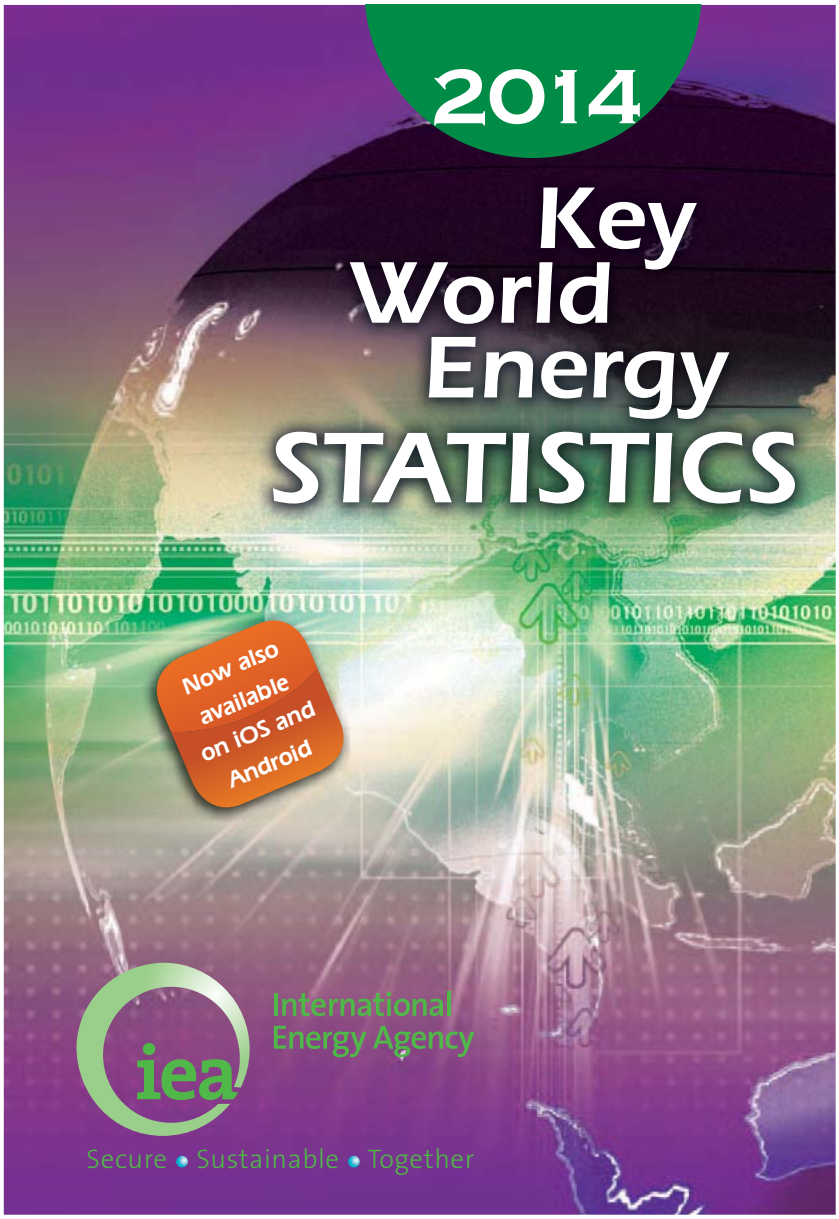
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The International Energy Agency

The IEA, which was established in November 1974, has over the years gained recognition as one of the world's most authoritative sources for energy statistics. Its all-encompassing annual studies of oil, natural gas, coal, electricity and renewables are indispensable tools for energy policy makers, companies involved in the energy field and scholars.

In 1997 the IEA produced a handy, pocket-sized summary of key energy data. This new edition responds to the enormously positive reaction to the books since then. **Key World Energy Statistics** from the IEA contains timely, clearly-presented data on the supply, transformation and consumption of all major energy sources. The interested businessman, journalist or student will have at his or her fingertips the annual Australian production of coal, the electricity production in Japan, the price of diesel oil in Spain and thousands of other useful energy facts.

Gathering and analysing statistics is one of the important IEA functions. But the Agency – an autonomous body within the Organisation for Economic Co-operation and Development – also:

- administers a plan to guard member countries against the risk of a major disruption of oil supplies
- coordinates national efforts to conserve energy and develop alternative energy sources, as well as to limit pollution and energy-related climate change
- disseminates information on the world energy market and seeks to promote stable international trade in energy.

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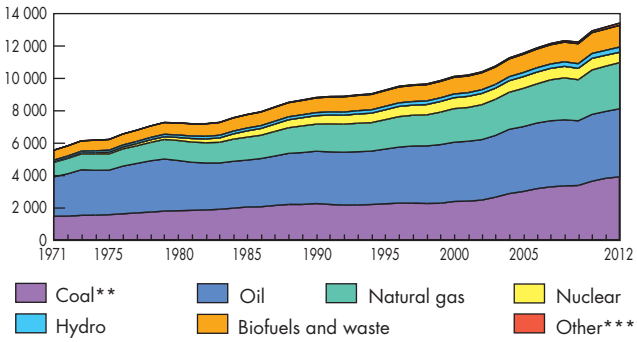
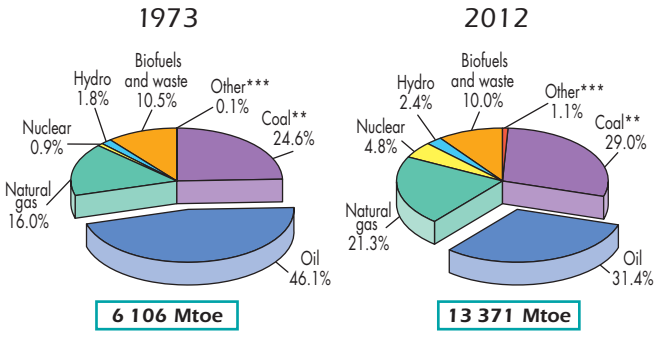
TOTAL PRIMARY ENERGY SUPPLY

World

World* total primary energy supply from 1971 to 2012
by fuel (Mtoe)



1973 and 2012 fuel shares of TPES

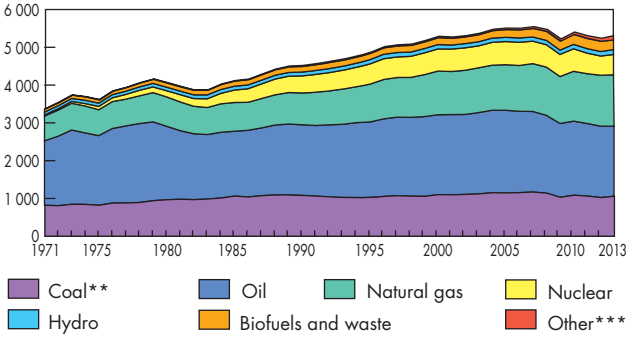


*World includes international aviation and international marine bunkers.
**In these graphs, peat and oil shale are aggregated with coal.
***Includes geothermal, solar, wind, heat, etc.

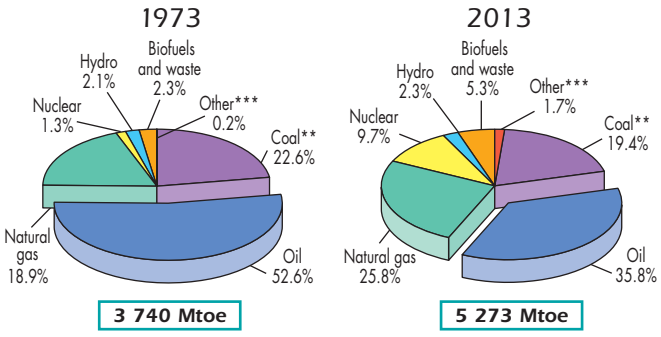
BY FUEL

OECD

OECD total primary energy supply* from 1971 to 2013
by fuel (Mtoe)



1973 and 2013 fuel shares of TPES*

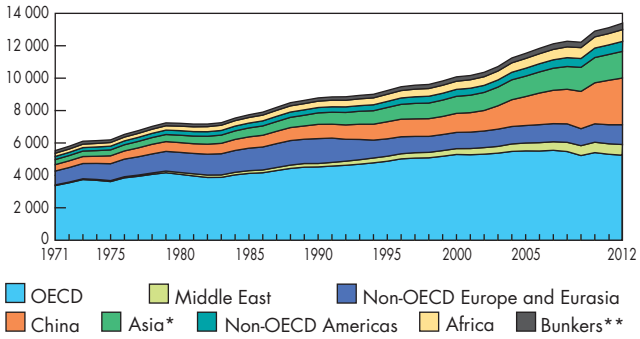


*Excludes electricity trade.
**In these graphs, peat and oil shale are aggregated with coal.
***Includes geothermal, solar, wind, heat, etc.

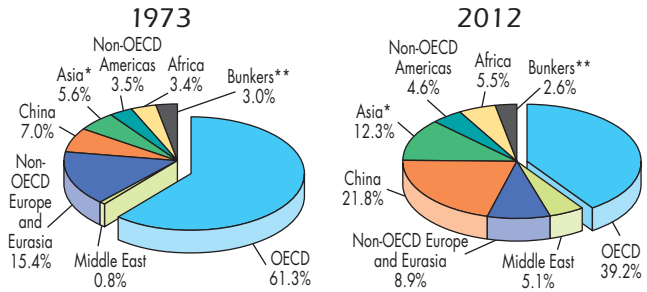
TOTAL PRIMARY ENERGY SUPPLY

World

World total primary energy supply from 1971 to 2012
by region (Mtoe)



1973 and 2012 regional shares of TPES



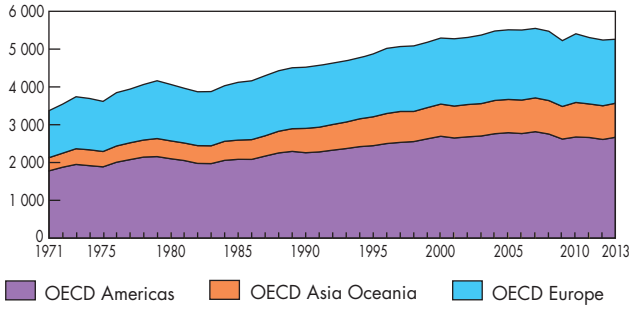
6 106 Mtoe | **13 371 Mtoe**

**Asia excludes China.*
***Includes international aviation and international marine bunkers.*

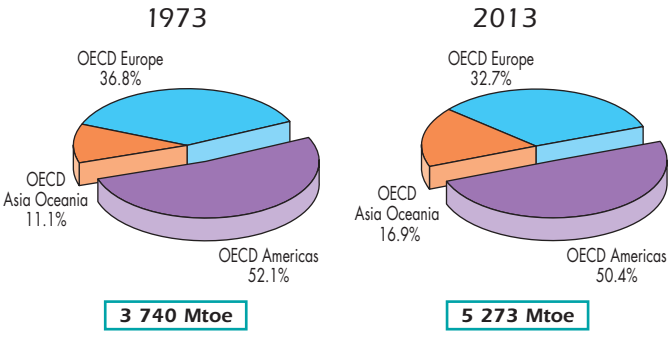
BY REGION

OECD

OECD total primary energy supply* from 1971 to 2013



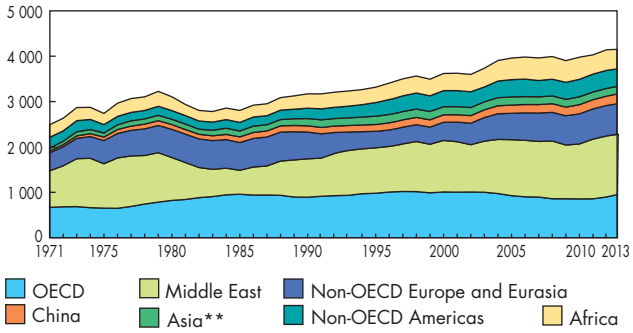
1973 and 2013 regional shares of TPES*



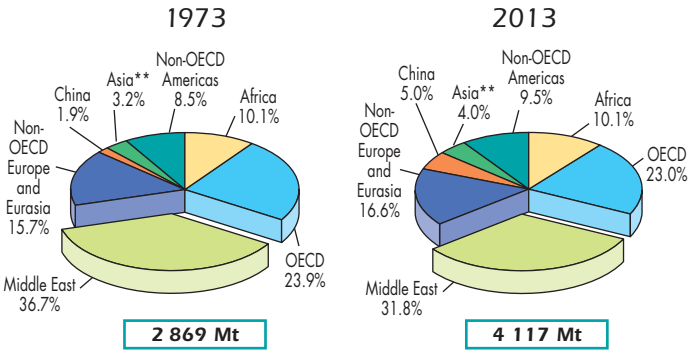
*Excludes electricity trade.

Crude Oil Production

Crude oil* production from 1971 to 2013
by region (Mt)



1973 and 2013 regional shares of crude oil* production



*Includes crude oil, NGL, feedstocks, additives and other hydrocarbons.
**Asia excludes China.

Producers, net exporters and net importers of crude oil*

Producers	Mt	% of world total
Saudi Arabia	540	13.1
Russian Federation	525	12.8
United States	440	10.7
People's Rep. of China	208	5.1
Canada	193	4.7
Kuwait	165	4.0
Venezuela	155	3.8
United Arab Emirates	153	3.7
Iraq	153	3.7
Islamic Rep. of Iran	151	3.7
Rest of the world	1 434	34.7
World	**4 117**	**100.0**

2013 data

Net exporters	Mt
Saudi Arabia	371
Russian Federation	239
Nigeria	124
Iraq	119
United Arab Emirates	118
Kuwait	103
Venezuela	93
Canada	90
Angola	84
Mexico	66
Others	578
Total	**1 985**

2012 data

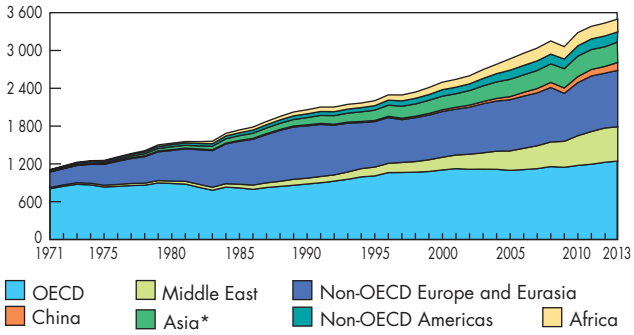
Net importers	Mt
United States	442
People's Rep. of China	269
India	185
Japan	179
Korea	128
Germany	93
Italy	74
Spain	60
Netherlands	57
France	57
Others	507
Total	**2 051**

2012 data

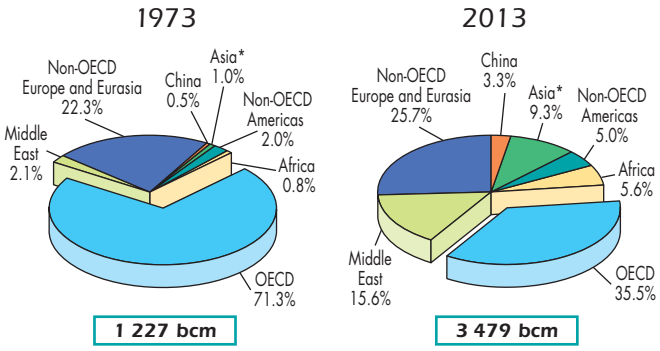
**Includes crude oil, NGL, feedstocks, additives and other hydrocarbons.*

Natural Gas Production

Natural gas production from 1971 to 2013 by region
(billion cubic metres)



1973 and 2013 regional shares of natural gas production



*Asia excludes China.

