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Energy and Economy

Energy and Economic Indicators

	2021	2022	GR
GDP (in billion pesos: at constant 2018 prices)	18,540.1	19,943.6	7.6%
Total Final Energy Consumption (in MTOE)	35.0	35.9	2.4%
Total Primary Energy Supply (in MTOE)	58.8	61.6	4.7%
Population (in million)	110.2	111.6	1.2%
Forex (in Pesos/USD)	50.8	56.1	10.5%
Average Crude Price (in USD/barrel)	69.2	70.2	1.4%

Sources:

Gross Domestic Product (GDP), Population -National Accounts, Philippine Statistical Authority (Rebased 2018)

Foreign Exchange Rate - *Bangko Sentral ng Pilipinas (BSP)*

Energy Supply - Policy Formulation and Research Division (PFRD), DOE

Crude Oil Price - *Oil Industry Management Bureau (OIMB), DOE*

Energy and Economy

Indicator	2021	2022	GR
<u>Intensity</u>			
Energy to GDP (TOE/Php1M)	3.17	3.09	-2.6%
Oil to GDP (BBL/Php)	7.80	8.07	3.4%
Electricity to GDP (Wh/Php)	5.72	5.59	-2.3%
<u>Elasticity</u>			
Energy to GDP	0.68	0.62	-8.4%
Oil to GDP	1.36	1.49	9.6%
Electricity to GDP	0.75	0.67	-10.3%
<u>Energy Per Capita (TOE/person)</u>	0.53	0.55	3.4%

** GDP Rebased 2018 @ constant price

Energy and Environment

GHG Emission, by Sector and Activity

MtCO ₂ e ⁽¹⁾			
Sector and Activity	2021	2022	GR
Industry	12.50	12.94	3.5%
Transport	31.53	35.42	12.3%
Others ⁽²⁾	12.13	9.88	-18.6%
Electricity Generation	73.88	76.28	3.3%
Energy ⁽³⁾	0.40	1.16	186.6%
Total	130.45	135.68	4.0%

Notes:

(1) Million tons of CO₂ Equivalent (MTCO₂e)

(2) includes Household, Services and Agriculture Sectors

(3) includes Oil refining, Electricity and other Energy sector own use and losses

*average annual growth rate

GHG Emission, by Fuel Type

MtCO ₂ e			
Fuel type	2021	2022	GR
Liquid Fossils (Oil)	49.81	54.40	9.2%
Solid Fossils (Coal)	74.05	75.17	1.5%
Gaseous Fossil (Natural Gas)	6.60	6.11	-7.4%
Total	130.45	135.68	4.0%

Energy and Environment

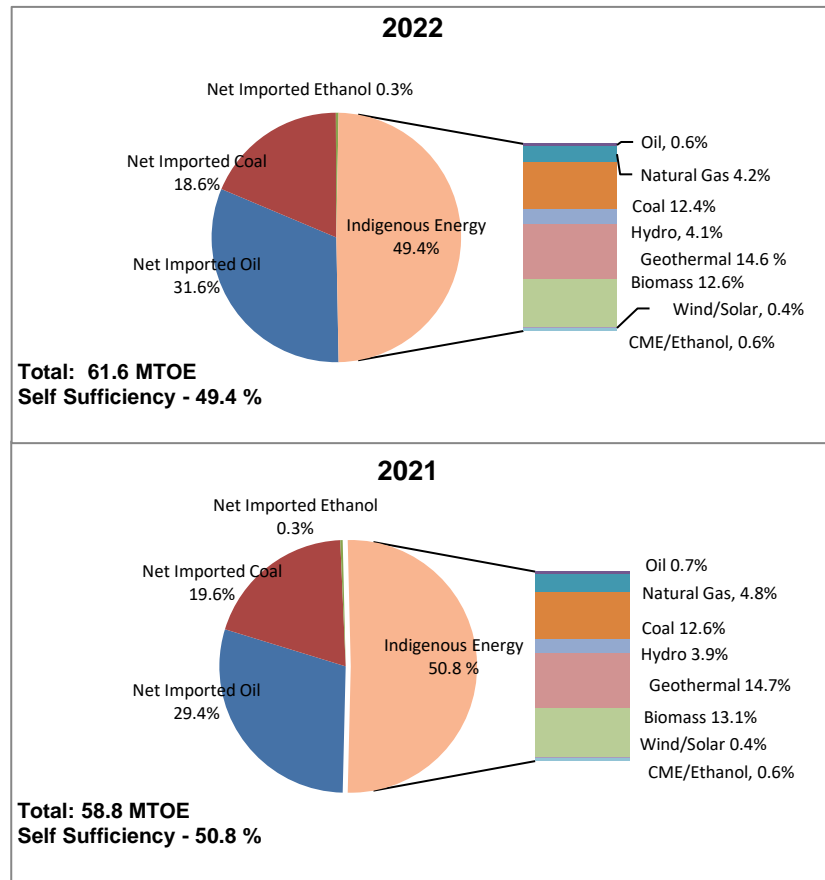
Environmental Emission Indicators

GHG emission is expressed in carbon dioxide equivalent (CO₂e) which accounts for the global warming potential (GWP) of CH₄ and N₂O, as prescribed by the Inter-governmental Panel on Climate Change (IPCC). GWP is the ratio of the warming resulting from the emission of one kilogram of a greenhouse gas to that of one kilogram emission of CO₂ over a fixed period of time (i.e. CH₄ and N₂O GWP is 21 times and 310 times the CO₂ emission, respectively)

