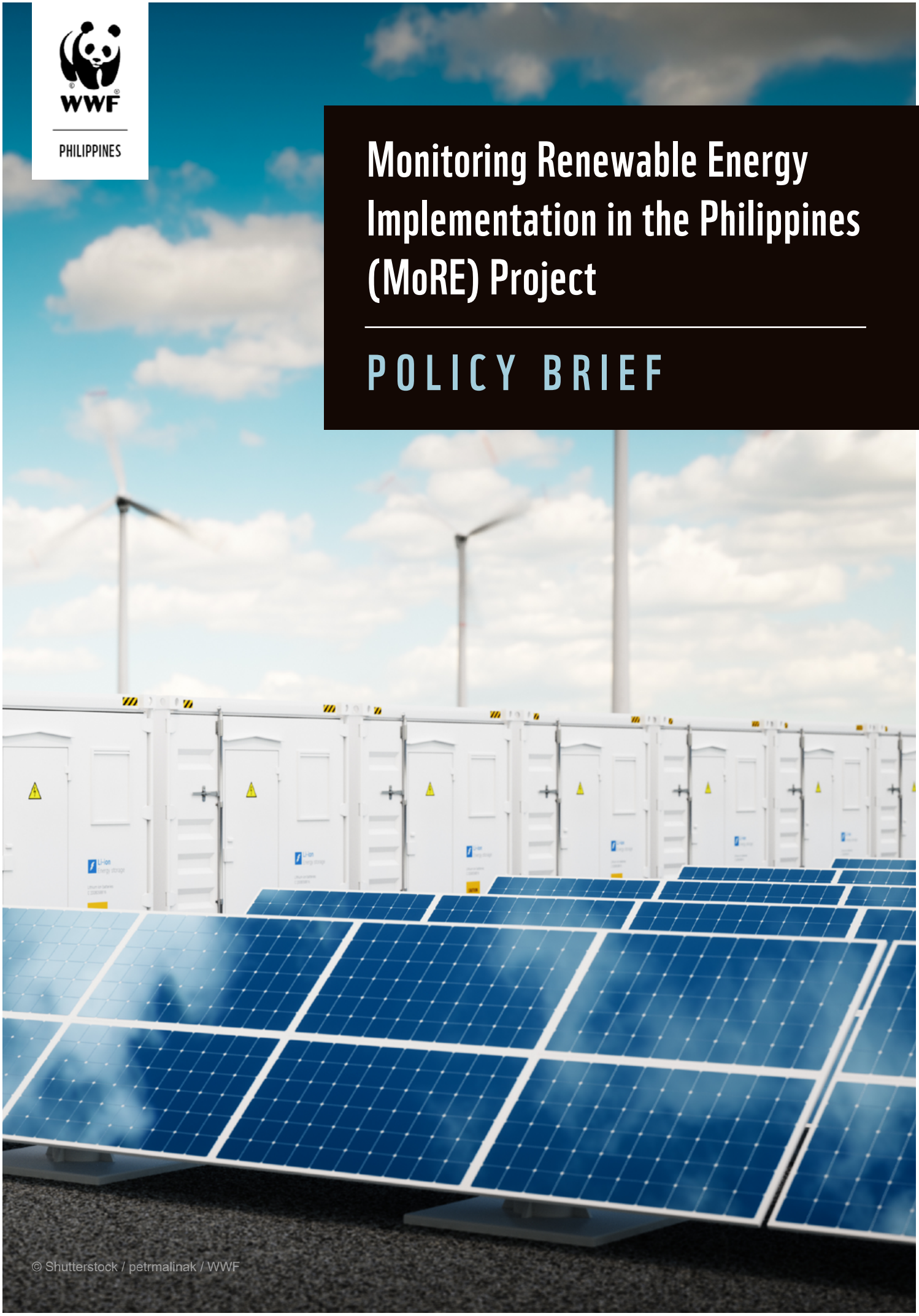
WWF

PHILIPPINES

Monitoring Renewable Energy Implementation in the Philippines (MoRE) Project

POLICY BRIEF



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01 Recap of the First Roundtable Discussion

On 28 October 2022, the Second Roundtable Discussion for the Monitoring Renewable Energy Implementation in the Philippines (***"MoRE"***) Project of World Wide Fund for Nature – Philippines (***"WWF-Philippines"***) was held. In line with the objectives of WWF-Philippines when it conducted its First Roundtable Discussion under the MoRE Project, the participants of the Second Roundtable Discussion likewise gathered to discuss their experiences and concerns regarding the development and implementation of the Philippines' renewable energy policies. This was done with the ultimate goal of conceptualizing a monitoring tool, which would facilitate a speedy and efficient policymaking process for all government agencies and policymakers involved.

As has been discussed in the first policy report, which covered the First Roundtable Discussion, there is a need for greater coordination and synergy between and among various government agencies in order to ensure the speedy and efficient implementation of the Philippines' renewable energy policies. Based on an analysis of the development of the relevant policies for the renewable energy mechanisms, which is reflected in the first policy report, it appears that there have been a variety of challenges in the implementation of these mechanisms.

Thus, under the MoRE Project, WWF-Philippines seeks to identify these challenges that have been encountered by the policymakers, particularly with respect to the exchange of information and the monitoring of the status of the development and implementation of the renewable energy mechanisms. This was done through a series of roundtable discussions with the relevant agencies, policymakers, and organizations from both the public and private sectors.

Considering that the monitoring tool is intended to serve as a tool that would aid policymakers in the development of renewable energy policies, it is only after identifying the various issues related to the development and implementation of the existing renewable energy policies that such a tool could be developed.

Brief recap of the first roundtable discussion

At the first round, the following renewable energy policies were discussed by the resource speakers:

(1) Feed-in tariff system (***"FiT"***);

(2) Renewable Energy Market (***"REM"***);

(3) Green Energy Option Program ("***GEOP"***);

(4) Renewable Energy Trust Fund (***"RETF"***); and

(5) Green Energy Auction.

First Presentation: Feed-in-Tariff

The first presentation at the First Roundtable Discussion was about the FiT. The representative from the National Transmission Commission (***"TransCo"***) reported on the status of the approved FiT rates, as well as the installation targets for renewable energy resources for the FiT.[1] The status of the disbursements of the FiT revenues up until August 2022 were also presented.

The Renewable Energy Act of 2008 (***"RE Act"***) also provides for a Feed-In Tariff (***"FiT"***) System, which aims to accelerate the development of emerging renewable energy resources. [2] The law specifically mandates that the system apply to electricity produced from wind, solar, ocean, run-of-river hydropower, and biomass.[3] According to the RE Act, the FiT System must contain, but shall not be limited to, the following:

(a) Priority connections to the grid for electricity generated from emerging renewable energy resources such as wind, solar, ocean, run-of-river hydropower, and biomass power plants within the territory of the Philippines;

(b) The priority purchase and transmission of, and payment for, such electricity by the grid system operators;

(c) Determination of the fixed tariff to be paid to electricity produced from each type of emerging renewable energy and the mandated number of years for the application of these rates, which shall not be less than twelve (12) years;

(d) The feed-in tariff to be set shall be applied to the emerging renewable energy to be used in compliance with the renewable portfolio standard as provided for in this Act and in accordance with the Renewable Portfolio Standards (***"RPS"***) rules that will be established by the Department of Energy (***"DOE"***).[4]

On 12 July 2010, the Energy Regulatory Commission (***"ERC"***) issued ERC Resolution No. 16, Series of 2010, which adopted the FiT Rules for the purpose of regulating the method of establishing and approving the FiT, as well as the FiT Allowance (***"FiT-All"***) only for those in On-Grid Areas.[5] Under the FiT Rules, and in compliance with the requirements of the RE Act, the FiTs shall be specific for each emerging renewable energy technology.[6] Furthermore, the FiT shall only apply to generation facilities, which enter into commercial operation after the effectivity of the FiTs, or to such parts of such existing facilities that have been substantially modified or expanded in accordance with the FiT Rules.[7]

The representative of TransCo then proceeded to discuss certain issues encountered in the implementation of the FiT. First of all, for the years 2020 and 2021, there had been a low rate of remittance of the FiT-All by the FiT-All collection agents.

According to the ERC Resolution No. 16, series of 2010, otherwise known as the "FiT Rules," "*[e]lectricity consumers who are supplied with electricity through the distribution or transmission shall share in the cost of the FiTs in part through a uniform charge (in PhP/kWh) to be referred to as the FiT-All and applied to all billed kWh.*" [8]

FiT Rules further provides that the FiT-All fund comprises proceeds of the collection of the FiT-All by the National Grid Corporation of the Philippines (***"NGCP"***) and the implementation of the generation cost recovery mechanism under the same rules.[9]

1 Preamble, DOE Department Circular No. DC2015-07-0014.
2 Section 7, Republic Act No. 9513.
3 Ibid.
4 Ibid.
5 Section 2.1., ERC Resolution No. 16, series of 2010.
6 Section 1.4., ERC Resolution No. 16, series of 2010.
7 Section 1.4., ERC Resolution No. 16, series of 2010.
8 Section 2.5, ERC Resolution No. 16, series of 2010.
9 Section 1.3., ERC Resolution No. 16, series of 2010.

Considering that one of the main features of the FiT, as established under Republic Act No. 9513, otherwise known as the RE Act, is the payment of a fixed tariff to electricity produced from each type of emerging renewable energy resource,[10] the importance of the collection of the FiT-All cannot be further underscored. The low remittance of the FiT-All by the collection agents designated under the FiT-All Guidelines[11] means that the payment of the fixed tariff to renewable energy developers will suffer unnecessary delays.

Aside from the low remittance of the FiT-All, the representative of the TransCo also reported that there had been delays in the approval by the ERC of the required FiT-All Rate. Needless to state, this likewise goes into issues regarding the implementation of the FiT, which will ultimately be detrimental to the renewable energy developers that avail of the benefits under the FiT system.

