



SUMMARY NOTES

EEAP WEBINAR 18

Evaluating Energy Efficiency in Asia Pacific: Technologies, Behaviors, and the Role of Evidence

On May 28, 2025, the Energy Evaluation Asia Pacific (EEAP) hosted its 18th webinar, focusing on the evaluation of energy efficiency in the Asia Pacific region, with a particular emphasis on technologies, behaviors, and the role of evidence in shaping effective energy policy.

The session featured two distinguished speakers:

- **Alexander Ablaza**, CEO, Climargy; Chair, Philippine Energy Efficiency Alliance and Asia-Pacific ESCO Industry Alliance
- **Sanjana Gorti**, Director, Air and Water Labs, J-PAL South Asia

Edward Vine opened the session by introducing EEAP's mission to promote objective evaluation of energy efficiency and renewable energy programs across the region. He highlighted the importance of behavioral science in energy policy and introduced the Eval Torch initiative as a global symbol of evaluation's role in sustainable development.

Alexander Ablaza presented on the growth and transformation of the ESCO market in the Philippines. He emphasized the need to treat energy efficiency as a primary energy resource and outlined the investment, policy, and institutional frameworks required to scale up implementation. Ablaza also discussed the role of measurement and verification in ensuring accountability and attracting private capital.

Sanjana Gorti shared evidence from randomized controlled trials conducted by J-PAL South Asia, demonstrating how behavioral interventions, smart metering, and real-time pricing can influence energy consumption. She emphasized the importance of rigorous evaluation in understanding both the intended and unintended impacts of energy efficiency programs and called for greater collaboration between researchers, governments, and civil society.

The webinar offered a rich exploration of energy efficiency strategies and evaluation methodologies, providing valuable insights for policymakers, researchers, and practitioners working to advance sustainable energy systems in the Asia Pacific region.

This document summarizes the key discussion points from the webinar.



Webinar Agenda

Time (Bangkok)	Sessions/Speakers
10:00-10:05 AM	<p>Welcome Remarks & Context Setting</p> <p><i>Edward Vine</i>, Affiliate, Lawrence Berkeley National Laboratory (LBNL) and Steering Committee Member, Energy Evaluation Asia Pacific (EEAP)</p>
10:05-10:40 AM	<p>Presenters</p> <p>1. Alexander Ablaza, President, Philippine Energy Efficiency Alliance (PE2) and Chief Executive Officer, Climargy Inc</p> <p><i>Discussion Topic: “The ESCO Market in the Philippines: New Frontier for Evaluators”</i></p> <p>2. Sanjana Gorti, Lead - Air & Water Labs, J-PAL South Asia</p> <p><i>Discussion Topic: “Social Norms and Smart Metering for Reducing Electricity Use: Evidence from Energy Studies”</i></p>
10:40-10:55 AM	<p>Moderated Audience Q&A</p> <p>Moderated by <i>Edward Vine</i>, Affiliate, Lawrence Berkeley National Laboratory (LBNL) and Steering Committee Member, Energy Evaluation Asia Pacific (EEAP)</p>
11:00 AM	<p>Concluding Comments & Vote of thanks</p> <p><i>Edward Vine</i>, Affiliate, Lawrence Berkeley National Laboratory (LBNL) and Steering Committee Member, Energy Evaluation Asia Pacific (EEAP)</p>

Introduction and Context Setting

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



Ed Vine, a member of the Steering Committee for EEAP, greeted the participants and speakers, introduced EEAP and provided a context of 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.

Ed also informed the audience that EEAP is planning to have a conference in Indonesia this year. The details will be shared on EEAP's website and social media once the details are confirmed.

Ed also informed the participants about the Eval Torch initiative, which EEAP is actively involved in. This initiative aims to unite the evaluation community to contribute to a more just and sustainable world by promoting the use of evaluation to address global challenges. The Eval Torch symbolizes a call to action for evaluators worldwide.

Ed emphasized the growing importance of behavioral science in energy efficiency. He referenced the American Council for an Energy-Efficient Economy's (ACEEE) work on no-cost behavioral science support for energy challenges, particularly in transportation, buildings, and industry. He expressed enthusiasm for the webinar's focus on ESCO markets and behavioral interventions, areas in which he has over 25 years of experience.



- **#EvalTorch is a symbol and a call to action, uniting the evaluation community to build a future where evaluation contributes to a more just and sustainable world. Starting its journey during the International Year of Evaluation in 2015, #EvalTorch carried the light of influential and transformative evaluation to over 70 countries and 92 events.**
- **Now reignited, #EvalTorch is travelling the world once again to celebrate the progress made and inspire action to make evaluation future-fit to address global challenges and opportunities.**

Presentation by Speakers

1. The ESCO Market in the Philippines: New Frontier for Evaluators

Alexander Ablaza, President, Philippine Energy Efficiency Alliance (PE2) and Chief Executive Officer, Climargy Inc



Alexander Ablaza discussed the development and future of the Energy Service Company (ESCO) market in the Philippines. As a leader of several nonprofit organizations, Ablaza emphasized the critical role of ESCOs in bridging the country's substantial energy efficiency investment gap. He outlined the mission of the Philippine Energy Efficiency Alliance (PE2), which aims to position energy efficiency as the "first fuel" in national energy strategies. Ablaza highlighted the need to mobilize approximately \$243 billion in investments by 2040 to reduce energy consumption by 182 million tons of oil equivalent. This would enhance energy security, reduce dependence on imported fossil fuels, generate over 9 million green jobs, and avoid \$720 billion in end-use energy costs.