Indicator	2021	2022	GR
GHG emission-to-GDP ratio			
(tCO ₂ e/PhP 100K, 2000=100)	0.70	0.68	-3.3%
GHG emission per capita			
(tCO ₂ e/person)	1.18	1.22	2.7%
GHG emission per Electricity Generation			
(tCO ₂ e/MWh)	0.70	0.68	-1.8%
GHG emission per Oil consumption			
(tCO ₂ e/TOE)	2.75	2.61	-4.9%
GHG emission per TPES			
(tCO ₂ e/TOE)	2.20	2.20	0.1%

Energy Mix

Total Primary Energy Supply Mix



Total Energy and Self-Sufficiency Level

In kTOE

	2021	2022	GR
Indigenous Energy	29,838	30,422	2.0%
Oil	392	358	-8.7%
Natural Gas	2,820	2,612	-7.4%
Coal	7,414	7,631	2.9%
Hydro	2,287	2,510	9.8%
Geothermal	8,613	8,963	4.1%
Biomass	7,721	7,731	0.1%
Wind	109	89	-18.9%
Solar ^a	126	157	24.0%
Biodiesel	157	166	5.7%
Bioethanol	200	206	2.9%
Imported Energy	28,943	31,136	7.6%
Oil	17,261	19,475	12.8%
Coal	11,499	11,445	-0.5%
Bioethanol	183	216	18.4%
Total Energy	58,781	61,558	4.7%
Renewable Energy (RE)	19,395	20,038	3.3%
Clean Energy (RE + Natural Gas)	22,215	22,650	2.0%
Self Sufficiency (%)	51	49	

Energy Consumption

*Total Final Energy Consumption, by Sector and Fuel Type

In kTOE

	2021	2022	GR
Industry	6,821	7,107	4.2%
Coal	1,950	1,855	-4.8%
Natural Gas	0.35	-	-
Oil	1,558	1,824	17.1%
Biomass ^(a)	923	924	0.0%
Biodiesel	15	24	53.7%
Electricity	2,375	2,480	4.4%
Transport	10,982	12,323	12.2%
Oil	10,503	11,790	12.3%
Biodiesel	101	117	16.1%
Bioethanol	369	406	10.2%
Electricity	9	10	9.3%
Households	10,179	10,310	1.3%
Oil	1,266	1,311	3.5%
Biomass ^(b)	5,904	5,962	1.0%
Electricity	3,008	3,037	1.0%
Services	4,848	4,452	-8.2%
Oil	2,662	2,005	-24.7%
Biomass ^(c)	330	332	0.6%
Biodiesel	40	26	-35.0%
Electricity	1,816	2,089	15.0%
Agriculture	556	378	-32.0%
Oil	243	139	-42.8%
Biodiesel	4	2	-46.6%
Electricity	308	237	-23.3%
Non-Energy Use	1,642	1,289	-21.5%
Oil	1,430	1,198	-16.2%
Coal	213	91	-57.3%
Total	35,028	35,859	2.4%

does not include energy for power application

(a) includes ricehull, fuelwood, bagasse, agriwaste and animal waste

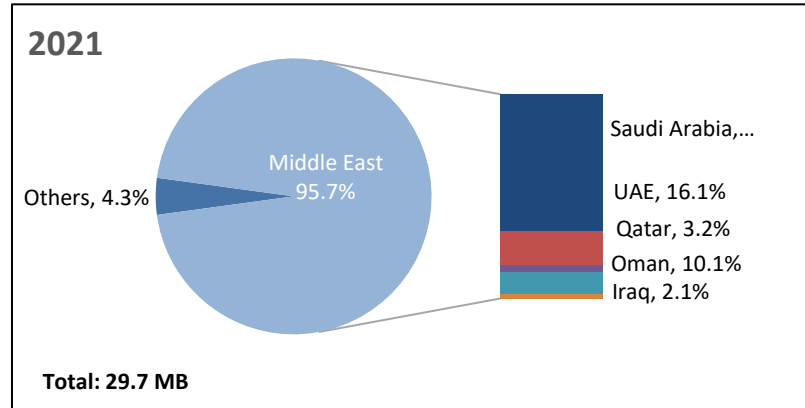
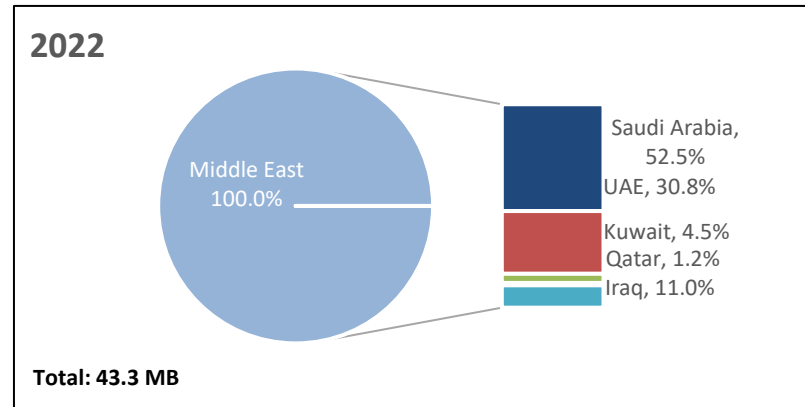
(b) includes charcoal, fuelwood, and agriwaste

