Part 2

Africa, South and Central America

The Group has a presence in 71 countries. As at the end of 2002 Group companies have 2 refineries with a combined refinery capacity of some 0.3 million barrels per day. Associated companies have 8 refineries with a total capacity at the end of 2002 of 0.3 million barrels per day (Group interest 0.1 million barrels per day).

There are a total of some 9,000 service stations in retail markets. Differentiated fuels are now available in 18 countries.

The sale of a 25% interest in Shell's marketing businesses in South Africa to the Thebe Investment Corporation was completed in the first quarter 2002. This sale is a positive response to the South African Government's Black Economic Empowerment initiative.

Global Businesses The Group manages its Aviation, Marine Products, LPG and Global Solutions businesses on a global basis. This global approach has allowed the Group to better meet the needs of its global customers, share best practice and common processes and drive for lower cost structures and supply chain optimisation. The simplification of structures in the USA will allow the Group to further extend these benefits, which will yield additional business and growth opportunities. The acquisition of Pennzoil-Quaker State Company will allow the Group to build a further global platform in lubricants. This will be in transition in 2003 and will be completed in 2004.

Shell Aviation is a world leader in the marketing of aviation fuel and in the operation of airport fuelling. Every day at over 800 airports in 90 countries, Shell Aviation fuel some 20,000 aircraft and supplies over 23 million gallons (87 million litres) of fuel. In 2002 Shell Aviation was recognised by global airlines as the World's best Jet Fuel Marketer, winning the coveted Armbrust Aviation award for the third time in five years.

Shell Marine Products is one of the world's leading suppliers of premium quality marine fuels, lubricants and services, working with international and local marine customers worldwide. The business supplies 20 different types of marine fuel oil to power diesel engine, steam and gas turbine vessels, together with around 100 different types of marine lubricants blended to provide optimum protection in the toughest environments. The business serves more than 15,000 customer vessels ranging from large ocean-going tankers to small fishing boats.

Shell Gas LPG markets LPG to around 40 million customers in over 55 countries and territories, supplying LPG for domestic purposes (heating, cooking etc), commercial (restaurants), agriculture and industry; in developed countries LPG is becoming increasingly popular as an automotive fuel. Typically LPG is distributed by cylinders, small tanks and large bulk tanks. During 2002 Shell Gas LPG completed the acquisition of Sihirgaz in Turkey, acquired the LPG business and assets of the Bharat Shell joint venture, as well as finalising the acquisition of Unipetrol's 55% share in Kralupol in the Czech Republic, giving the Group 100% ownership of the company.

Shell Global Solutions brings the Group's technology and technical experience to market by providing industry and other Group companies with innovative solutions to improve their performance. Shell Global Solutions has an extensive network of offices around the world, with primary commercial centres now operating in the USA, Europe and Asia Pacific. The business has shown a steady growth in revenues over the last 3–4 years.

A Memorandum of Understanding was signed in November 2002 between Shell Global Solutions International and China Petroleum and Chemical Corporation (Sinopec). It provides for Shell Global Solutions to provide a programme to improve the profitability of the Jinling refinery in Nanjing based on transferring industry 'best practices' to the refinery.

Shell Services offers industrial customers a range of services, including fluid management, asset management and maintenance, logistical support and power optimisation.

REFINING[a]

Cost of crude oil processed or consumed

$ per barrel

(including upstream margin on crude supplied by Group and associated exploration and production companies)

2002	2001	2000	1999	1998
24.35	23.56	27.50	17.58	12.58

Operable crude oil distillation capacity[b]

thousand barrels daily[c]

	2002	2001	2000	1999	1998
Europe	**1,809**	1,400	1,395	1,546	1,591
Other Eastern Hemisphere	**1,108**	1,155	1,099	1,073	1,072
USA	**1,075**	689	222	222	324
Other Western Hemisphere	**395**	398	372	371	364
	4,387	3,642	3,088	3,212	3,351

Crude oil processed[d]

thousand barrels daily[c]

	2002	2001	2000	1999	1998
Europe	**1,701**	1,309	1,337	1,531	1,602
Other Eastern Hemisphere	**870**	933	899	918	968
USA	**996**	624	196	188	282
Other Western Hemisphere	**314**	361	355	352	355
	3,881	3,227	2,787	2,989	3,207
Group share of associated companies	**473**	480	1,117	1,139	1,072

Crude oil distillation unit intake as percentage of operable capacity[e]

%

	2002	2001	2000	1999	1998
Europe	**94**	95	97	99	101
Other Eastern Hemisphere	**84**	90	85	90	93
USA	**91**	91	88	86	87
Other Western Hemisphere	**86**	91	98	97	97
Worldwide	**90**	92	92	95	97

Refinery processing intake[f]

thousand barrels daily[c]

	2002	2001	2000	1999	1998
Crude oil	**3,881**	3,227	2,787	2,989	3,207
Feedstocks	**203**	173	136	148	164
	4,084	3,400	2,923	3,137	3,371
Europe	**1,761**	1,358	1,394	1,602	1,670
Other Eastern Hemisphere	**941**	1,018	971	983	1,034
USA	**1,064**	663	198	192	308
Other Western Hemisphere	**318**	361	360	360	359
	4,084	3,400	2,923	3,137	3,371
					million tonnes a year
Metric equivalent	**201**	166	147	157	169

Refinery processing outturn[g]

thousand barrels daily[c]

	2002	2001	2000	1999	1998
Gasolines	**1,537**	1,242	957	1,021	1,088
Kerosines	**400**	369	320	368	387
Gas/Diesel oils	**1,287**	1,068	974	1,035	1,079
Fuel oil	**355**	339	316	361	434
Other products	**546**	417	350	283	324
	4,125	3,435	2,917	3,068	3,312

Group share of Equilon and Motiva volumes

(not included above) thousand barrels daily[b]

	2000	1999	1998
Refinery processing intake	656	797	656

a For the period 1998–2000 Equilon and Motiva were reported as associated companies. The Group share of refinery processing intake of Equilon and Motiva was reported separately. The basis of reporting in 2002 has been changed to reflect only those activities relating the the Oil Products business; previously the volumes of the Mobile refinery in Alabama, a refinery owned by Chemicals, was included within the USA volumes. The 2001 figures have been restated on a similar basis. Furthermore, the 2002 USA reported volumes include 100% of Equilon (now Shell Oil Products US) and 50% of Motiva; the 2001 figures have been restated in accordance with the ownership interests prevailing at the time.

b Group average operating capacity for the year and excluding mothballed capacity.

c One barrel daily is equivalent to approximately 50 tonnes a year, depending on the specific gravity of the crude oil. Daily signifies per calendar day.

d Including natural gas liquids; includes processing for others and excludes processing by others.

e Including crude oil and feedstocks processed in crude oil distillation units, and based on calendar-day capacities.

f Including crude oil and natural gas liquids plus feedstocks processed in crude oil distillation units and in secondary conversion units.

g Excluding "own use" and products acquired for blending purposes.

OIL SALES[a, b, c]

Product volumes[d]

thousand barrels daily

	2002	2001	2000	1999	1998
Europe					
Gasolines	**647**	531	510	506	490
Kerosines	**190**	164	178	192	187
Gas/Diesel oils	**950**	776	718	747	764
Fuel oil	**177**	174	192	186	208
Other products	**209**	207	212	199	193
	2,173	1,852	1,810	1,830	1,842
Other Eastern Hemisphere					
Gasolines	**332**	328	334	344	347
Kerosines	**142**	132	124	131	147
Gas/Diesel oils	**476**	460	452	437	432
Fuel oil	**188**	200	203	220	221
Other products	**149**	138	138	130	124
	1,287	1,258	1,251	1,262	1,271
USA					
Gasolines	**1,239**	737	189	185	283
Kerosines	**221**	138	31	31	54
Gas/Diesel oils	**401**	266	82	74	59
Fuel oil	**105**	65	17	25	38
Other products	**173**	111	114	71	269
	2,139	1,317	433	386	703
Other Western Hemisphere					
Gasolines	**317**	315	306	321	310
Kerosines	**74**	80	81	85	93
Gas/Diesel oils	**246**	252	275	277	279
Fuel oil	**92**	100	107	104	118
Other products	**49**	54	128	123	148
	778	801	897	910	948
Export sales					
Gasolines	**251**	202	455	279	257
Kerosines	**155**	154	128	128	113
Gas/Diesel oils	**222**	194	204	222	253
Fuel oil	**196**	168	204	175	163
Other products	**198**	197	192	174	166
	1,022	915	1,183	978	952
Total product sales					
Gasolines	**2,786**	2,113	1,794	1,635	1,687
Kerosines	**782**	668	542	567	594
Gas/Diesel oils	**2,295**	1,948	1,731	1,757	1,787
Fuel oil	**758**	707	723	710	748
Other products	**778**	707	784	697	900
	7,399	6,143	5,574	5,366	5,716

Group share of Equilon and Motiva volumes

(not included above) thousand barrels daily

	2000	1999	1998
Total oil products sales	1,508	1,429	1,070

Sales by product as percentage of total product sales

%

	2002	2001	2000	1999	1998
Gasolines	**37.7**	34.4	32.2	30.5	29.5
Kerosines	**10.6**	10.9	9.7	10.6	10.4
Gas/Diesel oils	**31.0**	31.7	31.0	32.7	31.3
Fuel oil	**10.2**	11.5	13.0	13.2	13.1
Other products	**10.5**	11.5	14.1	13.0	15.7
	100.0	100.0	100.0	100.0	100.0

Net product proceeds

$ million

by product	2002	2001	2000	1999	1998
Gasolines	**38,861**	30,455	27,046	18,594	18,603
Kerosines	**9,170**	8,710	7,877	5,300	4,748
Gas/Diesel oils	**28,077**	25,735	25,211	16,985	16,018
Fuel oil	**6,591**	5,900	6,752	4,309	3,546
Other products	**11,420**	9,845	10,470	8,243	7,631
Total oil products	**94,119**	80,645	77,356	53,431	50,546
by geographical area					
Europe	**30,228**	25,077	26,189	18,648	16,944
Other Eastern Hemisphere	**16,801**	17,371	18,278	13,254	12,000
USA	**26,200**	17,199	5,068	3,202	3,916
Other Western Hemisphere	**10,836**	12,118	14,226	11,300	12,240
Export sales	**10,054**	8,880	13,595	7,027	5,446
Total oil products	**94,119**	80,645	77,356	53,431	50,546

Average net product proceeds

$ per barrel

by product	2002	2001	2000	1999	1998
Gasolines	**38.22**	39.50	41.20	31.16	30.22
Kerosines	**32.12**	35.70	39.69	25.61	21.91
Gas/Diesel oils	**33.52**	36.19	39.79	26.49	24.55
Fuel oil	**23.82**	22.85	25.52	16.62	12.98
Other products	**40.21**	38.14	36.51	32.38	23.23
Total oil products	**34.85**	35.96	37.92	27.28	24.23
by geographical area					
Europe	**38.11**	37.09	39.52	27.92	25.20
Other Eastern Hemisphere	**35.77**	37.83	39.93	28.78	25.87
USA	**33.55**	35.78	31.98	22.70	15.27
Other Western Hemisphere	**38.18**	41.47	43.34	34.00	35.37
Export sales	**26.95**	26.59	31.40	19.69	15.67
Total oil products	**34.85**	35.96	37.92	27.28	24.23

a For the period 1998–2000 the Group share of Equilon and Motiva volumes was reported separately.

b The basis of reporting in 2002 has been changed to reflect only those activities which relate to the Oil Products business – previously some volumes handled by other businesses were included; the 2001 figures have been restated on a similar basis. The 2002 reported volumes include 100% of Equilon (now Shell Oil Products US) and 50% of Motiva sales to third parties; the 2001 figures have been restated in accordance with the ownership interests prevailing at that time.

c Sales figures exclude deliveries to other companies under reciprocal purchase and sale arrangements which are in the nature of exchanges. Sales of condensate and natural gas liquids are included.

d By country of destination, except where the ultimate destination is not known at the time of sale, in which case the sales are shown as export sales.

