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SYNOPSIS

The transition to low-carbon energy sources in the region is facing opposition from local communities adversely affected by the infrastructure development projects. The use of digital technologies, especially Artificial Intelligence, in social mobilisation has complicated the milieu, presenting both opportunities and risks for the energy transition.

COMMENTARY

Southeast Asia is set to expand the use of renewable energy sources, including solar, wind and hydropower. Such development is a key prerequisite for low-carbon energy transitions.

In anticipation of the region's growing energy demands – by 60 per cent between 2019 and 2040 – ASEAN member states have been ramping up their energy production. They have set an aspirational target for renewable energy sources to make up 23 per cent in the regional energy mix by 2025.

Local Opposition to Renewable Energy Projects

At the same time, renewable energy infrastructure development has impacted local communities, often resulting in the degradation of land and water quality and the displacement and loss of livelihoods. The weakness of local communities vis-à-vis the state and corporations, the absence of strong participatory mechanisms and fairness in compensation, and the lack of transparency in decision-making processes have already led to widespread opposition toward renewable energy projects from these local communities.

In Malaysia, opposition to the Bakun hydroelectric dam project in central Sarawak persisted for years before it was eventually commissioned in the 2010s. In Indonesia, residents of Poco Leok in East Nusa Tenggara Province and of Padarincang, Serang, in Banten Province, have mounted opposition to proposed geothermal power projects. In Thailand, a string of protests and legal challenges has been launched against various hydro dam projects in places such as Pak Beng, Nam Choan, and Xayaburi. The Yuam/Salween water diversion project has similarly been affected.

Digitalisation, Artificial Intelligence, and Social Mobilisation

Within the context of social mobilisation in the region, digital technologies such as social media and messaging platforms played an important role in influencing opinions, garnering support, and mobilising action. At the same time, these technologies have been used to spread disinformation, hate speech, and to cause polarisation. Added to them are various means of control through the use of surveillance and restrictive legal measures.

It is within this digital environment that Artificial Intelligence technology has been introduced. Given its rapidly expanding use, understanding its impacts on social mobilisation, particularly in relation to renewable energy expansion and energy transitions, is beneficial.

The use of the new technology can empower activism by increasing transparency through AI-powered real-time monitoring. An example of this is the use of AI-powered data collected by the World Resources Institute's Global Forest Watch by Forest Watch Indonesia – a civil society organisation working with the Aru indigenous people living in the Moluccas – to track the locations of illegal logging. This monitoring allows communities to follow timber movements to ports, record critical evidence and report the findings to the authorities. This has resulted in the confiscation of 38 containers of illegal timber in 2019 by the Ministry of Environment and Forestry.

Discussions on AI's role in the specific context of social mobilisation are still limited in Southeast Asia. However, given that such conversations have begun elsewhere, such as in the United States, it is important to pay close attention to them, considering the contested landscape of energy transition in the region.

Preliminary debates suggest that AI tools have the potential to help activists monitor state responses before, during, and after public protests, which is helpful for their logistical planning and real-time tracking of the movements of their friends and foes. In addition, through its capability to aggregate and analyse vast amounts of information and to disseminate it in structured and accessible ways, the AI technology may also enhance communication and cooperation among activists, helping them overcome leadership and organisational issues that often weaken social mobilisation.

On the other hand, the same technology has been used by their adversaries to enhance surveillance mechanisms aimed at suppressing activism among the people, including those living abroad, through censorship. In addition, AI-powered bots and

trolls have been deployed to intimidate activists, instil fear and discourage them from expressing their opinions. At the same time, AI-generated fake content and propaganda have been used to discredit them.

Governance Reforms Towards Just and Inclusive Energy Transition

In view of the uncertain implications of AI application in social mobilisation, there is an urgent need for guidelines on its use by state actors, activists and those engaging in social mobilisation. Importantly, it is essential to address governance problems that underpin the local communities' grievances.

The recent global turn toward just and inclusive energy transition principles, which explicitly recognise the need to protect those adversely affected by the low-carbon transition agenda, provides an entry point for countries in the region to address long-standing governance challenges and community opposition linked to renewable energy development.

At the regional level, ASEAN has begun to move in this direction. In 2024, the regional grouping endorsed the ASEAN Plan of Action for Energy Cooperation from 2026 to 2030 with a thematic focus on energy security and decarbonisation for a just and inclusive energy transition. More recently, in January 2025, the ASEAN Centre for Energy partnered with Oxfam in publishing *A Guide to a Just and Inclusive Energy Transition in ASEAN*.

With the growing use of AI, ASEAN countries must also track and examine its impact on the energy transition, and ensure the transparency of AI use, data security and adherence to ethical standards that safeguard the rights and participation of local communities. In addition, states must be held accountable to prevent repression and violence against communities protesting the energy transition. This is particularly critical in light of the region's push for cross-border electricity trade under the ASEAN Power Grid initiative, which hinges on renewable energy expansion.

Conclusion

To provide for a just and inclusive energy transition, it is necessary for states to reform their energy transition governance through the strengthening of inclusive and participatory processes. ASEAN member states and corporations constructing renewable energy infrastructure must assess the impacts of low-carbon energy development and prioritise meaningful consultative processes with affected communities. States would also need to uphold their rights and actively engage with civil society groups.

Cooperation among ASEAN member states is integral to the development of the just and inclusive energy transition frameworks and guidelines regionally. While ASEAN has published a guide on AI governance and ethics, the regional grouping must also establish and coordinate AI governance standards in relation to energy transition, ensuring that the new technology reinforces, rather than undermines, justice and inclusivity.

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