(c) includes ricehull, charcoal, and fuelwood

[Oil and Gas Production, by Source](#)

	2021	2022	GR
In MB			
Total Oil	632.29	558.28	-11.7%
Galoc	630.25	556.90	-11.6%
Alegria	2.04	1.37	-32.7%
Total Condensate	2,936.44	2,706.11	-7.8%
Malampaya Condensate	2,936.44	2,706.11	-7.8%
in MMSCF			
Total Gas	121,089	112,172	-7.4%
Malampaya Gas	121,089	112,172	-7.4%

Crude Oil Importation, by Country of Source

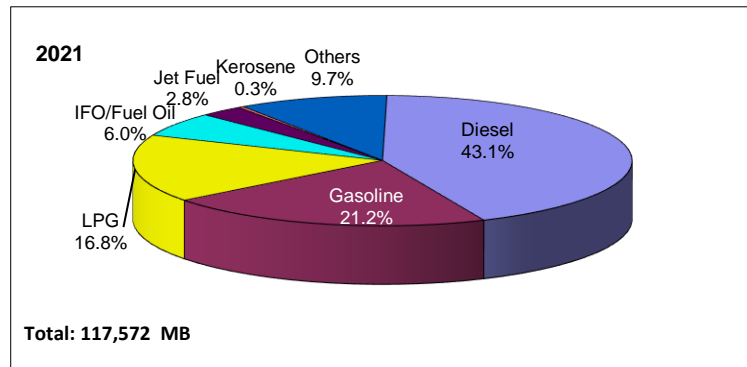
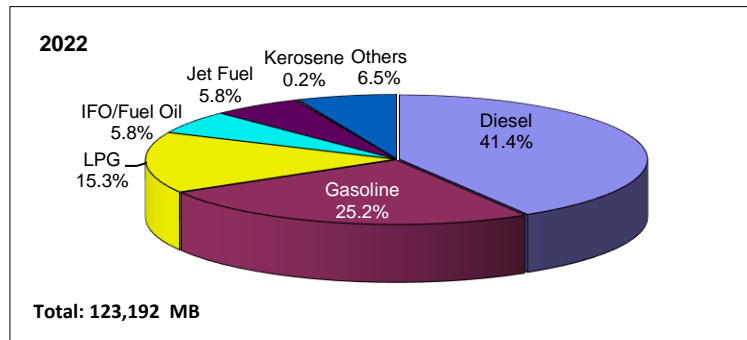


in MB

Source	2021	2022	GR
Middle East	28,411	43,343	52.6%
Saudi Arabia	19,059	22,760	19.4%
Iraq	630	4,760	655.6%
Kuwait ^(b)	-	1,952	-
UAE	4,769	13,368	180.3%
Qatar	952	502	-47.2%
Oman ^(c)	3,002	-	-
Others*	1,277	-	-
Total	29,689	43,343	46.0%

*Others include Singapore, Brunei, Russia, Vietnam, Korea, Australia and other Asia and Pacific Region

[Petroleum Products Importation, by Type](#)



in MB

Fuel	2021	2022	GR
Diesel	50,655	50,976	0.6%
Gasoline	24,927	31,002	24.4%
LPG	19,723	18,797	-4.7%
IFO/Fuel Oil	7,097	7,128	0.4%
Jet Fuel	3,331	7,128	114.0%
Kerosene	398	197	-50.4%
Others*	11,442	7,965	-30.4%
Total	117,572	123,192	4.8%

*Others include asphalt, solvents, naphtha/reformate, condensate

Petroleum Products Importation, by Country of Source

MB

Source	2021	2022	GR
Middle East	7,695	3,727	-51.6%
Bahrain	4	-	
KSA	2,438	116	
Kuwait	1,001	490	
Qatar	1,202	2,293	
UAE	3,049	828	
ASEAN	43,833	44,630	1.8%
Brunei	5,660	4,245	
Malaysia	13,429	11,723	
Singapore	20,361	27,437	
Thailand	3,647	1,110	
Vietnam	736	116	
OTHER ASIA	61,344	72,837	18.7%
China	35,279	18,974	
Hong Kong	0.50	-	
India	4,950	1,009	
Japan	2,323	7,722	
Russia	-	1,320	
South Korea	15,267	37,835	
Taiwan	3,525	5,978	
OTHERS*	4,701	1,998	-57.5%
Total	117,572	123,192	4.8%

*Others include countries from Africa, Asia and Pacific, Europe and North America

