1-01. Primary	v Energy
PE-SC2	Global Total Energy Supply, by source (exajoules)
Source;	International Energy Agency Data and Statistics
PE-SC2U	Global Total Energy Supply, by source (million tonnes of oil equivalent)
Source;	International Energy Agency Data and Statistics
PE-C1	Primary Energy: Consumption (exajoules)
Source;	BP "Statistical Review of World Energy 2022"
PE-C1U	Primary Energy: Consumption, estimated (million tonnes oil equivalent)
Source;	BP "Statistical Review of World Energy 2022"
PE-C2	World Consumption of Fossil Fuels (million tonnes of oil equivalent)
Source;	BP "Statistical Review of World Energy 2022"
PE-C6	Ratio of Primary Energy Consumption by fuel type
Source;	BP "Statistical Review of World Energy"
PE-C7	Trends in Primary Energy Consumption in Selected Areas, by sector (exajoules)
Source;	BP "Energy Outlook Summary Tables 2020"
PE-C8	Global Final Energy Consumption, by source (exajoules)
Source;	International Energy Agency Data and Statistics
PE-C8U	Global Final Energy Consumption, by source (million tonnes of oil equivalent)
Source;	International Energy Agency Data and Statistics
PE-C11U	Primary Energy Consumption per Capita, by country (tonnes of oil equivalent)
Source;	BP "Statistical Review of World Energy 2022"
PE-C12	Fossil Fuel Consumption per Capita, by country (tonnes of oil equivalent)
Source;	BP "Statistical Review of World Energy 2022"
PE-G1	Trends in Global Energy Balance (exajoules)
Source;	International Energy Agency Data and Statistics
PE-G1U	Trends in Global Energy Balance (million tonnes of oil equivalent)
Source;	International Energy Agency Data and Statistics
PE-G5	Trends in Primary Energy Balance in China (petajoules)
Source; PE-JD1	International Energy Agency Data and Statistics Energy Balance of Primary Energy in Japan, by fiscal year (petajoules)
Source:	Agency of Natural Resources and Energy (ANRE), Japan "General Energy Statistics"
PE-JD1U	Energy Balance of Primary Energy in Japan, by fiscal year (million tonnes of oil equivalent)
Source;	Agency of Natural Resources and Energy (ANRE), Japan "General Energy Statistics"
PE-JD3	Trends in Energy Balance in Japan (petajoules)
Source;	International Energy Agency Data and Statistics
PE-JD3U	Trends in Energy Balance in Japan (million tonnes of oil equivalent)
Source;	International Energy Agency Data and Statistics
PE-JD4	Trends in Energy Balance in Japan, by source (petajoules)
Source;	International Energy Agency Data and Statistics
PE-JD4U	Trends in Energy Balance in Japan, by source (million tonnes of oil equivalent)
Source;	International Energy Agency Data and Statistics
PE-JD8	Final Energy Consumption in Japan, by fuel type (petajoules)
Source;	Agency of Natural Resources and Energy (ANRE), Japan "General Energy Statistics"
PE-JD8U	Final Energy Consumption in Japan, by fuel type (million tonnes of oil equivalent)
Source;	Agency of Natural Resources and Energy (ANRE), Japan "General Energy Statistics"
PE-JD10	Trends of Direct Input Energy in Industries, by products (thousand tonnes of crude oil equivalent)
Source;	Agency of Natural Resources and Energy (ANRE), Japan "Yearbook of The Current Survey of Energy Consumption"
PE-JD11	Trends in Domestic Supply and Demand of Primary Energy per Capita in Japan (tonnes of oil equivalent)
Source;	Agency of Natural Resources and Energy (ANRE), Japan "General Energy Statistics"
PE-EB20	* Primary Energy: Energy Balance Flow of Primary Energy in Japan, 2020 fiscal year (petajoules)
Source;	Agency of Natural Resources and Energy (ANRE), Japan "General Energy Statistics FY2020"
PE-EB19	* Primary Energy: Energy Balance Flow of Primary Energy in Japan, 2019 fiscal year (petajoules)
Source;	Agency of Natural Resources and Energy (ANRE), Japan "General Energy Statistics FY2019" Salt Sufficiency Batia of Drimory Energy in Japan
PE-D1	Self-Sufficiency Ratio of Primary Energy in Japan
Source;	Agency of Natural Resources and Energy (ANRE), Japan "General Energy Statistics"

#### 1-02. Electricity

EL-EP1 Electricity Generation (terawatt-hours) BP "Statistical Review of World Energy 2022" Source; EL-EP1U Electricity Generation (million tonnes of oil equivalent) BP "Statistical Review of World Energy 2022" Source: EL-EP1U2 Electricity Generation (petajoules) BP "Statistical Review of World Energy 2022" Source: EL-EP3 Thermal Power Electricity Generation (terawatt-hours) Source: BP "Statistical Review of World Energy 2022" EL-EP4 Electricity Generation from Other Fuels (terawatt-hours) BP "Statistical Review of World Energy 2022" Source: EL-EP5 OECD or IEA Member Countries: Electricity Output (terawatt-hours) International Energy Agency "World Energy Balances Highlights 2022" Source; Ratio of Electricity Generation by fuel type EL-EP16 Source: BP "Statistical Review of World Energy" EL-EP17 Electricity Generation per Capita (megawatt-hours) BP "Statistical Review of World Energy 2022" Source: EL-CP5 World Electricity Generation Capacity by fuel source (gigawatts) International Energy Agency "World Energy Outlook" Source; EL-C3 Final Consumption of Electricity, by region (terawatt-hours) Source; Agency of Natural Resources and Energy (ANRE), Japan "Energy White Paper" EL-G1 Global Electricity Supply and Demand (terawatt-hours) International Energy Agency Data and Statistics Source; EL-IM4 OECD or IEA Member Countries: Electricity Imports (terawatt-hours) International Energy Agency "World Energy Balances Highlights 2022" Source: EL-EX4 OECD or IEA Member Countries: Electricity Exports (terawatt-hours) Source; International Energy Agency "World Energy Balances Highlights 2022" EL-P8 Industrial Electricity Prices in the IEA Countries (dollars per kilowatt-hour) Department for Business, Energy and Industrial Strategy (UK) "Energy Prices International Comparisons" Source: EL-P9 Electricity Prices for Households and Industry in Selected Countries (dollars per kilowatt-hour) Source; Agency of Natural Resources and Energy (ANRE), Japan "Energy White Paper" EL-PJ11 Summary of Power Generation Cost Estimation by fuel source Source: Ministry of Economy, Trade and Industry (METI), Japan EL-PJ12 Unit Price of Thermal Power Generation in Japan, by fuel type (yens per kilowatt-hour) Source; Energy Information Center "Shin-Denryoku Net Statistics" EL-JEP1 Domestic Electricity Generation, by fuel type (terawatt-hours) Source; Agency of Natural Resources and Energy (ANRE), Japan "Energy White Paper" EL-JEP1U Composition of Power Sources for Electricity Generation in Japan Source; Agency of Natural Resources and Energy (ANRE), Japan "Energy White Paper" EL-JEP2 Domestic Electricity Generation in Japan, by fuel type (terawatt-hours) International Energy Agency Data and Statistics Source: EL-JEP2U Domestic Electricity Generation in Japan, by fuel type (million tonnes of oil equivalent) International Energy Agency Data and Statistics Source; EL-JD1 Energy Balance of Electricity in Japan, by fiscal year (terawatt-hours) Source: Agency of Natural Resources and Energy (ANRE), Japan "General Energy Statistics" EL-JD1U Energy Balance of Electricity in Japan, by fiscal year (petajoules) Agency of Natural Resources and Energy (ANRE), Japan "General Energy Statistics" Source: EL-JD7 Domestic Electricity Generation Capacity, by fuel type (gigawatts) Source; Agency of Natural Resources and Energy (ANRE), Japan "Energy White Paper" EL-JD8 Input of Energy Sources for Electricity Generation (petajoules) Source; Agency of Natural Resources and Energy (ANRE), Japan "General Energy Statistics" EL-D2 Energy Density per Unit Weight (watt-hours per kilograms) Source; Japan Petroleum Development Association "JPDA Resource Assessment Study 2017" EL-D3 Battery demand by region, 2015-2020 (gigawatts per year) Source; International Energy Agency "Global EV Outlook 2022" EL-D4 Global Electric Car Stock by region and mode, 2010-2021 (million units) Source; International Energy Agency "Global EV Outlook 2022"

