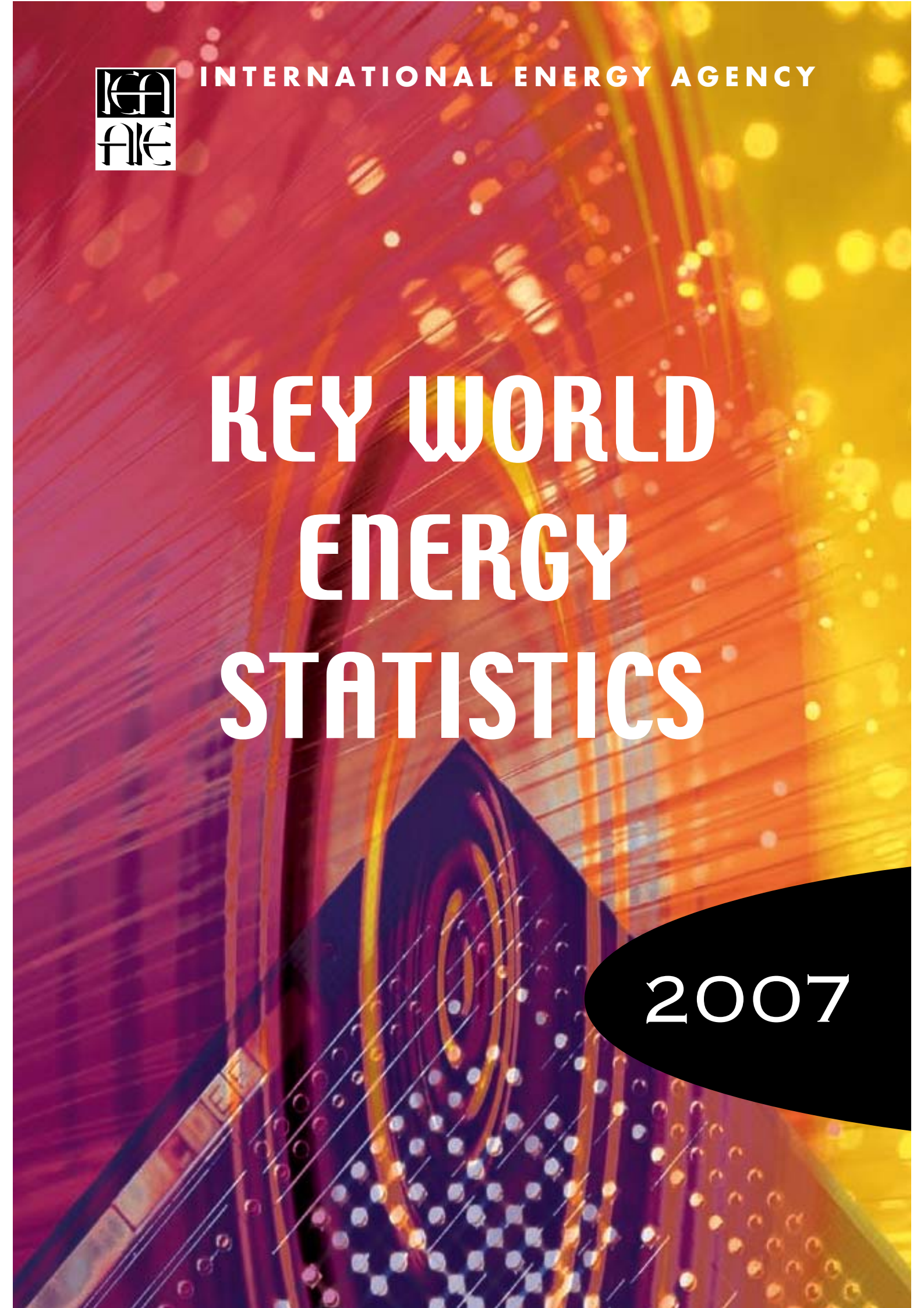

INTERNATIONAL ENERGY AGENCY
KEY WORLD ENERGY STATISTICS
2007

KEY WORLD ENERGY STATISTICS

IEA participating countries*

Australia
Austria
Belgium
Canada
Czech Republic
Denmark
Finland
France
Germany
Greece
Hungary
Ireland
Italy
Japan
Korea
Luxembourg
Netherlands
New Zealand
Norway
Portugal
Spain
Sweden
Switzerland
Turkey
United Kingdom
United States

*Poland and the Slovak Republic are expected to become member countries of the IEA in 2007

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 Polish production of coal, the electricity consumption in Thailand, the price of diesel oil in South Africa 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:

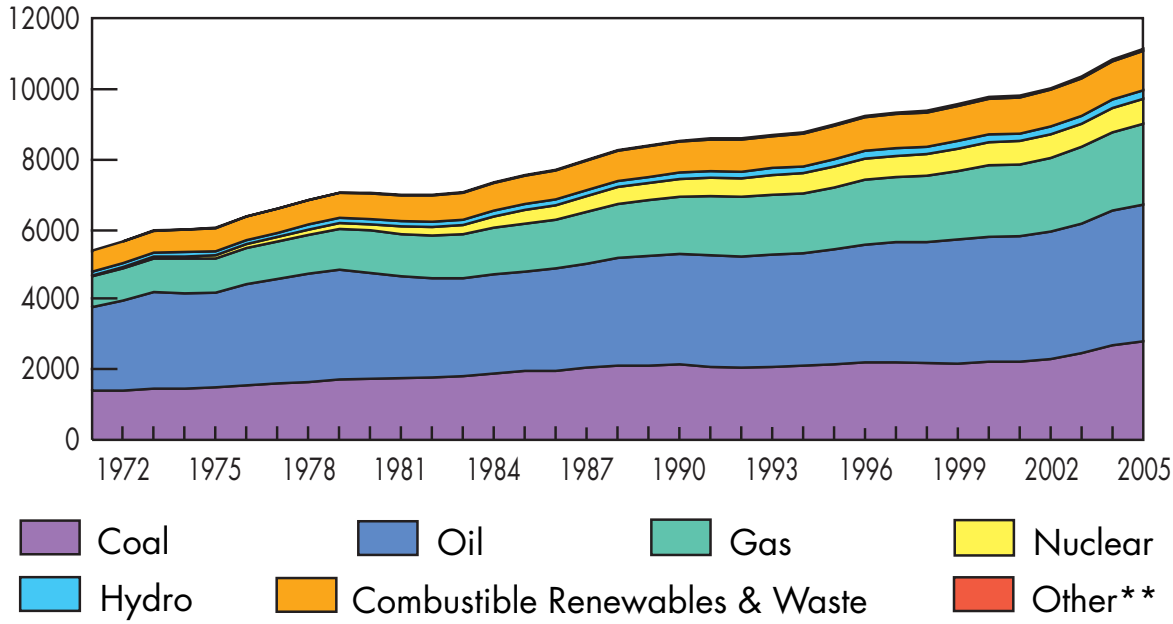
- administers a plan to guard member countries against the risk of a major disruption of oil supplies;
- coordinates national efforts to conserve energy and develop alternative energy sources, as well as to limit pollution and energy-related climate change; and
- disseminates information on the world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

TABLE OF CONTENTS

TOTAL PRIMARY ENERGY SUPPLY

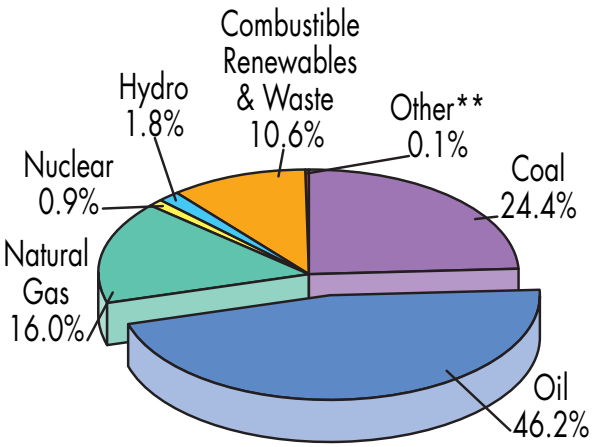
The World

Evolution from 1971 to 2005 of World Total Primary Energy Supply* by Fuel (Mtoe)



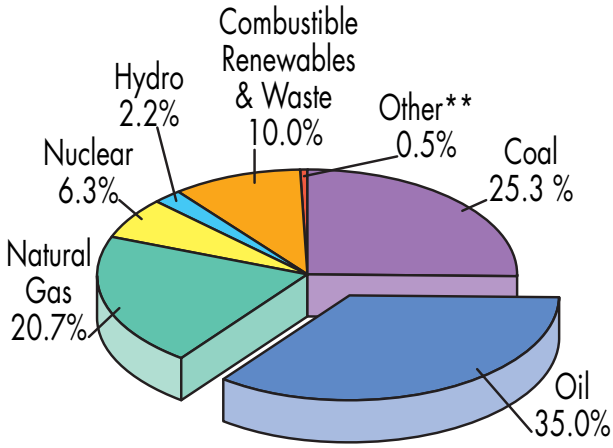
1973 and 2005 Fuel Shares of TPES*

1973



6 128 Mtoe

2005



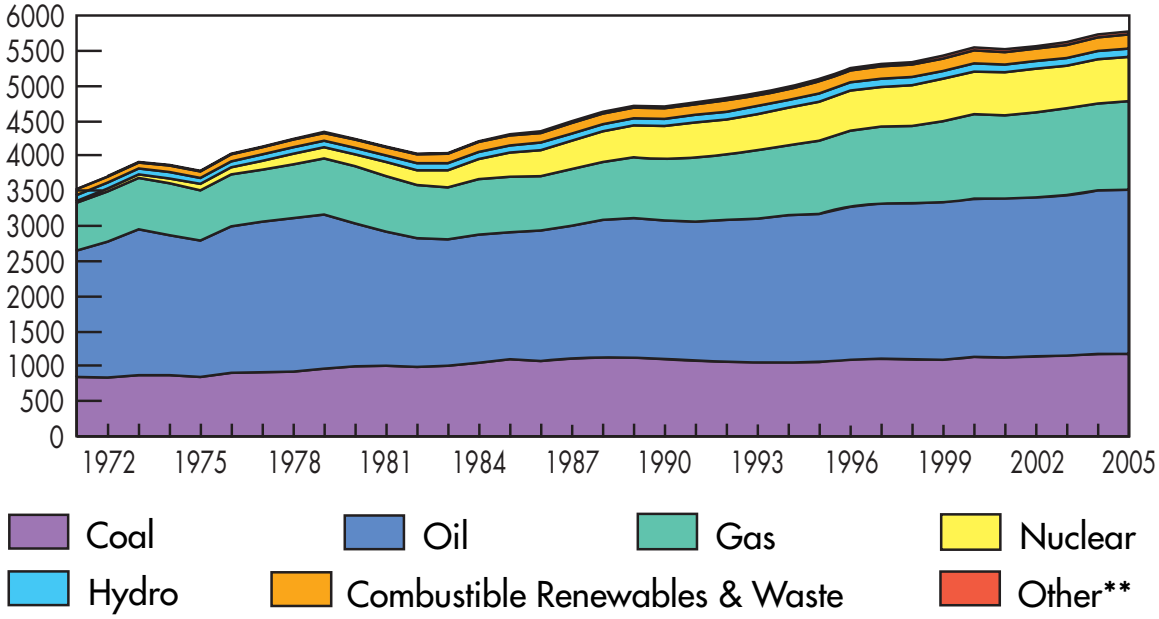
11 435 Mtoe

*Excludes electricity and heat trade.
**Other includes geothermal, solar, wind, heat, etc.

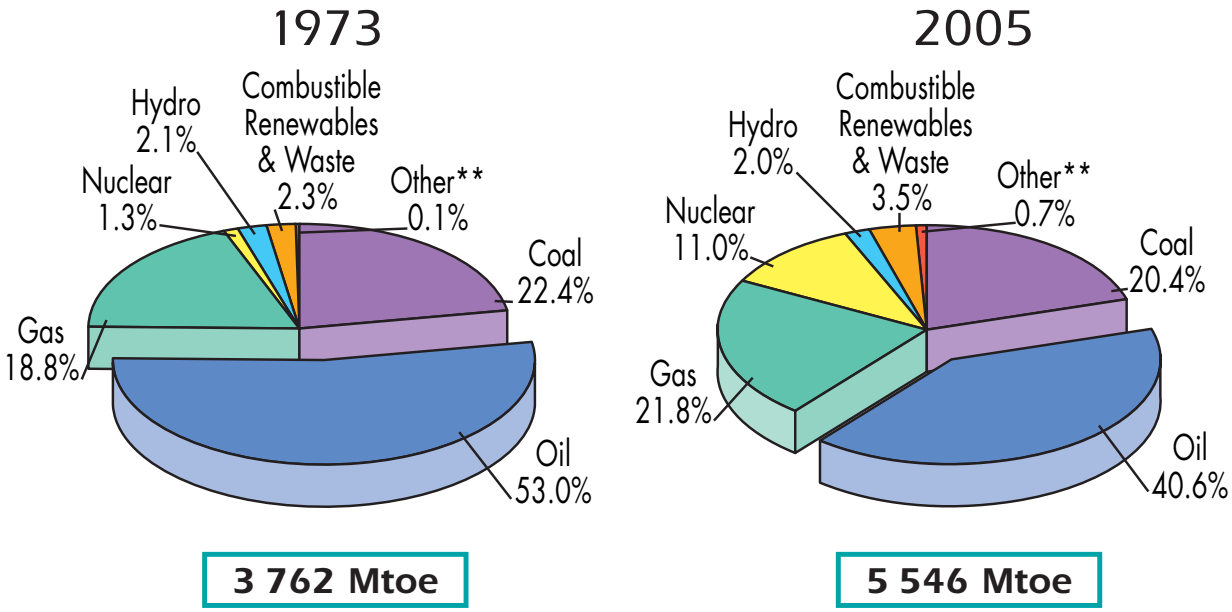
BY FUEL

The OECD

Evolution from 1971 to 2005 of OECD Total Primary Energy Supply* by Fuel (Mtoe)



1973 and 2005 Fuel Shares of TPES*



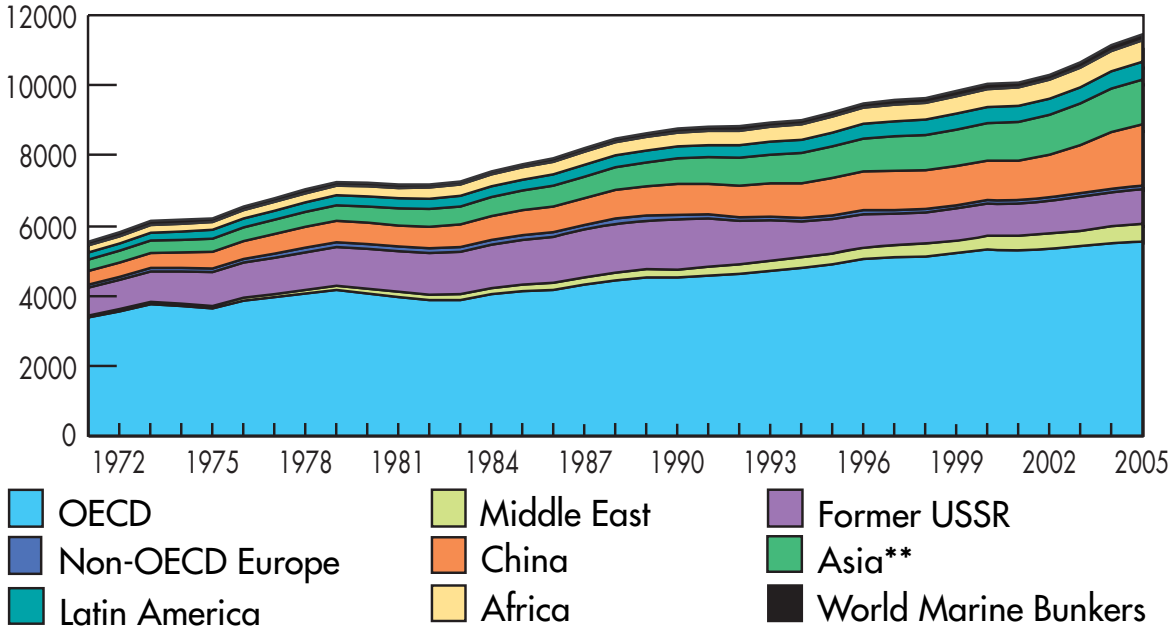
3 762 Mtoe **5 546 Mtoe**

**Excludes electricity and heat trade.*
***Other includes geothermal, solar, wind, heat, etc.*

TOTAL PRIMARY ENERGY SUPPLY

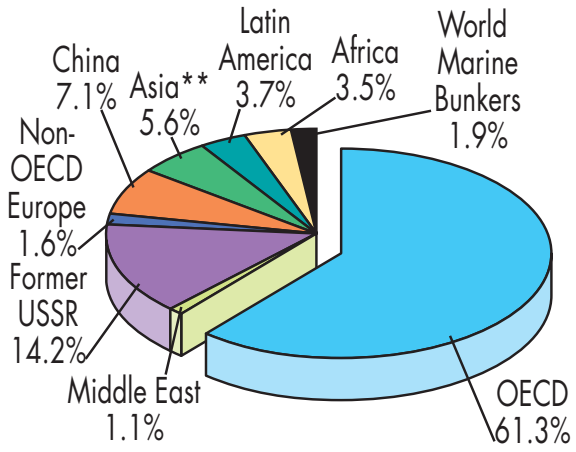
The World

Evolution from 1971 to 2005 of World Total Primary Energy Supply* by Region (Mtoe)



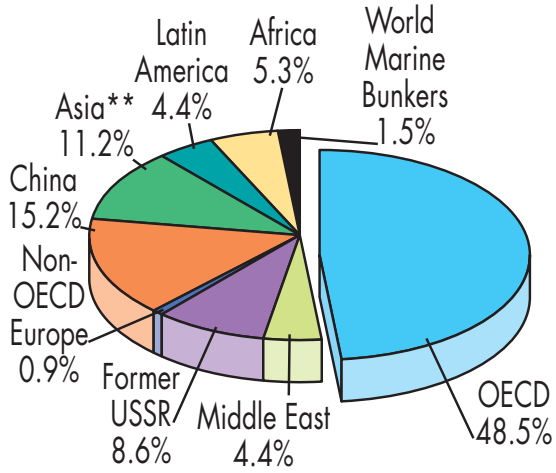
1973 and 2005 Regional Shares of TPES*

1973



6 128 Mtoe

2005



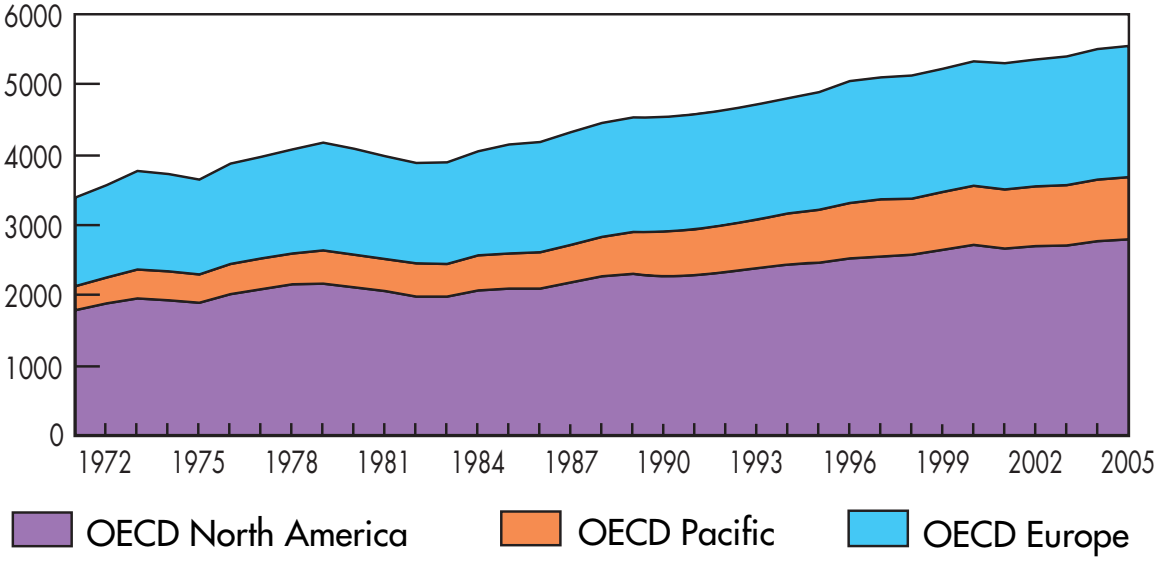
11 435 Mtoe

**Excludes electricity and heat trade.*
***Asia excludes China.*

BY REGION

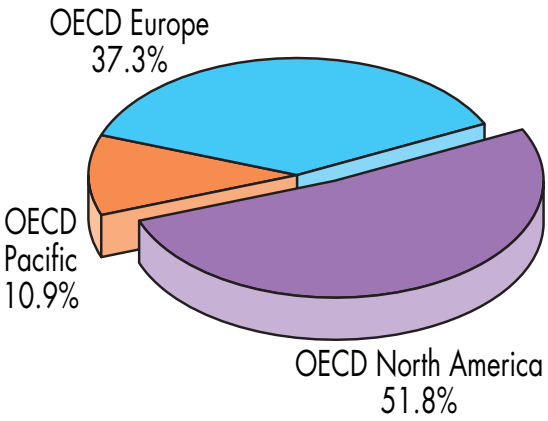
The OECD

Evolution from 1971 to 2005 of OECD Total Primary Energy Supply* by Region (Mtoe)



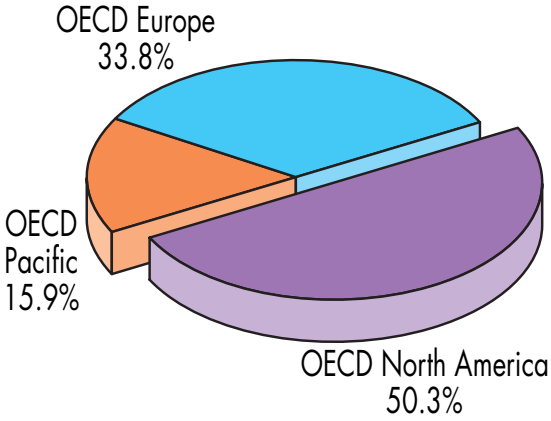
1973 and 2005 Regional Shares of TPES*

1973



3 762 Mtoe

2005

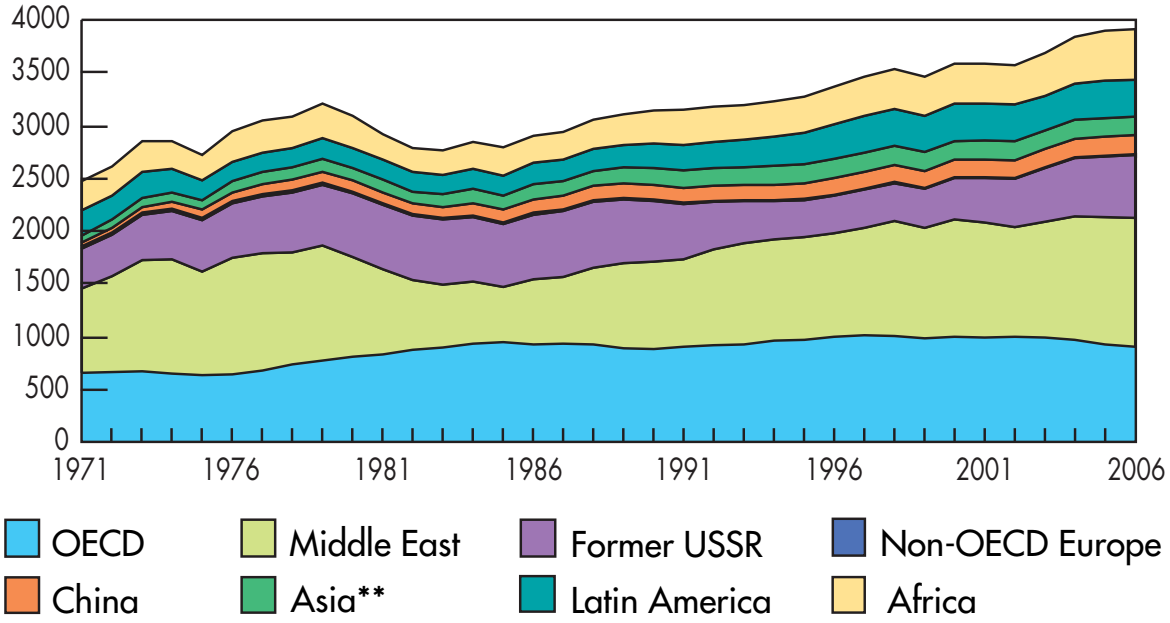


5 546 Mtoe

**Excludes electricity and heat trade.*

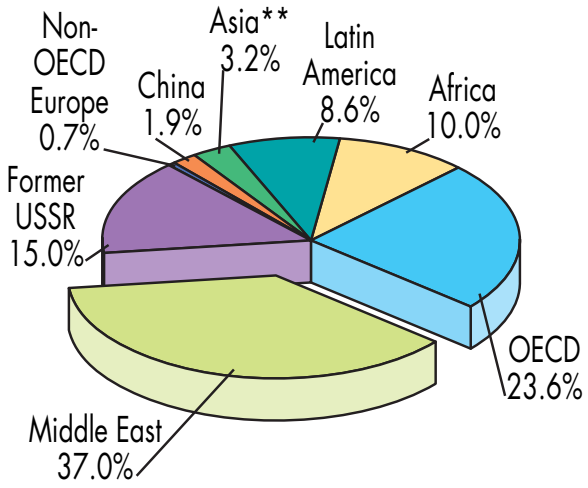
Crude Oil Production

Evolution from 1971 to 2006 of Crude Oil Production* by Region (Mt)



