



SUMMARY NOTES

EEAP WEBINAR 16

Insights from IEA's 2024 Energy Efficiency Report and Energy Efficiency Progress Tracker

On March 4, 2025, the Energy Evaluation Asia Pacific (EEAP) hosted its 16th webinar on the **Insights from IEA's 2024 Energy Efficiency Report and Energy Efficiency Progress Tracker**.

The session featured two distinguished speakers from the International Energy Agency (IEA):

- **Renee Stephens**, Energy Efficiency Policy Analyst, International Energy Agency (IEA)
- **Nicholas Howarth**, Energy Efficiency Policy Analyst, International Energy Agency (IEA)

Renee Stephens provided insights from the IEA's Energy Efficiency 2024 report, which was published in November 2024. She explored the latest trends in energy efficiency across various regions, sectors, and technologies, offering valuable insights into the progress and challenges faced globally. Her presentation highlighted the importance of energy efficiency in achieving climate goals and the need for robust policy implementation to drive significant improvements.

Nicholas Howarth introduced the IEA's Energy Efficiency Progress Tracker, a cutting-edge tool designed to offer policymakers the most up-to-date information on key energy efficiency indicators across different regions. He explained how this tracker can help monitor progress, identify gaps, and inform strategic decisions to enhance energy efficiency efforts worldwide. The tool aims to support the global community in accelerating the transition towards more sustainable and efficient energy systems.

The webinar provided a comprehensive overview of the current state of energy efficiency and the critical steps needed to achieve future targets, making it an invaluable resource for policymakers, researchers, and industry professionals.

This document summarizes the key discussion points from the webinar.



Webinar Agenda

Time (CET)	Sessions/Speakers
6:00-6:05 PM	<p>Welcome Remarks & Context Setting</p> <p><i>Edward Vine, Affiliate, Lawrence Berkeley National Laboratory (LBNL) and Steering Committee Member, Energy Evaluation Asia Pacific (EEAP)</i></p>
6:05-6:40 PM	<p>Presenters</p> <p>1. Renee Stephens, Energy Efficiency Policy Analyst, International Energy Agency (IEA)</p> <p><i>“IEA’s 2024 Energy Efficiency Report”</i></p> <p>2. Nicholas Howarth, Energy Efficiency Policy Analyst, International Energy Agency (IEA)</p> <p><i>“IEA’s Energy Efficiency Progress Tracker”</i></p>
6:40- 6:55 PM	<p>Moderated Audience Q&A</p> <p>Moderated by <i>Edward Vine, Affiliate, Lawrence Berkeley National Laboratory (LBNL) and Steering Committee Member, Energy Evaluation Asia Pacific (EEAP)</i></p>
7:00 PM	<p>Concluding Comments & Vote of thanks</p> <p><i>Edward Vine, Affiliate, Lawrence Berkeley National Laboratory (LBNL) and Steering Committee Member, Energy Evaluation Asia Pacific (EEAP)</i></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 July in Indonesia. The details will be shared on EEAP's website and social media once the details are confirmed.

Ed introduced the speakers and the topic they talked about.

Presentation by Speakers

Insights from IEA's 2024 Energy Efficiency Report

Renee Stephens, Energy Efficiency Policy Analyst, International Energy Agency (IEA)



Renee Stephens introduced the 2024 Energy Efficiency report, emphasizing that the IEA has published an Energy Efficiency report every year since 2016 and that it is the IEA's primary annual analysis on global energy efficiency developments. The report focuses on trends in energy intensity, demand, prices, and policies, and was published a year after the COP 28 summit, where nearly 200 countries agreed to double the global average annual rate of energy efficiency improvements by 2030.

Key insights from the report include the use of energy intensity to measure global energy efficiency progress, defined as the amount of energy used to create the same economic output. After the shocks from the COVID-19 pandemic and the global energy crisis, energy demand grew by 1.7% in 2023 and was estimated to grow by around 2% in 2024. Higher temperatures led to increased electricity demand for cooling, with nearly 80% of Asia Pacific countries reaching new

peak electricity demand records or suffering major disruptions due to extreme heat events. Investment in energy efficiency has stagnated since 2022, with most investments concentrated in North America, Europe, and China. However, the Asia Pacific region saw an estimated 10% increase in energy investments in 2024.

