THE MINERAL INDUSTRY OF

THE NETHERLANDS

By Harold R. Newman

The Netherlands was an important regional producer of natural gas and petroleum for the European market and played a major role as a transshipment center for mineral materials that entered and left continental Europe. In terms of world production, however, it was a modest producer of metallic and nonmetallic minerals and mineral products.

In 2002, the Dutch economy, which has been expanding for 4 years, slowed significantly and was practically at a standstill. The pace of economic growth at just 0.3% was the slowest in more than 20 years. The performance of the metal and electrical engineering sectors was particularly weak. The level of output in the oil, chemicals, and rubber industries, however, was higher (Netherlands Foreign Trade Agency, 2002§[1]).

Rotterdam, which was the world's largest container port and a major European transportation hub, remained extremely important as a shipping and storage center. In 2002, 322 million metric tons of cargo was handled in the port of Rotterdam, an increase of 2.4% compared with 2001. The increase was attributed to the increase in transshipment of ores and scrap metal by 6.7%; petrochemical products and petcoke, 25.5%; and containers, 5.9%. The transshipment of coal decreased by 4%; other bulk goods, such as minerals and building materials, decreased by 7.2% (Port of Rotterdam, 2002§).

In 2002, production of mineral commodities generally remained the same or dropped slightly. The high cost of social benefits contributed to the production costs of Dutch products, thus making them less competitive on the world market. The only mining operations left in the Netherlands in 2002 were involved in the extraction of limestone, peat, salt, and sand and gravel. The metal processing sector relied almost exclusively on imported ores and concentrates and scrap (table 1).

Since the 1980s, the Government has reduced its role in the economy, and privatization has continued with little debate or opposition. Nevertheless, the Government continued to dominate the energy sector and played a large role in the aviation, chemicals, telecommunications, and transportation sectors (table 2).

In 2002, the Netherlands was one of the top dozen trading countries in the world. Germany was the most important trading partner for the Netherlands. The trade balance between the Netherlands and the United States is listed in table 3.

The Central Bank had planned to sell 300 metric tons (t) of gold, which was about one-third of the nation's gold reserve. According to the timetable, 100 t was sold in 2000, and the remaining 200 t was to be sold by 2005 (Engineering and Mining Journal, 2000).

Boliden Cuivre & Zinc (BCZ) (a subsidiary of Boliden AB) acquired the assets of copper tubing manufacturer HME Netherland BV (HME) for €5.4 million ($6.2 million). The acquisition raised Boliden's production of copper tubing by almost 40% and established Boliden as one of the larger manufacturers of sanitary copper tubing in Europe with a market share of almost 16%. With a turnover of almost €45 million ($51 million), HME will be completely integrated with BCZ (Boliden AB, 2002§).

BP Netherlands and ChevronTexaco Corp. announced that they would build and operate a 22.5-megawatt (MW) wind farm at their jointly owned Nerefco refinery near Rotterdam. The $23 million project was due to begin operations in midyear 2002. It will generate electricity equivalent to what 20,000 households can consume in a year. The project will consist of nine state-of-the-art wind turbines, each with a generating capacity of 2.5 MW. The area location is on the shoreline with exposure to strong and consistent winds and access to the national power grid. The Dutch Government has set a target to increase the amount of electricity generated from renewable sources to 5% by 2005 (BP Group, 2002§).

The Netherlands was active on the international energy supply scene in more than one respect. The country supplied energy to Europe by pipelines and other methods and served as the entrepôt for oil products for northwestern Europe.

After Nederlandse Aardolie Maatschappij BV struck one of the largest natural gas fields in the world in the north part of the country in 1959, the decision was made to begin drilling for natural gas and petroleum in the North Sea. Natural gas has become the most important mineral fuel produced in the Netherlands. The Groningen Gasfield at Slochteren was one of the world's largest producing natural gas fields.

Veba Oil and Gas Netherlands was producing 31,500 barrels of oil per day from its Hanze field in the North Sea. This represents almost two-thirds of Dutch oil production. The field came onstream in August 2001 (Oil & Gas Journal, 2002).

References Cited

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Oil & Gas Journal, 2002, Veba Oil and Gas Netherlands: Oil & Gas Journal, v. 100, no. 4, January 28, p. 8.

[1]References that include a section mark (§) are found in the Internet References Cited section.

Internet References Cited

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Netherlands Foreign Trade Agency, 2002, Summary—The Dutch economy in 2002, accessed May 28, 2003, via URL http://www.hollandtrade.com/htmlen.