(b) Trading

In 2002, Shell Trading (US) Company (STUSCO) assumed the trading activities that had previously been conducted on behalf of Equilon Enterprises LLC and Motiva Enterprises LLC by Equiva Trading Company and its subsidiary Equiva Trading International.

(c) Shipping

During 2002, two new LNG carriers, each with a capacity of 134,500 cubic metres, were acquired to meet the growing demand for LNG shipping. One 32,477 deadweight tonne oil tanker was sold to a third party for further trading. The end 2002 tanker fleet numbers include the STUSCO US flag coastal products vessels.

Oil tankers[a] (at December 31)	number of ships					million deadweight tonnes				
Owned/demise-hired	**2002**	2001	2000	1999	1998	**2002**	2001	2000	1999	1998
VLCCs (very large crude carriers over 160,000 dwt)	**7**	7	8	9	9	**2.1**	2.1	2.3	2.6	2.6
Large range (45,000 to 160,000 dwt)	**16**	16	16	17	18	**1.3**	1.3	1.3	1.4	1.4
Medium range (25,000 to 45,000 dwt)	**5**	6	5	7	8	**0.2**	0.2	0.1	0.2	0.3
General purpose (10,000 to 25,000 dwt)/Specialist	**2**	2	1	1	2	**0.1**	0.1	0.1	0.1	0.1
	30	31	30	34	37	**3.7**	3.7	3.8	4.3	4.4
Time-chartered										
VLCCs (very large crude carriers over 160,000 dwt)	**1**	–	–	–	–	**0.3**	–	–	–	–
Large range (45,000 to 160,000 dwt)	**18**	17	9	9	15	**1.5**	1.5	0.7	0.8	1.3
Medium range (25,000 to 45,000 dwt)	**15**	7	8	7	8	**0.6**	0.3	0.3	0.3	0.3
General purpose (10,000 to 25,000 dwt)/Specialist	**6**	7	1	1	1	**0.1**	0.1	0.1	0.1	0.1
	40	31	18	17	24	**2.5**	1.9	1.1	1.2	1.7
Total oil tankers	**70**	62	48	51	61	**6.2**	5.6	4.9	5.5	6.1
Owned/demise-hired under construction or on order	–	–	–	–	1	–	–	–	–	0.1

Gas Carriers[a] (at December 31)	number of ships					thousand cubic metres				
	2002	2001	2000	1999	1998	**2002**	2001	2000	1999	1998
Owned/demise-hired (LNG)	**4**	2	–	–	–	**522**	253	–	–	–
Time-chartered (LNG)	–	–	2	2	2	–	–	253	253	253
Owned/demise-hired (LPG)	**1**	1	1	1	2	**59**	59	59	59	118
Time-chartered (LPG)	**3**	2	2	2	4	**145**	113	155	157	317
Total gas carriers	**8**	5	5	5	8	**726**	425	467	469	688
Owned/demise-hired under construction or on order (LNG)	**2**	4	–	–	–	**277**	556	–	–	–

a Excluding ships of less than 10,000 deadweight tonnes.

4 Chemicals

Group companies currently produce a large number of base chemicals and petrochemicals. They are major suppliers of base chemicals, styrene monomer, propylene oxide, solvents, deteregent intermediates and ethylene oxide and its derivatives. In addition, they are major manufacturers of catalysts and additives.

The long-term Chemicals portfolio consists of eight product business areas and four stand-alone companies or ventures – Basell, CRI International, Infineum, and Saudi Petrochemical Company.

Basell, a 50:50 joint venture between Group companies and BASF, is a global polyolefins company with customers in more than 120 countries and manufacturing facilities in 18 countries. CRI International Group is a major player in the refinery, petrochemical and environmental catalyst markets. It is a wholly owned Group subsidiary and is participating in three 50:50 joint ventures. Infineum, a 50:50 joint venture between Group companies and ExxonMobil with manufacturing locations in 12 countries, formulates, manufactures and markets high-quality fuel, lubricant and specialty additives and components.

In November 2002, the final investment decision was taken to proceed with the construction of the $4.3 billion Nanhai petrochemicals complex in southern China.

At December 31, 2002, Group companies had major interests in chemical manufacturing plants, as described below and on the following pages.

Sales — $ million

Net proceeds by main product category[a]	2002	2001	2000	1999	1998
Base and Intermediates	**5,689**	5,376	5,822	4,285	4,124
Performance products	**3,634**	3,032	6,000	5,962	5,479
Differentiated products	**922**	670	1,649	1,617	2,127
Other	**1,245**	1,538	1,734	1,022	542
	11,490	10,616	15,205	12,886	12,272

$ million

Net proceeds by geographical area[a]	2002	2001	2000	1999	1998
Europe	**4,086**	3,721	5,657	5,365	5,381
Other Eastern Hemisphere	**2,192**	1,659	1,921	1,621	1,324
USA	**4,710**	4,950	7,095	5,327	4,991
Other Western Hemisphere	**502**	286	532	573	576
	11,490	10,616	15,205	12,886	12,272

thousand tonnes

Sales volumes by main product category[b]	2002	2001	2000	1999	1998
Base and Intermediates	**13,658**	13,143	11,606	11,358	10,910
Performance products	**5,444**	4,442	7,562	8,282	6,880
Differentiated products	**2,290**	1,293	1,120	1,266	2,194

Ethylene capacity[c] Group and associated companies	2002	2001	2000	1999	1998
Nominal capacity (thousand tonnes/year)	**6,231**	5,808	5,438	5,307	5,259
Utilisation (%)	**92**	86	94	94	88

a Excluding proceeds from chemical trading activity.

b Excluding volumes from chemical trading activity.

c Data includes the ethylene complex at Mossmorran, UK, in which a Group company has 50% offtake rights but no equity interest.

Europe

Belgium CRI Catalyst Co Belgium N.V. manufactures catalysts at plants in Ghent. Bayer-Shell Isocyanates N.V., a 50:50 joint venture, produces toluene diisocyanate (TDI) and diphenyl methane diisocyanate (MDI) in Antwerp. All of the TDI production is allocated to the Group. During December 2002, Belgian Shell disposed of its 50% stake in North Sea Petrochemicals.

France At Berre L'Etang, Shell Pétrochimie Méditerranée (Group interest 100%) manufactures aromatics, butadiene, solvents, di-isobutylene (DIB) and some fine Chemicals (cyclo-octadiene/cyclo-dodecatriene). It operates polypropylene and polyethylene plants on behalf of Basell and a cracker on behalf of a 50:50 Shell Pétrochime Méditerranée-Basell joint venture. It also operates additives plants on behalf of Infineum and several polymer units on behalf of third party companies. Basell also manufactures low-density polyethylene at Fos. The Basell polyethylene plant started at the beginning of 2001.

Germany At Godorf, Shell DEA Oil GmbH, (SDO) (Group interest 100% since July 2002) manufactures benzene and toluene. Ex DEA plants also operated by SDO are: Wesseling (benzene and ethylene); Heide (benzene and ethylene); Karlsruhe, SDO 32.25% (propylene and MTBE); Schwedt, SDO 37.5% (propylene, benzene, toluene and xylene).

Netherlands Shell Nederland Chemie B.V. (SNC) (Group interest 100%) manufactures solvents, MTBE, brake fluids, glycolethers and urethanes (polyols) at Pernis, and lower olefins, benzene, ethyl benzene, ethylene oxide, styrene and propylene oxide at Moerdijk. At Pernis, SNC operates a polypropylene plant owned by Basell. At Moerdijk, SNC operates a styrene monomer and propylene oxide (SM/PO) plant, which is owned by Ellba CV, a 50:50 joint venture between the Group and BASF.

In late 2001, Shell Nederland Chemie brought a 100,000 tonne per year propylene oxide glycol ether plant on stream at Pernis, the Netherlands. The plant makes propylene glycol monomethyl ether, dipropylene glycol monomethyl ether, and propylene glycol monoethyl ether, some of which is esterified to form acetates. It adjoins a multipurpose plant in Pernis, which is producing 65,000 tonnes per year of ethylene oxide glycol ethers and brake fluids. The unit is connected by pipeline to cost-competitive propylene oxide supplies from Ellba's existing styrene monomer and propylene oxide operations in Moerdijk. Demand for propylene oxide glycol ethers as high-performance solvents is increasing worldwide in order to meet environmental quality legislation.

In November 2002, a new 500,000 tonnes per year benzene extraction unit came on stream one month ahead of schedule in Moerdijk. The unit will take benzene-rich streams from SNC's Moerdijk cracker and other Group European locations and the output will be used for styrene monomer/propylene oxide production on the same site.

Using the Group's SMPO process, Ellba produces simultaneously styrene monomer, of which the vast majority is used in polystyrene production, and propylene oxide, a chemical building block in a series of products, from industrial foams to surfactants, solvents, additives and lubricants.

As part of the ongoing drive to streamline chemicals operations a new supply and marketing company, Shell Chemicals Europe B.V., was established in the Netherlands. It started operations during November 2002. The new company is responsible for all chemicals sales contracts, supply chain management, and procurement of feedstocks and process chemicals across Western Europe. The primary contacts for customers and suppliers have remained unchanged.

The new structure is designed to improve speed and efficiency and overall ease of doing business for customers and suppliers, both today and in the future with new e-business systems. It is an important milestone in Chemicals' drive to simplify and streamline business processes and in making it easy to do business with Shell chemicals companies. The move builds on the steps already taken by Shell chemicals companies to operate on a regional and global basis and also ensures that they are well positioned to respond to European harmonisation.

United Kingdom Shell U.K. Limited on behalf of Shell Chemicals UK Limited (both Group interest 100%) operates plants at Stanlow, where base chemicals, detergents and intermediates, and industrial chemicals are produced. Basell produces polypropylene and low-density polyethylene at Carrington. Derivatives from ethylene oxide and propylene oxide are also manufactured at Carrington on behalf of Shell Chemicals UK. On the former ICI site at Wilton, Shell Chemicals UK has rights to an ethylene oxide supply and owns an ethoxylation unit. At Fife in Scotland, ExxonMobil operates an ethylene plant in which Shell Chemicals UK has an investment in a processing rights agreement entitling it to 50% of the output.

Other Eastern Hemisphere

Australia Basell produces polypropylene at plants in Clyde and Geelong, and operates a propylene splitting unit at Clyde.

China On December 28, 2000, Chinese authorities granted a business licence to the newly formed joint venture CNOOC and Shell Petrochemicals Company Limited. This is a 50:50 joint venture between Shell Nanhai BV (Group interest 100%) and CNOOC Petrochemicals Investment Limited. A final investment decision was made by the venture partners in November 2002 to proceed with the joint venture plans to construct a petrochemicals complex in the Huizhou municipality of the Guangdong province. Its major products would include ethylene and propylene; styrene monomer/propylene oxide; mono-ethylene glycol; polypropylene; high-density polyethylene; low-density polyethylene; and butadiene. Construction is in process with the plant scheduled to be completed in late 2005.

Saudi Arabia The Saudi Petrochemical Company (SADAF), a 50:50 joint venture with Saudi Basic Industries Corporation, owns a one million tonne a year ethylene cracker and downstream plants capable of producing 3.6 million tonnes a year of crude industrial ethanol, ethylene dichloride, caustic soda, styrene and methyl tertiary butyl ether. The marketing arms of both partners handle local and international marketing of SADAF products. The Group's marketing effort is co-ordinated by Shell Trading (M.E.) Private Limited (Group interest 100%) located in Dubai, United Arab Emirates.

Singapore Group companies own equity interests of 50% and 30% in two Sumitomo-managed joint ventures, namely Petrochemical Corporation of Singapore Private Limited (PCS) and The Polyolefin Company (Singapore) Pte Limited (TPC) respectively. PCS owns and operates two ethylene crackers with a total capacity of one million tonnes a year of ethylene and 500,000 tonnes a year of propylene. In 2000, a condensate splitter unit, owned 50:50 by PCS and the Group, but located in and operated by the Group's refinery on Pulau Bukom, was started up. This splitter supplies half of PCS's feedstock requirements. Group companies also own 70% of Ethylene Glycols (Singapore) Pte Ltd and 100% of Seraya Chemicals Singapore (Pte) Ltd, which own and operate an ethylene oxide/glycols plant and a styrene monomer/propylene oxide (SMPO) plant respectively. A new world-scale SMPO plant started operations in mid 2002 on a 50:50 basis with BASF, on the Seraya site. Mitsubishi Chemical Corporation has acquired capacity rights for up to 380,000 tonnes of styrene monomer with regard to the existing and new SMPO plants.

