# 2006 Minerals Yearbook

## UNITED KINGDOM

U.S. Department of the Interior
U.S. Geological Survey

July 2008

# The Mineral Industry of the United Kingdom

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The United Kingdom was a major European and world economy whose gross domestic product (GDP) in 2006 was ranked second after Germany in the European Union (EU). The output value of the United Kingdom's industry accounted for about 26% of the GDP. The country was a major regional processor of mineral raw materials and a manufacturer of producer and consumer durables. The country's heavy industries, which included companies that produced automotive and aviation products, chemicals, and machine tools, relied heavily on imported metal ores and concentrates, as well as on some industrial minerals and mineral fuels. The production of mineral fuels, which included coal, natural gas, and petroleum, formed a significant segment of the United Kingdom's mineral industry. The country also accounted for about 4% of world refined lead production, about 3% of refined nickel and crude salt output, about 2% of potash production, and more than 1% of the world's output of aluminum and crude steel (Bray, 2007, p. 5.17; Ober, 2007, p. 58.9; U.S. Central Intelligence Agency, 2007, p. 598; Carlin, Smith, and Bi, 2008, p. 42.20-42.21; Fenton, 2008, p. 37.13-37.14; Kostick, 2008, p. 63.15-63.17).

## Minerals in the National Economy

The value of mineral production, according to the latest available data (2005), amounted to about $57 billion,[1] which was about 3% of the United Kingdom's GDP. Fossil fuels (coal, gas, and oil) amounted to about 91% of the total value of mineral production. Aggregates, construction materials, and industrial minerals constituted about 9% of the total value of mineral production; and metals, an insignificant portion (Hetherington and others, 2007, p. 1).

The United Kingdom's mineral sector not only served domestic economic needs but its mining and processing companies continued to play an important role in global mineral prospecting, mineral development, and mineral commodity trade. The London Metal Exchange remained the dominant world central market for nonferrous metals and the authority on nonferrous metal futures.

## Government Policies and Programs

The 1971 Minerals Act, as amended, was the statute that governed the development and working of mineral deposits. Minerals, as defined in Section 209 of the Act, include all minerals and materials in or under the land of a kind ordinarily worked for removal by underground or surface workings; it does not, however, include peat cut for purposes other than for sale. Mineral development is specifically addressed in the Town and Country Planning (Minerals) Regulations, 1971 and the Town and Country Planning (Minerals) Act, 1981. Mineral rights to mineral fuels, such as coal, petroleum, and uranium, belong to the state. The Coal Authority is authorized to license open pit and underground mines to the private sector subject to restrictions on their size and the payment of a royalty on the amount of coal produced.

Most other mineral rights in Great Britain are privately owned with the exceptions of gold and silver, which are vested in the Royal Family. A different situation regarding mineral rights applies to Northern Ireland where, under the Mineral Development Act (Northern Ireland), 1969, the rights to work minerals and to license others to do so are vested in the state. Although the Government had ratified the Kyoto Protocol, the EU decided to meet Kyoto requirements as a whole, rather than as individual signatories, with each member state given a different emissions target by the EU.

## Production

In 2006, the United Kingdom's production of coal, natural gas, and crude oil continued to decline. Since 1999, the annual output of coal has dropped by about 47% and crude oil, by about 38%. Natural gas output has declined by 23% since 2002.

Production of metals displayed mixed results compared with respective output levels in 2005. Minor production gains were posted for primary lead and secondary lead and for crude steel. Minor production declines were noted in primary and secondary aluminum output and refined nickel production, and potash production also continued to decline (table 1).

## Structure of the Mineral Industry

Domestic and internationally owned corporations produced minerals and mineral-based commodities. Table 2 is a list of major mineral industry facilities.

## Mineral Trade

Metals trade balances in 2005 (the latest year for which data were available) were mixed. Metal ores and scrap and nonferrous metals registered negative trade balances of about $917 million and $377 million, respectively. Positive trade balances of about $1.2 billion, $1.1 billion, and $43.4 million were recorded for iron and steel, nonmonetary gold, and metal manufactures, respectively. Trade in coal, petroleum (including petroleum products), and natural gas recorded negative trade balances of $3.5 billion, $1.3 billion, and $800 million, respectively. The overall trade in minerals and mineral-based products amounted to about a negative $4.5 billion (Hetherington and others, 2007, p. 5).

