



2014 Minerals Yearbook

NETHERLANDS

THE MINERAL INDUSTRY OF THE NETHERLANDS

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In 2014, the nominal gross domestic product (GDP) of the Netherlands was estimated to have increased by 0.8% to \$696.3 billion (measured in terms of purchasing power parity), and the country was estimated to have had a 0.3% rate of inflation in the same year. The country accounted for 2.4% of the volume of world trade of goods and services, and it was a significant producer of crude oil and an important producer and distributor of natural gas in the European Union (EU) (CPB Netherlands Bureau for Economic Policy Analysis, 2015).

The Netherlands ranked 133d and 61st worldwide in terms of surface area and population size, respectively. In terms of economic performance in 2014, the Netherlands ranked as the 28th largest economy in the world and the 6th largest in the EU. The value of the Netherlands's exports in 2014 was \$552.8 billion, which made it the fifth-ranked exporter of goods in the world in terms of value. The Netherlands also was a significant importer of goods and services; in 2014, it imported \$488 billion in goods, making it the seventh-ranked importer of goods in the world (Netherlands Enterprise Agency, 2015; U.S. Central Intelligence Agency, 2015).

Minerals in the National Economy

The Staatstoezicht op de Mijnen [State Supervision of Mines] is the agency within the Ministerie van Economische Zaken [Ministry of Economic Affairs] that oversees the production of minerals in the Netherlands and the Netherlands Continental Shelf. The agency is responsible for drafting and enforcing mining laws and mine safety and mineral production regulations.

The mineral sector was dominated by natural gas and petroleum production, and there were about 150 extraction locations in offshore fields. The Ministry of Economic Affairs supervised mineral resource extraction at about 600 mainland locations. In the nonfuel mineral sector, the Netherlands was engaged principally in downstream activities, including the chemical and metallurgical industries, which used mainly imported ores and industrial minerals. Mining was limited to the extraction of limestone, peat, and sand and gravel by quarrying and solution mining of salt in the eastern and northern areas of the country (table 1; Staatstoezicht op de Mijnen, 2016).

Production

In 2014, the principal mineral commodities produced in the Netherlands were cadmium, crude petroleum, crude steel, pig iron, and refined zinc (table 1). Rotterdam was an important shipping and storage center. In 2014, the throughput of imports and exports of the following mineral commodities were the most important in terms of total tonnage: crude petroleum, 95.4 million metric tons (Mt); mineral oil products, 75 Mt; iron ore and scrap, 34.1 Mt; and coal, 30.4 Mt (Port of Rotterdam Authority, 2015, p. 2).

Structure of the Mineral Industry

According to the Netherlands Foreign Investment Agency, the country was host to about 6,300 foreign companies, such as BASF S.E. and Siemens AG of Germany; Yakult Honsha Company Ltd. of Japan; Saudi Basic Industries Corp. (SABIC) of Saudi Arabia; and Cisco Systems Inc., Microsoft Corp., and Nike Inc. of the United States. Over time, foreign companies have made direct investments totaling \$589 billion. Dutch-based multinationals, such as AkzoNobel NV, Heineken NV, ING NV, Koninklijke Philips N.V., KPN NV, Royal Dutch Shell plc, and Unilever NV also have made significant investments abroad. Mineral industry facilities in the Netherlands were mostly privately owned, although the Government continued to be involved in the energy sector through the regulation and oversight of petroleum and natural gas operations (Netherlands Enterprise Agency, 2015). Table 2 is a list of the major mineral industry facilities.

Commodity Review

Metals

Aluminum.—Klesch Aluminum Delfzijl BV (ALDEL) was scheduled to resume operations in March 2015 after being closed since December 2013 when it filed for bankruptcy at the court of Groningen. ALDEL stated that it had been struggling with increasing power prices and the differentials between the Netherlands and the surrounding countries. There was no primary aluminum production in the Netherlands in 2014 (Aluminum Delfzijl BV, 2013).