Second Presentation: Renewable Portfolio Standards and the Green Energy Auction

The second presentation at the First Roundtable Discussion was given by a representative of the National Renewable Energy Board (***"NREB"***). The NREB began by stating that, in connection with the Renewable Portfolio Standards (***"RPS"***), the entities mandated to participate (***"Mandated Participants"***) are still compliant with the minimum annual RPS requirements.

The RPS is a program, which requires all stakeholders in the electric power industry to contribute to the growth of the renewable energy industry in the country.[12] The RE Act implementing rules and regulations (***"RE Act IRR"***) defines the RPS as a market-based policy that requires certain electric power industry participants, including suppliers, to source an agreed portion of their energy supply from eligible renewable energy resources."[13]

In order to achieve the purpose behind the RPS, the NREB was mandated by the RE Act to set the minimum percentage of generation from eligible renewable energy resources, as well as to determine to which sector the RPS shall be imposed on a per grid basis.[14] This minimum percentage of generation shall be based on the sustainability of the renewable energy resources, the available capacity of the relevant grids, the available renewable energy resources within the specific grid, as well as any other relevant parameters that may be identified by the NREB.[15]

As a means of determining compliance with the minimum RPS requirements, the RE Act also established the Renewable Energy Certificates (***"RECs"***), which are "certificates that represent all renewable and environmental attributes from one MWH of electricity generation sourced from an eligible renewable energy generation facility."[16] Stated otherwise, RECs provide physical and tangible proof of the actual renewable energy generated by the renewable energy generation facilities (***"RE Generation Facilities"***).[17]

Pursuant to its mandate as the lead agency responsible for implementing the provisions of the RE Act,[18] the DOE issued and promulgated two (2) separate sets of rules pertaining to the RPS. The first set of rules issued by the DOE is DOE Department Circular No. DC2017-12-0015, otherwise known as the "RPS On-Grid Rules." The second set of rules is DOE Department Circular No. DC 2018-08-0024, otherwise known as the "RPS Off-Grid Rules."

10 Section 7(c), Republic Act No. 9513.
11 Section 2.2.1.1., ERC Resolution No. 24, series of 2013.
12 See DOE Department Circular No. 2017-12-0015 an
13 Section 3(bbb), Rule I, Part I, RE Act.
14 Section 6, Republic Act No. 9513.
15 Rule 2, Section 4(c), Implementing Rules and Regulations of the RE Act.
16 DOE Department Circular No. DC2019-12-0016
17 Section 8, Republic Act No. 9513
18 Section 5, Republic Act No. 9513

The RPS On-Grid Rules were adopted to set and establish a minimum annual RPS requirement and the minimum annual incremental renewable energy percentage that certain on-grid industry participants shall comply with.[19] These industry participants, who are called Mandated Participants, are as follows:[20]

(1) All Distribution Utilities (***"DUs"***), in relation to their Captive Customers;[21]

(a) Privately-owned DUs

(b) Electric cooperatives (***"ECs"***)

(c) Local government unit (***"LGU"***)-owned and controlled DUs

(d) Economic Zone Utilities

(2) All Suppliers of Electricity for the Contestable Market,[22] as defined in the Electric Power Industry Reform Act of 2001 (***"EPIRA"***) and pursuant to Retail Competition and Open Access (***"RCOA"***);

(a) Retail Electricity Suppliers (***"RES"***)

(b) Local RES

(c) Suppliers of Last Resort

(3) Generating companies, but only to the extent of their actual supply to their Directly Connected Customers (***"DCCs"***); and

(4) Other entities as may be recommended by NREB and approved by the DOE.

In determining the minimum amount of renewable energy required to be sourced by RE Generation Facilities, the RPS Composite Team shall compute the minimum annual RPS requirement for each On-Grid Mandated Participant. The computation of the minimum RPS requirement shall be based on the particular Mandated Participant's total MWh of energy sales in year 0, which already took place in 2018. The estimated energy sales for the succeeding years shall then be based on the energy sales for Year 0. Thereafter, a Transition Year, which took place in 2019, was implemented in order to allow the Mandated Participants to: (i) prepare all the information and data required in the establishment of the baseline to be determined by the DOE, (ii) prepare their respective compliance mechanisms, as well as (iii) prepare the consumers for the impact of the RPS On-Grid Rules.[23]

After determining the minimum RPS requirement of each On-Grid Mandated Participant, they shall then be obligated to comply with the said minimum RPS requirements by participating in the compliance mechanisms provided by law. Under the RE Act IRR, the DOE was required to issue RPS Rules that include the means by which the RPS Mandated Participants may comply with their minimum RPS requirements.[24]

With respect to the RPS Off-Grid, under the RE Act IRR, the National Power Corporation - Small Power Utilities Group (***"NPC-SPUG"***), its successors-in-interest, and Qualified Third Parties (***"QTP"***) in Off-Grid Areas shall likewise be mandated to source a minimum percentage of its total annual generation from renewable energy resources available within their respective areas.[25] Therefore, in addition to the RPS On-Grid Rules, the DOE also issued a separate set of rules called the RPS Off-Grid Rules.

19 Rule 1, Section 2, RPS On-Grid Rules.
20 Section 12, RPS On-Grid Rules.
21 Captive customers are electricity end-users who do not have the choice of a supplier of electricity.
22 Contestable customers are electricity end-users who have a choice of a supplier of electricity.
23 Rule 8, Section 26, RPS On-Grid Rules.
24 Section 4(c)(5), RE Act IRR.
25 Section 12, Rule 4, Part II, RE Act IRR.

The purpose behind the creation of the RPS Off-Grid Rules is to stimulate the growth of the renewable energy industry in the Off-Grid and Missionary Areas. Moreover, the RPS Off-Grid shall rationalize the efficient use of the Universal Charge-Missionary Electrification (***"UC-ME"***) and improve self-efficiency in power generation through the integration of renewable energy in the supply mix in Off-Grid and Missionary Areas.[26]

ERC CASE NO.	DATE FILED	PURPOSE	AMOUNT IN PHP
2013-191 RC	20 Sep 13	Shortfall of CY 2012 Subsidy	5,370,284,135.27
2014-89 RC	20 Jun 14	Shortfall of CY 2013 Subsidy	5,426,754,938.54
2014-135 RC	12 Sep 12	CY 2015 Subsidy	12,093,887,870.00
		CY 2016 Subsidy	11,371,002,556.00
2016-008 RC	26 Jan 16	Shortfall of CY 2014 Subsidy	5,895,588,224.47
2016-134 RC	26 May 16	CY 2017 Subsidy	10,324,139,351.43
2017-006 RC	27 Jan 17	Shortfall of CY 2015 Subsidy	1,111,902,576.28
2017-054 RC	30 May 17	CY 2018 Subsidy	13,304,273,206.97
2018-076 RC	13 Jul 18	CY 2019 Subsidy	17,804,818,088.38
2019-004 RC	11 Jan 19	Surplus of CY 2016	(1,483,845,466.76)
2019-069 RC	12 Sep 2019	CY 2020 Subsidy	18,460,843,967.62
2019-084 RC	28 Oct 2019	True up for 2017	849,455,932.62
2020-004 RC	23 Jan 2020	True up for CY 2018	5,918,612,399.05
2020-011 RC	13 Mar 2020	CY 2021 Subsidy	20,730,183,569.03
2021-017 RC	16 Mar 2021	Shortfall of CY 2019 Subsidy	7,562,400,703.79
2021-022 RC	21 Mar 2021	CY 2022 Subsidy	20,209,687,236.96
2022-014 RC	15 Mar 2022	CY 2023 Subsidy	20,462,800,653.03
2022-030 RC	15 Mar 2022	Shortfall of CY 2020 Subsidy	5,542,978,254.51

[27]

Therefore, pursuant to these purposes, the RPS Off-Grid Rules mandates certain off-grid energy industry participants to "generate and/or procure, supply, and subsequently maintain a minimum percentage of RE share in their energy portfolio to meet the minimum RE requirement in their area."[28]

26 Section 2, RPS Off-Grid Rules.
27 ERC-approved UC rates being implemented as of 31 December 2021, Power Sector Assets & Liabilities Management Corporation (PSALM), available at: https://www.psalm.gov.ph/universal/administrationofUC, last accessed on 14 December 2022.
28 Section 7, RPS Off-Grid Rules.

The representative of the NREB, however, reported that despite compliance by the Mandated Participants in the minimum annual RPS requirements, this compliance is only until the year 2022. Thus, beginning 2023, the NREB expects a shortfall in the RECs.

RECs are certificates that each Mandated Participant is entitled to receive from the renewable energy that it sources from eligible RE Generation Facilities. Thereafter, the Mandated Participant may choose to trade, bank, or ultimately surrender its RECs.

When a Mandated Participant trades its RECs, it means that it will transfer its RECs to another participant of the Renewable Energy Market (***"RE Market"***) for a certain price, as will be indicated in the relevant RE Market Manual.[29] In the inverse, a Mandated Participant that still lacks the sufficient number of RECs in order comply with its Minimum RPS Requirements shall be entitled to buy off another RE Market participant's RECs. When trading the RECs in the RE Market, the REC Price shall not be greater than the limit approved by the ERC upon the endorsement by the DOE.

The representative of the NREB proceeded to discuss the issues that have been encountered in the implementation of the various renewable energy policies in the Philippines. First of all, the NREB representative stated that there is currently a need to encourage more investors in the renewable energy system (***"RE system"***). This is actually a sentiment shared by the participants at the First Roundtable Discussion. Needless to state, one of the most direct ways to achieve the goal of having renewable energy comprise 35% of the Philippines' generation mix by 2030, is to encourage more investors to participate in the RE system.

The NREB representative then proceeded to discuss the Green Energy Auction (***"GEA"***). The GEA refers to a competitive process specifically available to renewable energy developers, through which such developers could offer their renewable energy to DUs, ECs, and electricity suppliers.

According to DOE's Department Circular No. DC2021-11-0036, "*[t]he Green Energy Auction including the Opt-in Mechanism shall serve as compliance with the Competitive Selection Process (CSP) requirements for DUs.*"[30] The program provides that: "*qualified bidders shall place their lowest price offers in PhP/kWh which must not be higher than the ceiling price set by the ERC – i.e., Green Energy Auction Reserve (GEAR) price. Winning bidders' offered price represent their Green Energy Tariff which shall be the basis for their payments.*"[31]

However, it is important to note that the GEA comes with a limitation that only those renewable energy facilities that have no existing power supply agreements (***"PSAs"***) with DUs or other offtakers at the time of the agreed delivery date may be allowed to participate in the said auction.