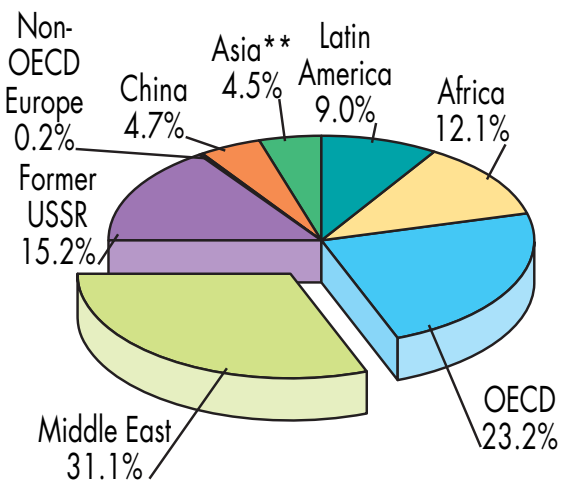
1973 and 2006 Regional Shares of Crude Oil Production*

1973



2 867 Mt

2006



3 936 Mt

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

Producers, Exporters and Importers of Crude Oil

Producers	Mt	% of World total
Saudi Arabia	507	12.9
Russia	477	12.1
United States	310	7.9
Islamic Rep. of Iran	216	5.5
People's Rep. of China	184	4.7
Mexico	183	4.6
Canada	151	3.8
Venezuela	151	3.8
Kuwait	139	3.5
United Arab Emirates	134	3.4
Rest of the World	1 484	37.8
World	**3 936**	**100.0**

2006 data

Exporters	Mt
Saudi Arabia	364
Russia	253
Islamic Rep. of Iran	132
Nigeria	119
Norway	115
Mexico	100
Venezuela	97
United Arab Emirates	97
Kuwait	84
Canada	84
Rest of the World	733
World	**2 178**

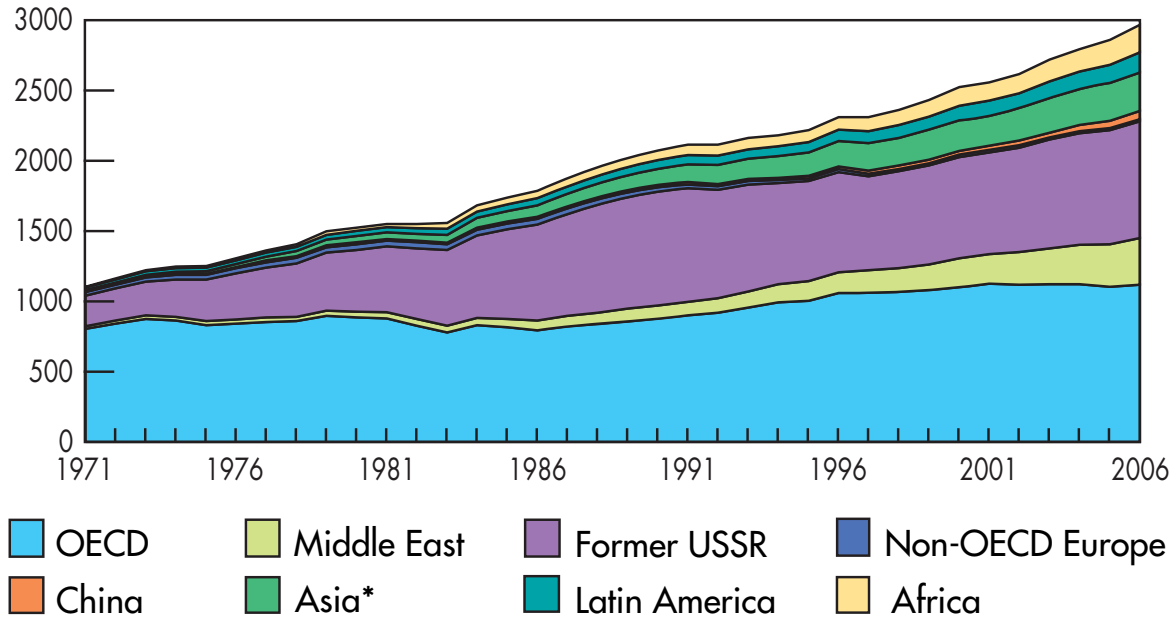
2005 data

Importers	Mt
United States	582
Japan	213
People's Rep. of China	127
Korea	115
Germany	112
India	99
Italy	95
France	84
Netherlands	62
Spain	60
Rest of the World	709
World	**2 258**

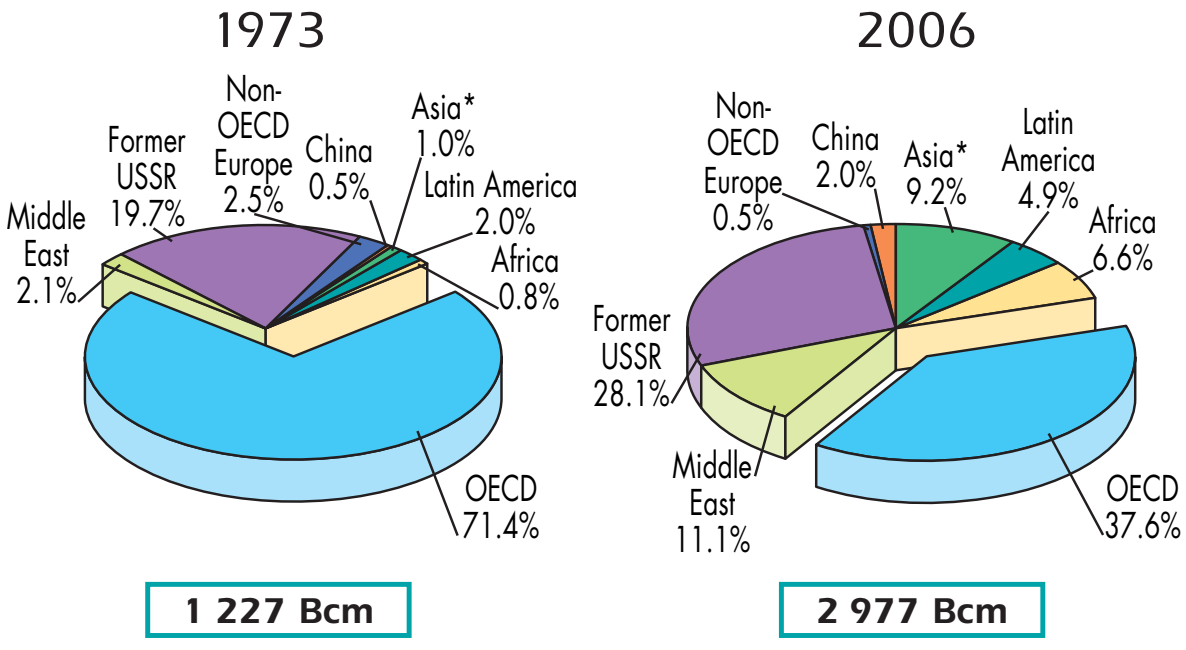
2005 data

Natural Gas Production

Evolution from 1971 to 2006 of Natural Gas Production by Region
(Billion Cubic Metres)



1973 and 2006 Regional Shares of Natural Gas Production



1 227 Bcm **2 977 Bcm**

**Asia excludes China.*

Producers, Exporters and Importers* of Natural Gas

Producers	Mm^3	% of World total
Russia	656 290	22.0
United States	524 368	17.6
Canada	189 179	6.4
Islamic Rep. of Iran	98 123	3.3
Norway	91 834	3.1
Algeria	88 785	3.0
United Kingdom	83 821	2.8
Netherlands	77 295	2.6
Indonesia	72 096	2.4
Turkmenistan	67 052	2.3
Rest of the World	1 027 709	34.5
World	**2 976 552**	**100.0**

2006 data

Exporters	Mm^3
Russia	202 844
Canada	102 102
Norway	86 169
Algeria	64 363
Netherlands	54 660
Turkmenistan	50 000
Indonesia	34 865
Malaysia	31 230
Qatar	31 224
United States	20 521
Rest of the World	206 516
World	**884 494**

2006 data

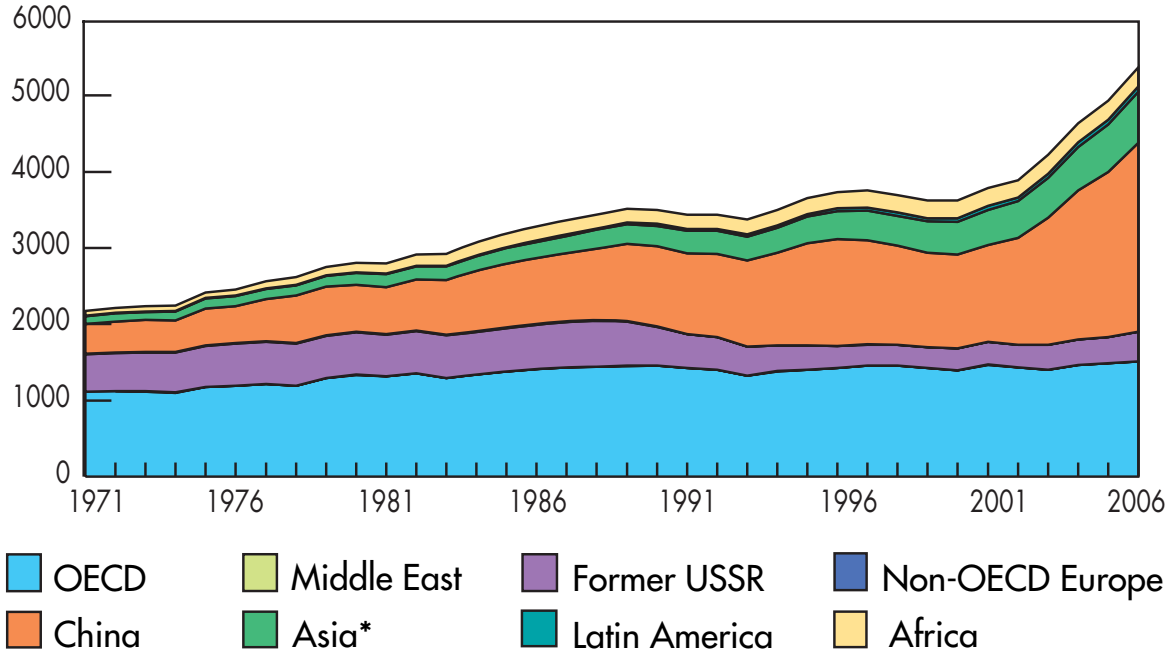
Importers	Mm^3
United States	118 569
Germany	93 730
Japan	88 633
Italy	77 399
Ukraine	50 221
France	45 278
Spain	34 409
Korea	32 981
Turkey	30 219
Netherlands	25 175
Rest of the World	276 378
World	**872 992**

2006 data

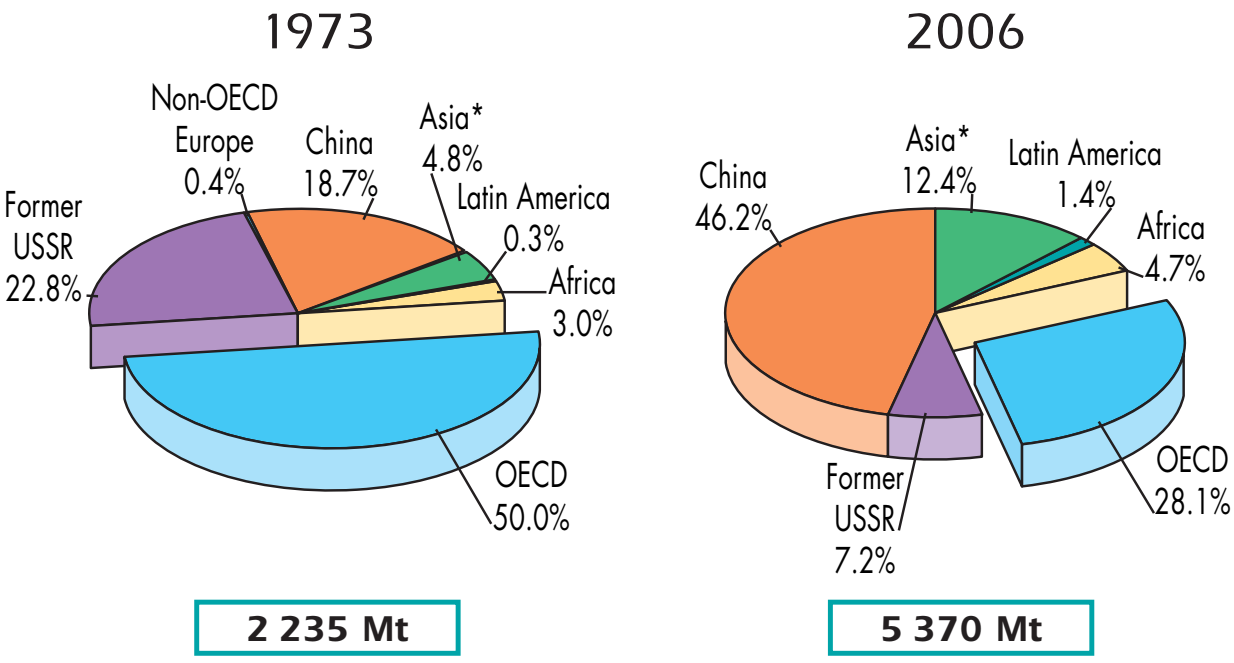
**Exports and imports include pipeline gas and LNG.*

Hard Coal Production

Evolution from 1971 to 2006 of Hard Coal Production by Region (Mt)



1973 and 2006 Regional Shares of Hard Coal Production



*Asia excludes China.

Producers, Exporters and Importers of Coal

Producers	Hard Coal (Mt)	Brown Coal (Mt)
People's Rep. of China	2 481	*
United States	990	76
India	427	30
Australia	309	71
South Africa	244	0
Russia	233	76
Indonesia	169	0
Poland	95	61
Kazakhstan	92	5
Colombia	64	0
Rest of the World	266	595
World	**5 370**	**914**

2006 data

Exporters	Hard Coal (Mt)
Australia	231
Indonesia	129
Russia	92
South Africa	69
People's Rep. of China	63
Colombia	60
United States	45
Canada	27
Kazakhstan	26
Vietnam	22
Rest of the World	51
World	**815**

2006 data

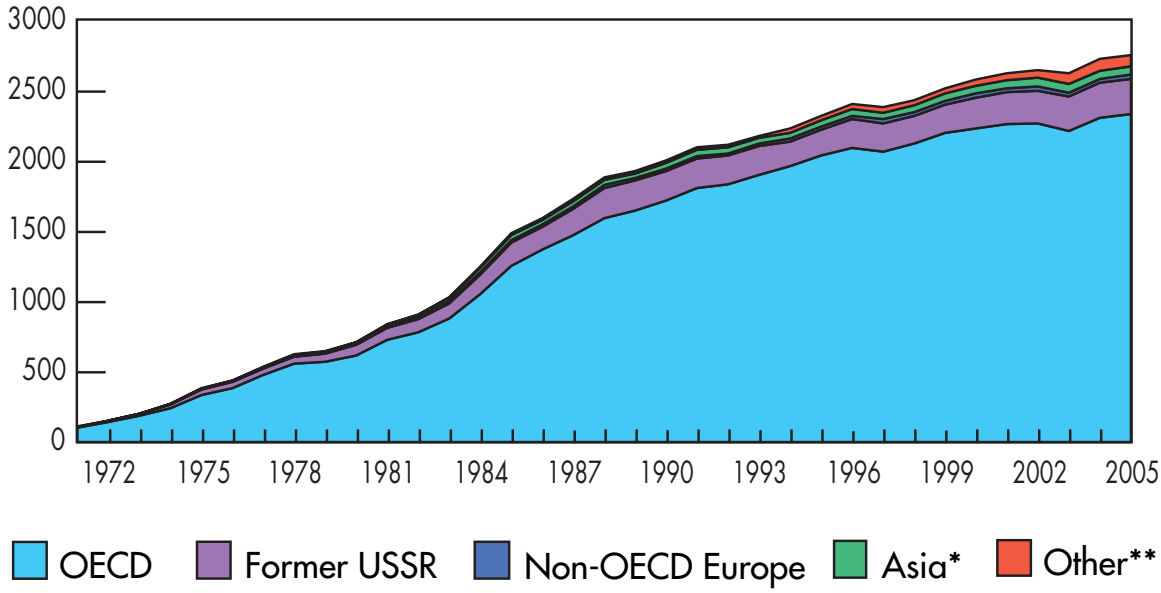
Importers	Hard Coal (Mt)
Japan	178
Korea	80
Chinese Taipei	64
United Kingdom	51
Germany	41
India	41
People's Rep. of China	37
United States	33
Russia	26
Italy	25
Rest of the World	243
World	**819**

2006 data

**Included in hard coal.*

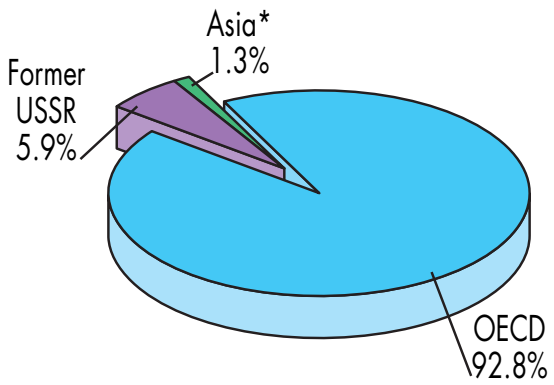
Nuclear Production

Evolution from 1971 to 2005 of Nuclear Production by Region (TWh)



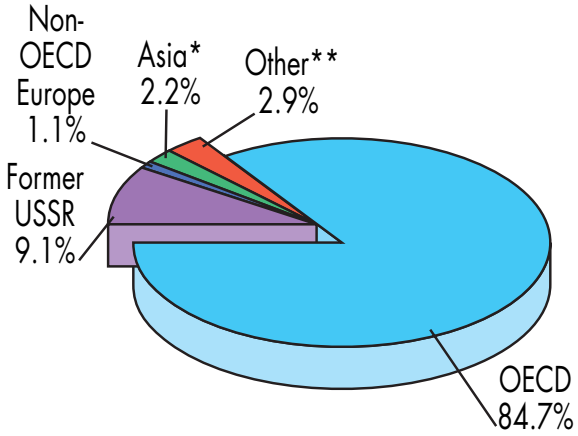
1973 and 2005 Regional Shares of Nuclear Production

1973



203 TWh

2005



2 768 TWh

**Asia excludes China.*
*** Other includes Africa, Latin America & China.*

Producers of Nuclear Electricity

Producers	TWh	% of World total
United States	811	29.2
France	452	16.3
Japan	305	11.0
Germany	163	5.9
Russia	149	5.4
Korea	147	5.3
Canada	92	3.3
Ukraine	89	3.2
United Kingdom	82	3.0
Sweden	72	2.6
Rest of the World	406	14.7
World	**2 768**	**100.0**

2005 data

Installed Capacity	GW
United States	98
France	63
Japan	48
Russia	22
Germany	20
Korea	17
Ukraine	13
Canada	13
United Kingdom	12
Sweden	9
Rest of the World	53
World	**368**

2005 data
Source: Commissariat à l'Énergie Atomique (France).

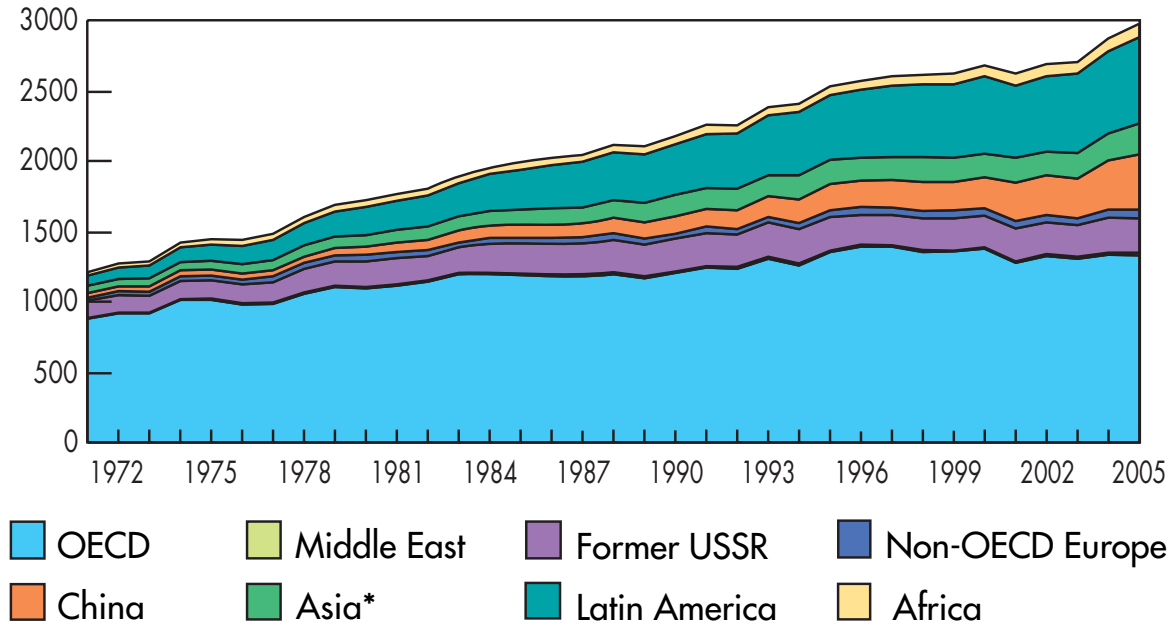
Country (based on first 10 producers)	% of nuclear in total domestic electricity generation
France	79
Ukraine	48
Sweden	46
Korea	38
Japan	28
Germany	26
United Kingdom	20
United States	19
Russia	16
Canada	15
Rest of the World*	8
World	**15**

2005 data

**Excludes countries with no nuclear production.*

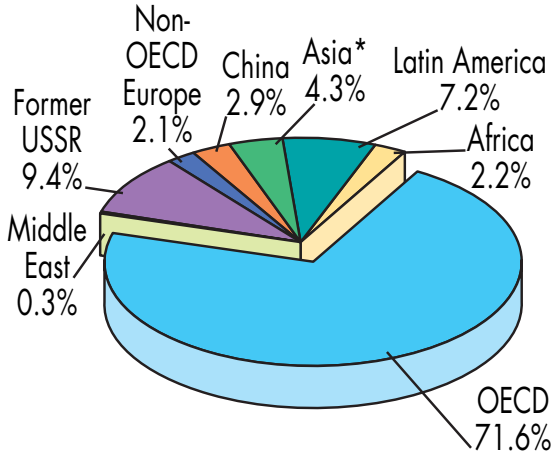
Hydro Production

Evolution from 1971 to 2005 of Hydro Production by Region (TWh)



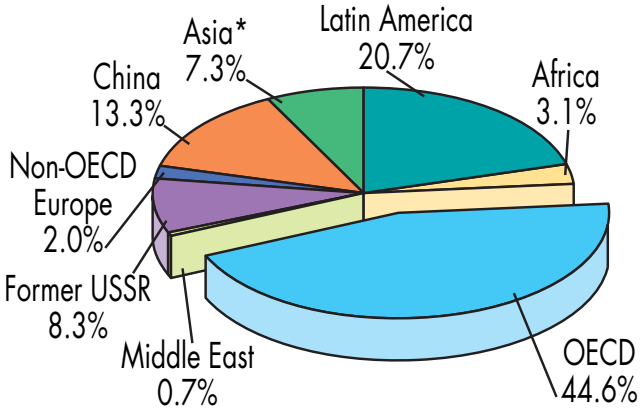
1973 and 2005 Regional Shares of Hydro Production

1973



1 295 TWh

2005



2 994 TWh

**Asia excludes China.*

Producers of Hydro Electricity

Producers	TWh	% of World total
People's Rep. of China	397	13.3
Canada	364	12.1
Brazil	337	11.3
United States	290	9.7
Russia	175	5.8
Norway	137	4.6
India	100	3.3
Japan	86	2.9
Venezuela	75	2.5
Sweden	73	2.4
Rest of the World	960	32.1
World	**2 994**	**100.0**

2005 data

Installed Capacity (based on production)	GW
People's Rep. of China	108
United States	96
Brazil	69
Canada	67
Japan	45
Russia	44
India	31
Norway	27
France	24
Italy	21
Rest of the World	304
World	**836**

2004 data

Sources: United Nations, IEA.

