

UNITED STATES SECURITIES AND EXCHANGE COMMISSION  
Washington, DC 20549

# FORM 20 - F

(Mark One)

REGISTRATION STATEMENT PURSUANT TO SECTION 12(b) or (g) OF THE SECURITIES EXCHANGE ACT OF 1934

OR

ANNUAL REPORT PURSUANT TO SECTION 13 OR 15(d) OF THE SECURITIES EXCHANGE ACT OF 1934

For the fiscal year ended December 31, 1999

OR

TRANSITION REPORT PURSUANT TO SECTION 13 OR 15 (d) OF THE SECURITIES EXCHANGE ACT OF 1934

For the Transition period from \_\_\_\_ to \_\_\_\_

Commission file number 1-9159

## NORSK HYDRO ASA

(Exact name of Registrant as specified in its charter)

Kingdom of Norway

(Jurisdiction of incorporation or organization)

Bygdøy allè 2

N-0240 OSLO 2

Norway

(Address of principal executive offices)

Securities registered or to be registered pursuant to Section 12(b) of the Act:

<u>Title of each class</u>	<u>Name of each exchange on which registered</u>
American Depositary Shares	New York Stock Exchange
Ordinary Shares of NOK 20 per share (par value)	New York Stock Exchange *

\* Not for trading, but only in connection with the registration of American Depositary Shares, pursuant to the requirements of the Securities and Exchange Commission.

Securities registered or to be registered pursuant to Section 12(g) of the Act: None

Securities for which there is a reporting obligation pursuant to Section 15(d) of the Act: Ordinary Shares of NOK 20 per share (par value)

Indicate the number of outstanding shares of each of the issuer's classes of capital or common stock as of the close of the period covered by the annual report.

266,596,650 Ordinary Shares of NOK 20 per share (par value)

Indicate by check mark whether the registrant: (1) has filed all reports required to be filed by Section 13 or 15(d) of the Securities Exchange Act of 1934 during the preceding 12 months (or for such shorter period that the registrant was required to file such reports), and (2) has been subject to such filing requirements for the past 90 days.

Yes  No

Indicate by check mark which financial statement item the registrant has elected to follow.

Item 17  Item 18



## TABLE OF CONTENTS

		<u>Page</u>
	Exchange Rates	3
PART I.	Item 1. - Description of Business	4
	Business Segments and Geographical Areas	5
	Exploration and Production	5
	Reserve Information	6
	Exploration	9
	Development	10
	Production	11
	Marketing of Production	15
	Transportation of Oil and Gas	16
	Competitive Conditions	18
	Norwegian Government Regulations - Oil and Gas	18
	Taxation in Norway	19
	Refining and Marketing	20
	Energy	21
	Aluminium Metal Products	23
	Aluminium Extrusion	25
	Other Light Metals	26
	Plant Nutrition	26
	Gas and Chemicals	29
	KFK	29
	Petrochemicals	30
	Other Activities	32
	Research and Development	32
	Employees	33
	Environmental Protection	33
	Additional Factors Which May Affect Business	35
	Item 2. - Description of Property	36
	Item 3. - Legal Proceedings	37
	Item 4. - Control of Registrant	37
	Item 5. - Nature of Trading Market	38
	Item 6. - Exchange Controls and Other Limitations Affecting Security Holders	38
	Item 7. - Taxation	39
	Item 8. - Selected Consolidated Financial Data	40
	Item 9. - Management's Discussion and Analysis of Financial Condition and Results of Operations	43
	Item 9A. Quantitative and Qualitative Disclosures About Market Risk	64
	Item 10. Directors and Officers of the Registrant	67
	Item 11. Compensation of Directors and Officers	68
	Item 12. Options to Purchase Securities from Registrant or Subsidiaries	68
	Item 13. Interest of Management in Certain Transactions	68
PART III.	Item 15. Defaults Upon Senior Securities	68
	Item 16. Changes in Securities and Changes in Security for Registered Securities and Use of Proceeds	69
PART IV.	Item 18. Financial Statements	74
	Item 19. Financial Statements and Exhibits	F-1
	Glossary	

Note: Omitted items are inapplicable.

In this Annual Report on Form 20-F, references to the "Company" are to Norsk Hydro ASA; references to "Hydro" or the "Group" are to the Company and its consolidated subsidiaries. References to the "Kingdom" are to the Kingdom of Norway. The Company publishes its consolidated financial statements in Norwegian kroner ("NOK"). In this Annual Report, references to "US dollar," "USD," or "\$" are to United States dollars. See Glossary at the end of this Annual Report.

## EXCHANGE RATES

The following table sets forth, for the periods and dates indicated, certain information concerning the exchange rate of Norwegian kroner for United States dollars based on the noon buying rate in The City of New York for cable transfers in foreign currencies as announced by the Federal Reserve Bank of New York for customs purposes (the "Noon Buying Rate").

Calendar Period	At 31 December	Average Rate (1)	High	Low
	(NOK per \$1) (2)			
1995	6.31	6.31	6.81	6.12
1996	6.38	6.45	6.62	6.30
1997	7.37	7.10	7.76	6.34
1998	7.58	7.56	8.32	7.31
1999	8.01	7.84	8.12	7.30
2000 (through 24 March, 2000) (3)	-	8.32	8.53	7.86

- (1) The average of the Noon Buying Rates on the last business day of each month during the period.
- (2) All figures have been taken directly from figures released through the Federal Reserve System in Washington D.C. or the Federal Reserve Bank of New York.
- (3) The Noon Buying Rate on 24 March, 2000, was NOK 8.3450 = \$1.00.

Fluctuations in the exchange rate between the Norwegian kroner and the US dollar will affect the US dollar equivalent of the Norwegian kroner price of the Ordinary Shares on the Oslo Stock Exchange and, as a result, are likely to affect the market price of the American Depositary Shares ("ADSs") in the United States. Such fluctuations would also affect the US dollar amounts received by holders of ADSs on conversion by the Depository of cash dividends paid in Norwegian kroner on the Ordinary Shares underlying the ADSs. See "Management's Discussion and Analysis of Financial Condition and Results of Operations - Currency Fluctuation" and "Selected Consolidated Financial Data - Dividends."

## PART I

### ITEM 1. - DESCRIPTION OF BUSINESS.

#### NORSK HYDRO ASA

Hydro is the largest publicly owned industrial group in Norway in terms of assets and operating revenues. Norsk Hydro ASA was organized as a corporation in 1905 to utilize Norway's large hydro-electric energy resources for the world's first industrial production of nitrogen fertilizers. Since that time, Hydro has further developed Norwegian energy and natural resources. Energy, in the form of hydro-electric power, natural gas and petroleum, has been the basis for Hydro's growth and is the common link among its core business activities.

In 1951, Hydro commenced the production of magnesium and in 1967 broadened its activities in the light metal sector by engaging in aluminum production. Production of these metals is energy intensive. Originally much of the energy required was sourced from Hydro's own production.

As the search for oil and gas began in the North Sea, Hydro became involved in the first concessions awarded on Norway's continental shelf in 1965, partly motivated by a desire to secure access to hydrocarbon feedstock for use in the production of ammonia, a key raw material for fertilizer production. Hydro and its partners discovered oil and gas in the Ekofisk field in 1969 and the Frigg field in 1971, discoveries which made Hydro a producer of oil and gas. Hydro has since become the operator for major offshore projects like the Oseberg field and has developed into a significant oil and gas company.

North Sea oil production gave Hydro long-term supplies of natural gas liquids (NGL), providing a basis for the Company's entry into the petrochemical business. In 1975, Hydro commenced oil refinery operations which were later integrated with a retail oil product marketing organization in Norway, Sweden and Denmark.

In 1999, Hydro acquired Saga Petroleum ASA, an independent oil and gas exploration and production company.

Today, Hydro's core areas are Oil and Energy, Light Metals and Agriculture.

Hydro is also engaged in other activities, including fish farming operations, industrial insurance (through the Group's wholly owned captive insurance company) and pharmaceuticals (through Pronova AS, a wholly owned Norwegian subsidiary). Other activities also include Technology and Projects, the company's main engineering

unit. Corporate includes, among other things, Hydro Data, a provider of information technology services to Hydro's operating units; Hydro Finance, the Group's central financing and treasury unit; and the corporate research centers.

The core areas and operating segments for financial reporting purposes are discussed below.

Norway is the main production base for the Group with large facilities in different parts of the country.

The most important markets for Hydro's products are outside Norway. Approximately 63 percent of Hydro's total sales are to customers located in the European Union (EU) with an additional 5 percent of sales to customers in other European countries (outside Norway).

## BUSINESS SEGMENTS AND GEOGRAPHICAL AREAS

### General

Hydro has divided its business areas into nine reportable industry segments. The segments are, with the exception of Petrochemicals, included in one of the three core areas of Hydro: Hydro Oil and Energy, Hydro Light Metals and Hydro Agri. Hydro Oil and Energy consists of Exploration and Production, Refining and Marketing, and Energy. Hydro Light Metals consists of Aluminum Metal Products, Aluminium Extrusion and Other Light Metals. Hydro Agri consists of Plant Nutrition, Gas and Chemicals and A/S Korn- og Föderstof Kompagniet. The Plant Nutrition segment is a result of a merger of the two segments formally referred to as Hydro Agri Europe and Hydro Agri International. Petrochemicals is a producer of the plastic raw material polyvinyl chloride (PVC) in Scandinavia and in the UK. Other Activities consists of Seafood, Pronova, Industrial Insurance, and Technology and Projects.

For a table showing the Group's operating revenues, sales to unaffiliated customers and operating income (after eliminating intersegment sales) by operating segment for each of the three fiscal years in the period ended 31 December, 1999, see "Selected Consolidated Financial Data." See "Management's Discussion and Analysis" for additional financial information regarding each segment. See Note 5 of "Notes to Consolidated Financial Statements" for a table showing the Group's operating revenues by geographical areas (after eliminating intersegment transactions) for each of the three fiscal years in the period ended 31 December, 1999. For definitions of certain terms used herein, see the glossary at the end of this Annual Report.

## EXPLORATION AND PRODUCTION

Exploration and Production is responsible for Hydro's oil and gas exploration, field development and operation of production and transportation facilities. Most of this activity presently takes place on the Norwegian continental shelf. The activity outside of Norway has increased over the past few years, and got a substantial boost through the purchase of Saga Petroleum ASA (Saga) in mid-1999. In February 2000, Hydro announced its decision to sell the oil interests on the British continental shelf acquired through the purchase of Saga. Hydro will, however, maintain its goals for international oil and gas operations, and is targeting activity in four to five core geographic areas, each with the potential to produce a minimum of 50,000 barrels of oil equivalents (boe) per day.

The acquisition of Saga, coupled with the agreed-upon transfer of certain of Saga's licenses on the Norwegian continental shelf to Statoil, the state-owned oil and gas company, furthers a number of Hydro's objectives for its Exploration and Production business. First, it represents a valuable addition to Hydro's reserves and strengthens its long-term production profile. Second, the Saga licenses which Hydro retained following the transfer to Statoil provide the potential for synergies to be derived from the integration of Hydro's and Saga's operations on the Norwegian continental shelf, in the form of lower production costs. Additional synergies will be derived from the streamlining of general administration functions relating to non-operating license interests. The reduction of unit costs of production from existing fields will become increasingly important as exploration on the Norwegian continental shelf progresses and new discoveries become smaller and more difficult to develop. Third, the enhancement of Hydro's petroleum operations provides Hydro with a greater ability to assume the technological and other risks of exploration and production activities outside of Norway, and to continue to compete in a global oil and gas market that has seen a number of large-scale mergers between several major oil companies over the past few years.

Hydro has as of 31 January, 2000 an interest in 105 licenses on the Norwegian continental shelf and is operator of 48 of these licenses. In the Saga transaction it was agreed that after a four-year transitional period, Statoil will take over responsibility as operator for the Snorre, Tordis, Vigdis and Visund fields. In addition, Hydro is involved in upstream activities in several countries abroad, mainly in the UK, Canada, Libya, Angola and Russia, and is currently establishing a presence in Iran.

Hydro recently finished a study of its exploration portfolio on the Norwegian continental shelf and has invited other

companies to consider buying or trading interests in 23 of its 105 licenses. Hydro wants to focus its efforts on a few key areas, which is in line with an industry trend to concentrate activities geographically for optimal use of oil companies' individual geologic expertise to secure satisfactory profitability.

Information about Hydro's interests, the field operator, production start up, production and reserves for its most important fields is presented in the tables on page 8.

Hydro's oil production increased by about 25 percent in 1999 compared with the previous year. The increase was due to the inclusion of Saga's production in the second half of 1999. In addition, the fields Oseberg East, Visund, Åsgard, Troll C, Borg and Kharyaga started production in 1999. Oil production from these fields has been lower than expected, mainly due to delayed start up for Oseberg East, Visund, Åsgard and Kharyaga. Gas production from Troll increased in 1999.

Hydro's production will increase in 2000 primarily as a result of the acquisition of Saga and the inclusion of Saga's production for the full year.

Hydro's proportion of oil production compared with total oil and gas production was 78 percent in 1999, compared with 79 percent in 1998 and 1997. Gas production began to increase in 1996 when Troll A and Sleipner West started production.

The gas proportion is expected to remain at the same level in the next year.

## **Reserve Information**

At the end of 1999, Hydro's share of proved developed oil and gas reserves was estimated to be 1,046 million boe, of which gas reserves accounted for approximately 45 percent. These reserves consist of 574 million boe of oil (including NGL and condensate) and 2,655 billion standard cubic feet (scf) of gas. Hydro's share of proved undeveloped reserves accounted for an additional 1,039 million boe, of which gas reserves accounted for approximately 60 percent. Proved undeveloped reserves consist of 416 million boe of oil and 3,484 billions scf of gas.

The following tables set forth Hydro's net quantities of proved oil and gas reserves as at 31 December, 1999, 1998, and 1997, and Hydro's net production of oil (including oil and gas condensate and NGL) and gas for each of the three years in the period ended 31 December, 1999. Hydro's accounting records and operating data state quantities of oil in terms of millions of boe and gas in terms of billions of scf.

Reserve quantities reflect estimated quantities of crude oil, natural gas and natural gas liquids that are demonstrated with reasonable certainty to be recoverable from known reservoirs under existing economic and operating conditions. Reserve quantities are revised as oil and gas are produced and additional data becomes available.

## Oil reserves and production

in millions of boe	1999			1998			1997		
	Norway	International	Total	Norway	International	Total	Norway	International	Total
Proved reserves, developed and undeveloped: (1) (2)									
At beginning of year	546	92	<b>638</b>	587	93	680	668	21	689
Revision of previous estimates (3)	22	1	<b>23</b>	33	-	33	(18)	-	(18)
Purchase (sale) or exchange of reserves (4)	229	56	<b>285</b>	-	-	-	9	-	9
Extensions and new discoveries (5)	131	10	<b>141</b>	3	-	3	5	72	77
Production	(91)	(6)	<b>(97)</b>	(77)	(1)	(78)	(77)	-	(77)
At end of year (6)	837	153	<b>990</b>	546	92	638	587	93	680
Of which developed:									
At beginning of year	358	17	<b>375</b>	356	19	375	368	-	368
At end of year	500	74	<b>574</b>	358	17	375	356	19	375

## Gas reserves and production

in billions of cubic feet	1999			1998			1997		
	Norway	International	Total	Norway	International	Total	Norway	International	Total
Proved reserves, developed and undeveloped: (1)									
At beginning of year	4,312	-	<b>4,312</b>	4,481	-	4,481	5,033	-	5,033
Revision of previous estimates (3)	37	-	<b>37</b>	(55)	-	(55)	(518)	-	(518)
Purchase (sale) or exchange of reserves (7)	1,511	222	<b>1,733</b>	-	-	-	44	-	44
Extensions and new discoveries (8)	207	-	<b>207</b>	2	-	2	33	-	33
Production	(139)	(11)	<b>(150)</b>	(116)	-	(116)	(111)	-	(111)
At end of year	5,928	211	<b>6,139</b>	4,312	-	4,312	4,481	-	4,481
Of which developed:									
At beginning of year	2,015	-	<b>2,015</b>	2,143	-	2,143	2,255	-	2,255
At end of year	2,444	211	<b>2,655</b>	2,015	-	2,015	2,143	-	2,143

- (1) For the definitions of proved, developed and undeveloped reserves, see "Glossary" at the end of this Annual Report. For additional information on government rights and production restrictions, see "Government Regulation."
- (2) Reserve estimates are made before payment-in-kind royalty of approximately 8.8, 11.0, and 15.9 million boe for oil for 1999, 1998, and 1997, respectively.
- (3) The revision of previous estimates relates to new information from current year drilling operations and additional data which now is available. In 1998, Hydro increased its interest in Snorre from 8.265 percent to 8.926 percent, due to redetermination. The decrease in reserves in 1997 was due to a more stringent criteria of 90 percent probability of recovery for proved reserves in accordance with new guidelines from Society of Petroleum Engineers and World Petroleum Congress. Hydro previously classified reserves as proved with an 80 percent probability of recovery.
- (4) In 1999, the increase in oil reserves was due to the inclusion of Saga's oil reserves. In 1998, oil reserves were neither purchased nor sold. In 1997, the increase in oil reserves was due to an increase in Hydro's interest in the Visund field from 12.6 percent to 16.1 percent.
- (5) In 1999, extensions and new discoveries for oil related to the Grane and Borg fields, and the Kharyaga field in Russia. In 1998, extensions and new discoveries were related to Sygna and Brage Sognefjord. In 1997, extensions and new discoveries for oil were primarily related to the Girassol field (Angola) and the Terra Nova field (Canada).
- (6) In 1999, reserve estimates included 192.0 million boe from outside the Norwegian Continental Shelf, mainly in the UK, Canada and Angola. Reserve estimates included 93 million boe and 92 million boe from outside the Norwegian Continental Shelf in Canada and Angola for 1998 and 1997, respectively.
- (7) In 1999, the increase in gas reserves was due to the inclusion and increase in ownership interest from the Saga acquisition. In 1998, gas reserves were neither purchased nor sold. The purchase of gas reserves in 1997 related to an increase in Hydro's interest in the Visund field from 12.6 percent to 16.1 percent.
- (8) In 1999, extensions and new discoveries for gas related to the Kvitebjørn and Tune fields. In 1998, the extensions and new discoveries for gas related to the Brage Sognefjord field. In 1997, the increase in gas reserves was due to a commercial solution for the gas in the Norne field.

## Proved reserves

as of 31 December, 1999

Field	Block	Operator	Hydro's interest	Hydro's share			Prod. start
				TOTAL mill. boe	OIL/NGL in millions of boe	GAS in billions of cubic feet	
Oseberg	30/6, 30/9	Norsk Hydro	19.60 – 22.24%	217	80	767	1988
Oseberg South	30/9	Norsk Hydro	32.02%	84	65	96	2000
Gullfaks fields	34/10, 33/12	Statoil	9.00%	77	49	151	1986
Ekofisk fields	2/4, 2/7, 2/5, 1/6, 7/11	Phillips Petroleum	5.81 – 6.65%	90	73	93	1971
Snorre fields	34/4, 34/7	Norsk Hydro	6.64 – 17.65%	177	166	53	1992
Brage	31/4, 30/6, 31/7	Norsk Hydro	23.20-24.44%	12	11	2	1993
Troll	31/2, 31/3, 31/5, 31/6	Norsk Hydro/ Statoil	9.78%	688	77	3,510	1995 1996
Sleipner fields	15/6, 15/9	Statoil	8.85 – 10.00%	79	19	322	1993
Njord	6407/7,10	Norsk Hydro	22.50%	22	22	-	1997
Norne	6608/10,11	Statoil	8.10%	30	25	29	1997
Visund	34/8, 34/7	Norsk Hydro	20.30%	86	46	102	1999
Åsgard	6407/2, 6506/11,12, 6507/11	Statoil	9.60%	159	70	501	1999
Varg	15/12	Norsk Hydro	35.00%	2	2	-	1998
Yme	9/2	Statoil	25.00%	3	3	-	1996
Grane	25/11	Norsk Hydro	22.40%	116	116	-	2003
Tune	30/4, 30/6, 30/8	Norsk Hydro	23.57%	19	4	83	2002
Kvitebjørn	34/11	Statoil	15.00%	28	7	112	2004
Other fields				4	3	7	
<b>Total Norway</b>				<b>1,893</b>	<b>837</b>	<b>5,928</b>	
Hibernia	Grand Banks Canada	HMDC *	5.00%	20	20	-	1997
Terra Nova	Grand Banks Canada	Petro-Canada	15.00%	32	32	-	2000
Girassol	Angola Block 17	Elf Exploration Angola	10.00%	41	41	-	2001
Kharyaga	Timan Pechora, Russland	Total Exploration Prod. Russia	40.00%	9	9	-	1999
Alba	North Sea, British sector	Chevron UK Ltd.	11.75%	21	21	-	1994
Britannia	North Sea, British sector	Britannia Operation Ltd.	9.01%	48	9	211	1998
Gryphon	North Sea, British sector	Kerr McGee North Sea (UK) Ltd	25.00%	9	9	-	1993
Thistle	North Sea, British sector	BP Amoco Exploration	18.28-41.67%	3	3	-	1978
Mabruk	Sirte basin, Libya	Total/Fina	25.00%	9	9	-	1995
<b>Total International</b>				<b>192</b>	<b>153</b>	<b>211</b>	
<b>Total</b>				<b>2,085</b>	<b>990</b>	<b>6,139</b>	

## 1999 production of oil and gas

Field	Operator	Hydro's interest	Hydro's share		
			TOTAL mill. boe	OIL/NGL in millions of boe	GAS in billions of cubic feet
Oseberg fields	Norsk Hydro	19.60-22.24%	23	23	-
Gullfaks fields	Statoil	9.00%	12	11	3
Frigg fields	Elf Aquitaine	6.05 – 32.87%	1	-	5
Ekofisk fields	Phillips Petroleum	5.81 – 6.65%	8	7	8
Brage	Norsk Hydro	23.20-24.44%	6	6	1
Heimdal	Norsk Hydro	9.70%	1	-	2
Snorre fields	Norsk Hydro	6.64 – 17.65%	18	17	4
Sleipner fields	Statoil	8.85 – 10.00%	11	5	37
Troll	Norsk Hydro/Statoil	9.78%	21	7	79
Njord	Norsk Hydro	22.50%	5	5	-
Norne	Statoil	8.10%	4	4	-
Visund	Norsk Hydro	20.30%	1	1	-
Varg	Norsk Hydro	35.00%	2	2	-
Yme	Statoil	25.00%	1	1	-
Åsgard	Statoil	9.60%	2	2	-
<b>Total Norway</b>			<b>116</b>	<b>91</b>	<b>139</b>
Hibernia (Canada)	HMDC *	5.00%	2	2	-
Kharyaga	Total Exploration Prod. Russia	40.00%	-	-	-
Alba	Chevron UK Ltd.	11.75%	2	2	-
Britannia	Britannia Operation Ltd.	9.01%	3	1	11
Gryphon	Kerr McGee North Sea (UK) Ltd.	25.00%	1	1	-
Thistle fields	BP Amoco Exploration	18.28-41.67%	-	-	-
Mabruk	Total/Fina	25.00%	-	-	-
<b>Total International</b>			<b>8</b>	<b>6</b>	<b>11</b>
<b>Total</b>			<b>**124</b>	<b>97</b>	<b>150</b>

\* HMDC: Hibernia Management Development Company.

\*\* Total daily production in 1999 is 340,000 boe.

## **EXPLORATION**

Hydro's total expenditures for oil and gas exploration and appraisal of discoveries amounted to NOK 1,513 million in 1999 compared with NOK 1,368 million in 1998. In 1999, NOK 1,202 million was expensed compared with NOK 1,221 million in 1998. In 1997, total exploration expenditures amounted to NOK 1,114 million and NOK 786 million was expensed. Saga accounted for NOK 301 million of the exploration expenditures in 1999. Increased exploration activities in Angola and Canada resulted in an increase in Hydro's international exploration expenditures, while exploration expenditures in Norway were reduced.

### **Norway**

Hydro participated in 18 exploration and appraisal wells which were completed on the Norwegian continental shelf during 1999. One of the wells was located at "Gjallarrayggen" at a water depth of 1,352 meters, deeper than for any other well drilled so far on the Norwegian continental shelf. The well turned out to be dry. Five discoveries were made. One minor find near the Yme field was made ready for production imminently and another four are expected to have commercial potential pending further appraisal.

In the 1999 North Sea licensing round Hydro was awarded operatorship in five new licenses and a participating interest in two others.

In the autumn of 1999 the Norwegian authorities announced the 16th licensing round, and Hydro submitted an application at the end of January 2000.

The evaluation of the Ormen Lange field has continued throughout 1999. The Ormen Lange field covers production license 208, 209 and 250. Hydro and Norske Shell have agreed to share the operatorship of the development and production phase of Ormen Lange. Hydro will be the operator for the development phase of the field while Norske Shell will be operator for the production phase. The earliest date for a Plan for Development and Operation (PDO) will be late 2002. The ability to sell Ormen Lange gas volumes at acceptable prices from 2006 and with a short build up period, are the main uncertainties relating to processing and submitting the Plan for Development and Operation in 2002.

### **International**

Hydro was involved in international exploration activities in eight countries in 1999; Angola, Canada, Russia, Yemen, the UK, Libya, Iran and the Faeroes. Hydro participated in the drilling of eight appraisal and eight exploration wells which were completed during 1999. Six exploration discoveries were made and five of these are expected to have a commercial potential pending further appraisal. Successful

appraisal wells were drilled in Angola, Canada and Yemen.

In Angola, Hydro has a ten percent interest in Block 17, where the Girassol oil discovery was made in 1996. Following the Girassol discovery, several discoveries have been made in Block 17. In 1997, substantial oil discoveries in the Dalia area were made; in 1998, the Rosa and Lirio discoveries; and in 1999, four additional discoveries were made by the wells Tulipa-1, Orquidea-1, Cravo-1 and Camelia-1. Further exploration and appraisal activities will continue in the coming years. Hydro signed a production Sharing Agreement (PSA) with the Angolian authorities in 1998 for a ten percent share of Block 9. In 1999, Hydro signed a PSA for a 27.5 percent share of Block 5. As a part of the acquisition of Saga, Hydro obtained a 14 percent interest in the shallow water Block 1. Minor discoveries have previously been made in this block and further exploration drilling will be carried out. Hydro is also involved in the announced Block 34 where a PSA is being negotiated.

Hydro is involved in the early phases of exploration projects in Russia. To date, no significant future financial commitments have been entered into for these projects pending negotiations with the local authorities and the evaluation of the projects' risk. Hydro is participating in projects which aim to develop oil reserves in the Pechora Sea and the onshore Timan Pechora area, located in the northwest of Russia. Hydro is also part of a group that is evaluating the development of the major Shtokmanovskoye gas field in the Barents Sea.

In Canada, Hydro entered into a strategic alliance agreement with Petro-Canada in late 1996 covering the Grand Banks area off the coast of Newfoundland. As part of this agreement, Hydro received 30 percent of Petro-Canada's interests in all significant discovery areas in the Jeanne d'Arc Basin. In 1998, four new exploration licenses on Grand Banks were awarded with Hydro having a 25 percent participation share. In 1998, Hydro signed a farm-in agreement for four licenses with Pan Canadian on the Scotian Shelf. In the spring of 1999 Hydro was awarded two deep water licenses on the Scotian Shelf, with working interests between 20 percent and 22.5 percent. In the fall of 1999 Hydro was awarded three licenses in the Flemish Pass Basin on the Grand Banks offshore Newfoundland. Hydro has a working interest of 40 to 50 percent in these licenses. Hydro participated in drilling two exploration and five appraisal wells in Canada in 1999. Two of the appraisal wells were drilled on the Hebron/Ben Nevis discovery on Grand Banks. Further evaluation of this discovery to determine if it can be commercially developed will take place in 2000. In the fourth quarter of 1999 Hydro sold its 7.5 percent share in the White Rose discovery.

Through the purchase of Saga, Hydro acquired exploration

interests in Libya, and potential exploration projects in Iran.

In Libya Hydro is involved in the Murzuk exploration licenses NC186 and NC187, which during 1999 were amended to include a larger area, Murzuk north. Hydro has a 20 percent interest, and extensive seismic interpretations were made in 1999 by the operator, Repsol, to mature drillable prospects for drilling in 2000.

The Iran activity involves an ongoing study agreement for the Abadan Area, onshore and offshore the Persian Gulf. An exploration contract for the Anaran block, containing the Changuleh discovery, was negotiated with National Iranian Oil Company during 1999. A contract is expected to be signed in 2000.

## **DEVELOPMENT <sup>\*)</sup>**

In 1999, Hydro invested NOK 46,596 million in the development of new and existing fields and transportation systems compared with NOK 6,167 million in 1998 and NOK 4,862 million in 1997. In addition, exploration costs of NOK 235 million, NOK 333 million and NOK 235 million were transferred to fields being developed in 1999, 1998 and 1997, respectively. Terra Nova, Snorre 2, Åsgard and Oseberg South were the four most important development projects in 1999. A summary of the fields under development, the operator and Hydro's share of reserves is set forth in the preceding tables. For information about the developments of the Heimdal field and Åsgard Unit, see "Production."

### **Norway**

**Oseberg South Field.** The authorities approved a PDO for Oseberg South in June 1997. Oil production started in February 2000 through the Omega North wells drilled from the Oseberg Field Center. Production from the Oseberg South Platform is expected to start in September 2000. This oil will be transported through a new pipeline to the Oseberg A platform for further processing and transport to shore through the Oseberg Transport System. The total investment is estimated to be NOK 9.8 billion. Hydro's investment is expected to be NOK 4.3 billion. Hydro's share in Oseberg South increased from 21.88 percent to 32.02 percent following the Saga acquisition.

**Tune Field.** The PDO for the gas/condensate field Tune was approved by the authorities in December 1999. The field will be developed with a subsea frame, and four wells which will be tied in to the Oseberg D platform for processing of the well stream. Production is planned to commence in 2002.

<sup>\*)</sup> Hydro's share of expected investments includes an estimate for capitalized interest.

Total investment is estimated to be NOK 2.9 billion. Hydro's investment is expected to be NOK 1.0 billion.

**Snorre Field.** The authorities approved the PDO for the Phase 2 of the Snorre Field in June 1998. The total investment is estimated at NOK 14.4 billion, of which Hydro's share is NOK 3.7 billion. Production is expected to start in August 2001. Hydro's share in the Snorre Field increased from 8.9265 to 17.65 percent as a result of the Saga acquisition.

**Gullfaks Satellites Phase 2.** The authorities approved in July 1998 a PDO for the Phase 2 development of the Gullfaks Satellites, covering production of gas with start up in October 2001. Total investment is estimated to be approximately NOK 8.3 billion, of which Hydro's share is NOK 816 million.

**Sygna Field.** The authorities approved a PDO for the Sygna oil field in July 1999. The total investment is estimated to be NOK 1.7 billion, of which Hydro's share is NOK 197 million. Hydro's share in Sygna increased from 3.78 to 5.976 percent as a result of the Saga acquisition. Sygna's production from the Statfjord C platform is expected to start in August 2000.

**Kvitebjørn Field.** A PDO for the development of the Kvitebjørn gas/condensate field was submitted to the authorities in December 1999. Total investment is estimated to be approximately NOK 10.0 billion, of which Hydro's share is NOK 1.8 billion. Production is expected to start in October 2004.

**Grane Field.** A PDO for the development of the Grane oil field was submitted to the authorities in December 1999. Production is expected to start in October 2003. The oil from Grane is planned to be transported through a pipeline to the Sture Terminal in Øygarden, Norway. Gas for injection in the field will be imported from Heimdal Gas Centre. Total investment is estimated to approximately NOK 16.3 billion, of which Hydro's share is NOK 4.6 billion.

### **International**

**Girassol Field.** The Girassol field on Block 17 in Angola was declared commercial in November 1997. A plan for development was sanctioned by the Angolan authorities in 1998. Production of oil is expected to start from a floating production unit in 2001. The total investment is estimated at NOK 21.6 billion. Hydro's share of the investment is expected to be NOK 2.5 billion.

**Terra Nova Field.** The Terra Nova oil field is located offshore, south east of St. John's, Newfoundland. A plan for development was approved by Canadian authorities in January 1998. Production is expected to start in the first half

year of 2001. The total investment is estimated at NOK 14.6 billion. Hydro's share of the investment, exclusive of its carry obligation to Petro-Canada, is expected to be NOK 2.6 billion.

A strategic alliance agreement with Petro-Canada was signed in 1996. Under terms of the agreement, Hydro and Petro-Canada exchanged working interests in the North Sea and Newfoundland effective December 1996. Petro-Canada received Hydro's nine percent share in Veslefrikk and a 7.5 percent interest in Njord. Hydro also carries part of Petro-Canada's costs for Hibernia and Terra Nova. Hydro paid approximately NOK 220 million in 1996, which fulfilled its carry obligation related to Hibernia. Hydro also guaranteed that total recoverable reserves attributable to Petro-Canada's working interest in the Veslefrikk field would not be less than a certain quantified amount of crude oil. If less, Hydro has an obligation to deliver indemnity volumes to Petro-Canada. The guarantee does not apply in case of force majeure, the failure of the operator to comply with good oil field practices, etc. At 31 December, 1999, the remaining guaranteed volume was 1.9 million standard cubic meters of crude oil, equivalent to approximately NOK 2.4 billion. In return, Hydro received working interests of five percent in Hibernia, 15 percent in Terra Nova (see above) and 30 percent of Petro-Canada's interests in all significant discovery areas in the Jeanne d'Arc Basin. See "Exploration". Hibernia started production in 1997. See "Production."

## PRODUCTION

A summary of the largest producing fields, the field operator, Hydro's interest and Hydro's share of the 1999 production is set forth in the preceding tables. The acquisition of Saga was effected as of 1 July, 1999 and as such, the average daily production amounts reflected with respect to each of the fields described under "Production" have been calculated by combining Saga's production from 1 July, 1999 to year-end with Hydro's production and dividing this sum by the number of days (i.e., 365) in the year. For this reason, these amounts understate average daily production amounts were Saga's production to have been included from 1 January, 1999.

### Norway

**Oseberg Fields.** The Oseberg fields are the largest contributors to the Group's oil production. Production started from the Oseberg Field Center in December 1988, and from the Oseberg C platform in September 1991. Production from these installations are in the decline phase. Oseberg East went on stream in May 1999, and the production from the Omega North wells in Oseberg South started in February 2000. The gas processing and transportation platform Oseberg D started operations in October 1999, and gas export is scheduled to commence 1 October, 2000. The oil is brought ashore by pipeline from Oseberg to the Sture terminal in Norway. The average daily production from the Oseberg fields in 1999 was around 350,000 barrels per day. Hydro's share of production was approximately 62,000 barrels per day. As a result of the Saga acquisition Hydro's share in the Oseberg Field increased from 13.68 to 22.23 percent. Hydro's share in Oseberg East increased from 12.25 to 19.6 percent, and from 21.88 to 32.02 percent in Oseberg South.

**Brage Field.** Production from the Brage field started in September 1993. The oil is transported to the Sture terminal via Oseberg Field Center. In 1999, the average production was approximately 67,000 barrels of oil per day. Hydro's share of production was approximately 16,000 barrels of oil per day. The production from the main reservoir is in the decline phase of production.

**Troll Field.** Oil production started from the Troll B platform in September 1995. The oil is transported to Mongstad through the Troll Oil Pipeline 1. The Troll C floating production unit, with an oil production capacity of 125,000 barrels per day, started production in October 1999. A new pipeline, Troll Oil Pipeline 2, has been constructed for transportation of oil from Troll C to Mongstad. Associated gas is routed to Troll A for further transport to Kollsnes in Norway. The total average oil production from Troll was approximately 228,000 barrels per day in 1999. Hydro's share of oil production was approximately 20,000 million barrels per day.

Gas production from the Troll A platform commenced in October 1996. The gas is piped to treatment facilities at the Kollsnes gas terminal in Norway, where condensate is separated from the gas. The dry gas is exported to the European continent through the Zeepipe / Statpipe / Norpipe / Franpipe pipelines. The average gas production and export in 1999, including gas associated with the oil production, was approximately 2,470 million standard cubic feet per day. Hydro's share of gas production was 217 million standard cubic feet per day. For more information see "Marketing of Production" and "Transportation of Oil and Gas." The Troll-Oseberg Gas Injection unit in the Troll field (TOGI), for which Hydro is operator, had no production in 1999. This was due to sufficient gas available for injection at Oseberg.

As a result of the Saga acquisition and redetermination within the Troll licenses, Hydro's share in Troll Unit increased from 7.69 percent to 9.78 percent.

**Snorre Field.** Production of oil and associated gas from the Snorre field commenced in August 1992. The oil and gas is piped to the Statfjord field for further processing and transportation. In 1999, the oil production from the Snorre field averaged approximately 165,000 barrels per day. Hydro's share of the production amounted to 25,000 barrels per day. Hydro's share in the Snorre field increased from 8.9265 percent to 17.65 percent as a result of the Saga acquisition.

**Tordis Field.** Production of oil and gas from the Tordis field commenced in June 1994. The oil is processed on Gullfaks C. Oil production from Tordis peaked in 1996 and started to decline in 1997, as expected, due to increased water production. However, tie-in of Tordis East and Borg have maintained the plateau level through the Tordis facility. Production of oil from the Tordis East field commenced in December 1998 and from the Borg field in July 1999. The Tordis Extension 2 project, involving water injector wells, is expected to improve production on the Tordis fields. Injection from the first well is expected to start in the summer of 2000. In 1999, the average daily oil production from the Tordis fields was approximately 78,000 barrels per day, of which Hydro's share was about 8,000 barrels per day. Hydro's share in the Tordis fields increased from 8.40 to 13.28 percent as a result of the Saga acquisition.

**Vigdis Field.** Production of oil and gas from the Vigdis field commenced in January 1997. The oil is processed on the Snorre platform and piped to Gullfaks A for storage and transportation. In 1999, the average daily oil production from the Vigdis field was approximately 85,000 barrels per day. Hydro's share was about 9,000 barrels per day. Hydro's share in Vigdis increased from 8.40 to 13.28 percent as a result of the Saga acquisition.

**Visund Field.** Visund contains both oil and gas reserves. In the first phase of production, which started in April 1999, only oil is exported from the floating production unit with a design capacity of 100,000 barrels of oil per day. The oil is stored in and shipped from Gullfaks C. In 1999, the average daily production from Visund in was approximately 11,000 barrels per day, of which Hydro's share of such production was about 2,000 barrels per day. Average daily production in 2000 is expected to be at 48,000 barrels per day, and should further increase by around 60 percent from 2000 to 2001, when plateau level is expected to be reached. An accelerated development of the northern reservoir with a subsea installation, with production start late in 2001, will be evaluated in 2000. Hydro's share in Visund increased from 16.1 percent to 20.3 percent as a result of the Saga acquisition.

**Gullfaks Fields.** The second largest contributor to Hydro's oil production is the Gullfaks field including its satellites Gullfaks West, Gullveig, Rimfaks and Gullfaks South. The Gullfaks field started production in 1986 and is developed with three integrated platforms with concrete substructures. The oil is transported by oil tankers from the field. The gas is transported through the Statpipe pipeline to the Kårstø terminal. In 1999, average daily oil production in was about 337,000 barrels per day. Hydro's share was about 30,000 barrels.

**Statfjord East.** The Statfjord East field, which is tied in to the Statfjord C platform, started production in 1994. In 1999, average oil production was about 65,000 barrels per day, of which Hydro's share was about 4,000 barrels per day. Hydro's share in Statfjord East increased from 4.2 to 6.64 percent as a result of the Saga acquisition.

**Varg Field.** Hydro became an owner of a 35 percent share in Varg as a result of the Saga acquisition. Oil production from the Varg field started in December 1998. In 1999, the average production was 30,000 barrels of oil per day. Hydro's share of production was approximately 6,000 barrels of oil per day. The field is developed with an unmanned wellhead platform combined with a floating production and storage unit. The processed oil is exported by shuttle tankers. Gas, which is not used to generate electricity, is injected into the reservoir to improve oil recovery. The production ship was sold in the summer of 1999, and is now leased back to the license from the new owner.

**Yme Field.** Hydro became an owner of a 25 percent share in Yme as a result of the Saga acquisition. The field, including the Yme Gamma, Beta East and Beta West fields, started production in February 1996. In 1999, the average production was 27,000 barrels of oil per day. Hydro's share was 3,000 barrels per day. The oil is stored in a storage tanker prior to shuttle transportation to the Mongstad refinery for final

processing. The gas is reinjected into the reservoir. The Beta East satellite is exploited by subsea wells tied into the platform. Production on the Yme Beta West field started in September 1999 from a subsea well which was connected to the Beta East subsea well template. The production from the Yme field is expected to cease in 2001.

**Ekofisk Fields.** Production from the Ekofisk fields started in 1971. From 1984, subsidence of the seabed around the Ekofisk complex was observed as a result of gradually decreasing reservoir pressure. To prevent the subsidence from negatively influencing production, several measures have been undertaken: water injection to maintain pressures, jacking up platform decks (1987) and a protection wall around the tank (1989). During 1998 most of the old platforms were shut down, and new facilities, Ekofisk II, started production in August 1998. The production still suffers from problems with Ekofisk II, specifically, the gas compression equipment system, and therefore less gas production is achieved. In 1999, the production of oil and gas from the Ekofisk area was around 288,000 barrels of oil and 350 million cubic feet of gas on average per day. Hydro's share was approximately 19,000 barrels of oil and 23 million cubic feet of gas. Hydro's share in Ekofisk increased from 6.365 to 6.654 percent as a result of the Saga acquisition.

The gas output from Ekofisk up to 2011 has been contracted to be sold through long-term contracts to a group of gas distributors in Germany, the Netherlands, Belgium and France. Negotiations are ongoing regarding terms and conditions for gas export from 2011 through the end of license period in 2028.

**Sleipner Fields.** The Sleipner East field started gas and condensate production in October 1993. Production from the Gungne satellite began in April 1996, and from the Loke Trias satellite in the third quarter of 1999. The condensate and gas production from Sleipner West started in August 1996. In 1999, the average production per day in from the Sleipner Fields was 132,000 barrels of condensate and 1,080 million cubic feet of gas. Hydro's share of the production was around 13,000 barrels of condensate and around 100 million of cubic feet of gas.

The operator has endeavored to resolve problems related to removal of CO<sub>2</sub> from the Sleipner West gas. However, the gas exports are not affected by the problem as the gas is mixed with gas from Sleipner East. All Sleipner East reserves and most of Sleipner West reserves will be sold under the Troll gas contracts. Transportation rights have been secured through existing transportation systems.

**Frigg Fields.** The Frigg field straddles the border line between the Norwegian and the United Kingdom sectors of the North Sea. Gas production from the Frigg field, which

started in 1977, has been in the decline phase of production for several years. East Frigg gas production stopped in December 1997. Lille-Frigg production stopped in late March 1999. It is currently anticipated that the reserves from Frigg and the satellite, Frøy, will be fully depleted between 2000 and 2002. Future production will be insignificant. After reductions in the reserve estimates for Frøy and Lille-Frigg in 1995 and 1996, Hydro recorded a provision for impairment of NOK 1,775 million in those years.

The full carrying value of Hydro's investment in the Frigg fields has been written down due to low remaining production and high operating costs. In 1999 the average production per day from the Frigg fields was approximately 9,000 barrels of oil/condensate and 81 million cubic feet of gas. Hydro's share of the production was approximately 600 barrels of oil/condensate and 13 million cubic feet of gas.

**Heimdal Field.** Hydro took over as operator from Elf as of 1 January, 1998. From the same date, Hydro increased its share in the Heimdal field from 6.2 to 15.8 percent and in the area around the Heimdal field, production license 036, from 6.9 to 21.9 percent. In 1999, Hydro's share increased from 15.8 to 19.27 percent in Heimdal field and from 21.92 to 28.531 percent in the area around Heimdal as a result of the Saga acquisition. Production of oil/NGL was on average around 2,000 barrels per day and 78 million cubic feet of gas per day. Hydro's share of the production was 164 barrels of oil/NGL and approximately six million cubic feet of gas per day. Production from the Heimdal reservoir closed down on 1 October, 1999, and the gas sales contracts with the buyers terminated the same date.

Hydro has decided to use the Heimdal platform to deliver third party processing services and act as a contact point for the dry gas transportation system. The Heimdal platform is thus under reconstruction to serve as a gas process and distribution center. The reconstruction consists of modifications to the existing platform and construction of a bridge connected riser platform. The authorities approved a PDO in February 1999. Six users, Huldra, Vale, Skirne, Vesterled, Grane and Oseberg Gas Transport, have entered into agreements for tie-in and use of the Heimdal platform. Total development cost is estimated at NOK 1.8 billion, which will be distributed between the various users. Hydro's exposure is estimated to be NOK 320 million. On completion of the modifications, scheduled for 1 October, 2000, the plan is to produce the remaining Heimdal reserves.

**Njord Field.** Production commenced in October 1997. The field installation consists of a floating production unit and a tanker for storage and loading of oil. Gas produced is injected to maintain reservoir pressure. Daily production in 1999 was approximately 61,000 barrels of oil per day, of which Hydro's share amounted to approximately 14,000

barrels per day.

**Åsgård Unit.** Åsgard Unit covers the three fields Midgard, Smørbukk and Smørbukk Sør. The Åsgard Unit owners are also responsible for investments for some of the extension and upgrading of the Kårstø gas treatment terminal. The total investment for the field developments, wells and terminal are estimated to be approximately NOK 52 billion. Hydro's share of the investment is expected to be NOK 7.1 billion. Oil production started from Åsgard in May 1999, and the gas production has a planned start up for 1 October, 2000. Through the acquisition of Saga, Hydro increased its share in Åsgard Unit from 2.6 to 9.6 percent.

In 1999, daily oil production was approximately 67,000 barrels of oil per day, of which Hydro's share was around 6,000 barrels. The floating production, storage and offloading unit has an oil processing capacity of approximately 200,000 barrels per day. The actual production has been lower due to technical problems.

**Norne Field.** Production of oil started in November 1997. In 1999 the average daily production was 143,000 barrels per day, of which Hydro's share was 12,000 barrels per day. By the end of 1999 a sufficient well capacity had been established to sustain a plateau production level of approximately 175,000 barrels per day. Gas handling facilities and gas transportation pipe line for the associated gas is currently being installed, with an expected start of gas export by 1 October, 2000.