Producers, net exporters and net importers* of natural gas

Producers	bcm	% of world total
United States	689	19.8
Russian Federation	671	19.3
Qatar	161	4.6
Islamic Rep. of Iran	159	4.6
Canada	155	4.5
People's Rep. of China	115	3.3
Norway	109	3.1
Netherlands	86	2.5
Saudi Arabia	84	2.4
Algeria	80	2.3
Rest of the world	1 170	33.6
World	**3 479**	**100.0**

2013 data

Net exporters	bcm
Russian Federation	203
Qatar	121
Norway	103
Canada	54
Algeria	45
Turkmenistan	45
Netherlands	40
Indonesia	35
Australia	26
Nigeria	22
Others	156
Total	**850**

2013 data

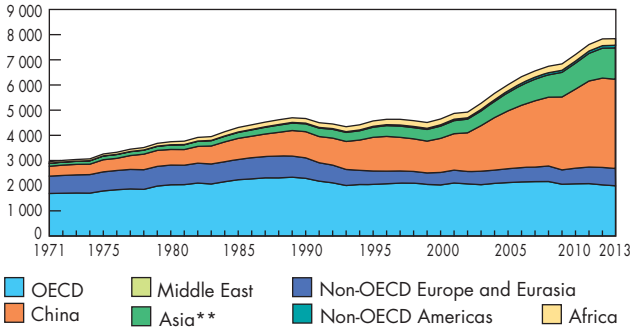
Net importers	bcm
Japan	123
Germany	76
Italy	62
Korea	53
People's Rep. of China	49
Turkey	45
France	43
United Kingdom	39
United States	37
Spain	30
Others	279
Total	**836**

2013 data

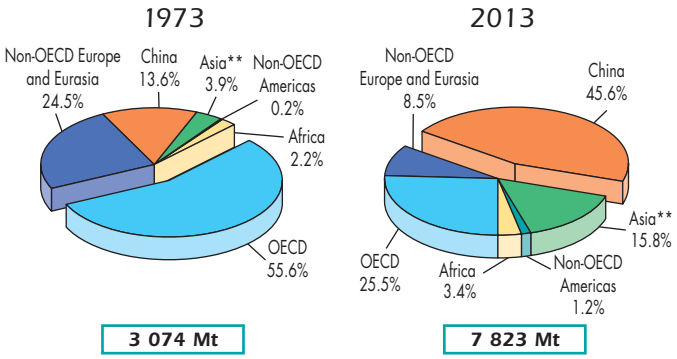
**Net exports and net imports include pipeline gas and LNG.*

Coal Production

Coal* production from 1971 to 2013
by region (Mt)



1973 and 2013 regional shares of coal* production



3 074 Mt **7 823 Mt**

**Includes steam coal, coking coal, lignite and recovered coal.*
***Asia excludes China.*

Producers, net exporters and net importers of coal*

Producers	Mt	% of world total
People's Rep. of China	3 561	45.5
United States	904	11.6
India	613	7.8
Indonesia	489	6.3
Australia	459	5.9
Russian Federation	347	4.4
South Africa	256	3.3
Germany	191	2.4
Poland	143	1.8
Kazakhstan	120	1.5
Rest of the world	740	9.5
World	**7 823**	**100.0**

2013 data

Net exporters	Mt
Indonesia	426
Australia	336
Russian Federation	114
United States	99
Colombia	74
South Africa	69
Kazakhstan	32
Canada	28
Mongolia	17
DPR of Korea	16
Others	26
Total	**1 237**

2013 data

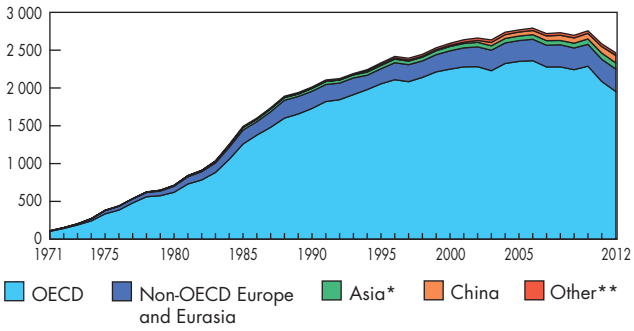
Net importers	Mt
People's Rep. of China	320
Japan	196
India	178
Korea	127
Chinese Taipei	68
Germany	50
United Kingdom	49
Turkey	28
Malaysia	23
Italy	20
Others	211
Total	**1 270**

2013 data

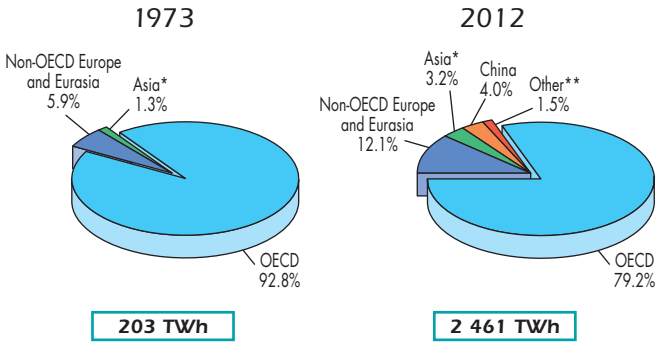
**Includes steam coal, coking coal, lignite and recovered coal.*

Nuclear Production

Nuclear production from 1971 to 2012
by region (TWh)



1973 and 2012 regional shares of nuclear production



*Asia excludes China.
**Other includes Africa, Non-OECD Americas and the Middle East.

Producers of nuclear electricity

Producers	TWh	% of world total
United States	801	32.5
France	425	17.3
Russian Federation	178	7.2
Korea	150	6.1
Germany	99	4.0
People's Republic of China	97	3.9
Canada	95	3.9
Ukraine	90	3.7
United Kingdom	70	2.8
Sweden	64	2.6
Rest of the world	392	16.0
World	**2 461**	**100.0**

2012 data

**Excludes countries with no nuclear production.*

Net installed capacity	GW
United States	102
France	63
Japan	44
Russian Federation	24
Korea	21
Canada	14
Ukraine	13
People's Republic of China	13
Germany	12
Sweden	9
Rest of the world	58
World	**373**

2012 data

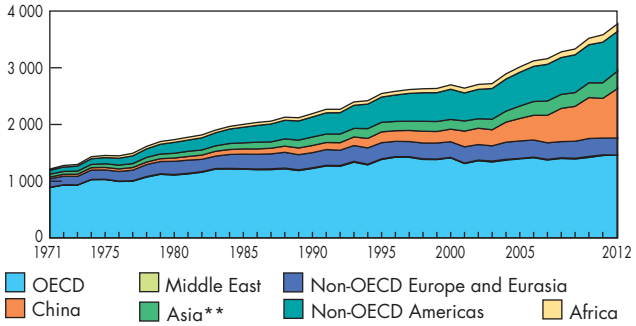
Sources: IEA, International Atomic Energy Agency.

Country (top-ten producers)	% of nuclear in total domestic electricity generation
France	76.1
Ukraine	45.4
Sweden	38.5
Korea	28.3
United Kingdom	19.5
United States	18.8
Russian Federation	16.6
Germany	16.0
Canada	15.0
People's Republic of China	2.0
Rest of the world*	8.1
World	**10.9**

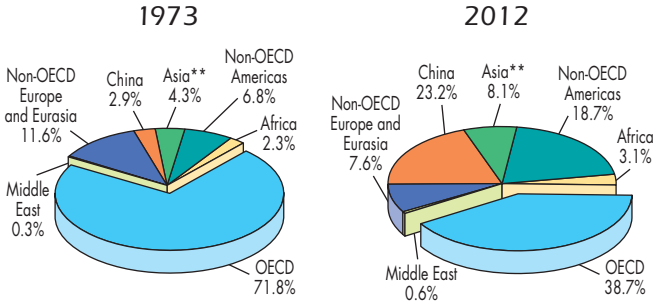
2012 data

Hydro Production

Hydro production* from 1971 to 2012
by region (TWh)



1973 and 2012 regional shares of hydro production*



1 296 TWh **3 756 TWh**

*Includes electricity production from pumped storage.
**Asia excludes China.

Producers of hydro electricity*

Producers	TWh	% of world total
People's Rep. of China	872	23.2
Brazil	415	11.1
Canada	381	10.1
United States	298	7.9
Russian Federation	167	4.5
Norway	143	3.8
India	126	3.4
Japan	84	2.2
Venezuela	82	2.2
Sweden	79	2.1
Rest of the world	1 109	29.5
World	**3 756**	**100.0**

2012 data

**Includes electricity production from pumped storage.*
***Excludes countries with no hydro production.*

Net installed capacity	GW
People's Rep. of China	194
United States	101
Brazil	84
Canada	76
Russian Federation	49
Japan	49
India	40
Norway	30
France	25
Italy	22
Rest of the world	355
World	**1 025**

2012 data

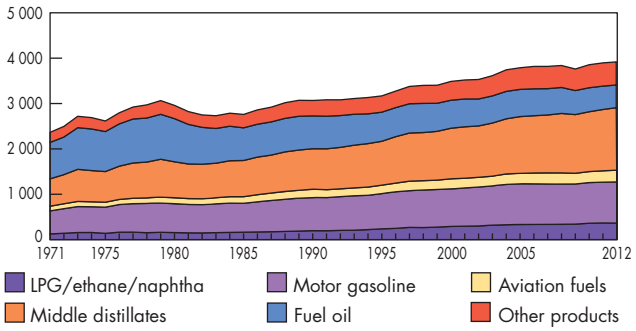
Sources: IEA, United Nations.

Country (top-ten producers)	% of hydro in total domestic electricity generation
Norway	96.7
Brazil	75.2
Venezuela	64.8
Canada	60.0
Sweden	47.5
People's Rep. of China	17.5
Russian Federation	15.6
India	11.2
Japan	8.1
United States	7.0
Rest of the world**	14.0
World	**16.5**

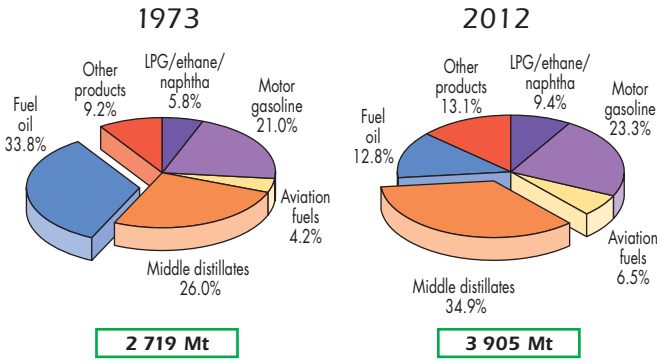
2012 data

Refining by Product

World refinery output from 1971 to 2012
by product (Mt)



1973 and 2012 shares of refinery production by product



Producers, net exporters and net importers of oil products

Producers	Mt	% of world total
United States	787	20.2
People's Rep. of China	441	11.3
Russian Federation	254	6.5
India	230	5.9
Japan	169	4.3
Korea	131	3.4
Brazil	104	2.7
Germany	101	2.6
Saudi Arabia	96	2.5
Canada	93	2.4
Rest of the world	1 499	38.2
World	**3 905**	**100.0**

2012 data

Net exporters	Mt
Russian Federation	105
United States	74
India	49
Saudi Arabia	44
Kuwait	33
Venezuela	23
Korea	21
Qatar	21
Italy	18
Algeria	13
Others	138
Total*	**539**

2012 data

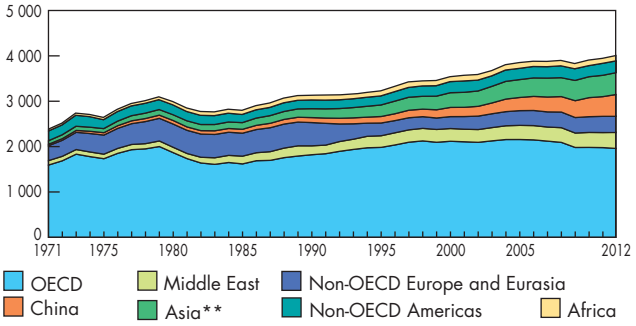
Net importers	Mt
Japan	37
Indonesia	27
People's Rep. of China	25
Mexico	24
France	23
Brazil	18
Hong Kong, China	17
Singapore	16
Australia	16
Germany	14
Others	243
Total*	**460**

2012 data

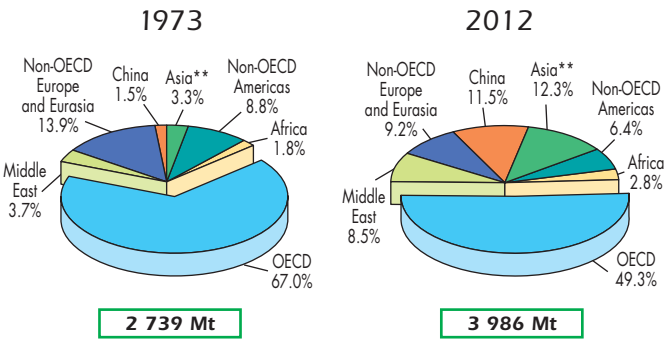
**The discrepancy between total net exports and total net imports arises from different data sources and possible misallocation of bunkers into exports for some countries.*

Refining by Region

World refinery intake* from 1971 to 2012
by region (Mt)



1973 and 2012 regional shares of refinery intake*



*Includes crude oil, NGL, refinery feedstocks, additives and other hydrocarbons.
**Asia excludes China.

Refinery capacity, net exporters and net importers of oil*

Crude distillation capacity	kb/cd	% of world total
United States	17 929	18.4
People's Rep. of China**	13 620	14.0
Russian Federation	6 010	6.2
Japan	4 493	4.6
India	4 394	4.5
Korea	3 051	3.1
Saudi Arabia	2 506	2.6
Germany	2 022	2.1
Italy	2 014	2.1
Brazil	2 006	2.1
Rest of the world	39 151	40.3
World	**97 196**	**100.0**

2013 data

Net exporters	Mt
Saudi Arabia	416
Russian Federation	344
Kuwait	136
Nigeria	117
Venezuela	116
United Arab Emirates	115
Iraq	108
Canada	100
Angola	81
Islamic Rep. of Iran	77
Others	562
Total	**2 172**

2012 data

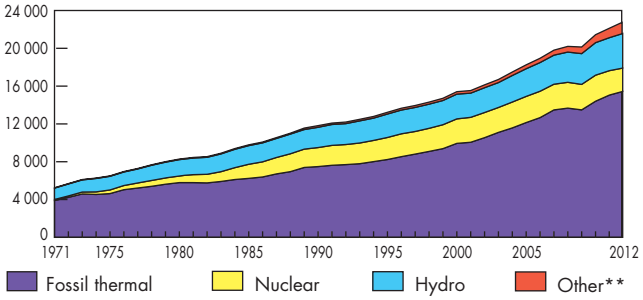
Net importers	Mt
United States	368
People's Rep. of China	293
Japan	216
India	136
Korea	107
Germany	107
France	80
Singapore	65
Spain	59
Italy	56
Others	672
Total	**2 159**

2012 data

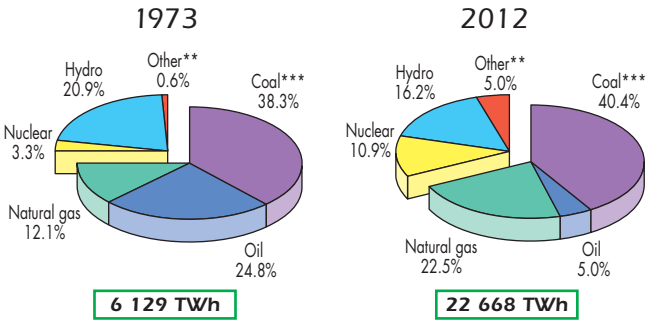
** Includes crude oil and oil products.*
***Includes unlisted small teapot refineries estimated at 500 kb/cd (i.e. calendar day).*

Electricity Generation by Fuel

World electricity generation* from 1971 to 2012
by fuel (TWh)



1973 and 2012 fuel shares of electricity generation*



*Excludes electricity generation from pumped storage.
**Includes geothermal, solar, wind, heat, etc.
***In these graphs, peat and oil shale are aggregated with coal.

Electricity production from fossil fuels

Coal*	TWh
People's Rep. of China	3 785
United States	1 643
India	801
Japan	303
Germany	287
Korea	239
South Africa	239
Australia	171
Russian Federation	169
United Kingdom	144
Rest of the world	1 387
World	**9 168**

2012 data

Oil	TWh
Japan	181
Saudi Arabia	150
Islamic Rep. of Iran	69
Mexico	56
Kuwait	40
Pakistan	35
United States	33
Indonesia	33
Russian Federation	28
Egypt	25
Rest of the world	478
World	**1 128**

2012 data

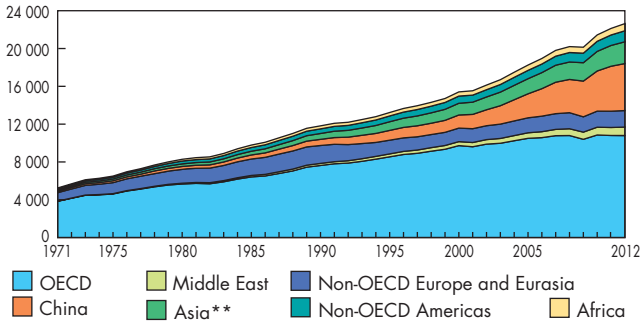
Natural gas	TWh
United States	1 265
Russian Federation	525
Japan	397
Islamic Rep. of Iran	170
Mexico	151
Italy	129
Egypt	125
Saudi Arabia	121
Thailand	117
Korea	112
Rest of the world	1 988
World	**5 100**

2012 data

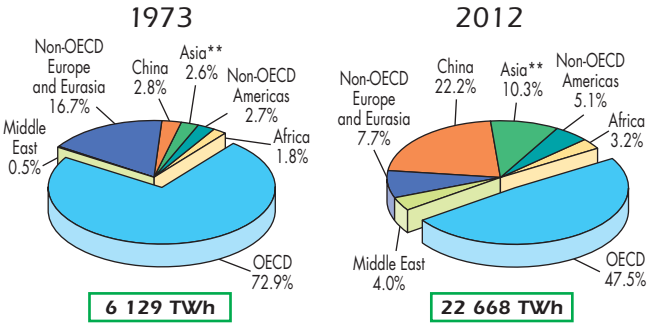
**In this table, peat and oil shale are aggregated with coal.*

Electricity Generation by Region

World electricity generation* from 1971 to 2012
by region (TWh)



1973 and 2012 regional shares of electricity generation*



*Excludes electricity generation from pumped storage.
**Asia excludes China.