Petroleum Products Exportation, by Country of Destination

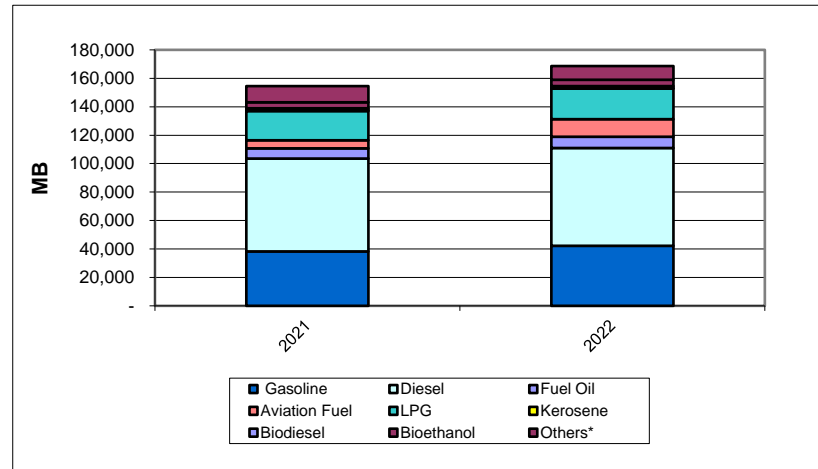
MB			
Destination	2021	2022	GR
MIDDLE EAST	298	-	-
Iraq	298	-	
ASEAN	3,729	3,698	-0.8%
Brunei	324	1,267	
Indonesia	95	90	
Malaysia	627	712	
Singapore	640	253	
Thailand	1,902	1,262	
Vietnam	141	113	
OTHER ASIA	2,876	1,977	-31%
China	1,259	1,287	
India	146	183	
Japan	-	11	
South Korea	789	246	
Taiwan	682	250	
OTHERS	77	-	-
Total	6,980	5,675	-18.7%

*Others include Australia, Belgium, Guam, Egypt, Saipan and USA

Petroleum Products Consumption, by Sector and Fuel Type

MB			
	2021	2022	GR
Industry	12,149	14,216	17.0%
Kerosene	157	87	-44.2%
LPG	2,165	2,195	1.4%
Diesel	6,593	8,906	35.1%
Fuel Oil	3,115	2,845	-8.7%
Biodiesel	118	182	53.7%
Transport	90,845	106,848	17.6%
Gasoline	38,224	42,096	10.1%
Diesel	40,363	44,656	10.6%
Fuel Oil	1,565	2,426	54.9%
Aviation Fuel	5,741	12,199	112.5%
LPG	30	2	-91.9%
Bioethanol	4,147	4,569	10.2%
Biodiesel	775	899	16.1%
Households	13,583	14,084	3.7%
LPG	13,178	13,723	4.1%
Kerosene	405	361	-10.8%
Services	21,638	16,756	-22.6%
LPG	5,208	5,574	7.0%
Diesel	15,052	9,782	-35.0%
Fuel Oil	1,071	1,200	12.0%
Biodiesel	307	200	-35.0%
Agriculture	1,851	1,065	-42.5%
Gasoline	126	143	13.5%
Kerosene	4	1	-70.1%
Diesel	1,676	895	-46.6%
Fuel Oil	12	7	-38.8%
Biodiesel	34	18	-46.6%
Power Generation	2,969	6,106	105.7%
Diesel	1,610	4,579	184.3%
Fuel Oil	1,282	1,434	11.8%
Biodiesel	76	93	23.1%
Non-Energy Use	11,387	9,496	-16.6%
Total	154,422	168,571	9.2%

Petroleum Products Consumption, by Fuel Type

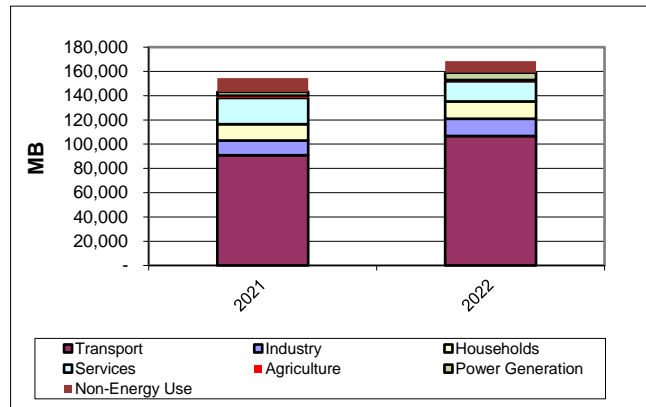


MB

	2021	2022	GR
Gasoline	38,349	42,238	10.1%
Diesel	65,294	68,819	5.4%
Fuel Oil	7,047	7,912	12.3%
Aviation Fuel	5,741	12,199	112.5%
LPG	20,582	21,495	4.4%
Kerosene	565	450	-20.5%
Biodiesel	1,310	1,392	6.3%
Bioethanol	4,147	4,569	10.2%
Others*	11,387	9,496	-16.6%
Total	154,422	168,571	9.2%

*Others include asphalts, solvents, naphtha/reformate, condensate

Petroleum Products Consumption, by Sector



MB

	2021	2022	GR
Transport	90,845	106,848	17.6%
Industry	12,149	14,216	17.0%
Households	13,583	14,084	3.7%
Services	21,638	16,756	-22.6%
Agriculture	1,851	1,065	-42.5%
Power Generation	2,969	6,106	105.7%
Non-Energy Use	11,387	9,496	-16.6%
Total	154,422	168,571	9.2%

