

Scaling Energy Efficiency Network (EEN): A Pathway for ASEAN's Industrial Decarbonisation

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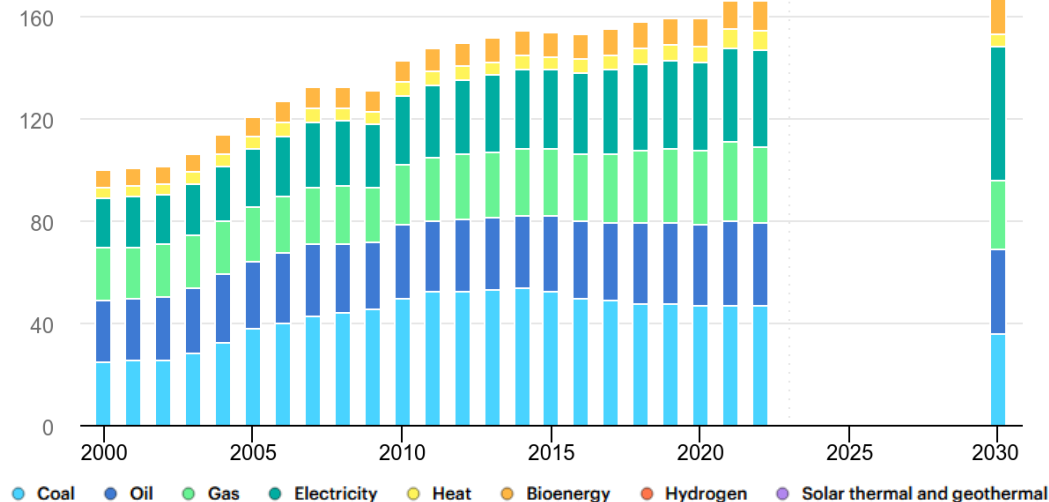
Outline

- **Why Energy Efficiency in Industry?**
- **What is Energy Efficiency Network (EEN)?**
- **EEN's Experiences: China and Viet Nam**
- **Scaling Energy Efficiency Network in ASEAN**
- **Call to Action**

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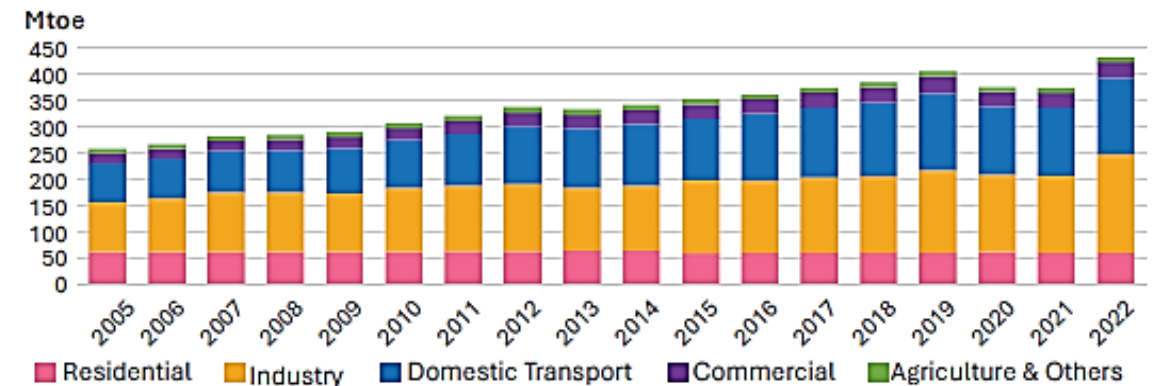


Why Energy Efficiency matters in Industry?



IEA (2022): The industrial sector accounted for 37% of global energy use in 2022, compared to 34% in 2002.

