



## Summary

### **2<sup>nd</sup> Clean Energy Finance and Investment Consultation Workshop “Unlocking finance and investment for clean energy in the Philippines” 24-25 November 2022 Bluewater Hotel, Panglao, Bohol**

#### **Day 2: Energy efficiency in public buildings**

The collaboration between the Organisation for Economic Co-operation and Development (OECD) Clean Energy Finance and Investment Mobilisation Programme (CEFIM) and the Philippine Department of Energy (DOE) was launched on 13 December 2021. One of the flagship outputs of the collaboration is a Clean Energy Finance and Investment Roadmap of the Philippines (to be released in mid-2023), which will provide an action plan to accelerate clean energy finance and investment in the country, focusing on offshore wind and energy efficiency in public buildings as priority sectors. Following a successful first workshop on 31 May- 01 June 2022, OECD CEFIM and DOE jointly organised a second workshop which brought together key public and private sector stakeholders to identify challenges and opportunities to scale up finance and investment for offshore wind and energy efficiency in public buildings in the Philippines.

Energy efficiency discussions took place under Chatham House rules on 25 November 2022, with participants joining both in-person and virtually. 57% of the participants were government representatives, 24% were from non-governmental organisations/international development organisations/donor groups, 14% were energy efficiency businesses/practitioners. Three roundtables were held, covering the topics of business models, policies, financing options, de-risking and international support for energy efficiency in public buildings.

This document provides a summary of the discussions on energy efficiency in public buildings along with key takeaways and next steps.

#### ***Efforts are underway to improve energy efficiency in public buildings***

- Under the 2019 Energy Efficiency and Conservation Act (EEC Act), which provides the blueprint for energy efficiency in the Philippines, the DOE so far has released 36 policy issuances setting objectives or providing guidelines for energy efficiency efforts.
- In particular, the public sector’s energy efficiency efforts are governed by the Government Energy Management Programme (GEMP), which mandates the reduction of government’s monthly electricity and fuel consumption by at least 10%. This can be achieved through both energy conservation measures and Government Energy Efficiency Projects (GEEPs).
- The Inter-Agency Energy Efficiency and Conservation Committee (IAEECC) was created under the EEC Act to provide strategic direction to the GEMP. It comprises 9 government agencies involved in the approval of all GEEPs and serves to improve interagency coordination.
- There have been notable recent updates to the GEMP to improve its scope and effectiveness. The programme has now been expanded to cover approximately 7 441 government entities (including

judicial bodies and local government units or LGUs), reflecting a whole-of-government approach. It has also incorporated compliance incentives, such that government entities that achieve the 10% energy consumption reduction target are now allowed to accumulate the full cost savings and reinvest in their own facilities.

- In addition, the DOE's Energy Utilisation and Management Bureau (EUMB) is also providing fiscal and non-fiscal incentives as required under the EEC Act. Fiscal incentives are being provided for simple and complex projects, both new and expansion-related, provided a minimum project boundary of 15% and minimum project investment cost of 10 million pesos. The classification of energy efficiency as both Tier-2 and Tier-3 under the Corporate Recovery and Tax Incentives for Enterprises (CREATE) Act also makes these projects eligible for income tax holidays (5-7 years) and duty-free equipment importation. Non-fiscal incentives like Excellence Awards are being given to several categories of establishments (including Government) to recognise outstanding performance on energy efficiency.
- The EUMB also conducts certification of energy efficiency practitioners, such as Energy Efficiency Managers, Energy Efficiency and Conservations Officers, and Energy Auditors. They also provide accreditations to energy service companies (ESCOs) and have registered a total of 42 ESCOs as of 2021.
- The EUMB is currently drafting updates to the Green Building Code, to be finalised in 2023, setting energy efficiency and conservation guidelines for buildings with areas more than 10 000 square feet and mandating them to have certified energy efficiency officers or managers. All new building permits will be bound by these guidelines.

