

## WHITE PAPER

# Challenges and Opportunities to Achieve Corporate Renewable Energy Targets in the Philippines: Focus on the Green Energy Option Program (GEOP)

August 2022

### *Executive Summary:*

Demand around the world for procuring renewable energy is growing and that is also true for the Philippines. This White Paper provides details into renewable energy (RE) procurement options available for commercial and industrial (C&I) customers in the country and insights on the difficulties the corporates and developers have identified in participating in the Green Energy Option Program (GEOP), the country's off-site RE procurement program. This paper also presents opportunities to enhance GEOP and increase investments in RE to ultimately reduce electricity rates for consumers.

### *Introduction and global context: Corporate science-based targets, net-zero, and 100% renewable energy goals*

Corporations globally have been setting “science-based targets” as a means to take action on climate change as well as demonstrate concrete sustainability commitments to increasingly conscious consumers and investors. Emissions reduction targets are defined as science-based if they are developed in line with what the latest climate science considers essential in achieving the scale of reductions required by the Paris Agreement. 100 percent renewable energy goals and [net-zero](#) emission reduction targets are all related to the overall concept of science-based targets aimed at setting companies on a clear path towards decarbonization. Since the energy sector is the main driver of climate change, the increased use of RE, alongside energy efficiency measures and clean heat solutions, are important facets of science-based targets. These targets show a clear route to reduce greenhouse gas emissions.

While science-based targets are good for the planet, the 2018 [survey](#) by the Science Based Targets initiative (SBTi) also confirmed that these targets provide several business benefits as well. They allow companies to strengthen brand reputation, enhance investor confidence, develop future-proof growth, realize savings, spur innovation and competitiveness, and reduce regulatory risk exposure. For example, close to 80 percent of corporations that committed to setting a science-based target found that “strengthened brand reputation” was one of the most significant business benefits for their company. As consumers become increasingly aware of the effects their choices have on the environment and ethical consumption continues to grow as a hot topic, a brand’s reputation for sustainability is of paramount importance. Another example is increased innovation: 63 percent of the survey respondents said setting a science-based target is already driving innovation within their company. A consequence of companies capturing and adapting to opportunities as the transition to a low-carbon economy is growing in momentum. Global brand [Sony](#) has said that their science-based target helped them drive the development of new products for use in their manufacturing process and contributed to reducing greenhouse gas emissions by nearly 80 percent during manufacture.

Increased participation in the movement is demonstrated by growing memberships in platforms like the SBTi, [RE100](#), and the Clean Energy Buyers Alliance (CEBA). At the end of 2021, [more than 2,200 companies](#) covering over a third of global economy market capitalization were

working with the SBTi—a rate of more than 110 new companies per month. Meanwhile, the RE100 coalition has [over 370 global businesses as members](#) that collectively have a demand of 385 terawatt-hours per year (TWh/yr) of renewable electricity; this amounts to over 5 times the annual electricity consumption of the Philippines. Notable global companies with climate-related commitments and RE targets operating in the Philippines include Coca-Cola, Concentrix, Holcim, Nestle, Unilever, and Uniqlo, to name a few. This movement is not limited to global corporations, as Philippine conglomerates such as the Ayala and the Lopez group and local property developers such as NEO and Arthaland (ALCO) have also set net-zero targets. It is clear there is very strong demand for RE based on the growing number of science-based targets and net-zero initiatives made by companies around the world and here in the Philippines. The GEOP joins the list of a number of options for procuring RE in the Philippines to meet the growing demand from global and local companies and their supply chains.

**Box: Net-zero targets among leading Philippine businesses**

Ayala Corporation aims to reach net-zero emissions by 2050. In a statement, the firm said that its net-zero target will cover direct emissions from owned or controlled sources (Scope 1), indirect emissions from the generation of purchased power (Scope 2), and all other indirect emissions in the value chain (Scope 3). Its real estate subsidiary, Ayala Land, [has committed to net-zero Scope 1 and 2 carbon emissions in its malls, offices and hotel properties by 2022](#).

Lopez Group's First Philippine Holdings Corporation aims to be at the forefront of the transition to a net-zero economy by 2050. Its RE subsidiary, Energy Development Corporation (EDC), leads the Net Zero Carbon Alliance. Lopez Group's construction affiliate, First Balfour, is one of the pioneer members of the Net Zero Carbon Alliance. To meet its net-zero carbon goals, it plans to eventually convert its natural gas plants to be repowered with clean hydrogen.