[1]Where necessary, values have been converted from the British pound sterling (£) to U.S. dollars (US$) at the average rate of £1.84=US$1.00 and from the European euro (€) to U.S. dollars (US$) at the average rate of €0.796=US$1.00 for 2006.

## Commodity Review

### *Metals*

**Aluminum.**—British Alcan Aluminium Ltd. operated two primary aluminum smelters in the United Kingdom. The nation's third smelter was operated by Anglesey Aluminium Metal Ltd. All the aluminum smelters depended on imported alumina for feedstock. There were several small secondary smelters, which in 2006 accounted for about 35% of the United Kingdom's total aluminum production (table 1).

**Copper and Nickel.**—Although the United Kingdom did not mine nickel or mine or produce copper, Alba Mineral Resources plc (Alba) continued to study the Arthrath copper-nickel-platinum group project in Aberdeenshire, Scotland. At midyear, Alba reported having reached a joint-venture and exploration option agreement with Inco Ltd. of Canada. The agreement gave Inco the right to earn a 60% interest in the Arthrath project in return for a capitalization of $3.14 million for exploration during a 4-year period. Alba reported that extensive disseminated magmatic nickel-copper sulfide mineralization was present on the Arthrath prospect (Alba Mineral Resources plc, 2006).

**Gold.**—Falkland Gold and Minerals Ltd. (FGML) continued to explore for gold in the overseas territory of the Falkland Islands. By October 2006, FGML had drilled about one-half of its planned 23 targets. Earlier indications showed subeconomic resources of gold and platinum-group metals (Falkland Gold and Minerals Limited, 2006, p. 1).

In Northern Ireland, Tournigan Gold Corp. of Canada continued exploration for gold at Curraghinalt, and Galantas Gold Corp. continued the development of Omagh gold mine in County Tyrone. Galantas was building Northern Ireland's first gold mine. Trial runs of ore through the concentrate plant started in December 2006. Initial commercial production was scheduled for early 2007 (Galantas Gold Corp., 2007).

**Iron and Steel.**—In 2006, steel output in the United Kingdom increased by 5.5% compared with that of 2005 (table 1). Major issues pertaining to the steel industry during the year involved new investments and possible ownership changes at Corus Group plc, which was the dominant producer of steel in the United Kingdom. In April, Corus announced plans to invest $73.6 million in the modernization of two slab casters at the company's Teesside cast-product facility. An auction deadline for acquiring Corus set by The Panel on Takeovers and Mergers, which was an independent financial organization that regulated commercial company mergers and takeovers in the United Kingdom, was January 30, 2007. In late 2006, Tata Steel of India submitted a bid of about $8 billion for Corus. Companhia Siderugica Nacional of Brazil also expressed interest in acquiring Corus (Minerals UK, 2006a; b).

### *Industrial Minerals*

The United Kingdom remained an important producer of such minerals as barite, calcareous material for cement, clays, and fluorspar.

**Barite.**—Locally-produced barite continued to be a major component in the drilling mud used by petroleum drilling companies that operated in the North Sea. The major producer of barite was M-I Drilling Fluids (UK) Ltd., which operated the underground Foss Mine near Aberfeldy in Perthshire, Scotland. Barite production in England has increasingly become a byproduct of fluorspar mining in the Southern Pennine Orefield (British Geological Survey, 2006a).

**Cement.**—Raw materials for cement produced in the United Kingdom included chalk, clays, limestone, and mudstone. Cement-manufacturing companies included Lafarge Cement UK, Ltd., Castle Cement Ltd., CEMEX UK Operations, Ltd., and Buxton Lime Industries Ltd., which had total clinker capacities of 6.0 million metric tons per year (Mt/yr), 3.6 Mt/yr, 2.8 Mt/yr, and 800,000 metric tons per year (t/yr), respectively. In 2006, cement production in the United Kingdom amounted to about 11.4 million metric tons (Mt), which was an increase of about 1.6% compared with that of 2005 (table 1; British Geological Survey, 2005, p. 14).