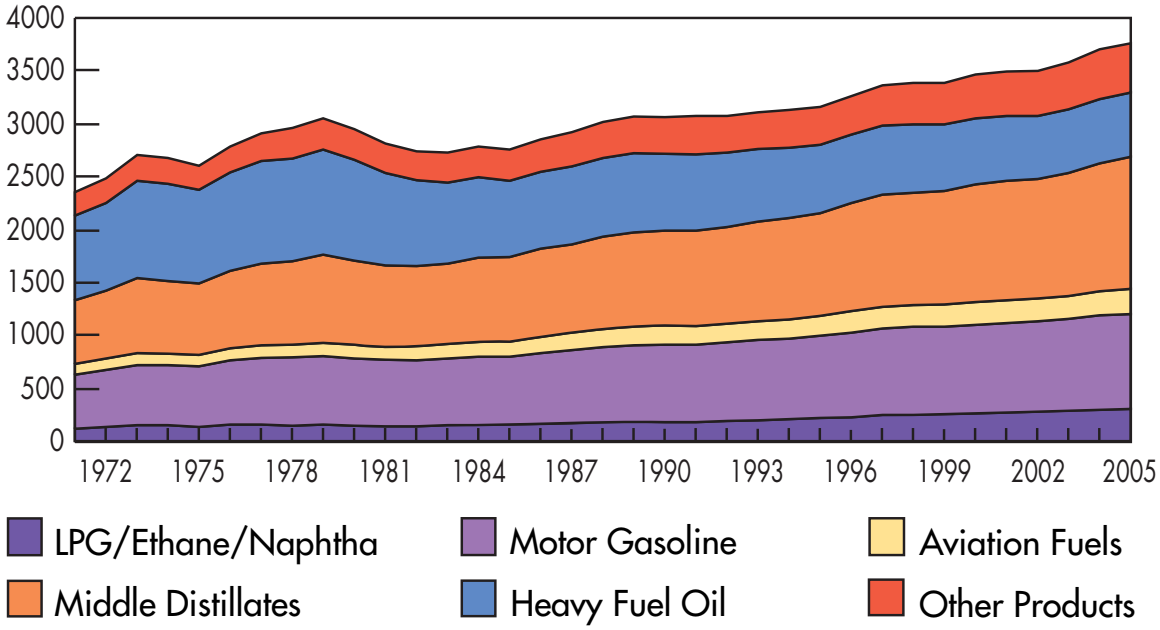
Country (based on first 10 producers)	% of hydro in total domestic electricity generation
Norway	98.9
Brazil	83.7
Venezuela	73.9
Canada	57.9
Sweden	46.0
Russia	18.3
People's Rep. of China	15.9
India	14.3
Japan	7.8
United States	6.8
Rest of the World*	13.9
World	**16.4**

2005 data

** Excludes countries with no hydro production.*

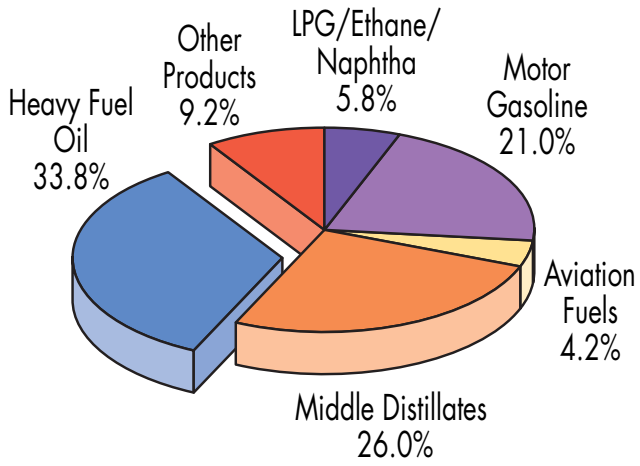
Refining by Product

Evolution from 1971 to 2005 of World Refinery Production by Product (Mt)



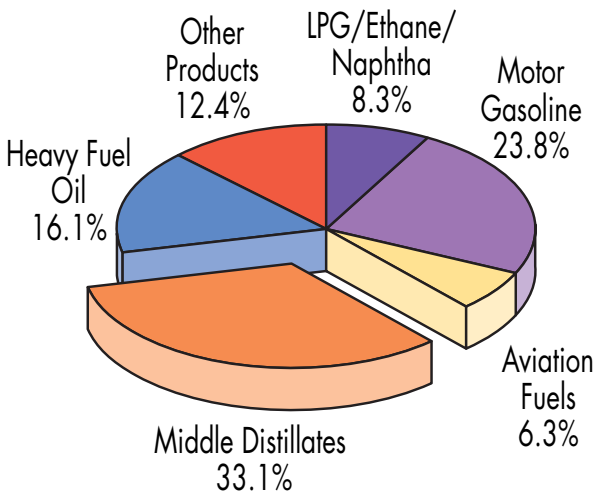
1973 and 2005 Shares of Refinery Production by Product

1973



2 719 Mt

2005



3 773 Mt

Producers, Exporters and Importers of Petroleum Products

Producers	Mt	% of World total
United States	837	22.2
People's Rep. of China	279	7.4
Japan	205	5.4
Russia	203	5.4
India	129	3.4
Germany	123	3.3
Korea	120	3.2
Canada	102	2.7
Italy	101	2.7
Saudi Arabia	99	2.6
Rest of the World	1 575	41.7
World	**3 773**	**100.0**

2005 data

Exporters	Mt
Russia	84
Netherlands	76
Saudi Arabia	62
United States	58
Singapore	57
Korea	35
Venezuela	34
Kuwait	30
United Kingdom	30
Italy	28
Rest of the World	458
World	**952**

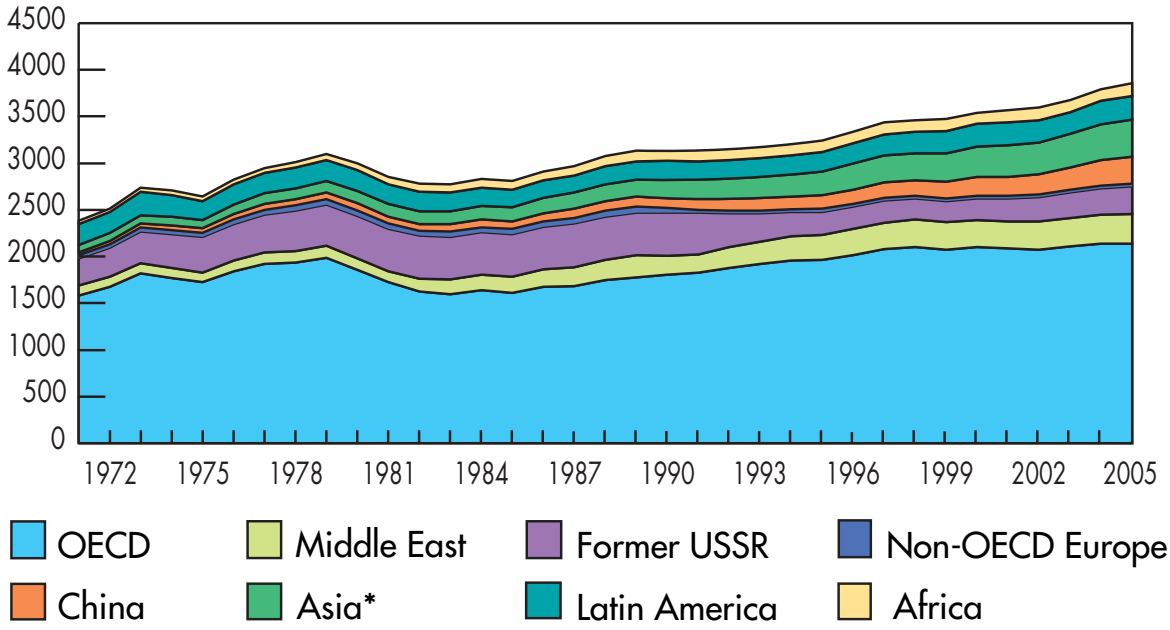
2005 data

Importers	Mt
United States	116
Netherlands	64
Japan	49
Singapore	49
People's Rep. of China	41
France	37
Germany	35
Spain	28
United Kingdom	23
Indonesia	21
Rest of the World	414
World	**877**

2005 data

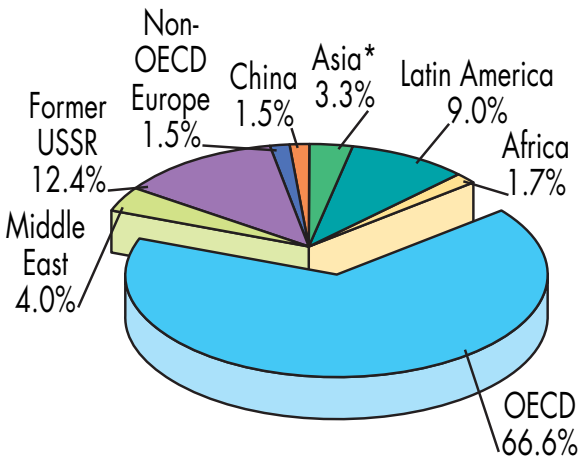
Refining by Region

Evolution from 1971 to 2005 of World Refinery Throughput by Region (Mt)



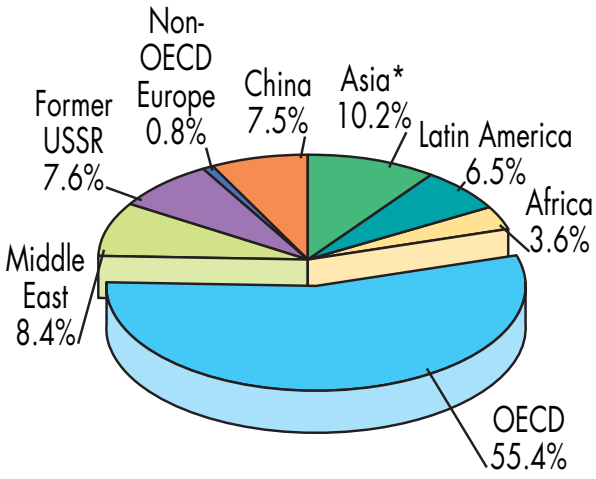
1973 and 2005 Regional Shares of Refinery Throughput

1973



2 739 Mt

2005



3 855 Mt

**Asia excludes China.*

Refinery Capacity, Net Exporters and Net Importers of Oil*

Crude Distillation Capacity	kb/cd	% of World total
United States	17 287	20.1
Former USSR	7 740	9.0
People's Rep. of China**	7 200	8.4
Japan	4 670	5.4
India	2 980	3.5
Korea	2 580	3.0
Germany	2 430	2.8
Italy	2 320	2.7
Saudi Arabia	2 100	2.4
Canada	2 020	2.3
Rest of the World	34 765	40.4
World	**86 092**	**100.0**

2006 data

Net Exporters	Mt
Saudi Arabia	424
Russia	335
Islamic Rep. of Iran	140
Venezuela	131
Norway	124
Nigeria	115
Kuwait	114
United Arab Emirates	102
Mexico	88
Algeria	75
Rest of the World	576

2005 data

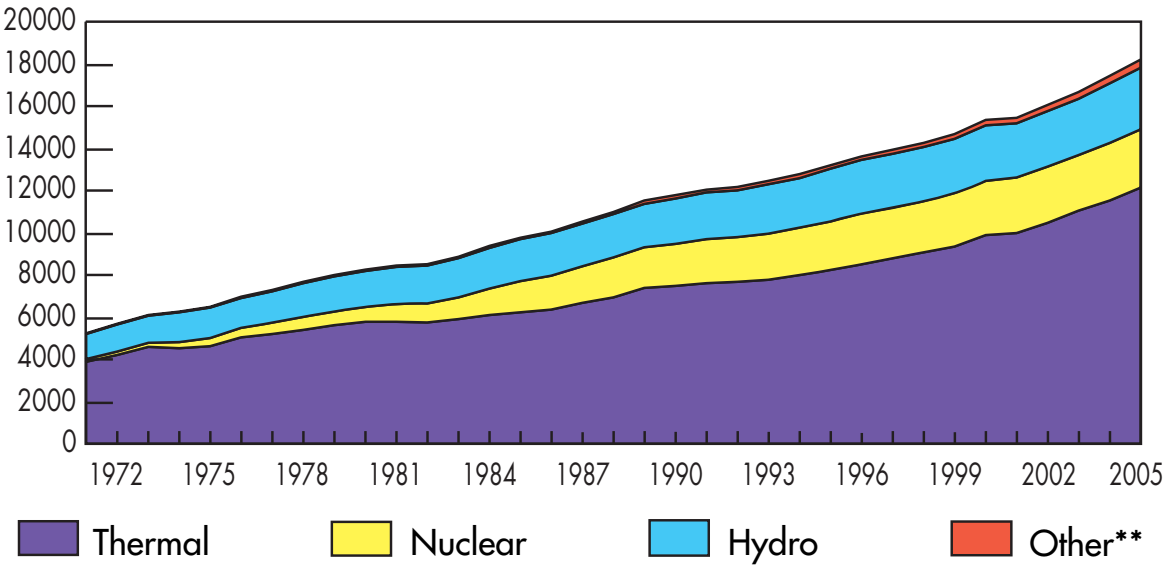
Net Importers	Mt
United States	634
Japan	253
People's Rep. of China	142
Germany	120
Korea	100
France	94
India	90
Italy	80
Spain	80
Netherlands	48
Rest of the World	588

2005 data

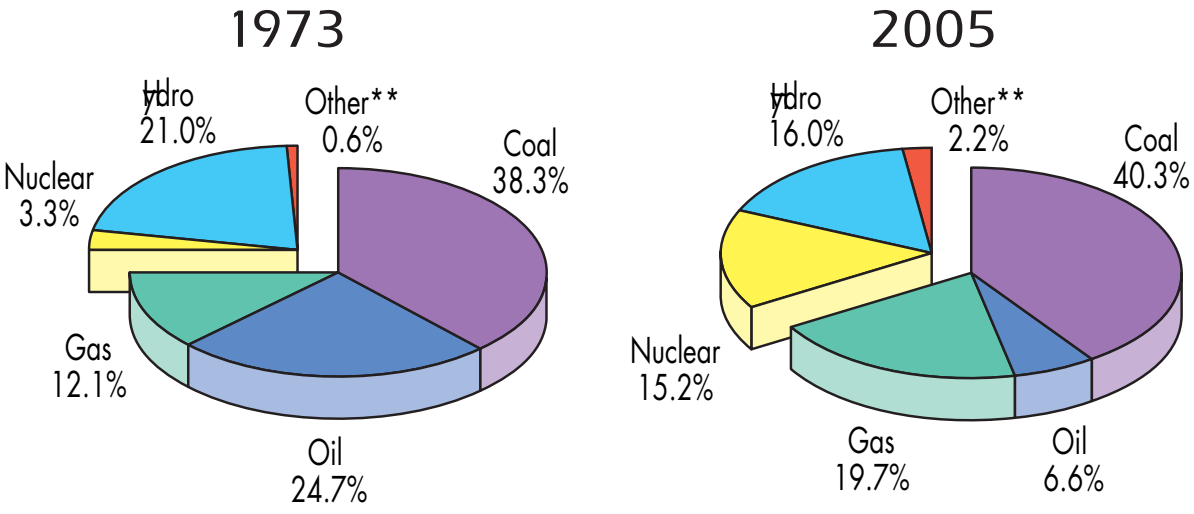
**Crude oil and petroleum products.*
***Does not include unlisted small teapot refineries which are estimated at between 200 and 500 kbd (1000 barrels per calendar day)*

Electricity Generation* by Fuel

Evolution from 1971 to 2005 of World Electricity Generation* by Fuel (TWh)



1973 and 2005 Fuel Shares of Electricity Generation*



*Excludes pumped storage.

**Other includes geothermal, solar, wind, combustible renewables & waste.

Electricity Production from Fossil Fuels

Coal	TWh
United States	2 154
People's Rep. of China	1 972
India	480
Japan	309
Germany	305
South Africa	229
Australia	201
Russia	166
Korea	149
Poland	145
Rest of the World	1 241
World	**7 351**

2005 data

Oil	TWh
Japan	146
United States	141
Saudi Arabia	90
Mexico	69
People's Rep. of China	61
Italy	47
Indonesia	41
Kuwait	36
Iraq	33
Islamic Rep. of Iran	33
Rest of the World	504
World	**1 201**

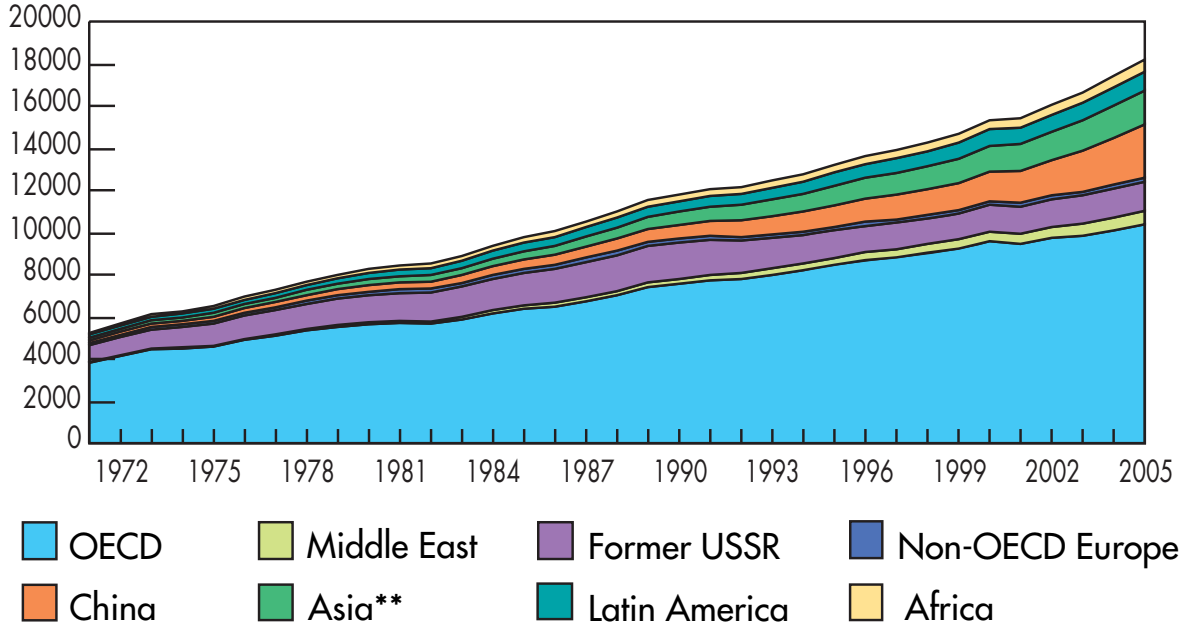
2005 data

Gas	TWh
United States	783
Russia	439
Japan	231
United Kingdom	153
Italy	149
Islamic Rep. of Iran	132
Thailand	94
Saudi Arabia	86
Mexico	85
Egypt	81
Rest of the World	1 364
World	**3 597**

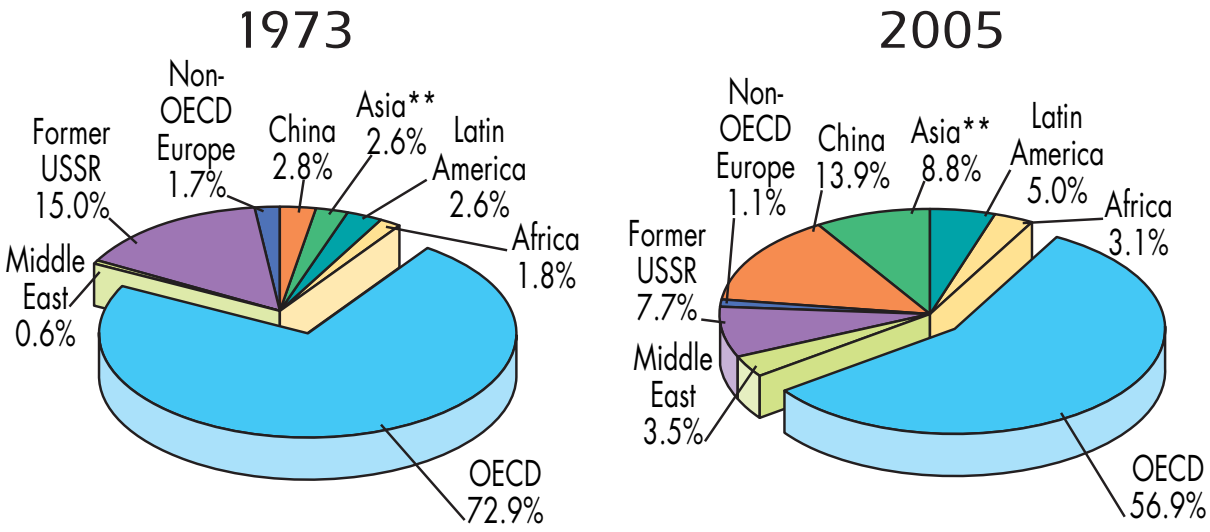
2005 data

Electricity Generation* by Region

Evolution from 1971 to 2005 of World Electricity Generation* by Region (TWh)



1973 and 2005 Regional Shares of Electricity Generation*



6 116 TWh **18 235 TWh**

** Excludes pumped storage.*

***Asia excludes China.*

Producers, Exporters and Importers of Electricity

Producers*	TWh	% of World total
United States	4 268	23.4
People's Rep. of China	2 497	13.7
Japan	1 094	6.0
Russia	951	5.2
India	699	3.8
Canada	628	3.4
Germany	613	3.4
France	571	3.1
Brazil	403	2.2
United Kingdom	398	2.2
Rest of the World	6 113	33.6
World	**18 235**	**100.0**

