Emerging Technology Discussion Series: A closer look at Energy Storage and Grid Interconnection to support the ET in Indonesia

27 June 2023

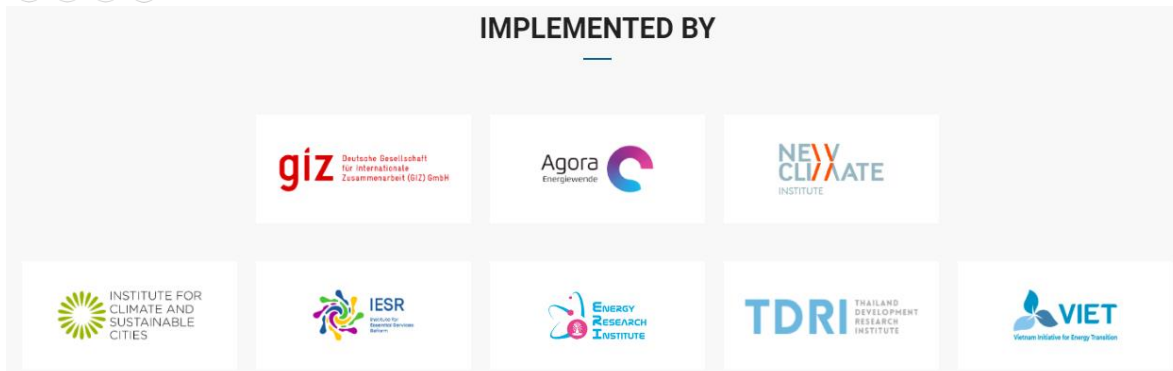on behalf of Clean, Affordable and Secure Energy (CASE) for Southeast Asia

CASE Programme

(Year 2020 to 2027; 4 countries in SEA)

CASE: Clean, Affordable and Secure Energy for South East Asia (2020-2027)

Goal: Changing the Narrative of the Energy Transition

IMPLEMENTED BY

Overall Objectives

- The narrative of the direction of the energy sector in SEA has substantially shifted towards an evidence-based energy transition (ET), aiming to increase political ambition to comply with the Paris Agreement.

Output I Research and Evidence	Output II Transparency and Mapping (RT)	Output III Dialogue and Action (non-energy sector)	Output IV Technical Assistance (energy sector)	Output V Promoting public discourse
The evidence base for an energy transition in SEA is improved.	Transparency of key stakeholders' activities with respect to essential elements of the energy transition is strengthened to maximise synergies.	The dialogue on energy transition within government (and public) bodies is improved.	Capacities of key energy sector stakeholders to promote an energy transition are strengthened.	A public discourse on energy transition is established.

Key Partners

- Ministry of National Development Planning (Dit. KTI)

- MEMR (RBTKE, DJK), Bappenas, MoF, OJK, Non-Government Institutions, Universities/ Academia, Media, etc

CASE wants to facilitate changes from the existing narrative to the 'new narrative' through its activities

CASE for Southeast Asia

Existing Narrative of ET in Indonesia	→ CASE ID Activities	New Narrative of ET in Indonesia

3 Main Themes or Thematic Focus

RE & EE Upscaling	Decarbonization of power system	Sustainable Energy Finance (SEF)

LTES, Communication

1. Capacity development (trainings, workshops, hearings)
2. Dialogues
3. Knowledge products (insights, factsheets, publications, infographics, brochures, etc.)
4. Policy advice and recommendations
5. Outreach, advocacy and communications

