



The TPSA Project Reviews Renewable Energy and the Constraints to Its Expansion in Indonesia

This TPSA activity enhanced the understanding of key stakeholders in both the public and private sectors regarding the current conditions of the renewable energy market, as well as the major constraints faced by the energy sector. A road map for positive change to the investment climate for renewable energy in Indonesia was produced.

Background

The overall objective of the Canada-Indonesia Trade and Private Sector Assistance (TPSA) project is to reduce poverty and increase sustainable economic growth in Indonesia through the expansion of Indonesian trade with Canada and the encouragement of Canadian investment in Indonesia.

This TPSA activity built on this objective by focusing on renewable energy, an area of development that has attracted Canadian investment and has considerable potential for expansion. It aimed to help the government and private sector in Indonesia overcome regulatory or policy issues that may be impeding investment or competitiveness in the renewable energy sector.

The Indonesian government is committed to increasing the use of the nation's vast renewable energy resources so that they make up 23 per cent of its energy mix by 2027.¹ The commitment to increase renewable energy was made as part of a package of measures to tackle climate change in Indonesia's nationally determined contribution (NDC).² The NDC pledges to reduce emissions by 26 per cent against the business-as-usual scenario by 2020 and by 41 per cent if international support is obtained.



Focus-group discussion on renewable energy on July 31, 2018.

Description of Activities

In May and June 2018, interviews based on a structured questionnaire were held with public-and private-sector stakeholders including Canadian Solar, a leading global manufacturer of solar photovoltaic (PV) modules and a provider of solar-energy solutions. Interviewees also included senior representatives from the Indonesian state electricity company Perusahaan Listrik Negara (PLN), the Ministry of Energy and Mineral Resources (MEMR), the Co-ordinating Ministry of Economic Affairs (CMEA), the Indonesian Chamber of Commerce and Industry (KADIN), private power producers, Indonesia's Parliamentary Commission VII



Presentation by Dr. Scott Younger on September 19, 2018.

on Energy (DPR), the President's Office, and the Indonesian Renewable Energy Society (METI).

On July 31, 2018, 22 participants from the private-sector renewable energy space, including some of those interviewed, and members of chambers of commerce, including KADIN, took part in a focus-group discussion (FGD) held at the Financial Club in Jakarta.

TPSA project Field Director Greg Elms kicked off the FGD by setting out the Canadian government's intentions of engagement in Indonesia. Dr. J. Scott Younger, President Commissioner of PT Glendale Partners, followed with a presentation outlining the objectives of the study, the potential of the renewable market in Indonesia (with a specific focus on four areas: solar, biomass, waste-to-energy, and ocean tidal energy), and the challenges faced by investors.

Given the political reality of the Indonesian government's promise of affordable electricity with no price increases for power until after next year's elections and the establishment of a new government in 2020, the main aim of the FGD was to seek avenues for improving the regulatory environment for renewable energy that would have a chance of succeeding in the short term. This was termed the "low-hanging fruit" approach.

The FGD began with a suggestion that a big opportunity for solar rooftop power, especially for industry, could be realized if Regulation 1/2017, which limits independent power production to less than 200 kilowatts without effective PLN sanction, could be modified. This is in line with the stated govern-

ment policy of accelerating the use of solar rooftop power, although for now, the focus is on household rather than industrial users.

As it stands, the fines paid to PLN for production over 200 kilowatts, combined with the short duration of solar (four hours), make it uneconomic. MEMR and PLN are in discussion, but each blames the other for the regulation, since there was little or no dialogue during the framing of the regulation, and none with private-sector investors.

A number of speakers reiterated the low regional electricity-generation cost benchmark, or *Biaya Pokok Pembangunan* (BPP) rates, as one of the main negative factors for renewable energy investors. However, some had developed renewable energy projects that were viable in regions where the BPP was in the higher range of US12 cents–20 cents per kilowatt-hour. For example, in the most recent showcase wind-turbine projects in South Sulawesi, the first phase had a BPP of US11.9 cents per kilowatt-hour and provided an attractive return on investment, but now the BPP has been reduced to between US6 cents and US7 cents per kilowatt-hour, and developers and investors are not attracted.

Another speaker suggested that the FGD participants need to lay the groundwork for a road map leading to an improved renewable-energy investment climate by identifying stakeholders who can influence the outcome. The separate but related work in the renewable space by KADIN and the European Business Chamber of Commerce (EuroCham) suggests that these are two strong



Greg Elms, TPSA Field Director, facilitates the discussion on September 19, 2018.



and knowledgeable groups who, together with METI, could form a powerful presence to improve the regulatory environment for renewable energy. There was consensus from FGD participants that continued dialogue between the renewable-energy private sector and government stakeholders, as well as the relevant government agencies, is required to bring more consistency to the regulatory environment.

It was recognized that a paradigm shift is required in Indonesia's national energy policy and structure if the country is to achieve:

- its economic and sustainable development goals;
- its commitment to provide electricity to all its citizens in sufficient quantity and with sufficient reliability to enable sustainable advances in economic and social well-being;
- its international renewable energy and GHG emissions reduction targets;
- the ability to power the country's economic development and both attain and justify its position as the world's fifth-largest economy by 2050.

A paradigm shift would probably involve reframing the roles and structure of PLN, but these issues would be tackled over the long term. A number of suggestions were tabled, such as dividing PLN according to function (generation, transmission, and distribution), separating its public obligation to provide electrical power to the people from its requirement to make a profit, and establishing regional entities that cater to the very different demands, demographics, and geographic realities of the islands, especially in eastern Indonesia.