With respect to the implementation of the GEA, the NREB representative stated that the timeline of the process is too short. To emphasize, the NREB representative explained that the Terms of Reference (***"ToR"***) for the auction was issued first without the GEAR Price having been approved by the ERC. Ideally, the ToR should be issued together with the GEAR Price in order to trigger the immediate reaction of those renewable energy developers (***"RE Developers"***) who are interested in participating. As a result, therefore, of the belated issuance of the GEAR Price, the RE Developer's interest to participate in the auction was diminished.

In addition to the foregoing issues, the NREB representative also reported that the one percent (1%) mandated increase in the RPS requirements is no longer enough to reach the goal of having renewable energy comprise 35% of the Philippines' generation mix by 2030. The solution, as per the NREB representative, is to escalate this mandated increase from 1% to 2.52%.

29 Section 3.3, RE Market Rules.
30 Section 13, DOE Department Circular No. DC2021-11-0036.
31 https://www.doe.gov.ph/sites/default/files/pdf/announcements/nrep-2020-2040_0.pdf

Third Presentation: Renewable Energy Market

The final presentation at the First Roundtable Discussion was about the REM and was presented by a representative of the Philippine Electricity Market Corporation (***"PEMC"***).

In order to facilitate, as well as closely monitor and regulate, the electricity suppliers' compliance with their annual RPS requirements, the RE Act mandated the DOE to implement a system known as the Renewable Energy Market (***"REM"***).[32] The REM involves the issuance, storage, trading, and surrender of RECs, which are market-based instruments that serve as evidence of energy actually generated by eligible renewable energy facilities.[33] The REM is intended as a venue for REM Participants who are obligated under the RPS Rules issued by the DOE to comply with their RPS requirements.[34]

For purposes of the REM, a single REC is issued to an eligible RE Generation Facility for each mega-watt hour (MWh) of renewable energy that the said facility generates.[35] Upon the issuance of an REC, such instrument remains valid for a period of three (3) years.[36] During the REC's validity and prior to its expiration, the REM participant that owns the REC may bank it, trade it with other REM participants, and/or surrender it as a means of compliance with its RPS requirements.

Should the REM Participant choose to bank its RECs, it may bank an REC for up to three (3) years from the date the particular REC was issued.[37] Needless to state, an REC that has expired shall then be considered invalid and can neither be transferred to another REM Participant nor surrendered for compliance with its own RPS requirement.[38] Another option that the REM Participant may choose to do is to trade its RECs in the REM. Under the REM, an REM Participant may transfer an REC to another REM Participant's Registry Account.[39] Therefore, given that REM Participants may trade their RECs with each other, an REM Participant may acquire RECs from other REM Participants in order to allow it to comply with its RPS requirements. Ultimately, the REM Participants shall retire their RECs by surrendering the RECs to the Renewable Energy Registrar (***"RE Registrar"***) up to an amount necessary to cover their respective minimum RPS requirements.

The PEMC representative reported that there is an almost 100% approval for REM registration applications. According to the representative, this will surely facilitate the implementation of the REM. He added that the FiT, the Net Metering Program, the GEOP, and the GEA all play a big role in the compliance of the Mandated Participants with their RPS requirements. This, therefore, emphasizes the need for certain resolutions to be put in place to support these policies.

The first resolution provided by the PEMC representative is for there to be extensive stakeholder consultations. More particularly, a fundamental mechanism for such consultations should be established, wherein the stakeholders could provide their feedback, which will lead to the introduction of eventual refinements to the existing renewable energy policies. This reflects the need for the monitoring tool sought to be developed by WWF-Philippines to provide for a venue wherein the feedback and comments of the relevant stakeholders could be given.

Another resolution proposed by the PEMC representative is to provide for more aggressive targets for renewable energy, as driven by the RPS. This necessitates enhancements to the net metering program, as well as to the implementation of the GEA and the GEOP.

32 Section 8, Republic Act No. 9513.
33 Section 8, Republic Act No. 9513.
34 Section 1.1.3.2., DOE Department Circular No. 2019-12-0016.
35 Section 3.1.1.1., DOE Department Circular No. 2019-12-0016.
36 Section 3.3.2.2., DOE Department Circular No. 2019-12-0016.
37 Section 3.3.2.1., DOE Department Circular No. 2019-12-0016.
38 Section 3.3.2.3., DOE Department Circular No. 2019-12-0016.
39 Section 3.3.1.1., DOE Department Circular No. 2019-12-0016.

02 Second Roundtable Discussion

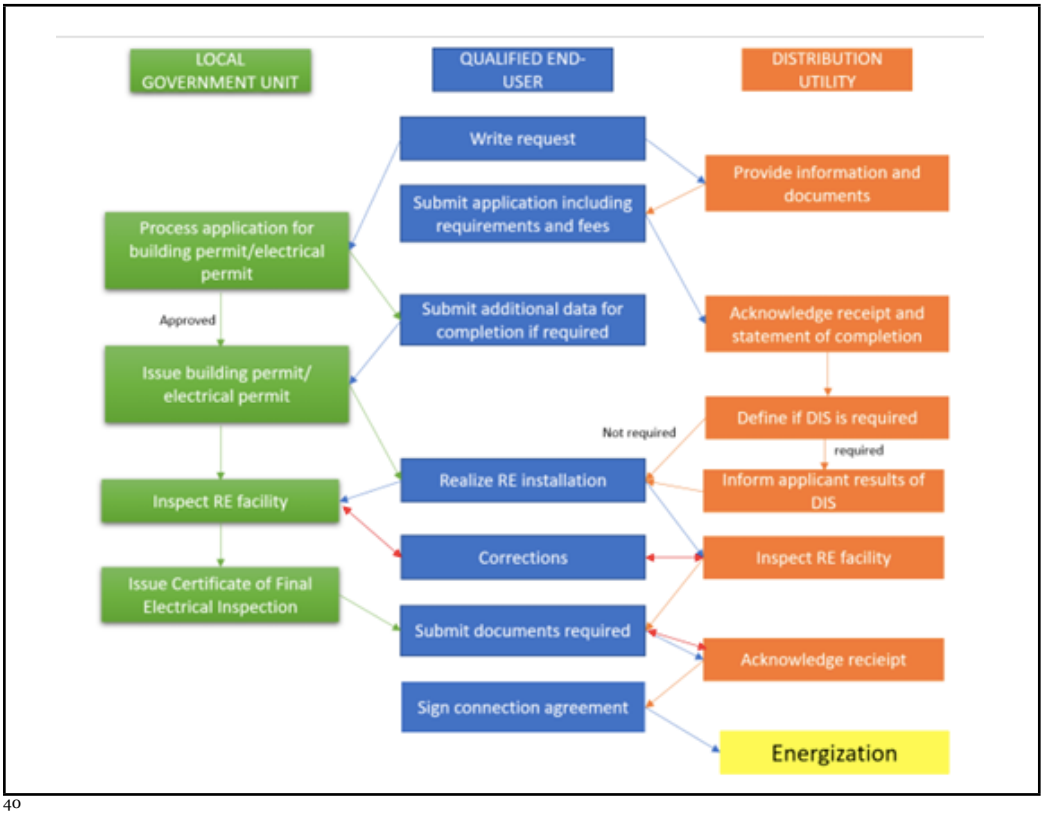
There were issues and challenges that were raised at the first roundtable that were echoed again in the second roundtable discussion particularly during the discussion presented by the representatives coming from the ERC and NGCP.

Similar to the format of the First Roundtable Discussion, WWF-Philippines also invited a variety of resource speakers not only from the public sector, but the private sector, as well, in order to elaborate on the experiences of the relevant stakeholders in the development and implementation of the Philippines' renewable energy policies.

First Presentation: Energy Regulatory Commission

The first resource speaker was a representative of the ERC, who was invited to discuss the approval of the market pricing caps and the various renewable energy fees. In their presentation, the ERC presented the challenges in the implementation of the renewable energy policies in terms of the issuance of permits and other delays in the LGUs.

More particularly, according to the ERC representative, there is an absence of uniformity in the already voluminous amount of permits required from RE Developers. For example, some LGUs require permits in addition to those that are generally required to operate. This, therefore, fuels the disinterest of many stakeholders to invest in renewable energy.



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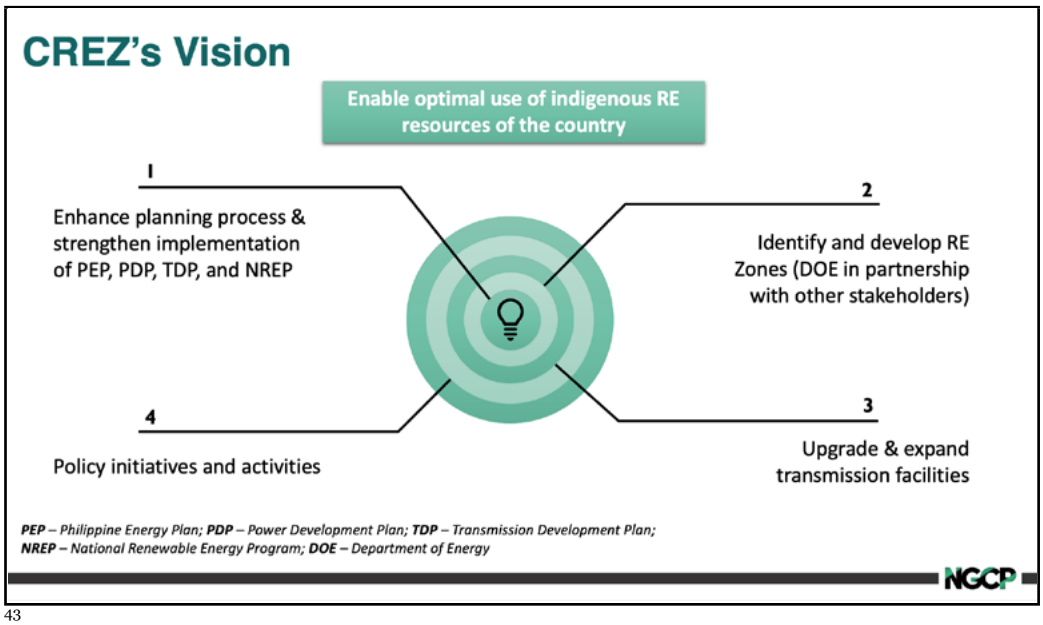
40 This table shows the simplified permitting process, as presented by the Energy Regulatory Commission during the Second Roundtable Discussion.

