

Statistics 1994

euro  gas

1. ENERGY

1994 - Primary Energy Consumption in EUROGAS Member Countries

MTOE	A	B	CH	D	DK	E	F	GB	I	IRL	NL	S	SF	TOTAL
Oil	11.2	20.6	12.0	105.4	8.5	52.4	91.1	74.0	92.9	5.0	23.8	16.5	6.4	552.2
Solid Fuels	3.0	9.1	0.2	95.1	8.0	18.0	13.0	49.6	12.7	3.1	8.3	2.3	5.6	228.9
Natural gas	5.9	9.7	2.0	61.5	2.7	6.5	27.7	58.7	41.0	2.0	33.4	0.8	2.7	254.4
Nuclear Electricity 1)	0.0	10.0	6.0	33.9	0.0	14.4	93.7	21.9	0.0	0.0	1.0	19.0	4.8	204.7
Hydro Electricity 1)	3.2	0.1	3.4	4.2	0.0	2.4	7.0	9.4	3.9	0.1	0.0	3.1	1.0	30.8
Electricity net import	-0.1	0.5	-1.0	0.5	-1.1	0.2	-16.5	1.5	3.1	0.0	0.9	0.0	1.7	-10.4
Renewables 2)	3.6	0.0	0.4	9.4	1.6	2.5	4.2	1.2	3.1	0.0	0.0	6.6	5.0	27.4
Other	0.7	0.0	0.7	3.9	0.0	0.0	0.0	0.0	0.0	0.0	0.8	0.3	0.0	6.4
Total	36.5	50.2	21.7	344.5	16.7	96.4	221.1	207.2	156.7	10.2	88.0	50.8	29.4	1,294.4

Notes:

1) Domestically produced

2) Renewables include biomass, wind, solar and geothermal energy

1994 - Primary Energy Consumption by Fuel (Eurogas 13)

TOTAL : 1295 MTOE



IEA Energy Indicators for 1994 Primary Energy Consumption (PEC) per capita and per GDP unit:

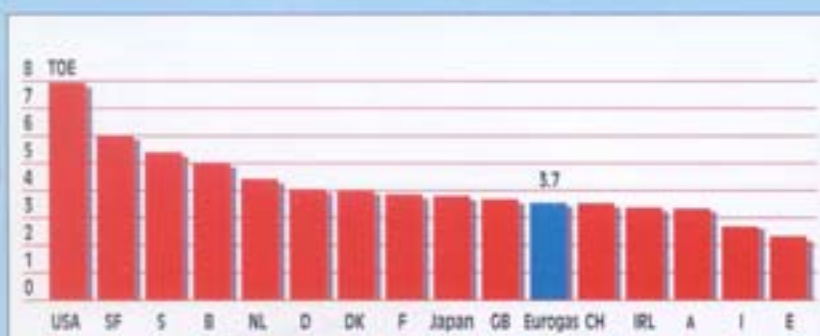
	A	B	CH	D	DK	E	F	GB	I	IRL	NL	S	SF	Average
PEC per capita 1)	3.30	5.13	3.39	4.15	4.02	2.81	3.34	5.77	2.89	3.54	4.55	5.63	5.97	3.88
PEC/GDP-ratio 2)	0.15	0.26	0.11	0.19	0.15	0.19	0.18	0.22	0.14	0.21	0.25	0.22	0.25	0.19

Notes:

1) IEA - estimate (for 1994) measured as total primary energy supply in TOE per inhabitant.

2) IEA - estimate (for 1994) measured as total primary energy supply in TOE per \$ 1000 of GDP at 1990 prices and exchange rates.

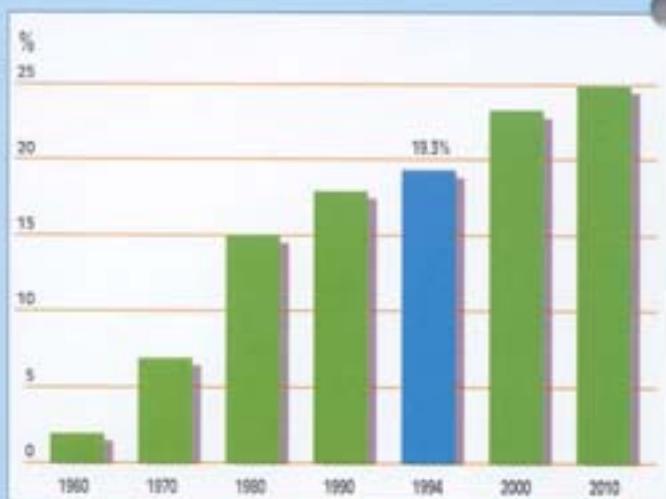
1994 Primary Energy Consumption per Capita