Recap: CASE Highlights in Jan – June 2023

Major Events

1. Agreeing OP 2023 of CASE IDN (January 2023)
2. Focus group discussion on ETS & carbon pricing development (31st January 2023)
3. Media/ Journalist Training (31st January – 1st April 2023)
4. Support the initial input for the new draft of RPJP (February 2023).
5. Dialogue with private sector on financing industry decarbonisation (23rd March 2023).
6. Kick off: emerging technology option to support Indonesia to achieve net zero emission (6th March 2023).
7. Supporting DTC Make IT & GSMA: Sustainable energy finance for the startups, beyond the financial return (14th March 2023).
8. FGD: Communications Strategic Refinement (10th March 2023)
9. CASE Teaching for future (school) (April – May 2023)
10. Energy Transition Symposium: Indonesia's Online Media Coverage on Energy Transition 2020 – 2022 (April 2023)
11. Alun-Alun Eropa – EU Day (May 2023)
12. Comms WG Workshop (May 2023)

13. SEF training for local govt. (together with ICLEI) (April – June 2023)
14. Climate-Energy Mini Workshop: Energy Sector Perspectives on Article 6 of The Paris Agreement (5th June 2023)
15. CEFI training (together with OECD, USAID Sinar) (19 – 23 June 2023)
16. Ongoing: Long Term Energy Scenario as the input for the draft of RPJP/ RPJMN (2022 – 2024)
17. Ongoing: Supporting JETP Secretariat (April – August 2023)
18. Ongoing: Documenting Best Practice EE Financing Business – MEMR (April - …)
19. Ongoing: workshop EE for industries (May - …)
20. Ongoing: synthesis study on EE financing (May – …)

FGD: ETS & Carbon Pricing

Site visit to factory, dialogue on industry decarbonization

Workshop: SEF for the startups

CASE Teaching for School

LTES Development

- The Long-Term Energy Scenario (LTES) is energy modeling study that in line with the Indonesian Vision (Visi Indonesia Emas 2045), attentive to the NZE target, and related trend & commitment.
- The LTES study is expected to: to support the development narrative of RPJPN as well as the preparation of new RPJMN.

Kick off: emerging technology option to support Indonesia to achieve net zero emission

- Discussion on emerging energy technologies options and their potential to support Indonesia's energy transition and national development plan;Discussion on how Indonesia could recognize the recent technology development. It is including to consider some relevant aspects to plan Indonesia's energy system, as well as sharing knowledge on adapting the technologies that could be applied to Indonesia.

Clean Energy Finance and Investment training

- Hosted by MEMR and OJK supported through synergy between CASE, OECD and USAID Sinar
- Attended by more than 80 participants. The training divided into three training classes (RE, EE, and FI), facilitating the dialogues between regulators, project developers/private and financiers.

Emerging Technology Discussion Series: Energy Storage System and Grid Interconnection

- Discussion on the emerging energy storage and grid interconnection technologies and their potential to support Indonesia's energy transition;

- Understanding different perspectives on the **pros and cons** of energy storage system technologies and grid interconnection concepts;

- **What does it mean for Indonesia?** Discussion on how Indonesia can adapt to technological developments in energy storage systems and grid interconnection, as well as consider key aspects in planning the energy system in Indonesia.

Thank you

**Deni Gumilang,
Senior Advisor / Team Leader CASE Indonesia**

on behalf of Clean, Affordable and Secure Energy (CASE) for Southeast Asia

Energy Programme – United towards a Decarbonized Energy System

NATIONAL TARGETS

GHG Reduction: Net Zero by 2060, Peak Power Emissions 2030

Coal Phase Out

Renewable Energy
23% until 2025, 34% by 2030

Energy Efficiency
17% until 2025

Access to Electricity
99% until 2025

TOPICS

| Policy Advice: Renewable Energy, Carbon | Decarbonisation | Energy Dialogues | Power System Planning & Operation | Renewable Energy Pilots & Innovation | Skill Development/ Vocational, Education, and Training (VET) |
| Just Transition in Mining Regions | Private Sector Cooperation | Triangular Cooperation | Access to Finance | Public Awareness & Campaigns | |

PROJECTS IMPLEMENTED BY giz *Deutsche Gesellschaft für Internationale Zusammenarbeit (GIZ) GmbH*