NEO is the owner, developer, and manager of green buildings located in the Bonifacio Global City business district in Metro Manila. NEO has set the [goal](#) of reaching net-zero energy by 2025 and an overall 50 percent reduction in carbon emissions from assets under direct control by 2030.

Property developer Arthaland [committed to net zero carbon by 2030](#). Arthaland was the first Philippine company to become a signatory to the Net Zero Carbon Buildings Commitment of the World Green Building Council.

***Local Context: Pathways to 100% RE goals for companies in the Philippines***

With energy use accounting for [75.6](#) percent of greenhouse gas emissions in the world, [49.3](#) percent in Southeast Asia, and [58.98](#) percent in the Philippines, decarbonizing the energy sector with RE, energy efficiency, and clean heat is an essential and urgent task. [The research](#) by the International Energy Agency suggests that to achieve net-zero, most companies can and should reduce their carbon dioxide emissions by 90-95 percent by 2050 or sooner, leaving the remaining 5-10 percent that are not possible to taper to be neutralized by carbon removals. In the Philippines, a key step in achieving science-based targets and net-zero goals is by shifting company operations to 100 percent RE. This can be accomplished with on-site solutions such as solar rooftops, off-site power wheeling, or a combination of both.

The Philippines' unsubsidized electricity rates are among the highest in Asia. The expensive, unpredictable costs of electricity have hastened businesses and other electricity customers to explore alternative pathways to procure price competitive RE. The levelized costs of electricity (LCOE) for solar energy, wind energy, and other RE resources has dropped to levels that are well below utility retail rates from a number of reasons: declining solar photovoltaic (PV) and wind power system costs, national policy that promotes RE use, plentiful RE resources, and availability of experienced and competitively-priced local developers and service providers. As seen in Table 1 below, in the decade since the first feed-in tariff (FIT) rates were announced in 2012, solar PV has seen significant rate reductions (close to 58 percent) and on-shore wind, biomass power, and run-of-river hydropower also experienced rate reductions. These latest

rates are considerably lower than rates for any new coal, natural gas, and oil power plants. For solar PV and wind, their rates are also lower than existing coal, natural gas, and oil power plants.

Table 1: Comparison of electricity rates on different RE technologies (Philippine Pesos per Kilowatt-hour), 2012 to 2022

Technology	FIT Rate (2012)	FIT Rate (2015)	Green Energy Auction Rate (Ceiling Price)	2022 Green Energy Auction Tariff (Pay-as-bid)	Reduction <sup>1</sup> of (2012 vs 2022)
Solar PV	9.68	8.69	3.6779	3.41 - 3.6779	57.68%
On-shore wind	8.53	7.40	6.0584	3.86 - 4.64	37.30%
Run-of-river hydro	5.90	5.8705	5.4913	5.39- 5.49	6.48%
Biomass	6.63	6.19	5.0797	5.07	18.09%

### *Off-site Power Wheeling via the Retail Electricity and Competitive Access (RCOA) and GEOP*

There are now two options available for power wheeling. The original option is the RCOA, where a portion of electricity could be generated from RE sources and available to “contestable customers” or end-users that have a monthly peak-demand greater than 500 kilowatt (kW). The second and newest power wheeling option is the GEOP, which offers 100 percent energy generation from RE sources for users with a monthly peak demand greater than 100 kW. Under power wheeling contracts, C&I customers can contract with so-called retail electricity suppliers (RES).

The main advantage of these two power wheeling options compared to the incumbent utility offer is the ability for qualifying electricity customers to negotiate directly with the RES on the generation rate and other applicable charges, with the ultimate goal of securing more affordable electricity rates. For example, under RCOA, the generation rate for the majority of the RES is lower than the generation rate of what Meralco charges.<sup>2</sup> Figures 1 and 2 below provide a comparison of the weighted average cost of generation by all RES participants in the RCOA program to the average cost of generation by Meralco for the first quarter of 2022. The average rate was noticeably lower (PHP 4.05/kWh) compared to Meralco's (PHP 5.36/kWh). In addition, C&I customers can decide on who to purchase their electricity from with contracts and they can select a RES that operates on RE or sources from RE power plants and potentially help achieve their sustainability goals. The bars on the left highlighted in yellow represent examples of RES with RE sources (geothermal and hydro power) that CEIA has been able to engage with.