Producers, net exporters and net importers of electricity

Producers*	TWh	% of world total
People's Rep. of China	4 985	22.0
United States	4 271	18.8
India	1 128	5.0
Russian Federation	1 069	4.7
Japan	1 026	4.5
Canada	634	2.8
Germany	623	2.7
France	559	2.5
Brazil	552	2.4
Korea	531	2.3
Rest of the world	7 290	32.3
World	**22 668**	**100.0**

2012 data

Net exporters	TWh
Paraguay	48
Canada	47
France	45
Germany	21
Sweden	20
Norway	18
Czech Republic	17
Russian Federation	16
Ukraine	11
Spain	11
Others	62
Total	**316**

2012 data

Net importers	TWh
United States	47
Italy	43
Brazil	40
Finland	17
Netherlands	17
United Kingdom	12
Hong Kong, China	10
Belgium	10
Thailand	8
Iraq	8
Others	108
Total	**320**

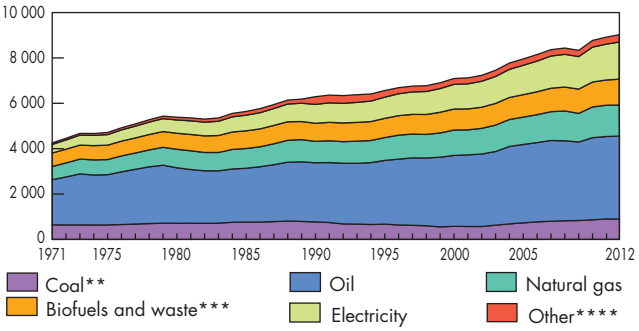
2012 data

**Gross production minus production from pumped storage plants.*

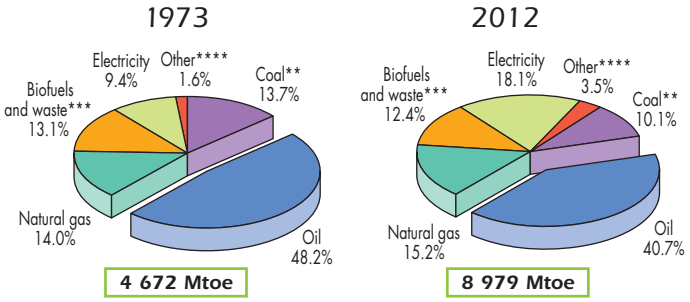
TOTAL FINAL CONSUMPTION

World

World* total final consumption from 1971 to 2012 by fuel (Mtoe)



1973 and 2012 fuel shares of total final consumption

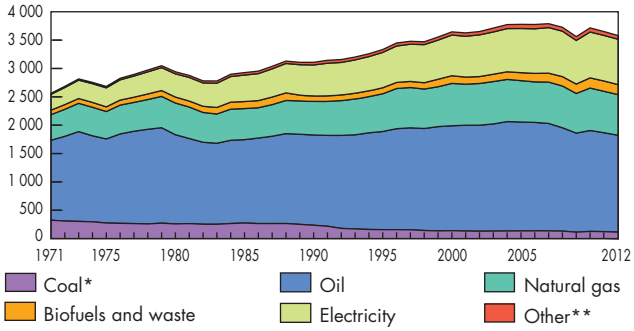


*World includes international aviation and international marine bunkers.
**In these graphs, peat and oil shale are aggregated with coal.
***Data for biofuels and waste final consumption have been estimated for a number of countries.
****Includes geothermal, solar, wind, heat, etc.

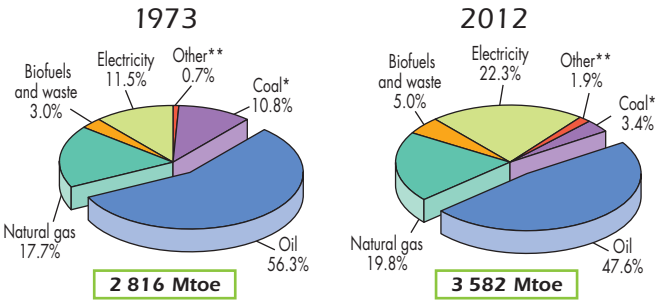
BY FUEL

OECD

OECD total final consumption from 1971 to 2012
by fuel (Mtoe)



1973 and 2012 fuel shares of total final consumption

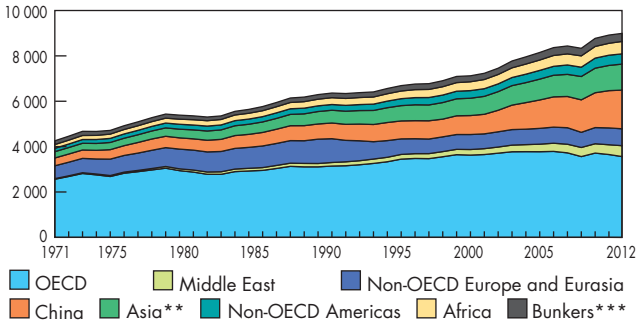


**In these graphs, peat and oil shale are aggregated with coal.*
***Includes geothermal, solar, wind, heat, etc.*

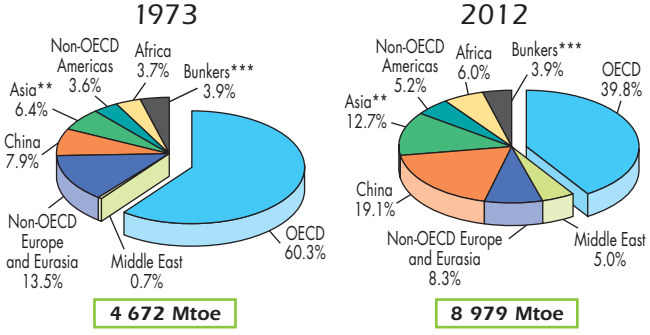
TOTAL FINAL CONSUMPTION

World

World total final consumption* from 1971 to 2012
by region (Mtoe)



1973 and 2012 regional shares of total final consumption*

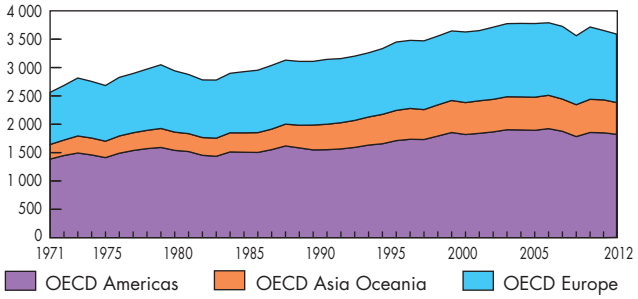


*Data for biofuels and waste final consumption have been estimated for a number of countries.
**Asia excludes China.
***Includes international aviation and international marine bunkers.

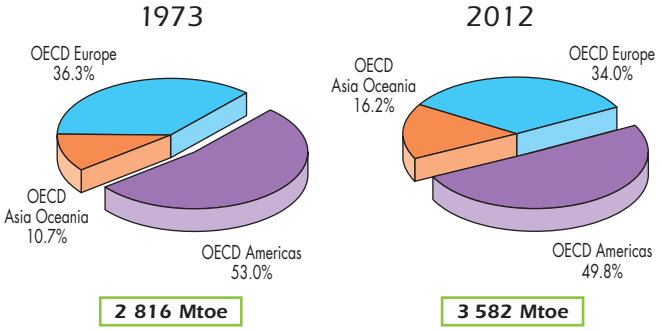
BY REGION

OECD

OECD total final consumption from 1971 to 2012
by region (Mtoe)



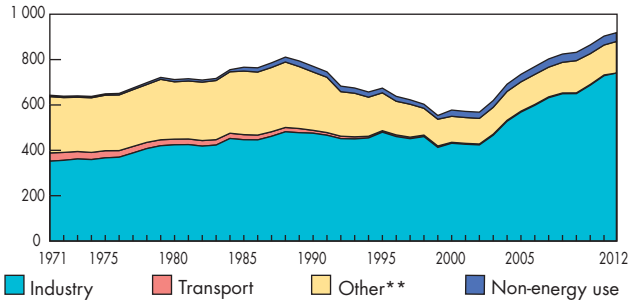
1973 and 2012 regional shares of total final consumption



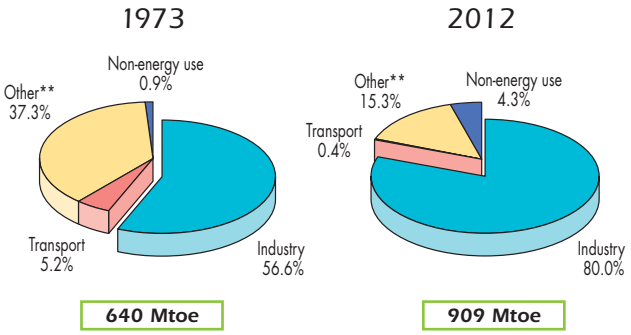
TOTAL FINAL CONSUMPTION

Coal*

Total final consumption from 1971 to 2012
by sector (Mtoe)



1973 and 2012 shares of world coal* consumption

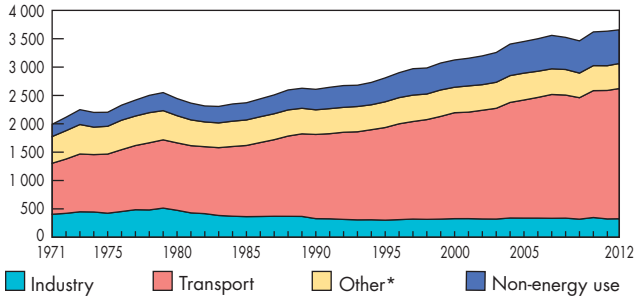


*In these graphs, peat and oil shale are aggregated with coal.
**Includes agriculture, commercial and public services, residential, and non-specified other.

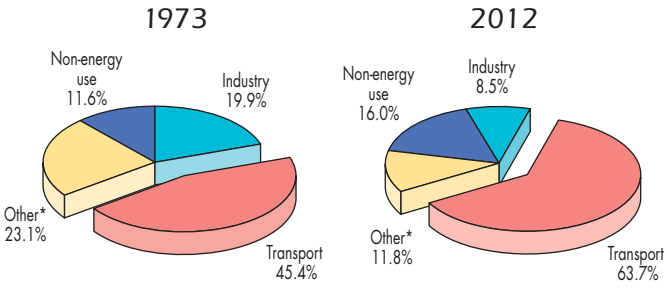
BY SECTOR

Oil

Total final consumption from 1971 to 2012
by sector (Mtoe)



1973 and 2012 shares of world oil consumption

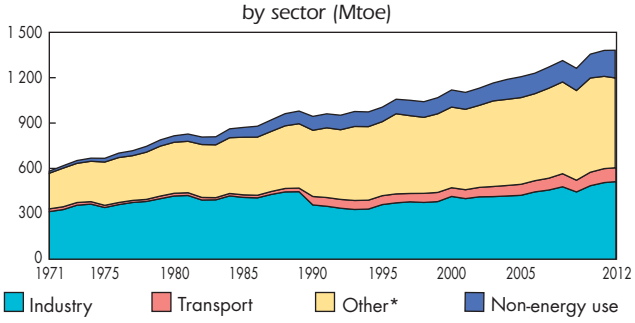


**Includes agriculture, commercial and public services, residential, and non-specified other.*

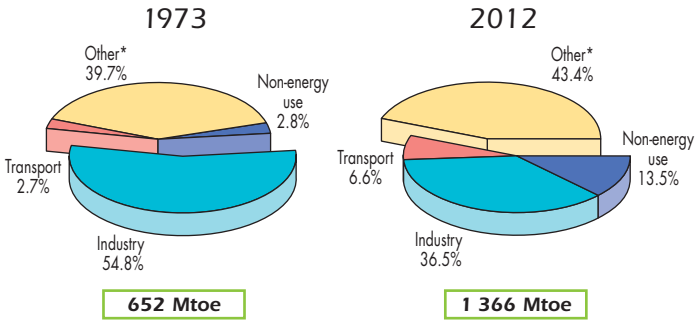
TOTAL FINAL CONSUMPTION

Natural gas

Total final consumption from 1971 to 2012
by sector (Mtoe)



1973 and 2012 shares of world natural gas consumption

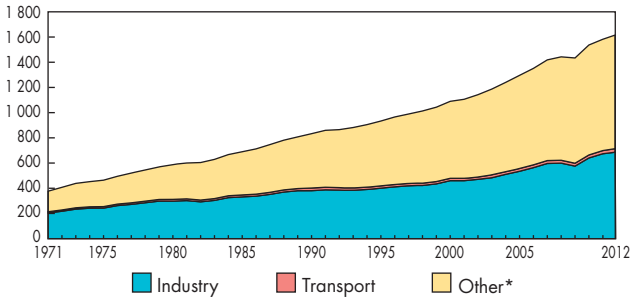


*Includes agriculture, commercial and public services, residential, and non-specified other.

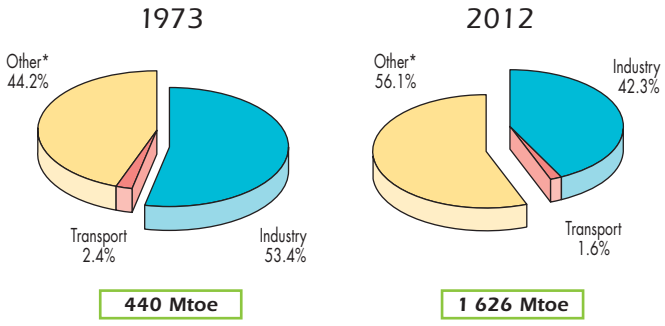
BY SECTOR

Electricity

Total final consumption from 1971 to 2012
by sector (Mtoe)



1973 and 2012 shares of world electricity consumption



**Includes agriculture, commercial and public services, residential, and non-specified other.*

SIMPLIFIED ENERGY

World

1973

(Mtoe)

SUPPLY AND CONSUMPTION	Coal[a]	Crude oil	Oil products	Natural gas	Nuclear	Hydro	Biofuels and waste[b]	Other[c]	Total
Production	1 478.93	2 938.38	-	993.05	53.05	110.31	640.06	6.13	6 219.91
Imports	140.06	1 561.94	408.57	73.40	-	-	0.13	8.15	2 192.24
Exports	-130.40	-1 612.99	-442.94	-72.56	-	-	-0.19	-8.31	-2 267.39
Stock changes	12.32	-19.81	-16.37	-15.09	-	-	0.06	-	-38.90
TPES	**1 500.91**	**2 867.51**	**-50.75**	**978.81**	**53.05**	**110.31**	**640.06**	**5.96**	**6 105.86**
Transfers	-	-46.76	48.78	-	-	-	-	-	2.02
Statistical difference	7.48	12.13	-6.66	4.78	-	-	-0.17	-0.03	17.52
Electricity plants	-556.97	-22.91	-318.13	-160.52	-52.95	-110.31	-2.40	503.60	-720.60
CHP plants	-86.40	-	-28.62	-50.84	-0.10	-	-0.91	100.94	-65.93
Heat plants	-7.81	-	-0.90	-0.68	-	-	-0.80	7.11	-3.08
Blast furnaces	-81.53	-	-2.72	-	-	-	-0.06	-	-84.31
Gas works	9.85	-0.60	-9.07	-6.18	-	-	-	-	-6.01
Coke ovens[d]	-100.69	-	-0.68	-0.19	-	-	-0.02	-	-101.58
Oil refineries	-	-2 782.89	2 762.10	-	-	-	-	-	-20.79
Petchem. plants	-	5.09	-5.37	-	-	-	-	-	-0.28
Liquefaction plants	-0.73	0.23	-	-	-	-	-	-	-0.50
Other transformation	-	-	-0.12	-0.03	-	-	-23.70	-	-23.85
Energy ind. own use	-35.06	-2.59	-158.81	-106.78	-	-	-0.20	-57.68	-361.11
Losses	-9.06	-7.07	-0.27	-6.03	-	-	-0.25	-43.15	-65.83
TFC	**639.99**	**22.14**	**2 228.78**	**652.32**	**-**	**-**	**611.55**	**516.76**	**4 671.54**
Industry	362.12	16.41	432.35	356.95	-	-	86.71	286.90	1 541.44
Transport[e]	33.00	-	1 019.57	17.72	-	-	0.24	10.60	1 081.12
Other	238.86	0.00	520.41	259.28	-	-	524.60	219.26	1 762.42
Non-energy use	6.01	5.73	256.44	18.37	-	-	-	-	286.55

(a) In this table, peat and oil shale are aggregated with coal.
(b) Data for biofuels and waste final consumption have been estimated for a number of countries.
(c) Includes geothermal, solar, wind, heat, etc.
(d) Also includes patent fuel, BKB and peat briquette plants.
(e) Includes international aviation and international marine bunkers.