**Clay and Shale.**—In 2006, the Imerys Group, which was a leading producer of kaolin (china clay) in the world, announced plans to reorganize its operations, which would involve ceasing the production of paper coating clay owing to its high energy cost. The company reported that it would focus production on lower grade (and lower cost) filler clays, but would continue to produce high-grade clays for ceramics and chemical and rubber products (Imerys S.A., 2006).

**Fluorspar.**—Glebe Mines Ltd. was the only domestic producer of fluorspar (calcium fluorite) and supplied the two United Kingdom fluorochemical producers with acid-grade fluorspar. Glebe's operations were based on surface extraction and processing in the Southern Pennine Orefield. Glebe operated the Cavendish Mill near Stoney Middleton for the supply of acid-grade fluorspar, together with byproduct barite and lead concentrate. Reserves of fluorite were estimated to be about 1 Mt, which would be sufficient for mill requirements for the next 10 years at current production levels (British Geological Survey, 2006b).

### *Mineral Fuels*

**Coal.**—UK Coal plc, which was the leading coal mining company in England, operated five underground and seven open pit coal mines in 2006. Scottish Coal Company Ltd., which operated 12 surface mines, was the leading coal producer in Scotland. Of the 17 licenses for underground mining in the United Kingdom, 7 were held by UK Coal. The 41 surface mines in the United Kingdom were mined by 16 operators. Scottish Coal held the largest number of surface mine licenses, with 14. More than 50 Mt/yr of coal was used to fuel about 41% of the country's electricity-generating plants, which made coal the leading fuel source used for power generation.

**Natural Gas and Petroleum.**—The North Sea holds Europe's largest natural gas and petroleum reserves. As of January 2006, the United Kingdom's estimated proven crude oil reserves totaled 4.0 billion barrels, which was the largest within the EU; the reserves were located mostly offshore on the United Kingdom Continental Shelf. Most of the country's production has come from basins east of Scotland in the central North Sea. The northern North Sea, east of the Shetland Islands, also contains considerable reserves, and smaller deposits are located in the North Atlantic Ocean. Besides these offshore assets, the country had the Wytch Farm field, which was the largest onshore oilfield in Europe. Production of petroleum and natural gas in 2006 declined by about 10% and 9%, respectively, compared with that of 2005 (table 1; U.S. Energy Information Administration, 2006).

## Outlook

The United Kingdom will continue to be a major European and global processor and fabricator of crude mineral products. Onshore exploration activities will be directed mainly toward gold and mixed sulfide ores. Offshore natural gas and petroleum exploration and site development will continue to be focused in the North Sea, particularly in the areas west of the Shetland Islands, the central North Sea, and the Southern Gas Basin of the North Sea.

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TABLE 1

UNITED KINGDOM: PRODUCTION OF MINERAL COMMODITIES[1]

(Metric tons unless otherwise specified)