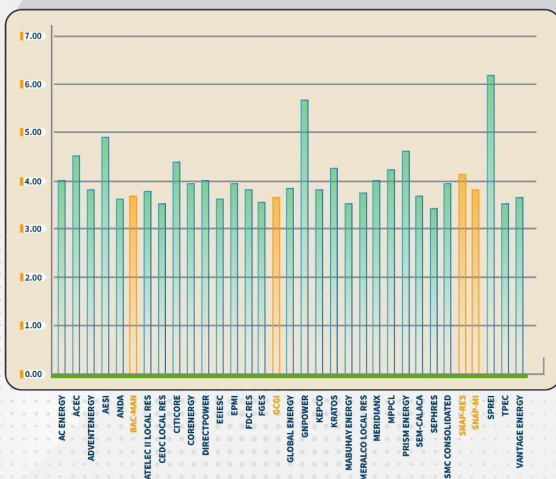
<sup>1</sup> Note: FIT rates are different from auction bids as the former guarantees a specific investment return to project sponsors. Both are good references, however, for time-specific prices of renewable energy technologies, considering capital costs, operational costs, and other costs.

<sup>2</sup> Meralco is the Philippines' dominant distribution utility who captures more than 60% of national electricity sales.

# RCOA RES Generation Rate *VS* Meralco Rates

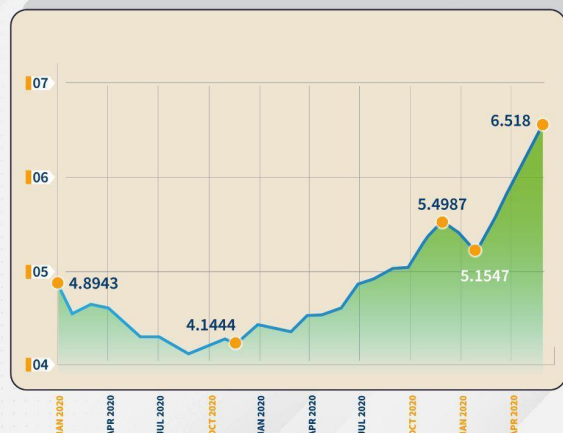
## Retail Electricity Generation Rates (Q1 2022)

Average Rate= 4.05 PHP/kWh (72 US Cents/kWh)



## Meralco Generation Rates (2022-present)

Average Rate (Q1 2022)= 5.3652 PHP/kWh (95 US Cents/kWh)



### Understanding the benefits of the GEOP

The GEOP opens up new power wheeling options for qualifying electricity customers beyond what the RCOA offers. The GEOP is a voluntary policy mechanism that was only fully implemented in January 2022 but has been in the making for over a decade; it was contained as one of the provisions of the [RE Law of 2008](#), implemented under the Philippine’s Department of Energy’s Department Circular [DC2018-07-0019](#), and became officially operational through ERC’s [Resolution No. 08, Series of 2021](#). This policy allows smaller C&I consumers to source 100 percent of their electricity supply directly from RE sources and lowers the qualifying threshold to include all electricity end-users with an average peak demand of 100 kW or greater for the past 12 months. Another advantage of the GEOP versus the incumbent utility’s offer is the ability to negotiate lower generation rates, which allows consumers to potentially enjoy electricity cost savings while unlocking brand reputation benefits derived from sustainability claims.

The Clean Energy Investment Accelerator (CEIA) has engaged several RES to learn firsthand about the GEOP transaction process. We have compiled a list of GEOP-licensed RES in [Annex A](#) wherein the list includes 18 suppliers as of December 2021. The RES we have engaged with have confirmed that they are able to offer lower generation rates compared to the rates provided by the local DU, allowing customers to realize cost savings from the moment they switch to RE under the GEOP. They also provided the following payment models that can be offered by RE suppliers through the GEOP.

1. **Fixed energy rate for the duration of the contract:** RE suppliers can offer a fixed rate for customers with 24/7 energy utilization that is steady, predictable, and cost-effective.
2. **Fixed discount from the rate of the DU:** RE suppliers can offer a rate with a fixed discount from the monthly rate of the DU. The discounted rates could potentially be 5 to 12 percent lower than the DU’s generation rate.

3. **Market based pricing:** Customers can also explore pegging their rate to the price of generation in the spot market.

The Philippine Department of Energy continues to publish on their website a list of authorized RES that can procure energy from RE facilities. Qualifying C&I customers can approach any of the authorized RES to start the process towards their transition to the GEOP.

### *Challenges in the GEOP implementation to date*

The CEIA has collected insights about the implementation of the GEOP since its launch in January 2022 through dialogues with C&I customers<sup>3</sup>, GEOP-licensed RES companies, and other stakeholders among the private sector, non-profits, and government officials. These stakeholders were asked to share what they perceive the benefits of the GEOP to be, what they perceive the issues or gaps to be, and their proposed solutions for improvement. The top challenges include a slower-than-expected uptake from qualified customers switching to this option, gaps in awareness on both the demand and supply sides, uncertainties surrounding utilization of Renewable Energy Certificates (RECs), and policy design issues, among others.