Figure 1.6 ASEAN Total Final Energy Consumption by Sector, 2005-2022



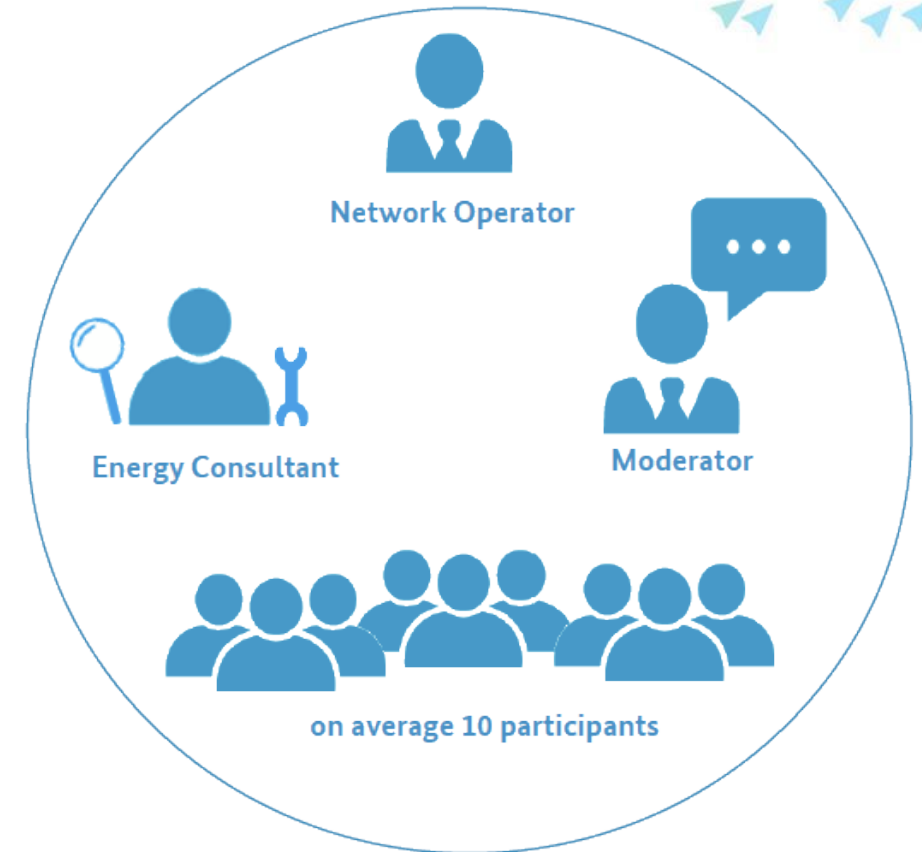
ACE (2024): In ASEAN, industry accounted for 43% of total energy use in 2022, up from 38.4% in 2019.

What is Energy Efficiency Network (EEN)?

Structured and moderated **mutual learning** between companies with **expert guidance** to reduce the search and transaction costs for **energy efficiency and climate mitigation measures**.

