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2019 Minerals Yearbook

UNITED KINGDOM [ADVANCE RELEASE]

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

August 2023

The Mineral Industry of the United Kingdom

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In 2019, the United Kingdom extracted limited quantities of metallic minerals (gold and lead), whereas the processing of imported metal ores and concentrates played a more significant role in the country's mineral industry. The country was the world's 15th-ranked importer of metallic ores, slag, and ash, by value. The United Kingdom produced refined metals, such as aluminum, lead, nickel, and raw steel. Industrial mineral production included barite, cement, clay, fluorspar, lime, nitrogen, and potash. The country also produced mineral fuels, including coal, natural gas, and crude petroleum (table 1; United Nations Statistics Division, 2020; Bide and others, 2021, p. 11).

Minerals in the National Economy

In 2019, the United Kingdom had the sixth-largest economy in the world by gross domestic product (GDP); its nominal GDP was $2.83 trillion, and its real GDP had increased by 1.5%. In 2018 (the latest year for which data were available), the construction sector accounted for 6.1% of the country's gross value added (GVA); manufacturing of mineral products, 2.2%; and mining and quarrying, 0.9%. The manufacturing of mineral products included that of metal products, which accounted for 1.2% of the GVA; coke, refined petroleum, and chemicals, 0.8%; and nonmetallic mineral products, 0.3%. In 2019, of the total employment of 32.8 million people in the country (a 1% increase from that in 2018), the manufacturing sector employed 2.99 million people (a 3% increase); the construction sector, 2.36 million (unchanged); and the mining, energy, and water sectors together, 556,000 (a 5% decrease) (Office for National Statistics, 2019, 2020a; World Bank, The, 2021a, b).

Government Policies and Programs

In the United Kingdom, mineral rights are generally privately owned, except with respect to coal, gold, natural gas, petroleum, and silver. The owner of the land is entitled to all mineral deposits in the subsoil. Planning permission is required for their extraction by a mineral planning authority. The legislative framework for the mineral sector is provided by the Health and Safety at Work Act 1974, the Management of Health and Safety at Work Regulations 1999, the Quarries Regulations 1999, and the Mining Regulations 2014 (Mayer Brown Practices, The, 2016; British Geological Survey, 2020).

Production

In 2019, significant increases in mineral production included that of gold, which increased by about 20 times (estimated) [from 3 kilograms (kg) to 64 kg]; fluorspar, 82% (estimated); and anthracite coal, 25%. The production of potash (K_2O equivalent) decreased by 49%; bituminous coal, 34%; refined nickel (estimated), 15%; and aluminum (primary), 11%. The increase in gold output was attributed to the ramping up of production at Galantas Gold Corp. of Canada's Omagh Mine, which was reopened in November 2018. The decrease in potash (K_2O equivalent) output was a result of decreased output from the Boulby Mine; the mine ceased potash (60% K_2O) production at the end of the second quarter of 2018 owing to decreased reserves and produced only polyhalite (14% K_2O) during the remainder of the year. Data on mineral production are in table 1.

Structure of the Mineral Industry

Gold and silver are the property of the Crown, which grants licenses for development and production through the Crown Estate. Petroleum and gas also belong to the Crown under the Continental Shelf Act 1964 and the Petroleum (Production) Act 1998. The Oil & Gas Authority (OGA) regulates petroleum and natural gas licensing, exploration, production, and infrastructure. The majority of coal is owned by the Coal Authority under the Coal Industry Act 1994. The Authority manages those resources under its control and is authorized to grant licenses for exploration and extraction to the private sector subject to restrictions on mine size and the payment of a royalty. The British Geological Survey performs mineral research, reports mineral production, and compiles information on mines and quarries in the United Kingdom. Domestic and foreign-owned corporations produced minerals and mineral-based commodities (Mayer Brown Practices, The, 2016; British Geological Survey, 2020; Cameron and others, 2020). Table 2 is a list of major mineral industry facilities.

Mineral Trade

In 2019, the value of the United Kingdom's exports in goods totaled $475.9 billion[1] (GBP372.6 billion). Crude petroleum exports were valued at $26.7 billion in 2019; iron and steel, $6.0 billion; natural gas, $1.4 billion; coal, $138 million; nonferrous metal ores, $34 million; and other mining and quarrying product, $1.1 billion. In terms of amount, exports of crude petroleum totaled 40.8 million metric tons (Mt) [308 million barrels (Mbbl)]; the major recipients were the Netherlands (accounted for 37%, by weight), China (25%), Germany (17%), and the United States (5%) (Department for Business, Energy & Industrial Strategy, 2020b, d; Office for National Statistics, 2020b).