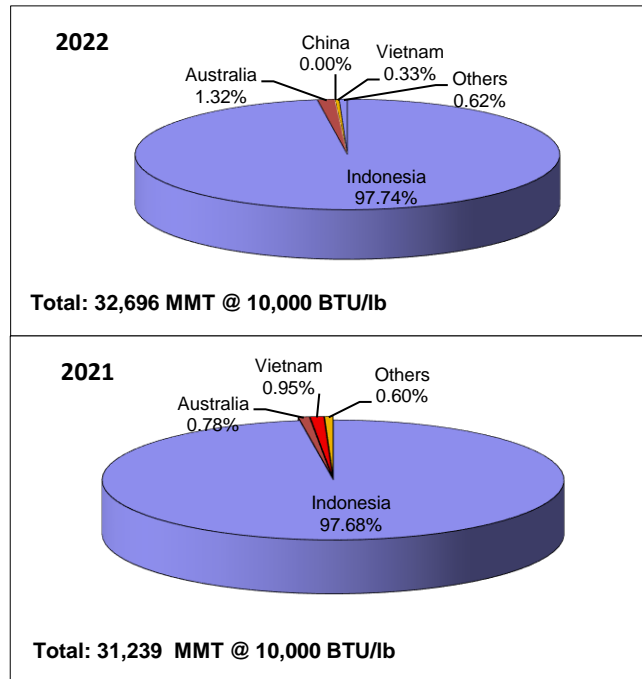
Coal

Coal Production, by Source

in MMT at 10,000 BTU/lb

	2021	2022	GR
Semirara	13,957	14,387	3.1%
Cebu	1	2	95.6%
Albay, Bicol	8	2	-71.2%
Negros	0	0.34	1101.6%
Small-scale Mines	82	66	-19.7%
Total Production	14,048	14,457	2.9%
Run of Mine (MMT)	14,378	16,061	11.7%

Coal Importation, by Country of Source

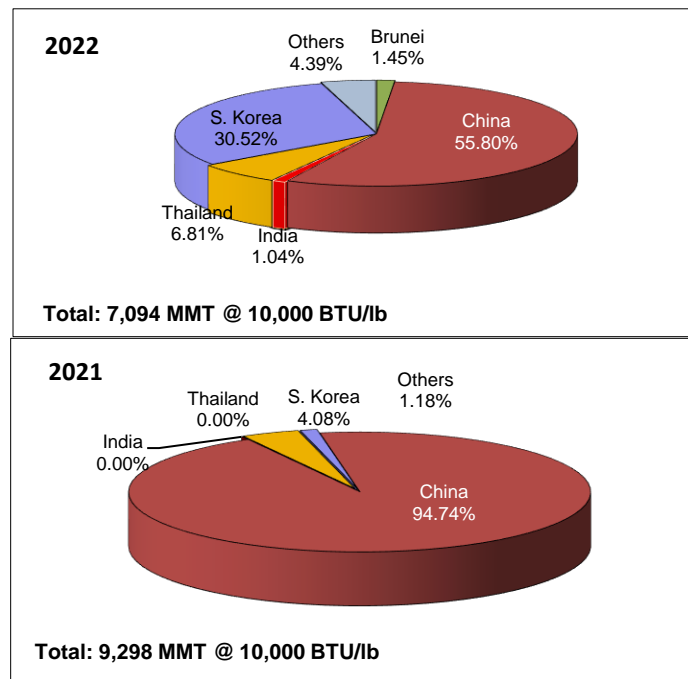


in MMT @ 10,000 BTU/lb

Country	2021	2022	GR
Indonesia	30,514	31,955	4.7%
Australia	242	433	78.6%
China	0.05	0.11	126.2%
Vietnam	297	106	-64.2%
Others*	186	202	8.3%
Total	31,239	32,696	4.7%

*Imports from India, Malaysia, Peru, Russia, Taiwan, South Korea, South Africa and USA

Coal Exportation, by Country of Destination

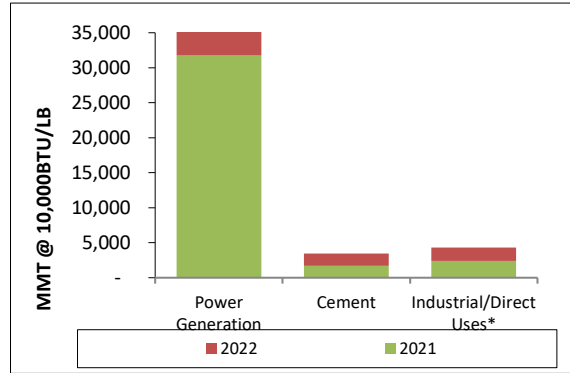


in MMT @ 10,000 BTU/lb

Country	2021	2022	GR
Brunei ^(e)	-	102.58	-
China	8,809	3,959	-55.1%
India	-	74	-
Thailand	-	483	-
S. Korea	379	2,165	471.1%
Others*	110	311	184.0%
Total	9,298	7,094	-23.7%

*Includes Cambodia, Papua New Guinea, and Vietnam

[Coal Consumption, by Major Type of User](#)