According to the participants of the Second Roundtable Discussion, some of these additional requirements are, at times, unnecessary. This leads to different stakeholders from the public and private sectors to lack familiarity with the requirements. Furthermore, there is also a lack of familiarity from the public and private sectors regarding the application process, in general. Needless to state, this issue is one of the many discussed during the roundtable discussions, that need to be properly addressed in order to promote the renewable energy sector.

Second Presentation: National Grid Corporation of the Philippines

After the presentation of the ERC representative, a representative from the National Grid Corporation of the Philippines (***"NGCP"***) gave a presentation on the status of the transmission grid. In their presentation, the NGCP representative provided positive updates concerning the trajectory of renewable energy in the Philippines.

The NGCP representative discussed the Philippines' existing policy establishing Competitive Renewable Energy Zones (***"CREZ"***). As discussed in the first policy report, the CREZ process was established by the DOE through its Department Circular No. DC2018-09-0027, entitled "*Establishment and Development of Competitive Renewable Energy Zones in the Country*."[41] This department circular aims to streamline the process for proactive transmission planning by identifying candidate renewable energy zones, which represent geographic areas with the most economically viable renewable energy resources characterized by high-quality, low-cost renewable energy potential, in addition to high levels of private-sector developer interest.[42]



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Proceeding to the issues and challenges in the implementation of renewable energy policies, the NGCP representative reported that one of the challenges faced by the NGCP is on the right of way (***"ROW"***) over properties traversed by the transmission grid. According to the NGCP representative, there are transmission backbone projects tagged as CREZ-related that have been filed to ERC for approval. However, the challenge behind this is for the ROW over the properties going to the CREZ, which are necessary for the transmission grid. Therefore, regulatory support is needed to allow the smooth implementation of CREZ-related transmission projects.

41 DOE Department Circular No. DC2018-09-0027.
42 Section 1(c)(i), DOE Department Circular No. DC2018-09-0027.
43 Slide from National Grid Corporation of the Philippines presentation during the Second Roundtable Discussion, which shows the vision for the CREZ.

Third Presentation: National Electrification Administration

The third presentation was given by a representative of the National Electrification Administration (***"NEA"***). The presentation focused on a discussion of the efforts towards the electrification of off-grid areas. These efforts from the NEA include the Strategized Sitio Electrification Program (***"SSEP"***), as well as the Strategized Household Electrification Program (***"SHEP"***).

Pursuant to the Philippine Government's efforts towards the total electrification of the country, the NEA, through NEA Memorandum No. 2022-35, dated 15 July 2022, issued its "Revised Policy Guidelines on the Implementation of Strategized Total Electrification Program" (***"STEP"***).[44] This STEP integrates the various electrification strategies of the government, namely:[45]

(a) Expanded Sitio Electrification Program (***"Expanded SEP"***), for On-Grid and Off-Grid areas;

(b) Barangay Line Enhancement Program (***"BLEP"***); and

(c) Expanded Household Electrification Program (***"Expanded HEP"***), for On-Grid and Off-Grid Areas.

Fourth Presentation: Board of Investments

A representative of the Board of Investments (***"BOI"***) was invited to discuss the status of the incentives given to investors in the renewable energy sector. In their presentation, the representative of the BOI highlighted the existing incentives laws, which are granted under the RE Act, as well as Republic Act No. 11534, otherwise known as the Corporate Recovery and Tax Incentives for Enterprises Act (***"CREATE"***). According to the representative of the BOI, these incentives will encourage the existing investors in the energy sector to shift to renewable energy.

Aside from the incentives granted under the above laws, the BOI also provided a discussion on the Philippine Government's Strategic Investment Priority Plan (***"SIPP"***). As discussed by the BOI representative, the SIPP is the Philippines' main investment plan, which contains a list of priority activities for investment promotion and facilitation. These activities contained in the list, which include investments in the renewable energy sector, are supported by the Philippine Government through the provision of fiscal and non-fiscal incentives, as provided in the CREATE Act.

44 NEA Memorandum No. 2022-35, dated 15 July 2022.
45 Background, NEA Memorandum No. 2022-35, dated 15 July 2022.

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Fifth Presentation: Private Stakeholder (Romblon Electric Cooperative Inc.)

For the Second Roundtable Discussion, aside from public stakeholders, a representative from the private sector was invited to share the experiences and challenges faced by private stakeholders in connection with the implementation of renewable energy policies.

46 The slides showing the priority investments of the Philippine Government are lifted from the presentation of the Board of Investments during the Second Roundtable Discussion.

03 Discussion During the Breakout Sessions

As stated earlier, the participants in the Second Roundtable raised issues and challenges, which were also discussed during the First Roundtable Discussion. To facilitate a clearer discussion, this policy brief contains a consolidated discussion of all the issues and challenges raised during both Roundtable Discussions.

Consolidated Results of the First and Second Roundtable Discussions

Incentivization of renewable energy development

According to the first roundtable discussion conducted by WWF-Philippines, there are several factors that hinder the effective promotion of renewable energy. One of the difficulties surrounding the promotion of renewable energy refers to the cost accompanying the development of renewable energy facilities. Admittedly, renewable energy development has initially not been a cost-effective endeavor. This factor alone has initially made it difficult to promote renewable energy.

For example, with respect to renewable energy technologies, these alone generally require a large infusion of money by investors. This is one of the reasons why, in an opinion written by the Foundation for Economic Freedom (***"FEF"***)– a public advocacy in the Philippines – while renewable energy has a role in providing energy in the Philippines, it is, however, seen as requiring high additional payments on the part of the end-users for its utilization.[47] The FEF also adds that, instead of promoting renewable energy, it is more prudent to first rehabilitate our existing energy resources, and further wait until the overall cost of implementing and utilizing renewable energy drops.[48]

However, it bears stressing that, with the progress made in the development of renewable energy technologies, the cost of developing and creating renewable energy facilities has decreased considerably. A vital example can be observed in a study conducted by Friedrich Ebert-Stiftung, a German political party foundation, wherein it can be seen that the cost of developing solar projects dropped by eighty percent (80%) from 2011 to 2016, and that for wind projects being lower by around fifty percent (50%) within the same time period.[49] The price of solar energy is, according to solar developers, cheaper than that of coal.[50]

Not only has the cost of developing renewable energy facilities decreased, it is also notable that operating renewable energy facilities has also involved almost zero variable costs in the Philippines' energy market, according to studies conducted by.[51] This almost zero variable cost leads to the bidding price at which energy sourced from renewable energy resources clears at the electricity market being lower.[52]

Another challenge raised pertains to the tedious procedures involving government procedural systems, which include, among others, securing permits for renewable energy projects. According to the participants of the first roundtable discussion, the lengthy permitting process has been identified as one of the biggest obstacles to the deployment of renewable energy.

47 https://newsinfo.inquirer.net/47007/the-trouble-with-the-feed-in-tariff. Last accessed 29 September 2022, 1:35 am
48 https://newsinfo.inquirer.net/47007/the-trouble-with-the-feed-in-tariff. Last accessed 29 September 2022, 1:35 am
49 "*Towards a Just Transition in the Philippine Electricity Sector: Challenges and Opportunities,*" Friedrich Ebert-Stiftung (Roberto S. Verzola, Jose D. Logarta Jr. (Viking), and Pedro H. Maniego, Jr.), 2017.
50 Ibid.
51 "*Towards a Just Transition in the Philippine Electricity Sector: Challenges and Opportunities,*" Friedrich Ebert-Stiftung (Roberto S. Verzola, Jose D. Logarta Jr. (Viking), and Pedro H. Maniego, Jr.), 2017.
52 Ibid.

Just at the initial stage, the requirement for renewable energy developers to secure numerous permits and signatures can already lengthen the permitting process, especially in view of the manner by which these documents have to go through different bureaus, divisions, and agencies. This process is further lengthened and complicated when these bureaus, divisions, and agencies have clarifications regarding the applications of the RE Developers.

In connection with the challenge of the complex permitting system of renewable energy facilities, the difficulties regarding the implementation of the renewable energy policies itself was also raised. According to the participants of the first roundtable discussion, the Philippine Government already has sufficient laws and policies relating to renewable energy. Furthermore, according to the DOE's Renewable Energy Management Bureau (***"REMB"***) – the bureau primarily responsible for implementing policies, plans, and programs related to the accelerated development, transformation, utilization, and commercialization of renewable energy resources and technologies – there are already enough, if not substantial, laws and policies to fulfill the objectives of the RE Act.

However, one of the problems identified by the participants of the first roundtable discussion lies in the fact that renewable energy was not fully promoted not only in the private sector, but even in the public sector. Therefore, this led to the said private and public sectors lacking familiarization with the various renewable energy policies, as well as the respective sectors' roles in effectively and efficiently enforcing the same.

In order for the Philippine Government to more effectively promote renewable energy, the participants of the roundtable discussion emphasized that the innate qualities and benefits of renewable energy resources should be emphasized. One of the inherent qualities of renewable energy resources, such as wind, solar, hydro, geothermal, ocean, biomass, and biofuel is that these resources are replenishable. This means that these renewable energy resources will practically not be depleted, in relation to the country's efforts to meet the sustainability of the country's energy requirements.

On the other hand, conventional sources of energy, as opposed to renewable energy resources, are those that are quickly depleted. Moreover, the replenishment of these conventional sources is too slow as to be considered as sustainable in view of the country's energy requirements.

