2013 Minerals Yearbook

ITALY

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The Mineral Industry of Italy

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In 2013, Italy's nominal gross domestic product (GDP) was $2.071 trillion, which was a decrease of 1.9% compared with that of 2012. Italy ranked fourth in the European Union (EU), in terms of GDP, after Germany, the United Kingdom, and France. Italy was the 11th-ranked crude steel producer and the 14th-ranked manufacturer of cement in the world, as measured by tonnage of production (World Steel Association, 2014, p. 9).

Italy had ceased mining for metals, and the raw materials necessary for its metal-refining industry were imported or obtained from secondary scrap recovery. Italy still had a very active industrial minerals sector, producing principally cement, clays, gypsum, lime, limestone, marble, salt, sand and gravel, silica sand, and talc. In terms of energy, Italy produced natural gas and also crude oil and petroleum refinery products; however, Italy was not self-sufficient, and it relied on energy imports to satisfy its domestic energy consumption. Italy, similar to other highly industrialized countries, was undergoing a shift towards a more services-based economy. In 2013, industry accounted for only 24.4% of the GDP, and services accounted for 73.5% (tables 1 and 2; Cembureau, 2014a, p. 12; 2014b, p. 7; U.S. Central Intelligence Agency, 2014; World Bank, The, 2014; World Steel Association, 2014, p. 8).

Minerals in the National Economy

Italy's mineral industry produced such metals as copper, iron and steel, lead, and zinc, all of which were important materials for the country's manufacturing sector. In 2013, production in the construction sector decreased by 10.3% following a decrease of 13.7% in 2012. In 2013, production in the industrial sector decreased by 3.1% following a decrease of 6.4% in 2012. These decreases were the result of the deteriorating economic conditions in Italy during the continuing world economic slowdown that began in 2008. The decreases in production affected the mineral industry in Italy and weakened demand, particularly for industrial mineral products (table 1).

The metal-processing industries and particularly steel production were significant contributors to Italy's economy. Italy was highly dependent on imported mineral fuels. Eni S.p.A. (Eni), which was 30% owned by the Italian Government, was the country's leading petroleum and natural gas company (table 2).

Government Policies and Programs

The Government played a significant role in the economy through regulation of ownership of large financial and industrial companies; privatization and regulatory reform in accordance with EU directives, however, had reduced that role in recent years. Italy's basic mining legislation is mining law No. 1443 of July 29, 1927, which gives subsoil ownership of minerals to the state. The reimbursement to the state by mining concessionaires is regulated by law No. 752 of June 10, 1982. Quarrying operations are regulated by law No. 44 of September 1982.

All petroleum and gas upstream activities are supervised by the Ufficio Nazionale Minerario per gli Idrocarburi e la Geotermia [National Office for Mining, Hydrocarbons, and Geothermal Resources] (UNMIG), which operates within the Ministero dello Sviluppo Economico [Ministry of Economic Development]. After various organizational changes, the eight divisions that compose UNMIG now all operate within the Directorate General for Energy and Mineral Resources. By presidential decree, in 2007, the Committee for Hydrocarbons and Mineral Resources (CIRM) was set up to carry out the duties of the UNMIG. The committee performs technical advisory tasks related to mining, hydrocarbon production, and mineral royalties (Ministero dello Sviluppo Economico, 2010).

Production

In 2013, asphalt and bituminous rock production decreased by 45% to 1.15 million metric tons (Mt) from 2.1 Mt in 2012. Lime, refined copper, and granite production decreased by 37%, 34%, and 33% respectively. There were also decreases in the production of dolomite, by 30%; bentonite, 28%; pig iron, 26%; cement, 17%; and crude steel, 11.6%. The production of lead increased by 30%; gypsum, by 17%; zinc metal, by 14%; and common clay, by 11.5% (table 1).