# 1-03. Renewable Energy

RE-FP5	Global Gross Heat Production, by source (petajoules)
Source;	International Energy Agency Data and Statistics
RE-EP1	Electricity Generation from Renewable Energy Sources (terawatt-hours)
Source;	BP "Statistical Review of World Energy 2022"
RE-EP5	Gross Electricity Generation, by source (terawatt-hours)
Source;	International Energy Agency Data and Statistics
RE-EP5U	Gross Electricity Generation, by source (petajoules)
Source;	International Energy Agency Data and Statistics
RE-EP7	Renewable Energy: Annual Electricity Generation, by type (terawatt-hours)
Source;	International Renewable Energy Agency Data & Statistics
RE-EP8	Renewable Energy: Annual Electricity Generation, by country (terawatt-hours)
Source;	International Renewable Energy Agency Data & Statistics
RE-CP7	Installed Renewable Electricity Capacity (gigawatts)
Source;	International Renewable Energy Agency Data & Statistics
RE-CP8	Installed Total Renewable Energy Power Generation Capacity, by country (gigawatts)
Source;	International Renewable Energy Agency Data & Statistics
RE-CP10	Annual and Cumulative Total New Renewable Power Generation Capacity, 2010-2020 (gigawatts)
Source;	International Renewable Energy Agency "Renewable Power Generation Costs in 2020"
RE-P5	Renewable Energy: Total Installed Cost, Capacity Factor and LCOE, 2010 and 2021
Source;	International Renewable Energy Agency "Renewable Power Generation Costs in 2021"
RE-JEP1	Trends in Electricity Power Generation Using Japanese Alternative Energy by Major Domestic Power Companies
	(gigawatt-hours)
Source;	Agency of Natural Resources and Energy (ANRE), Japan; The Federation of Electric Power Companies (FEPC)
RE-JEP5	Gross Electricity Generation in Japan, by source (gigawatt-hours)
Source;	International Energy Agency Data and Statistics
RE-JD1	Energy Balance of Renewable Energy excl. Hydro in Japan, by fiscal year (petajoules)
Source;	Agency of Natural Resources and Energy (ANRE), Japan "General Energy Statistics"
RE-JD7	Domestic Electricity Generation by Renewable Energy Facilities under the FIT Scheme in Japan (gigawatt-hours)
Source;	Agency of Natural Resources and Energy (ANRE), Japan
RE-D1	<ul> <li>Relationship between LOCE and Deployment of Renewable Energy, by source</li> </ul>
Source;	International Renewable Energy Agency "Renewable Power Generation Costs 2020"
RE-D2	* Renewable Energy Potential, <i>estimated</i>
Source;	J-WatER (Ed.) 2006 "小水力エネルギー読本 (in Japanese)", Tokyo: Ohmsha

## 1-04. Greenhouse Gas

Carbon Dioxide Equivalent Emissions from Energy, Process Emissions, Methane, and Flaring (million tonnes of CO2
equivalent)
BP "Statistical Review of World Energy 2022"
Carbon Dioxide Emissions from Fossil Fuel Combustion (million tonnes of CO2 equivalent)
BP "Statistical Review of World Energy 2022"
Total Greenhouse Gas Emissions without LULUCF (million tons of CO2 equivalent)
Greenhouse Gas Inventory Office of Japan, National Institute for Environmental Studies (NIES) "GHG emissions /
removals data from Annex I Parties, 1990 $\sim$ 2020"
Total Greenhouse Gas Emissions from Energy Sector (million tons of CO2 equivalent)
Greenhouse Gas Inventory Office of Japan, National Institute for Environmental Studies (NIES) "GHG emissions /
removals data from Annex I Parties, 1990 $\sim$ 2020"
Total Greenhouse CO2 Emissions without LULUCF (million tons)
Greenhouse Gas Inventory Office of Japan, National Institute for Environmental Studies (NIES) "GHG emissions /
removals data from Annex I Parties, 1990 $\sim$ 2020"
Global Carbon Dioxide Emissions from Fossil Fuel Consumption and Cement Production (million metric tons of C)
Carbon Dioxide Information Analysis Center (CDIAC) at Appalachian State University
Global Carbon Dioxide Emissions from Fossil Fuel Consumption and Cement Production, by country (thousand metric
tons)
Carbon Dioxide Information Analysis Center (CDIAC) at Appalachian State University
Per-Capita Carbon Dioxide Emissions from Fossil Fuel Consumption and Cement Production, by country (metric tons of
CO2 equivalent)
Carbon Dioxide Information Analysis Center (CDIAC) at Appalachian State University

GG-JEM1	Greenhouse Gas Emissions without LULUCF in Japan, by gas type (million tons of CO2 equivalent)
Source;	Greenhouse Gas Inventory Office of Japan, National Institute for Environmental Studies (NIES) "GHG emissions /
	removals data from Annex I Parties, 1990 $\sim$ 2020"
GG-JEM2	Greenhouse Gas Emissions, by sector (million tons of CO2 equivalent)
Source;	National Institute for Environmental Studies (NIES) "National GHG Inventory Report of JAPAN, 2021"
CD-JEM3	Carbon Dioxide Emissions, by sector (million tons-CO2)
Source;	National Institute for Environmental Studies (NIES) "National GHG Inventory Report of JAPAN, 2021"
CD-JEM5	Greenhouse Carbon Dioxide Emissions Derived from Fuel Burning, by sector (thousand tons)
Source;	National Institute for Environmental Studies (NIES) "National GHG Inventory Report of JAPAN, 2021"
CD-JEM6	Domestic Allocated CO2 Emissions, by fiscal year (hundred million tons of CO2 equivalent)
Source;	Ministry of Environment (MoE), Japan
CD-JEM7	Carbon Dioxide Emissions by Fuel Combustions, by energy source (million tons-CO2)
Source;	National Institute for Environmental Studies (NIES) "National GHG Inventory Report of JAPAN, 2021"
CD-JEM8	Domestic CO2 Emissions from Thermal Power Electricity Generation, by fuel type (hundred million tons of CO2
	equivalent)
Source;	Ministry of Environment (MoE), Japan
CD-JEM11	per-Capita Greenhouse Gas Emissions by fiscal year (tons of CO2 equivalent)
Source;	Greenhouse Gas Inventory Office of Japan, National Institute for Environmental Studies (NIES) "GHG emissions /
	removals data from Annex I Parties, 1990 $\sim$ 2020"
CD-D1	<ul> <li>* Change in Increase of Atmospheric Carbon Dioxide Concentration (ppm)</li> </ul>
Source;	United Nations Environment Programme Data
GG-D2	<ul> <li>* Annual Average Temperature Deviation of World and Japan</li> </ul>
Source;	Japan Meteorological Agency (JMA)
GG-D3	<ul> <li>* Targets and Track Performance for GHG reduction, by country</li> </ul>
Source;	Japan Electric Power Information Center, Inc. (JEPIC)
CD-D5	* Global Carbon Dioxide Emissions from Fossil Fuel Consumption and Cement Production
Source;	Carbon Dioxide Information Analysis Center (CDIAC) at Appalachian State University
CD-D6	<ul> <li>* Top 20 countries of Total and per-Capita CO2 emissions</li> </ul>
Source;	Carbon Dioxide Information Analysis Center (CDIAC) at Appalachian State University
CD-D12	Life-cycle Carbon Dioxide Emissions From Electricity (grams-CO2 per kilowatt-hours)
Source;	World Nuclear Association "Carbon Dioxide Emissions From Electricity"
CD-D13	Life-cycle Carbon Dioxide Emissions From Electricity Generation (grams-CO2 per kilowatt-hours)
Source;	Agency of Natural Resources and Energy (ANRE), Japan "Energy White Paper 2021"

