## Chapter 15

# Capacity-Building Needs for Energy Security for Lao PDR

**Jeremy Gross** 

This chapter should be cite as: Gross, J. (2024), 'Capacity-Building Needs for Energy Security for Lao PDR', in Phoumin, H. and A.Phongsavath (eds.), *Energy Security White Paper: Policy Directions for Inclusive and Sustainable Development for Lao PDR and the Implications for ASEAN.* Jakarta: ERIA, pp. 346-349.

### 1. Introduction

There is no one definition of capacity building, but generally, it refers to enhancing existing – or providing new – skills, methodologies, approaches, and processes to relevant stakeholders, both at the level of the individual and organisation who are responsible for developing, implementing, and monitoring particular tasks or fields of work associated with all elements of obtaining a particular policy outcome. Capacity building is wide-ranging, taking various forms at different times and along a temporal timescale. Whilst some technical skills needed can be identified in advance, implementation requires the agility to react and to adapt to changing circumstances, both at the technical skills level and to changing social, political, and economic contexts. This is especially true of policies that are many years in the making. Capacity building therefore has an inherent dynamic to it; it is neither a simple, predetermined checklist of trainings to be provided nor an exercise detached from real-time feedback loops affecting policy implementation.

Capacity building is also more than specific skills needed to carry out particular technical tasks; it is needed around the whole policy ecosystem to support a desired outcome. Identifying technical skills needed for a specific task can often be done with ease, but identifying the skills needed around a policy environment – rather than scientific and technical training needs – can be more difficult. For example, imparting knowledge about how to operate an infrastructure facility must run in parallel to ensuring that the facility complies with local and national laws and regulations as well as international obligations.

To cover all aspects of capacity building, capacity building cannot be an afterthought but must be integral to the design and adoption of policy. It can contribute to forestalling certain pitfalls at a later stage. Thinking through the types of support likely to be needed is important, as what may initially appear to be an ideal policy may – on a more thorough evaluation – reveal a potential level of complexity and support needed. Indeed, ideal policies may not be practical policies if they demand levels of human and capital resources beyond the means available or be practical for implementation.

This brings into focus further important aspects of capacity-building planning. First, policy planning must include not just a cost-benefit analysis of expected outcomes but also the cost of capacity-building support. It may be necessary to develop different sets of options to support implementation, which should be considered as part of the decision-making process. Such planning for capacity building helps ensure that an outcome being pursued can be achieved and that resources available are in equilibrium with resources needed for implementation.

### 2. Types and Targets of Capacity Building

As already noted, capacity building comes in various forms, is targeted towards different stakeholders, must be provided by different experts, and takes place at various times along the policy development/ implementation lifecycle. The most common types of capacity building required are:

- (i) conducting policy modelling and/or cost-benefit analyses;
- (ii) undertaking domestic regulatory mapping to understand which laws and regulations need to be reformed to implement new policies or to remove regulations acting as barriers to more dynamic reform and regulatory compliance;
- (iii) undertaking international regulatory mapping (e.g. non-tariff measures);
- (iv) conducting advocacy, including support for particular stakeholders to know how to share their findings on a particular issue;
- (v) providing issue-specific technical training;
- (vi) developing implementation work plans;
- (vii) creating monitoring and evaluation frameworks;
- (viii) monitoring policy implementation;
- (ix) conducting outreach and awareness-raising activities; and
- (x) sharing lessons learned and comparative experiences.

It is beneficial to bear in mind the range of possible support that exists. From this menu of capacity-building activities, certain amounts of knowledge and competency will already exist and be institutionalised amongst sets of stakeholders experienced in a particular field. However, any new policy or effort to innovate is likely to necessitate more people who need to be brought into the project circle. Thus, certain requisite skills – whether in relation to policy development within amongst policy officials or technical staff in relation to policy roll-out – must be prepared for. Neither the resources nor the time needed for this should be underestimated.

With capacity building likely needed for a wide and large number of stakeholders – including government officials, legislators, independent regulators, oversight agencies, state-owned enterprises, the private sector, and community groups – the burden of who is responsible for providing the capacity building to different target audiences must also be considered. It is incumbent on the government, which establishes policy, to be aware of its own resource limitations as well as those of counterpart stakeholders who will play a vital role in the success of a policy.

Another type of capacity building support emanates from the benefit of learning from others. Developing policies around energy security is not unique to Lao People's Democratic Republic (Lao PDR). Whilst there will be differences in various countries' experiences – for example, access to energy supplies based on whether the country has its own energy sources or it is an energy importer – there are issues that all countries must address, such as improving the energy efficiency of appliances. How countries tackle these issues is ripe for information sharing and standardisation.