Structure of the Mineral Industry

The Italian Government had ultimate control of Italy's mineral industry. Mineral resources, by law, are the property of the state, but private and mixed public and private entities were the principal owners of Italy's mineral industry. Companies with significant operations in Italy were Glencore Xstrata plc of Switzerland, which had a lead refinery at San Gavino; IMI FABI S.p.A., which had a talc mine at Orani; Italcementi S.p.A., which had major cement plants in Calusco, Collefero, and Monselice; Lucchini S.p.A., which produced pig iron at its plant in Trieste; the Riva Group, which had several steelmaking plants (of which the most significant was located in Taranto); and the petroleum and hydrocarbons Company ENI S.p.A., which had oilfields offshore Sicily and in the Adriatic Sea and onshore in the Po River Valley (table 2).

Mineral Trade

Within the EU, Italy received 10.3% of all imports of mineral fuels, lubricants, and related materials from and supplied 12.4% of all exports to countries outside the EU. Italy also accounted for 11.4% of imports and 6.6% of exports of raw materials from the EU. Italy traded mostly with its EU partners, as 70.1% of all Italy's exports went to EU members and 66.3% of its imports came from EU members. In 2013, the United States imported $38.7 billion and exported $16.8 billion worth of goods and services to Italy, principally chemicals, machinery, miscellaneous manufactured goods, petroleum and coal products, and transportation equipment (European Commission, 2014a–e; U.S. Census Bureau, 2014).

Commodity Review

Metals

Aluminum and Bauxite and Alumina.—Italy did not produce alumina in 2013. United Company RUSAL (RUSAL) of Russia continued its suspension of operations at its Eurallumina facility in Italy owing to the high cost of running the facility (particularly the cost of electricity), and no production was reported from the plant since 2009 (table 1; United Company RUSAL, 2014, p. 5).

Copper.—The main copper producers in Italy were KME Group S.p.A., which had operations at Fornaci di Barga and at Scrivia under its subsidiary KME Italy S.p.A., and Simar S.p.A (Simar) (a member of the Cordofin Group S.p.A.), which had a refinery at Porto Marghera, near Venice. Simar produced mainly copper-zinc-titanium alloys (KME Group S.p.A., 2010, p. 4; Simar S.p.A., 2010). For its copper production, Italy imported small amounts of copper concentrate and relied mainly on imports of copper metal and on scrap recovery.

Iron and Steel.—On September 12, the steel company Riva Acciaio S.p.A (Riva) announced that all activities had ceased at its plants in Annone Brianza (Province of Lecco); Cerveno, Malegno, and Sellero (Brescia); Lesegno (Cuneo); and Verona and Caronno Pertusella (Varese). Ilva S.p.A. (another steel producer owned by the Riva Group) was not affected by this decision. On September 30, however, Riva announced that production would resume at all its plants. Riva said that the closures became necessary owing to a judge's decision to seize the assets of the owners of the company. The company indicated that this order did not allow for economic operating conditions or for the continuation of normal activity by the company (SteelOrbis.com, 2013a, b).

Lead and Zinc.—Glencore Xstrata remained the country's principal processor of lead and zinc (table 2). The company operated a plant (smelter and refinery) at Porto Vesme, Sardinia.

Industrial Minerals

In 2013, Italy remained a leading European producer and a significant world producer of such industrial minerals as feldspar (22% of world output), pumice (18%), gypsum (2%), lime (2%), and bentonite (1% each) (Corathers, 2015; Crangle, 2015a, b; Tanner, 2015; Virta, 2015).

Cement.—Italy's cement consumption decreased by 15.1% owing to a generalized decrease in construction activity, which was driven by the continued contraction of the economy in 2013. Reductions in the civil engineering works sector and nonresidential construction sector, were the most significant, although a reduction in the residential construction sector was quite significant as well (Cembureau, 2014a, p. 17; 2014b, p. 11).

Outlook

Italy's manufacturing industries remain those most affected by the decrease in domestic demand. The construction sector continues to be affected by low investment. Italy is one of the largest EU members in terms of population and the size of its industrial sector; however, the economic recession continues to affect its mineral and industrial production sectors. Italy will likely continue to rely on imported and recycled primary mineral materials for its industrial sector. The country is also likely to continue to rely on major imports of mineral fuels despite potential increases in domestic mineral fuels production from new deposits coming onstream in the near term. Economic reforms and austerity programs may continue to curtail increases in domestic consumption.

