



2014 Minerals Yearbook

UNITED KINGDOM

THE MINERAL INDUSTRY OF THE UNITED KINGDOM

By John R. Matzko

In 2014, the United Kingdom's gross domestic product (GDP) in current U.S. dollars was \$2.95 trillion. In real terms, the GDP increased by 3.0% compared with that of 2013, and was projected to increase by 2.5% in 2015. The United Kingdom's economy was the 3d largest in Europe after Germany and France in terms of GDP based on purchasing power parity and 11th in the world. The services sector composed nearly 80% of the United Kingdom's GDP; the industrial sector, nearly 20%; and the agricultural sector, less than 1%. The country's industrial base was composed of companies that provided automotive, aviation, and railroad products, shipbuilding, chemicals, and machine tools. These industries relied on many imported metal ores, concentrates, refined metals, and industrial minerals. The United Kingdom has large resources of coal, natural gas, and petroleum, but oil and gas production has been declining and, since 2005, the United Kingdom has been a net importer of energy (International Monetary Fund, 2015; U.S. Central Intelligence Agency, 2015).

In 2012 (the latest year for which data were available), the country accounted for about 1.9% of the world's refined nickel production (including nickel content of chemicals). In 2014, the United Kingdom produced 2.5% of the world's crude salt output and 1.6% of the world's potash output (Bolen, 2016; Jasinski, 2016; Kuck, 2015, p. 51.24).

Minerals in the National Economy

The United Kingdom's mining and processing companies played an important role in global mineral prospecting, mineral development and production, and mineral commodity trade. By 2014, production of metal ores in the United Kingdom has mostly ceased; the processing of metals, however, was still important for the United Kingdom's exports and its industrial sector. London is home to the London Metal Exchange, which remained the world's leading central market for nonferrous metals, and it is also an international hub for the headquarters of major mining and mineral processing companies in the world, although many of these companies do not have production facilities in the country. The United Kingdom was a producer of various industrial minerals, and it was also a significant producer of crude oil, gas, and refinery products (Perez, 2016, p. 48.1).

Government Policies and Programs

The 1971 Minerals Act, as amended, is the statute that governs the development and exploitation 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; they do 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, established in 1994 pursuant to the Coal Industry Act, 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. The Petroleum (Production) Act 1998 and the Continental Shelf Act, 1964, provide that oil and gas in the United Kingdom, both onshore and offshore in territorial waters and the United Kingdom continental shelf, belong to the state. Onshore activities require a license, which grants exclusive rights to explore for and develop oil and gas within land areas of Great Britain. In June 2014, the Government introduced the Petroleum Licensing (Exploration and Production) (Landward Areas) Regulations, 2014 (the 2014 Regulations). These regulations, which apply to any license granted on or after July 17, 2014, altered the clauses for new onshore petroleum exploration and development licenses. The new clauses consider the wide distribution of shale reserves across license areas, clarify the process for time extensions, and accelerate the dissemination of geologic data and operational results from hydraulic fracturing. The Finance Act, 2014, also contains measures designed to promote onshore oil and gas projects, including an onshore tax allowance, which secures a portion of the profits of onshore oil and gas projects from certain taxes. Most other mineral rights in England, Scotland, and Wales are privately owned, and there is no specific national licensing system for their exploration and extraction, but planning permission must be obtained from a mineral planning authority for their extraction. Exceptions are gold and silver, which are vested in the Crown State; a license is required for the exploration and development of these metals (British Geological Survey, 2015; Dewar and Ofori-Quaah, 2015, p. 271; Rafferty, 2015, p. 189).

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 Department of Enterprise, Trade and Investment, which grants prospecting and mining licenses to commercial companies for exploration and development of minerals. The three main exceptions are gold and silver, minerals that were being worked at the time of the 1969 Act, and common substances, such as aggregates and (or) sand and gravel (Dewar and Ofori-Quaah, 2015, p. 271).

Production

The production of a number of mineral commodities increased significantly in 2014. Fluorspar output increased by 157%; barite, by 47%; other clays (including shale), by 6%; hydraulic cement, by 13%; and slate, by 13%. The increases in the production of fluorspar and barite may be attributed to the reestablishment of mining facilities in Derbyshire in 2012 and the subsequent rampup in production during the past 2 years.

The production of primary lead metal decreased by an estimated 13.9%, and marketable natural gas decreased by an estimated 12.3% (table 1).

