

IESR Vacancy

Energy System Modeler

Background

Institute for Essential Services Reform (IESR), a think tank in energy and environment, aims to transform Indonesia's energy sector to reach net-zero emissions by 2050. The Energy System Modeler will be responsible for the development and improvement of IESR's Indonesia energy system model. The role is expected to contribute to the strengthening of IESR's credibility and evidence-based policy advocacy for the energy transition in Indonesia.

About the Position

IESR is looking for an Energy System Modeler. The person in this position will be part of IESR's Data and Modeling (DMo) Research Group and will contribute to the evidence-building and advocacy process of IESR with relevant stakeholders. The person is responsible in conducting energy system modeling to support the development of decarbonization pathways for the energy sector as a whole. The output of the modeling is expected to provide an overview of the most optimized pathway for Indonesia to reach its net-zero emissions. The modeling would contribute to wide of range research projects within IESR, requiring further adjustments to suit the need of each project, which would be highly dependent on the research questions and/or objectives.

IESR is seeking a highly motivated, experienced, and qualified candidate to join our dynamic team.

A. Responsibilities and Tasks

The responsibilities of the Energy System Modeler shall include, but not limited to, the following:

- Develop, calibrate, and validate IESR's Indonesia energy system model
- Gather and disseminate modeling insights amongst peer analysts
- Engage in the process of seeking feedbacks from relevant stakeholders to improve the model, which would generally be in the form of Focus Group Discussion (FGD)

- Participate in modeling-driven advocacy activities, e.g., communicating modeling output to PLN's system planning division, BAPPENAS, or other relevant government ministries
- Write a research paper out of the modeling output targeting journal submission

B. Qualifications, competencies and experience

- Possess a master's degree in energy system modelling, energy and climate economics, or other quantitative research fields. A doctoral degree is an advantage
- Minimum 2 years of working experience in energy system modeling tools, preferably LEAP. Experience in other modelling tools, e.g., TIMES and OSeMOSYS, would be highly valuable
- A good understanding in any integrator/optimization tools, e.g., GAMS, CPLEX, Cbc, MOSEK and/or Gurobi
- A proficient user of data/programming languages, preferably Python. Experience in other programming languages, e.g., JSON, XML, C++, Stata, and/or R, is an advantage
- Knowledge of climate, energy, and environmental issues is an advantage
- Familiar with Reference Energy System (RES), energy commodities, process/technologies, and commodity flows
- Experience in working with and/or in government agencies and ministries in the field of climate, energy, economics, and environment would be highly valuable
- Excellent written and oral knowledge of Bahasa Indonesia and English, including the ability to write a report/technical/research paper
- Ability to work in an intercultural environment
- Willingness to learn and adaptability for new and relevant knowledge
- Excellent time-management skills

C. Duration

The position is for three years contract and can be extended with 3 months' probation. Expected starting date is March 2025.

D. Salary

The salary will be commensurate with the candidate's qualifications and experience.

E. How to apply

- Candidate to download application from IESR's website.
- Send the completed application form together with an application letter and latest CV, recommendation letter to hrd@iesr.or.id before **February 28, 2025**
- Only qualified candidate will be called for interviews.