### *Slow uptake and awareness gaps among companies and utilities*

Despite the excitement for the program, the uptake of GEOP has been very slow. Only 68 facilities are currently enrolled in the program per the Independent Electricity Market Operator of the Philippines' (IEMOP) [database](#); these facilities are owned by just 49 unique companies. Assuming an average of 250 kW demand per facility, this only translates to 16.75 megawatt (MW) of RE demand under GEOP, or less than 1 percent of the Philippine's total electricity demand in the first 6 months of the GEOP's implementation.

We have also observed that many corporate buyers are not aware of the program or do not know how to take action and start the process. In fact, some of these companies are not even aware if they are eligible to shift to the GEOP program. Under the GEOP rules, the DUs and small local utilities called electric cooperatives are required to inform their customers on their eligibility for the GEOP program if they have at least 100 kW of demand. This has been confirmed by conversations with the supply chain partners of a major automotive company, wherein knowledge gaps on the GEOP among some provincial electric cooperatives were highlighted.

### *Uncertainty over RECs*

Under the current version of the GEOP, DUs retain all Renewable Energy Certificates (RECs) transacted for the DUs to meet the mandates under the Philippines' [Renewable Portfolio Standard](#). RECs contain the legal representation of all environmental attributes associated with the RE generated. Therefore, it is important to note that corporate buyers that seek to claim the use of RE through RECs cannot verifiably do so under the current rules. Government officials have stated in public discussions that the RECs attributed to the generated electricity consumed by the customers will be redeemed by the DU hosting the GEOP customers. This presents a problem for international companies that look at RECs as an essential tool for their 100 percent RE targets and net-zero goals.

---

<sup>3</sup> C&I customers that CEIA has consulted include a Fortune 500 food and beverage European company, a leading clothing retailer, and a leading auto manufacturer alongside the Philippines' biggest energy companies.

### *Corporates who do not own buildings/facilities have limited GEOP participation*

Most global corporates operating in the country cannot participate directly in the GEOP because most of them are only leasing their offices and facilities in-country. This gives them little to no option in procuring RE since they do not own the facilities. GEOP participation solely falls to building owners. Right now, apart from branding and potentially lower prices, there are no incentives for the building owners to supply RE to their tenants.

### *GEOP design considerations: The replacement power requirement favors RES with baseload RE technologies*

The Department of Energy's [GEOP rules](#) about issuing operating permits to RES includes a provision on "Replacement Power".<sup>4</sup> Under this provision, RES are required to provide or contract replacement power to address the variability of RE technologies to ensure that end-users are supplied with sufficient and reliable electricity. Furthermore, there is also a provision on replacement power in a follow-up rule from the [Energy Regulatory Commission](#) stating that the replacement power shall be exclusively sourced from RE resources. This means that RES will have to provide RE on a 24/7 basis. Consequently, this requirement is deemed to favor those RES that have operating geothermal and hydropower (i.e. impounded hydropower) assets, which are considered "baseload" RE, over the RES with only "variable" RE technologies such as solar PV and on-shore wind. This means that an RES that only has solar in its portfolio needs to contract with another RES or generator that can supply the replacement power to fulfill the requirement. As a result, the prices could potentially be higher due to limited baseload RE capacity, which would then contradict GEOP's goal of providing cheaper RE electricity for end-users.

### *Limited participation among the RES companies means limited options for the consumers*

The slow transition to GEOP is not limited to customers only; data from the IEMOP shows that there are only 15 RES companies registered in the platform compared to the 18 RES companies announced by the Department of Energy. Most of the 15 RES belong to the same parent companies, leaving only six unique players in the GEOP RES list to date: the Lopez Group, Aboitiz, Ayalas, Megawide's Citicore, Yuchengco's EEI, and Shell Energy Philippines. These are also incumbent conglomerates in the Philippines' energy sector with available baseload RE, showing that only those RES companies with hydro and geothermal assets can start serving customers using the GEOP. This, in turn, limits consumer options when it comes to choosing registered RES.

### *Lack of uniformity in the information of the GEOP-related charges and costs*

Another minor challenge raised is an issue with the cost of "technically compliant" meter replacement that is a prerequisite to GEOP migration.<sup>5</sup> DUs supposedly have different interpretations of the rules and, as such, some of them have pushed the cost of meter upgrade to the C&I customers. A RES consulted on this issue anticipated the price of replacement of a new GEOP-compatible meter to cost up to USD \$200 per unit. The amount is minimal but the uncertainty of costs is another issue surrounding GEOP participation.

