

# Japan - Energy System Overview

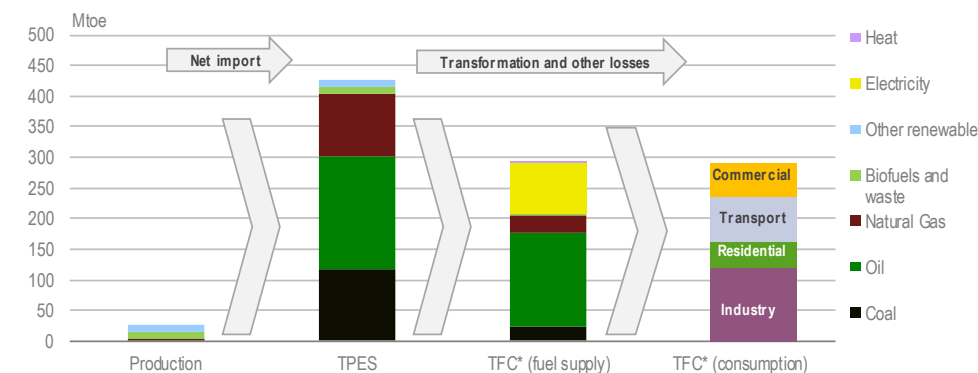
## General information

Japan		
Country size	377 000 km <sup>2</sup>	8th compared to IEA countries
Population (2015)	126.981 million	11.2% of IEA population
GDP (2015)	4462.319 billion USD 2010 prices and PPPs	

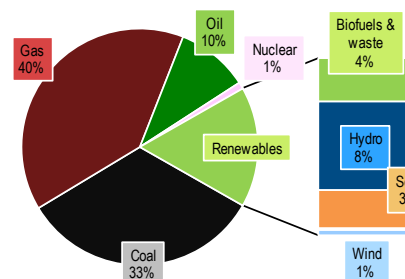
## Energy system transformation

### SUPPLY AND DEMAND 2015

TPES: 429.8 Mtoe, 6% renewables (IEA average 10%)



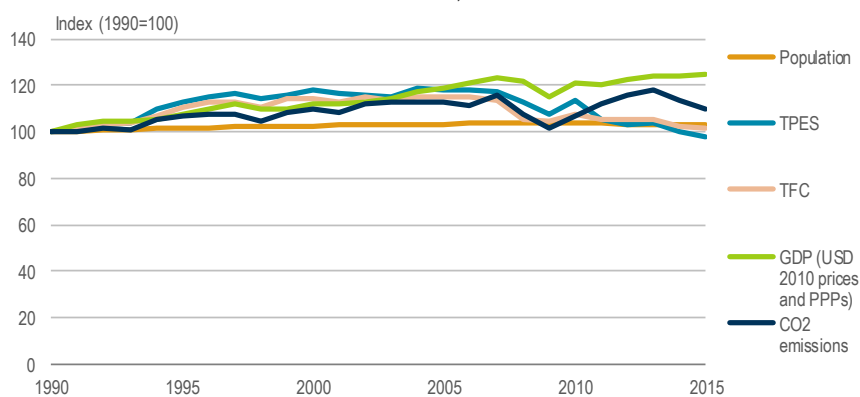
Electricity generation: 1035.3 TWh  
16% renewables (IEA average: 24%)



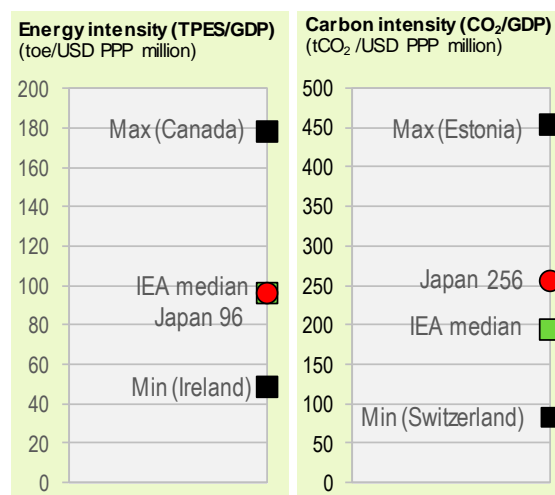
### Fuel shares compared to IEA average

Fuel	TPES	IEA average	Ranking in IEA	Electricity	IEA average	Ranking in IEA
Coal	27%	18%	6	33%	30%	10
Oil	43%	36%	5	10%	2%	2
Gas	23%	26%	12	40%	25%	4
Hydro	2%	2%	15	8%	13%	15
Nuclear	1%	10%	16	1%	19%	16
Biofuels	3%	6%	27	4%	3%	18
Wind	0%	1%	26	0%	5%	26
Geothermal	1%	1%	6	0%	0%	6
Solar	1%	0%	6	3%	2%	7

### KEY ENERGY INDICATOR DEVELOPMENT, 1990-2015



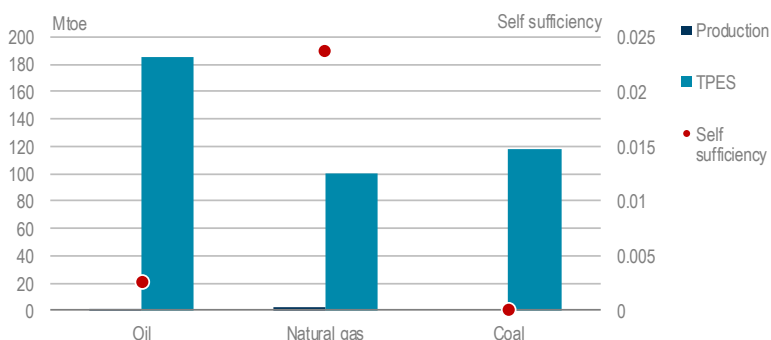
### INTENSITY



	Japan	IEA average
TPES/Capita (Mtoe/Million)	3.39	4.44
Electricity consumption/Capita (MWh/capita)	7.86	8.71
CO2 emission/Capita (tCO <sub>2</sub> )	8.99	9.88

## Energy security

### PRODUCTION AND SELF SUFFICIENCY 2015



FUEL	NET IMPORTS*	IMPORT/EXPORT COUNTRY
Crude Oil	165 Mt (import dependency: 99.7%)	Saudi Arabia (34.1%) United Arab Emirates (25.5%)
Oil Products	25.2 Mt	United States (17.5%) Korea (14.1%)
Natural gas	114.7 bcm (import dependency: 97.6%)	Australia (22.9%) Malaysia (18.7%)
Coal	189.6 Mt (import dependency: 100%)	Australia (66%) Indonesia (16.9%)
<b>ELECTRICITY</b>		
Imports	0 TWh	-
Exports	0 TWh	-

\*negative numbers mean net exports

Source: IEA energy balances 2017