### ***Challenges remain for LGUs to implement energy efficiency measures***

- A few LGUs have made progress towards the GEMP target, allocating resources to energy-efficiency-related research, planning, data collection, monitoring, and maintenance of equipment. These are already seeing results in the form of reduced energy bills.
- In some off-grid areas, with heavy reliance on expensive diesel, LGUs have made significant energy efficiency improvements to their equipment – not necessarily with the objective to comply with the GEMP but simply on grounds that these are good financial investments.
- Nevertheless, overall compliance with GEMP remains low (around 8.26%) as persistent hurdles continue slowing uptake.
- Most notably, stakeholders highlighted that LGUs continue to face significant knowledge and capacity constraints. For instance, LGUs have overall limited awareness of the GEMP mandates, and those who do, may lack the capacity to plan and undertake energy efficiency projects, conduct energy audits, and do the necessary procurement (e.g., preparation of Request for Proposal/ technical specifications, technical review, bid evaluation etc.).
- Complicated procurement rules further hamper LGUs' ability to undertake energy efficiency projects, including through ESCOs. In particular, under current regulations, energy performance contracts are not classified as 'pure services contract' (a pre-requisite to qualify for procurement), thus making it difficult for LGUs to contract private ESCOs, which typically provides bundled contracts (encompassing a mix of goods and services). Another problem with such contracts is that they are usually long term (10-15 years), and LGUs may be unwilling to enter into long term contracts that go beyond the political life of their administration. These constraints have severely limited private ESCOs participation in implementing energy efficiency projects in public buildings.
- Therefore, LGUs must go through the Philippines National Oil Company – Renewables Corporation (PNOC-RC) or another government agency (the Department of Science and Technology or DOST) to do their energy audits because procurement from another government entity is far less cumbersome than through private ones.
- Still, it came out clear that neither the PNOC-RC nor the Government has the capacity to audit the 7 441 government entities covered under the GEMP, let alone fill the energy efficiency investment gap in public buildings. As an example, PNOC-RC has only audited a cumulated 79 LGUs as of 2022 while DoE has set a target for the Government to audit 100 government buildings yearly --

which is laudable albeit small compared to actual number of facilities requiring energy auditing. Beyond auditing (which is key to identify opportunities and create a baseline for evaluating energy savings), the PNOC-RC and the Government also have little capacity/dry powder to invest, build and operate energy efficiency projects.

- In that context, it was noted that the public super ESCO model could help address some of these procurement issues with private entities as, in that case, a public entity would be transacting with another one. Most notably, a publicly owned super ESCO could act as a demand/project aggregator to realise economies of scale – through bulk procurement of energy-efficient appliances or bundling of projects/public buildings to reach critical mass for financing/investment –, provide financing as well as directly implement energy efficiency projects and capacity building activities to support an ESCO market development (e.g., sub-contracting private ESCOs -- ensuring additionality to avoid stunting the market).
- The Government reiterated its support of the concept of a public Super ESCO, although previous efforts to establish one have, thus far, been unsuccessful.
  - The Asian Development Bank provided a USD 31.5 million loan to the Philippine Government, one of the objectives of which was to create a super ESCO out of PNOC. Notwithstanding, this could not be realised due to internal management decisions. Instead, the PNOC-RC was created with the objective of investing in and supporting energy efficiency projects.
  - However, PNOC-RC no longer does energy efficiency project investment due to capital constraints. It now provides technical expertise to project developers to prepare investor-ready projects (e.g., preparing for bidding process, assisting in selection of bidders, etc.).
- There are examples of successful implementation of a public super ESCO model globally. One of them is India's Energy Efficiency Services Limited (EESL), which was established in 2009 as a joint venture of four public enterprises under the Ministry of Power, to finance and deliver energy efficiency solutions, especially in the residential and public sectors. EESL's business model is based on a "Pay as You Save" principle whereby no subsidy from the government nor upfront payment from users is required and all capital expenditures are repaid from realised energy savings. To do that, EESL has implemented a number of initiatives among which a national "bulk procurement" programme for LEDs, which helped achieve significant cost reduction.

### ***Private sector participation and international support is required to scale up efforts***

- While targets are ambitious, the Government has very limited budget to finance energy efficiency projects by itself, although it has set aside budget to finance a few clean energy initiatives. For instance, it has implemented solar rooftop projects in 3 government buildings and, as mentioned above, has allocated PHP 25 million in the 2023 budget to support energy audits for 100 LGUs (to be conducted by ESCOs).
- As a result, LGUs have mainly had to fund their energy efficiency projects by reallocating internal budget, with measures such as plan phasing (i.e., starting with small investments and staggering large investment to spread across fiscal years).
- However, this has considerable limits as budget often does not suffice and projects are implemented without cost recovery (i.e., through energy cost reduction) – as current budget rules do not allow capital expenditures (CAPEX) repayment from savings and over multiple years. This point was particularly emphasised in a poll asking participants about the greatest challenge to energy efficiency adoption by LGUs: 43% of respondents highlighted "budgetary constraint" as the single biggest challenge, even before procurement rules (24%), which ranked second.
- To circumvent this issue, the DoE promulgated Department Circular DC 2022-04-0006, which allows LGUs to identify their own budgets as part of the wider government budget, allowing these to accrue and reuse freed-up budget from lower energy consumption (resulting from the implementation of energy conservation measures) to repay or invest in new, energy efficiency-related CAPEX. This will be done by way of the issuance of Energy Cost Reduction certificates, allowing the use savings to fund improvements in energy efficiency and conservation in GEs

facilities, as well as providing other incentives, in compliance with existing regulations and guidelines.