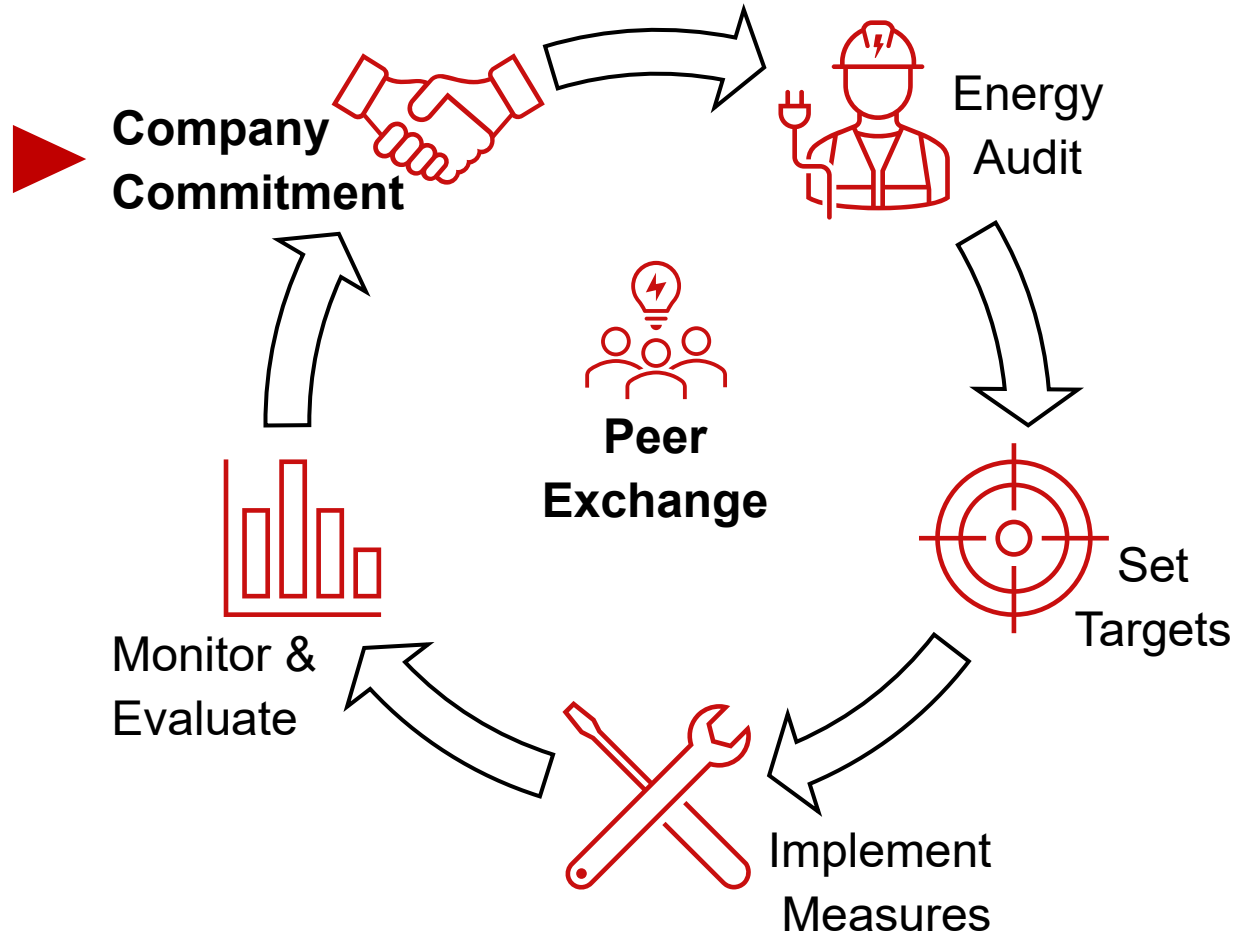
Typical setup:

- Group of 5–15 companies
- Voluntary and practical cooperation
- Duration: 24–48 months (can include multiple phases)
- Goal: Improve energy efficiency and reduce GHG emissions
- Process: identify savings potential > set targets > implement measures > monitor progress

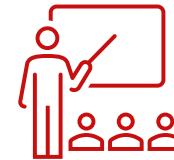


Source: GS IEEKN, dena

How EEN Work: Process Flow



!! Critical factors:



Strong **moderators**
(emphasizes certified experts)