2005 data

Exporters**	TWh
France	68
Germany	61
Paraguay	44
Canada	44
Switzerland	32
Czech Republic	25
Russia	23
Sweden	22
United States	20
Austria	18
Rest of the World	270
World	**627**

2005 data

Importers**	TWh
Germany	57
Italy	50
United States	45
Brazil	39
Switzerland	38
Netherlands	24
Austria	20
Canada	20
Finland	18
Hungary	16
Rest of the World	285
World	**612**

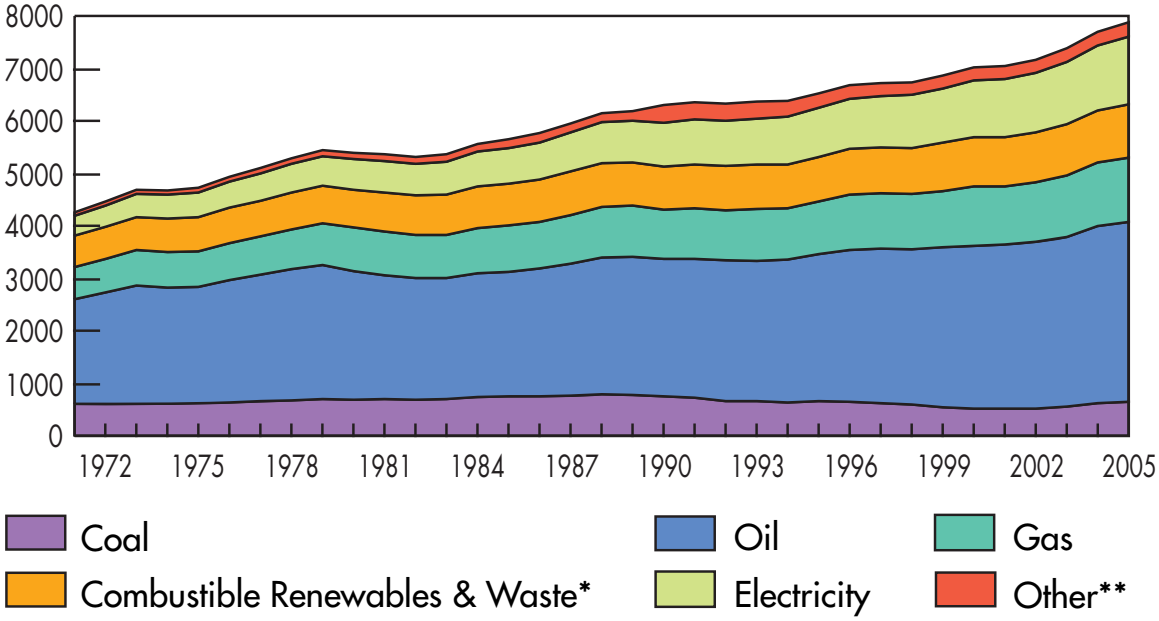
2005 data

** Gross production minus production from pumped storage plants.*
*** Total exports and total imports (ncluding transit)*

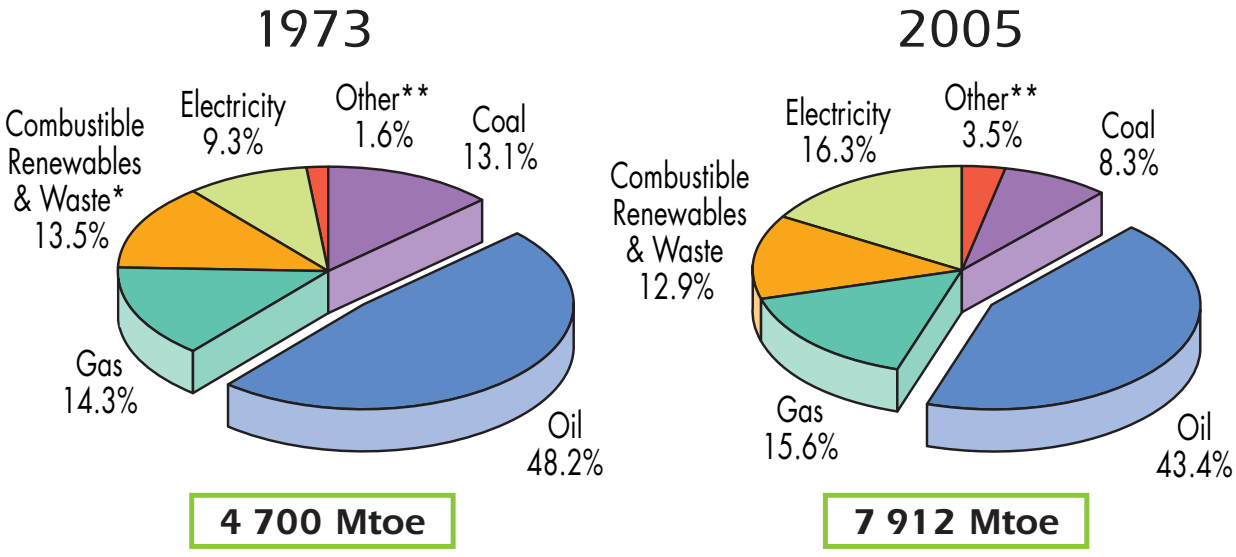
TOTAL FINAL CONSUMPTION

The World

Evolution from 1971 to 2005 of World Total Final Consumption by Fuel (Mtoe)



1973 and 2005 Fuel Shares of Total Final Consumption

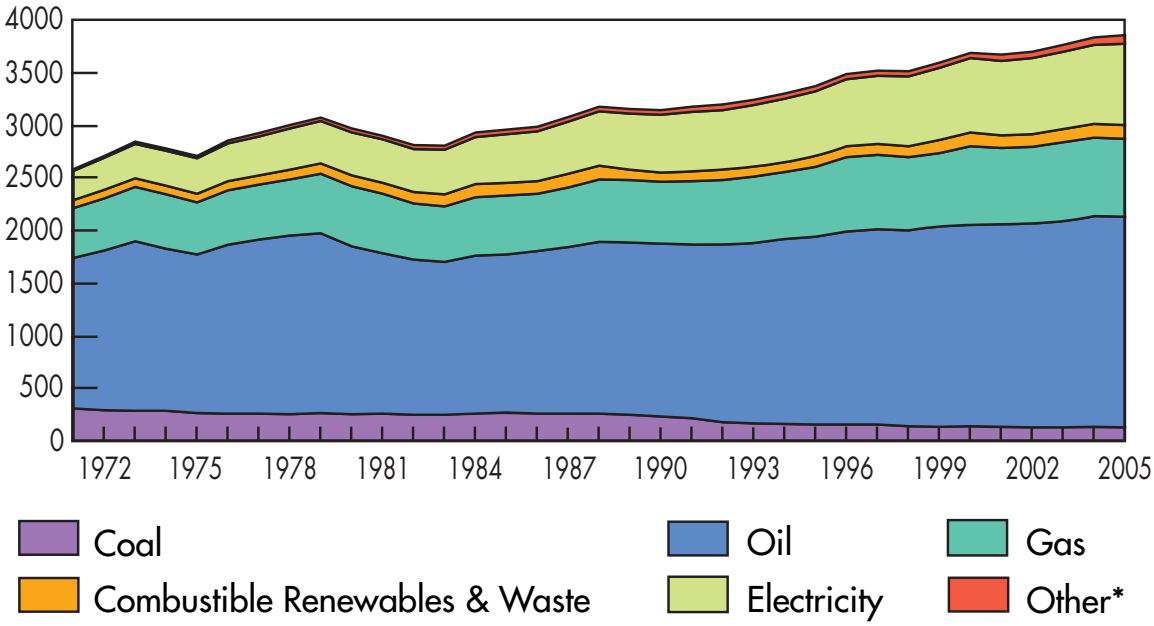


** Prior to 1994 combustible renewables & waste final consumption has been estimated.*
***Other includes geothermal, solar, wind, heat, etc.*

BY FUEL

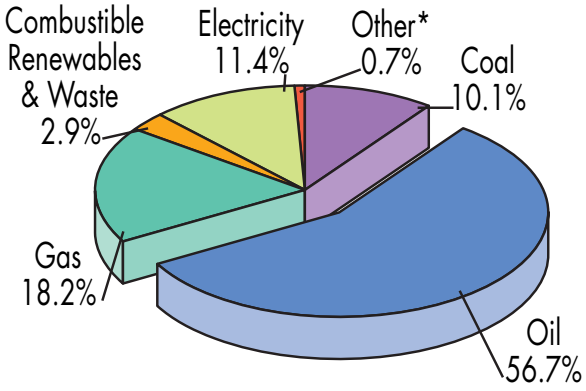
The OECD

Evolution from 1971 to 2005 of OECD Total Final Consumption by Fuel (Mtoe)



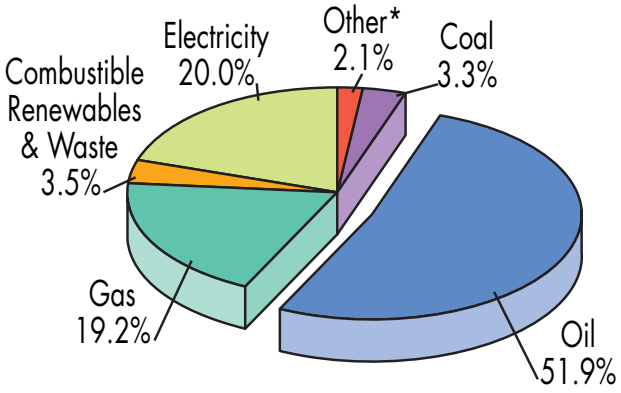
1973 and 2005 Fuel Shares of Total Final Consumption

1973



2 839 Mtoe

2005



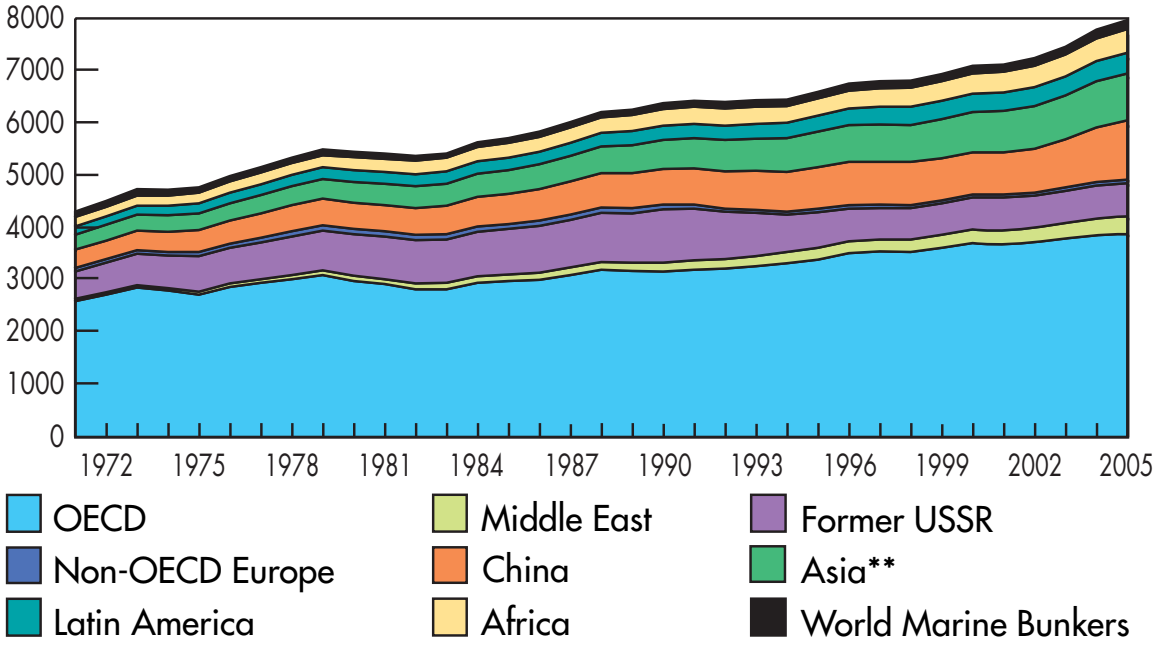
3 853 Mtoe

**Other includes geothermal, solar, wind, heat, etc.*

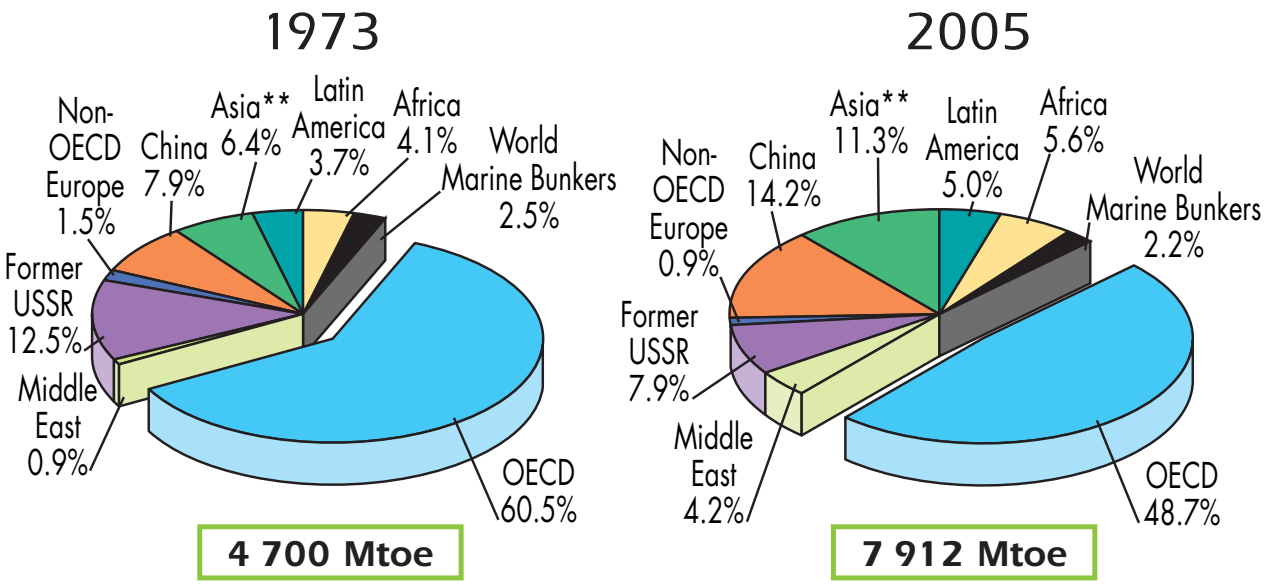
TOTAL FINAL CONSUMPTION

The World

Evolution from 1971 to 2005 of World Total Final Consumption* by Region (Mtoe)



1973 and 2005 Regional Shares of Total Final Consumption*

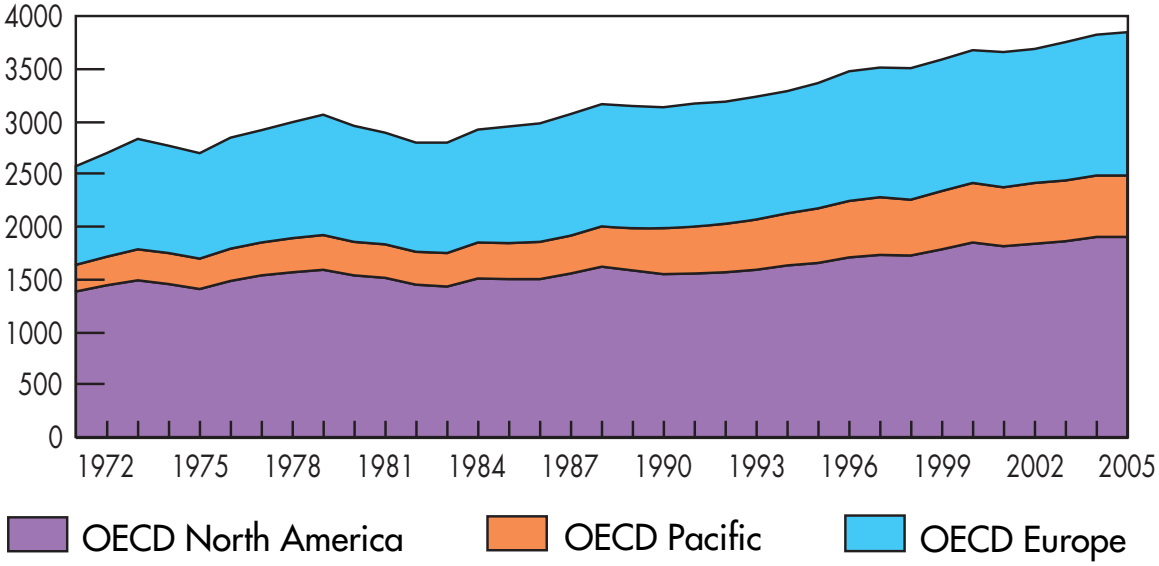


** Prior to 1994 combustible renewables & waste final consumption has been estimated.*
***Asia excludes China.*

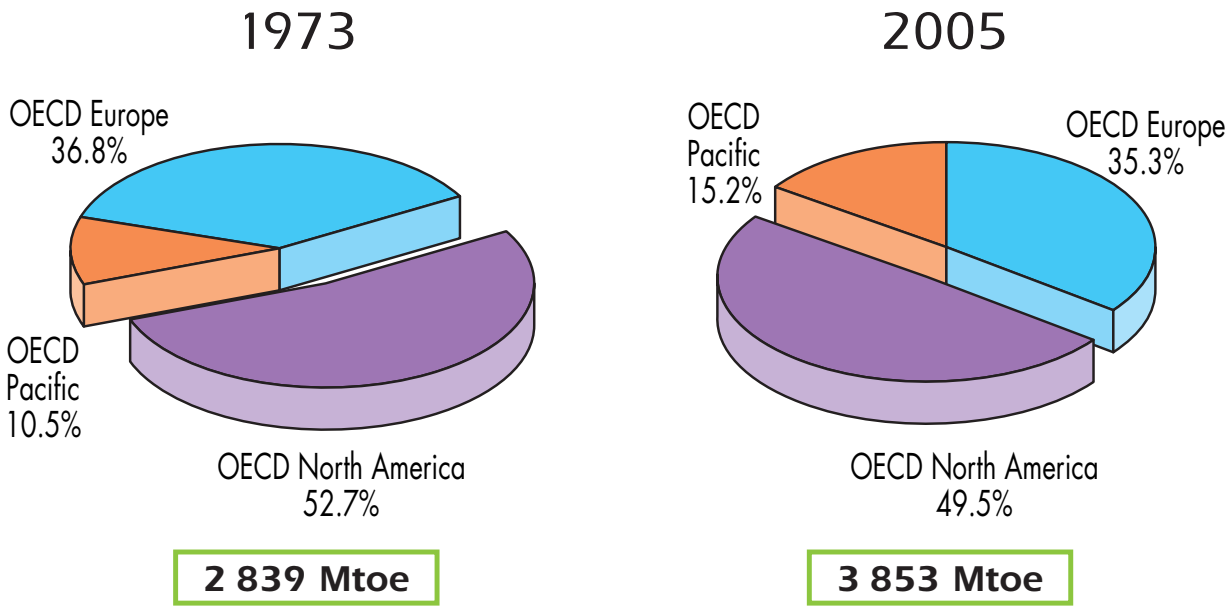
BY REGION

The OECD

Evolution from 1971 to 2005 of OECD Total Final Consumption by Region (Mtoe)



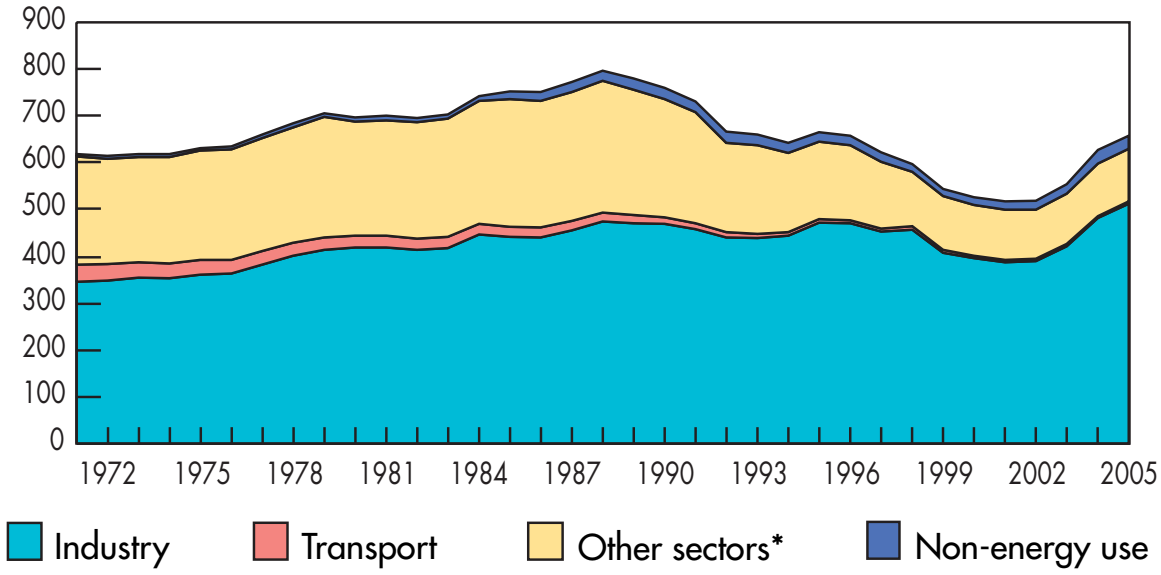
1973 and 2005 Regional Shares of Total Final Consumption



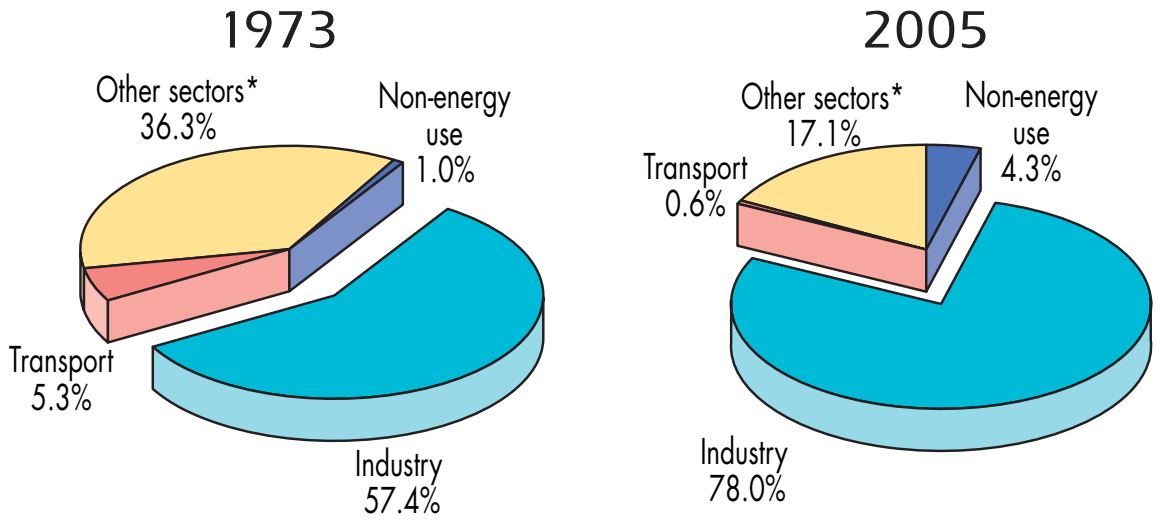
TOTAL FINAL CONSUMPTION

Coal

Evolution from 1971 to 2005 of Total Final Consumption by Sector (Mtoe)