# <u>2-01. Oil</u> (Crude Oil)

<u>2-01. Oil</u> (Crud	e Oil)
OL-FP1	Oil: Production (million tonnes)
Source;	BP "Statistical Review of World Energy 2022"
OL-FP2(2)	Oil: Natural Gas Liquids Production (million tons)
Source;	BP "Statistical Review of World Energy 2022"
OL-FP6	World Crude Oil Production by country (million tons)
Source;	OPEC "Annual Statistical Bulletin 2022"
OL_UC-FP7	Production of Tight Oil in the United States (million tons)
Source;	U.S. Energy Information Administration Data Statistics
OL_UC-FP8	Production of Oil Sands (million metric tonnes)
Source;	World Mining Congress "World Mining Data"
OL-RP1	Oil: Refinery throughput (million tonnes)
Source;	OPEC "Annual Statistical Bulletin 2022"
OL-EP1	Electricity Generation from Oil (terawatt-hours)
Source;	BP "Statistical Review of World Energy 2022"
OL-EP1U	Electricity Generation from Oil (thousand tonnes of oil equivalent)
Source;	BP "Statistical Review of World Energy 2022"
OL-DC1	World Oil Demand, by country (million tons)
Source;	OPEC "Annual Statistical Bulletin 2022"
OL-C1	Oil: Consumption (million tonnes)
Source;	BP "Statistical Review of World Energy 2022"
OL-C2	Oil: Consumption (exajoules)
Source;	BP "Statistical Review of World Energy 2022"

OL-S1 Oil Stocks of IEA Countries (days of net imports) Source: International Energy Agency Data and Statistics OL-R Oil: Proved Reserves (billion tonnes) Source; BP "Statistical Review of World Energy 2021" OL-RU Oil: Proved Reserves (thousand million barrels) BP "Statistical Review of World Energy 2021" Source: OL\_UC-R2 Technically Recoverable Oil Resources, by fuel type (billion barrels) Source; International Energy Agency "World Energy Outlook 2022" OL-G1 Trends in Global Crude Oil Balance (petajoules) Source; International Energy Agency Data and Statistics OL UC-G2 Tight Oil Production and Proved Reserves from Selected U.S. Tight Plays (million barrels) U.S. Energy Information Administration "Proved Reserves of Crude Oil and Natural Gas in the United States" Source: OL-IM1 Oil: Trade Movements, Imports (million tonnes per year) BP "Statistical Review of World Energy 2022" Source; OL-IM2 World Exports of Crude Oil, by country (million tons) OPEC "Annual Statistical Bulletin 2022" Source: OL-IM4 Import of Crude Oil from OPEC Countries in the Selected Countries (thousand tonnes) Source: ENEOS Cooperation (Website) "Oil Handbook Data" OL-EX1 Oil: Trade Movements, Exports (million tonnes per year) BP "Statistical Review of World Energy 2022" Source: OL-EX2 World Imports of Crude Oil, by country (million tons) OPEC "Annual Statistical Bulletin 2022" Source; OL-P1 Oil: Crude Oil Prices 1861-2021 (dollars per barrel) Source: BP "Statistical Review of World Energy 2022" OL-P2 Oil: Spot Crude Prices (dollars per barrel) BP "Statistical Review of World Energy 2022" Source: **OL-P3(2)** Crude Oil Prices of WTI and Brent (dollars per barrel) Source; U.S. Energy Information Administration Data Statistics OL-P4 OPEC Basket Price (dollars per barrel) Source; OPEC "Annual Statistical Bulletin 2022" OL-PJ1 CIF Import Price of Crude Oil in Japan, by fiscal year ENEOS Cooperation (Website) "Oil Handbook Data" Source: OL-PJ2 Import Price of Crude Oil, by contract (dollars per barrel) Agency of Natural Resources and Energy (ANRE), Japan "Yearbook of Mineral Resources and Petroleum Products Source: Statistics (Petroleum)" OL-PJ3 Import Prices of Crude Oil in Japan Source; Ministry of Finance, Japan: Trade Statistics of Japan OL-JFP1 Domestic Production of Crude Oil, by prefecture (thousand kilolitres) Source; Agency of Natural Resources and Energy (ANRE), Japan "Yearbook of Mineral Resources and Petroleum Products Statistics (Petroleum)" OL-JFP2 Domestic Production of Main Petroleum Products in Japan, by fuel type (thousand kilolitres) Source; Agency of Natural Resources and Energy (ANRE), Japan "Yearbook of Mineral Resources and Petroleum Products Statistics (Petroleum)" OL-JD1 Domestic Supply and Demand of Crude Oil in Japan, by fiscal year (thousand kilolitres) Source: Agency of Natural Resources and Energy (ANRE), Japan "General Energy Statistics" OL-JD1U Domestic Supply and Demand of Crude Oil in Japan, by fiscal year (petajoules) Agency of Natural Resources and Energy (ANRE), Japan "General Energy Statistics" Source; OL-JD2 Domestic Supply and Demand of Oil Products in Japan, by fiscal year (thousand kilolitres, refinery oil equivalent) Source; Agency of Natural Resources and Energy (ANRE), Japan "General Energy Statistics" OL-JD2U Domestic Supply and Demand of Oil Products in Japan, by fiscal year (petajoules) Source; Agency of Natural Resources and Energy (ANRE), Japan "General Energy Statistics" OL-JD3 Trends in Crude Oil Balance in Japan (petajoules) Source: International Energy Agency Data and Statistics OL-JD8 Changes in Oil Stock, Japan (ten thousand kilolitres) Agency of Natural Resources and Energy (ANRE), Japan "Yearbook of Mineral Resources and Petroleum Products Source; Statistics (Petroleum)" OL-JD9F Trends in Dependence of Crude Oil Imports in Japan, by fiscal year (%) Agency of Natural Resources and Energy (ANRE), Japan "Yearbook of Mineral Resources and Petroleum Products Source: Statistics (Petroleum)"

OL-JD10	Domestic Crude Oil Processing in Japan (thousand kilolitres)
Source;	Agency of Natural Resources and Energy (ANRE), Japan "Yearbook of Mineral Resources and Petroleum Products
	Statistics (Petroleum)"
OL-JD11	Supply and Demand of Main Petroleum Products in Japan (million kilolitres)
Source;	Agency of Natural Resources and Energy (ANRE), Japan "Yearbook of Mineral Resources and Petroleum Products Statistics (Petroleum)"
OL-JIM1U	Import of Oil and Oil Products to Japan, by type (thousand kilolitres)
Source;	Ministry of Finance, Japan: Trade Statistics of Japan
OL-JIM2U	Import of Crude and Bituminous Oil, by area and country (thousand kiloliters)
Source;	Ministry of Finance, Japan: Trade Statistics of Japan
OL-JIM5	Import of Crude Oil, by supplier (million tonnes)
Source;	Agency of Natural Resources and Energy (ANRE), Japan "Yearbook of Mineral Resources and Petroleum Products Statistics (Petroleum)"
OL-JIM6	Import of Crude Oil, by area and country (thousand tonnes)
Source;	Agency of Natural Resources and Energy (ANRE), Japan "Yearbook of Mineral Resources and Petroleum Products
	Statistics (Petroleum)"
OL-EB21	* Crude Oil: Energy Balance Flow of Oil and Products in Japan, 2021 fiscal year (terajoules)
Source;	Agency of Natural Resources and Energy (ANRE), Japan "General Energy Statistics FY2021"
OL-EB19	* Crude Oil: Energy Balance Flow of Oil and Products in Japan, 2019 fiscal year (terajoules)
Source;	Agency of Natural Resources and Energy (ANRE), Japan "General Energy Statistics FY2019"
OL-D1	* Major Oil and Gas Fields in the World
Source;	ENEOS Cooperation (Website) "Oil Handbook Data"
OL-D2	* Major Discovery of Large-Scale Oil Fields to 2015-2001 (hundred million barrels)
Source;	Japan Petroleum Development Association "JPDA Resource Assessment Study"
OL_UC-D3	Production of Oil Shales (thousand metric tonnes)
Source;	World Mining Congress "World Mining Data"
OL-D4	* Crude Capacity of Refinery facilities in Japan (barrels daily)
Source;	Petroleum Association of Japan
OL-D6	* Overview of OPEC member countries 2021
Source;	OPEC "Annual Statistical Bulletin 2022"
2-02. Natural	
NG-FP1	Natural Gas: World Production (billion cubic meters)
Source;	BP "Statistical Review of World Energy 2022"

