



2011 Minerals Yearbook

NETHERLANDS

THE MINERAL INDUSTRY OF THE NETHERLANDS

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In 2011, the Netherlands' gross domestic product (GDP) was \$824.7 billion, which was an increase of 1.1% compared with that of the previous year. The Netherlands was a significant producer of nitrogen and salt, accounting for 1.3% and 1.7% of world production, respectively. The main emphasis of the Dutch mineral industry was on trade and processing, and the country also was a modest producer of metallic and nonmetallic minerals and mineral products. In 2011, the Netherlands was a significant regional producer of natural gas and petroleum for the European market and a major transshipment center for mineral products that entered and left continental Europe. In 2011, the Port of Rotterdam was the busiest port in Europe in terms of the value and the volume of the cargo handled at the port. The Netherlands was the European Union's (EU's) fourth ranked exporting country after Germany, France, and Italy, although it ranked only seventh among EU countries in terms of GDP based on purchasing power parity (Apodaca, 2012; Kostick, 2012; Port of Rotterdam Authority, 2012, p. 5, 13; U.S. Central Intelligence Agency, 2012).

Minerals in the National Economy

The Staatstoezicht op de Mijnen [State Supervision of Mines] (SodM) 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, mine safety, and mineral production regulations.

The mineral sector was dominated by natural gas and petroleum production, of which about 40% was from offshore fields. 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. 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 (table 1; Staatstoezicht op de Mijnen, 2009).

Production

In 2011, crude steel production increased by 4.3% and pig iron production increased by 2.5%. The principal mineral commodities that were produced in the Netherlands were primary aluminum, cadmium, cement, crude petroleum, natural gas, iron and steel, salt, and refined zinc. Rotterdam remained important as a shipping and storage center. In 2011, the throughput (imports and exports) of the following mineral commodities were the most important in terms of total volume: crude petroleum, 92.8 million metric tons (Mt); mineral oil products, 73.4 Mt; iron ore and scrap, 37.4 Mt; and coal, 26.7 Mt (table 1; Port of Rotterdam Authority, 2012, p. 2).

Structure of the Mineral Industry

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. Table 2 is a list of the major mineral industry facilities.

Commodity Review

Metals

Iron and Steel.—Tata Steel Group (Tata), which was the owner of Tata Steel Europe Ltd., announced in its annual report for 2011 that the Ijmuiden steel plant had begun a 5-year improvement program that was focused on enhancing production capacity, improving reliability, and reducing cost. Ijmuiden Tata Steel Europe Ltd. was previously known as Corus, but the name was changed officially in September 2010 (Tata Steel Group, 2012, p. 25).

Zinc.—Nyrstar NV (Nyrstar) reported that although a roaster at the plant located in Budel underwent planned care and maintenance work in the first quarter of 2011, the plant's total zinc metal production was higher in 2011 than in 2010. Nyrstar also reported that the company planned to shut down its roaster and acid plant at Budel for 3 weeks in the second quarter of 2012 for maintenance, which was expected to reduce the production of zinc metal in 2012 by a maximum of 5,000 metric tons. The Budel smelter production helped Nyrstar achieve a record zinc metal production in 2011 of 1.125 Mt (Nyrstar NV, 2012, p.16).

Mineral Fuels

Natural Gas.—Northern Petroleum Plc. (Northern) announced the sale of its interests in the Vinkega gasfield to Vermillion Oil and Gas Netherlands B.V. for about \$4.1 million. This field underlies part of both Vermillion's Gorredijk license and Northern's Drenthe III license. Northern also reported that although its Waalwijk field had been scheduled for closure in 2008, improvements in the operations at Waalwijk and at the P12 fields were extending the life of the gasfields, and production there was continuing. Northern was using those operations as a remote operating control center for four new fields that had recently begun production (Northern Petroleum Plc., 2012, p. 18).

Petroleum.—Royal Dutch Shell plc. (Shell) stated that the Schoonebeek oilfield had restarted production in 2011. The field had been closed for 15 years, but because of enhanced oil recovery technology, the field had been brought back into production. Shell owned a 30% interest in the field (Royal Dutch Shell plc., 2012, p. 22).

Outlook

Natural gas is expected to be the leading sector for attracting investment in the Dutch economy. Public and private investments in the development of natural gas fields and the distribution of natural gas are increasing rapidly. The Netherlands is becoming the leading natural gas distribution center in Europe, and this trend will likely continue as the Netherlands is expected to continue to be an exporter of natural gas in the region.