1973 and 2005 Shares of World Coal Consumption

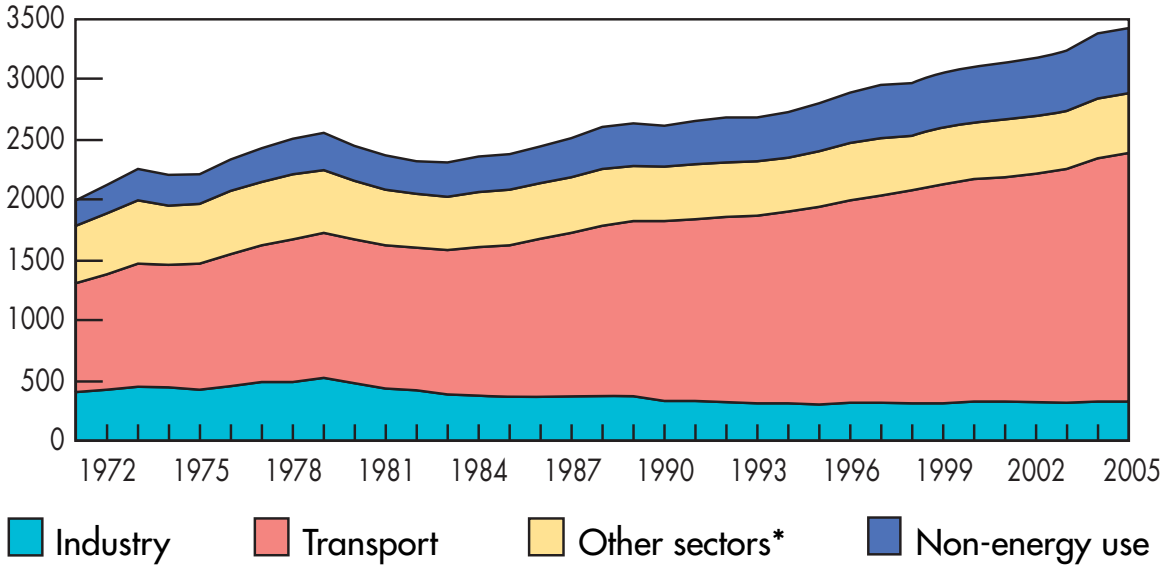


**Other sectors comprises agriculture, commercial & public service, residential and non-specified.*

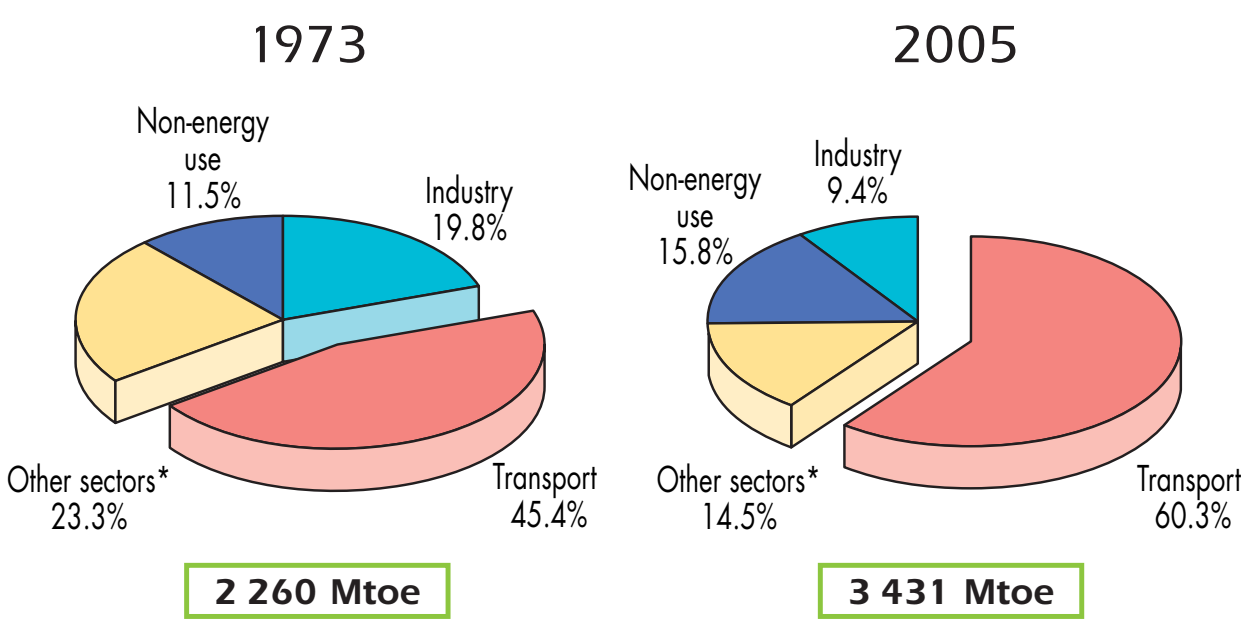
BY SECTOR

Oil

Evolution from 1971 to 2005 of Total Final Consumption by Sector (Mtoe)



1973 and 2005 Shares of World Oil Consumption

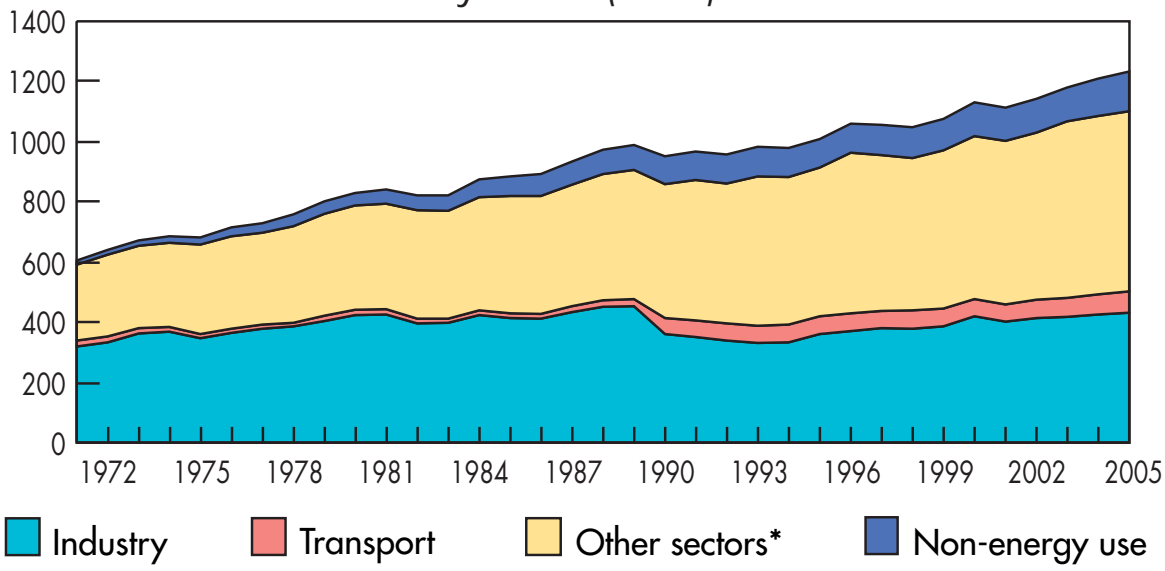


**Other sectors comprises agriculture, commercial & public service, residential and non-specified.*

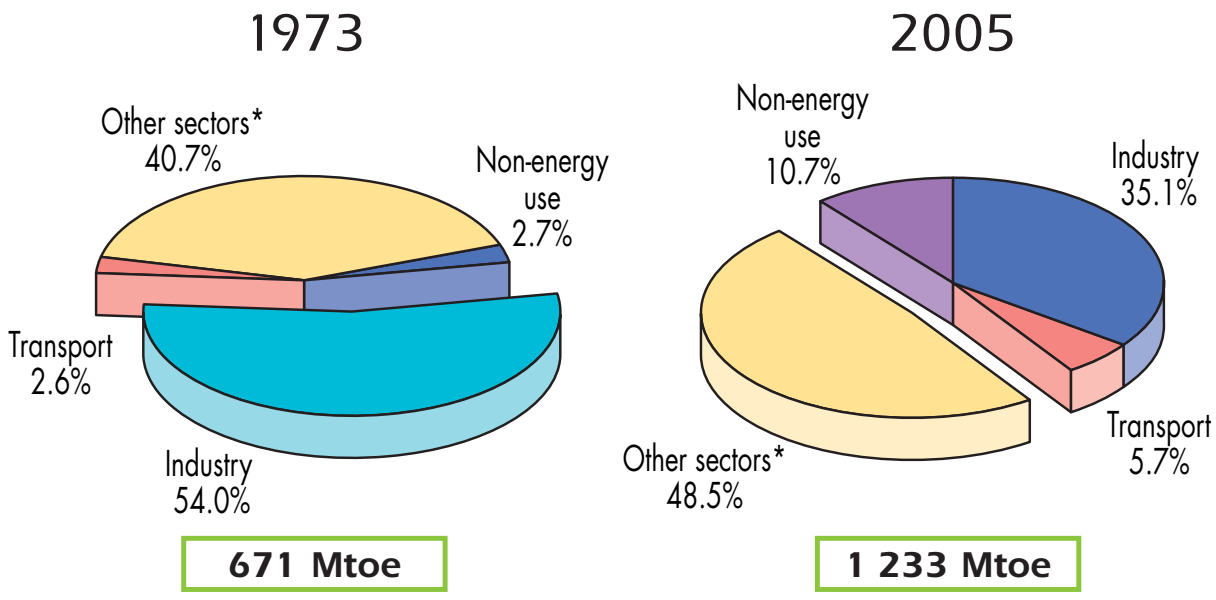
TOTAL FINAL CONSUMPTION

Gas

Evolution from 1971 to 2005 of Total Final Consumption by Sector (Mtoe)



1973 and 2005 Shares of World Gas Consumption

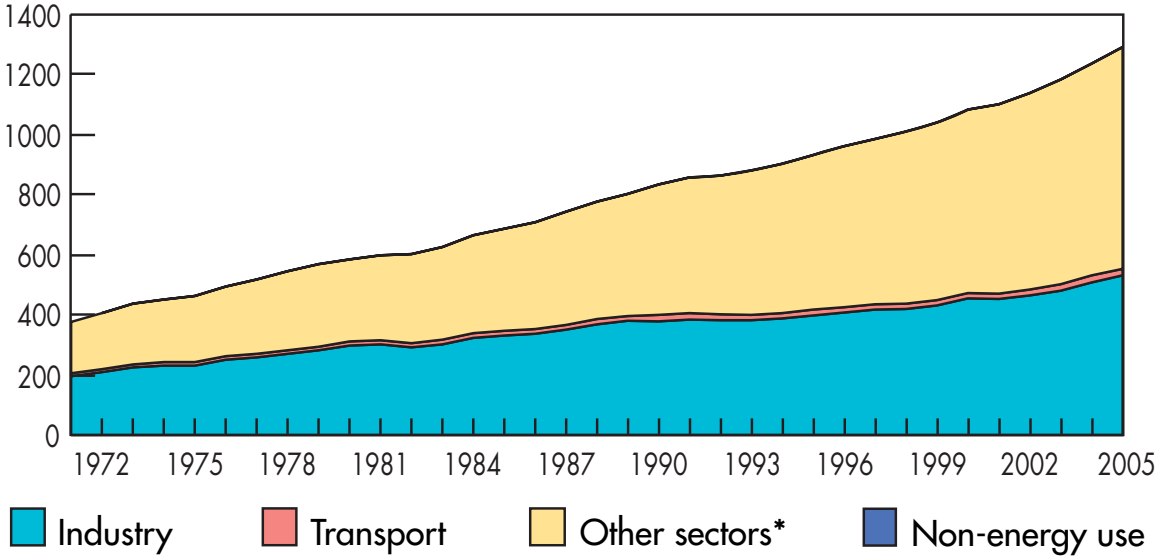


*Other sectors comprises agriculture, commercial & public service, residential and non-specified.

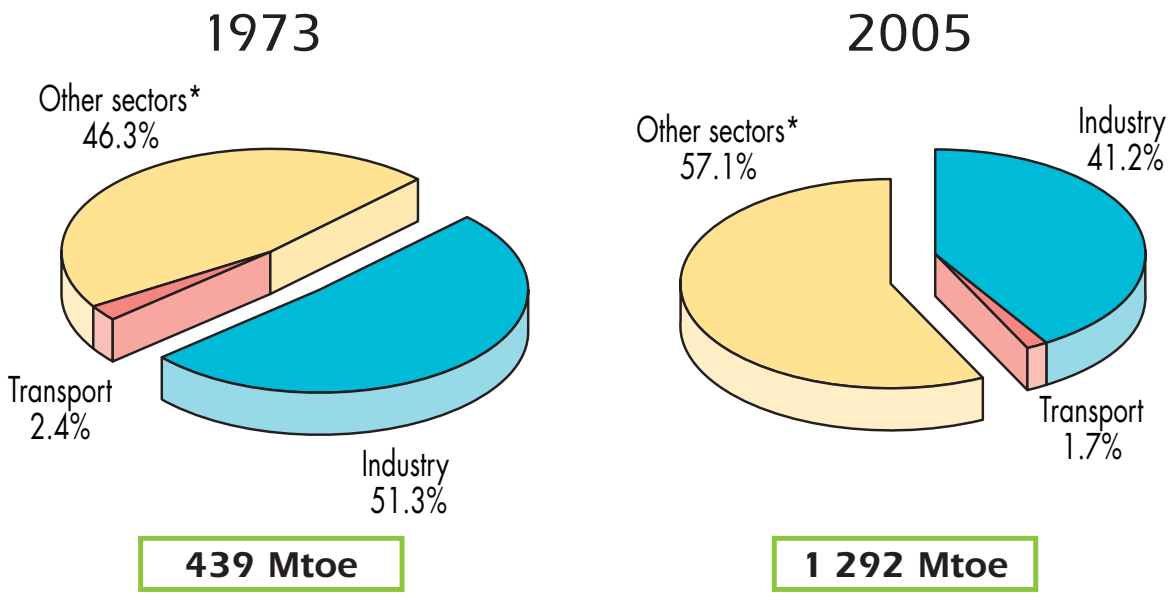
BY SECTOR

Electricity

Evolution from 1971 to 2005 of Total Final Consumption by Sector (Mtoe)



1973 and 2005 Shares of World Electricity Consumption



**Other sectors comprises agriculture, commercial & public service, residential and non-specified.*

SIMPLIFIED ENERGY

The World

1973

(Mtoe)

SUPPLY AND CONSUMPTION	Coal	Crude Oil	Petroleum Products	Gas	Nuclear	Hydro	Combustible Renewables & Waste[a]	Other[b]	Total
Indigenous Prod.	1475.71	2935.87	–	993.51	53.05	110.23	648.70	6.13	6223.20
Imports	139.99	1577.16	409.81	73.41	–	–	0.12	8.14	2208.63
Exports	–130.35	–1611.05	–440.77	–72.80	–	–	–0.19	–8.27	–2263.43
Stock Changes	12.22	–21.82	–16.08	–15.00	–	–	–0.23	–	–40.91
TPES	**1497.58**	**2880.15**	**–47.03**	**979.11**	**53.05**	**110.23**	**648.40**	**6.00**	**6127.49**
Transfers	–	–43.47	48.43	–	–	–	–	–	4.96
Statistical Diff.	12.89	12.10	–7.05	4.79	–	–	–	–0.03	–388.78
Electricity Plants	–557.33	–22.65	–317.94	–160.05	–52.95	–110.23	–2.73	502.68	–721.21
CHP Plants	–87.77	–	–28.39	–50.85	–0.10	–	–0.75	100.70	–67.16
Heat Plants	–9.22	–	–0.91	–0.69	–	–	–0.80	7.11	–4.50
Gas Works	–9.86	–0.60	–9.27	13.52	–	–	–	–	–6.21
Pet. Refineries	–	–2800.71	2772.64	–	–	–	–	–	–28.07
Coal Transf.	–183.81	–	–3.38	–0.19	–	–	–0.08	–	–187.46
Liquefaction	–0.73	0.24	–	–	–	–	–	–	–0.48
Other Transf.	–	5.32	–5.47	–0.03	–	–	–11.04	–	–11.22
Own Use	–34.10	–2.62	–161.81	–106.70	–	–	–0.07	–57.78	–363.08
Distribution Losses	–7.40	–7.07	–0.27	–7.51	–	–	–	–43.07	–65.32
TFC [c]	**620.25**	**20.70**	**2239.52**	**671.40**	**–**	**–**	**632.94**	**515.62**	**4700.43**
Industry Sector	356.13	16.38	431.92	362.04	–	–	–	277.14	1507.24
Transport Sector [d]	32.99	–	1024.31	17.72	–	–	–	10.47	1085.82
Other Sectors	225.12	–	527.07	273.27	–	–	–	228.01	1410.83
Non–Energy Use [e]	6.00	4.32	256.22	18.37	–	–	–	–	285.06

(a) Combustible renewables & waste final consumption has been estimated. (b) Other includes geothermal. solar. electricity and heat. wind. etc. (c) Totals may not always add up due to a lack of breakdown of consumption for combustible renewables & waste. (d) Includes international marine bunkers. (e) Includes petrochemical feedstocks.

BALANCE TABLE

The World

2005

(Mtoe)

SUPPLY AND CONSUMPTION	Coal	Crude Oil	Petroleum Products	Gas	Nuclear	Hydro	Combustible Renewables & Waste	Other[a]	Total
Indigenous Prod.	2908.31	4008.01	–	2371.57	721.83	251.32	1146.88	59.83	11467.75
Imports	521.12	2299.34	898.57	701.14	–	–	3.45	52.59	4476.21
Exports	–514.96	–2224.35	–972.32	–715.59	–	–	–3.81	–53.89	–4484.92
Stock Changes	–22.36	–6.97	–0.20	4.42	–	–	–0.01	–	–25.12
TPES	**2892.11**	**4076.03**	**–73.95**	**2361.54**	**721.83**	**251.32**	**1146.51**	**58.53**	**11433.92**
Transfers	–	–122.60	139.82	–	–	–	–	–	17.22
Statistical Diff.	–8.41	–15.14	–6.36	2.54	–	–	–0.10	0.19	–27.27
Electricity Plants	–1688.51	–23.98	–229.56	–525.11	–710.42	–251.32	–37.31	1354.68	–2111.53
CHP Plants	–174.07	–	–29.87	–290.59	–11.41	–	–30.95	302.63	–234.25
Heat Plants	–91.34	–0.76	–13.92	–94.88	–	–	–7.12	176.34	–31.69
Gas Works	–13.37	–	–3.81	10.77	–	–	–	–	–6.41
Pet. Refineries	–	–3927.06	3880.40	–0.71	–	–	–	–	–47.37
Coal Transf.	–175.12	0.02	–2.69	–0.23	–	–	–	–	–178.03
Liquefaction	–17.81	8.56	–	–6.67	–	–	–	–	–15.92
Other Transf.	–0.35	28.29	–29.34	–2.08	–	–	–51.58	–	–55.06
Own Use	–61.05	–7.99	–210.63	–193.80	–	–	–0.39	–170.00	–643.85
Distribution Losses	–2.59	–4.30	–0.36	–27.53	–	–	–0.01	–153.26	–188.05
TFC	**659.49**	**11.06**	**3419.75**	**1233.24**	**–**	**–**	**1019.05**	**1569.11**	**7911.70**
Industry Sector	514.05	3.89	321.20	432.16	–	–	179.44	642.06	2092.80
Transport Sector [b]	4.28	0.02	2067.10	70.76	–	–	18.55	22.20	2182.91
Other Sectors	112.93	0.38	495.72	598.49	–	–	820.70	904.86	2933.08
Non–Energy Use [c]	28.23	6.77	535.72	131.82	–	–	0.36	–	702.90

(a) Other includes geothermal. solar. electricity and heat. wind. etc.
(b) Includes international marine bunkers.
(c) Includes petrochemical feedstocks.

SIMPLIFIED ENERGY

The OECD

1973

(Mtoe)

SUPPLY AND CONSUMPTION	Coal	Crude Oil	Petroleum Products	Gas	Nuclear	Hydro	Combustible Renewables & Waste	Other*	Total
Indigenous Prod.	818.29	701.75	–	705.65	49.22	78.46	85.96	6.13	2445.46
Imports	121.72	1286.57	337.43	62.56	–	–	0.03	7.55	1815.85
Exports	–111.07	–63.46	–173.84	–50.39	–	–	–0.01	–7.00	–405.78
Intl. Marine Bunkers	–	–	–72.76	–	–	–	–	–	–72.76
Stock Changes	14.41	–11.04	–11.51	–11.98	–	–	0.06	–	–20.07
TPES	**843.35**	**1913.81**	**79.32**	**705.83**	**49.22**	**78.46**	**86.04**	**6.67**	**3762.69**
Transfers	–	–37.99	42.12	–	–	–	–	–	4.13
Statistical Diff.	17.70	13.22	2.28	–5.62	–	–	–0.00	–	27.57
Electricity Plants	–387.37	–20.67	–223.37	–108.33	–49.12	–78.46	–1.42	363.19	–505.54
CHP Plants	–53.52	–	–7.93	–11.65	–0.10	–	–0.75	30.94	–43.01
Heat Plants	–9.22	–	–0.91	–0.69	–	–	–0.80	7.11	–4.50
Gas Works	–8.40	–0.60	–8.81	13.02	–	–	–	–	–4.79
Pet. Refineries	–	–1871.71	1864.06	–	–	–	–	–	–7.66
Coal Transf.	–90.91	–	–3.38	–0.19	–	–	–0.02	–	–94.51
Liquefaction Plants	–	0.03	–	–	–	–	–	–	0.03
Other Transf.	–	5.12	–5.27	–0.03	–	–	–	–	–0.18
Own Use	–23.62	–1.00	–127.38	–72.86	–	–	–0.07	–33.37	–258.29
Distribution Losses	–2.32	–	–0.24	–3.95	–	–	–	–30.33	–36.83
TFC	**285.69**	**0.21**	**1610.48**	**515.53**	**–**	**–**	**82.99**	**344.21**	**2839.11**
Industry Sector	179.29	0.21	310.53	253.72	–	–	42.02	168.80	954.56
Transport Sector	7.21	–	691.14	17.00	–	–	0.00	5.29	720.64
Other Sectors	96.10	–	396.27	239.28	–	–	40.97	170.13	942.74
Non–Energy Use**	3.10	–	212.54	5.53	–	–	–	–	221.17

**Includes geothermal, solar, electricity and heat, wind, etc.*
*** Includes petrochemical feedstocks.*

BALANCE TABLE

The OECD

2005

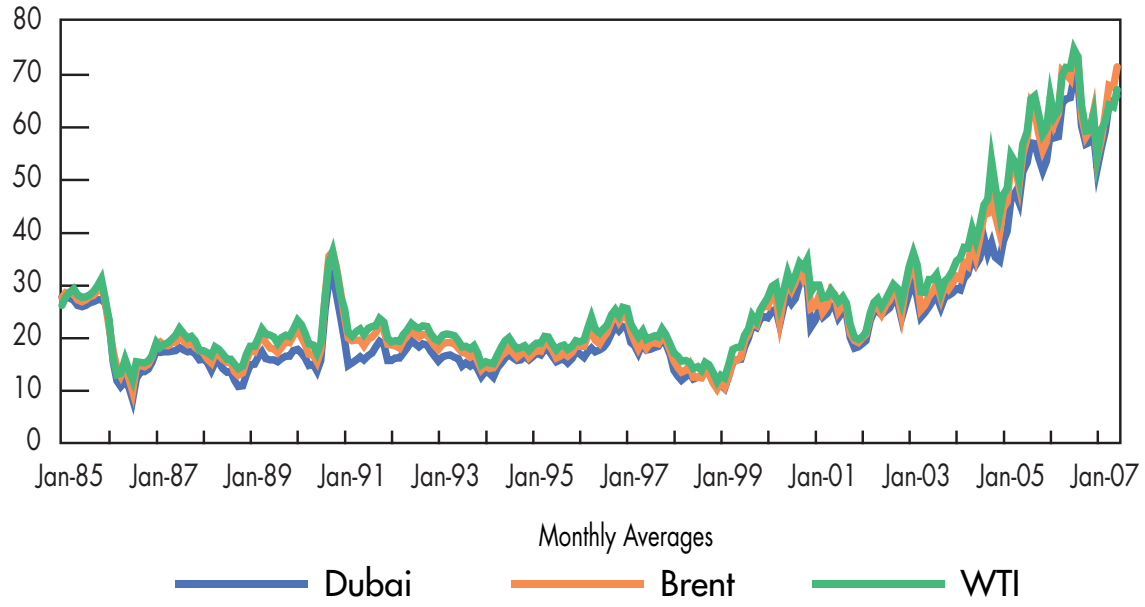
(Mtoe)