Structure of the Mineral Industry

The United Kingdom is home to several leading mineral and mineral processing companies. London is the main market for trade in metals, and metal-commodities-backed financial instruments, such as delivery contracts, futures, and swaps. Among the leading domestic companies, BP p.l.c. and Royal Dutch Shell plc are among the most significant in terms of value (financial performance), as they ranked second and fifth, respectively, among global energy companies in 2014 (Platts McGraw Hill Financial, 2015). Glencore plc is a major Anglo-Swiss trading and mining conglomerate with operations throughout the world. In the United Kingdom it produces primary and secondary lead through subsidiaries. UK Coal Production Ltd. is the principal owner and operator of underground coal mines in the United Kingdom. Table 2 is a list of major mineral industry facilities in the country.

Mineral Trade

In 2014, the United Kingdom's major trade partners were European Union (EU) member countries, the United States, and China. The major import partners of the United Kingdom in 2014 were Germany (which provided 14.4% of imports to the United Kingdom), China (9.2%), the United States (8.4%), the Netherlands (7.7%) and France (6.3%). The major export partners of the United Kingdom in 2014 were the United States (which received 12.6% of the United Kingdom's exports), Germany (10.2%), the Netherlands (7.2%), Switzerland (6.9%), and France (6.4%). The value of the United Kingdom's exports in 2014 was \$511.1 billion, and imports were valued at \$694.3 billion, resulting in a trade deficit of \$183.2 billion for the year. The country's major imports in 2014 were machinery (12.3% of total imports); mineral fuels and oil (11.7%); vehicles (11.0%); electronic equipment (8.9%); and gems, precious metals, and coins (5.2%). The country's major exports in 2014 were machinery (14% of total exports), mineral fuels and oil (10.8%), vehicles (10.6%), gems and precious metals (10.5%), and pharmaceuticals (6.6%) (Department for Business Innovation and Skills, 2015).

Commodity Review

Metals

Aluminum.—Rio Tinto Alcan Ltd.'s smelter at Lochaber, Scotland, with an annual capacity of 47,000 metric tons per year (t/yr), is the United Kingdom's only operating primary aluminum smelter since the closures of the Anglesey Aluminium Metal Ltd. facility in Holyhead, Wales, in September 2009, and the Rio Tinto Alcan Ltd. facility at Lynemouth, England, in March 2012. Primary aluminum production at the Lochaber smelter was 42,000 metric tons (t) in 2014, representing a decrease of 4.6% from the country's production of 44,000 t in 2013 (tables 1, 2; Homewood, 2015; Rio Tinto plc, 2015, p. 195, 216).

Gold.—The Crown State is the commercial agent for the British Government in charge of providing licenses for the development and production of gold and silver in the United Kingdom. In 2014, there was only one producing gold mine in the United Kingdom. The Cavanacaw open pit mine, operated by Omagh Minerals Ltd. (wholly owned by Galantas Gold Corp. of Canada), is located in Northern Ireland. In 2013, the latest year for which information was available, the mine produced 42 kilograms (kg) of gold valued at GBP1 million (\$1.6 million¹). The company's 2014 revised assessment of gold resources indicated an overall 19% increase in resources since the 2013 report. The Kearny and Joshua veins at the mine were targets for future underground mining (McFarlane and others, 2009; Galantas Gold Corp., 2014; Bide and others, 2015, p. 10, 13; Mining-technology.com, 2016).

In 2014, Scotgold Resources Ltd. (Australia) continued work to advance the Cononish gold and silver project to production. Work also continued on early stage regional exploration activities on the nearby Grampian project, which was prospective for both gold and base metal occurrences. Both projects are located near the town of Tyndrum in the Grampian Highlands of midwestern Scotland. As of mid-2014, the reported mineral resources at Cononish, including measured, indicated, and inferred, totaled 460,600 t grading at 11.7 grams per metric ton (g/t) gold and 45 g/t silver. Given the grade range, the inferred mineral resource was estimated to be between 2,640 kg (85,000 troy ounces) and 3,950 kg (127,000 troy ounces) of gold. The company thought the Cononish project could be in production within 18 months of obtaining financing (Scotgold Resources Ltd., 2014, p. 2–5, 7, 9).

Industrial Minerals

Barite.—The United Kingdom's barite production was dominated by M-I Drilling Fluids (UK) Ltd., which operated the underground Foss Mine located near Aberfeldy in Perthshire County, Scotland. The production of this mine accounted for most of the production in the United Kingdom; the remaining output of barite was from the Southern Pennine Orefield where barite was derived as a byproduct of fluorspar mining (table 2).

Fluorspar.—British Fluorspar Ltd., a wholly owned subsidiary of the Fluorsid Group, was established in 2012 to resume operations of the fluorspar mining facilities in Derbyshire, England, which ceased mining and was placed on care-and-maintenance status in 2010. In 2013, the company began production of fluorspar with byproduct barite and lead from the Milldam underground mine. In 2014, the company was granted permission by the Peak District National Park Authority to increase production over the next 15 years and to increase mine truck traffic from 60,000 t/yr to 150,000 t/yr. In 2014, production was 65,000 t of fluorspar and 10,000 t of barite (British Fluorspar Ltd., 2014; Derbyshire Times, 2014; UK Minerals Forum, 2014, p. 8).