Another quality of renewable energy resources that must be emphasized, as discussed by the participants of the first roundtable discussion, is its impact on our environment. This has been contrasted to conventional energy sources, which have received a variety of criticisms, especially with respect to their carbon and greenhouse emission levels. More particularly, these conventional energy sources have been proven to massively contribute to climate change and other dangerous emissions.

As regards the issue on cost, which is undeniably an important consideration in implementing renewable energy policies for different projects, the participants of the first roundtable discussion stated that there is a need to fully and strictly implement the Philippine Government's policies formulated in connection with incentivization of renewable energy development.

For instance, under DOE Department Circular No. DC2009-05-0008, wherein the implementing rules and regulations of the RE Act (***"RE Act IRR"***) is enshrined, the following fiscal incentives for RE Developers are available:[53]

(a) income tax holiday for the first seven (7) years of commercial operation;

(b) duty-free importation of renewable energy machinery, equipment and materials;

53 Section 13, Rule 5, Part III, DOE Department Circular No. DC2009-05-0008.

(c) special realty tax rates on equipment and machinery;

(d) net operating loss carry-over;

(e) reduced corporate tax rate (10 percent after income tax holiday);

(f) accelerated depreciation;

(g) zero percent value added tax (VAT) rate;

(h) cash incentive for renewable energy developers for missionary electrification;

(i) tax exemption of carbon credits; and

(j) tax credit on domestic capital equipment and services.

The RE Act IRR also provides for the following incentives and privileges:[54]

(a) tax rebates for purchases of renewable energy components;

(b) financial assistance program;

(c) exemption from the Universal Charge;

(d) cash incentive for renewable energy developers for missionary electrification;

(e) payment of transmission charges; and

(f) Priority Dispatch and Must Dispatch status for intermittent

Clearly, the RE Act offers a wide variety of both fiscal and non-fiscal incentives in its efforts to attract additional investments in the renewable energy sector.

Foreign ownership

Another issue raised by the participants of the Roundtable Discussions is the limitations on foreign ownership for renewable energy projects. Under the 1987 Constitution,

> *"All lands of the public domain, waters, minerals, coal, petroleum, and other mineral oils,* ***all forces of potential energy, fisheries, forests or timber, wildlife, flora and fauna, and other natural resources are owned by the State. With the exception of agricultural lands, all other natural resources shall not be alienated. The exploration, development, and utilization of natural resources shall be under the full control and supervision of the State. The State may directly undertake such activities, or it may enter into co-production, joint venture, or production-sharing agreements with Filipino citizens, or corporations or associations at least sixty per centum of whose capital is owned by such citizens****. Such agreements may be for a period not exceeding twenty-five years, renewable for not more than twenty-five years, and under such terms and conditions as may be provided by law. In cases of water rights for irrigation, water supply, fisheries, or industrial uses other than the development of water power, beneficial use may be the measure and limit of the grant."* (Emphasis supplied)

54 Section 17, Rule 5, Part III, DOE Department Circular No. DC2009-05-0008.

Given the above constitutional provision, foreign investors were allowed to own only 40% of the equity in corporate entities developing or owning renewable energy projects. This is because renewable energy resources, such as "all forces of potential energy" are owned by the State. This involves renewable energy resources, such as solar energy and wind energy. Thus, only large-scale geothermal exploration, development, and utility projects were allowed to have 100% foreign ownership.

The government has allowed **one hundred percent (100%) foreign ownership of geothermal projects** in order to incentivize investment into these projects, provided that Financial and Technical Assistance Agreements (***"FTAAs"***) are executed by the foreign company with the government as well as mandating an initial investment of at least USD: FIFTY MILLION (USD 50,000,000).[55]

Republic Act No. 11659, otherwise known as the Public Service Act of 2022, was passed, which allowed foreigners to own 100% of companies in industries not designated as public utilities. However, for solar and wind projects to be owned by 100% foreign-owned companies, a law must still be enacted that will allow ownership of such projects.

Recently, however, there has been progress in allowing foreign investments in the renewable energy sector due to an opinion released by the Department of Justice (***"DOJ"***), which stated that the constitutional limitation is not applicable to renewable energy projects. In discussing the above-quoted constitutional limitation, the DOJ opined that *"the Constitutional foreign ownership restriction on the exploration, development and utilization of natural resources only covers things that are susceptible to appropriation, thus excluding the sun, the wind, and the ocean."*[56] Thus, considering that the sun, the wind, and the ocean are not susceptible to appropriation, renewable energy projects utilizing such resources are not covered by the prohibition.

The DOJ further explained that under Article XII Section 2 of the Constitution, the phrase *"all forces of potential energy" should be interpreted to exclude "kinetic energy."*[57] The DOE also explained that renewable energy sources like solar, wind, hydro, and ocean or tidal energy are considered kinetic energy sources.[58] However, with respect to hydropower projects, the DOE clarified that the *"appropriation of waters direct from the source shall continue to subject foreign ownership in the Water Code."*[59]

Pursuant to the opinion of the DOJ, the RE Act IRR was amended by the DOE, on 15 November 2022, through DOE Department Circular No. DC2022-11-0034.[60] This department circular amended Section 19 of the RE Act IRR, which used to provide that "the exploration, development, production and utilization of natural resources shall be under the full control and supervision of the State."[61]

In addition to the revision of the RE Act IRR, the DOE is also considering the revision of the Philippines' Foreign Investment Negative List (***"FINL"***),[62] which contains a list of investment activities, as well as the mandated maximum amount of foreign investment in each.[63] The proposed revision of the FINL will reflect that renewable energy projects will not be covered by the 60%-40% Filipino-Foreign ownership requirements.[64]

55 https://www.doe.gov.ph/sites/default/files/pdf/announcements/nrep-2020-2040_0.pdf
56 "DOJ: RE projects exempted from 40% Foreign Investment Cap," Power Philippines, 03 October 2022, available at: https://powerphilippines.com/doj-re-projects-exempted-from-40-foreign-investment-cap/, last accessed on 25 November 2022.
57 Ibid.
58 Ibid.
59 "DOE eyeing revisions on foreign investment negative list," Power Philippines News, 21 November 2022, available at: https://powerphilippines.com/doe-eyeing-revisions-on-foreign-investment-negative-list/, last accessed on 25 November 2022.
60 DOE Department Circular No. DC2022-11-0034.
61 Section 19(B), Rule 6, RE Act IRR.
62 Executive Order No. 175, S.2022.
63 "DOE eyeing revisions on foreign investment negative list," Power Philippines News, 21 November 2022, available at: https://powerphilippines.com/doe-eyeing-revisions-on-foreign-investment-negative-list/, last accessed on 25 November 2022.
64 Ibid.

Few incentives to entice the market to transition to renewable energy projects

Another issue identified during the Roundtable Discussions was that there are just a few incentives to entice investors in conventional energy projects to transition to renewable energy projects. Currently, most of the investors in generation facilities utilizing conventional energy sources have not yet fully realized their return on investment. Therefore, this makes it difficult for these investors to transition to renewable energy projects.

Currently, in view of the increasing need to maintain the reliability of the energy grid, the Philippine Government's efforts towards oil and gas exploration are being ramped up. According to Senate Committee on Energy vice chairman Senator Sherwin Gatchalian, a resolution was filed in the Senate, which seeks to explore the potential for oil and gas in the West Philippine Sea in order to lessen the Philippines' reliance on fuel imports.[65]

Based on the Philippine Energy Plan 2020-2040 (***"PEP 2020-2040"***), the projected investments on coal from 2021 to 2040 are as follows:

	EXPLORATION		DEVELOPMENT AND PRODUCTION	
	ADDITIONAL RESERVES (MMMT)	INVESTMENTS (PHP MILLION)	ADDITIONAL PRODUCTION (MMMT)	INVESTMENTS (PHP MILLION)
2020-2022	65.00	2,901	52.00	118,606
2023-2040	223.00	9,953	230.00	524,601
TOTAL	**288.00**	**12,854**	**282.00**	**643,207**

[66]

While there is still a certain level of dependence on conventional energy sources to ensure the reliability of the grid, the Philippine Government has also made commitments in the international community to promote renewable energy.

In 2015, the Philippine Government, as a member state of the United Nations, reaffirmed its commitment to pursue the seventeen (17) Sustainable Development Goals (***"SDGs"***), as issued by the United Nations General Assembly (***"UN GA"***) of 2015.

The SDGs, as a whole, is a collection of goals designed to be a "*blueprint to achieve a better and more sustainable future for all.*"[67] Of particular interest is SDG 7, which seeks to "*[e]nsure access to* ***affordable, reliable, sustainable and modern energy for all.***" SDG 7 provides for the following targets that all committed member states shall pursue:[68]

65 "Senate probe to help unlock oil, gas potential in West Philippines Sea," Power Philippines News, 17 October 2022, available at: https://powerphilippines.com/senate-probe-to-help-unlock-oil-gas-potential-in-west-philippines-sea/, last accessed on 25 November 2022.
66 Philippine Energy Plan 2020-2040.
67 United Nations (2017) Resolution adopted by the General Assembly, 06 July 2017, Work of the Statistical Commission pertaining to the 2030 Agenda for Sustainable Development.
68 "Goal 7: Affordable and Clean Energy," United Nations Environment Programme (UNEP), accessible at https://www.unep.org/explore-topics/sustainable-development-goals/why-do-sustainable-development-goals-matter/goal-7, last accessed on 02 August 2022.

TARGET 7.1	By 2030, ensure universal access to affordable, reliable and modern energy services;
TARGET 7.2	By 2030, increase substantially the share of renewable energy in the global energy mix;
TARGET 7.3	By 2030, double the global rate of improvement in energy efficiency;
TARGET 7.a	By 2030, enhance international cooperation to facilitate access to clean energy research and technology, including renewable energy, energy efficiency and advanced and cleaner fossil-fuel technology, and promote investment in energy infrastructure and clean energy technology; and
TARGET 7.b	By 2030, expand infrastructure and upgrade technology for supplying modern and sustainable energy services for all in developing countries, in particular least developed countries, small island developing States, and land-locked developing countries, in accordance with their respective programmes of support.