In 2019, the value of the United Kingdom's imports in goods totaled $641.2 billion (GBP502.1 billion). Crude petroleum imports were valued at $24.8 billion in 2019; natural gas, $8.2 billion; iron and steel, $7.9 billion; nonferrous metal ores, $862 million; iron ore, $760 million; coal, $752 million; and other mining and quarrying products, $1.5 billion. The country imported 44.6 Mt (336 Mbbl) of crude petroleum; the leading suppliers were Norway (39%, by weight) and the United States (25%)

[1]Where necessary, values have been converted from British pounds sterling (GBP) to U.S. dollars (US$) at the annual average exchange rate of GBP0.783=US$1.00 for 2019.

(Department for Business, Energy & Industrial Strategy, 2020c, d; Office for National Statistics, 2020b).

Exports from the United Kingdom to the United States totaled $63.2 billion; the leading mineral commodities exported were petroleum products ($2.3 billion) and crude petroleum ($1.5 billion). Imports from the United States totaled $69.1 billion; the leading mineral commodities imported were nonmonetary gold ($10.8 billion) and crude petroleum ($5.3 billion) (U.S. Census Bureau, 2020a, b).

Commodity Review

Metals

Gold.—In December, Scotgold Resources Ltd. of Australia announced that it would start production of gold and silver from its Cononish Mine in May 2020. The proven and probable reserves of Cononish were 555,000 metric tons (t) of ore at grades of 11.1 grams per metric ton (g/t) gold and 47.7 g/t silver containing about 6,200 kg of gold and 26,500 kg of silver. The mine's annual production capacity was planned to be 730 kg of gold for up to 9 years (McSherry, 2019; Scotgold Resources Ltd., 2019).

Lithium.—British Lithium Ltd.'s (formerly Metampere Ltd.'s) 2019 drilling analysis near St. Austell in Cornwall showed that a continuous lithium mineralized zone extends down more than 200 meters from the surface. British Lithium expected that lithium will be extracted from mica in granite and that the processing facility will be able to produce 20,000 metric tons per year of lithium—enough to make batteries for 350,000 electric vehicles each year. To secure the supply in the country, the Government of the United Kingdom considered lithium as "a metal of importance" within the technology sector (Perrin, 2019; SBPR Ltd., 2019).

Iron and Steel.—In October, the Gupta Family Group Alliance planned to merge its iron and steel facilities into a London-based entity named Liberty Steel Group by the end of 2019. After the integration, Liberty Steel would include operations from Liberty House in the United Kingdom and other steel units in Australia, Europe, and the United States (Smalley, 2019).

In November, British Steel Ltd. agreed to sell its business to Chinese steelmaker Jingye Group. The agreement included British Steel's steelworks and mills at Teesside, Scunthorpe, and Skinningrove in the United Kingdom and plants in France and the Netherlands. Jingye planned to invest $1.5 billion in modernizing these plants during the next 10 years. British Steel had previously entered the insolvency process in May after the Government had declined to support the company's owner, Greybull Capital, for its operations (British Steel Ltd., 2019; Zhang and Lewis, 2019).

Tin and Tungsten.—In December, Tungsten West Ltd. acquired the Drakelands Mine at Hemerdon, Plympton, from Hargreaves Services plc. for $3.6 million (GBP2.8 million). With the deal, Drakelands Restoration Ltd. (a subsidiary of Hargreaves Services plc that had taken over the site in 2019) signed a 10-year mining service contract with Tungsten West starting in 2021. Previously, in 2015, Wolf Minerals (UK) Ltd. (a subsidiary of Wolf Minerals Ltd. of Australia) had reopened the mine after the mine had been closed since 1944, but Wolf Minerals ceased tin-tungsten mining at the mine in October 2018 owing to the company's failure to meet its short-term working capital requirements (Telford, 2019a, b).