| Commodity | | 2002 | 2003[e] | 2004[e] | 2005[e] | 2006[e] |
|---|---|---|---|---|---|---|
| METALS | | | | | | |
| Aluminum: | | | | | | |
| Alumina from imported bauxite | | 73,800 | -- r | -- r | -- r | -- |
| Metal: | | | | | | |
| Primary | | 344,318 | 342,748 2 | 359,631 2 | 368,477 2 | 360,300 2 |
| Secondary | | 204,900 | 205,400 2 | 205,400 2 | 205,301 2 | 197,900 2 |
| Total | | 549,218 | 548,148 2 | 565,031 2 | 573,778 2 | 558,200 |
| Cadmium, metal, including secondary | | 292 | 22 2 | -- | -- | -- |
| Iron and steel: | | | | | | |
| Iron ore and concentrate, manganiferous: | | | | | | |
| Gross weight | | 464 | 500 | 500 | 354 r | 350 |
| Fe content, 54% Fe | | 255 | 275 | 275 | 195 r | 195 |
| Metal: | | | | | | |
| Pig iron | thousand metric tons | 8,560 r | 10,228 2 | 10,180 2 | 10,236 r | 899 2 |
| Steel: | | | | | | |
| Crude | do. | 11,718 | 12,900 | 13,766 2 | 13,210 2 | 13,931 2 |
| Hot-rolled | do. | 10,876 r, 2 | 10,396 r, 2 | 11,528 r, 2 | 10,299 r, 2 | 10,500 |
| Lead: | | | | | | |
| Mine output, Pb content[e] | | 700 | 700 | 500 | 500 | 500 |
| Metal: | | | | | | |
| Smelter: | | | | | | |
| Bullion from imported concentrate | | 36,000 | 9,000 | 36,000 | 36,000 | 35,000 |
| Refined: | | | | | | |
| Primary[4] | | 207,719 | 196,000 r | 125,938 r, 2 | 161,350 r | 163,700 2 |
| Secondary[3] | | 166,927 | 169,574 | 120,000 r | 143,000 r | 144,000 2 |
| Total | | 374,646 | 365,574 | 245,938 | 304,350 r | 307,700 2 |
| Nickel, metal, refined[5] | | 33,790 | 26,788 | 38,606 | 37,600 r | 36,800 2 |
| Zinc, metal, smelter | | 99,600 | 99,600 r | 16,600 r | -- | -- |
| INDUSTRIAL MINERALS | | | | | | |
| Barite[e, 6] | | 59,000 | 57,000 | 61,000 r | 62,000 r | 60,000 |
| Bromine[e] | | 24,500 | 25,000 | -- | -- | -- |
| Cement, hydraulic | thousand metric tons | 11,089 | 11,215 | 11,405 | 11,216 | 11,400 2 |
| Clays:[e] | | | | | | |
| Fire clay | do. | 491 | 528 | 402 | 395 | 400 |
| Fuller's earth[7] | do. | 33 | 19 | 115 | -- | -- |
| Kaolin, china clay[8] | do. | 2,163 | 2,097 | 1,995 | 1,911 r | 1,900 |
| Ball clay and pottery clay[7] | do. | 921 | 885 | 965 | 1,011 | 1,000 |
| Other, including shale | do. | 10,306 | 10,680 | 11,164 | 10,898 | 11,000 |
| Feldspar, china stone | | 1,896 | 2,865 | 2,274 | 1,835 | 2,000 |
| Fluorspar, all grades[e, 9] | | 53,000 | 56,000 | 50,080 | 60,980 | 60,000 |
| Gypsum and anhydrite[e] | thousand metric tons | 1,700 | 1,700 | 1,686 | 1,700 | 1,700 |
| Lime, hydrated and quicklime[e] | do. | 1,500 | 1,500 | 1,500 | 1,500 | 1,500 |
| Nitrogen, N content of ammonia | do. | 837 | 1,044 | 1,071 | 1,080 | 1,100 |
| Potash, KCL product | | 900,000 | 1,040,000 | 912,000 | 732,000 | 700,000 |
| Salt:[e] | | | | | | |
| Rock | thousand metric tons | 1,500 | 1,700 | 2,000 | 2,000 | 2,000 |
| From brine | do. | 1,000 | 1,000 | 1,000 | 1,000 | 1,000 |
| In brine, sold or used as such | do. | 3,200 | 3,200 | 2,800 | 2,800 | 2,800 |
| Sand and gravel: | | | | | | |
| Common sand and gravel | do. | 94,424 | 91,211 | 97,333 | 94,666 | 95,000 |
| Sodium compounds, carbonate, n.e.s.[e, 10] | do. | 1,000 | 1,000 | 1,000 | 1,000 | 1,000 |

See footnotes at end of table.

TABLE 1--Continued

UNITED KINGDOM: PRODUCTION OF MINERAL COMMODITIES[1]

(Metric tons unless otherwise specified)