Port of Rotterdam, 2002, Top year for the port of Rotterdam, accessed May 23, 2003, at URL http://www.portpress.com/UK/pressrelease/2002_FR/topgear.asp?Ing=UK.

Major Sources of Information

National Geological Survey of the Netherlands
Princetonlaan 6
TA Utrecht
3508 The Netherlands

Ministry of Economic Affairs
EC The Hague
2500 The Netherlands

TABLE 1
NETHERLANDS: PRODUCTION OF MINERAL COMMODITIES[1]

(Metric tons unless otherwise specified)

Commodity[2]		1998	1999	2000	2001	2002[e]
METALS						
Aluminum, metal:						
Primary		264,000 [e]	286,400	301,700	294,100	284,000
Secondary		102,000	88,000	119,000	120,000 [e]	120,000
Cadmium, metal, primary		739	731	628	455	485 [3]
Iron and steel:						
Ore, sintered, from imported ore		3,376,000	3,094,000	3,000,000 [e]	3,000,000 [e]	3,000,000
Metal, pig iron, including blast-furnace ferroalloys (if any)		5,561,000	5,307,000	4,969,000	5,305,000	5,000,000
Steel:						
Crude		6,379,000	6,077,000	5,667,000	6,037,000	6,000,000
Semimanufactures		4,964,000	4,786,000	4,956,000	5,335,000	5,300,000
Lead, metal, refined, secondary		13,200	19,900	22,200	24,400	22,000
Zinc, metal, primary		218,700	221,400	216,800	204,800	203,400
INDUSTRIAL MINERALS						
Cement, hydraulic	thousand tons	3,235	3,480	3,450	3,400 [e]	3,400
Magnesium compounds:[e]						
Chloride		25,000	23,000	25,000	25,000	25,000
Oxide		10,000	10,000	10,000	10,000	10,000
Nitrogen, N content of ammonia	thousand tons	2,350	2,428	2,543	1,939	1,970
Salt, all types[e]	do.	5,500	5,000	5,000	5,000	5,000
Sand, industrial[e]	do.	14	15	15	15	15
Sodium compounds, n.e.s.:[e]						
Carbonate, synthetic		400,000	350,000	350,000	350,000	350,000
Sulfate:						
Natural		20,000	20,000	20,000	20,000	20,000
Synthetic		15,000	15,000	15,000	15,000	15,000
Sulfur:[e]						
Elemental byproduct:						
Of metallurgy		131,000	129,000	123,000 [3]	126,000 [3]	125,000
Of petroleum and natural gas		432,000	445,000	428,000 [3]	384,000 [3]	385,000
Total		563,000	574,000	551,000 [3]	510,000 [3]	510,000
Sulfuric acid, anhydrous, H_2SO_4		1,250,000	1,000,000	1,000,000	1,000,000	1,000,000
MINERAL FUELS AND RELATED MATERIALS						
Coke, metallurgical		2,829,000	2,247,000	2,300,000 [e]	2,300,000 [e]	2,300,000
Gas:						
Marketed[e]	million cubic meters	10,000	10,000	10,000	10,000	10,000
Natural:						
Gross	do.	76,331	68,528	69,180	74,232	75,000
Marketed	do.	75,201	67,228	68,157	73,296	74,000
Natural gas liquids[e]	thousand 42-gallon barrels	170,000 [2]	160,000	170,000	160,000	160,000

See footnotes at end of table.

TABLE 1--Continued
NETHERLANDS: PRODUCTION OF MINERAL COMMODITIES[1]

(Metric tons unless otherwise specified)

Commodity[2]		1998	1999	2000	2001	2002[e]
MINERAL FUELS AND RELATED MATERIALS--Continued						
Petroleum:						
Crude	thousand 42-gallon barrels	19,164	18,978	17,633	18,000 [e]	18,000
Refinery products:						
Liquefied petroleum gas	do.	34,561	44,904	42,711	42,000 [e]	42,000
Mineral jelly and wax	do.	936	927	896	900 [e]	900
Gasoline, motor	do.	76,653	112,651	121,669	120,000 [e]	120,000
Naphtha and white spirit	do.	45,960	77,537	96,076	90,000 [e]	90,000
Kerosene and jet fuel	do.	50,808	55,816	59,888	60,000 [e]	60,000
Refinery gas	do.	11,858	11,480	10,486	11,000 [e]	11,000
Diesel oil	do.	159,100	161,733	164,060	160,000 [e]	160,000
Residual fuel oil	do.	102,605	81,127	72,900	81,000 [e]	80,000
Bitumen	do.	4,499	4,260	4,130	4,200 [e]	4,200
Unspecified	do.	31,913	40,075	41,349	40,000 [e]	40,000
Total	do.	518,893	590,510	614,165	609,000 [e]	608,000

[e]Estimated; estimated data are rounded to no more than three significant digits; may not add to total shown.
[1]Table includes data available through May 2003.
[2]In addition to the commodities listed, the Netherlands produced limestone and construction materials, such as sand and gravel, but output was not reported and no basis exists to make reliable estimates of output.
[3]Reported figure.

