



Malaysia: How to Scale Up Investment in Renewable Energy

Roman Vakulchuk^{a*}, Hoy-Yen Chan^b, Muhammad Rizki Kresnawan^b,
Monika Merdekawati^b, Indra Overland^a,
Haakon Fossum Sagbakken^a, Beni Suryadi^b,
Nuki Agya Utama^b, Zulfikar Yurnaidi^b

<http://dx.doi.org/10.13140/RG.2.2.32870.45124>



Action plan to attract investment in renewable energy in Malaysia

- Reform energy governance in favour of renewable energy
- Ensure streamlined management of the regulatory framework for renewable energy
- Develop a framework for easier grid connection and use
- Enhance awareness-raising measures for investors
- Make market entry easy and attractive

Malaysia set a target of 20% renewables in the energy mix by 2025, an 18% increase from the 2% it had in 2018 [1]. One of the planned measures is the development of large-scale solar power [2]. To reach the target, it will be necessary to attract a total of USD 8 billion of renewable energy investment during this period [1]. Considering the fact that Malaysia attracted only USD 2.5 billion from 2006 to 2018, the country will need to attract USD 1.3 billion on average every year from 2019. To achieve this, it will need to undertake serious reform measures to improve the investment climate for renewables and conditions for renewable energy deployment. Given the ever-increasing global competition for renewable energy investment, the rapid implementation of such reforms becomes an imperative. This in turn requires strong governance.

Malaysia is ranked no 114 out of 156 countries in the Index of Geopolitical Gains and Losses after energy transition ([GeGaLo Index](#)) and thus needs to improve its capacity for renewable energy governance if it does not want to fall behind [3].

With this background, we propose five actions that can improve the attractiveness of Malaysia's investment climate for renewable energy to 2025 and beyond.

Action 1: Reform energy governance in favour of renewable energy

Given its ambitious goals and targets, Malaysia needs to reform its energy governance system and expand the role of renewable energy institutions. It could choose one of two strategies to carry out the governance reform. One option would be to expand institutional support for the Sustainable Energy Development Authority (SEDA), which is currently responsible for administering the feed-in tariff mechanism (see Figure 1), and assign it more regulatory power and controlling functions. Alternatively, instead of expanding SEDA, it could set up a new ministry for renewable energy with autonomous decision-making power and responsibilities. This should pave the way for strengthening human and institutional resources for governing the renewable energy sector. This would also be a more powerful signal to foreign investors, as it would show that renewables are prioritised in the energy system [4].

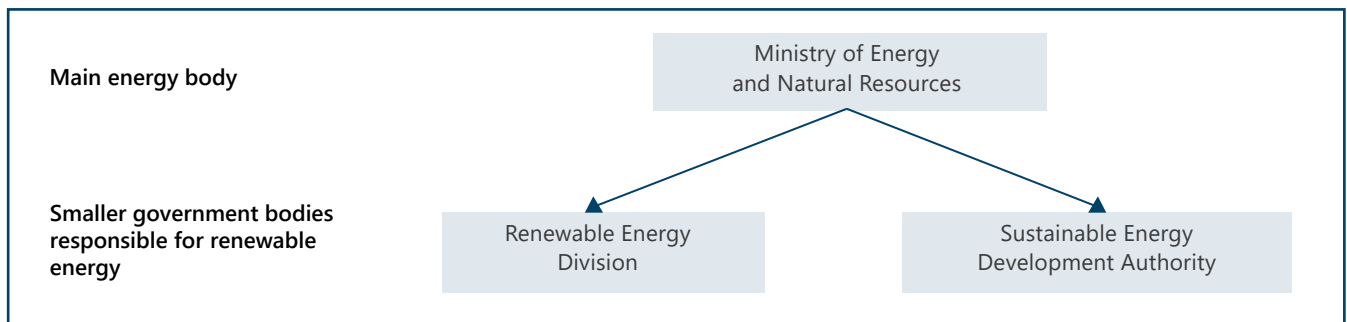


Figure 1. Current energy governance in Malaysia

^aNorwegian Institute of International Affairs (NUPI), Oslo, Norway.

^bASEAN Centre for Energy (ACE), Jakarta, Indonesia.

* Email: rva@nupi.no

Table 1. Malaysia’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 2: Ensure streamlined management of the regulatory framework for renewable energy

The investment framework for renewable energy in Malaysia is clearly one of the most nuanced and well-developed in Southeast Asia. The country has an advanced regulatory framework for renewables (see Table 1). Renewable energy is part of Malaysia’s Nationally Determined Contribution (NDC) [5]. Feed-in tariff and auction mechanisms have been designed and successfully tested. Malaysia also has a net energy metering system in place. A Green Technology Financing Scheme, Green Investment Tax Allowance, Green Income Tax Exemption initiatives and Large Scale Solar competitive bidding programme have been launched. Given the increasing complexity of the regulatory environment, Malaysia could focus on ensuring that there are no overlapping or contradicting policies and incentive measures and that they are complementary with each other.

The adoption of various incentive mechanisms has not yet translated into more investment in the renewable energy sector. Advanced regulations need to be managed by strong institutions, and these are still not present in Malaysia [1]. The current enforcement capacity of the Ministry of Energy and Natural Resources and SEDA is limited and addressing this should be one of the main priorities (see Action 1).

