



# 2010 Minerals Yearbook

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## CROATIA

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# THE MINERAL INDUSTRY OF CROATIA

By Mark Brininstool

Croatia produced a limited number of mineral commodities, none of which were produced in a quantity that was significant on a world scale. In 2010, Croatia's gross domestic product (GDP) decreased by 1.2% compared with the GDP in 2009. In 2009 (the latest year for which data were available), Croatia imported about \$2.3 billion<sup>1</sup> worth of mining and quarrying products and exported only about \$334 million. Imports of crude oil and natural gas accounted for about \$2.1 billion of the imports. Crude oil made up about 8.3% of the value of all Croatian imports and was the most important imported product in terms of value; natural gas made up about 2.1% of all Croatian imports and was the third most valuable imported product. For the foreseeable future, Croatia will most likely remain a modest producer of mineral commodities and continue to be heavily dependent on imports of mineral fuels (Croatian Bureau of Statistics, 2010, p. 369, 379; 2011, p. 44).

## Production

Crude steel, production of which increased by 100% compared with that of 2009, was the only mineral commodity

produced in Croatia for which output was reported to have increased. Production of lime decreased by 47% compared with that of 2009; sulfur production, by 32%; crushed and brown stone, by 25%; gypsum and anhydrite, by 21%; and silica sand, by 13%. Production of carbon black was temporarily halted by Petrokemija d.d. owing to a lack of consumer demand (Petrokemija d.d., 2011, p. 10).

## Structure of the Mineral Industry

Table 2 is a list of the major mineral industry facilities in Croatia.

## References Cited

- Croatian Bureau of Statistics, 2010, Statistical yearbook 2010: Zagreb, Croatia, Croatian Bureau of Statistics, December, 585 p.  
Croatian Bureau of Statistics, 2011, Statistical information 2011: Zagreb, Croatia, Croatian Bureau of Statistics, June, 94 p.  
Petrokemija d.d., 2011, Annual report, January–December 2010: Kutina, Croatia, Petrokemija d.d., 34 p.

<sup>1</sup>Where necessary, values have been converted from Croatian kuna (HRK) to U.S. dollars (US\$) at the rate of HRK0.18=US\$1.00.

TABLE 1  
CROATIA: PRODUCTION OF MINERAL COMMODITIES<sup>1</sup>

(Metric tons unless otherwise specified)

Commodity <sup>2</sup>	2006	2007	2008	2009	2010 <sup>e</sup>
<b>METALS</b>					
Aluminum: <sup>3</sup>					
Alloys	31,573	32,703	31,582	30,000 <sup>e</sup>	30,000
Semimanufactures:					
Rolled	48,785	49,050	52,135	50,000 <sup>e</sup>	50,000
Extruded	6,670	6,953	6,287	6,000 <sup>e</sup>	6,000
Total	55,455	56,003	58,422	56,000 <sup>r,e</sup>	56,000
Steel:					
Crude, from electric furnaces	80,516	76,252	121,759	51,583	103,000 <sup>4</sup>
Semimanufactures, hot rolled <sup>e</sup>	60,000	75,000	121,000	51,000	103,000
<b>INDUSTRIAL MINERALS</b>					
Cement	3,598	3,587	3,637	2,823	2,664 <sup>4</sup>
Clays:					
Bentonite	16,410	19,578	19,759	-- <sup>r</sup>	-- <sup>e</sup>
Ceramic clay <sup>c</sup>	300,718 <sup>4</sup>	300,000	300,000	300,000	300,000
Gypsum and anhydrite, crude	170,351	334,962	329,649	221,888 <sup>r</sup>	176,000 <sup>4</sup>
Lime	260	572	541	350 <sup>r</sup>	186 <sup>4</sup>
Nitrogen, N content of ammonia <sup>c</sup>	300	300	300	300 <sup>r</sup>	300
Pumice and related materials, volcanic tuff <sup>c</sup>	17 <sup>4</sup>	15 <sup>4</sup>	15	15	15
Salt, all sources <sup>c</sup>	29,589 <sup>4</sup>	32,536 <sup>4</sup>	30,000 <sup>r</sup>	30,000 <sup>r</sup>	30,000
Sand and gravel, excluding glass sand <sup>c</sup>	365,550 <sup>4</sup>	350,000	350,000	350,000	350,000
Silica sand (quartz, quartzite, glass sand)	139,730	147,855	150,000 <sup>e</sup>	278,231 <sup>r</sup>	241,000 <sup>4</sup>

See footnotes at end of table.