USA

Shell Chemical LP (Group interest 99.1%) has manufacturing facilities located at Mobile, Alabama; Martinez, California; St. Rose, Geismar and Norco, Louisiana; and Deer Park, Texas. Manufactured chemical products include lower olefins, aromatics/phenol, solvents, ethylene oxide/glycol, higher olefins and their derivatives, propanediol (PDO), styrene monomer-propylene, additives and catalysts. These chemical products are used in many consumer and industrial products and processes and are sold primarily to industrial markets in the United States.

In 2002 Shell Chemical LP completed a major expansion project at its Geismar, Louisiana facility, securing its position as an integrated global producer of higher olefins, alcohols and ethoxylates. This expansion significantly increased current production capability for higher olefins and detergent alcohols. The new linear alpha olefin unit that uses the SHOP process (Shell Higher Olefins Process) has a capacity to produce 320,000 tonnes per year, bringing the Group's total higher olefins capacity to 1,250,000 tonnes per year. Linear alpha olefins are used to make products such as linear low-density polyethylene, high-performance synthetic lubricants, biodegradable detergents, and environmentally compliant oilfield drilling fluids.

In addition, a debottlenecking project has expanded Geismar's capacity to produce NEODOL detergent alcohols and LINEVOL plasticiser alcohols by about 150,000 tonnes per year. NEODOL alcohols are used primarily to produce biodegradable surfactants for use in household detergents.

Sabina Petrochemicals, a joint venture (Group interest 62%) between Shell Chemicals, BASF Corporation and ATOFINA Petrochemicals, Inc., a division of Totalfinaelf SA, continues with the construction of a world-scale integrated butadiene complex (including a world-scale butadiene extraction unit, indirect alkylation unit, pipelines, and other offsite facilities) in Port Arthur, Texas. Planned for start up in early 2004, the butadiene extraction facility will have a production capacity of 400,000 tonnes a year and will meet the growing needs of customers in the area's butadiene triangle, including many tire manufacturers. With this expansion, the Group is bringing production close to the largest concentration of butadiene consumers in the world.

A cracker in Deer Park is also being expanded through a major debottleneck project. The additional capacity of approximately 540,000 tonnes of ethylene a year is planned to come on stream in late 2003. When completed, the world-scale Deer Park facility is expected to produce about 1.3 million tonnes of ethylene a year. A major part of the Deer Park output will feed the above-mentioned higher olefins and detergent development project at Geismar and the butadiene joint venture at Port Arthur. Chemicals is planning to connect these developments by pipelines with Deer Park.

In addition, Basell operates polyolefin plants in Bayport, Texas; Jackson, Tennessee; and Lake Charles, Louisiana. Infineum has manufacturing facilities in Argo, Illinois; Baytown, Texas; Bayway, New Jersey; and Belpre, Ohio. CRI's catalyst manufacturing locations are at Martinez, Pittsburgh and Azusa, in California; Lafayette, Louisiana; Michigan City, Indiana; and Willow Island, West Virginia.

Other Western Hemisphere

Puerto Rico Shell Chemical Yabucoa Inc owns and operates a 77,000-barrels a day refinery producing feedstock for Shell's Deer Park, TX and Norco, LA chemical plants. The facility also produces gasoline, diesel, jet fuel and residual fuels, which are primarily being used in Puerto Rico. This refinery was acquired in 2001 from Puerto Rico Sun Oil Company, LLC.

Canada Shell Chemicals Canada Limited (Group interest 100%) produces styrene, isopropyl alcohol, and ethylene glycol, and markets a broad range of petrochemicals. Manufacturing locations are at Scotford, Alberta, and Sarnia, Ontario. Basell owns and operates a polypropylene unit both at Varennes, Quebec, and at Sarnia. Basell also operates the isopropyl alcohol plant at Sarnia on behalf of Shell Chemicals Canada Ltd.

In 2002, a joint venture contract was signed with SGF Chimie, a subsidiary of the Société Générale de Financement du Québec, to form a 50:50 joint venture that plans to build and operate the first world-scale polytrimethylene terephthalate (PTT) plant near Montreal. The 95,000 tonnes per year plant is expected to start production at the end of 2003. The Group markets PTT under the trademark CORTERRA™ Polymers, with their main use in carpet and textile fibres.

5 Renewables

Group companies also seek opportunities in other businesses aimed at enhancing longer-term prospects for growth and profitability. Shell Renewables is developing the Group's options in renewable energy, focusing on two principle areas – solar and wind energy. The business manufactures and markets solar energy systems, and develops and operates wind parks.

Shell Solar moved into the top five global players with the acquisition of Siemens Solar in April 2002. The company manufactures solar photovoltaic products in Europe, the US and Asia. Sales operations based in over 90 countries around the world provide customers with solar solutions to their energy requirements working through a network of distributors, dealers and Shell owned outlets. The main customer segments for the Shell Solar business are grid connected, industrial, rural and consumer markets. Shell WindEnergy is focusing on developing and operating wind farms and selling green electricity, building on its strengths in project management, financing and engineering design. Business development activity is concentrated in Europe and North America. In 2002 the company brought on stream two wind parks in California – Cabazon and White Water Hill – bringing the overall portfolio to 240MW.

6 Other Activities

For information on Shell Consumer and Shell Hydrogen see pages 53 and 54.

7 Research

Group research and development (R&D) programmes are carried out through a worldwide network of laboratories, with major efforts concentrated in the Netherlands, UK and USA; other laboratories are located in Belgium, Canada, France, Germany, Japan and Singapore. Group companies' R&D expenses (including depreciation) for the years 1998 to 2002 are set out below:

Research and development expenditure $ million

	2002	2001	2000	1999	1998
Total (including depreciation)	**472**	387	389	505	799

Exploration and Production

Shell's R&D division is responsible for the research, development and application of integrated technology solutions for Group operating assets around the world. The division's primary business objectives are: select, develop and implement technologies that enable the Group operating assets to successfully discover and produce greater levels of hydrocarbons; achieve continual improvement of cost efficiency, increase operational safety and reduce environmental impact.

In-house capabilities are used in the research, development and application of proprietary E&P technologies in conjunction with service industry or academic capabilities where applicable.

Primary technology focus areas of the division are: enhanced sub-surface imaging, complex reservoir performance modelling, enhanced well construction, and smaller, more efficient production facilities both onshore and offshore including subsea.

Gas & Power

The focus of R&D has been on cost leadership and the creation of viable business opportunities through maintaining Shell's competitive position in liquefied natural gas (LNG) technology, particularly LNG processing, safety, transport and storage. Recently the Floating LNG (FLNG) concept has been added to Shell technology portfolio. The concept benefits mainly from the elimination of a long pipeline needed to deliver feed gas to shore-based plants in the commercialisation of remote gas reserves. The Group is further developing its leading position in Gas to Liquids (GTL) conversion through R&D programmes aimed at improving catalysts and process technology to further reduce capital costs and improve process efficiency. GTL product development is also an important focus of work. Group companies have a high international reputation in matters of safety and the environment, and are leading participants in the setting of safety standards for gas operations. Furthermore R&D efforts are focused on maintaining a leading edge with regard to sustainable development across the Gas & Power technology portfolio.

Oil Products

R&D programmes continue to emphasise the improvement of key products and their applications and the further advancement of process technologies including related technical services that provide Group companies with a competitive advantage. For the fuels business, top tier differentiated fuels have been launched in more than 40 countries. Further effort was focused on the cost effective formulation of new products and cost reduction in current formulations. Product stewardship considerations, particularly those related to health and the environment, continue to be given high priority in all areas.

Key drivers in process research have been the need to achieve best-in-class performance in terms of reliability and availability, supply chain optimisation, cost reduction and further reduction in energy consumption and CO_2 emissions. Catalyst development has contributed to increased margin generation. Environmentally focused programmes provide solutions ranging from soil remediation techniques to explosion hazard assessments.

A strategic programme aimed at developing break-through options in sustainable energy and sustainable mobility is pursued, covering new routes from biomass to bio-fuels and a new approach to CO_2 sequestration by mineralisation. The further development of the catalytic partial oxidation technology continues to be followed up commercially with the shorter-term focus on stationary applications.

Chemicals

R&D and other technical services continue to improve key products and technologies that provide Shell Chemicals with sustainable leadership positions in selected products. Improvements in manufacturing processes – achieved by means of increased feedstock flexibility, product yield, energy efficiency or plant throughput – are leading to lower production costs at existing facilities. Process intensification and manufacturing integration is resulting in lower unit investment costs. Market positions are being enhanced through the introduction of new product concepts, close technical links with important industrial customers, and the full integration of R&D into the business.

F PERSONNEL

Employees by segment (average numbers)[a] — thousands

	2002	2001	2000	1999	1998
Exploration and Production	17	14	13	14	16
Gas & Power	2	2	2	1	1
Oil Products	75	58	58	57	58
Chemicals	9	9	14	18	20
Corporate and Other	8	7	8	9	7
	111	90	95	99	102

Employees by geographical area (average numbers)[a] — thousands

	2002	2001	2000	1999	1998
Europe					
Netherlands	11	10	10	9	9
UK	9	10	10	11	12
Others	26	18	21	22	20
	46	38	41	42	41
Other Eastern Hemisphere	27	24	24	25	27
USA	23	12	14	15	17
Other Western Hemisphere	15	16	16	17	17
	111	90	95	99	102

Employees by segment (at December 31)[a] — thousands

	2002	2001	2000	1999	1998
Exploration and Production	17	15	13	13	15
Gas & Power	2	2	2	1	1
Oil Products	80	58	58	56	58
Chemicals	9	9	10	17	20
Corporate and Other	8	7	7	9	8
	116	91	90	96	102

Employee emoluments — $ million

	2002	2001	2000	1999	1998
Remuneration	6,096	4,651	4,560	4,980	5,260
Social law taxes	518	395	390	467	476
Pensions and similar obligations	(201)	(580)	(577)	(10)	245
	6,413	4,466	4,373	5,437	5,981

a Excludes employees of associated companies such as those in Brunei, Germany, Oman and USA. Includes 50% of the employees of Shell Expro in the UK and of NAM in the Netherlands and 30% of Shell Petroleum Development Nigeria.

Selected Financial Data

Royal Dutch

per €0.56 ordinary share[a]

	2002	2001	2000	1999	1998[b]
Net assets – €	**17.49**	19.54	18.50	15.91	13.47
Total assets – €	**18.50**	20.52	19.42	16.77	14.31
Profit after taxation – €[c]	**2.87**	3.44	3.86	2.27	0.12
Dividends declared – €	**1.72**[d]	1.66	1.59	1.51	1.45
Dividends – equivalent payment in dollars	[e]	1.50	1.40	1.47	1.60

a Following the redenomination from guilders into euros in May 2002, the authorised share capital of Royal Dutch as set forth in its Articles of Association consists of 3,198,800,000 ordinary shares, par value €0.56 each, and 1,500 priority shares, par value €448 each. The number of ordinary shares and priority shares issued and paid up at the end of 2000, 1999 and 1998 were 2,144,296,352 ordinary shares and 1,500 priority shares, at the end of 2001 were 2,126,647,800 ordinary shares and 1,500 priority shares, and at the end of 2002 were 2,099,285,000 ordinary shares and 1,500 priority shares. The issued and paid-up share capital at the end of 2000, 1999 and 1998 was €1,216,979,748[b], at the end of 2001 was €1,206,969,043[b] and at the end of 2002 was €1,176,271,600.

b The euro figures are translated from the guilder amounts at the fixed conversion rate of 2.20371.

c The calculation of per share data includes shares held to back share options (refer to Note 22 of the Group Financial Statements on pages G25 to G27). There is no difference between basic and diluted earnings per share. Calculations are based on a weighted average of 2,092,718,616 shares in issue during the year 2002 (2001: 2,119,873,567; 2000, 1999 and 1998 on 2,144,296,352 shares in issue). For this purpose shares repurchased under the buyback programme are deemed to have been cancelled on purchase date.

d Figure includes proposed final dividend of €1.00 per €0.56 ordinary share, subject to finalisation by the General Meeting of Shareholders to be held on April 23, 2003.

e The 2002 final dividend in dollars will be determined by the dollar/euro exchange rate ruling on April 28, 2003.