Action 3: Develop a framework for easier grid connection and use

One of the weaknesses of Malaysia’s renewable energy sector is that it lacks a comprehensive mechanism for assessing and improving electricity network connections, use, pricing and renewable energy integration mechanisms [8]. The Philippines and Vietnam stand out as ASEAN leaders in this regard, and Malaysia could draw on their experience. As a first measure, Malaysia could develop a detailed set of rules for systematic and regular assessment of the country’s grid connection and its flexibility. This could help identify risks and costs for power operators, adding more predictability to renewable energy projects and contracts.

Action 4: Enhance awareness-raising measures for investors

Malaysia is one of the leaders among the ASEAN countries in terms of adopting a wide range of incentives for investors. The adoption of Malaysia Energy Supply Industry 2.0 (MESI 2.0) aimed at promoting green energy trading, the Renewable Energy Transition Roadmap (RETR) 2035 and other measures (see Action 3) are clear signs of Malaysia’s serious commitment to renewable energy. These and other measures require regular and systematic awareness-raising and information campaigns. SEDA plays an instrumental role in raising awareness and communication. It has a user-friendly and advanced website offering useful information to any interested party. It could also take a more proactive approach to informing about reforms that the country undertakes, adopt a communication strategy for investor

outreach, create an international stakeholder database and send stakeholders regular updates about changes in the business climate for renewable energy.

Action 5: Make market entry easy and attractive

There is a single market entry point in Malaysia, but company registration and obtaining of licences is a complex process involving multiple actors (see Table 2). One way to streamline market entry could be to organise priority entry for renewable energy investors. Their project applications, company registration and launch of business operations could be processed as a matter of priority by a special government institution that would deal only with renewable energy investors and operators.

Table 2. Market entry for foreign investors in Malaysia

Task	Government body
Company registration	Companies Commission of Malaysia
Investment promotion, networking and obtaining manufacturing licences	Malaysian Investment Development Authority under Ministry of Industry and Trade Sustainable Energy Development Authority

Issuing operating licences for power generation

- Suruhanjaya Tenaga (also known as Energy Commission)
- Tenaga Nasional Berhad for Peninsular Malaysia
- Sabah Energy for Sabah State
- Sarawak Energy for Sarawak State

References

- [1] GlobalData Energy. Malaysia Needs US\$8 Billion Investment to Achieve 20% Renewable Energy Target by 2025. 2019.
- [2] SEDA. Renewable Energy in Malaysia. Kuala-Lumpur: Sustainable Energy Development Authority (SEDA); 2020.
- [3] Overland I, Bazilian M, Ilimbek Uulu T, Vakulchuk R, Westphal K. The GeGaLo Index: Geopolitical Gains and Losses after Energy Transition. Energy Strategy Reviews 2019;26:100406. <https://doi.org/10.1016/j.esr.2019.100406>.
- [4] Vakulchuk R, Hlaing KK, Naing EZ, Overland I, Suryadi B, Velautham S. Myanmar's Attractiveness for Investment in the Energy Sector: A Comparative International Perspective 2017. <https://doi.org/10.2139/ssrn.3023133>.
- [5] ACE. Malaysia. Country Profile. Jakarta: ACCEPT. ASEAN Centre for Energy (ACE); <https://accept.aseanenergy.org/country/Malaysia/>; 2020.
- [6] REN21. Renewables 2019 Global Status Report. Paris: Renewable Energy Policy Network for the 21st Century (REN21); 2019.
- [7] ACE. ACCEPT-Renewable Energy & Energy Efficiency Policy Database. ASEAN Energy Database System. Jakarta: ASEAN Centre for Energy (ACE); 2020.
- [8] World Bank. Regulatory Indicators for Sustainable Energy. The World Bank Group; 2018.

This policy brief is a product of the **ASEAN Climate Change and Energy Project (ACCEPT)**.

ACCEPT is funded by the Norwegian Government under the Norwegian-ASEAN Regional Integration Programme (NARIP) and is jointly implemented by the ASEAN Centre for Energy (ACE) and the Norwegian Institute of International Affairs (NUI). The project includes the active involvement of key ASEAN stakeholders, and helps enhance modelling, analytical and regional policy planning capacities within ASEAN.

ACE is an intergovernmental organisation within ASEAN structure that represents the 10 ASEAN Member States' (AMS) interests in the energy sector.

NUI carries out research on international issues of importance to Norway and the world.



accept.aseanenergy.org

[@ASEAN_EnergyCC](https://twitter.com/ASEAN_EnergyCC)

[@asean_energycc](https://www.instagram.com/asean_energycc)



Implemented by:



Supported by:



ASEAN Centre for Energy
Soemantri Brodjonegoro II Building
Jl. H.R. Rasuna Said Block X-02, Kav. 07-08,
RT.10/RW.4, Kuningan Timur, Kecamatan
Setiabudi, Daerah Khusus Ibukota Jakarta 12950

+62 21 527 9332

aseanenergy.org

The views expressed in this policy brief are those of the author(s) and do not necessarily reflect those of ASEAN Centre for Energy (ACE) as an institution, any associated ASEAN Member States/Institutions/Individuals, or partner institutions.

This is an open access publication under the terms and conditions of the Creative Commons Attribution (CC BY) license (<http://creativecommons.org/licenses/by/4.0/>). The material can be used freely, as long as a complete reference to this policy brief is included.