## International

**Hibernia Field.** The Hibernia field is located in the Grand Banks area offshore the east coast of Newfoundland in Canada. Oil production came on stream in November 1997. The production in 1999 reached an average level of 100,000 barrels per day, of which Hydro's share amounted to 5,000 barrels per day. The estimated average production level in 2000 is expected to be 150,000 barrels per day and a further production build up is expected in 2001. The platform has handled peak throughput of 180,000 barrels per day.

**Kharyaga.** The Kharyaga field located in North West Russia started production in October 1999 under a Production Sharing Agreement (PSA) with the Russian authorities. Hydro's share in the PSA is 40 percent. In 1999, the average oil production reached 2,000 barrels of oil per day. Hydro's share amounted to 600 barrels of oil per day (net after Government take). The expected average production during 2000 is 8,500 barrels of oil per day.

**Mabruk.** The Mabruk field is located in Libya, and production started in 1995. Hydro became owner of a 25 percent share in the license through the acquisition of Saga. Hydro's share is through a Development and Production

Sharing Agreement with NOC, the National Oil Company in Libya. In 1999, the average oil production from the field was 18,000 barrels per day of which Hydro's share was approximately 1,000 barrels of oil per day (net after Government take).

**Alba Field.** Hydro became an owner in Alba as a result of the Saga acquisition. The Alba field is located in the UK sector of the North Sea. The field started production in 1994. The northern part of the field has been developed with an integrated drilling, processing and living quarters platform. The southern part of the field is being developed using extended reach drilling technology. In 1999, the average daily production from the field was approximately 76,000 barrels of oil. Hydro's share of production was around 5,000 barrels per day. Hydro has decided to sell its interest in the Alba field.

**Britannia Field.** Hydro became an owner in Britannia as a result of the Saga acquisition. The field, which is located in the UK sector of the North Sea, has been developed with a single processing, drilling and accommodation platform and a subsea manifold.

Gas is being transported through pipeline to St. Fergus. Production started in August 1998. In 1999, the average daily production from the field was approximately 39,000 barrels of condensate and 641 million cubic feet of gas. Hydro's share of production was approximately 2,000 barrels of condensate and 30 million cubic feet of gas per day. Hydro has decided to sell its interest in the Britannia field.

**Gryphon Field.** Hydro became an owner in Gryphon as a result of the Saga acquisition. Production from the Gryphon field, which is located in the UK sector of the North Sea, started in 1993 and peaked in 1995. The field is developed using a floating production, storage and offloading vessel connected to subsea wells. In 1999, the average daily production from the field was approximately 21,000 barrels of oil. Hydro's share of production was around 3,000 barrels of oil per day. Hydro has decided to sell its interest in the Gryphon field.

**Thistle Area.** Hydro became an owner in the Thistle area as a result of the Saga acquisition. The Thistle area, which is located in the UK sector of the North Sea, includes Thistle, Area C, Deveron and the Don Northeast and Southwest fields. The production from the Thistle field started in 1978. The main production platform is the Thistle platform. The other fields are tied to this platform either by deviated wells or as satellites. In 1999, the average daily production from the area was approximately 9,000 barrels of oil. Hydro's share of production was around 1,000 barrels of oil per day. Hydro has decided to sell its interest in the Thistle area.

## MARKETING OF PRODUCTION

Natural gas produced from fields in which Hydro has an interest is mainly sold under long-term contracts. Pricing under such contracts is generally based on a market principle whereby the natural gas price is indexed to oil product prices in the end user market, mainly gas oil and low sulfur fuel oil. Norwegian natural gas export contracts are generally negotiated jointly by the three Norwegian companies, Statoil, Hydro and Saga in the Gas Negotiating Committee (GNC) on a non field-specific basis. Hence, Hydro's options in selling natural gas on a company basis are limited. In 1993, a Gas Supply Committee (FU) consisting of both Norwegian and international companies was established to propose fields to be allocated deliveries for new gas sales contracts negotiated by the GNC. The allocation of fields to contracts is decided by the Norwegian authorities.

Gas consumption in Western Europe, the most important market for Norwegian gas, increased by approximately 4.7 percent from 1998 to 1999. Gas consumption continued to grow at the same rate as in the two last decades, steadily increasing the market share of natural gas in relation to other fuels. This trend is anticipated to continue into the next decade, with an annual demand growth of between three and four percent.

In the mid-1980's, contracts were entered into between the licensees of the Troll field and a group of continental European gas distributors for the sale of substantial volumes of the Troll gas. The contracts provide considerable flexibility, allowing for the supply of gas from other fields on the Norwegian continental shelf.

Deliveries from the Sleipner East field started in 1993 and deliveries from the Troll and Sleipner West commenced in 1996 for delivery under contracts terminating in 2026. In 1995, the remaining purchase options were exercised by existing customers. Substantially all gas production from the first development phase of the Troll and Sleipner East fields will be sold through these contracts.

Natural gas deliveries from the Norwegian continental shelf amounted to 45.8 billion standard cubic meters in 1999. Hydro's share of these deliveries was approximately 9.1 percent.

During 1999, a gas sales agreement with the Polish Oil and Gas Company was entered into for deliveries of 0.5 billion cubic meters per year until 2006. Deliveries are expected to start in 2000.

Based upon all present contractual commitments, the total committed gas sales from the Norwegian continental shelf will be around 70 billion cubic meters annually in plateau period starting around 2005. Since not all of the contract

volumes have been allocated to fields, Hydro's share of the future deliveries is uncertain. However, Hydro's share is expected to be between 11 and 12 percent of total deliveries.

In 1996, the Norwegian authorities decided that the gas sales contract with the German company, Verbundnetzgas (VNG), should be allocated to the Oseberg Field, and that Hydro should become operator of the contract administration. The gas deliveries started in October 1996. The Troll and Sleipner fields will deliver gas on behalf of Oseberg until year 2000, when gas export from Oseberg is planned to commence. However, the operator tasks have already been undertaken by Hydro.

The operatorship of the gas sales contract with Transgas was transferred to Hydro on 1 December, 1999 as the Oseberg field was assigned the contractual responsibility for the Transgas deliveries.

The responsibility for contract administration for the gas contracts for Heimdal was transferred to Hydro from Elf as part of the transfer of the operatorship of the field, which was effective as of 1 January, 1998.

Hydro markets its own crude oil. A portion of the production is channeled to Hydro's affiliated refinery. The remainder is sold on a spot or short-term basis, generally at current world market prices, through its trading operations. See "Management's Discussion and Analysis - Risk Management - Commodity price risk - Oil".

## Transportation of Oil and Gas

Hydro has an interest in all major pipelines for the transportation of oil and gas on the Norwegian continental shelf and in the corresponding land terminals, as set forth in the table below.

Pipeline	End points	Length (km)	Hydro's interest (%)
Norsea Gas A/S (gas) (1)	Ekofisk - Emden (Germany)	440	4.63
Norpipe Oil A/S (oil) (1)	Ekofisk - Teesside (UK)	335	3.50
Frigg Norwegian pipeline (gas) (1)	Frigg - St. Fergus (UK)	350	32.87
Statpipe (gas)	Statfjord - Ekofisk - Kårstø (Norway)	880	10.00
Oseberg Transport System (OTS) (oil) (2)	Oseberg - Sture (Norway)	115	22.23
Zeepipe phases 1 & 2 (gas) (1)	Troll - Sleipner - Zeebrugge (Belgium)	1,300	8.00
Europipe (gas)	Troll - Sleipner - Emden (Germany)	600	8.00
Frostpipe (oil)	Frigg - Oseberg (Norway)	82	13.75
Sleipner East NGL pipeline (oil)	Sleipner - Kårstø (Norway)	245	10.00
Troll Oil 1 & 2	Troll - Mongstad (Norway)	85	9.73
Franpipe (gas) (1)	Draupner (16/11 S/E) - Dunkerque (France)	840	11.65
Netra (gas)	Etzel (Germany) - Salzwedel (Germany)	292	6.20
Åsgard Transport (gas) (3)	Åsgard - Kårstø (Norway)	730	9.60
Europipe 2 (gas)	Kårstø (Norway) - Dornum (Germany)	653	15.36
Oseberg Gas Transport (OGT) (2) (3)	Oseberg - Heimdal (Norway)	108	22.23
Vesterled (2) (4)	Heimdal - Frigg (Norway)	45	17.33

(1) Hydro has a 4.63 percent interest in the terminals at Emden, 5.3 percent interest in the Teesside oil and condensate terminal, a 32.87 percent interest in the St. Fergus gas terminal, a 5.39 percent interest in the gas terminal at Zeebrugge and a 7.57 percent interest in the Dunkerque gas terminal.

(2) Hydro is operator for the OTS, OGT and Vesterled.

(3) Pipeline is under construction.

(4) Construction is planned to start in autumn 2000.

Due to the acquisition of Saga, Hydro's interests in most of the oil and gas pipelines have increased in 1999. In general, Hydro's transportation interests are approximately equal to Hydro's shares in the oil and gas fields on which the transportation systems were based. The pipelines can also be used for transportation of oil and gas for other than the owning companies, and this will become increasingly important as new fields are developed in the vicinity of existing infrastructure.

The carrying value of Hydro's shares in transportation systems and associated terminal and processing facilities was NOK 12 billion at the end of 1999. Most transport agreements are based on a tariff per unit transported which covers the operating costs of the transport system plus a return on the capital invested. The Norwegian government must approve the tariff.

The first phase of the Zeepipe gas pipeline, from the Sleipner field to Zeebrugge in Belgium, was completed in 1993. The Europipe gas pipeline to Emden in Germany was completed in 1995. Phase 2A and 2B of Zeepipe, to link the Zeepipe and Europipe pipelines to the Troll field, were completed in 1996 and 1997, respectively.

In 1998, the Franpipe pipeline from Sleipner to Dunkerque was completed. Further, a pipeline from the Kårstø terminal to Dornum in northern Germany, the Europipe 2 pipeline, started operations in the autumn of 1999.

In conjunction with the further development of the Ekofisk fields (Ekofisk II), the license periods for the oil pipeline to Teesside in the UK and for the gas pipeline to Emden in Germany were extended to the year 2028. As compensation for extending the license period, the Norwegian state and Statoil will increase their interest to 60 percent in the gas transport and terminal system in 2005 and further to 70 percent in 2007. Hydro's share in the gas chain will therefore be reduced from 4.63 to 3.93 percent in 2005, and further reduced to 3.239 percent in 2007.

In 1999, approximately 459,000 barrels of oil were transported per day through the Oseberg Transport System (OTS). Hydro's share in OTS increased from 13.68 to 22.3 percent as a result of the Saga acquisition.

As a result of the Saga acquisition, Hydro became an owner in Vestprosess DA (VP) with an interest share of 17 percent. VP is a transportation system for condensate and NGL from Kollsnes and Sture to Mongstad, and a new fractioning plant for refining of these products at the Mongstad plant. VP started operations in October 1999. VP transports and processes products "as produced" from the Troll facilities at

Kollsnes, from OTS-The Sture Crude Upgrading Project at Sture and from the Mongstad refinery. Necessary agreements with Kollsnes, Sture and Mongstad have been established. Transportation and processing agreements with initial shipper licences are currently in the process of being finalized.

A plan for installation and operation, covering the upgrade of the Sture oil terminal, was approved by the authorities in 1998. The upgrade will allow for further processing of Oseberg crude oil and allow for the production of a propane and butane mix (LPG). The Sture Crude Upgrading Project (SCUP) facilities started up as planned 1 December, 1999. The SCUP facilities are built for and include three entities/owner groups: OTS, Hydro as 100 percent owner of the LPG facilities, and Vestprosess DA.

The Åsgard Transport system is under construction and is expected to be operational in the year 2000. Åsgard Transport will transport gas from the Åsgard field to the Kårstø terminal for processing. A major expansion of the process capacity of the Kårstø terminal is also under construction and is scheduled for completion in year 2000. Total investment is expected to be NOK 8.3 billion. Hydro's share of the investment is expected to be approximately NOK 1.2 billion. Through the acquisition of Saga, Hydro increased its share in Åsgard Transport from 2.6 to 9.6 percent

Hydro is operator of the Oseberg Gas Transport (OGT) system, which will export gas from the Oseberg field to Heimdal for further transportation through the Statpipe or Vesterled system. The authorities approved a Plan for Investment and Operations in the spring of 1999. The total investments are expected to be NOK 1.6 billion, including OGT's share of the Heimdal Riser Platform. Hydro's share of the investment is expected to be approximately NOK 400 million. The OGT system will be ready for start up 1 October, 2000.

Hydro is also operator of the Vesterled system, which will export gas from Heimdal to St. Fergus in the UK via a new connection to the existing Frigg Norwegian Pipeline. A Plan for Investment and Operations was submitted to the authorities in December 1999, and is expected to be approved in May 2000.

Vesterled will comprise the new 45 km pipeline connection, Vesterled's share of the Heimdal Riser Platform and the Frigg Norwegian Pipeline, which will be merged into the Vesterled. The total investments are estimated to be NOK 935 million. Hydro's share will be approximately NOK 215 million. Vesterled is planned to be ready for start up 1 October, 2002.

Crude oil from Hibernia is transported from the field in two dedicated offshore loading tankers partly direct to market and partly via a transshipment terminal at Whiffen Head, Newfoundland. Hydro has a 14.9 percent interest in the long-term timecharter for one of these tankers. Timecharter for a third tanker, in which Hydro has a 12.7 percent interest, was entered into in 1998. This tanker is under construction and will start operation concurrently with start of production from the Terra Nova field. The terminal is owned by Newfoundland Transshipment Ltd. Hydro has a five percent shareholder interest in this company and has entered into a long-term obligation for use of capacity at the terminal. The terminal will be expanded for Terra Nova. When Terra Nova starts production, the total tanker capacity will be operated in a pool as one regional transportation arrangement.

### **Competitive conditions**

In December 1997, the European Union (EU) approved the Gas Market Directive, which aims to liberalize the European gas market. Being a major natural gas exporter to the European market, as well as a major natural gas consumer, the consequences for Hydro are likely to be twofold. As an exporter of gas, there will be a need to adapt to changing market conditions with potentially more players and competition in the market. However, increased competition in the end user market could eventually lead to reduced energy costs for Hydro facilities situated in the EU. In addition, changes in the natural gas market could provide new business opportunities upon which Hydro may also capitalize.

Norway is not a member of the EU, but the directive is relevant for Hydro's Norwegian operations because Norway participates in the European Single Market through the European Economic Area (EEA) agreement. The directive is to be implemented by the EEA nations by the end of year 2000.

The directive prescribes that a minimum of 20 percent of national markets should be opened for competition, growing to at least 33 percent after ten years. The most important policy tool will be the introduction of Third Party Access (TPA) in downstream transportation systems for natural gas undertakings, power plants and large industrial customers.

### **Norwegian Government Regulations - Oil and gas**

Hydro is subject to Government regulations of various kinds in different countries as are other companies in similar businesses. In particular, the oil and gas business in Norway is governed by laws defining the rights of the government and license holders. Licenses were for many years subject to a minimum state participation of 50 percent and to sliding

scale provisions under which the Norwegian government could increase its share in any license varying with the planned production profile for that license. The sliding scale provisions have been abolished for licenses granted after 1 January, 1993. Furthermore the Norwegian government has decided that the sliding scale option shall not be exercised for licenses that have not yet made a development decision. In addition, the Norwegian government's participation in new licenses is no longer fixed at 50 percent and may vary from license to license. In the 15th licensing round in 1996, the maximum government participation was 35 percent.

For licenses granted after 1 July, 1985, the authorities can delay development of a field indefinitely pursuant to the Norwegian Petroleum Act. Should development be delayed, licensees can apply for an automatic extension of the license term corresponding to the delay period. For licenses granted before 1 July, 1985, the conditions in the specific license apply.

According to the Norwegian Petroleum Act, the Norwegian government may, if vital national interests are at stake, direct the oil companies to reduce petroleum production. Due regard must be given to long-term gas supply agreements. The Norwegian government exercised its rights under the Act in the period from 1987 to 1990. In the period from 30 June, 1990 to the second tertial 1998, the Norwegian government imposed no limitations on petroleum production. Since the second tertial 1998, production regulation has been effective with the aim to reduce oil production by three percent relative to previous production plans reported to the authorities. Any prolongation or reduction of Norwegian production cuts after the first quarter of 2000 will be assessed in light of the market development.

The Norwegian government can require that licensees participate in the dismantlement and removal of offshore oil and gas installations (platforms) when production ceases or at the expiration of the concessions, whichever occurs first. If the Norwegian government requires, dismantlement and removal costs are not tax deductible. The Norwegian government is, however, required to reimburse participants for a portion of these costs. Costs will be reimbursed in the same proportion as the accumulated petroleum taxes paid by each company over the life of the field in relation to the accumulated petroleum tax base for the same period. Hence, with the tax regime applicable to the Norwegian petroleum industry, the Norwegian government would carry the larger part of such costs. The cost of any dismantlement and removal will vary depending on the type of installation and the decision of the authorities regarding the timing, type and degree of dismantlement and removal.

The Norwegian government has the option to take ownership of an installation at no cost to it at the end of the applicable concession period. In such case, the Norwegian government would assume total responsibility for any dismantlement and removal of the installation. As a basis for estimating Hydro's future participation in well closure costs and dismantlement and Hydro's future abandonment and dismantlement costs, management evaluates Norwegian and international laws, treaties and practices, and the estimated value of recoverable oil and gas reserves that are expected to exist at the end of the various concession periods.

Licensees are responsible for all plugging and well closure costs of individual wells on the Norwegian continental shelf. These costs are treated as a deductible expense for both ordinary tax and special petroleum tax purposes.

Accruals for both estimated future abandonment and dismantlement costs and plugging and well closure costs are recorded using the unit-of-production method.

Hydro's share of the estimated total cost of well closure costs and decommissioning and removal of the installations is approximately NOK 4,052 million. As of 31 December, 1999, Hydro had accrued NOK 2,041 million for well closure and abandonment costs for offshore installations. In 1999, NOK 542 million was charged to expense. In 1998 and 1997 charges to expense were NOK 277 million and NOK 300 million, respectively. In 1999 and 1998 expense included additional accruals due to increased cost estimates for several fields and a shorter expected production period for the Frigg area.

### Taxation in Norway

**Ordinary Taxes.** Profits from domestic oil production are subject to Norwegian income taxes at the rate of 28 percent. Profits from domestic oil production are subject to Norwegian income taxes at the rate of 28 percent. The maximum depreciation rate for investments in oil and gas production facilities is 16 2/3 percent per year for tax purposes. The depreciation starts when expenditures are incurred. Deductions for exploration and other costs are given in the year they are incurred. Revenue for tax purposes is based on market norm prices (as determined on a quarterly basis by a Government appointed board) for crude oil and on realized prices for gas and other primary products. A company's income and costs connected with all offshore petroleum projects are assessed on a consolidated company basis.

**Special Petroleum Tax.** This tax is levied on net income from oil and gas activities on the Norwegian continental shelf less an "uplift." The tax rate of the special petroleum tax is 50 percent (in addition to the corporate tax of 28 percent.) For

capital expenditures incurred after 1 January, 1992, the "uplift" is equivalent to five percent per year of the original amount of the capital expenditure for a six year period starting when the expenditure occurs. Unused "uplift" can be carried forward indefinitely.

**Thin Capitalization Rules.** As of 1 January, 1994, thin capitalization rules were adopted for companies operating on the Norwegian continental shelf. Under the thin capitalization rules, the portion of interest expense which is deductible for ordinary and special petroleum taxes will be reduced if debt to total capital exceeds 80 percent. Hydro is not presently affected by these rules.

**Carbon Dioxide Emissions Tax.** Beginning 1 January, 1991, the Norwegian government introduced a tax for carbon dioxide (CO<sub>2</sub>) emissions from platforms. As of 1 January, 1999, the tax was decreased from NOK 1.07 to NOK 0.89 per standard cubic meter gas flared or used for fuel purposes offshore. The tax has been further reduced to NOK 0.70 per standard cubic meter as of 1 January, 2000.

The CO<sub>2</sub> tax, which is treated as part of operating costs, is a deductible expense for both ordinary and special petroleum income taxes.

**Royalty.** A Norwegian government royalty is applied to fields approved for development prior to 1 January, 1986. The royalty rates vary from 10 percent to 16 percent for oil and increases with the level of production. Gullfaks and Oseberg are now the only licenses held by Hydro for which royalty is applicable. For these fields royalty will be gradually reduced for a period of six years, commencing 1 January, 2000.

**Area Fee.** The area fee is a fee per square kilometer of license area. The rates increase over time, beginning with the award of the license. The rate structure was modified and the rate level reduced in 1998. As from 1 January, 1999, the area fee is not applied during the first years after the license is awarded. The rate then increases to a maximum of NOK 70,000 per square kilometer per year approximately 16 years after the award of the exploration license.

### Taxation in United Kingdom

**Petroleum Revenue Tax.** The Petroleum Revenue Tax (PRT) is assessed on a field by field basis. A ring fence around each project precludes the ability to offset losses from one field against the PRT bill of another field. PRT is currently assessed on the basis of six-month periods. The tax rate is 50%. PRT has been abolished for fields approved for development after March 16, 1993. In Hydro's portfolio, Alba, Gryphon and the fields in the Thistle area are subject to PRT. Britannia is not subject to PRT. PTR has the effect of taxing the more profitable fields while allowing sufficient

incentive to develop marginal fields. The effective rate of PRT may, therefore, vary markedly from one field to another.

PRT is assessed on total field revenues less deductions for royalty, operating costs and allowable capital expenditures plus any uplift. Certain capital expenditures are currently uplifted at a rate of 35%. When a field has reached "payback," any capital expenditures in subsequent periods will not qualify for uplift. Payback is defined as the point in time when accumulated income exceeds accumulated costs.

Further deductions can be taken for losses carried forward plus the cash equivalent of the "oil allowance". The maximum oil allowance per chargeable period per field equals 500,000 tonnes with an accumulated allowance of 10 million tonnes for fields approved for development prior to 1982, and 20 million tonnes for fields approved for development between 1982 and 1993. Oil allowance not used in any period may be carried forward as long as the field produces oil, but the maximum oil allowance per chargeable period still applies to each such period.

To benefit less profitable fields, there is an upper limit known as a "safeguard" on the amount of PRT payable. This is calculated entirely separately, and the payment is the lower of PRT calculated under the general rule and the tax payable as calculated for safeguard purposes. Safeguard applies for a period up to payback together with half as many chargeable periods again.

**Corporation Tax.** CT is charged on a company basis and not on a field basis. It is, therefore, possible to offset losses arising in one field against profits from another field. CT is assessed on a fiscal year basis. It is currently charged at a rate of 30% of the Company's total revenues less operating costs, exploration costs, abandonment costs and depreciation for tax purposes. Furthermore, PRT payable is deducted when calculating CT profits.

**Royalty.** A royalty is payable at 12.5% of the value of production from each license, less certain cost deductions. Fields given development consent after March 31, 1982 are exempt. For Hydro, only the Thistle-fields are subject to royalty.

## REFINING AND MARKETING

The activities of Refining and Marketing include marketing of crude oil, natural gas liquids and refined oil products. Hydro has an interest in the Scanraff refinery in Lysekil, Sweden, and has a wholly owned retail marketing network for gasoline and oil products in Sweden. Through its alliance in the 50 percent-owned Hydro Texaco, Hydro participates in retail marketing activities in Norway, Denmark and the Baltic countries.

### Refining and Marketing

(000's tonnes)	1999	1998	1997
<b>Refining</b>			
Gasoline	969	856	926
Diesel fuels, gasoils, etc.	880	836	902
Heavy fuel oil	476	481	514
Other	59	49	69
Total refining	2,384	2,222	2,411
<b>Trading</b>			
Crude oil/NGL	11,927	11,453	11,341
Oil products	2,660	2,686	2,822
<b>Distribution and sales <sup>1)</sup></b>			
(000's cubic metres)			
Gasoline	635	634	647
Gas oil	823	870	851

<sup>1)</sup> Excludes Hydro Texaco

International trading activities include the sale of Hydro's crude oil, refined oil products and NGL production, as well as the supply of NGL feedstock to several of Hydro's fertilizer and petrochemical plants. The volumes of these activities have increased proportionately to Hydro's oil and gas production over the past years.

Hydro holds a 21.5 percent share in the Scanraff refinery and a 50 percent share in the adjacent catalytic cracker for upgrading of products (Scanracker). Scanraff is one of Europe's most modern refineries with a crude oil capacity of ten million tonnes per year, of which Hydro's share in 1999 corresponded to about 2.4 million tonnes of finished products. This represents an increase of approximately .2 million tonnes from 1998 attributable to Scanraff's maintenance shutdown in 1998 for approximately five weeks. A substantial portion of Hydro's share of refined oil products is sold through Hydro's affiliated retail outlets in Scandinavia. Effective 1 January, 1995, Hydro and Texaco Inc. merged their retail marketing and distribution systems in Norway and Denmark in a joint venture in which each owner has a 50 percent interest. In 1999, Hydro Texaco had a 18.6 percent market share for gasoline in Norway and 15.6 percent in Denmark. The joint venture operates 411 gasoline outlets in Norway, 504 in Denmark and 30 in the Baltics.

In 1999, Hydro's retail network in Sweden comprised 592 gasoline outlets and 114 Hydro Diesel Service (HDS) site. Since its 1996 acquisition of Uno-X, a Swedish gasoline chain, Hydro has increased its Swedish market share in gasoline to 11.9 percent.

Both directly and through the Hydro Texaco joint venture, Hydro is marketing a full range of complementary energy products to end users in Scandinavia, including oil products, electricity, biodiesel for cars and bioenergy for heating.

Future consumption of oil products will depend on the general economic development in Scandinavia as well as the prevailing duty and tax policy. A moderate growth in fuel consumption is expected. However, consumption of heating oil is expected to continue to decline.

Capital expenditures in 1999 were NOK 79 million and related to the maintenance of depots and existing retail network and new-build outlets. Capital expenditures in 1998 were NOK 136 million and primarily related to capital expended for the re-identification of Uno-X stations that were acquired in 1996 and some maintenance of existing retail stations.

With effect from 1 January, 2000, oil and gas trading, refining activities and sale of dry gas will be transferred to Energy. The remaining oil marketing activities in Sweden, including Hydro's joint venture Hydro Texaco, will be reported under a separate segment named Oil Marketing.

## ENERGY

Energy's activities include the production and sale of electricity generated at hydro-electric power plants in Norway, primarily for use in Hydro's own production facilities. Energy is also responsible for acquiring additional power to meet the needs of Hydro's production facilities in Norway.

(in TWh)	1999	1998	1997
Internally generated power	10.2	8.8	9.2
Total power available	29.7	24.0	23.6

The total amount of power available in 1999, either produced by Hydro or contracted, was 29.7 TWh, compared with 24 TWh and 23.6 TWh in 1998 and 1997, respectively. The increase in 1999 was primarily due to higher water reservoir levels resulting in increased power production and increased trading activity due to favorable market conditions. In 1999, Hydro consumed approximately 45 percent of the available power, mainly for the production of light metals.

Consumption varies somewhat from year to year depending upon the production levels in Hydro's light metals and other production facilities. In 1999, about 10.2 TWh was produced by Hydro's own power plants or plants in which Hydro has an equity interest. This compares with 8.8 TWh in 1998 and 9.2 TWh in 1997. In addition, in 1999 Hydro received 0.2 TWh from plants that it operates but in which it has no ownership interest. These supplies are fully integrated into the national electric power grid (inter-connection and power sharing) system, which further secures supplies and gives added flexibility. Hydro is, therefore, in a good position to purchase or sell surplus power from or to other producers and utilities.

In May 1998, Hydro obtained a gas shipping license providing Hydro the right to trade and ship gas in the UK market. Specifically, Hydro acquired a transport right for 0.5 billion cubic meters of gas in the Interconnector UK Ltd. between the UK and Belgium. Operations began on 1 October, 1998 with gas trading between the continent and the UK. With the liberalization of the European energy markets, Energy has established an operating unit in Brussels. The primary function of the unit is to further develop Hydro's downstream activities based on natural gas and the generation, marketing and trading of electricity, as well as to coordinate the sourcing of electricity and natural gas for other Hydro divisions. In view of these developments, Hydro has shifted its focus from electricity trading to gas trading due to higher margins associated with the latter. (See "Quantitative and Qualitative Disclosures About Market Risk - Risk Management - Commodity Price Risk - Electricity" for additional information.) Through its ownership in the German Netra pipeline, Energy is shipping gas from Emden to

Salzwedel in Germany.

Energy has clear title concessions which do not revert to the Norwegian government for power plants with a generating capacity of 2.9 TWh per year. This represents approximately 34 percent of its normal production capacity. The remaining production capacity will revert to the Norwegian government without compensation after the expiration of the concessions. This will take place in the period between 2022 and 2049. In 1995, Hydro reached an agreement with the Norwegian government that extended the concession periods for four power plants through the year 2046 for compensation totaling NOK 1.2 billion paid by Hydro in 1996. The plants have a combined annual production of around 3 TWh. See the additional discussion of the concession laws regulating the ownership of hydro-electric power plants under Item 2 - "Description of Property."

Energy has the responsibility to source necessary electric power to Hydro's plants in Norway. To meet those needs Energy has entered into long-term purchase contracts, the majority of which are with the state-owned power company, Statkraft. These long-term contracts provide assurance of availability of a certain quantity of power to Hydro's power-intensive industries. The contracts are considered favorable to Hydro.

In 1993 Energy entered into agreements with Statkraft for an extension through the year 2010 of certain purchase contracts scheduled to expire in 1996. The contracts provide for 1.6 TWh per year at a variable price linked to the price of aluminum and 0.7 TWh per year at a competitive price with slowly rising prices in real terms. During 1995, Hydro entered into a new agreement with Statkraft, which included a renegotiation, extending the term of existing contracts from 1998 to 2010. As part of that agreement, Hydro will receive an additional 0.45 TWh on similar terms from 2007 to 2010.

In 1997, Hydro entered into an agreement with Statkraft to purchase electricity from 2000 to 2020. This agreement covers the entire portfolio of the existing contracts described above and other long-term purchase contracts providing for a total of 5.4 TWh per year. The agreement extended the term of these contracts, which previously were to expire between 2007 and 2010, to 2020. An additional 1 TWh annually was secured from 2000 to 2020. The price for these deliveries under the new contracts are based on a price formula which adjusts for real terms, and therefore, will be higher than in the present contracts.

Hydro owns one-third of the shares in Naturkraft AS, which obtained concessions to build two gas-fired power plants in Western Norway. The owners decided in 1999 not to build the plants based on the restrictive emission permit for CO<sub>2</sub> which was given in January 1999. A renewed debate on

concession requirements for gas-fired power plants is expected in the Norwegian Parliament in the spring session of 2000.

In 1998, Hydro launched the idea of a hydrogen-fired power plant concept, producing low CO<sub>2</sub> emissions. The concept continues to be considered technically feasible, but further work is needed in order to improve the profitability of the project.

The Norwegian and Swedish energy markets have been deregulated. A Nordic energy exchange was established on 1 January, 1996, with Sweden and Norway as participants. Finland joined in June 1998. Border tariffs between the countries were also abolished.

Capital expenditures in 1999 were NOK 57 million. This included investments in upgrading of hydro power plants and extension of the Netra pipeline. Capital expenditures in 1998 of NOK 127 million primarily related to investments in the peat pellets factory in The Republic of Ireland.

#### **Government regulations (Norway)**

In 1996, a tax law was enacted in Norway for hydro-electric power plants which came into effect as of 1 January, 1997. In addition to ordinary income tax, the major provisions of the law called for the introduction of a surtax. The existing production tax was abolished as of 1 January, 1998. The law also provides for an upward revision of the tax depreciation basis of assets. The higher basis will be deductible in future years in the form of increased tax depreciation both for ordinary income tax and surtax purposes. For additional information see "Item 9 - Management's Discussion and Analysis of Financial Condition and Results of Operations - 1999 Compared with 1998 and 1998 Compared with 1997 - Taxes and net income."

#### **Ordinary Taxes (Norway)**

Profits from hydro-electric power production are subject to ordinary Norwegian income taxation at a rate of 28 percent. Fixed assets are depreciated for tax purposes over 67 years or concession period, if shorter (dams and tunnels); 40 years (machinery); and at a 5 percent declining balance (transmission and other electrical equipment). The depreciation base of fixed assets was revalued as of 1 January, 1997. The tax law described above requires the depreciation base to be revalued at the greater of replacement cost reduced by tax depreciation or the historical cost reduced by tax depreciation. Furthermore, immaterial assets and goodwill are also deductible through tax depreciation for assets that revert to the Norwegian government.

A company's ordinary income tax for hydro-electric power plants is assessed on an aggregated basis and may be tax consolidated with other activities in Norway.

#### **Surtax on hydro-electric power plants (Norway)**

The surtax rate is 27 percent. The surtax is assessed individually for each hydro-electric power plant (ring-fenced taxation). Unlike the ordinary income tax, finance costs are not deductible, but to compensate for this, an uplift is deductible. Uplift is a special tax deduction computed as a percentage of the average tax basis of fixed assets (including immaterial assets and goodwill) for a given year. The percentage, which is determined annually by the authorities, essentially provides for a certain return on capital which is not subject to surtax. The percentage used to calculate the uplift for 1999 was 9.1 percent.

Revenue for surtax purposes is based on market spot prices with certain exceptions. Revenues from power supplies used for a company's own industrial production facilities and from sales under certain long-term contracts are not subject to market spot price adjustments. As most of Hydro's hydro-electric production is used for its own production or sold under qualifying contracts, only a minor portion of the production will be subject to taxation based on spot prices at the time of production.

Losses can be carried forward indefinitely or until the plant reverts to the State. Losses carried forward are adjusted for inflation and the uplift percentage each year.

Apart from the uplift deduction, the provisions for finance costs and the use of spot prices for revenue measurement, and the elements of the ordinary tax and surtax base are identical.

#### **Natural resource tax (Norway)**

A natural resource tax related to hydro-generated electricity became effective from 1 January, 1997. The rate for 1999 is NOK 0.013 per kWh. The tax is fully deductible from the Group's ordinary income tax.

## **ALUMINIUM METAL PRODUCTS**

Hydro is one of the largest European producers of primary aluminum with growing remelt activities. Hydro's goal is to maintain its status as a reliable and long-term supplier of raw materials, aluminum and semi-fabricated products.

In 1999, capital expenditures for Aluminum Metal Products were NOK 826 million, compared with NOK 924 million in 1998. The upgrade of the Årdal Carbon plant and the increase of the cast house capacity in the Årdal Metal plant were the two largest investment projects in 1999.

#### **Trading and Marketing**

As part of its strategy to be a full-service aluminum supplier, Hydro engages in trading of aluminum and related raw materials. Aluminum trading activities consist of both physical metal purchases and sales, as well as trading on the London Metal Exchange (LME). For additional information on derivative commodity instruments, see "Management's Discussion and Analysis - Risk Management."

In 1999, Hydro entered in to a 10-year metal purchase contract for approximately one million tonnes of primary aluminum from Albras in Northern Brazil. The aluminum will be marketed through Hydro's world wide metal supply system.

#### **Aluminum production**

(tonnes)	1999	1998	1997
<b>PRIMARY ALUMINUM</b>			
Karmøy	<b>267,000</b>	267,000	226,000
Årdal	<b>201,000</b>	197,000	181,000
Sunddal	<b>149,000</b>	146,000	142,000
Høyanger	<b>71,000</b>	70,000	61,000
Sørå			
(Hydro's 49.9% share)	<b>59,000</b>	56,000	53,000
Slovalco			
(Hydro's 10% share)	<b>11,000</b>	11,000	11,000
<b>Total primary aluminum production</b>	<b>758,000</b>	747,000	674,000
<b>REMELTING</b>	<b>300,000</b>	204,000	201,000
Average price primary aluminum (USD/tonne per London Metal Exchange 3-month price)	<b>1,387</b>	1,380	1,619

#### **Raw Materials**

Alumina and energy are the major raw materials for primary aluminum production. Hydro has a 35 percent interest in the Alpart alumina refinery in Jamaica to secure a portion of its long-term raw material supply. The remaining 65 percent is owned by Kaiser Aluminum Corporation. The Alpart refinery has a production capacity of 1.5 million tonnes per year. The

Alpart refinery provided Hydro with 530,000 tonnes of alumina in 1999. Alpart has secured long-term supplies of bauxite, the raw material used in alumina production, from local sources.

In January 2000 Hydro purchased a 25.3 percent share in the Alunorte alumina refinery in Brazil. This will provide 375,000 tonnes of alumina starting in year 2000. The Alunorte refinery processes bauxite from the Tombetas mine in Brazil. Hydro already has an ownership interest in the mining company MRN, which extracts bauxite from the Tombetas mine.

In India, Hydro and its partners (Alcan Aluminium and Indian Aluminium Company Limited), are performing a study regarding the possible construction in the state of Orissa of an alumina plant with a capacity of 1.2 million tonnes per year (the Utkal project). Hydro has 45 percent stake in the Utkal project.

Alpart and Alunorte serve as the source of about 60 percent of Hydro's alumina required for its primary metal production. Alumina requirements in excess of this quantity are secured through long-term contracts.

### **Production**

Hydro produces its primary aluminum at wholly-owned smelters at Karmøy, Høyanger, Sunndal and Årdal in Norway. The Norwegian smelters principally use Hydro's own production of hydro-electric power. Hydro also produces primary aluminum via its 49.9 percent interest in Sør-Norge Aluminium A/S (Søral) and its 14.5 percent interest in Slovalco, in Slovakia. Hydro increased its interest in Slovalco from 10 percent to 14.5 percent in December 1999.

Hydro also has several commercial contracts, including an off take agreement with Slovalco, which in 1999 supplied Hydro with 74,000 tonnes of primary aluminum in excess of the tonnage received through its ownership interest in the smelter. A tolling agreement with an American smelter provides an additional 151,000 tonnes per year, which is primarily shipped to the US and Japan. Hydro also has a long-term collaboration agreement with Talum, a primary metal producer in Slovenia, which provides Hydro with 40,000 tonnes of aluminum per year.

Hydro has signed a Declaration with The Ministry of Industry and Commerce of the government of Iceland and the National Power Company under which it will perform a study to establish the viability of a primary aluminum plant in Reydarfjörður, located on the east coast of Iceland. The project is a joint venture with Icelandic investors.

Production of primary aluminum was 758,000 tonnes in

1999, an increase of 11,000 tonnes compared with 1998. All production capacity was fully utilized during 1999.

Hydro has increased its market position through remelt activities and long-term supply agreements. Hydro remelted approximately 300,000 tonnes of metal in 1999 in its remelt facilities in Clervaux, Luxembourg; Rackwitz, Germany; Luce, France; as well as at its metal plants in Norway.

At the end of 1997, Hydro strengthened its position as a supplier of extrusion ingot by purchasing a remelt facility in Rackwitz, Germany, with remelt production in 1998 of 23,000 tonnes. Production capacity at the end of 1999 was 42,000 tonnes.

Hydro will build a plant for the remelting of aluminum scrap in Hendersen, Kentucky. The plant, which will have an initial annual capacity of 90,000 tonnes, will commence operation in 2001. Utilizing state-of-the-art technology, the plant will produce a product interchangeable with primary aluminum billet produced in smelters.

### **Competitive Conditions**

Most of Hydro's production of primary aluminum is sold in Western Europe.

Demand for aluminum has historically been very cyclical in nature and closely tied to general economic conditions, which influence the industrial production, building and transportation industries.

Important structural changes are taking place within the aluminium industry. The ownership concentration, defined as the share of primary aluminium capacity, held by the six major companies, is increasing. The share was 43 percent in 1995, is 50 percent today, and should be 55 percent following the completion of the Alcan/Pechiney/Algroup (Alusuisse) merger and Alcoa's take-over of Reynolds. At the same time government involvement is dropping, from 25 percent in 1995 to 15 percent today. This trend is likely to continue. On the alumina side, Alcoa is an emerging dominant supplier to the third party market. Including the effect of the Reynolds acquisition, Alcoa would have a market share of more than 50 percent.

For Hydro, this market development creates challenges in terms of increased need for cost reductions. However, the positive aspect is the potential for improved profitability within this business. In this context, Hydro will take advantage of its multi-sourcing concept, as well as product decommo-ditization strategy, for Europe and other parts of the world, such as the US.

As part of a multi-sourcing concept and a desire to offer an

extended product package to customers (scrap remelt service) Hydro is establishing remelt plants for conversion of extrusion scrap into extrusion billets in major markets in Europe. The same strategy is now being implemented in the US, the first step being the remelt plant now under construction in Henderson, Kentucky with a capacity of 60,000 tonnes.

## ALUMINIUM EXTRUSION

Aluminium Extrusion is the world's second largest extruder of aluminum in terms of volume, and clear market leader in aluminum extrusions in Europe. In recent years, Hydro has increased its focus on downstream aluminum products by expanding its extrusion production facilities. Aluminium Extrusion has its own plants in all major markets in Europe and the Americas. Also, Aluminium Extrusion has international joint ventures in Asia and South Africa. It is the world market leader in aluminum tubing for automotive heat transfer applications. Aluminium Extrusion has its own companies for the development, production and marketing of its building system brands WICONA®, DOMAL® and HYDRO MANUEL FERREIRA® in Europe and has more than 60 business units in over 20 countries worldwide. There are 8,000 employees in Aluminium Extrusion.

The building industry currently represents more than half of the consumption of aluminum extrusions, while the transportation sector has and will continue to offer interesting growth potential for aluminum extrusion applications. The low weight and recycling qualities of aluminum provide advantages over competing materials. Aluminium Extrusion is collaborating with car manufacturers and first tier automotive suppliers on several projects to develop aluminum components for heat transfer systems. Supplying the automotive industry requires meeting demanding technical standards while pioneering new technology in a very price competitive market with competition from alternative materials. The Heat Transfer business area of Aluminium Extrusion has a technical center for product and process development in Denmark and is strongly supported by highly competent research and development environments both within Aluminium Extrusion and Aluminium Metal Products.

As of 1 March 2000, the Baltimore-based Wells Aluminium Corporation is a part of Aluminium Extrusion. Wells has 7 plants in 6 states, supplying soft alloy extrusions and fabricated and finished aluminium components, and with leadership positions in a number of attractive market niches. More than 50 percent of the extrusions produced by Wells

incorporate value-added fabrication and/or finishing. The company will form a new business unit "Extrusion North America." Wells has an extruded products production capacity of approximately 75,000 tonnes.

### Aluminium Extrusion Production

(tonnes)	1999	1998	1997
Extrusion products	<b>376,000</b>	353,000	327,000
Remelting	<b>25,000</b>	68,000	63,000

In 1999, capital expenditures for Aluminium Extrusion were NOK 467 million compared with NOK 617 million in 1998. Capital expenditures included significant upgrading of manufacturing facilities at six plants. Market positions of the building systems unit were strengthened by taking complete ownership of operations in Austria, the Czech Republic and Hungary and acquiring a building systems company in Switzerland. The Heat Transfer unit opened a new welded tube plant in the US. The enhanced focus on marine applications of the extrusion international unit, driven by the growing market for use of light metals in ferries and cruise ships, was strengthened by the merger of the engineering unit Hydro Aluminium Maritime with the manufacturing company Marine Aluminium to form Hydro Marine Aluminium in Norway with a 70 percent Hydro participation.

The firm backlog for total extruded products amounted to NOK 1,237 million at the end of 1999 compared to NOK 1,069 million at the end of 1998.

### Raw Materials and Production

Aluminium Extrusion had three remelt operations in Europe in 1999, which are part of its operational support. Ownership of a fourth remelt operation was transferred to Aluminium Metal Products in 1999. Approximately 25,000 tonnes of metal was remelted in 1999 compared to 27,000 tonnes remelted at the same three plants in 1998.

### Competitive Conditions

A major reason for Hydro's strong competitive position in the extruded products sector is the high degree of customer focus in a purposefully decentralized organization. Demand for aluminum has historically been very cyclical in nature. This is closely tied to the general economic conditions which influence the industrial production, building and transportation industries.

Worldwide aluminum extrusion consumption increased in 1999 at a higher rate than in 1998. Growth is expected to continue in 2000 at approximately the same level, although rates will vary in different regions compared to 1999.

## OTHER LIGHT METALS

**Aluminium Rolled Products'** (HARP) activities are primarily located in Norway and its production is sold to the European market. Rolled products are used within the packaging, transportation and building industries. HARP's production of rolled products was 127,000 tonnes in 1999 compared to 123,000 tonnes in 1998. In order to secure the supply of recycled aluminum, a 40 percent interest in ALKU-Metalle GmbH was acquired in November 1998. During the first quarter of 1999, Hydro shut down Hydroslug a.s.

**Automotive Structures** (HAST) is a global leading producer of aluminum extrusion based automotive applications within crash management, body structures and sub frames.

HAST has experienced a strong growth in the market place. Annual sales in 1999 for the extrusion based activity amounted to NOK 2 billion from 10 development and production facilities in 7 countries. HAST supplies products to the major car manufacturers in addition to several first and second tier suppliers. HAST received several large orders in 1999 for aluminium extrusion based bumper beams and deformation elements. Based on current orders, HAST is expected to achieve in a few years a market share in the car segment of around 25 percent for bumper beams in Europe and a market presence in North America. In addition, selected important orders were awarded to HAST for aluminium space frames in Europe and for sub frames in North America in 1999.

In July 1999, Gränges (now Sapa) and the Plastics Bumper Systems unit of HAST were merged. HAST has an interest of 40 percent in the new company Gränges Autoplastics AB (now Autoplastics). In March 2000, Hydro entered into an agreement to sell the shares in Autoplastics back to Gränges.

**Magnesium.** Hydro is the world's largest producer of primary magnesium and is also involved in recycling of magnesium. The western industry is composed of less than 10 producers while there are numerous small plants in China and three in the CIS. Hydro has plants for the production of primary magnesium in Norway and in Canada. Hydro owns 49 percent of the Canadian company, Meridian Technologies Inc., the world's leading magnesium die caster. The remaining 51 percent is held by our joint venture partner Teksid S.p.A., a subsidiary of Fiat S.p.A.

Hydro's combined production of primary and recycled magnesium was 113,000 tonnes in 1999 compared to 106,000 tonnes and 88,000 tonnes in 1998 and 1997, respectively.