SUPPLY AND CONSUMPTION	Coal	Crude Oil	Petroleum Products	Gas	Nuclear	Hydro	Combustible Renewables & Waste	Other*	Total
Indigenous Prod.	1003.14	965.84	–	911.59	611.43	109.26	192.19	40.31	3833.78
Imports	355.89	1670.05	540.73	539.49	–	–	3.21	35.43	3144.81
Exports	–231.12	–408.35	–409.78	–247.85	–	–	–0.96	–33.94	–1332.00
Intl. Marine Bunkers	–	–	–96.45	–	–	–	–	–	–96.45
Stock Changes	2.35	–8.88	–4.17	8.21	–	–	–0.05	–	–2.54
TPES	**1130.27**	**2218.66**	**30.34**	**1211.44**	**611.43**	**109.26**	**194.39**	**41.80**	**5547.60**
Transfers	–	–34.15	44.39	–	–	–	–	–	10.24
Statistical Diff.	–12.49	–16.44	–8.93	1.86	–	–	0.11	0.05	–35.84
Electricity Plants	–826.07	–8.23	–90.60	–263.43	–603.08	–109.26	–27.84	770.00	–1158.51
CHP Plants	–87.42	–	–17.33	–113.49	–8.35	–	–29.13	150.21	–105.50
Heat Plants	–3.96	–	–1.61	–5.42	–	–	–3.34	25.84	11.50
Gas Works	–2.42	–	–2.42	3.09	–	–	–	–	–1.75
Pet. Refineries	–	–2183.13	2191.63	–0.71	–	–	–	–	7.78
Coal Transf.	–59.30	0.02	–2.08	–0.23	–	–	–0.00	–	–61.59
Liquefaction Plants	–	0.57	–	–1.17	–	–	–	–	–0.60
Other Transf.	0.00	24.03	–24.87	–0.00	–	–	–0.12	–	–0.96
Own Use	–11.47	–0.21	–119.92	–88.65	–	–	–0.11	–71.01	–291.37
Distribution Losses	–0.98	–	–0.01	–3.15	–	–	–0.01	–64.07	–68.22
TFC	**126.18**	**1.11**	**1998.59**	**740.12**	**–**	**–**	**133.96**	**852.82**	**3852.78**
Industry Sector	107.11	0.04	143.26	255.02	–	–	65.12	289.96	860.51
Transport Sector	0.10	–	1255.84	21.58	–	–	11.47	9.81	1298.81
Other Sectors	17.23	–	251.91	427.42	–	–	57.38	553.05	1306.98
Non–Energy Use**	1.73	1.07	347.59	36.09	–	–	–	–	386.48

**Includes geothermal, solar, electricity and heat, wind, etc.*
*** Includes petrochemical feedstocks.*

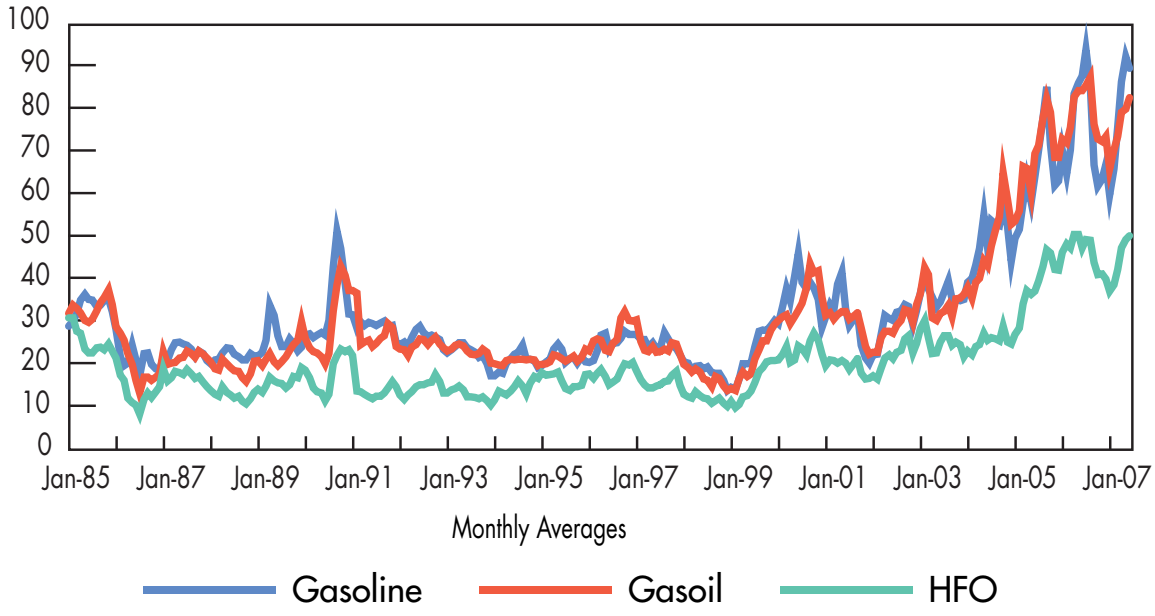
Crude Oil

Key Crude Oil Spot Prices in US Dollars/barrel



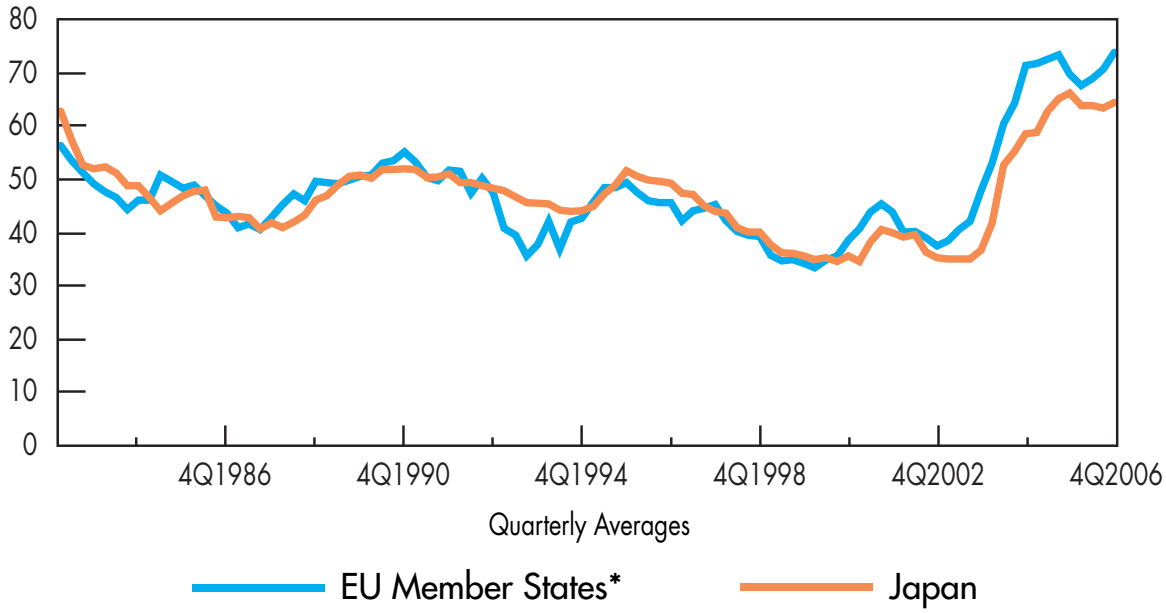
Petroleum Products

Rotterdam Oil Product Spot Prices in US Dollars/barrel



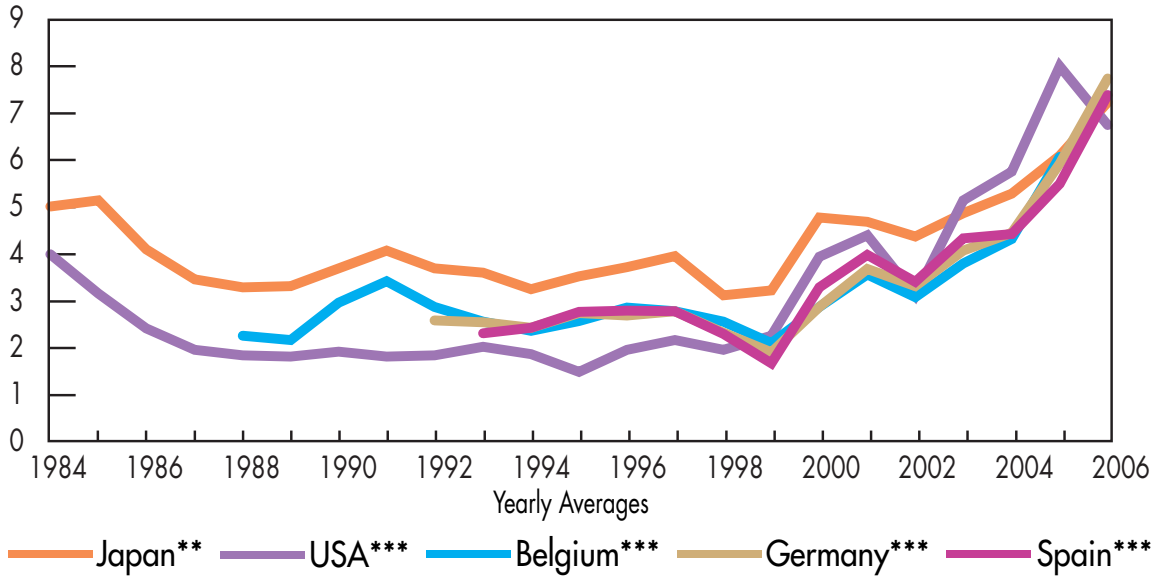
Coal

Steam Coal Import Costs in US Dollars/tonne



Natural Gas

Natural Gas Import Prices in US Dollars/MBtu



**European Union member states excluding Romania and Bulgaria, where information is available.*
***LNG ***Pipeline*

RETAIL PRICES[a]

	Heavy Fuel Oil for Industry[b] (tonne)	Light Fuel Oil for Households (1000 litres)	Automotive Diesel Oil[c] (litre)	Unleaded Premium[d] (litre)
Australia	..	..	..	0.912
Austria	383.51	785.19	0.795	1.323
Belgium	304.03	664.63	1.102	1.695
Canada	316.47	693.97	0.812	0.802
Chinese Taipei	390.40	x	0.688	0.786
Czech Republic	294.02	719.45	1.060	1.263
Denmark	400.77	1 248.94	1.079	1.582
Finland	391.47	740.06	1.047	1.587
France	318.36	764.42	1.123	1.562
Germany	318.09	668.51	1.193	1.645
Greece	423.24 L	1264.98 L	1.067 L	1.313 L
Hungary	369.31	x	1.073	1.329
India	329.62 L	210.23 L	0.744 L	0.980 L
Ireland	467.21	847.23	1.110	1.347
Italy	370.73	1 382.38	1.197	1.592
Japan	516.46	597.93	0.748	1.146
Korea	513.95	921.75	..	1.515
Luxembourg	208.04 L	615.33	0.987	1.363
Mexico	204.07	..	0.456	0.614
Netherlands	366.90	1 090.94	1.132	1.805
New Zealand	359.44	..	0.586	0.990
Norway	..	1 006.58	1.375	1.766
Poland	402.07	791.72	0.987	1.287
Portugal	475.75	834.86	1.209	1.619
South Africa	387.53 L	..	0.780 L	0.822 L
Slovak Republic	305.38	..	1.157	1.369
Spain	372.15	725.63	1.005	1.248
Sweden	914.91	1 327.54	1.206	1.557
Switzerland	315.79 L	564.88	1.153	1.260
Turkey	642.98	1 488.40	1.553	1.944
United Kingdom	464.66	680.18	1.521	1.706
United States	307.94	644.76	0.674	0.624

(a) Prices are for 1st quarter 2007, or latest available L. (b) High sulphur fuel oil for Canada, India, Ireland, Mexico, New Zealand, South Africa, Turkey and the United States; low sulphur fuel oil for all other countries. (c) For commercial purposes. (d) Unleaded premium gasoline (95 RON); unleaded regular for Australia, Canada, Japan, Korea, Mexico, New Zealand

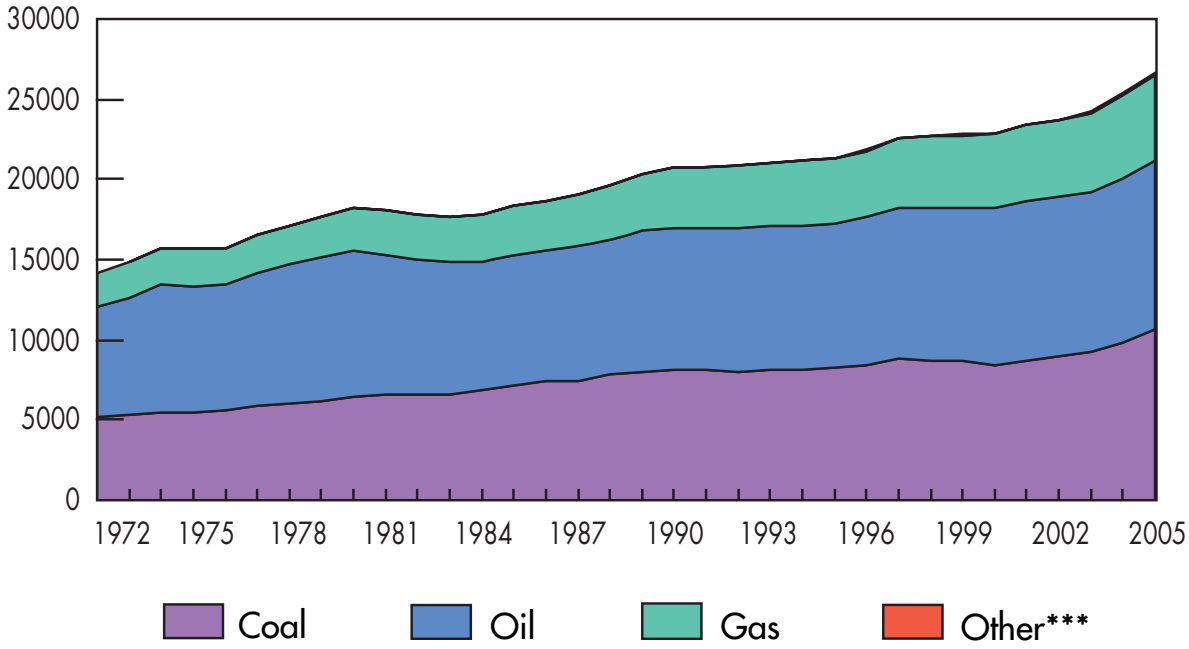
IN SELECTED COUNTRIES in US Dollars/Unit

Nat Gas for Industry (10^7 kcal GCV[e])	Nat Gas for Households (10^7 kcal GCV[e])	Steam Coal for Industry[f] (tonne)	Electricity for Industry[g] (kWh)	Electricity for Households[g] (kWh)	
..	..	..	0.0609 L	0.0985 L	Australia
..	902.90	183.05	0.1260	0.2025	Austria
c	..	..	..	..	Belgium
255.16 L	504.68 L	..	0.0490 L	0.0676 L	Canada
458.34 L	427.03	..	0.0571	0.0785	Chinese Taipei
366.34	531.09	c	0.1085	0.1370	Czech Republic
c	1270.76 L	..	0.0759 L	0.3237 L	Denmark
251.56	361.19	137.05	0.0803	0.1400	Finland
393.69	751.77	123.43 L	0.0533	0.1515	France
..	..	..	0.0840 L	0.2124 L	Germany
379.06 L	604.68 L	..	0.0693 L	0.1135 L	Greece
535.60	585.01	..	0.1276	0.1735	Hungary
..	..	36.86 L	..	0.0425 L	India
c	863.17	..	0.1504	0.2261	Ireland
354.17 L	829.24 L	73.03 L	0.2359	0.2529	Italy
401.53 L	1245.56 L	66.59	0.1205 L	0.1888 L	Japan
503.85	659.24	95.02	0.0682	0.1034	Korea
..	558.72 L	..	..	0.1833 L	Luxembourg
340.35	611.15	x	0.1025	0.1204	Mexico
227.77 L	1 015.82	..	c	0.2731	Netherlands
240.36	1 103.69	c	0.0661	0.1471	New Zealand
x	x	..	0.0569 L	0.1210 L	Norway
337.45	577.20	68.63	0.0785	0.1343	Poland
425.81	1 022.39	..	0.1229	0.2041	Portugal
377.37 L	x	21.07	0.0218 L	0.0592 L	South Africa
398.25	618.77	..	0.1283	0.1733	Slovak Republic
373.18	840.73	..	0.0913 L	0.1647 L	Spain
..	..	..	..	..	Sweden
566.75	850.61	103.00	0.0816	0.1325	Switzerland
402.78	479.19	65.25	0.1008	0.1128	Turkey
379.48 L	801.12	88.39 L	0.1322 L	0.2205	United Kingdom
304.93	464.33	56.77	0.0613	0.1002	United States

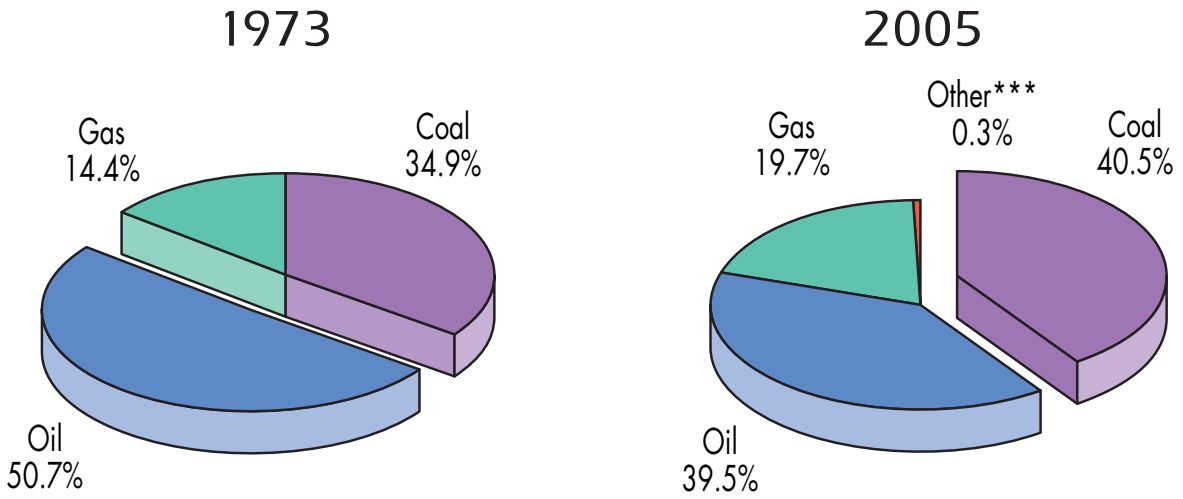
and the United States. (e) Gross calorific value.
(f) Brown coal for Turkey. (g) Price excluding tax for the United States.
.. not available x not applicable c confidential

CO_2 Emissions by Fuel

Evolution from 1971 to 2005 of World* CO_2 Emissions** by Fuel (Mt of CO_2)



1973 and 2005 Fuel Shares of CO_2 Emissions**



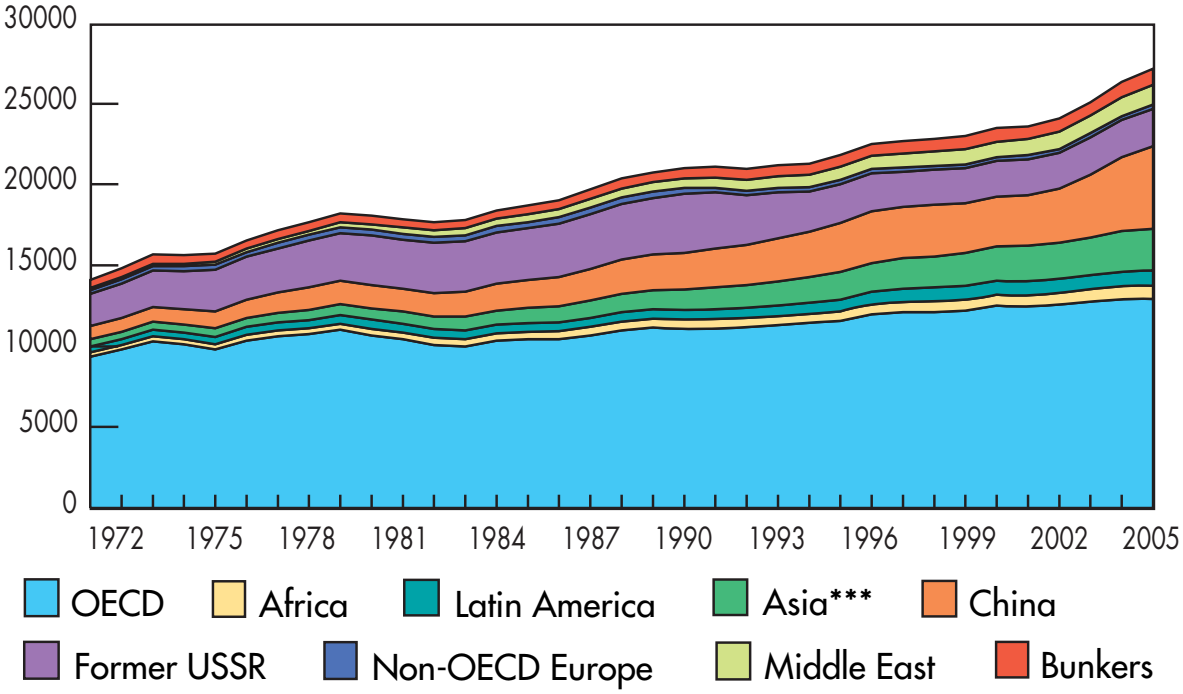
15 661 Mt of CO_2

27 136 Mt of CO_2

** World includes international aviation and international marine bunkers.*
*** Calculated using IEA's Energy Balance Tables and the Revised 1996 IPCC Guidelines. CO_2 emissions are from fuel combustion only. *** Other includes industrial waste and non-renewable municipal waste.*

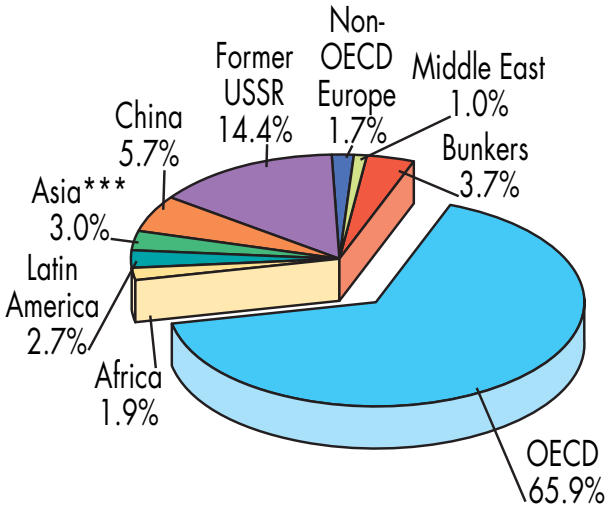
CO_2 Emissions by Region

Evolution from 1971 to 2005 of World* CO_2 Emissions** by Region (Mt of CO_2)



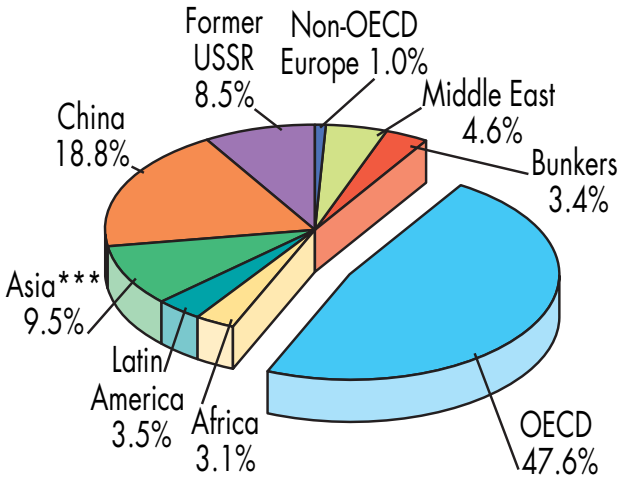
1973 and 2005 Regional Shares of CO_2 Emissions**