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TABLE 1

ITALY: PRODUCTION OF MINERAL COMMODITIES[1]

(Metric tons unless otherwise specified)

Commodity		2009	2010	2011	2012	2013
METALS						
Aluminum:						
Alumina, calcined basis		752,873	--	--	--	--
Metal:						
Primary		170,600	168,000	141,000	110,000	--
Secondary[2]		826,977	1,246,236	1,049,101	1,002,814	1,061,603
Total		997,577	1,414,236	1,190,101	1,112,814	1,061,603
Bismuth, metal[e]		5	5	5	5	5
Copper, metal, refined, all kinds[e]		6,500	1,800	7,600	7,700	4,900
Iron and steel, metal:						
Pig iron	thousand metric tons	5,692	8,555	9,838	9,424	6,935
Ferroalloys, electric furnace:						
Ferromanganese		5,500	17,000	18,000	18,000	18,000
Ferrosilicon[e]		10,000	10,000	10,000	10,000	10,000
Silicomanganese		17,000	22,900	24,600	24,600	24,600
Other[e]		10,000	10,000	10,000	10,000	10,000
Total		42,500	59,900	62,600	62,600	62,600
Steel, crude	thousand metric tons	19,848	25,750	28,735	27,257	24,058
Lead:						
Mine output, Pb content[e]		800	800	800	--	--
Metal, refined:						
Primary		17,000	--	--	--	30,000
Secondary		132,000	150,000	149,500	138,400	150,000
Total		149,000	150,000	149,500	138,400	180,000
Zinc, metal, primary		103,400	104,700	110,200	97,200	111,000
INDUSTRIAL MINERALS						
Barite[e]		3,500	3,500	3,500	3,500	3,500
Bromine[e]		300	300	300	--	--
Cement, hydraulic	thousand metric tons	36,317	34,408	33,120	26,200	22,000
Clays, crude:						
Ball clay	do.	1,070	612	638	746	696
Bentonite	do.	146	111	102	144	103
Common clay	do.	6,324	5,900	4,750	3,777	4,212
Fuller's earth[e]	do.	3	3	3	3	3
Kaolin[e]	do.	5	6	8	8	8
Refractory, excluding kaolinitic earth	do.	844	844 [e]	844 [e]	878	870
Diatomite[e]		25,000	25,000	25,000	25,000	25,000
Feldspar[e]	thousand metric tons	4,700	4,700	4,700	4,700	4,700
Gypsum	do.	5,101	4,441	5,939	2,563	2,994
Lime, hydrated, hydraulic, and quicklime[e]	do.	6,000	5,800	5,800	5,800	3,640
Magnesia[e]	do.	100	100	100	100	100
Nitrogen, N content of ammonia[e]	do.	460	460	460	2,365 [3]	1,900

See footnotes at end of table.

TABLE 1—Continued
ITALY: PRODUCTION OF MINERAL COMMODITIES[1]

(Metric tons unless otherwise specified)