Consistent with SDG 7 and the goal to achieve the above targets by 2030, the Philippine Government issued the National Renewable Energy Program 2020-2040 (***"NREP"***), wherein the country set a target of 35% percent share of renewable energy in the generation mix by 2030.[69] The renewable energy share shall then be increased to 50% by 2040.[70]

In 2021, the Philippine Government then participated in the United Nation Climate Change Conference in Glasgow, Scotland, which is known as the 26th Conference of the Parties (***"COP26"***). This was attended by then Secretary of Finance Carlos Dominguez III. At COP26, Finance Secretary Dominguez emphasized the need for increased climate financing from wealthy economies, especially considering those countries' considerable contribution to the world's carbon footprint. In connection with the COP26, the Philippine Government declared its commitment to reduce its greenhouse gas (***"GHG"***) emissions by 75% from 2020 to 2030.

This commitment of the Philippine Government led to its participation in the Asian Development Bank's (***"ADB"***) Energy Transition Mechanism (***"ETM"***), which seeks to fund the early retirement of coal-run power plants and replace these plants with renewable energy alternatives.[71] This move is consistent with the policy espoused in the RE Act, which aims "***to reduce the country's dependence on fossil fuels xxx.***"[72]

Thus, in 2021 and in connection with the ETM, the Bangko Sentral ng Pilipinas (***"BSP"***) called on banks to support the country's energy transition.[73] Consequently, some banks have begun to shift their support from conventional energy projects to renewable energy projects. For example, Banco de Oro (***"BDO"***), a Filipino bank, declared that it will reduce its investments in coal by up to 50% in the next decade.[74]

69 Chapter 2, National Renewable Energy Plan 2020-2040.
70 Ibid.
71 Speech by Masatsugu Asakawa, ADB President, at the Launch of the Partnership for Energy Transition Mechanism (ETM) at the 26th session of the Conference of the Parties (COP26) to the United Nations Framework Convention on Climate Change (UNFCCC), 3 November 2021, Glasgow, UK.
72 Section 2(a), Republic Act No. 9513.
73 "BSP to banks: Fund energy transition," Power Philippines News, 07 December 2021, available at: https://powerphilippines.com/bsp-to-banks-fund-energy-transition/, last accessed on 25 November 2022.
74 "BDO to cut funding of coal projects by 50%," Power Philippines News, 09 September 2022, available at: https://powerphilippines.com/bdo-to-cut-funding-of-coal-projects-by-50/, last accessed on 25 November 2022

As discussed during the Roundtable Discussions, one recommendation that can be made with regard to this issue is for a feasibility study to be conducted to make the investors aware of available prospective investments in the renewable energy sector. Such feasibility study can consider the inclusion of additional subsidies and incentives for investments in clean energy technologies, in addition to those already in existence. It is also recommended that a clearer pathway and outlook in the renewable energy sector be issued to guide prospective investors.

The DOE can also consider the creation of a clear and reasonable transition path to further assist energy companies utilizing conventional forms of fuel in transitioning to cleaner technologies. In connection with this, the Philippine Government should be able to provide and explore laws, rules, and regulations regarding incentives for undertaking such transition.

According to the International Renewable Energy Agency (***"IRENA"***), renewable energy has become more affordable, which has allowed for a "more viable displacement of conventional coal- and oil-burning systems."[75] In fact, according to IRENA, the transition from conventional energy to renewable energy would cost less than retaining dependence on conventional energy because the amounts saved by reducing subsidies to conventional energy would exceed the transition investment costs by "three to seven times."[76] This, therefore, shows that reducing incentives to coal and fossil fuel will be more beneficial in the long run.

Lack of technical personnel

The participants of the first roundtable discussion also identified the lack of technical personnel in the government. These technical personnel are important, especially if relevant financial and technical data from the implementation by the different government agencies of the renewable energy policies are to be processed and analyzed. Even though a wide array of information is generated from the implementation of the renewable energy policies and the operationalization of the renewable energy facilities, these data will be of no significant use if the Philippine Government lacks the personnel to process and analyze these.

As discussed during the roundtable discussion, the lack of technical personnel is brought about by the absence of competitive compensation packages, as compared to those provided by other countries. This ultimately leads to an increase in the difficulty of hiring more knowledgeable and competent people in the Philippine Government. Thus, the Philippine Government should consider more ways to incentivize and encourage technical personnel to join the government workforce, such as in revisiting and improving existing service level incentives.

The role of the National Grid Corporation of the Philippines

One of the issues raised during the first roundtable discussion refers to the effectiveness of the role of the NGCP as the Philippines' transmission service provider. As the transmission service provider, it is the entity primarily responsible for the operation, maintenance, and development of the country's transmission grid.

According to the participants of the first roundtable discussion, the role of the various agencies and stakeholders, including the NGCP, must be reviewed.

75 IRENA (2019), Transforming the energy system – and holding the line on the rise of global temperatures, International Renewable Energy Agency, Abu Dhabi.
76 Ibid.

As to the NGCP, it has been described in the first roundtable discussion as the liaison between the government and the private sector. As the transmission service provider, the NGCP is considered as the gateway in the energy sector because it has a crucial role in linking the power generators to the DUs in order to deliver electricity to areas where it is needed.

Furthermore, the participants of the roundtable discussion added that the capacity of the transmission grid to accommodate renewable energy is considered as one of the major hurdles in the renewable energy sector. The participants stated that no matter how much energy is generated by the existing renewable energy facilities, there will still be no significant impact to the energy sector if such energy is incapable of being injected into the transmission grid.

Aside from the foregoing issues, the first roundtable discussion revealed that there is an experience on the side of the private sector that the NGCP has controlled the energy market strictly. According to the participants of the first roundtable discussion, market forces should be given stronger emphasis for the more effective transmission and distribution of electricity. There were, therefore, suggestions to review and remove the requirements in the policies, such as the cap on net metering, which have been described as arbitrary.

Moreover, considering that the NGCP is considered as the gateway in the energy sector, any setbacks and issues arising in the transmission grid will lead to a bottleneck in the implementation of the renewable energy policies. Thus, there is a need to review the role of the NGCP and to determine ways on how to make it more effective in its performance of such role. Additionally, the Philippine Government should examine and improve the processes of the NGCP regarding the testing and commissioning of renewable energy facilities.

More importantly, a review of the regulatory constraints pertaining to the regulatory gridlock, the infrastructure, and the needed support in the transmission grid shall be made. As a more aggressive measure, there were suggestions from the first roundtable discussion to consider the possibility of removing the role of NGCP as there are disadvantages to a centralized planning system.

Participation of renewable energy stakeholders

Furthermore, policy instruments have been placed in the RE Act in order to promote the development of renewable energy. As stated earlier, various policies have been implemented by the Philippine Government to promote and support the development of renewable energy, such as the FiT, the REM, the RPS, GEOP, and the RETF.

However, as discussed by the participants of the first roundtable discussion, the DOE and its bureaus are not the only government agencies that are involved in the development and implementation of the renewable energy laws. As a matter of fact, there are other agencies that must also be involved, particularly in terms of both technical and procedural activities pertaining to the renewable energy sector.

For instance, the following key agencies have been given their own responsibilities under the RE Act and Republic Act No. 9367, otherwise known as the Biofuels Act of 2006:[77]

- ***Department of Science and Technology (DOST)*** – coordinate with Department of Agriculture (DA) in identifying and developing viable feedstock for the production of biofuels; develop research and development program for sustainable biofuel production and utilization.

77 Republic Act No. 9367.

- ***Department of Agriculture (DA)*** – develop a national program for the production of crops for use as feedstock supply, that would also guarantee sufficient and reliable supply of feedstock is allocated for biofuel production; undertake biofuel feedstock research and development; coordinate with the Philippine Coconut Authority (PCA) and Sugar Regulatory Administration (SRA) to identify and publish potential areas for expansion and production of raw materials as feedstock, and other policies in support of the biofuels program; certifies whether the proposed feedstock may be utilized for biofuel feedstock production.

- ***Department of Agrarian Reform (DAR)*** – approves conversion of agricultural lands to biofuel production site.

- ***Department of Labor and Employment (DOLE)*** – recommend policies and programs that will enhance social impact of the National Biofuels Program, including promotion of gainful livelihood and employment opportunities and social protection coverage.

- ***Department of Trade and Industry (DTI)*** – promote development of alternative fuel technology for vehicles, engines and parts in correspondence with the requirements of the mandated minimum biofuel blends; in coordination with Department of Transportation and Communication (DOTC) and the Department of Environment and Natural Resources (DENR), formulate and implement a national motor vehicle inspection and maintenance program as a measure to reduce emissions from motor vehicles pursuant to the Philippine Clean Air Act of 1999.

- ***Department of Environment and Natural Resources (DENR)*** – issues Environment Compliance Certificate (ECC).

- ***National Commission for Indigenous Peoples (NCIP)*** – issues Certificate of Precondition (Certificate of Non-Overlap for sites outside ancestral domain; Certificate of Compliance if area is within/overlaps with ancestral domain).

- ***Philippine Coconut Authority (PCA)*** – develop and implement policies and programs within the coconut industry in support of the National Biofuels Program, such as: formulate and implement necessary regulatory measures to ensure availability, sufficiency, quality, and sustainability of supply of coconut raw materials for the National Biofuels Program, require the accreditation/registration of reputable and credible oil mills that will supply coconut oil (CNO) requirements of coco biodiesel products.

- ***Tariff Commission*** – create and classify a tariff line for biofuels and biofuel-blends in consideration of World Trade Organization (WTO) and ASEAN Free Trade Area (AFTA) agreements.

Likewise, the following government agencies are given their respective and unique responsibilities under the RE Act,:

- ***Board of Investments (BOI)*** – register renewable energy developers, manufacturers, fabricators and suppliers of locally produced renewable energy equipment to qualify for availment of fiscal incentives.

- ***Department of Environment and Natural Resources (DENR)*** – member of the NREB; issues ECC, Forest Land Use Agreement (FLAg)/Special Land Use Agreement (SLUP) for area in public domain.