An explosion at the Canadian DC-caster facility at the beginning of 1999 caused Hydro to abandon the production of DC products and develop a safer process using different technology as a replacement. At the end of 1999, a project was completed at Porsgrunn giving flexibility to produce either pure or alloy ingot.

## PLANT NUTRITION

Plant Nutrition's main activities are the production and sale of ammonia and fertilizer products, including nitrate fertilizer, complex fertilizer and urea, primarily in Europe with the trading of fertilizer principally outside Europe. Ammonia is the main intermediate in the production of nitrogen fertilizer.

Plant Nutrition is one of the world's largest producers of fertilizers and is the leading fertilizer producer in Western Europe.

In Trinidad and Tobago, Plant Nutrition has a 49 percent interest in two plants (Tringen) with a combined ammonia capacity of approximately 990,000 tonnes per year and a 100 percent interest in an ammonia plant with capacity of 305,000 tonnes per year. Hydro is committed to purchase approximately 700,000 tonnes of ammonia each year from Tringen up to the end of 2003 at fixed and variable prices.

The Farmland Hydro venture, in which each of the partners, Farmland and Hydro, owns 50 percent, has a phosphate fertilizer production plant in Green Bay, Florida. The plant produces diammonium phosphate (DAP) and mono-ammonium phosphate (MAP). The output is sold through Plant Nutrition's international distribution system, complementing its product range.

In 1999, capital expenditures were about NOK 1,096 million compared with NOK 1,960 million in 1998. A greater proportion of investments in 1999 related to maintenance of existing plants and upgrading of the ammonia plants in Le Havre and Porsgrunn. Investments in 1998 were mostly related to capacity expansion of the ammonia plant at Hydro Agri Trinidad, maintenance of existing plants, and the upgrade of the ammonia plant in Porsgrunn. The upgrade of Plant Nutrition's ammonia plant in Porsgrunn in Norway was completed during the summer of 1999. The upgrade increased capacity by approximately 70,000 tonnes.

New information systems and a further integration of the European organization have been implemented. Costs relating to the development and implementation of these new information systems peaked in 1998. The project was completed during the first half of 1999. One of several objectives of this project is to reduce overhead costs in the

future.

The phosphoric acid plant in Vlaardingen in the Netherlands was closed down, effective November 1999. The closure reduced the number of staff at Plant Nutrition's facility by approximately 85. The total costs related to the closure were NOK 195 million. Of this, NOK 120 million was charged to operating income in the fourth quarter of 1998 with the remainder charged in the first quarter of 1999.

### Marketing

Plant Nutrition has established a marketing network and distribution system in approximately 20 countries in Europe and an international marketing network and distribution system with chartered gas tankers, bulk blending plants, sales offices, terminals and bagging operations in more than 35 countries outside Europe. This smoothes seasonal demands for deliveries and allows for better capacity utilization.

Plant Nutrition owns 25 percent of Qatar Fertiliser Company S.A.Q. (Qafco) in Qatar. Plant Nutrition provides marketing support and technical assistance to Qafco. In 1994, it entered a ten year marketing agreement to sell ammonia and urea produced by Qafco on a commission basis. This provides the segment with additional products for markets outside Europe. In 1997, Qafco's urea capacity was nearly doubled by the start up of Qafco III, a new plant having a capacity of 730,000 tonnes for urea and 550,000 tonnes for ammonia. See Note 14 of "Notes to the Consolidated Financial Statements."

The fertilizer industry is characterized by strong seasonal fluctuations. Generally in Europe about 80 percent of annual fertilizer use occurs in a six to eight week season. In contrast, production takes place evenly throughout the year. Approximately 65-70 percent of the annual sales of Plant Nutrition's European production of fertilizers occurs in the period from September to March. In order to assure that the product is available at agricultural co-operatives and wholesalers in the peak period and to fully utilize the storage capacity of the total distribution system, Plant Nutrition seeks to sell products evenly throughout the year. This may require extension of credit terms during the off-season. The increase in working capital requirements for extended credit terms is normally offset by the alternative costs which would otherwise be incurred for carrying inventory during the off-season.

### Raw material consumption

(000's tonnes)	1999	1998	1997
Oil/gas (million toe)	3.5	3.6	4.0
Phosphate rock	1,150	1,250	1,200
Potassium	850	970	950

### Production

(000's tonnes)	1999	1998	1997
Ammonia (NH3)	3,300	3,400	3,650
Fertilizer products	11,300	11,600	11,900

### Raw Materials and Production

The most important raw materials for Plant Nutrition's fertilizer operations are natural gas, phosphate rock and potassium.

The annual consumption of oil and gas in the fertilizer business amounts to about 3.5 million tonnes of oil equivalents purchased mainly from external suppliers. Gas supplies to the European ammonia plants are mainly covered by contracts which provide for quarterly price adjustments to reflect movements in the price of oil products. In 1999, Plant Nutrition's ammonia production was 3.3 million tonnes. Ammonia consumption was approximately 3.8 million tonnes in 1999.

Phosphate rock is a key raw material for phosphate and complex fertilizers. Phosphate rock requirements are mainly covered through contracts at prevailing market rates. The annual consumption of phosphate rock will be significantly reduced as a consequence of the closure of the phosphoric acid plant in Vlaardingen. Plant Nutrition's requirements for phosphoric acid are covered through long-term contracts with external parties.

Plant Nutrition's major large scale fertilizer production facilities include: two plants each in Norway, Sweden and Germany; four plants each in France and Italy; one plant in the United Kingdom and one plant in the Netherlands. The bulk of the production equipment was put into operation during the 1980's and 1990's. At the end of 1999, Plant Nutrition's total production capacity was approximately 12 million tonnes per year.

Hydro entered into a joint venture with the South African chemicals company AECI in December 1999 for the production and marketing of NPK and liquid fertilizers in South Africa. The joint venture company, Kynoch, is the leader in the South African fertilizer market.

Capacity utilization levels in Plant Nutrition's fertilizer plants in 1999 were comparable to 1998 levels. Due to high stocks, production was reduced at some sites for a period in 1999.

## Fertilizer sales

(000's tonnes)	1999	1998	1997
Europe	<b>10,900</b>	10,700	11,200
Outside Europe	<b>8,200</b>	7,800	7,600
Total	<b>19,100</b>	18,500	18,800

## Competitive Conditions

In 1992, the members of the EU agreed upon the implementation of the CAP (Common Agriculture Policy) reform which included an agreement that 15 percent of acreage devoted to arable crops should be taken out of production during 1993-1996. By mid-1994, this reduction had been implemented. During this same period, imports of fertilizers into Western Europe from the former Soviet Union (FSU) and Eastern Europe were increasing. The set-aside acreage was reduced from the initial 15 percent to 12 percent for the 1994/1995 season, 10 percent for the 1995/1996 season, 5 percent for the 1996/1997 and 1997/1998 seasons and increased again to 10 percent for the 1998/1999 season. It will remain at the 10 percent level for the 1999/2000 season and for the foreseeable future.

Fertilizer consumption in Western Europe increased slightly during the 1994/1995, the 1995/1996 and the 1996/1997 season. In the 1997/1998 season, however, fertilizer consumption decreased slightly. Fertilizer deliveries in the 1998/1999 season increased slightly for nitrogen and fell for phosphate and potash. Fertilizer deliveries of nitrogen in the first half of the 1999/2000 season (July 1999 to December 1999) were slightly higher than the year before.

Imports of fertilizers into Western Europe have not changed significantly since 1995/96. Imports from FSU and Central Europe decreased, while imports from other regions increased somewhat. Preliminary estimates indicate that imports to Western Europe have decreased in the current fertilizer season as well.

Western European fertilizer producers raised production during 1996 as a result of improved operational efficiency. The higher level of production continued in 1997 and 1998.

Plant Nutrition's competitors include five major European producers which have individual market shares in the Western European market ranging from five to ten percent. Most have a strong presence in their home country and some sales in other European countries. There are also numerous small producers which only sell to local markets. Most imports into Western Europe originate in Eastern Europe or the FSU. The industry has surplus capacity in some product groups and in some periods during the year.

## Prices for fertilizer products

(average monthly quotations)	1999	1998	1996
Urea - FOB Middle East \$/tonne	79	93	136
Ammonia - C&F Western Europe \$/tonne	119	145	186
DAP - FOB Gulf of Mexico \$/tonne	178	203	200

As evident from the above table, prices for nitrogen fertilizer fell significantly during 1997, 1998, and 1999. China stopped importing urea in April 1997 and the negative effect of this was worsened by the financial crisis in south east Asia. This strongly influenced the international market for urea in 1998 and also in 1999. Low prices for urea, which can be a substitute for other types of nitrogen fertilizer, normally leads to downward price pressure on other nitrogen fertilizer products. The weakness in the international markets in combination with high capacity utilization for European producers led to lower nitrogen fertilizer prices in Europe. This significantly impacted Fertilizer's operations since over half of its production is straight nitrogen fertilizer. Nitrogen fertilizer prices may continue to be affected by these factors also in 2000. See "Management Discussion and Analysis - Fertilizer - Outlook" for more information.

The capacity utilization of European nitrate production plants has been gradually reduced during the last years. Together with depressed commodity prices world wide, this led to severe price pressure on nitrate products in Europe. Financial results for the industry have consequently been declining. Most large producers in Europe, including Hydro, have announced comprehensive restructuring programs that are expected to improve the capacity utilization of the industry in Europe and improve margins. In December 1999 Hydro announced the decision to close down capacity of approximately 1 million tonnes of nitrate capacity in Europe. The names of the factories involved in the restructuring program were published in March 2000. See "Management Discussion and Analysis - Plant Nutrition - Outlook." High oil and gas prices will however represent a challenge for the whole European and North American nitrogen industry for year 2000.

## **GAS AND CHEMICALS**

Gas and Chemicals markets numerous products which mainly have their origin in Hydro's ammonia and fertilizer production. The main business sectors are Hydrogas, Hydro Chemicals (nitrogen based chemicals including technical nitrates), HydroCare and Hydro Oleochemicals. Gas and Chemicals focuses on sales and development of customer-specific products and applications.

The major industrial gas products are carbon dioxide and three atmospheric gases: nitrogen, oxygen and argon, all of which are supplied in bulk and cylinders. Carbon dioxide is used in the production of soft drinks and beer. In the food production and processing industry, carbon dioxide is utilized in both solid and liquid form for refrigerating, freezing and packing of foods. Nitrogen functions as a refrigerant and freezing agent, and as an inert gas. Among its many applications, oxygen is used for medical purposes and in combustion processes. Argon is used in an assortment of industrial processes and in welding.

Hydro Chemicals' products include nitrates for non-military explosives, urea for the production of glue, and nitrogen chemicals for a variety of industrial processes. Nitrogen based chemical products are sold to the mining, chemical and metallurgical industries, and to power plants.

The demand for HydroCare's products for the treatment of waste water from industries and municipalities is growing in the international market. HydroCare's main product for this application is Nutriox (TM).

Hydro Oleochemicals, which in 1998 was transferred from Pronova, another Hydro company, is in the international business of fatty acids and esters. Fish oil is the main raw material used in manufacturing.

The principal manufacturing plants in Europe are located in Norway, Denmark, Sweden, Germany, the Netherlands, France, the United Kingdom and Italy. In Asia Hydro has manufacturing plants in Sri Lanka, India, Thailand and Malaysia. In 1999, construction of a new factory in Malaysia was completed and put into operation.

Hydro's acquisition of the fertilizer plants in Italy has given Gas and Chemicals opportunities to expand its business particularly for products with their origin in fertilizer production (for example, urea being sold for the production of glue). In 1997, a 50 percent owned joint venture was established in Colombia to supply explosives to the mining industry. In addition, activities were expanded for carbon dioxide gas through the acquisition of a subsidiary in India and a 52 percent stake in a company in Thailand. The company also strengthened its distribution system for liquid carbon dioxide through the purchase of a new specialty

vessel and the construction of terminals in Sweden and Poland.

In 1995, Hydro expanded its existing production capacity of carbon dioxide by 100,000 tonnes in the Netherlands. In addition, Hydro acquired from ICI the right to sell carbon dioxide to its end users in the United Kingdom in order to strengthen Hydro's position in the UK market. Hydro also entered into a long-term contract to purchase carbon dioxide from ICI in the UK.

Carbon dioxide is also sourced through long-term contracts from external suppliers.

Gas and Chemicals implemented new information systems in 1998 at a cost of NOK 600 million.

Capital expenditures in 1999 totalled approximately NOK 246 million compared with NOK 415 million in 1998. In addition, approximately NOK 460 million in production assets were transferred to Gas and Chemicals from Hydro Agri Europe (now Plant Nutrition) in 1998.

### **Competitive Conditions**

Gas and Chemicals competes with large international chemical and industrial gas companies. Product and application development, technical support, cost efficient production and logistics are basic competitive factors. Most products are sold to industrial customers and are therefore sensitive to business cycles.

The industrial gas business has been extended in Asia according to plans, but the Asian financial turmoil has impacted our business negatively.

### **KFK**

Hydro owns 62.3 percent of A/S Korn- og Foderstof Kompagniet (KFK). KFK is a publicly-held Danish company engaged in the production and sale of animal and fish feed, as well as the trading of grain, feedstuffs, fertilizer and other agricultural related products. In 1996 KFK established operations in the Swedish market through acquisition of a majority position in Svenska Foder AB which had the same activities as KFK with the exception of fish feed. In addition KFK's business also includes the fish feed activities of the Biomar Group.

KFK produces feedstuff by combining locally purchased grain and other imported ingredients at 18 modern blending units across Denmark and Sweden. KFK also operates blending units for fish feed in Denmark, Norway, France and the UK.

Grain trading is an integral part of the feed operations since grain is the most important input into feed blends. Locally purchased grain is also traded internationally. In addition, KFK is engaged in grain handling and drying.

KFK has a network of approximately 100 distribution points in Denmark and is a major supplier of feedstuffs, fertilizers and other products to Danish farmers. KFK supplies approximately one quarter of the Danish market with these products.

Within the fish feed business area that operates under the brand Biomar, KFK has had a strong expansion in recent years. Biomar, with a turnover of NOK 1.8 billion, is the second largest player in the European markets.

In 1998 a fish feed factory at Myre in Norway was severely damaged by fire. New capacity was established during 1999 at the factory in Karmøy, and a new factory at Myre will be ready in the middle of 2000.

As part of a program to better utilize the assets in the animal feed business, KFK in 1998 decided to close down two of its feed blending units in Denmark. The closures took place in 1999 and represented approximately 15 percent of KFK's capacity at the time of the closure. The remaining blending units will be part of a centrally optimized system covering the demand for animal feed.

Capital expenditures for KFK was NOK 428 million in 1999 compared to NOK 248 million in 1998.

### **Competitive Conditions**

KFK is operating in a highly competitive environment, and there is some over-capacity in the grain and feedstuff business in Denmark where at the same time a vigorous reduction of the number of farms is taking place. The structure of the grain and feedstuff sector has not kept up with the structure of the agricultural sector. During 1999, however, a number of acquisitions and mergers in both the co-operative and the private part of the sector occurred. KFK has taken part in this process by purchasing Sjølund Mølle A/S, one of the largest private grain and feedstuff companies in Denmark.

The fish feed business is characterized by a few large companies covering approximately three quarters of the market. The market can be divided into feed for salmon and feed for trout and other fish. The market for salmon is the biggest and also the fastest growing market.

## **PETROCHEMICALS**

Hydro is one of the leading manufacturers of the plastic raw material PVC (polyvinyl chloride) and intermediate products in Europe. Moreover, alliances have provided Hydro with positions in Singapore and China, while a new petrochemicals plant is being built in Qatar.

The main area of use for PVC is within the building and construction industry. PVC-based products are used for various types of pipes, floors, roofing materials, window profiles and cable insulation. PVC is also utilized in packaging, automotive applications and several other uses.

Hydro's petrochemical activities are integrated from the production of ethylene and chlorine, which are the basic components for VCM (vinyl chloride monomer, the raw material for PVC), to the finished product, PVC. In addition, some of the raw materials are purchased from third parties. Two types of PVC are produced, suspension PVC (S-PVC) and paste PVC (P-PVC). PVC is also processed with additives into PVC compounds, with a variety of grades to meet customer specifications.

Hydro's fully integrated ethylene, chlorine and VCM production complex is located at Rafnes in Norway. VCM and chlorine are also produced at Stenungsund in Sweden. PVC operations are located in Porsgrunn in Norway, Stenungsund in Sweden and Aycliffe in the UK.

Caustic soda, a by-product of chlorine production, is sold to customers in Europe and North America. In addition to its own production, Hydro trades moderate quantities of caustic soda in the same markets.

Hydro is in the process of finalizing necessary permits from Norwegian authorities for modernization of the chlorine and VCM plants at Rafnes and increased production. Realization of the project is dependent on approval from Hydro's Board of Directors.

Hydro has a 60 percent interest in Singapore Polymer Corporation (SPC), a PVC resin and a compounding producer. SPC's annual production of 25,000 tonnes of PVC resin was closed in December 1999, after 30 years of service. Nevertheless, the company remains the largest single-site compounder in South East Asia with a capacity of 70,000 tonnes per year. Hydro also owns a 51 percent interest in a relatively small compounding company in India.

Hydro also has a 26 percent interest in a PVC resin and compound manufacturer in Portugal (CIRES), and a 31.8 percent interest in Suzhou Huasu Plastics Co. Ltd., near Shanghai in China. Suzhou Huasu Plastics started production of PVC film in 1994, and in September 1999 the construction of a S-PVC plant with a capacity of 100,000 tonnes per year

was completed.

Hydro has a 29.7 percent interest in a joint venture project in Qatar. Construction work started in 1999, and the take over certificate is scheduled to be issued in June 2001. The total project costs are estimated to be NOK 4.5 billion. Capacity will be 260,000 tonnes of chlorine, 175,000 tonnes of EDC (ethylene-di-chloride for external sale) and 230,000 tonnes of VCM.

Mabo, the leading Scandinavian plastic pipe producer, was sold to the Austrian company Pipelife (a joint venture between Solvay and Wienerberger), with effect from 1 January, 1999. Mabo had been a wholly-owned subsidiary of Hydro since 1993. In 1998, Mabo had sales of NOK 944 million and a manning of 690.

Hydro Coatings was sold to BASF with effect from 1 September, 1999. Hydro Coatings produces 10,000 tonnes of plastisol and other solution coatings at facilities mainly in the UK for customers engaged in coil coating of metal strips. The 1998 sales were NOK 263 million. Manning at the time of the sale of Hydro Coatings was 135.

Capital expenditures in 1999 were NOK 432 million compared to NOK 452 million in 1998.

#### Petrochemicals production

(000's tonnes)	1999	1998	1997
<b>BASE PRODUCTS</b>			
VCM	<b>539</b>	512	537
Caustic soda	<b>272</b>	270	276
<b>POLYMERS</b>			
S-PVC	<b>451</b>	403	352
P-PVC	<b>68</b>	68	65
Total Polymers	<b>519</b>	471	417
PVC Compounds	<b>161</b>	139	131

#### Average quoted prices

(000's tonnes)	1999	1998	1997
Ethylene - DEM/tonne delivered	<b>829</b>	845	993
VCM - Spot export FPB USD/tonne	<b>418</b>	315	445
S-PVC - DEM/kg delivered	<b>1.22</b>	1.21	1.35

#### Raw Materials and Production

The Rafnes ethylene plant, in which Hydro is operator and has a 51 percent interest, is to a large extent supplied by long-term contracts for natural gas liquids (NGL) from a number of North Sea fields. Hydro's share of the ethylene produced in 1999 was 187,000 tonnes. Additional ethylene requirements of about 50,000 tonnes were purchased through

long-term agreements and about 6,000 tonnes were spot purchases. A new cracker furnace in the ethylene plant is under construction. It will commence producing in the summer of 2000 and will provide Hydro with approximately 20,000 tonnes of additional ethylene per year. A major maintenance shut down at Rafnes is expected to occur in May 2000 and will affect the production of ethylene, VCM and chlorine. The ethylene plant has a maintenance turnover period of 4 years, whereas the chlorine and the VCM plants shut down for maintenance every second year

The total production of chlorine was 243,000 tonnes in 1999.

Throughout 1999, Hydro's S-PVC plant in Porsgrunn, Norway, improved its operations. As a result, it reached the targeted design capacity by the autumn of 1999.

#### Competitive Conditions

At the end of 1996, an improvement program was launched with the aim to improve Petrochemical's annual operating income by NOK 500 million in the year 2000 compared to 1996. Improvements have been achieved through cost reductions and increased efficiency in existing and new production capacity. The results at the end of 1999 confirm that Hydro continues to progress according to the program.

In the first half of 1999, the PVC market was affected by the negative cycle in the building and construction industry, and continued to be negatively impacted by the turbulence in the Asian economies. During the fall, global S-PVC demand increased. The West European quoted price developed from 1.01 DEM/kg in the second quarter to 1.59 DEM/kg in the fourth quarter (ICIS-LOR).

The global PVC demand in 1999 increased by 4 percent, from approximately 24 million tonnes in 1998 to approximately 25 million tonnes in 1999. PVC has been the focus of environmental groups due to potential negative health and environment effects arising from the production, use and disposal of PVC. To date, the total demand for PVC does not appear to have been significantly altered as a result of this focus.

Hydro is the largest PVC supplier in the Nordic countries with a market share of approximately 50 percent. In the United Kingdom, Hydro ranks first with approximately 30 percent of the market.

S-PVC pipe grade is considered to be a commodity product, while there is considerable product and price differentiation in other S-PVC applications. P-PVC, which accounts for about 10 percent of the total PVC market, is traditionally considered to be a specialty product influenced only to a limited extent by the S-PVC price development. In recent years, PVC producers have to a greater extent integrated

downstream activities into PVC compounding and bulk PVC-based production, such as pipe, fittings and calendared film. Hydro's competitive position in vinyl is enhanced by its well balanced product chain, geographical concentration and a high level of customer service.

There were several mergers/acquisitions in both the global, as well as the European, vinyl industry in the late 1990s. Hydro is taking steps towards organizing its Petrochemicals entities in Norway into one separate legal entity, to be better positioned to take part in this restructuring. See "Management Discussion and Analysis - Petrochemicals - Outlook."

## OTHER ACTIVITIES

**Hydro Seafood.** Hydro is the largest salmon farmer in Europe, with farming operations in Norway, Ireland and Scotland. Including affiliated companies, the production amounted to 71,000 tonnes of Atlantic salmon in 1999. An increasing part of the volume is sold as value added products which are processed in Hydro's own processing plants in Norway and France.

An outbreak of the fish disease, Infectious Salmon Anemia (ISA), in Scotland in 1998 led to culling of smolts and slaughter of salmon. This affected the result of Hydro Seafood for 1998 and will lead to lower production for the next few years.

Hydro has in March 2000 entered into final and exclusive negotiation with the Dutch company Nutreco Holding N.V. to sell its salmon production and sales activities operating as Hydro Seafood AS. It is expected that a definitive agreement will be entered into during the first half of April 2000.

**Pronova's** main products are Omega-3 fatty acids used in nutritional supplements, functional foods and pharmaceuticals.

Pronova has developed a drug, Omacor™, for treatment of hypertriglyceridemia (increased blood lipids). The drug has been approved in Norway, France, Germany, Austria, Greece and the UK. Omacor™ is licensed to AstraZeneca for the Far East. In Norway, the product is marketed by Pharmacia & Upjohn. The product was launched in Thailand in February 1999 and in the Philippines in March 2000. The product will be launched in Taiwan in the fourth quarter of 2000, and it is expected that the product will be launched in Hong Kong and Singapore in 2001. Pronova is preparing a registration of the drug in China. The company will send in a variation of the registration in European countries for the indication "prevention of sudden death in post MI patients" in March

2000, and the company will file a FDA application during the second quarter.

Effective 1 July, 1999, Pronova's alginate business, Pronova Biopolymer a.s, was divested and taken over by the US based company, FMC.

**Technology and Projects (HTP)** provides project and engineering services to Hydro's operating segments.

**Industrial Insurance.** Industriforsikring a.s is a wholly owned subsidiary which provides property, casualty and marine insurance for companies in the Hydro Group.

## RESEARCH AND DEVELOPMENT

The Group spent a total of approximately NOK 1,043 million, NOK 1,044 million and NOK 868 million during 1999, 1998, and 1997 respectively, on research and development activities.

The Group engages in research and development, both to maintain its competitive position and to develop new products and processes. The Group has reinforced its efforts to utilize its ecological knowledge as a competitive advantage. Several segments have carried out lifecycle analyses for their products and are working with customers on possibilities for reuse, recycling, waste reduction, and lower energy consumption both in production and over the life of the product. Hydro maintains major research centers in Porsgrunn and Bergen, Norway, with a combined staff of approximately 542 as well as smaller research groups in several subsidiaries. The Bergen facility is dedicated to the Group's oil and gas activities. Research centers for Hydro Aluminium are located at Karmøy, Årdal and Sunndal in Norway, and in several subsidiaries.

The following highlights major contributors to total research and development costs incurred in 1999.

The **Oil and Energy** area incurred research and developments costs in 1999 totaling approximately NOK 107 million, mainly by the Exploration and Production segment. The amount incurred was primarily aimed at exploration technology, virtual reality, increased oil recovery, multi-phase transportation, well technology, deep water technology, subsea solutions and Health, Safety and Environment with the purpose of reducing field development and operating costs. Special focus on reduction of emissions of carbon dioxide (CO<sub>2</sub>) and Nitrogen Oxides (NO<sub>x</sub>) is included in Hydro's research and development programs.

Research and development costs for the **Hydro Agri** area were NOK 272 million in 1999. The **Plant Nutrition**

segment contributed NOK 241 million and **Gas and Chemicals** segment contributed NOK 31 million to the total. These costs are related to projects focused on improvements of products and production processes, including solving environmental issues.

The **Light Metals** area incurred a total of NOK 451 million in research and development costs in 1999. The **Aluminium Metal Products** segment incurred NOK 198 million relating to work on core technologies, new products and processes. NOK 67 million was incurred by the Aluminium Extrusion segment focusing on metallurgy and die technology.

**Other Light Metals** contributed NOK 186 million in 1999 to the Light Metals area. **Hydro Automotive Structures** incurred NOK 96 million to this total. The activities are primarily focused on improvements of material and production processes, as well as development of new products in order to be an attractive partner to the automotive industry. **Hydro Magnesium** incurred NOK 59 million aimed towards increasing productivity and product quality. The Porsgrunn research center works closely with market development personnel in Detroit, Bottrup, Brussels and Tokyo to promote and develop applications for magnesium, particularly in the automotive industry. **Hydro Aluminium Rolled Products** contributed NOK 31 million in research and development costs in 1999.

**Petrochemicals** incurred NOK 49 million in research and development costs in 1999. The main research and development areas are related to process improvements in VCM and PVC technology, aiming at higher productivity and lower costs, PVC formulation developments with a view to minimizing the environmental impact of the PVC life cycle, and some unconventional technologies for the production of olefins and multimodifier particles.

## EMPLOYEES

At 31 December, 1999, the Group employed approximately 37,900 people, compared with approximately 39,600 people in 1998 and 38,300 people in 1997. Approximately 20,200 of the Group's employees were located outside Norway at 31 December, 1999 compared to approximately 21,600 at the end of 1998 and 20,500 at the end of 1997.

Production workers and certain staff categories in Norway are generally organized on a national basis with annual or biannual contract negotiations held between employee organizations and the national employers' association. Norwegian employees are represented in Hydro's Corporate Assembly and Board of Directors. See "Directors and Officers of the Registrant - Corporate Assembly."

Outside Norway, the practice concerning the degree of worker organization and the form of negotiations varies from one country to another.

## ENVIRONMENTAL PROTECTION

Hydro is subject to changing environmental laws and regulations that in the future may require the company to modernize technology to meet more stringent emissions standards or to take actions for contaminated areas.

Hydro had accrued NOK 204 million as of 31 December, 1999 and NOK 262 million as of 31 December 1998, for corrective environmental measures. The corresponding expense was NOK 10 million in 1999, compared to NOK 42 million and NOK 47 million in 1998 and 1997, respectively.

Hydro's share of the estimated total future cost of well closure, decommissioning and removal of offshore installations is approximately NOK 4,052 million. As of 31 December, 1999, Hydro had accrued NOK 2,041 million for well closure and abandonment costs using the unit-of-production method. The accrual was NOK 1,115 million as of 31 December, 1998. Abandonment expense was NOK 542 million in 1999, compared to NOK 277 million and NOK 300 million in 1998 and 1997, respectively. Hydro's future expenses for these corrective environmental measures are affected by a number of uncertainties, including but not limited to the method and extent of corrective action. Due to uncertainties inherent in the estimation process, it is reasonably possible that such estimates could be revised in the near term. In addition, conditions which could require future expenditures may be determined to exist for various sites, including Hydro's major production facilities and product storage terminals. Hydro cannot determine the amount of such future costs due to the unknown timing and extent of corrective actions which may be required. Hydro's main production facilities and operations are located in countries where punitive damages for environmental regulation violations are not excessive. Accordingly, Hydro does not expect that such costs and liabilities will have a material impact on the Group's results of operations, financial position or liquidity based on its current situation and the current regulatory environments in which it operates.

Environmental protection and safety are integral parts of the responsibilities and duties carried out by all levels of Hydro management. Industrial operations in all parts of the world have had, and continue to have, adverse effects on the environment. These are problems which Hydro takes very seriously and which are closely followed. Hydro's research centers also devote considerable efforts to environmental

assessment studies and development of methods and technologies aimed at identification and reduction of possible environmental hazards.

Hydro has during the last several years focused on work on waste minimization and disposal. The most significant waste problem concerns gypsum deposits from production of phosphoric acid. The phosphoric acid plant in Vlardingem, the Netherlands, was closed in 1999 and discharges of phosphorous, gypsum and cadmium stopped. The environmental clean-up cost is estimated at NOK 25 million. Run-off from gypsum deposits contain heavy metals and must therefore be made secure. In order to do this, deposits are treated with calcium to bind the phosphorus. Clean-up has been finalized or is near completion at the following closed fertilizer sites in France: Lievin, Rassuen and Pierrefitte. A final closure plan for a gypsum plant outside Landskrona, Sweden, was delivered to the appropriate authorities in 1999. The plan for "closing" the gypsum island at the Landskrona plant proposes covering the gypsum with clay and soil enabling grass to grow on top. The acid waters seeping out of the gypsum stack will be cleaned in a treatment plant until sufficient water quality is obtained. The closure plan is based on extensive environmental impact assessments undertaken by third party experts. The estimated costs to secure the deposits were originally recognized when it was decided to close the plants in 1991 as part of Agriculture's restructuring measures and subsequently reclassified to environmental provisions. During 1995 and 1994, higher operating costs to treat run-off-water led to upward revisions of the accruals.

For sites in operation, the need for clean-up of contaminated soil is guided by environmental risk assessments. Costs for soil clean-up/demolition of buildings in Sluiskil (the Netherlands), Rostock (Germany), and Ravenna and Ferrara (Italy) are estimated at approximately NOK 60 million.

Efforts are being made on offshore installations to reduce the use of potentially harmful chemicals discharged to water with the goal to achieve zero environmental impact from all discharges to the sea by 2005. One of the key means to achieve this is reinjection. Six of the 11 platforms in operation at the beginning of year 2000 have reinjection: Visund (produced water and drill cuttings), Brage (90 percent of produced water), Njord (designed for reinjection of future produced water), Varg (drill cuttings), Oseberg East (drill cuttings), and Oseberg B (drill cuttings).

Oil discharges to the sea from offshore operations have increased. The main reason is the use of horizontal wells in thin layers of oil in the Troll B field. This technology enables considerable oil production in fields previously not commercially viable, but it also leads to water breakthrough and larger volumes of oil discharges. At Troll B, the water

quantities are huge, but the concentrations of components which may be environmentally harmful are low. In view of this and the very high cost, no reinjection at Troll B is planned.

About 81 percent of the ships visiting the Sture crude oil terminal in 1999 had equipment for use of the Volatile Organic Compounds-recovery facility. From 2000, Hydro will require vapor emission control systems on all ships loading oil at the terminal other than those larger than 120,000 DWT. Exemption will be made for them until 2002/2003.

In 1999 at the Oseberg field center, Norsk Hydro started its first offshore combined-cycle power plant. The energy efficiency is around 56 percent, compared to an efficiency of 36 to 37 percent for modern offshore single cycle gas turbines.

The Visund platform, which was in operation from 1999, is the first platform which most closely meets all the new requirements of Hydro's environmental strategy, including reinjection of produced water, injection of waste from drilling operations and no flaring under normal conditions.

On the Njord and Oseberg fields, flaring (the burning off of surplus gas for safety reasons) has been reduced. This concept involves the reinjection of gas.

All fuel tanks and pipelines more than 20 years old are being replaced in gasoline stations in Norway. Costs are expensed as incurred as on-going maintenance costs. Station grounds are being inspected and cleared where appropriate. In Denmark oil companies and national authorities co-operate to clean up the area around stations that will be closed down. The program in Denmark entails closing down and cleaning up the ground around approximately 250 Hydro Texaco gasoline outlets. In Denmark, such clean-up costs are funded by the authorities from a special duty which the consumer pays when purchasing gasoline.

In 1999 the program for installing point-feeders in the Söderberg cells at the Karmøy smelter to reduce anode effect frequency and cuts emissions of perfluoride carbon gases and polycyclic aromatic hydrocarbons was completed. A voluntary agreement between the aluminum industry and the Norwegian authorities concerning reduction of greenhouse gases was entered into in 1997. The aluminum industry in Norway has committed to reducing emissions of greenhouse gases per metric tonne of produced aluminum by 55 percent between 1990 and 2005. In 1999, the specific emissions from Hydro's aluminum metal plants had decreased by 43 percent compared to the 1989 level.

Hydro has ongoing research projects for greenhouse gas abatement measures, and developed in 1998 an innovative

project for reducing greenhouse gas emissions from natural gas based power production, using the captured CO<sub>2</sub> for enhanced oil recovery. The concept is considered technically feasible, but further work is needed in order to improve the profitability of the project.

Scandinavian environmental authorities are pressing for the phase-out of the use of lead as a pigment and stabilizer for plastics including PVC. Hydro has been involved with Ciba Specialty Chemicals, part of the Ciba-Geigy Swiss Chemicals Group, in developing an organic-based stabilizer for PVC pipes and fittings. For most applications this may be a viable alternative but would increase production costs.

In 1999 there were several incidents where emissions exceeded standards. Hydro is working with the authorities on these matters. Hydro was not fined for violations of environmental requirements in 1999.

In addition, Hydro incurs annual costs for the operation of rinsing and treatment equipment designed to reduce emissions and for waste containment or disposal, which are considered part of its normal production costs.

Six fatal accidents occurred last year, compared to four in each of the two preceding years. Five Hydro employees lost their lives: in Brazil, Sunndal (Norway), Høyanger (Norway), Holland (USA), and Flekkefjord (Norway). One contractor employee died at Stord (Norway). In spite of intensive preventive work, the five-year moving average fatal-accident rate for employees and contractors has not improved during the last year, although it has been significantly reduced during the last 14 years.

The LTI rate (lost-time injuries per million hours worked) for Norsk Hydro employees was four in 1999, the same as in 1998.

## **ADDITIONAL FACTORS WHICH MAY AFFECT BUSINESS**

In order to utilize the "Safe Harbor" provisions of the United States Private Securities Litigation Reform Act of 1995, Hydro is providing the following cautionary statement. The Company and its representatives may make written or oral forward-looking statements with regard to certain expectations, plans and objectives of Hydro, including statements included in its filings with the Securities and Exchange Commission and in other reports to the shareholders. In addition, Hydro has established certain targets for average return on capital employed, long-term debt to equity ratio and dividend as a percent of net income seen over a period of several years. Management does not anticipate that all targets

would necessarily be met in any individual period and targets must be seen over a longer time perspective.

By their nature, forward-looking statements, involve risk and uncertainty because they relate to events and depend on circumstances that will occur in the future. The actual results and developments may differ materially from those expressed or implied in the forward-looking statements, including the targets stated above, due to any number of different factors. Certain forward-looking statements are included in "Item 1 - Description of Business" and "Item 9 - Management's Discussion and Analysis of Financial Condition and Results of Operations," particularly under "Competitive Conditions" and "Outlook" captions. The statements include management's aims, objectives and plans, such as planned expansions, investments or other projects, targeted production volumes, capacity or rate, start-up dates, cost reductions, profit objectives, and various expectations about future developments in the market (particularly prices, demand, supply and competition), results of operations, margins, risk management and so forth. The following paragraphs include important factors, although not exhaustive, that may cause actual results or developments to differ materially from those expressed or implied by the forward-looking statements.

The Group has activities in industries that are highly competitive. In all its business segments, the Group competes against some of the largest entities in the world.

All segments are subject to substantial fluctuations in supply and demand affecting prices and profitability. In the Exploration and Production segment, in particular, earnings may be adversely affected by local laws and regulations, such as changes in taxes, sliding scale provisions and royalties, and environmental protection control. Political developments (particularly in the Middle East) can significantly affect world oil supply and prices. In all business areas and in its financing operations, the Group may be adversely affected by fluctuations in exchange rates.

Hydro is not materially dependent on any patents, trademarks, licenses, franchises, concessions or royalty agreements which may expire, other than in the Exploration and Production segment. Generally, oil and gas licenses in Norway are awarded for the normal expected production life of fields. The Norwegian government has historically extended certain licenses for fields in which substantial additional investments have been made and has granted longer than usual licenses in certain cases. The Group's main hydro-electric power concessions or long-term power supply contracts do not expire until after the year 2020. Generally, power under the expired concessions has been made available to the licensees at prevailing market rates.

The Group is not materially dependent on one or a few suppliers or customers. The prices of most raw materials and energy sources on which Hydro depends have been volatile.

The Group companies work with or produce a number of hazardous substances. The handling of such toxic, inflammable or explosive substances creates a potential risk of serious injury to employees and others and of damage to plants and other property.

## **ITEM 2. - DESCRIPTION OF PROPERTY.**

The Group's rights to oil and gas located on the Norwegian continental shelf, mainly in the North Sea, are among its most important assets. See "Description of Business - Oil and Gas - Exploration, Development and Production" for information with regard to reserves and sources of oil and gas and "Description of Business - Oil and Gas - Government Regulations" with regard to the Norwegian government's authority to increase its participation in the development of certain oil and gas fields (the "sliding scale") and other regulatory matters.

The Group's major production plants in Norway are located at Porsgrunn (fertilizers, magnesium and PVC), Rafnes (petrochemicals), Karmøy, Årdal, Sunndalsøra, Holmestrand, and Høyanger (aluminum) and Glomfjord (fertilizers). The Group owns hydro-electric power stations in five Norwegian counties. Of these power stations, certain plants with an average annual production of some 2.9 billion kWh are permanent property of the Group, whereas the rest of the approximately 5.5 billion kWh are subject to government concessions expiring between the years 2022 and 2049. At the end of the concession period, the power stations revert to the government free of charge. Hydro's principal Agriculture and Light Metals production facilities abroad are located in Austria, Belgium, Canada, Denmark, France, Germany, Italy, Ivory Coast, Luxembourg, the Netherlands, Poland, Portugal, Spain, Sri Lanka, Sweden, Trinidad and Tobago, the United Kingdom, and the United States. Hydro has interests in an oil refinery in Sweden, a retail gasoline and fuel oil marketing network through an affiliated company in Denmark and Norway, and wholly owned operations in Sweden. Hydro also participates in a fertilizer complex in Qatar and alumina refineries in Jamaica and Brazil.

Practically all of the Group's properties are owned by the Company's subsidiaries, except certain facilities in the oil and gas, hydro-electric and petrochemical businesses which are jointly owned with other companies. All the major facilities of the Group are insured in line with normal industry practice.

### ITEM 3. - LEGAL PROCEEDINGS.

On 15 March, 1996, Norsk Hydro USA Inc., a wholly owned subsidiary of Hydro received notice that the Port Authority of New York and New Jersey had filed a complaint in the Superior Court of New Jersey naming Norsk Hydro USA Inc., as one of the defendants in an action in connection with property damages and related losses suffered in the bombing by terrorist of the World Trade Center in February terrorist 1993. In February 1997, Hydro Agri North America was substituted for Norsk Hydro USA Inc. and the case was removed to Federal District Court in New Jersey. In December 1997, the complaint was dismissed by the District Court, but this decision was appealed by the plaintiff. In 1999, the Third Circuit Court of Appeals affirmed the decision of the District Court dismissing the complaint filed by the Port Authority of New York and New Jersey. The period of time within which the plaintiffs could file an appeal with the United States Supreme Court has expired.

On 23 July, 1999 and 4 February, 2000, Dolphin AS presented claims to Hydro for higher day rates associated with a drilling rig, which has been leased for a period of seven years. The claims are based on a general upgrading of the drilling rig and total NOK 1,941 million. Hydro evaluates the claims together with its partners. Hydro will utilize the drilling rig in its activities associated with the Snorre Unit and Production License 089, in which Hydro has ownership interests of 17.66 percent and 13.28 percent, respectively. As such, any additional net rental cost to Hydro is expected to be substantially less than the amount claimed by Dolphin AS.

Hydro is involved in or threatened with various other legal, tax and environmental matters arising in the ordinary course of business. Hydro is of the opinion that resulting liabilities, if any, will not have a material adverse effect on its consolidated results of operations, liquidity or financial position.

### ITEM 4. - CONTROL OF REGISTRANT.

The following table sets forth as of 31 December, 1999 certain information concerning the officers and directors of the Company and concerning the Kingdom of Norway (the "Kingdom"), which is the only person known to Norsk Hydro ASA to own beneficially, directly or indirectly, more than 10 percent of its outstanding shares.

<u>Title of Class</u>	<u>Owner</u>	<u>Number owned</u>	<u>% of Class</u>
Ordinary Shares			
	Kingdom of Norway	116,832,180	44
	Officers and Directors of the Company (as a group)	Less than	0.10

As of 24 March, 2000, Morgan Guaranty Trust Company of New York, through its nominee company, Guaranty Nominees Limited, held interests in 14,143,872 Ordinary Shares (approximately 5 percent) on behalf of registered holders of ADRs.

The Kingdom acquired most of its interest in the Company in 1945. Since 1945, the Kingdom has not disposed of any Ordinary Shares owned by it; however, there can be no assurance that the Kingdom will not do so in the future. The Ministry of Trade and Industry represents the Norwegian government in exercising the Kingdom's voting rights. Acting through the Norwegian government, the Kingdom, in its capacity as a shareholder of the Company, has never taken an active role in the day-to-day management of Hydro.

## ITEM 5. - NATURE OF TRADING MARKET.

The Company's Ordinary Shares are listed on the stock exchanges in Oslo, Amsterdam, Basel, Düsseldorf, Frankfurt, Geneva, Hamburg, Paris, Stockholm, Zürich and London. The ADSs are listed on the New York Stock Exchange.

The following table gives, for the periods indicated, adjusted high and low prices for the Company's Ordinary Shares on the Oslo Stock Exchange and the ADSs on the New York Stock Exchange - Composite Tape.

	Oslo Stock Exchange		New York Stock Exchange	
	High	Low	High	Low
	(In NOK)		(In U.S. dollars)	
1998				
First quarter	389.0	315.5	51 3/8	42 3/4
Second quarter	385.0	328.0	51 1/2	42 3/4
Third quarter	351.5	263.5	46 3/8	33 7/8
Fourth quarter	320.0	235.5	43 1/2	30 3/4
1999				
First quarter	316.5	248.0	41 1/4	33
Second quarter	359.0	288.5	46 1/8	36 7/8
Third quarter	366.0	295.5	46 3/8	38 1/4
Fourth quarter	336.0	303.5	43 7/8	38 1/4
2000				
Through				
24 March, 2000	363.0	302.0	45 1/4	36 1/8

There were 267 holders of Ordinary Shares with addresses in the United States (not including the Depositary) as of 24 March, 2000. These shareholders held 13,501,092 Ordinary Shares, equal to approximately 5 percent of the outstanding Ordinary Shares. As of 24 March, 2000, a total of 14,143,872 ADSs (representing approximately 5 percent of the total Ordinary Shares outstanding) were held by approximately 766 registered holders of ADSs.

## ITEM 6. - EXCHANGE CONTROLS AND OTHER LIMITATIONS AFFECTING SECURITY HOLDERS.

There are no limitations either under the laws of the Kingdom of Norway or under the Articles of Association of the Company restricting the right of non-residents to buy, sell, hold or vote with Ordinary Shares other than those referred to in the following paragraphs. There are no restrictions on the remittance of dividends to non-resident holders.

Based on a 1917 law as amended in 1994, which applies to Norwegian companies engaged in hydropower, mining and real estate, no person or entity may acquire more than 20 percent of the share capital or the right to vote more than 20 percent of the share capital of the Company, and no group of two or more persons may, whether by mutual agreement or by family relationship, jointly or separately acquire an aggregate of more than 20 percent of the share capital of the Company or 20 percent of its voting rights of its share capital unless such person or persons obtain the consent of the Norwegian government. The Depositary and The Depositary Trust Company have been granted a concession from the Norwegian government to hold up to 25 percent of the Ordinary Shares of the Company in their respective capacities as depositaries. Effective 1 January, 1995, legislation harmonizing laws in Norway with EU requirements eliminated restrictions on foreign ownership in Norwegian companies. Parties are now required to notify the Ministry of Industry and Energy of the acquisition of interests in certain companies if this causes the party's ownership interest to exceed one-third, one-half or two-thirds of the company. This applies to companies which have more than 50 employees, or gross sales of more than NOK 50 million per year, or have received public funding for a project in excess of NOK 5 million. In certain cases, the Ministry may review the acquisition in which case it will be approved, not approved or certain conditions may be set to the acquisition.

## ITEM 7. - TAXATION.

The following summary outlines certain United States and Norwegian tax consequences to a beneficial owner of ADSs who is a citizen or resident of the United States, a domestic corporation, or is otherwise subject to United States federal income taxation on a net income basis in respect of an ADS (a "United States Holder").

Because the following is a summary only, holders of ADSs are advised to satisfy themselves as to the overall tax consequences of their ownership of ADSs and the Ordinary Shares corresponding thereto by consulting their own tax advisors.

