CCI FRANCE PHILIPPINES

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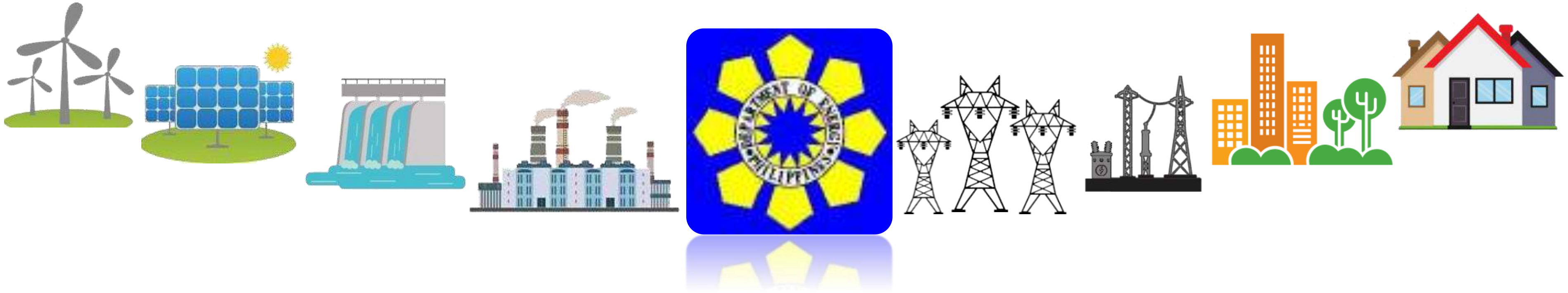
Undersecretary

NETWORKING LUNCHEON
with USEC. GUEVARA

INFRA & ENERGY TALKS



Opportunities in the Philippine Energy and Infrastructure Industry

Rowena Cristina L. Guevara, Ph.D.
Undersecretary

12 September 2023

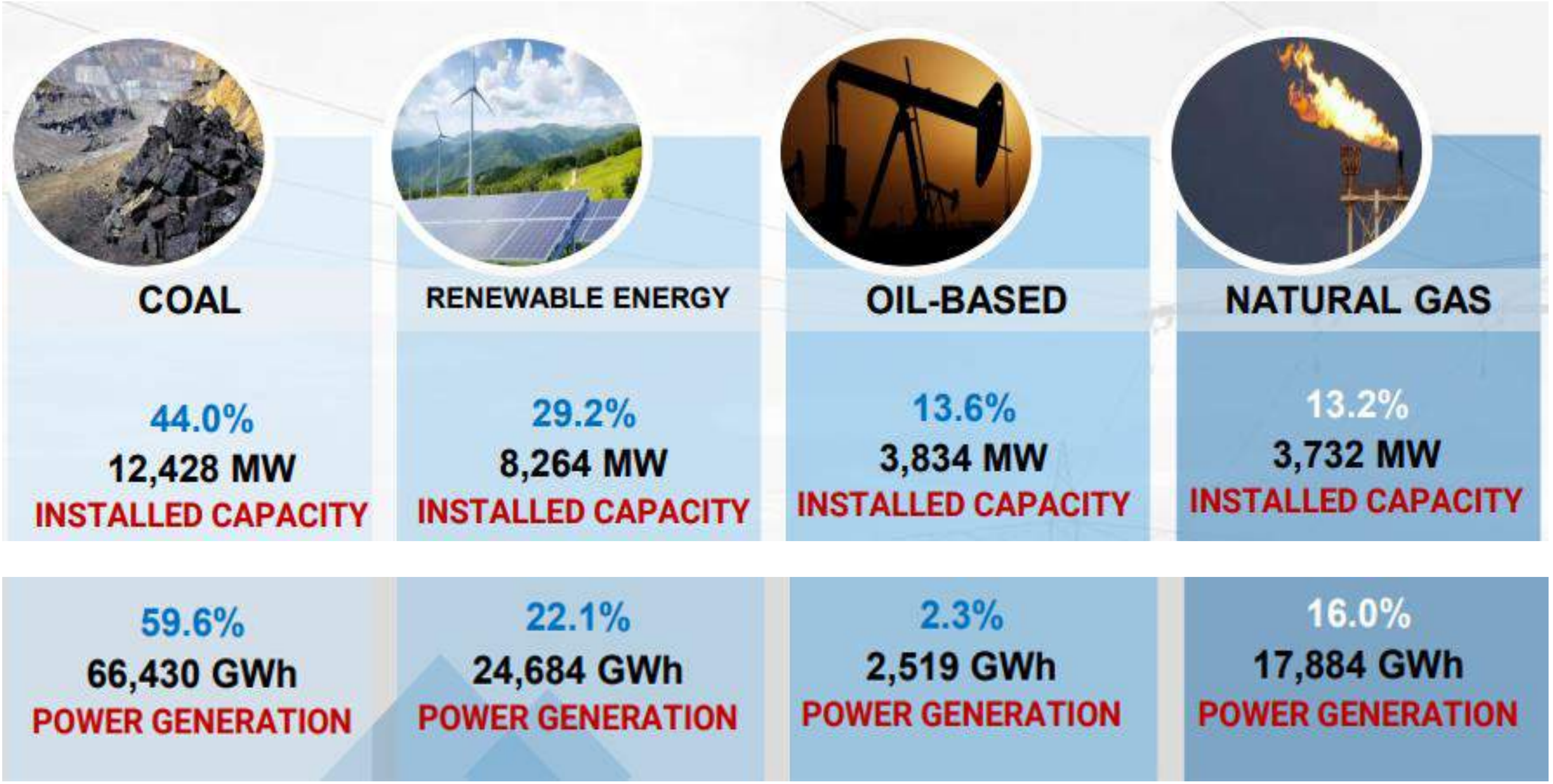
Presentation Outline

1 Power Statistics in the Philippines

2 DOE Initiatives and Strategies

3 Investment Opportunities

Power Statistics in the Philippines



GRIDS	PEAK DEMAND (MW)	TOTAL INSTALLED CAPACITY (MW)
LUZON	12,113	19,744
VISAYAS	2,316	3,972
MINDANAO	2,167	4,542
TOTAL	16,596	28,258