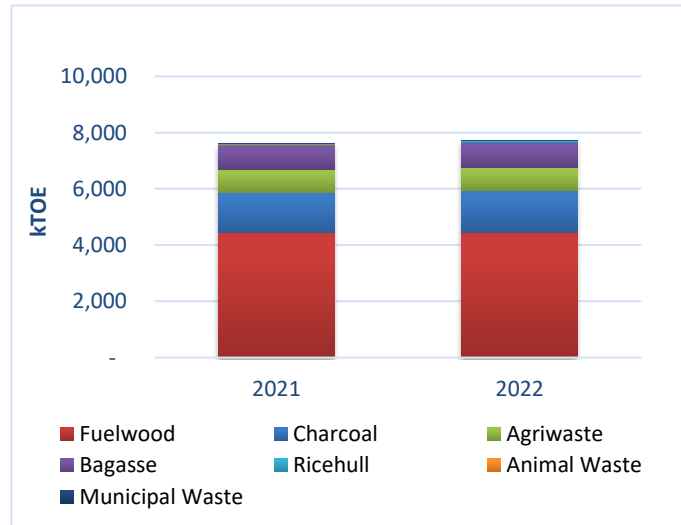
in MMT @ 10,000 BTU/lb

	2021	2022	GR
Power Generation	31,738	32,454	2.3%
Cement	1,697	1,755	3.5%
Industrial/Direct Uses*	2,400	1,932	-19.5%
TOTAL	35,834	36,141	0.9%

*non-energy use as raw materials

Renewable Energy

Biomass Production, by Fuel Type



in kTOE

	2021	2022	GR
Fuelwood	4,439	4,449	0.2%
Charcoal	1,420	1,476	3.9%
Agriwaste	837	831	-0.7%
Bagasse	851	908	6.7%
Ricehull	44	44	-0.3%
Animal Waste	17	17	0.2%
Municipal Waste	3	7	121.9%
Total	7,611	7,731	1.6%

[Geothermal, Hydro, Wind, Solar and Biomass](#)

Geothermal

	2018	2019	2020	2021	2022
Installed Generating Capacity (MW)	1,944	1,928	1,928	1,928	1,952
Dependable Generating Capacity (MW)	1,770	1,792	1,753	1,753	1,763
Electricity Generation (GWh)	10,435	10,691	10,757	10,016	10,425

Hydropower

	2018	2019	2020	2021	2022
Installed Generating Capacity (MW)	3,701	3,760	3,779	3,752	3,745
Dependable Generating Capacity (MW)	3,473	3,508	3,527	3,500	3,444
Electricity Generation (GWh)	9,384	8,025	7,192	9,185	10,085

Wind

	2018	2019	2020	2021	2022
Installed Generating Capacity (MW)	427	427	443	427	427
Dependable Generating Capacity (MW)	427	427	443	427	412
Electricity Generation (GWh)	1,153	1,042	1,026	1,270	1,030

Solar

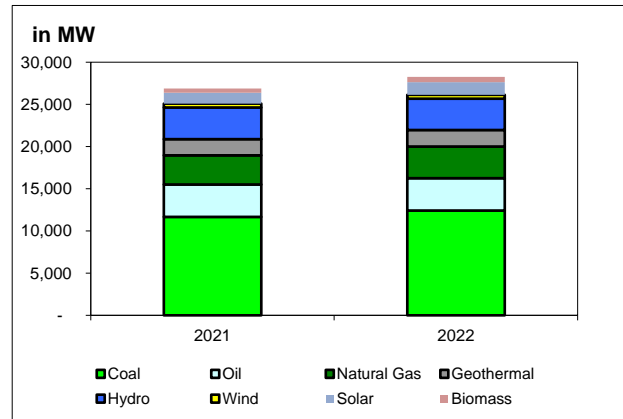
	2018	2019	2020	2021	2022
Installed Generating Capacity (MW)	896	921	1,019	1,317	1,530
Dependable Generating Capacity (MW)	740	737	817	1,034	1,150
Electricity Generation (GWh)	1,249	1,246	1,373	1,470	1,822

Biomass

	2018	2019	2020	2021	2022
Installed Generating Capacity (MW)	258	363	483	489	611
Dependable Generating Capacity (MW)	182	227	285	291	382
Electricity Generation (GWh)	1,105	1,040	1,261	1,445	1,322

Power

Installed Generating Capacity, by Source



in MW

	2021	2022	GR
Total Installed Capacity	26,882	28,258	5%
Coal	11,669	12,428	7%
Oil	3,847	3,834	0%
Natural Gas	3,453	3,732	8%
Renewable Energy	7,914	8,264	4%
Geothermal	1,928	1,952	1%
Hydro	3,752	3,745	0%
Biomass	489	611	25%
Wind	427	427	0%
Solar	1,317	1,530	16%

[Power Generation, by Source and Grid](#)

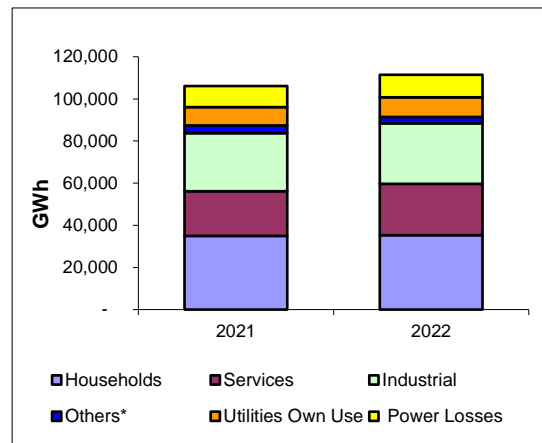
in GWh			
Luzon	2021	2022	GR
Coal	43,133	48,626	13%
Oil	996	1,507	51%
Natural Gas	19,060	17,884	-6%
Renewable Energy	12,053	11,803	-2%
Geothermal	3,838	3,921	2%
Hydro	5,412	5,239	-3.2%
Biomass	988	691	-30%
Solar	721	1,099	52%
Wind	1,095	854	-22%
Total	75,243	79,821	6%