BALANCE TABLE

World

2012

(Mtoe)

SUPPLY AND CONSUMPTION	Coal[a]	Crude oil	Oil products	Natural gas	Nuclear	Hydro	Biofuels and waste[b]	Other[c]	Total
Production	3 966.59	4 205.11	-	2 847.95	642.12	315.81	1 340.71	142.85	13 461.14
Imports	778.91	2 291.55	1 137.40	863.52	-	-	15.56	58.58	5 145.53
Exports	-805.81	-2 219.62	-1 213.37	-871.26	-	-	-12.74	-58.23	-5 181.03
Stock changes	-61.18	1.83	1.65	3.35	-	-	-0.26	-	-54.62
TPES	**3 878.51**	**4 278.88**	**-74.32**	**2 843.56**	**642.12**	**315.81**	**1 343.27**	**143.19**	**13 371.03**
Transfers	-0.39	-171.52	207.77	-0.00	-	-	-	-	35.85
Statistical difference	-199.73	-3.97	-9.01	7.47	-	-	-0.23	-0.21	-205.67
Electricity plants	-2 094.52	-42.69	-219.22	-748.20	-638.54	-315.81	-81.63	1 654.43	-2 486.17
CHP plants	-177.35	-0.01	-25.19	-324.77	-3.59	-	-52.43	335.70	-247.65
Heat plants	-127.52	-0.80	-11.69	-94.38	-	-	-11.31	194.92	-50.77
Blast furnaces	-186.42	-	-0.44	-0.05	-	-	-0.02	-	-186.93
Gas works	-7.08	-	-3.76	3.84	-	-	-0.05	-	-7.06
Coke ovens[d]	-67.85	-	-2.61	-0.00	-	-	-0.01	-	-70.47
Oil refineries	-	-4 068.39	3 995.56	-0.90	-	-	-	-	-73.73
Petchem. plants	-	32.88	-32.89	-	-	-	-	-	-0.02
Liquefaction plants	-18.93	11.62	-	-15.36	-	-	-	-	-22.67
Other transformation	-0.06	2.46	-0.60	-4.10	-	-	-74.95	-0.64	-77.88
Energy ind. own use	-85.91	-10.37	-190.82	-282.62	-	-	-11.91	-207.82	-789.45
Losses	-3.35	-8.02	-0.70	-18.62	-	-	-0.17	-178.69	-209.55
TFC	**909.39**	**20.06**	**3 632.08**	**1 365.87**	**-**	**-**	**1 110.56**	**1 940.89**	**8 978.86**
Industry	727.74	9.68	299.57	498.64	-	-	186.62	818.52	2 540.77
Transport[e]	3.28	-	2 327.70	90.37	-	-	59.97	25.65	2 506.97
Other	139.30	0.14	430.05	592.33	-	-	863.97	1 096.71	3 122.51
Non-energy use	39.07	10.24	574.76	184.53	-	-	-	-	808.60

(a) In this table, peat and oil shale are aggregated with coal.
(b) Data for biofuels and waste final consumption have been estimated for a number of countries.
(c) Includes geothermal, solar, wind, heat, etc.
(d) Also includes patent fuel, BKB and peat briquette plants.
(e) Includes international aviation and international marine bunkers.

SIMPLIFIED ENERGY

OECD

1973

(Mtoe)

SUPPLY AND CONSUMPTION	Coal[a]	Crude oil	Oil products	Natural gas	Nuclear	Hydro	Biofuels and waste[b]	Other[c]	Total
Production	819.10	710.51	-	706.22	49.22	78.94	87.29	6.13	2 457.40
Imports	121.92	1 277.47	336.20	62.55	-	-	0.03	7.55	1 805.73
Exports	-111.10	-63.58	-172.72	-50.38	-	-	-0.01	-7.01	-404.80
Intl. marine bunkers	-	-	-73.65	-	-	-	-	-	-73.65
Intl. aviation bunkers	-	-	-24.64	-	-	-	-	-	-24.64
Stock changes	14.54	-10.78	-11.36	-12.07	-	-	0.06	-	-19.62
TPES	**844.46**	**1 913.62**	**53.83**	**706.32**	**49.22**	**78.94**	**87.36**	**6.66**	**3 740.42**
Transfers	-	-41.28	42.49	-	-	-	-	-	1.22
Statistical difference	14.80	11.29	2.56	-5.61	-	-	-0.00	0.00	23.04
Electricity plants	-387.59	-20.61	-228.38	-108.33	-49.12	-78.94	-1.43	364.70	-509.71
CHP plants	-52.07	-	-7.89	-11.64	-0.10	-	-0.75	30.94	-41.51
Heat plants	-7.81	-	-0.90	-0.68	-	-	-0.80	7.11	-3.08
Blast furnaces	-65.52	-	-2.72	-	-	-	-	-	-68.24
Gas works	11.02	-0.60	-8.72	-6.37	-	-	-	-	-4.68
Coke ovens[d]	-25.70	-	-0.68	-0.19	-	-	-0.02	-	-26.59
Oil refineries	-	-1 865.94	1 868.42	-	-	-	-	-	2.48
Petrochem. plants	-	4.88	-5.16	-	-	-	-	-	-0.28
Liquefaction plants	-	0.02	-	-	-	-	-	-	0.02
Other transformation	-	-	-0.12	-0.03	-	-	-	-	-0.15
Energy ind. own use	-24.53	-0.99	-128.88	-72.36	-	-	-0.07	-33.38	-260.20
Losses	-3.80	-	-0.23	-2.63	-	-	-	-30.54	-37.20
TFC	**303.27**	**0.39**	**1 583.63**	**498.48**	**-**	**-**	**84.30**	**345.49**	**2 815.56**
Industry	182.79	0.39	312.91	250.44	-	-	42.26	169.41	958.18
Transport	7.34	-	665.68	17.00	-	-	0.00	5.30	695.32
Other	110.05	-	393.09	225.47	-	-	42.04	170.78	941.43
Non-energy use	3.10	-	211.95	5.58	-	-	-	-	220.63

(a) In this table, peat and oil shale are aggregated with coal.
(b) Data for biofuels and waste final consumption have been estimated for a number of countries.
(c) Includes geothermal, solar, wind, heat, etc.
(d) Also includes patent fuel, BKB and peat briquette plants.

BALANCE TABLE

OECD

2012

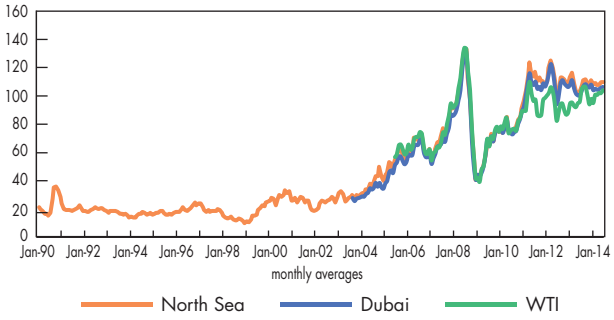
(Mtoe)

SUPPLY AND CONSUMPTION	Coal[a]	Crude oil	Oil products	Natural gas	Nuclear	Hydro	Biofuels and waste[b]	Other[c]	Total
Production	952.55	933.13	-	1 006.80	508.71	119.47	267.86	80.68	3 869.21
Imports	387.11	1 483.56	565.42	650.40	-	-	13.95	38.25	3 138.70
Exports	-319.42	-348.40	-566.58	-316.50	-	-	-5.80	-39.48	-1 596.18
Intl. marine bunkers	-	-	-75.68	-	-	-	-0.05	-	-75.73
Intl. aviation bunkers	-	-	-87.09	-	-	-	-	-	-87.09
Stock changes	-0.38	-5.56	2.38	4.32	-	-	0.04	-	0.80
TPES	**1 019.87**	**2 062.72**	**-161.55**	**1 345.02**	**508.71**	**119.47**	**276.01**	**79.45**	**5 249.70**
Transfers	-	-57.72	82.09	-	-	-	-	-	24.38
Statistical difference	-9.95	2.16	-8.68	4.81	-	-	0.09	0.33	-11.24
Electricity plants	-727.20	-11.67	-61.68	-383.80	-505.67	-119.47	-43.96	764.39	-1 089.06
CHP plants	-77.81	-	-13.10	-114.46	-3.04	-	-43.36	149.98	-101.80
Heat plants	-5.07	-	-1.19	-8.22	-	-	-6.31	16.25	-4.53
Blast furnaces	-53.16	-	-0.44	-0.05	-	-	-	-	-53.65
Gas works	-2.17	-	-3.45	3.78	-	-	-0.04	-	-1.88
Coke ovens[d]	-7.45	-	-1.07	-0.00	-	-	-0.01	-	-8.54
Oil refineries	-	-2 019.35	1 995.20	-0.90	-	-	-	-	-25.05
Petrochem. plants	-	28.90	-29.41	-	-	-	-	-	-0.51
Liquefaction plants	-0.90	1.37	-	-2.31	-	-	-	-	-1.85
Other transformation	0.00	0.73	-	-0.79	-	-	-0.45	-0.64	-1.16
Energy ind. own use	-14.63	-0.07	-99.28	-130.96	-	-	-1.17	-76.78	-322.89
Losses	-0.86	-	-0.01	-2.96	-	-	-0.03	-65.57	-69.44
TFC	**120.66**	**7.07**	**1 697.43**	**709.15**	**-**	**-**	**180.77**	**867.41**	**3 582.49**
Industry	95.51	2.33	96.69	250.92	-	-	66.98	280.49	792.92
Transport	0.16	-	1 107.94	24.56	-	-	42.85	8.97	1 184.48
Other	22.69	-	201.35	400.36	-	-	70.94	577.94	1 273.29
Non-energy use	2.30	4.74	291.45	33.31	-	-	-	-	331.80

(a) In this table, peat and oil shale are aggregated with coal.
(b) Data for biofuels and waste final consumption have been estimated for a number of countries.
(c) Includes geothermal, solar, wind, heat, etc.
(d) Also includes patent fuel, BKB and peat briquette plants.

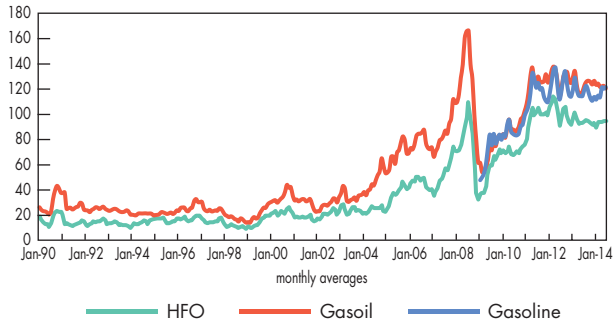
Crude Oil

Key crude oil spot prices in USD/barrel



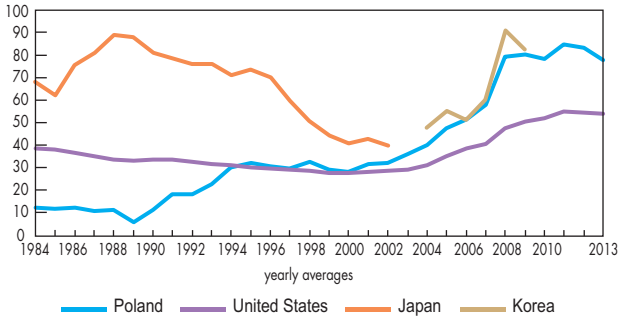
Oil Products

Rotterdam oil product spot prices in USD/barrel



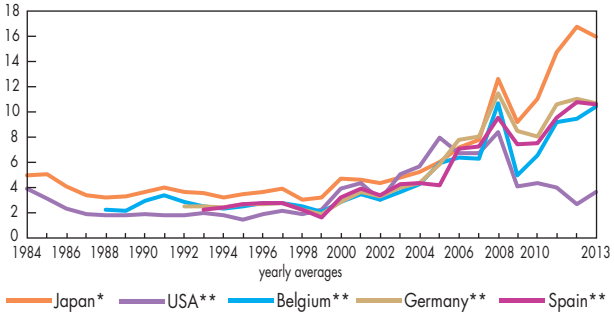
Coal

Steam Coal for Electricity Generation in USD/tonne



Natural Gas

Natural gas import prices in USD/MBtu



**LNG **Pipeline*

RETAIL PRICES[a] IN SELECTED

	Heavy fuel oil for industry[b] (tonne)	Light fuel oil for households (1 000 litres)	Automotive diesel oil[c] (litre)	Unleaded premium[d] (litre)
Australia	..	..	..	1.474
Austria	778.15	1 258.00	1.539	1.841
Belgium	701.97	1 119.36	1.637	2.197
Canada	695.48	1 181.23	1.290	1.296
Chile	..	1 268.99	..	1.529
Czech Republic	519.52	1 208.00	1.508	1.801
Denmark	949.59	2 085.14	1.624	2.257
Estonia	..	1 339.30	1.512	1.765
Finland	..	1 428.44	1.679	2.209
France	742.14	1 228.86	1.512	2.061
Germany	658.17	1 089.76	1.633	2.097
Greece	796.68	1 719.62	1.510	2.246
Hungary	676.29	x	1.487	1.821
Ireland	1 124.71	1 426.52	1.647	2.097
Israel	c	2 056.61	c	2.079
Italy	776.85	1 928.14	1.841	2.353
Japan	913.89	1 011.60	1.213	1.540
Korea	904.89	1 261.81	..	2.058
Luxembourg	..	1 028.04	1.421	1.777
Mexico	509.78	x	0.831	0.975
Netherlands	665.34	..	1.616	2.316
New Zealand	710.87	..	0.931	1.860
Norway	..	1 834.71	1.756	2.432
Poland	811.50	1 264.97	1.420	1.738
Portugal	1 081.15	1 753.62	1.673	2.114
Slovak Republic	683.53	..	1.561	1.984
Slovenia	x	1 383.58	1.513	1.983
Spain	754.40	1 221.25	1.514	1.913
Sweden	1 450.56	2 062.81	1.793	2.183
Switzerland	809.34	1 153.54	1.721	1.918
Turkey	1 186.07	1 795.43	2.248	2.472
United Kingdom	c	1 093.03	1.889	2.140
United States	705.22	1 101.07	1.046	0.944

(a) Prices are for 1st quarter 2014 or latest available quarter for oil products, and annual 2013 for other products.
(b) Low sulphur fuel oil; high sulphur fuel oil for Canada, Ireland, Mexico, New Zealand, Turkey and the United States.
(c) For commercial purposes.

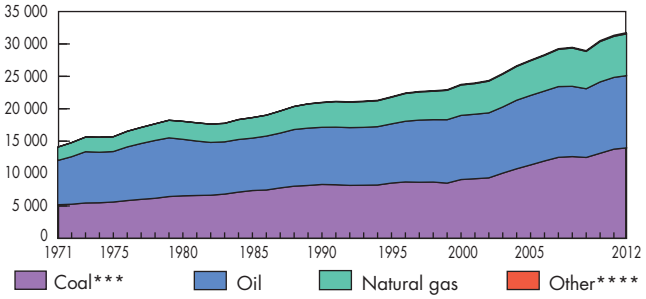
OECD COUNTRIES in USD/unit

Nat. gas for industry (MWh GCV[e])	Nat. gas for households (MWh GCV[e])	Steam coal for industry[f] (tonne)	Electricity for industry (MWh)	Electricity for households (MWh)	
..	..	..	..	..	Australia
48.84	92.88	257.32	141.16	271.90	Austria
39.89	88.08	..	128.24	263.77	Belgium
13.72	33.81	..	..	..	Canada
..	111.94	..	118.02	172.34	Chile
47.33	83.95	c	148.84	205.57	Czech Republic
..	129.98	..	119.62	393.93	Denmark
47.15	66.33	..	124.85	174.76	Estonia
47.50	65.34	271.09	106.61	202.27	Finland
51.83	89.64	..	126.02	193.36	France
49.89	94.61	..	169.32	387.63	Germany
60.99	151.50	..	141.91	216.38	Greece
45.62	57.51	..	132.71	182.01	Hungary
51.74	96.98	..	173.32	292.66	Ireland
c	x	x	114.34	151.62	Israel
..	..	..	321.70	305.56	Italy
..	..	126.21	174.23	242.14	Japan
78.68	75.80	..	..	101.42	Korea
53.53	78.88	x	106.60	206.82	Luxembourg
..	34.24	x	121.53	90.85	Mexico
41.48	103.68	..	112.84	257.20	Netherlands
24.01	116.72	c	..	..	New Zealand
x	x	..	68.71	148.51	Norway
42.27	68.05	100.40	109.48	196.30	Poland
55.71	117.47	215.09	152.06	279.57	Portugal
49.34	70.64	..	179.07	238.05	Slovak Republic
57.89	91.38	c	125.73	212.76	Slovenia
45.12	108.22	..	..	..	Spain
63.80	162.77	..	90.43	233.66	Sweden
72.24	108.36	123.52	132.55	203.69	Switzerland
43.73	52.54	105.19	146.68	189.96	Turkey
41.89	76.67	155.47	139.78	228.86	United Kingdom
15.39	34.05	79.39	68.20	121.16	United States

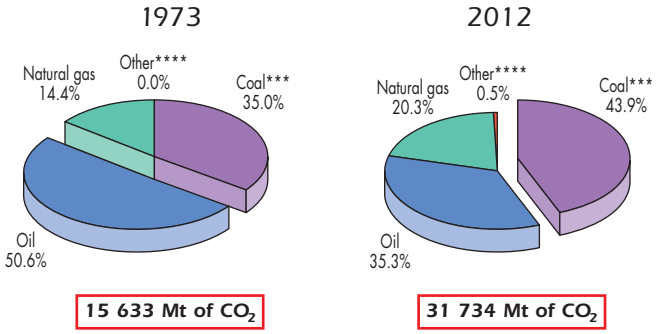
(d) Unleaded premium gasoline (95 RON); unleaded regular for Japan. (e) Gross calorific value. (f) Brown coal for Turkey.
.. not available x not applicable c confidential

CO_2 Emissions by Fuel

World* CO_2 emissions** from 1971 to 2012 by fuel (Mt of CO_2)



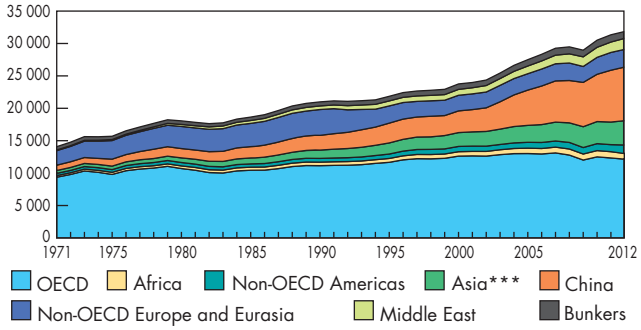
1973 and 2012 fuel shares of CO_2 emissions**