NG-FP2	Natural Gas: World Production (petajoules)
Source;	BP "Statistical Review of World Energy 2022"
NG-FP2U	Natural Gas: World Production (million tonnes of oil equivalent)
Source;	BP "Statistical Review of World Energy 2022"
NG-EP1	Electricity Generation from Natural Gas (terawatt-hours)
Source;	BP "Statistical Review of World Energy 2022"
NG-EP1U	Electricity Generation from Natural Gas (million tonnes of oil equivalent)
Source;	BP "Statistical Review of World Energy 2022"
NG-DC1	World Natural Gas Demand, by country (billion cubic meters)
Source;	OPEC "Annual Statistical Bulletin 2022"
NG-DC1U	World Natural Gas Demand, by country (million tonnes of oil equivalent)
Source;	OPEC "Annual Statistical Bulletin 2022"
NG-DC1U2	World Natural Gas Demand, by country (petajoules)
Source;	OPEC "Annual Statistical Bulletin 2022"
NG-C1	Natural Gas: Consumption (billion cubic meters)
Source;	BP "Statistical Review of World Energy 2022"
NG-C2	Natural Gas: Consumption (petajoules)
Source;	BP "Statistical Review of World Energy 2022"
NG-C2U	Natural Gas: Consumption (million tonnes of oil equivalent)
Source;	BP "Statistical Review of World Energy 2022"
NG-R	Natural Gas: Proved Reserves (trillion cubic meters)
Source;	BP "Statistical Review of World Energy 2021"
NG-RU	Natural Gas: Proved Reserves (billion tonnes of oil equivalent)
Source;	BP "Statistical Review of World Energy 2021"

NG\_UC-R1 Unproved Technically Recoverable Resources of Shale Gas and Tight Oil Source: U.S. Energy Information Administration "World Shale Resource Assessments" NG\_UC-R2 Technically Recoverable Fossil Fuel Resources, by fuel type (trillion cubic meters) International Energy Agency "World Energy Outlook 2022" Source; NG-G1 Trends in Global Natural Gas Balance (petajoules - on a gross calorific basis) International Energy Agency Data and Statistics Source: Proved Reserves and Production of Shale Gas and Coalbed Methane in the United States (billion cubic feet) NG\_UC-G3 Source; U.S. Energy Information Administration Data Statistics NG-T1 Natural Gas: Inter-regional Trade by pipelines (billion cubic meters) Source; BP "Statistical Review of World Energy" NG-T2 Natural Gas: Trade Movements by pipelines (billion cubic meters) BP "Statistical Review of World Energy" Source: NG-IM1 Natural Gas: LNG Imports, by country (billion cubic meters) BP "Statistical Review of World Energy 2022" Source; NG-IM2 World Imports of Natural Gas, by country (billion cubic meters) OPEC "Annual Statistical Bulletin 2022" Source: NG-IM2U World Imports of Natural Gas, by country (million tonnes of oil equivalent) Source: OPEC "Annual Statistical Bulletin 2022" NG-EX1 Natural Gas: LNG Exports, by country (billion cubic meters) BP "Statistical Review of World Energy 2022" Source: NG-EX2 World Natural Gas Exports, by country (billion cubic meters) Source; OPEC "Annual Statistical Bulletin 2022" NG-EX2U World Natural Gas Exports, by country (million tonnes of oil equivalent) Source: OPEC "Annual Statistical Bulletin 2022" NG-P1 Natural Gas: Prices (dollars per thousand cubic meters NG) BP "Statistical Review of World Energy 2022" Source: NG-P1U Natural Gas: Prices (dollars per million Btu) Source; BP "Statistical Review of World Energy 2022" NG-P3 Annual Prices of Natural Gas in Japan, US and Europe (dollars per million Btu) Source; Energy Information Center "Shin-Denryoku Net Statistics" NG-P3(2) Monthly Prices of Natural Gas in Japan, US and Europe (dollars per million Btu) The World Bank "World Bank Commodity Price Data (The Pink Sheet)" Source; NG-PJ1 CIF Import Price of LNG in Japan, by fiscal year Agency of Natural Resources and Energy (ANRE), Japan "Energy White Paper" Source: NG-PJ3 Import Prices of Natural Gas in Japan (dollars per ton) Ministry of Finance, Japan: Trade Statistics of Japan, IMF Source: NG-PJ4 Import Gas Prices of in Japan, by type (thousand yens per metric ton) Energy Information Center "Shin-Denryoku Net Statistics" Source: NG-JFP1 Domestic Production of Natural Gas, by field and prefecture (million cubic meters) Source; Ministry of Economy, Trade and Industry (METI), Japan "Yearbook of Current Production Statistics (Mineral Resources and Petroleum Products, Ceramics and Building Materials)", etc. NG-JD1 Domestic Supply and Demand of Natural Gas in Japan, by fiscal year (thousand tonnes of imported LNG equivalent) Source; Agency of Natural Resources and Energy (ANRE), Japan "General Energy Statistics" NG-JD1U Domestic Supply and Demand of Natural Gas in Japan, by fiscal year (petajoules) Source: Agency of Natural Resources and Energy (ANRE), Japan "General Energy Statistics" NG-JD2 Domestic Supply and Demand of City Gas in Japan, by fiscal year (million cubic meters, city gas equivalent) Agency of Natural Resources and Energy (ANRE), Japan "General Energy Statistics" Source: NG-JD2U Domestic Supply and Demand of City Gas in Japan, by fiscal year (petajoules) Source: Agency of Natural Resources and Energy (ANRE), Japan "General Energy Statistics" NG-JD9 Supply and Demand of Liquid Petroleum Gas in Japan (million tonnes) Source; Agency of Natural Resources and Energy (ANRE), Japan "Yearbook of Mineral Resources and Petroleum Products Statistics (Petroleum)" NG-JD11 Domestic Inventory of LNG in Japan, end-of -month inventory (million tonnes) Source; Japan Oil, Gas and Metals National Corporation (JOGMEC) "Oil and Natural Gas Information Monthly Report" NG-JD12 Changes in LP Gas Stockpile in Japan (ten thousand kilolitres) Source: Agency of Natural Resources and Energy (ANRE), Japan "Current Satus of LP Gas Stockpile" NG-JIM1 Import of Natural Gas to Japan, by type (million metric tons) Ministry of Finance, Japan: Trade Statistics of Japan Source:

NG-JIM2	Import of LNG to Japan, by country (thousand metric tons)
Source;	Ministry of Finance, Japan: Trade Statistics of Japan
NG-EB21	$^{st}$ Natural Gas: Energy Balance Flow of Natural Gas in Japan, 2021 fiscal year (terajoules)
Source;	Agency of Natural Resources and Energy (ANRE), Japan "General Energy Statistics FY2021"
NG-EB19	* Natural Gas: Energy Balance Flow of Natural Gas in Japan, 2019 fiscal year (terajoules)
Source;	Agency of Natural Resources and Energy (ANRE), Japan "General Energy Statistics FY2019"
NG-D1	* Major Discovery of Large-Scale Gas Fields to 2015-2001 (trillion cubic feet)
Source;	Japan Petroleum Development Association "JPDA Resource Assessment Study"
NG_UC-D2	* Schematic Geology of Natural Gas Resources
Source;	U.S. Energy Information Administration
NG-D3	* Greenhouse Gas Emissions over the Life Cycle of City Gas (grams-CO2 per megajoule)
Source;	The Japan Gas Association