---

<sup>4</sup> Section 4.7 and Section 10 of the DOE GEOP Rules (DC2020-04-009)

<sup>5</sup> The meter that works for GEOP should be able to conduct a reading every five minutes, instead of the existing 15-minute meter in most properties.

## *Challenges beyond GEOP*

During the roundtable meeting between the U.S. government representatives and the Philippine Department of Energy in May 2022, companies such as Amazon, Lululemon, and Ralph Lauren expressed that the ability to procure 100 percent RE has become one of their decision criteria to invest in a country. The corporates also mentioned that 100 percent RE is not enough; it should also be accessible, affordable and “additional”, meaning that RE is generated from new RE plants instead of existing ones. Not being able to participate in a RE procurement mechanism such as GEOP could have negative impacts on how global companies participate and support the energy transition in the Philippines.

### *Absence of GEOP and RCOA in Mindanao due to unavailability of the Wholesale Electricity Spot Market (WESM) in the region*

The Philippines has three island-groups: northernmost Luzon, the economically dominant island-group and home to national capital Manila and its peripheral provinces, Visayas in the center, and Mindanao in the south. Mindanao has 16 percent of industrial consumption in the Philippines, marginally higher than that of Visayas. Mindanao has been experiencing increased growth, driven by quickly expanding metropolitan centers such as Davao, General Santos, Cagayan de Oro, and Zamboanga. Despite growth on this island, RCOA and GEOP are still not available for C&I customers here. The WESM is not yet operational in the region due to grid interconnection delays owing to the Philippines' archipelagic nature. The operation of WESM in Mindanao has been dependent on the completion of the Mindanao-Visayas Interconnection Project (MVIP), which will connect the isolated Mindanao to Luzon and Visayas. The latest expected completion date of the MVIP is in October 2022, but until then, corporates with huge C&I operations in Mindanao, such as Coca-Cola, Holcim, and Nestle, must wait to be able to procure RE to meet their net-zero targets.

### *Opportunities and solutions for GEOP*

It is hoped that in addressing these GEOP issues, the Philippines can facilitate the ability of companies to procure 100 percent RE that is accessible, affordable, and additional. This White Paper proposes the following solutions to address the ongoing challenges in the GEOP implementation and to increase the participation among C&I end-users.

#### *Addressing design gaps in the GEOP*

- **Replacement power:** Currently, the GEOP provides unintended advantages to RES with baseload RE sources like geothermal and hydro, because of the replacement power requirements. Addressing the replacement power requirement will allow more RES to register for the GEOP and will offer customers more RE options and will diversify the market.
- **RECs:** The current situation for RECs is mired in the issues related to possible double counting of RECs due to provisions on domestic RECs rules under the Renewable Portfolio Standards. The current GEOP rules do not allow corporates to purchase and retire RECs because the RECs are attributed to the DU that generates the RE sold to the customer. Determining a solution that satisfies the DUs that need RECs for their Renewable Portfolio Standard requirements and companies who want to purchase RECs to reach their energy and sustainability goals should be determined.

### *Expanding retail choice for 100 percent RE to more end-users by reducing or eliminated thresholds*

- Implement the provision that could lower and potentially remove the qualifying threshold for GEOP participants.<sup>6</sup> This would create an even more impactful energy transformation in the Philippines.

### *Engaging with facility owners and exploring green leases*

- Encouraging facility and building owners to procure energy through GEOP will support global companies, retail brands, and the service sector to shift to 100 percent RE.
- The adoption of green leases or high performance leases should be explored by property developers of malls and offices to support the net-zero commitments of corporates operating in the country. Green leases are modifications to traditional commercial leases that allow both the facility owners and tenants to better realize the benefits of investing in RE and energy efficiency measures. Green leases include clauses in the lease to equitably align the costs and benefits of energy and other sustainability investments of landlords, tenants, and real estate teams. Based on a [case study](#) (2021) in Brazil, developers and landlords providing net-zero energy leased buildings can gain a 3-7 percent higher occupancy rate, 3.5 percent higher rent, and 13 percent higher sale value. Green leases would allow corporates that do not qualify for GEOP and RCOA to realize the benefits of these programs through collaboration with the property developers.