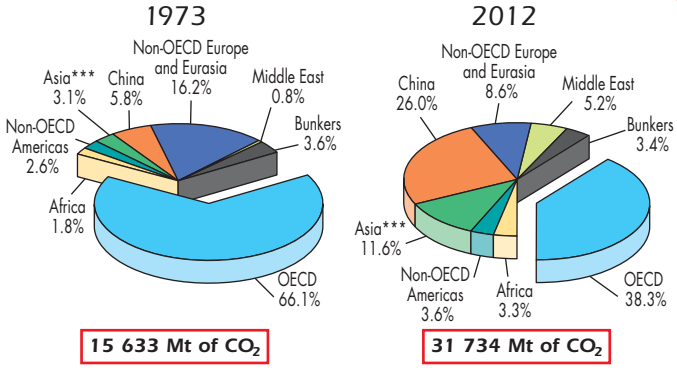
**World includes international aviation and international marine bunkers.*
***Calculated using the IEA's energy balances and the Revised 1996 IPCC Guidelines. CO_2 emissions are from fuel combustion only. ***In these graphs, peat and oil shale are aggregated with coal. ****Includes industrial waste and non-renewable municipal waste.*

CO_2 Emissions by Region

World* CO_2 emissions** from 1971 to 2012 by region (Mt of CO_2)



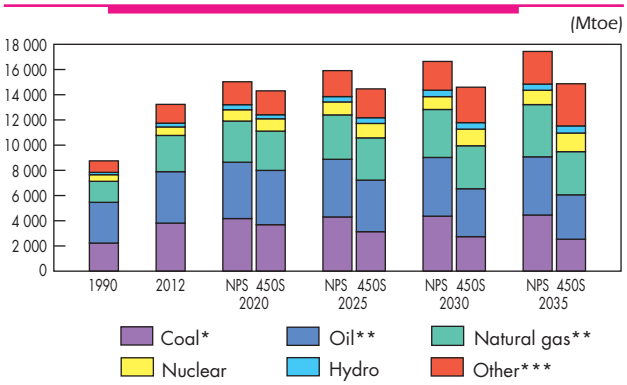
1973 and 2012 regional shares of CO_2 emissions**



**World includes international aviation and international marine bunkers, which are shown together as Bunkers. **Calculated using the IEA's energy balances and the Revised 1996 IPCC Guidelines. CO_2 emissions are from fuel combustion only. ***Asia excludes China.*

OUTLOOK FOR WORLD TPES

TPES Outlook by Fuel

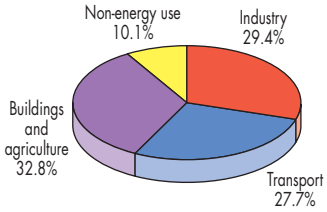


NPS: New Policies Scenario (based on policies under consideration)

*450S: 450 Scenario**** (based on policies needed to limit global average temperature increase to 2 °C)*

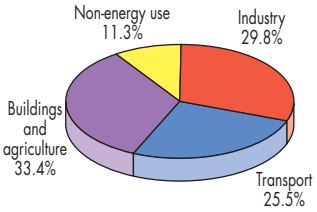
Total Final Consumption by Sector in 2035

New Policies Scenario



12 001 Mtoe

450 Scenario

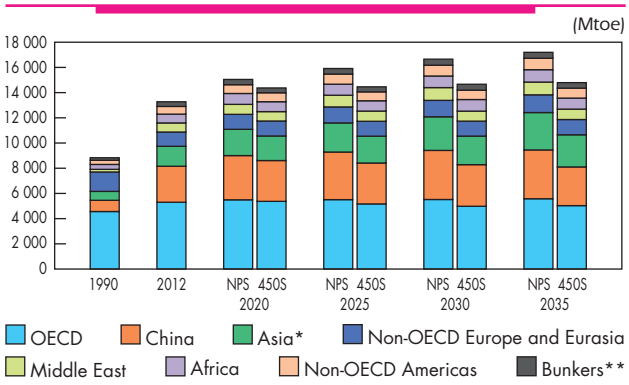


10 442 Mtoe

**In these graphs, peat and oil shale are aggregated with coal.*
***Includes international aviation and international marine bunkers.*
****Includes biofuels and waste, geothermal, solar, wind, tide, etc.*
*****Based on a plausible post-2013 climate-policy framework to stabilise the long-term concentration of global greenhouse gases at 450 ppm CO_2-equivalent.*

(Source: IEA, *World Energy Outlook 2013*)

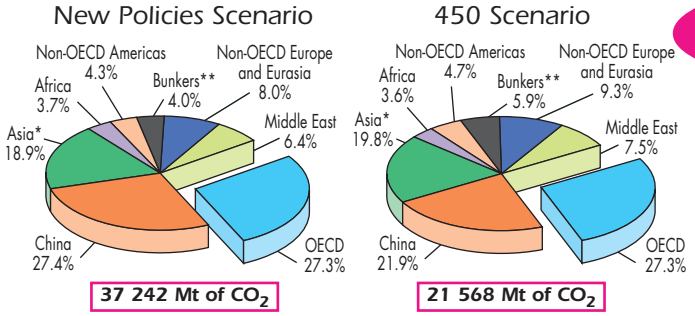
TPES Outlook by Region



NPS: New Policies Scenario (based on policies under consideration)

*450S: 450 Scenario*** (based on policies needed to limit global average temperature increase to 2 °C)*

CO_2 Emissions by Region in 2035



**Asia excludes China.*
***Includes international aviation and international marine bunkers.*
****Based on a plausible post-2013 climate-policy framework to stabilise the long-term concentration of global greenhouse gases at 450 ppm CO_2-equivalent.*
CO_2 emissions are from fossil fuel combustion only.

Selected Indicators for 2012

Region/ Country/ Economy	Population (million)	GDP (billion 2005 USD)	GDP (PPP) (billion 2005 USD)	Energy prod. (Mtoe)	Net imports (Mtoe)	TPES (Mtoe)	Elec. cons.[a] (TWh)	CO_2 emissions[b] (Mt of CO_2)
World	7 037	54 588	82 901	13 461	-	13 371[c]	20 915	31 734[d]
OECD	1 254	39 490	39 202	3 869	1 543	5 250	10 145	12 146
Middle East	213	1 430	4 184	1 796	-1 091	681	790	1 647
Non-OECD Europe and Eurasia	341	1 644	4 065	1 842	-627	1 194	1 552	2 732
China	1 358	4 756	13 289	2 525	496	2 909	4 737	8 251
Asia	2 320	3 568	12 643	1 464	235	1 644	2 071	3 698
Non-OECD Americas	467	2 369	5 340	802	-172	611	979	1 148
Africa	1 083	1 331	4 177	1 162	-418	733	641	1 032
Albania	3.16	11.22	25.69	1.67	0.39	2.07	6.14	3.83
Algeria	38.48	123.61	438.34	143.76	-97.21	46.33	46.28	114.35
Angola	20.82	55.92	136.33	97.15	-82.45	14.28	4.98	16.46
Argentina	41.09	287.91	658.58	75.17	7.06	80.24	124.38	188.51
Armenia	2.97	6.64	19.30	0.81	2.21	2.97	5.46	5.42
Australia	23.13	924.97	872.42	317.39	-186.80	128.27	236.33	386.27
Austria	8.43	337.69	306.34	12.80	21.57	33.11	71.72	64.73
Azerbaijan	9.30	28.95	131.65	58.73	-44.27	13.69	19.08	29.27
Bahrain	1.32	22.09	47.76	19.77	-6.64	12.60	23.20	28.81
Bangladesh	154.70	92.36	325.96	27.19	5.49	33.17	43.25	59.55
Belarus	9.46	45.98	142.31	4.12	26.60	30.50	34.99	71.12
Belgium	11.05	406.82	363.64	15.89	46.89	55.95	88.88	104.56
Benin	10.05	5.71	15.11	2.17	1.92	3.92	0.92	4.95
Bolivia	10.50	13.22	52.87	20.08	-11.51	8.51	6.78	16.32
Bosnia and Herzegovina	3.83	12.88	28.20	4.52	2.21	6.67	12.54	21.22
Botswana	2.00	13.39	25.80	1.32	1.29	2.16	3.23	4.47
Brazil	198.66	1 136.56	2 532.37	251.90	33.64	281.72	498.36	440.24
Brunei Darussalam	0.41	10.28	26.12	18.52	-14.48	3.86	3.69	8.40

(a) Gross production + imports – exports – losses.
(b) CO_2 emissions from fuel combustion only. Emissions are calculated using the IEA's energy balances and the Revised 1996 IPCC Guidelines.

TPES/ pop. (toe/capita)	TPES/ GDP (toe/000 2005 USD)	TPES/ GDP (PPP) (toe/000 2005 USD)	Elec. cons./pop. (kWh/ capita)	CO_2/ TPES (t CO_2/ toe)	CO_2/ pop. (t CO_2/ capita)	CO_2/ GDP (kg CO_2/ 2005 USD)	CO_2/ GDP (PPP) (kg CO_2/ 2005 USD)	Region/ Country/ Economy
1.90	0.24	0.16	2 972	2.37	4.51	0.58	0.38	World
4.19	0.13	0.13	8 089	2.31	9.68	0.31	0.31	OECD
3.19	0.48	0.16	3 704	2.42	7.72	1.15	0.39	Middle East
3.50	0.73	0.29	4 551	2.29	8.01	1.66	0.67	Non-OECD Europe and Eurasia
2.14	0.61	0.22	3 488	2.84	6.08	1.73	0.62	China
0.71	0.46	0.13	893	2.25	1.59	1.04	0.29	Asia
1.31	0.26	0.11	2 094	1.88	2.46	0.48	0.21	Non-OECD Americas
0.68	0.55	0.18	592	1.41	0.95	0.78	0.25	Africa
0.66	0.18	0.08	1 943	1.84	1.21	0.34	0.15	Albania
1.20	0.37	0.11	1 203	2.47	2.97	0.93	0.26	Algeria
0.69	0.26	0.10	239	1.15	0.79	0.29	0.12	Angola
1.95	0.28	0.12	3 027	2.35	4.59	0.65	0.29	Argentina
1.00	0.45	0.15	1 838	1.83	1.83	0.82	0.28	Armenia
5.55	0.14	0.15	10 218	3.01	16.70	0.42	0.44	Australia
3.93	0.10	0.11	8 511	1.96	7.68	0.19	0.21	Austria
1.47	0.47	0.10	2 053	2.14	3.15	1.01	0.22	Azerbaijan
9.56	0.57	0.26	17 601	2.29	21.86	1.30	0.60	Bahrain
0.21	0.36	0.10	280	1.80	0.38	0.64	0.18	Bangladesh
3.22	0.66	0.21	3 698	2.33	7.51	1.55	0.50	Belarus
5.06	0.14	0.15	8 040	1.87	9.46	0.26	0.29	Belgium
0.39	0.69	0.26	92	1.26	0.49	0.87	0.33	Benin
0.81	0.64	0.16	646	1.92	1.55	1.23	0.31	Bolivia
1.74	0.52	0.24	3 271	3.18	5.54	1.65	0.75	Bosnia and Herzegovina
1.08	0.16	0.08	1 611	2.07	2.23	0.33	0.17	Botswana
1.42	0.25	0.11	2 509	1.56	2.22	0.39	0.17	Brazil
9.38	0.38	0.15	8 949	2.17	20.38	0.82	0.32	Brunei Darussalam

(c) TPES for world includes international aviation and international marine bunkers as well as electricity and heat trade.
(d) CO_2 emissions for world include emissions from international aviation and international marine bunkers.

Region/ Country/ Economy	Population (million)	GDP (billion 2005 USD)	GDP (PPP) (billion 2005 USD)	Energy prod. (Mtoe)	Net imports (Mtoe)	TPES (Mtoe)	Elec. cons.[a] (TWh)	CO_2 emissions[b] (Mt of CO_2)
Bulgaria	7.31	33.85	88.95	11.78	6.83	18.35	34.79	44.30
Cambodia	14.87	9.98	36.96	3.94	1.58	5.48	3.06	4.17
Cameroon	21.70	20.91	49.34	7.85	-0.74	6.99	5.68	5.42
Canada	34.88	1 293.15	1 291.14	419.66	-168.71	251.12	542.68	533.74
Chile	17.40	165.22	276.67	13.05	24.96	37.21	66.25	77.77
People's Rep. of China	1 350.70	4 522.14	12 968.57	2 525.28	467.59	2 894.28	4 693.68	8 205.86
Colombia	47.70	203.27	496.98	124.53	-90.81	31.59	53.91	67.35
Congo	4.34	8.43	21.77	15.73	-13.87	1.71	0.78	2.18
Dem. Rep. of Congo	65.71	10.81	26.42	20.94	-0.22	20.56	7.37	2.42
Costa Rica	4.81	27.47	56.08	2.46	2.37	4.73	9.11	6.75
Côte d'Ivoire	19.84	19.00	48.58	12.49	0.15	12.61	5.06	7.83
Croatia	4.27	44.95	68.29	3.45	4.39	7.92	16.30	17.19
Cuba	11.27	56.93	64.52	5.52	6.15	11.38	15.51	28.82
Cyprus*	0.86	18.82	20.48	0.11	2.61	2.23	4.58	6.46
Czech Republic	10.51	149.64	250.41	32.64	10.81	42.65	66.27	107.77
Denmark	5.59	258.64	180.56	18.96	-0.66	17.34	33.77	37.13
Dominican Republic	10.28	51.94	100.91	0.80	7.22	7.55	14.95	19.81
Ecuador	15.49	55.28	136.72	28.64	-14.68	14.42	19.76	33.10
Egypt	80.72	125.90	768.85	82.05	-3.58	78.21	145.66	196.85
El Salvador	6.30	19.11	41.79	2.30	2.07	4.37	5.35	6.15
Eritrea	6.13	1.23	6.45	0.62	0.18	0.80	0.31	0.54
Estonia	1.34	15.82	25.35	5.09	1.16	5.52	8.85	16.35
Ethiopia	91.73	24.66	99.62	43.04	2.75	45.49	5.30	7.93
Finland	5.41	207.81	170.99	17.24	15.54	33.30	84.93	49.41
FYR of Macedonia	2.11	7.32	19.63	1.52	1.44	2.97	7.64	8.69
France	65.43	2 249.44	1 959.01	134.47	124.13	252.33	482.05	333.89
Gabon	1.63	10.95	26.19	14.08	-11.58	2.21	1.77	2.47
Georgia	4.49	9.34	26.78	1.10	2.65	3.71	8.69	6.81
Germany	81.92	3 073.86	2 851.34	123.38	199.56	312.53	584.71	755.27
Ghana	25.37	18.37	82.27	9.97	0.40	10.13	8.84	12.81

(a) Gross production + imports – exports – losses.
(b) CO_2 emissions from fuel combustion only. Emissions are calculated using the IEA's energy balances and the Revised 1996 IPCC Guidelines.

TPES/ pop. (toe/capita)	TPES/ GDP (toe/000 2005 USD)	TPES/ GDP (PPP) (toe/000 2005 USD)	Elec. cons./pop. (kWh/ capita)	CO_2/ TPES (t CO_2/ toe)	CO_2/ pop. (t CO_2/ capita)	CO_2/ GDP (kg CO_2/ 2005 USD)	CO_2/ GDP (PPP) (kg CO_2/ 2005 USD)	Region/ Country/ Economy
2.51	0.54	0.21	4762	2.41	6.06	1.31	0.50	Bulgaria
0.37	0.55	0.15	206	0.76	0.28	0.42	0.11	Cambodia
0.32	0.33	0.14	262	0.78	0.25	0.26	0.11	Cameroon
7.20	0.19	0.19	15 558	2.13	15.30	0.41	0.41	Canada
2.14	0.23	0.13	3 807	2.09	4.47	0.47	0.28	Chile
2.14	0.64	0.22	3 475	2.84	6.08	1.81	0.63	People's Rep. of China
0.66	0.16	0.06	1 130	2.13	1.41	0.33	0.14	Colombia
0.40	0.20	0.08	180	1.27	0.50	0.26	0.10	Congo
0.31	1.90	0.78	112	0.12	0.04	0.22	0.09	Dem. Rep. of Congo
0.98	0.17	0.08	1 896	1.43	1.41	0.25	0.12	Costa Rica
0.64	0.66	0.26	255	0.62	0.39	0.41	0.16	Côte d'Ivoire
1.85	0.18	0.12	3 819	2.17	4.03	0.38	0.25	Croatia
1.01	0.20	0.18	1 376	2.53	2.56	0.51	0.45	Cuba
2.58	0.12	0.11	5 313	2.90	7.50	0.34	0.32	Cyprus*
4.06	0.29	0.17	6 306	2.53	10.25	0.72	0.43	Czech Republic
3.10	0.07	0.10	6 040	2.14	6.64	0.14	0.21	Denmark
0.73	0.15	0.07	1 455	2.62	1.93	0.38	0.20	Dominican Republic
0.93	0.26	0.11	1 276	2.30	2.14	0.60	0.24	Ecuador
0.97	0.62	0.10	1 804	2.52	2.44	1.56	0.26	Egypt
0.69	0.23	0.10	850	1.41	0.98	0.32	0.15	El Salvador
0.13	0.65	0.12	50	0.68	0.09	0.44	0.08	Eritrea
4.12	0.35	0.22	6 603	2.96	12.20	1.03	0.64	Estonia
0.50	1.84	0.46	58	0.17	0.09	0.32	0.08	Ethiopia
6.15	0.16	0.19	15 687	1.48	9.13	0.24	0.29	Finland
1.41	0.41	0.15	3 625	2.93	4.13	1.19	0.44	FYR of Macedonia
3.86	0.11	0.13	7 367	1.32	5.10	0.15	0.17	France
1.35	0.20	0.08	1 081	1.12	1.51	0.23	0.09	Gabon
0.83	0.40	0.14	1 935	1.84	1.52	0.73	0.25	Georgia
3.82	0.10	0.11	7 138	2.42	9.22	0.25	0.26	Germany
0.40	0.55	0.12	348	1.26	0.50	0.70	0.16	Ghana

Please refer to geographical coverage section for more details.