| Commodity | | 2002 | 2003[e] | 2004[e] | 2005 | 2006 |
|---|---|---|---|---|---|---|
| INDUSTRIAL MINERALS--Continued | | | | | | |
| Stone: | | | | | | |
| Calcite[e] | thousand metric tons | 10 | 10 | 10 | 10 | 10 |
| Chalk | do. | 8,587 | 8,066 | 7,997 | 7,105 | 7,000 |
| Dolomite | do. | 12,947 | 12,167 | 12,226 | 11,514 | 11,500 |
| Igneous rock | do. | 51,225 | 51,356 | 53,037 | 53,104 | 53,000 |
| Limestone | do. | 80,688 | 78,935 | 81,648 | 77,596 | 80,000 |
| Sandstone | do. | 18,362 | 18,259 | 18,844 | 18,685 | 18,500 |
| Slate, including fill | do. | 742 | 832 | 901 | 928 | 900 |
| Total | do. | 172,561 [r] | 170,000 | 175,000 | 169,000 | 171,000 |
| Sulfur, byproduct: | | | | | | |
| Talc, soapstone, pyrophyllite | | 6,194 | 6,494 | 3,881 | 6,000 | 6,000 |
| Titanium, titanium dioxide | thousand metric tons | 200 | 200 | 200 | 200 | 200 |
| MINERAL FUELS AND RELATED MATERIALS | | | | | | |
| Coal, anthracite and bituminous: | thousand metric tons | 29,989 | 28,279 | 25,096 | 20,498 | 20,000 |
| Coke: | | | | | | |
| Metallurgical | do. | 4,335 | 4,286 [2] | 4,038 | 4,105 | 4,000 |
| Breeze, all types | do. | 224 | 315 [2] | 298 | 259 | 250 |
| Gas, natural, marketable[11] | billion cubic meters | 104 [r] | 103 [r] | 96 [r] | 88 [r] | 80 [2] |
| Peat[e] | cubic meters | 973 [2] | 2,008 | 1,262 | 1,505 | 1,500 |
| Petroleum: | | | | | | |
| Crude[12] | thousand 42-gallon barrels | 810,158 | 733,763 | 715,304 | 660,285 [r] | 597,140 [2] |
| Refinery products | thousand metric tons | 83,996 | 84,529 | 89,828 | 86,003 | 85,000 |

[e]Estimated; estimated data are rounded to no more than three significant digits; may not add to totals shown. [p]Preliminary. [r]Revised. -- Zero.

[1]Table includes data available through November 2007.

[2]Reported figure.

[3]Includes a small quantity of primary lead from domestic concentrate.

[4]Produced entirely from imported bullion and includes the lead content of alloys.

[5]Refined nickel.

[6]Includes witherite.

[7]Salable product.

[8]Sales, dry weight.

[9]Proportions of grades not available; probably about two-thirds acid grade.

[10]Not elsewhere specified.

[11]Methane, excluding gas flared or reinjected.

[12]Excludes gases and condensates.

TABLE 2
UNITED KINGDOM: STRUCTURE OF THE MINERAL INDUSTRY IN 2006

(Thousand metric tons unless otherwise specified)