Visayas	2021	2022	GR
Coal	8,999	8,501	-6%
Oil	468	563	20%
Natural Gas	-	-	-
Renewable Energy	6,801	7,159	5%
Geothermal	5,535	5,813	5.0%
Hydro	89	39	-56%
Biomass	350	517	48%
Solar	652	614	-6%
Wind	174	176	1%
Total	16,268	16,222	0%

Mindanao	2021	2022	GR
Coal	9,920	9,303	-6%
Oil	152	449	194%
Natural Gas	-	-	-
Renewable Energy	4,532	5,721	26.3%
Geothermal	643	690	7.3%
Hydro	3,684	4,807	30.5%
Biomass	107	114	6%
Solar	97	110	14%
Wind	-	-	-
Total	14,604	15,473	6%

Philippines	2021	2022	GR
Coal	62,052	66,430	7%
Oil	1,616	2,519	56%
Natural Gas	19,060	17,884	-6%
Renewable Energy	23,386	24,684	6%
Geothermal	10,016	10,425	4.1%
Hydro	9,185	10,085	9.8%
Biomass	1,445	1,322	-9%
Solar	1,470	1,822	24%
Wind	1,270	1,030	-19%
Total	106,115	111,516	5%
Self-sufficiency level (%)	45	43	

Electricity Consumption, by Sector

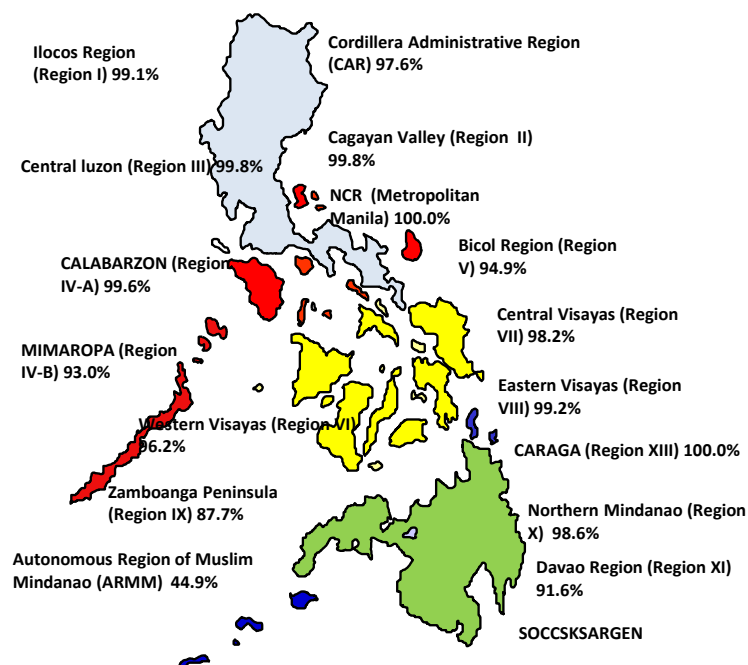


in GWh

	2021	2022	GR
Households	34,981	35,324	1.0%
Services	21,119	24,294	15.0%
Industrial	27,623	28,844	4.4%
Others*	3,695	2,871	-22.3%
Utilities Own Use	8,729	9,490	8.7%
Power Losses	9,968	10,693	7.3%
Total	106,115	111,516	5.1%

* others include Transport and AFF

*Regional Household Electrification Level



Region	Potential HH**	Served HH	Unservd HH (actual per DU)	Electrification Level (%)
CAR	395,881	444,842	9,442	97.6
I	1,151,629	1,344,032	10,380	99.1
II	804,380	943,585	1,606	99.8
III	2,566,558	3,273,636	4,901	99.8
IV-A	3,404,958	4,390,777	12,123	99.6
IV-B	682,668	737,715	47,513	93.0
V	1,216,421	1,254,915	62,470	94.9
NCR	3,095,766	3,702,957	-	100.0
LUZON	13,318,261	16,092,459	148,435	98.9
VI	1,716,637	1,849,027	65,892	96.2
VII	1,699,148	1,886,216	31,306	98.2
VIII	985,913	1,099,352	7,912	99.2
VISAYAS	4,401,698	4,834,595	105,110	97.6
IX	799,219	701,909	98,497	87.7
X	1,042,929	1,130,219	15,117	98.6
XI	1,177,461	1,106,772	99,181	91.6
XII	1,050,680	1,008,544	70,810	93.3
CARAGA	574,338	759,456	-	100.0
ARMM	620,385	280,119	342,082	44.9
MINDANAO	5,265,012	4,987,019	625,687	88.1
PHILIPPINES	22,984,971	25,914,073	879,232	96.2

* Dec 2022 electrification level report of REAMD-EPIMB as of 2023 April 18

**Based on the PSA 2015 Census of Population

Note:

A new formula was adopted for computing the electrification level which is
 $(\text{potential HH} - \text{unserved HH}) / \text{potential HH}$

[Transmission Profile](#)

Transmission Lines (Circuit-Kilometers)	2018	2019	2020	2021
Luzon	9,447	9,227	9,396	9,499
Visayas	5,379	5,299	5,299	5,379
Mindanao	5,679	5,553	5,824	5,855
Total Philippines	20,505	20,079	20,519	20,732

*There was a decrease in total transmission line length in circuit-km due to modification and divestment of various sub-transmission assets.