Share of Natural Gas in 1994
Primary Energy Consumption

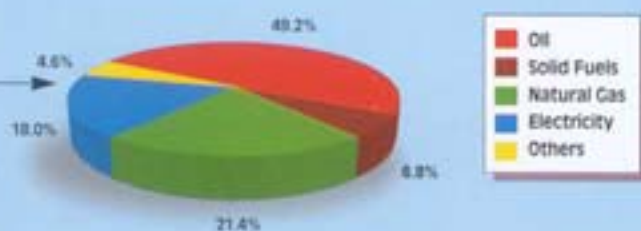


Share of Natural Gas in EU
Primary Energy Consumption



Final Energy Consumption by Source, 1994
(Eurogas 15)

TOTAL : 905 MTOE



2. NATURAL GAS SALES & SUPPLIES

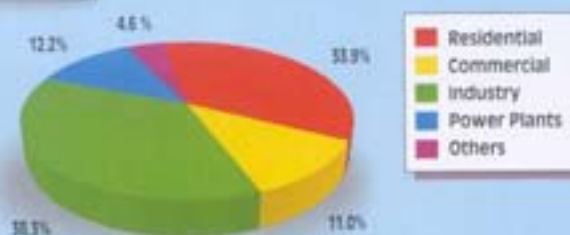
1994 - Inland Sales of Natural Gas by Sector in EUROGAS Member Countries

PJ	A	B	CH	D	DK	E	F	GB	I	IRL	NL	S	SF	TOTAL
Residential	80.0	156.3	22.7	885.9	22.2	43.9	496.4	1 187.0	623.5	10.0	426.1	2.5	2.9	3 806.4
Commercial	0.6	56.5	16.1	114.8	12.2	14.6	203.3	335.0	165.4	2.1	130.7	2.9	1.0	1 263.3
Industry	79.0	180.1	27.7	1 214.5	34.5	280.7	381.6	615.0	811.9	38.0	915.8	11.2	65.5	4 412.7
Power plants	62.0	70.2	0.0	216.4	9.4	2.6	1.2	412.0	205.5	41.9	284.8	0.0	27.8	1 402.7
Others	13.0	0.0	4.1	349.9	34.5	0.0	0.0	12.0	34.9	0.7	4.6	16.1	62.7	582.5
Total	274.0	446.1	65.8	2 761.4	115.8	291.8	1 291.3	2 361.0	1 891.2	100.1	1 542.3	61.8	127.7	11 524.8

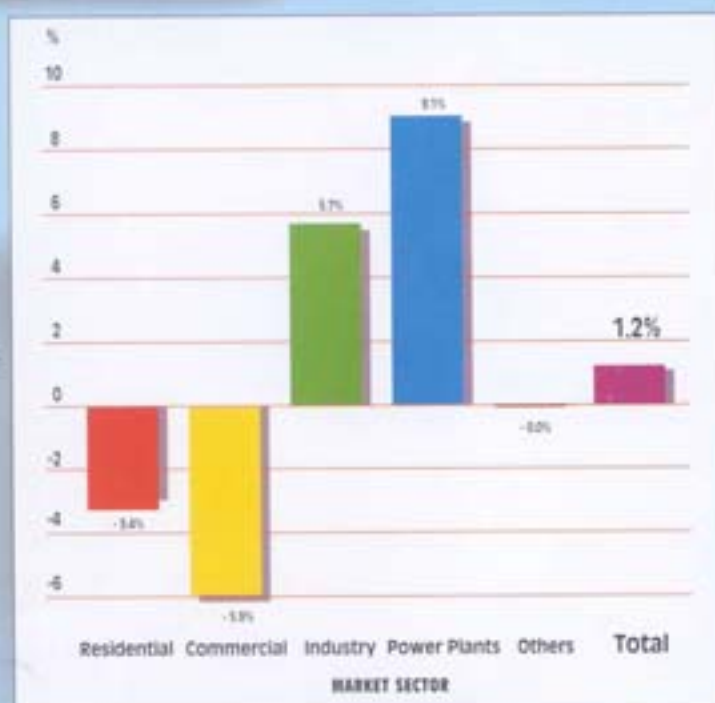
With an assumed energy content of 1 m³ of 39 MJ (GCV), Total Inland Sales correspond to 296 BCM (approx. 250 MTOE (HCV))

Natural Gas Sales by Sector, 1994
(Eurogas %)

TOTAL : 250 MTOE



1994 Gas Demand Growth Rate
by Sector (Eurogas %)



While gas demand increased by 1.2% in 1994, total primary energy consumption in Eurogas member countries decreased by approx. 0.2%. Weather conditions in most of Europe were significantly milder in 1994 than normal.