BMZ					BMWK			
REEP *Renewable Energy for Electrification Programme*	**ENTRI** *Renewable Energy Mini-Grids Triangular Cooperation*	**SoCool** *Solar Cold Chains for Green Economy*	**DRM** *Domestic Resource Mobilisation for Sustainable Development*	**ISED** *Innovation and Investment for Inclusive Sustainable Economic Development*	**ExploRE** *Strategic Exploration of Economic Mitigation Potential through RE*	**SETI** *Sustainable Energy Transition Indonesia*	**CASE** *Clean, Affordable & Secure Energy for Southeast Asia*	**JET** *Innovation Regions for Just Energy Transition*
2017 – 2024	2023 - 2026	2023 - 2026	2023 – 2026	2021 – 2024	2018 – 2025	2022 – 2028	2020 –2027	2023 – 2027

Energy Transition Cluster: Leadership Team

Lisa Tinschert
Cluster Coordinator, Lead Advisor Energy Programme

Ade Cahyat
Just Transition Lead
JET, CASE, DRM2

Budi Kuncoro
Energy Fiscal Policies Lead
DRM2

Deni Gumilang
Energy-Climate - Finance Nexus Lead
CASE, SETI, ExploRE

Dody Setiawan
Bioenergy, Hydrogen, Power to X Lead
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Frank Stegmüller
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SoCool

Gitafajar Saptyani
Senior Liaison Officer
GoI

Johannes Anhorn
Built Environment & Industries Lead
SETI, PEEB Cool

Ruly Marianti
Green Skills & Employment Lead
ISED

Christoph Lürssen
Power System Lead
REEP2

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Rural Electrification, South South North Coop. Lead
ENTRI, develoPPP

Recap: CASE Highlights in 2022

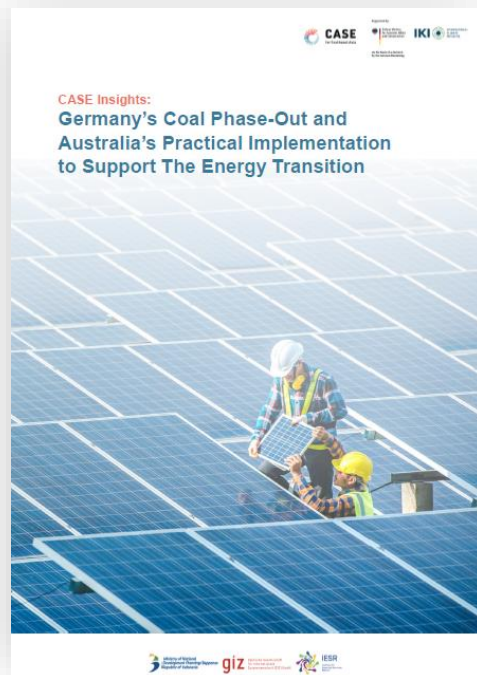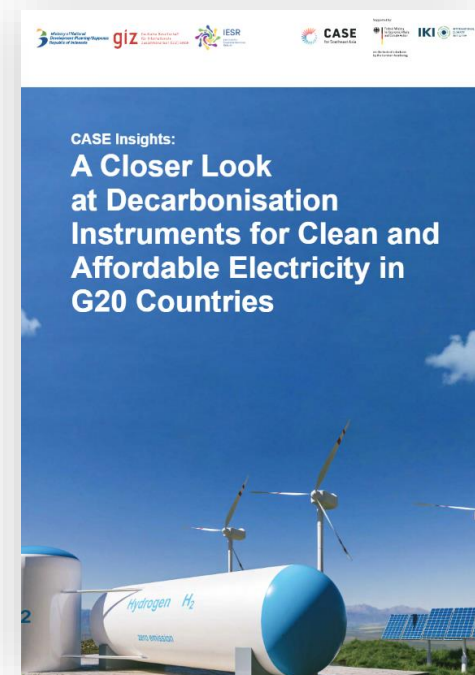## Published Knowledge Products

March

April

June

December

December