Iron and Steel.—Tata Steel Group (Tata) of India, which was the owner of Tata Steel Europe Ltd., stated in its annual report for 2013 that its Ijmuiden steel plant was going through a 5-year improvement program that was focused on enhancing production capacity, improving reliability, and reducing cost. Tata reported that at the end of the program, the total capacity of the plant would increase from 7.2 million metric tons per year (Mt/yr) of crude steel to 7.7 Mt/yr. Tata Steel Europe was part of the ultra-low carbon dioxide emission steelmaking (ULCOS) consortium, which is a consortium of 48 European companies and organizations that had developed a process to produce iron that reduces carbon dioxide emissions by eliminating the need to pelletize iron ore and to produce coke from coal (Tata Steel Group, 2014, p. 12, 23, 24).

Zinc.—Nyrstar NV's Budel plant increased its production to 290,000 metric tons in 2014, which, according to the company, set a new production record. The increased production was owing to scheduled continuing improvements to its electrolysis processes. Nyrstar indicated that the Budel plant would continue to update its installations and processes throughout 2014 and 2015 with the aim of being able to handle a wider range of

concentrates and to increase production (Nyrstar NV, 2015a, p. 43; 2015b).

Mineral Fuels

Natural Gas.—The Dutch Minister of Economic Affairs stated in January that natural gas production at the Groningen field would be reduced during the next 3 years owing to the concern of local residents about vibrations that were attributed to the exploitation of the field. The Groningen field was a major asset for its operators—Exxon Mobil Corp. of the United States, Royal Dutch Shell, and the Dutch Government—owing to its flexible delivery profile and the important source of revenue it represents. The field was important also as it supplied natural gas to customers in northwestern Europe in the winter months. Natural gas output at the Groningen field was reduced to a maximum of 39.62 billion cubic meters in 2014 and would be reduced to 16.98 billion cubic meters in 2015. Groningen, which is located in the northeastern portion of the Netherlands, produced nearly 54 billion cubic meters of natural gas in 2013 (Platts, 2014).

Outlook

The Netherlands is expanding its infrastructure to increase the volume of its natural gas exports in the region. Renewable energy is being promoted by the Government as the Netherlands plan to meet European Commission targets by 2020. The Port of Rotterdam is expected to continue to be a major port in Europe, particularly for container traffic, and it is expected to continue to play a significant role in European trade.

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TABLE 1
NETHERLANDS: PRODUCTION OF MINERAL COMMODITIES¹

(Metric tons unless otherwise specified)

Commodity ²	2010	2011	2012	2013	2014	
METALS						
Aluminum, metal, primary	300,000	300,000	110,000	50,000	--	
Cadmium, metal, primary	560	570	560	560	570	
Iron and steel:						
Pig iron, including blast-furnace ferroalloys (if any)	5,799,000	5,943,000	5,909,000	5,686,000	5,868,000	
Steel:						
Crude	6,651,000	6,937,000	6,867,000	6,714,000	6,964,000	
Semimanufactures	6,523,000	6,765,000	6,739,000	6,580,000	6,700,000 ^e	
Lead, metal, refined, secondary ^e	27,000 ^r	27,000 ^r	27,000 ^r	27,000 ^r	27,000	
Zinc, metal, primary	254,000	261,000	257,000	275,000	290,000	
INDUSTRIAL MINERALS						
Cement, hydraulic ^e	thousand metric tons	2,138	2,318	2,500	2,500	2,600
MINERAL FUELS AND RELATED MATERIALS						
Gas, dry natural:						
Gross	million cubic meters	88,668	80,731	80,787	86,422 ^r	86,400 ^e
Marketed	do.	88,660	80,731	80,787	86,422 ^r	86,400 ^e
Petroleum:						
Crude	thousand 42-gallon barrels	7,300	8,121	8,212	7,556 ^r	7,738
Refinery products:						
Liquefied petroleum gas	do.	16,534	16,500	17,958	17,484 ^r	17,500 ^e
Gasoline, motor	do.	63,145	63,000	59,495	53,765 ^r	53,800 ^e
Naphtha and white spirit ^e	do.	90,000	--	--	--	--
Kerosene and jet fuel	do.	51,794	51,700	55,991	53,801 ^r	53,800 ^e
Refinery fuel and loss ^e	do.	30,000	--	--	--	--
Diesel oil	do.	159,031	159,000	151,511	150,599 ^r	151,000 ^e
Residual fuel oil	do.	63,218	63,000	55,918	54,385 ^r	54,500 ^e
Unspecified	do.	101,653	100,000	104,755	102,612 ^r	102,000 ^e
Total	do.	575,375	453,000	445,628	432,646 ^r	432,000 ^e

^eEstimated; estimated data are rounded to no more than three significant digits; may not add to totals shown. ^rRevised. do. Ditto. -- Zero.