- ***Department of Finance (DOF)/Bureau of Customs, Bureau of Internal Revenue*** – formulate guidelines/mechanisms to implement fiscal-related provisions such as: exemption from duties on renewable energy machinery, equipment and materials; zero percent VAT; tax rebate for purchase of renewable energy components in consultation with DOST, DTI, DOE; member of the NREB.
- ***Department of Trade and Industry (DTI)*** – member of the NREB;
- ***Department of Agrarian Reform (DAR)*** – approves conversion of agricultural lands to industrial sites;
- ***Energy Regulatory Commission (ERC)*** – formulates the FiT system rules;
- ***National Commission for Indigenous Peoples (NCIP)*** – issues Certificate of Non-Overlap for sites outside ancestral domain; Free and Prior Informed Consent/ Certificate of Precondition if area is within/overlaps with ancestral domain;
- ***National Transmission Corporation (TRANSCO)*** – provide necessary mechanisms for physical connection and ensuring safety and reliability of electricity transmission; member of the NREB;
- Others: Maritime Industry Authority (MARINA), Bureau of Fisheries and Aquatic Resources (BFAR), Philippine Navy, Philippine Coast Guard, etc. – for necessary clearances.

In view of the participation required of the numerous government agencies, the participants of the Roundtable Discussions stated that the Philippine Government should establish procedural systems to ensure that there is an efficient and orderly way of implementing the renewable energy policies. Furthermore, the participants discussed that the roles of the various government agencies and the relevant stakeholders should be more clearly defined.

An example of this issue can be seen in the fact that the DOE found the need to clarify the mandates and roles of certain government agencies in relation to the procurement of energy supply.[78] More particularly, the DOE shall issue guidelines that are meant to clarify the mandate of the ERC's role in the conduct of the competitive selection processes for PSAs.[79] In view of the fact that there are still uncertainties in the roles of the policymakers and government agencies, one recommendation is for the policymakers to undertake a review of the roles of the government agencies and issue clarificatory guidelines pertaining thereto. This will have the effect of obviating the possibility of any confusion as to the roles and responsibilities of the policymakers and, thus, improve the process of developing and implementing renewable energy policies.

At present, each stage involves a series of approvals, certifications, and permits from multiple government agencies. This applies even to renewable energy facilities located in off-grid areas, which are considered as being too remote as to not be attractive to renewable energy investors. The different and complex steps involved in the development of renewable energy suggest that the procedure can take a while to accomplish before a renewable energy facility may begin to operate and be considered as profitable.

The roundtable discussion also raised the fact that there is a very limited participation on the part of certain sectors, especially in the development of renewable energy policies. In order to improve the drafting and implementation the renewable energy policies, the private sector and the LGUs should be allowed an increased participation in the development of such policies.

78 "DOE to clarify mandates, rules on supply procurement," Power Philippines News, 30 August 2022, available at: https://powerphilippines.com/doe-to-clarify-mandates-rules-on-supply-procurement/, last accessed on 25 November 2022.

79 Ibid.

Thus, the lengthy permitting process has been identified as one of the major obstacles to the deployment of renewable energy facilities. The permitting process alone – not to mention the time that is needed in putting up the renewable energy project – could take years to complete. Hence, aside from strictly enforcing renewable energy policies, there is also a need to further engage the different government sectors by undertaking actions, such as adding more personnel to effectuate the implementation of such tedious process.

Need to increase the mandated minimum increase in RPS requirements

As earlier discussed, the discussion in the Roundtable Discussions revealed that there is a common sentiment among the participants that the mandated minimum increase of 1% in the RPS requirement is no longer sufficient to ensure that the Philippines meets its goal of having renewable energy comprise 35% of the generation mix by 2030 and 50% by 2040.

In line with this, the DOE issued DOE Department Circular No. DC2022-09-0030, which revised the annual incremental increase in the RPS requirements from 1% to 2.52%.[80] Under Section 2 of the DOE's department circular, it is provided that:[81]

> *"[t]he adoption of the Adjusted Km of 2.52% starting 2023 is necessary to meet the aspirational target of more than 50% RE share in the country's power generation mix by 2040 expressed in MWh"*

It is worth noting, at this juncture, that the DOE, in coordination with the NREB and in consultation with the stakeholders, is required to conduct an annual review of this minimum increase in the RPS requirements. Thus, the monitoring tool will be of great help to this effort of the DOE if the monitoring tool contains a venue to allow the relevant stakeholders to provide their feedback on the actual implementation of the policies. The monitoring shall also contain data, which will reflect whether the objectives of the renewable energy policies are being properly pursued.

Constraints and Challenges Discussed in the Off-Grid Areas

While the issues and challenges discussed above generally apply to the renewable energy sector, as a whole, there is a need to address certain issues and challenges that apply to the renewable energy sector in off-grid areas, in particular. Thus, the following are the relevant issues and challenges discussed by the participants in the Roundtable Discussions:

Electric cooperatives and small companies have limited financial resources

To ensure continuous operations, electric cooperatives (***"ECs"***) and private companies need to further sustain and continually improve their overall performance. This shall include a reassessment of their financial capabilities and funding, institutional and technical operations, continuous reformulation of plans and programs that are adaptive and robust, the implementation of more aggressive strategies and activities, and the close monitoring of all progress to address major issues and concerns.

In the Philippines, the restructured electric power industry is composed of four sectors: generation, transmission, distribution, and supply. The generation sector is composed of generation companies, co-generation companies, and independent power producers. A generation company is required to obtain authorization from ERC to operate in this sector. Generation is relatively a capital-intensive and energy-intensive activity.

80 DOE Department Circular No. DC2022-09-0030.
81 Section 2, DOE Department Circular No. DC2022-09-0030.

Similarly, the distribution of electricity to end-users is a regulated common carrier business. DUs must secure a national franchise and are subject to regulation by ERC. DUs are composed of private utilities, ECs, LGU-operated utilities, and other duly authorized entities. DUs can merge, consolidate, integrate, and enter into a management contract, bulk procurement, and joint ventures, subject to ERC guidelines. Being a regulated sector of the Philippine Electric Power Industry, DUs cannot change the terms and conditions of their services to end-users without approval by the ERC.

Funding or financial resources are also greatly needed for the ECs and small private distributors to ensure continuous operations. New technologies that provide support to ECs for enhanced capabilities, better technological processes, more accurate data collection, and remote monitoring of generation and distribution systems could result in more stable electricity access for end-users. The better distribution and delivery to end-user will lead to more stable services, which in turn could provide assurances to lenders on the credit worthiness of such entities, hence greater access to credit and fundings for ECs.

Need for standardization and streamlining of policies and processes

Small renewable projects can require as much time for due diligence as large-scale projects. A single approach to securing permits and licenses does not benefit the ECs and small players in the industry. Reducing these requirements is necessary in order to optimize efficiencies for the assessment and processing of permits before the government agencies. Alternatively, a portfolio approach may be taken by an EC or a developer, whereby a series of projects with common attributes are bundled and financed together.

The processes and assessment requirements need inter-governmental coordination to streamline the costs and the turnaround time of similar requirements, inspections, and tests. The ultimate goal of this journey is to create a price-based competition, incentive-based regulation, open access to transmission and distribution facilities, and to attract sufficient private investments to meet demand in the long run and provide a reliable supply to consumers.

Contract reviews and categorization need to be further standardized and simplified for ECs. It should revisit the one-size-fits-all modality to ensure that investors are not demotivated by the large investment and capital needed for smaller projects. This should take into consideration the capacity of the renewable energy company in terms of facilities, capabilities of the technical personnel, and the uniqueness of the market that they are servicing.

However, the reform process also requires a strong and independent regulatory body that does not succumb to pressures from the influential market players it regulates, as well as a government whose commitment to reform does not change with the change in the political environment.

Suggestions for ECs and Private Companies

(1) A restructuring of employee incentives and compensation;

(2) Providing training to further help develop human resource and technical knowledge;

(3) Providing technical and financial assistance to those who have limited resources like the cooperatives;

(4) To support information exchange to ECs by sharing more information about their programs and operating expertise.

(5) Provide an active secretariat for data collection, reporting, and analysis amongst government institutions and stakeholders. Currently, there is a designated secretariat, however, due to the bulk of transactional activities that they complete on a day-to-day basis, analyzing and interpreting, and communicating the data collected, which should provide real-time guidance to stakeholders, are the activities not completed.

04 The Monitoring Tool

Oftentimes, once a policy is issued the focus of the government agencies goes into only the implementation of such policy. However, in order to determine whether the policy is working as intended, it is important for a system of monitoring and evaluation to be put in place. Monitoring involves the collection of relevant data going into the implementation of a particular policy. Evaluation, on the other hand, involves a systematic and objective assessment of an on-going or completed project, programme or policy, its design, implementation and results.[82] These data can be categorized into two kinds, namely: quantitative data and qualitative data.

Simply put, quantitative data refers to data and information that can be measured through values expressed as numbers. For example, quantitative data can include information such as the percentage of successful registrants in the REM, out of all existing Mandated Participants in the RPS that are required to register in the system. Another example of quantitative data is the frequency of power outages that occur in the electric grid.

On the other hand, qualitative data goes into the information that is descriptive, and is expressed in terms of language rather than in numbers. This includes questions on the "why" and "how" of policies. For example, collection of qualitative data in relation to renewable energy policies can include feedback from the relevant stakeholders in the renewable energy sector as to how certain policies affect them or why these stakeholders might think that certain policies do not work.

One of the proofs that a monitoring tool is necessary to improve the development and implementation of renewable energy policies is that, during the discussion of the policies, the participants from both the public and the private sectors provided a variety of comments and feedback that reveal issues and suggestions that may improve the effectivity of the policies.

Needless to state, a study of the development and implementation of renewable energy policies, as well as an examination of the results, challenges, and issues are both important in order to determine whether a particular renewable energy policy is producing the effects intended by the policymakers. Thus, a monitoring and evaluation tool is a necessary and indispensable aspect of policymaking, which will aid the policymakers in adjusting and refining the policies, as to ensure the attainment of the objectives behind these policies.

