



THE ASEAN CENTRE FOR ENERGY (ACE) INVITES ASEAN NATIONALS TO APPLY FOR THE FOLLOWING VACANCY

ASSOCIATE SENIOR ENERGY MODELER – BUILDING

BACKGROUND

The ASEAN Centre for Energy (ACE) is an intergovernmental organisation that independently represents the 10 ASEAN Member States' (AMS) interests in the energy sector. The Centre serves as a catalyst for the economic growth and integration of the ASEAN region by initiating and facilitating multilateral collaborations as well as joint and collective activities on energy. It is guided by a Governing Council composed of Senior Officials on Energy from each AMS and a representative from the ASEAN Secretariat as an ex-officio member. Hosted by the Ministry of Energy and Mineral Resources of Indonesia, ACE office is located in Jakarta.

Part of the efforts to fulfil ACE's function as a regional centre of excellence that builds a coherent, coordinated, focused and robust energy policy agenda and strategy for ASEAN, the Energy Efficiency and Conservation Department responsible for managing on energy efficiency and conservation-related programmes, research, and study projects to support the implementation of ASEAN Plan of Action for Energy Cooperation (APAEC).

The APAEC is a guiding policy document to advance multilateral energy cooperation and integration towards achieving the goals of ASEAN Economic Community. The strategies of APAEC 2016-2025 Phase II: 2021-2025 is driven by the overall theme of "Enhancing Energy Connectivity and Market Integration in ASEAN to Achieve Energy Security, Accessibility, Affordability and Sustainability for All" and sub-theme "Accelerating Energy Transition and Strengthening Energy Resilience through Greater Innovation and Cooperation". The APAEC consists of seven (7) Programme Areas, including Energy Efficiency and Conservation, which aiming to achieve 32% energy intensity reduction by 2025 based on 2005 levels by promoting energy efficiency and conservation measures in building, industry, and transport.

The Asia Low Carbon Buildings Transition project is supported by the International Climate Initiative (IKI) of the German Federal Ministry for Economic Affairs and Climate Action (BMWK) and implemented by a consortium comprise of the Global Green Growth Institute (GGGI), the ASEAN Centre for Energy (ACE) and the Energy Efficiency Services Limited of India.

Rapid economic development in the region has led to a boom in building construction, with floor area projected to double by 2060. This growth drives energy demand and emissions, especially from cooling needs in hot climates. However, many Asian countries lack the frameworks, capacity, and financing to enable low-carbon buildings at scale. While regional plans like APAEC provide efficiency blueprints, targeted support is needed to assist



governments, industries, and financial institutions in implementation. Therefore, the project will address regulatory, capacity and financing gaps that prevent large scale adoption of low carbon buildings (LCB). Project interventions build technical and institutional capacity for city and state governments to contribute to national GHG emission reduction targets from building materials and operations, particularly from cooling, complementing regional and global initiatives in the five target countries – Cambodia, India, Indonesia, Thailand, and Vietnam.

The project Four strategies are employed to transform existing and new buildings towards carbon neutrality by 2050: (1) institutional capacity of governments is enhanced; (2) technical capacity of industry and service professionals to deliver LCB is substantially improved through trainings and tools; (3) financing is leveraged for efficient cooling and LCB through common metrics and innovative business models; and (4) creation of market demand for LCB, replication of project tools and approach through systematic sharing of lessons, between project countries and globally.

The project aims to achieve 4 outputs:

1. **Standardized tools and systems for managing carbon emissions from the building sector developed and piloted.** This includes developing an assessment tool to quantify embodied and operational carbon, piloting a building registry, and policy recommendations for net-zero buildings.
2. **Key industry stakeholders have enhanced capacity to deliver low carbon buildings.** This will be done through training programs, integration of low carbon concepts into university curricula, and promoting energy service companies.
3. **Financial pathways established to facilitate financing for low carbon buildings.** Activities involve engaging financial institutions, developing a taxonomy to link building performance with finance, and demonstrating innovative models like on-bill financing.
4. **Project knowledge documented and shared to facilitate replication and scaling up.** Knowledge products, training materials and project data will be disseminated online and through workshops to promote adoption in other regions.

Specifically, ACE's tasks include:

1. Developing online tools and processes for design standards, carbon and energy estimation for architects and developers, and a regional buildings database. (Output I)
2. Incorporating state-of-the-art technologies for efficient cooling into green procurement guidelines for the building sector. (Output I)
3. Facilitating pilots for energy performance contracting and on-bill financing in the building sector, particularly with SMEs. (Output III)
4. Evaluating policy and market readiness for on-bill financing and SME ESCO models in Thailand, Indonesia, and Vietnam. (Output III)
5. Piloting an integration of energy efficiency financing and business models through online processes for low-carbon buildings. (Output III)



To execute these initiatives effectively, ACE is seeking **one (1) Associate Senior Energy Modeler – Building**.