Total Installed Capacity:
28,258 MW

Total Generation:
111,516 GWh

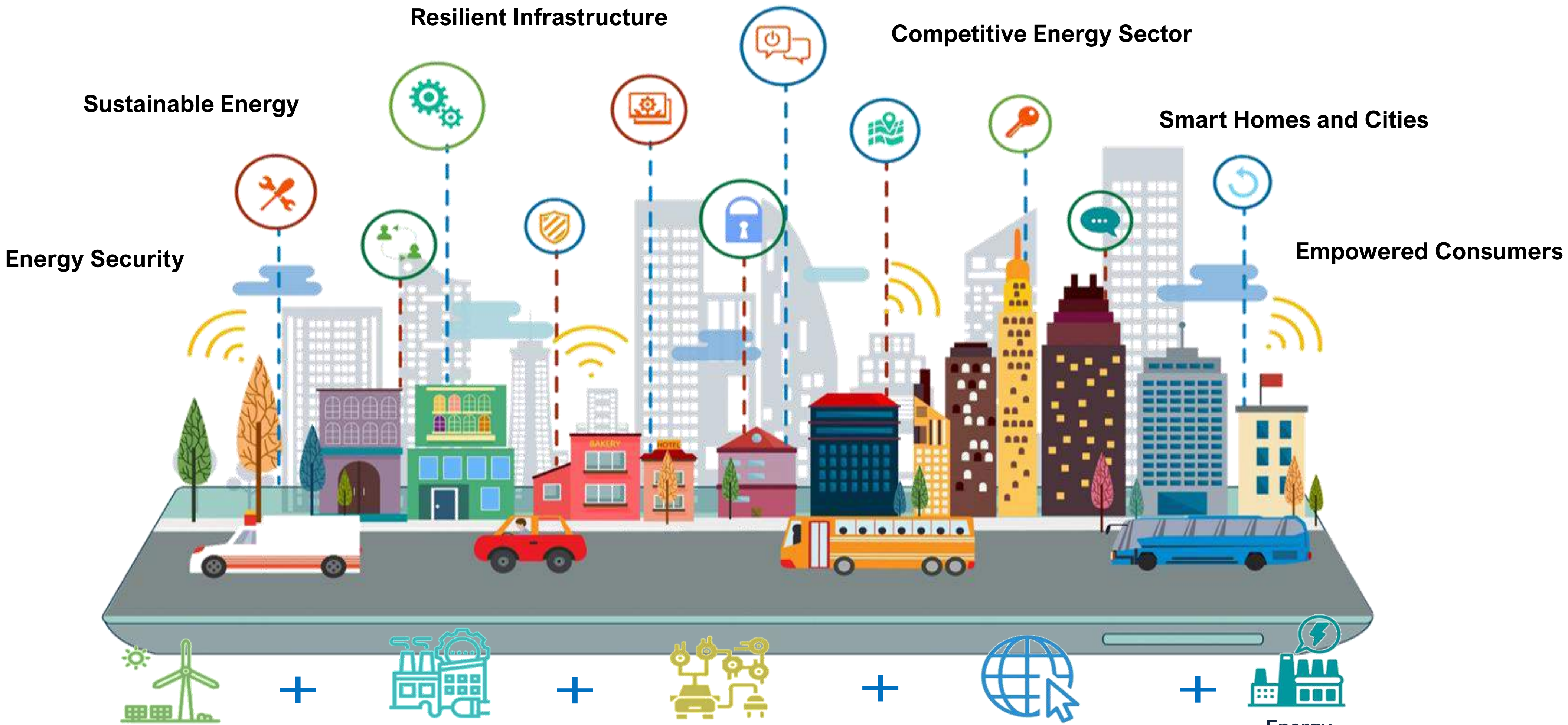
Renewable Energy Profile

Installed Capacity:
8,264 MW (29.2%)

Gross Generation:
24,684 GWh (22.1%)

6.9%	Geothermal	9.3%
13.3%	Hydro	9%
2.2%	Biomass	1.2%
5.4%	Solar	1.6%
1.5%	Wind	0.9%

