



**Southeast Asia –
Australia Energy
Transition
Human Capacity
Development
Fellowships
Program**

Australia | October – December

Australia's National Science Agency



SEA-Australia Energy Transition Human Capacity Development Program

Purpose

- Strengthen the capability of Southeast Asian utilities, energy ministries, and research institutions to support affordable, sustainable, and secure energy systems.
- Build technical expertise, modelling capability, and leadership to accelerate the region's energy transition.
- Facilitate knowledge exchange and exposure to Australia's experience in integrating renewable energy into power systems.



SEA-AET Human Capacity Development Activities

Fellowships	Scholar's Program	Research Grants Program
In-country placements at CSIRO for applied research and industry-focused projects	Co-supervision of Master's and PhD research with Australian universities and CSIRO experts	Collaborative research projects between Southeast Asian and Australian institutions



2026 SEA-HCD Fellowships Program

Location: Australia

Duration: 3 months (October – December 2026)

Fellowship placements: up to 4 fellows



Purpose: to strengthen the energy sector in SEA through in-country placements at CSIRO



Intent: to build technical skills that support the transition to affordable, secure and sustainable power systems



Funding: by the Australian Department of Foreign Affairs and Trade ([DFAT](#)) and delivered in partnership between [CSIRO](#) International Programs and Energy Research Unit.



Program Modules

Week	Activity
Week 1	On-boarding, Induction, and Online Training
Week 2 – 3	Understanding the problem and available data
Week 4 – 5	Data exploration and visualization
Week 6	Fellow presents the problem/dataset to a broader audience
Week 7 – 8	Solution Development
Week 9 – 12	Solution Refinement, Final Presentations and Feedback



Expected Qualifications	Assessment Criteria
• Have significant technical capability. • Have a clearly defined problem and a viable proposal for how to address the issue. • Have full support from their home agencies, both during the Program and for implementation of outcomes upon their return. • Be eligible to travel and stay in Australia for the required period (where relevant). • Be fluent in English. • Be able to participate within the Program timetable.	• Relevance and quality of the problem/opportunity • Feasibility of finding a solution through the placement • Applicant capability fit • Scalability of outcomes • Capability development • Knowledge transfer • Regional benefit



Priority Themes

Inverter Design: Development of design methods, standards, and capabilities for inverter-based resources (IBRs) to ensure system reliability.

Stability Tools and Methods: New tools and approaches to maintain power system stability and security as synchronous machines are displaced by IBRs.

Control Room of the Future: Advanced technologies enabling improved real-time visibility, monitoring, and decision-making for system operators.

Planning: New metrics, models, and tools to support planning under an evolving and increasingly variable energy mix.

Restoration and Black Start: Procedures and strategies for restoring power systems with high or full IBR penetration.

Services: Definition and quantification of essential system services required to maintain reliable and cost-effective operation in renewable-dominant systems.

Architecture: Future power system design frameworks integrating technology, markets, regulation, and T&D coordination in high-renewable environments.

Distributed Energy Resources (DERs): Analysis of challenges and opportunities from high DER penetration to improve system operation and control.

DERs and Stability: Modelling DER dynamics to support secure and stable power system operation under high DER uptake.

Submission Requirements

Completed application form

Completed project proposal

CV

Proof of English Proficiency

- All documents should be submitted in one email in English in PDF format with file name '*SEA HCD Fellowships Application - <Insert Your Name>*'
- For any inquiries or clarifications related to the submission process, kindly direct your questions to hcd@csiro.au cc: ira.martina@csiro.au

Submission deadline: 24 July 2026 - 23:59 UTC+8

Project Title: [Floating Utility-Scale Photovoltaic Site Selection in Indonesia: A Multi-Criteria Decision Analysis Approach](#)

Challenge: Indonesia has significant potential for floating solar photovoltaic (FPV) deployment, but selecting suitable sites requires balancing technical, economic, environmental, and infrastructure considerations.

Approach: Indra worked with CSIRO's Energy Systems team to develop a Multi-Criteria Decision Analysis (MCDA) framework to evaluate and rank **92 potential FPV sites** across Indonesia. The framework assessed sites using eight key criteria.

Key Outcomes

- Evaluated and ranked 92 candidate FPV sites across Indonesia.
- Tested three weighting approaches and three MCDA ranking methods to improve decision-making robustness.
- Identified CRITIC and Equal Weight methods as the most consistent and reliable approaches for site prioritisation.
- Demonstrated the importance of transparent weighting and sensitivity analysis in renewable energy planning.

Case Study: Indra (2025) Floating Solar Site Selection in Indonesia



*The project provides a practical and adaptable decision-support framework to help governments, utilities, and planners identify suitable locations for floating solar development, **supporting Indonesia's renewable energy transition** and long-term energy planning goals.*

Frequently Asked Questions (FAQs)

Does my proposal need to have a complete solution already identified?

No. Applicants are expected to clearly define a problem or opportunity. The Fellowship is intended to help Fellows develop the skills, knowledge, and approaches needed to investigate and address that challenge.

How long should the project proposal be?

Applicants should follow the proposal template and guidelines provided on the Fellowship webpage.

What will happen during the interview?

Shortlisted applicants will be asked to present their project proposal and discuss its relevance, feasibility, expected outcomes, and potential benefits to their organisation and the wider region.

Will CSIRO provide salary replacement during the duration of the SEA-HCD Fellowship?

The SEA-HCD Fellowship does not provide salary replacement. Participating organisations are requested to continue paying the Fellow's salary for the duration of the placement, as the Fellowship is undertaken as part of the Fellow's professional duties and development.

Are there any costs that Fellows are expected to cover themselves?

Fellows are responsible for personal expenses beyond the provided allowance, including leisure activities, personal travel, excess baggage, dependent-related costs, and other non-program-related expenses.



Thank you

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