



**International
Energy Agency**
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Energy Policies of IEA Countries - Poland 2016 Review

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Corrigendum

Please note that despite our best efforts to ensure quality control, errors have slipped into Energy Policies of IEA Countries -Poland 2016 Review

The text in pages 198 to 200 has changed. It should be replaced by the following pages

Energy Policies of IEA Countries

Poland

2016 Review

Energy balances and key statistical data

Unit: Mtoe

SUPPLY	1973	1990	2000	2010	2013	2014	2015
TOTAL PRODUCTION	107.41	103.87	79.24	67.08	70.93	67.34	67.68
Coal	100.73	98.97	71.30	55.38	57.14	54.03	53.87
Peat	-	-	-	-	-	-	-
Oil	0.39	0.18	0.72	0.74	0.98	0.97	0.95
Natural gas	4.87	2.38	3.31	3.69	3.82	3.73	3.68
Biofuels and waste ¹	1.29	2.23	3.73	6.83	8.20	7.68	8.00
Nuclear	-	-	-	-	-	-	-
Hydro	0.13	0.12	0.18	0.25	0.21	0.19	0.16
Wind	-	-	-	0.14	0.52	0.66	0.93
Geothermal	-	-	0.00	0.01	0.02	0.02	0.02
Solar/other ²	-	-	-	0.02	0.05	0.06	0.08
TOTAL NET IMPORTS³	-13.89	0.26	9.02	31.39	25.20	27.17	28.00
Coal Exports	26.98	20.51	17.33	11.01	11.86	10.64	10.59
Coal Imports	0.82	0.40	1.02	8.27	6.45	6.42	5.06
Coal Net imports	-26.17	-20.12	-16.31	-2.74	-5.41	-4.22	-5.53
Oil Exports	1.12	1.48	1.92	3.52	6.93	7.48	8.45
Oil Imports	12.87	15.79	21.74	29.19	28.38	29.23	32.54
Oil Int'l marine and aviation bunkers	-0.71	-0.61	-0.56	-0.72	-0.67	-0.73	-0.83
Oil Net imports	11.04	13.69	19.27	24.95	20.78	21.02	23.25
Natural Gas Exports	-	0.00	0.03	0.04	0.08	0.06	0.05
Natural Gas Imports	1.39	6.77	6.64	8.91	10.27	9.71	9.99
Natural Gas Net imports	1.39	6.77	6.61	8.87	10.19	9.65	9.95
Electricity Exports	0.32	0.99	0.83	0.66	1.06	0.98	1.27
Electricity Imports	0.17	0.90	0.28	0.54	0.67	1.16	1.24
Electricity Net imports	-0.15	-0.09	-0.55	-0.12	-0.39	0.19	-0.03
TOTAL STOCK CHANGES	-0.64	-1.02	0.52	1.96	1.47	-0.47	-0.75
TOTAL SUPPLY (TPES)⁴	92.88	103.11	88.77	100.43	97.61	94.04	94.93
Coal	74.70	78.87	56.30	54.66	53.01	49.31	48.33
Peat	-	-	-	-	-	-	-
Oil	10.68	13.04	19.16	25.40	22.21	21.99	23.32
Natural gas	6.26	8.94	9.96	12.80	13.73	13.40	13.77
Biofuels and waste ¹	1.27	2.23	3.72	7.25	8.25	8.22	8.35
Nuclear	-	-	-	-	-	-	-
Hydro	0.13	0.12	0.18	0.25	0.21	0.19	0.16
Wind	-	-	-	0.14	0.52	0.66	0.93
Geothermal	-	-	0.00	0.01	0.02	0.02	0.02
Solar/other ²	-	-	-	0.02	0.05	0.06	0.08
Electricity trade ⁵	-0.15	-0.09	-0.55	-0.12	-0.39	0.19	-0.03
Shares in TPES (%)							
Coal	80.4	76.5	63.4	54.4	54.3	52.4	50.9
Peat	-	-	-	-	-	-	-
Oil	11.5	12.7	21.6	25.3	22.8	23.4	24.6
Natural gas	6.7	8.7	11.2	12.7	14.1	14.3	14.5
Biofuels and waste ¹	1.4	2.2	4.2	7.2	8.5	8.7	8.8
Nuclear	-	-	-	-	-	-	-
Hydro	0.1	0.1	0.2	0.2	0.2	0.2	0.2
Wind	-	-	-	0.1	0.5	0.7	1.0
Geothermal	-	-	0.0	0.0	0.0	0.0	0.0
Solar/other ²	-	-	-	0.0	0.0	0.1	0.1
Electricity trade ⁵	-0.2	-0.1	-0.6	-0.1	-0.4	0.2	-