¹Table includes data available through June 5, 2015.

²In addition to the commodities listed, the Netherlands produced magnesium compounds, nitrogen, salt, sodium compounds, sulfur (as an elemental byproduct of metallurgy and of petroleum and natural gas), and construction materials, such as limestone, peat, and sand and gravel, but available information was not sufficient to make reliable estimates of output.

TABLE 2
NETHERLANDS: STRUCTURE OF THE MINERAL INDUSTRY IN 2014

(Thousand metric tons unless otherwise specified)

Commodity		Major operating companies and major equity owners	Location of main facilities	Annual capacity
Aluminum:				
Primary		Klesch Aluminum Delfzijl BV ¹ (ALDEL) (Klesch and Co. Ltd., 100%)	Smelter at Delfzijl	165
Secondary		Alumax Recycling BV	Smelter at Kerkade	50
Do.		Zeeland Aluminium Co. BV (ZALCO) (UTB Holding B.V. 100%)	Plant at Flushing (Vlissingen)	230
Cadmium	metric tons	Nyrstar NV	Plant at Budel	650
Calcium carbonate, ground		Omya Netherlands BV	Plant at Moerdijk	500
Cement		Eerste Nederlandse Cement Industrie NV (HeidelbergCement Group, 100%)	Plants at IJmuiden, Maastricht, and Rotterdam	3,700
Do.		Cementfabriek IJmuiden BV	Three plants at IJmuiden	1,600
Do.		Cementfabriek Rozenburg BV	Two plants at Rozenburg	920
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	Nederlandse Aardolie Maatschappij BV (NAM) (Exxon Mobil Corp., 50%, and Royal Dutch Shell plc., 50%)	Groningen, Leeuwarden, Assen, and other onshore gasfields and several offshore wells in the North Sea	225
Petroleum:				
Crude	42-gallon barrels per day	BP p.l.c., ConocoPhillips Co., and Chevron Corp.	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) (Exxon Mobil Corp., 50%, and Royal Dutch Shell plc, 50%)	Onshore fields: Berkel, DeLier, Ijselmonde, Meerkapelle, Pernis, Pinacke, Rotterdam, Schoonebeck, West, Werkendam, and Zoetemeer	20,500
Do.	do.	Veba Oil and Gas Netherlands BV	Hanze field, North Sea	31,500
Refinery		Several companies, of which the four major ones are:	Refineries, including:	1,230,500
Do.		Netherlands Refining Co. (BP p.l.c., 69%, and Chevron Corp., 31%)	Rotterdam	(446,000)
Do.		Shell Nederland Raffinaderij BV	Pernis	(374,000)
Do.		Esso Nederland BV	Rotterdam	(175,000)
Do.		Zeeland Refinery NV (Total Nederland NV, 55%, and LUKOIL 45%)	Vlissingen	(150,000)
Salt		Akzo Nobel Salt BV (Akzo Nobel NV, 100%)	Mines, of which:	4,100
Do.		do.	Hengelo	(2,100)
Do.		do.	Delfzijl	(2,000)
Sand, silica		Sigrano Nederland NV (Sibelco Group)	Mines and plants at Heerlin and Maastricht	500
Do.		Lieben Minerals BV	Mines at South Limburg	150
Sodium:				
Carbonate, synthetic		Brunner Mond Group BV	Plant at Delfzijl	380
Sulfate, synthetic		do.	do.	600
Steel		Tata Steel Europe Ltd. (Tata Steel Group)	Plant at IJmuiden	7,200
Zinc		Nyrstar NV	Plant at Budel	290
Do., do. Ditto.				

¹Klesch Aluminum Delfzijl BV filed for bankruptcy on December 30, 2013, and remained closed until March 2015, when it officially reopened.