

# Ireland - Energy System Overview



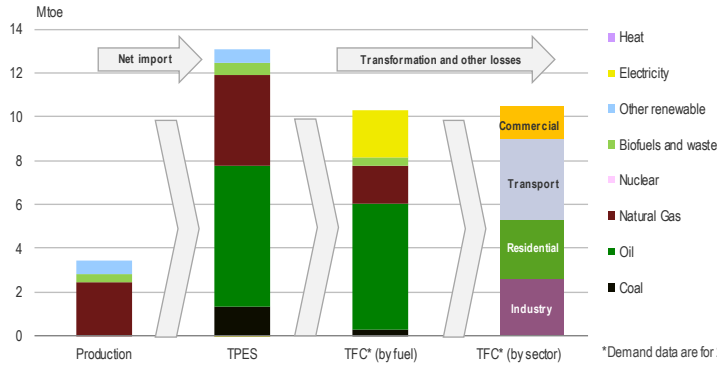
## General information

Ireland		
Country size	69 000 km <sup>2</sup>	22th compared to IEA countries
Population (2016)	4.7 million	0.4% of IEA population
GDP (2016)	284 billion USD 2010 prices and PPPs	* PPP = Purchasing Power Parities

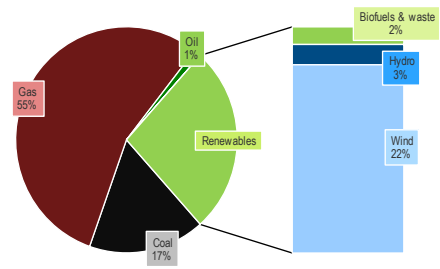
## Energy system transformation

### SUPPLY AND DEMAND 2016

TPES: 13.8 Mtoe, 8% renewables (IEA average 10%)



ELECTRICITY GENERATION: 30.1 TWh  
25% renewables (IEA average: 24%)

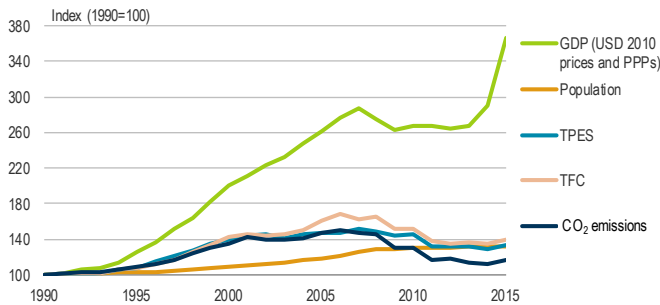


### Fuel shares compared to IEA average

Fuel	TPES (%)	IEA average* (%)	IEA range (%)	Electricity (%)	IEA average (%)	IEA range (%)
Coal	10	17	0-69	16	28	0-84
Oil	47	36	7-58	1	2	0-10
Gas	30	27	2-40	51	27	1-51
Hydro	0	2	0-43	2	13	0-96
Nuclear	0	10	0-44	0	19	0-73
Biofuels	4	6	2-27	2	3	0-26
Wind	4	1	0-7	20	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



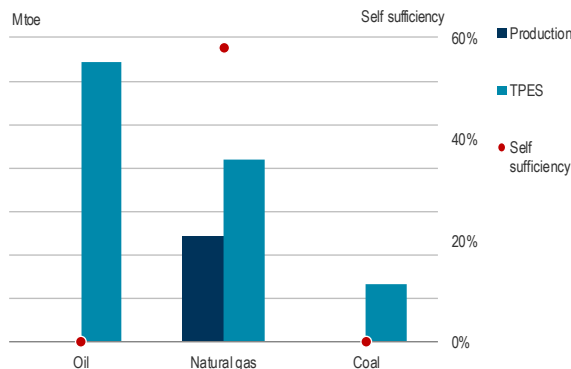
### ENERGY AND CARBON INTENSITY (2016)

	Ireland	IEA average
TPES per capita (toe/cap)	2.94	4.42
Electricity consumption per capita (MWh/cap)	5.90	8.69
Emissions* per capita (tCO <sub>2</sub> /cap)	7.61	9.88
Energy intensity (TPES) (Mtoe/USD PPP million)	48	96
Emission* intensity (tCO <sub>2</sub> / USD PPP million)	131	193

\* CO<sub>2</sub> emissions from fuel combustion (2015 data)

## Energy Security

### PRODUCTION AND SELF SUFFICIENCY, 2016



### ENERGY IMPORT/EXPORT

FUEL	QUANTITY	IMPORT/EXPORT COUNTRY
<b>Crude Oil</b>		
Imports	3.2 Mt	Norway (80.5%)
Exports	0 Mt	-
<b>Oil Products</b>		
Imports	5.6 Mt	United Kingdom (62.9%)
Exports	1.6 Mt	United Kingdom (67.4%)
<b>Natural gas</b>		
Imports	2 bcm	United Kingdom (100%)
Exports	0 bcm	-
<b>Coal</b>		
Imports	1.9 Mt	Non-specified (90%)
Exports	0 Mt	United Kingdom (100%)
<b>ELECTRICITY</b>		
Imports	1.8 TWh	-
Exports	1.1 TWh	-

Note: 2016 data are estimated

Source: IEA World Energy Balances 2017