0 is negligible, - is nil, .. is not available, x is not applicable. Please note: rounding may cause totals to differ from the sum of the elements.

		Unit: Mtoe						
DEMAND								
FINAL CONSUMPTION		1973	1990	2000	2010	2013	2014	2015
TFC		60.55	61.43	57.77	69.97	66.83	65.24	66.15
Coal		29.02	17.34	13.18	13.81	12.57	11.86	11.31
Peat		-	-	-	-	-	-	-
Oil		8.96	10.94	17.51	23.24	20.80	20.94	21.84
Natural gas		4.42	7.69	8.16	10.54	10.82	10.41	10.61
Biofuels and waste ¹		0.81	1.63	3.60	5.60	6.02	5.75	5.87
Geothermal		-	-	0.00	0.01	0.02	0.02	0.02
Solar/other ²		-	-	-	0.01	0.03	0.04	0.05
Electricity		5.01	8.28	8.43	10.21	10.63	10.78	10.99
Heat		12.33	15.56	6.89	6.55	5.95	5.45	5.46
Shares in TFC (%)								
Coal		47.9	28.2	22.8	19.7	18.8	18.2	17.1
Peat		-	-	-	-	-	-	-
Oil		14.8	17.8	30.3	33.2	31.1	32.1	33.0
Natural gas		7.3	12.5	14.1	15.1	16.2	16.0	16.0
Biofuels and waste ¹		1.3	2.7	6.2	8.0	9.0	8.8	8.9
Geothermal		-	-	-	0.0	0.0	0.0	-
Solar/other ²		-	-	-	0.0	0.0	0.0	0.1
Electricity		8.3	13.5	14.6	14.6	15.9	16.5	16.6
Heat		20.4	25.3	11.9	9.4	8.9	8.3	8.3
TOTAL INDUSTRY⁶		29.46	27.21	21.44	18.55	19.29	19.44	19.63
Coal		10.80	6.75	7.48	3.82	3.83	3.84	3.54
Peat		-	-	-	-	-	-	-
Oil		2.92	3.04	4.27	4.45	3.86	3.85	3.94
Natural gas		4.00	4.43	4.12	4.75	5.17	5.26	5.35
Biofuels and waste ¹		0.17	0.68	0.70	1.30	1.74	1.84	1.89
Geothermal		-	-	-	-	-	-	-
Solar/other ²		-	-	-	-	-	-	-
Electricity		3.28	3.68	3.43	3.57	4.07	4.09	4.26
Heat		8.30	8.64	1.45	0.67	0.63	0.57	0.66
Shares in total industry (%)								
Coal		36.6	24.8	34.9	20.6	19.9	19.8	18.0
Peat		-	-	-	-	-	-	-
Oil		9.9	11.2	19.9	24.0	20.0	19.8	20.1
Natural gas		13.6	16.3	19.2	25.6	26.8	27.0	27.2
Biofuels and waste ¹		0.6	2.5	3.3	7.0	9.0	9.5	9.6
Geothermal		-	-	-	-	-	-	-
Solar/other ²		-	-	-	-	-	-	-
Electricity		11.1	13.5	16.0	19.2	21.1	21.0	21.7
Heat		28.2	31.7	6.8	3.6	3.2	2.9	3.4
TRANSPORT⁴		8.97	7.13	9.51	16.94	15.52	15.64	16.59
OTHER⁷		22.13	27.09	26.81	34.48	32.03	30.15	29.93
Coal		14.57	10.43	5.70	9.99	8.74	8.02	7.78
Peat		-	-	-	-	-	-	-
Oil		1.03	1.41	4.19	3.24	2.81	2.78	2.72
Natural gas		0.42	3.26	3.98	5.57	5.28	4.79	4.90
Biofuels and waste ¹		0.65	0.95	2.90	3.43	3.54	3.20	3.20
Geothermal		-	-	0.00	0.01	0.02	0.02	0.02
Solar/other ²		-	-	-	0.01	0.03	0.04	0.05
Electricity		1.43	4.13	4.60	6.36	6.29	6.43	6.47
Heat		4.03	6.92	5.44	5.88	5.33	4.88	4.80
Shares in other (%)								
Coal		65.8	38.5	21.3	29.0	27.3	26.6	26.0
Peat		-	-	-	-	-	-	-
Oil		4.7	5.2	15.6	9.4	8.8	9.2	9.1
Natural gas		1.9	12.0	14.8	16.2	16.5	15.9	16.4
Biofuels and waste ¹		2.9	3.5	10.8	10.0	11.0	10.6	10.7
Geothermal		-	-	-	0.0	0.0	0.0	0.1
Solar/other ²		-	-	-	-	0.1	0.1	0.2
Electricity		6.5	15.2	17.2	18.4	19.6	21.3	21.6
Heat		18.2	25.6	20.3	17.0	16.6	16.2	16.0