Substation Capacity (In Million Volt-Amperes)	2018	2019	2020	2021
Luzon	26,598	28,021	27,955	29,976
Visayas	4,874	4,884	4,487	5,754
Mindanao	3,380	3,531	5,331	6,141
Total Philippines	34,852	36,436	37,773	41,871

Source: NGCP Transmission Development Plan 2022-2040 Consultation Draft Report as of March 2022

Glossary

Condensate	Liquid hydrocarbons separated from gas production.
Dependable Capacity	The capacity that can be relied upon to carry system load for a specified time interval and period, provide assumed reserve, and/or meet firm power obligations.
Electrification	Electrification is either done through <i>grid</i> or <i>off-grid</i> connection. When a barangay is provided with electricity through grid connection, it means that the distribution line has reached the barangay proper. It may also mean that almost 50.0 percent of potential households in the barangay are connected to a distribution utility (DU) (i.e. MERALCO) or at least one is connected to other DUs. Off-grid connection pertains to a barangay having about 20 to 30 households availing the connection.
Energy Intensity	Calculated as units of energy (million tons of oil equivalent, MTOE) per unit of GDP (in billion pesos).
Energy Per Capita	Amount of energy used per person. It is calculated as total primary energy demand (in MTOE) over population (in millions).
Energy Self Sufficiency	The ratio of the country's domestic energy supply to total supply; measures the degree at which domestic energy forms can support total energy demand.
Energy to GDP Elasticity	The percentage change in energy supply to achieve one per cent change in national GDP. Calculated as the ratio of growth of primary energy demand over GDP growth.
Gas (or Natural Gas)	A naturally occurring mixture of hydrocarbon and non-hydrocarbon gases in porous formations beneath the earth's surface, often in association with petroleum. The principal constituent is methane.
Geothermal Energy	Energy generated by heat stored in the earth, or the collection of absorbed heat derived from underground in the atmosphere and oceans.

Gross Domestic Product (GDP)	Total market value of all final goods and services produced within the country in a given period of time (usually a calendar year), or the sum of value added of all final goods and services produced within a country in a given period of time.
Gross National Product (GNP)	The value of all (final) goods and services produced in a country in one year, plus income earned by its citizens abroad, minus income earned by foreigners in the country.
Hydropower	Also called hydraulic power or water power; derived from the force or energy of moving water, which may be harnessed for useful purposes.
Indigeneous Energy	Refers to all energy forms produced/sourced from within the country's natural resources.
Installed Capacity	The total of the capacities shown on the nameplates of the generating units in a powerplant.
Renewable Energy	Energy generated from natural resources which are naturally replenished. It includes solar power, wind power, hydroelectricity, micro hydro, biomass and biofuels.
Run of Mine	Coal directly coming from the mine
Total Final Energy Consumption (TFEC)	The sum of all energy forms consumed/used by different economic sectors
Total Primary Energy Demand (TPED)	The sum of total final consumption, power generation, other energy sector (own use and losses).
Total Primary Energy Supply (TPES)	The sum of all energy derived from domestic sources (indigeneous, renewable), imported from outside the country, stock change (+/-) and export (-)

Units of Measurement

BCF	Billion Cubic Feet
BTu	British Thermal Units
Ckt-Km	Circuit-Kilometer
GWh	Gigawatt-Hour
KWh	Kilowatt-hour
kTOE	Thousand Tonnes of Oil Equivalent
Lb	Pound
MB	Thousand Barrels
MMMT	Million Metric Tons
MMSCF	Million Standard Cubic Feet
MMT	Thousand Metric Tons
MVA	Megavolt Ampere
MW	Megawatt
Php	Philippine Peso
ROM	Run of Mine
USD	US Dollar

Conversion Table

Fuels	to KTOE
Coal (MT @ 10,000 btu/lb.)	0.000528
Natural Gas (MMSCF)	0.023290
Crude (MB)	0.134400
Condensate (NGL) (MB)	0.104400
Premium Gasoline (MB)	0.124500
Regular Gasoline (MB)	0.122300
Kerosene (MB)	0.127000
Diesel (MB)	0.134700
Fuel Oil (MB)	0.144400
LPG (MB)	0.092200
Jet (MB)	0.127000
Avgas (MB)	0.122400
Naphtha (MB)	0.123800
Asphalts (MB)	0.152100
Lubes & Greases (MB)	0.141200
Others (MB)	0.123300
Ricehull (MT)	0.000345
Charcoal (MT)	0.000600
Fuelwood (MT)	0.000329
Bagasse (MT)	0.000426
Agriwaste (MT)	0.000329
Animal Waste (MT)	0.000516
Ethanol (BBL)	0.000089
CME (BBL)	0.000130
Hydro (GWh)	0.086000
Geothermal (GWh)	0.860000
Wind (GWh)	0.860000
Solar (GWh)	0.860000