Future Energy Scenario: PEP 2020 – 2040



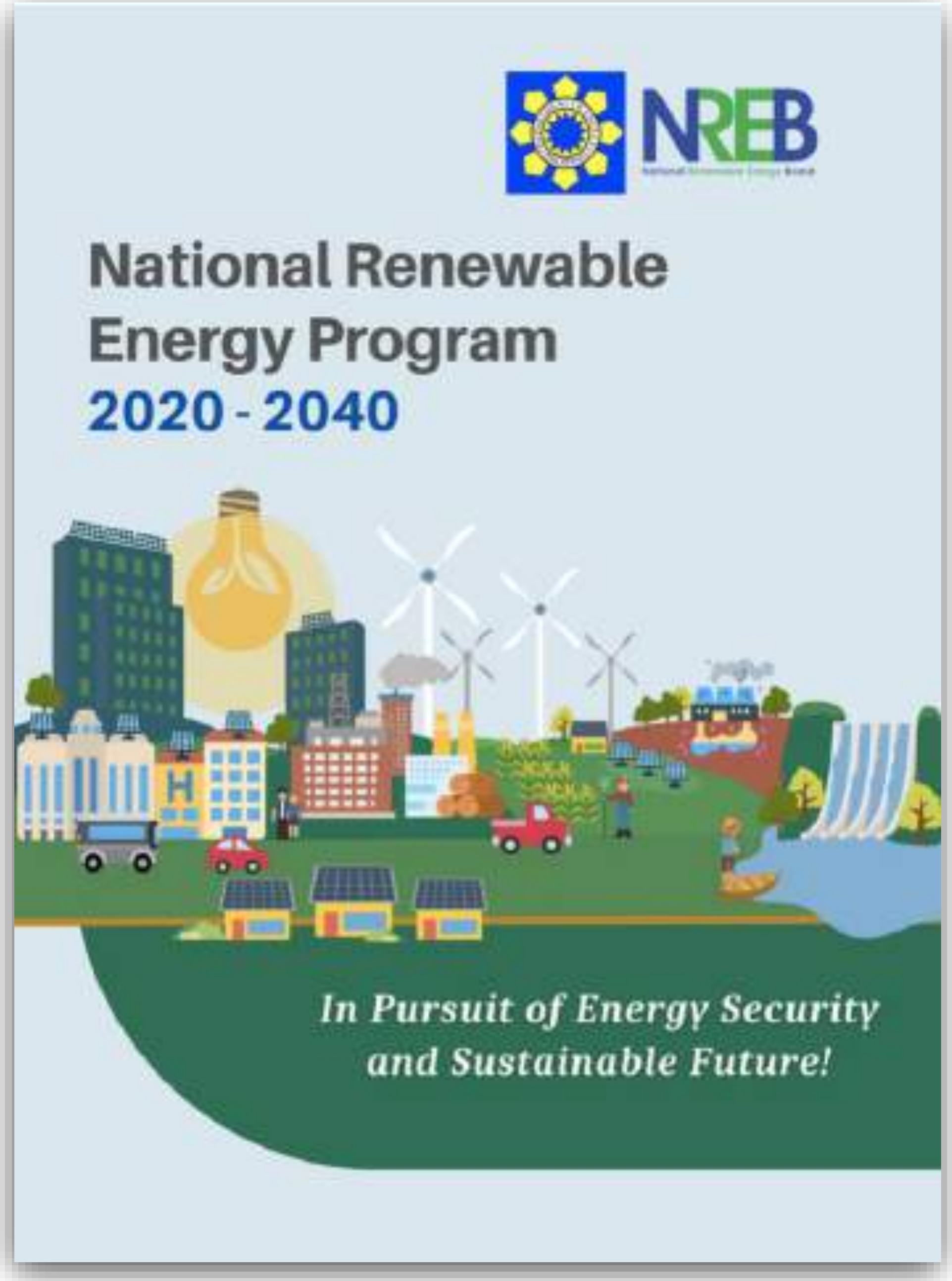
Renewable Energy
35% of power generation mix by 2030; and 50% by 2040

Energy Efficiency and Conservation
5% energy savings on oil products and electricity by 2040

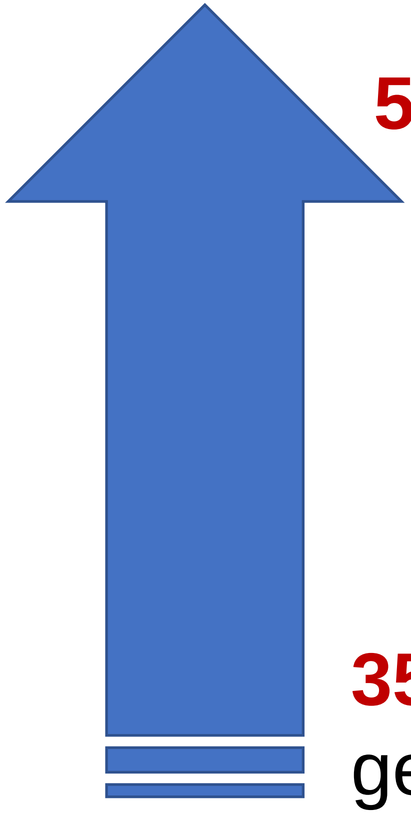
Emerging and Innovative Technologies
10% EV penetration rate in road transport by 2040; Exploring new and efficient technologies

Information and Communications Technology
Adopting advanced and interoperable ICT in the energy chain