Shell Transport

per 25p Ordinary share[a]

	2002	2001	2000	1999	1998
Net assets – pence	**166.3**	173.5	166.0	142.4	135.0
Total assets – pence	**175.7**	182.6	175.0	151.1	144.0
Adjusted Earnings (pro forma) – pence[b]	**25.9**	30.7	33.8	21.4	0.5
Dividends declared – pence	**15.25**[c]	14.8	14.6	14.0	13.5

a The authorised share capital of Shell Transport as set forth in its Memorandum of Association consists of £2,500,000,000 divided into 9,948,000,000 Ordinary shares of 25 pence each and 3,000,000 First Preference shares of £1 each and £10,000,000 Second Preference shares of £1 each.

The number of issued and paid up Ordinary shares, First Preference shares and Second Preference shares of Shell Transport at the end of 1998–2002 inclusive was:

Number of issued shares

	2002	2001	1998–2000
Ordinary share	**9,667,500,000**	9,748,625,000	9,943,509,726
First Preference	**2,000,000**	2,000,000	2,000,000
Second Preference	**10,000,000**	10,000,000	10,000,000

The amount of issued and paid up share capital of Shell Transport at the end of 1998–2002 inclusive was:

Issued and paid up capital

2002	2001	1998–2000
2,428,875,000	2,449,156,280	2,497,877,432

b Adjusted earnings includes Shell Transport's share of earnings retained by companies of the Royal Dutch/Shell Group. A reconciliation between this Adjusted earnings per share measure and Shell Trasnport's basic earnings per share is provided on page S2. The calculation of per share data includes shares held to back share options (refer to Note 22 of the Group Financial Statements on pages G25 to G27). There is no difference between basic and diluted earnings per share. Calculations are based on a weighted average of 9,708,889,499 shares in issue during the year 2002 (2001: 9,832,071,191, 2000 and 1999: on 9,943,509,726 shares in issue).

c Includes proposed final dividend of 9.30p per 25p Ordinary share, which is subject to approval at the Annual General Meeting of Shell Transport on April 23, 2003.

Shell Transport

per New York Share[a]

	2002	2001	2000	1999	1998
Dividends and tax credits – equivalent payment in dollars	[b]	1.29	1.24	1.31	1.33

a One New York Share or American Depositary Receipt (ADR) = six 25p Ordinary shares.

b Not available at time of printing.

Under the provisions of the UK/USA Double Taxation Conventions, US resident holders of American Depositary Receipts (New York Shares) receive a tax credit (currently 10/90 of the net dividend) concurrently with their dividend – less a deduction for UK withholding tax at 15% or the value of the tax credit, whichever is the lower. The tax credit was 1/4 of the net dividend for dividends paid in years prior to 1999. US portfolio shareholders are subject to tax on the gross dividend (net dividend plus tax credit) with credit for the UK withholding tax. The dividends paid in 1998 (1997 final and 1998 interim) were foreign income dividends and, as such, carried no tax credit and were not subject to withholding tax.

The payment of future dividends on shares of Royal Dutch and Shell Transport will depend upon the Group's earnings, financial condition (including its cash needs), future earnings prospects and other factors. Additional information on dividends is given under Royal Dutch Petroleum Company – Articles of Association (page 60) and The Shell Transport and Trading Company, Public Limited Company – Memorandum and Articles of Association (page 69).

Discussion and Analysis of Financial Condition and Results of Operations

Royal Dutch Petroleum Company

Translated into euros, Royal Dutch's share in the net income of the Royal Dutch/Shell Group of Companies for the years 2002, 2001 and 2000 respectively amounts to €5,989 million, €7,265 million and €8,272 million. The dividends distributed from Group companies to Royal Dutch for the years 2002, 2001 and 2000 were respectively €3,317 million (including dividends yet to be distributed), €6,148 million and €5,694 million. When interest income has been added and administrative expenses deducted, after-tax net income for the year 2002 amounted to €6,004 million compared with €7,282 million for 2001 and €8,285 million for 2000.

Royal Dutch's 60% interest in the Group net assets, expressed in dollars, has been translated into a euro amount at the year-end rate ($1= €0.9556 at December 31, 2002). The amount thus obtained, which appears in the Balance Sheet on page R2, should be regarded as a reflection of the dollar value of Royal Dutch's interest in the Group's assets and liabilities. Consequently, changes in the dollar/euro rate lead to translation effects in the Royal Dutch Financial Statements. The movements in the value of the dollar, between $1= €1.1302 at December 31, 2001 and $1= €0.9556 at December 31, 2002, led to a negative translation effect of €6,218 million, compared with a positive translation effect of €1,958 million in 2001. These effects are dealt with separately from the "Translation effect arising from movements in dollar/euro rate", as shown in Note 4 on pages R3 and R4. The translation effects are dealt with in the Balance Sheet items "Investments in companies of the Royal Dutch/Shell Group" and "Investment reserves".

The final dividend for 2002 proposed by the Supervisory Board and the Board of Management is €1.00 on each of the ordinary shares of €0.56 outstanding at December 31, 2002 (excluding the shares acquired and held by the Company in its own capital). Subject to adoption of this proposal by the General Meeting of Shareholders to be held on April 23, 2003, payment of the final dividend will result in a total dividend for 2002 of €1.72 on each of the said shares (compared with €1.66 and €1.59 per ordinary share for the years 2001 and 2000, respectively).

Euro reporting

With effect from 1999 euro reporting has been adopted instead of guilder reporting for the Financial Statements of Royal Dutch. Comparative data previously reported in guilders have been translated into euro amounts using the fixed conversion rate of 2.20371 guilders per euro. However, the Financial Statements of the Royal Dutch/Shell Group of Companies will continue to be stated in dollars.

Share buyback and cancellation of shares

The General Meeting of Shareholders held on May 16, 2002, adopted a proposal to reduce the Company's issued share capital with €15,323,168 by cancellation of 27,362,800 ordinary shares which the Company had acquired between the General Meeting of May 17, 2001 and the General Meeting held on May 16, 2002 under the share buyback programme that took effect in February 2001. This cancellation effectively took place on August 21, 2002.

The General Meeting of Shareholders further renewed the authorisation of the Board of Management, with effect from July 1, 2002, and for a period of 18 months, for the acquisition by the Company, with due observance of the statutory provisions and for its own account, of shares in its capital up to a maximum of 10% of the issued capital. Such shares can be acquired on the stock exchange or otherwise at a price between an amount equal to the par value of the shares and an amount equal to 110% of the opening price quoted for shares of the Company at Euronext Amsterdam on the day of the acquisition or, in absence of such a price, the last previous price quoted there.

In 2002 the Company repurchased a total of 17,935,000 shares.

It will be proposed to the General Meeting of Shareholders to be held on April 23, 2003, to cancel the shares acquired by the Company in the period between the General Meetings in 2002 and 2003 and to renew the authorisation of the Board of Management for the acquisition by the Company of its own shares for a period of 18 months with effect from July 1, 2003.

Since the beginning of the programme until March 3, 2003 a total number of 60,796,352 ordinary shares has been acquired by the Company, of which so far 45,011,352 shares have been cancelled.

Since the year end the Company has not purchased any shares on the market as at March 3, 2003.

The "Shell" Transport and Trading Company, Public Limited Company

Shell Transport's earnings for the year 2002 amounted to £2,509.3 million (£3,016.3 million in 2001; £3,360.9 million in 2000). The amount available for distribution (inclusive of distributions from companies of the Royal Dutch/Shell Group) was £1,404.0 million in 2002 (£2,547.3 million in 2001; £2,308.3 million in 2000).

Shell Transport's net assets at December 31, 2002 were £16,073.9 million, in comparison with £16,914.4 million at the end of 2001. Of these two amounts, £15,632.3 million and £16,032.2 million respectively represented Shell Transport's share in the net assets of companies of the Royal Dutch/Shell Group.

A final dividend of 9.3p per 25p Ordinary share has been declared for 2002. Subject to its approval at the Annual General Meeting to be held on April 23, 2003, dividends totalling 15.25p per 25p Ordinary share are payable in respect of 2002, in comparison with dividends paid of 14.8p and 14.6p for 2001 and 2000, respectively.

Share buyback

Since December 31, 2002 the Company had, under the Share buyback programme, purchased no Ordinary shares on the market as at March 3, 2003. Shares purchased under the buyback programme will be cancelled and will not rank for dividends, but any shares purchased on or after April 2, 2003 will be entitled to the dividend payable on May 6, 2003.

Royal Dutch/Shell Group of Companies

Summarised Financial Data

Income data

					$ million
	2002	2001	2000	1999	1998
Sales proceeds					
Oil and gas	**220,172**	162,925	175,372	135,472	124,712
Chemicals	**14,659**	13,767	15,658	13,408	12,795
Other	**767**	589	481	826	767
Gross proceeds	**235,598**	177,281	191,511	149,706	138,274
Sales taxes, excise duties and similar levies	**56,167**	42,070	42,365	44,340	44,582
Net proceeds	**179,431**	135,211	149,146	105,366	93,692
Earnings by industry segment					
Exploration and Production	**6,997**	8,023	10,059	4,753	(60)
Gas & Power	**774**	1,226	112	398	(155)
Oil Products	**1,618**	3,067	2,068	2,105	2,675
Chemicals	**489**	230	992	1,064	(525)
Other industry segments	**(110)**	(287)	(12)	(28)	(46)
Total operating segments	**9,768**	12,259	13,219	8,292	1,889
Corporate	**(751)**	(320)	(825)	(538)	(810)
Minority interests	**(95)**	(387)	(30)	(193)	(178)
Earnings on an estimated current cost of supplies (CCS) basis[a]	**8,922**	11,552	12,364	7,561	901
CCS adjustment	**497**	(700)	355	1,023	(551)
Net income	**9,419**	10,852	12,719	8,584	350

Assets and liabilities data (at December 31)

					$ million
Total fixed and other long-term assets	**112,145**	81,065	76,568	83,491	87,469
Net current assets/(liabilities)	**(14,569)**	(2,989)	3,232	(3,071)	(8,541)
Total debt	**19,691**	5,820	7,427	12,931	13,810
Parent Companies' interest in Group net assets	**60,064**	56,160	57,086	56,171	54,962
Minority interests	**3,562**	3,477	2,881	2,842	2,701
Capital employed	**83,317**	65,457	67,394	71,944	71,473

Cash flow data

					$ million
Cash flow provided by operating activities	**16,365**	16,933	18,359	11,059	14,729
Capital expenditure (including acquisitions)	**21,109**	9,626	6,209	7,409	12,859
Cash flow used in investing activities	**20,715**	9,108	1,571	3,023	12,500
Dividends paid	**7,189**	9,627	5,501	5,611	5,993
Cash flow used in financing activities	**53**	11,562	9,125	6,256	3,582
Increase/(decrease) in cash and cash equivalents	**(5,114)**	(4,761)	7,388	1,326	(1,589)

Other statistics

Return on average capital employed[b]	**14.0%**	19.2%	19.5%	12.1%	2.8%
Total debt ratio[c]	**23.6%**	8.9%	11.0%	18.0%	19.3%

a On this basis, cost of sales of the volumes sold in the period is based on the cost of supplies of the same period (instead of using the first-in first-out (FIFO) method of inventory accounting used by most Group companies) and allowance is made for the estimated tax effect. These earnings are more comparable with those of companies using the last-in first-out (LIFO) inventory basis after excluding any inventory drawdown effects.

b CCS earnings plus the Group share of interest expense, less tax on the interest expense, as a percentage of the Group share of average capital employed.

c Total debt as a percentage of capital employed.