As a follow-up to the FGD, a one-day workshop titled "Renewable Energy Road Map Proposals" was held in Jakarta on September 19, 2018, attended by 38 stakeholders from government and the private sector, including many who had also taken part in the July 31 FGD.

The workshop consisted of two presentations by Dr. Younger, each followed by a question-and-answer session with participants. The first presentation was an overview of the findings of the study. It included proposed next steps to reactivate



Questions from the audience on September 19, 2018.

a sector that has been largely put on hold by the current administration, but that is expected to be at the forefront of policy of the next government, due to take office in approximately one year's time. The second presentation focused on the particular situation and needs of sparsely populated eastern Indonesia, an area significantly left behind in the development of electricity services.

From the time this activity began in April 2018, there has been a shift toward a greater future reliance on Indonesia's vast renewable energy resources. This shift has been seen in government agencies, academia, think tanks, and the private sector. In response to this, PLN called on the government to provide a special subsidy for renewable energy to alleviate financial risks to private-sector investors and accelerate growth in the sector, with an eye on the country's target commitment to increase the proportion of renewable energy in the energy mix to 23 per cent by 2027. Economic experts have suggested that the government raise fuel prices in order to cut fuel imports and narrow the current account deficit without significantly harming domestic industries. Increasing investment in and reliance on renewable energy would also have a beneficial impact by helping to reduce the costs of fuel imports.

There is growing sympathy toward the restructuring of PLN, as currently it does not adequately serve the needs of the industry. When compared with power-generation industry structures in more developed economies, the required reach of PLN is well beyond the size of the company and its expected responsibilities.



One possible organizational structure tabled at the workshop was as follows:

- The PLN should concentrate on regulatory and transmission issues, and divest itself of its energy-generation responsibilities. Split the company into a few regional bodies, organized as business entities as a first step towards flotation on the stock market, with the ability to raise funds on general money markets and not rely on government budgets.
- Local governments should be responsible for power distribution, sub-transmission, and support to local communities.
- Remote communities should utilize renewable energy solutions, with solar and micro hydro as top agenda approaches, and local smart grids.
- The private sector should focus on generation, shareholders in power-generation business entities floated on the stock markets, and assisting in the development of smart grids (e.g., for eastern Indonesia).

Results

Feedback from participants at the September 29, 2018, workshop indicated that the FGD and workshop were successful and overall levels of satisfaction were high.

All participants reported that their knowledge and skills related to the training subject were increased: 59 per cent said “significantly” and 41 per cent said “to some extent.” The participants also noted that their new level of confidence in applying the knowledge gained from the training ranged from “good” to “excellent.” Forty-four per cent of participants said they will use their new knowledge “very frequently,” 26 per cent said “frequently,” and 30 per cent said “occasionally.”

Key Takeaways/Conclusions

The use of FGDs to gather data and opinions, followed by a workshop to discuss and debate the issues, has proven to be a successful approach for identifying constraints to the uptake of renewable energy in the energy sector and teasing out possible recommendations to improve performance in the short, medium, and longer term.

Several measures were identified to improve the attractiveness of the renewable energy market

to the private sector, involving swift and simple changes to ministerial regulations that are already under scrutiny from government agencies and the private sector and are not particularly controversial. Such changes could be implemented within the current presidential term. These “low-hanging fruit” measures have been supplemented with medium- and longer-term measures for positive change in a road map report for renewable energy.

The key takeaway is the requirement for a change in the way the energy sector operates in Indonesia and, in particular, the role, functions, and structure of PLN, the state-owned monopoly electrical utility company. This restructuring of PLN was recognized to be vital by all stakeholders including most of the government respondents.

These are fundamental requirements for ensuring Indonesia can achieve the following goals:

- generate and distribute sufficient electrical power to its vast population and its industrial and commercial base;
- fulfill its 21st-century sustainable development goals;
- meet its nationally and internationally mandated renewable-energy and GHG-reduction targets.

About the TPSA Project

TPSA is a five-year, C\$12-million project funded by the Government of Canada through Global Affairs Canada. The project is executed by The Conference Board of Canada, and the primary implementation partner is the Directorate General for National Export Development, Ministry of Trade.

TPSA is designed to provide training, research, and technical assistance to Indonesian government agencies, the private sector—particularly small and medium-sized enterprises (SMEs)—academics, and civil society organizations on trade-related information, trade policy analysis, regulatory reforms, and trade and investment promotion by Canadian, Indonesian, and other experts from public and private organizations.

The overall objective of TPSA is to support higher sustainable economic growth and reduce poverty in Indonesia through increased trade and trade-enabling investment between Indonesia



and Canada. TPSA is intended to increase sustainable and gender-responsive trade and investment opportunities, particularly for Indonesian SMEs, and to increase the use of trade and investment analysis by Indonesian stakeholders for expanded trade and investment partnerships between Indonesia and Canada.

The expected immediate outcomes of TPSA are:

- improved trade and investment information flows between Indonesia and Canada, particularly for the private sector, SMEs, and women entrepreneurs, including trade-related environmental risks and opportunities;
- enhanced private sector business links between Indonesia and Canada, particularly for SMEs;
- strengthened analytical skills and knowledge of Indonesian stakeholders on how to increase

trade and investment between Indonesia and Canada;

- improved understanding of regulatory rules and best practices for trade and investment.

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ENDNOTES

¹ The original deadline of 2023 was subsequently extended to 2027.

² NDCs are agreements that outline efforts by a country to reduce national emissions and adapt to the impacts of climate change as part of its commitment to sustainable development under the 2015 United Nations Paris Agreement.