¹Where necessary, values have been converted from British pounds (GBP) to U.S. dollars (US\$) at an average annual exchange rate of GBP0.6072=US\$1.00 for 2014.

Mineral Fuels

Coal.—Domestic coal production in the United Kingdom decreased by about 9% in 2014 to an alltime low of 11.6 million metric tons (Mt) as compared with 12.8 Mt in 2013. This decrease was owing to the closure of a number of mines in 2013 and increasingly unfavorable geologic conditions, such as thinner coal seams, at some mines. Over the past 40 years, the principal use of coal in the United Kingdom has been for electrical generation, which consumes on average 80% of the annual coal supply. To meet this demand, combined with falling levels of domestic coal production, the United Kingdom has increasingly relied on imported coal, which totaled 42 Mt in 2014, a decrease of 15% compared with 2013. The decrease was owing largely to decreased demand by electricity producers, who were in turn driven by outages and closures of power stations and a lower demand for electricity overall. Russia contributed 46% of bituminous coal imports in 2014; Colombia and the United States (combined) provided another 50%. Australia, Russia, and the United States contributed 89% of coking coal imports. At the end of 2014, employment in coal mines totaled 3,601 people (table 1; Bide and others, 2015, p. 13; Department of Energy and Climate Change, 2015; MacLeay and others, 2015, p. 43–45; Michaels, 2015).

In 2014, 81% of the country's coke supply was produced domestically; the remainder was imported from Australia, Russia, and the United States. The production of coke decreased by 4.5% (to 3.6 Mt) in 2014, compared with 2013. The only dedicated coke plant in the United Kingdom, Monckton Coke and Chemicals, closed in December 2014, however, coke was still being produced and used at several steelworks (MacLeay and others, 2015, p. 48).

Natural Gas and Petroleum.—In 2014, the United Kingdom was the leading producer of oil and the second-ranked producer of natural gas in the EU. Crude oil production was approximately 310 million barrels and natural gas production was 36.6 billion cubic meters in 2014. After many years of exporting domestically produced oil and natural gas, production declined recently owing to high tax rates and aging oil fields and infrastructure. In 2013, the United Kingdom became a net importer of petroleum products for the first time since 1984. At the end of 2014, the United Kingdom's total proved crude oil reserves were 3.0 billion barrels, which was the largest within the EU; the reserves were located mostly in the North Sea on the United Kingdom Continental Shelf (UKCS). More than 90% of the country's oil production came from the central and northern sections of the North Sea. Production of crude oil and natural gas liquids from the North Sea fields decreased by 1.8% in 2014, compared with 2013. The Buzzard oilfield in the central North Sea was the most prolific oilfield on the UKCS. 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 Wytch Farm field in Dorset, England, was the largest onshore oilfield in western Europe. Production at the six major operating refineries in the United Kingdom decreased by 7.8% in 2014 compared with 2013. The oil and gas industry employed a total of 375,000 people in 2014, of which 30,000 were directly

employed by exploration and production companies (Lewis and others, 2014, p. 25; offshore-technology.com, 2014; U.S. Energy Information Administration, 2014; BP p.l.c., 2015, p. 6, 8, 22; MacLeay and others, 2015, p. 61).

AB Nynas Ltd. of Sweden ceased processing crude oil at its petroleum refinery at Dundee, Scotland, in December 2013, citing oversupplied markets with no short-term improvement expected. The refinery was converted into a bitumen depot and distribution point and would continue to manufacture specialized bitumen for local and United Kingdom markets (Argo, 2014; AB Nynas Ltd., 2015, p. 7, 16).