### 2-03. Coal

CO-R	Coal: Proved Reserves (million tonnes)
Source;	BP "Statistical Review of World Energy"
CO-RU	Coal: Proved Reserves (billion tonnes of oil equivalent)
Source;	BP "Statistical Review of World Energy"
CO-G1	Trends in Global Coal Energy Balance (petajoules)
Source;	International Energy Agency Data and Statistics
CO-G2(2)	Trends in Global Coking Coal Energy Balance (petajoules)
Source;	International Energy Agency Data and Statistics
CO-IM1	Import of Coal by area (exajoules)
Source;	BP "Statistical Review of World Energy 2022"
CO-IM1U	Import of Coal by area (million tonnes of oil equivalent))
Source;	BP "Statistical Review of World Energy 2022"
CO-EX1	Export of Coal by Area (exajoules)
Source;	BP "Statistical Review of World Energy 2022"
CO-EX1U	Export of Coal by Area (million tonnes of oil equivalent))
Source;	BP "Statistical Review of World Energy 2022"
CO-P1	Coal: Prices (dollars per ton)
Source;	BP "Statistical Review of World Energy"
CO-P3(2)	Monthly Prices of Australias and South Africas Coals (dollars per metric ton)
Source;	The World Bank "World Bank Commodity Price Data (The Pink Sheet)"
CO-PJ1	CIF Import Price of Coal in Japan, by fiscal year
Source;	Ministry of Finance, (affiliated organization) Japan Tariff Association "Japan Exports & Imports, Country by
	Commodity", etc.
CO-PJ4	Import Prices of Coal in Japan, by type (dollars per metric ton)
Source;	Ministry of Finance, Japan: Trade Statistics of Japan
CO-JFP2	Domestic Production of Coal, by fiscal year (million tons)
Source;	Agency of Natural Resources and Energy (ANRE), Japan "Energy White Paper"
CO-JD1	Domestic Supply and Demand of Coal in Japan, by fiscal year (thousand tonnes of steam coal equivalent)
Source;	Agency of Natural Resources and Energy (ANRE), Japan "General Energy Statistics"
CO-JD1U	Domestic Supply and Demand of Coal in Japan, by fiscal year (petajoules)
Source;	Agency of Natural Resources and Energy (ANRE), Japan "General Energy Statistics"
CO-JD2	Domestic Supply and Demand of Coal Products in Japan, by fiscal year (thousand tonnes, steam coal equivalent)
Source;	Agency of Natural Resources and Energy (ANRE), Japan "General Energy Statistics"
CO-JD2U	Domestic Supply and Demand of Coal Products in Japan, by fiscal year (petajoules)
Source;	Agency of Natural Resources and Energy (ANRE), Japan "General Energy Statistics"
CO-JD3(2)	Trends in Coking Coal Energy Balance in Japan (petajoules)
Source;	International Energy Agency Data and Statistics
CO-JIM1	Import of Coal in Japan, by type and use (thousand metric tons)
Source;	Ministry of Finance, Japan: Trade Statistics of Japan
CO-JIM2	Import of Anthracite (Hard Coal) to Japan, by country (thousand metric tons)
Source;	Ministry of Finance, Japan: Trade Statistics of Japan
CO-JIM3	Import of Coking Coal to Japan, by country (million tons)
Source;	Ministry of Finance, Japan: Trade Statistics of Japan
CO-JIM4	Import of Steam Coal to Japan, by country (million tons)
Source;	Ministry of Finance, Japan: Trade Statistics of Japan

CO-JIM5	Import of Brown Coal to Japan, by country (thousand metric tons)
Source;	Ministry of Finance, Japan: Trade Statistics of Japan
CO-JIM6	Import of Lignite to Japan, by country (thousand metric tons)
Source;	Ministry of Finance, Japan: Trade Statistics of Japan
CO-EB21	* Coal Energy: Energy Balance Flow of Coal and Products in Japan, 2021 fiscal year (terajoules)
Source;	Agency of Natural Resources and Energy (ANRE), Japan "General Energy Statistics FY2021"
CO-EB19	st Coal Energy: Energy Balance Flow of Coal and Products in Japan, 2019 fiscal year (terajoules)
Source;	Agency of Natural Resources and Energy (ANRE), Japan "General Energy Statistics FY2019"
CO-D1	* Summary for Electricity Generation by Coal Thermal Power, estimated
Source;	Agency of Natural Resources and Energy (ANRE), Japan "Energy White paper 2021"
2-04. Nuclea	r (incl. Uranium, Thorium)
Th-MP2	Thorium: World Monazite Concentrate Production (metric tons, gross weight)
Source;	U.S. Geological Survey "Minerals Yearbook"
U-MP3	Uranium: Mine Production of Uranium (tonnes of metal content)
Source;	"World Mineral Statistics" contributed by permission of the British Geological Survey
U-MP4	Historical Uranium Production (tonnes-U)
Source;	Nuclear Energy Agency & the International Atomic Energy Agency "Uranium: Resources, Production and Demand",
	"Forty Years of Uranium Resources, Production and Demand in Perspective"
NU-EP1	Nuclear: Power Generation (terawatt-hours)
Source;	BP "Statistical Review of World Energy 2022"
NU-EP1U	Nuclear: Power Generation (thousand tonnes of oil equivalent)
Source;	BP "Statistical Review of World Energy 2022"
NU-EP1U2	Nuclear: Power Generation (exajoules)
Source;	BP "Statistical Review of World Energy 2022"
NU-CP3	Nuclear: Operating Nuclear Reactors and Generating Capacity (gigawatt)
Source;	Nuclear Energy Agency & the International Atomic Energy Agency "Uranium: Resources, Production and Demand",
	"Forty Years of Uranium Resources, Production and Demand in Perspective"
NU-CP13	Nuclear: Operating Nuclear Reactors and Generating Capacity, by area (gigawatt)
Source;	Agency of Natural Resources and Energy (ANRE), Japan "Energy White Paper"
U-R1	Identified Recoverable Resources (thousand tonnes-U)
Source;	Nuclear Energy Agency & the International Atomic Energy Agency "Uranium: Resources, Production and Demand"
U-R2	Uranium: Reasonably Assured Recoverable Resources (thousand tonnes-U)
Source;	Nuclear Energy Agency & the International Atomic Energy Agency "Uranium: Resources, Production and Demand",
<b>T</b> I DO	"Forty Years of Uranium Resources, Production and Demand in Perspective"
Th-R3	Thorium: Identified thorium resources, in situ (tonnes-Th)
Source;	Nuclear Energy Agency & the International Atomic Energy Agency "Uranium: Resources, Production and Demand"
U-P3	Monthly Uranium Prices (dollars per pound U308 equivalent)
Source;	International Monetary Fund "IMF Primary Commodity Prices"
U-P4	Uranium Annual Prices (dollars per pound U308 equivalent)
Source; U-PJ3	Nuclear Energy Agency & the International Atomic Energy Agency "Uranium: Resources, Production and Demand"
Source;	Import Prices of Uranium/Thorium in Japan (dollars per ton) Ministry of Finance, Japan: Trade Statistics of Japan, IMF
NU-JEP1	Nuclear: Nuclear Power Generation (terawatt-hours)
Source;	Agency of Natural Resources and Energy (ANRE), Japan "General Energy Statistics"
NU-JEP2	Operation Results of Nuclear Power Generation in Japan (terawatt-hours)
Source;	Japan Atomic Industrial Forum Inc. (JAIF)
U-JIM1	Import of Uranium/Thorium in Japan (metric tons)
Source;	Ministry of Finance, Japan: Trade Statistics of Japan
U-JIM2	Import of Natural Uranium in Japan, by country (metric tons)
Source;	Ministry of Finance, Japan: Trade Statistics of Japan
U-JIM3	Import of Enriched Uranium, Plutonium in Japan, by country (metric tons)
Source;	Ministry of Finance, Japan: Trade Statistics of Japan
NU-JIM5	Import of Nuclear Fuel Elements for Nuclear Reactors, Cartridge-type unused, in Japan, by country (metric tons)
Source;	Ministry of Finance, Japan: Trade Statistics of Japan
U-JEX1	Export of Uranium/Thorium in Japan (metric tons)
Source;	Ministry of Finance, Japan: Trade Statistics of Japan
NU-JEX5	Export of Used Nuclear Fuel Elements for Nuclear Reactors, Cartridge-type, in Japan, by country (kilograms)
Source;	Ministry of Finance, Japan: Trade Statistics of Japan