Energy Resiliency
Resilient and climate-proof energy infrastructure



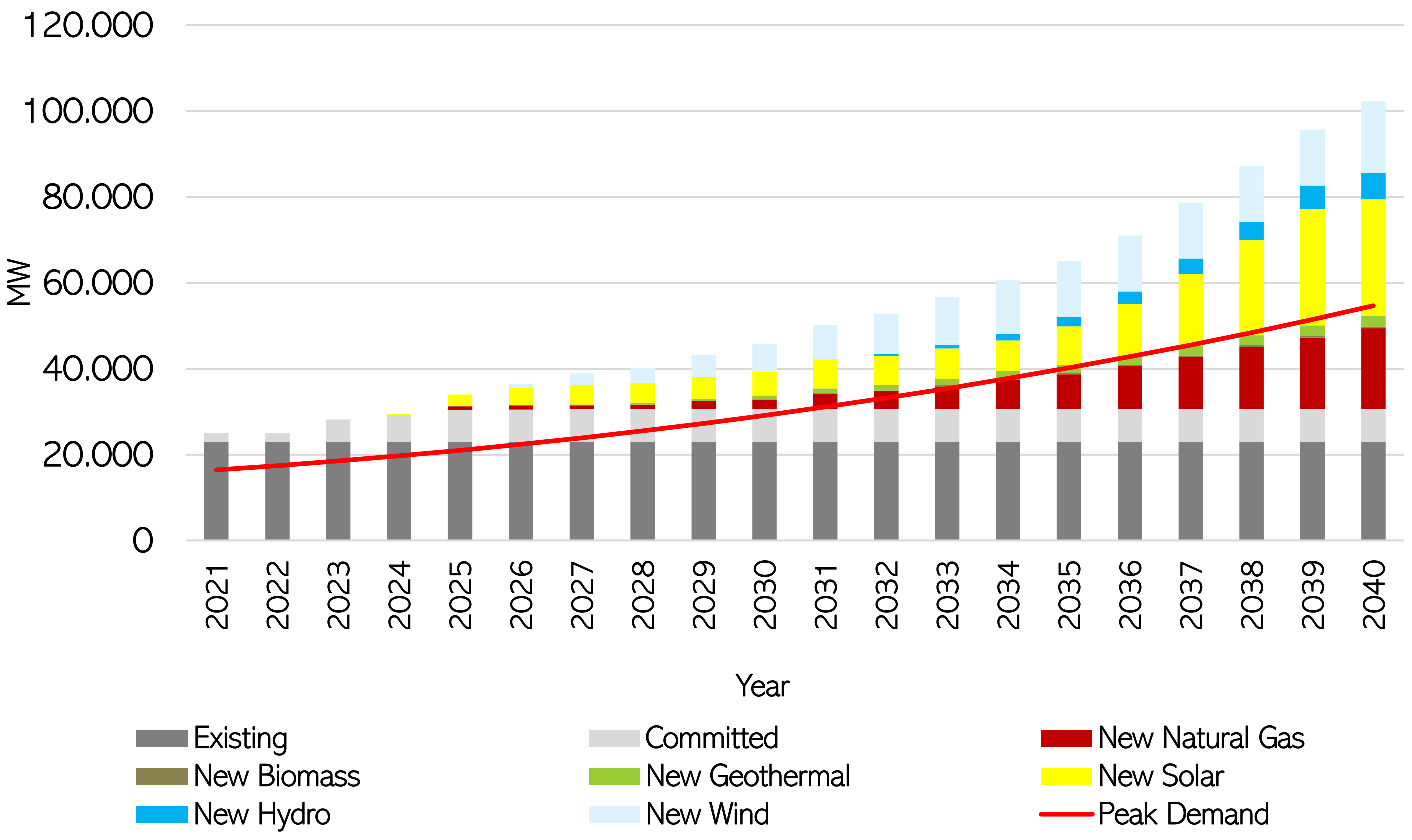
National Renewable Energy Program 2020-2040



50% RE share by 2040

35% RE share in power generation mix by 2030

RE Outlook, 2021-2040



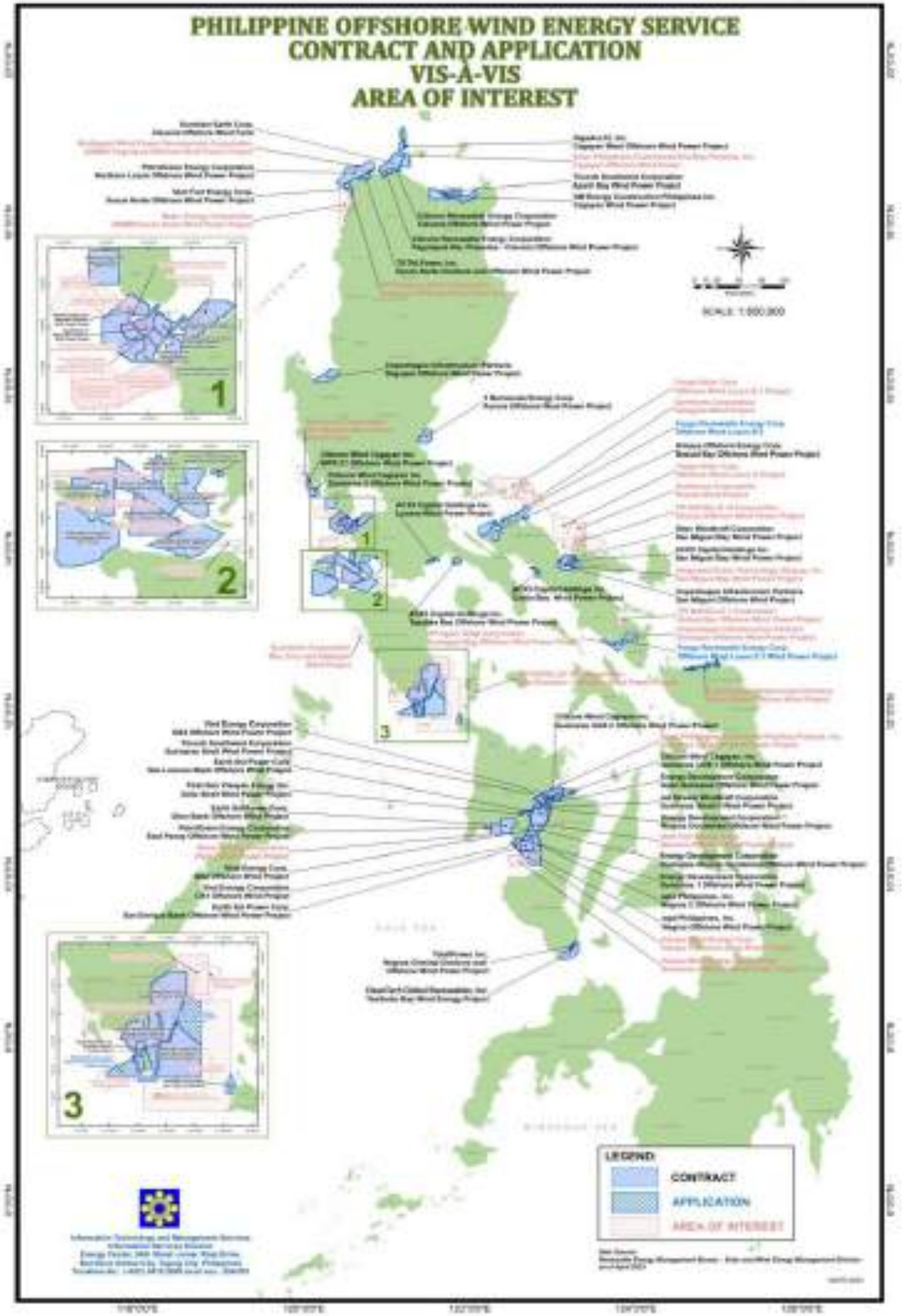
Particulars, in MW	2021	2025	2030	2035	2040
New Natural Gas	0	759	2,259	8,159	18,859
New Biomass	0	120	120	360	364
New Geothermal	0	0	850	1,900	2,500
New Solar	0	2,660	5,585	8,910	27,162
New Hydro	0	0	0	2,200	6,150
New Wind	0	0	6,450	13,050	16,650
Cumulative New RE	**0**	**2,780**	**13,005**	**26,420**	**52,826**
Committed Capacity	2,066	7,512	7,592	7,592	7,592
Existing Capacity	22,954	22,954	22,954	22,954	22,954
Peak Demand	16,482	21,019	29,128	40,209	54,655