TABLE 2
NETHERLANDS: STRUCTURE OF THE MINERAL INDUSTRY IN 2002

(Thousand metric tons unless otherwise specified)

Commodity		Major operating companies	Location of main facility	Annual capacity
Aluminum:				
Primary		Pechiney Nederland NV	Smelter at Vlissingen	175
Do.		Corus Group	Smelter at Delfzijl	100
Secondary		Alumax Recycling BV	Smelter at Kerkade	50
Cadmium	tons	Budelco BV (Australian Overseas Smelting Pty. Ltd, 50%, and Kempensche Zinkmaatschappij Zincs de la Campine BV, 50%)	Plant at Budel-Dorplein	650
Cement		Eerste Nederlandse Cement Industrie NV	Ten plants at Maastrict	2,700
Do.		Cementfabriek IJmuiden BV	Three plants at Ijmuiden	1,600
Do.		Cementfabriek Rozenburg BV	Two plants at Rozenburg	920
Lead		Hollandse Metallurgische Industrie Billiton BV	Electrolytic plant at Arnhem	35
Do.		Billiton Witmetaal BV	Electrolytic plant at Naarden	6
Limestone		Ankerpoort NV (Lhoist SA, 100%)	Mines at Maastricht and Winterswijk	600
Magnesia		Nedmag Industries Mining & Manufacturing BV	Plant at Veendam	130
Do.		MAF Magnesite BV	Plant at Schiedam	40
Natural gas	million cubic meters per day	Nederlandse Aardolie Maatschappij BV (NAM)	Groningen, Leeuwarden, Assen, and other onshore gasfields and several offshore wells in the North Sea	225
Petroleum, crude	barrels per day	Amoco Inc., Conoco Inc., and Unocal Inc.	766 wells (204 producing) including the following North Sea fields: Haven, Helder, Helm, Hoorn, Kotter, Logger, and Rijn	83,500
Do.	do.	Nederlandse Aardolie Maatschappij BV (NAM)	Onshore fields: Berkel, DeLier, Ijselmonde, Meerkapelle, Pernis, West, Pinacke, Rotterdam, Schoonebeck, Werkendam, and Zoetemeer	20,500
Do.	do.	Veba Oil and Gas Netherlands	Hanze field, North Sea	31,500

TABLE 2--Continued
NETHERLANDS: STRUCTURE OF THE MINERAL INDUSTRY IN 2002

(Thousand metric tons unless otherwise specified)

Commodity	Major operating companies	Location of main facility	Annual capacity
Refineries	Six companies, of which the major ones are:	Refineries	1,230,500
		Of which:	
	Netherlands Refining Co.	Rotterdam	(446,000)
	Shell Nederland Raffinaderij BV	Pernis	(374,000)
	Esso Nederland BV	Rotterdam	(175,000)
	Total Raffinaderij Nederland NV	Vlissingen	(150,000)
Salt	Akzo Nobel Salt BV (Akzo Nobel BV, 100%)	Mines	4,100
		Of which:	
		Hengelo	(2,100)
		Delfzijl	(2,000)
Sand, silica	Lieben Minërals BV	Mines at South Limburg	150
Sodium:			
Carbonate, synthetic	do.	Plant at Delfzijl	380
Sulfate, synthetic	do.	do.	600
Steel	Corus Group	Plant at Ijmuiden	6,100
Zinc	Budel Zinc BV (Pasminco Europe BV)	Plant at Budel-Dorplein	215

TABLE 3
NETHERLANDS: EXPORT AND IMPORT TRADE
WITH THE UNITED STATES

(Million dollars)

	2001		2002	
Month	Exports	Imports	Exports	Imports
January	1,809	835	1,471	685
February	1,821	725	1,483	736
March	1,912	860	1,707	762
April	1,756	831	1,717	894
May	1,594	880	1,591	877
June	1,627	777	1,534	812
July	1,290	734	1,350	873
August	1,530	745	1,510	769
September	1,363	690	1,516	768
October	1,501	889	1,473	514
November	1,614	775	1,490	668
December	1,668	774	1,494	587
Total	19,485	9,515	18,336	8,945

Source: U.S. Census Bureau, Foreign Trade Division, April 2003.