Under Norwegian tax laws currently in effect, dividends paid to foreign shareholders of Norwegian corporations are, unless otherwise provided for in an applicable tax treaty, subject to a yearly stipulated withholding tax in Norway of 25 percent. Norwegian tax authorities are expected to consider the holders of ADSs to be the shareholders for such Norwegian withholding tax purposes.

The maximum rate of withholding tax on dividends paid to a United States resident pursuant to the current United States-Norway income tax treaty (the "Treaty") is 15 percent. Several other tax treaties reduce the maximum rate to similar levels. Unless it shall be properly demonstrated to the Company and to the Norwegian tax authorities that the beneficial shareholders, including the holders of ADSs, are resident of a country in respect of which a lower withholding tax rate applies pursuant to a relevant tax treaty, such dividend payments will be subject to full Norwegian withholding tax at a rate of 25 percent.

If, however, the recipient of a dividend is determined to be engaged in a business activity taxable in Norway and the shares with respect to which the dividend is paid are effectively connected with such activity, then the amount distributed will be taxed as dividend income in Norway, subject to tax treaty regulations.

Dividends received by a United States Holder of ADSs will be included in gross income and treated as foreign source dividend income for United States federal income tax purposes and will not be eligible for the dividends received deduction allowed to corporations. A United States Holder of ADSs may claim a credit for the Norwegian withholding tax imposed on such dividends, but such dividend income will be treated separately, together with other items of "passive" or "financial services" income, for purposes of computing the foreign tax credit allowable.

The Treaty generally prohibits Norwegian taxation of capital gains realized by United States residents from the sale or other disposition of stock in a Norwegian corporation,

provided that the United States resident (i) does not own more than 25 percent of the stock of that corporation, (ii) does not have a permanent establishment in Norway with respect to which such gain is effectively connected and (iii) is not an individual who either (a) is present in Norway for 183 days or more during the year in which such gain is realized or (b) maintains for 183 days or more during the year in which such gain is realized, a fixed base in Norway with respect to which such gain is effectively connected.

United States Holders will be subject to United States federal income taxation on gains realized upon the sale or other disposition of ADSs to the same extent as on other gains from sales or dispositions of stock.

## ITEM 8. - SELECTED CONSOLIDATED FINANCIAL DATA.

The following financial information with respect to the five years ended 31 December, 1999, and as of 31 December, 1999, 1998, 1997, 1996 and 1995 has been derived from Hydro's audited consolidated financial statements prepared in accordance with United States generally accepted accounting principles ("US GAAP"). The financial information for the three years ended 31 December, 1999 and as of 31 December, 1998 and 1997 should be read in conjunction with, and is qualified in its entirety by reference to, the consolidated financial statements and notes included elsewhere in this Annual Report. See the "Consolidated Financial Statements".

### Income Statement Data <sup>(1)</sup>

	Year ended 31 December,				
	1999	1998	1997	1996	1995
	(In NOK million, except per share data)				
Operating revenues (7)	102,433	97,468	97,722	85,736	80,947
Operating costs and expenses excluding depreciation, impairment and restructuring charges (7)	83,572	84,130	80,194	68,358	63,496
Depreciation	10,494	7,508	6,826	6,725	5,992
Provision for impairment and losses	–	–	–	1,000	755
Restructuring charges	632	–	–	–	–
Operating income	7,735	5,830	10,702	9,653	10,704
Financial and other income (expense) (2)	138	1	(357)	624	385
Income before taxes and minority interest	7,873	5,831	10,345	10,277	11,089
Provision for taxes	(4,337)	(1,979)	(5,092)	(4,053)	(3,861)
Minority interest	(90)	(98)	(48)	(20)	(78)
Income (loss) before cumulative effect of accounting changes	3,446	3,754	5,205	6,204	7,150
Cumulative effect of accounting change for:					
Impairment loss		–	–	–	(17)
Start-up costs	(30)	–	–	–	–
Net income (loss)	3,416	3,754	5,205	6,204	7,133
Earnings (loss) per share:					
Before cumulative effect of accounting changes	13.90	16.40	22.70	27.10	31.20
Cumulative effect of accounting changes	(0.10)	–	–	–	(0.10)
Earnings (loss) per share:	13.80	16.40	22.70	27.10	31.10
Cash dividends paid per share during period:					
NOK per share (3)	7.50	7.50	7.00	6.00	4.25

### Balance Sheet Data <sup>(1)</sup>

	As of 31 December,				
	1999	1998	1997	1996	1995
	(In NOK million)				
Cash, cash equivalents and other liquid assets	9,970	4,429	5,299	6,491	8,027
Total assets	177,419	124,023	115,336	105,464	98,707
Short-term debt	8,268	6,737	8,401	4,956	4,221
Long-term debt	42,228	24,105	17,412	17,330	17,288
Deferred tax liabilities	30,573	18,645	17,930	16,953	17,385
Shareholders' equity	59,497	48,291	45,717	41,547	37,154

## Segment Data

The following tables show the Group's operating revenues, sales to unaffiliated customers and operating income (after eliminating intersegment sales) by business segment for each of the three fiscal years in the period ended 31 December, 1999.

Year ended 31 December, Business Segment <sup>(1)</sup>	Operating Revenues			Sales to unaffiliated customers			Operating Income/(loss)		
	1999	1998	1997	1999	1998	1997	1999	1998	1997
	(In NOK million)								
Exploration and Production	17,406	10,637	13,151	6,996	3,612	3,549	5,840	2,565	6,363
Refining and Marketing	15,716	11,101	14,584	15,185	10,609	14,072	495	112	284
Energy	3,301	3,068	3,280	1,328	1,372	1,739	618	573	652
Eliminations	(10,331)	(6,940)	(9,533)	-	-	-	9	10	(18)
Hydro Oil and Energy	26,092	17,866	21,482	23,509	15,593	19,360	6,962	3,260	7,281
Hydro Aluminium Metal Products	17,281	18,235	16,138	12,072	12,375	10,260	1,357	1,854	1,197
Hydro Aluminium Extrusion	12,081	12,088	10,438	11,974	11,944	10,265	649	536	474
Other Light Metals (4)	7,716	7,869	6,824	7,442	7,629	6,635	216	162	25
Eliminations	(4,857)	(5,865)	(5,901)	-	-	-	(43)	25	(58)
Hydro Light Metals	32,221	32,327	27,499	31,488	31,948	27,160	2,179	2,577	1,638
Plant Nutrition	26,799	27,997	29,149	24,776	26,493	28,160	(2,239)	(582)	869
Gas and Chemicals	4,718	4,716	4,383	4,521	4,457	4,176	349	261	305
A/S Korn- og Föderstof Kompagniet	9,756	10,143	10,007	9,558	9,877	9,825	233	375	89
Eliminations	(1,615)	(1,540)	(950)	-	-	-	(14)	4	15
Hydro Agri	39,658	41,316	42,589	38,855	40,827	42,161	(1,671)	58	1,278
Petrochemicals	5,346	6,028	6,034	5,221	5,851	5,855	113	229	430
Other Activities (5)	3,847	3,759	3,473	2,793	2,609	2,540	246	(52)	93
Segments	107,164	101,296	101,077	101,866	96,828	97,076	7,829	6,072	10,720
Corporate (6)	3,959	4,346	3,990	567	640	646	(101)	(236)	(23)
Eliminations	(8,690)	(8,174)	(7,345)	-	-	-	7	(6)	5
Total	102,433	97,468	97,722	102,433	97,468	97,722	7,735	5,830	10,702

(1) See Note 2 to the "Consolidated Financial Statements" for a discussion of significant business acquisitions and dispositions during the three-year period ended December 31, 1999.

(2) "Equity in net income of non-consolidated investees" is included under "Financial and other income (expense)."

(3) Cash dividends paid during the period are payment for dividends related to the previous year.

(4) Other Light Metals consists of the following: Aluminium Rolled Products, Automotive Structures and Magnesium.

(5) Other Activities consists of the following: Seafood, Pronova, Industrial Insurance and Technology and Projects.

(6) In "Corporate," operating income includes the net effect of the overfunding of certain pension schemes by NOK 393 million, NOK 524 million and NOK 508 million in 1999, 1998 and 1997, respectively.

(7) Starting in 1998, operating revenues and operating costs related to some of Hydro's aluminum remelt activity are presented gross in the income statement. In prior years, such revenues and costs were presented net and included in operating revenues. Prior years' amounts have been reclassified. The change increases operating revenues and operating costs by NOK 1,553 million in 1997, NOK 896 million in 1996 and NOK 1,215 million in 1995.

## Dividends

The Company has paid an annual dividend on its capital stock in each year since 1971.

Under Norwegian law, any plan to pay dividends in cash or in kind must be proposed by the Board of Directors and approved by the shareholders at a general meeting.

Norwegian law does not permit the payment of dividends in respect of interim periods in cash or in kind. Dividends in respect of a year are normally fixed at the annual general meeting held in the following year, usually in April, and paid to holders of record on the date of such meeting. Dividends have usually been mailed by the Company to shareholders approximately five to six weeks after approval at the annual general meeting. See "Description of American Depositary Receipts - Dividends, Other Distributions and Rights." The following table sets forth dividends in respect of Ordinary Shares paid in each of the past five years, in each case in respect of the preceding year. See also "Exchange Rates."

Year in which Paid <sup>(2)</sup>	Dividend per Ordinary Share <sup>(1)</sup>	
	NOK	Translated into U.S. dollars <sup>(2)</sup>
1995	4.25	0.65
1996	6.00	0.91
1997	7.00	0.99
1998	7.50	1.00
1999	7.50	0.97
2000 <sup>(3)</sup>	8.00	

(1) Dividend payments by the Depositary to holders of ADSs were converted at prevailing exchange rates on the date of such payments. Each ADS represents one deposited Ordinary Share.

(2) Translated at the Noon Buying Rate at each respective dividend payment date.

(3) A dividend of NOK 8.00 per share with respect to 1999, was proposed by the Board of Directors to the General Assembly for approval at the annual general meeting scheduled for 27 April, 2000 to be paid on 18 May, 2000 to the holders of record on 27 April, 2000 of Ordinary Shares.

## Dividend Policy

The Group believes that the long-term return to shareholders should reflect the added value created by the Group. This is expressed partly by dividends paid and partly by a long-term increase in the share price. Dividends paid should increase steadily in line with the growth of Hydro's profits. In determining the dividend, the need to maintain financial strength and flexibility will also be considered, as will the possibilities for growth through new profitable investments. Over time, the total return to shareholders should accrue to a greater extent from the increase in share price than from dividends received. The Board of Directors considers it appropriate that the dividend over several years should average around 30 percent of the Group's net income.

Future dividends will be dependent on Hydro's future earnings, financial condition and cash flow, as well as other factors affecting Hydro.

## ITEM 9. - MANAGEMENT'S DISCUSSION AND ANALYSIS OF FINANCIAL CONDITION AND RESULTS OF OPERATIONS.

This discussion should be read in connection with the information contained in the Company's consolidated financial statements and the related notes and the information on the risk and uncertainty of forward-looking statements found in "Forward-looking Statements" and "Item 1 - Additional Factors Which May Affect Business."

### 1999 COMPARED WITH 1998

Group operating revenues of NOK 102,433 million in 1999 were 5 percent higher than in 1998. Operating revenues of Saga included in the consolidated accounts were NOK 3,880 million. Operating income increased by 33 percent compared to the previous year. Earnings in 1999 were favorably influenced by a significantly higher crude oil price, while low prices for fertilizer and lower realized prices of aluminium negatively impacted 1999 earnings.

NOK million	1999	1998	1997
Operating revenues	102,433	97,468	97,722
Operating income	7,735	5,830	10,702
Non-consolidated investees	339	410	402
Net interest expense	1,167	1,065	869
Net foreign exchange loss	304	361	275
Net gain on securities	(379)	(1,015)	(236)
Other, net	459	(2)	(71)
Net financial expense	1,551	409	837
Other income	1,350	-	78
Income before taxes	7,873	5,831	10,345
Income tax expense	(4,294)	(1,990)	(5,198)
Tax effect of changes in tax law	(43)	11	106
Minority interest	(90)	(98)	(48)
Income before cumulative effect of change in accounting principles	3,446	3,754	5,205
Cumulative effect of change in accounting principles	(30)	-	-
Net income	3,416	3,754	5,205
Earnings per share (NOK)	13.80	16.40	22.70

The main items affecting the change in operating income were:

NOK million	1999 vs. 1998
Prices, Exploration and Production	3,230
Margin	(1,225)
Volume	1,280
Depreciation, Exploration and Production (ex. Saga)	(310)
Saga	270
Fixed costs	25
Restructuring costs Plant Nutrition	(632)
Other non-recurring items Plant Nutrition	(680)
Other	(50)

### Financial and other

The results for non-consolidated investees decreased compared to the previous year. The decline was mainly due to reduced performance from Hydro's fertilizer affiliates, while earnings improved for Dyno ASA and Hydro Texaco. In 1998, earnings from Dyno included provisions related to a legal settlement in the US, which reduced Hydro's earnings by NOK 198 million.

Net financial expense was NOK 1,551 million, compared with NOK 409 million in 1998. In 1998, net financial items were affected by a pre-tax gain of NOK 1.1 billion related to the sale of Hydro's shares in Saga Petroleum ASA. Capitalized interest in 1999 was NOK 839 million, compared to NOK 614 million in the previous year.

Net interest expense increased by NOK 102 million in 1999 due to higher net interest bearing debt.

The US dollar exchange rate rose in 1999 from NOK 7.61 per dollar at the beginning of the year to NOK 8.01 at the end of the year. The net foreign exchange loss in 1999 decreased to NOK 304 million from NOK 361 million in 1998. During 1998, the dollar strengthened from NOK 7.33 at the beginning of the year to NOK 7.61 at year-end.

In 1999, other income of NOK 1,350 million consisted of a gain of NOK 149 million on the sale of the plastic pipe systems of Mabo, a gain of NOK 1,025 million on the sale of Pronova Biopolymer, a gain of NOK 234 million on the sale of Hydro Coatings and a loss of NOK 58 related to the transfer of the plastic bumper system activities.

### Taxes and net income

Income before taxes and minority interest increased 35 percent from 1998. The provision for current and deferred taxes was equivalent to 55 percent of pre-tax income in 1999, compared to 34 percent in 1998. The higher relative proportion of income attributable to offshore oil and gas activities on the Norwegian continental shelf increased the effective tax rate. In addition, the 1998 tax rate was positively influenced by a settlement on tax consolidation in the Netherlands related to parts of Hydro's agriculture activities. Current tax represents 82 percent of total taxes, compared to 70 percent in 1998.

Net income was NOK 3,416 million (NOK 13.80 per share) in 1999, compared to NOK 3,754 million (NOK 16.40 per share) in 1998.

### Balance sheet

The balance sheet of Hydro is significantly influenced by the Saga acquisition. Total assets and total liabilities increased by NOK 46.1 billion and NOK 38.2 billion, respectively, as a result of the acquisition of Saga.

Short-term bank loans and the current portion of long-term debt increased to NOK 8,268 million at the end of 1999 from NOK 6,737 million at the end of 1998.

Hydro's long-term interest bearing debt at the end of 1999 was NOK 42,228 million, compared to NOK 24,105 million at the end of 1998.

Net interest bearing debt (short- and long-term interest bearing debt, including the current portion of long-term debt,

less cash and cash equivalents) at the end of 1999 was NOK 43.1 billion, compared to NOK 28.9 billion at the end of 1998. The increase in net interesting bearing debt resulted from the issuance of new debt in 1999 and the debt acquired via the Saga acquisition, which at year-end was NOK 5.2 billion. At the date of acquisition, net-interest bearing debt in Saga was NOK 14.7 billion. Norsk Hydro ASA issued long-term debt in January 1999 in the aggregate principal amount of NOK 7.1 billion in the US and the UK. The US issue and the UK issue totaled USD 575 million and GBP 225 million, respectively. In addition Hydro issued Euro bonds of EUR 300 million at 6.25 percent in October 1999.

Minority interest increased by 5 percent to NOK 1,323 million in 1999.

Shareholders' equity was NOK 59,497 million at the end of 1999, an increase of 23 percent compared to 1998. The share capital increase related to the Saga acquisition led to an increase in shareholders' equity in 1999 of NOK 11,603 million.

## HYDRO OIL AND ENERGY

NOK million	1999	1998	1997
Operating revenues	<b>26,092</b>	17,866	21,482
Operating income	<b>6,962</b>	3,260	7,281
Current assets	<b>21,714</b>	9,741	10,567
Non-current assets	<b>80,685</b>	38,965	36,310
Return on capital employed	<b>14%</b>	9%	20%
Number of employees	<b>3,505</b>	2,999	2,572

Hydro Oil and Energy, which in 1999 consisted of the segments Exploration and Production, Refining and Marketing and Energy, had operating income of NOK 6,962 million in 1999. This was an increase of NOK 3,702 million or 114 percent compared to 1998.

With effect from 1 January, 2000, oil and gas trading, refining activities and sale of dry gas will be transferred to Energy. The remaining oil marketing activities in Sweden, including Hydro's joint venture Hydro Texaco, will be reported under a separate segment named Oil Marketing.

## EXPLORATION AND PRODUCTION

NOK million	1999	1998	1997
Operating revenues	<b>17,406</b>	10,637	13,151
Operating income	<b>5,840</b>	2,565	6,363
Exploration activity	<b>1,513</b>	1,368	1,114
Current assets	<b>16,894</b>	6,720	7,627
Non-current assets	<b>75,501</b>	33,486	30,957
Return on capital employed	<b>13%</b>	8%	20%
Number of employees	<b>2,867</b>	2,351	2,114

Internal sales, mainly to Refining and Marketing, amounted to NOK 10,410 million in 1999 compared to NOK 7,025 million in 1998.

Saga Petroleum's activities are consolidated in Hydro's accounts with effect from 1 July, 1999.

The main items affecting the change in operating income, excluding effects from Saga, were:

NOK million	1999 vs. 1998
Price	3,230
Volume	200
Royalty	(60)
Production costs	(45)
Exploration costs	260
Depreciation	(275)
Write-down Sincor	95
Other (including net transportation tariffs)	(400)

Effects from Saga	1999 vs. 1998
Volume	3,905
Royalty	(115)
Production costs	(645)
Exploration costs	(240)
Depreciation, including amortization of excess purchase price of Saga	(2,390)
Price hedging program	(365)
Other	120

### Revenues and market conditions

Operating revenues increased by 64 percent due to higher oil prices and volume. Most of the oil produced by Exploration and Production is sold through Refining and Marketing. In 1999, these sales increased by 49 percent compared to 1998. Internal sales to Refining and Marketing represented 59 percent of Exploration and Production's total operating revenues in 1999, compared to 65 percent in 1998. The remaining 41 percent of 1999 operating revenues was comprised mainly of sales of gas and transportation tariffs, in addition to external oil sales, mainly by Saga. Total external sales by Saga represented 22 percent of total operating revenues. With the full integration of Saga's operation in 2000, most of the oil produced by Saga will be sold through Hydro Energy, which will include oil and gas trading with effect from 1 January, 2000.

In 1999, Hydro realized an average crude oil price of USD 18.50 per barrel compared to USD 12.40 per barrel in 1998. The realized oil price in Norwegian kroner was NOK 145 per barrel in 1999 compared to NOK 94 per barrel in 1998. Saga's price hedging program for crude oil negatively affected 1999 operating income by NOK 367 million and financial expense by NOK 377 million. Due to the time lag in the price-setting mechanism for gas relative to crude oil,

average prices for gas were lower in 1999 than the previous year.

Hydro's total production of oil and gas was 340,000 barrels of oil equivalents per day (boed) compared to 270,000 boed in 1998. The increase was mainly due to production from Saga of 130,000 boed in the second half of 1999, which on an annualized basis, represented a contribution of 65,000 boed. Oil production accounted for 78 percent of the total production in 1999 compared to 79 percent in 1998. Gas production rose to 11.7 million standard cubic meters per day in 1999 compared to 9.0 million standard cubic meters in 1998. Included in the increase of 2.7 million standard cubic meters per day was Saga's total gas production of 621 million standard cubic meters in the second half of 1999 or 1.7 million standard cubic meters per day on an annualized basis.

Oil production from fields put into operation in 1999 was lower than expected, mainly due to delayed start-up and the resulting lower production from the fields Visund, Åsgard, Oseberg East and Kharyaga. Oil production was lower from the existing fields, Oseberg and Brage, which are in the decline phase of oil production, while Njord increased its production. Gas production from the major field, Troll, increased in 1999. As a result of the acquisition of Saga, Hydro gained access to production from Saga's existing fields in Norway. Hydro's production outside of Norway has also increased due to production from Saga's fields in the United Kingdom and Libya.

Global oil production decreased to approximately 74 million barrels per day in 1999 from an average of 75.5 million barrels per day in 1998. OPEC production declined by 1.4 million barrels per day, while the decrease in production outside of OPEC was approximately 0.2 million barrels 1999.

At the beginning of 1999, the Brent Blend oil price was around USD 11 per barrel. Prices started to increase around March, after OPEC decided to cut their oil production further by 1.7 million barrels per day. Since March the prices have increased steadily, and at year end the price of Brent Blend was approximately USD 25 per barrel.

This increase in price, primarily caused by OPEC production cuts, was also due to a reduction in production outside of OPEC, an increase in demand as a result of better economic conditions in Asia, as well as colder weather conditions in the OECD area.

Gas consumption in Western Europe, the most important market for Norwegian gas, increased by approximately 4.7 percent from 1998 to 1999. Increase in demand for gas used for generation of electrical power was the primary reason for this growth. Natural gas exports from the Norwegian Continental Shelf grew by 6.3 percent to 45.8 billion standard cubic meters, of which Hydro's share was approximately 9.1 percent.

## **Operating costs**

Average production cost (cost of operating field and transportation facilities including CO<sub>2</sub> emission tax, insurance, and gas purchased for injection, excluding transportation tariffs and depreciation) was NOK 22 per boe in 1999 compared with NOK 21 per boe in 1998. Hydro's total expenditure for exploration of oil and gas and appraisal of discoveries amounted to NOK 1,513 million in 1999 compared to NOK 1,368 million in 1998. Saga accounted for NOK 301 million of the increase in exploration expenditures in 1999. Increased exploration activities in Angola and Canada resulted in an increase in Hydro's international exploration activities, while exploration activities in Norway were reduced by 13 percent compared to 1998. Of the total exploration expenditures, NOK 1,202 million was expensed in 1999 compared to NOK 1,221 million in 1998. Accruals for well closure, decommissioning and removal costs totaled NOK 542 million in 1999.

Depreciation, including provisions for abandonment and well closure cost, averaged NOK 49 per boe in 1999, compared to NOK 35 per boe the previous year. This increase is related to more production from fields with higher depreciation cost per boe, and also to increased accruals related to decommissioning and well closure. Depreciation related to the excess value over book value of assets acquired from Saga amounted to NOK 8 per boe on an annualized basis.

A total number of approximately 710 employees have accepted severance payments and early retirement packages offered as part of the reorganization process following Hydro's acquisition of Saga. Approximately 650 employees accepted before year-end and the remaining 60 employees in the first part of year 2000.

## **Outlook**

Hydro's production is expected to increase in 2000, primarily as a result of the acquisition of Saga. Depreciation per boe is expected to increase in 2000, mainly due to increased depreciation related to the Saga excess value over book value.

Total exploration activities are expected to be higher in 2000 compared to 1999. The main reasons are increased participation in Norwegian licenses, and participation in new areas abroad due to the Saga integration. Exploration and appraisal activities in Angola and Canada are also expected to increase.

Hydro's future international activities will be focused on four to five core geographic areas, each with the potential to produce a minimum of 50,000 boe per day. Saga's interests on the British Continental Shelf are to be sold as they are not consistent with the core geographic areas' growth strategy.

Global oil demand in 2000 is expected to rise by 2.4 percent to 77 million barrels of oil per day. This rise, if

realized, will be higher than experienced over the past several years, and is seen as a sign of a return to more normal conditions after a period characterized by a low increase in demand. Production outside of OPEC is expected to increase to approximately 45.6 million barrels of oil per day. Crude oil prices will to a large extent depend upon OPEC's production level. The price of exported gas from Norway is closely linked to industrial fuel oil prices, with a slight time lag.

In the third quarter of 1999, Hydro purchased put options that give it the right to sell 30 million barrels of oil in 2000 for an average price slightly above USD 15 per barrel. This is to ensure earnings against the effects of low crude oil prices. The cost of the put options, approximately NOK 91 million, will be amortized throughout year 2000.

The Gas Negotiating Committee (GNC) entered into a long-term contract in 1999 with the Polish Oil and Gas Company. Deliveries are likely to begin in 2000. In addition, the GNC entered into a short-term contract for deliveries to the UK during the winter 1999/2000. Based upon all present contracts, the total committed gas sales from the Norwegian Continental Shelf will be around 70 billion standard cubic meters in the plateau sales period starting around 2005. Hydro's expected share of the committed volume in 2005 is about 10.5 percent.

The Saga acquisition is expected to create annual cost savings of NOK 1.4 billion to the Norwegian oil industry, of which NOK 500 million is expected to benefit Hydro.

## REFINING AND MARKETING

NOK million	1999	998	1997
Operating revenues	<b>15,716</b>	11,101	14,584
Operating income	<b>495</b>	112	284
Non-consolidated investees	<b>117</b>	36	(71)
Current assets	<b>5,435</b>	2,364	2,529
Non-current assets	<b>1,923</b>	1,908	1,885
Return on capital employed	<b>22%</b>	8%	11%
Number of employees	<b>290</b>	270	267

The main items affecting the change in operating income were:

NOK million	1999 vs. 1998
Margin (including trading)	420
Volume	20
Fixed costs	(40)
Other	(15)

### Revenues and market conditions

Operating revenues increased by 42 percent in 1999 compared with 1998, primarily because of significantly higher oil prices. The average Brent Blend crude oil price increased 41 percent in 1999 compared to the prior year.

Selling prices of refined products increased correspondingly, but at a slower rate. Approximately 84 percent of operating revenues were related to trading and refining activities, which consists of sales of crude oil and condensates production. Marketing of oil products in Sweden accounted for the remaining 16 percent.

Hydro's earnings from refining increased by 133 percent compared to 1998. The improvement was mainly caused by better margins on sales from inventories acquired at lower historical costs and the prior year being impacted by a six-week maintenance shutdown of Scanraff. However, measured on a daily basis, Hydro's refining margins weakened during 1999 as a result of the rapid increase in crude oil prices.

Income from the international trade of crude oil, liquefied natural gas and refined oil products increased by 85 percent compared with 1998, reflecting favorable positioning in relation to market price movements.

In Sweden, marketing activities showed significantly improved results in 1999, primarily due to better realized retail and wholesale margins. In the Swedish retail fuel market, the demand for gasoline was virtually unchanged from 1998, whereas diesel consumption increased by 1 percent. Consumption of heating oil declined by 3 percent. Hydro slightly improved its market share in the Swedish market in 1999.

Hydro's share of net income in non-consolidated investees, which almost solely consists of Hydro Texaco, more than doubled from 1998. The improvement was primarily caused by increased oil prices and better margins in the Norwegian and Danish retail gasoline market.

### Operating costs

Total operating costs, consisting mainly of raw materials and product variable costs of crude oil and refined oil product purchases, increased by 39 percent compared with 1998 primarily due to increased oil prices. Refining costs per barrel, comprised of both fixed and variable processing costs, were at the same level as the previous year.

### Outlook

In the Scandinavian retail market, demand for motor fuels is expected to be stable or slightly increasing. Consumption of heating oil is expected to decline as a result of competition from complementary energy sources, electricity and natural gas - a process in which Hydro is actively involved. Hydro's earnings from refining and marketing activities will continue to be strongly affected by the international oil price development, industry-wide refining margins and competitive conditions in the Scandinavian retail markets.

## ENERGY

NOK million	1999	1998	1997
Operating revenues	<b>3,301</b>	3,068	3,280
Operating income	<b>618</b>	573	652
Non-consolidated investees	<b>(9)</b>	(75)	(14)
Current assets	<b>1,440</b>	944	908
Non-current assets	<b>3,261</b>	3,571	3,468
Return on capital employed	<b>19%</b>	15%	22%
Number of employees	<b>348</b>	378	368

Internal sales were NOK 1,973 million, mainly to Aluminium Metal Products compared to NOK 1,696 million in 1998.

The main items affecting the change in operating income were:

NOK million	1999 vs. 1998
Margin	(20)
Volume	140
Peat activities in Ireland	(100)
Other	25

### Revenues and market conditions

In 1999, operating revenues for Energy were NOK 3,301 million, an increase of 8 percent compared to 1998. The increase was primarily due to an increase in operating revenues from European gas trading activities. Electricity trading revenues decreased by 7 percent due to lower electricity prices.

Gross margins on electricity sales increased in 1999 by NOK 120 million due to increased electricity production. Higher than normal inflow into reservoirs in 1999 allowed for higher net sales of electricity in the spot market. Average spot prices fell from 11.6 øre/KWh in 1998 to 11.2 øre/KWh in 1999. Energy's European gas trading activity margins increased to NOK 35 million compared to NOK 2 million in 1998, the figure for 1999 representing a full year of trading activity versus one month in 1998.

Energy's total marketed electricity volume increased to 29.7 TWh in 1999 from 24.0 TWh in 1998. Electricity production for Hydro-operated plants totaled 10.4 TWh in 1999, an increase of 16 percent compared to 1998.

Net energy exports from Norway amounted to 2.1 TWh in 1999, compared to net imports of 3.6 TWh in 1998.

### Operating costs

In 1999, Energy incurred a non-recurring cost when it closed down and sold its Peat business in the Republic of Ireland, which negatively impacted operating income by NOK 100 million. Of this amount, NOK 87 million represented the write-down of assets and NOK 13 million represented related operating costs incurred in 1999.

Power plant operating costs totaled NOK 560 million, compared to NOK 545 million in 1998, an increase of 3

percent. Business and project costs of NOK 60 million decreased by NOK 15 million, or 20 percent from the previous year. Other operating costs remained virtually unchanged from 1998.

Operating costs of NOK 34 million, related to the growing European gas trading activities, increased by NOK 6 million or 21 percent from the prior year.

Energy's share of net income of its non-consolidated investees produced a net loss of NOK 9 million in 1999, compared with a net loss of NOK 75 million in 1998. The postponement of the Naturkraft AS project contributed to the reduction in the net loss in 1999.

### Outlook

Water reservoir levels were normal, based on an eight year average, at the end of 1999. At year-end, the forward market showed no change in spot prices. Production level is estimated to be above a normal level of 8.5 TWh in 2000. Energy will continue building up its European gas trading activity in line with the liberalization of the European energy markets.

## HYDRO LIGHT METALS

NOK million	1999	1998	1997
Operating revenues	<b>32,221</b>	32,327	27,499
Operating income	<b>2,179</b>	2,577	1,638
Current assets	<b>15,783</b>	16,487	14,216
Non-current assets	<b>13,684</b>	13,219	11,648
Return on capital employed	<b>10%</b>	13%	10%
Number of employees	<b>15,219</b>	15,889	16,088

Hydro Light Metals consists of the segments Aluminium Metal Products, Aluminium Extrusion and Other Light Metals. Other Light Metals consists of Aluminium Rolled Products, Automotive Structures and Magnesium. In 1999, the operating income for the Hydro Light Metals was NOK 2,179 million, which was a decrease of 15 percent compared to 1998.

## ALUMINIUM METAL PRODUCTS

NOK million	1999	1998	1997
Operating revenues	<b>17,281</b>	18,235	16,138
Operating income	<b>1,357</b>	1,854	1,197
Non-consolidated investees	<b>62</b>	108	66
Current assets	<b>8,403</b>	9,433	6,327
Non-current assets	<b>5,143</b>	4,735	4,308
Return on capital employed	<b>15%</b>	23%	18%
Number of employees	<b>3,651</b>	3,823	4,151

In 1999, operating revenues for Aluminium Metal Products were NOK 17,281 million, a decrease of 5 percent compared to 1998. Internal sales to other segments in Hydro amounted to NOK 5,209 million compared to NOK 5,860 in 1998, a decrease of 11 percent. These sales are mainly to Aluminium Extrusion.

The main items affecting the change in operating income were:

NOK million	1999 vs. 1998
Margin	(600)
Volume	120
Fixed costs	(100)
Trading and price hedging	40
Other	45

Share of net income from affiliated companies decreased by 42 percent compared with 1998, mainly due to decreased margins at Sørval and project costs from Utkal Alumina International Limited.

### Revenues and market conditions

Operating revenues from the sale of own primary aluminium production were 3 percent below the previous year. The increase in sales volume of primary aluminium production by 1 percent was more than offset by reduced realized prices. Operating revenues from other activities were 9 percent below the previous year.

The average three-month price for primary aluminium on the London Metal Exchange (LME) was USD 1,387 per tonne in 1999, virtually unchanged from the average price of USD 1,380 per tonne in 1998. The three month price on the LME increased from USD 1,403 per tonne at 30 June, 1999 to USD 1,655 per tonne at 31 December, 1999. At 31 December, 1998, the corresponding price was USD 1,239 per tonne. Due to time lags in contract prices, Hydro realized average prices in Norwegian kroner that were 7 percent below 1998. Hydro had recognized gains of NOK 229 million on its price hedging program in 1999, compared to NOK 191 million in 1998. (Please refer to the Risk Management section for a further explanation of the price hedging program).

Shipments in the Western world increased by approximately 5 percent during 1999 compared with 1998. Registered inventories were stable during the year. Thus, stock level relative to consumption has been reduced. The market situation in Europe was affected by the downturn in Asian economies during the first half year of 1999, leading to pressure on product premiums above the standard LME price. However, the situation gradually improved during the year, and Hydro by year-end was fully utilizing its cast house product capacity at reasonable product premiums.

### Operating costs

Total operating costs per tonne of primary aluminium were in line with the previous year. Raw material cost per tonne produced decreased by 6 percent compared to 1998, mainly due to reduced alumina prices. Fixed costs increased by 4 percent compared to 1998.

Alumina and electricity are the most important raw materials for the production of primary aluminium. In 1999, Hydro sourced approximately 36 percent of the alumina requirements for its primary metal production from an affiliated refinery in Jamaica. The remaining part of Hydro's alumina requirements was secured through long-term contracts linked to primary aluminium prices. Electricity prices were slightly higher in 1999 compared to 1998.

Operating income for aluminium trading activities was in line with the previous year.

### Outlook

Industry shipments are expected to increase by 3-4 percent in 2000 compared to 1999. The favorable market situation for aluminium may lead to additional restart of idle capacity. However, a shortage of alumina may limit such restarts. Supply surplus in the aluminium industry is not expected to be an issue in 2000.

Hydro has sales contracts in place for about one-third of its primary metal production in 2000 at an expected price of USD 1,430 per tonne. The main part of the pre-sold metal is tied to normal customer pricing, while the remainder is connected to the price-hedging program carried out in the first half of 1999. Measured against year-end market prices, the program for 2000 will have a negative effect. The size of the effect will depend on the further price development; as of 31 December, 1999, this loss was NOK 246 million. Aluminium price volatility can result in significant fluctuations in the marked-to-market adjustments for LME positions which are recorded to operating income.

Measured against market prices at year-end, Hydro's trading activities have contracts in place for aluminium and alumina representing an unrealized profit of approximately NOK 200 million. Hydro's ability to recognize this amount will depend upon market developments in 2000.

## ALUMINIUM EXTRUSION

NOK million	1999	1998	1997
Operating revenues	<b>12,081</b>	12,088	10,438
Operating income	<b>649</b>	536	474
Current assets	<b>4,930</b>	4,551	4,057
Non-current assets	<b>3,295</b>	3,427	3,014
Return on capital employed	<b>13%</b>	12%	12%
Number of employees	<b>7,871</b>	7,806	7,760

The main items affecting the change in operating income were:

<u>NOK million</u>	<u>1999 vs. 1998</u>
Margin	(110)
Volume	340
Fixed costs	(90)
<u>Other</u>	<u>(25)</u>

### **Revenues and market conditions**

Hydro Aluminium Extrusion's operating revenues calculated in local currencies showed growth in all business units in 1999, whereas growth measured in NOK was flat. The Extrusion Europe unit accounted for 57 percent of operating revenues; sales of Building Systems, 17 percent; sales of Heat Transfer tubing and components to the automotive market, 18 percent. The remaining 8 percent was split among Extrusion International, sales of general extrusions outside Europe, and Light Metal Wheels.

Sold volume of general extruded profiles increased by 5 percent in 1999. Global shipments of heat transfer products increased in 1999 by 11 percent over the previous year, while shipments within the Building Systems unit increased by 9 percent.

A strong European economy, southern Europe contributing more than northern, and continued strong growth in the US economy resulted in increased extrusion consumption, which in Europe amounted to approximately 4 percent. This is a result of the increasing demand for aluminium extrusions, particularly in the building sector in southern Europe and in the machine and electronic industries in northern Europe. In addition, market penetration of air conditioning systems for cars in Europe is increasing the demand for Heat Transfer tubing.

### **Operating costs**

The high volume increased capacity utilization at Hydro's extrusion plants. Capacity was added mainly through minor investments in Germany, Italy and Brazil. Productivity in manufacturing processes was improved in line with the segment's continuous improvement program. Fixed costs increased slightly in 1999.

### **Outlook**

The economic outlook for the main markets in Europe and the US continues to be positive for 2000, and the demand for aluminium extrusions is expected to continue to increase.

Following a substantial increase in the activities within the non-residential building sector in the early 90's, the sector has during the past few years been through a consolidation phase. This consolidation phase, mainly within the German building industry, continued in 1999, but the market is expected to recover in 2000. In Southern Europe, building activities in recent years have been very high and this trend is

expected to continue in 2000. A similar consolidation phase is expected to occur in Southern Europe.

The market penetration effect on sales of Hydro's Heat Transfer tubing will continue and constant product development within this area will add value beyond the pure volume increase.

As of 1 March, 2000, the Baltimore-based Wells Aluminium Corporation wells is a part of Hydro Aluminium Extrusion, as the result of Hydro's acquisition. Wells has 7 plants in 6 states, supplying soft alloy extrusions and fabricated and finished aluminium components, with leadership positions in a number of attractive market niches. More than 50 percent of the extrusions produced by Wells incorporate value-added fabrication and/or finishing. The company will form a new business unit "Extrusion North America." Wells has an extruded products production capacity of approximately 75,000 tonnes.

## OTHER LIGHT METALS

NOK million	1999	1998	1997
Operating revenues	<b>7,716</b>	7,869	6,824
Operating income	<b>216</b>	162	25
Non-consolidated investees	<b>(89)</b>	(39)	(18)
Current assets	<b>3,639</b>	3,442	4,664
Non-current assets	<b>5,247</b>	5,057	4,326
Return on capital employed	<b>2%</b>	3%	2%
Number of employees	<b>3,697</b>	4,260	4,177

**Aluminium Rolled Products'** operating revenues decreased in 1999 compared to 1998 due to the closing of Hydro Slug AS. Operating income increased in 1999 due to higher volumes and better margins.

**Automotive Structures'** operating revenues and operating income in 1999 were lower than in 1998, because with effect as of the 2nd quarter of 1999, Hydro and Gränges (now Sapa AB) of Sweden agreed to merge their plastic bumper system operations. Hydro's shares in three subsidiaries were exchanged for 40 percent of the shares in a newly merged company, Gränges Autoplastics AB (now Autoplastics AB). The shares were exchanged at fair value, resulting in a loss of NOK 58 million in 1999. In March, 2000, Hydro entered into an agreement to sell the shares in Autoplastics back to Gränges. The sale will result in a gain of approximately the same size as the loss recorded in 1999.

**Magnesium's** operating revenues increased by 7 percent in 1999, while operating income decreased by approximately 12 percent. Improved production together with almost unchanged average prices contributed positively, while a write-down of capitalized project costs resulted in an overall net decrease.

In 1992, an anti-dumping duty of 21 percent was imposed on US imports of pure magnesium produced at Hydro's plant in Canada. The US Department of Commerce (DOC) requires three consecutive annual reviews with zero dumping margin before the case can be considered for revocation. Despite having met the three-year requirement, the DOC decided in 1999 not to revoke the order based on its determination that Hydro had not shipped sufficient "commercial quantities" during the previous three 12 month periods. Hydro will continue to pursue revocation via the annual review process, while raising the level of its shipments of pure magnesium to the US. Furthermore, Hydro has filed a complaint at the United States Court of International Trade contesting the DOC's decision. Hydro is also participating in a five year automatic review (Sunset Review) conducted by the DOC and the International Trade Commission (ITC), to be concluded by July 2000, which could result in revocation. A countervailing duty applicable to Hydro's imports of pure and alloyed magnesium from Canada to the US, originally at 7.61 percent, has been

gradually reduced to 2.02 percent, and is expected to decline in future years. A separate Sunset Review, which could result in revocation of this duty, is also underway at the DOC and ITC.

The trend of increasing demand for alloy magnesium die castings in motor vehicles is expected to continue, and will be the principal driver of growth for the foreseeable future. Based on announced projects and general interest from new potential entrants, the industry is considered likely to be adequately supplied to support anticipated growth.

## HYDRO AGRI

NOK million	1999	1998	1997
Operating revenues	<b>39,658</b>	41,316	42,589
Operating income (loss)	<b>(1,671)</b>	58	1,278
Current assets	<b>21,275</b>	21,046	22,516
Non-current assets	<b>15,764</b>	17,346	14,913
Return on capital employed	<b>(3%)</b>	3%	7%
Number of employees	<b>11,479</b>	12,072	11,626

Hydro Agri, which consists of the segments, Plant Nutrition, Gas and Chemicals and A/S Korn- og Foderstof Kompagniet (KFK), had an operating loss of NOK 1,671 million. This was a decrease of NOK 1,729 million compared to 1998.

## PLANT NUTRITION

NOK million	1999	1998	1997
Operating revenues	<b>26,799</b>	27,997	29,149
Operating income (loss)	<b>(2,239)</b>	(582)	869
Non-consolidated investees	<b>210</b>	379	345
Current assets	<b>15,921</b>	15,468	18,243
Non-current assets	<b>11,939</b>	13,389	12,009
Return on capital employed	<b>(7%)</b>	0%	7%
Number of employees	<b>7,802</b>	8,364	8,158

Of Plant Nutrition's total operating revenues, 8 percent were internal revenues, mainly from sales to Gas and Chemicals. The corresponding amount for 1998 was 5 percent.

Share of net income from non-consolidated investees was reduced by 45 percent, mostly due to reduced earnings in Qafco (reduced urea prices) and Farmland, (reduced DAP prices).

The main items affecting the change in operating income were:

NOK million	1999 vs. 1998
Margin	(900)
Volume	180
Fixed costs	400
Restructuring	(632)
Non-recurring costs	(680)
Other	(25)

### Revenues and market conditions

Operating revenues decreased by 4 percent in 1999 compared to 1998. An increase in volume did not offset reduced fertilizer prices, which continued their downward movement, particularly in Europe.

The international market for urea was fairly stable through 1999, but with lower prices than in 1998. The average Middle East urea price declined by 16 percent from 1998 to 1999. The import demand was negatively influenced by import restrictions in China and heavily subsidized fertilizer production in India. Also in 1999, additional production capacity outstripped consumption growth, worsening the global supply/demand balance.

Developments in the international nitrogen fertilizer markets, combined with the surplus capacity of nitrates, put downward pressure on prices for nitrogen fertilizers in Western Europe in 1999. Average nitrogen fertilizer prices in Western Europe dropped by 15 percent during 1999. Reduction in complex fertilizer (NPK) prices was smaller.

The average DAP price (US Gulf) dropped by 13 percent from 1998 to 1999. New production capacity in India, Pakistan and Australia, combined with low consumption in the US, resulted in excess capacity. Capacity closures towards the end of the year, permanent and temporary, have contributed to a leveling out of prices. At the end of 1999, the DAP price was USD 147/mt (fob) compared to an average 1998 price of USD 203/mt.

Sales of fertilizers produced in Western Europe by Hydro amounted to 11.7 million tonnes, compared to 11.3 million tonnes in 1998. Total sales, including third party products, totaled 19.2 million tonnes, an increase of 4 percent compared to 1998.

For the 1999 calendar year, total fertilizer deliveries to the most important markets in Western Europe were slightly higher than in 1998. Fertilizer deliveries in Western Europe during the first half of the 1999/2000 fertilizer season (July through December 1999) increased slightly from the corresponding period of the previous year.

According to the European Fertilizer Manufacturers Association numbers, West European nitrogen consumption increased by approximately 1 percent from 97/98 to 98/99. Consumption increased in Germany, Ireland and Spain. Phosphate consumption declined by approximately 1 percent

and potash consumption declined by 4 percent.

The ammonia price (North West Europe) has declined further and fell on average by 18 percent from 1998 to 1999. Traded ammonia volume was slightly lower than in 1998, mainly due to reduced production in Trinidad.

### Operating costs

Raw material costs were reduced in 1999 compared to 1998. Natural gas is the most important raw material for the production of ammonia and nitrogen fertilizer. In 1999 average gas prices stated in US dollars decreased by almost 20 percent compared to 1998 despite the crude oil price increase towards the end of the year. Considerable amounts of phosphate and potassium are also used in the production of complex fertilizer. Prices for these raw materials were basically at the same level as in 1998.

Fixed operating costs decreased during 1999. Costs relating to the development of an integrated information system amounted to approximately NOK 150 million, compared to NOK 400 million in 1998. The implementation of the system in the European part of the organization was finalized in the first half of 1999.

Hydro has decided to close down capacity of approximately 1,000,000 tonnes of nitrate capacity given Hydro's estimation of an overcapacity of 2.5-3.0 million tonnes in the European nitrate industry combined with the perception that the European nitrate market has limited growth potential in the foreseeable future. The plants affected by the capacity reduction are Landskrona in Sweden, Immingham in Great Britain and Montoir in France. The plants are expected to stop production permanently during the second quarter of 2000. The decision to reduce capacity was announced in December 1999, and the names of the factories involved in the restructuring program were announced in March 2000. Total restructuring provisions of NOK 632 million were taken in 1999, of which NOK 444 million was for write-downs and NOK 188 million was for the expected costs to dismantle the plant facilities and to terminate agreements with customers and suppliers.

In 1999 operating income for the fertilizer business was charged with non-recurring items of NOK 849 million, the main items are discussed below, in addition to the restructuring charge.