Commodity		2009	2010	2011	2012	2013
INDUSTRIAL MINERALS—Continued						
Perlite[e]		60,000	60,000	60,000	60,000	60,000
Pigments, mineral, iron oxides, natural		105	117	112 [e]	118 [e]	137 [e]
Pumice and related materials:[e]						
Pumice	thousand metric tons	30	30	30	30	28
Pozzolan	do.	4,000	4,000	4,000	4,000	4,000
Salt	do.	3,471	4,006	2,912	3,098	2,879
Sand and gravel	do.	164,218	150,996	164,844	123,049	102,381
Silica sand	do.	19,759	17,656	16,369	13,946	13,870
Sodium compound, n.e.s:[e, 4]						
Soda ash	do.	500	500	500	500	500
Sodium sulfate	do.	125	125	125	125	125
Stone:						
Calcareous:						
Alabaster	do.	7,000 [e]	7,000 [e]	7,000 [e]	7,000 [e]	2,912
Chalk[e]	do.	228	200	200	200	790
Dolomite	do.	1,601	1,572	1,139	1,069	751
Limestone for lime and cement	do.	41,090	38,440	37,269	28,524	24,706
Marble and travertine, crude	do.	4,604	5,500	3,516	3,348	2,819
Crushed and broken[5]	do.	84,718	80,336	76,793	74,169	63,782
Granite	do.	1,009	1,614	1,585	1,734	1,160
Sandstone	do.	451	497	440	281	270
Slate	do.	52	55	61	44	43
Sulfur:[e]						
From metallurgy	do.	90	90	90	90	90
From hydrocarbons	do.	650	650	650	650	650
Talc and related materials		112,000	110,000	110,000	110,000	110,000
MINERAL FUELS AND RELATED MATERIALS						
Asphalt and bituminous rock, natural	thousand metric tons	1,030	1,454	2,169	2,100 [e]	1,158
Coke, metallurgical[e]	do.	4,000	4,000	4,000	4,000	4,000
Gas, natural	million cubic meters	8,127	8,296	8,438	8,608 [r]	8,600 [e]
Natural gas liquids	thousand 42-gallon barrels	-- [r]	-- [r]	-- [r]	-- [r]	--
Petroleum:						
Crude	do.	30,215	35,040	36,201	36,865	37,157
Refinery products	do.	665,541	688,646	653,533 [r]	617,543 [r]	617,000 [e]

[e]Estimated; estimated data are rounded to no more than three significant digits; may not add to totals shown. [r]Revised. do. Ditto. -- Zero.
[1]Table includes data available through November 10, 2014.
[2]Unwrought aluminum alloys in secondary form.
[3]Reported figure.
[4]Not elsewhere specified.
[5]Includes output of limestone and serpentine for dimension stone.

TABLE 2
ITALY: STRUCTURE OF THE MINERAL INDUSTRY IN 2013

(Thousand metric tons unless otherwise specified)