U-D1	Typical Natural Uranium Concentrations (ppm-U)
Source;	World Nuclear Association "Uranium Resources - Supply of Uranium"
NU-D2	* Current Status of Nuclear Power Generation in the world
Source;	Agency of Natural Resources and Energy (ANRE), Japan "Energy White Paper 2022"
NU-D3	* World Nuclear Power Plants with Long-term Operation
Source;	Japan Atomic Industrial Forum Inc. (JAIF)
NU-D4	* Current Status of Nuclear Power Plants in Japan
Source;	Japan Atomic Industrial Forum Inc. (JAIF)
NU-D5	* Current Situation of High Level Radioactive Waste Disposal
Source;	Agency of Natural Resources and Energy (ANRE), Japan "Energy White Paper 2022"
NU-D6	* Spent Nuclear Fuel Storage in Japan
Source;	The Federation of Electric Power Companies of Japan (FEPC)
NU-D7	$^{m *}$ Japan's Export Record of Nuclear Reactors and Isotope Separation Equipment
Source;	Ministry of Finance, Japan: Trade Statistics of Japan
<u>2-05. Hydrop</u>	power
HP-EP1	 Hydroelectricity: Power Generation (terawatt-hours)
Source;	BP "Statistical Review of World Energy 2022"
HP-EP1U	Hydroelectricity: Power Generation (thousand tonnes of oil equivalent)
Source;	BP "Statistical Review of World Energy 2022"
HP-EP1U2	Hydroelectricity: Power Generation (exajoules)
Source;	BP "Statistical Review of World Energy 2022"
HP-EP8	Renewable Hydropower Electricity Generation, by country (gigawatt-hours)
Source;	International Renewable Energy Agency Data & Statistics
HP-EP9	Pumped Storage Electricity Generation, by country (gigawatt-hours)
Source;	International Renewable Energy Agency Data & Statistics
HP-CP7	Installed Hydropower Electricity Capacity, by country (gigawatts)
Source;	International Renewable Energy Agency Data & Statistics
HP-CP8	Installed Renewable Hydropower Electricity Capacity, by country (megawatts)
Source;	International Renewable Energy Agency Data & Statistics
HP-CP9	Installed Pumped-Storage Hydroelectricity Capacity, by country (megawatts)
Source;	International Renewable Energy Agency Data & Statistics
HP-P5	Global Levelised Cost of Electricity from Hydropower Generation (dollars per kilowatt-hour)
Source;	International Renewable Energy Agency "Renewable Power Generation Costs"
HP-P8	Large and Small Hydropower Project LCOE Weighted Averages, by country/region 2010-2021 (dollars per kWh)
Source;	International Renewable Energy Agency "Renewable Power Generation Costs"
HP-PJ6	Purchase Price of Hydropower Electricity under the FIT Scheme for Renewable Energy, by fiscal year (yens per kWh)
Source;	Agency of Natural Resources and Energy (ANRE), Japan
HP-PJ7	Average Purchase Prices of FIT-based Electricity by Hydropower (yens per kilowatt-hour)
Source;	Agency of Natural Resources and Energy (ANRE), Japan
HP-JEP1	Domestic Hydroelectric Power Generation in Japan, by fiscal year (gigawatt-hours) Agency of Natural Resources and Energy (ANRE), Japan "Energy White Paper"
Source; HP-JD1	Energy Balance of Hydraulic Power Generation in Japan, by fiscal year (terawatt-hours)
Source;	Agency of Natural Resources and Energy (ANRE), Japan "General Energy Statistics"
HP-JD1U	Energy Balance of Hydraulic Power Generation in Japan, by fiscal year (petajoules)
Source;	Agency of Natural Resources and Energy (ANRE), Japan "General Energy Statistics"
HP-JD2	Energy Balance of Pumped Storage in Japan, by fiscal year (terawatt-hours)
Source;	Agency of Natural Resources and Energy (ANRE), Japan "General Energy Statistics"
HP-JD2U	Energy Balance of Pumped Storage in Japan, by fiscal year (petajoules)
Source;	Agency of Natural Resources and Energy (ANRE), Japan "General Energy Statistics"
HP-JD6	Status of Installed Middle- or Small-Scale Hydropower under the FIT Scheme for Renewable Energy, by fiscal year
	(kilowatts)
Source;	Agency of Natural Resources and Energy (ANRE), Japan
HP-JD7	Domestic Electricity Generation by Middle- or Small-Scale Hydropower under the FIT Scheme in Japan (gigawatt-hours)
Source;	Agency of Natural Resources and Energy (ANRE), Japan
HP-JD8	Domestic Hydroelectric Power Generation Capacity in Japan, by fiscal year (thousand kilowatts)
Source;	Agency of Natural Resources and Energy (ANRE), Japan "Energy White Paper"
HP-D1	* World Major Hydroelectric Power Plants (megawatts)
Source;	Power Technology "World's biggest hydroelectric power plants"

HP-D2	* Potential Water Resources for Hydropower in Japan, by capacity
Source;	Agency of Natural Resources and Energy (ANRE), Japan
HP-D3	* Major Hydroelectric Power Plants (Capacity: > 150 MW) in Japan (kilowatts)
Source;	The Federation of Electric Power Companies of Japan (FEPC)
HP-D4	<ul> <li>* Outline of Typical Small-scale Hydropower Developable Sites</li> </ul>
Source;	J-WatER (Ed.) 2006 "小水力エネルギー読本 (in Japanese)", Tokyo: Ohmsha
	* Potential for Introducing Small-Scale Hydro Resources in Japan
Source;	Ministry of the Environment Government of Japan: Renewable Energy Potential System (REPOS)
<u>2-06. Solar E</u>	
<u>2-06. Solar El</u> PV-RP2	World Polysilicon Production for Solar Cells, Estimated (tonnes)
Source;	International Energy Agency "Trends in Photovoltaic Applications"
PV-RP3	Actual PV Module Production and Production Capacities (megawatts)
Source;	International Energy Agency "Trends in Photovoltaic Applications"
SO-EP1	Renewables: Generation-Solar (terawatt-hours)
Source;	BP "Statistical Review of World Energy 2022"
SO-EP1U	Renewables: Generation-Solar (thousand tonnes of oil equivalent)
Source;	BP "Statistical Review of World Energy 2022"
SO-EP1U2	Renewables: Generation-Solar (exajoules)
Source;	BP "Statistical Review of World Energy 2022"
PV-EP8	Solar-Photovoltaic Electricity Generation, by country (gigawatt-hours)
Source;	International Renewable Energy Agency Data & Statistics
SO-EP9	Concentrated Solar Power (CSP) Electricity Generation by country (gigawatt-hours)
Source; <b>PV-CP5</b>	International Renewable Energy Agency Data & Statistics Annual Installed Photovoltaic Capacity in Selected Countries (megawatts)
Source;	International Energy Agency "Trends in Photovoltaic Applications"
PV-CP8	Installed Solar-Photovoltaic Capacity, by country (megawatts)
Source;	International Renewable Energy Agency Data & Statistics
SO-CP9	Installed Concentrated Solar Power (CSP) Capacity, by country (megawatts)
Source;	International Renewable Energy Agency Data & Statistics
PV-C6	Consumption Unit of Polysilicon for Crystalline Silicon Solar Cells Manufacturing, estimated (grams per watt)
Source;	International Energy Agency "Trends in Photovoltaic Applications"
SO-G1	Global Energy Balance of Solar Thermal Energy (petajoules)
Source;	International Energy Agency Data and Statistics
PV-P3	Prices of Polysilicon for Crystalline Silicon Solar Cells (dollars per kilogram) International Energy Agency "Trends in Photovoltaic Applications", Bernreuter Research
Source; <b>PV-P5</b>	Global Levelised Cost of Electricity from Solar-Photovoltaic (dollars per kilowatt-hour)
Source;	International Renewable Energy Agency "Renewable Power Generation Costs"
PV-P6	Utility-scale Solar PV Weighted Average Cost of Electricity in Selected Country (dollars per kilowatt-hour)
Source;	International Renewable Energy Agency "Renewable Power Generation Costs"
PV-P7	Residential and Commercial Sector Solar PV Levelised Cost of Electricity, by country or state (dollars per kWh)
Source;	International Renewable Energy Agency "Renewable Power Generation Costs"
SO-P8	Global Levelised Cost of Electricity from Concentrated Solar Power (dollars per kilowatt-hour)
Source;	International Renewable Energy Agency "Renewable Power Generation Costs"
PV-PJ6	Purchase Price of Hydropower Electricity under the FIT Scheme for Renewable Energy, by fiscal year (yens per kWh)
Source;	Agency of Natural Resources and Energy (ANRE), Japan
PV-PJ7	Average Purchase Prices of FIT-based Electricity by Photovoltaic (yens per kilowatt-hour)
Source; <b>PV-JEP1</b>	Agency of Natural Resources and Energy (ANRE), Japan
Source;	Photovoltaic Electricity Power Generation in Japan (gigawatt-hours) Agency of Natural Resources and Energy (ANRE), Japan
PV-JD1	Energy Balance of Photovoltaic in Japan, by fiscal year (terawatt-hours)
Source;	Agency of Natural Resources and Energy (ANRE), Japan "General Energy Statistics"
PV-JD1U	Energy Balance of Photovoltaic in Japan, by fiscal year (petajoules)
Source;	Agency of Natural Resources and Energy (ANRE), Japan "General Energy Statistics"
SO-JD2	Energy Balance of Solar Heat Use in Japan, by fiscal year (petajoules)
Source;	Agency of Natural Resources and Energy (ANRE), Japan "General Energy Statistics"
PV-JD6	Status of Installed Photovoltaic under the FIT Scheme for Renewable Energy, by fiscal year (gigawatts)
Source;	Agency of Natural Resources and Energy (ANRE), Japan