| Commodity | Major operating companies and major equity owners | Location of main facilities[1] | Annual capacity |
|---|---|---|---|
| Aluminum: | | | |
| Primary | British Alcan Aluminium Ltd. | Lynemouth Smelter, Northumberland County, England | 169 |
| Do. | do. | Locchaber Smelter, Fort William County, Scotland | 41 |
| Do. | Anglesey Aluminium Metal Ltd. (Rio Tinto Corp., 51%, and Kaiser Aluminum and Chemical Corp., 49%) | Holyhead, Gwynedd County, Wales | 144 |
| Secondary | Hydro Aluminium Deeside Ltd. (Hydro Aluminium AS) | Wrexham, Clwyd County, Wales | 55 |
| Do. | Cohen Alloys Ltd. | Glasgow, Scotland | NA |
| Do. | Coleshill Aluminium Ltd. | Coleshill, Warwickshire, England | NA |
| Do. | Dolgarrog Aluminium Ltd. | Dolgarrog, Conwy, Gwynedd County, Wales | 9 |
| Barite | M-I Drilling Fluids (UK) Ltd. | Foss Mine, near Aberfeldy, Perthshire County, Scotland | 50 |
| Do. | Glebe Mines Ltd. | Arthurton West, Bow Rake, High Rake, and Watersaw Mines, Southern Pennine Orefield, Derbyshire County, England | 15 |
| Celestite | Bristol Minerals Co. Ltd. | Yate, Avon County, England | 30 |
| Cement | Lafarge Cement UK, Ltd. (Lafarge Group) | Aberthaw plant, East Aberthaw, Barry, South Glamorgan County, Wales | 500 |
| Do. | do. | Barnstone plant, near Langar, Nottinghamshire County, England | -- [2] |
| Do. | do. | Cauldon plant, near Leek, Staffordshire County, England | 1,000 |
| Do. | do. | Cookstown plant, Cookstown, County Tyrone, Northern Ireland | 500 |
| Do. | do. | Dunbar plant, Dunbar, East Lothian, Scotland | 1,000 |
| Do. | do. | Hope plant, Hope Valley, Derbyshire County, England | 1,300 |
| Do. | do. | Northfleet plant, Northfleet, Kent County, England | 1,000 |
| Do. | do. | Westburyplant Westbury, Wiltshire County, England | 700 |
| Do. | Castle Cement Ltd. (Heidelberg Cement AG, 100%) | Ketton plant, Rutland County, near Stamford, Lincolnshire County, England | 1,400 |
| Do. | do. | Padeswood plant, Mold, Flintshire County, Wales | 1,400 |
| Do. | do. | Ribblesdale plant, Clitheroe, Lancashire County, England | 1,400 |
| Do. | CEMEX UK Operations, Ltd. (CEMEX, S.A.B. de C.V., 100%) | Rugby plant, Rugby, Warwickshire County, England | 1,800 |
| Do. | do. | Barrington plant, Barrington, Cambridgeshire County, England | 300 |
| Do. | do. | South Ferriby plant, North Lincolnshire County, England | 800 |
| Do. | Buxton Lime Industries Ltd. | Tunstead plant, Buxton, Derbyshire County, England | 800 |
| Clay: | | | |
| Ball clay | WBB Minerals (S.C.R.-Sibelco NV) | Various operations in northern and southern Devon County, England | 500 |
| Do. | Imerys Group | Operations in Bovey and Wareham Basins, Dorset County, England | 300 |
| China clay (kaolin) | do. | Mines and plants in Cornwall and Devon Counties, England | 3,000 |
| Do. | WBB Minerals (S.C.R.-Sibelco NV) | Mines and plants in Cornwall County, England | 1,000 |

See footnotes at end of table.

TABLE 2--Continued
UNITED KINGDOM: STRUCTURE OF THE MINERAL INDUSTRY IN 2006

(Thousand metric tons unless otherwise specified)

| Commodity | | Major operating companies and major equity owners | Location of main facilities[1] | Annual capacity |
|---|---|---|---|---|
| Coal | | | | |
| Underground mines | | UK Coal plc | Operations in England include the Daw Mill Colliery, Warwickshire County; the Kellingley Colliery, North Yorkshire County; the Maltby Colliery, Rotherham, Yorkshire County; the Thoresby Colliery, Nottinghamshire County; the Welbeck Colliery, Nottinghamshire County | 30,000 |
| Do. | | Goitre Tower Colliery Ltd. | Tower Colliery, Hirwaun, Mid Glamorgan County, Wales | 500 |
| Surface pits | | Scottish Coal Company Ltd. | Operations in Scotland include the Broken Cross pit near Douglas, South Lanarkshire County; Chalmerston pit, Dalmellington, East Ayrshire County; Chapelhill, South Lanarkshire County; Glentaggart pit, near Douglas, South Lanarkshire; Newbigging Farm pit, near Howgate, Midlothian County; Powharnal pit, near Muirkirk, East Ayrshire County, St. Ninians (Greenbank) pit, northeast of Dunfermline, Fife | 4,000 |
| Do. | | ATH Resources PLC | Operations in Scotland include the Grievehill, the Laigh Glenmuir, and the Skares road pits in Ayrshire County; Glenmuckloch pit, Dumfries and Galloway County | 1,600 |
| Do. | | Celtic Energy Ltd. | Margam pit, near Bridgend, Mid Glamorgan County, Wales | 350 |
| Do. | | do. | Nant Helen Extension pit, Abercraf, West Glamorgan Wales | 400 |
| Do. | | do. | Selar pit, Glynneath, West Glamorgan, Wales | 400 |
| Do. | | Energybuild Ltd. | Nant-y-Mynydd pit, Neath, West Glamorgan, Wales | 130 |
| Do. | | H.J. Banks Mining (Banks Group) | Dehli pit, Stannington, Northumberland County, England | NA |
| Fluorspar | | Glebe Mines Ltd. | Mill at Stoney Middleton, mines in Derbyshire County, England | 60 |
| Gold | kilograms | Galantas Gold Corp. | Omagh Mine, near Omagh, County Tyrone, Northern Ireland | 900 [3] |
| Gypsum | | British Gypsum Ltd. | Several mines and quarries in England, which include the Barrow Mine, Barrow upon Soar, southeast of Loughborough, Leicestershire County; the Brightling Mine, Robertsbridge, East Sussex County; the Birkshead Mine, Kirby Thore, near Penrith, Cumbria County; the Fauld Mine, Tutbury, near Burton on Trent, Staffordshire County; the Kilvington Quarry, Staunton in the Vale, Kilvington, Nottinghamshire County; the Marbleegis Mine, East Leake, northeast of Loughborough, Leicestershire County; the Newbiggin Mine, Newbiggin, near Kirby Thore, Cumbria County | 3,500 |
| Lead: | | | | |
| Primary | | Britania Refined Metals Ltd. (Xstrata plc) | Northfleet, Kent County, England | 180 |
| Secondary | | Britannia Recycling Ltd. (Xstrata plc) | Wakefield, West Yorkshire County, England | 20 |
| Do. | | H.J. Enthoven Ltd. (Quexco Inc, 100%) | Darley Dale, Derbyshire County, England | 75 |
| Natural gas | billion cubic meters per year | Numerous domestic and international oil companies | North Sea gasfields | 100 |