Outlook

The United Kingdom's manufacturing industry is expected to continue to rely on imported raw minerals owing to the current lack of domestic exploitation of these resources. However, production of some mineral commodities, such as fluorspar and barite, has increased during the past few years owing to reestablished and expanded production at existing mines. Gold production will likely increase in the near- to medium-term at the Cavanacaw Mine in Northern Ireland owing to an increase in assessed gold resources and the potential for developing underground mining. Development is expected to continue on the Cononish and Grampian gold projects in western Scotland. Wolf Minerals Ltd. (Australia) is developing the first new mine in the United Kingdom in nearly 50 years. Initial production from the planned open pit mine at the Drakelands (formerly Hemerdon) tungsten mine project in Devon was expected towards the end of 2015. The mine has the potential to be one of the largest tungsten and tin resources in the Western Hemisphere. Wolf Minerals Ltd. anticipated that its processing plant would produce approximately 5,000 t/yr of tungsten concentrate and 1,000 t/yr of tin concentrate. Sirius Minerals Plc secured sales agreements and commitments from customers in Africa, Europe, South America, and Southeast Asia and for polyhalite from the company's York potash project, the world's largest and highest grade deposit of polyhalite. The agreements point to a growing global market for the mineral. Although the United Kingdom remained a significant producer of crude oil and natural gas in Europe in 2014, the decline in domestic production of these commodities was expected to continue into 2015 owing to aging fields and infrastructure and diminishing prospects for substantial new discoveries. At the same time, the tax structure for the industry is being reviewed. The production of steel will likely remain stable and continue to reflect international trends in demand (Galantas Gold Corp., 2014; Leonida, 2014; Sirius Minerals Plc, 2014; U.S. Energy Information Agency, 2014, p. 4; Wolf Minerals Ltd., 2016).

References Cited

- AB Nynas Ltd., 2015, Annual report 2014: AB Nynas Ltd., 116 p. (Accessed April 28, 2016, at <http://www.nynas.com/Global/Investor%20relations/Q%20reports/Nynas%20Annual%20Report%202014.pdf>.)
- Argo, Andrew, 2014, Spotlight on Nynas' redundant assets at Dundee waterfront: DC Thomson Co. Ltd., November 24. (Accessed April 28, 2016, at <https://www.thecourier.co.uk/business/business-news/140446/spotlight-on-nynas-redundant-assets-at-dundee-waterfront/>.)

