

# 2016 Minerals Yearbook

**IRELAND [ADVANCE RELEASE]** 

## THE MINERAL INDUSTRY OF IRELAND

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In 2016, Ireland was a leading producer of peat (the secondranked producer in the world after Finland, with about 16% of world production), and alumina (ranked seventh in the world, with about 1.6% of world production). Ireland's nominal gross domestic product (GDP) was \$305 billion<sup>1</sup> compared with \$291 billion in 2015, which was a net increase of about 5%. The value of total exports was \$132 billion compared with \$124.7 billion (revised) in 2015. The value of imports was \$82 billion compared with \$77.8 billion (revised) in 2015. Ireland's leading export partners were the United States, which received 26.7% of Ireland's exports; Belgium, 12.3%; and the United Kingdom (excluding Northern Ireland), 11.2%; the leading import partners were the United Kingdom (excluding Northern Ireland), which supplied 21.3% of Ireland's imports; the United States, 18.8%; and France, 13.4% (Central Statistics Office, 2017a, b; 2018a, p. 24-29; 2018b, c; Apodaca, 2018; Bray, 2018).

#### Minerals in the National Economy

In 2016, the mining and quarrying sector accounted for 0.4% of the total net sales value of products compared with 0.5% in 2015; basic metals and fabricated metal products, machinery, and equipment accounted for 4.2% of the total net sales value of products compared with 4.5% in 2015. By the end of 2016, a total of 42 companies held 510 prospecting licenses in Ireland for such commodities as barite, base metals, gold, platinum-group metals (PGM), rare-earth elements (REEs), and silver (Department of Communications, Energy and Natural Resources, 2016, p. 8; Central Statistics Office, 2017b, p. 26).

#### **Production**

In 2016, reported natural gas production increased to 2,999 million cubic meters from 132 million cubic meters in 2015; this increase was mainly the result of the commissioning of the Corrib gasfield (see the "Mineral Fuels" section). Other significant production increases included that of naphtha (by 162%) and peat briquets (24%). Decreases in mineral commodity production were reported mainly for silver (by 71%), peat (fuel use, 11%), and refinery fuel and losses (11%). Production of mined zinc and mined lead decreased by 38% and 37%, respectively, owing to the closure of the Lisheen Mine in 2015. These and other production data are in table 1.

#### Structure of the Mineral Industry

In 2016, there were two active mining operations in Ireland—the Tara lead and zinc mine, which also produced silver, and

was located in Navan, Co. Meath, and the gypsum operation with adjacent mines in Drummond and Knocknacran located in Co. Monaghan. The Tara lead and zinc mine, which was owned and operated by Boliden Tara Mines Ltd. (a subsidiary of Boliden AB of Sweden) was considered the largest zinc mine operation in Europe in terms of production tonnage. The gypsum mines were owned and operated by Irish Gypsum Ltd. (a subsidiary of Saint Gobain Group of France). The country's major mineral facilities and their annual capacities are listed in table 2 (Department of Communications, Energy and Natural Resources, 2016, p. 25–26).

#### **Commodity Review**

#### Metals

Gold.—In July 2016, Conroy Gold and Natural Resources (Conroy Gold) of Ireland announced the discovery of four new gold zones in the Glenish target property located in Clontibret, Co. Monaghan. The property, composed of 147 hectares, included intersections ranging from 2 to 3 meters (m) with grades ranging from 1.43 to 2.65 grams per metric ton gold at depths of between 18 to 64 m. No further plans for the property were released (Cogley, 2016).

Lead and Zinc.—In October 2015, Vedanta Resources Plc. officially ceased operations at its Lisheen underground lead-zinc mine owing mainly to the depletion of reserves. In 2016, the company—along with the local Environmental Protection Agency, the Exploration and Mining Division, and the Tipperary County Council—coordinated the procedures required by the statutory permits for the closing of the mine (Department of Communications, Energy and Natural Resources, 2016, p. 25).

By the end of 2016, Boliden announced the discovery of new mineralization in the already established Tara lead and zinc mine. The Tara Deep deposit had an inferred mineral resource of 10 million metric tons (Mt) of ore at grades of 8.5% zinc and 1.8% lead. By the end of 2015, the company announced that Tara's lead and zinc mine project was estimated to have Joint Ore Reserves Committee (JORC)-classified ore reserves (proven and probable) of 17 Mt grading 6.3% zinc and 1.5% lead (Department of Communications, Energy and Natural Resources, 2016, p. 25; Boliden AB, 2017, p. 8, 98).

#### Mineral Fuels

Natural Gas.—On December 30, 2015, the joint venture of Shell E&P Ireland Ltd. (45%), Statoil Exploration Ireland Ltd. (36.5%), and Vermilion Energy Ireland Ltd. (18.5%), announced the commissioning of the Corrib gasfield located off the coast of Co. Mayo. The gasfield, which was projected to have a lifespan of 15 to 20 years, had an estimated capacity of about 52,500 barrels per day of oil (Deegan, 2016).