Unit: Mtoe

DEMAND							
ENERGY TRANSFORMATION AND LOSSES	1973	1990	2000	2010	2013	2014	2015
ELECTRICITY GENERATION⁸							
Input (Mtoe)	39.67	55.16	40.79	42.24	42.05	39.98	40.69
Output (Mtoe)	7.22	11.56	12.31	13.51	14.11	13.63	14.13
Output (TWh)	83.91	134.42	143.17	157.09	164.02	158.51	164.34
Output Shares (%)							
Coal	93.9	97.5	96.3	88.1	85.2	83.0	80.9
Peat	-	-	-	-	-	-	-
Oil	2.3	1.2	1.3	1.8	1.1	1.0	1.3
Natural gas	1.7	0.1	0.6	3.1	3.2	3.4	3.9
Biofuels and waste ¹	0.4	0.2	0.2	4.0	5.3	6.3	6.1
Nuclear	-	-	-	-	-	-	-
Hydro	1.7	1.1	1.5	1.9	1.5	1.4	1.1
Wind	-	-	-	1.1	3.7	4.8	6.6
Geothermal	-	-	-	-	-	-	-
Solar/other ²	-	-	-	-	-	-	-
TOTAL LOSSES	28.95	37.77	31.87	30.68	30.58	29.40	29.90
of which:							
Electricity and heat generation ⁹	18.21	25.94	20.34	20.74	20.76	19.80	19.89
Other transformation	4.02	3.95	3.24	1.93	2.41	2.47	2.27
Own use and transmission/distribution losses ¹⁰	6.73	7.88	8.29	8.00	7.41	7.14	7.74
Statistical Differences	3.38	3.91	-0.86	-0.22	0.19	-0.60	-1.12
INDICATORS	1973	1990	2000	2010	2013	2014	2015
GDP (billion 2010 USD)	197.49	226.98	326.66	479.24	517.57	534.56	554.07
Population (millions)	33.37	38.03	38.26	38.52	38.50	38.48	38.52
TPES/GDP (toe/1000 USD) ¹¹	0.47	0.45	0.27	0.21	0.19	0.18	0.17
Energy production/TPES	1.16	1.01	0.89	0.67	0.73	0.72	0.71
Per capita TPES (toe/capita)	2.78	2.71	2.32	2.61	2.54	2.44	2.46
Oil supply/GDP (toe/1000 USD) ¹¹	0.05	0.06	0.06	0.05	0.04	0.04	0.04
TFC/GDP (toe/1000 USD) ¹¹	0.31	0.27	0.18	0.15	0.13	0.12	0.12
Per capita TFC (toe/capita)	1.81	1.62	1.51	1.82	1.74	1.70	1.72
CO ₂ emissions from fuel combustion (MtCO ₂) ¹²	312.8	344.8	289.7	307.6	292.1	279.1	282.4
CO ₂ emissions from bunkers (MtCO ₂) ¹²	2.2	1.9	1.7	2.2	2.0	2.2	2.5
GROWTH RATES (% per year)	73-90	90-00	00-10	10-12	12-13	13-14	14-15
TPES	0.6	-1.5	1.2	-1.4	-0.1	-3.7	0.9
Coal	0.3	-3.3	-0.3	-3.5	4.2	-7.0	-2.0
Peat	-	-	-	-	-	-	-
Oil	1.2	3.9	2.9	-2.1	-8.7	-1.0	6.1
Natural gas	2.1	1.1	2.5	3.4	0.4	-2.4	2.8
Biofuels and waste ¹	3.4	5.3	6.9	7.7	-2.0	-0.4	1.6
Nuclear	-	-	-	-	-	-	-
Hydro	-0.1	4.0	3.3	-16.5	20.0	-10.5	-16.0
Wind	-	-	-	68.9	26.5	27.9	41.5
Geothermal	-	-	15.8	10.9	18.8	5.3	10.0
Solar/other ²	-	-	-	15.5	43.8	39.1	23.4
TFC	0.1	-0.6	1.9	-1.5	-1.5	-2.4	1.4
Electricity consumption	3.0	0.2	1.9	1.5	1.1	1.4	2.0
Energy production	-0.2	-2.7	-1.7	3.1	-0.6	-5.1	0.5
Net oil imports	1.3	3.5	2.6	-2.9	-11.7	1.1	10.6
GDP	0.8	3.7	3.9	3.3	1.3	3.3	3.6
TPES/GDP	-0.2	-5.0	-2.6	-4.5	-1.3	-6.7	-2.6
TFC/GDP	-0.7	-4.2	-1.9	-4.6	-2.8	-5.5	-2.1