Industrial Minerals

Potash.—In November, Sirius Minerals plc planned a $600 million bond sale for its $5 billion polyhalite project. The company had previously canceled a $500 million bond sale in September owing to adverse market conditions. Sirius Minerals had raised $1.2 billion to begin the construction of the project and needed an additional $3.8 billion to complete the project. The project was to construct a 37-kilometer tunnel beneath the North York Moors between the Woodsmith Mine and the Teesside Port. Sirius Minerals expected to produce polyhalite from 2021 and to increase the production capacity to 10 million metric tons per year (Mt/yr) by 2024, 13 Mt/yr by 2026, and 20 Mt/yr by 2029 (Gleeson, 2018; Jamasmie, 2019; O'Connor, 2019).

Mineral Fuels

Coal.— In 2019, West Cumbria Mining Ltd. proceeded to open the Woodhouse Colliery Mine—a new underground metallurgical coal mine near Whitehaven, Cumbria—after the Government's decision not to block the planning permission against protests by climate change campaigners. The company planned to employ 500 people, produce 2.5 Mt/yr of metallurgical coal starting no later than 2022, and supply steelmakers in the United Kingdom and other countries in Europe. In 2019, the United Kingdom produced 689,000 t of metallurgical coal and imported 2.2 Mt, mostly from the United States (970,000 t), Russia (710,000 t), and Australia (423,000 t) (table 1; Adeeb, 2019; Department for Business, Energy & Industrial Strategy, 2020a, p. 35).

Natural Gas and Petroleum.—In January, China National Offshore Oil Corp. (CNOOC) announced the discovery of a natural gas and condensate reservoir on the Glengorm project in the central North Sea. The reservoir of 250 Mbbl of oil equivalent (about 42 billion cubic meters of natural gas) was the largest natural gas discovery in the North Sea since that of the Culzean field (258 Mbbl of oil equivalent) in 2008. CNOOC was the operator of the field and held a 50% working interest; Total E&P UK North Sea Ltd. and Euroil each held a 25% interest (Jacobs, 2019; Rystad Energy, 2019).

In September, Chrysaor Holdings Ltd. completed its $2.68 billion purchase of ConocoPhillips' UK North Sea petroleum and gas operations. The transaction had an effective date of January 1, 2018. In the first half of 2019, Chrysaor's production totaled 195,000 barrels of oil equivalent per day (BOE/d) by adding 72,000 BOE/d from the operations acquired. The deal was expected to make Chrysaor one of the major petroleum and gas producers in the United Kingdom (Chrysaor Holdings Ltd., 2019).

In November, Ithaca Energy Ltd. (a subsidiary of Israel's Delek Group Ltd.) completed the $2 billion purchase of Chevron North Sea Ltd.'s North Sea petroleum and gas fields. The transaction had an effective date of January 1, 2019. Ithaca Energy expected that the acquisition of the additional 10 production fields would increase the company's production by 300% to 80,000 BOE/d and increase its proven reserves by 150% to 225 Mbbl (Scheer, 2019).

In November, the Government suspended its support for hydraulic fracturing in England until it is proved safe. The suspension came right after an interim report published in 2019 by the OGA indicated that the methods for predicting the size and possibility of hydraulic-fracturing-induced seismicity needed further testing. The report followed after the 2018 microseismic events at the Preston New Road site near Blackpool, Lancashire. Cuadrilla Resources Ltd. had previously explored for shale gas at the site since 2017, and Cuadrilla's fracturing had been suspended on August 23, 2019. A magnitude 2.9 earthquake, the largest event at the site, was recorded on August 26, 2019 (Department for Business, Energy & Industrial Strategy, 2019; Oil & Gas Authority, 2019, p. 3, 16, 20).

Outlook

The United Kingdom's manufacturing industry is likely to continue to rely on imported metallic minerals owing to the lack of domestic production of such raw materials. In the short to medium terms, production of gold and silver may increase as Galantas Gold's Omagh Mine ramps up production, and Scotgold's Cononish Mine commences operations as planned. Reopening the Drakelands Mine is expected to help bring tin-tungsten production at the mine to its previous level. Potash production may increase if Sirius Minerals' polyhalite project proceeds as expected.

In the medium to long terms, steel production is likely to increase if the facility upgrading at the Jingye Group's operations formerly owned by British Steel and the restructuring of Liberty Steel are fruitful. Production of anthracite and bituminous coal for thermal uses and powerplants is projected to decrease as the share of natural gas and renewable energy sources continues to increase for such uses. Production of metallurgical coal may increase when West Cumbria Mining starts production, and natural gas output may increase as natural gas resources in the North Sea are further explored.