Capital investment

$ million

	2002	2001	2000	1999	1998
Capital expenditure[a]					
Exploration and Production	**13,146**	6,875	3,801	4,137	6,474
Gas & Power	**471**	313	288	470	1,816
Oil Products	**7,653**	1,462	1,258	1,338	2,776
Chemicals	**680**	685	726	1,178	1,491
Other	**494**	291	136	286	302
	22,444	9,626	6,209	7,409	12,859
Exploration expense (excluding depreciation and release of currency translation differences)	**915**	857	753	1,062	1,595
New equity investments in associated companies	**684**	704	605	630	871
New loans to associated companies	**605**	370	556	394	411
Other investments	–	224	414	–	–
Total capital investment[a]	**24,648**	11,781	8,537	9,495	15,736
[a]comprising					
Exploration and Production	**14,082**	8,000	4,839	5,390	8,316
Gas & Power	**682**	810	483	675	1,986
Oil Products	**7,945**	1,518	1,565	1,356	2,843
Chemicals	**839**	751	941	1,384	1,869
Other segments	**495**	332	153	296	311
New loans to associated companies	**605**	370	556	394	411
	24,648	11,781	8,537	9,495	15,736

Quarterly income data

$ million

	2002 4th Quarter	2002 3rd Quarter	2002 2nd Quarter	2002 1st Quarter	2001 4th Quarter	2001 3rd Quarter	2001 2nd Quarter	2001 1st Quarter	2000 4th Quarter	2000 3rd Quarter	2000 2nd Quarter	2000 1st Quarter
Gross proceeds	**64,317**	**63,401**	**57,611**	**50,269**	40,394	43,079	45,981	47,827	50,811	49,478	46,042	45,180
less sales taxes, excise duties and similar levies	**15,734**	**14,518**	**13,221**	**12,694**	10,669	10,430	10,171	10,800	10,538	10,802	10,111	10,914
Net proceeds	**48,583**	**48,883**	**44,390**	**37,575**	29,725	32,649	35,810	37,027	40,273	38,676	35,931	34,266
Cost of sales	**40,614**	**41,271**	**37,868**	**31,461**	24,585	26,310	28,314	28,630	31,999	31,429	28,204	26,696
Gross profit	**7,969**	**7,612**	**6,522**	**6,114**	5,140	6,339	7,496	8,397	8,274	7,247	7,727	7,570
Operating profit	**4,372**	**5,232**	**4,119**	**4,100**	1,930	4,625	6,347	7,100	5,891	6,016	6,512	6,081
Net income	**2,314**	**2,631**	**2,212**	**2,262**	900	2,454	3,608	3,890	3,113	3,060	3,211	3,335
Earnings on an estimated current cost of supplies basis[b]	**2,326**	**2,419**	**2,100**	**2,077**	1,393	2,641	3,512	4,006	3,490	2,768	3,025	3,081

a Includes acquisitions. 2002 includes $1.3 billion for DEA (payable in July 2003).

b On this basis, cost of sales of the volumes sold in the period is based on the cost of supplies of the same period (instead of using the first-in first-out (FIFO) method of inventory accounting used by most Group companies) and allowance is made for the estimated tax effect. These earnings are more comparable with those of companies using the last-in first-out (LIFO) inventory basis after excluding any inventory drawdown effects.

US dollar exchange rates[a]

€1 = $

		Average[b]	High	Low	Period end
Year:					
1997[c]		0.8887			
1998[c]		0.8996			
1999		1.0588			
2000		0.9209			
2001		0.8909			
2002		0.9495			
Month:					
2002	July		1.0156	0.9730	
	August		0.9882	0.9640	
	September		0.9959	0.9685	
	October		0.9881	0.9708	
	November		1.0139	0.9895	
	December		1.0485	0.9927	
2003	January		1.0861	1.0361	
	February		1.0875	1.0708	
As at March 3, 2003					1.0835

£1 = $

		Average[b]	High	Low	Period end
Year:					
1997		1.6397			
1998		1.6602			
1999		1.6146			
2000		1.5138			
2001		1.4382			
2002		1.5084			
Month:					
2002	July		1.5800	1.5206	
	August		1.5709	1.5192	
	September		1.5700	1.5343	
	October		1.5708	1.5418	
	November		1.5915	1.5440	
	December		1.6095	1.5555	
2003	January		1.6482	1.5975	
	February		1.6480	1.5727	
As at March 3, 2003					1.5755

a Exchange rates are based upon the noon buying rate in New York City for cable transfers in foreign currencies as certified for customs purposes by the Federal Reserve Bank of New York.

b Calculated by using the average of the exchange rates on the last business day of each month during the year.

c The euro-to-dollar exchange rates prior to the fixing of the euro conversion rate in January 1999 are derived from guilders-per-dollar exchange rates and the fixed guilders-per-euro conversion rate of 2.20371.

Critical Accounting Policies

In order to prepare the Financial Statements in conformity with generally accepted accounting principles in the Netherlands and the USA, management has to make estimates and assumptions. The matters described below are considered to be the most critical in understanding the judgments that are involved in preparing the Financial Statements and the uncertainties that could impact the amounts reported on the results of operations, financial condition and cash flows. Accounting policies are described in Note 2 to the Financial Statements.

Estimation of oil and gas reserves
Oil and gas reserves have been estimated in accordance with industry standards and SEC regulations. Proved oil and gas reserves are the estimated quantities of crude oil, natural gas and natural gas liquids that geological and engineering data demonstrate with reasonable certainty to be recoverable in future years from known reservoirs under existing economic and operating conditions. These estimates do not include probable or possible reserves. Estimates of oil and gas reserves are inherently imprecise and represent only approximate amounts and are subject to future revision, as they are based on available reservoir data, prices and costs as of the date the estimate is made. Accordingly, the financial measures that are based on proved reserves are also subject to change.

Depreciation, depletion and amortisation
Proved reserves are used when calculating the unit-of-production rates used for depreciation, depletion and amortisation for tangible fixed assets related to hydrocarbon production activities. The amount of depreciation is based on the units of production over the proved developed reserves of the relevant field during the time period. Similarly, rights and concessions are depleted on the unit-of-production basis over the total proved reserves of the relevant area. Unproved properties are amortised as required by particular circumstances. Other tangible fixed assets are generally depreciated on a straight-line basis over their estimated useful lives (five to twenty years), while other intangible fixed assets are amortised on a straight-line basis over their estimated useful lives (with a maximum of forty years).

Recoverability of assets
The carrying amounts of fixed assets are reviewed for possible impairment whenever events or changes in circumstances indicate that the carrying amounts for those properties may not be recoverable. If assets are determined to be impaired, the carrying amounts of those assets are written down to fair value. For this purpose, assets are grouped based on separately identifiable and largely independent cash flows. Estimates of future cash flows of assets related to hydrocarbon production activities are based on proved reserves, except in circumstances where it is probable that additional resources will be developed and contribute to cash flows in the future.

Environmental expenditures
Liabilities for environmental remediation resulting from past operations or events are recognised, based on current estimates, in the period in which an obligation to a third party arises, as long as the obligations can be reasonably estimated. Because actual costs can differ from estimates due to changes in laws and regulations and clean-up technology as well as public expectations and discovery and analysis of site conditions, the carrying amount of liabilities is regularly reviewed and adjusted.

Decommissioning and restoration costs
Provisions are held for the future decommissioning and restoration of oil and natural gas production facilities and pipelines at the end of their economic lives. Estimated decommissioning and restoration costs are based on current requirements, technology and price levels. Most of these obligations are many years in the future and the precise requirements that will have to be met are uncertain because technologies and costs as well as political, environmental, and safety expectations are subject to change.

Summary of Group Results

Financial Results $ million

	2002	2001	2000
Net income	**9,419**	10,852	12,719
Change	**-13%**	-15%	+48%
Earnings on an estimated current cost of supplies (CCS) basis	**8,922**	11,552	12,364
Change	**-23%**	-7%	+64%
Special credits/(charges)	**(296)**	(432)	(747)
Adjusted CCS earnings[a]	**9,218**	11,984	13,111
Change	**-23%**	-9%	+85%

a Earnings on an estimated CCS basis excluding special items.

2002

To facilitate a better understanding of the underlying business performance, the financial results are analysed on an estimated current cost of supplies (CCS) basis adjusting for special items, being those significant credits or charges resulting from transactions or events which, in the view of management, are not representative of normal business activities of the period and which affect comparability of earnings. It should be noted that adjusted CCS earnings is not a measure of financial performance under generally accepted accounting principles in the Netherlands and the USA.

The Group's adjusted CCS earnings for the year were $9,218 million, showing a 23% decline on 2001. Despite a 6% increase in production volumes, earnings in Exploration and Production were weakened by lower gas realisations, higher depreciation and costs, as well as changes to the UK tax regime. Earnings were substantially affected in Gas & Power by lower LNG prices and in Oil Products by historically low refining margins and weaker marketing margins. Chemicals' earnings were sharply up reflecting improved volumes and margins, lower costs and an incremental fiscal benefit of $37 million. The target of reducing underlying unit costs by 3% was exceeded by $100 million, with total actual savings of over $600 million. Reported net income fell by 13% to $9,419 million including net special charges of $296 million.

Four major acquisitions were completed; Enterprise Oil (Enterprise) in the UK, DEA Oil (DEA) in Germany, and in the USA Pennzoil-Quaker State and Texaco's interests in Equilon and Motiva. Total investment in these acquisitions, including acquired debt, was over $16 billion. Excellent progress has been made on realising the benefits of synergies, with approximately $370 million delivered in 2002.

Total capital investment for the year amounted to $24.6 billion including acquisitions. Excluding major acquisitions, capital investment totalled $14.2 billion. The return on average capital employed on a CCS earnings basis was 14.0%. At the end of the year, the debt ratio was 23.6% and cash, cash equivalents and short-term securities amounted to $1.6 billion.

Hydrocarbon production was the highest in recent history at four million barrels of oil equivalent per day. Brent crude prices averaged $25.05 a barrel compared with $24.45 a barrel in 2001. Production constraints in some countries led to a steady price increase in the first three quarters of the year. Prices subsequently weakened only to rebound to $30 a barrel at the end of the year when Venezuelan supply was disrupted. The crude price outlook for 2003 is highly uncertain and prices are expected to be volatile and impacted by developments in the Middle East and Venezuela.

In Gas & Power, the LNG business continued to grow delivering record volumes, although lower prices led to a decline in earnings. Global demand for LNG remained firm and expansion of existing projects and the securing of long-term supply contracts, especially in Asia Pacific, will provide for future growth.

Industry refining margins over the year were poor, at their lowest for a decade, while marketing margins were squeezed by rising crude prices. The outlook for refining margins in 2003 is uncertain and dependent on crude supply and the pace of global economic recovery. Integration of the Texaco interests and Pennzoil-Quaker State is vital to realising the potential of Oil Products in the USA.

Chemicals saw some signs of improvement in the business environment but it was still a very challenging year due to difficult trading conditions, particularly in the USA. Industry utilisation remained flat in Europe but improved in the USA from historically low levels in 2001. Cracker margins in both regions were down from a year ago. The outlook for Chemicals is mixed and will depend on economic recovery and improvement in consumer confidence levels.

2001
Earnings for 2001 of $11,984 million on an estimated current cost of supplies basis excluding special items were the second highest ever, 9% lower than the record results of 2000. Lower crude oil prices and weaker refining and chemicals margins more than offset the benefits of increased hydrocarbon production, better marketing margins and cost improvements. Reported net income fell 15% to $10,852 million.

Lower costs made a substantial contribution to earnings, with cost improvements of $5.1 billion (relative to a 1998 baseline) exceeding the Group's $5 billion target. Cost improvements were achieved by all major businesses. Exploration and Production delivered $2.1 billion, of which $0.7 billion resulted from lower exploration expenses. Oil Products also contributed $2.1 billion to the total, while Chemicals delivered $0.7 billion and other businesses $0.2 billion.

Capital investment rose 38% to $11.8 billion, mainly due to increased spending on growth projects in Exploration and Production. The return on average capital employed on a CCS earnings basis was 19.2%, just below the record 19.5% in 2000. The total debt ratio at the end of the year was 8.9%. Cash, cash equivalents and short-term securities amounted to $6.7 billion.

Total hydrocarbon production was at its highest levels in recent history and 2% higher than in 2000. Oil production fell by 2% because of natural declines in some fields, divestments and field performance. Production of natural gas was 10% higher than in 2000.