Operating loss included a charge of NOK 75 million associated with the shutdown of the Vlaardingen phosphoric acid plant in the Netherlands, in addition to the NOK 120 million charged in 1998. The plant ceased operation in November 1999. Capacity utilization for Hydro's fertilizer plants was slightly lower than in 1998. Due to high inventory volumes, the production was reduced at some sites. Hydro's ammonia plant in Porsgrunn started production late in July after having been closed for almost a year due to a major revamp. The ammonia/urea plant in Le Havre was out of

production for 11 weeks in the autumn, also due to revamp.

In March 1999, a Hydro Agri improvement program was launched. The original target was a cost reduction of approximately NOK 1,000 million (compared to 1998) to be achieved by the end of 2001. This target has since been revised upward to approximately NOK 1,350 million in fixed costs and NOK 400 million in variable costs. By the end of 1999 the reduction in full-time equivalents in the fertilizer business was 600 persons. In the accounts of 1999 approximately NOK 330 million has been provided for to cover the redundancy costs related to the demanning of approximately 800 people. This includes NOK 62 million related to the closure of the Vlaardingen phosphoric acid plant.

The financial situation of the farming industry in Central Europe has been difficult the last couple of years. As a consequence, Hydro has made provisions of NOK 86 million for estimated losses on accounts receivable in this region.

The operating loss includes an expense of NOK 229 million related to long term contracts for purchase of ammonia from Tringen. Of the expense in 1999, NOK 128 million represents accruals for estimated losses for future purchases.

## Outlook

The oversupply situation in the urea market is expected to continue for a period of time with a low price level as a consequence. New capacity will come on-stream during 2000 and 2001. A major part of the exporting urea industry has a cost basis that is not linked to the oil price level. The two largest urea-consuming countries, China and India, are expected to continue to subsidize their domestic industry and major import demand is not likely from these countries.

Nitrate prices in Western Europe decreased more than expected through 1999. As a result of poor performance and low capacity utilization within the nitrate industry, several European companies, including Hydro, announced restructuring measures during the end of 1999 and beginning of 2000. These closures will imply capacity reduction of approximately 2 million tonnes of nitrate capacity, approximately 15 percent of Western European nitrate capacity. The reduced supply is expected to contribute to an improved market balance in 2000.

The DAP prices fell significantly in 1999 and are expected to be low in 2000.

The price of oil affects gas prices, and with the high prices at the end of 1999 and beginning of 2000, the energy costs at Hydro fertilizer plants will increase. This represents a major challenge for the fertilizer business. A USD 1 barrel increase on a yearly basis represents a NOK 130-150 million increase in operating cost for Plant Nutrition.

No major change in fertilizer consumption is expected in West Europe. The set aside rate in the EU is currently at 10

percent and is expected to remain at this level.

In December 1999, Hydro entered into a joint venture with the South African chemicals company, AECL, for the production and marketing of NPK and liquid fertilizers in South Africa. The joint venture company, Kynoch Fertilizer, is the leader in the South African fertilizer market with a market share of 40 percent.

During 1999, decisions leading to a total manning reduction of 800 full-time equivalents were made. Of these approximately 600 left during 1999. The restructuring program is expected to reduce the number of employees by approximately an additional 300 persons at the production sites. Costs of approximately NOK 150 million related to this demanning will most probably be incurred in the first quarter of 2000. Hydro has also launched an overhead turnaround project that is expected to reduce manning significantly. The costs related to this program will be clarified later this year. Hydro expects total manning for the fertilizer business in 2001 to be reduced by about 1,900-2,200 full-time equivalents (including employees and consultants) compared to the start of 1999. This will represent a 20-25 percent manning reduction.

## GAS AND CHEMICALS

NOK Million	1999	1998	1997
Operating revenues	<b>4,718</b>	4,716	4,383
Operating income	<b>349</b>	261	305
Current assets	<b>2,553</b>	1,937	1,395
Non-current assets	<b>2,173</b>	2,394	1,676
Return on capital employed	<b>11%</b>	11%	15%
Number of employees	<b>1,568</b>	1,623	1,325

The main items affecting the change in operating income were:

NOK million	1999 vs. 1998
Margin	40
Volume	80
Fixed costs	(25)
Other	(5)

### Revenues and market conditions

The increase in operating revenues in Hydrogas and HydroCare in 1999 was offset by slightly lower operating revenues in Hydro Chemicals, the largest business unit, and in Hydro Oleochemicals, leaving the segment's total operating revenues virtually unchanged from the prior year.

Hydro Chemicals' operating revenues decreased by 2 percent due to lower international market prices of nitrogen based products, while improved margins contributed to an increase in operating income. Contribution from new

products and applications continued to improve overall performance for Hydro Chemicals in 1999.

The 4 percent increase in operating revenue for Hydrogas was due to sales growth in established operations in Western Europe and new carbon dioxide sales in Asia.

HydroCare increased its operating revenues due to new projects outside Scandinavia.

### Operating costs

Raw material costs were reduced from 1998 to 1999.

Ammonia, the main raw material for Hydro Chemicals, experienced a 21 percent reduction in price from 1998. The price of urea for technical applications was reduced by 22 percent compared to 1998. Both urea and ammonia are mainly sourced from other Hydro units.

Hydrogas' sourcing and logistical costs increased due to a major revamp of Hydro's ammonia plant in Porsgrunn, which created a stoppage in carbon dioxide supply from this source during the first seven months of 1999.

Fixed costs increased during 1999 by 1 percent. The underlying increase was mainly related to geographical expansion and business development for Hydrogas. Fixed costs in 1999 were charged with a provision for demanning of about NOK 30 million.

Non-recurring costs in 1999 consist of a charge of NOK 66 million related to write-downs of a rare earth production facility in Norway and a hydrochloride acid recycling plant in Germany. The 1998 operating costs were charged NOK 60 million for the implementation of a new administrative system and NOK 42 million for the write-down of the rare earth production facility in Norway.

### Outlook

Continued low urea and ammonia prices are assumed in 2000.

Hydro Chemicals' volumes are expected to remain stable at high levels of capacity utilization. Margins are under pressure in international nitrate markets, where as, margins on ammonia based products are expected to be stable.

Sales volumes are expected to increase for core activities, particularly in Hydrogas and HydroCare, due to market growth, new applications and sales established in new geographical areas.

## A/S KORN- OG FODERSTOF KOMPAGNIET - KFK

NOK Million	1999	1998	1997
Operating revenues	9,756	10,143	10,007
Operating income	233	375	89
Current assets	3,792	3,988	3,712
Non-current assets	1,654	1,566	1,229
Return on capital employed	7%	12%	6%
Number of employees	2,109	2,092	2,143

The main items affecting the change in operating income were:

NOK million	1999 vs. 1998
Margin	130
Volume	75
Fixed costs	(45)
Depreciation and amortization	(210)
Other	(90)

### Revenues and market conditions

In 1999, operating revenues from the grain and feed-stuff business fell 4 percent, and from fish feed activities, 6 percent, compared to the prior year, both due solely to a decline in prices.

The Danish and Swedish markets for grain and feed-stuff are highly competitive, and grain products especially have shown lower margins than in 1998. This has partly been offset by a higher sale of compounds.

Operating revenues from the Norwegian fish feed market were influenced by a fire in the fish feed factory in Myre in 1998, which reduced production capacity in the short-term. Therefore, sales volumes in Norway were 9 percent lower than in 1998, although the total Norwegian market showed a volume increase. The margins in all markets were considerably higher than in 1998 primarily due to lower raw material costs.

### Operating costs

Raw material costs, which constitute the largest part of total operating costs, were at a lower level in 1999 compared to 1998. The grain and feedstuff activities had a decline in raw material costs of 9 percent, and fish feed activities had a decline in raw material costs of over 20 percent.

Depreciation increased by NOK 212 million in 1999. A change in accounting principle in 1998 created a favorable one-time effect of NOK 238 million in 1998. The operating costs in 1998 were also positively affected by an insurance settlement of NOK 68 million related to a fire in the fish feed factory in Myre, Norway.

## Outlook

The improvement in operating income for fish feed activities is not expected to continue at the same rate in 2000. However sales volumes are expected to increase considerably, among other reasons because both the Norwegian factories will be ready for normal production during the high season. Within the grain and feed-stuff business, the main focus in year 2000 will be to continue the cost reduction initiatives.

## PETROCHEMICALS

NOK million	1999	1998	1997
Operating revenues	5,346	6,028	6,034
Operating income	113	229	430
Current assets	3,031	2,624	3,311
Non-current assets	3,240	3,656	3,498
Return on capital employed	10%	6%	9%
Number of employees	1,937	2,965	2,984

The main items affecting the change in operating income were:

NOK million	1999 vs. 1998
Margin	(275)
Volume	125
Fixed costs	30
Other	5

### Revenues and Market Conditions

In 1999, operating revenues for Petrochemicals were 11 percent lower than in 1998, due to disposals of the plastic pipe systems activity of Mabo and Hydro Coatings, and lower average product prices. Petrochemicals' operating income decreased by 51 percent, because of the factors which contributed to the reduction in operating revenues and higher feed-stock costs in the ethylene plant. However, at year-end significantly higher product prices were being realized.

Disposals of assets in Singapore Polymer Corporation in connection with a relocation increased operating income with NOK 52 million.

Global demand for PVC was approximately 4 percent above demand in 1998, and about equal to the demand in 1997. The total Western European consumption of PVC increased by 3 percent in 1999 versus 1998; in North America, by 2 percent; and in Asia, by 6 percent. The sale of PVC from the US to Asia was low due to weak margins combined with high domestic demand and therefore, relatively higher margins in the US market. Because of increased need for VCM in Hydro's production of PVC, and also weak prices, Hydro's sale of VCM to Asia was low.

Hydro's average realized price for S-PVC (CIF) was 5 percent lower in 1999 than in 1998. However, realized price for S-PVC increased dramatically at the end of the year, and

the average price for the second half versus the first half of 1999 was 39 percent higher. This price increase was mainly due to increased raw material prices (oil), in combination with higher demand in Europe for PVC.

Hydro's total production of S-PVC increased to 451,000 tonnes, a 12 percent increase over 1998.

Caustic prices deteriorated throughout 1999. On average, realized FOB prices for caustic soda were NOK 1,294 per tonne in 1999, compared with NOK 1,579 per tonne in 1998.

On 1 March, 1999, Hydro announced the sale of the activity in Mabo AS to Pipelife (a joint venture between Wienerberger of Austria and Solvay of Belgium). The net gain before tax from this sale was NOK 149 million. On 7 September, 1999, Hydro announced the sale of its coil coating business, the Hydro Coatings Group, to BASF with a net gain before tax of NOK 234 million. In 1998, operating revenues for Mabo and the Hydro Coatings were NOK 1,207 million.

### Operating Cost

Total raw material costs for Petrochemicals was approximately 6 percent below 1998. This was mainly due to the sales of Mabo and Hydro Coatings, partly offset by increased prices for natural gas liquids (NGL) and higher PVC volumes produced.

Total fixed cost were reduced compared to 1998. This was mainly attributable to the sales of Mabo and Hydro Coatings, lower development costs for a new administrative system in 1999 than in 1998 and reduced manning.

### Outlook

Global demand for PVC is expected to increase by 5 percent in 2000 versus 1999.

The average price for PVC for year 2000 is expected to be slightly below year end prices in 1999. Large new capacities brought on stream between 1997 and 2000 do not seem to have created a significant downward pressure on margin.

Hydro has designated Petrochemicals as a non-core business segment and has committed to actively taking part in the restructuring of the Petrochemicals business.

## OTHER ACTIVITIES

**Hydro Seafood's** operating revenues and operating income increased in 1999 compared to 1998. In 1998, the outbreak of the fish disease, Infectious Salmon Anemia (ISA), in Scotland required the slaughter of salmon, which led to significant losses.

Hydro has in March 2000 entered into final and exclusive negotiations with the Dutch company Nutreco Holding N.V. to sell its salmon production and sales activities operating as Hydro Seafood AS. It is expected that a final agreement will be realized during the first half of April.

**Pronova's** operating revenues and operating income decreased in 1999 compared with 1998. During 1999, Pronova divested its subsidiary, Pronova Biopolymer (alginates), to FMC Corporation with a pre-tax profit of NOK 1,025 million. The major part of the remaining Pronova consists of the Omega-3 fatty acids where particularly the lipid-lowering drug Omacor is supposed to have a high potential.

**Hydro Technology and Projects'** operating revenues decreased in 1999 from 1998. Operating income was slightly reduced in 1999 compared to 1998.

**Hydro's insurance activities'** operating income was higher compared to 1998. In 1999, insurance activities had gross premium revenues of NOK 515 million, while total assets at year end amounted to NOK 3,810 million.

## **1998 COMPARED WITH 1997**

Group operating revenues of NOK 97,468 million in 1998 were at the same level as in 1997. Operating income decreased 46 percent compared to the previous year. Light Metals showed substantial improvement, mainly due to higher metal production and better margins. Earnings weakened considerably for Hydro Agri, Hydro Oil and Energy and Petrochemicals, mainly due to lower prices.

### **Financial and other**

The results for non-consolidated investee companies were comparable to the previous year. The fertilizer affiliates showed improvement despite weak markets, as did the retail gasoline marketing company, Hydro Texaco, and Sør-Norge Aluminium A/S (Søral). Dyno made provisions in connection with legal settlements in the US, resulting in a reduction of NOK 198 million to Hydro's net income.

Net financial expense was NOK 409 million, compared with NOK 837 million in 1997. The decrease was significantly affected by the gain of NOK 1,131 million related to the sale of Hydro's share in Saga Petroleum. Capitalized interest in 1998 was NOK 614 million, compared to NOK 565 million in the previous year.

Net interest expense increased by NOK 196 million in 1998 due to higher net interest bearing debt and the currency exchange rate effect on the interest expense, mainly due to the strengthening of the US dollar (USD).

The US dollar exchange rate rose in 1998 from NOK 7.33 per dollar at the beginning of the year to NOK 7.61 at the end of the year. The net foreign exchange loss in 1998 increased to NOK 361 million from NOK 275 million in 1997. During 1997, the dollar strengthened from NOK 6.45 to NOK 7.33 at

year-end.

In 1997, other income of NOK 78 million reflected a gain on the sale of a portion of a partly owned power plant.

### **Taxes and net income**

Income before taxes and minority interest decreased 44 percent from 1997. The provision for current and deferred taxes was equivalent to 34 percent of pre-tax income in 1998, compared to 49 percent in 1997. The lower relative proportion of income attributable to Norwegian offshore oil and gas activities lowered the effective tax rate. In addition, the tax effect from the gain on the sale of Hydro's shares in Saga Petroleum, taxed at a tax rate of 28 percent, and the final ruling regarding tax consolidation in the Netherlands of parts of Hydro's European fertilizer operations, created positive one-time effects. Excluding these non-recurring effects, the effective tax rate for 1998 would have been approximately 49 percent. Current tax represents 70 percent of total taxes, compared to 81 percent in 1997.

Net income was NOK 3,754 million (NOK 16.40 per share) in 1998, compared to NOK 5,205 million (NOK 22.70 per share) in 1997.

### **Balance sheet**

Hydro's long-term interest bearing debt at the end of 1998 was NOK 24,105 million, compared to NOK 17,412 million at the end of 1997.

Short-term bank loans and the current portion of long-term debt decreased to NOK 6,737 million at the end of 1998 from NOK 8,401 million at the end of 1997.

Net interest bearing debt (short- and long-term interest bearing debt plus current portion of long-term debt less cash and cash equivalents) at the end of 1998 was NOK 28.9 billion, compared to NOK 23.4 billion at the end of 1997. During 1998, Hydro has issued new long-term debt in US dollar, Norwegian and Swedish kroner. In addition, the weakening of the Norwegian kroner has resulted in increased net interest bearing debt. In 1998, Norsk Hydro ASA issued long-term bonds in the US and Norway totalling NOK 4.75 billion. The US debentures totalled USD 500 million and the Norwegian issue totalled NOK 1 billion.

Minority interest increased by 10 percent to NOK 1,266 million in 1998.

Shareholders' equity was NOK 48,291 million at the end of 1998, which was an increase of 6 percent compared to 1997.

## EXPLORATION AND PRODUCTION

In 1998, operating revenues for Exploration and Production were NOK 10,637 million, a decrease of 19 percent compared to 1997. Internal sales, mainly to Refining and Marketing, amounted to NOK 7,020 million. In 1998, operating income amounted to NOK 2,565 million, a decrease of 60 percent compared to 1997.

### Revenues and market conditions

Most of the oil produced by Exploration and Production is sold through Refining and Marketing. These sales represent approximately 65 percent of Exploration and Production's operating revenues. The remaining 35 percent is comprised mainly of sales of gas and transportation tariffs.

In 1998, Hydro realized an average crude oil price of USD 12.40 per barrel, compared to USD 19.20 per barrel in 1997. The corresponding oil price in Norwegian kroner was NOK 94 per barrel in 1998, compared to NOK 135 per barrel in 1997. The average gas price in Norwegian kroner was sustained at the same level as in 1997, mainly due to time lag in the price-setting mechanism for gas relative to crude oil. A weaker Norwegian currency in 1998 also had a positive effect on gas prices measured in Norwegian kroner. Royalties were reduced mainly due to lower oil prices.

Hydro's production of oil and gas in 1998 was 270,000 bar-rels of oil equivalents per day (boed), compared to 266,000 boed in 1997. Oil production accounted for 79 percent of total production in 1998, approximately the same level as in 1997. The Oseberg, Gullfaks and Brage fields have reached the decline phase in their oil production and produced less than in 1997. However, the decrease was more than compensated by production from the new fields, Njord, Norne, Vigdis and Hibernia. Gas production rose to 9.0 million standard cubic meters per day in 1998, compared to 8.6 million standard cubic meters in 1997. The Troll field contributed to most of the increase.

Global oil production increased to approximately 75.3 million barrels per day in 1998 from an average of 74.4 million barrels per day in 1997. OPEC production rose by 0.7 million barrels per day, while the increase in oil production outside of OPEC was approximately 0.2 million barrels per day in 1998.

At the beginning of 1998, the Brent Blend oil price was approximately USD 16 per barrel, but for the majority of 1998, it varied between USD 11-13 per barrel. During the spring and summer, the OPEC countries agreed to lower production by a total of 2.6 million barrels of oil per day, of which about 80 percent was fulfilled. Yet oil prices continued their downward trend through 1998. This was partly a result of the economic crisis in Asia and mild winter conditions in

the OECD area, which led to reduced demand and increased oil stocks throughout 1998. The Brent Blend oil price at year end was approximately USD 11 per barrel.

Gas consumption in Western Europe, the most important market for Norwegian gas, increased by approximately 4 percent from 1997 to 1998. Gas consumption in segments other than domestic heating continued to grow at the same rate as for the last two decades, resulting in an increased market share of natural gas compared to other types of fuels. Natural gas deliveries from the Norwegian continental shelf grew by 1 percent to 42.6 billion standard cubic meters, of which Hydro's share was approximately 7.5 percent.

### Operating costs

Average production cost (cost of operating field and transportation facilities, including CO<sub>2</sub> emission tax, insurance and gas purchased for injection, excluding transportation tariffs and depreciation) was NOK 21 per boe in 1998, compared with NOK 19 per boe in 1997. Depreciation, including provisions for abandonment and well closure cost, averaged NOK 35 per boe in 1998, compared to NOK 32 per boe in the previous year. The increase in depreciation primarily reflected the change to more stringent criteria for proved reserves. A write-down of NOK 95 million was recorded in connection with Hydro's decision to withdraw from the Sincor project in Venezuela. Hydro's total expenditure for exploration for oil and gas and appraisal of discoveries amounted to NOK 1,368 million in 1998 and NOK 1,114 million in 1997. Of these amounts, NOK 1,221 million was expensed in 1998, compared to NOK 786 million in 1997. The increase reflected higher exploration activity and lower capitalization caused by fewer commercial discoveries.

## REFINING AND MARKETING

In 1998, operating revenues for Refining and Marketing were NOK 11,101 million, a decrease of 24 percent compared to 1997. In 1998, operating income amounted to NOK 112 million, a decrease of 61 percent compared to 1997.

Hydro's share of equity in net income of non-consolidated investees, which principally consists of Hydro Texaco, improved significantly in 1998. The improvement was mainly the result of 1997 being a year with particularly high costs related to redesign of the gasoline stations in Norway and Denmark and very low margins in the Norwegian retail gasoline market.

### Revenues and market conditions

In 1998, operating revenues were 24 percent lower than in 1997, primarily reflecting declining oil prices. Brent Blend crude prices decreased approximately USD 5 per barrel throughout 1998, and the average level was 35 percent lower than in 1997. The decrease stated in Norwegian kroner was 31 percent. Selling prices of refined oil products declined correspondingly, averaging 29 percent below 1997 prices. Trading and refining activities, including sales of Hydro's crude oil and condensates production, accounted for approximately 80 percent of operating revenues, and marketing of oil products in Sweden accounted for the remaining 20 percent.

Hydro's refining margins, stated in US dollars per barrel, were virtually unchanged from the previous year. However, because of negative impacts from declining oil prices and a six-week scheduled maintenance shutdown of Scanraff, Hydro's partly owned refinery in Sweden, earnings from refining were 27 percent lower than in 1997. A volatile oil market led to lower operating income for the international trade of crude oil, natural gas liquids and refined oil products, and operating income decreased compared with 1997. Marketing activities in Sweden were negatively impacted by losses realized from declining crude oil prices with high historical inventory cost, and declining consumption of gasoline and heating oil in the Swedish market.

During 1998, demand for gasoline in the Swedish retail market decreased by approximately 3 percent. Also, relatively mild winter temperatures at the beginning of 1998 contributed to a decline in heating oil consumption of 1 percent. In a rapidly changing and competitive marketplace, Hydro has maintained its market shares in the Swedish market in 1998.

## Operating costs

Total operating costs, comprised mainly of raw materials and other product variable costs, decreased from the prior year, primarily due to the decline in international oil prices. Refining costs, as a whole, declined 6 percent compared with the previous year due to the six-week maintenance shutdown in 1998. However, refining costs per barrel remained unchanged from the previous year.

## ENERGY

In 1998, operating revenues for Hydro Energy were NOK 3,068 million, a decrease of 6 percent compared to 1997. Internal sales were NOK 1,696 million, mainly to Hydro Aluminium Metal Products. Operating income for Hydro Energy decreased 12 percent to NOK 573 million in 1998.

Hydro Energy's share of net income of its non-consolidated investees produced a net loss of NOK 75 million in 1998, compared with a net loss of NOK 14 million in 1997. The loss in 1998 is mainly related to the gas power project Naturkraft AS.

### Revenues and market conditions

In 1998, operating revenues from internal sales of electricity increased by 3 percent from 1997, due to increased sales to Hydro Aluminium Metal Products. External revenues from sales of electricity were reduced by 25 percent, mainly due to lower prices. Adjusted for purchases of electricity, margins were reduced in 1998 by NOK 160 million due to lower electricity prices and a reduction in income from trading activities. The 1997 results were favorably influenced by forward sales contracts entered into during the winter of 1996/1997.

Average spot prices fell from 13.5 øre/KWh in 1997 to 11.6 øre/KWh in 1998. Net energy imports to Norway amounted to 3.6 TWh in 1998, compared to 3.8 TWh in 1997.

Hydro's total marketed electricity volume increased to 24.0 TWh in 1998 from 23.6 TWh in 1997. Electricity production for Hydro-operated plants totalled 9.0 TWh in 1998, a decline of 13 percent compared to 1997. On 1 January, 1998, operation of the Høyanger Power Station was transferred to Statkraft as a consequence of the concession regime. The same amount of power is now covered by a long-term contract with Statkraft.

### **Operating costs**

As a part of the new hydropower tax regime in Norway resulting in higher taxes, the production levy on electricity was removed as of 1998, resulting in a cost reduction of NOK 140 million compared to 1997. Other operating costs remained virtually unchanged from 1997.

In 1998, the increased business and project development activities, primarily related to gas and gas-fired power plants, contributed to a rise in cost of NOK 40 million.

## **ALUMINIUM METAL PRODUCTS**

In 1998, operating revenues for Aluminium Metal Products were NOK 18,235 million, an increase of 13 percent compared to 1997. Internal sales to other segments in Hydro amounted to NOK 5,860 million, mainly to Aluminium Extrusion. In 1998, operating income was NOK 1,854 million, an increase of 55 percent compared to 1997.

Share of net income from associated companies increased by 64 percent compared with 1997, mainly due to increased production and margins at Sørå.

### **Revenues and market conditions**

Operating revenues from the sale of primary aluminum and trading activities were 13 percent above the previous year. This was due to higher sales volume combined with the effect of a strong US dollar exchange rate and increased product premiums.

The average three-month price for primary aluminum on the London Metal Exchange (LME) was USD 1,380 per tonne in 1998. This was a 15 percent decrease compared to the average price of USD 1,620 per tonne in 1997. Due to time lags in contract prices and effects of product premiums, as well as forward sales and a strong US dollar exchange rate, Hydro realized average prices in Norwegian kroner that were 4 percent higher than in 1997. Hydro has recognized gains of NOK 191 million on its price hedging program in 1998.

Asia accounts for about 25 percent of the total world's consumption of aluminum. The economic crisis in Asia led to

a decrease in industry shipments of about 11 percent for this region. Shipments in the US and Europe increased by 2-3 percent. The net effect in the total Western world consumption was a shipment reduction of 1-2 percent. Registered inventories were stable during the year. However, during 1998 there was an estimated increase of about 300,000 tonnes of metal stocks accumulated outside the official producer and LME system.

Hydro's primary aluminum production increased by 12 percent compared to 1997 and operating capacity was fully utilized in 1998.

### **Operating costs**

Operating costs per tonne primary aluminum were reduced by 2 percent from the previous year .

The raw materials cost per tonne produced decreased by 3 percent compared to 1997. Also other operating costs per tonne were reduced due to increased production volume and effects from the ongoing cost reduction program.

Alumina and electricity are the most important raw materials for the production of primary aluminum. In 1998, Hydro covered approximately 35 percent of its alumina requirements from an affiliated refinery in Jamaica. The remaining part of Hydro's alumina requirements was secured through long-term contracts linked to primary aluminum prices. Electricity prices remained unchanged in 1998 compared to 1997.

Fixed costs increased due to non-recurring costs for re-organizing of administration units and an increase in production capacity. Operating income for aluminum trading activities was NOK 60 million below levels in 1997, mainly due to lower premiums and lower profit on LME-trading.

## **ALUMINIUM EXTRUSION**

Aluminium Extrusion's operating revenues rose 16 percent to NOK 12,088 million in 1998. Operating income amounted to NOK 536 million, an increase of 13 percent compared to 1997.

### **Revenues and market conditions**

Aluminium Extrusion's operating revenues showed growth in all business areas in 1998. The Extrusion Europe area accounted for 55 percent of operating revenues, sales of Building Systems 17 percent, and sales of Heat Transfer tubing and components to the automotive market 17 percent. The remaining 11 percent was split among Light Metal Wheels, Finished Products and general extrusion outside Europe. Of total revenues for the year, 4 percent is attributable to newly acquired units.

Despite decreased primary aluminum prices, overall extrusion margins were kept on a satisfactory level.

Sold volume of general extruded profiles increased in 1998 due to acquisitions and better market performance. Global shipments of heat transfer products increased in 1998 by more than 8 percent over the previous year, while shipments within the Building Systems business area were unchanged.

A strong European economy and continued growth in the US economy resulted in increased extrusion consumption, which in Europe amounted to approximately 4 percent. This is a result of the increasing demand of aluminum extrusions, particularly in the building, machine and electronic industries. In addition, market penetration of air conditioning systems for cars in Europe is increasing the demand for Heat Transfer tubing. The European building market showed higher growth in Southern Europe than in the northern part. Altogether, this growth was a good basis for market development in all business areas.

### **Operating costs**

The high volume increased capacity utilization at Hydro's extrusion plants. Capacity was added through acquisitions during 1997, as well as through investments in Denmark and the UK. NOK 95 million of the operating cost deviation is related to acquisitions made at the end of 1997. Capacity increases at existing plants and inflation have also contributed to increased capacity related costs. Productivity in manufacturing processes was improved in accordance with the segment's continuous improvement program. Higher fixed costs were incurred in a US plant for Heat Transfer related to start-up of a new product line.

### **OTHER LIGHT METALS**

**Aluminium Rolled Products'** operating revenues and operating income increased in 1998 compared to 1997. The increase was mainly due to higher sales prices and margins, but also higher volume produced.

**Automotive Structures** operating revenues were higher in 1998 than in 1997. Operating loss was reduced in 1998 from 1997 due to higher volumes and improved operations.

**Magnesium's** operating revenues and operating income increased in 1998 from 1997. This increase was attributed to a rise in sales volumes.

In 1992, an anti-dumping duty of 21 percent was imposed on

US imports of pure magnesium produced at Hydro's plant in Canada. The US Department of Commerce normally requires three consecutive annual reviews with zero percent in revised duties before the case can be revoked. The Department of Commerce has temporarily confirmed zero percent in revised duties also for the third year but did not revoke the order. The final decision is expected in 1999. A countervailing duty applicable to Hydro's imports of pure and alloyed magnesium from Canada to the US, originally at 7.61 percent has been gradually reduced to 2.78 percent. This duty is expected to gradually decline over the next few years.

Increase in demand for alloy magnesium is expected to continue, and Europe is expected to catch up with the US in the use of magnesium in automobiles. The closure of Dow Chemicals' plant in Texas has reduced capacity by almost 20 percent. The reduction is expected to be compensated by increased production from existing suppliers and new entrants to the magnesium market are expected.

### **PLANT NUTRITION**

In 1998, the operating revenues of Plant Nutrition was NOK 27,997 million, a decrease of 4 percent compared to 1997. Of Plant Nutrition's total operating revenues, 5 percent were internal revenues, mainly from sales to Gas and Chemicals. Operating income for Plant Nutrition fell from NOK 869 million in 1997 to a loss of NOK 582 million in 1998.

Share of net income from associated companies increased 10 percent compared with 1997. This was explained by appreciation of the Thai baht, offsetting last year's currency losses in the Thai marketing joint venture, Viking, and improved earnings from Farmland Hydro, which produces DAP (Diammonium Phosphate). Lower prices for urea and ammonia affected Qafco and Tringen negatively. Production volumes increased for Qafco, but were stable for the other two companies.

### **Revenues and market conditions**

Operating revenues decreased by 4 percent in 1998 compared to 1997, as a result of reduced sales volumes and declining prices for nitrogen fertilizers particularly in Europe.

In 1998, the international market for urea continued to be strongly influenced by the import embargo that China introduced in April 1997. Combined with an increase in global production capacity, this resulted in a surplus of fertilizer in the market. Average sales prices for urea in 1998 were approximately 30 percent below the previous year. Prices of other nitrogen fertilizer products for export out of Europe declined significantly during 1998.

Developments in the international market for urea, combined

with high capacity utilization for most of the Western European nitrogen fertilizer producers, put downward pressure on prices for nitrogen fertilizers in Western Europe in 1998. Nitrogen fertilizer prices in the major markets of Western Europe dropped by 5-10 percent during 1998. This had a significant effect on Hydro's earnings, as nitrogen fertilizer represented more than half of its sales in Western Europe. The markets for complex (NPK) fertilizer showed a more stable development.

The price level for DAP was virtually unchanged from last year. The main importers, China, Pakistan and India, all increased their imports and full production capacity was maintained.

Sales of fertilizer's produced in Western Europe by Hydro amounted to 11.3 million tonnes, compared to 11.7 million tonnes in 1997. Total sales, including third party products, totaled 18.5 million tonnes, a reduction of 2 percent compared to 1997.

For the 1998 calendar year, total fertilizer deliveries to the most important markets in Western Europe were slightly lower than in 1997. Fertilizer deliveries in Western Europe during the first half of the 1998/1999 fertilizer season (July through December 1998) fell significantly from the corresponding period in the previous year.

Fertilizer consumption in Western Europe during the fertilizer season from July 1997 to June 1998 was slightly lower than in the previous season. Fertilizer imports to Europe from Eastern Europe and the former Soviet Union have shown a slight decline, partly due to an anti-dumping duty the European Union imposed on ammonium nitrate imports from Russia.

Prices for ammonia declined throughout 1998. On average, prices were approximately 20 percent below the level for 1997. The 1998 market was dominated by excess supply for export compared to previous years. New capacity came on stream in Trinidad, not offset by any major reductions in existing capacity.

### **Operating costs**

Raw material costs were slightly reduced in 1998 compared to 1997. Natural gas is the most important raw material for the production of ammonia and nitrogen fertilizer. In 1998, gas prices stated in US dollars decreased compared to 1997. The savings from lower gas prices were partly offset by the stronger US dollar.

Considerable amounts of phosphate and potassium are also used in the production of complex fertilizer. In 1998, prices for these raw materials were somewhat higher than in the previous year.

Fixed operating costs decreased during 1998 measured in

European currencies. Stated in Norwegian kroner, costs rose slightly compared to 1997. Costs relating to the development and implementation of new integrated information systems increased from approximately NOK 200 million in 1997 to approximately NOK 400 million in 1998. This project is in the implementation phase and is expected to be completed during the first half of 1999.

Operating loss includes a charge of NOK 120 million associated with the shutdown of a phosphoric acid plant in the Netherlands.

Capacity utilization for Hydro's fertilizer plants was slightly lower than in 1997. Due to high stocks, Hydro reduced production at some sites for a period in 1998.

Hydro's ammonium nitrate plant in Ambès, France, was out of production during the autumn of 1998 after a mechanical breakdown. Hydro's ammonia plant in Porsgrunn, Norway, has also been out of production since the autumn of 1998 due to a major revamp.

## **GAS AND CHEMICALS**

In 1998, Gas and Chemicals had operating revenues of NOK 4,716 million, which was an increase of 8 percent from 1997. Operating income decreased by 14 percent to NOK 261 million in 1998.

### **Revenues and market conditions**

Despite the increase in overall operating revenues for Gas and Chemicals in 1998, operating revenues in Hydro Chemicals, the largest business unit, remained unchanged from 1997. The other business units: Industrial Gases, HydroCare and Hydro Oleochemicals, had increases in operating revenues.

Operating revenues for Hydro Chemicals remained unchanged, even though there was a decline in prices related to ammonia and urea-based products. Despite declining prices, major improvements were achieved in supplying ammonium nitrate to the non-military explosive business. In addition, improved margins on nitrogen-based chemicals contributed to an increase in operating income for the Hydro Chemicals unit in 1998. Lower activity in Asia was offset by an improved position in Europe. Contributions from new products and market segments also helped to improve overall performance for Hydro Chemicals in 1998.

The increase in operating revenues for Industrial Gases was due to expansion of carbon dioxide sales to a variety of market segments in Southern and Eastern Europe and in Asia.

HydroCare increased its operating revenues in 1998 with its

waste water treatment in Europe, Asia and North America. Its main customers were municipalities and pulp and paper industries.

The effect of the transfer of Hydro Oleochemicals from Pronova in early 1998 was an increase of Gas and Chemicals' operating revenues by NOK 226 million compared to 1997.

### **Operating costs**

Total raw material costs were reduced by 10 percent from 1997 to 1998. Ammonia, the main raw material for Hydro Chemicals, experienced a significant reduction in prices from 1997. Urea for technical applications had a reduction in prices by approximately 30 percent compared to 1997. Both urea and ammonia are mainly sourced from other Hydro units. Non-recurring costs in 1998 were the implementation of new information systems of NOK 60 million and the writedown of NOK 42 million for the rare earth oxides plant in Norway.

### **KORN- OG FODERSTOFKOMPAGNIET – KFK**

In 1998, operating revenues were NOK 10,143 million, the same level as in 1997. Operating income in 1998 was NOK 375 million, compared to NOK 89 million in 1997.

### **Revenues and market conditions**

Total operating revenues were negatively influenced by 2 percent from the grain and feed-stuff business, while the fish feed business compensated for this with higher sales.

Grain and feed-stuff activities experienced a decline in prices of 4 percent and in sales of arable products of 18 percent from 1997. Basically, market share has been maintained. The wet harvest of 1998 gave KFK increased revenues from its grain drying and cleaning operations.

Fish feed activities had an increase in revenues of 28 percent compared to 1997. This was primarily due to higher sales of salmon feed. Market share was extended, primarily in the salmon feed market.

### **Operating costs**

Raw materials, which constitute the largest part of total operating costs, were at the same level as in 1997, but with large fluctuations within single types of raw materials. In 1998, an insurance settlement related to a fire in the fish feed factory in Myre, Norway, improved operating income by NOK 68 million. Operating income also benefited from a

change in KFK's accounting principle for depreciation, which created a favorable one-time effect of NOK 238 million.

### **PETROCHEMICALS**

In 1998, operating revenues for Petrochemicals were sustained at the same level as in 1997. Petrochemicals' operating income decreased by approximately 47 percent, from NOK 430 million in 1997 to NOK 229 million in 1998.

### **Revenues and market conditions**

Hydro's average realized prices for S-PVC were 13 percent lower in 1998 than in 1997. The fall in S-PVC prices was mainly caused by reduced demand in Asia, which has led to lower global utilization of capacity. Hydro's total sales of PVC increased in 1998 as a result of good utilization of the increased capacity at the plants in the UK and in Norway.

Global demand for PVC was approximately 2.5 percent below demand in 1997, but with regional variations. In the US, demand rose 5 percent. Western Europe had a fall in demand of 1 percent, while Asia had a fall in demand of 19 percent. The sale of PVC from the US to Asia was low in 1998 as a result of good domestic demand in the US and low export prices from the US.

The VCM market tends to follow S-PVC market trends. Hydro's average realized prices for VCM were approximately 10 percent below the average in 1997. Because of increased need for VCM in Hydro's production of PVC and weak prices, there were no sales of VCM to Asia in 1998.

An increase in caustic soda prices positively affected Hydro's results in 1998. On average, market prices for caustic soda were NOK 1,779 per tonne in 1998, compared to NOK 1,382 per tonne in 1997.

Operating revenues climbed 16 percent for Petrochemicals' plastic pipe operations (Mabo AS) in 1998. The increase was mainly due to a full year of operations since its purchase in Finland in 1997 and increased activity in Poland.

### **Operating costs**

Raw material costs for Petrochemicals were approximately 4 percent above those in 1997. This was mainly due to reduced access to raw materials and renegotiation of purchase contracts for Natural Gas Liquid.

Fixed costs increased compared with 1997. This was mainly caused by costs related to the implementation of a new administrative system. Depreciation rose 15 percent compared to 1997, mainly due to the first full year with new plants in Aycliffe in the UK and Porsgrunn in Norway.

## OTHER ACTIVITIES

**Hydro Seafood's** earnings were lower than in 1997 and showed an operating loss in 1998. The outbreak of the fish disease, Infectious Salmon Anemia (ISA), in Scotland requiring the slaughter of salmon, led to significant losses. Earnings improvement in the Norwegian and Irish operations, as a result of higher sales prices and reduced production cost, could not offset this loss.

**Pronova's** operating revenues decreased in 1998 compared with 1997. The reason was the transfer of Pronova's Oleochemicals group to the Industrial Chemicals segment in early 1998. Operating income increased in 1998 mainly due to higher sales prices and sales volumes in the alginate operations, Pronova's largest business area.

**Hydro Technology and Projects'** operating revenues increased in 1998 from 1997. Due to significant upfront costs related to international expansion and other non-recurring costs, the segment showed an operating loss in 1998.

**Hydro's insurance activities'** operating income was on the same level as in 1997. In 1998, insurance activities had gross premium revenues of NOK 532 million, while total assets at year end amounted to NOK 3,476 million.

## LIQUIDITY AND CAPITAL RESOURCES

NOK million	1999	1998	1997
Cash flow provided by (used for):			
Operations	<b>14,744</b>	8,500	10,386
Investments	<b>(8,366)</b>	(11,612)	(10,817)
Financing	<b>(1,233)</b>	2,317	(752)
Increase (decrease) in cash and cash equivalents	<b>5,499</b>	(502)	(1,100)
Return on:			
Shareholders' equity	<b>6%</b>	8%	12%
Capital employed	<b>9%</b>	8%	13%
Long-term debt/equity ratio	<b>0.69</b>	0.49	0.37

### Cash flow

Cash provided by operations in 1999 of NOK 14,744 million was 73 percent above the level in 1998 and 42 percent above 1997, due mainly to improved earnings excluding non-cash items.

For the two previous years, net working capital requirements increased and, thus, reduced cash provided by operations.

Cash used for investing activities decreased by 28 percent from 1998, due mainly to higher proceeds from sales of investments in 1999 than in 1998. Investments in property, plant and equipment amounted to NOK 13,029 million in 1999, which was 6 percent higher than in 1998 and 23 percent higher than in 1997. Investments in the Exploration and Production segment including Saga's investments in second half accounted for approximately 67 percent of total investment in 1999 compared with 52 percent and 48 percent in 1998 and 1997, respectively. Long-term investments, which included the purchase of subsidiaries and other ownership interests, decreased in 1999 to NOK 188 million.

In 1999, NOK 1,233 million was used in financing activities. By comparison NOK 2,317 million was provided in 1998 and NOK 752 million was used in 1997. Repayments of loans totaled NOK 19,626 million in 1999, while short-term and long-term proceeds were NOK 21,707 million.

### Outlook

In January 2000, Norsk Hydro ASA increased its bond loans in the European market from EUR 300 million to EUR 400 million. The original bond, issue in October 1999 at 6.25 percent, is due on 15 January, 2010.

Hydro anticipates that cash from operations, the proceeds from the issue of debentures and notes and credit facilities currently in place will be sufficient to meet all expected capital expenditures and financial commitments in 2000.

## IMPACT OF NEW ACCOUNTING STANDARDS NOT YET IMPLEMENTED

**Derivative Instruments and Hedging.** In June 1998, the FASB issued Statement No. 133, "Accounting for Derivative Instruments and Hedging Activities" (SFAS 133). This Statement standardizes the accounting for derivative instruments, including certain derivative instruments embedded in other contracts. Under this standard, derivative instruments are required to be carried in the balance sheet at fair value. The accounting for changes in the fair value of a derivative instrument depends on whether it has been designated and qualifies as part of a hedging relationship. If the derivative instrument is not designated as part of a hedging relationship, the change in the fair value is recognized in earnings in the period of change. SFAS 133 is effective for the fiscal quarters of fiscal years beginning after June 15, 2000. Hydro has not yet determined the impact of adopting SFAS 133 on the Group's future results of operations and financial position.

## EURO

Hydro has implemented a comprehensive program to prepare for the introduction of the euro currency. Based on preliminary evaluations and findings, there are no material adverse effects on competitive implications of increased price transparency in the European markets and Hydro's exposure to currency risk from the euro conversion. The introduction of the euro also provides immediate opportunities in finance and administrative processes which Hydro has responded to by implementing and developing new administrative systems for the euro conversion. To date, the costs and potential costs incurred are not material and Management believes that there will be no adverse effect on the Company's financial condition or results of operations.

## FORWARD-LOOKING STATEMENTS

Hydro has established certain targets for average return on capital employed, long-term debt to equity ratio and dividend as a percent of net income seen over a period of several years. Management does not anticipate that all targets would necessarily be met in any individual period and targets must be seen over a longer time perspective. In addition, reference is made to Item 1, "Additional Factors Which May Affect Business," for the cautionary statement about factors that may cause actual results to differ materially from those contained in any oral or written forward-looking statements made on behalf of the Company. This includes targets stated above, statements above under "Outlook," Item 9 A, and other forward-looking statements contained in this annual report.

## ITEM 9A. - QUANTITATIVE AND QUALITATIVE DISCLOSURES ABOUT MARKET RISK

### RISK MANAGEMENT

Hydro's primary market risks are commodity price risks arising mainly from fluctuations in the prices of crude oil, aluminum, natural gas, electricity, fertilizers, magnesium and petrochemicals. In addition, Hydro is also exposed to foreign currency risk due to the fluctuations of the Norwegian kroner against other currencies, primarily the US dollar, and interest rate risk.

#### Total company

A substantial part of Hydro's products are commodities. Commodities are subject to significant fluctuations in supply and demand, which strongly affect prices and profitability. Hydro manages a portion of its commodity price risks through the use of derivative commodity instruments to reduce its exposure to changes in crude oil, aluminum, natural gas, electricity, and fertilizer prices.

Prices of many of Hydro's most important products, mainly crude oil, aluminum, natural gas and magnesium, are either determined in US dollars or are influenced by local currency rates against the US dollar. The cost of raw materials, including natural gas, NGLs, and alumina, are affected by the US dollar price of petroleum, while the cost of aluminum and energy are influenced by the US dollar. The launch of the Euro may lead to important commodities being priced in Euro. This may alter the currency exposure for Hydro and, eventually, the Euro may become a more significant part of Hydro's debt composition. Hydro enters into derivative financial instruments primarily aimed to reduce cash flow risks associated with debt repayments, collection of selected receivables, and liquidity needs for certain currencies.

The derivative financial and commodity instruments that Hydro uses to manage its primary market risks are as follows:

futures:	crude oil, aluminum, electricity
forwards:	crude oil, aluminum, electricity, natural gas, foreign currency
options:	crude oil, aluminum, electricity, foreign currency
swaps:	crude oil, aluminum, NGLs, foreign currency, interest rate

Hydro considers all significant derivative financial and commodity instruments to be held for purposes of managing foreign exchange, interest rate and commodity price exposures. Instruments held for speculative or trading purposes, including the remaining derivative financial and commodity instruments acquired via the Saga acquisition, are

considered immaterial. For accounting purposes, unless otherwise disclosed below, derivative financial and commodity instruments are marked to market value with the resulting gain or loss reflected in income since most of them do not meet the criteria for hedge accounting. This can result in volatility in earnings as the associated gain or loss on the related transactions may be reported in earnings in different periods. Hydro's use of various derivative commodity instruments is subject to the continuous oversight and control of the segment's management and periodically reviewed by corporate management. Segment policies govern the limit for exposure to derivatives in terms of amount, duration, and quantities as well as providing "stop-loss."

#### Commodity price risk

The following highlights Hydro's main commodity price risks.