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TABLE 1

UNITED KINGDOM: PRODUCTION OF MINERAL COMMODITIES[1]

(Metric tons, gross weight, unless otherwise specified)

Commodity[2]		2015	2016	2017	2018	2019
METALS						
Aluminum, metal:						
Primary		47,000	48,000	46,500 r	44,400 r	39,400
Secondary		148,800	148,800	148,800	149,000 e	149,000 e
Gold, mine, Au content	kilograms	--	6 r	--	3 e	64 e
Iron and steel:						
Pig iron	thousand metric tons	8,774	6,142	5,996	5,590 r	5,643
Steel:						
Raw steel	do.	10,907	7,635	7,491	7,268 r	7,225
Products, rolled	do.	7,953	6,683	6,329	6,529 r	6,530 e
Lead, refinery:						
Primary[3]		149,000 r	170,000 r	165,000 r	153,000 r	153,000 e
Secondary[4]		158,000	158,000	160,000	168,000	164,000
Nickel, refinery, metal, electrolytic		38,804	45,194	38,052 r	41,220 r	35,000 e
Platinum-group metals, refinery:[e]						
Palladium	kilograms	11,000	10,000	6,700	--	--
Platinum	do.	4,800	5,200	4,800	--	--
Silver, mine, Ag content	do.	--	14 r	--	NA	NA
Tin, mine, Sn content		--	160	255	230 e	--
Tungsten, mine, concentrate, W content		155	736	1,086	1,000 r, e	--
INDUSTRIAL MINERALS						
Barite[5]		50,000	56,000	55,000 r	55,000	55,000 e
Cement:						
Clinker	thousand metric tons	7,804	8,056	7,824	7,734	7,830
Hydraulic	do.	9,235	9,370	9,359	9,197	9,079
Clay:						
Ball clay, including pottery[e]		740,000	753,000	850,000	867,000 r	870,000
Kaolin, china clay[e]		1,010,000	940,000	970,000	996,000 r	1,000,000
Unspecified, including shale		4,552,000	4,694,000	5,544,000	4,606,000 r	4,500,000 e
Fluorspar, all grades		17,000	12,000	11,000	11,000	20,000 e
Gypsum, mine[e, 6]	thousand metric tons	1,800	1,600	1,300	1,400 r	1,400
Lime, hydrated and quicklime[e]	do.	1,600	1,400	1,400	1,500 r	1,500
Nitrogen, ammonia, N content	do.	840	820	790 r	740 r	790
Potash, marketable, K_2O equivalent		384,000	287,000	200,000	175,000 r	88,900
Salt, all types[e]	thousand metric tons	4,700	4,700 r	4,700 r	4,700 r	4,700
Sand and gravel, industrial, silica		3,822,000 r	4,251,000 r	4,490,000 r	4,863,000 r	4,900,000 e
Soda ash, synthetic		400,000	400,000 e	400,000 e	400,000 e	400,000 e
Stone, sand, and gravel, construction:						
Sand and gravel, common sand	thousand metric tons	66,443	68,075	67,549 r	69,317 r	69,000 e
Stone, crushed:						
Chalk	do.	3,500	3,690 e	3,700 e	3,700 e	3,700 e
Dolomite	do.	3,600	4,200 e	4,200 e	4,200 e	4,200 e
Igneous rock	do.	46,200	49,000 e	50,000 e	50,000 e	50,000 e
Limestone	do.	70,500	74,000 e	74,000 e	74,000 e	74,000 e
Sandstone[e]	do.	13,200	14,000	14,000	14,000	14,000
Slate, including fill	do.	760 r	780 r	820 r	820 r	820 e
Talc		5,430	2,997	3,128 r	1,640 r	1,700 e

See footnotes at end of table.

TABLE 1—Continued

UNITED KINGDOM: PRODUCTION OF MINERAL COMMODITIES[1]

(Metric tons, gross weight, unless otherwise specified)

Commodity[2]		2015	2016	2017	2018	2019
MINERAL FUELS AND RELATED MATERIALS						
Coal:						
Anthracite	thousand metric tons	858	1,036 r	445 r	395 r	495
Bituminous	do.	7,668	2,000 r	1,822 r	1,478 r	982
Metallurgical	do.	72	1,142 r	773 r	707 r	689
Coke, metallurgical, includes breeze	do.	2,716	1,332	1,361	1,263	1,295
Natural gas, marketable	million cubic meters	40,466	41,653	42,100	41,034 r	39,673
Petroleum:						
Crude	thousand 42-gallon barrels	323,335	334,509	325,026	359,006	368,012
Refinery	do.	463,304	455,472	454,052	441,868 r	445,831

[e]Estimated. [r]Revised. do. Ditto. NA Not available. -- Zero.