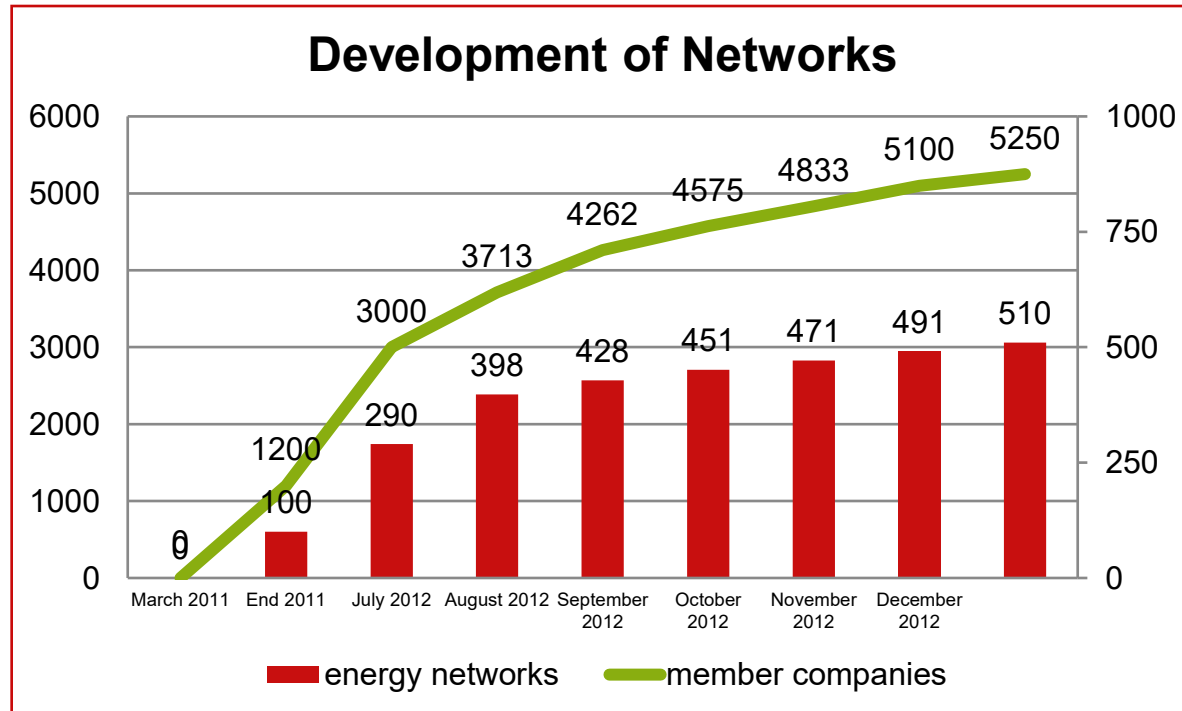


Policy **incentives**
(e.g. tax breaks for participants)

EEN Experience in China

Key Drivers:

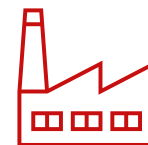
- **National Target:** 16% energy intensity reduction by 2015 (12th Five-Year Plan)
- **Energy Saving Obligation:** Utilities must save 0.3% of energy sold with industrial clients
- **Power Shortages:** Frequent summer peak cuts drove demand for energy efficiency



960 GWh / year
Electricity Savings



573 Networks
in 27 Provinces



5,963
Members
(2013)

690 MW
Peak Load
Reduction



1,802
EE Measures
Implemented



EEN Experience in Viet Nam



5.2 GWh / year
Electricity Savings

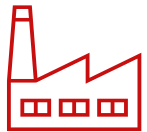


Networks:
Thai Nguyen
Ho Chi Minh City
Bin Duong (SME)



60 Identified
EE Measures
34 Implemented

8 Companies:



Logistic, Garment, Textile, Paper,
Paper Packing, Label Printing,
Plastic Packing, Tire Production



25 Companies from various sectors:
Steel, Mechanical, Cement, Coal-fired Power
Plant, Textile, Garment, Paper Packing,
Brewery, Plastic, Food Processing, Water,
Waste-water, Chemical

Lessons Learnt:

- **Local Moderators** (provincial authorities or industry associations) are ideal facilitators
- Organise meetings within short travel distances
- **Role model**, identify 1–2 active companies to inspire others
- **Leverage synergies**, link with other projects for technical/financial support
- **EEN integration** with national regulation, EE community (e.g. VEECOM - Vietnam EE Community)



Widespread adoption of energy efficiency and climate action networks



First pilots for energy efficiency and climate action networks



Corporate networks focusing, among other things, on increasing energy efficiency

Scaling Energy Efficiency Network in ASEAN

Challenges



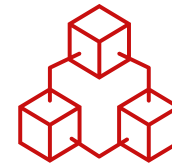
- Lack of **awareness**
- **Funding** gaps
- **Fragmented** industries

Opportunities

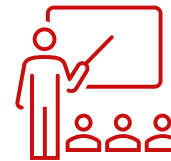


- Industrial cluster **leverage**
- Promote **capacity development**
- Green **jobs** creation