**Aluminum.** Hydro is a leading producer of primary aluminum and aluminum fabricated products. Hydro also has considerable activities related to physical aluminum and raw material trading aimed at extending Hydro's role as a reliable and long-term supplier of raw materials and aluminum products. The objective of this trading is to optimize logistical costs and strengthen market positions by providing customers with flexibility in pricing and sourcing. To secure margins on physical contracts, Hydro enters into corresponding London Metal Exchange (LME) futures and options contracts. Hydro manages its total trading activities on a portfolio basis, often taking LME positions based upon net exposures. Accordingly, it is difficult to meet certain hedge accounting criteria. Therefore, aluminum price volatility can result in significant fluctuations in the marked to market adjustments for LME positions recorded to operating income. However, the effect of price changes of future physical metal purchases and sales is expected to largely offset the marked to market adjustments for those LME contracts. In addition, Hydro engages in speculative trading within strict limits as defined by management. Volatility from market adjustments on speculative positions will not have offsetting effects from other transactions.

In 1998 and 1999, Hydro entered into short positions using LME contracts as a hedge against the risk of lower prices for anticipated metal sales of primary production in 1999 and 2000. This hedging program started in 1998. The LME contracts limit the unfavorable effect of price decreases on future metal sales, but also limit the favorable effect from price increases. These transactions qualify for deferral accounting. As of 31 December, 1999, the deferred loss of the hedge contracts was NOK 246 million compared to a gain of NOK 266 million at year-end 1998. The loss, adjusted for effects of future price changes, will be reflected in earnings when production is sold.

**Gas.** Hydro is a producer, consumer, buyer and seller of

gas. The production in the Norwegian part of the North Sea is sold through the Gas Negotiation Committee ("GNC"). The consumption is mainly supplied by long-term contracts with major producers and distributors. Hydro is mainly involved in physical over-the-counter forward contracts traded bilaterally in the UK and the European continent. The main purpose of this activity is to secure gas deliveries to its customers, to reduce the risk in the gas portfolio against unfavorable fluctuations in price, and to participate in limited speculative trading within strict limits defined by management.

**Electricity.** Hydro is a producer, consumer, buyer and seller of electricity. In Norway, Hydro's consumption of electricity exceeds its production. This deficit is principally covered through its long-term purchase contracts with other Norwegian producers. Hydro's demand and supply balance can also be affected by other factors such as seasonal variations and the level of its production, which is influenced by precipitation and reservoir levels. Hydro employs derivative instruments, such as futures, forwards and options, and physical contracts that are traded either bilaterally or over electricity exchanges in Scandinavia. The main purpose of this activity is to secure electricity on the Scandinavian market for its own consumption and delivery commitments, to reduce the risk in the electricity portfolio against unfavorable fluctuations in price, and to participate in limited speculative trading within strict limits defined by management.

**Oil.** Hydro produces and sells crude oil and refined petroleum products. The Saga acquisition has increased Hydro's exposure to fluctuations in oil price. In the latter half of 1999, Hydro purchased put options to hedge a portion of 2000's oil production against the risk of declining oil prices. These put options entitle Hydro to sell 30 million barrels of oil in 2000 for an average price slightly above USD 15 per barrel. In addition, Hydro inherited Saga's price hedging program for crude oil which terminated at year-end 1999. Hydro utilizes Brent futures and swaps, and options with international oil and trading companies. These instruments are used to mitigate unwanted price exposure for a portion of its crude oil portfolio production, principally oil cargoes that are in transit, and certain inventories of oil or petroleum products at its partly owned refinery in Sweden.

#### **Foreign exchange risk**

Hydro's primary foreign currency risk is tied to local currency fluctuations against the US dollar. To reduce the long-term effects of fluctuations in US dollar exchange rates, Hydro incurs most of its debt in US dollars. Approximately 68 percent of Hydro's long-term debt, including Saga's long-term debt, is in US dollars. The remaining long-term debt is denominated in Norwegian kroner, Euro, Swedish kroner, and British pounds. Hydro's operating income is most

likely to be improved when the US dollar appreciates against European currencies, whereas financial expense, including interest expense and net foreign currency losses, is likely to be negatively affected. In addition, the effects of translation of local currency financial statements of subsidiaries outside of Norway into Norwegian kroner can influence comparative results of operations.

The Saga acquisition has increased Hydro's exposure to changes in the oil price and fluctuations in the US dollar as the oil activity has become relatively more important for the group. The currency composition of Hydro's debt has been adjusted to partly reflect the changes in exposure. Hydro primarily employs foreign currency swaps and forward currency contracts to modify the currency exposures for Hydro's long-term debt portfolio. Foreign currency swaps allow Hydro to raise long-term borrowings in one currency and swap them into another with lower funding costs rather than borrowing directly in the second currency. Forward currency contracts are entered to safeguard cash flows for anticipated future transactions or to cover short-term liquidity needs in one currency by excess liquidity available in another currency. Entering into short-term forward currency contracts also reduces funding costs when compared with drawing a short-term loan in one currency and investing short-term in another.

In order to further mitigate its exposure to foreign currency risk, Hydro has designated a portion of its foreign denominated long-term debt, including certain related balances in currencies arising from foreign currency swaps and forwards, as hedges of net foreign investments in subsidiary companies. The foreign exchange gains and losses on this debt are recorded as a separate component of equity.

#### **Interest rate risk**

Hydro is exposed to changes in interest rates primarily as a result of borrowing and investing activities used to maintain liquidity and fund its business operations. Management's strategy is to have debt with long average life and stable interest payments at the lowest possible level. Hydro maintains a high ratio of long-term, fixed-rate debt with an even debt repayment schedule and adequate resources to allow for financial flexibility. The Saga debt securities acquired are also long-term with fixed interest rates and are considered well suited to Hydro's own loan portfolio in terms of maturity and average interest rates. Hydro uses from time to time derivative financial instruments such as foreign currency and interest rate swaps to minimize its exposure to interest rate risks.

#### **Sensitivity analysis**

Hydro has chosen sensitivity analysis to provide information about its potential exposure to hypothetical loss for derivative instruments and financial instruments in compliance with

requirements of the Securities and Exchange Commission (SEC).

The sensitivity analysis reflects the hypothetical loss in fair values assuming a 10 percent change in rates or prices and no changes in the portfolio of instruments as of 31 December, 1999. Hydro's management cautions against relying on the information presented. This is due to the arbitrary nature of assumptions involved, the inability of such a simple analysis to model reality, continuous changes to its portfolio and the exclusion of certain of Hydro's positions necessary to reflect the net market risk of the Group. Accordingly, the information does not represent management's expectations about probable future losses. The most significant limitations on the figures provided are as follows:

The presentation only includes the effects of the derivative instruments discussed above and of certain financial instruments (see Note 2 below). It does not include related physical positions, contracts, and anticipated transactions that many of the derivatives instruments are meant to secure. A rate or price change of 10 percent will often result in a corresponding effect to the fair value of the physical or underlying position such that the resulting gains and losses would offset. In addition, as allowed by the SEC regulations, Hydro has excluded accounts payable and accounts receivable from the presentation which may have had a significant effect on foreign exchange risk figures provided.

The computations, which provide the most negative effect to Hydro of either a 10 percent increase or decrease in each rate or price, also do not take into account correlations which would be expected to occur between the risk exposure categories. For example, the effect that a change in a foreign exchange rate may have on a commodity price is not reflected in the table. Furthermore, it is not probable that all rates or prices would simultaneously move in directions that would have negative effects on Hydro's portfolio of instruments.

The effects of these limitations on the estimates may be material.

(unaudited) NOK million	Fair value 31.12.99 <sup>1)</sup>	Hypothetical loss from +/- 10% change in:			
		Interest rates	Foreign currency exch. rates	Com- modity prices	Other
Derivative instruments related to:					
Commodities	(231)	-	18	203	
Other	(295)	-	571	-	
Financial instruments <sup>2)</sup>	(38,280)	2,021	3,490	-	111
(unaudited) NOK million	Fair value 31.12.98 <sup>1)</sup>	Hypothetical loss from +/- 10% change in:			
		Interest rates	Foreign currency exch. rates	Com- modity prices	Other
Derivative instruments related to:					
Commodities	289	-	-	227	
Other	(73)	1	769	-	
Financial instruments <sup>2)</sup>	(25,538)	1,025	2,295	-	83

1) The change in fair value due to price changes is calculated based upon pricing formulas for certain derivatives, the Black-Scholes model for options and the net present value of cash flows for certain financial instruments or derivatives. Discount rates used vary as appropriate for the individual instruments.

2) Financial instruments include cash and cash equivalents, investments in marketable securities, bank loans and other interest bearing short-term debt and long-term debt. A substantial portion of the hypothetical loss in fair value for changes in interest rates relates to Hydro's long-term fixed rate debt. As Hydro expects to hold this debt until maturity, changes in the fair value of debt would not be expected to effect earnings.

During 1999, Hydro issued fixed rate debentures of USD 575 million, GBP 225 million, and EURO 300 million. Hydro decreased its position in LME-traded contracts for the year ended 31 December, 1999 compared to the previous year. These contracts were executed as part of Hydro's management of the risks associated with the fluctuations in the price of its commodity-based products.

With regard to Saga Petroleum, oil-based options and swaps, Norwegian kroner and an aggregate of USD 700 million denominated long-term debt were maintained during 1999. The oil-based options and swaps terminated at 31 December, 1999. As a result of the incorporation of Saga Petroleum's debt portfolio, Hydro increased its position in long-term debt.

In the second half of 1999, Hydro entered into put options to hedge anticipated oil transactions in 2000 against the risk of declining oil prices. As a consequence of the activities mentioned, Hydro increased its exposure to risks related to interest rates and primarily the US dollar exchange rate versus Norwegian kroner, thus leading to an increase in the hypothetical losses in the fair value for the year ended 31 December, 1999. As discussed above, the hypothetical loss does not include, among other things, certain positions necessary to reflect the net market risk of the Group. Therefore, Hydro's management cautions against relying on the information presented.

## ITEM 10. - DIRECTORS AND OFFICERS OF THE REGISTRANT.

### CORPORATE ASSEMBLY

In accordance with Norwegian law, the Company has established a Corporate Assembly with 21 members. The shareholders elect 14 members with four deputy members at the annual general meeting of shareholders, and the Norwegian employees of the Group elect seven members, three observers and seven deputy members from among themselves. The Chairman and Vice-Chairman of the Corporate Assembly are Mr. Sven Ullring and Mr. Svein Steen Thomassen, respectively.

Major investments and substantial changes related to the number or allocation of employees are subject to approval by the Corporate Assembly. The Corporate Assembly typically meets four or five times annually. Members of the Corporate Assembly and Board of Directors are elected for a period of two years.

### BOARD OF DIRECTORS

The overall control of policy and management of Hydro is vested in its Board of Directors. The Board of Directors consists of nine members nominated and elected by the Corporate Assembly and usually meets once a month. Six members are elected by the shareholder representatives and three members by the employees' representatives in the Corporate Assembly.

Members of the Board of Directors as of 24 March, 2000, are:

		<u>Initially elected</u>
Einar Kloster	Chairman, Former President and CEO Philips Lighting B.V.	1991
Anne Cathrine Høeg Rasmussen	Partner, law firm Schjødt AS	1988
Borger A. Lenth	Partner, law firm Hjort DA	1990
Egil Myklebust	President of the Group	1992
Gudmund Per Olsen	Employee of Norsk Hydro	1999
Benedicte Berg Schilbred	Man. Dir. of Odd Berg Group	1990
Odd Semstrøm	Employee of Norsk Hydro	1997
Tom Wachtmeister	Vice-Chairman, Atlas Copco AB	1994
Per Wold	Employee of Norsk Hydro	1990

Senior Management as of 24 March, 2000, are:

		<u>Year first appointed as Officer</u>
Egil Myklebust	President	1982
Thorleif Enger	Executive Vice President	1996
Leiv Lea Nergaard	Executive Vice President & Chief Financial Officer	1987
Eivind Reiten	Executive Vice President	1988
Tore Torvund	Executive Vice President	1990

No Director or Officer has any family relationship with any other Director or Officer.

## ITEM 11. - COMPENSATION OF DIRECTORS AND OFFICERS.

For the year ended 31 December, 1999, the aggregate compensation, calculated in accordance with the requirements of the United States Securities and Exchange Commission, of all Directors and Officers as a group (13 persons), as listed in Item 10, was NOK 14,892,000. For the year ended 31 December, 1999, the President's salary and other benefits inclusive of remuneration as member of the board was NOK 3,429,000. In accordance with an established policy applying to all Hydro employees, the president received an additional payment of one month's salary, amounting to NOK 250,000, in connection with his 25-year anniversary with the company. The Directors' fees amounted to an aggregate of NOK 1,315,000 in 1999. Remuneration paid to the members of the Corporate Assembly totalled NOK 391,500.

In 1997, a bonus plan for the President was established. The bonus, which starts at 10 percent of base salary when the average return on capital employed (ROCE) over a 2-year period is 12 percent, increases on a linear basis. Due to the level of net income in 1998, no bonus was paid in 1999 based on average ROCE for 1997 and 1998. In 1998 the bonus amounted to NOK 416,000 which was in addition to the President's salary and other benefits stated above. A similar bonus plan for the remaining four members of the corporate Management Board, currently consisting of Thorleif Enger, Leiv L. Nergaard, Eivind Reiten and Tore Torvund, was established in 1998. No bonuses were paid in 1999 under this plan. In 1998, bonuses paid totalled NOK 1,292,000.

The Company's employment contract with the President provides that, in the event that employment terminates, he has the right to salary and the accrual of pension rights for a three year period. The Company's obligation is reduced by salary received or pension rights accrued from other sources.

No amount was set aside or accrued by the Company or any of its subsidiaries during the year ended 31 December, 1999, to provide pension, retirement or similar benefits for non-executive Directors. For all employees or past employees, including the President and three members of the Board of Directors nominated by the employees, the Group has pension plans which are organized as independent entities based on actuarial principles. In addition, there are supplementary unfunded pension plans for senior employees in Norway. See Note 20 of "Notes to the Consolidated Financial Statements."

## ITEM 12. - OPTIONS TO PURCHASE SECURITIES FROM REGISTRANT OR SUBSIDIARIES.

Members of Hydro's senior corporate management own the following number of options:

	March 24, 2000 Options
Egil Myklebust	10,000
Thorleif Enger	7,000
Leiv L. Nergaard	7,000
Eivind Reiten	7,000
Tore Torvund	7,000

In 1999, Hydro adopted a stock compensation plan granting stock options to corporate officers and to certain key employees with a strike price of NOK 367.50 per share. The options can be exercised in the period from 1 January, 2001 to 31 December, 2002. The employee must retain 50 percent of the shares acquired under the plan for at least one year after the exercise date. The options expire if the employee voluntarily leaves the Company before exercising the options and are generally non-transferrable. All the shares underlying the option have been authorized.

Including those individuals listed above, a total of 46 members of management have been granted options under the stock compensation plan to purchase a total of 165,000 Norsk Hydro shares.

## ITEM 13. - INTEREST OF MANAGEMENT IN CERTAIN TRANSACTIONS.

Loans to members of the Corporate Assembly, the Board of Directors and the President totalled NOK 3,820,000, NOK 3,500,000 and NOK 3,386,000 at 31 December, 1999, 1998 and 1997, respectively.

## PART III

## ITEM 15. - DEFAULTS UPON SENIOR SECURITIES.

None.

## **ITEM 16. - CHANGES IN SECURITIES AND CHANGES IN SECURITY FOR REGISTERED SECURITIES.**

None.

\* \* \*

### **DESCRIPTION OF ORDINARY SHARES**

#### **VOTING RIGHTS**

The ordinary shares of the Company all have equal voting rights, and no voting rights are accorded to any other security. Shareholders of the Company are entitled to attend, in person or by proxy, shareholders' meetings, and they have one vote for each share held. The annual general meeting of shareholders is required to be held within six months after the end of the Company's fiscal year. Norwegian law does not require the Company to send proxy forms to its shareholders. Under Norwegian law, notice of shareholders' meetings must be given at least two weeks in advance of the meeting, and in accordance with its Articles of Association, the Company must give notice by publication in certain Norwegian newspapers at least two weeks in advance of the annual general meeting, as well as mailing a notice to each shareholder with a known address.

Apart from the general meeting, extraordinary meetings of shareholders may be held whenever considered necessary by the Board of Directors. An extraordinary meeting may also be convened for the consideration of specific matters at the request of the Company's auditor or by the shareholders representing at least 5 percent of the share capital of the Company. Any matter that may be raised at an annual general meeting may also be raised at an extraordinary meeting.

As a general rule, decisions which shareholders are entitled to make pursuant to Norwegian law or to the Company's Articles of Association may be made by a simple majority of votes cast. However, any decision to amend the Company's Articles of Association, including any increase in the Company's share capital, requires the approval of at least two-thirds of the votes cast at a shareholders' meeting as well as two-thirds of the share capital represented at the meeting.

Certain decisions which have the effect of substantially altering the rights and preferences of any share or class of shares require the approval of all shareholders, or of affected shareholders, in which case the approval of at least two-thirds of the votes cast at a shareholders' meeting as well as two-thirds of the share capital represented at the meeting is also required. There are currently no authorized or outstanding preference shares.

In order to vote at a general or extraordinary meeting of the Company, shareholders must at least three days prior to the meeting be registered as holders of the shares and notify the Company of their intention to attend.

The beneficial owners of ADSs are only able to vote at meetings by surrendering their ADRs, withdrawing their ordinary shares from the Depositary and registering their ownership of such ordinary shares directly in the Company's share register on the VPS System (described below) at least three days prior to the date of such meeting.

#### **THE VPS SYSTEM**

The Norwegian Verdipapirsentralen (the "VPS System") which came into operation in 1986, is a certificateless securities' registry system created by an act of the Norwegian Parliament dated 14 June, 1985. In general terms, the VPS System is a computerized bookkeeping system operated by an independent institution in which the ownership of and all transactions related to Norwegian listed equity securities must be recorded. The Company's share register has been transferred to the VPS System, and according to its Articles of Association the shares of the Company are registered in the VPS system.

All transactions related to securities registered with the VPS System are handled through computerized book entries. The VPS System confirms each entry by sending a transcript to the relevant shareholder. In order to effect such entries, the individual security holder must establish a securities account or accounts with one or more Norwegian accounting agents. Norwegian banks, the Bank of Norway and authorized securities brokers in Norway are allowed to act as accounting agents. If the shareholder does not establish such an account, an accounting agent will be appointed on the shareholder's behalf by the issuer of the security in question.

The entry of a transaction in the VPS System will normally be decisive in determining the legal rights of parties claiming an interest in the security.

The VPS System is strictly liable for any loss suffered as a result of faulty registration or the amending or deletion of rights in respect of registered securities except in the event of contributory negligence on the part of the aggrieved party.

## **DIVIDENDS**

Under Norwegian law, any plan to pay dividends must be proposed by the Board of Directors and approved by the shareholders at a general meeting of shareholders.

Dividends are distributed based on retained earnings. Deductions must be made in the retained earnings for capitalized costs for research and development, goodwill and net deferred tax benefit that have been recorded in the balance sheet. With respect to any license or entity in which the Company has an investment valued using proportionate consolidation or the equity method, the difference between the Company's share of the earnings of the license or entity recognized and the dividend received from such license or entity is allocated to the reserve for valuation variances. The reserve for valuation variances constitutes undistributable equity, and may not be distributed either as a dividend or as a distribution in connection with a reduction in capital. The dividend cannot exceed the amount proposed or consented to by the Board of Directors. Norwegian law does not permit the payment of dividends based on interim results of operations. Once the annual financial statements have been approved at the annual general meeting of shareholders, dividends can be proposed for shareholder approval to be paid from retained earnings.

In accordance with Norwegian law, the Company cannot distribute any dividend, if the equity, according to the balance sheet, amounts to less than 10 percent of the balance sheet total without following the procedure for a reduction of the share capital. No dividend may be distributed, in any circumstances, which exceeds an amount that is compatible with prudent and sound business practice and with due consideration of any loss that may have been incurred, or expected to be incurred, after the balance sheet date.

Dividends have usually been mailed by the Company to shareholders approximately five to six weeks after they have been approved at the annual general meeting of shareholders.

## **ADDITIONAL ISSUANCES AND PREEMPTIVE RIGHTS**

All issuances of ordinary shares by the Company, including bonus issues (share dividends), require amendments to be made to the Articles of Association and thus require the same vote as amendments to the Articles of Association. Unless the shareholders, by such vote, waive such right, upon any increase in the amount of share capital outstanding, shareholders of the Company and holders of founder and subscription certificates (see "Control of Registrant") are entitled to a preferential right to subscribe to the new shares in proportion to their holdings. Such preferential rights extend to shares not subscribed for by other shareholders having such rights.

Under Norwegian law, bonus issues (share dividends) of the Company's ordinary shares may be distributed, subject to shareholder approval, from amounts (i) which could otherwise be distributed as dividends, or (ii) which may be created by transferring funds from the Company's premium reserve or from retained earnings available for dividends. Such bonus issues (share dividends) may be effected either by issuing new ordinary shares of the Company's share capital or by increasing the par value of the ordinary shares outstanding.

## **RIGHTS UPON WINDING-UP OR LIQUIDATION**

Any decision by a Norwegian company to wind-up or liquidate requires the approval of two-thirds of the votes cast by its shareholders, as well as two-thirds of the share capital represented at the meeting called to vote on the issue. In the event of a winding-up or liquidation, after payment of all liabilities, the remaining assets of the Company, if any, would be divided among the holders of ordinary shares according to the respective number of ordinary shares held.

## **MISCELLANEOUS**

Except in certain circumstances, no acquirer of ordinary shares is entitled to any of the rights of a shareholder unless and until he has registered the transfer in the Company's share registry on the VPS System. Under Norwegian law, any acquisition of ordinary shares must be so registered within one month after such acquisition and any transfer of ordinary shares must be evidenced by a written confirmation to each party to the transfer.

The Company's Articles of Association were amended on 5 November, 1987 to provide that the Board of Directors may refuse transfers of shares and may take other steps necessary to prevent transfers being made in conflict with Norwegian law.

## DESCRIPTION OF AMERICAN DEPOSITARY RECEIPTS

The following is a summary of certain provisions of the Amended and Restated Deposit Agreement (the "Deposit Agreement"), pursuant to which the ADRs are issued. The Deposit Agreement is between the Company, the Depositary, and the holders from time to time of ADRs. Such summary does not purport to be complete and is qualified in its entirety by reference to the Deposit Agreement. Copies of the Deposit Agreement are available for inspection at the Depositary's Office of the Depositary in New York City and at the principal Oslo office of Den norske Bank (the "Custodian") or any successor or additional custodian.

### AMERICAN DEPOSITARY RECEIPTS

ADRs evidencing ADSs are issuable by the Depositary pursuant to the Deposit Agreement. Each ADR evidences a specified number of ADSs, each of which will represent, as of the date thereof, one ordinary share (or evidence of rights to receive one ordinary share) transferred to the Depositary's account in the Company's share registry on the VPS System. An ADR may evidence any number of ADSs.

### DEPOSIT AND WITHDRAWAL OF DEPOSITED SECURITIES

The Depositary has agreed that, upon the transfer to its account in the VPS System of ordinary shares, and subject to the terms of the Deposit Agreement, it will execute and deliver at its Depositary's Office, which is presently located at 30 West Broadway, New York, New York 10015, to the person or persons specified by the depositor, an ADR or ADRs registered in the name of such person or persons for the number of ADSs issuable in respect of such transfer or deposit.

Upon surrender of ADRs at the Depositary's Office and upon payment of the charges provided in the Deposit Agreement and subject to the terms thereof, an ADR holder is entitled to have the ordinary shares relating to the surrendered ADRs transferred to an account in the name of the ADR holder in the VPS System and to the delivery, at the Depositary's Office or at the office of the Custodian, of any other documents of title at the time represented by the surrendered ADRs. The forwarding of documents of title for such delivery at the Depositary's Office in New York City will be at the risk and expense of the ADR holder.

## DIVIDENDS, OTHER DISTRIBUTIONS AND RIGHTS

The Depositary is required, to the extent that in its judgment it can convert Norwegian kroner on a reasonable basis into U.S. dollars and transfer the resulting U.S. dollars to the United States, to convert all cash dividends and other cash distributions which it receives in respect of the deposited ordinary shares into U.S. dollars and to distribute the amounts thus received to the holders of ADRs in proportion to the number of ADSs representing such ordinary shares held by each of them. The amount distributed will be reduced by any amounts required to be withheld by the Company or the Depositary on account of taxes. See "Taxation". If the Depositary determines, in its judgment, that Norwegian kroner received by it cannot be so converted or transferred, the Depositary may distribute the Norwegian kroner or in its discretion hold it for the respective accounts of the ADR holders entitled to receive the same.

If a distribution by the Company consists of a dividend in, or distribution of, ordinary shares, the Depositary may, with the Company's approval, and shall, if the Company shall so request, distribute to the holders of outstanding ADRs, in proportion to their holdings, additional ADRs for an aggregate number of ADSs representing the number of ordinary shares received as such dividend or distribution. If additional ADRs are not so distributed, each ADS shall thenceforth also represent the additional ordinary share or shares distributed upon the ordinary share or shares represented thereby.

In the event that the Company shall offer or cause to be offered to the holders of ordinary shares any rights to subscribe for additional ordinary shares or any rights of any other nature, the Depositary will, after consultation with the Company, have discretion as to the procedure to be followed in making such rights available to the holders of ADRs or in disposing of such rights for the benefit of such holders and making the net proceeds available in U.S. dollars to such holders, provided that the Depositary will, if requested by the Company, either (a) make such rights available to holders of ADRs by means of warrants or otherwise, if lawful and feasible, or (b) if making such rights available is not lawful or not feasible, or if the rights represented by such warrants or other instruments are not exercised and appear to be about to lapse, sell such rights or warrants or other instruments at public or private sale, at such place or places and upon such terms as the Depositary may deem proper, and allocate the proceeds of such sales for the account of the holders of ADRs otherwise entitled thereto upon an averaged or other

practicable basis without regard to any distinctions among such holders because of exchange restrictions, or the date of delivery of any ADR or ADRs, or otherwise.

## **RECORD DATES**

Whenever any cash dividend or other cash distribution, if any, shall become payable or any distribution other than cash shall be made, or whenever rights shall be issued, with respect to the ordinary shares, or whenever the Depositary shall receive notice of any meeting of holders of ordinary shares, the Depositary will fix a record date for the determination of the holders of ADRs who will be entitled to receive such dividend, distribution or rights, or the net proceeds of the sale thereof, or to give instructions for the exercise of voting rights at any such meeting, subject to the provisions of the Deposit Agreement.

## **VOTING OF THE UNDERLYING ORDINARY SHARES**

Upon receipt of notice of any meeting of holders of ordinary shares, the Depositary has agreed that, as soon as practicable thereafter, it will mail a notice containing a summary of the information as is contained in such notice of meeting to the record holders of ADRs. However, any holder of an ADR who wishes to vote at a meeting of shareholders must withdraw the underlying ordinary shares from the Depositary and register such shares in the VPS system in the name of the beneficial holder thereof. See "Description of Ordinary Shares - Voting Rights" for a discussion of the requirement under current Norwegian law that only beneficial owners of ADSs who are also the record holders of ADSs may vote.

## **REPORTS AND NOTICES**

The Depositary will make available for inspection by ADR holders at its Depositary's Office any reports and communications received from the Company which are both (a) received by the Depositary as the holder of the ordinary shares and (b) made generally available to the holders of such ordinary shares by the Company. The Depositary will also mail or, when requested by the Company, otherwise make available to ADR holders, copies of such reports and communications as provided in the Deposit Agreement.

## **AMENDMENT AND TERMINATION OF THE DEPOSIT AGREEMENT**

The form of the ADRs and the Deposit Agreement may at any time be amended by agreement between the Company and the Depositary. Any amendment which imposes or increases any fees or charges (other than stock transfer or other taxes and other governmental charges, transfer or registration fees, cable, telex or facsimile transmission costs, delivery costs, and expenses of the Depositary in connection with conversion of any currency into US dollars,) or which otherwise prejudices any substantial existing right of ADR holders, will not take effect as to outstanding ADRs until the expiration of three months after notice of such amendment has been given to the record holders of outstanding ADRs. Every holder of an ADR at the time such amendment becomes effective, if such holder has been given such notice, will be deemed by continuing to hold such ADR to consent and agree to such amendment and to be bound by the Deposit Agreement or the ADRs as amended thereby. In no event may any amendment impair the rights of any ADR holder to surrender his ADR and receive therefore the ordinary shares and other property represented thereby.

Whenever so directed by the Company, the Depositary has agreed to terminate the Deposit Agreement by mailing notice of such termination to the record holders of all ADRs then outstanding at least 60 days prior to the date fixed in such notice for such termination. The Depositary may likewise terminate the Deposit Agreement at any time 60 days after the Depositary shall have delivered to the Company a notice of its election to resign and a successor depositary shall not have been appointed and accepted its appointment as provided in the Deposit Agreement. If any ADRs remain outstanding after the date of termination, the Depositary thereafter will discontinue the registration of transfer of ADRs, will suspend the distribution of dividends to the holders thereof and will not give any further notices or perform any further acts under the Deposit Agreement, except the collection of dividends and other distributions pertaining to the ordinary shares and any other property, the sale of rights as provided in the Deposit Agreement, the delivery of ordinary shares and other property represented by ADRs and the delivery of proceeds of the sale of any rights or other property, in exchange for surrendered ADRs. At any time after the expiration of two years from the date of termination, the Depositary may sell the ordinary shares and any other property and hold the net proceeds, together with any cash then held, without liability for interest, for the pro rata benefit of the holders of ADRs which have not theretofore been surrendered.

## CHARGES OF DEPOSITARY

The Depositary will charge the party to whom ADRs are delivered against deposits, and the party surrendering ADRs for delivery of ordinary shares or other deposited securities, property and cash, \$5.00 for each 100 ADRs (or fraction thereof) represented by the ADRs issued or surrendered. The Company will pay all other charges of the Depositary and those of any registrar or co-registrar under the Deposit Agreement, except for taxes and other governmental charges, any applicable share transfer or registration fees on deposits or withdrawals of ordinary shares, certain cable, telex, facsimile transmission and delivery charges and such expenses as are incurred by the Depositary in the conversion of foreign currency into US dollars. The Company will pay all charges and expenses of the Depositary in connection with the initial issuance of ADRs payable as a dividend or distribution to shareholders and in connection with any rights offering to shareholders. The charges and expenses of the Custodian are for the sole account of the Depositary.

## GENERAL

Neither the Depositary nor the Company will be liable to the holders of ADRs if prevented or delayed by law, governmental authority, any provision of the Company's Articles of Association or any circumstances beyond its control in performing their obligations under the Deposit Agreement. The obligations of the Company and the Depositary under the Deposit Agreement are expressly limited to performing in good faith their respective duties specified therein.

If any ADSs are listed on one or more stock exchanges the Depositary will act as registrar or, with the approval of the Company, appoint a registrar or one or more co-registrars, for registry of the ADRs evidencing such ADSs in accordance with any requirements of such exchanges. Such registrars or co-registrars may be removed and a substitute or substitutes appointed by the Depositary upon the request or with the approval of the Company.

The ADRs are transferable on the books of the Depositary; provided, however, that the Depositary may close the transfer books at any time or from time to time, when deemed expedient by it in connection with the performance of its duties or at the request of the Company. As a condition precedent to the execution and delivery, registration of transfer, split-up, combination or surrender of any ADR or transfer and withdrawal of ordinary shares, the Depositary or the Custodian may require payment from the presenter of the ADR or the depositor of the ordinary shares of a sum sufficient to reim-

burse it for any tax or other governmental charge and any stock transfer or registration fee with respect thereto and payment of any applicable fees payable by the holders of ADRs. The Depositary may refuse to deliver ADRs, register the transfer of any ADR or make any distribution of, or related to, ordinary shares until it or the Custodian has received such proof of citizenship, residence, exchange control approval, legal or beneficial ownership or other information as it may deem necessary or proper or as the Company may require by written request to the Depositary. The delivery, transfer and surrender of ADRs generally may be suspended during any period when the transfer books of the Depositary are closed, or if any such action is deemed necessary or advisable by the Depositary or the Company at any time or from time to time. The transfer books of the Depositary shall at all reasonable times be open for inspection by the holders of ADRs and the Company; provided that such inspection shall not be for the purpose of communicating with holders of ADRs in the interest of a business or object other than the business of the Company or a matter related to the Deposit Agreement or the ADRs.

The Depositary, upon the request or with the approval of the Company, may appoint one or more cotransfer agents for the purpose of effecting transfers, combinations and split-ups of ADRs at designated transfer offices on behalf of the Depositary. In carrying out its functions, a co-transfer agent may require evidence of authority and compliance with applicable laws and other requirements by holders of ADRs or persons entitled thereto and will be entitled to protection and indemnity to the same extent as the Depositary.

## **PART IV**

### **ITEM 18. - FINANCIAL STATEMENTS.**

See pages F-1 to F-26.

## INDEPENDENT AUDITORS' REPORT

To the Board of Directors and shareholders of Norsk Hydro ASA  
Oslo, Norway

We have audited the consolidated balance sheets of Norsk Hydro ASA and its subsidiaries as of 31 December, 1999 and 1998, and the related consolidated statements of income, of comprehensive income, and of cash flows for each of the three years in the period ended 31 December, 1999. Our audits also included the schedule to the consolidated financial statements listed in the Index at Item 19(a). As described in Note 1 to the consolidated financial statements, these financial statements and financial statement schedule have been prepared on the basis of accounting principles generally accepted in the United States. These financial statements and financial statement schedule are the responsibility of the Company's management. Our responsibility is to express an opinion on these financial statements and financial statement schedule based on our audits.

We conducted our audits in accordance with auditing standards generally accepted in the United States. Those standards require that we plan and perform the audit to obtain reasonable assurance about whether the financial statements are free of material misstatement. An audit includes examining, on a test basis, evidence supporting the amounts and disclosures in the financial statements. An audit also includes assessing the accounting principles used and significant estimates made by management, as well as evaluating the overall financial statement presentation. We believe that our audits provide a reasonable basis for our opinion.

In our opinion, such consolidated financial statements present fairly, in all material respects, the financial position of Norsk Hydro ASA and its subsidiaries as of 31 December, 1999 and 1998, and the results of their operations and their cash flows for each of the three years in the period ended 31 December, 1999, in conformity with accounting principles generally accepted in the United States. Also, in our opinion, the financial statement schedule, when considered in relation to the basic consolidated financial statements taken as a whole, presents fairly in all material respects the information set forth therein.

DELOITTE & TOUCHE AS

Oslo, Norway  
22 March, 2000

# Norsk Hydro ASA and subsidiaries

## US GAAP

### CONSOLIDATED INCOME STATEMENTS

Amounts in NOK million (except per share amounts)	Notes	Year ended 31 December,		
		1999	1998	1997
<b>Operating revenues</b>	5	<b>102,433</b>	97,468	97,722
Raw materials and energy costs		<b>61,185</b>	62,446	60,428
Payroll and related costs	7, 20	<b>14,051</b>	13,081	11,801
Depreciation, depletion and amortization	5, 15	<b>10,494</b>	7,508	6,826
Other		<b>8,336</b>	8,603	7,965
Restructuring costs	6	<b>632</b>	-	-
<b>Operating costs and expenses</b>	7	<b>94,698</b>	91,638	87,020
<b>Operating income</b>	5	<b>7,735</b>	5,830	10,702
Equity in net income of non-consolidated investees	5, 14	<b>339</b>	410	402
Financial expense, net	8, 24	<b>(1,551)</b>	(409)	(837)
Other income, net	9	<b>1,350</b>	-	78
<b>Income before taxes and minority interest</b>		<b>7,873</b>	5,831	10,345
Current income tax expense	10	<b>(3,553)</b>	(1,379)	(4,117)
Deferred income tax expense	10	<b>(741)</b>	(611)	(1,081)
Tax effect of changes in tax law	10	<b>(43)</b>	11	106
Minority interest		<b>(90)</b>	(98)	(48)
<b>Income before cumulative effect of change in accounting principle</b>		<b>3,446</b>	3,754	5,205
Cumulative effect of change in accounting principle		<b>(30)</b>	-	-
<b>Net income</b>		<b>3,416</b>	3,754	5,205
Earnings per share before change in accounting principle	3	<b>13.90</b>	16.40	22.70
<b>Earnings per share</b>	3	<b>13.80</b>	16.40	22.70

### CONSOLIDATED STATEMENTS OF COMPREHENSIVE INCOME

Net income		<b>3,416</b>	3,754	5,205
Other comprehensive income, net of tax:				
Net unrealized gain (loss)				
on securities available-for-sale		<b>2</b>	(851)	212
Net foreign currency translation adjustments		<b>(523)</b>	1,416	357
Minimum pension liability adjustment		<b>(8)</b>	(27)	-
Total other comprehensive income (loss), net of tax	3	<b>(529)</b>	538	569
<b>Comprehensive income, net of tax</b>		<b>2,887</b>	4,292	5,774

The accompanying notes are an integral part of the consolidated financial statements.

# Norsk Hydro ASA and subsidiaries

## US GAAP

### CONSOLIDATED BALANCE SHEETS

Amounts in NOK million	Notes	31 December, 1999	31 December, 1998
<b>ASSETS</b>			
Cash and cash equivalents	25	7,435	1,936
Other liquid assets	11, 25	2,535	2,493
Accounts receivable, less allowances of 792 and 650	25	23,254	19,219
Inventories	12	16,327	15,494
Prepaid expenses and other current assets	25	8,199	5,572
Current deferred tax assets	10	945	597
<b>Current assets</b>		<b>58,695</b>	<b>45,311</b>
Non-consolidated investees	14	6,966	6,297
Property, plant and equipment, less accumulated depreciation, depletion and amortization	15	102,498	63,632
Prepaid pension, investments and other non-current assets	13, 16, 20	7,989	7,784
Deferred tax assets	10	1,271	999
<b>Non-current assets</b>		<b>118,724</b>	<b>78,712</b>
<b>Total assets</b>	<b>5</b>	<b>177,419</b>	<b>124,023</b>
<b>LIABILITIES AND SHAREHOLDERS' EQUITY</b>			
Bank loans and other interest-bearing short-term debt	17, 25	7,361	5,150
Current portion of long-term debt	19, 25	907	1,587
Other current liabilities	18, 25	28,509	19,668
Current deferred tax liabilities	10	216	222
<b>Current liabilities</b>		<b>36,993</b>	<b>26,627</b>
Long-term debt	19, 25	42,228	24,105
Accrued pension liabilities	20	2,287	1,812
Other long-term liabilities	21, 25	4,734	3,499
Deferred tax liabilities	10	30,357	18,423
<b>Long-term liabilities</b>		<b>79,606</b>	<b>47,839</b>
<b>Minority shareholders' interest in consolidated subsidiaries</b>		<b>1,323</b>	<b>1,266</b>
Share capital	3	5,332	4,581
Paid-in premium	3	15,055	4,203
Retained earnings	3	39,761	38,065
-Treasury stock	3	(1,564)	-
Accumulated other comprehensive income	3	913	1,442
<b>Shareholders' equity</b>	<b>3</b>	<b>59,497</b>	<b>48,291</b>
<b>Total liabilities and shareholders' equity</b>		<b>177,419</b>	<b>124,023</b>

The accompanying notes are an integral part of the consolidated financial statements.

# Norsk Hydro ASA and subsidiaries

## US GAAP

### CONSOLIDATED STATEMENTS OF CASH FLOWS

Amounts in NOK million	Notes	Year ended 31 December,		
		1999	1998	1997
<b>Operating activities:</b>				
Net income		3,416	3,754	5,205
Adjustments to reconcile net income to net cash provided by operating activities:				
Depreciation, depletion and amortization	5	10,494	7,508	6,826
Restructuring costs	6	632	-	-
Equity in net income of non-consolidated investees	14	(339)	(410)	(402)
Dividends received from non-consolidated investees	14	550	330	646
Cumulative effect of accounting changes	1	30	-	-
Deferred taxes	10	784	600	975
Gain on sale of non-current assets		(1,282)	(1,017)	(59)
Loss on foreign currency transactions	8	304	361	275
Net sales (purchases) of trading securities		374	298	(163)
Other		28	42	(477)
Working capital changes that provided (used) cash:				
Receivables		(2,823)	(1,007)	(887)
Inventories		(948)	(346)	(626)
Prepaid expenses and other current assets		(3,374)	(291)	(725)
Other current liabilities		6,898	(1,322)	(202)
<b>Net cash provided by operating activities</b>		<b>14,744</b>	<b>8,500</b>	<b>10,386</b>
<b>Investing activities:</b>				
Purchases of property, plant and equipment		(13,029)	(12,321)	(10,623)
Acquisition of Saga Petroleum ASA	2	719	-	-
Purchases of other long-term investments		(907)	(1,550)	(1,349)
Net sales (purchases) of short-term investments		32	(16)	443
Proceeds from sales of property, plant and equipment		1,956	274	218
Proceeds from sales of other long-term investments		2,863	2,001	494
<b>Net cash used in investing activities</b>		<b>(8,366)</b>	<b>(11,612)</b>	<b>(10,817)</b>
<b>Financing activities:</b>				
Loan proceeds		21,707	7,614	2,583
Principal repayments		(19,626)	(3,579)	(1,731)
Ordinary shares purchased	3	(1,599)	-	-
Ordinary shares issued		3	-	-
Dividends paid	3	(1,718)	(1,718)	(1,604)
<b>Net cash provided by (used in) financing activities</b>		<b>(1,233)</b>	<b>2,317</b>	<b>(752)</b>
<b>Foreign currency effects on cash flows</b>		<b>354</b>	<b>293</b>	<b>83</b>
<b>Net increase (decrease) in cash and cash equivalents</b>		<b>5,499</b>	<b>(502)</b>	<b>(1,100)</b>
<b>Cash and cash equivalents at beginning of year</b>		<b>1,936</b>	<b>2,438</b>	<b>3,538</b>
<b>Cash and cash equivalents at end of year</b>		<b>7,435</b>	<b>1,936</b>	<b>2,438</b>
Cash disbursements were made for:				
Interest (net of amount capitalized)		887	929	939
Income taxes		1,868	3,314	4,426

The accompanying notes are an integral part of the consolidated financial statements.

# Norsk Hydro ASA and subsidiaries

## Notes to the consolidated financial statements

### 1. SUMMARY OF SIGNIFICANT ACCOUNTING POLICIES

The consolidated financial statements of Norsk Hydro ASA and its subsidiaries (Hydro) are prepared in accordance with United States generally accepted accounting principles (US GAAP). Preparation of the financial statements requires management to make estimates and assumptions that affect the reported amounts of assets, liabilities, revenues and expenses as well as disclosures of contingencies. Actual results may ultimately differ from estimates.

#### Consolidation

The consolidated financial statements include Norsk Hydro ASA and subsidiary companies owned directly or indirectly more than 50 percent. Interests in oil and gas licenses are accounted for by the proportionate consolidation method. All material intercompany transactions and balances have been eliminated.

Investments in companies (non-consolidated investees) in which Hydro has a substantial ownership interest of 20 to 50 percent of voting shares and exercises significant influence are accounted for using the equity method.

#### Foreign Currency Translation

Translation gains or losses from entities using local currency as the functional currency, and the effects of exchange rate changes on transactions designated as hedges of net foreign investments, are included in Other comprehensive income.

#### Revenue Recognition

Revenue from sales of products is recognized at the time products are shipped to the customer. Revenues from the production of oil and gas are recognized on the basis of the company's net working interest, regardless of whether the production is sold (entitlement method).

#### Cash and Cash Equivalents

Cash and cash equivalents include cash, bank deposits and all other monetary instruments with a maturity of less than three months at the date of purchase.

#### Other Liquid Assets

Other liquid assets include bank deposits and all other monetary instruments with a maturity between three and twelve months at the date of purchase and Hydro's current portfolio of marketable equity and debt securities. The portfolio of securities are considered trading securities and are valued at fair value (market). The resulting unrealized holding gains and losses are included in financial income and expense. Investment income is recorded when earned.

#### Inventories

Inventories are valued at the lower of cost, using the first-in, first-out method (FIFO), or net realizable value. Cost includes direct materials, direct labor and the appropriate portion of production overhead or the price to purchase inventory.

#### Investments

Investments include Hydro's portfolio of long-term marketable equity securities in which there is less than 20 percent ownership. The portfolio is considered available-for-sale securities and is valued at fair value (market). The resulting unrealized holding gains and losses, net of applicable taxes, are credited or charged to Other comprehensive income and accordingly do not affect net income. Investment income is recorded when earned.

#### Property, Plant and Equipment

Property, plant and equipment is carried at historical cost less accumulated depreciation, depletion and amortization. When it is probable that the carrying amount of an asset will not be recoverable, a write-down (impairment) to fair value is recorded based upon the criteria in Statement of Financial Accounting Standards (SFAS) No. 121.

Periodic maintenance and repairs applicable to production facilities are accounted for on an accrual basis. Normal maintenance and repairs for all other properties are expensed as incurred. Major replacements and renewals that materially extend the life of properties are capitalized and any assets replaced are retired.

**Capitalized Interest** Interest is capitalized as part of the historical cost of major assets constructed.

**Leased Assets** Capital leases, which provide Hydro with substantially all the rights and obligations of ownership, are classified as assets under property, plant and equipment and as liabilities under long-term debt valued at the present value of minimum lease payments. The asset is subsequently depreciated and the liability is reduced for lease payments less the effective interest expense.

**Environmental Expenditures** Environmental expenditures which increase the life, capacity, or result in improved safety or efficiency of a facility are capitalized. Expenditures that relate to an existing condition caused by past operations are expensed. Liabilities are recorded when environmental assessments or clean-ups are probable and the cost can be reasonably estimated.

**Exploration and Development Costs of Oil and Gas Reserves** Hydro follows the "successful efforts" method of accounting for oil and gas exploration and development costs. Exploratory costs, excluding the costs of exploratory wells, are charged to expense as incurred. Drilling costs for exploratory wells are capitalized pending the determination of whether the wells found proved reserves. If such reserves are not found, the drilling costs are charged to operating expense. All development costs for wells, platforms, equipment and related interest are capitalized. Preproduction costs are expensed as incurred.

# Norsk Hydro ASA and subsidiaries

## Notes to the consolidated financial statements

**Depreciation, Depletion and Amortization** Depreciation is computed using the straight line method with the following rates:

Machinery and equipment	8 – 25 percent
Buildings	2 – 5 percent
Other	10 – 20 percent

Producing oil and gas properties are depreciated as proved developed reserves are produced using the unit-of-production method computed by individual field. Depreciation and depletion expense includes provisions for future abandonment and removal costs for offshore facilities.