Region/ Country/ Economy	Population (million)	GDP (billion 2005 USD)	GDP (PPP) (billion 2005 USD)	Energy prod. (Mtoe)	Net imports (Mtoe)	TPES (Mtoe)	Elec. cons.[a] (TWh)	CO_2 emissions[b] (Mt of CO_2)
Gibraltar	0.03	1.09	0.93	0.00	2.79	0.17	0.17	0.53
Greece	11.09	208.22	234.49	10.43	19.44	26.55	61.13	77.51
Guatemala	15.08	34.94	93.97	8.24	3.28	11.07	8.13	10.49
Haiti	10.17	4.68	14.28	3.33	0.79	4.07	0.51	2.07
Honduras	7.94	12.45	31.29	2.45	2.68	5.08	5.40	8.16
Hong Kong, China	7.16	234.25	320.74	0.11	28.41	14.63	43.12	44.99
Hungary	9.92	108.94	169.08	10.58	12.43	23.47	38.87	43.55
Iceland	0.32	17.07	10.85	5.11	0.79	5.69	17.06	1.84
India	1 236.69	1 389.05	5 567.13	544.55	243.22	788.13	939.78	1 954.02
Indonesia	246.86	427.48	1 948.84	440.25	-226.23	213.59	181.04	435.48
Islamic Rep. of Iran	76.42	245.23	1 053.29	302.90	-82.66	219.59	210.35	532.15
Iraq	32.58	80.54	421.88	155.12	-109.66	45.04	48.31	118.98
Ireland	4.59	208.04	165.60	1.29	11.84	13.25	25.98	35.55
Israel	7.91	190.02	229.42	3.26	22.43	24.28	56.87	73.27
Italy	60.91	1 729.86	1 605.06	31.86	132.60	158.80	321.38	374.77
Jamaica	2.71	11.34	19.07	0.50	2.57	2.81	3.24	7.09
Japan	127.55	4 694.39	3 993.81	28.32	435.27	452.28	988.92	1 223.30
Jordan	6.32	17.93	63.87	0.27	7.89	7.62	14.89	21.70
Kazakhstan	16.79	87.19	321.89	164.64	-88.02	74.85	85.38	225.78
Kenya	43.18	25.67	81.17	16.89	4.38	20.54	6.79	10.64
Korea	50.00	1 078.21	1 399.65	46.22	228.61	263.44	517.33	592.92
DPR of Korea	24.76	27.38	102.78	20.26	-6.18	14.08	16.20	45.42
Kosovo	1.81	5.26	13.20	1.75	0.65	2.37	5.17	8.00
Kuwait	3.25	96.63	243.93	173.25	-136.84	34.61	53.76	91.26
Kyrgyzstan	5.61	3.21	14.23	1.75	2.52	4.13	10.14	9.51
Latvia	2.03	17.14	32.05	2.34	2.69	4.42	7.30	7.01
Lebanon	4.43	31.32	65.12	0.23	7.20	7.18	13.78	21.03
Libya	6.16	36.87	67.77	86.78	-69.07	17.15	29.58	44.20
Lithuania	2.99	30.06	56.13	1.56	5.91	7.38	10.78	13.33
Luxembourg	0.53	41.40	34.94	0.13	4.35	4.09	7.80	10.22

(a) Gross production + imports – exports – losses.
(b) CO_2 emissions from fuel combustion only. Emissions are calculated using the IEA's energy balances and the Revised 1996 IPCC Guidelines.

TPES/ pop. (toe/capita)	TPES/ GDP (toe/000 2005 USD)	TPES/ GDP (PPP) (toe/000 2005 USD)	Elec. cons./pop. (kWh/ capita)	CO_2/ TPES (t CO_2/ toe)	CO_2/ pop. (t CO_2/ capita)	CO_2/ GDP (kg CO_2/ 2005 USD)	CO_2/ GDP (PPP) (kg CO_2/ 2005 USD)	Region/ Country/ Economy
5.40	0.16	0.19	5 344	3.06	16.52	0.48	0.57	Gibraltar
2.39	0.13	0.11	5 511	2.92	6.99	0.37	0.33	Greece
0.73	0.32	0.12	539	0.95	0.70	0.30	0.11	Guatemala
0.40	0.87	0.29	50	0.51	0.20	0.44	0.15	Haiti
0.64	0.41	0.16	680	1.61	1.03	0.66	0.26	Honduras
2.05	0.06	0.05	6 026	3.07	6.29	0.19	0.14	Hong Kong, China
2.37	0.22	0.14	3 919	1.86	4.39	0.40	0.26	Hungary
17.74	0.33	0.52	53 156	0.32	5.73	0.11	0.17	Iceland
0.64	0.57	0.14	760	2.48	1.58	1.41	0.35	India
0.87	0.50	0.11	733	2.04	1.76	1.02	0.22	Indonesia
2.87	0.90	0.21	2 752	2.42	6.96	2.17	0.51	Islamic Rep. of Iran
1.38	0.56	0.11	1 483	2.64	3.65	1.48	0.28	Iraq
2.89	0.06	0.08	5 661	2.68	7.74	0.17	0.21	Ireland
3.07	0.13	0.11	7 193	3.02	9.27	0.39	0.32	Israel
2.61	0.09	0.10	5 277	2.36	6.15	0.22	0.23	Italy
1.04	0.25	0.15	1 198	2.53	2.62	0.63	0.37	Jamaica
3.55	0.10	0.11	7 753	2.70	9.59	0.26	0.31	Japan
1.21	0.43	0.12	2 357	2.85	3.43	1.21	0.34	Jordan
4.46	0.86	0.23	5 085	3.02	13.45	2.59	0.70	Kazakhstan
0.48	0.80	0.25	157	0.52	0.25	0.41	0.13	Kenya
5.27	0.24	0.19	10 346	2.25	11.86	0.55	0.42	Korea
0.57	0.51	0.14	654	3.23	1.83	1.66	0.44	DPR of Korea
1.31	0.45	0.18	2 860	3.38	4.43	1.52	0.61	Kosovo
10.65	0.36	0.14	16 542	2.64	28.08	0.94	0.37	Kuwait
0.74	1.29	0.29	1 809	2.30	1.70	2.96	0.67	Kyrgyzstan
2.17	0.26	0.14	3 589	1.59	3.45	0.41	0.22	Latvia
1.62	0.23	0.11	3 113	2.93	4.75	0.67	0.32	Lebanon
2.79	0.46	0.25	4 805	2.58	7.18	1.20	0.65	Libya
2.47	0.25	0.13	3 607	1.81	4.46	0.44	0.24	Lithuania
7.69	0.10	0.12	14 667	2.50	19.21	0.25	0.29	Luxembourg

Region/ Country/ Economy	Population (million)	GDP (billion 2005 USD)	GDP (PPP) (billion 2005 USD)	Energy prod. (Mtoe)	Net imports (Mtoe)	TPES (Mtoe)	Elec. cons.[a] (TWh)	CO_2 emissions[b] (Mt of CO_2)
Malaysia	29.24	198.43	570.74	88.80	-6.17	81.23	126.11	195.89
Malta	0.42	6.84	9.71	0.01	2.04	0.67	2.00	2.52
Mauritius	1.29	8.39	18.64	0.23	1.62	1.34	2.61	3.69
Mexico	117.05	1 027.51	1 571.20	218.98	-22.89	188.39	245.57	435.79
Republic of Moldova	3.56	3.70	13.16	0.12	3.16	3.28	5.39	7.62
Mongolia	2.80	4.56	20.66	18.33	-15.82	3.94	4.49	14.22
Montenegro	0.62	2.88	6.59	0.71	0.37	1.06	3.36	2.30
Morocco	32.52	83.22	202.76	1.66	18.07	18.80	28.87	51.84
Mozambique	25.20	10.52	21.82	15.80	-4.38	10.44	11.44	2.60
Myanmar	52.80	22.85	93.78	22.51	-7.26	15.27	8.02	11.65
Namibia	2.26	9.88	18.40	0.35	1.32	1.62	3.65	3.18
Nepal	27.47	10.96	52.18	8.51	1.69	10.10	3.28	4.89
Netherlands	16.75	680.92	610.99	64.72	30.04	78.58	115.13	173.77
Netherlands Antilles*	0.23	2.70	2.42	0.00	4.43	2.06	1.12	4.77
New Zealand	4.44	125.76	116.36	16.04	3.79	18.96	41.32	32.14
Nicaragua	5.99	8.09	22.72	1.86	1.47	3.31	3.41	4.30
Nigeria	168.83	177.64	818.65	271.71	-139.76	133.74	26.22	64.56
Norway	5.02	329.30	238.47	198.89	-168.75	29.19	118.73	36.19
Oman	3.31	46.01	131.45	75.77	-50.63	26.32	21.61	67.63
Pakistan	179.16	138.47	696.36	65.99	20.12	85.76	80.13	137.44
Panama	3.80	28.37	56.45	0.90	6.76	4.15	7.39	9.88
Paraguay	6.69	11.49	43.01	7.53	-2.55	5.00	8.73	5.06
Peru	29.99	127.56	310.15	23.35	-2.14	21.70	36.53	45.82
Philippines	96.71	145.16	517.64	24.43	19.79	42.55	64.56	79.46
Poland	38.54	407.64	705.63	71.43	30.92	97.85	148.42	293.77
Portugal	10.58	188.41	221.39	4.60	18.25	21.39	49.80	45.89
Qatar	2.05	123.54	247.21	220.38	-180.85	37.92	32.62	75.78
Romania	20.08	117.14	239.84	27.19	7.93	34.92	52.24	78.97
Russian Federation	143.53	980.91	2 178.44	1 331.61	-564.94	756.59	947.59	1 659.03
Saudi Arabia	28.29	497.62	1 280.72	625.00	-425.53	200.26	247.90	458.80
Senegal	13.73	10.95	26.59	2.32	2.06	4.13	2.89	5.64

(a) Gross production + imports – exports – losses.
(b) CO_2 emissions from fuel combustion only. Emissions are calculated using the IEA's energy balances and the Revised 1996 IPCC Guidelines.

TPES/ pop. (toe/capita)	TPES/ GDP (toe/000 2005 USD)	TPES/ GDP (PPP) (toe/000 2005 USD)	Elec. cons./pop. (kWh/ capita)	CO_2/ TPES (t CO_2/ toe)	CO_2/ pop. (t CO_2/ capita)	CO_2/ GDP (kg CO_2/ 2005 USD)	CO_2/ GDP (PPP) (kg CO_2/ 2005 USD)	Region/ Country/ Economy
2.78	0.41	0.14	4 313	2.41	6.70	0.99	0.34	Malaysia
1.60	0.10	0.07	4 766	3.76	6.02	0.37	0.26	Malta
1.04	0.16	0.07	2 019	2.75	2.86	0.44	0.20	Mauritius
1.61	0.18	0.12	2 098	2.31	3.72	0.42	0.28	Mexico
0.92	0.89	0.25	1 514	2.33	2.14	2.06	0.58	Republic of Moldova
1.41	0.87	0.19	1 604	3.61	5.08	3.12	0.69	Mongolia
1.71	0.37	0.16	5 412	2.16	3.70	0.80	0.35	Montenegro
0.58	0.23	0.09	888	2.76	1.59	0.62	0.26	Morocco
0.41	0.99	0.48	454	0.25	0.10	0.25	0.12	Mozambique
0.29	0.67	0.16	152	0.76	0.22	0.51	0.12	Myanmar
0.72	0.16	0.09	1 614	1.97	1.41	0.32	0.17	Namibia
0.37	0.92	0.19	119	0.48	0.18	0.45	0.09	Nepal
4.69	0.12	0.13	6 872	2.21	10.37	0.26	0.28	Netherlands
9.01	0.77	0.85	4 891	2.31	20.85	1.77	1.97	Netherlands Antilles*
4.27	0.15	0.16	9 298	1.70	7.23	0.26	0.28	New Zealand
0.55	0.41	0.15	568	1.30	0.72	0.53	0.19	Nicaragua
0.79	0.75	0.16	155	0.48	0.38	0.36	0.08	Nigeria
5.82	0.09	0.12	23 656	1.24	7.21	0.11	0.15	Norway
7.94	0.57	0.20	6 520	2.57	20.41	1.47	0.51	Oman
0.48	0.62	0.12	447	1.60	0.77	0.99	0.20	Pakistan
1.09	0.15	0.07	1 943	2.38	2.60	0.35	0.18	Panama
0.75	0.43	0.12	1 305	1.01	0.76	0.44	0.12	Paraguay
0.72	0.17	0.07	1 218	2.11	1.53	0.36	0.15	Peru
0.44	0.29	0.08	668	1.87	0.82	0.55	0.15	Philippines
2.54	0.24	0.14	3 851	3.00	7.62	0.72	0.42	Poland
2.02	0.11	0.10	4 708	2.15	4.34	0.24	0.21	Portugal
18.49	0.31	0.15	15 904	2.00	36.95	0.61	0.31	Qatar
1.74	0.30	0.15	2 602	2.26	3.93	0.67	0.33	Romania
5.27	0.77	0.35	6 602	2.19	11.56	1.69	0.76	Russian Federation
7.08	0.40	0.16	8 763	2.29	16.22	0.92	0.36	Saudi Arabia
0.30	0.38	0.16	210	1.37	0.41	0.51	0.21	Senegal

Please refer to geographical coverage section for more details.

Region/ Country/ Economy	Population (million)	GDP (billion 2005 USD)	GDP (PPP) (billion 2005 USD)	Energy prod. (Mtoe)	Net imports (Mtoe)	TPES (Mtoe)	Elec. cons.[a] (TWh)	CO_2 emissions[b] (Mt of CO_2)
Serbia	7.22	27.85	69.95	10.78	3.98	14.46	31.58	44.09
Singapore	5.31	183.37	338.47	0.60	70.74	25.05	46.16	49.75
Slovak Republic	5.41	63.11	114.81	6.45	10.12	16.65	27.78	31.88
Slovenia	2.06	38.25	50.29	3.56	3.64	7.00	13.94	14.63
South Africa	52.28	307.31	558.65	166.08	-21.70	140.00	230.54	376.12
Spain	46.16	1 160.46	1 219.94	33.34	100.45	124.97	260.69	266.58
Sri Lanka	20.33	38.30	160.59	5.93	5.92	11.27	10.71	15.86
Sudan*	48.03	31.14	111.74	17.12	-0.21	16.66	7.64	14.46
Sweden	9.52	417.24	332.48	36.18	15.36	50.16	136.03	40.42
Switzerland	7.93	439.80	314.23	12.73	14.59	25.61	63.06	41.26
Syrian Arab Republic	22.40	28.71	76.00	13.47	2.08	15.02	26.18	40.05
Chinese Taipei	23.43	481.13	800.17	13.31	94.88	104.68	240.98	256.61
Tajikistan	8.01	3.67	16.57	1.67	0.63	2.27	13.87	2.74
United Rep. of Tanzania	47.78	22.43	68.43	19.94	2.40	22.16	4.81	8.89
Thailand	66.79	223.90	808.81	75.73	56.10	126.56	165.54	256.65
Togo	6.64	2.74	7.61	2.50	0.67	3.12	0.98	1.62
Trinidad and Tobago	1.34	18.97	34.68	39.80	-19.95	19.23	8.89	37.09
Tunisia	10.78	40.78	101.95	7.26	2.99	9.89	15.21	23.04
Turkey	74.90	627.75	1015.40	30.56	88.97	116.90	206.71	302.38
Turkmenistan	5.17	16.91	57.45	68.03	-42.03	25.57	12.81	63.82
Ukraine	45.59	95.48	338.64	85.42	38.51	122.66	165.99	281.07
United Arab Emirates	9.21	221.65	468.10	194.35	-107.61	67.47	93.67	170.97
United Kingdom	63.71	2 393.03	2 068.88	117.48	86.93	192.23	347.30	457.45
United States	314.28	14 231.58	14 231.58	1 806.48	374.88	2 140.62	4 069.06	5 074.14
Uruguay	3.40	25.46	54.37	1.85	3.36	4.63	9.96	8.39
Uzbekistan	29.78	25.18	124.86	56.75	-8.46	48.28	47.80	111.14
Venezuela	29.96	192.07	471.08	199.29	-120.77	76.38	101.88	178.28
Viet Nam	88.77	87.53	388.72	69.33	-6.44	64.85	112.97	142.85
Yemen	23.85	18.57	84.97	15.11	-8.05	6.92	4.23	19.97
Zambia	14.08	11.23	37.52	8.24	0.89	9.08	8.45	2.76
Zimbabwe	13.72	5.83	3.94	8.92	0.66	9.58	8.18	9.98

(a) Gross production + imports – exports – losses.
(b) CO_2 emissions from fuel combustion only. Emissions are calculated using the IEA's energy balances and the Revised 1996 IPCC Guidelines.