Commodity	Major operating companies and major equity owners	Location of main facilities	Annual capacity
Aluminum	Alcoa Inc.	Smelter at Fusina	44
Barite	Bariosarda S.p.A. (Ente Mineraria Sarda)	Barega and Mont Ega Mines on Sardinia	100
Do.	Edem S.p.A. (Government)	Mines at Val di Castello, Lucca	20
Do.	Edemsarda S.p.A. (Soc. Imprese Industriali)	Mines at Su Benatzu, Stefano, and Peppixeddu, Sardinia	20
Do.	Societá Mineraria Baritina S.p.A	Mines at Marigolek, Monte Elto, and Primaluna, near Milan	20
Bauxite	Sardabauxiti S.p.A. (Cogein S.p.A., 40%; Comtec S.p.A., 40%; Icofin Co., 20%)	Mine at Olmedo, Sardinia	350
Cement	11 companies, of which the largest are as follows:	Locations:	
Do.	Italcementi S.p.A. (Italcementi Group)	18 plants, of which the largest are Calusco, Monselice, and Collefero	15,000
Do.	Buzzi Unicem Group	11 plants, of which Guidonia, Lugagnano, Morano, Piacenza, S'Arcangelo di Romagna, and Settimello are the largest	9,000
Do.	Cementerie del Tirreno S.p.A.	6 plants at Arquasta Scivia, Livorno, Maddaloni, Napoli, Spoleto, and Taranto	5,300
Clay, bentonite	Industria Chimica Carlo Laviosa S.p.A	Mines and plant on Sardinia and a plant near Pisa	250
Copper:			
Refined	Simar S.p.A. (Cordifin S.p.A.)	Refinery at Porto Marghera	60
Refined, secondary	KME Italy S.A. (KME Group S.p.A.)	Refinery at Fornaci di Barga and Scrivia	24
Do.	Sitindustrie S.p.A.	Refinery at Pieve Vergonte	22
Feldspar	At least 5 companies, of which the largest are as follows:	Locations:	1,500
Do.	Maffei S.p.A.	Surface mines at Pinzolo and Campiglia	(200)
Do.	do.	Underground mine at Vipiteno	(300)
Do.	Miniera di Fragne S.p.A.	Surface mine at Alagna Valsesia	(60)
Do.	Sabbie Silicee Fossanova S.P.A.	Surface mine at Fossanova	(30)
Gypsum	Fassa S.r.l.	Plant at Moncalvo, Asti	90
Iron and steel:			
Pig iron	Altiforni e Ferriere di Servola S.p. A. (Lucchini S.p.A.)	Pig iron and coke plant at Trieste	5,000
Steel, crude	Four companies:	Of which:	25,000
	Ilva S.p.A. (Riva Group)	5 steel plants, the largest of which is Taranto (1,500)	
	Riva Acciaio S.p.A. (Riva Group)	7 steel plants	
	Luccini S.p.A. (OAO Sverstal)	Steel plant in Piombino	
	Acciaierie e Ferriere Vicentine Beltrame S.p.A. (AFV-Beltrame S.p.A.)	Steel plant at Vicenza	
Lead, metal	Glencore Xstrata plc	Refinery at San Gavino, Sardinia	100
Do.	do.	Kivcet smelter and Imperial smelter at Porto Vesme, Sardinia	80
Lime	Unicale S.p.A.	Plants in Lombardy region	500
Magnesium, metal	Societa Italiana Magnesio S.p.A.	Plant at Bolzano	8
Marble	A number of companies, of which the largest include:	Locations:	2,000
Do.	Mineraria Marittima Srl	Quarries in the Carrara and Massa areas	(500)
Do.	Industria dei Marmi Vicentini S.p.A.	do.	(300)
Do.	Figaia S.p.A.	do.	(100)
Nitrogen, N content of ammonia	Hydro Agri S.p.A.	Plant at Ferrara	410

See footnotes at end of table.

TABLE 2—Continued
ITALY: STRUCTURE OF THE MINERAL INDUSTRY IN 2013

(Thousand metric tons unless otherwise specified)

Commodity		Major operating companies and major equity owners	Location of main facilities	Annual capacity
Petroleum:				
Crude		Eni S.p.A.	Oilfields offshore of Sicily, in the Adriatic Sea, and onshore in the Po River Valley	90
Refined	thousand 42-gallon barrels per day	Various companies	About 14 refineries	2,000
Potash, ore		Industria Sali Otassici e Affini per Aziono S.p.A.	Underground mines at Corvillo, Pasquasia, and Racalmuto, Sicily	1,300
Do.		Sta. Italiana Sali Alcalini S.p.A. (Italkali)	Underground mines at Casteltermini and Pasquasia, Sicily	700
Pumice		Pumex S.p.A.	Quarries, Lipari Island, north of Sicily	600
Do.		Sta. Siciliana per l'Industria ed il Commercio della Pomice di Lipari S.p.A. (Italpomice S.p.A.)	do.	200
Pyrite		Nuova Solmine S.p.A.	Underground mines at Campiano and Niccioleta	900
Salt, rock		Sta Italiana Sali Alcalini S.p.A. (Italkali)	Underground mines at Petralia, Racalmuto, and Realmonte, Sicily	4,000
Do.		Solvay S.p.A.	Underground mines at Buriano, Pontteginori, and Querceto, Tuscany	2,000
Talc		Luzenac Val Chisone S.p.A.	Mines at Pinerolo, near Turin, and an open pit mine in Orani, Sardinia	120
Do.		IMI FABI S.p.A.	Mine at Orani, Sardinia	20
Zinc, metal		Glencore Xstrata plc	Plant at Porto Vesme, Sardinia	120
Do.		Pertulosa Sud S.p.A.	Plant at Crotone, Calabria	100

Do., do. Ditto.