1973



15 661 Mt of CO_2

2005

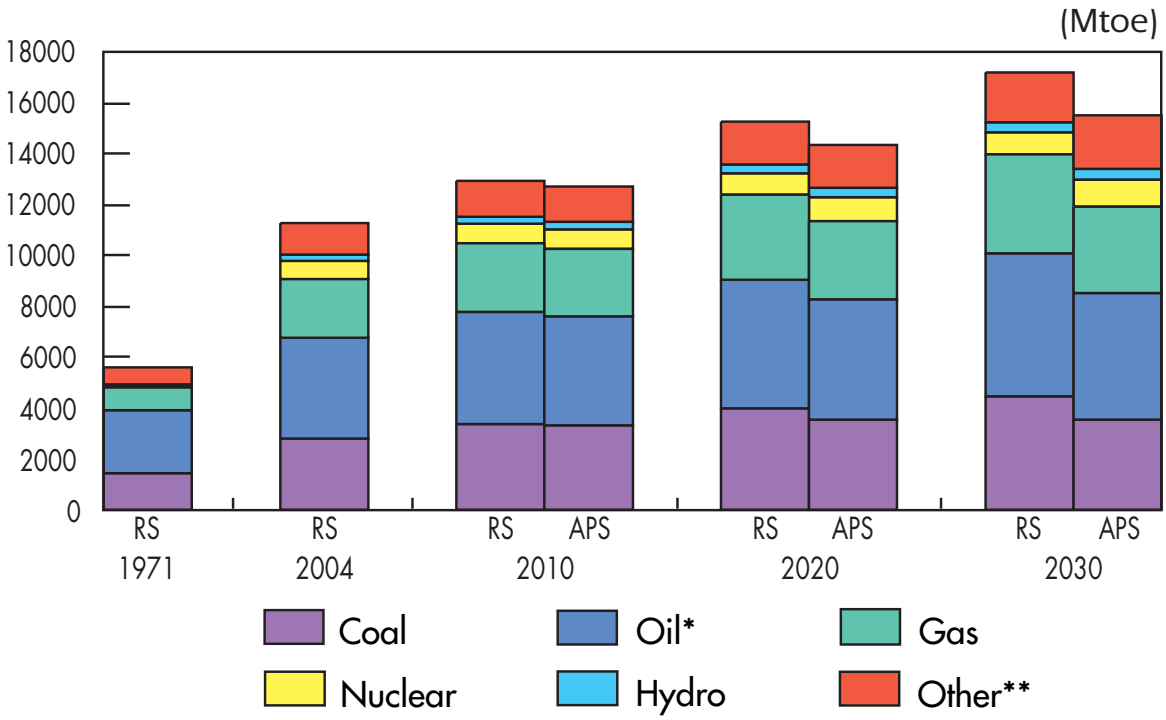


27 136 Mt of CO_2

** World includes international aviation and international marine bunkers, which are shown together as Bunkers. ** Calculated using IEA's Energy Balance Tables 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

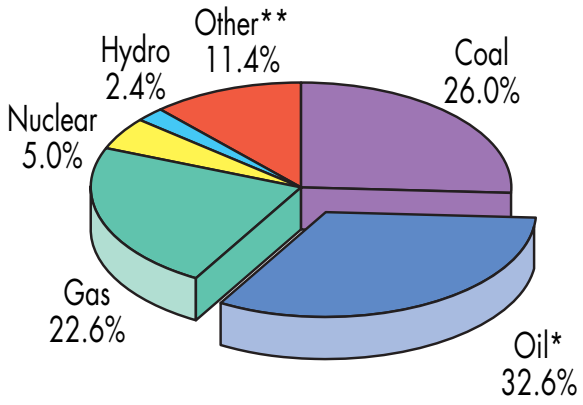


RS: Reference Scenario (based on current policies)

APS: Alternative Policy Scenario (based on policies under consideration)

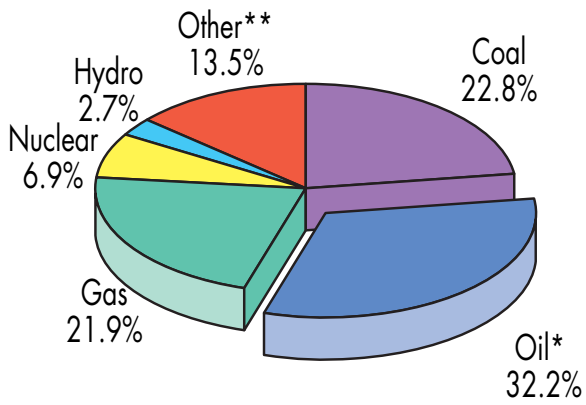
Fuel Shares of TPES* in 2030 for the Reference Scenario and Alternative Policy Scenario

RS 2030



17 100 Mtoe

APS 2030



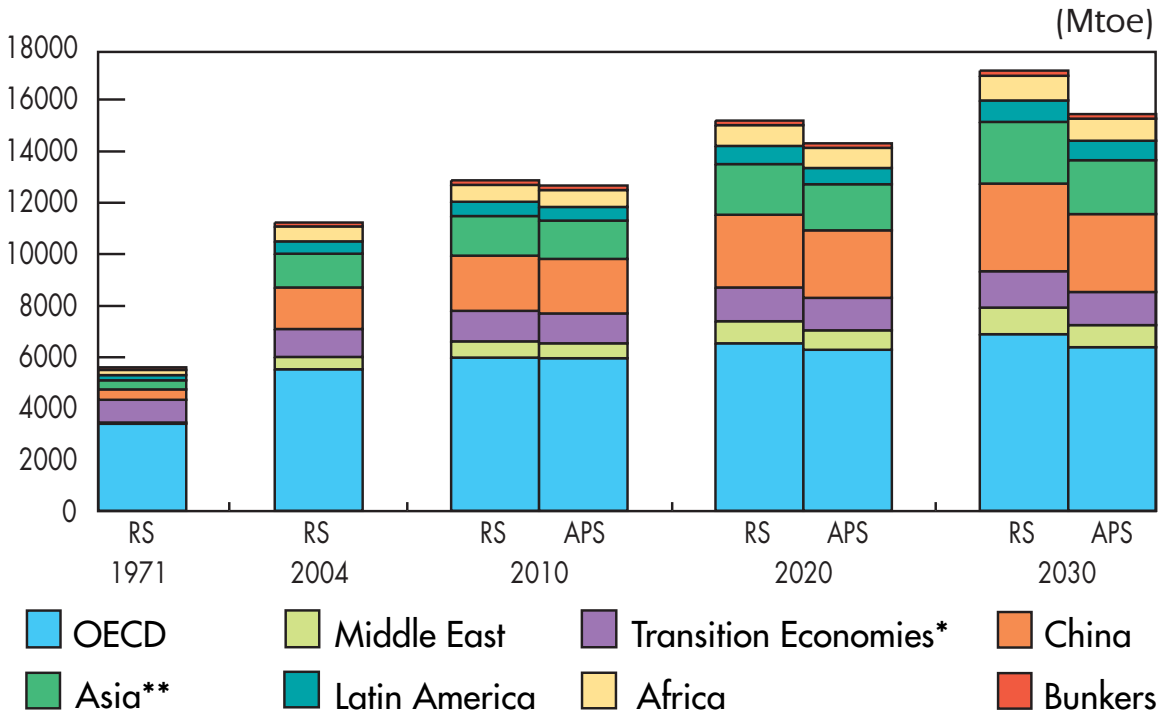
15 400 Mtoe

** Includes bunkers.*

*** Other includes combustible renewables & waste, geothermal, solar, wind, tide, etc.*

(Source: IEA WEO 2006)

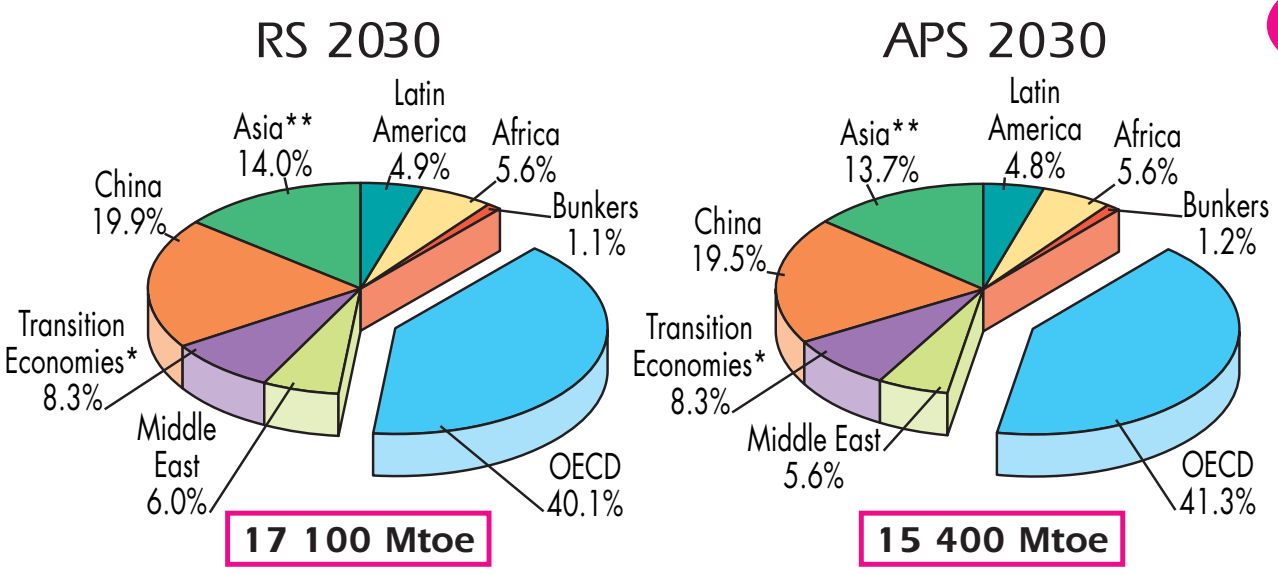
TPES Outlook by Region



RS: Reference Scenario (based on current policies)

APS: Alternative Policy Scenario (based on policies under consideration)

Regional Shares of TPES in 2030 for the Reference Scenario and Alternative Policy Scenario



*Includes Former USSR and Non-OECD Europe.
** Asia excludes China.

Selected Indicators for 2005

Region/ Country	Popu-lation (million)	GDP (billion 2000$)	GDP (PPP) (billion 2000$)	Energy Prod. (Mtoe)	Net Imports (Mtoe)	TPES (Mtoe)	Elec. Cons.[a] (TWh)	CO_2 Emissions[b] (Mt of CO_2)
World	6432	36281	54618	11468	-	11434[c]	16695	27136[d]
OECD	1172	28394	30321	3834	1813	5548	9800	12910
Middle East	187	786	1362	1496	-979	503	558	1238
Former USSR	285	525	2099	1551	-565	980	1199	2303
Non-OECD Europe	54	152	428	63	43	105	167	263
China	1311	2098	8057	1641	124	1735	2363	5101
Asia	2080	1974	7089	1114	199	1286	1343	2591
Latin America	449	1620	3193	680	-168	500	761	938
Africa	894	731	2069	1088	-475	605	503	835
Albania	3.13	4.79	14.80	1.17	1.23	2.40	3.68	4.61
Algeria	32.85	69.70	206.42	175.07	-139.95	34.77	29.52	84.30
Angola	15.94	14.94	33.11	70.70	-59.34	9.90	2.27	8.45
Argentina	38.75	313.63	492.24	81.05	-16.49	63.72	93.69	140.94
Armenia	3.02	3.41	13.27	0.86	1.70	2.56	4.54	4.14
Australia	20.47	469.81	616.75	270.98	-148.02	121.96	234.20	376.78
Austria	8.23	208.31	247.30	9.81	24.76	34.36	64.95	77.18
Azerbaijan	8.39	9.91	37.44	27.30	-12.76	13.84	20.20	31.28
Bahrain	0.73	10.60	13.89	16.13	-8.13	8.13	8.26	18.32
Bangladesh	141.82	61.36	259.08	19.31	4.58	24.19	20.78	36.34
Belarus	9.78	18.26	68.86	3.80	22.71	26.59	31.37	60.71
Belgium	10.47	249.35	293.67	13.90	50.89	56.65	89.17	111.70
Benin	8.44	2.75	8.56	1.67	0.90	2.58	0.59	2.52
Bolivia	9.18	9.74	23.03	13.87	-8.98	5.31	4.40	11.85
Bosnia and Herzegovina	3.91	6.44	25.75	3.34	1.56	4.96	9.07	15.93
Botswana	1.77	8.20	19.45	1.05	0.84	1.89	2.58	4.31
Brazil	186.41	670.45	1393.43	187.83	25.14	209.53	375.19	329.28

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

TPES/ Pop (toe/capita)	TPES/ GDP (toe/000 2000$)	TPES/ GDP (PPP) (toe/000 2000$ PPP)	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/ 2000$)	CO_2/ GDP (PPP) (kg CO_2/ 2000$ PPP)	Region/ Country
1.78	0.32	0.21	2596	2.37	4.22	0.75	0.50	World
4.74	0.20	0.18	8365	2.33	11.02	0.45	0.43	OECD
2.69	0.64	0.37	2980	2.46	6.62	1.58	0.91	Middle East
3.44	1.87	0.47	4209	2.35	8.08	4.39	1.10	Former USSR
1.94	0.69	0.25	3086	2.50	4.87	1.73	0.61	Non-OECD Europe
1.32	0.83	0.22	1802	2.94	3.89	2.43	0.63	China
0.62	0.65	0.18	646	2.01	1.25	1.31	0.37	Asia
1.11	0.31	0.16	1695	1.88	2.09	0.58	0.29	Latin America
0.68	0.83	0.29	563	1.38	0.93	1.14	0.40	Africa
0.77	0.50	0.16	1176	1.92	1.47	0.96	0.31	Albania
1.06	0.50	0.17	899	2.42	2.57	1.21	0.41	Algeria
0.62	0.66	0.30	142	0.85	0.53	0.57	0.26	Angola
1.64	0.20	0.13	2418	2.21	3.64	0.45	0.29	Argentina
0.85	0.75	0.19	1504	1.62	1.37	1.21	0.31	Armenia
5.96	0.26	0.20	11439	3.09	18.41	0.80	0.61	Australia
4.17	0.16	0.14	7889	2.25	9.38	0.37	0.31	Austria
1.65	1.40	0.37	2409	2.26	3.73	3.16	0.84	Azerbaijan
11.18	0.77	0.59	11366	2.25	25.10	1.73	1.32	Bahrain
0.17	0.39	0.09	147	1.50	0.26	0.59	0.14	Bangladesh
2.72	1.46	0.39	3208	2.28	6.21	3.32	0.88	Belarus
5.41	0.23	0.19	8515	1.97	10.67	0.45	0.38	Belgium
0.31	0.94	0.30	70	0.98	0.30	0.92	0.29	Benin
0.58	0.54	0.23	479	2.23	1.29	1.22	0.51	Bolivia
1.27	0.77	0.19	2321	3.21	4.07	2.47	0.62	Bosnia and Herzegovina
1.07	0.23	0.10	1462	2.28	2.44	0.53	0.22	Botswana
1.12	0.31	0.15	2013	1.57	1.77	0.49	0.24	Brazil

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

Region/ Country	Population (million)	GDP (billion 2000$)	GDP (PPP) (billion 2000$)	Energy Prod. (Mtoe)	Net Imports (Mtoe)	TPES (Mtoe)	Elec. Cons.[a] (TWh)	CO_2 Emissions[b] (Mt of CO_2)
Brunei Darussalam	0.37	4.85	8.14	21.08	-18.39	2.64	2.80	5.09
Bulgaria	7.74	16.03	62.20	10.65	9.52	20.06	31.90	46.12
Cambodia	13.64	5.66	34.14	3.54	1.29	4.83	0.76	3.71
Cameroon	16.32	12.06	33.38	11.94	-5.06	6.98	3.49	2.93
Canada	32.27	822.39	990.45	401.26	-133.96	271.95	558.50	548.59
Chile	16.30	93.22	174.35	9.12	22.01	29.57	50.10	58.62
People's Rep. of China	1304.50	1889.93	7842.20	1640.94	100.12	1717.15	2322.72	5059.87
Chinese Taipei	22.89	355.53	571.80	12.59	95.06	105.78	218.64	261.28
Colombia	45.60	99.13	296.30	79.46	-50.16	28.59	40.01	59.90
Congo	4.00	3.99	4.49	13.68	-12.48	1.20	0.58	0.96
Dem. Rep. of Congo	57.55	5.24	36.56	17.39	-0.42	16.97	5.35	2.28
Costa Rica	4.33	19.47	39.19	1.84	1.99	3.82	7.44	5.42
Cote d'Ivoire	18.15	10.47	26.61	8.20	-0.28	7.84	3.17	6.26
Croatia	4.44	23.16	51.55	3.80	5.20	8.89	15.44	20.77
Cuba	11.27	29.31	75.31	5.52	5.29	10.20	12.97	23.76
Cyprus	0.76	10.63	15.46	0.05	2.86	2.55	4.21	7.04
Czech Republic	10.23	67.82	182.19	32.87	12.72	45.21	64.92	118.12
Denmark	5.42	171.08	164.43	31.30	-10.52	19.61	36.09	47.51
Dominican Republic	8.90	23.40	65.03	1.53	5.82	7.36	9.47	16.87
Ecuador	13.23	20.50	51.08	28.60	-17.81	10.44	9.33	23.39
Egypt	74.03	120.22	285.65	76.04	-13.35	61.30	90.73	147.60
El Salvador	6.88	14.63	32.17	2.54	2.11	4.63	4.44	5.92
Eritrea	4.40	0.76	4.34	0.50	0.23	0.77	0.24	0.62
Estonia	1.35	7.89	18.54	3.72	1.49	5.10	7.49	15.95
Ethiopia	71.26	10.02	66.86	19.86	1.56	21.63	2.59	4.83
Finland	5.25	137.84	152.80	16.56	19.51	34.96	84.57	55.42
France	62.70	1430.13	1695.97	136.89	143.30	275.97	483.23	388.38
Gabon	1.38	5.38	8.56	12.12	-10.41	1.72	1.29	1.79
Georgia	4.47	4.34	13.40	1.27	1.94	3.21	7.48	3.78
Germany	82.46	1961.79	2169.43	134.50	214.47	344.75	586.41	813.48
Ghana	22.11	6.36	48.78	6.36	2.58	8.94	5.99	7.06

(a) Gross production + imports – exports – transmission/distribution losses.

TPES/ Pop (toe/capita)	TPES/ GDP (toe/000 2000$)	TPES/ GDP (PPP) (toe/000 2000$ PPP)	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/ 2000$)	CO_2/ GDP (PPP) (kg CO_2/ 2000$ PPP)	Region/ Country
7.06	0.55	0.32	7495	1.93	13.76	1.05	0.63	Brunei Darussalam
2.59	1.25	0.32	4121	2.30	5.96	2.88	0.74	Bulgaria
0.35	0.85	0.14	56	0.77	0.27	0.66	0.11	Cambodia
0.43	0.58	0.21	214	0.42	0.18	0.24	0.09	Cameroon
8.43	0.33	0.27	17307	2.02	17.00	0.67	0.55	Canada
1.81	0.32	0.17	3074	1.98	3.60	0.63	0.34	Chile
1.32	0.91	0.22	1781	2.95	3.88	2.68	0.65	People's Rep. of China
4.62	0.30	0.18	9550	2.47	11.41	0.73	0.46	Chinese Taipei
0.63	0.29	0.10	877	2.10	1.31	0.60	0.20	Colombia
0.30	0.30	0.27	144	0.80	0.24	0.24	0.21	Congo
0.29	3.24	0.46	93	0.13	0.04	0.44	0.06	Dem. Rep. of Congo
0.88	0.20	0.10	1719	1.42	1.25	0.28	0.14	Costa Rica
0.43	0.75	0.29	174	0.80	0.34	0.60	0.24	Cote d'Ivoire
2.00	0.38	0.17	3475	2.34	4.68	0.90	0.40	Croatia
0.90	0.35	0.14	1151	2.33	2.11	0.81	0.32	Cuba
3.37	0.24	0.16	5558	2.76	9.26	0.66	0.46	Cyprus
4.42	0.67	0.25	6343	2.61	11.55	1.74	0.65	Czech Republic
3.62	0.11	0.12	6659	2.42	8.77	0.28	0.29	Denmark
0.83	0.31	0.11	1065	2.29	1.90	0.72	0.26	Dominican Republic
0.79	0.51	0.20	705	2.24	1.77	1.14	0.46	Ecuador
0.83	0.51	0.21	1226	2.41	1.99	1.23	0.52	Egypt
0.67	0.32	0.14	645	1.28	0.86	0.40	0.18	El Salvador
0.18	1.02	0.18	55	0.81	0.14	0.82	0.14	Eritrea
3.79	0.65	0.28	5568	3.13	11.81	2.02	0.86	Estonia
0.30	2.16	0.32	36	0.22	0.07	0.48	0.07	Ethiopia
6.67	0.25	0.23	16123	1.59	10.56	0.40	0.36	Finland
4.40	0.19	0.16	7707	1.41	6.19	0.27	0.23	France
1.24	0.32	0.20	932	1.04	1.30	0.33	0.21	Gabon
0.72	0.74	0.24	1672	1.18	0.85	0.87	0.28	Georgia
4.18	0.18	0.16	7111	2.36	9.87	0.41	0.37	Germany
0.40	1.41	0.18	271	0.79	0.32	1.11	0.14	Ghana

(b) CO_2 emissions from fuel combustion only. Emissions are calculated using IEA's energy balances and the Revised 1996 IPCC Guidelines.

Region/ Country	Population (million)	GDP (billion 2000$)	GDP (PPP) (billion 2000$)	Energy Prod. (Mtoe)	Net Imports (Mtoe)	TPES (Mtoe)	Elec. Cons.[a] (TWh)	CO_2 Emissions[b] (Mt of CO_2)
Gibraltar	0.03	0.62	0.65	0.00	1.30	0.15	0.15	0.45
Greece	11.10	180.45	282.62	10.30	23.13	30.98	58.20	95.67
Guatemala	12.60	21.85	51.21	5.41	2.86	7.99	6.64	10.48
Haiti	8.53	3.70	12.62	1.92	0.58	2.50	0.34	1.67
Honduras	7.21	7.10	21.99	1.78	2.30	3.87	4.28	6.42
Hong Kong (China)	6.94	207.93	215.18	0.05	23.53	18.08	40.05	40.73
Hungary	10.09	59.29	155.82	10.33	17.58	27.76	38.04	57.68
Iceland	0.30	10.61	10.02	2.64	1.08	3.63	8.31	2.21
India	1094.58	644.10	3362.05	419.04	121.60	537.31	525.93	1147.46
Indonesia	220.56	207.74	754.08	263.39	-83.50	179.51	112.33	340.98
Islamic Rep. of Iran	68.25	132.62	483.81	303.81	-140.67	162.50	146.23	407.08
Iraq	28.83	19.10	26.11	96.04	-64.82	30.76	33.26	84.64
Ireland	4.15	124.11	141.26	1.66	13.80	15.29	25.93	43.77
Israel	6.92	127.17	159.31	2.06	18.25	19.50	46.80	59.86
Italy	58.53	1132.83	1521.65	27.63	159.33	185.19	332.23	454.00
Jamaica	2.66	8.74	10.13	0.48	3.41	3.84	6.57	9.63
Japan	127.76	4994.13	3473.78	99.77	438.98	530.46	1051.90	1214.19
Jordan	5.47	11.42	26.93	0.25	7.08	7.09	9.07	17.90
Kazakhstan	15.15	29.96	105.87	121.69	-68.51	52.44	48.57	154.74
Kenya	34.26	15.15	37.79	13.89	3.40	17.25	4.93	9.86
Korea	48.29	637.95	957.92	42.93	176.26	213.77	375.66	448.91
DPR of Korea	22.49	10.53	37.02	20.21	1.00	21.21	19.29	73.39
Kuwait	2.54	52.17	59.37	146.31	-117.61	28.14	38.91	74.63
Kyrgyzstan	5.14	1.64	8.82	1.45	1.35	2.80	9.48	5.45
Latvia	2.30	11.57	27.93	2.29	2.79	4.72	6.22	7.34
Lebanon	3.58	20.29	17.77	0.22	4.96	5.58	8.99	15.81
Libya	5.85	44.00	41.13	94.97	-75.83	19.05	19.53	45.40
Lithuania	3.41	16.55	44.03	3.93	4.87	8.59	10.60	13.40
Luxembourg	0.46	23.56	25.88	0.07	4.68	4.78	7.29	11.35
FYR of Macedonia	2.03	3.84	13.03	1.46	1.24	2.74	6.95	8.28

(a) Gross production + imports – exports – transmission/distribution losses.