TPES/ pop. (toe/capita)	TPES/ GDP (toe/000 2005 USD)	TPES/ GDP (PPP) (toe/000 2005 USD)	Elec. cons./pop. (kWh/ capita)	CO_2/ TPES (t CO_2/ toe)	CO_2/ pop. (t CO_2/ capita)	CO_2/ GDP (kg CO_2/ 2005 USD)	CO_2/ GDP (PPP) (kg CO_2/ 2005 USD)	Region/ Country/ Economy
2.00	0.52	0.21	4 371	3.05	6.10	1.58	0.63	Serbia
4.72	0.14	0.07	8 690	1.99	9.36	0.27	0.15	Singapore
3.08	0.26	0.15	5 139	1.91	5.90	0.51	0.28	Slovak Republic
3.40	0.18	0.14	6 778	2.09	7.11	0.38	0.29	Slovenia
2.68	0.46	0.25	4 410	2.69	7.20	1.22	0.67	South Africa
2.71	0.11	0.10	5 647	2.13	5.77	0.23	0.22	Spain
0.55	0.29	0.07	527	1.41	0.78	0.41	0.10	Sri Lanka
0.35	0.53	0.15	159	0.87	0.30	0.46	0.13	Sudan*
5.27	0.12	0.15	14 289	0.81	4.25	0.10	0.12	Sweden
3.23	0.06	0.08	7 953	1.61	5.20	0.09	0.13	Switzerland
0.67	0.52	0.20	1 169	2.67	1.79	1.40	0.53	Syrian Arab Republic
4.47	0.22	0.13	10 283	2.45	10.95	0.53	0.32	Chinese Taipei
0.28	0.62	0.14	1 732	1.21	0.34	0.75	0.17	Tajikistan
0.46	0.99	0.32	101	0.40	0.19	0.40	0.13	United Rep. of Tanzania
1.89	0.57	0.16	2 479	2.03	3.84	1.15	0.32	Thailand
0.47	1.14	0.41	147	0.52	0.24	0.59	0.21	Togo
14.38	1.01	0.55	6 651	1.93	27.74	1.96	1.07	Trinidad and Tobago
0.92	0.24	0.10	1 411	2.33	2.14	0.57	0.23	Tunisia
1.56	0.19	0.12	2 760	2.59	4.04	0.48	0.30	Turkey
4.94	1.51	0.45	2 476	2.50	12.34	3.77	1.11	Turkmenistan
2.69	1.28	0.36	3 641	2.29	6.16	2.94	0.83	Ukraine
7.33	0.30	0.14	10 175	2.53	18.57	0.77	0.37	United Arab Emirates
3.02	0.08	0.09	5 452	2.38	7.18	0.19	0.22	United Kingdom
6.81	0.15	0.15	12 947	2.37	16.15	0.36	0.36	United States
1.36	0.18	0.09	2 933	1.81	2.47	0.33	0.15	Uruguay
1.62	1.92	0.39	1 605	2.30	3.73	4.41	0.89	Uzbekistan
2.55	0.40	0.16	3 401	2.33	5.95	0.93	0.38	Venezuela
0.73	0.74	0.17	1 273	2.20	1.61	1.63	0.37	Viet Nam
0.29	0.37	0.08	177	2.88	0.84	1.08	0.24	Yemen
0.65	0.81	0.24	600	0.30	0.20	0.25	0.07	Zambia
0.70	1.64	2.43	596	1.04	0.73	1.71	2.53	Zimbabwe

Sources: Energy data: IEA. Population: OECD/World Bank.
GDP and GDP(PPP) (in 2005 USD): OECD/World Bank/CEPII, Bureau van Dijk (Paris).
**Please refer to geographical coverage section for more details.*

General conversion factors for energy

To:	TJ	Gcal	Mtoe	MBtu	GWh
From:	multiply by:				
TJ	1	238.8	2.388×10^{-5}	947.8	0.2778
Gcal	4.1868×10^{-3}	1	10^{-7}	3.968	1.163×10^{-3}
Mtoe	4.1868×10^{4}	10^{7}	1	3.968×10^{7}	11630
MBtu	1.0551×10^{-3}	0.252	2.52×10^{-8}	1	2.931×10^{-4}
GWh	3.6	860	8.6×10^{-5}	3412	1

Conversion factors for mass

To:	kg	t	lt	st	lb
From:	multiply by:				
kilogramme (kg)	1	0.001	9.84×10^{-4}	1.102×10^{-3}	2.2046
tonne (t)	1 000	1	0.984	1.1023	2 204.6
long ton (lt)	1 016	1.016	1	1.120	2 240.0
short ton (st)	907.2	0.9072	0.893	1	2 000.0
pound (lb)	0.454	4.54×10^{-4}	4.46×10^{-4}	5.0×10^{-4}	1

Conversion factors for volume

To:	gal U.S.	gal U.K.	bbl	ft^3	l	m^3
From:	multiply by:					
U.S. gallon (gal)	1	0.8327	0.02381	0.1337	3.785	0.0038
U.K. gallon (gal)	1.201	1	0.02859	0.1605	4.546	0.0045
barrel (bbl)	42.0	34.97	1	5.615	159.0	0.159
cubic foot (ft^3)	7.48	6.229	0.1781	1	28.3	0.0283
litre (l)	0.2642	0.220	0.0063	0.0353	1	0.001
cubic metre (m^3)	264.2	220.0	6.289	35.3147	1000.0	1

Selected country-specific net calorific values

Steam Coal

Top-ten producers in 2013	toe/tonne
People's Rep. of China	0.516
United States	0.534
India	0.437
Indonesia	0.575
South Africa	0.564
Australia	0.597
Russian Federation	0.601
Kazakhstan	0.444
Colombia	0.650
Poland	0.540

Crude oil*

Top-ten producers in 2013	toe/tonne
Russian Federation	1.005
Saudi Arabia	1.016
United States	1.033
People's Rep. of China	1.000
Kuwait	1.016
Iraq	1.023
Venezuela	1.069
United Arab Emirates	1.018
Islamic Rep. of Iran	1.019
Mexico	1.070

*Excludes NGL, feedstocks, additives and other hydrocarbons.

Default net calorific values

Oil products

	OECD Europe*	OECD Americas	OECD Asia Oceania	Non-OECD
	toe/tonne			
Refinery gas	1.182	1.149	1.149	1.149
Ethane	1.182	1.180	1.180	1.180
Liquefied petroleum gases	1.099	1.130	1.139	1.130
Motor gasoline excl. biofuels	1.051	1.070	1.065	1.070
Aviation gasoline	1.051	1.070	1.065	1.070
Gasoline type jet fuel	1.027	1.070	1.065	1.070
Kerosene type jet fuel	1.027	1.065	1.063	1.065
Kerosene	1.027	1.046	1.025	1.046
Gas/diesel oil excl. biofuels	1.017	1.017	1.017	1.034
Fuel oil	0.955	0.960	1.017	0.960
Naphtha	1.051	1.075	1.032	1.075
White spirit	1.041	1.027	1.027	1.027
Lubricants	1.003	1.003	1.025	1.003
Bitumen	0.931	0.955	0.927	0.931
Paraffin waxes	0.955	0.955	0.955	0.955
Petroleum coke	0.764	0.764	0.807	0.764
Non-specified oil products	0.955	0.955	0.955	0.955

*Defaults for OECD Europe were also applied to non-OECD Europe and Eurasia countries.

Selected country-specific gross calorific values

Natural gas

Top-ten producers in 2013	kJ/m³
United States	38 155
Russian Federation	38 230
Qatar	41 400
Islamic Rep. of Iran	39 356
Canada	38 740
People's Rep. of China	38 931
Norway	39 400
Netherlands	33 339
Saudi Arabia	38 000
Algeria	39 565

Note: to calculate the net calorific value, the gross calorific value is multiplied by 0.9.

Conventions for electricity

Figures for electricity production, trade, and final consumption are calculated using the energy content of the electricity (i.e. at a rate of 1 TWh = 0.086 Mtoe). Hydro-electricity production (excluding pumped storage) and electricity produced by other non-thermal means (wind, tide/wave/ocean, photovoltaic, etc.) are accounted for similarly using 1 TWh = 0.086 Mtoe. However, the primary energy equivalent of nuclear electricity is calculated from the gross generation by assuming a 33% conversion efficiency, i.e. 1 TWh = (0.086 ÷ 0.33) Mtoe. For geothermal and solar thermal, if no country-specific information is reported, the primary energy equivalent is calculated as follows:

- 10% for geothermal electricity;
- 50% for geothermal heat;
- 33% for solar thermal electricity;
- 100% for solar thermal heat.

GLOSSARY

Coal — *Coal* includes all coal, both primary (including coking coal, steam coal and lignite) and derived fuels (including patent fuel, coke oven coke, gas coke, BKB, gas works gas, coke oven gas, blast furnace gas and other recovered gases). For presentational purposes, peat (including peat products) and oil shale are also included in this category where applicable.

Hard coal — *Hard coal* comprises anthracite, coking coal and other bituminous coal.

Steam coal — *Steam coal* comprises anthracite, other bituminous coal and sub-bituminous coal.

Crude oil — *Crude oil* comprises crude oil, natural gas liquids, refinery feedstocks and additives as well as other hydrocarbons.

Oil products — *Oil products* comprises refinery gas, ethane, LPG, aviation gasoline, motor gasoline, jet fuels, kerosene, gas/diesel oil, fuel oil, naphtha, white spirit, lubricants, bitumen, paraffin waxes, petroleum coke and other oil products.

Natural gas — *Natural gas* includes both "associated" and "non-associated" gas.

Nuclear — *Nuclear* shows the primary heat equivalent of the electricity produced by a nuclear power plant with an average thermal efficiency of 33%.

Hydro — *Hydro* shows the energy content of the electricity produced in hydro power plants. Hydro output excludes output from pumped storage plants.

Biofuels and waste — *Biofuels and waste* comprises solid biofuels, liquid biofuels, biogases, industrial waste and municipal waste. Biofuels are defined as any plant matter used directly as fuel or converted into fuels (e.g. charcoal) or electricity and/or heat. Included here are wood, vegetal waste (including wood waste and crops used for energy production), ethanol, animal materials/wastes and sulphite lyes. Municipal waste comprises wastes produced by residential, commercial and public services, that are collected by local authorities for disposal in a central location for the production of heat and/or power.

Other — *Other* includes geothermal, solar, wind, tide/wave/ocean energy, electricity and heat. Unless the actual efficiency of geothermal and solar thermal is known, the quantity of geothermal and solar energy entering electricity generation is inferred from the electricity/heat production at geothermal and solar plants assuming an average thermal efficiency of:

- 10% for geothermal electricity;
- 50% for geothermal heat;
- 33% for solar thermal electricity;
- 100% for solar thermal heat.

Other (ctd.)

For solar PV, wind and tide/wave/ocean energy, the quantities entering electricity generation are equal to the electrical energy generated. Direct use of geothermal and solar heat is also included here. Electricity is accounted for at the same heat value as electricity in final consumption (i.e. 1 GWh = 0.000086 Mtoe). Heat includes heat that is produced for sale and is accounted for in the transformation sector.

Production

Production is the production of primary energy, i.e. coking coal, steam coal, lignite, peat, oil shale, crude oil, NGLs, natural gas, biofuels and waste, nuclear, hydro, geothermal, solar and the heat from heat pumps that is extracted from the ambient environment. Production is calculated after removal of impurities (e.g. sulphur from natural gas).

Imports and exports

Imports and *exports* comprise amounts having crossed the national territorial boundaries of the country, whether or not customs clearance has taken place.

a) Oil and natural gas

Quantities of crude oil and oil products imported or exported under processing agreements (i.e. refining on account) are included. Quantities of oil in transit are excluded. Crude oil, NGL and natural gas are reported as coming from the country of origin; refinery feedstocks and oil products are reported as coming from the country of last consignment. Re-exports of oil imported for processing within bonded areas are shown as exports of product from the processing country to the final destination.

b) Coal

Imports and *exports* comprise the amount of fuels obtained from or supplied to other countries, whether or not there is an economic or customs union between the relevant countries. Coal in transit is not included.

c) Electricity

Amounts are considered as imported or exported when they have crossed the national territorial boundaries of the country.

International marine bunkers

International marine bunkers covers those quantities delivered to ships of all flags that are engaged in international navigation. The international navigation may take place at sea, on inland lakes and waterways, and in coastal waters. Consumption by ships engaged in domestic navigation is excluded. The domestic/international split is determined on the basis of port of departure and port of arrival, and not by the flag or nationality of the ship. Consumption by fishing vessels and by military forces is also excluded.

International aviation bunkers

International aviation bunkers covers deliveries of aviation fuels to aircraft for international aviation. Fuels used by airlines for their road vehicles are excluded. The domestic/international split should be determined on the basis of departure and landing locations and not by the nationality of the airline. For many countries this incorrectly excludes fuel used by domestically owned carriers for their international departures.

Stock changes	*Stock changes* reflects the difference between opening stock levels on the first day of the year and closing levels on the last day of the year of stocks on national territory held by producers, importers, energy transformation industries and large consumers. A stock build is shown as a negative number, and a stock draw as a positive number.
Total primary energy supply (TPES)	*Total primary energy supply (TPES)* is made up of production + imports – exports – international marine bunkers – international aviation bunkers ± stock changes. For the world total, international marine bunkers and international aviation bunkers are not subtracted from TPES.
Transfers	*Transfers* includes both interproduct transfers, products transferred and recycled products.
Statistical differences	*Statistical differences* includes the sum of the unexplained statistical differences for individual fuels, as they appear in the basic energy statistics. It also includes the statistical differences that arise because of the variety of conversion factors in the coal and oil columns.
Electricity plants	*Electricity plants* refers to plants which are designed to produce electricity only. If one or more units of the plant is a CHP unit (and the inputs and outputs can not be distinguished on a unit basis) then the whole plant is designated as a CHP plant. Both main activity producers and autoproducer plants are included here.
Combined heat and power plants	*Combined heat and power plants* refers to plants which are designed to produce both heat and electricity, sometimes referred as co-generation power stations. If possible, fuel inputs and electricity/heat outputs are on a unit basis rather than on a plant basis. However, if data are not available on a unit basis, the convention for defining a CHP plant noted above is adopted. Both main activity producers and autoproducer plants are included here.
Heat plants	*Heat plants* refers to plants (including heat pumps and electric boilers) designed to produce heat only, which is sold to a third party under the provisions of a contract. Both main activity producers and autoproducer plants are included here.
Blast furnaces	*Blast furnaces* contains inputs to and outputs of fuels from blast furnaces.
Gas works	*Gas works* is treated similarly to electricity generation, with the quantity produced appearing as a positive figure in the coal column or the natural gas column after blending with natural gas, inputs as negative entries in the coal and oil products columns, and conversion losses appearing in the total column.

Coke ovens *Coke ovens* contains losses in transformation of coal from primary to secondary fuels and from secondary to tertiary fuels (hard coal to coke and patent fuel, lignite to BKB, etc.).

Oil refineries *Oil refineries* shows the use of primary energy for the manufacture of finished oil products and the corresponding output. Thus, the total reflects transformation losses. In certain cases the data in the total column are positive numbers. This can be due to either problems in the primary refinery balance or to the fact that the IEA uses regional net calorific values for oil products.

Petrochemical plants *Petrochemical plants* covers backflows returned from the petrochemical industry. Note that backflows from oil products that are used for non-energy purposes (i.e. white spirit and lubricants) are not included here, but in non-energy use.

Liquefaction plants *Liquefaction plants* includes diverse liquefaction processes, such as coal liquefaction plants and gas-to-liquid plants.

Other transformation *Other transformation* covers non-specified transformation not shown elsewhere, such as the transformation of primary solid biofuels into charcoal.

Energy industry own use *Energy industry own use* contains the primary and secondary energy consumed by transformation industries for heating, pumping, traction and lighting purposes [ISIC 05, 06, 19 and 35, Group 091 and Classes 0892 and 0721].

Losses *Losses* includes losses in energy distribution, transmission and transport.

Total final consumption (TFC) *Total final consumption (TFC)* is the sum of consumption by the different end-use sectors. Backflows from the petrochemical industry are not included in final consumption.

Industry *Industry* consumption is specified in the following subsectors (energy used for transport by industry is not included here but reported under transport):

- *Iron and steel industry* [ISIC Group 241 and Class 2431];
- *Chemical and petrochemical industry* [ISIC Divisions 20 and 21] excluding petrochemical feedstocks;
- *Non-ferrous metals* basic industries [ISIC Group 242 and Class 2432];
- *Non-metallic minerals* such as glass, ceramic, cement, etc. [ISIC Division 23];
- *Transport equipment* [ISIC Divisions 29 and 30];
- *Machinery* comprises fabricated metal products, machinery and equipment other than transport equipment [ISIC Divisions 25 to 28];

Industry (ctd.)

- *Mining (excluding fuels) and quarrying* [ISIC Divisions 07 and 08 and Group 099];
- *Food and tobacco* [ISIC Divisions 10 to 12];
- *Paper, pulp and printing* [ISIC Divisions 17 and 18];
- *Wood and wood products* (other than pulp and paper) [ISIC Division 16];
- *Construction* [ISIC Divisions 41 to 43];
- *Textile and leather* [ISIC Divisions 13 to 15];
- *Non-specified* (any manufacturing industry not included above) [ISIC Divisions 22, 31 and 32].

Transport

Transport includes all fuels used for transport [ISIC Divisions 49 to 51]. It includes transport in industry and covers domestic aviation, road, rail, pipeline transport, domestic navigation and non-specified transport. Fuel used for ocean, coastal and inland fishing (included under fishing) and military consumption (included in other non-specified) are excluded from transport. Please note that international marine and international aviation bunkers are also included here for world total.