Philippines: Economic and development impacts of reducing 182 Mtoe in final energy consumption through EE&C by 2040





Economic	Energy Security	Climate Change Mitigation
<ul style="list-style-type: none"> USD 720 billion in end-use savings Reduced dependence on imported fossil fuels Incremental GDP growth 9 million green jobs Over 500% Gov't recovery of fiscal incentives through additional tax revenues 	<ul style="list-style-type: none"> 45,900 MW deferred energy infrastructure capital requirements for energy production, transmission and distribution Decelerated rise in energy prices 	<ul style="list-style-type: none"> Up to 1.7 GtCO₂e in greenhouse gas emission reduction Contributing to Paris climate agreement obligations Attracts climate funding

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He traced the evolution of energy efficiency legislation in the Philippines, culminating in the passage of Republic Act 11285 in 2019. This law institutionalized energy efficiency and conservation, introduced mandatory energy audits, and established performance standards for buildings, vehicles, and appliances. It also created a framework for certifying ESCOs and energy managers, and included both fiscal and non-fiscal incentives, as well as penalties for non-compliance.

Ablaza highlighted the importance of measurement and verification (M&V) in the success of energy efficiency initiatives. The Philippine Energy Efficiency and Conservation Act mandates energy audits, performance benchmarks, and the use of certified energy managers and ESCOs to ensure accountability and transparency. These evaluation mechanisms are essential for tracking progress, verifying energy savings, and building investor confidence in energy efficiency as a viable asset class.

He detailed the structure and growth of the ESCO market, noting the increasing number of certified ESCOs and the diversification of technologies they support. Ablaza also introduced Climargy, a private-sector super ESCO aggregator, which pools and finances energy efficiency projects across various sectors.

In closing, Ablaza underscored the importance of a supportive policy environment and the need for innovative financing mechanisms to scale up energy efficiency investments. He advocated for the removal of energy subsidies that distort market signals and hinder private investment, and called for continued collaboration among stakeholders to accelerate the clean energy transition in the Asia-Pacific region.

Main Takeaways:

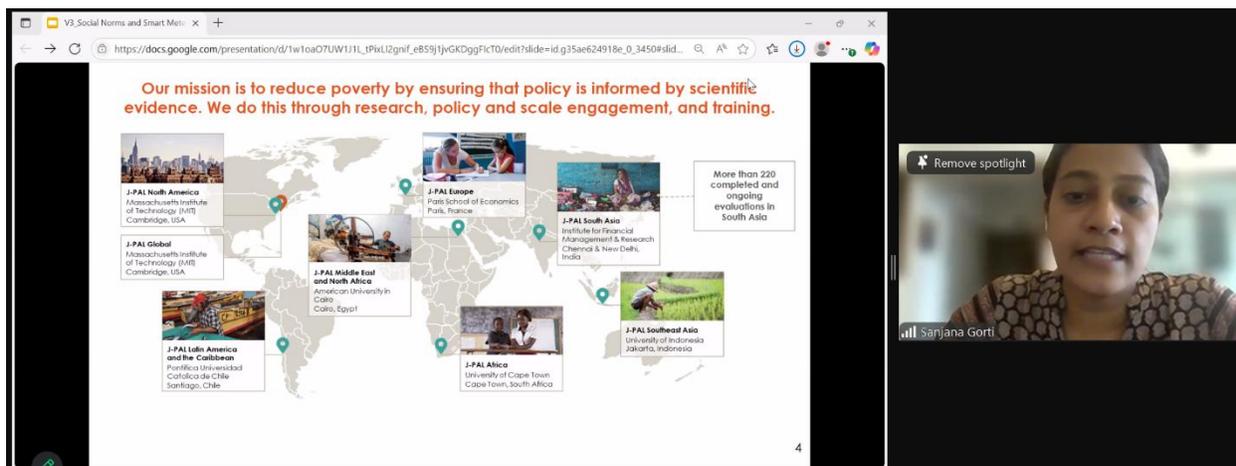
- **Energy Efficiency as a Strategic Priority:** Energy efficiency should be treated as a primary energy resource, requiring large-scale investment and policy support to drive economic growth, reduce emissions, and enhance energy security in the Philippines.
- **Measurement and Evaluation as Enablers:** Measurement, verification, and evaluation play a critical role in ensuring accountability, verifying energy savings, and building investor confidence—making them essential components of effective energy efficiency implementation.