Footnotes to energy balances and key statistical data

1. Biofuels and waste comprises solid biofuels, liquid biofuels, biogases, industrial waste and municipal waste. Data are often based on partial surveys and may not be comparable between countries.
2. Other includes tide, wave and ambient heat used in heat pumps.
3. In addition to coal, oil, natural gas and electricity, total net imports also include peat, biofuels and waste and trade of heat.
4. Excludes international marine bunkers and international aviation bunkers.
5. Total supply of electricity represents net trade. A negative number in the share of TPES indicates that exports are greater than imports.
6. Industry includes non-energy use.
7. Other includes residential, commercial and public services, agriculture/forestry, fishing and other non-specified.
8. Inputs to electricity generation include inputs to electricity, CHP and heat plants. Output refers only to electricity generation.
9. Losses arising in the production of electricity and heat at main activity producer utilities and autoproducers. For non-fossil-fuel electricity generation, theoretical losses are shown based on plant efficiencies of approximately 33% for nuclear and solar thermal, 10% for geothermal and 100% for hydro, wind and solar photovoltaic.
10. Data on “losses” for forecast years often include large statistical differences covering differences between expected supply and demand and mostly do not reflect real expectations on transformation gains and losses.
11. Toe per thousand US dollars at 2010 prices and exchange rates.
12. “CO₂ emissions from fuel combustion” have been estimated using the IPCC Tier I Sectoral Approach from the *2006 IPCC Guidelines*. In accordance with the IPCC methodology, emissions from international marine and aviation bunkers are not included in national totals. Projected emissions for oil and gas are derived by calculating the ratio of emissions to energy use for 2013 and applying this factor to forecast energy supply. Projected emissions for coal are based on product-specific supply projections and are calculated using the IPCC/OECD emission factors and methodology.