The IEA estimated slow global progress on energy efficiency at around 1% in 2024, similar to 2023, and significantly lower than the COP 28 target. Many countries have achieved higher efficiency improvements in the past, but policy implementation needs to ramp up to sustain these levels. The IEA tracks energy efficiency policy progress, noting increased coverage across all sectors and regions. The IEA's BECCA tool assesses building energy code coverage and identifies opportunities for improvement. New policies in 2024 include Vietnam's Power Development Plan, new vehicle standards in Australia and Chile, and industrial motor policies in Indonesia and South Africa. Strengthened policies include Indonesia's Just Energy Transition Partnership, China's national energy intensity improvement plan, and India's updated building energy codes.

Regional highlights include significant progress in energy efficiency in China since 2010, with industrial energy demand almost quadrupling but mitigated by efficiency measures. In India, the focus on electric vehicle adoption, with policies like the FAME scheme, has significantly boosted EV sales, particularly in the two- and three-wheeler segments.

Renee Stephens concluded by emphasizing the importance of strong energy efficiency policies to achieve climate goals and move from ambition to action. She highlighted upcoming IEA events and the opening of the IEA's first regional cooperation center in Singapore to expand impact and collaborations in the region.

IEA events on Energy Efficiency in 2025



Renee Stephens






12-13 June 2025
Brussels, Belgium

- IEA 10th Annual Global Conference on Energy Efficiency
- The IEA's most high-level event on energy efficiency to date

07-11 April 2025
Paris, France

- 20th Energy Efficiency Policy Training Week

www.iea.org/events

Main Takeaways

- **Stagnation in Investments:** Energy efficiency investments have stagnated since 2022, with most concentrated in North America, Europe, and China, while the Asia Pacific region saw a 10% increase in 2024.
- **Need for Strong Policies:** Global progress on energy efficiency remains slow at around 1% in 2024, highlighting the need for robust policies to achieve climate goals and sustain higher efficiency improvements.

Insights from IEA's Energy Efficiency Progress Tracker

Nicholas Howarth, Energy Efficiency Policy Analyst, International Energy Agency (IEA)



Nicholas Howarth began by emphasizing the importance of building an energy evidence base to inform policy at different levels. He highlighted the commitment made at COP 28 to triple renewable energy capacity globally and double the global average rate of energy efficiency improvements by 2030. This commitment raises critical questions for the energy evaluation community, such as how to measure progress and translate global targets into national strategies.

Nicholas noted that while renewable energy capacity is on track to meet global targets, energy efficiency progress is lagging. The IEA measures this progress in terms of primary energy intensity, which needs to improve from an average rate of 2% per year to 4%. He discussed various policy measures that can contribute to this goal, including technical and material efficiency, electrification, renewables, and behavioral and infrastructure shifts.

To help countries track their progress, the IEA launched a new data product that provides detailed information across eight regions and 140 countries. This includes metrics on energy intensity, energy demand, electrification progress, and financing solutions. Nicholas highlighted the Asia Pacific region's significant influence on global progress due to its large share of global primary energy demand. He noted that while the region has historically led global progress, its rate of improvement has slowed since COVID-19.

Track efficiency progress for 8 regions and over 140 countries



Nicholas Howarth

How is the world tracking towards the COP28 doubling efficiency goal?

What is my country's historical level of energy efficiency progress?

How does my country compare with similar countries in my region?

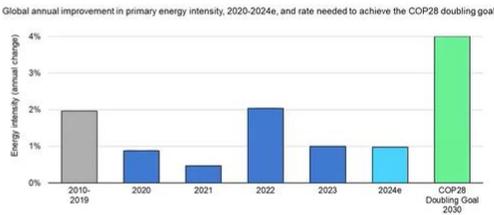
What might be an appropriate level of progress to contribute to the COP28 2030 global doubling goal?