[1]Table includes data available through November 18, 2020. All data are reported unless otherwise noted. Estimated data are rounded to no more than three significant digits.

[2]In addition to the commodities listed, lead (as a byproduct of fluorspar mining) and peat may have been produced, but available information was inadequate to make reliable estimates of output.

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

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

[5]May be a byproduct of fluorspar production.

[6]Excludes gypsum used in cement production.

TABLE 2
UNITED KINGDOM: STRUCTURE OF THE MINERAL INDUSTRY IN 2019

(Thousand metric tons unless otherwise specified)

Commodity	Major operating companies and major equity owners	Location of main facilities[1]	Annual capacity
Aluminum:			
Primary	SIMEC and Liberty House Group	Lochaber Smelter, Fort William County, Scotland	48
Secondary	Cohen Alloys Ltd.	Plant in Glasgow, Scotland	10
Do.	Coleshill Aluminium Ltd. (Ensco 178 Ltd., 100%)	Smelter in Coleshill, Warwickshire, England	15
Do.	Hydro Aluminium Deeside Ltd. (Norsk Hydro ASA)	Smelter in Wrexham, Clwyd County, Wales	60
Barite	British Fluorspar Ltd. (Fluorsid Group s.r.l.)	Milldam Mine,[2] Great Hucklow, Derbyshire County, England	NA
Do.	M-I SWACO (Schlumberger Oilfield UK plc)	Foss Mine, Aberfeldy, Perthshire County, Scotland	42
Cement	Aggregate Industries Ltd. (LafargeHolcim Ltd.)	Cauldon plant near Leek, Staffordshire County, England	960
Do.	do.	Cookstown plant, Cookstown, County Tyrone, Northern Ireland	480
Do.	Aventas Group (formerly Quinn Group)	Derrylin plant, Fermanagh, Northern Ireland	500
Do.	Breedon Group plc	Hope plant, Hope Valley, Derbyshire County, England	1,300
Do.	CEMEX UK Operations Ltd. (CEMEX, S.A.B. de C.V.)	Rugby plant, Rugby, Warwickshire County, England	1,800
Do.	do.	South Ferriby plant, North Lincolnshire County, England	700
Do.	do.	Tilbury plant, Tilbury, Essex, England	1,200
Do.	Hanson Cement (HeidelbergCement AG)	Ketton plant, Stamford, England	1,300
Do.	do.	Padeswood plant, Mold, Flintshire County, Wales	650
Do.	do.	Ribblesdale plant, Clitheroe, Lancashire County, England	1,300
Do.	Tarmac (CRH plc)	Aberthaw plant,[3] East Aberthaw, Barry, South Glamorgan County, Wales	500
Do.	do.	Dunbar plant, Dunbar, East Lothian, Scotland	1,150
Do.	do.	Tunstead plant, Buxton, Derbyshire County, England	1,100
Clay:			
Ball clay	Imerys Minerals Ltd. (Imerys S.A.)	Pits in Devon and Dorset Counties	325
Do.	Sibelco UK	Pits and works in Devon County	500
China clay (kaolin)	Imerys Minerals Ltd. (Imerys S.A.)	Pits and works in Cornwall County	3,000
Do.	Sibelco UK	Pits and works in Devon County	1,000
Coal:			
Underground mines	3 D's Mining Ltd.	Dan-y-Graig Colliery, Crynant, Neath Port Talbot County	NA
Do.	Ayle Colliery Co. Ltd.	Ayle Colliery, Ayle, Northumberland County	NA
Do.	Energybuild Ltd.	Aberpergwm Mine, Glynneath, Neath Port Talbot County	NA
Do.	NH Colliery Ltd.	Nant Hir No. 2 Colliery (Elwyn Mine), Seven Sisters, Neath Port Talbot County	NA
Do.	UK Coal Production Ltd.	Operations[4] in England include the Kellingley Colliery, North Yorkshire County, and the Thoresby Colliery Nottinghamshire County	5,000
Surface pits	Banks Group	Bradley Mine, Leadgate, Durham County, and Shotton Mine, Stannington, Northumberland County	NA
Do.	Celtic Energy Ltd.	Nant Helen Remainder Mine, Ystradgynlais, Powys County	400
Do.	Hargreaves Land Ltd.	Field House Mine, West Rainton, Durham County, and House of Water Mine, Dalleagles, East Ayrshire Council	NA
Do.	HM Project Developments Ltd.	Halton Lee Gate Mine, Northumberland County	NA
Do.	Miller Argent (South Wales) Ltd.	Ffos-y-fran Land Reclamation Scheme, Dowlais, Merthyr Tydfil County	NA