Note: Additional 52,826 MW RE capacity needed by 2040

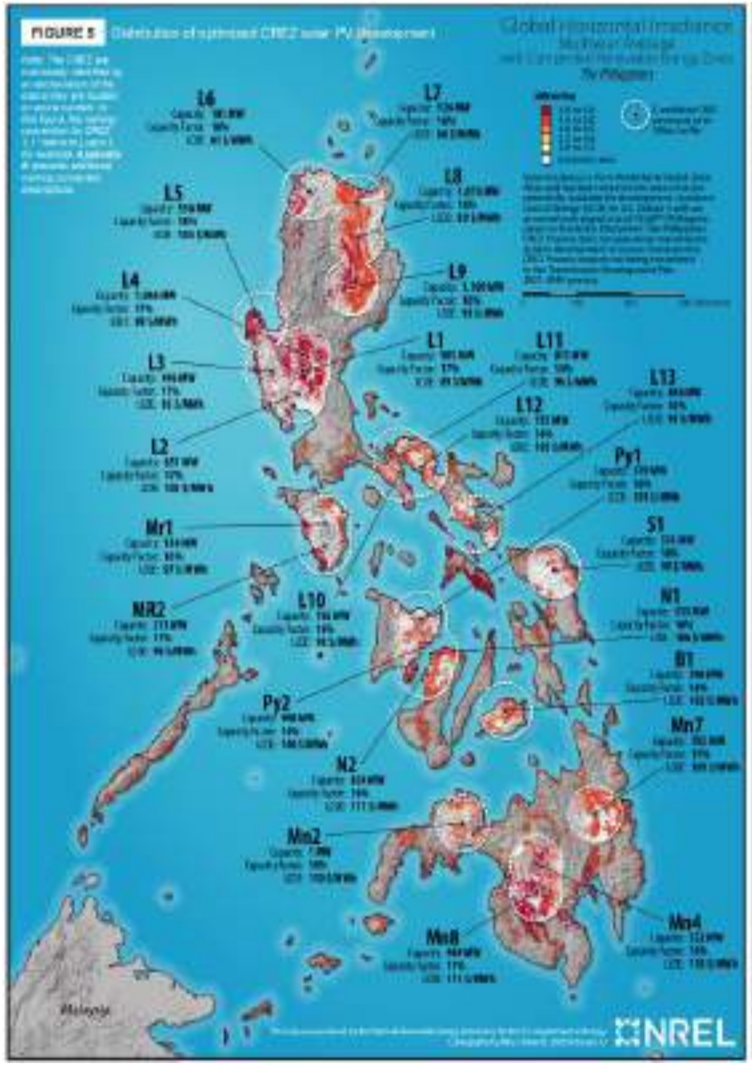
Offshore Wind

DOE has awarded **78 Offshore Wind (OSW) Energy Service Contracts**:

- Spread mainly in north of Luzon, west of Metro Manila, north and south of Mindoro, Guimaras Strait, Negros and Panay West
- Activities are mainly preliminary wind data gathering, permitting & consenting, grid and port studies
- Aggregate potential capacity of **61.6 GW**



Competitive Renewable Energy Zones (CREZ)



- **DOE** initiated the Competitive Renewable Energy Zones (CREZ) Project in 2018
- Identified **25 Strategic Areas** with high concentration of **solar and wind resources** throughout the country
- **58,110 MW** Solar PV and **93,987 MW** Wind potential capacities
- **Other CREZ Potentials**

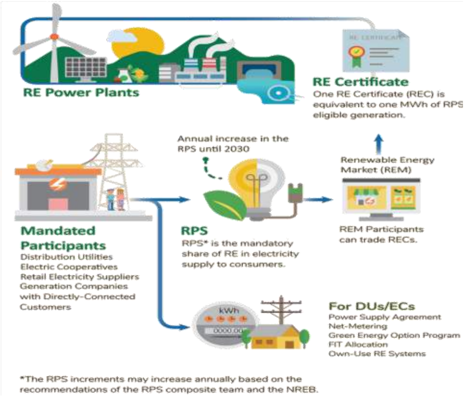
	Geothermal (MW)	Hydropower (MW)	Biomass (MW)
Luzon	285.00	270,603.00	210.00
Visayas	40.00	1,917.00	71.00
Mindanao	40.00	382,514.00	93.00
Philippines	**365.00**	**655,034.00**	**374.00**