See footnotes at end of table.

TABLE 2--Continued

UNITED KINGDOM: STRUCTURE OF THE MINERAL INDUSTRY IN 2006

(Thousand metric tons unless otherwise specified)

| Commodity | | Major operating companies and major equity owners | Location of main facilities[1] | Annual capacity |
|---|---|---|---|---|
| Nickel, refined | | INCO Europe Ltd. (CVRD INCO Ltd.) | Clydach Refinery, near Swansea, West Glamorgan County, Wales | 30 |
| Nitrogen, N content of ammonia | | Terra Nitrogen Ltd. | Billingham, Durham County, England and Severnside, near Bristol, Avon County, England | 550 |
| Do. | | GrowHow UK Ltd. (Kemira GroHow Oyj) | Ince, Lancashire County, England | 400 |
| Petroleum: | | | | |
| Crude | million 42-gallon barrels per day | Numerous domestic and international oil companies, which include Apache North Sea Ltd., BG Group, BHP Billiton Ltd., BP p.l.c., Challenger Minerals Inc., Chevron Ltd., ConocoPhillips Ltd., Dana Petroleum plc, Eni Ltd., Exxon Mobil Corp., Hess Corp., Lundin Britain Ltd., Maersk Oil UK Ltd., Marathon Oil U.K. Ltd., Midmar Energy Onshore Ltd., Nexen Petroleum Inc., Noble Energy (Europe) Ltd., Oilexco Inc., Perenco UK Ltd., Petro-Canada UK Ltd., Premier Oil plc, Royal Dutch Shell plc, Statoil (U.K.) Ltd.,Talisman Ltd., Total S.A., and Tullow Oil (U.K.) Ltd. | North Sea oilfields | 2 |
| Refined | million 42-gallon barrels | Exxon Mobil Corp. | Fawley refinery, Southampton, Hampshire County, England | 120 |
| Do. | do. | Royal Dutch Shell plc | Stanlow manufacturing complex, Ellesmere Port, Cheshire County, England | 100 |
| Do. | do. | ConocoPhillips Ltd. | Humber refinery, South Killingholme, North Lincolnshire County, England | 90 |
| Do. | do. | Total S.A, | Lindsey refinery, Killingholme, North Lincolnshire County, England | 85 |
| Do. | do. | Chevron Ltd. | Pembroke refinery, Pembroke, Dyfed County, Wales | 82 |
| Do. | do. | Ineos Group | Grangemouth refinery, Grangemouth, Stirling County, Scotland | 80 |
| Do. | do. | BP p.l.c. | Coryton refinery, Stanford-le-Hope, Essex County, England | 80 |
| Do. | do. | Petroplus Holdings AG | Teesside refinery, Middlesborough, Cleveland County, England | 43 |
| Do. | do. | Total S.A., 70%, and Murco Petroleum Ltd., 30% | Milford Haven, Dyfed County, Wales | 40 |
| Do. | do. | Eastham Refinery Ltd. (Shell UK Ltd., 50%, and AB Nynas Ltd., 50%) | Eastham refinery, Ellesmere Port, Cheshire County, England | 9 |
| Do. | do. | AB Nynas Ltd. | Dundee refinery, Dundee, Scotland | 4 |
| Platinum-group metals | | Johnson Matthey plc | Refineries at Enfield (London) and Royston, Hertfordshire County, England | NA |
| Do. | | CVRD Inco Ltd. | Acton refinery, London, England | NA |
| Potash | | Cleveland Potash Ltd. (Israel Chemicals Ltd., 100%) | Boulby Mine, Yorkshire County, England | 1,000 |
| Salt: | | | | |
| Road | | do. | do. | 600 |
| Rock | | British Salt Ltd. | Middlewich, Cheshire County, England | 800 |
| Do. | | Irish Salt Mining and Exploration Co. Ltd. | Kilroot Mine, Carrick Fergus, Northern Ireland | 500 |
| Sand and gravel | | Hanson plc | Various offshore and onshore locations | NA |
| Silica sand | | WBB Minerals (S.C.R.-Sibelco NV) | Various operations in Cheshire, Humberside, and Norfolk Counties, England | 5,000 |
| Do. | | Hanson plc | Various locations | NA |