1994 - Supplies of Natural Gas in EUROGAS Member Countries :

PJ	A	B	CH	D	DK	E	F	GB	I	IRL	NL	S	SP	TOTAL	%
Indigenous Production	94.3	0.0	0.0	463.7	186.8	33.5	131.5	2,338.0	773.4	102.8	2,766.1	0.0	0.0	7,251.4	62.9
• Net Imports from EU members	0.0	189.0	78.2	839.0	-75.0	0.0	164.7	-34.0	169.7	0.0	-1,311.2	31.8	0.0	56.0	0.5
• Net Imports from Non-EU members	192.0	265.7	14.3	1,408.8	0.0	835.9	1,265.8	+19.2	864.2	0.0	80.9	0.0	127.4	4,354.8	39.8
• changes in stocks (+) and other balances	21.0	0.0	11.6	-270.9	-5.3	-47.6	-40.3	-42.0	-8.1	0.0	6.8	0.0	0.4	274.8	-2.3
• Net Supplies	274.0	464.1	92.7	3,761.4	116.5	291.6	1,291.5	2,361.0	1,891.3	302.8	1,542.4	31.8	127.8	11,327.6	100.0

Notes:

- (+) - Increase in stocks
- (-) - Decrease in stocks

Breakdown of Total Natural Gas Supplies in Eurogas Member Countries

1994 Net Imports by Source

TOTAL : 95 MTOE

TOTAL : 255 MTOE

Net imports: 37.1%



Indigenous Production: 62.9%

Russia : 51.8%
Algeria : 24.1%
Norway : 23.9%
Others : 0.2%
Total : 100.0%

3. INTERNATIONAL GAS TRADE

EU Share of World Gas Trade



46%

In 1994, world natural gas trade (import/export) totalled to some 510 MTOE. 46% of this gas was imported by EU-countries.

Cross Border Gas Supplies of Total EU Gas Consumption



54%

In 1994, total EU gas consumption was approx. 255 MTOE. Nearly 54% of this gas crossed at least one country border on its way to the consumer.

EU Gas Import Dependency



38%

38% of EU's total gas consumption in 1994 (i.e. 255 MTOE) was net imported from outside the EU.

Source : CEEGAS, EUROGAS and EUROSTAT

4. NATURAL GAS DEMAND & SUPPLY OUTLOOK

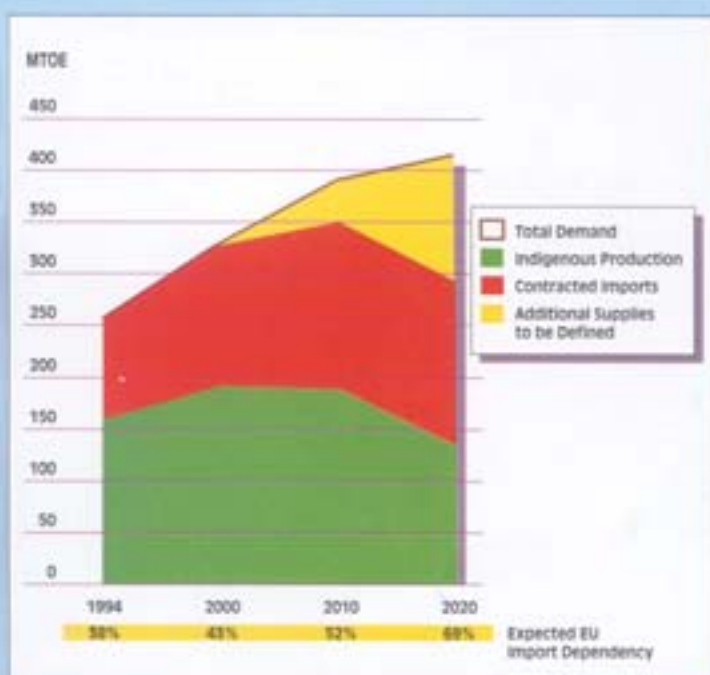
EUROGAS Long-term Natural Gas Demand & Supply Outlook for EU 15 :

MTOE	1994	2000	2010	2020
Total Demand	255	315 - 330 ^{*1}	350 - 385	365 - 415
Indigenous Production	160	180 - 190	170 - 185	120 - 130
Contracted Imports	95	150 - 160	165	160
Additional Supplies ^{**1} to be Defined	-	-	15 - 35	90 - 125
Expected EU Import Dependency	38 %	43 %	52 %	67 - 69 %

*1 The intervals refer to the difference between Eurogas' Lower Case and Base Case.