TABLE 1—Continued  
CROATIA: PRODUCTION OF MINERAL COMMODITIES<sup>1</sup>

(Metric tons unless otherwise specified)

Commodity <sup>2</sup>	2006	2007	2008	2009	2010 <sup>e</sup>	
INDUSTRIAL MINERALS—Continued						
Stone: <sup>e</sup>						
Crushed and brown Dimension stone	thousand metric tons	17,625 <sup>4</sup>	18,000	18,000	17,652 <sup>r,4</sup>	13,270 <sup>4</sup>
Sulfur, byproduct of petroleum		7,500 <sup>e</sup>	7,500 <sup>e</sup>	9,819	10,315	7,000 <sup>4</sup>
MINERAL FUELS AND RELATED MATERIALS						
Carbon black		26,265	23,724	16,903	3,976	-- <sup>4</sup>
Natural gas, gross production	million cubic meters	2,715	2,892	2,729	2,705 <sup>r</sup>	2,727 <sup>4</sup>
Petroleum: <sup>e</sup>						
Crude, gross weight, includes condensate <sup>5</sup>	thousand 42-gallon barrels	6,800	6,520	6,200	5,760	5,340
Refinery products <sup>6</sup>	do.	36,400	39,900	32,100	31,700	31,200

<sup>e</sup>Estimated; estimated data are rounded to no more than three significant digits. <sup>r</sup>Revised. do. Ditto.

<sup>1</sup>Table includes data available through October 24, 2011.

<sup>2</sup>In addition to commodities listed, common clay and other industrial minerals may have been produced, but available information was inadequate to make reliable estimates of output.

<sup>3</sup>Crude aluminum had not been produced in Croatia since 1991 when Tvornica Lakhir Metala (TLM) d.o.o. stopped production.

<sup>4</sup>Reported figure.

<sup>5</sup>Figures were converted to barrels from metric tons. The reported data, in thousand metric tons, were as follows: 2006—917; 2007—879; 2008—835; 2009—776; and 2010—720.

<sup>6</sup>Figures were converted to barrels from metric tons. The reported data, in thousand metric tons, were as follows: 2006—4,865; 2007—5,321; 2008—4,196; 2009—4,246; and 2010—4,200 (estimated).

TABLE 2  
CROATIA: STRUCTURE OF THE MINERAL INDUSTRY IN 2010

(Thousand metric tons unless otherwise specified)

Commodity	Major operating companies	Location of main facilities	Annual capacity
Aluminum alloys and semimanufactures	Tvornica Lakhir Metala (TLM) d.o.o. (Adrial d.o.o. Sibenik)	Sibenik	40 <sup>e</sup>
Do.	Top-Tvornica Olovni i Aluminijskih	Savska	NA
Carbon black	Petrokemija d.d.	Kutina	NA
Cement	Cemex Hrvatska d.d. (CEMEX S.A.B. de C.V., 100%)	Plants at Kastel Sucurac, Solin, and Solin Majdan	2,400
Do.	Holcim (Hrvatska) d.o.o.	Plant at Koromacno	1,000
Do.	Istra Cement International d.d. (Part of CALUCEM Group)	Plant at Pula	NA
Do.	Tvornica Cementa Umag d.o.o.	Cement plant at Umag	350
Do.	Nasicecement d.d. (Nexe Grupa d.d.)	Nasice	1,000
Natural gas	million cubic meters	INA-Industrija Nafta d.d. Zagreb (INA)	Natural gasfields at Molve, offshore platforms in the Adriatic Sea, and other locations
Petroleum:			
Crude	thousand 42-gallon barrels per day	do.	Oilfields at Kalinovac, Sandrovac, Struzec, Zutica, and other locations.
Refined		do.	Refinery at Rijeka (Urinj)
Do.		do.	Refinery at Sisak
Salt		Solana Pag d.d.	Pag Island (marine salt)
Steel, crude		CMC Sisak d.d. [Commercial Metals Co. (CMC)]	Plant at Sisak
Do.		Zeljezara Split d.d. (Zlomrex S.A., 94.8%)	Plant at Split

<sup>e</sup>Estimated. Do., do. Ditto. NA Not available.

<sup>1</sup>Zeljezara Split d.d. stopped production in early 2009 and production remained suspended throughout 2010.