POSITION IDENTIFICATIONS

Job Title : Associate Senior Energy Modeler - Building
Job Level : Senior Officer
Department : Energy Efficiency and Conservation Department.
Reporting To : Head of Energy Efficiency and Conservation Department & Programme Manager of Asia Low Carbon Building Transition

DUTIES AND RESPONSIBILITIES

Under the guidance of the Head of Energy Efficiency and Conservation and Programme Manager of Asia Low Carbon Building Transition, the Associate Senior Modeler - Building will be responsible for the following duties:

- Lead the development of databases on energy efficient and climate-friendly building and online tools to facilitate investment for energy efficiency and conservation projects in building sector.
- Coordinate and support the Consortium Partners to develop building registry and building carbon performance assessment tool for low carbon building, including data collection, scenario modelling and validation, and supporting its integration into ACE online tools and platforms.
- Conduct research and analysis on policies and regulations related to low carbon and energy efficient buildings and provide policy recommendations and roadmap towards net-zero carbon building.
- Facilitate capacity development of government officials, building designers/architects, building developers, auditors, and ESCOs on low carbon buildings through the development of university syllabus on energy management and carbon performance of buildings, including the conduct of energy management and building energy audit training programme.
- Develop reports, articles, case studies, and research related to energy efficiency and conservation in Southeast Asia's building sector.
- Contribute to modelling and analysis of residential and commercial building sector for ASEAN Energy Outlook.
- Assist in identifying opportunities for project funding, such as, drafting concept papers, project proposals and reports, developing project budget and monitoring strategies
- Coordinate and communicate closely with ACE internal pillars and departments.
- Carry out another task/s that may be assigned to him/her by the Executive Director.

QUALIFICATIONS

- A Master's degree in engineering (mechanical, architectural, civil), energy management, energy policy and planning, climate & sustainability, data



analysis/statistics, or a related discipline. A Doctor's degree is an advantage.

- At least five (5) years of experience in building energy modelling, analysis, and implementing energy-efficient and low-carbon building technologies and systems and advising on energy policies, particularly related to building energy efficiency and sustainability.
- Extensive experience with energy modelling software (e.g., eQUEST, EnergyPlus, EDGE), spreadsheet software (e.g., Microsoft Excel), including scripting with Python or VBA.
- Expertise in building energy systems design and retrofitting for energy efficiency. Knowledge of HVAC, lighting, building enclosure systems, and building science. Understanding of energy codes and standards (e.g., IECC, ASHRAE 90.1, LEED, ENERGY STAR) as well as understanding in sustainable building practices and green building standards.
- Ability to perform building analysis calculations, including physics, engineering, and financing related, utilising well-known and robust models/tools, analyse model outputs and develop detailed studies on building components and energy efficiency alternatives.
- Certifications such as CEM, LEED accreditation, ASHRAE BEMP, or EDGE Expert/EDGE Auditor are beneficial.
- Experience or involvement in the ASEAN energy sector or projects, especially in the topics of energy efficiency in building, is a plus.
- Experience in managing energy modelling projects from inception to completion.

PERSONAL COMPETENCY

- Strong teamwork skills with an action-oriented, problem-solving, analytical, and creative thinking approach.
- Ability to work accurately, pay attention to detail, meet deadlines, and efficiently organize work while handling a variety of tasks simultaneously.
- Excellent interpersonal attributes, including sensitivity, sound judgment, and strong organizational and leadership capabilities. Able to work effectively in a multicultural environment.
- Promote an open reporting culture that is transparent, compliant, and embodies integrity.
- Excellent command of written and spoken English.

REMUNERATION AND BENEFITS:

The successful candidate will be stationed in Jakarta, Indonesia and will be offered a one-year contract, with a probationary period of three (3) months. The contract may be extended annually by the Executive Director depending on performance.

The monthly salary ranged from USD 1,760 – USD 2,992. The compensation shall be commensurate with the educational qualification and experience of the candidate. All other



applicable benefits (transportation allowance, communication allowance, health, and life insurance, etc.) shall be subject to the ACE consolidated rules and regulations.

The successful candidate is expected to be on board by **August 2024**.

HOW TO APPLY

Submit your application through <https://aseanenergy.org/vacancies/> and click "Apply Now", by latest **31 July 2024**. The Selection Committee's decision is final and only shortlisted candidates will be notified.

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