See footnotes at end of table.

TABLE 2—Continued
UNITED KINGDOM: STRUCTURE OF THE MINERAL INDUSTRY IN 2019

(Thousand metric tons unless otherwise specified)

Commodity		Major operating companies and major equity owners	Location of main facilities[1]	Annual capacity
Fluorspar		British Fluorspar Ltd. (Fluorsid Group s.r.l.)	Milldam Mine,[2] Great Hucklow, and Mill at Stoney Middleton, Derbyshire County	65
Do.		Breedon Group plc	Hope Limestone quarry,[2] Castleton, Derbyshire County	NA
Do.		UK Mining Ventures	Rogerley Mine, Frosterley, Durham County	NA
Gold, mine, Au content	kilograms	Galantas Gold Corp.	Omagh Mine,[2] Omagh, Tyrone County, Northern Ireland	NA
Do.	do.	Gold Mine of Wales (Alba Mineral Resources, 90%)	Clogau Gold Mine,[5] Bontddu, Wales	NA
Do.	do.	Scotgold Resources Ltd.	Cononish Mine,[2, 5] Trossachs National Park, Scotland	72
Gypsum		British Gypsum Ltd. (Saint-Gobain S.A.)	Bantycock quarry, Newark, Nottinghamshire County; Barrow Mine, Barrow upon Soar, Leicestershire County; Birkhead Mine, Long Marton, Cumbria County; Brightling Mine, Robertsbridge, East Sussex County; Fauld Mine, Tutbury, Staffordshire County; and Marblaegis Mine, East Leake, Nottinghamshire County	2,000
Iron and steel		British Steel Ltd.	Scunthorpe Works, Scunthorpe, Lincolnshire County, England	2,800
Do.		do.	Teesside Works, Redcar, Cleveland County, England	3,900
Do.		do.	Skinningrove Works, Carlin How near Saltburn-by-the-Sea, Cleveland County, England	NA
Do.		Celsa Steel UK Ltd. (Celsa Group)	Castle Works, Cardiff, South Glamorgan County, Wales	1,200
Do.		Liberty Speciality Steels Ltd. (Liberty Steel Group)	Port Talbot Works, Port Talbot, West Glamorgan, Wales	3,750
Do.		do.	Rotherham Works, Rotherham, South Yorkshire County, England	1,200
Do.		do.	Stocksbridge Works[6] near Sheffield, South Yorkshire County, England	NA
Lead:				
Mine, Pb content	metric tons	British Fluorspar Ltd. (Fluorsid Group s.r.l.)	Milldam Mine,[2] Great Hucklow, Derbyshire County	100
Refined:				
Primary		Britannia Refined Metals Ltd. (Glencore plc)	Plant in Northfleet, Kent County, England	180
Secondary		H.J. Enthoven Ltd. (Quexco Inc.)	Darley Dale smelter, Derbyshire County, England	80
Natural gas	billion cubic meters	Numerous domestic and international companies	North Sea gasfields	50
Nickel, refined		Vale Europe Ltd. (Vale S.A.)	Clydach refinery near Swansea, West Glamorgan County, Wales	40
Nitrogen, N content of ammonia		CF Fertilisers UK Ltd.	Ince Nitrogen Complex, Ince, Cheshire County	1,000
Petroleum:				
Crude	million 42-gallon barrels per day	Numerous domestic and international companies, including BP plc, Chrysaor Holding Ltd., EnQuest plc, IGas Energy Ltd., Ithaca Energy, Neptune Energy, Petrogas NEO UK Ltd., Premier Oil UK Ltd., Shell UK, and Total UK	North Sea and onshore oilfields	1
Refined	million 42-gallon barrels	Eastham Refinery Ltd. (Shell UK Ltd., 50%, and AB Nynas Ltd., 50%)	Eastham refinery, Ellesmere Port, Cheshire County, England	8
Do.	do.	Essar Energy plc	Stanlow manufacturing complex, Ellesmere Port, Cheshire County, England	98

