Zealand and some 30 countries in between

Our mission

- To take a leadership role in expanding the practice of, and capacity for, objective evaluation of energy efficiency and renewable energy programs and policies

Our activities

EEAP brings together people interested in energy evaluation across the Asia-Pacific region through:

- Fostering a network of practitioners and stakeholders in the Asia-Pacific energy sector
- Sharing our database of resources on international best practices in energy evaluation
- Holding online [Webinars](#) sharing developments and skills in particular aspects of energy evaluation
- Holding international [Events](#); such as a conference in the Asia-Pacific Region

<https://energy-evaluation.org/presentation-asia/>



Ed expressed enthusiasm for the webinar’s focus on appliance energy efficiency, noting that while previous EEAP webinars had touched on the topic, this was the first time all three presenters were dedicated to it. He praised CLASP for its global leadership and expansion beyond the U.S. and Europe and shared his admiration for the organization’s ability to work across diverse regions and cultures. He also acknowledged CLASP’s strong leadership and its impactful work in large economies like China, India, and Indonesia.

Presentation by Speakers

1. “China’s Mandatory Appliance Policies and Their Impact Assessment”

Hu Bo, Manager Technical, China, CLASP

Bo Hu, representing CLASP China, presented an in-depth analysis of China’s mandatory appliance energy efficiency policies and their impact assessment using the MAPSI tool. He explained that appliances account for approximately 38% of China’s total carbon emissions, with motors, cooling systems, and lighting being the largest contributors. Bo discussed the evolution of China’s MEPS, noting a trend toward integrating multiple standards to cover broader product categories. He showcased the impact of the GB21435-2019 standard for air conditioners, which led to the rapid phase-out of inefficient fixed-speed units. Using MAPSI, Bo projected that cumulative emission reductions could reach up to 800 megatons of CO₂ by 2060, highlighting the importance of early and ambitious policy implementation.



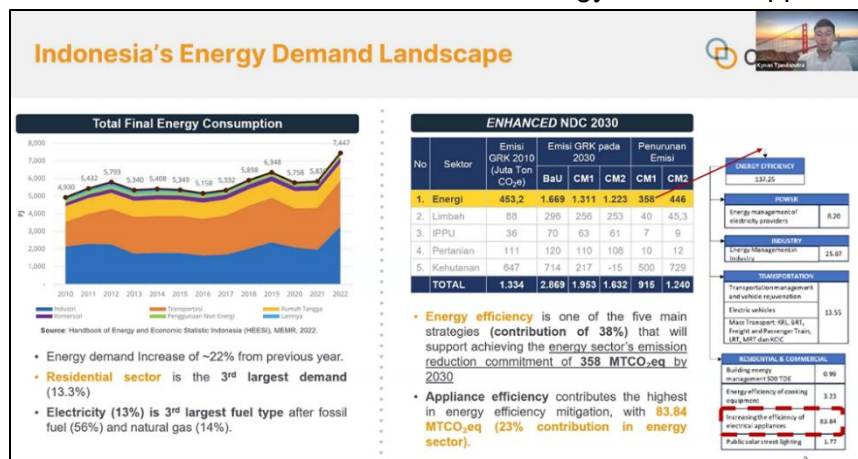
Main Takeaways:

- China's appliance efficiency policies are critical to achieving its 2060 carbon neutrality goal, given the sector's significant share of emissions.
- The MAPSI tool enables robust modelling and impact assessment, supporting evidence-based policy revisions and future projections.

2. "Evaluating Policy Impacts: Indonesia's Experience in Energy-Efficient Appliances"

Kynan Tjandaputra, Senior Associate Climate, Indonesia, CLASP

Kynan Tjandaputra, from CLASP Indonesia shared the country's progress in developing appliance energy efficiency policies since 2010, in close collaboration with the Ministry of Energy and Mineral Resources (MEMR). He emphasized the vital role of data-driven policymaking, citing a nationwide residential energy use survey conducted in 2018, supported by MEMR, which identified rice cookers as the most energy-intensive appliance in Indonesian households,



reflecting the nation's unique cultural context. Kynan shared MEMR's proactive efforts to address the challenge of "dumping" of inefficient appliances to the country, noting that CLASP's Southeast Asia AC Dumping Study provided valuable insights that informed and increased the government's confidence to strengthen air conditioner standards in 2023. He also

highlighted the importance of stakeholder engagement and technical studies to overcome resistance and improve policy effectiveness