- Bide, T., Brown, T.J., Hobbs, S.F., and Idoine, N., 2015, United Kingdom minerals yearbook 2014: British Geological Survey open report, OR/15/043, Keyworth, Nottingham, United Kingdom, 91 p. (Accessed January 8, 2016, at <https://www.bgs.ac.uk/downloads/start.cfm?id=3030>.)
- Bolen, W.P., 2016, Salt: U.S. Geological Survey Mineral Commodity Summaries 2016, p. 138–139.
- BP p.l.c., 2015, BP statistical review of world energy: BP p.l.c., June. (Accessed January 8, 2016, at <https://www.bp.com/content/dam/bp/pdf/energy-economics/statistical-review-2015/bp-statistical-review-of-world-energy-2015-full-report.pdf>.)
- British Fluorspar Ltd., 2014, Home page: British Fluorspar Ltd. (Accessed January 5, 2016, at <http://britishfluorspar.com/eng/>.)
- British Geological Survey, 2015, Minerals UK, legislation and policy—Mine waste: London, United Kingdom, British Geological Survey. (Accessed December 17, 2015, at <https://www.bgs.ac.uk/mineralsuk/planning/legislation/mineWaste.html>.)
- Department for Business Innovation and Skills [United Kingdom], 2015, International trade in goods based on UN Comtrade data—United Kingdom: Department for Business Innovation and Skills. (Accessed January 7, 2016, at <http://comtrade.un.org/labs/BIS-trade-in-goods/?reporter=826&year=2014&flow=2>.)
- Department of Energy and Climate Change [United Kingdom], 2015, Digest of United Kingdom energy statistics (DUKES), Solid fuels and derived gasses—Chapter 2—Coal production and stocks, 1970–2014 (DUKES 2.1.1): London, United Kingdom, Department of Energy and Climate Change, July 30. (Accessed April 28, 2016, at https://www.gov.uk/government/uploads/system/uploads/attachment_data/file/448384/dukes2_1_1.xls.)
- Derbyshire Times, 2014, Peak District—Permission granted to mine for 14 more years: Johnson Publishing Ltd., October 16. (Accessed January 5, 2016, at <http://www.derbyshiretimes.co.uk/news/grassroots/peak-districtpermission-granted-to-mine-for-14-more-years-1-6898937>.)
- Dewar, John, and Ofori-Quaah, F.H., 2015, United Kingdom, *in* The international comparative legal guide to—Mining law 2016 (3d ed.): London, United Kingdom, Global Legal Group, p. 271–277. (Accessed December 16, 2015, at <http://www.milbank.com/images/content/2/1/21545/ML16-Chapter-41-United-Kingdom.pdf>.)
- Galantas Gold Corp., 2014, Resource assessment: Galantas Gold Corp., July 28. (Accessed January 11, 2016, at <http://www.galantas.com/operations/2014-resource-assessment/>.)
- Homewood, Paul, 2015, The demise of the UK aluminium industry: Not A Lot of People Know That blog posting, April 20. (Accessed December 8, 2015, at notalotofpeopleknowthat.wordpress.com/2015/04/20/the-decline-of-the-uk-aluminium-industry/.)
- International Monetary Fund, 2015, World economic outlook database: International Monetary Fund, October. (Accessed December 14, 2015, at https://www.imf.org/external/pubs/ft/weo/2015/02/weodata/weorept.aspx?sy=2013&ey=2020&scsm=1&ssd=1&sort=country&ds=&br=1&pr1.x=81&pr1.y=7&c=112&s=NGDP_R%2CNGDP_RPCH%2CNGDP%2CNGDPD&grp=0&a=.)
- Jasinski, S.M., 2016, Potash: U.S. Geological Survey Mineral Commodity Summaries 2016, p. 126–127.
- Kuck, P.H., 2015, Nickel, *in* Metals and minerals: U.S. Geological Survey Minerals Yearbook 2012, v. I, p. 51.1–51.31. (Accessed January 5, 2016, at <http://minerals.usgs.gov/minerals/pubs/commodity/nickel/myb1-2012-nicke.pdf>.)
- Leonida, Carly, 2014, Groundbreaking UK project underway: Mining Journal, September 5, 2014, p. 8. (Accessed January 11, 2016, at <http://www.mining-journal.com/world/europemiddle-east/groundbreaking-uk-project-underway/>.)
- Lewis, Chris, Deane, Andrew, and Speirs, Julie, 2014, Fuelling the next generation—A study of the UK upstream oil and gas workforce: Ernst & Young Global Ltd., December, 47 p. (Accessed January 8, 2016, at <http://oilandgasuk.co.uk/wp-content/uploads/2015/10/EY-Report-Fuelling-the-next-generation-A-study-of-the-UK-upstream-oil-gas-workforce-.pdf>.)
- MacLeay, Iain, Harris, Kevin, and Annut, Anwar, 2015, Digest of United Kingdom energy statistics 2015: London, United Kingdom, Department of Energy and Climate Change, July 30, 266 p. (Accessed December 8, 2015, at https://www.gov.uk/government/uploads/system/uploads/attachment_data/file/450302/DUKES_2015.pdf.)
- McFarlane, J.A.S., Moles, N.R., and Green, D.I., 2009, Acicular barite in the Cavanacaw gold mine, County Tyrone, Northern Ireland: Journal of the Russell Society, v. 12, p. 65–67. (Accessed January 8, 2016, at https://www.researchgate.net/publication/261108676_Acicular_baryte_in_the_Cavanacaw_gold_mine_County_Tyrone_Northern_Ireland.)
- Michaels, Chris, 2015, Coal in 2014, *in* Energy trends: London, United Kingdom, Department of Energy and Climate Change, September 24, p. 88–93. (Accessed December 11, 2015, at https://www.gov.uk/government/uploads/system/uploads/attachment_data/file/462360/Coal_2014.pdf.)
- Mining-technology.com, 2016, Omagh gold project, United Kingdom: Kable Intelligence Ltd. (Accessed January 8, 2016, at http://www.mining-technology.com/projects/omagh_gold/.)
- offshore-technology.com, 2014, Independent Scotland’s bounty—The biggest oil fields in the UK North Sea: Kable Intelligence Ltd., September 10. (Accessed January 8, 2016, at <http://www.offshore-technology.com/features/featuredeep-pockets--the-biggest-offshore-oil-fields-in-the-uk-north-sea-4190153/>.)
- Perez, A.A., 2016, The mineral industry of the United Kingdom, *in* Area reports—International—Europe and Central Eurasia: U.S. Geological Survey Minerals Yearbook 2013, v. III, p. 49.1–49.7.
- Platts McGraw Hill Financial, 2015, Platts top 250—Global energy company rankings: Platts McGraw Hill Financial. (Accessed January 8, 2016, at <http://top250.platts.com/Top250Rankings/2014/Region/Industry>.)
- Rafferty, Phillipa, 2015, Energy law in the United Kingdom, *in* The European energy handbook 2015: Herbert Smith Freehills LLP, February, 274 p. (Accessed January 8, 2016, at http://www.cobalt.legal/file/repository/publications/pdf/European_Energy_Handbook_2015.pdf.)
- Rio Tinto plc, 2015, Annual report 2014: London, United Kingdom, Rio Tinto plc, 228 p. (Accessed December 8, 2015, at http://www.riotinto.com/ar2014/pdfs/rio-tinto_2014-annual-report.pdf.)
- Scotgold Resources Ltd., 2014, Annual report: West Perth, Western Australia, Australia, Scotgold Resources Ltd., 60 p. (Accessed January 7, 2016, at <http://www.scotgoldresources.com.au/wp-content/uploads/2014/10/SCT147127-SCOTGOLD-ANNUAL-REPORT-2014.pdf>.)
- Sirius Minerals Plc, 2014, Sirius Minerals Plc—Additional take-or-pay offtake agreement and sales commitments: RNS, London Stock Exchange, December 19. (Accessed January 11, 2016, at <http://otp.investis.com/clients/uk/sirius-minerals/rns/regulatory-story.aspx?cid=485&newsid=465650>.)
- UK Minerals Forum, 2014, The future of our minerals—A summary report: UK Minerals Forum, November, 15 p. (Accessed January 5, 2016, at [http://www.british-aggregates.co.uk/documentation/doc136_UKMineralsForumFINAL07112014\(1\).pdf](http://www.british-aggregates.co.uk/documentation/doc136_UKMineralsForumFINAL07112014(1).pdf).)
- U.S. Central Intelligence Agency, 2015, United Kingdom, *in* The world factbook: U.S. Central Intelligence Agency, December 7. (Accessed January 7, 2016, at <https://www.cia.gov/library/publications/resources/the-world-factbook/geos/uk.html>.)
- U.S. Energy Information Administration, 2014, United Kingdom: U.S. Energy Information Administration country analysis brief, July 2, 17 p. (Accessed January 8, 2016, at http://www.eia.gov/beta/international/analysis_includes/countries_long/United_Kingdom/uk.pdf.)
- Wolf Minerals Ltd., 2016, Drakelands Mine: Wolf Minerals Ltd. (Accessed January 11, 2016, at <http://www.wolfminerals.com.au/irm/content/drakelands-mine.aspx?RID=324>.)