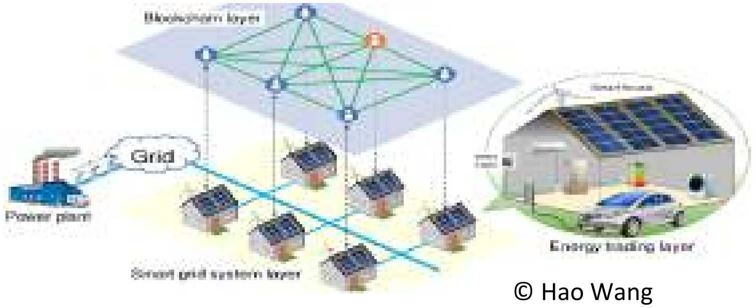
Building Port Infrastructure

The funds to support port infrastructure buildout and expansion are expected to come from:

- private sector financing
- grants and debt through bilateral and multilateral development finance and other forms of climate finance
- Official Development Assistance (ODA)
- Public-Private Partnerships and other similar mechanisms

Market – Driven Development Mechanisms





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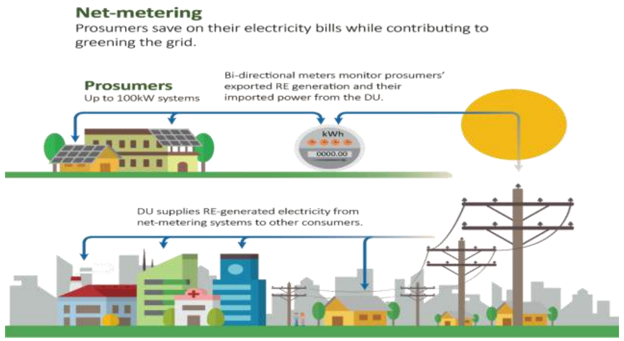


DC2022-10-0031; preferential Dispatch of all RE Resources in the Wholesale Electricity Spot Market (WESM)

On-grid and Off-grid **Renewable Portfolio Standards** now increased from 1% to 2.52%

Expanded Rooftop Solar Program providing policy framework for additional market options such as Supply Contingency Program and Peer-to-Peer Trading

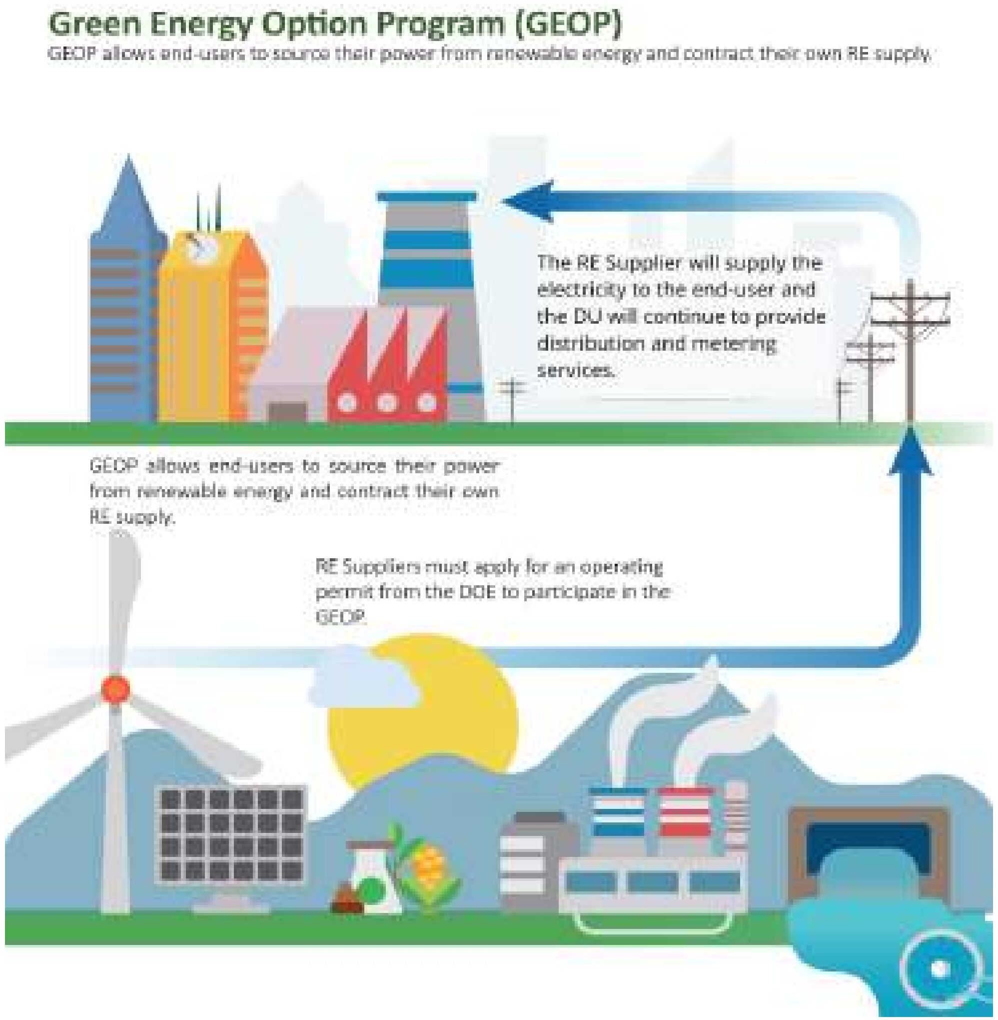
Net-Metering empowers electricity end-users to produce electricity and sell excess to the grid up to 100 kW, transforming them into ***"prosumers"***