Crude oil prices weakened over the course of the year, with the sharpest falls recorded in the aftermath of September 11. Brent crude prices averaged $24.45 a barrel, compared with $28.50 a barrel in 2000. Oil prices were relatively robust until September, with market concerns over the economic slowdown in the USA offset by production restraints by the leading oil exporting countries. But post-September 11 fears of a global recession triggered additional price falls.

With the exception of the US Gulf coast, industry refining margins fell last year driven by weakening demand due to the general economic slowdown.

Marketing earnings benefited from higher gross fuels margins and the continued roll-out of differentiated fuels.

Trading conditions for the Chemicals business were challenging, especially in the USA, where the impact of falling demand was exacerbated by new capacity. Chemical volumes were essentially unchanged from 2000.

EXPLORATION AND PRODUCTION

Earnings

			$ million
	2002	2001	2000
Segment earnings	**6,997**	8,023	10,059
Special credits/(charges)	**(55)**	(24)	623
Adjusted segment earnings	**7,052**	8,047	9,436
Change	***-12%***	*-15%*	*+107%*

2002

Adjusted earnings for the year were $7,052 million, 12% lower than in 2001. This reflects the impact of lower gas realisations, changes to UK tax rates, higher depreciation and higher costs. However, these factors were partially offset by a 6% increase in hydrocarbon production to four million barrels of oil equivalent per day, the highest in recent years.

Special charges for the year amounted to $55 million (compared with $24 million in 2001) mainly from previously capitalised oil and gas costs in equity associate Woodside Petroleum (Group interest 34%) that are no longer considered to be recoverable and integration costs relating to the Enterprise acquisition. These charges were partially offset by credits related to the grant of manufacturing and marketing rights to expandable tubular technology.

Crude oil and natural gas prices

In 2002, Brent crude prices averaged $25.05 a barrel compared with $24.45 a barrel the previous year. Crude oil prices recovered steadily in the first three quarters of the year from below $20 to exceed $30 a barrel reflecting production constraints in certain countries. Prices subsequently weakened only to rebound to $30 a barrel at the end of the year when supply from Venezuela was disrupted. The crude price outlook for 2003 is highly uncertain and prices are expected to be volatile and impacted by developments in the Middle East and Venezuela.

Natural gas prices outside the USA remain linked to liquid hydrocarbon prices and reflected the pattern of steady increase over the year. In the USA, prices were lower than in 2001 although strengthened towards the end of the year.

Oil and gas production

Total hydrocarbon production for 2002 rose by 6%, comprising a 7% increase in oil production and a 5% increase in gas production. Oil production benefited from the acquisition of Enterprise, an additional interest in the Draugen field in Norway and new fields in the USA and Denmark. These increases were partly offset by lower OPEC production quotas, normal field declines, and divestments in New Zealand and elsewhere. Gas production also increased as a result of the acquisition of Enterprise and from new fields in the USA. These increases were partly offset by the effects of warmer weather in Europe, normal field declines in the USA and divestments in New Zealand.

Excluding the contribution of Enterprise volumes, total hydrocarbon production was 1% higher than in 2001.

Portfolio actions

The successful acquisition of Enterprise in 2002 for a cash consideration of $5.3 billion was the most significant change to strengthen the Group's upstream portfolio, adding new developments and exploration acreage in several countries and contributing some $100 million to earnings and some $850 million to cash from operating activities. Integration has proceeded rapidly with significant synergies realised and the demonstration that more can be achieved in 2003. The new assets provided an immediate boost to global production and are contributing an additional 240,000 barrels of oil equivalent per day. The portfolio was further enhanced by the acquisition of an increased stake in the Norwegian Draugen field where Group interest was increased by 10% to 26.2%. The North American gas portfolio was improved through the acquisition of new fields in the Pinedale, Wyoming area.

The exploration portfolio was refreshed and achieved an exploration and appraisal global success rate of some 55%, including significant discoveries in the USA Gulf of Mexico, such as Great White, Deimos and Tahiti. In Kazakhstan, the Kashagan field (Group interest 16.7%) was declared commercial and initial estimates suggest that the field could contain 7–9 billion barrels of oil. The more recent discovery of the Kalamkas field further underlines the immense potential of the Kazakhstan region. Major discoveries were also made in Brazil, Ireland and Nigeria. New exploration licences were acquired in geographic areas where the Group has strategic interests such as the USA Gulf of Mexico and Norway.

The result of these portfolio actions, together with the Group's leadership in technology, is the strengthening of a portfolio that is very robust at both high and low oil prices.

Capital investment

Capital investment of $14.1 billion was $6.1 billion higher than in 2001, mainly as a result of the acquisition of Enterprise and increased investment in growth projects. These include the Athabasca Oil Sands Project in Canada and the EA Project in Nigeria, both of which began production in late 2002, the offshore development Na Kika in the USA and Bonga in Nigeria. Work also began on the Goldeneye gas field in the North Sea which is scheduled to start production in late 2004.

Reserves
The proved hydrocarbon reserves replacement ratio for 2002 was 117% and the five year rolling average (including oil sands) now stands at 109%. Excluding the effects of acquisitions and divestments the hydrocarbon reserves replacement ratio for 2002 was 50%. Proved reserves are equivalent to more than 13 years of current production. The additions to proved reserves arose mainly from the acquisition of Enterprise, which substantially bolstered the Group's overall portfolio in Europe and the Americas. These were augmented by discoveries and extensions in the Caspian and the USA and improved recovery in West Africa, Asia Pacific and the USA.

2001
Adjusted earnings for 2001 of $8,047 million were 15% below the $9,436 million reported in 2000. The benefits from the highest hydrocarbon production in recent history and a 7% rise in gas realisations were more than offset by declining oil prices and increased depreciation and exploration expenses. Performance improvements remained a priority, and cost savings totalling $2.1 billion against a 1998 baseline were achieved in 2001. Special charges for 2001 amounted to $24 million, compared with special credits of $623 million in 2000, mainly related to gains from divestments.

In 2001, the Brent crude oil price averaged $24.45 a barrel compared to $28.50 a barrel in 2000. Oil prices were affected during much of the year by the deterioration of the global economy and over-supply in the world oil market.

Natural gas prices outside the USA remain linked to liquids prices, and therefore in 2001 displayed similar volatility, declining in the second half of the year. US gas prices in particular declined markedly from record levels early in 2001.

Total hydrocarbon production rose by 2% in 2001. A 10% increase in gas production was offset by a 2% decline in oil production. Gas production was boosted by the acquisition of Fletcher Challenge Energy (FCE) in New Zealand, new fields in the UK, USA and Egypt and higher demand in the Netherlands, UK and Nigeria. The decrease in oil production was mainly attributable to normal declines in the UK, USA, Gabon and Australia and divestments in 2000. There was also some disappointing field performance in the UK. These decreases were partly offset by production from FCE and from fields that came on stream in the USA and UK.

The upstream portfolio was strengthened in 2001 through both exploration success and acquisitions. Two major discoveries were made in Nigeria, one of which – Bonga South-West – was the largest industry discovery made in 2001. In Brazil, Block BS-4 was estimated to have recoverable reserves of over 300 million barrels of oil equivalent.

The portfolio was further enhanced by the acquisitions of FCE in New Zealand and McMurry Energy Company (McMurry) in the USA. The acquisition of FCE strengthened the Group's presence in Asia Pacific. McMurry added proven natural gas reserves in the Rocky Mountains. There were no significant divestments in 2001.

Capital investment of $8.0 billion was $3.2 billion higher than in 2000, mainly as a result of the acquisitions of FCE and McMurry, as well as increased project activity, especially in Canada, the USA and Nigeria. Two major developments that highlighted Shell's expertise in the technologically demanding but highly prospective deepwater environment, came on stream in 2001. Brutus, the Group's fifth successful tension-leg platform in the Gulf of Mexico (Group interest 100%), was completed ahead of schedule and below budget. Malampaya (Group interest 45%), located in 850 metres of water off the Philippines, came on stream on time and within budget.

The proved hydrocarbon reserves replacement ratio for 2001 was 74%. The proved hydrocarbon reserves replacement ratio before the effect of divestments and acquisitions was 52%. The additions to proved reserves arose mainly from discoveries and extensions in the USA and the UK, acquisitions in New Zealand, the USA and Brunei, improved recovery in Denmark and Oman and revisions in existing fields in the Netherlands and Nigeria, offset by negative revisions in Canada and Egypt.

GAS & POWER

Earnings

			$ million
	2002	2001	2000
Segment earnings	**774**	1,226	112
Special credits/(charges)	**(23)**	9	(641)
Adjusted segment earnings	**797**	1,217	753
Change	**-35%**	+62%	+156%

2002

Adjusted earnings of $797 million in 2002 were 35% lower than the $1,217 million record reported in 2001. Lower earnings were mainly due to lower LNG prices, lower trading income in North America and a performance bonus related to the USA natural gas liquids business recorded in 2001. This was partly offset by record LNG volumes of 9.1 million tonnes and an improved contribution from the power business.

Segment earnings for the year of $774 million included special credits of $163 million mainly from the sale of Shell's direct and indirect interests in midstream assets in Europe and the USA. Offsetting these credits were special charges of $186 million, including $171 million write-downs related to the power business.

Capital investment

Capital investment, excluding new loans to associated companies of $270 million in 2002 ($152 million in 2001), was $682 million in 2002 compared with $810 million in the previous year. Main investments during 2002 related to LNG supply, shipping and re-gasification projects and power developments.

Portfolio actions

Gas & Power's LNG business continued to grow strongly, with new supplies targeting key markets, reinforcing Shell's leading position in the industry. The North West Shelf joint venture (Group interest 22%) in Australia was selected to supply the first LNG to China through the import terminal in Guangdong Province. Additional sales agreements with Japanese utilities were completed for supplies from Malaysia Tiga (Group interest 15%) and the North West Shelf project. Malaysia Tiga's two-train LNG plant is due to commence operations in 2003. In Australia, a 4.2 million tonnes per annum (mtpa) fourth train is under construction for completion in 2004 and will supply existing and new Japanese customers. Train 3 of Nigeria LNG (Group interest 25.6%) was completed in 2002, three months ahead of schedule and within budget. Additionally, Nigeria LNG secured a loan of over $1 billion, the largest ever project financing in Sub-Saharan Africa, towards the construction of a 4th and 5th train expansion. These two trains are due on stream in 2005 and will supply markets in the Atlantic Basin, bringing the annual capacity of the plant to 17 million tonnes and making it the third largest LNG facility in the world. In Venezuela, Shell was selected as a partner with Mitsubishi and PDVSA for the Mariscal Sucre LNG project (Group interest 30%). This project aims to develop substantial gas reserves in the Norte de Paria fields for both export and domestic markets.

In support of the business's global LNG strategy of linking new markets with the Group's portfolio of LNG supply sources, two of the four new build LNG carriers were commissioned and delivered. Construction began on the Hazira Port and LNG terminal to access the growing Indian market. In addition, the Group is actively progressing access to the North American market through LNG terminal capacity at Cove Point and Elba Island in the USA, and other potential sites. Gas & Power's other businesses also progressed during 2002. In the Middle East significant progress was made towards the development of world-scale Gas to Liquids facilities. While in the midstream, a joint venture framework agreement was signed for the West-East pipeline project in China to bring clean burning natural gas to the rapidly expanding Chinese energy market.

In power, InterGen (Group interest 68%), a joint venture with Bechtel, started operations at projects in Turkey, Egypt and Mexico, increasing InterGen's operational capacity by 70% during the year to 5.2 Gigawatts.

As part of the business's active portfolio management half of the Group's interest in Brunei Shell Tankers was divested, as was the 5% interest in HEIN GAS in Germany and part of the Group's minority interest in other midstream assets in Germany. In 2002, the sale of the indirect 14.75% interest in Ruhrgas, for some €1.5 billion, was agreed subject to final clearance. In March 2003 the sale was closed. InterGen completed the sale of its onshore Texas pipelines.

2001

Adjusted earnings for 2001 of $1,217 million were a record, and 62% higher than the $753 million reported in 2000. This was mainly due to the growth in LNG volumes at the Nigeria and Oman facilities that came on stream in 2000, higher trading income and a performance bonus related to the natural gas liquids business in North America. These improvements were partly offset by lower results in power generation and higher project development costs associated with growing the business.