### 3. Examples of Capacity Building

The chapters of this paper resonate with the various forms of capacity building listed previously; others may become apparent on policy adoption and roll out. From the chapters, it is clear that the target audience for capacity building in Lao PDR will be varied, based around the many different objectives to be achieved.

As several authors note, capacity building is an ongoing affair rather than a one-time event. Leong Siew Meng, in his chapter on end-use sector energy efficiency, is explicit about success depending on the success of capacity building, starting from structured continuous professional development programmes and awareness campaigns, broken out into immediate and long-term measures. Chin Loon Ong, in his chapter on energy management systems and energy service companies, also notes the ongoing nature of capacity building through short and medium- and long-term policies.

Alloysius Joko Purwanto, Ryan Wiratama Bhaskara, and Citra Endah Nur Setyawati, in their chapter on a sustainable transport system and power market, note that capacity building will be needed to strengthen technical expertise on electric vehicles and low-carbon transport. Priority needs to be given to government officials to elaborate regulations, especially in term of standardisation, vehicle registration, charging infrastructure, and policy alignment amongst related ministries. This, in turn, must be followed by capacity building for officials to implement associated programmes, monitor impacts, and enforce regulations. Capacity building is also needed for private sector players and potential private investors to take part in government electric vehicle-related programmes.

Concerning biofuel development, capacity building is needed by smaller businesses in rural areas to improve their efficiency in producing biofuels for their feedstock, meet the required standards, access financial resources, and participate in the biofuel industry supply chain. Regarding the development of logistics and distribution centres, capacity building needs to be given to government officials to better understand the economic roles of logistics and distribution centres for the movement of goods and to formulate policy measures to increase the efficiency and sustainability of the movement of goods within Lao PDR. Capacity-building efforts must focus on logistics, distribution centre owners and operators, as well as trucking companies to understand governments strategies, measures, and regulations and to help improve their management capacity. From just this one chapter, it is clear that stakeholders with many types of expertise are needed to provide capacity building in many fields.

Financial literacy for stakeholders – including the government, banks, financial institutions, and potential investors – concerning investment opportunities, risk management, and financial modelling specific to sustainable energy projects, is a theme Farhad Taghizadeh-Hesary touches upon in his chapter on financing energy supply security in Lao PDR. Financial literacy workshops will allow policymakers and decision-makers make informed investment decisions, vital for fostering private investment in green energy projects. Bolstering this literacy can effectively drive the transition to sustainable energy by creating an environment conducive to private sector involvement in green energy initiatives. Improved financial literacy and decision-making are essential to attract private investment, ensure sustainable funding, and promote energy security and economic development.

Taghizadeh-Hesary also notes the specific technical training needed by local professionals at the state-owned and private electricity companies to develop and to maintain solar, wind and hydropower technologies. Whilst various international organisations and institutions have organised training programmes on green energy in Lao PDR, especially hydropower, this knowledge needs to be expanded to include energy alternatives like solar and wind power. Such capacity building is important for professionals in Lao PDR to design, implement, and maintain sustainable energy projects cost-effectively; drive innovation; and reduce reliance on external expertise. A longer-term positive outcome of developing this expert workforce is that they can become leaders in a particular field, exporting their technical skills and expertise in the future.

Hoyyen Chan, in her chapter on voluntary carbon markets, notes financing around capacity building emanating from international sources, such as those tied to international agreements and bilateral and regional sources. For example, there is support available for mitigating greenhouse gas emissions under Article 6.4 of the Paris Agreement. At the regional level, the Association of Southeast Asian Nations (ASEAN) provides capacity-building opportunities to support its various regional frameworks. In addition to benefitting from these funds, buying into regional standards ensures that national standards are compatible and compliant with those of other ASEAN Member States. In addition, there are global funds through initiatives such as the Global Green Growth Institute, which can be tapped for developing carbon markets.

#### 4. Summary

This chapter serves to highlight the variety of potential types of capacity building that exist and the importance of planning for capacity building needs as part of policy design. This type of forwards planning helps ensure that policies identified are better thought through and costed, contributing to the likelihood of a positive policy outcome. It also helps policymakers consider all stakeholders associated with the policy, their potential roles, and their contributions. If this can be done for all sectors of energy security for Lao PDR, this will contribute significantly to the success of the country's energy security.