Green Energy Option Program

- Voluntary policy mechanism allowing end-users **with 100kW and above demand** to source electricity supply from RE resources through RE Suppliers

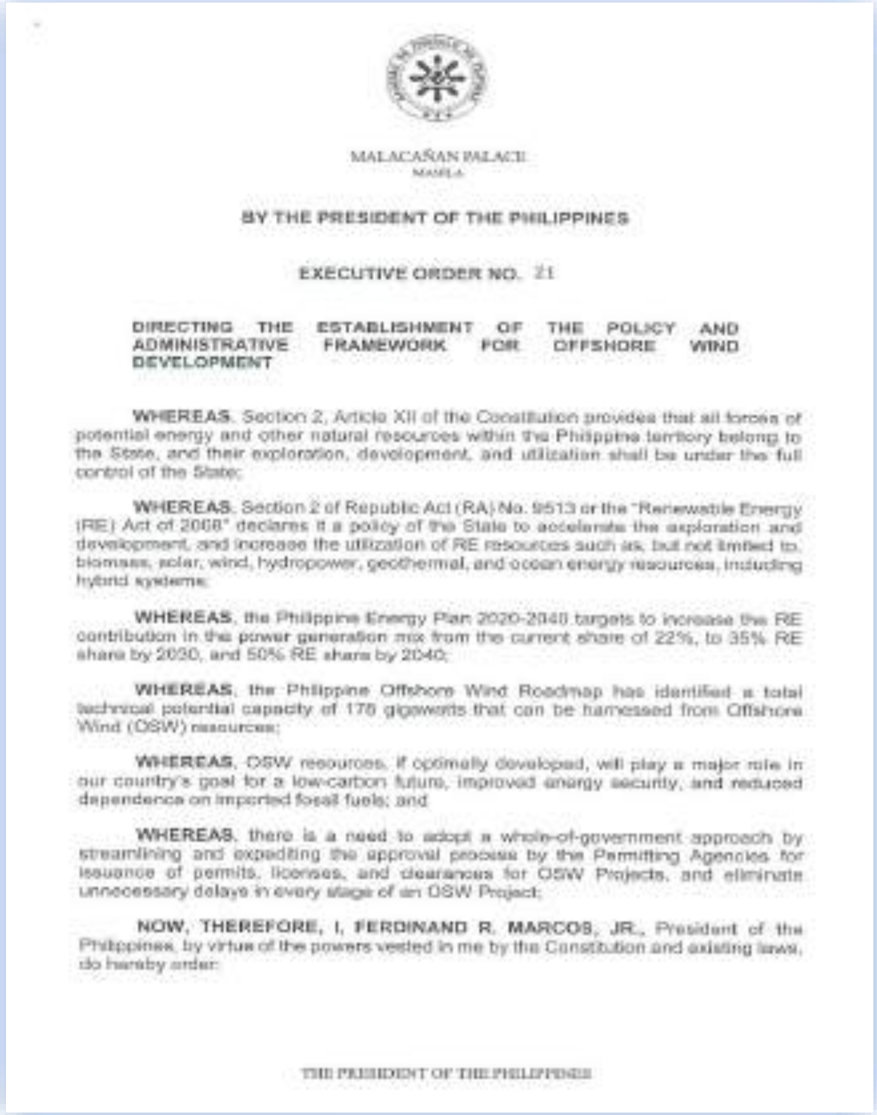
- 15 August 2023: DOE issued **19 GEOP** Operating Permits to RE Suppliers

- As of 11 June 2023: Total of **236 customers already switched to GEOP**, equivalent to 228 MW estimated non-coincidental peak demand



E.O. No. 21, Series of 2023; issued on 19 April 2023

Source: Manila Bulletin



MALACAÑAN PALACE
MANILA

BY THE PRESIDENT OF THE PHILIPPINES

EXECUTIVE ORDER NO. 21

DIRECTING THE ESTABLISHMENT OF THE POLICY AND ADMINISTRATIVE FRAMEWORK FOR OFFSHORE WIND DEVELOPMENT

WHEREAS, Section 2, Article XII of the Constitution provides that all forces of potential energy and other natural resources within the Philippine territory belong to the State, and their exploration, development, and utilization shall be under the full control of the State;

WHEREAS, Section 2 of Republic Act (RA) No. 9513 or the "Renewable Energy (RE) Act of 2008" declares it a policy of the State to accelerate the exploration and development, and increase the utilization of RE resources such as, but not limited to, biomass, solar, wind, hydropower, geothermal, and ocean energy resources, including hybrid systems;

WHEREAS, the Philippine Energy Plan 2020-2040 targets to increase the RE contribution in the power generation mix from the current share of 22%, to 35% RE share by 2030, and 50% RE share by 2040;

WHEREAS, the Philippine Offshore Wind Roadmap has identified a total technical potential capacity of 178 gigawatts that can be harnessed from Offshore Wind (OSW) resources;

WHEREAS, OSW resources, if optimally developed, will play a major role in our country's goal for a low-carbon future, improved energy security, and reduced dependence on imported fossil fuels; and

WHEREAS, there is a need to adopt a whole-of-government approach by streamlining and expediting the approval process by the Permitting Agencies for issuance of permits, licenses, and clearances for OSW Projects, and eliminate unnecessary delays in every stage of an OSW Project;

NOW, THEREFORE, I, FERDINAND R. MARCOS, JR., President of the Philippines, by virtue of the powers vested in me by the Constitution and existing laws, do hereby order:

THE PRESIDENT OF THE PHILIPPINES

Source:https://www.officialgazette.gov.ph/downloads/2023/04apr/20240419-EO-21-FRM.pdf