TPES/ Pop (toe/capita)	TPES/ GDP (toe/000 2000$)	TPES/ GDP (PPP) (toe/000 2000$ PPP)	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/ 2000$)	CO_2/ GDP (PPP) (kg CO_2/ 2000$ PPP)	Region/ Country
5.43	0.24	0.23	5179	3.00	15.00	0.73	0.69	Gibraltar
2.79	0.17	0.11	5242	3.09	8.62	0.53	0.34	Greece
0.63	0.37	0.16	527	1.31	0.83	0.48	0.20	Guatemala
0.29	0.68	0.20	40	0.67	0.20	0.45	0.13	Haiti
0.54	0.55	0.18	593	1.66	0.89	0.90	0.29	Honduras
2.60	0.09	0.08	5768	2.25	5.87	0.20	0.19	Hong Kong (China)
2.75	0.47	0.18	3771	2.08	5.72	0.97	0.37	Hungary
12.25	0.34	0.36	28057	0.61	7.37	0.21	0.22	Iceland
0.49	0.83	0.16	480	2.14	1.05	1.78	0.34	India
0.81	0.86	0.24	509	1.90	1.55	1.64	0.45	Indonesia
2.38	1.23	0.34	2142	2.51	5.96	3.07	0.84	Islamic Rep. of Iran
1.07	1.61	1.18	1154	2.75	2.94	4.43	3.24	Iraq
3.69	0.12	0.11	6249	2.86	10.55	0.35	0.31	Ireland
2.82	0.15	0.12	6759	3.07	8.65	0.47	0.38	Israel
3.16	0.16	0.12	5676	2.45	7.76	0.40	0.30	Italy
1.44	0.44	0.38	2474	2.51	3.62	1.10	0.95	Jamaica
4.15	0.11	0.15	8233	2.29	9.50	0.24	0.35	Japan
1.30	0.62	0.26	1657	2.52	3.27	1.57	0.66	Jordan
3.66	2.01	0.53	3626	2.96	10.81	5.95	1.58	Kazakhstan
0.50	1.14	0.46	144	0.57	0.29	0.65	0.26	Kenya
4.43	0.34	0.22	7779	2.10	9.30	0.70	0.47	Korea
0.94	2.02	0.57	858	3.46	3.26	6.97	1.98	DPR of Korea
11.10	0.54	0.47	15348	2.65	29.38	1.43	1.26	Kuwait
0.54	1.70	0.32	1842	1.95	1.06	3.32	0.62	Kyrgyzstan
2.05	0.41	0.17	2702	1.56	3.19	0.63	0.26	Latvia
1.56	0.27	0.31	2514	2.83	4.42	0.78	0.89	Lebanon
3.25	0.43	0.46	3336	2.38	7.76	1.03	1.10	Libya
2.52	0.52	0.20	3104	1.56	3.93	0.81	0.30	Lithuania
10.45	0.20	0.18	15961	2.37	24.67	0.48	0.44	Luxembourg
1.35	0.71	0.21	3416	3.02	4.08	2.16	0.64	FYR of Macedonia

(b) CO_2 emissions from fuel combustion only. Emissions are calculated using IEA's energy balances and the Revised 1996 IPCC Guidelines.

Region/ Country	Popu-lation (million)	GDP (billion 2000$)	GDP (PPP) (billion 2000$)	Energy Prod. (Mtoe)	Net Imports (Mtoe)	TPES (Mtoe)	Elec. Cons.[a] (TWh)	CO_2 Emissions[b] (Mt of CO_2)
Malaysia	25.35	112.46	245.39	93.92	-33.42	61.28	83.67	138.04
Malta	0.40	3.88	6.89	0.00	0.95	0.95	1.98	2.63
Mexico	105.30	636.16	982.69	259.20	-81.27	176.53	195.73	389.42
Republic of Moldova	4.21	1.81	7.86	0.09	3.47	3.56	5.54	7.93
Mongolia	2.79	1.24	4.79	2.69	-0.16	2.56	3.25	9.61
Morocco	30.17	40.91	122.25	0.98	12.85	13.81	19.40	41.34
Mozambique	19.79	5.77	21.87	11.74	-1.53	10.21	9.24	1.51
Myanmar	50.52	15.20	74.60	22.14	-7.41	14.73	3.92	11.02
Namibia	2.03	4.23	13.71	0.33	1.05	1.38	2.88	2.76
Nepal	27.13	6.35	37.43	8.15	1.02	9.17	1.88	3.05
Netherlands	16.32	407.95	478.78	61.90	37.86	81.85	114.04	182.95
Netherlands Antilles	0.18	2.28	2.56	0.00	3.33	1.66	0.96	3.84
New Zealand	4.10	62.70	95.45	12.20	4.92	16.91	39.92	34.88
Nicaragua	5.15	4.58	16.83	1.95	1.36	3.34	2.26	4.09
Nigeria	131.53	60.41	131.94	231.78	-127.10	103.78	17.90	54.85
Norway	4.62	184.79	180.46	233.70	-200.44	32.12	116.22	37.00
Oman	2.57	22.94	35.53	59.59	-47.23	13.96	9.42	26.98
Pakistan	155.77	92.77	328.49	61.27	15.54	76.33	71.07	118.40
Panama	3.23	14.25	21.86	0.74	1.86	2.60	4.85	5.67
Paraguay	5.90	8.03	24.36	6.58	-2.63	3.97	5.01	3.44
Peru	27.97	65.35	150.27	10.79	3.22	13.81	23.12	28.40
Philippines	83.05	93.73	379.61	24.20	20.42	44.69	49.73	76.42
Poland	38.16	198.26	473.37	78.63	16.68	92.97	131.19	295.81
Portugal	10.55	116.32	194.07	3.58	24.55	27.17	49.19	63.01
Qatar	0.81	23.66	31.23	77.65	-61.84	15.83	13.38	36.37
Romania	21.63	48.86	174.38	27.90	10.21	38.34	50.67	90.96
Russia	143.11	349.85	1380.75	1184.86	-531.37	646.68	828.12	1543.76
Saudi Arabia	23.12	229.10	323.15	576.70	-434.18	140.28	157.52	319.68
Senegal	11.66	5.52	18.59	1.27	1.97	3.04	1.78	4.63
Serbia and Montenegro	8.06	10.87	23.39	11.41	5.25	16.66	29.18	50.37
Singapore	4.34	112.22	114.58	0.00	51.13	30.10	36.29	43.10

(a) Gross production + imports – exports – transmission/distribution losses.

TPES/ Pop (toe/capita)	TPES/ GDP (toe/000 2000$)	TPES/ GDP (PPP) (toe/000 2000$ PPP)	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/ 2000$)	CO_2/ GDP (PPP) (kg CO_2/ 2000$ PPP)	Region/ Country
2.42	0.54	0.25	3301	2.25	5.45	1.23	0.56	Malaysia
2.35	0.24	0.14	4911	2.77	6.58	0.68	0.38	Malta
1.68	0.28	0.18	1859	2.21	3.70	0.61	0.40	Mexico
0.85	1.97	0.45	1316	2.23	1.88	4.38	1.01	Republic of Moldova
0.92	2.07	0.53	1164	3.75	3.44	7.75	2.01	Mongolia
0.46	0.34	0.11	643	2.99	1.37	1.01	0.34	Morocco
0.52	1.77	0.47	467	0.15	0.08	0.26	0.07	Mozambique
0.29	0.97	0.20	78	0.75	0.22	0.73	0.15	Myanmar
0.68	0.33	0.10	1420	2.00	1.36	0.65	0.20	Namibia
0.34	1.44	0.24	69	0.33	0.11	0.48	0.08	Nepal
5.02	0.20	0.17	6989	2.24	11.21	0.45	0.38	Netherlands
9.06	0.73	0.65	5268	2.31	21.33	1.68	1.50	Netherlands Antilles
4.12	0.27	0.18	9733	2.06	8.51	0.56	0.37	New Zealand
0.65	0.73	0.20	439	1.22	0.79	0.89	0.24	Nicaragua
0.79	1.72	0.79	136	0.53	0.42	0.91	0.42	Nigeria
6.95	0.17	0.18	25145	1.15	8.01	0.20	0.21	Norway
5.44	0.61	0.39	3669	1.93	10.50	1.18	0.76	Oman
0.49	0.82	0.23	456	1.55	0.76	1.28	0.36	Pakistan
0.80	0.18	0.12	1499	2.18	1.76	0.40	0.26	Panama
0.67	0.49	0.16	849	0.87	0.58	0.43	0.14	Paraguay
0.49	0.21	0.09	827	2.06	1.02	0.43	0.19	Peru
0.54	0.48	0.12	599	1.71	0.92	0.82	0.20	Philippines
2.44	0.47	0.20	3438	3.18	7.75	1.49	0.62	Poland
2.58	0.23	0.14	4663	2.32	5.97	0.54	0.32	Portugal
19.47	0.67	0.51	16454	2.30	44.90	1.54	1.16	Qatar
1.77	0.78	0.22	2342	2.37	4.21	1.86	0.52	Romania
4.52	1.85	0.47	5786	2.39	10.79	4.41	1.12	Russia
6.07	0.61	0.43	6813	2.28	13.83	1.40	0.99	Saudi Arabia
0.26	0.55	0.16	152	1.52	0.40	0.84	0.25	Senegal
2.07	1.53	0.71	3619	3.02	6.25	4.63	2.15	Serbia and Montenegro
6.93	0.27	0.26	8358	1.43	9.93	0.38	0.38	Singapore

(b) CO_2 emissions from fuel combustion only. Emissions are calculated using IEA's energy balances and the Revised 1996 IPCC Guidelines.

Region/ Country	Population (million)	GDP (billion 2000$)	GDP (PPP) (billion 2000$)	Energy Prod. (Mtoe)	Net Imports (Mtoe)	TPES (Mtoe)	Elec. Cons.[a] (TWh)	CO_2 Emissions[b] (Mt of CO_2)
Slovak Republic	5.39	25.61	73.36	6.61	12.31	18.83	26.50	38.30
Slovenia	2.00	22.87	39.64	3.44	3.88	7.31	13.84	15.50
South Africa	46.89	159.70	463.47	158.59	-28.28	127.64	227.30	330.34
Spain	43.40	680.84	995.48	30.28	124.68	145.20	266.77	341.75
Sri Lanka	19.63	19.66	80.22	5.25	4.32	9.37	7.43	12.27
Sudan	36.23	16.75	67.14	31.13	-12.42	18.40	3.48	10.24
Sweden	9.03	271.84	270.92	34.78	20.11	52.17	139.34	50.95
Switzerland	7.50	259.57	231.00	10.88	16.43	27.15	61.77	44.98
Syria	19.04	22.37	64.51	29.14	-11.21	17.91	26.66	47.76
Tajikistan	6.51	1.54	7.85	1.52	1.93	3.46	14.85	5.67
United Rep. of Tanzania	38.33	12.65	25.38	19.10	1.33	20.40	2.36	4.10
Thailand	64.23	157.07	495.88	53.97	46.56	100.04	125.26	214.29
Togo	6.15	1.50	8.23	1.59	0.42	1.99	0.59	0.98
Trinidad and Tobago	1.31	11.14	16.85	31.40	-18.29	12.71	6.67	23.28
Tunisia	10.03	24.21	74.69	6.68	1.63	8.45	11.97	19.29
Turkey	72.07	246.22	567.99	23.61	61.89	85.21	136.75	218.93
Turkmenistan	4.83	5.53	29.81	61.14	-44.80	16.34	8.37	41.49
Ukraine	47.08	45.24	286.82	80.98	59.70	143.24	152.91	296.82
United Arab Emirates	4.53	103.93	102.90	167.89	-111.38	46.94	56.26	110.38
United Kingdom	60.22	1626.78	1699.55	204.30	32.26	233.93	376.63	529.89
United States	296.68	10995.80	10995.80	1630.68	734.87	2340.29	4046.60	5816.96
Uruguay	3.46	21.68	30.69	1.02	2.23	2.89	6.64	5.25
Uzbekistan	26.17	17.94	48.02	56.57	-9.51	47.04	43.42	110.10
Venezuela	26.58	131.08	156.81	204.71	-143.33	60.94	75.70	142.31
Vietnam	83.12	44.75	227.09	69.54	-17.60	51.30	47.59	80.36
Yemen	20.98	11.14	17.36	20.41	-12.61	6.73	3.67	18.69
Zambia	11.67	4.06	10.62	6.51	0.67	7.12	8.28	2.15
Zimbabwe	13.01	5.49	23.59	8.86	0.86	9.72	12.50	10.34

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

TPES/ Pop (toe/capita)	TPES/ GDP (toe/000 2000$)	TPES/ GDP (PPP) (toe/000 2000$ PPP)	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/ 2000$)	CO_2/ GDP (PPP) (kg CO_2/ 2000$ PPP)	Region/ Country
3.50	0.74	0.26	4920	2.03	7.11	1.50	0.52	Slovak Republic
3.66	0.32	0.18	6916	2.12	7.75	0.68	0.39	Slovenia
2.72	0.80	0.28	4848	2.59	7.04	2.07	0.71	South Africa
3.35	0.21	0.15	6147	2.35	7.87	0.50	0.34	Spain
0.48	0.48	0.12	379	1.31	0.63	0.62	0.15	Sri Lanka
0.51	1.10	0.27	96	0.56	0.28	0.61	0.15	Sudan
5.78	0.19	0.19	15430	0.98	5.64	0.19	0.19	Sweden
3.62	0.10	0.12	8235	1.66	6.00	0.17	0.19	Switzerland
0.94	0.80	0.28	1400	2.67	2.51	2.14	0.74	Syria
0.53	2.24	0.44	2282	1.64	0.87	3.68	0.72	Tajikistan
0.53	1.61	0.80	61	0.20	0.11	0.32	0.16	United Rep. of Tanzania
1.56	0.64	0.20	1950	2.14	3.34	1.36	0.43	Thailand
0.32	1.33	0.24	96	0.49	0.16	0.65	0.12	Togo
9.74	1.14	0.75	5110	1.83	17.77	2.09	1.38	Trinidad and Tobago
0.84	0.35	0.11	1194	2.28	1.92	0.80	0.26	Tunisia
1.18	0.35	0.15	1898	2.57	3.04	0.89	0.39	Turkey
3.38	2.95	0.55	1731	2.54	8.59	7.50	1.39	Turkmenistan
3.04	3.17	0.50	3248	2.07	6.30	6.56	1.03	Ukraine
10.35	0.45	0.46	12412	2.35	24.37	1.06	1.07	United Arab Emirates
3.88	0.14	0.14	6254	2.27	8.80	0.33	0.31	United Kingdom
7.89	0.21	0.21	13640	2.49	19.61	0.53	0.53	United States
0.84	0.13	0.09	1916	1.82	1.52	0.24	0.17	Uruguay
1.80	2.62	0.98	1659	2.34	4.21	6.14	2.29	Uzbekistan
2.29	0.46	0.39	2848	2.34	5.35	1.09	0.91	Venezuela
0.62	1.15	0.23	573	1.57	0.97	1.80	0.35	Vietnam
0.32	0.60	0.39	175	2.78	0.89	1.68	1.08	Yemen
0.61	1.76	0.67	709	0.30	0.18	0.53	0.20	Zambia
0.75	1.77	0.41	961	1.06	0.79	1.88	0.44	Zimbabwe

Sources: Energy data: IEA
Population: OECD/World Bank
GDP and GDP(PPP) (in 2000 US$): OECD/World Bank/CEPII (Paris)

General Conversion Factors for Energy

To: / From:	TJ	Gcal	Mtoe	MBtu	GWh
	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: / From:	kg	t	lt	st	lb
	multiply by:				
kilogram (kg)	1	0.001	9.84×10^{-4}	1.102×10^{-3}	2.2046
tonne (t)	1000	1	0.984	1.1023	2204.6
long ton (lt)	1016	1.016	1	1.120	2240.0
short ton (st)	907.2	0.9072	0.893	1	2000.0
pound (lb)	0.454	4.54×10^{-4}	4.46×10^{-4}	5.0×10^{-4}	1

Conversion Factors for Volume

To: / From:	gal U.S.	gal U.K.	bbl	ft^3	l	m^3
	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

Specific Net Calorific Values

Crude Oil*

	toe/tonne
Saudi Arabia	1.016
United States	1.029
Russia	1.005
Iran	1.019
Mexico	1.054
China	1.000
Venezuela	1.069
Canada	1.022
Norway	1.022
Kuwait	1.016

** for selected countries.*

Petroleum Products*

	toe/tonne
Refinery gas	1.150
LPG	1.130
Ethane	1.130
Naphtha	1.075
Motor Gasoline	1.070
Jet Fuel	1.065
Kerosene	1.045
Gas/Diesel Oil	1.035
Heavy Fuel Oil	0.960
Other Products	0.960

** selected products - average values.*

Coal*

	toe/tonne
China	0.531
United States	0.634
India	0.441
Australia	0.614
South Africa	0.564
Russia	0.545
Indonesia	0.615
Poland	0.551
Kazakhstan	0.444
Ukraine	0.505

** steam coal production for selected countries.*

Gross Calorific Values

Natural Gas*

	kJ/m^3
Russia	37578
United States	38347
Canada	38260
Iran	39536
Algeria	42000
United Kingdom	39799
Norway	40029
Netherlands	33320
Indonesia	40600
Turkmenistan	37700

**for selected countries (production).*
Note: to calculate the net heat content, the gross heat content 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, 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 = (0.08630.33) Mtoe. In the case of electricity produced from geothermal heat, if the actual geothermal efficiency is not known, then the primary equivalent is calculated assuming an efficiency of 10%, so 1 TWh = (0.08630.1) Mtoe.

Glossary

Coal

Coal includes all coal, both primary (including hard coal and lignite) and derived fuels (including patent fuel, coke oven coke, gas coke, BKB, coke oven gas and blast furnace gas). Peat is also included in this category.

Crude Oil

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

Petroleum Products

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

Gas

Gas includes natural gas (excluding natural gas liquids) and gas works gas. The latter appears as a positive figure in the "gas works" row but is not part of indigenous production.

Nuclear

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

Hydro

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

Combustible Renewables & Waste

Combustible Renewables & Waste comprises biomass and animal products (wood, vegetal waste, ethanol, animal materials/ wastes and sulphite lyes), municipal waste (wastes produced by the residential, commercial and public service sectors that are collected by local authorities for disposal in a central location for the production of heat and/or power) and industrial waste.

Other

Other includes geothermal, solar, wind, tide, wave energy, electricity and heat. Unless the actual efficiency of the geothermal process is known, the quantity of geothermal energy entering electricity generation is inferred from the electricity production at geothermal plants assuming an average thermal efficiency of 10 per cent. For solar, wind, tide and wave 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.

Indigenous production

Indigenous production is the production of primary energy, i.e. hard coal, lignite, peat, crude oil, NGLs, natural gas, combustible renewables & 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.

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 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.

Stock changes

Stock changes reflect 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 indigenous production + imports - exports - international marine bunkers ± stock changes. For the World Total, international marine bunkers are not subtracted from TPES.

Transfers

Transfers include both interproduct transfers and products transferred.

Statistical differences

Statistical differences is a category which 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. UNIPEDE refers to these 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.

Gas works

Gas works is treated similarly to electricity generation, with the quantity produced appearing as a positive figure in the gas column, inputs as negative entries in the coal and petroleum products columns, and conversion losses appearing in the total column.

Petroleum refineries

The row *Petroleum refineries* shows the use of primary energy for the manufacture of finished petroleum 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 is using standardised net calorific values for the petroleum products.

Coal transformation

Coal transformation contains losses in transformation of coal from primary to secondary fuels and from secondary to tertiary fuels (hard coal to coke, coke to blast furnace gas, lignite to BKB, etc.).

Liquefaction

Liquefaction 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. It also includes backflows from the petrochemical sector.

Own use

Own use contains the primary and secondary energy consumed by transformation industries for heating, pumping, traction and lighting purposes [International Standard Industrial Classification (ISIC) Divisions 10, 11, 12, 23 and 40]. These are shown as negative figures. Included here are, for example, coal mines' own use of energy, power plants' own consumption (which includes net electricity consumed for pumped storage), and energy used for oil and gas extraction.

Distribution and transmission losses

Distribution and transmission losses includes losses in gas distribution, electricity transmission and coal 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 sector

Consumption in the *Industry sector* includes the following sub-sectors (energy used for transport by industry is not included here but reported under transport):

- *Iron and steel* industry [ISIC Group 271 and Class 2731];
- *Chemical industry* [ISIC Division 24];
- *Non-ferrous metals* basic industries [ISIC Group 272 and Class 2732];
- *Non-metallic mineral* products such as glass, ceramic, cement, etc. [ISIC Division 26];
- *Transport equipment* [ISIC Divisions 34 and 35];
- *Machinery*. Fabricated metal products, machinery and equipment other than transport equipment [ISIC Divisions 28, 29, 30, 31 and 32];
- *Mining (excluding fuels) and quarrying* [ISIC Divisions 13 and 14];
- *Food and tobacco* [ISIC Divisions 15 and 16];
- *Paper, pulp and print* [ISIC Divisions 21 and 22];

Industry sector (ctd.)

- *Wood and wood products* (other than pulp and paper) [ISIC Division 20];
- *Construction* [ISIC Division 45];
- *Textile and leather* [ISIC Divisions 17, 18 and 19];
- *Non-specified* (any manufacturing industry not included above) [ISIC Divisions 25, 33, 36 and 37].

Transport sector

The *Transport sector* includes all fuels for transport [ISIC Divisions 60, 61 and 62]. It includes transport in the industry sector and covers road, railway, aviation, domestic navigation, fuels used for transport of materials by pipeline and non-specified transport. Fuel used for ocean, coastal and inland fishing should be included in fishing (other sectors). Please note that international marine bunkers are also included here for world total.

Other sectors

Other sectors cover agriculture/forestry [ISIC Divisions 01 and 02], fishing [ISIC Division 05], residential, commercial and public services [ISIC Divisions 41, 50, 51, 52, 55, 63, 64, 65, 66, 67, 70, 71, 72, 73, 74, 75, 80, 85, 90, 91, 92, 93, 95 and 99], and non-specified consumption.

Non-energy use

Non-energy use covers use of *other petroleum products* such as white spirit, paraffin waxes, lubricants, bitumen and other products. It also includes the non-energy use of coal (excluding peat). These products are shown separately in final consumption under the heading *non-energy use*. It is assumed that the use of these products is exclusively non-energy use. It should be noted that petroleum coke is included as non-energy use only when there is evidence of such use; otherwise it is included as energy use in *industry* or in *other sectors*. Non-energy use also includes petrochemical feedstocks. The petrochemical industry includes cracking and reforming processes for the purpose of producing ethylene, propylene, butylene, syhtesis gas, aromatics, butadiene and other hydrocarbon-based raw materials in processes such as steam cracking, aromatics plants and steam reforming.

GEOGRAPHICAL COVERAGE

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