TABLE 1
UNITED KINGDOM: PRODUCTION OF MINERAL COMMODITIES¹

(Metric tons unless otherwise specified)

Commodity	2010	2011	2012	2013	2014 ^c	
METALS						
Aluminum, metal:						
Primary	186,000	213,000	60,000	44,000	42,000 ²	
Secondary	99,600 ^r	99,200 ^r	148,800 ^r	148,800 ^r	149,000	
Total	285,600 ^r	312,200 ^r	208,800 ^r	192,800 ^r	191,000	
Iron and steel:						
Metal:						
Pig iron	thousand metric tons	7,233	6,625	7,183	9,471	9,705 ²
Steel:						
Crude	do.	9,709	9,478	9,579	11,858	12,120 ²
Hot-rolled	do.	8,395	7,963	7,042	8,031	8,087 ²
Lead:						
Mine output, Pb content ^c		400 ^r	300	100	100 ^r	100
Metal:						
Smelter, bullion from imported concentrate ^c		36,000	36,000	36,000	36,000	36,000
Refined:						
Primary ³		151,000	125,000	157,000	174,200 ^r	150,000
Secondary ⁴		150,000 ^r	150,000 ^r	155,000	155,000	155,000
Total		301,000 ^r	275,000 ^r	312,000	329,200 ^r	305,000
Nickel, metal ⁵		31,600 ^r	37,400	34,300	40,400 ^r	40,000
INDUSTRIAL MINERALS						
Barite ⁶		34,099 ^r	31,000	30,000	30,000	44,000
Cement, hydraulic ^c	thousand metric tons	7,880 ^r	8,530 ^r	7,950	8,200 ^r	9,300 ²
Clays:						
Fire clay	do.	110	162	96	105 ^r	100
Kaolin, china clay ^{e,7}	do.	1,140 ^r	1,290 ^r	1,150	1,110	1,090
Ball clay and pottery clay ^{e,8}	do.	900 ^r	930 ^r	750	740	733
Other, including shale	do.	5,934	6,154	5,497	6,464 ^r	7,500
Feldspar, china stone ^e		500	500	--	--	--
Fluorspar, all grades ⁹		26,420 ^r	--	--	30,000 ^e	77,000
Gypsum and anhydrite ^e	thousand metric tons	1,200	1,200	1,200	1,200	1,200
Lime, hydrated and quicklime ^c	do.	1,500	1,500	1,500	1,500	1,600
Nitrogen, N content of ammonia ^c	do.	1,100	1,100	1,100	1,100	1,100
Potash, KCl product ^c		700,000	770,000	900,000	900,000 ^r	900,000
Salt, all kinds:	thousand metric tons	6,666	6,060	6,152	6,601 ^r	6,600
Sand and gravel, common sand and gravel ^c	do.	61,700 ^{r,2}	63,087 ^r	56,640 ^r	57,977 ^r	62,200
Sodium compounds, carbonate, n.e.s. ^{e,10}	do.	1,000	1,000	1,000	1,000	1,000
Stone:						
Chalk	do.	3,626	3,996	3,473	3,528 ^r	3,800
Dolomite	do.	4,540	4,490	4,896	3,432 ^r	(11)
Igneous rock	do.	44,876	44,400	40,200	40,500 ^r	44,000
Limestone	do.	56,985 ^r	58,100 ^r	54,800	56,900 ^r	65,500 ¹¹
Sandstone ^e	do.	11,556 ²	12,300	11,500	11,500 ^r	12,500
Slate, including fill	do.	695	763	701	885 ^r	1,000
Total	do.	122,278 ^r	124,049 ^r	115,570	116,745 ^r	126,800
Talc, soapstone, pyrophyllite		2,633 ^r	3,708 ^r	3,667 ^r	2,947 ^r	3,000
Titanium, titanium dioxide ^c	thousand metric tons	260 ^r	280 ^r	200	220 ^r	200
MINERAL FUELS AND RELATED MATERIALS						
Coal, anthracite and bituminous	thousand metric tons	18,347 ^r	18,552 ^r	16,967 ^r	12,767 ^r	11,648 ²
Coke:						
Metallurgical	do.	3,990 ^r	4,021 ^r	3,712 ^r	3,769 ^r	3,601 ²
Breeze, all types	do.	32 ^r	31 ^r	31 ^r	32 ^r	31 ²
Gas, natural, marketable ¹²	billion cubic meters	59	66	57 ^e	57 ^e	50
Peat	thousand cubic meters	1,004	825	568 ^r	1,254 ^r	1,300
Petroleum:						
Crude ¹³	thousand 42-gallon barrels	430,791	422,568	368,139	312,878	310,250 ²
Refinery products	do.	565,422	565,000	530,308 ^e	530,000 ^e	499,320 ²