Social Norms and Smart Metering for Reducing Electricity Use: Evidence from Energy Studies



Sanjana Gorti, Lead - Air & Water Labs, J-PAL South Asia

Sanjana Gorti, who leads J-PAL South Asia's air and water labs, delivered an insightful presentation on the role of evidence-based research and policy in addressing energy and environmental challenges in South Asia. She emphasized the importance of randomized controlled trials (RCTs) in evaluating the effectiveness of interventions aimed at reducing energy consumption and improving efficiency.



Our mission is to reduce poverty by ensuring that policy is informed by scientific evidence. We do this through research, policy and scale engagement, and training.

More than 220 completed and ongoing evaluations in South Asia

J-PAL South Asia: Institute for Financial Management & Research, Chennai & New Delhi, India

J-PAL Africa: University of Cape Town, Cape Town, South Africa

J-PAL Southeast Asia: University of Indonesia, Jakarta, Indonesia

J-PAL Middle East and North Africa: American University in Cairo, Cairo, Egypt

J-PAL Latin America and the Caribbean: Pontificia Universidad Católica de Chile, Santiago, Chile

J-PAL Global: Massachusetts Institute of Technology (MIT), Cambridge, USA

J-PAL North America: Massachusetts Institute of Technology (MIT), Cambridge, USA

J-PAL Europe: Paris School of Economics, Paris, France

Sanjana Gorti

Sanjana presented findings from several key studies:

Social Comparisons to Reduce Overconsumption: In New Delhi, households that received weekly reports comparing their electricity use to that of neighbors, along with conservation tips, reduced their electricity consumption by 7%. However, when financial incentives were added, the effect disappeared, suggesting that monetary rewards may undermine intrinsic motivation.

Smart Metering and Prepaid Meters: A study in Cape Town showed that households switching to prepaid meters reduced electricity use by 13% and improved payment behavior. These effects persisted for at least a year, demonstrating the potential of prepaid systems to enhance energy management.

Real-Time Pricing: In Japan, dynamic pricing notifications led to more sustained reductions in electricity use than social motivation messaging. Households continued conserving energy even after the intervention ended.

Information Campaigns and Subsidies: In Gujarat, energy audits and government-sponsored engineers led to a 9.5% increase in energy consumption due to expanded production, highlighting a potential rebound effect, where efficiency gains lead to increased usage.

Sanjana emphasized the importance of collaboration across sectors, including governments, civil society, and research institutions, to integrate evidence into real-world policymaking. She encouraged partnerships to scale effective solutions and address climate and energy challenges more systematically.

Main Takeaways:

1. **Behavioral interventions**, such as social comparisons and dynamic pricing, can effectively reduce energy use.
2. **Smart metering** improves both energy efficiency and payment compliance, especially in low-income settings.
3. **Evaluation is essential** to understanding both intended and unintended impacts of energy efficiency programs, such as rebound effects.

Presenters' Bio

Alexander Ablaza,

President, Philippine Energy Efficiency Alliance (PE2) and Chief Executive Officer, Climargy Inc

Alexander currently serves as Chief Executive Officer at Climargy Inc. The last 25 years of Alex Ablaza's 40-year professional career have been dedicated to growing energy efficiency and other clean energy technology deployment in 17 Asian markets through the identification, due diligence and financial close of over three billion dollars (> USD 3 bn) in direct investments, and also through catalytic market and policy interventions. Across Asia and the Middle East, he currently provides



energy efficiency expertise with the objective of scaling up energy efficiency capital flows through innovative finance, investment structures and policy reform. He convened and chairs the Asia-Pacific ESCO Industry Alliance and the Philippine Energy Efficiency Alliance. He co-founded the Global ESCO Network and co-chairs a taskforce of the global coalition, Mission Efficiency. Wearing his investment hat, he designed and heads Climargy, the world's pioneer private Super-ESCO aggregator of ESCO project assets. Alex is armed with 37 years of project and corporate management experience, and an educational background in civil engineering (BSCE) and business economics (MBE).



Sanjana Gorti

Lead - Air & Water Labs, J-PAL South Asia

Sanjana leads J-PAL South Asia's Air and Water Labs (AWL), aimed at carrying out evidence-based research and policy addressing the most pressing air and water challenges in South Asia. In her role, she leads the strategy and execution of the AWLs and engages actively with state and federal government agencies, domain experts, and academicians to promote and support the use of evidence-based research in formulating policy.

She provides strategic oversight to the Energy, Environment, and Climate Change (E2C2) sector and has worked across air pollution, energy access, and market-based instruments. Notably, she contributed to the implementation of the world's first pilot emissions trading scheme for particulate matter in Gujarat. Apart from managing several large-scale projects, she continues to support the expansion of market-based regulation for pollutants and provides strategic oversight to J-PAL SA's partnership with the Government of Punjab, which aims to institutionalize an evidence-informed approach to policymaking through research, capacity building, and policy collaborations.

She has previously worked extensively in the financial inclusion sector in different positions at Bharat Financial Inclusion Limited, providing low-cost financial products to rural and economically backward households across various states in India. Sanjana has a master's in public administration from the School of International and Public Affairs, Columbia University, a master's from Xavier Institute of Management, Bhubaneswar, and a bachelor's in mechanical engineering from Mumbai University.

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