

Chapter 6

Policy Recommendations

August 2019

This chapter should be cited as

ERIA (2019), 'Policy Recommendations', in Yoshikawa, H. and V. Anbumozhi (eds.), *Shaping Energy Policies to Achieve the Sustainable Development Goals in Myanmar and the Greater Mekong Subregion*. ERIA Research Project Report FY2018 no.10, Jakarta: ERIA, pp.99–102.

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This report analysed power-sector policy in Myanmar and the GMS using various approaches. The research touched upon international grid connectivity, rural electrification, sustainable development, barriers to mini-grid diffusion, and a financing method for mini-grids. The following summarises the lessons from the analysis.

1. Renewables and the Peace Process

Large-scale development projects should employ a conflict-sensitive approach.

Poverty reduction is important but does not necessarily lead to immediate peace. When conducting a large-scale development project, policy makers should consider local circumstances and seek agreement with locals through an appropriate community consultation process. Otherwise, the risk of a conflict intensifying due to a large-scale development will be greater.

Pay attention to decentralised renewable energy as a component in cooperative projects.

Although their use is limited to basic applications, SHSs can satisfy increasing demand for mobile charging. SHSs are not politically sensitive and local people can derive significant benefits from them. SHSs can, therefore, serve as a starting point for a cooperative project, which can be followed by a mini-grid project as electricity consumption expands.

Increase the number of energy engineers.

One issue raised was the dearth of engineers in rural areas. Engineers hired by the government cannot cover every corner of a region, whilst few companies operate in rural areas, and few possess the needed technical capability. No one can check the quality of infrastructure such as roads. In the NCDDP, providing technical assistance through DRD engineers alone was no longer sufficient when the number of projects ballooned, and the project's organisational structure was enhanced. People are waiting to learn the technology, and expanding CSOs' efforts to provide them with technical education would be effective.

Review existing social service systems for collaborative opportunities.

To conduct cooperative projects, state authorities should recognise and respectfully work with local service providers (EAOs and CSOs). Although Burmese society is characterised by patron-client relationships, it is important to recognise that ethnic minorities are not clients in need of

central government protection. The central government should not aim to replace the EAO in its patron–client relationship with villagers.

2. Regional Power Connectivity for Myanmar and the GMS

The government should consider integration as a mechanism to foster equitable national development of renewable energy.

The government should ensure that the benefits from interconnection are shared across the country and are not captured only by populations and businesses in urban areas already connected to the national grid. National and state governments should work together so that benefit-sharing mechanisms with local communities can be considered from the beginning.

Myanmar should evaluate electricity imports to ameliorate insufficient power capacity in the short run and improve national energy security in the long run.

How to meet both needs should be further studied. Overdependence on electricity imports could become a concern in the long term. Exploring imports from other countries such as Lao PDR should continue to secure a diversified generation mix. Power imports from China could be planned jointly with exports to Bangladesh. The structure of contracts and price arrangements between the three countries will be critical: no party should dominate.

Consider strengthening and expanding the national grid.

The country has no single 500 kV line, which limits the viability of transboundary power trade. The construction of such infrastructure, already in plan, is critical to make the imports from neighbours economical. Ageing infrastructure leads to high technical losses.

3. Barrier to Development of Renewable-based Mini-grids

Increase the tariffs for the main grid to pay for development and operation costs.

A subsidised national grid tariff not only causes economic losses for the national grid but also hinders the development of mini-grids. A possible increase in the national grid tariff has been discussed, but it is politically sensitive and has been repeatedly postponed. Current electricity charges cannot cover power generation costs of the national grid, and various reports mention the need to increase prices. The tariff increase in the summer of 2019 is in the right direction, but a higher price hike should be pursued.

Give instruction to villagers in advance.

Instructing villagers in advance could help to reduce potential complaints about the mini-grid. Villagers should understand the do's and don't's such as running many appliances at one time.

Fill the education gap of local developers.

Local developers need help in applying for soft loans from international donor organisations. However, they cannot afford to pay for support because they operate the mini-grids at low profit rates. If the loan aims to assist local operators, lenders should provide support services in-house or outsource them.

Use affordable technology.

Often, aid projects install high-quality technology in rural areas, but operation and maintenance pose difficulties. Lack of parts and engineers is a problem.

4. Financing Mini-grids

To secure significant government support, provide a public financing mechanism such as a dedicated fund.

Where the banking sector is not mature, as in Myanmar, a fund mechanism is important to achieve multi-year targets. A law legalising a rural development fund is in its final deliberation. As the law states that the fund can be used for rural infrastructure such as electrification, communities can reasonably expect the fund mechanism to support mini-grids.

Fund sources can be secured as an ear-marked tax such as a gasoline tax.

The initial cost of a mini-grid needs to be subsidised, especially in the community model. DRD support for one project is around US\$0.18 million. As the minister of MOEE states, 2,000 villages in peripheral regions need mini-grids. Around US\$360 million is needed to achieve mini-grid targets in conflict-prone areas. In Thailand (Energy Conservation [ENCON] Fund), the petroleum tax is the feasible option. Assuming surging transportation use in urban areas, a 5% tax rate on gasoline and on diesel is sufficient to fund mini-grids in Myanmar.

Line ministries should be reformed to diffuse mini-grid systems on a large scale.

The MOEE oversees on-grid electrification whilst the MoALI conducts off-grid electrification projects such as the '60-20-20' programme. As MoALI is not an 'energy' ministry, the programme remains small. To expand the scale and integrate off-grid systems with on-grid ones, institutional reform of MOEE and MoALI is required for their deeper integration and coordination. Ultimately,

an integrated policy and planning body such as the previous government's National Energy Management Committee is required.

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