CAP's Initiative: **Activating the EEN in ASEAN**



Network Concept
with Support Activities



Best
Practices



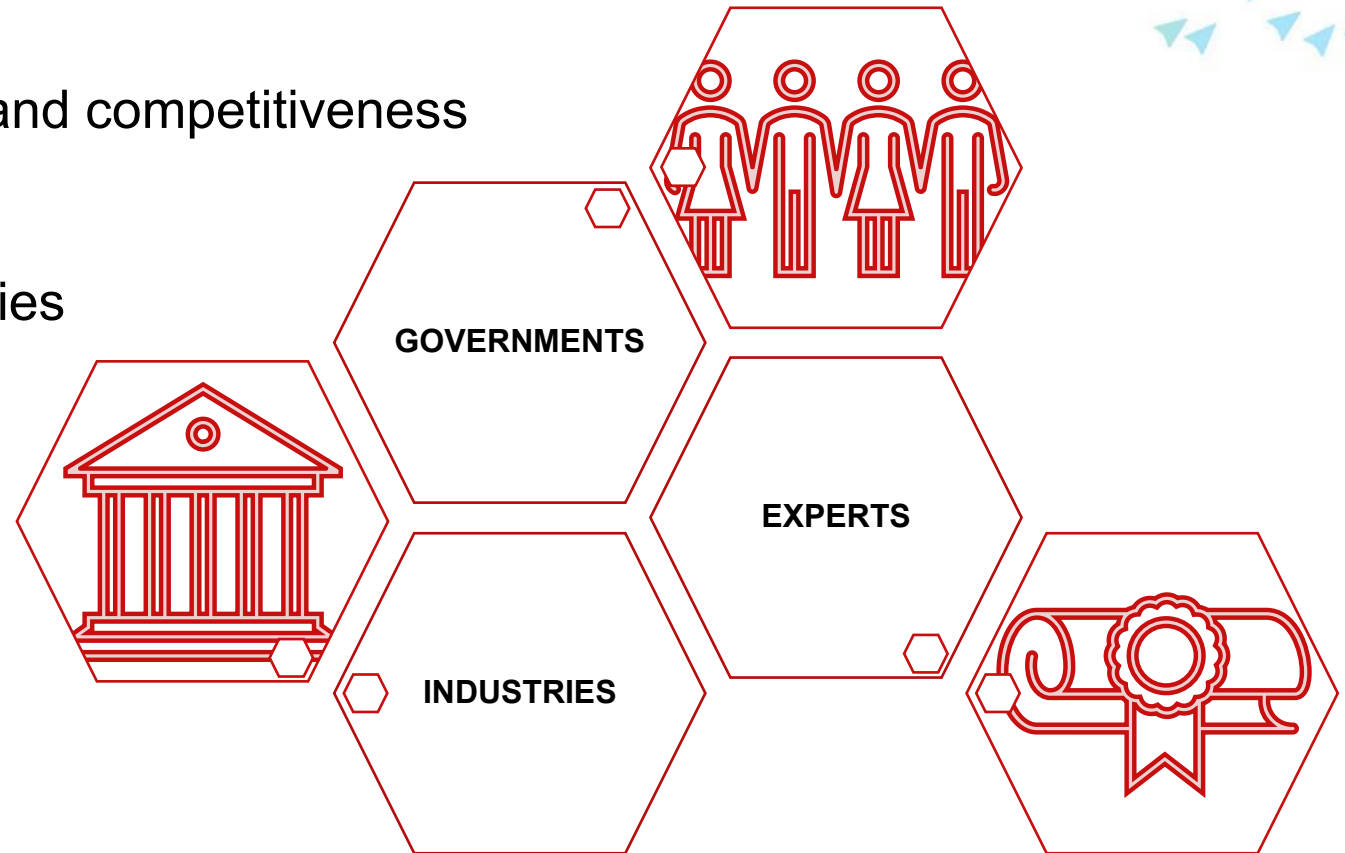
Stakeholder
Engagement



Sustainability
Model

Call to Action

- **Industries**
Participate in EEN for cost savings and competitiveness
- **Governments**
Integrate EEN into national EE policies
- **Experts**
Facilitate peer-to-peer learning



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