



Thailand: Improving the Business Climate for Renewable Energy Investment

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Action plan to attract investment in renewable energy in Thailand

- Set up a dedicated ministry for governing renewables
- Expand and improve the regulatory framework
- Capitalise on its peer-to-peer energy trading experience
- Simplify market entry for foreign investors
- Build capacity for renewable energy governance

Thailand is among ASEAN's renewable energy leaders. It attracted more than USD 10.7 billion of investment in renewable energy from 2006 to 2018. The country's total installed capacity of renewable energy represented over 60% of the total capacity of ASEAN in 2019 [1]. Renewables accounted for 15% of its energy mix in 2018, and a target of 30% in 2036 was set. Despite this, during 2018–2019, Thailand experienced relative stagnation in terms of attracted investment. There are three main reasons for this. First, Thailand is no longer the only attractive market in ASEAN as it was just after 2010, as other countries are becoming increasingly attractive to investors (e.g. Vietnam). Second, investors expect more proactive energy sector reforms from Thailand and remain cautious regarding new investment projects. Third, the capacity for governing renewables is limited. Thailand is ranked no 85 out of 156 countries in the Index of Geopolitical Gains and Losses after energy transition ([GeGaLo Index](#)) and needs to build strong institutions for renewable energy governance to stay ahead [2].

Taking into account these points, we propose five actions that can improve the attractiveness of Thailand's investment climate for renewable energy in both the short and long term.

Action 1: Set up a dedicated ministry for governing renewables

To stand out as an active reformer, Thailand could focus more on energy governance reform and set up a ministry or similar type of autonomous institution for governing renewable energy. Currently, four different government bodies – the Department of Alternative Energy Development and Efficiency under the Ministry of Energy, the Energy Policy and Planning Office, the Energy Regulatory Commission, and the Electricity Generating Authority of Thailand – are responsible for renewable energy policy. Each of the four institutions has limited capacity to govern the growing renewable energy sector. One can also observe functional overlap and fragmented governance of the sector. Moreover, the coordination and communication between central and provincial energy authorities could be improved. Establishing an autonomous institution, providing it with sufficient human resources and assigning it a broad scope of responsibilities could help address the above-mentioned issues [3]. Importantly, initiating profound energy governance reform can help pique the interest from international renewable energy investors.

Action 2: Expand and improve the regulatory framework

Renewable energy is part of Thailand's Nationally Determined Contribution (NDC) under the Paris Agreement [4]. The regulatory framework for renewables is advanced, but it could be further developed (see Table 1). One of the first measures could be to expand the fiscal incentives for investors by adopting tender mechanisms and production tax credits. Thailand has both the feed-in tariff and auction system in place and could develop these mechanisms further. In 2018, slow progress on the issue of feed-in tariffs for renewables versus power purchases from gas-based power plants led to uncertainty, staving off new investment in wind and solar energy projects [5]. Developing a robust power purchasing framework for solar and wind energy could attract more investors and have an immediate positive impact on Thailand's image as an attractive investment destination.

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Table 1. Thailand’s regulatory framework compared to other ASEAN countries (2020)

| Type of policy | | Philippines | Vietnam | Indonesia | Malaysia | Thailand | Singapore | Myanmar | Lao PDR | Cambodia | Brunei Darussalam |
|--|---|-------------|---------|-----------|----------|----------|-----------|---------|---------|----------|-------------------|
| Regulatory policies | Renewable energy in INDC or NDC | • | • | • | • | • | • | • | • | • | • |
| | Renewable energy targets | • | • | • | • | • | • | • | • | | • |
| | Feed-in tariff/auctions/premium payment | • | • | • | • | • | | | | • | |
| | Net metering/billing/direct consumption-supply | • | • | • | • | | • | | | | |
| | Biofuel blend obligation/mandate/target | • | • | • | • | • | | | | | |
| | Electric utility quota obligation/RPS | • | • | • | • | | | | | | |
| | Tradable REC | | • | | | | | | | | |
| | Renewable heat obligation/mandate | | | | | | | | | | |
| Fiscal incentives and public financing | Tax incentives | • | • | • | • | • | | • | • | • | |
| | Public investment/loans/grants/subsidies/rebates | • | • | • | • | • | • | | • | | |
| | Reductions in sales, CO ₂ , VAT or taxes | • | • | • | • | • | | • | | | |
| | Tendering | • | | • | • | | • | | | | |
| | Investment or production tax credits | • | • | • | | | | | | | |
| | Energy production payment | • | | | | • | | | | | |

Sources: [6,7].

Action 3: Capitalise on its peer-to-peer energy trading experience

Thailand was among the ASEAN pioneers in the adoption of peer-to-peer energy trading in 2018. This allowed for more active participation from the private sector and prosumer communities. Thailand could capitalise on this successful experience and actively promote this form of energy trading throughout the country. This could also mitigate governance inefficiencies and reduce the burden on public utility companies at the provincial level (as discussed in Action 1) through direct participation of the private sector, households and communities.

Table 2. Market entry for foreign investors in Thailand

| Task | Government body |
|--|--|
| Company registration and issuing investment licences | <ul style="list-style-type: none"> Department of Business Development – Ministry of Commerce Board of Investment |
| Issuing licences for power projects | <ul style="list-style-type: none"> Office of Energy Regulatory Commission |
| Off-taker | <ul style="list-style-type: none"> Electricity Generating Authority of Thailand Provincial Electricity Authority Metropolitan Electricity Authority |

Action 4: Simplify market entry for foreign investors

There is no priority entry for renewable energy companies in Thailand, and one way to improve the investment climate could be to establish this. The market entry could be also improved by streamlining company registration and issuance of investment licences (see Table 2). If Thailand decides to establish a ministry of renewable energy (see Action 1), the ministry could assist in issuing investment and other licences and thus simplify the business conditions and reduce red tape for renewable energy investors.

Action 5: Build capacity for renewable energy governance

Thailand is a member of the International Renewable Energy Agency (IRENA), the main institution for building renewable energy governance capacity. It also actively partners with the Asian Development Bank (ADB), which was instrumental in developing the first solar and wind projects and issuing the first green bond in the country. To design and successfully implement Actions 1–3, Thailand could request special technical support and capacity building from ADB, the International Energy Agency, IRENA and other organisations. It could take the initiative and launch a multi-stakeholder group for the realisation of energy governance reform. Such a group could also help ensure donor coordination for the launch of new renewable energy projects with development assistance components.

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