CLIMATE IMPACTS OF THE BUILDINGS SECTOR



25% of total final energy consumption in ASEAN comes from buildings



23% of total CO₂ emissions are related to buildings

Building energy consumption could increase by **35%** by 2050 without energy efficiency measures

Energy efficiency measures could reduce this growth by 4.0%

PEEB ASEAN has an energy intensity reduction target of **32%** by 2025



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PROJECT IMPLEMENTATION

AFD: Provides funding and technical assistance to support energy efficiency projects and ensures overall programme coordination.

ASEAN Centre for Energy (ACE): Collaborates with Member States to implement programme activities and facilitates regional stakeholder engagement.

About Partnership for Energy Efficiency in Buildings (PEEB)

The Partnership for Energy Efficiency in Buildings (PEEB) is transforming the buildings and construction sector through financing, policy support and capacity building with the vision to achieve a low-emissions and a climate-resilient built environment.
PEEB was initiated in 2016, at COP22 by Germany and France and it is catalysed by the Global Alliance for Buildings and Construction (GlobalABC).
PEEB taps into the expertise of its implementing agencies : Agence Française de Développement (AFD), Deutsche Gesellschaft für Internationale Zusammenarbeit (GIZ), and Agence de l'Environnement et de la Maîtrise de l'Energie (ADEME).

For more information, please visit the website or contact info@peeb.build PROMOTING ENERGY EFFICIENCY IN BUILDINGS THROUGH PEE ASEAN

RÉPUBLIQU FRANÇAISI

The PEEB ASEAN initiative aims to support the transition of the building sector towards better energy and environmental performance and increased resilience to the effects of climate change.

The Partnership for Energy Efficiency in Buildings

(PEEB) was initiated at COP22 by Germany and France with the support of the Global Alliance for Buildings and Construction (GlobalABC). It is managed by the Agence Française de Développement (AFD), the Deutsche Gesellschaft für Internationale Zusammenarbeit (GIZ), and the Agence de l'Environnement et de la Maîtrise de l'Énergie (ADEME).

The PEEB ASEAN initiative is one of the funding windows of the Partnership for Energy Efficiency in Buildings. It will run from June 2024 to June 2028 with a total budget of 5 million euros. It is jointly implemented by AFD, serving as the investment facility, and ASEAN Centre for Energy (ACE), serving as the enabling facility.

AFD has provided €5 million in financing for PEEB ASEAN, including the following:

- A grant of €2 million to finance institutional support activities implemented by the ASEAN Centre for Energy
- A technical assistance facility of €1.5 million for project preparation
- An investment grant of €1.5 million for projects financed by AFD Group and its partners

WHY PEEB ASEAN

According to the ASEAN Energy Outlook (7th edition), buildings account for 23% of total final energy consumption (TFEC) in ASEAN as of 2020 and contribute to 25%, or approximately 453.74 Mt CO₂-eq, of the region's total CO₂ emissions. The PEEB ASEAN initiative is crucial for achieving the ambitious target of reducing energy intensity by 32% by 2025, in line with the ASEAN Plan of Action for Energy Cooperation (APAEC) Phase II. By investing in energy-efficient and lowcarbon buildings, the initiative contributes to reducing greenhouse gas emissions, improving air quality, and enhancing climate resilience

MAIN CHALLENGES TO ENERGY EFFICIENCY IN BUILDINGS

Regulation and governance:

Absence of regulatory frameworks and dedicated entities for energy efficiency.

Building efficiency regulations: Non-existent or unenforced codes and standards.

Insufficient fiscal instruments:

Lack of financial mechanisms and subsidies to support energy efficiency investments.

Training and capacity building:

Insufficient training programmes for industry professionals.

Information and market-based instruments:

Low adoption of energy efficiency certifications and labels.



THE VISION

Manelle Ait-Sahlia Deputy Head of the Energy Division at the AFD and PEEB Manager:

"Through its Investment Facility, PEEB ASEAN will support local stakeholders in implementing large-scale building projects, focusing on improving the resilience and living conditions of populations that are particularly vulnerable to climate change. As Southeast Asia experiences rapid urbanization and economic growth, PEEB ASEAN will align with AFD's ambitious energy transition strategy to address the urgent need for enhancing energy efficiency and resilience in the building sector. This initiative will not only reduce greenhouse gas emissions but also offer substantial economic benefits. Energy-efficient and resilient buildings lower operational costs, enhance energy security, reduce reliance on fossil fuels, and withstand the impacts of climate change more effectively."

Dr. Nuki Aqya Utama Executive Director of ASEAN Centre for Energy, expressed his enthusiasm about the partnership, stating:

"We are immensely grateful for the support from AFD. This grant is not just a fund; it is a catalyst that will enable us to advance the promotion of high energy and environmental performance standards in the building sector by strengthening national and regional frameworks and policies through capacity building of ASEAN Member States and stakeholders. This includes support for the financing of energy-efficient building projects in ASEAN Member States. Through the Promthe Programme for Energy Efficiency in Buildings (PEEB ASEAN) programme, we aim to set a benchmark for energy efficiency that could serve as an aspirational model for similar initiatives globally."

PEEB ASEAN OUTPUTS **AND ACTIVITIES**

The PEEB ASEAN initiative aims to transform the building sector in ASEAN to achieve high energy and environmental performance. It is structured around two main components: enhancing enabling activities for building energy efficiency and investing in building energy efficiency and scaling-up.

TWO MAIN COMPONENTS:

INSTITUTIONAL SUPPORT

This component is implemented by ACE, with the aim of creating a framework to encourage energy efficiency in buildings in the region. It has four modes of action:

- Making recommendations to improve in public policies and regulatory frameworks
- Developing a regional digital hub to share information and raise awareness among energy stakeholders
- Providing capacity building for high-level political decision-makers on energy efficiency in buildings
- Implementing tailor-made activities based on the needs of countries identified during the feasibility study

INVESTMENT GRANT AND TECHNICAL ASSISTANCE

This component is implemented by AFD to scale up ambitious projects for energy efficiency and resilience and to achieve longlasting transformation in the building sector.

- PEEB ASEAN supports projects at each phase of their advancement, trhough feasibility studies, architectural design, construction supervision, and impact assessment. These projects are carried out by AFD Group (AFD, Proparco, Expertise France) or by its partners, in synergy with its activities and PEEB's objectives
- PEEB ASEAN mobilizes international technical experts to strengthen the capacities of partners in designing and implementing environmentally sound building projects with high energy performance. It also provides investment grants, in addition to the financing provided by AFD or Proparco, as a means to encourage project owners to implement bioclimatic design and energy efficiency as part of their projects.



PROJECT COMPONENTS

ENERGY EFFICIENCY POLICIES

- Establish technical working groups
- Review and strengthen existing policies
- Organize regional workshops



DIGITAL HUB

- Develop a digital platform
- Promote best practices
- Simulates and facilitates innovation

CAPACITY BUILDING

- Training programs in energy efficiency
- Study tours for knowledge sharing
- Improve local skills

EFFECTIVE ENABLING ACTIVITIES

- Identify effective support activities
- Design detailed implementation plans
- Increase Member States' capacity

TECHNICAL ASSISTANCE



- Technical support for energy audits
- · Environmental technical assistance during project design and implementation

PROJECT FINANCING

- Financing tools for projects
- Facilitate energy efficiency investments
- Support for project owners

VISIBILITY AND COMMUNICATION

- Communication strategies
- Promote programme successes
- Engage stakeholders



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