Other

Other covers residential, commercial and public services [ISIC Divisions 33, 36-39, 45-47, 52, 53, 55, 56, 58-66, 68-75, 77-82, 84 (excluding Class 8422), 85-88, 90-99], agriculture/forestry [ISIC Divisions 01 and 02], fishing [ISIC Division 03] and non-specified consumption.

Non-energy use

Non-energy use covers those fuels that are used as raw materials in the different sectors and are not consumed as a fuel or transformed into another fuel. Non-energy use also includes petrochemical feedstocks. Non-energy use is shown separately in final consumption under the heading *non-energy use*.

Unit abbreviations

bcm	billion cubic metres	**MBtu**	million British thermal units
Gcal	gigacalorie	**Mt**	million tonnes
GCV	gross calorific value	**Mtoe**	million tonnes of oil equivalent
GW	gigawatt	**MWh**	megawatt hour
GWh	gigawatt hour	**PPP**	purchasing power parity
kb/cd	thousand barrels per calendar day	**t**	metric ton = tonne = 1 000 kg
kcal	kilocalorie	**TJ**	terajoule
kg	kilogramme	**toe**	tonne of oil equivalent = 10^7 kcal
kJ	kilojoule	**TWh**	terawatt hour
kWh	kilowatt hour	**USD**	United States dollar

GEOGRAPHICAL COVERAGE

OECD[1]	Australia, Austria, Belgium, Canada, Chile, the Czech Republic, Denmark, Estonia, Finland, France, Germany, Greece, Hungary, Iceland, Ireland, Israel, Italy, Japan, Korea, Luxembourg, Mexico, the Netherlands, New Zealand, Norway, Poland, Portugal, the Slovak Republic, Slovenia, Spain, Sweden, Switzerland, Turkey, the United Kingdom and the United States.
Middle East	Bahrain, Islamic Republic of Iran, Iraq, Jordan, Kuwait, Lebanon, Oman, Qatar, Saudi Arabia, Syrian Arab Republic, United Arab Emirates and Yemen.
Non-OECD Europe and Eurasia	Albania, Armenia, Azerbaijan, Belarus, Bosnia and Herzegovina, Bulgaria, Croatia, Cyprus[2], the Former Yugoslav Republic of Macedonia, Georgia, Gibraltar, Kazakhstan, Kosovo[3], Kyrgyzstan, Latvia, Lithuania, Malta, Republic of Moldova, Montenegro[3], Romania, Russian Federation, Serbia[3], Tajikistan, Turkmenistan, Ukraine and Uzbekistan.
China	People's Republic of China and Hong Kong, China.
Asia	Bangladesh, Brunei Darussalam, Cambodia, India, Indonesia, Democratic People's Republic of Korea, Malaysia, Mongolia, Myanmar, Nepal, Pakistan, Philippines, Singapore, Sri Lanka, Chinese Taipei, Thailand, Viet Nam and Other Asia.
Non-OECD Americas	Argentina, Bolivia, Brazil, Colombia, Costa Rica, Cuba, Dominican Republic, Ecuador, El Salvador, Guatemala, Haiti, Honduras, Jamaica, Netherlands Antilles[4], Nicaragua, Panama, Paraguay, Peru, Trinidad and Tobago, Uruguay, Venezuela and Other Non-OECD Americas.
Africa	Algeria, Angola, Benin, Botswana, Cameroon, Congo, Democratic Republic of Congo, Côte d'Ivoire, Egypt, Eritrea, Ethiopia, Gabon, Ghana, Kenya, Libya, Mauritius, Morocco, Mozambique, Namibia, Nigeria, Senegal, South Africa, Sudan[5], United Republic of Tanzania, Togo, Tunisia, Zambia, Zimbabwe and Other Africa.

1. OECD includes Estonia and Slovenia starting in 1990. Prior to 1990, data for these two countries are included in Non-OECD Europe and Eurasia.

*2. **Note by Turkey:***
The information in this document with reference to "Cyprus" relates to the southern part of the Island. There is no single authority representing both Turkish and Greek Cypriot people on the Island. Turkey recognises the Turkish Republic of Northern Cyprus (TRNC). Until a lasting and equitable solution is found within the context of United Nations, Turkey shall preserve its position concerning the "Cyprus issue".

Note by all the European Union Member States of the OECD and the European Union:
The Republic of Cyprus is recognised by all members of the United Nations with the exception of Turkey. The information in this document relates to the area under the effective control of the Government of the Republic of Cyprus.

3. Serbia includes Kosovo from 1990 to 1999 and Montenegro from 1990 to 2004.

4. The Netherlands Antilles was dissolved on 10 October 2010, resulting in two new constituent countries, Curaçao and Saint Maarten, with the other islands joining the Netherlands. However, due to a lack of detailed data, the IEA secretariat's data and estimates under the Netherlands Antilles cover the whole territory of the former Netherlands Antilles.

5. South Sudan became an independent state on 9 July 2011. However, due to a lack of detailed data, the IEA Secretariat's data and estimates under Sudan cover the whole territory of Sudan as it was on 1 January 2011.

Note: The countries listed above are those for which the IEA secretariat has direct statistics contacts. This document is without prejudice to the status of or sovereignty over any territory, to the delimitation of international frontiers and boundaries and to the name of any territory, city or area. In this publication "country" refers to country or territory, as the case may be.

Ten Annual Publications

Energy Statistics of OECD Countries, 2014 Edition

No other publication offers such in-depth statistical coverage. It is intended for anyone involved in analytical or policy work related to energy issues. It contains data on energy supply and consumption in original units for coal, oil, natural gas, biofuels/waste and products derived from these primary fuels, as well as for electricity and heat. Complete data are available for 2011 and 2012 and supply estimates are available for the most recent year (i.e. 2013). Historical tables summarise data on production, trade and final consumption. Each issue includes definitions of products and flows and explanatory notes on the individual country data.

Published July 2014 - Price €120

Energy Balances of OECD Countries, 2014 Edition

A companion volume to Energy Statistics of OECD Countries, this publication presents standardised energy balances expressed in million tonnes of oil equivalent. Energy supply and consumption data are divided by main fuel: coal, oil, natural gas, nuclear, hydro, geothermal/solar, biofuels/waste, electricity and heat. This allows for easy comparison of the contributions each fuel makes to the economy and their interrelationships through the conversion of one fuel to another. All of this is essential for estimating total energy supply, forecasting, energy conservation, and analysing the potential for interfuel substitution. Complete data are available for 2011 and 2012 and supply estimates are available for the most recent year (i.e. 2013). Historical tables summarise key energy and economic indicators as well as data on production, trade and final consumption. Each issue includes definitions of products and flows and explanatory notes on the individual country data as well as conversion factors from original units to tonnes of oil equivalent.

Published July 2014 - Price €120

Energy Statistics of Non-OECD Countries, 2014 Edition

This publication offers the same in-depth statistical coverage as the homonymous publication covering OECD countries. It includes data in original units for more than 100 individual countries and nine main regions. The consistency of OECD and non-OECD countries' detailed statistics provides an accurate picture of the global energy situation for 2011 and 2012. For a description of the content, please see Energy Statistics of OECD Countries above.

Published August 2014 - Price €120

Energy Balances of Non-OECD Countries, 2014 Edition

A companion volume to the publication Energy Statistics of Non-OECD Countries, this publication presents energy balances in thousand tonnes of oil equivalent and key economic and energy indicators for more than 100 individual countries and nine main regions. It offers the same statistical coverage as the homony¬mous publication covering OECD countries, and thus provides an accurate picture of the global energy situation for 2011 and 2012. For a description of the content, please see Energy Balances of OECD Countries above.

Published August 2014 - Price €120

Electricity Information 2014

This reference document provides essential statistics on electricity and heat for each OECD member country by bringing together information on production, installed capacity, input energy mix to electricity and heat production, input fuel prices, consumption, end-user electricity prices and electricity trades.

Published August 2014 - Price €150

Coal Information 2014

This well-established publication provides detailed information on past and current evolution of the world coal market. It presents country-specific statistics for OECD member countries and selected non-OECD countries on coal production, demand, trade and prices. This publication represents a key reference tool for all those involved in the coal supply or consumption stream, as well as institutions and governments involved in market and policy analysis of the world coal market.

Published August 2014 - Price €165

Natural Gas Information 2014

A detailed reference work on gas supply and demand, covering not only OECD countries but also the rest of the world. Contains essential information on LNG and pipeline trade, gas reserves, storage capacity and prices. The main part of the book, however, concentrates on OECD countries, showing a detailed gas supply and demand balance for each individual country and for the three OECD regions, as well as a breakdown of gas consumption by end-user. Import and export data are reported by source and destination.

Published August 2014 - Price €165

Oil Information 2014

A comprehensive reference book on current developments in oil supply and demand. The first part of this publication contains key data on world production, trade, prices and consumption of major oil product groups, with time series back to the early 1970s. The second part gives a more detailed and comprehensive picture of oil supply, demand, trade, production and consumption by end-user for each OECD country individually and for OECD regions. Trade data are reported extensively by origin and destination.

Published August 2014 - Price €165

Renewables Information 2014

This reference document brings together in one volume essential statistics on renewables and waste energy sources. It presents a detailed and comprehensive picture of developments for renewable and waste energy sources for each of the OECD member countries, encompassing energy indicators, generating capacity, electricity and heat production from renewable and waste sources, as well as production and consumption of renewable and waste products.

Published August 2014 - Price €110

CO_2 Emissions from Fuel Combustion, 2014 Edition

In order for nations to tackle the problem of climate change, they need accurate greenhouse gas emissions data. This publication provides a basis for comparative analysis of CO_2 emissions from fossil fuel combustion, a major source of anthropogenic emissions. The data in this book are designed to assist in understanding the evolution of the emissions of CO_2 from 1971 to 2012 for more than 140 countries and regions by sector and by fuel. Emissions were calculated using IEA energy databases and the default methods and emissions factors from the *Revised 1996 IPCC Guidelines for National Greenhouse Gas Inventories*.

Published November 2014 - Price €165

Two Quarterlies

Oil, Gas, Coal and Electricity, Quarterly Statistics

This publication provides up-to-date, detailed quarterly statistics on oil, coal, natural gas and electricity for OECD countries. Oil statistics cover production, trade, refinery intake and output, stock changes and consumption for crude oil, NGL and nine selected oil product groups. Statistics for electricity, natural gas and coal show supply and trade. Import and export data are reported by origin and destination. The gas trade data from 1st quarter 2011 onwards corresponds to physical flows (entries/exits). Moreover, oil as well as hard coal and brown coal production are reported on a worldwide basis.

Published Quarterly - Price €120, annual subscription €380

Energy Prices and Taxes

This publication responds to the needs of the energy industry and OECD governments for up-to-date information on prices and taxes in national and international energy markets. It contains crude oil import prices by crude stream, industry prices and consumer prices. The end-user prices for OECD member countries cover main petroleum products, gas, coal and electricity. Every issue includes full notes on sources and methods and a description of price mechanisms in each country. Time series availability varies with each data series.

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The IEA Monthly Oil Data Service provides the detailed databases of historical and projected information which is used in preparing the IEA monthly *Oil Market Report* (OMR). The IEA Monthly Oil Data Service comprises three packages available separately or combined as a subscriber service on the Internet. The data are available at the same time as the official release of the *Oil Market Report*.

The packages include:

- Supply, Demand, Balances and Stocks — Price: €6 000
- Trade — Price: €2 000
- Field-by-Field Supply — Price: €3 000
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A description of this service is available on our website:
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The Monthly Gas Data Service

The Monthly Gas Data Service provides monthly natural gas data for OECD countries:

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- Production, trade, stock changes and levels where available, gross inland deliveries, own use and losses;
- Highly detailed trade data with about 50 import origins and export destinations;
- LNG trade detail available from January 2002;
- From 2011 onwards, transit volumes are included and trade data corresponds to entries/exits.

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The IEA statistics site can be accessed at:
www.iea.org/statistics/

Note: The prices quoted for Electronic Editions are for single-user licences. Please contact us for information on multi-user licence prices.

For more information, please feel free to contact the Energy Data Centre of the IEA by

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Oil Market Report

Each month, *the* primary source of data on supply, demand, stocks, prices and refining

Since its appearance in 1983, the International Energy Agency's *Oil Market Report (OMR)* has become *the* definitive source of information on world oil market fundamentals, covering supply, demand, OECD stocks, prices and refining as well as OECD and selected non-OECD trade.

The *OMR* provides the most extensive, up-to-date statistical data available on current world oil market trends. It is the first and exclusive source to present official government statistics from all OECD countries, as well as selected data from non-OECD countries.

The main market movements of the month are highlighted in a convenient summary, while detailed analysis explains recent market developments and provides an insight into the months ahead. It is the *only* regular short-term analysis of the oil industry available based on information obtained from the extensive IEA network of contacts with government and industry.

The *OMR* provides both historical data and supply/demand forecasts for the year ahead. Featuring tables, graphs and statistics, it provides all the data and analysis necessary to track the oil market and to identify trends in production, consumption, refining, inventories in OECD countries and prices for both crude and products.

Additionally, subscribers to the *OMR* receive a copy of the annual *Medium-Term Oil Market Report (MTOMR)* which examines key industry themes. These include the impact of the global economic slowdown on oil demand, upstream and downstream investment levels, the likely pace of development of biofuels and non-conventional oil supplies, likely oil products availability and oil price formation. The *MTOMR* provides detailed supply and demand forecasts for crude oil and oil products looking five years forward, and since its inception in 2006 the report has become a standard industry reference.

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The *WEO-2014* will also provide in-depth analysis of some topical energy sector issues:

- **Nuclear power:** Uncertainties continue to cloud the future for nuclear – government policy, public confidence, financing in liberalised markets, competitiveness versus other sources of generation and the looming retirement of a large fleet of older plants. The study will assess the outlook for nuclear power and its implications.
- **Energy sector investment** (*WEO Special Report* released 3 June): The analysis will provide a detailed assessment of current flows and future investment needs along the entire energy value chain, examining the scale of investment required and financing options. The report will also show how barriers to investment vary according to the strength of decarbonisation policies.
- **Africa** (*WEO Special Report* to be released 13 October): This continent-wide focus, paying particular attention to the energy outlook for sub-Saharan Africa, will include data and projections for the entire region as well as for its key energy-producing and consuming countries. Key elements for analysis will be the prospects for improving access to modern energy services and for developing the region's huge resource potential in a way that contributes not only to regional and global energy balances but also to local economic and social well-being.

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NOTES

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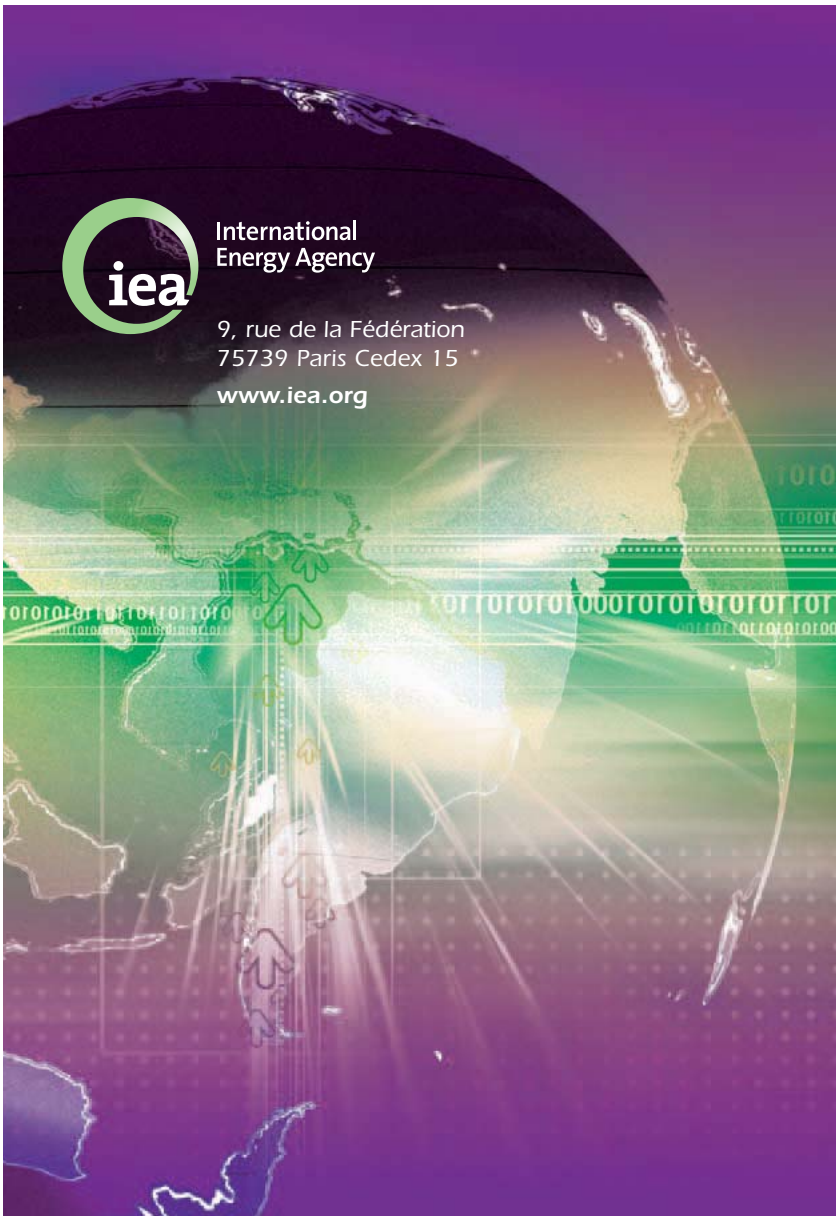
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