The production of aluminum, cement, and steel in the Netherlands is expected to remain relevant for the Dutch economy. The Port of Rotterdam is expected to continue to be a leading European port, particularly in terms of container traffic, and 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	2007	2008	2009	2010	2011 ^c
METALS					
Aluminum, metal, primary	301,200	317,000	300,000	300,000	300,000
Cadmium, metal, primary	495	527	490	560 ^r	570
Iron and steel:					
Pig iron, including blast-furnace ferroalloys (if any)	6,412,000	5,998,000	4,601,000	5,799,000	5,943,000 ³
Steel:					
Crude	7,368,000	6,880,000	5,194,000	6,651,000	6,937,000 ³
Semimanufactures	6,800,000 ^e	6,800,000 ^e	5,100,000	6,523,000 ^r	6,765,000 ³
Lead, metal, refined, secondary ^e	16,000	16,000	16,000	17,000	17,000
Zinc, metal, primary	231,652	239,500	224,000	254,000 ^r	261,000
INDUSTRIAL MINERALS					
Cement, hydraulic ^e	thousand metric tons	2,400	2,700	2,700	2,700
Magnesium compounds: ^e					
Chloride		25,000	25,000	25,000	25,000
Oxide		10,000	10,000	10,000	10,000
Nitrogen, N content of ammonia ^e	thousand metric tons	1,800	1,800	1,800	1,800
Salt, all types ^e	do.	6,000	6,000	6,000	6,000
Sodium compounds, n.e.s.: ^{e,4}					
Carbonate, synthetic		350,000	350,000	350,000	350,000
Sulfate:					
Natural		20,000	20,000	20,000	20,000
Synthetic		15,000	15,000	15,000	15,000
Sulfur, elemental byproduct: ^e					
Of metallurgy		115,000	115,000	115,000	115,000
Of petroleum and natural gas		400,000	400,000	400,000	400,000
Total		515,000	515,000	515,000	515,000
MINERAL FUELS AND RELATED MATERIALS					
Gas, dry natural:					
Gross	million cubic meters	76,172 ^r	83,846 ^r	78,919 ^r	88,668 ^r
Marketed	do.	76,087 ^r	83,733 ^r	78,891 ^r	88,660 ^r
Petroleum:					
Crude	thousand 42-gallon barrels	14,565 ^r	12,230 ^r	9,302 ^r	7,300 ^r
Refinery products:					
Liquefied petroleum gas	do.	15,208	15,189	16,018	16,534 ^r
Gasoline, motor	do.	59,012	59,442	60,037	63,145 ^r
Naphtha and white spirit ^e	do.	90,000	90,000	90,000	90,000
Kerosene and jet fuel	do.	55,253	50,868	46,484	51,794 ^r
Refinery fuel and loss ^e	do.	30,000	30,000	30,000	30,000
Diesel oil	do.	145,054	153,492	153,556	159,031 ^r
Residual fuel oil	do.	61,434	55,626	54,800	63,218 ^r
Unspecified	do.	111,774	116,999	121,416	101,653 ^r
Total	do.	567,735	571,616	572,311	575,375 ^r

^eEstimated; data are rounded to no more than three significant digits; may not add to totals shown. ^rRevised. NA Not available. do. Ditto.

¹Table includes data available through November 28, 2012.

²In addition to the commodities listed, the Netherlands produced construction materials, such as limestone, peat, and sand and gravel, but output was not reported, and information was not available to make reliable estimates of output.

³Reported figure.

⁴Not elsewhere specified.

TABLE 2
NETHERLANDS: STRUCTURE OF THE MINERAL INDUSTRY IN 2011

(Thousand metric tons unless otherwise specified)

Commodity		Major operating companies and major equity owners	Location of main facilities	Annual capacity
Aluminum:				
Billets		Zeeland Aluminium Co. NV (Basemet B.V., a division of Klesch and Co. Ltd., 100%)	Plant at Flushing (Vlissingen)	230
Primary		do.	do.	100
Do.		Aluminum Delfzijl B.V. (Basemet B.V., a division of Klesch and Co. Ltd., 100%)	Smelter at Delfzijl	160
Secondary		Alumax Recycling BV	Smelter at Kerkade	50
Cadmium	metric tons	Nyrstar NV (Zinifex Ltd. and Umicore NV) ¹	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, Koter, 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.		Total Raffinaderij Nederland NV	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 Minëraals BV	Mines at South Limburg	150
Sodium:				
Carbonate, synthetic		Brunner Mond Group B.V.	Plant at Delfzijl	380
Sulfate, synthetic		do.	do.	600
Steel		Tata Steel Europe Ltd.	Plant at IJmuiden	7,000
Zinc		Nyrstar NV (Zinifex Ltd. and Umicore NV) ¹	Plant at Budel	260

Do., do. Ditto.

¹Nyrstar NV is an independent publicly traded company formed from the combined zinc and lead smelting and alloying business of Zinifex Ltd. and the zinc smelting and alloying business of Umicore NV.