PV-JD7	Domestic Electricity Generation by Photovoltaic under the FIT Scheme in Japan (gigawatt-hours)	
Source;	Agency of Natural Resources and Energy (ANRE), Japan	
PV-JD8	Domestic Photovoltaic Power Generation Capacity in Japan, by fiscal year (megawatts)	
Source;	Agency of Natural Resources and Energy (ANRE), Japan	
PV-JD10F	Shipments of Photovoltaic Modules in Japan, by fiscal year (megawatts)	
Source;	Japan Photovoltaic Electricity Association (JPEA)	
PV-D1	* PV System Value Chain (Ex. Crystalline Si PV Technology)	
Source;	New Energy and Industrial Technology Development Organization (NEDO)	
PV-D2	<ul> <li>Polysilicon Production Capacities of Major Manufactures (metric tons)</li> </ul>	
Source;	Bernreuter Research	
PV-D3	* Global manufacturers in terms of PV Cell / Module Production (gigawatts)	
Source;	International Energy Agency "Trends in Photovoltaic Applications in 2022"	
PV-D4	Indicative Module Prices in Selected Reporting Countries (US dollars per watt)	
Source;	International Energy Agency "Trends in Photovoltaic Applications in 2020"	
PV-D5	* Potential for Introducing Solar-Photovoltaic Resources in Japan	
Source;	Ministry of the Environment Government of Japan: Renewable Energy Potential System (REPOS)	
SO-D6	* Potential for Introducing Solar-Thermal Energy Resources in Japan (terajoules per year)	
Source;	Ministry of the Environment Government of Japan: Renewable Energy Potential System (REPOS)	

# 2-07. Geothermal Energy

GE-EP1	Renewables: Generation- Geothermal, Biomass and Other (terawatt-hours)	
Source;	BP "Statistical Review of World Energy 2022"	
GE-EP1U	Renewables: Generation- Geothermal, Biomass and Other (million tonnes of oil equivalent)	
Source;	BP "Statistical Review of World Energy 2022"	
GE-EP1U2	Renewables: Generation- Geothermal, Biomass and Other (exajoules)	
Source;	BP "Statistical Review of World Energy 2022"	
GE-EP8	Geothermal Energy Electricity Generation, by country (gigawatt-hours)	
Source;	International Renewable Energy Agency Data & Statistics, United Nation Data Statistics	
GE-CP8	Installed Geothermal Power Capacity, by country (megawatts)	
Source;	International Renewable Energy Agency Data & Statistics	
GE-G1	Global Energy Balance of Geothermal Energy (petajoules)	
Source;	International Energy Agency Data and Statistics	
GE-G8	Summary of the Various Categories of Direct Use Worldwide for 1995-2020 (megawatts)	
Source;	J.W.Lund et al. "Direct Utilization of Geothermal Energy 2020 Worldwide Review"	
GE-P5	Global Levelised Cost of Electricity from Geothermal (dollars per kilowatt-hour)	
Source;	International Renewable Energy Agency "Renewable Power Generation Costs"	
GE-PJ6	Purchase Price of Geothermal Electricity under the FIT Scheme for Renewable Energy, by fiscal year (yens per kWh)	
Source;	Agency of Natural Resources and Energy (ANRE), Japan	
GE-PJ7	Average Purchase Prices of FIT-based Electricity by Geothermal (yens per kilowatt-hour)	
Source;	Agency of Natural Resources and Energy (ANRE), Japan	
GE-JD1	Energy Balance of Geothermal Power Generation in Japan, by fiscal year (terawatt-hours)	
Source;	Agency of Natural Resources and Energy (ANRE), Japan "General Energy Statistics"	
GE-JD1U	Energy Balance of Geothermal Power Generation in Japan, by fiscal year (petajoules)	
Source;	Agency of Natural Resources and Energy (ANRE), Japan "General Energy Statistics"	
GE-JD3	Geothermal Energy Balance in Japan (terajoules)	
Source;	International Energy Agency Data and Statistics	
GE-JD6	Status of Installed Geothermal Power under the FIT Scheme for Renewable Energy, by fiscal year (megawatts)	
Source;	Agency of Natural Resources and Energy (ANRE), Japan	
GE-JD7	Domestic Electricity Generation by Geothermal Power under the FIT Scheme in Japan (gigawatt-hours)	
Source;	Agency of Natural Resources and Energy (ANRE), Japan	
GE-JD9	Approved Output of Geothermal Power Plants in Japan, by fiscal year (megawatts)	
Source;	Agency of Natural Resources and Energy (ANRE), Japan	
GE-D1	* Potential for Introducing Geothermal Resources in Japan	
Source;	Ministry of the Environment Government of Japan: Renewable Energy Potential System (REPOS)	
GE-D2	* Potential for Introducing Geothermal Heat Pumps in Japan (petajoules per year)	
Source;	Ministry of the Environment Government of Japan: Renewable Energy Potential System (REPOS)	
GE-D3	* Large-Scale Geothermal Power Plants in Japan (kilowatts)	
Source;	Geothermal Research Society of Japan; Japan Geothermal Association (JGA)	

### 2-08. Wind Energy

WD-EP1	Renewables: Generation- Wind (terawatt-hours)	
Source;	BP "Statistical Review of World Energy 2022"	
WD-EP1U	Renewables: Generation- Wind (thousand tonnes of oil equivalent)	
Source;	BP "Statistical Review of World Energy 2022"	
WD-EP1U2	Renewables: Generation- Wind (exajoules)	
Source;	BP "Statistical Review of World Energy 2022"	
WD-EP7	Wind Energy Electricity Generation, by country (gigawatt-hours)	
Source;	International Renewable Energy Agency Data & Statistics, United Nation Data Statistics	
WD-EP8	Onshore Wind Energy Electricity Generation, by country (gigawatt-hours)	
Source;	International Renewable Energy Agency Data & Statistics, United Nation Data Statistics	
WD-EP9	Offshore Wind Energy Electricity Generation by country (gigawatt-hours)	
Source;	International Renewable Energy Agency Data & Statistics	
WD-CP1	Installed Wind Turbine Capacity (megawatts)	
Source;	BP "Statistical Review of World Energy 2022"	
WD-CP8	Installed Onshore Wind Power Capacity, by country (megawatts)	
Source;	International Renewable Energy Agency Data & Statistics	
WD-CP9	Installed Offshore Wind Power Capacity, by country (megawatts)	
Source;	International Renewable Energy Agency Data & Statistics	
WD-P5	Global Levelised Cost of Electricity from Wind Energy (dollars per kilowatt-hour)	
Source;	International Renewable Energy Agency "Renewable Power Generation Costs"	
WD-P7	The Weighted Average LCOE of Commissioned Onshore Wind Projects	
Source;	International Renewable Energy Agency "Renewable Power Generation Costs"	
WD-P8	Weighted Average LCOE of Offshore Wind in European and Asian Countries (dollars per kilowatt-hour)	
Source;	International Renewable Energy Agency "Renewable Power Generation Costs"	
WD-PJ6	Purchase Price of Wind Power Electricity under the FIT Scheme for Renewable Energy, by fiscal year (yens per kWh)	
Source;	Agency of Natural Resources and Energy (ANRE), Japan	
WD-PJ7	Average Purchase Prices of FIT-based Electricity by Wind Power (yens per kilowatt-hour)	
Source;	Agency of Natural Resources and Energy (ANRE), Japan	
WD-JEP1	Wind Electricity Power Generation in Japan (gigawatt-hours)	
Source;	Agency of Natural Resources and Energy (ANRE), Japan	
WD-JD1	Energy Balance of Wind Power Generation in Japan, by fiscal year (terawatt-hours)	
Source;	Agency of Natural Resources and Energy (ANRE), Japan "General Energy Statistics"	
WD-JD1U	Energy Balance of Wind Power Generation in Japan, by fiscal year (petajoules)	
Source;	Agency of Natural Resources and Energy (ANRE), Japan "General Energy Statistics"	
WD-JD6	Status of Installed Wind Power under the FIT Scheme for Renewable Energy, by fiscal year (megawatts)	
Source;	Agency of Natural Resources and Energy (ANRE), Japan	
WD-JD7	Domestic Electricity Generation by Wind Power under the FIT Scheme in Japan (gigawatt-hours)	
Source;	Agency of Natural Resources and Energy (ANRE), Japan	
WD-JD8	Domestic Wind Power Generation Capacity in Japan, by fiscal year (megawatts)	
Source;	Agency of Natural Resources and Energy (ANRE), Japan	
WD-D1	* Potential for Introducing Wind Power Energy Resources in Japan	
Source;	Ministry of the Environment Government of Japan: Renewable Energy Potential System (REPOS)	