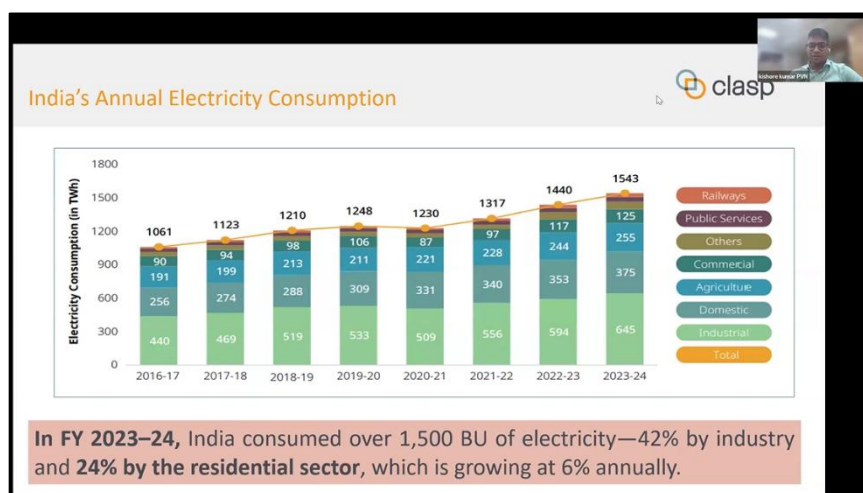
Main Takeaways:

- Appliance efficiency policies must be tailored to local cultural and market contexts, as shown by Indonesia's focus on rice cookers.
- Regional benchmarking and anti-dumping measures are essential to prevent the influx of obsolete appliances and ensure policy integrity.

3. “Transforming India’s Appliance Efficiency Landscape to Achieve Climate Goals”

Kishore Kumar, Senior Manager, India, CLASP

Kishore Kumar, Senior Manager at CLASP India, presented India’s comprehensive Standard & Labeling Program, which began in 2006 and now covers 41 appliances, with plans to expand to 50 by 2030. He highlighted India’s ambitious climate and energy goals, including becoming a net-zero economy by 2070 and doubling energy efficiency improvement rates by 2030, as committed in the G20. Kishore shared impressive impact metrics, including 691 billion kWh of electricity savings and 543 million tons of CO₂ emission reductions since the program’s inception. He



emphasized the importance of compliance mechanisms such as check testing, challenge testing, and market surveillance, which have been scaled up significantly to ensure manufacturers adhere to efficiency standards. India’s leadership in harmonizing standards with neighboring countries further demonstrates its commitment to regional collaboration.

Key Takeaways:

- India’s appliance efficiency program has delivered substantial environmental and economic benefits, with billions in energy savings and emissions reductions.
- Strong compliance and regional leadership are key to sustaining and expanding the impact of energy efficiency policies.

Presenters' Bio



Hu Bo

Manager Technical, CLASP, China

Hu Bo is a Technical Manager for CLASP China Program, responsible for providing comprehensive technical support in MEPS research, emission reduction modeling, data analysis, and network building. His professional career began in 2007 and focuses on energy using product MEPS and labelling research, promoting energy efficiency market transformation, facilitating regional and international energy efficiency cooperation. He holds a Bachelor's degree in Environmental Engineering and a Master's degree in Safety Technology and Engineering from the University of Science and Technology, Beijing. In his personal interests, he enjoys electronic design, cooking and photography.



Kynan Tjandaputra

Senior Associate Climate, CLASP, Indonesia

Kynan Tjandaputra is a Senior Associate on CLASP's Climate team, serving as the technical expert and program implementer for CLASP's Indonesia program. He works on various policy developments, compliance processes, and market transformation initiatives, with a particular focus on cooling. Over the past three years, he has led national efforts to advance energy efficiency regulations and build strong partnerships and trust with local stakeholders.



Kishore Kumar

Senior Manager, Climate, CLASP, India

Kishore Kumar is a Senior Manager at CLASP with over 15 years of international experience in energy efficiency, climate action, and renewable energy. At CLASP, he leads high-impact initiatives advancing appliance efficiency and supporting national climate goals. Previously, he worked with the United Nations Development Programme (UNDP) and the Bureau of Energy Efficiency (BEE) in India. Kishore has contributed to over 30 appliance efficiency policies across India and globally, driving market transformation, strengthening compliance systems, and supporting implementation efforts in India, south asia and Southeast Asian countries. He has collaborated extensively with the India's Ministry of Power, philanthropic organizations, and leading manufacturers to accelerate sustainable energy transitions. He holds graduate and postgraduate degrees in Electrical & Electronics Engineering and Energy Systems.

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