82 See "Monitoring & Evaluation Policy," VLIR-UOS, 2015, available at: https://cdn.vliruos.be/vliruos/fc852496eb363d4e71f2895ba18c04dc.pdf, last accessed on 25 November 2022.

Suggested Features of the Monitoring Tool

In accordance with the discussions from the Roundtable Discussions, the following are the elements and features that the participants would like to include in the monitoring tool:

Data collection

According to the participants of the Roundtable Discussions, the current situation when it comes to the collection of data from the implementation of renewable energy policies is that it lacks sufficient quantification in most reports. Moreover, there is a need for more in-depth analysis of data in order to provide better guidance to all relevant stakeholders from both the public and private sectors.

Considering that the monitoring and evaluation of renewable energy policies involves a continuous process of data collection, the monitoring tool must identify the sources of data and provide for a suitable venue that will allow the stakeholders to submit and present these data. The most common sources of data are from the internal records of government agencies, as well as from the relevant stakeholders from the private sector. Normally, internal records contain quantitative data that are collected by the stakeholders in the process of their implementation of the policies.

Going into the collection of qualitative data, the monitoring tool can include a survey or feedback form for each renewable energy policy being monitored and evaluated therein. This will enable the policymakers to assess how a particular renewable energy policy is affecting stakeholders and if such policy is achieving its intended objectives and goals.

Another source of data could be from focal groups or workshops, which will reflect the public and private stakeholders' satisfaction and opinion on the development and implementation of the renewable energy policies. While these cannot be directly conducted on the monitoring tool, the policymakers and stakeholders can conduct such focal groups or workshops and could subsequently submit and upload onto the monitoring tool a report containing the discussions that had been done therein.

The gathering of feedback from the stakeholders shall include the setting of a time when the policymakers and stakeholders will reconvene to assess whether there is any need to amend or revise any of the existing policies. Also, the feedback mechanism of the monitoring tool shall allow for the stakeholders to post clarifications and inquiries related to new policy issuances and procedural processes.

One concern that was raised during the Roundtable Discussions and which must be considered in the monitoring tool is the confidentiality of the information uploaded onto the monitoring tool. This is because certain information from the public sector, as well as from the private entities in the renewable energy sector, are considered confidential and sensitive information.

Technical experts

As discussed during the Roundtable Discussions, even though an incredible amount of data is collected, these data will serve no purpose if there is no panel of technical experts who can interpret and process the information collected. Therefore, the monitoring tool should involve technical experts who are qualified to interpret the data collected and provide for a report, which could be utilized by the policymakers and stakeholders.

One possible resource for technical experts can be the Legal Advisory Panel recently constituted by the DOE. This Legal Advisory Panel, which is co-chaired by retired Supreme Court Chief Justices Artemio Panganiban and Reynato Puno, is intended to advise the DOE on energy-related reform initiatives and legal matters, which include the promotion of indigenous and low-carbon sources.[83] Another one of its purposes is to study how certain legal processes may be improved in order to encourage more investments from the private sector.[84] Thus, given the functions of the Legal Advisory Panel, the data collected could be better analyzed and utilized if this panel is invited to participate as experts for the monitoring tool.

Monitoring of project status

It was also raised that the monitoring tool be centralized which means that the information to be published or presented be in such a way that will cater the needs for renewable energy based on the geospatial, availability, usefulness as well as the transparency of the data to be provided. For instance, one data that can be requested is the location of the service contracts that provide 10 megawatts below.

In this way, stakeholders will be able to properly identify the needs and demands for that particular location. Hence, the categorization of the information needed in the monitoring tool is important so that various key players can properly identify the need and demands in that particular area.

There is also a suggestion for the need to monitor those renewable energy contracts that were already awarded. In this way, we can track any progress with regard to these awarded renewable energy contracts to be updated with the status; if there are delays; to help the concerned stakeholder to identify the cause of the delay.

In view of the foregoing, it is necessary that the status of the renewable energy projects and policies be uploaded onto the monitoring tool. These shall include the following aspects of the projects and policies:

(a) Registration status – In order to gauge interest in the projects and policies, the participation of stakeholders, or lack thereof, should be studied.

(b) Status of Licenses and Permitting – As can be observed from the Roundtable Discussions, one of the most common challenges when it comes to the operationalization of renewable energy projects is in securing the licenses and permits by the RE Developers. Thus, the monitoring and evaluation tool shall determine which licenses and permits are required of renewable energy projects and whether there have been difficulties or bottlenecks in securing particular licenses and permits.

(c) Existing projects and proponents – This will allow the policymakers and stakeholders to determine whether there are already existing projects and participants that are addressing a specific need in the renewable energy sector. As discussed by the participants in the Roundtable Discussions, it will be extremely useful for the stakeholders to know the location of specific service contracts and pending contracts that have not yet been awarded. One feature that the participants would like to see is a heat map of the projects. One route that can be considered is to include the CREZ, which, as discussed earlier, is an effort of the NGCP in making it easier for investors to know the areas where renewable energy projects are needed.

83 "DOE forms Legal, Energy Advisory Panel," Power Philippines News, 26 August 2022, available at: https://powerphilippines.com/doe-forms-legal-energy-advisory-panel/, last accessed on 25 November 2022.
84 Ibid.

In addition to the foregoing, changes and improvements made by the policymakers in the policies should also be monitored in the monitoring tool. It is recommended that the renewable energy projects and policies include technical data and financial data for transparency and the participation of the relevant stakeholders. These may be incorporated in the milestones feature of the monitoring tool – updates, statuses, and other relevant information – which are discussed below.

Policy milestones

As discussed earlier, there is no point in gathering data from the implementation of renewable energy policies if there is no evaluation of information. Thus, an important aspect in evaluating policies is to identify specific milestones that the policymakers and stakeholders can refer to in order to determine if the relevant policies are in keeping with the goals and objectives of the Philippine Government in promoting the renewable energy sector.

Considering that the rules go through public consultation, it is recommended that the discussions in such public consultations include the setting of milestones. Some of the criteria that may be included can pertain to whether the policies and projects are successful when viewed in relation to the Philippines' commitments and mandates, such as the reduction of GHG emissions, the compliance with the Philippines' Nationally Determined Contributions ("NDCs"), and the percentage of renewable energy produced as compared to the total energy produced in the country, among others.

Given that the renewable energy projects aim to stop global warming, to reduce the environmental footprint of its activities, and slow down climate change, it was suggested by the participants of the Roundtable Discussions that the end result, which is a worldwide measure, be also monitored. This includes the index on GHG emissions, carbon neutrality, and general environmental reporting guidelines on waste, water, air, and land utilizations and conservations.

In order to make the evaluation of the policies more effective, the monitoring tool shall indicate the short-term, medium-term, and long-term milestones and indicators for each policy being monitored and evaluated therein. These indicators must comply with the following criteria:

(a) Specific;

(b) Measurable;

(c) Attainable;

(d) Appropriate;

(e) Relevant; and

(f) Time-bound.

Include each phase in the development and implementation of renewable energy policies

A question raised during the Roundtable Discussions was whether the whole processes for each policy shall be indicated in the monitoring tool. More particularly, it should be considered whether the status of the endorsement, development, enactment, and implementation of the policies should be reflected and reported in the monitoring tool. Moreover, another question is whether the relevant policymaker shall update the monitoring tool with respect to the status for each phase of the renewable energy policies.

Identification of roles and responsibilities

One of the main concerns of the participants of the Roundtable Discussion was the confusion in the roles and responsibilities of the government agencies in relation to each renewable energy policy. It was suggested that there be no duplication in the functions of the government agencies, especially if a certain function is already performed by a particular agency of the government.

As discussed earlier, there has been confusion in the roles and responsibilities of the government agencies and policymakers involved in the renewable energy projects and policies. Therefore, to improve the process of developing and implementing renewable energy policies, it would be prudent for the monitoring tool to include a clear delineation of roles for each agencies involved. The monitoring tool could include a matrix containing the relevant government agencies and policymakers, as well as the status of their compliance with the implementation of the relevant renewable energy policy.

Form

Based on the discussions of the participants of the Roundtable Discussions, it appears that the preferred form of the tool is through a website, wherein usable data will be collated and presented in an organized fashion. A website dashboard will allow for the visualization of data, which will allow for the easier reference of the public and private stakeholders.

The monitoring tool should also allow the stakeholders to filter data on the monitoring tool for their easier reference. These filters shall be categorized based on the specific attributes of the data gathered. For example, the data could be sorted or filtered based on factors, such as the date of issuance of the policy, the date of commencement of the renewable energy project, the geographical area of projects, and the types of renewable energy sector participants involved. Needless to state, the depth and amount of detail involved will depend on the amount of technical and financial support that will be allotted to the monitoring tool.

Information dissemination

It was commented during the discussion that the monitoring tool was initiated because of the current set up of the information dissemination tool, which only provides a pocket style of information that is deemed too unorganized. Based on the current situation, issuances are posted by government agencies on their respective websites and not on a platform that compiles these issuances. Thus, one of the goals of the monitoring tool should be to reach as many people as possible so that the stakeholders will understand the different benefits of using renewable energy, as well as how certain policies work.

Constant adjustments in the monitoring tool

Finally, given the constant changes in the policies that exist and those that have yet to be included in the monitoring tool, as well as changes and additions in the commitments of the Philippine Government in relation to the renewable energy sector, there is a need to conduct continuous reassessments of the monitoring tool itself in order to determine whether the tool is still able to serve its purpose effectively.

05 Conclusion

Given the foregoing discussion of the issues and challenges encountered by the policymakers and stakeholders in the development and implementation of renewable energy policies, such as regulatory delays, lack of available organized information, and confusion in the roles and responsibilities of government agencies, among others, it is clear that the creation of a monitoring tool will contribute greatly to the Philippine Government's efforts towards the promotion of the renewable energy sector. A monitoring tool will allow the government agencies to determine whether a policy, through its lifetime, should be revised and adjusted in order to make such policy more effective and responsive to the needs of the stakeholders.

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