¹Where necessary, values have been converted from euro area euros (EUR) to U.S. dollars (US\$) at an average annual exchange rate of EUR0.9036=US\$1.00 for 2016 and EUR0.9012=US\$1.00 for 2015 based on the Central Statistics Office of Ireland's yearly average exchange rates for converting foreign currencies into U.S. dollars.

#### Outlook

Lead and zinc remained the principal commodities for exploration in Ireland, although many companies have an interest or are investing in the prospecting for and exploration for deposits of antimony, barite, calcite, copper, fluorite, gemstones, gold, gypsum, iron, lithium, molybdenum, PGMs, REEs, silver, tin, and tungsten. Foreign direct investment in the mining sector along with world market prices of commodities will determine whether expansion of Ireland's mineral industry continues in the long run (Department of Communications, Energy and Natural Resources, 2016, p. 26).

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 $\label{eq:table 1} \textbf{TABLE 1} \\ \textbf{IRELAND: PRODUCTION OF MINERAL COMMODITIES}^1 \\$ 

(Thousand metric tons, gross weight, unless otherwise specified)

Commodity <sup>2</sup>		2012	2013	2014	2015	2016
METALS						
Alumina		1,927	1,935	1,951	1,898 <sup>r</sup>	1,898
Lead:						
Mine production, Pb content	metric tons	47,000	43,000	40,500 <sup>r</sup>	31,300 <sup>r</sup>	19,600
Refinery production, secondary <sup>e</sup>	do.	20,000 r	20,000 r	17,200 <sup>r</sup>	17,200 <sup>r</sup>	18,000
Silver, mine production, Ag content	kilograms	9,454 <sup>r</sup>	7,822 <sup>r</sup>	6,400 <sup>r</sup>	3,770 °	1,080
Zinc, mine production, Zn content	metric tons	337,500	326,700 <sup>r</sup>	282,600 r, e	236,300 <sup>r</sup>	147,800
INDUSTRIAL MINERALS						
Cement, hydraulic		1,198	2,000 e	2,100 e	2,500 r, e	2,500
Gypsum		300	210	210	250 r, e	250
Lime <sup>e</sup>	metric tons	300,000	300,000	270,000	260,000	250,000
MINERAL FUELS AND RELATED MAT	ΓERIALS					
Natural gas, marketable m	illion cubic meters	224	339	152	132 <sup>r</sup>	2,999
Peat:						
Fuel use		3,890 <sup>r</sup>	3,890 r, e	3,890 r, e	3,138 <sup>r</sup>	2,779
Horticultural use <sup>e</sup>		500	400	400	400	400
Briquets	_	190 <sup>e</sup>	190 <sup>e</sup>	190 °	148 <sup>r</sup>	183
Petroleum, refinery production:	-					
Distillate fuel oil thousan	d 42-gallon barrels	9,125 <sup>r</sup>	8,395	8,109 <sup>r</sup>	8,777 <sup>r</sup>	8,275
Gasoline, motor	do.	4,745 <sup>r</sup>	4,380	4,130 <sup>r</sup>	5,143 <sup>r</sup>	4,709
Liquefied petroleum gas	do.	840	730	697 <sup>r</sup>	545 <sup>r</sup>	499
Naphtha	do.	140	140	140	247 <sup>r</sup>	646
Refinery fuel and losses	do.	750	750	750	710 <sup>r</sup>	630
Residential fuel oil	do.	6,205	6,205 <sup>r</sup>	6,045 <sup>r</sup>	7,772 <sup>r</sup>	7,122
Total	do.	21,800 <sup>r</sup>	20,600	19,900 <sup>r</sup>	23,200 <sup>r</sup>	21,900

<sup>&</sup>lt;sup>e</sup>Estimated. <sup>r</sup>Revised. do. Ditto.

<sup>&</sup>lt;sup>1</sup>Table includes data available through March 27, 2018. All data are reported unless otherwise noted. Totals and estimated data are rounded to no more than three significant digits.

<sup>&</sup>lt;sup>2</sup>In addition to the commodities listed, limestone, seawater magnesia, sand and gravel, stone (crushed), and significant quantities of synthetic and industrial diamond may have been produced, but available information was inadequate to make reliable estimates of output.

## TABLE 2 IRELAND: STRUCTURE OF THE MINERAL INDUSTRY IN 2016

(Thousand metric tons unless otherwise specified)

of main facility	capacity
Mines in Knocknacran and	
Co. Monaghan	
van, Co. Meath	215
Kinsale Head field, Celtic Sea	
Corrib gasfield, located off the	
Mayo	
inly in the	4,200
r Cork	26,000
van, Co. Meath	1,100
f	ivan, Co. Meath field, Celtic Sea

Do., do. Ditto. NA Not available.