- Still, participants highlighted the need to raise additional funds and diversify sources of funding going forward, such as with increased central budget allocations for seed capital and by looking into innovative financing arrangements – including through Public Private Partnership or PPPs.
- In this regard, there was a general consensus over the fact that using the PPP model for energy efficiency could potentially help address budget constraints and procurement issues. However, LGUs still have limited capacity to enter into PPPs for energy efficiency while the small size of energy efficiency projects makes it challenging to attract private actors. The PPP centre has played an important role in providing support to accelerate uptake of the energy saving PPP model through project preparation and transaction advisory to LGUs. Canada also provided support to PPP through the National Economic and Development Authority.
- In light of those issues, participants stressed the need for development partners to support the implementation of demonstration projects for PPP and Energy Performance Contracts, starting with a subset of LGUs as well as provide further capacity building support. In this regard, development partners have been spearheading initiatives to support the Philippines regarding have provided support e.g., ETP is implementing an energy efficiency financing roadmap notably building on OECD's and the Government's efforts, while GiZ introduced ISO standards for assessing and reporting financing projects for climate mitigations.
- Participants also highlighted demand side management or DSM (including through smart meters), as an important area for support as it has a great potential to support energy efficiency efforts. On-bill financing was mentioned as possible way to fund DSM projects.

### **Key takeaways**

- It appeared clear from the discussion that LGUs still need technical assistance and capacity building support in order to avail of energy efficiency opportunities, and thereby meet the GEMP target. Key training/capacity building areas notably relate to public procurement (e.g., equipment, EPC, energy audit services), implementation of energy efficiency projects or the use of PPP for energy efficiency. Also, further awareness raising efforts are needed to help LGUs familiarise themselves with the changing legal and policy architecture for energy efficiency (including through the EEC Act and GEMP) and thereby start taking action.
- Existing rules continue to make the procurement of energy efficiency projects from private firms cumbersome. This points to a need to explore options to accommodate and expedite the procurement of energy efficiency projects – either through specific carve-outs or rule change. This will be paramount in order to allow greater level of private sector participation – especially given the limited capacity of the Government / PNOC-RC to support energy efficiency improvements in public buildings. As was suggested, starting with a subset of LGUs/Government institutions could be a way to trial and evaluate the impact of any possible rule change.
- There was overall an agreement from the Government and participants on the potential benefits of establishing a public Super ESCO in the Philippines, particularly as a way around public procurement issues. Such institution could support the development of a private ESCO market in the country, notably through projects aggregation, bulk procurement, or sub-contracting work to local private ESCOs, among others. However, further investigation is needed to better grasp the reasons behind the limited success of past attempts to make the PNOC-RC a public Super ESCO and lessons learned from this experience.
- While compliance with the GEMP remains low, there are positive signs of progress -- as showcased by some LGUs which have made significant efforts to improve their buildings' energy efficiency. Notwithstanding, these efforts have been largely funded on budget (without cost recovery) and hence, will be difficult to scale up/replicate. As stressed during the discussion, earmarking an increased portion of LGU's/central budget to energy efficiency (to the extent possible) will be necessary (especially in the early stages of deployment) while continuing to diversify sources of funding over time (whether this be from concessional lending or directly from financial markets).

- Equally, creating innovative financial vehicles and instruments (e.g., equity and guarantee funds, energy savings insurance, joint venture transactions, on-bill financing) that can enable public funding and private sector capital flows into ESCO and energy efficiency will be important. For example:
  - The creation of an Energy Efficiency Revolving fund (drawing from the Thai model) could help ESCOs and LGUs access long term concessional finance and/or equity and, and, in its early days, help support the deployment of demonstration projects. Such a fund, it was suggested, could for example be capitalised from a 'real property' tax (also known as Amilyar).
  - In the US, a syndicated ESCO model was used wherein a financial institution enters a partnership with an ESCO to develop projects with the ESCO being its technical arm.
- All in all, over the short/medium term, participants stressed the importance of setting up demonstration projects -- e.g., for energy performance contracts or other innovative structures -- to prove concept and set an example for replication. In this regard, one suggestion was, for instance, to create a fast-track programme with a few government entities (possibly the 9 IAEECC members) to provide a template or track record for implementing energy efficiency projects for other LGUs to follow.

## Next steps

Based on the key outcomes from this workshop as summarised in this document, the OECD CEFIM team will begin drafting the Clean Energy Finance and Investment Roadmap for the Philippines. Further research and analysis may be required to gain a deeper understanding of some of the key priority areas identified during the workshop and develop recommendations accordingly, and the CEFIM team will be organising additional bilateral stakeholder consultations as needed. Finally, a third joint workshop will be organised virtually with DOE and other stakeholders in early 2023 to agree on the recommendations emerging from this process. The Roadmap is then expected to be published by mid-2023.