### **Intangible Assets**

Intangibles and deferred charges with a defined and measurable relationship to future revenues, such as goodwill in subsidiaries and patents, are capitalized. Goodwill and intangibles are amortized on a straightline basis over the lesser of their benefit period or 10 years.

### **Oil and Gas Royalty**

Oil and gas revenue is recorded net of royalties payable.

### **Research and Development**

Research and development costs are expensed when incurred.

### **Other Income (Expense), net**

Items of income and expense which are material in nature and from sources other than normal production and sales operations are classified as other income and expense.

### **Foreign Currency Transactions**

Realized and unrealized gains or losses on monetary assets or liabilities denominated in a currency other than the functional currency are included in net income.

### **Income Taxes**

Deferred income tax expense is calculated using the liability method in accordance with SFAS No. 109. Under this method, deferred tax assets and liabilities are measured based upon temporary differences, which are differences between the carrying values of assets and liabilities for financial reporting and their tax basis. Deferred income tax expense is the change during the year in the deferred tax assets and liabilities. Effects of changes in tax laws and tax rates are recognized at the date the tax law changes. Hydro recognizes the effect of uplift, a special deduction for petroleum surtax in Norway, at the investment date. Deferred taxes are not provided on undistributed earnings of most subsidiaries, as such earnings are deemed to be indefinitely reinvested.

### **Derivative Financial Instruments**

Hydro has activities in derivative financial instruments which represent an integral part of the management of Hydro's total foreign currency and interest rate exposure.

Hydro does not normally hold derivative financial instruments for speculative or trading purposes. Derivative

financial instruments are normally marked to their market value with the resulting gain or loss reflected in net financial expense because instruments do not meet the criteria for deferral accounting. See Note 25 for the balance sheet classification of these instruments.

**Forward currency contracts and options** are marked to their market value at each balance sheet date with the resulting unrealized exchange gain or loss recorded under financial income and expense.

**Interest rate and foreign currency swaps** Interest income and expense relating to swaps are netted and recognized as income or expense over the life of the contract. Foreign currency swaps are translated into Norwegian kroner at applicable exchange rates on the balance sheet date with the resulting unrealized exchange gain or loss recorded under financial income and expense.

**Swaption contracts** are marked to their market value at each balance sheet date with the resulting unrealized gain or loss reflected in net financial income (expense).

Hydro is exposed to credit losses if the counterparties to derivative financial instruments fail to perform for those instruments with positive fair value. See Note 25. Hydro limits this credit risk by dealing with various international banks with established limits for transactions with each institution.

Hydro does not normally enter into derivative financial instruments that require daily cash settlements for changes in value. At the settlement date, cash effects are included in the Statements of Cash Flows under operating activities.

### **Derivative Commodity Instruments**

Hydro uses commodity futures, forwards, options and swaps primarily to manage exposures to movements in commodity prices and only to a limited degree engages in speculative trading. Except as discussed below, instruments do not meet criteria for deferral accounting and are marked to market and included in prepaid expenses and other current assets or Other current liabilities. The resulting gain or loss is reflected in operating income.

Deferral accounting is applied to derivative instruments, London Metal Exchange (LME) futures and some oil contracts in a hedging strategy when: a reduction of enterprise risk has been demonstrated, instruments are matched and designated as hedges to underlying hedged items (rather than being evaluated on a portfolio basis) and there is a direct correlation between gains and losses on the instrument and the hedged item. Deferred gains and losses are recorded to operating revenue or cost, as appropriate, in the same period as the hedged item.

Hydro is to some extent exposed to credit risk for counterparties to derivative commodity instruments. However, the risk is significantly reduced because most instruments are settled through commodity exchanges. Hydro limits credit risks for other counterparties with policies for credit ratings

# Norsk Hydro ASA and subsidiaries

## Notes to the consolidated financial statements

and limits for each party.

Certain derivative commodity instruments require daily cash settlements (principally LME futures and options, and oil futures). LME options also involve an initial receipt or payment of a premium and give rise to delivery of an agreed amount of cash if the option is exercised. Most other instruments have a cash effect at settlement date. These cash effects are included in the Statements of Cash Flows under operating activities when incurred.

### Stock-based Compensation

Hydro uses the intrinsic value method prescribed by the Accounting Principles Board (APB) Opinion No. 25 to account for stock-based compensation. Under this method, compensation expense is recorded in the income statement if the market price of the Company's shares exceed the strike price of option grants to employees at the date of the grant. The intrinsic value of the award is amortized over the period from the date of the grant until the options become exercisable.

### Reissuance of treasury stock to employees

Reissuance of treasury stock to employees is recorded at market value on the transaction date. In certain cases, the price paid by employees may be less than market value, whereby the difference is recorded as salary expense.

### Employee Retirement Plans

Pension costs are calculated in accordance with Statement of Financial Accounting Standards No. 87.

### Accounting Changes

Hydro has in 1999 implemented SOP (Statement of Position) 98-5 from the AICPA (American Institute of Certified Public Accountants) requiring all start-up costs to be expensed as incurred. Previously capitalized costs have been expensed in 1999. In 1998, Hydro adopted several Financial Accounting Standard Board (FASB) statements. Statement of Financial Accounting Standards (SFAS) No. 130, "Reporting Comprehensive Income," requires the components of comprehensive income to be disclosed in the financial statements. SFAS No. 131, "Disclosures about Segments of an Enterprise and Related Information," requires certain information to be reported about operating segments on a basis consistent with the internal organizational structure. SFAS No. 132, "Employers' Disclosures about Pensions and Other Postretirement Benefits," revises the disclosures for pensions and other postretirement benefits.

### Reclassifications

Certain amounts in previously issued consolidated financial statements have been reclassified to conform with the 1999 presentation.

Starting 1998, operating revenues and operating costs related to some of Hydro's aluminium remelt activity are presented gross in the income statement. In prior years, such revenues and costs were presented net and included in operating revenues. Prior years' amounts have been reclassified. The change increases operating revenues and

operating costs by NOK 1,553 million in 1997.

## 2. BUSINESS COMBINATIONS AND DISPOSITIONS

Subsequent to and during the three years ended 31 December, 1999, Hydro entered into the following significant business combinations and dispositions. Each acquisition was recorded following the purchase method of accounting unless otherwise stated below.

**2000 Acquisitions** Hydro acquired Wells Aluminium Corporation, a leading aluminum extruder in the United States of America. The purchase price was NOK 1,352 million, including debt assumed of NOK 870 million.

**2000 Dispositions** Hydro has accepted an offer to sell its presently owned 38.1 percent ownership interest in Dyno ASA at NOK 206 per share which gives a total price of NOK 2,009 million. The offer is pending certain conditions to be met including government approvals.

Hydro has in March 2000 entered into final and exclusive negotiations with the Dutch company Nutreco Holding N.V. to sell its salmon production and sales activities operating as Hydro Seafood AS. It is expected that a final agreement will be realized during the first half of April.

**1999 Acquisitions** Hydro and Den norske stats oljeselskap a.s (Statoil) jointly acquired all the outstanding ordinary shares in Saga Petroleum ASA (Saga), an independent oil and gas exploration and production company. The consideration offered for the Saga ordinary shares (other than those shares held by U.S. Persons, as defined in Regulation S under the Securities Act of 1933) consisted of one Hydro share for each three Saga shares with an additional cash payment in NOK in an amount which ensured that the aggregate consideration per Saga share had a value of NOK 135. U.S. Persons were subsequently offered a cash payment of NOK 135 per share.

All of Saga's outstanding ordinary shares were acquired, representing a total value of NOK 20.2 billion. An agreement between Hydro and Statoil required the transfer of Saga's interests in certain oil and gas production licenses with a total market value of NOK 8.4 billion. The transfer to Statoil was made with effect from 1 July, 1999. The consideration received from Statoil, in exchange for such interests, consisted of Statoil's shares in Saga and a cash payment of NOK 4,361 million, which was received by Hydro in December 1999.

Hydro's acquisition of the ordinary shares of Saga, which amounted to NOK 16.3 billion, was effected by the issuance of 37.5 million ordinary shares and a cash payment of NOK 4,629 million. Upon consolidation of Saga, which was effected from 1 July, 1999, the assets and liabilities of Saga were recorded at their fair value. The portion of the acquisition cost of Saga that has been allocated to Saga's oil and gas production licenses and certain pipelines was NOK 12.6 billion.

# Norsk Hydro ASA and subsidiaries

## Notes to the consolidated financial statements

Amounts in NOK million

Total value of Saga shares	16,246
Costs and transaction fees	52
<b>Hydro's purchase price</b>	<b>16,298</b>

### Allocation of purchase price

External cash and cash equivalents	1,039
Other current assets	7,337
Property, plant and equipment	38,503
Other non-current assets	451
Short-term debt	(3,322)
Long-term debt	(15,769)
Other long-term liabilities	(11,941)

**Fair value of net assets of Saga as of 1 July, 1999 after elimination of assets acquired by Statoil 16,298**

The excess value could be adjusted when a final decision is taken by the Norwegian authorities regarding Saga's tax position.

**1999 Dispositions** Hydro disposed of the following significant subsidiaries or ownership interests for aggregate proceeds of NOK 2.4 billion, resulting in a pretax gain of NOK 1,408 million:

Company	Location	Business
Mabo AS activities	Norway	Petrochemicals
Hydro Coatings	United Kingdom	Petrochemicals
Pronova Biopolymer a.s activities	Norway	Alginates

Hydro and Gränges AB (now Sapa AB) merged their respective autoplastics activities and formed Gränges Autoplastics AB (now Autoplastics AB). The transaction was accounted for as a non-monetary exchange, in which Hydro exchanged shares in subsidiaries for a 40 percent ownership in the new company. The transaction was recorded at fair value and resulted in a pretax loss of NOK 58 million. See Note 14.

In March 2000, Hydro entered into an agreement to sell the shares in Autoplastics back to Gränges. The sale will result in a gain of approximately the same size as the loss recorded in 1999.

**1998 Acquisitions** Hydro increased its ownership interest in Meridian Technologies Inc. from 27 percent to 49 percent for an aggregate purchase price of NOK 460 million. See Note 14.

**1997 Acquisitions** Hydro acquired the following significant subsidiaries or ownership interests for an aggregate purchase price of NOK 909 million:

Company	Location	Business
Ellay Enfield Ltd.	United Kingdom	Aluminium extrusion
Acro	Brazil	Aluminium extrusion
Remaining 60% of Raufoss Automotive AS activities	Norway	Automotive structures
M-Plast OY	Finland	Petrochemicals

Hydro increased its ownership interests in Frøya Holding a.s (fish farming) from 90 percent to 100 percent.

**1997 Dispositions** As part of a sales transaction, Hydro reduced its ownership interest in Norwegian hydro-electric power plants at Skafså from 51.67 percent to 33 percent and its share of electricity production from 82.92 percent to 33 percent. Total proceeds from the sale was NOK 80 million, consisting of a 33 percent ownership interest in two new power plants valued at NOK 52 million and cash compensation for the remainder. The sale resulted in a pretax gain of NOK 78 million.

### Pro Forma Information (Unaudited)

The following unaudited pro forma information has been prepared assuming Saga was acquired as of the beginning of each period presented.

Amounts in NOK million	31.12.99	31.12.98
Assets	169,733	165,025
	<b>Year 1999</b>	<b>Year 1998</b>
Operating revenues	104,864	101,972
Operating income	6,880	1,573
Net income	2,330	813
Earnings per share	8.80	3.10

This pro forma information has been prepared for comparative purposes only and does not purport to be indicative of what would have occurred had the transaction occurred on the date described above. The effect of the remaining acquisitions and dispositions for 1999 and 1998 on the unaudited pro forma information is not material.

# Norsk Hydro ASA and subsidiaries

## Notes to the consolidated financial statements

### 3. CONSOLIDATED SHAREHOLDERS' EQUITY

Amounts in NOK million except number of shares in thousands	Ordinary Shares issued		Additional paid-in capital	Total paid-in capital	Total Retained earnings	Treasury Stock		Accumulated other compre- hensive income	Total shareholders' equity
	Norsk Hydro ASA Number	Amount				Norsk Hydro ASA Number	Amount		
Balance, 31 December, 1996	229,073	4,581	4,203	8,784	32,428	-	-	335	41,547
Net income 1997					5,205				5,205
Dividend declared and paid (NOK 7.00 per share)					(1,604)				(1,604)
Net unrealized gain on securities								212	212
Foreign currency translation								357	357
Balance, 31 December, 1997	229,073	4,581	4,203	8,784	36,029	-	-	904	45,717
Net income 1998					3,754				3,754
Dividend declared and paid (NOK 7.50 per share)					(1,718)				(1,718)
Net unrealized loss on securities								(851)	(851)
Minimum pension liability								(27)	(27)
Foreign currency translation								1,416	1,416
Balance, 31 December, 1998	229,073	4,581	4,203	8,784	38,065	-	-	1,442	48,291
Net income 1999					3,416				3,416
Dividend declared and paid (NOK 7.50 per share)					(1,718)				(1,718)
Common shares issued in Saga acquisition	37,524	751	10,852	11,603					11,603
Net unrealized gain on securities								2	2
Minimum pension liability								(8)	(8)
Foreign currency translation								(523)	(523)
Purchase of treasury stock						(5,000)	(1,599)		(1,599)
Treasury stock reissued to employees					(2)	109	35		33
Balance, 31 December, 1999	266,597	5,332	15,055	20,387	39,761	(4,891)	(1,564)	913	59,497

#### Components of Accumulated Other Comprehensive Income and Related Tax Effects:

Amounts in NOK million	31 December,								
	1999			1998			1997		
	Pretax	Tax Effect	Net	Pretax	Tax Effect	Net	Pretax	Tax Effect	Net
Unrealized gain on securities	5	-	5	16	(1)	15	302	(52)	250
Less: Reclassification adjustment	(3)	-	(3)	(1,165)	299	(866)	(53)	15	(38)
<b>Net unrealized gain (loss) on securities</b>	<b>2</b>	<b>-</b>	<b>2</b>	<b>(1,149)</b>	<b>298</b>	<b>(851)</b>	<b>249</b>	<b>(37)</b>	<b>212</b>
Foreign currency translation	(554)	14	(540)	1,576	(160)	1,416	498	(141)	357
Less: Reclassification adjustment	17	-	17	-	-	-	-	-	-
<b>Net foreign currency translation</b>	<b>(537)</b>	<b>14</b>	<b>(523)</b>	<b>1,576</b>	<b>(160)</b>	<b>1,416</b>	<b>498</b>	<b>(141)</b>	<b>357</b>
<b>Minimum pension liability adjustment</b>	<b>(11)</b>	<b>3</b>	<b>(8)</b>	<b>(11)</b>	<b>(16)</b>	<b>(27)</b>	<b>(9)</b>	<b>9</b>	<b>-</b>
<b>Total accumulated other comprehensive income</b>	<b>(546)</b>	<b>17</b>	<b>(529)</b>	<b>416</b>	<b>122</b>	<b>538</b>	<b>738</b>	<b>(169)</b>	<b>569</b>

Norsk Hydro ASA had authorized, issued and outstanding 229,072,674 ordinary shares having a par value of NOK 20 per share for the years ended 31 December, 1998, and 1997. For the year ended 31 December, 1999, 266,596,650 ordinary shares were issued and authorized having a par value of NOK 20 per share, of which 4,891,088 shares were treasury stock resulting in 261,705,562 outstanding ordinary shares. In 1999, Hydro acquired 5,000,000 of the company's own shares for a market price of NOK 1,599 million. The share repurchase was authorized at the Annual General Meeting. The shares may be used as consideration in connection with commercial transactions or share schemes for the employees and employee representatives. In December 1999, Hydro sold 108,912 shares of its treasury stock to employees for a price of NOK 33 million. The weighted average number of outstanding shares for the year ended 31 December, 1999 was 247,045,270. As a result of the Saga acquisition, the Kingdom of Norway's ownership interest in Norsk Hydro ASA reduced from 51 percent to 43.8 percent in 1999. The share capital and paid-in premium of Norsk Hydro ASA constitute the nondistributable portion of shareholders' equity and are not available for dividend purposes. Included in the retained earnings for the group are restricted reserves of certain subsidiary companies amounting NOK 17,689 million that are not available for dividend purposes.

# Norsk Hydro ASA and subsidiaries

## Notes to the consolidated financial statements

### 4. STOCK OPTION PLAN

#### Stock-based Compensation

In 1999, Hydro adopted a stock compensation plan granting stock options to corporate officers and to certain key employees. The options can be exercised in the period from 1 January, 2001 to 31 December, 2002. The employee must retain 50 percent of the shares acquired under the plan for at least one year after the exercise date. The options expire if the employee voluntarily leaves the company before exercising the options and are generally non-transferable. All the shares authorized have been granted.

Options outstanding	Number of shares	Strike price (in NOK)	Fair value per share (in NOK)
<b>January 1, 1999</b>	-	-	-
Grants (December 13)	165,000	367.50	42
Exercised	-	-	-
Cancelled	-	-	-
<b>December 31, 1999</b>	165,000	367.50	42
<b>Options exercisable:</b>			
December 31, 1999	-	-	-

#### Pro Forma Information (Unaudited)

Statement of Financial Accounting Standards (SFAS) No. 123 requires disclosure of certain pro forma information based on the estimated fair value of the options granted if the intrinsic value method is used to measure compensation expense. See Note 1. Under the fair value method defined by SFAS No. 123, compensation expense is measured by using estimated fair value of the options at the date of the grant. For the pro forma disclosure, the estimated fair value is amortized from the date of the grant until the options become exercisable. The following unaudited pro forma information is presented as if the fair value method of accounting for stock-based compensation had been used:

In NOK millions, except for earnings per share (unaudited)	1999
Pro forma net income	3,416
Pro forma earnings per share	13.80

Hydro used a valuation model based on the Black-Scholes option-pricing model. The assumptions used in the model are: expected life of 2 years, expected volatility of 31 percent, and a risk-free interest of 5.9 percent and a dividend yield of about 2.5 percent.

### 5. INDUSTRY AND GEOGRAPHIC SEGMENT INFORMATION

Hydro's operating segments are managed separately because each operating segment represents a strategic business unit that offers different products and serves different markets. Operating segments are components of a business about which separate financial information is available, and which are evaluated regularly by the chief operating decision maker with regard to performance and to the allocation of resources. Hydro's chief operating decision-making group is the Corporate Management Board. Generally, financial information is required to be disclosed on the basis that is used internally and enables an investor to see the company through the eyes of management.

Hydro has nine reportable industry segments. The reportable segments are, with the exception of Petrochemicals, included in one of three core areas of Hydro, which are Hydro Oil and Energy, Hydro Light Metals and Hydro Agri. In 1999, Hydro began presenting its reportable segment information on a basis that provides sub-totaled information for each core area. Prior year amounts have been reclassified to conform to current year presentation. **Hydro Oil and Energy** consists of Exploration and Production, Refining and Marketing and Energy. Exploration and Production is responsible for Hydro's oil and gas exploration, field development and operation of production and transportation facilities. Refining and Marketing trades crude oil, natural gas liquids (NGL) and refined oil products and is engaged in refining, marketing and distribution of gasoline and other oil products. Energy produces and sells electricity generated at hydro-electric power stations in Norway, primarily for use in Hydro's own production facilities. Energy also handles trading activities in the Swedish and UK markets. **Hydro Light Metals** consists of Aluminium Metal Products, Aluminium Extrusion and Other Light Metals. Aluminium Metal Products' activities include the production of primary aluminium in Norway, remelting of metal, and the international trading of alumina, aluminium and aluminium products. Aluminium Extrusion is involved in the manufacture and sale of extruded aluminium products. Other Light Metals consist of Aluminium Rolled Products, Automotive Structures and Magnesium. **Hydro Agri** consists of Plant Nutrition, Gas and Chemicals and A/S Korn og Foderstof Kompagniet. Plant Nutrition's main activities are the production and sale of ammonia and fertilizer products, including nitrate fertilizer, complex fertilizer and urea. Most of the production is undertaken in Europe while trading is done worldwide. Plant Nutrition segment is a result of a merger between the two segments Hydro Agri Europe and Hydro Agri International. Gas and Chemicals markets numerous products which mainly have their origin in Hydro's ammonia and fertilizer production. A/S Korn og Foderstof Kompagniet is primarily engaged in the production and sale of animal and fish feed, as well as the trading of grain, feedstuffs, fertilizers and other agricultural related products. **Petrochemicals** is a producer of the plastic raw material polyvinyl chloride (PVC) in Scandinavia and in the UK.

#### Industry Segment Information

Hydro evaluates performance based on stand-alone segment operating income, and generally accounts for intersegment sales and transfers as if the sales or transfers were to third parties, that is, at current market prices. Corporate includes activities seen as incidental to Hydro's operations and unallocated revenues, expenses, liabilities and assets. Revenues and expenses not allocated to industry segments and geographic segments principally include interest income and expense, realized and unrealized foreign exchange gains and losses and the net effect of the overfunding of certain pension schemes. The accounting policies of the operating segments are the same as those described in the summary of significant accounting policies. See Note 1.

# Norsk Hydro ASA and subsidiaries

## Notes to the consolidated financial statements

Amounts in NOK million	External revenues			Internal revenues			Total operating revenues		
	1999	1998	1997	1999	1998	1997	1999	1998	1997
Exploration and Production	<b>6,996</b>	3,612	3,549	<b>10,410</b>	7,025	9,602	<b>17,406</b>	10,637	13,151
Refining and Marketing	<b>15,185</b>	10,609	14,072	<b>531</b>	492	512	<b>15,716</b>	11,101	14,584
Energy	<b>1,328</b>	1,372	1,739	<b>1,973</b>	1,696	1,541	<b>3,301</b>	3,068	3,280
Eliminations	-	-	-	<b>(10,331)</b>	(6,940)	(9,533)	<b>(10,331)</b>	(6,940)	(9,533)
Hydro Oil and Energy	<b>23,509</b>	15,593	19,360	<b>2,583</b>	2,273	2,122	<b>26,092</b>	17,866	21,482
Aluminium Metal Products	<b>12,072</b>	12,375	10,260	<b>5,209</b>	5,860	5,878	<b>17,281</b>	18,235	16,138
Aluminium Extrusion	<b>11,974</b>	11,944	10,265	<b>107</b>	144	173	<b>12,081</b>	12,088	10,438
Other Light Metals <sup>1)</sup>	<b>7,442</b>	7,629	6,635	<b>274</b>	240	189	<b>7,716</b>	7,869	6,824
Eliminations	-	-	-	<b>(4,857)</b>	(5,865)	(5,901)	<b>(4,857)</b>	(5,865)	(5,901)
Hydro Light Metals	<b>31,488</b>	31,948	27,160	<b>733</b>	379	339	<b>32,221</b>	32,327	27,499
Plant Nutrition	<b>24,776</b>	26,493	28,160	<b>2,023</b>	1,504	989	<b>26,799</b>	27,997	29,149
Gas and Chemicals	<b>4,521</b>	4,457	4,176	<b>197</b>	259	207	<b>4,718</b>	4,716	4,383
A/S Korn og Foderstof Kompagniet	<b>9,558</b>	9,877	9,825	<b>198</b>	266	182	<b>9,756</b>	10,143	10,007
Eliminations	-	-	-	<b>(1,615)</b>	(1,540)	(950)	<b>(1,615)</b>	(1,540)	(950)
Hydro Agri	<b>38,855</b>	40,827	42,161	<b>803</b>	489	428	<b>39,658</b>	41,316	42,589
Petrochemicals	<b>5,221</b>	5,851	5,855	<b>125</b>	177	179	<b>5,346</b>	6,028	6,034
Other Activities <sup>2)</sup>	<b>2,793</b>	2,609	2,540	<b>1,054</b>	1,150	933	<b>3,847</b>	3,759	3,473
Segments	<b>101,866</b>	96,828	97,076	<b>5,298</b>	4,468	4,001	<b>107,164</b>	101,296	101,077
Corporate	<b>567</b>	640	646	<b>3,392</b>	3,706	3,344	<b>3,959</b>	4,346	3,990
Eliminations	-	-	-	<b>(8,690)</b>	(8,174)	(7,345)	<b>(8,690)</b>	(8,174)	(7,345)
Total	<b>102,433</b>	97,468	97,722	-	-	-	<b>102,433</b>	97,468	97,722

Amounts in NOK million	Operating income (loss)			Depreciation, depletion and amortizations			Equity in net income non-consolidated investees			EBITDA <sup>5)</sup>		
	1999	1998	1997	1999	1998	1997	1999	1998	1997	1999	1998	1997
Exploration and Production	<b>5,840</b>	2,565	6,363	<b>6,072</b>	3,505	3,128	<b>(13)</b>	7	11	<b>11,903</b>	6,084	9,506
Refining and Marketing	<b>495</b>	112	284	<b>140</b>	125	115	<b>117</b>	36	(71)	<b>757</b>	279	338
Energy	<b>618</b>	573	652	<b>214</b>	137	122	<b>(9)</b>	(75)	(14)	<b>821</b>	635	838
Eliminations	<b>9</b>	10	(18)	-	-	-	-	-	-	<b>9</b>	10	(19)
Hydro Oil and Energy	<b>6,962</b>	3,260	7,281	<b>6,426</b>	3,767	3,365	<b>95</b>	(32)	(74)	<b>13,490</b>	7,008	10,663
Aluminium Metal Products	<b>1,357</b>	1,854	1,197	<b>537</b>	479	418	<b>62</b>	108	66	<b>1,996</b>	2,443	1,625
Aluminium Extrusion	<b>649</b>	536	474	<b>391</b>	368	355	<b>12</b>	4	6	<b>1,056</b>	912	838
Other Light Metals <sup>1)</sup>	<b>216</b>	162	25	<b>576</b>	480	407	<b>(89)</b>	(39)	(18)	<b>690</b>	622	418
Eliminations	<b>(43)</b>	25	(58)	-	-	-	-	-	-	<b>(44)</b>	26	(58)
Hydro Light Metals	<b>2,179</b>	2,577	1,638	<b>1,504</b>	1,327	1,180	<b>(15)</b>	73	54	<b>3,698</b>	4,003	2,823
Plant Nutrition	<b>(2,239)</b>	(582)	869	<b>1,246</b>	1,309	1,147	<b>210</b>	379	345	<b>(356)</b>	1,119	2,338
Gas and Chemicals	<b>349</b>	261	305	<b>396</b>	340	203	<b>5</b>	16	6	<b>752</b>	618	517
A/S Korn og Foderstof Kompagniet <sup>3)</sup>	<b>233</b>	375	89	<b>211</b>	(1)	238	-	-	-	<b>445</b>	403	407
Eliminations	<b>(14)</b>	4	15	-	-	-	-	-	-	<b>(14)</b>	4	15
Hydro Agri	<b>(1,671)</b>	58	1,278	<b>1,853</b>	1,648	1,588	<b>215</b>	395	351	<b>827</b>	2,144	3,277
Petrochemicals	<b>113</b>	229	430	<b>383</b>	434	379	<b>(26)</b>	9	(7)	<b>852</b>	672	828
Other Activities <sup>2)</sup>	<b>246</b>	(52)	93	<b>204</b>	214	197	<b>16</b>	22	2	<b>1,882</b>	320	404
Segments	<b>7,829</b>	6,072	10,720	<b>10,370</b>	7,390	6,709	<b>285</b>	467	326	<b>20,749</b>	14,147	17,995
Corporate <sup>4)</sup>	<b>(101)</b>	(236)	(23)	<b>129</b>	124	123	<b>54</b>	(57)	76	<b>107</b>	1,045	270
Eliminations	<b>7</b>	(6)	5	<b>(5)</b>	(6)	(6)	-	-	-	<b>3</b>	(12)	(5)
Total	<b>7,735</b>	5,830	10,702	<b>10,494</b>	7,508	6,826	<b>339</b>	410	402	<b>20,859</b>	15,180	18,260

<sup>1)</sup> Other Light Metals consists of the following: Aluminium Rolled Products, Automotive Structures and Magnesium.

<sup>2)</sup> Other Activities consists of the following: Seafood, Pronova, Industrial Insurance and Technology and Projects.

<sup>3)</sup> Depreciation expense for 1998 includes a favorable one-time effect of a change in KFK's method of depreciation. The effect did not have a material impact on Hydro's results of operations.

<sup>4)</sup> In Corporate, operating loss includes the net effect of the overfunding of certain pension schemes by NOK 393 million, NOK 524 million and NOK 508 million in 1999, 1998 and 1997 respectively. In 1999, Hydro began allocating a larger portion of corporate costs to the industry segments. In 1999, such amount was NOK 396 million.

<sup>5)</sup> Earnings before interest, tax, depreciation, amortization and certain financial expense (income).

# Norsk Hydro ASA and subsidiaries

## Notes to the consolidated financial statements

Amounts in NOK million	Assets		Non-consolidated investees, investments and advances		Additions Property, Plant & Equipment	
	1999	1998	1999	1998	1999	1998
Exploration and Production	92,395	40,206	94	86	47,693	6,414
Refining and Marketing	7,358	4,272	1,199	1,137	79	136
Energy	4,701	4,515	121	139	57	127
Eliminations	(2,055)	(287)	-	-	-	-
Hydro Oil and Energy	102,399	48,706	1,414	1,362	47,829	6,677
Aluminium Metal Products	13,546	14,168	606	494	826	924
Aluminium Extrusion	8,225	7,978	93	93	467	617
Other Light Metals <sup>1)</sup>	8,886	8,499	1,021	635	575	677
Eliminations	(1,190)	(939)	-	-	-	-
Hydro Light Metals	29,467	29,706	1,720	1,222	1,868	2,218
Plant Nutrition	27,860	28,857	1,876	1,884	1,096	1,960
Gas and Chemicals	4,726	4,331	122	120	246	415
A/S Korn og Foderstof Kompagniet	5,446	5,554	2	-	428	248
Eliminations	(993)	(350)	(2)	(2)	-	-
Hydro Agri	37,039	38,392	1,998	2,002	1,770	2,623
Petrochemicals	6,271	6,280	348	268	432	452
Other Activities <sup>2)</sup>	7,488	6,478	74	78	253	215
Segments	182,664	129,562	5,554	4,932	52,152	12,185
Corporate	41,995	31,529	1,412	1,365	165	228
Eliminations	(47,240)	(37,068)	-	-	-	-
Total	177,419	124,023	6,966*	6,297**	52,317**	12,413**

<sup>1)</sup> Other Light Metals consists of the following: Aluminium Rolled Products, Automotive Structures and Magnesium.

<sup>2)</sup> Other Activities consists of the following: Seafood, Pronova, Industrial Insurance and Technology and Projects.

### Operating Revenues by Country of Customer

The following specification of operating revenues is based upon customer location.

Amounts in NOK million	1999	1998	1997
<b>Norway</b>	<b>10,099</b>	8,528	9,409
<b>European Union:</b>			
Germany	11,100	11,395	10,828
Great Britain	10,956	9,473	11,424
France	10,595	9,569	8,627
Sweden	9,734	9,308	9,098
Denmark	6,728	6,611	6,462
Italy	5,309	5,809	5,873
Spain	2,478	2,305	1,714
Other	7,738	8,526	8,138
Total EU	64,638	62,996	62,164
<b>Europe - Other:</b>	<b>5,561</b>	5,109	4,817
<b>Outside Europe:</b>			
USA	10,089	9,096	8,489
Asia	4,808	4,452	5,469
Canada/Other America	4,660	4,481	4,612
Africa	2,204	2,418	2,343
Australia/New Zealand	374	388	419
Total Outside Europe	22,135	20,835	21,332
<b>Total</b>	<b>102,433</b>	97,468	97,722
Export sales from Norway to unaffiliated customers	29,659	27,640	28,377

### Long-Lived Assets by Location of Operations

The following specification of long-lived assets is based upon location of operation. Included in long-lived assets are investments in non-consolidated investees; property, plant and equipment (net of accumulated depreciation); and non-current financial assets.

Amounts in NOK million	1999	1998
<b>Norway</b>	<b>86,516</b>	52,263
<b>European Union:</b>		
Great Britain	7,132	2,596
Denmark	2,883	2,860
France	1,764	1,878
Sweden	1,604	2,040
Germany	1,321	1,737
The Netherlands	1,307	1,449
Italy	583	773
Other	1,098	1,120
Total EU	17,692	14,453
<b>Europe - Other:</b>	<b>305</b>	438
<b>Outside Europe:</b>		
Canada	5,438	4,480
Africa	1,752	545
Asia	1,766	1,415
USA	1,536	1,416
Other America	1,281	1,241
Total Outside Europe	11,773	9,097
<b>Total</b>	<b>116,286</b>	76,251

# Norsk Hydro ASA and subsidiaries

## Notes to the consolidated financial statements

### 6. RESTRUCTURING COSTS

On 17 December, 1999, Hydro announced a restructuring program in the Plant Nutrition segment. The program involves reducing Hydro's fertilizer activities in Europe by eliminating one million tonnes of nitrate fertilizer capacity. The reduction of production capacity will be accomplished by the closure of three and dismantlement of two plant facilities in Europe. The plant facilities will be shut down by the second quarter of year 2000. As part of the closure of the plant facilities, restructuring costs of NOK 632 million were recorded in the fourth quarter of 1999. The restructuring costs of NOK 632 million included an impairment loss on the plant facilities of NOK 444 million, whose fair value was estimated by discounting the expected future cash flows from the individual plant facilities. The restructuring costs also included an accrual of NOK 188 million for costs to discontinue the activities described above. The expected date of completion of the plan to discontinue the above described activities is 31 December, 2001. The costs to discontinue the activities described above include costs to dismantle the plant facilities and to terminate agreements with customers and suppliers, and are included in other current liabilities as of 31 December, 1999.

### 7. OPERATING COSTS AND EXPENSES

Operating costs include research and development, operating lease expense and payroll and related costs as follows:

Amounts in NOK million	1999	1998	1997
<b>Research and development expense</b>	<b>1,043</b>	1,044	868
<b>Operating lease expense: 1)</b>			
Drilling rigs, ships, office space	1,133	1,345	1,099
Office space leased from Hydro's independent pension trust	156	153	150
<b>Total</b>	<b>1,289</b>	1,498	1,249
<b>Payroll and related costs:</b>			
Salaries	11,314	10,931	9,925
Social security costs	1,600	1,472	1,338
Social benefits	517	459	460
Net periodic pension cost (Note 20)	620	219	78
<b>Total</b>	<b>14,051</b>	13,081	11,801

To estimate earnings in relation to research and development costs incurred is impracticable for the years ended 31 December, 1999, 1998 and 1997.

- 1) Minimum future rentals are in total NOK 6,622 million which are due under non-cancelable operating leases as follows (in NOK million): 2000 – 1,242; 2001 – 1,476; 2002 – 975; 2003 – 766; 2004 – 461; and Thereafter – 1,702.

### 8. FINANCIAL INCOME AND EXPENSE

Amounts in NOK million	1999	1998	1997
Interest income	(1,399)	(673)	(522)
Interest expense	2,566	1,738	1,391
Net foreign exchange loss	304	361	275
Net gain on securities	(379)	(1,015)	(236)
Dividends received	(103)	(132)	(122)
Other, net	562	130	51
<b>Net financial expense</b>	<b>1,551</b>	409	837

Interest capitalized in 1999, 1998 and 1997 was NOK 839 million, NOK 614 million and NOK 565 million, respectively.

### 9. OTHER INCOME AND EXPENSE

Other income totaled NOK 1,350 million in 1999 comprised of a gain of NOK 149 million on the sale of the plastic pipe systems activities of Mabo AS, a gain of NOK 1,025 million on the sale of Pronova Biopolymer, a gain of NOK 234 million on the sale of Hydro Coatings and a loss of NOK 58 million related to the transfer of Hydro's plastic bumper system activities to Gränges Autoplastics AB.

In 1997, other income was NOK 78 million and related to gain on the sale of a portion of Hydro's interest in a partly owned power plant.

### 10. INCOME TAX EXPENSE

Amounts in NOK million	1999	1998	1997
<b>Income before taxes and minority interest:</b>			
Norway	8,276	5,337	7,735
Other countries	(403)	494	2,610
<b>Total</b>	<b>7,873</b>	5,831	10,345

Current taxes:			
Norway	2,909	1,319	3,338
Other countries	644	60	779
<b>Current income tax expense</b>	<b>3,553</b>	1,379	4,117

Deferred taxes:			
Norway	1,458	955	877
Other countries	(674)	(355)	98
Deferred tax expense	784	600	975
<b>Total income tax expense</b>	<b>4,337</b>	1,979	5,092

### Components of deferred income tax expense

Amounts in NOK million	1999	1998	1997
<b>Deferred tax expense, excluding items below</b>	<b>671</b>	576	1,127
Benefits of tax loss carryforwards	142	(176)	144
Tax expense (benefit) allocated to other comprehensive income	(11)	144	113
Effect of tax law changes <sup>1)</sup>	43	(11)	(106)
Net change in valuation allowance	(61)	67	(303)
<b>Deferred tax expense</b>	<b>784</b>	600	975

- 1) In 1996, a new tax law was enacted in Norway for hydro-electric power plants which was effective as of 1 January, 1997. The new tax law provided for an upward revision of the tax depreciation base of power plant assets. This resulted in a deferred tax benefit of NOK 776 million in 1996 based upon the Company's best estimate of the revised tax basis. When the new basis was available in 1997, the effect of the change in tax law was revised. This resulted in an additional deferred tax benefit of NOK 131 million in 1997.

# Norsk Hydro ASA and subsidiaries

## Notes to the consolidated financial statements

### Reconciliation of Norwegian nominal statutory tax rate to effective tax rate

Amounts in NOK million	1999	1998	1997
Expected income taxes at statutory tax rate <sup>1)</sup>	2,205	1,633	2,897
Petroleum surtax <sup>2)</sup>	2,904	1,361	2,747
Uplift benefit <sup>2)</sup>	(829)	(628)	(558)
Hydro-electric power surtax <sup>3)</sup>	171	86	60
Tax law changes	43	(11)	(106)
Losses and other deductions with no tax benefit	776	446	249
Non-deductible expenses	186	184	189
Foreign tax rate differences	(41)	34	184
Tax free income	(384)	(144)	(106)
Dividend exclusion	(10)	(46)	(30)
Losses and other benefits not previously recognized	(853)	(844)	(443)
Other, net	169	(92)	9
<b>Income tax expense</b>	<b>4,337</b>	<b>1,979</b>	<b>5,092</b>
<b>Effective tax rate</b>	<b>55.1%</b>	<b>33.9%</b>	<b>49.2%</b>

- Norwegian nominal statutory tax rate is 28 percent.
- Revenue from oil and gas activities on the Norwegian continental shelf is taxed according to the Petroleum Tax Law. This stipulates a surtax of 50 percent after deducting uplift, a special deduction for surtax, in addition to normal corporate taxation.
- Beginning in 1997, a surtax of 27 percent is applied to taxable income, with certain adjustments, for Norwegian hydro-electric power plants. The surtax comes in addition to the normal corporate taxation. Tax depreciation, including that from the upward revision of basis under the new law, is deductible for both corporate tax and surtax purposes.

At the end of 1999, Hydro had tax loss carryforwards of NOK 7,291 million, primarily in Germany, France, Italy, Trinidad, Jamaica and Canada. Carry forward amounts expire as follows:

Amounts in NOK million	
2000	78
2001	27
2002	321
2003	212
2004	1,024
After 2004	685
Without expiration	4,944
<b>Total</b>	<b>7,291</b>

The tax effects of temporary differences and tax loss carryforwards giving rise to deferred tax assets and liabilities were as follows as of 31 December, 1999 and 1998:

Amounts in NOK million	Deferred Tax			
	Assets 1999	Liabilities 1999	Assets 1998	Liabilities 1998
<b>Short-term:</b>				
Marketable securities	1	(89)	1	(80)
Inventory valuation	151	(332)	144	(242)
Accrued expenses	1,014	(129)	341	-
Unrealized exchange gains	-	(49)	-	(166)
Uplift benefit	504	-	476	-
Other	-	(15)	14	(37)
<b>Long-term:</b>				
Marketable securities	-	(1)	1	(1)
Unrealized exchange (gains) losses	77	(9)	116	(88)
Depreciation	2,138	(25,177)	2,311	(12,538)
Capitalized interest	-	(4,015)	-	(3,302)
Exploration drilling costs	-	(2,892)	-	(2,566)
Other non-current assets	1,275	(1,184)	1,316	(530)
Accrued expenses	1,054	(567)	261	(602)
Pensions	631	(1,459)	175	(1,538)
Deferred gains on sales	247	(994)	139	(746)
Uplift benefit	2,985	-	1,296	-
Other	240	(1,252)	946	(1,391)
Total tax loss carryforwards	2,604	-	2,696	-
<b>Subtotal</b>	<b>12,921</b>	<b>(38,164)</b>	<b>10,233</b>	<b>(23,827)</b>
Total valuation allowance	(3,114)		(3,455)	-
Gross deferred tax assets and liabilities	<b>9,807</b>	<b>(38,164)</b>	<b>6,778</b>	<b>(23,827)</b>

Deferred income taxes have not been provided for on undistributed earnings of foreign subsidiaries since those earnings are indefinitely invested. If this was to be provided for the amount would have been based on undistributed earnings of foreign subsidiaries amounting to NOK 9,479 million. No deferred income taxes have been recognized on undistributed domestic subsidiary earnings which can be remitted tax-free as dividends.

### 11. OTHER LIQUID ASSETS

Amounts in NOK million	1999	1998
Bank time deposits	16	45
Marketable equity securities	1,095	812
Debt securities and other	1,424	1,636
<b>Total</b>	<b>2,535</b>	<b>2,493</b>

The net change in unrealized gains on securities for the years ended 31 December 1999, 1998 and 1997 was a net gain of NOK 36 million, a net loss of NOK 236 million and a net gain of NOK 128 million, respectively. Total cost of marketable equity securities and debt securities and other was NOK 2,198 million and NOK 2,149 million at 31 December, 1999 and 1998, respectively.

# Norsk Hydro ASA and subsidiaries

## Notes to the consolidated financial statements

### 12. INVENTORIES

Amounts in NOK million	1999	1998
Finished goods	9,356	9,455
Work in progress	1,571	1,533
Raw materials	5,400	4,506
<b>Total</b>	<b>16,327</b>	<b>15,494</b>

### 13. AVAILABLE-FOR-SALE SECURITIES

As of 31 December, 1999 and 1998, available-for-sale securities at cost amounted to NOK 13 million and NOK 14 million, respectively, with unrealized holding gains of NOK 4 million and NOK 2 million respectively. Proceeds from the sale of available-for-sale securities was NOK 1,788 million and NOK 135 million for the years ended 31 December, 1998 and 1997 respectively. The gross realized gain from such sales was NOK 1,139 and NOK 53 million, respectively. Amounts for the year ended 31 December, 1999 were not material.

### 14. NON-CONSOLIDATED INVESTEEES

#### Analysis of Investments and Advances

(20% to 50% ownership)

Amounts in NOK million	1999	1998	1997
Balance 01.01	<b>6,297</b>	5,234	5,584
Investment (sale), net	<b>385</b>	694	60
Change in long-term advances, net	<b>(6)</b>	51	3
Transfers (to) from other investments	<b>402</b>	135	(385)
Hydro's share of net income	<b>418</b>	459	424
Amortization of goodwill	<b>(61)</b>	(42)	(22)
Write-down of investments	<b>(18)</b>	(7)	-
Dividends received by Hydro	<b>(550)</b>	(330)	(646)
Foreign currency translation and other	<b>99</b>	103	216
<b>Balance 31.12</b>	<b>6,966</b>	6,297	5,234

Amounts in NOK million	Hydro Texaco	Scan-cracker	Scanraff	Søral	Meridian	Auto-plastics	Qafco	Tringen	Farmland	Dyno	Others	Total Hydro
Balance 01.01.1998	764	208	307	268	220	-	862	203	321	1,129	952	5,234
Investment (sale), net					410						284	694
Change in long-term advances, net		(16)	44		50				(11)		(16)	51
Transfer (to) from other investments											135	135
Hydro's share of net income	44			102	(15)		87	83	174	(56)	40	459
Amortization of goodwill	(6)				(20)						(16)	(42)
Write-down of investments											(7)	(7)
Dividends received by Hydro				(42)			(123)	(37)	(59)	(29)	(40)	(330)
Foreign currency translation and other	47	2	2		(10)		35	8	13	(19)	25	103
<b>Balance 31.12.1998</b>	<b>849</b>	<b>194</b>	<b>353</b>	<b>328</b>	<b>635</b>	<b>-</b>	<b>861</b>	<b>257</b>	<b>438</b>	<b>1,025</b>	<b>1,357</b>	<b>6,297</b>

#### Changes in 1999:

Investments (sale), net											385	<b>385</b>
Change in long-term advances, net		(19)	(11)			15					9	<b>(6)</b>
Transfer (to) from other investments						394					8	<b>402</b>
Hydro's share of net income	119			84	(39)	(5)	34		114	46	65	<b>418</b>
Amortization of goodwill	(6)				(39)	(6)					(10)	<b>(61)</b>
Write-down of investments											(18)	<b>(18)</b>
Dividends received by Hydro	(16)			(50)			(91)	(77)	(229)	(29)	(58)	<b>(550)</b>
Foreign currency translation and other	(39)	2	2		72	(6)	37	13	22	9	(13)	<b>99</b>
<b>Balance 31.12.1999</b>	<b>907</b>	<b>177</b>	<b>344</b>	<b>362</b>	<b>629</b>	<b>392</b>	<b>841</b>	<b>193</b>	<b>345</b>	<b>1,051</b>	<b>1,725</b>	<b>6,966</b>

# Norsk Hydro ASA and subsidiaries

## Notes to the consolidated financial statements

### Specification of non-consolidated investees

Amounts in NOK million, except ownership	Percentage owned by Hydro 1999	Investments in and advances to investees		Hydro's current receivable (payable), net with investees	
		1999	1998	1999	1998
Hydro Texaco	50.0%	907	849	55	41
Scancracker	50.0%	177	194	(10)	(10)
Scanraff	21.5%	344	353	6	(6)
Søral	49.9%	362	328	(133)	(149)
Meridian	49.0%	629	635	15	29
Autoplastics	40.0%	392	-	-	-
Qafco	25.0%	841	861	(35)	(22)
Tringen	49.0%	193	257	(35)	(109)
Farmland Hydro	50.0%	345	438	31	41
Dyno	38.1%	1,051	1,025	-	-
Other <sup>1)</sup>	-	1,725	1,357	426	795
<b>Total</b>		<b>6,966</b>	<b>6,297</b>	<b>320</b>	<b>610</b>

<sup>1)</sup> Includes non-consolidated investees where total investments in and advances to each individual investee amounts to less than NOK 200 million.

