

Poland - Energy System Overview



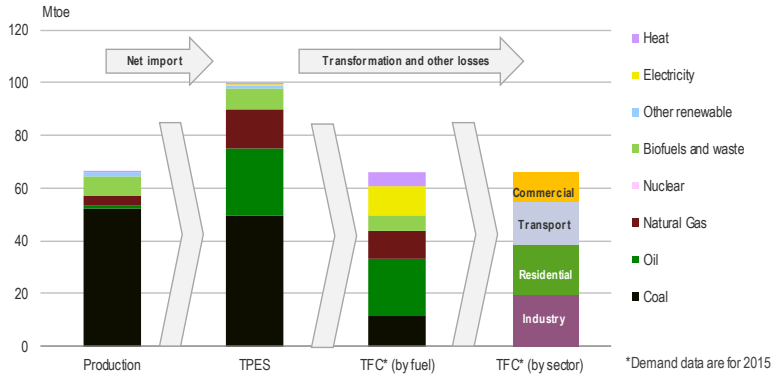
General information

Poland		
Country size	313 000 km ²	10th compared to IEA countries
Population (2016)	38.4 million	3.3% of IEA population
GDP (2016)	956 billion USD 2010 prices and PPPs	* PPP = Purchasing Power Parities

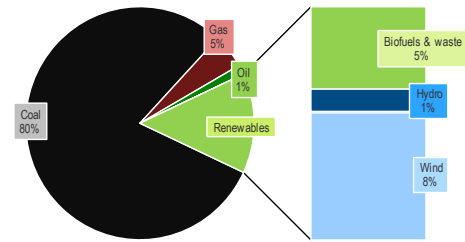
Energy system transformation

SUPPLY AND DEMAND 2016

TPES: 99.2 Mtoe, 9% renewables (IEA average 10%)



ELECTRICITY GENERATION: 166.2 TWh
14% renewables (IEA average: 24%)

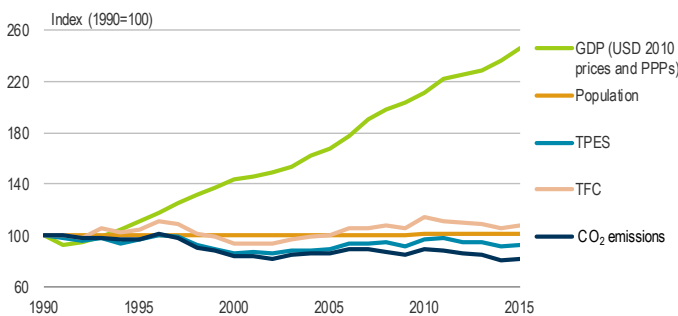


Fuel shares compared to IEA average

Fuel	TPES (%)	IEA average* (%)	IEA range (%)	Electricity (%)	IEA average (%)	IEA range (%)
Coal	50	17	0-69	80	28	0-84
Oil	26	36	7-58	1	2	0-10
Gas	15	27	2-40	5	27	1-51
Hydro	0	2	0-43	1	13	0-96
Nuclear	0	10	0-44	0	19	0-73
Biofuels	8	6	2-27	5	3	0-26
Wind	1	1	0-7	8	6	0-42
Geothermal	0	1	0-23	0	0	0-18
Solar	0	1	0-3	0	2	0-13

* IEA Average - total supply per fuel / TPES for 29 IEA countries

KEY ENERGY INDICATOR DEVELOPMENT, 1990-2015



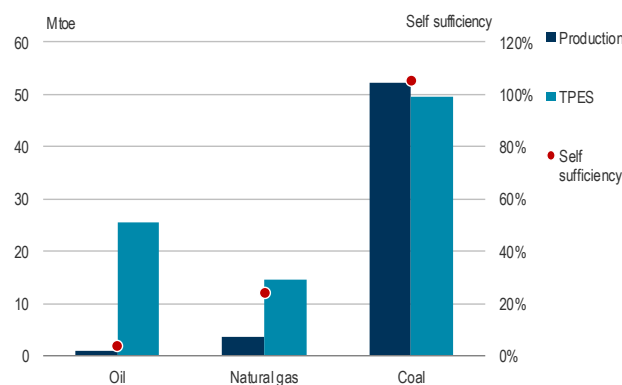
ENERGY AND CARBON INTENSITY (2016)

	Poland	IEA average
TPES per capita (toe/cap)	2.58	4.42
Electricity consumption per capita (MWh/cap)	4.11	8.69
Emissions* per capita (tCO ₂ /cap)	7.34	9.88
Energy intensity (TPES) (Mtoe/USD PPP million)	104	96
Emission* intensity (tCO ₂ /USD PPP million)	303	193

* CO₂ emissions from fuel combustion (2015 data)

Energy Security

PRODUCTION AND SELF SUFFICIENCY, 2016



ENERGY IMPORT/EXPORT

FUEL	QUANTITY	IMPORT/EXPORT COUNTRY
Crude Oil		
Imports	24.8 Mt	Russian Federation (83.7%)
Exports	0.2 Mt	Germany (100%)
Oil Products		
Imports	7.2 Mt	Russian Federation (37.3%)
Exports	7.2 Mt	Netherlands (36.5%)
Natural gas		
Imports	14.7 bcm	Russian Federation (74.3%)
Exports	0.9 bcm	Ukraine (100%)
Coal		
Imports	8.6 Mt	Russia (60.6%)
Exports	9.3 Mt	Czech Republic (32.4%)
ELECTRICITY		
Imports	14.5 TWh	Germany (73.7%)
Exports	14.8 TWh	Czech Republic (66%)

Note: 2016 data are estimated

Source: IEA World Energy Balances 2017