See footnotes at end of table.

TABLE 1—Continued
UNITED KINGDOM: PRODUCTION OF MINERAL COMMODITIES¹

²Estimated; estimated data are rounded to no more than three significant digits; may not add to totals shown. [†]Revised. do. Ditto. -- Zero.

¹Table includes data available through December 22, 2015.

²Reported.

³Produced entirely from imported bullion, and includes the lead content of alloys.

⁴Includes a small quantity of primary lead from domestic concentrate.

⁵Refined nickel.

⁶Includes witherite.

⁷Sales, dry weight.

⁸Salable product.

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

¹⁰Not elsewhere specified.

¹¹Limestone and dolomite reported together in 2014.

¹²Methane, excluding gas flared or reinjected.

¹³Excludes gases and condensates.

TABLE 2
UNITED KINGDOM: 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 ¹	Annual capacity
Aluminum:			
Primary	Rio Tinto Alcan Ltd.	Lynemouth Smelter, Northumberland County, England (closed in March 2012)	182
Do.	do.	Lochaber Smelter, Fort William County, Scotland	47
Do.	Anglesey Aluminium Metal Ltd. (Rio Tinto Corp., 51%, and Kaiser Aluminum and Chemical Corp., 49%)	Holyhead, Gwynedd County, Wales (closed in September 2009)	144
Secondary	Hydro Aluminium Deeside Ltd. (Hydro Aluminium AS)	Wrexham, Clwyd County, Wales	63
Do.	Cohen Alloys Ltd. (Ensco 178 Ltd.)	Glasgow, Scotland	10
Do.	Coleshill Aluminium Ltd.	Coleshill, Warwickshire, England	15
Barite	M-I Drilling Fluids (UK) Ltd.	Foss Mine, near Aberfeldy, Perthshire County, Scotland	50
Do.	British Fluorspar Ltd. (Fluorsid Group s.r.l., 100%)	Arthurton West, Bow Rake, High Rake, and Watersaw Mines, Southern Pennine Orefield, Derbyshire County, England	15
Cement	Lafarge Tarmac (Lafarge S.A., 50%, and Anglo American plc, 50%)	Aberthaw plant, East Aberthaw, Barry, South Glamorgan County, Wales	500 ²
Do.	do.	Barnstone plant, near Langar, Nottinghamshire County, England (closed 2006)	-- ³
Do.	do.	Cauldon plant, near Leek, Staffordshire County, England	900
Do.	do.	Cookstown plant, Cookstown, County Tyrone, Northern Ireland	480
Do.	do.	Dunbar plant, Dunbar, East Lothian, Scotland	1,150
Do.	do.	Tunstead plant, Buxton, Derbyshire County, England	1,095
Do.	Hanson Cement (HeidelbergCement AG, 100%)	Ketton plant, Rutland County, near Stamford, Lincolnshire County, England	1,390
Do.	do.	Padeswood plant, Mold, Flintshire County, Wales	820
Do.	do.	Ribblesdale plant, Clitheroe, Lancashire County, England	960
Do.	CEMEX UK Operations, Ltd. (CEMEX, S.A.B. de C.V., 100%)	Rugby plant, Rugby, Warwickshire County, England	1,800
Do.	do.	South Ferriby plant, North Lincolnshire County, England	750
Do.	Hope Construction Materials Ltd. (ArcelorMittal)	Hope plant, Hope Valley, Derbyshire County, England	1,300
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 2014