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TABLE 2—Continued
UNITED KINGDOM: STRUCTURE OF THE MINERAL INDUSTRY IN 2019

(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	Exxon Mobil Corp.	Fawley refinery, Southampton, Hampshire County, England	100
Do.	do.	Ineos Group	Grangemouth refinery, Grangemouth, Stirling County, Scotland	77
Do.	do.	Phillips 66 Co.	Humber refinery, South Killingholme, North Lincolnshire County, England	81
Do.	do.	Total S.A.	Lindsey refinery, Killingholme, North Lincolnshire County, England	71
Do.	do.	Valero Energy Corp.	Pembroke refinery, Pembroke, Dyfed County, Wales	78
Platinum	kilograms	Vale Europe Ltd. (Vale S.A.)	Acton refinery, London	6,000
Polyhalite		Cleveland Potash Ltd. (Israel Chemicals Ltd.)	ICL Boulby Mine, Loftus, North Yorkshire County	130
Potash		do.	ICL Boulby Mine, Loftus, North Yorkshire County[5]	600
Salt:				
Road salt		British Salt Ltd. (Tata Chemicals Europe)	Warmingham brinefields and Middlewich plant, Cheshire County, England	800
Rock salt		do.	do.	600
Do.		Cleveland Potash Ltd. (Israel Chemicals Ltd.)	ICL Boulby Mine,[2] Loftus, North Yorkshire County	NA
Do.		Irish Salt Mining and Exploration Co. Ltd.	Kilroot Mine, Carrickfergus, Antrim County	500
Sea salt		Cornish Sea Salt Co.	Porthkerris plant, Porthkerris, Cornwall County	NA
Do.		Maldon Salt Crystal Co. Ltd.	Maldon Salt Works, Maldon, Essex County	NA
Sand and gravel		Hanson plc (HeidelbergCement AG)	Various offshore and onshore locations	NA
Silica sand		do.	Quarries at various locations	NA
Do.		Sibelco UK	Quarries in Cheshire, Norfolk, and Surrey Counties	5,000
Silver, mine, Ag content		Galantas Gold Corp.	Omagh Mine,[2] Omagh, Tyrone County, Northern Ireland	NA
Do.		Scotgold Resources Ltd.	Cononish Mine,[2, 5] Trossachs National Park, Scotland	NA
Soda ash		Brunner Mond Group (Tata Chemicals Ltd.)	Northwich, Cheshire County, England	900
Stone:				
Crushed		Breedon Group plc	Quarries at various locations	NA
Do.		Hanson plc (HeidelbergCement AG)	do.	70,000
Slate		Carillion plc	Quarries at various locations[7]	1,000
Do.		Greaves Welsh Slate Co. Ltd.	Llechwedd Slate Mine, Blaenau Ffestiniog, Gwynedd County, Wales	NA
Do.		Welsh Slate Ltd. (Breedon Group)	Penrhyn quarry, Bangor, Gwynedd County, Wales	NA
Talc		Thulecraft Ltd.	Crossgeo quarry, Haroldswick, Shetland Islands	5
Tin, mine, Sn content		Private owner	Blue Hills Tin (Streams) Mine, Trevellas Coombe, St. Agnes, Cornwall County	NA
Do.		Strongbow Exploration Inc.	South Crofty Mine,[8] Cornwall County, England	NA
Do.	metric tons	Tungsten West Ltd.	Drakelands Mine[2, 9] near Hemerdon, Devon, England	260
Tungsten, mine, W content		do.	do.	2

Do., do. Ditto. NA Not available.

[1]May include historic, postal, or preserved county names instead of current administrative division names, such as those for cities, county boroughs, or unitary authorities.

[2]Multicommodity production facility.

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

[4]Closed in 2015.

[5]Production suspended since 2018.

[6]Remelt facilities.

[7]Entered liquidation in January 2018.

[8]Closed in 1998 and expected to reopen in 2021.

[9]Closed in 2018 and expected to reopen in 2021.