DOJ Opinion on Foreign Ownership

- ✓ 100% foreign RE projects
- ✓ Facilitates faster entry of RE investments

Green Energy Auction Program 2 and 3

- **GEA-2** conducted on 03 July 2023, with 105 Preliminary Winning Bids covering 3,440.756 MW capacity committed to deliver power from 2024-2026

Technology	Capacity (MW)
Solar-Ground	1,878.982
Solar-Rooftop	9.390
Solar -Floating	90
On-shore Wind	1,462.384
TOTAL	**3,440.756**

- **GEA-3** for geothermal, ROR hydro and impounding hydro
- GEA-3 in the 4th Quarter of 2023

Open and Competitive Selection Process 4

The DOE approved **19 Pre-Determined Areas** (PDAs) to be offered under the OCSP 4. **DC2023-06-0019**, issued on 08 June 2023 provides the list of these PDAs, including the guidelines for the conduct of OCSP 4.

RE Technology	No. of PDAs	Potential Capacity in MW
Geothermal	3	160
Hydropower	13	87.96
Wind	3	To be determined

Fiscal Incentives for RE Projects

1 **7-YEAR INCOME TAX HOLIDAY**

For the first seven (7) years of its commercial operations, the duly registered RE developer shall be exempt from income taxes levied by the national government.

2 **DUTY-FREE IMPORTATION**

Within the first ten (10) years upon the issuance of a certification of an RE developer, the importation of machinery and equipment, and materials and parts thereof, including control and communication equipment, shall not be subject to tariff duties:

3 **SPECIAL REALTY TAX RATES ON EQUIPMENT AND MACHINERY**

Realty and other taxes on civil works, equipment, machinery, and other improvements of a Registered RE Developer actually and exclusively used for RE facilities shall not exceed one and a half percent (1.5%)

4 **NET OPERATING LOSS CARRY-OVER**

5 **CORPORATE TAX RATE**

After seven (7) years of income tax holiday, all RE Developers shall pay a corporate tax of ten percent (10%) on its net taxable income

6 **ACCELERATED DEPRECIATION**

7 **ZERO PERCENT VALUE-ADDED TAX RATE**

The sale of fuel or power generated from renewable sources, shall be subject to zero percent (0%) value-added tax (VAT)

8 **CASH INCENTIVE OF RENEWABLE ENERGY DEVELOPERS FOR MISSIONARY ELECTRIFICATION**

entitled to a cash generation-based incentive per kilowatt hour rate generated, equivalent to fifty percent (50%) of UCME

9 **TAX EXEMPTION OF CARBON CREDITS**

10 **TAX CREDIT ON DOMESTIC CAPITAL EQUIPMENT AND SERVICES**

Energy Storage Systems

Reserve Market

Energy Storage System (ESS)

Hydrogen/Ammonia

Solid Waste Management

Develop and Utilize our RE resources without sacrificing the country Energy Security

- Focus on resources that are readily available
- Extend necessary support to encourage and promote its development

Attention to Geothermal Energy and WTE Development (indigenous and baseload)

Off-Shore Wind

Marine/Tidal Energy

Electric Vehicle (EV) and EV Charging Station (EVCS)

CREVI: COMPREHENSIVE ROADMAP FOR THE EV INDUSTRY

Publication of the Comprehensive Roadmap for the EV Industry on 17 April 2023

3 POLICIES ISSUED

DC2023-05-0010 : Guidelines on the Unbundling of EVCS Charging Fee Pursuant to EVIDA

DC2023-05-0011: Guidelines in the Accreditation of EVCS Providers and Registration of EVIDA

DC2023-05-0012: Guidelines on the EV Recognition and Adoption of EV Standard Classification on Road Transport for Incentive Eligibility Pursuant to the EVIDA

RECOGNIZED

As of 01 August 2023

87 EV

44 BE
V
13 HEV
5 PHEV
25 LEV

REGISTERED
S

EVCS

Under DC2023-05-0011

2

AC Charger

ACCREDITED

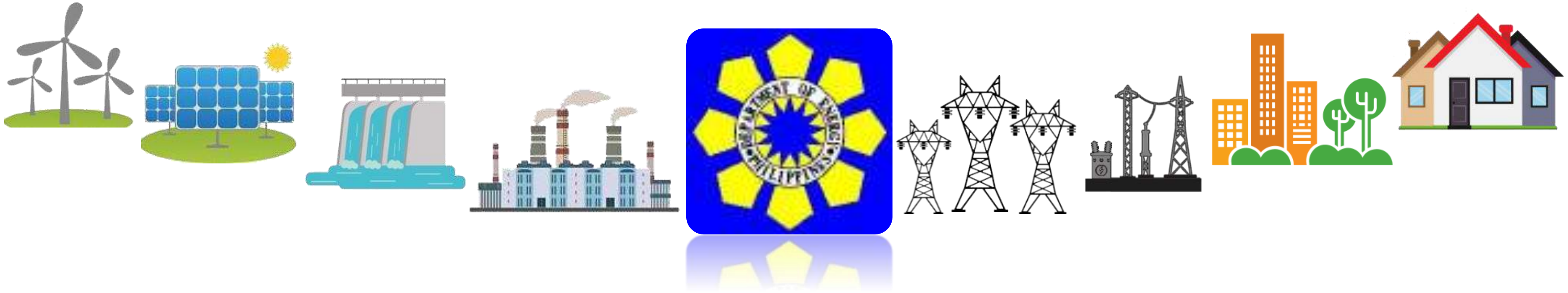
EVCS

PROVIDERS

3 OPERATOR

2 SERVICE

2 SUPPLIE
R



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