See footnotes at end of table.

TABLE 2--Continued
UNITED KINGDOM: STRUCTURE OF THE MINERAL INDUSTRY IN 2006

(Thousand metric tons unless otherwise specified)

| Commodity | Major operating companies and major equity owners | Location of main facilities[1] | Annual capacity |
|---|---|---|---|
| Slate, natural | Alfred McAlpine Slate Ltd. (Welsh Slate) | Operations in Wales include the Penrhyn quarry, Bethesda, Conwy County; the Pen Yr Orsedd quarry, Nantlle, Gwynedd County; quarries at Blaenau Ffestiniog and Cwt y Bugail, Gwynedd County | 1,000 |
| Do. | Greaves Welsh Slate Company Ltd. | Llechwedd Slate Mines, Blaenau Ffestiniog, Gwynedd County, Wales | NA |
| Soda ash | Brunner Mond Group (Tata Chemicals Ltd.) | Northwich, Cheshire County, England | 900 |
| Steel | Corus Construction & Industrial (Corus Group plc) | Scunthorpe Works, Scunthorte, Lincolnshire County, England | 4,500 |
| Do. | Corus Teesside Cast Products (Corus Group plc) | Teesside Works, Redcar, Cleveland County, England | 3,900 |
| Do. | Corus Strip Products UK (Corus Group plc) | Port Talbot works, Port Talbot, West Glamorgan, Wales | 3,750 |
| Do. | Corus Engineering Steels (Corus Group plc) | Rotherham Works, Rotherham, South Yorkshire County, England | 1,200 |
| Do. | do. | Stocksbridge Works near Sheffield, South Yorkshire County, England | NA [4] |
| Do. | Corus Special Profiles (Corus Group plc) | Skinningrove, Carlin How, near Saltburn-by-the-Sea, Cleveland County, England | NA |
| Do. | Celsa Manufacturing Ltd. (Grupo Celsa, 100%) | Tremorfa Works, Cardiff, South Glamorgan County, Wales | 850 |
| Stone, crushed | Hanson plc | 90 quarries in various locations | 70,000 |
| Talc | Alex Sandison and Son Ltd. | Unst, Shetland Islands | 15 |
| Tin, ore | Baseresult Holdings Ltd. | South Crofty Mine, Cornwall County, England | NA [5] |

NA Not available. -- Zero.

[1]May include historic, postal, or preserved counties instead of current regional governments, such as cities, county boroughs, or unitary authorities.

[2]Grinding plant only. Kilns closed in May 2006.

[3]Under construction.

[4]Remelt facilities.

[5]Mine has been on care and maintenance status (but open for tours) since operations were suspended in 1998. Redevelopment of the mine is underway.