### *Other policy asks for a comprehensive energy transformation in the Philippines*

Additional policy asks have been raised through CEIA's conversations and consultations with the industry stakeholders while learning about the GEOP that deserve to be elevated to high-level decision makers to unlock more RE investments in the Philippines and add more RE capacity at the speed and scale needed to respond to the energy demands of C&I customers :

- **Implement reduced RCOA threshold:** The ERC has yet to finalize the timeline to reduce the threshold to participate in RCOA. The [draft timeline](#) that was released in 2020 to reduce the threshold up to 10 kW by January 2023 has not been implemented; this needs to follow through to allow more consumers to have the power of choice and demand for clean energy.
- **RE auctions should be recurring and continue to expand beyond the initial ~2,000 MW offered:** The Philippine Department of Energy should plan to have RE auctions on a regular cadence to maintain investors' interest, ensure rapid buildout of new RE capacity to address energy supply constraints, and achieve overall grid decarbonization targets.
- **Remove automatic pass-throughs in power purchase agreements (PPA):** In the Philippines, a typical PPA between a DU and a fossil-based power producer includes provisions for fuel costs to be automatically passed on to consumers. This "automatic pass-through" means that whenever the cost of fuel, such as imported coal, goes up in the world market, power producers and distributors could simply pass this higher cost on to consumers instead of looking for cheaper alternative power sources. As most RE technologies do not consume any fuel, they could compete better with fossil

---

<sup>6</sup> Section 4.3 of the GEOP rules states: "All End-Users with average peak demand below 100 kW may participate in the GEOP, after the DOE, in consultation with NREB and industry stakeholders, determines that the technical requirements and standards are already met. Separate Rules will be issued after proper determination."



fuels if automatic pass-through provisions are removed. This creates a level playing field that allows cost-competitive, cheaper RE to compete directly with fossil fuels. This also incentivizes price stability and avoids the ups and downs of volatile commodity markets and foreign exchange, ultimately benefiting energy consumers with lost-cost options for their electricity needs

- **Avoid liquified natural gas (LNG) lock-in:** LNG is incorrectly seen as a cleaner alternative to coal but is being considered as a means to achieve the country's Clean Energy Scenario, as laid out in the [Philippine Energy Plan 2020-2040](#). This goes against the economic interests of the country especially as the gas prices have soared to record highs. In addition, the overlooked indirect effects of LNG can negate its direct benefits. A notable indirect effect is a crowd-out, where bridging with LNG technologies siphons investments away from emerging RE technologies and can eventually result in carbon lock-in or a continued dependence on fossil fuel technologies.

### *Conclusions*

The Philippines is well on its way to offering a variety of RE procurement opportunities that will not only be advantageous for the country in its energy transition, but would also benefit companies around the world who do business in the Philippines, want to purchase more RE, and invest in RE solutions within the country. The implementation of the GEOP that started in January 2022 offers a new power wheeling opportunity with several benefits for qualifying customers, such as a lower threshold to partake in the program, cheaper electricity costs, and the opportunity to source 100 percent RE, but unfortunately has many aspects that could be improved. Policy makers should prioritize quickly addressing the numerous issues raised in the points above to increase participation in the program for customers and RE suppliers, improve how RE incentives like RECs are generated and shared, and overall bring the Philippines closer to meeting their 100 percent RE goals.

### *About the Clean Energy Investment Accelerator (CEIA)*

The CEIA is a public-private partnership that addresses barriers to clean energy deployment in the commercial and industrial sectors in emerging markets, which include Vietnam, Indonesia, and the Philippines. The CEIA is jointly led by the [World Resources Institute \(WRI\)](#), [Allotrope Partners](#), and the [U.S. National Renewable Energy Laboratory \(NREL\)](#). Each member brings a unique set of technical expertise to ensure successful country-based efforts, led by local and regional staff, which is all supported by a wider global team.

CEIA partners with large energy purchasers to send a strong demand signal and deploy clean energy and collaborates with governments to strengthen policy frameworks, to grow clean energy project pipelines.

CEIA acts as a bridge, translating international commitments into on-the-ground market transformation. As demonstrated in today's convening, high-level commitment platforms, target setting protocols, reporting methodologies, & business coalitions including CEBA can benefit from CEIA's local presence and expertise, as CEIA brings together in-country coalitions of private sector, public sector, and utility partners to overcome barriers to clean energy procurement and investment among C&I energy users.