The investees' business, majority owners, nature of related party transactions with Hydro and, when material to Hydro, the amount of these transactions follow:

Hydro Texaco a.s operates 955 gasoline stations and 162 diesel stations in Norway, Denmark and the Baltics. Hydro and Texaco Inc. each own 50 percent in the joint venture. Hydro sells and purchases oil related products to and from the joint venture at market prices. Sales from Hydro Texaco to Hydro amounted to NOK 660 million, NOK 338 million and NOK 281 million in 1999, 1998 and 1997, respectively. Sales from Hydro to Hydro Texaco amounted to NOK 628 million, NOK 532 million and NOK 487 million in 1999, 1998 and 1997, respectively.

Skandinaviska Raffinaderiet AB (Scanraff) and Skandinaviska Kracker AB (Scancracker) operate the Scanraff refinery and adjacent cracking facilities. Hydro paid processing fees to Scanraff for refining of its oil of NOK 225 million, NOK 205 million and NOK 218 million in 1999, 1998 and 1997, respectively. The other partner is an unaffiliated company.

Sør-Norge Aluminium A/S (Søral), a Norwegian primary aluminium manufacturer, sells 50 percent of its production to each major owner at current market prices. The other 50 percent owner of Søral is an unaffiliated company. Sale of aluminium from Søral to Hydro amounted to NOK 811 million, NOK 1,141 million and NOK 961 million in 1999, 1998 and 1997, respectively. Sales from Hydro to Søral amounted to NOK 266 million, NOK 330 million and NOK 252 million in 1999, 1998 and 1997, respectively.

Meridian Technologies Inc. (Meridian) is a Canadian company owned 51 percent by Teksid S.p.A. (a subsidiary of the Fiat group) and 49 percent by Hydro. Meridian provides aluminium and magnesium die-casting products to the automobile industry. Meridian has been a major customer, in terms of volume, of alloyed magnesium for each of the years 1999, 1998 and 1997. Operating revenues from sales to Meridian were not material to the Other Light Metals segment as a whole.

Gränges Autoplastics AB (now Autoplastics AB) is a leading European supplier of plastics systems for interior and exterior applications within the automotive industry. See Note 2.

Qatar Fertiliser Company S.A.Q. (Qafco) owns a fertilizer complex for which Hydro provides marketing support and technical assistance. The remaining 75 percent of Qafco is owned by the State of Qatar. Hydro bought urea from Qafco amounting to NOK 670 million, NOK 688 million and NOK 459 million in 1999, 1998 and 1997, respectively.

Trinidad Nitrogen Co., Ltd. (Tringen), the owner of two ammonia plants, has agreements which obligate Hydro to buy or act as a marketing agent on a commission basis for all production. Hydro paid NOK 675 million, NOK 884 million and NOK 910 million, net of commission received, for ammonia purchases in 1999, 1998 and 1997, respectively. The majority owner of Tringen is the State of Trinidad and Tobago.

The ownership interest in Farmland Hydro LP entitles Hydro to act as the worldwide agent for sales of its phosphate fertilizers. The other partner is an unaffiliated company. Sales from Hydro to Farmland Hydro amounted to NOK 231 million, NOK 271 million and NOK 368 million in 1999, 1998 and 1997, respectively.

Dyno ASA (Dyno) is a publicly owned explosives, chemicals and plastics producer. In 1997 and 1998, Dyno made provisions in connection with its legal dispute in the United States. These provisions reduced Hydro's net income in 1998 by NOK 198 million. In 1999, Hydro accepted from Industri Kapital, a Swedish investment company, an offer of NOK 206 per share for its 38.1 percent interest in Dyno. This represents a sales price of slightly more than NOK 2.0 billion. The sale is dependent on the approval of relevant government authorities.

### Non-consolidated investees – 100 percent basis

The following table sets forth summarized unaudited financial information of Hydro's non-consolidated investees on a 100 percent combined basis. Hydro's share of these investments, which is also specified below, is accounted for using the equity method.

Amounts in NOK million (unaudited)	1999	1998	1997
<b>Balance Sheet Data:</b>			
Current assets	16,841	15,057	14,168
Non-current assets	29,275	25,992	21,010
<b>Total</b>	<b>46,116</b>	<b>41,049</b>	<b>35,178</b>
Current liabilities	13,560	12,707	10,115
Non-current liabilities	12,740	10,335	10,672
Minority interest	422	300	225
Shareholders' equity	19,394	17,707	14,166
<b>Total</b>	<b>46,116</b>	<b>41,049</b>	<b>35,178</b>
Hydro's investments and advances	6,966	6,297	5,234
<b>Income Statement Data:</b>			
Operating revenues	35,729	35,209	34,317
Operating income	2,567	2,990	3,193
Income before taxes and minority interest	1,779	2,101	2,120
<b>Net income</b>	<b>1,083</b>	<b>926</b>	<b>1,415</b>
Hydro's share of net income	418	459	424

# Norsk Hydro ASA and subsidiaries

## Notes to the consolidated financial statements

### 15. PROPERTY, PLANT AND EQUIPMENT

Amounts in NOK million	LAND-BASED ACTIVITIES						Total
	Land	Machinery and Equipment	Buildings	Plant under construction	Other	E&P <sup>1)</sup>	
COST:							
Cost 31.12.1998	1,104	54,299	16,062	3,045	816	65,069	<b>140,395</b>
Additions at cost	36	2,496	606	1,482	4	47,693	<b>52,317</b>
Retirements	(82)	(3,070)	(693)	(118)	(41)	(1,773)	<b>(5,777)</b>
Transfers	-	2,398	301	(2,699)	-	-	<b>-</b>
Foreign currency translation	(39)	(1,154)	(282)	(26)	-	631	<b>(870)</b>
<b>Balance 31.12.1999</b>	<b>1,019</b>	<b>54,969</b>	<b>15,994</b>	<b>1,684</b>	<b>779</b>	<b>111,620</b>	<b>186,065</b>
DEPRECIATION:							
Balance 31.12.1998	-	(35,498)	(8,220)	-	(146)	(32,899)	<b>(76,763)</b>
Depreciation, depletion and amortization <sup>2)</sup>	-	(3,570)	(592)	-	(52)	(5,530)	<b>(9,744)</b>
Retirements	-	1,465	323	-	13	424	<b>2,225</b>
Foreign currency translation and transfers	-	815	141	-	-	(241)	<b>715</b>
<b>Balance 31.12.1999</b>	<b>-</b>	<b>(36,788)</b>	<b>(8,348)</b>	<b>-</b>	<b>(185)</b>	<b>(38,246)</b>	<b>(83,567)</b>
NET BOOK VALUE:							
Balance 31.12.1998	1,104	18,801	7,842	3,045	670	32,170	63,632
<b>Balance 31.12.1999</b>	<b>1,019</b>	<b>18,181</b>	<b>7,646</b>	<b>1,684</b>	<b>594</b>	<b>73,374</b>	<b>102,498</b>

<sup>1)</sup> Includes land-based activities for Exploration and Production (E&P)

<sup>2)</sup> In 1999, Hydro recorded impairment losses of NOK 739 million, NOK 295 million of which were recorded as a component of depreciation, depletion and amortization. The remaining NOK 444 million was recorded as restructuring costs. See Note 6. Impairment losses for 1998 and 1997 were NOK 248 million and NOK 11 million, respectively. The fair value of the impaired assets was generally estimated by discounting the expected future cash flows of the individual assets. During the three years ended 31 December, 1999, impairment was generally indicated as the result of current period cash flow losses, combined with a history of losses, or a significant change in the manner in which the asset is to be used.

<sup>3)</sup> Includes NOK 680 million related to capital leases.

### 16. PREPAID PENSION, INVESTMENTS AND NON-CURRENT ASSETS

Amounts in NOK million	1999	1998
Goodwill for consolidated subsidiaries, less accumulated amortization	<b>458</b>	711
Intangible assets, less accumulated amortization	<b>710</b>	751
Total intangible assets	<b>1,168</b>	1,462
Prepaid pension (Note 20)	<b>4,316</b>	4,266
Available-for-sale securities at fair value (Note 13)	<b>17</b>	16
Other investments at cost	<b>870</b>	842
Non-current assets	<b>1,618</b>	1,198
Total prepaid pension, investments and non-current assets	<b>6,821</b>	6,322
<b>Total</b>	<b>7,989</b>	7,784

### 17. BANK LOANS AND OTHER INTEREST BEARING SHORT-TERM DEBT

Amounts in NOK million	Weighted Average Interest Rates as of 31 December		1999	1998
	1999	1998		
Bank loans and overdraft facilities	<b>6.0%</b>	7.0%	<b>4,834</b>	3,427
Commercial paper	<b>3.1%</b>	3.0%	<b>1</b>	11
Other	<b>4.8%</b>	4.0%	<b>2,526</b>	1,712
<b>Total</b>			<b>7,361</b>	5,150

As of 31 December, 1999, Norsk Hydro ASA had committed and unused short-term credit facilities with various banks totaling approximately NOK 3,297 million. Interest rates range from 2.5 to 8.7 percent depending on the currency of the facilities. No compensating balance is required.

# Norsk Hydro ASA and subsidiaries

## Notes to the consolidated financial statements

### 18. OTHER CURRENT LIABILITIES

Amounts in NOK million	1999	1998
Accounts payable	12,393	10,371
Income taxes payable	2,266	582
Payroll and value added taxes	2,444	2,429
Accrued liabilities	10,360	5,320
Other liabilities	1,046	966
<b>Total</b>	<b>28,509</b>	<b>19,668</b>

### 19. LONG-TERM DEBT

Substantially all unsecured debenture bond and unsecured bank loan agreements contain provisions restricting the pledging of assets to secure future borrowings without granting a similar secured status to the existing bondholders and lenders. Certain of the debenture bond agreements contain provisions allowing Hydro to call the debt prior to its final redemption date at par or at certain specified premiums.

#### Long-term debt payable in various currencies:

Amounts in million	Weighted Average Interest Rates	Denominated Amount 1999	Balance in NOK 1999	1998
Unsecured debenture bonds:				
USD	7.5%	3,146	25,213	14,239
NOK	8.6%	5,494	5,494	4,588
GBP	7.5%	325	4,209	1,264
DEM	-	-	-	1,137
EURO	6.3%	300	2,415	-
<b>Total</b>			<b>37,331</b>	<b>21,228</b>
Unsecured bank loans:				
USD	6.0%	450	3,607	2,213
SEK	5.5%	1,022	961	980
Other			150	242
<b>Total</b>			<b>4,718</b>	<b>3,435</b>
Capital lease obligations			568	589
Mortgage loans			230	121
Other long-term debt			288	319
<b>Outstanding debt</b>			<b>43,135</b>	<b>25,692</b>
Less: Current portion			(907)	(1,587)
<b>Total long-term debt</b>			<b>42,228</b>	<b>24,105</b>

Hydro utilizes foreign currency swaps to manage foreign exchange risk on its long-term debt which are not reflected in the table above. (See Note 24).

#### Payments on long-term debt fall due as follows:

Amounts in NOK million	Debentures	Bank-loans	Capital lease	Other	Total
2000	594	133	52	128	907
2001	1,702	146	54	41	1,943
2002	2,200	128	58	38	2,424
2003	1,895	80	63	33	2,071
2004	1,291	21	69	27	1,408
Thereafter	29,649	4,210	272	251	34,382
<b>Total</b>	<b>37,331<sup>1)</sup></b>	<b>4,718<sup>2)</sup></b>	<b>568</b>	<b>518</b>	<b>43,135</b>

1) Of which Norsk Hydro ASA is responsible for NOK 30,557 million.

2) Of which Norsk Hydro ASA is responsible for NOK 1,362 million.

Hydro had unsecured variable rate bank loans of NOK 3,223 million and NOK 20 million at 31 December, 1999 and 31 December, 1998, respectively, based on interbank interest rates.

Hydro has entered into agreements with several international banks for long-term, stand-by credit for a total amount of USD 1,950 million. There are no borrowings under these facilities at 31 December, 1999. Commitment fees range from 0.063 percent to 0.125 percent.

Subsequent to 31 December, 1999, Hydro issued EURO 100 million (NOK 810 million) of 6.25 percent notes repayable in 2010.

### 20. EMPLOYEE RETIREMENT PLANS

#### Pension Benefits

Norsk Hydro ASA and many of its subsidiaries have defined benefit retirement plans which cover substantially all of their employees. Plan benefits are generally based on years of service and final salary levels. Some subsidiaries have defined contribution or multiemployer plans.

#### Net periodic pension cost (credit)

Amounts in NOK million	1999	1998	1997
Defined benefit plans:			
Benefits earned during the year, net of participants' contributions	434	345	286
Interest cost on prior period benefit obligation	765	683	652
Expected return on plan assets	(1,132)	(1,121)	(1,079)
Recognized net gain	(11)	(63)	(66)
Amortization of prior service cost	141	111	109
Amortization of net transition asset	(56)	(55)	(54)
Curtailment loss	13	-	2
Settlement gain	(2)	-	-
<b>Net periodic pension cost (credit)</b>	<b>152</b>	<b>(100)</b>	<b>(150)</b>
Defined contribution plans	52	53	45
Multiemployer plans	31	36	36
Termination benefits and other	385	230	147
<b>Total net periodic pension cost</b>	<b>620</b>	<b>219</b>	<b>78</b>
Change in the additional minimum pension liability included within other comprehensive income	11	11	9

# Norsk Hydro ASA and subsidiaries

## Notes to the consolidated financial statements

### Change in projected benefit obligation (PBO)

Amounts in NOK million	1999	1998
Projected benefit obligation at beginning of year	(11,778)	(10,555)
Benefits earned during the year	(448)	(359)
Interest cost on prior period benefit obligation	(765)	(683)
Actuarial gain (loss)	551	(288)
Plan amendments	(96)	(264)
Benefits paid	655	611
Curtailment gain	11	-
Settlements	73	-
Special termination benefits	(40)	-
Business combinations	(749)	-
Foreign currency translation	58	(240)
Projected benefit obligation at end of year	(12,528)	(11,778)

### Change in pension plan assets

Amounts in NOK million	1999	1998
Fair value of plan assets at beginning of year	15,518	15,725
Actual return on plan assets	2,547	42
Company contributions	45	48
Plan participants' contributions	15	14
Benefits paid	(576)	(534)
Settlements	(77)	-
Business combinations	624	-
Foreign currency translation	21	223
Fair value of plan assets at end of year	18,117	15,518

### Status of pension plans reconciled to balance sheet

Amounts in NOK million	1999	1998
Defined benefit plans:		
Funded status of the plans at end of year	5,589	3,740
Unrecognized net gain	(2,821)	(841)
Unrecognized prior service cost	368	426
Unrecognized net transition asset	(188)	(234)
Net prepaid pension recognized	2,948	3,091
Termination benefits and other	(817)	(544)
Total net prepaid pension recognized	2,131	2,547
Amounts recognized in the statement of financial position consist of:		
Prepaid pension	4,316	4,266
Accrued pension liabilities	(2,287)	(1,812)
Intangible asset	7	9
Accumulated other comprehensive income	95	84
Net amount recognized	2,131	2,547
<b>Weighted-average assumptions at end of year:</b>		
Discount rate	7.0%	6.5%
Expected return on plan assets	8.0%	7.5%
Rate of compensation increase	2.3%	2.0%

The projected benefit obligation, accumulated benefit obligation, and fair value of plan assets for pension plans with accumulated benefit obligations in excess of plan assets were NOK 1,672 million, NOK 1,314 million and NOK 59 million, respectively, at 31 December, 1999, and NOK 1,435 million, NOK 1,177 million, and NOK 2 million, respectively, at 31 December, 1998.

Effective 1 July, 1998 Hydro increased the pensions of current pensioners in its main pension plans in Norway by approximately 7 percent. The resulting prior service cost of NOK 228 million is being amortized on a straight line basis over the two years, beginning 1 January, 1999.

Effective 1 July, 1996 Hydro increased the pensions of current pensioners in its main pension plans in Norway by approximately 7 percent. The resulting prior service cost of NOK 181 million was fully amortized as of 31 December, 1998.

### Other Retirement Benefits

Hydro has unfunded retiree medical and life insurance plans for certain of its employees located outside of Norway. Related net periodic postretirement cost was NOK 22 million, NOK 14 million and NOK 7 million for 1999, 1998 and 1997, respectively. The postretirement liability was NOK 221 million and NOK 194 million at 31 December, 1999 and 1998, respectively.

### 21. CONTINGENCIES AND OTHER LONG TERM LIABILITIES

Hydro is subject to changing environmental laws and regulations that in the future may require the company to modernize technology to meet more stringent emissions standards or to take actions for contaminated areas. At 31 December, 1999 and 1998, Hydro had accrued NOK 204 million and NOK 262 million, respectively, for corrective environmental measures. The corresponding expense was NOK 10 million in 1999 compared to NOK 42 million and NOK 47 million in 1998 and 1997, respectively. Hydro's share of the estimated total future cost of well closure, decommissioning and removal of offshore installations is approximately NOK 4,052 million. As of 31 December, 1999, Hydro had accrued NOK 2,041 million for well closure and abandonment costs using the unit-of-production method. The accrual was NOK 1,115 million as of 31 December, 1998. Abandonment expense was NOK 542 million, NOK 277 million and NOK 300 million in 1999, 1998 and 1997, respectively. Hydro's future expenses for these corrective environmental measures are affected by a number of uncertainties including, but not limited to, the method and extent of corrective action. Due to uncertainties inherent in the estimation process, it is at least reasonably possible that such estimates could be revised in the near term. In addition, conditions which could require future expenditures may be determined to exist for various sites, including Hydro's major production facilities and product storage terminals. The amount of such future costs is not determinable due to the unknown timing and extent of corrective actions which may be required.

On 15 March, 1996, Norsk Hydro USA Inc., a wholly owned subsidiary of Hydro received notice that the Port

# Norsk Hydro ASA and subsidiaries

## Notes to the consolidated financial statements

Authority of New York and New Jersey had filed a complaint in the Superior Court of New Jersey naming Norsk Hydro USA Inc., as one of the defendants in an action in connection with property damages and related losses suffered in the bombing by terrorist of the World Trade Center in February 1993. In February 1997, Hydro Agri North America was substituted for Norsk Hydro USA Inc. and the case was removed to Federal District court in New Jersey. In December 1997, the complaint was dismissed by the District Court, but this decision was appealed by the plaintiff. In 1999, the Third Circuit Court of Appeals affirmed the decision of the United States District Court in New Jersey dismissing the complaint filed by the Port Authority of New York and New Jersey. The period of time within which the plaintiffs could file an appeal with the United States Supreme Court has expired.

On 23 July, 1999 and 4 February, 2000, Dolphin AS presented claims to Hydro for higher day rates associated with a drilling rig, which has been leased for a period of seven years. The claims are based on a general upgrading of the drilling rig and total NOK 1,941 million. Hydro evaluates the claims together with the partners. Hydro will utilize the drilling rig in its activities associated with the Snorre Unit and Production License 089, in which Hydro has ownership interests of 17.66 percent and 13.28 percent, respectively. As such, any additional net rental cost to Hydro is expected to be substantially less than the amount claimed by Dolphin AS.

Hydro is involved in or threatened with various other legal, tax and environmental matters arising in the ordinary course of business. Hydro is of the opinion that resulting liabilities, if any, will not have a material adverse effect on its consolidated results of operations, liquidity or financial position.

Amounts in NOK million	1999	1998
<b>Other long-term liabilities</b>		
Insurance premiums and loss reserves	713	815
Accruals abandonment costs offshore	1,104	536
Accruals decommissioning costs offshore	937	579
Postretirement benefits other than pension	221	194
Other	1,759	1,375
<b>Total</b>	<b>4,734</b>	<b>3,499</b>

### 22. SECURED DEBT AND GUARANTEES

Amounts in NOK million	1999	1998
<b>Amount of secured debt</b>	<b>335</b>	<b>309</b>
<b>Assets used as security:</b>		
- Plant and equipment, etc.	236	396
- Buildings	638	401
- Other	161	124
<b>Total</b>	<b>1,035</b>	<b>921</b>
<b>Guarantees (off-balance sheet):</b>		
Contingency for discounted bills	48	92
Guarantees of debt	582	995
Indirect guarantees	6,438	3,359
<b>Total</b>	<b>7,068</b>	<b>4,446</b>

Hydro provides guarantees arising in the ordinary course of business including stand-by letters of credit, letters of credit, performance bonds and various payment or financial guarantees.

Following the asset exchange between Hydro and Petro-Canada in 1996, Hydro guaranteed that the total recoverable reserves attributable to Petro-Canada's working interest in the Veslefrikk field shall not be less than a certain quantified amount of crude oil. If less, Hydro has an obligation to deliver indemnity volumes to Petro-Canada. The guarantee does not apply in cases of force majeure, the failure of the operator to comply with good oil field practices, etc.

At 31 December, 1999, the remaining guaranteed volume was 1.9 millioner Sm<sup>3</sup> of crude oil, equivalent to approximately NOK 2,400 million.

### 23. CONTRACTUAL AND OTHER COMMITMENTS FOR FUTURE INVESTMENTS AND OPERATIONS

As of 31 December, 1999:	Investments		
Amounts in NOK million	2000	Thereafter	Total
Contract commitments for investments in property, plant and equipment:			
Land based	855	134	989
Oil and gas fields and transport systems	4,270	8,347	12,617
<b>Total</b>	<b>5,125</b>	<b>8,481</b>	<b>13,606</b>
Additional authorized future investments in property, plant and equipment:			
Land based	719	61	780
Oil and gas fields and transport systems	281	1,370	1,651
<b>Total</b>	<b>1,000</b>	<b>1,431</b>	<b>2,431</b>
Contract commitments for other future investments:	1,612	-	1,612

Additional authorized future investments include projects formally approved for development by the Board of Directors or management given the authority to approve such investments. General investment budgets are excluded from these amounts.

Hydro has entered into take-or-pay and long-term contracts providing for future payments to secure pipeline and transportation capacity, processing services, raw materials and electricity and steam. In addition, Hydro has entered into long-term sale commitments to deliver goods. This principally relates to obligations to deliver gas from fields on the Norwegian continental shelf for a total amount of NOK 106.3 billion.

# Norsk Hydro ASA and subsidiaries

## Notes to the consolidated financial statements

The non-cancelable future fixed and determinable obligation as of 31 December, 1999 is as follows:

Amounts in NOK million	Take-or-pay and Long-term contracts			
	Transport and Other	Raw materials	Energy related	Sale com- mitments
2000	437	1,234	1,023	(5,058)
2001	434	1,038	1,123	(6,094)
2002	435	1,045	1,051	(6,190)
2003	414	1,180	1,044	(6,528)
2004	398	470	1,044	(6,515)
Thereafter	2,886	1,825	21,100	(96,846)
<b>Total</b>	<b>5,004</b>	<b>6,792</b>	<b>26,385</b>	<b>(127,258)</b>

Terms of certain of these agreements include additional charges covering variable operating expenses in addition to the fixed and determinable component shown above.

In addition, Hydro has contracted to purchase 28.2 million tonnes of alumina over the next 14 years with variable prices referenced to the London Metal Exchange quoted prices.

The total purchases under the take-or-pay agreements and long-term contracts were as follows (in NOK million):  
1999 – 2,932; 1998 – 3,278; 1997 – 3,042.

#### 24. DERIVATIVE FINANCIAL INSTRUMENTS AND RISK MANAGEMENT

Hydro utilizes interest rate and foreign currency swaps to alter the interest rate or currency exposures for its long-term debt portfolio. See Note 19.

Forward currency contracts often provide needed liquidity in one currency in exchange for excess liquidity in another. For a description of risk management and financial market risk see the "Risk Management" discussion in the Management's Discussion and Analysis section of this report. Refer to Note 1 under "Derivative Financial Instruments" for information about credit risk and cash flows of these instruments.

##### Interest Rate Swaps

At year end 1999, Hydro had two interest swaps, acquired as a part of the Saga acquisition. The interest swaps have offsetting terms and the combined swaps have no market value at 31 December, 1999.

##### Outstanding interest rate swaps at 31 December, 1999

Notional amount	Hydro pays	Hydro receives	Maturity
USD 500 million	NIBOR + 1.6%	Fixed 10.5%	March 2002
USD 500 million	Fixed 10.5%	NIBOR +1.6%	March 2002

The Norwegian kroner equivalent of the notional contract amounts above is approximately NOK 8.0 billion.

##### Swaption Contract

Hydro acquired, as part of the Saga acquisition, a sold swaption contract whereby the other party has a right to enter into a interest rate swap in the period from March 2000 to September 2008, under which Hydro will receive a fixed interest of 7.25 percent while paying LIBOR on a notional amount of USD 100 million (NOK 802 million). Under the contract, Hydro will receive 0.25 percent of the notional amount annually until the option is exercised or until

the contract expires in March 2009. The contract is recorded at fair value.

##### Foreign Currency Swaps

Amounts in million						
Hydro receiver Currency	Amount	Interest Rate Ref.	Hydro payer Currency	Amount	Interest Rate Ref.	Maturity
CHF	200	fixed	USD	136	floating	Apr. 00
DEM	70	fixed	USD	50	fixed	Mar. 00
USD	16	floating	DKK	100	fixed	Jan. 03

Floating interest rates are principally based on the London interbank offered rate (LIBOR) 6 months. The Norwegian kroner equivalent of the notional contract amounts above is approximately NOK 1.6 billion stated at year end exchange rates, which compares to outstanding contracts at the end of 1998 of NOK 2.0 billion.

##### Forward Currency Contracts

The buy amounts represent commitments to purchase foreign currencies and the sell amounts represent commitments to sell foreign currencies.

The following contracts were outstanding at 31 December, 1999, and mature between January 2000 and September 2001.

Amounts in million	In currency		In NOK	
	Buy	Sell	Buy	Sell
USD	1,317	(23)	10,544	(181)
NOK	389	(3,794)	389	(3,794)
DEM	69	-	287	-
GBP	55	(17)	711	(220)
SEK	-	(1,669)	-	(1,572)
CHF	-	(190)	-	(957)
DKK	-	(1,317)	-	(1,428)
CAD	-	(490)	-	(2,710)
Other	-	-	194	(1,234)
<b>Total</b>			<b>12,125</b>	<b>(12,096)</b>

The notional amounts stated at forward rates above of approximately NOK 12.1 billion compare with outstanding contracts at the end of 1998 of approximately NOK 15.6 billion.

##### Forward Currency Options

Hydro had a portfolio of purchased and written foreign currency options at 31 December, 1999. The portfolio was acquired as part of the Saga purchase. The written options in the portfolio are designed to reduce total premium payments.

The following contract amounts were outstanding at 31 December, 1999:

Amounts in million	Notional amount	Notional amount
	USD	NOK
Bought put options	120	958
Sold put options	120	958
Sold call options	187	1,495
<b>Total</b>		<b>3,411</b>

The option contracts outstanding at 31 December, 1999 mature between January 2000 and August 2001.

# Norsk Hydro ASA and subsidiaries

## Notes to the consolidated financial statements

### 25. FAIR VALUE OF FINANCIAL INSTRUMENTS

The estimated fair values of financial instruments not otherwise disclosed are as follows:

Amounts in NOK million	Carrying Amount 1999	Fair Value 1999	Carrying Amount 1998	Fair Value 1998
<b>Assets:</b>				
<i>Current assets:</i>				
Forward currency contracts	125	125	90	90
<i>Non-current assets:</i>				
Foreign currency swaps	18	-	67	56
Interest rate swap	-	55	-	-
<b>Liabilities:</b>				
<i>Current liabilities:</i>				
Forward currency contracts	(96)	(96)	(181)	(181)
Foreign currency swaps	(204)	(213)	(7)	(7)
Foreign currency options	(21)	(21)	-	-
<i>Other long-term liabilities:</i>				
Foreign currency swaps	-	-	(65)	(64)
Interest rate swap	-	(55)	-	-
Swaption contract	(25)	(25)	-	-
<i>Long-term debt</i>	<b>(43,135)</b>	<b>(41,746)</b>	<b>(25,692)</b>	<b>(26,959)</b>

The recorded amounts of cash and cash equivalents, receivables, bank loans and other interest bearing short-term debt, and other liabilities approximate their fair values.

Marketable equity and debt securities are recorded at their fair values. (Notes 11 and 13).

Fair values are estimated using quoted market prices, estimates obtained from brokers and other appropriate valuation techniques based upon information available as of 31 December of the respective years. The fair value estimates do not necessarily reflect the values which could be realized in the current market.

### 26. SUPPLEMENTARY OIL AND GAS INFORMATION

#### Costs Incurred on Oil and Gas Properties

##### EXPLORATION COSTS

Amounts in NOK million	Norway			International			Total		
	1999 <sup>1)</sup>	1998	1997	1999 <sup>1)</sup>	1998	1997	1999 <sup>1)</sup>	1998	1997
Capitalized at beginning of year	856	725	787	174	491	392	1,030	1,216	1,179
Incurred during the year	796	914	695	702	454	411	1,498	1,368	1,106
Acquisition cost <sup>2)</sup>	362	-	8	-	-	-	362	-	8
Expensed	(671)	(776)	(530)	(531)	(445)	(256)	(1,202)	(1,221)	(786)
Transferred to development	(185)	(7)	(235)	(50)	(326)	-	(235)	(333)	(235)
Disposals	-	-	-	(41)	-	(56)	(41)	-	(56)
Capitalized at end of year	<b>1,158</b>	856	725	<b>254</b>	174	491	<b>1,412</b>	1,030	1,216

<sup>1)</sup> 1999 figures include Saga Petroleum

<sup>2)</sup> 1999 represents exploration costs acquired from Saga Petroleum. See Note 2.

##### DEVELOPMENT, TRANSPORTATION SYSTEMS AND OTHER COSTS

Amounts in NOK million	Changes in net book value								
	1999	Norway		International			1999	Total	
	1999	1998	1997	1999	1998	1997	1999	1998	1997
Net book value at beginning of year	28,688	26,651	24,903	2,451	1,506	899	31,139	28,157	25,802
Cost incurred during the year <sup>1)</sup>	6,765	5,098	4,302	1,668	1,069	534	8,433	6,167	4,836
Acquisition cost <sup>2)</sup>	32,360	-	26	5,803	-	-	38,163	-	26
Transferred from exploration cost	185	7	235	50	326	-	235	333	235
Amortization	(4,938)	(3,068)	(2,815)	(594)	(157)	(9)	(5,532)	(3,225)	(2,824)
Disposals <sup>3)</sup>	(736)	-	-	(146)	(212)	-	(882)	(212)	-
Foreign currency translation	-	-	-	418	(81)	82	418	(81)	82
Net book value at end of year	<b>62,324</b>	28,688	26,651	<b>9,650</b>	2,451	1,506	<b>71,974</b>	31,139	28,157

<sup>1)</sup> In 1999, NOK 924 million, NOK 624 million, and NOK 44 million of development costs related to activities in Canada, Angola, and Russia, respectively. In addition, NOK 55 million of development costs related to Saga's activities in primarily UK and Ireland. In 1998, NOK 796 million and NOK 202 million of development costs related to activities in Canada and Angola, respectively. In 1997, NOK 412 million was related to Canadian activities.

<sup>2)</sup> In 1999, includes acquisition of Saga fields and transportation systems in Norway and in the UK and Ireland.

<sup>3)</sup> Consists of disposals in 1999 related to Saga for the Varg ship and fields in Indonesia.

# Norsk Hydro ASA and subsidiaries

## Notes to the consolidated financial statements

### Proved Reserves of Oil and Gas (Unaudited)

Proved reserves are the estimated quantities of crude oil, natural gas, and natural gas liquids which geological and engineering data demonstrate with reasonable certainty to be recoverable in future years from known reservoirs under existing economic and operating conditions. Proved developed reserves can be expected to be recovered through existing wells with existing equipment and operating methods. Proved undeveloped reserves are expected to be recovered from undrilled production wells on exploration licenses. Reserves are expected to be revised as oil and gas are produced and additional data become available. The main part of production and reserves are on the Norwegian Continental Shelf. The Norwegian State has the option to reduce Hydro's participation in certain licenses in accordance with the sliding scale agreement.

### PROVED RESERVES OF OIL AND GAS (Unaudited)

	Norway		International		Total	
	Oil mmboe <sup>1</sup>	Natural gas billion Sm <sup>3</sup>	Oil mmboe <sup>1</sup>	Natural Gas billion Sm <sup>3</sup>	Oil mmboe <sup>1</sup>	Natural gas billion Sm <sup>3</sup>
<i>Proved development and undeveloped reserves</i>						
<b>At 31 December, 1996</b>	668	142.2	21	-	689	142.2
Revisions of previous estimates <sup>2)</sup>	(18)	(14.8)	-	-	(18)	(14.8)
Purchase (sale)/exchange of reserves in place <sup>3)</sup>	9	1.4	-	-	9	1.4
Extensions and new discoveries	5	0.9	72	-	77	0.9
Production for the year	(77)	(3.1)	-	-	(77)	(3.1)
<b>At 31 December, 1997<sup>5)6)</sup></b>	<b>587</b>	<b>126.6</b>	<b>93</b>	<b>-</b>	<b>680</b>	<b>126.6</b>
Revisions of previous estimates <sup>2)</sup>	33	(1.5)	-	-	33	(1.5)
Purchase (sale)/exchange of reserves in place	-	-	-	-	-	-
Extensions and new discoveries	3	0.1	-	-	3	0.1
Production for the year	(77)	(3.3)	(1)	-	(78)	(3.3)
<b>At 31 December, 1998<sup>5)6)</sup></b>	<b>546</b>	<b>121.9</b>	<b>92</b>	<b>-</b>	<b>638</b>	<b>121.9</b>
Revisions of previous estimates	22	1.0	1	-	<b>23</b>	<b>1.0</b>
Purchase (sale)/exchange of reserves in place <sup>3)</sup>	229	42.7	56	6.3	<b>285</b>	<b>49.0</b>
Extensions and new discoveries <sup>4)</sup>	131	5.8	10	-	<b>141</b>	<b>5.8</b>
Production for the year	(91)	(3.9)	(6)	(0.3)	<b>(97)</b>	<b>(4.2)</b>
<b>At 31 December, 1999<sup>5)6)</sup></b>	<b>837</b>	<b>167.5</b>	<b>153</b>	<b>6.0</b>	<b>990</b>	<b>173.5</b>
<i>Proved development reserves</i>						
At 31 December, 1996	368	63.7	-	-	368	63.7
At 31 December, 1997	356	60.6	19	-	375	60.6
At 31 December, 1998	358	57.0	17	-	375	57.0
<b>At 31 December, 1999</b>	<b>500</b>	<b>69.1</b>	<b>74</b>	<b>6.0</b>	<b>574</b>	<b>75.1</b>

1) Includes crude oil and NGL/Condensate.

2) In 1998, Hydro increased its interest in the Snorre field from 8.3 percent to 8.9 percent as a result of a redetermination of the field. The decrease in reserves in 1997 was due to the change to more stringent criteria of 90 percent probability of recovery for proved reserves in accordance with new guidelines from the Society of Petroleum Engineers and World Petroleum Congress. Hydro previously classified reserves as proved with an 80 percent probability of recovery.

3) In 1999, the increase in reserves is due to the inclusion and increase in ownership interest from the Saga acquisition. In 1997, increase in oil reserves is due to an increase in interest in the Visund field from 12.6 to 16.1 percent.

4) In 1999, extensions and new discoveries for oil related to the Grane and Borg fields. Kvitebjørn and Tune fields were for gas. The Kharyaga field in Russia comprised the international extensions and new discoveries for oil.

5) Reserve estimates are made before royalties of approximately 8.8, 11.0 and 15.9 million barrels of oil equivalents for 1999, 1998 and 1997, respectively.

6) In 1999, reserve estimates include 192.0 million barrels of oil equivalents from outside the Norwegian Continental Shelf, mainly in UK, Canada and Angola.

# Norsk Hydro ASA and subsidiaries

## Notes to the consolidated financial statements

### Results of Operations for Oil and Gas Producing Activities

As required by Statement of Financial Accounting Standards No. 69, the revenues and expenses included in the following table reflect only those relating to the oil and gas producing operations of Hydro. In addition to these operations, Exploration and Production in Note 5 reflects revenues and expenses relating to petroleum transport operations.

The "results of operations" should not be equated to net income since no deduction nor allocation is made for interest costs, general corporate overhead costs, and other costs. Income tax expense is a theoretical computation based on the statutory tax rates after giving effect to the effects of uplift and permanent differences only.

Amounts in NOK million	Norway			International <sup>1)</sup>			Total		
	1999	1998	1997	1999	1998	1997	1999	1998	1997
Sales to unaffiliated customers	<b>4,687</b>	2,173	2,345	<b>1,085</b>	223	7	<b>5,772</b>	2,396	2,352
Intercompany transfers	<b>10,320</b>	6,934	9,523	-	-	-	<b>10,320</b>	6,934	9,523
Total revenues	<b>15,007</b>	9,107	11,868	<b>1,085</b>	223	7	<b>16,092</b>	9,330	11,875
<b>Operating costs and expenses:</b>									
Production costs	<b>3,142</b>	2,158	1,999	<b>171</b>	165	3	<b>3,313</b>	2,323	2,002
Exploration expenses	<b>670</b>	775	530	<b>531</b>	446	256	<b>1,201</b>	1,221	786
Depreciation, depletion and amortization	<b>4,881</b>	3,006	2,794	<b>673</b>	169	5	<b>5,554</b>	3,175	2,799
Total expenses	<b>8,693</b>	5,939	5,323	<b>1,375</b>	780	264	<b>10,068</b>	6,719	5,587
Results of operations before taxes	<b>6,314</b>	3,168	6,545	<b>(290)</b>	(557)	(257)	<b>6,024</b>	2,611	6,288
Current and deferred income tax expense	<b>(4,576)</b>	(1,934)	(4,694)	<b>93</b>	180	86	<b>(4,483)</b>	(1,754)	(4,608)
Result of operations	<b>1,738</b>	1,234	1,851	<b>(197)</b>	(377)	(171)	<b>1,541</b>	857	1,680

<sup>1)</sup> Includes UK.

### Standardized Measure of Discounted Future Net Cash Flows and Changes Therein Relating to Proved Oil and Gas Reserves (Unaudited)

The standardized measure of discounted future net cash flows of Hydro's proved reserves of oil (including natural gas liquids and condensate) and gas is prepared in compliance with Statement of Financial Accounting Standards No. 69.

Future net cash flows are based on numerous assumptions which may or may not be realized. The Management of Hydro cautions against relying on the information presented because of the highly arbitrary nature of assumptions involved and susceptibility of estimates to change as new and more accurate data become available.

The individual components of future net cash flows shown below were computed using prices, production costs, development costs, royalty levels, foreign exchange rates, statutory tax rates and estimated proved reserve quantities at the respective year ends.

# Norsk Hydro ASA and subsidiaries

## Notes to the consolidated financial statements

### STANDARDIZED MEASURE OF DISCOUNTED FUTURE NET CASH FLOWS

Amounts in NOK million	Norway			International			Total		
	1999	1998	1997	1999	1998	1997	1999	1998	1997
Future cash inflow	<b>274,800</b>	118,900	157,100	<b>32,300</b>	6,900	10,400	<b>307,100</b>	125,800	167,500
Future production costs	<b>(48,800)</b>	(29,600)	(29,900)	<b>(8,100)</b>	(1,900)	(2,500)	<b>(56,900)</b>	(31,500)	(32,400)
Future development costs	<b>(21,200)</b>	(13,100)	(15,500)	<b>(4,800)</b>	(3,600)	(3,600)	<b>(26,000)</b>	(16,700)	(19,100)
Future income tax expense	<b>(140,200)</b>	(51,500)	(82,000)	<b>(5,300)</b>	(400)	(400)	<b>(145,500)</b>	(51,900)	(82,400)
Future net cash flows	<b>64,600</b>	24,700	29,700	<b>14,100</b>	1,000	3,900	<b>78,700</b>	25,700	33,600
Less: 10% annual discount for estimated timing of cash flows	<b>(25,400)</b>	(12,900)	(13,500)	<b>(5,100)</b>	(1,000)	(2,800)	<b>(30,500)</b>	(13,900)	(16,300)
Standardized measure of discounted future net cash flow	<b>39,200</b>	11,800	16,200	<b>9,000</b>	-	1,100	<b>48,200</b>	11,800	17,300

### MAJOR SOURCES OF CHANGES IN THE STANDARDIZED MEASURE OF DISCOUNTED FUTURE NET CASH FLOWS

Amounts in NOK million	1999	1998	1997
Net changes in prices and production costs	<b>45,600</b>	(20,200)	(12,100)
Sales and transfers of oil and gas produced, net of production costs	<b>(13,300)</b>	(7,100)	(10,100)
Extensions, unitizations, discoveries and improved recovery, net of related costs	<b>13,100</b>	100	3,900
Purchase/Exchange of interest in field	<b>38,400</b>	-	700
Sale/Exchange of interest in field	<b>-</b>	-	(200)
Changes in estimated development costs	<b>(11,900)</b>	(3,800)	(5,200)
Development costs incurred during the year	<b>6,000</b>	5,000	4,000
Net change in income taxes	<b>(48,200)</b>	18,000	21,400
Accretion of discount	<b>800</b>	1,900	1,500
Revisions of previous reserve quantity estimates	<b>6,000</b>	500	(4,500)
Other	<b>(100)</b>	100	100
Total change in the standardized measure during the year	<b>36,400</b>	(5,500)	(500)

### Production

The following table presents the average sales price (including transfers) and production costs per unit or crude oil and natural gas, net of reductions in respect of royalty payments, during 1999, 1998 and 1997.

Amounts in NOK	Norway			International			Total		
	1999	1998	1997	1999	1998	1997	1999	1998	1997
Average Sales Price									
crude oil (per barrel)	<b>143.9</b>	93.5	135.1	<b>157.7</b>	72.3	-	<b>144.7</b>	93.5	135.1
natural gas (per cubic feet)	<b>166</b>	1.98	1.97	<b>1.84</b>	-	-	<b>1.65</b>	1.98	1.97
Average production cost (per boe)	<b>22.6</b>	20.3	17.9	<b>23.6</b>	35.2	-	<b>22.4</b>	20.5	17.9

# Norsk Hydro ASA and subsidiaries

## Schedule VIII - Valuation and qualifying accounts and reserves

(Amounts in NOK million)

Description	Balance at beginning of period	Additions		Deductions (Note 2)	Balance at end of period
		Charged to costs and expenses	Charged to other accounts (Note 1)		
Year ended 31 December, 1999:					
Allowance for doubtful accounts	650	302	(21)	139	792
Restructuring allowance	–	188	3	–	191
Environmental accruals	1,378	532	591	255	2,246
Year ended 31 December, 1998:					
Allowance for doubtful accounts	520	243	30	143	650
Restructuring allowance	-	–	–	-	–
Environmental accruals	1,094	320	17	53	1,378
Year ended 31 December, 1997:					
Allowance for doubtful accounts	514	142	25	161	520
Restructuring allowance	21	–	-	21	-
Environmental accruals	768	348	17	39	1,094

Note 1: Includes amounts recognized in business combinations and foreign currency translation adjustments.

Note 2: Deductions primarily represent uncollectible accounts charged against the allowance for doubtful accounts and expenditures related to and reductions of restructuring allowances and environmental accruals.

## GLOSSARY

### Terms Relating to the Group's Businesses and Operations

Term	Definition
ADR	American Depositary Receipt, evidencing a specified number of ADSs
ADS	American Depositary Share, representing one deposited Ordinary Share
AN	Ammonium nitrate fertilizer
bbls	Barrels of crude oil, including NGLs
boe	Barrels of oil equivalents
boed	Barres of oil equivalents per day
bscf	billions standard of cubic feet
CAN	Calcium ammonium nitrate fertilizer
Company	Norsk Hydro ASA
CO <sub>2</sub>	Carbon dioxide
Hydro / The Group	The Company and its consolidated subsidiaries
DAP	Diammoniumphosphate fertilizer
Deposit Agreement	Deposit Agreement, dated as of 3 January, 1986, as amended and restated as of 1 October, 1987, among the Company, the Depositary and the holders of ADRs from time to time
Depositary	Morgan Guaranty Trust Company of New York, as depositary of ADSs
EDC	Ethylene di chloride
kWh	Kilowatt hour
MAP	Monammonium phosphate fertilizer
mcf	Thousands of cubic feet of natural gas
NGLs	Oil and gas condensate and natural gas liquids
NPK	Complex fertilizers
Ordinary Share	Ordinary Share, par value NOK 20 per share of the Company
proved oil and gas reserves	The estimated quantities of crude oil, natural gas, and natural gas liquids which geological and engineering data demonstrate with reasonable certainty to be recoverable in future years from known reservoirs under existing economic and operating conditions
proved developed oil and gas reserves	Reserves that can be expected to be recovered through existing wells with existing equipment and operating methods
proved undeveloped oil and gas reserves	Reserves that are expected to be recovered from new wells on undrilled acreage, or from existing wells where a relatively major expenditure is required for recompletion
PVC	Polyvinyl chloride, a plastic raw material
scf	standard cubic feet
Sm <sup>3</sup>	standard cubic meter
tonne	One metric tonne (approximately 1,000 kilograms or 2,205 pounds)
TWh	Terawatt hour (one billion kilowatt hours)
VCM	Vinyl chloride monomer, the main raw material for PVC
VPS System	The Norwegian Verdipapirsentralen. See "Changes in Securities and Changes in Security for Registered Securities - Description of Ordinary Shares - The VPS System"

## **SIGNATURES**

Pursuant to the requirements of Section 12 of the Securities Exchange Act of 1934, the registrant certifies that it meets all of the requirements for filing on Form 20-F and has duly caused this annual report to be signed on its behalf by the undersigned, thereunto duly authorized.

For and on behalf of  
NORSK HYDRO ASA

/s/ Leiv L. Nergaard

LEIV L. NERGAARD  
(Executive Vice President and  
Chief Financial Officer)

Date : 28 March, 2000