The growth in the LNG business was reflected in the 19% increase in equity LNG sales volumes, which reached 8.9 million tonnes in 2001, compared to 7.5 million tonnes in 2000.

Segment earnings for 2001 included a net special credit of $9 million. In 2000, segment earnings included net special charges of $641 million, mainly from the restructuring of assets in the USA.

Capital investment was $810 million compared with $483 million in 2000, excluding new loans to associated companies. Main investments during 2001 related to LNG projects, LNG shipping, power developments, offshore pipelines in the USA and the acquisition of equity stakes in gas distribution companies in Egypt and Greece.

The portfolio of LNG supply projects continued to grow. A fourth train (the basic LNG processing unit) of 4.2 million tonnes per annum (Mtpa) was approved in Australia for the North West Shelf project for start up in 2004.

Shell also secured access to several emerging LNG markets, including capacity rights in re-gasification terminals close to growing gas markets such as Cove Point and Elba Island in the USA, and in Spain. The Hazira terminal in Gujarat began construction to supply the growing Indian market.

In Egypt, the Group acquired 18% of the shares in Natgas, which had a 20-year concession to build and operate a natural gas transmission and distribution network aimed at industrial and commercial customers.

Four new power plants in the USA, UK, Australia and China were commissioned by InterGen (Group interest 68%) during 2001 with twelve more plants under construction. Two power plants designed to supply electricity during peak demand periods were commissioned to supply the growing California energy market. These were the first to be approved under the California Energy Commission's emergency procedures. In the first quarter of 2002 Kinder Morgan purchased InterGen's Tejas Gas pipeline and storage system. In addition, the Group won bids for the refurbishment of two power projects in Nigeria.

OIL PRODUCTS

Earnings

			$ million
	2002	2001	2000
Segment net income	**2,178**	2,332	2,437
Segment earnings on an estimated current cost of supplies (CCS) basis	**1,618**	3,067	2,068
Special credits/(charges)	**(184)**	(310)	(970)
Adjusted CCS segment earnings	**1,802**	3,377	3,038
Change	***-47%***	*+11%*	*+56%*

2002

Adjusted CCS earnings in 2002 were $1,802 million compared to the record earnings of $3,377 million in 2001. The business environment deteriorated in 2002 with historically low refining margins over the first half of the year and pressure on marketing margins from rising crude oil prices. Unit cost reductions of 3% were achieved in marketing. Unit manufacturing costs were 1% higher due to unplanned maintenance and lower intakes in response to uneconomic margins. The overall cost reduction per barrel of product sales was 2%. Benefits from the acquisitions of Pennzoil-Quaker State and Texaco's interests in Equilon and Motiva (the latter with Saudi Refining Inc.) in the USA and DEA in Germany are ahead of schedule. In aggregate these acquisitions added some $100 million to adjusted CCS earnings and some $200 million to cash from operating activities in 2002.

Outside the USA, adjusted CCS earnings for 2002 of $1,797 million were 40% lower than in 2001. This reflected lower industry refining margins in Rotterdam and Singapore, which declined by $0.95 per barrel and $0.40 per barrel respectively. Overall refinery utilisation was 4% lower, although refinery intake rose by 10% as a result of higher throughput in Germany. Marketing earnings declined as gross fuels margins were squeezed over the greater part of the year when supply costs rose faster than sales prices. Differentiated retail fuels, now launched in 46 countries, and income from convenience retailing partially offset the margin decline. Total inland sales volumes for the year were 8% higher (excluding the increase from DEA they were unchanged). Trading earnings for the year declined, with limited regional arbitrage opportunities; shipping earnings were adversely affected by a decline in freight rates. Earnings from Shell Global Solutions (commercialisation of technology) showed further growth.

In the USA, adjusted earnings fell from $402 million to $5 million in 2002. Industry refining margins fell sharply by $3.85/bbl on the US West Coast and by $2.40/bbl on the US Gulf Coast. Unplanned shutdowns continued to impact earnings despite overall refinery utilisation rising by 1%. Marketing earnings declined, with weaker gasoline margins over the first half of the year. Trading and transportation earnings were lower. Reduced costs resulting from streamlining of business structures provided significant offset, notwithstanding transition costs resulting from integration of the two major acquisitions in the USA.

On a global basis, net special charges for the year totalled $184 million. Most of these resulted from the closure of refinery assets, continued restructuring in the USA and Europe and increases in provisions for litigation and environmental remediation in the USA. These were partially offset by gains on asset sales, principally from pipeline assets in the USA. Special charges in 2001 totalled $310 million, mainly consisting of restructuring and rebranding charges in the USA.

Fluctuations in crude oil and product prices during 2002 led to inventory holding gains amounting to $560 million. Inventory holding gains/losses are included in cost of sales in the Group Statement of Income.

Capital investment
Capital investment in 2002 amounted to $7.9 billion which included $5.1 billion relating to the three major acquisitions and investment of $0.8 billion in the USA since the consolidation of Equilon (Group interest now 100%). Capital investment in 2001 was $1.5 billion.

Portfolio actions
The Oil Products portfolio was significantly strengthened in 2002 through acquisitions which will reinforce the objective of leading the global downstream industry.

In January a 50:50 joint venture in Germany with RWE-DEA commenced operations and in July Shell took ownership of 100% of the venture for a cash consideration of $1.3 billion, to be paid in July 2003. Integration of this business is proceeding well and is on track to achieve $150 million in pre-tax benefits by the end of 2003. The acquisition of Texaco's interests in Equilon and Motiva, the downstream joint ventures in the USA, was completed in February. Good progress has been made in capturing the planned synergies and benefits from the changes of ownership; business structures have been streamlined and some 800 of the 13,000 Texaco stations had been rebranded to Shell at the end of 2002, in a programme which will be completed by June 2004. As part of the upgrading of the quality of the overall retail network in the USA the total number of sites will be reduced by some 30%. The purchase of Pennzoil-Quaker State Company in the USA was completed in October after regulatory clearance. The transaction has a total equity value of $1.8 billion and Shell has also taken on $1.1 billion of debt. This acquisition will make Shell a leader in both the US and global lubricants markets with pre-tax synergy benefits expected to be $140 million by 2004.

The sale of a 25% interest in Shell's marketing businesses in South Africa to Thebe Investment Corporation was completed in a positive response to the South African Government's Black Economic Empowerment initiative.

2001
Record adjusted CCS earnings of $3,377 million were 11% up on 2000. The strong performance reflected the benefits from an extensive cost improvement programme that has delivered $2.1 billion in savings compared with a 1998 baseline. The rationalisation of under-performing assets also underpinned the improved performance.

Outside the USA, adjusted CCS earnings rose by 13% to $2,975 million. Higher marketing earnings were supported by higher gross fuels margins and the continuing introduction of differentiated retail fuels.

In the USA, adjusted earnings were $402 million compared with $395 million in 2000. The Equilon and Motiva joint ventures recorded higher earnings, but these were partially offset by higher expenses outside these ventures.

Earnings from trading again made a substantial contribution with benefits accruing from the integration of trading operations on a global basis.

Special charges in 2001 totalled $310 million worldwide, principally constituting restructuring and re-branding expenses connected with the acquisition of Texaco's interests in the Equilon and Motiva joint ventures. The special charges for 2000 were mainly related to the impairment of the Rayong refinery in Thailand.

The improved marketing performance in 2001 was partly offset by a decline in refining earnings. Refinery intake was 3% down on 2000, and margins came under pressure, particularly in the second half of the year. This was the result of lower demand due to the economic slowdown, a consequent rise in stocks and increased competition exacerbated by surplus industry capacity.

Industry refining margins in Rotterdam averaged $1.80 a barrel in 2001, compared with $3.00 in 2000. Refining margins were also under pressure elsewhere. In Singapore, the average refining margin fell from $1.20 a barrel in 2000 to just $0.80 because of surplus refining capacity in Asia Pacific. On the US Gulf coast, the average refining margin rose from $4.50 a barrel in 2000 to $5.30 in 2001, reflecting strong US gasoline prices in the first half of 2001.

With crude oil and product prices being lower towards the end of 2001 compared to 2000, inventory holding losses amounting to $735 million were reported.

Capital investment for 2001 amounted to $1,518 million, compared with $1,565 million in 2000. The focus was on marketing operations in key countries. In 2001 these accounted for $1,102 million of the total, while $360 million was spent on refining assets and $56 million on investment in associated companies.

Shell Global Solutions, providing technology and technical expertise and services to industry customers, continued to grow, and generated increased earnings for the third consecutive year.

A joint venture agreement was completed with Sinopec in China for a major expansion of Shell service stations in one of the world's fastest-growing economies.

CHEMICALS

Earnings

			$ million
	2002	2001	2000
Segment earnings	**489**	230	992
Special credits/(charges)	**(62)**	(11)	67
Adjusted segment earnings	**551**	241	925
Change	***+129%***	*-74%*	*-6%*

2002

The business environment showed some improvement after the extremely challenging conditions in 2001 although trading conditions, especially in the USA, remained difficult. Adjusted earnings at $551 million showed a significant improvement compared with $241 million the previous year. The increase reflects a 4% rise in volumes, improved margins, lower costs and an incremental fiscal benefit of $37 million. Results from associates also improved, reflecting better cost management and the benefits of restructuring, primarily in Basell, the 50:50 joint venture with BASF. Industry utilisation remained flat in Europe, but improved in the USA from historically low levels in 2001. Low gas feedstock prices relative to crude prices in the USA made the economics of cracking liquid feedstocks less favourable. Continued focus on cost improvement and higher volumes meant that total unit costs, excluding feedstocks, improved by 7%. A non-recurring fiscal benefit of $102 million resulted from European restructuring.

Segment earnings showed special charges of $62 million consisting of provisions related to asset rationalisation and litigation claims.

Capital investment
Capital investment in 2002 totalled $839 million compared with $751 million in 2001. Capital is being directed to projects that enhance the Group's ability to manufacture and sell bulk petrochemical building blocks to large industrial customers and included initial equity investment in southern China for the Nanhai petrochemicals project.

Portfolio actions
After a period when the focus has been on divestment, attention in 2002 turned to strengthening and enhancing the Chemicals portfolio.

The final investment decision on the Nanhai petrochemicals project in Guangdong Province in China was taken. The Group has a 50% share in this $4.3 billion project which constitutes its largest ever single chemicals investment. Construction work is due to start in 2003 with the plant scheduled to be completed in late 2005.

In 2002, Chemicals brought on-line some 2 million tonnes of new production capacity. Successful completion of a fourth olefins and alcohols unit at Geismar in the USA consolidated the Group's position as the world's largest supplier of higher olefins and detergent alcohols. The $500 million Ellba Eastern complex in Singapore started operation. This is a 50:50 joint venture with BASF to produce styrene monomer, propylene oxide and polyols.

A new benzene unit in the Netherlands was completed ahead of schedule. The plant uses new technology to minimise environmental impact and help reduce the movement of benzene-containing streams in Shell's European business. The unit will take benzene-rich streams from the Moerdijk cracker and other Shell European locations and the output will be used for styrene monomer/propylene oxide production on the same site.

Also, construction began of a new polymer polyol plant at Pernis, the Netherlands, which will be the largest in Europe and will consolidate the Group's position as the leader in the global polyols market. Further, a joint venture with SGF Chimie (Group interest 50%) was established to build and operate a polytrimethylene terephthalate plant in Montreal, Canada. These products are used in carpeting and textiles; the plant is expected to start production at the end of 2003.

The drive to simplify and streamline business processes and to make it easy to do business with Shell chemical companies continued. A single marketing and supply company for Europe was established in order to improve speed and efficiency for customers and suppliers.

2001
Despite 2001 being one of the most challenging years for the chemical industry, the business remained profitable. The difficult trading conditions were reflected in the 74% fall in adjusted earnings to $241 million. Underlying volumes (excluding feedstock trading and divested businesses) were maintained however, in spite of weak markets. Lower unit margins in most businesses, particularly in the USA, accounted for the decline in earnings. Lower demand due to the economic slowdown, combined with new capacity coming on stream also affected chemical markets.