## ANNEX A: List of Qualified Renewable Energy Suppliers under the GEOP as of January 2022

	RE Supplier	Point of Contact	Email Address	Contact Number	Website
1	BAC-MAN Geothermal Inc.	Ann Christine T. Rojo	<a href="mailto:rojo.act@energy.com.ph">rojo.act@energy.com.ph</a>	(+632) 7755-2332 / (+632) 8667-7332 +639178180963	<a href="https://www.energy.com.ph/bac-man-geothermal-inc-bgi/">https://www.energy.com.ph/bac-man-geothermal-inc-bgi/</a>
2	First Gen Energy Solutions Inc.	Ann Christine T. Rojo	<a href="mailto:rojo.act@energy.com.ph">rojo.act@energy.com.ph</a>	(+632) 3449-6400 +639178180963	<a href="https://www.firstgen.com.ph/">https://www.firstgen.com.ph/</a>
3	AC Energy Philippines Inc.	Engr. Sheila C. Mina Assistant Vice President, Commercial Operations	<a href="mailto:mina.sc@acenergy.com.ph">mina.sc@acenergy.com.ph</a> <a href="mailto:retail@acenergy.com.ph">retail@acenergy.com.ph</a>	(+632) 7-730-6300 loc. 6385	<a href="https://acen.com.ph/">https://acen.com.ph/</a>
4	Aboitiz Energy Solutions, Inc. (AESI)	Sabrina A. Cua Assistant Vice President - Energy Sales	<a href="mailto:sabrina.abis@aboitiz.com">sabrina.abis@aboitiz.com</a>	+639178818981	<a href="http://www.aboitizpower.com">www.aboitizpower.com</a>
5	AP Renewables, Inc. (APRI)	Sabrina A. Cua Assistant Vice President - Energy Sales	<a href="mailto:sabrina.abis@aboitiz.com">sabrina.abis@aboitiz.com</a>	+639178818981	<a href="http://www.aboitizpower.com">www.aboitizpower.com</a>
6	Adventenergy Inc. (ADVENT)	Sabrina A. Cua Assistant Vice President - Energy Sales	<a href="mailto:sabrina.abis@aboitiz.com">sabrina.abis@aboitiz.com</a>	+639178818981	<a href="http://www.aboitizpower.com">www.aboitizpower.com</a>
7	Prism Energy, Inc. (PRISM)	Sabrina A. Cua Assistant Vice President - Energy Sales	<a href="mailto:sabrina.abis@aboitiz.com">sabrina.abis@aboitiz.com</a>	+639178818981	<a href="http://www.aboitizpower.com">www.aboitizpower.com</a>
8	Therma Luzon, Inc. (TLI)	Sabrina A. Cua Assistant Vice President - Energy Sales	<a href="mailto:sabrina.abis@aboitiz.com">sabrina.abis@aboitiz.com</a>	+639178818981	<a href="http://www.aboitizpower.com">www.aboitizpower.com</a>
9	DirectPower Services Inc.	Jonybelle M. Sobremisana	<a href="mailto:info.res@avalaland.com.ph">info.res@avalaland.com.ph</a>	(+632) 7907-8239	<a href="https://www.avalaland.com.ph/direct-power-services-inc/">https://www.avalaland.com.ph/direct-power-services-inc/</a>
10	EEI Energy Solutions Corporation	Salvador M. Salire Jr. General Manager	<a href="mailto:smsalireir@eei.com.ph">smsalireir@eei.com.ph</a>	(+632) 8334-2677 loc. 331	<a href="https://eei-energy.com/">https://eei-energy.com/</a>
		Valia Mae E. Quinajon Operations Manager	<a href="mailto:ymequinahon@eei.com.ph">ymequinahon@eei.com.ph</a>	(+632) 8334-2677 loc. 331	
		Jhasmin D. Canlas Energy Sales Associate	<a href="mailto:jdcanlas@eei.com.ph">jdcanlas@eei.com.ph</a>	+639178546731	
		John Henry B. Pantilanan Energy Sales Associate	<a href="mailto:jhbpantilanan@eei.com.ph">jhbpantilanan@eei.com.ph</a> <a href="mailto:eeienergysolutions@eei.com.ph">eeienergysolutions@eei.com.ph</a>	+639205677680	
11	Mpower	Camille Calupitan Legal Counsel	<a href="mailto:cffcalupitan@meralco.com.ph">cffcalupitan@meralco.com.ph</a>	(+632) 1622 6243	<a href="http://www.mpower.com.ph">www.mpower.com.ph</a>
12	Shell Energy Philippines, Inc.	Eric Louis Senior Compliance Advisor	<a href="mailto:Eric.Loius@shell.com">Eric.Loius@shell.com</a> <a href="mailto:ShellEnergyPhilippines@shell.com">ShellEnergyPhilippines@shell.com</a>	(+632) 7502 7994	<a href="https://www.shell.com.ph/shell-energy-philippines.html">https://www.shell.com.ph/shell-energy-philippines.html</a>
13	Citicore Energy Solutions, Inc.	Jerard Garcia	<a href="mailto:jgarcia@crec.com.ph">jgarcia@crec.com.ph</a> <a href="mailto:info@crec.com.ph">info@crec.com.ph</a> <a href="mailto:corpaffairs@crec.com.ph">corpaffairs@crec.com.ph</a>	(+632) 8255 4600	<a href="https://www.citicorepower.com.ph/">https://www.citicorepower.com.ph/</a>
14	SPARC-Solar Powered Agri- Rural	Mia Rivera	<a href="mailto:mia.rivera@pureenergy.com.ph">mia.rivera@pureenergy.com.ph</a>	(+632) 813 8892 to 97	<a href="https://pureenergy.com.ph/iustsolar/">https://pureenergy.com.ph/iustsolar/</a>