(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 Production Ltd.	Operations in England include the Kellingley Colliery, North Yorkshire County, and the Thoresby Colliery, Nottinghamshire County.	30,000
Surface pits		Celtic Energy Ltd.	Nant Helen Extension pit, Abercraf, West Glamorgan, Wales	400
Do.		do.	Selar pit, Glynneath, West Glamorgan, Wales	400
Do.		do.	East Pit East, Tairgwaith, West Glamorgan, Wales	350
Do.		Energybuild Ltd.	Nant-y-Mynydd pit, Neath, West Glamorgan, Wales	130
Fluorspar		British Fluorspar Ltd. (Fluorsid Group, 100%)	Mill at Stoney Middleton, mines in Derbyshire County, England	65
Gold	kilograms	Galantas Gold Corp.	Omagh Mine, near Omagh, County Tyrone, Northern Ireland	900 ⁴
Gypsum		British Gypsum Ltd. (Saint-Gobain S.A., 100%)	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		Britannia Refined Metals Ltd. (Glencore plc)	Northfleet, Kent County, England	180
Secondary		Britannia Recycling Ltd. (Glencore 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	Numerous domestic and international oil companies	North Sea gasfields	100
Nickel, refined		Vale Europe Ltd. (Vale S.A.)	Clydach Refinery, near Swansea, West Glamorgan County, Wales	40
Nitrogen, N content of ammonia		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 Corp., ConocoPhillips Corp., Dana Petroleum plc, Eni S.p.A., 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	122
Do.		Essar Energy plc	Stanlow manufacturing complex, Ellesmere Port, Cheshire County, England	98
Do.		ConocoPhillips Co.	Humber refinery, South Killingholme, North Lincolnshire County, England	102
Do.		Total S.A.	Lindsey refinery, Killingholme, North Lincolnshire County, England	81
Do.		Valero Energy Corp.	Pembroke refinery, Pembroke, Dyfed County, Wales	86

See footnotes at end of table.

TABLE 2—Continued
UNITED KINGDOM: 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 ¹	Annual capacity	
Petroleum—Continued:				
Refined— Continued	million 42-gallon barrels	Ineos Group	Grangemouth refinery, Grangemouth, Stirling County, Scotland	88
Do.	do.	Total S.A., 70%, and Murco Petroleum Ltd., 30%	Milford Haven, Dyfed County, Wales (ceased summer 2014)	40
Do.	do.	Eastham Refinery Ltd. (Shell UK Ltd., 50%, and AB Nynas Ltd., 50%)	Eastham refinery, Ellesmere Port, Cheshire County, England	8
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.		Vale Acton (Vale Group)	Acton refinery, London, England	NA
Potash		Cleveland Potash Ltd. (Israel Chemicals Ltd., 100%)	Boulby Mine, Yorkshire County, England	1,000
Salt:				
Road		British Salt Ltd.	Middlewich, Cheshire County, England	800
Rock		do.	do.	600
Do.		Irish Salt Mining and Exploration Co. Ltd.	Kilroot Mine, Carrick Fergus, Northern Ireland	500
Sand and gravel		Hanson plc (HeidelbergCement AG, 100%)	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 (HeidelbergCement AG, 100%)	Various locations	NA
Slate, natural		Carillion Plc.	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		Tata Steel Europe (Tata Steel Group)	Scunthorpe Works, Scunthorpe, Lincolnshire County, England	4,500
Do.		Tata Steel Europe Teesside Cast Products (Tata Steel Group)	Teesside Works, Redcar, Cleveland County, England	3,900
Do.		Tata Steel Europe Strip Products UK (Tata Steel Group)	Port Talbot works, Port Talbot, West Glamorgan, Wales	3,750
Do.		Tata Steel Europe Engineering Steels (Tata Steel Group)	Rotherham Works, Rotherham, South Yorkshire County, England	1,200
Do.		do.	Stocksbridge Works near Sheffield, South Yorkshire County, England	NA ⁵
Do.		Tata Steel Europe Special Profiles (Tata Steel Group)	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 (HeidelbergCement AG, 100%)	90 quarries in various locations	70,000
Tin, ore		Celeste Copper Corp.	South Crofty Mine, Cornwall County, England	NA

Do., do. Ditto. NA Not available. -- Zero.

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

²Grinding plant only. Kilns closed in May 2006.

³Grinding and blending plant.

⁴Under construction.

⁵Remelt facilities.