# 2-09. Bio Energy

BE-FP1	Renewable energy - Biofuels Production (thousand tonnes of oil equivalent)
Source;	BP "Statistical Review of World Energy 2022"
BE-FP1U	Renewable energy - Biofuels Production (petajoules)
Source;	BP "Statistical Review of World Energy 2022"
BE-FP1U2	Renewable energy - Biofuels Production, by type (petajoules)
Source;	BP "Statistical Review of World Energy 2022"
BE-EP7	Renewable Bioenergy: Electricity Generation, by country (gigawatt-hours)
Source;	International Renewable Energy Agency Data & Statistics
BE-EP8	Solid Biofuel Electricity Generation, by country (gigawatt-hours)
Source;	International Renewable Energy Agency Data & Statistics
BE-EP9	Liquid Biofuel Electricity Generation, by country (gigawatt-hours)
Source;	International Renewable Energy Agency Data & Statistics
BE-EP10	Biogas Electricity Generation by country (gigawatt-hours)
Source;	International Renewable Energy Agency Data & Statistics

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BE-CP7
                 Installed Renewable Bioenergy Electricity Capacity, by country (megawatts)
      Source:
                    International Renewable Energy Agency Data & Statistics
BE-CP8
                 Installed Renewable Solid Biofuel Electricity Capacity, by country (megawatts)
      Source;
                   International Renewable Energy Agency Data & Statistics
BE-CP9
                 Installed Renewable Liquid Biofuel Electricity Capacity, by country (megawatts)
                   International Renewable Energy Agency Data & Statistics
      Source:
BE-CP10
                 Installed Biogas Power Generation Capacity, by country (megawatts)
                   International Renewable Energy Agency Data & Statistics
      Source;
BE-C1
                 Renewable energy - Biofuels Consumption (thousand tonnes of oil equivalent)
      Source;
                    BP "Statistical Review of World Energy 2022"
BE-C1U
                 Renewable energy - Biofuels Consumption (petajoules)
                    BP "Statistical Review of World Energy 2022"
      Source;
BE-G1
                 Global Energy Balance of Biomass
                   International Energy Agency Data and Statistics
      Source;
BE-P5
                 Global Levelised Cost of Electricity from Bio Energy (dollars per kilowatt-hour)
                   International Renewable Energy Agency "Renewable Power Generation Costs"
      Source:
BE-PJ3
                 Import and Export Prices of Biofuel in Japan(dollars per ton)
      Source:
                   Ministry of Finance, Japan: Trade Statistics of Japan
BE-PJ6
                 Purchase Price of Biomass Power Electricity under the FIT Scheme for Renewable Energy, by fiscal year (yens per kWh)
                    Agency of Natural Resources and Energy (ANRE), Japan
      Source:
BE-PJ7
                 Average Purchase Prices of FIT-based Electricity by Biomass(yens per kilowatt-hour)
      Source;
                   Agency of Natural Resources and Energy (ANRE), Japan
BE-JEP1
                 Biomass Electricity Generation in Japan (gigawatt-hours)
      Source:
                    Agency of Natural Resources and Energy (ANRE), Japan
BE-JD1
                 Energy Balance of Biomass Energy in Japan, by fiscal year (petajoules)
                   Agency of Natural Resources and Energy (ANRE), Japan "General Energy Statistics"
      Source:
BE-JD2
                 Domestic Supply of Liquid Biofuel in Japan, by fiscal year (thousand kilolitres)
      Source;
                    Agency of Natural Resources and Energy (ANRE), Japan "General Energy Statistics"
BE-JD6
                 Status of Installed Biomass Power under the FIT Scheme for Renewable Energy, by fiscal year (megawatts)
      Source;
                   Agency of Natural Resources and Energy (ANRE), Japan
BE-JD7
                 Domestic Electricity Generation by Biomass under the FIT Scheme in Japan (gigawatt-hours)
                   Agency of Natural Resources and Energy (ANRE), Japan
      Source:
BE-JD8
                 Domestic Use of Wood Biomass Fuels in Japan (thousand tons, or thousand absolute dry tons)
                   Ministry of Agriculture, Forestry and Fisheries (MAFF), Japan
      Source:
BE-JIM2
                 Import of Pellet Fuel to Japan, by country (thousand metric tons)
                    Ministry of Finance, Japan: Trade Statistics of Japan
      Source:
BE-JIM3
                 Import of Palm Kernel Shell to Japan, by country (thousand metric tons)
                    Ministry of Finance, Japan: Trade Statistics of Japan
      Source:
BE-JIM4
                 Imports of Raw Materials for Bioethanol in Japan (thousand kilolitres)
      Source;
                   Ministry of Finance, Japan: Trade Statistics of Japan
BE-JIM4U
                 Imports of Bio-ETBE in Japan (thousand tonnes)
      Source:
                    Ministry of Finance, Japan: Trade Statistics of Japan
BE-JIM5
                 Import of Biodiesel in Japan (tonnes)
                   Ministry of Finance, Japan: Trade Statistics of Japan
      Source:
BE-JIM6
                 Import of Bagasse and Sugar Beet Pulp etc. in Japan (thousand metric tons)
      Source;
                    Ministry of Finance, Japan: Trade Statistics of Japan
BE-JEX5
                 Export of Biodiesel in Japan (tonnes)
      Source;
                    Ministry of Finance, Japan: Trade Statistics of Japan
               * Classification and Usage Form of Biomass Resources
BE-D2
                    New Energy and Industrial Technology Development Organization (NEDO)
      Source;
BE-D3
               * Biomass Resource Use in Japan, by type (million tons of carbon equivalent)
                    Ministry of Agriculture, Forestry and Fisheries (MAFF), Japan
      Source:
2-10. Other Sources (Waste, Marine, etc.)
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#### 1) Wastes

OT_WS-FP5	Gross Heat Production from Wastes (terajoules)
Source;	International Energy Agency Data and Statistics
OT_WS-EP5	Gross Electricity Generation from wastes (gigawatt-hours)
Source;	International Energy Agency Data and Statistics

OT_WS-EP8(3)	Renewable Municipal Waste Electricity Generation, by country (gigawatt-hours)	
Source;	International Renewable Energy Agency Data & Statistics	
OT_WS-CP8(3)	Renewable Municipal Waste Electricity Capacity, by country (megawatts)	
Source;	International Renewable Energy Agency Data & Statistics	
OT_WS-G1	Global Energy Balance of Waste (terajoules)	
Source;	International Energy Agency Data and Statistics	
OT_WS-JEP1	Waste Electricity Generation in Japan (gigawatt-hours)	
Source;	Agency of Natural Resources and Energy (ANRE), Japan	
OT_WS-JD1	Energy Balance of Effective Recovery Use of Wasted Energy in Japan, by fiscal year (petajoules)	
Source;	Agency of Natural Resources and Energy (ANRE), Japan "General Energy Statistics"	
OT_WS-JD3	Energy Balance of Municipal Waste in Japan (terajoules)	
Source;	International Energy Agency Data and Statistics	
OT_WS-JD4	Energy Balance of Industrial Waste in Japan (terajoules)	
Source;	International Energy Agency Data and Statistics	
OT_WS-D1	<ul> <li>Classification of Municipal and Industrial Waste</li> </ul>	
Source;	Ministry of Environment (MoE), Japan	
2) Marine ener	Sy .	
OT_MA-EP6	Gross Electricity Generation from Tidal, Wave, Ocean (gigawatt-hours)	
Source;	International Energy Agency Data and Statistics	
OT_MA-EP9	Marine Energy Electricity Generation, by country (megawatt-hours)	
Source;	International Renewable Energy Agency Data & Statistics	
OT_MA-CP9	Marine Energy Electricity Generation (on-grid type), by country (kilowatts)	
Source;	International Renewable Energy Agency Data & Statistics	

\* These tables and figures are described in Japanese only. All remarks in tables and figures are described in Japanese.