**1 Mainly expected to be additional imports

EU Natural Gas Demand & Supply Outlook 1994-2020 (Base Case)



EU Natural Gas Demand Outlook by Sector (Base Case)



7. THE EUROPEAN NATURAL GAS INDUSTRY IN KEY FIGURES

Number of Gas Customers (in thousands) as of 1 January 1995 :

	A	B	CH	D	DK	E	F	GB	I	IRL	NL	S	SF	TOTAL
Domestic	1,126	2,180	805	14,700	266	2,518	9,200	18,258	11,490	227	5,830	46	25	88,433
Non-Domestic	1	78	22	800	6	33	400	854	810	8	270	3	1	3,189
Total	1,128	2,258	827	15,500	272	2,551	9,790	19,215	14,300	235	6,100	49	26	91,622

Number of Employees as of 1 January 1995 :

	A 1)	B	CH	D	DK	E	F 2)	GB 3)	I	IRL	NL	S	SF	TOTAL
Total for Transmission and Distribution	3,401	4,158	1,740	48,000	1,339	4,158	23,820	22,000	33,000	883	11,430	225	301	106,228

Investments in 1994 (mln ECU - average July 1994 rates) :

	A	B	CH	D	DK	E	F 4)	GB	I	IRL	NL	S	SF	TOTAL
Total for Transmission and Distribution	218	227	243	4,380	87	396	949	691	1,500	65	407	3	6	9,034

Length of Pipelines as of 1 January 1995 (km):

	A	B	CH	D	DK	E	F	GB	I	IRL	NL	S	SF	TOTAL
Transmission	670	3,549	1,600	47,000	1,068	6,201	31,500	18,000	26,700	958	11,486	460	620	100,524
Distribution	20,761	38,804	11,230	363,000	16,036	13,219	152,500	249,300	153,000	4,150	107,000	2,800	1,350	1,074,362
Total	21,431	42,353	12,830	310,000	17,104	19,400	184,000	267,300	181,700	5,108	118,486	3,260	1,970	1,074,886

Natural Gas Storages as of 1 January 1995 :

	A	B	CH 5)	D	DK	E	F	GB	I	IRL	NL	S	SF	TOTAL
Number of Storage Facilities	1	1	1	33	2	3	16	7	8	0	1	0	0	77
Maximum Working Volume mld m ³	2,205	527	appr 10	11,951	appr 48	1,214	10,300	3,400	appr 14,500	0	appr 75	0	0	appr 4,700
Maximum Withdrawal Capacity mld m ³ /day	25.1	appr 19	appr 1.4	285	18	7	171	138	appr 262	0	appr 31	0	0	appr 870

Notes :

- 1) Number of employees is for Austrian gas supply undertakings.
- 2) Number of employees is for Gaz de France only.
- 3) Number of employees is for British Gas, Transco only.
- 4) Investments are for Gaz de France only.
- 5) Abroad.



Definitions :

Internationally agreed statistical methods and definitions have been applied.

Primary Energy Consumption is defined as the total gross energy supply (indigenous production plus net imports) before any conversion of the primary energy into final energy forms has taken place.

Final Energy Consumption is the Primary Energy Consumption less net energy losses in the production of electricity and synthetic gas, refinery use and other energy sector uses and losses.

Natural Gas Sales and Supplies have been stated in PJ because of different national gas qualities. With an assumed energy content of 1 m³ of natural gas of 39 MJ (Gross Calorific Value), 1 PJ corresponds to approx. 25.6 mill. m³ of natural gas.

Conversion Factors :

1 m ³ of natural gas	=	39 megajoules (MJ - GCV)	=	10.8 kWh
1000 m ³ of natural gas	=	0.9 ton oil equivalent (toe - crude oil)		
1 cubic meter (m ³)	=	35.315 cubic feet (cf)		
1 million m ³ of LNG	=	593 million m ³ of gas		
Net Calorific Value	=	0.9 Gross Calorific Value		
1 Megajoule	=	10 ⁶ Joules		
1 Gigajoule	=	10 ⁹ Joules		
1 Terajoule	=	10 ¹² Joules		
1 Petajoule	=	10 ¹⁵ Joules		
1 BCM	=	1 Billion Cubic Meters		
1 MTOE	=	1 Million Tonnes of Oil Equivalent	=	41.86 PJ (NCV)
1PJ (GCV)	=	25.6 million m ³ gas		

Heat units :

Equivalent to :	GJ	kWh	MBtu	th	therm
1 gigajoule (GJ)	1	277.8	0.948	238.9	9.479
1 kilowatt-hour (kWh)	3.6 10 ⁻³	1	3.411 10 ⁻³	0.86	3.411 10 ⁻²
1 million British Thermal Units (MBtu)	1.055	293.2	1	252	10
1 thermie (th)	4.186 10 ³	1.162	3.968 10 ⁻¹	1	3.968 10 ²
1 therm	0.1055	29.32	1 10 ⁻¹	25.2	1