Sales proceeds were down 30%, but allowing for the effects of divestments and portfolio restructuring, the decrease was 5%.

The weakness in cracker margins in the USA was exacerbated by a reversal in the second half of the year in the normally favourable economics of the liquid feedstocks used by Shell crackers. Cracker margins in Europe, although generally lower than in 2000, were better than in the USA.

Annual cost improvements of $726 million against the 1998 baseline exceeded the $650 million target.

Capital investment in 2001 totalled $751 million, compared with $941 million in 2000.

The large-scale divestment programme announced in 1998, leading to a radical restructuring of the chemicals business and a reduction in capital employed from $12.7 billion to $8.5 billion, was completed in early 2001.

The acquisition of the Yabucoa refinery in Puerto Rico was made at the end of 2001, improving the supply of feedstocks to Shell operations in Texas and Louisiana.

Basell, the 50:50 joint venture with BASF, announced the rationalisation of polyolefin production in both Europe and the USA.

OTHER INDUSTRY SEGMENTS

Earnings

			$ million
	2002	2001	2000
Segment earnings	**(110)**	(287)	(12)
Special credits/(charges)	**17**	(96)	83
Adjusted segment earnings	**(127)**	(191)	(95)

Renewables

2002
Wind power continues to develop as a promising business. In particular, the first two commercial scale projects, Rock River and White Deer in the USA have delivered a strong performance in their first full year of operation. The acquisition of Whitewater Hill, a 60MW wind park in the San Gorgonio Pass, California, and of the nearby Cabazon Pass wind park will bring the Group's generating capacity in the USA to 230MW.

In Europe work continues to evaluate and develop offshore projects in the Netherlands and the UK. The Group is part of the NoordzeeWind consortium which has agreed, with the Dutch government, the development of the 100MW Near Shore Wind Park at Egmond aan Zee.

The Group's solar business has been operating in a more difficult environment. It is now one of the major photovoltaic players, after buying out the remainder of its joint venture with Siemens and E.On in April 2002. However, in response to the overcapacity in photovoltaic manufacturing around the world and the downturn in demand that has affected all companies in the sector, the restructuring of this business was announced. The intention is to concentrate manufacturing operations in the USA, Germany and Portugal.

Despite the challenging trading environment there were some notable successes including the contract to supply photovoltaic modules for the roof of the Munich Trade Fair Centre, in Germany, and the first solar home systems being delivered in Xinjiang, China.

2001
In 2001, Renewables reinforced its competitive position in the rapidly expanding global market for renewable energy sources.

Renewables announced what will be one of the world's biggest solar rural electrification projects, in a remote area of western China, with solar home systems to be installed in 78,000 households.

Wind power also showed promise, with growing demand for "green" electricity. In 2001, a 50 megawatt (MW) wind farm in Wyoming, and an 80MW wind farm in Texas were acquired. The two projects, which between them can meet the energy needs of some 60,000 households, boosted total installed capacity from 8MW to 138MW.

Shell Consumer

2002

At the beginning of 2002 Shell Consumer, Shell Capital and Shell Internet Works were reorganised into one new business, Shell Consumer. The rationale is to leverage the Shell brand more widely in the consumer space, particularly where it can lend support to the Group's established businesses. The mandate is to add value through developing innovative consumer and financial products businesses.

During the year there was much progress on the business development and operational fronts. This included Shell autoserv, a car servicing business first piloted in 2001, which was expanded in 2002 and now operates sites in Australia, South Africa and Thailand. Credit card businesses are now operating in Norway and the UK. Shell Consumer divested its share in a retail energy business in Australia but developed new operations in the Netherlands ("green" power) and Norway (electricity) alongside its continuing gas and electricity business in a number of states in the USA where deregulation has offered opportunities to new entrants.

2001

Shell Consumer was formed as a new business in March 2001, with a mandate to grow new value in the consumer market.

The focus of the business development activity in Shell Consumer during 2001 was primarily centred on retail energy, car servicing, heating, ventilation and climate control services, mobile services for motorists on the move and a range of services for home owners delivered via the internet.

In the business sphere, Shell Capital made a number of loans to independent oil and gas producers in the USA, Canada and the Caspian Sea region. In the USA, a number of loans were made to gasoline and convenience store owners. In Norway, a Shell Visa card was launched, and in the UK Shell Capital entered the vehicle financing market.

In the business-to-business area, Shell Internet Works had minority investments in Trade-Ranger, the energy and petrochemical e-procurement exchange, and Currenex, the online foreign currency trading business. Trade-Ranger completed its second round financing in 2001.

In Argentina and Singapore, consumer-oriented portals were launched providing customers with a variety of services and products. In both cases this includes ordering online and delivery of goods via the local service station network.

Shell Internet Ventures, the Group's venture capital fund, made six investments totalling $25 million in technology companies with products and services relevant to Shell businesses.

Shell Hydrogen

2002

The Group continues to explore technology that could allow hydrogen and fuel cells to meet the world's future energy needs in a sustainable and emission-free way.

Amongst the developments in 2002 was the announcement of a plan to build the first hydrogen refueling station in Tokyo. Shell is an important partner in this project that is sponsored by the Japanese government and will provide hydrogen to a fleet of prototype vehicles. The Group acquired an equity stake in QuestAir Technologies Inc (Group interest 10.6%) that is developing technology to purify hydrogen. It is vital to develop this technology if hydrogen is to become commercially available on a wide scale. Work also continued with joint venture partners on the development of commercially attractive fuel cells and on developing safe and convenient hydrogen storage systems.

2001

In 2001, research intensified into the technologies that could underpin the future transformation away from fossil fuels and towards a hydrogen and fuel cell-based economy. Shell Hydrogen continued to develop its presence in a number of promising technological areas. Four joint ventures were created, two of which were private capital joint ventures to invest in emerging companies concentrating on promising hydrogen and fuel cell technology. The remaining two focused on existing technology. One commercialising hydrogen-producing fuel processors while the other focusing on metal hydride hydrogen storage tanks.

CORPORATE

2002

Adjusted earnings for 2002 showed a loss of $751 million compared with a loss of $320 million in the previous year. The increased loss is mainly a result of higher net interest costs.

2001

In 2001, adjusted losses of $320 million showed a $317 million improvement over the $637 million loss recorded in 2000, reflecting reduced net interest expense from a year earlier and favourable currency exchange effects. The special charges in 2000 mainly related to the endowment of The Shell Foundation.

LIQUIDITY AND CAPITAL RESOURCES

Statement of Cash Flows

The net effect of the flow of funds for 2002 was a decrease of $5.1 billion in cash and cash equivalents.

Cash flow generated by operations decreased from $16.9 billion in 2001 to $16.4 billion in 2002. Within cash flow used in investing activities (net $20.7 billion), capital expenditure and new investments in associates increased from $10.7 billion to $22.4 billion, mainly due to acquisitions (see below). There were proceeds from sales of assets and disposals of investments in associates of $1.6 billion; in 2001 such proceeds amounted to $1.8 billion. Dividends of $7.0 billion were paid in 2002 to the Parent Companies, Royal Dutch and Shell Transport, a decrease of $2.4 billion compared with 2001 due to lower share buybacks by the Parent Companies. In addition, there was a net drawdown in debt of $6.7 billion, due mainly to the acquisitions.

Capital investment

Group companies' capital expenditure, exploration expense, new investments in associated companies and other investments increased by $12.8 billion to $24.6 billion in 2002, mainly as a result of the acquisitions of Enterprise Oil, Pennzoil-Quaker State, DEA and additional interests in Equilon and Motiva. Exploration and Production expenditure, at $14.1 billion (2001: $8.0 billion), accounted for more than half of this total. Oil Products investment totalled $7.9 billion (2001: $1.5 billion). Chemicals investment was $0.8 billion (2001: $0.8 billion), while Gas & Power accounted for $0.7 billion (2001: $0.8 billion).

Capital investment in 2003 is estimated to be approximately $12 billion. Spending will continue to be subjected to investment discipline, stringent project selection and the need to balance profitability with growth. Exploration and Production will continue to be the major element. It is expected that the Group companies' investments will be financed from internally generated funds.

Financial condition

Cash, cash equivalents and short-term securities were $1.6 billion at the end of 2002, down $5.1 billion on 2001, whilst the total of short and long-term debt increased by $13.9 billion to $19.7 billion. The debt ratio increased from 8.9% in 2001 to 23.6% in 2002, within the desired gearing range.

Net assets increased by $3.9 billion to $60.1 billion during 2002. Fixed and other long-term assets increased by $31.0 billion to $112.1 billion. Net current liabilities increased by $11.6 billion to $14.6 billion. During 2002, the Group increased its Medium Term Note and Commercial Paper Facilities to a total of $26 billion. These facilities, together with available funds, offer ample flexibility to meet working capital needs.

The following table summarises the Group's principal contractual obligations and commercial commitments as of December 31, 2002. Please also refer to Notes 15, 16 and 18 to the Financial Statements.

Payments due by period

Contractual Obligations	Total	Less than 1 year	2–3 years	4–5 years	After 5 years
					$ billion
Long-term debt	**8.5**	2.2	2.1	3.4	0.8
Leasing arrangements	**9.4**	2.0	2.1	1.3	4.0
Long-term purchase obligations	**9.1**	0.6	1.1	1.0	6.4
Long-term power capacity obligations	**6.9**	0.2	0.6	0.7	5.4
Other long-term liabilities	**6.1**	–	3.7	1.5	0.9
Total	**40.0**	5.0	9.6	7.9	17.5

Environmental and decommissioning costs

Group companies are present in over 145 countries and territories throughout the world and are subject to a number of different environmental laws, regulations and reporting requirements. It is the responsibility of each Group company to implement a health, safety and environmental management system that is suited to its particular circumstances.

The costs of prevention, control, abatement or elimination of releases into the air and water, as well as the disposal and handling of wastes at operating facilities, are considered to be an ordinary part of business. As such, these amounts are included within operating expenses. An estimate of the order of magnitude of amounts incurred in 2002 for Group companies, based on allocations and managerial judgement, is $1.1 billion (2001: $0.6 billion). Expenditures of a capital nature to limit or monitor hazardous substances or releases include both remedial measures on existing plants and integral features of new plants. Whilst some environmental expenditures are discrete and readily identifiable, others must be reasonably estimated or allocated based on technical and financial judgements which develop over time. Consistent with the preceding, estimated environmental capital expenditures made by companies with major capital programmes during 2002 were $0.8 billion (2001: $0.4 billion). Those Group companies are expected to incur environmental capital costs of at least $0.8 billion during both 2003 and 2004. It is not possible to predict with certainty the magnitude of the effect of required investments in existing facilities on Group companies' future earnings, since this will depend amongst other things on the ability to recover the higher costs from customers and through fiscal incentives offered by governments. Nevertheless, it is anticipated that over time there will be no material impact on the total of Group companies' earnings. These risks are comparable to those faced by other companies in similar businesses. At the end of 2002, the total liabilities being carried for environmental clean-up were $797 million (2001: $454 million). In 2002, there were payments of $139 million and increases of provisions of $120 million. Provisions being carried for expenditures on decommissioning and site restoration, including oil and gas platforms, amounted to $3,528 million (2001: $2,615 million).

OTHER MATTERS

Risk management and internal control

The Group's approach to internal control is based on the underlying principle of line management's accountability for risk and control management. The Group's risk and internal control policy explicitly states that the Group has a risk-based approach to internal control and that management in the Group is responsible for implementing, operating and monitoring the system of internal control, which is designed to provide reasonable but not absolute assurance of achieving business objectives.

Established review and reporting processes bring risk management into greater focus and enable the Conference (meetings between the members of the Supervisory Board and the Board of Management of Royal Dutch and the Directors of Shell Transport) regularly to review the overall effectiveness of the system of internal control and to perform a full annual review of the system's effectiveness.

At Group level and within each business, risk profiles which highlight the perceived impact and likelihood of significant risks are reviewed each quarter by the Committee of Managing Directors and by the Conference. Each risk profile is supported by a summary of key controls and monitoring mechanisms. A risk-based approach to internal control continues to be embedded within the businesses. In addition, non-Shell operated ventures and affiliates are encouraged to adopt processes consistent with the Group's approach.