	RE Supplier	Point of Contact	Email Address	Contact Number	Website
	Communities Corporation				
15	Green Core Geothermal, Inc.	Ann Christine T. Rojo	<a href="mailto:rojo.act@energy.com.ph">rojo.act@energy.com.ph</a>	(+632) 8667 7332 (+632) 7755 2332 +639178180963	<a href="https://www.energy.com.ph/green-core-geothermal-inc-gcgi/">https://www.energy.com.ph/green-core-geothermal-inc-gcgi/</a>
16	Solar Philippines Retail Electricity, Inc.	Archie Velasco	<a href="mailto:archie.velasco@solarphilippines.ph">archie.velasco@solarphilippines.ph</a>	+639985621251	<a href="https://www.solarphilippines.ph/">https://www.solarphilippines.ph/</a>
17	SN Aboitiz Power-Magat, Inc.	Shan Benjamin R. Buyco Senior Manager - Strategic Marketing	<a href="mailto:shan.benjamin.buyco@snaboitiz.com">shan.benjamin.buyco@snaboitiz.com</a> <a href="mailto:m.marketing@snaboitiz.com">m.marketing@snaboitiz.com</a>	(+632) 818-9101	<a href="https://www.snap-res.com/">https://www.snap-res.com/</a>
18	SN Aboitiz Power-RES, Inc.				

**Annex B: List of Notable Companies with Science-based Targets, Net Zero Goals, Sustainability, and 100% RE Goals with Activities or Supply Chains in the Philippines**

Company	Platform Membership	Comments/Notes
Lululemon	CEDI	
REI	CEDI	
Amazon Web Services	CEDI	
Coca-Cola	Science-Based Targets	
Toyota Motor Philippines	None available	Internal commitment via " <a href="#">Toyota Environmental Challenge 2050</a> "
Mitsubishi Motors	None available	Internal commitment via " <a href="#">Environmental Plan</a> "
Nestle Philippines	RE100, REPH100	
Accenture	RE100, REPH100	
Concentrix	None available	Internal commitment via " <a href="#">Concentrix Catalyst</a> "
Unilever Philippines	RE100, REPH100	
HSBC	RE100, REPH100	
Signify Philippines or Philips Lighting	RE100, REPH100	
3M	RE100	
Apple	RE100	
ASUS	RE100	
BMW	RE100	
Decathlon	RE100	
Dell Technologies	RE100	
Deloitte	RE100	
Google	RE100	
Heineken	RE100	
Hewlett Packard Enterprise	RE100	
Hyundai Motor Company	RE100	
Infosys	RE100	
Ingka Group (IKEA)	RE100	
Johnson & Johnson	RE100	
JPMorgan Chase & Co.	RE100	
KPMG	RE100	
Mars	RE100	
McKinsey & Company	RE100	
Meta (Facebook)	RE100	
Nike	RE100	
Salesforce	RE100	
Sanofi	RE100	
Schneider Electric	RE100	
Sony Group Corporation	RE100	
Starbucks	RE100	
Under Armour	RE100	
Wells Fargo & Co.	RE100	
Proctor & Gamble		Internal commitment via " <a href="#">Net-Zero</a> "

Company	Platform Membership	Comments/Notes
		<a href="#">2040 Ambition</a> ”
Xerox		Internal commitment via “ <a href="#">Roadmap to Net-Zero 2040</a> ”
Marriott	Science-Based Targets	
Microsoft Corporation	Science-Based Targets	
Pfizer Inc.	Science-Based Targets	
McDonald's	Science-Based Targets	