- First of its kind energy efficiency tracking data up to 2024 and main IEA Scenarios to 2030
 - Energy intensity progress
 - Primary energy demand (TES)
 - Final energy consumption (TFC)
 - Electrification progress
 - Electricity consumption
- Energy efficiency investment trends
 - Efficiency financing solutions repository

Energy Efficiency Progress Tracker

Tracking energy efficiency progress for all regions and countries

Global annual improvement in primary energy intensity, 2020-2024e, and rate needed to achieve the COP28 doubling goal



Year	Annual Change (%)
2010-2019	~2.0
2020	~1.0
2021	~0.5
2022	~2.0
2023	~1.0
2024e	~1.0
COP28 Doubling Goal 2030	4.0

Access this, and more:
<https://www.iea.org/data-and-statistics/data-tools/energy-efficiency-progress-tracker>



Nicholas concluded by emphasizing the role of energy efficiency in moderating fast electricity demand growth and the importance of strong policies to achieve climate goals. He highlighted the need for more evidence to link specific policies to overall energy demand indicators.

Main Takeaways:

1. **Slow Energy Efficiency Progress:** Energy efficiency improvements are lagging behind renewable energy capacity, needing to increase from 2% to 4% annually to meet COP 28 goals.
2. **Need for Robust Policies and Tracking:** The IEA's new data tool helps countries track energy efficiency progress, emphasizing the importance of strong policies and accurate tracking to achieve climate targets.

Presenters' Bio

Renee Stephens

Energy Efficiency Policy Analyst, International Energy Agency (IEA)

Renee Stephens is an energy efficiency policy analyst at the International Energy Agency with a focus on Southeast Asia. Before joining the IEA, Renee had worked in the public sector on energy efficiency and climate change policy, and supported the implementation of climate change initiatives in the Asia Pacific region.



Dr. Nicholas Howarth,

Energy Analyst and Policy Advisor, International Energy Agency (IEA)

Dr. Nicholas Howarth is an energy economist at the International Energy Agency (IEA), specializing in climate change and energy efficiency. His work has directly contributed to decision-making processes at high-level forums such as the G20 and the United Nations. Dr. Howarth has extensive experience advising governments and businesses across various countries, including Australia, the United Kingdom, Saudi Arabia, and nations in the Gulf region, as well as China and Europe.



EEAP's Upcoming Events

1. EEAP Webinar #17 on Implementing and Evaluating Energy Efficiency Policies for Buildings in Asia Pacific

Date: April 3, 2025 (Thursday) | **Time:** 11 AM (Bangkok Time) **Duration:** 75 Minutes

Registration: <https://us06web.zoom.us/meeting/register/Pj53YAGkRPaEALCj5rehTA>



**ENERGY EVALUATION ASIA PACIFIC
WEBINAR SERIES**

EEAP Webinar # 17
**Implementing and Evaluating Energy
Efficiency Policies for Buildings in Asia Pacific**

			
KIMBERLY ROSEBERRY Economic Affairs Officer, Energy Division, UNESCAP	GENNAI KAMATA Associate Programme Officer, Buildings and Urban Energy, UNEP	THIEN JUENGWIRUNCHODINAN Solution Development, Coral Life	EDWARD VINE Steering Committee Member, EEAP
<i>"Building Energy Efficiency: Taking Stock of Policy and Practice in Asia and the Pacific"</i>	<i>"UNEP/Global ABC and Cool Coalition efforts towards energy-efficient and resilient buildings in Asia"</i>	<i>"Advancing Energy Efficiency in Buildings: Market Trends, Performance, and the Path Forward"</i>	Webinar Moderator

April 4, 2025 (Thursday)
11:00 AM (BANGKOK)
5:00 AM (PARIS)

Join our webinar to learn from experts on developing, implementing, and evaluating energy efficiency programs and policies in Asia Pacific buildings.

REGISTER NOW
<https://energy-evaluation.org>



2. EEAP Conference 2025

Theme: "Building an evidence-based path to net zero energy transition and global sustainable development"

August 2025, Jakarta, Indonesia

For more details, please check EEAP's website and social media pages

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