



2012 Minerals Yearbook

ANGOLA

THE MINERAL INDUSTRY OF ANGOLA

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In 2012, Angola's real gross domestic product (GDP) as reported by the International Monetary Fund increased by 5.2%; the GDP based on purchasing power parity was \$12.3 billion; and the per capita GDP, \$6,092. The mineral sector, in particular the petroleum industry, was a significant contributor to economic growth. Angola accounted for about 2% of world petroleum output in 2012. Domestic petroleum production accounted for 90% of exports, 80% of Government revenue, and 47% of the GDP. Rough diamond production was also of economic importance to Angola. In 2012, the country produced 6.5% of world rough diamond output, which contributed \$1.1 billion to Government revenue. Other mineral commodities produced in the country included cement, gold, granite, gypsum, marble, and salt. Undeveloped mineral resources included beryllium, clay, copper, iron ore, lead, lignite, manganese, mica, nickel, peat, phosphate rock, quartz, silver, tungsten, uranium, vanadium, and zinc (African Development Bank, Organisation for Economic Co-operation and Development, United Nations Development Programme, and Economic Commission for Africa, 2013, p. 92, AfricanEconomicOutlook.org, 2013, p. 1; Angolan National Private Investment Agency, 2013, p. 79; BP p.l.c., 2013b; International Monetary Fund, 2013; Kimberley Process Rough Diamond Statistics, 2013).

Government Policies and Programs

The nonfuel mineral sector in Angola is regulated by Mining Law No. 31/11 of September 23, 2011. On May 13, 2012, the Government enacted a new foreign exchange law for the oil and gas sectors (law No. 2/12). The new law requires foreign exchange transactions by Sociedade Nacional de Combustíveis de Angola (Sonangol) and its foreign and domestic investment partners to be made only through authorized financial institutions in Angola. Under the new foreign exchange law, the funds necessary for the payment of all business-related expenses must also be kept in local Angolan banks and all payments of services and goods to local entities must be paid in kwanzas, which is the Angolan local currency. The new foreign exchange was expected to increase the volume and size of petroleum-related transactions going through Angola's domestic banking system (Clifford Chance LLP, 2012; African Development Bank, Organisation for Economic Co-operation and Development, United Nations Development Programme, and Economic Commission for Africa, 2013, p. 92).

In 2012, the Government also launched a strategic plan to develop integrated infrastructure projects with member states of the Southern Africa Development Community, including two main railway corridors that connect Angola to the Democratic Republic of the Congo [Congo (Kinshasa)] and Namibia. Most of the country's basic infrastructure, including bridges, railroads, and roads, were damaged during the longstanding Angolan civil war (1975–2002). Many of these structures

continued to be in need of repair in 2012. Angola also continued to struggle with electrical power shortages, and many businesses relied on independent power generators for electricity. In 2011, the World Bank reported that Angola would require a sustained expenditure of \$2.1 billion per year for the next decade to build, repair, and maintain the transportation and electrical infrastructure. This was in addition to the \$4.3 billion the country was already spending annually on infrastructure. Investments in infrastructure projects were mostly funded by the Government through revenues from the petroleum sector and by external financing from China (Pushak and Foster, 2011, p. 1–5, 10, 22–23; Angolan National Private Investment Agency, 2013, p. 30).

Production

Rough diamond production as reported by the Kimberley Process Certification Scheme was 8.33 million carats, which was about the same amount that was produced in 2011. In terms of value, however, Angola's rough diamond production decreased by 4.5% to \$133 per carat from about \$140 per carat in 2011. Petroleum refinery products and crude petroleum output increased by 44.3% and 3.4%, respectively, to 21.9 million barrels (Mbbbl) and 651.2 Mbbbl, respectively. The increase in output in the petroleum sector was the result of higher recovery rates from the Greater Plutónio oilfield (Block 18) and the Pazflor oilfield (Block 17). Salt production remained at the same level as that of 2011. Cement production was estimated to have increased by 7% to 1.6 million metric tons (Mt). Output data for gypsum were not available, but the level of output was estimated to have remained about the same as in 2011. Gold was reportedly mined by artisanal miners in Cabinda Province; however, information was inadequate to make reliable estimates of output in 2012. Data on mineral production are in table 1 (AfricanEconomicOutlook.org, 2013, p. 4; Kimberley Process Rough Diamond Statistics, 2013).

Structure of the Mineral Industry

Table 2 is a list of major mineral industry facilities.

Mineral Trade

Angola's exports to the United States were valued at \$9.8 billion in 2012 compared with \$13.6 billion in 2011. The majority of these exports were crude petroleum and fuel oil, which were valued at \$9.3 billion and \$445 million, respectively. Other exports to the United States included gem-quality diamond valued at \$86.1 million; liquefied petroleum gas, \$8.2 million; and petroleum products, \$7.1 million. Imports from the United States were valued at \$1.5 billion; these included nearly \$317 million in drilling and

oilfield equipment, nearly \$27 million in iron and steel products, about \$20.8 million in excavating machinery, \$2.8 million in petroleum products, \$2 million each in iron and steel mill products and specialized mining equipment, \$1.5 million in nuclear fuel materials, \$688,000 in natural gas liquids, \$600,000 in coal and other nonspecified fuels, \$139,000 in alumina and aluminum combined, and \$7,000 each in copper and gem-quality diamond (U.S. Census Bureau, 2013a, b).

Commodity Review

Metals

Iron Ore.—Projects to re-launch iron ore mining in Kassala-Kitungo in Kwanza Norte Province and Cassinga in southern Huila Province were reportedly at the feasibility stage in 2012. The joint developers of the projects were Government-owned Empresa Nacional de Ferro de Angola (Ferrangol E.P.), Angolana de Exploraco de Recursos Minerais, and Singapore-based DT Group. The projects, which also would include the reopening of the Novo Oeiras iron casting plant and the construction of two steel plants in Huila Province, were expected to be completed by 2015. The Cassinga Mine was expected to produce 20 million metric tons per year (Mt/yr) of iron ore (Fletcher, 2012; Macaclub News Agency, 2012a, c).

Industrial Minerals

Cement.—A new cement plant with a capacity to produce 720,000 metric tons per year (t/yr) was commissioned in Benguela Province in late 2012. Genea Angola Group, which was the company that owned the plant, planned to increase the capacity to 1 Mt/yr by 2013. Other cement plants in Angola included the Nova Cimangola cement plant, which had the capacity to produce 1.8 Mt/yr of cement, and the Lobito cement plant, which had the capacity to produce 250,000 t/yr of cement. Angola also imported cement to meet its domestic demand. Most of these imports came from China (Macaclub News Agency, 2012b; CW Group, 2013).

Diamond.—Diamond mining in Angola was from both primary (kimberlite) and secondary (alluvial) deposits, which are located in the northern Provinces of Lunda Norte and Lunda Sul. The Government estimated that about 700 primary diamond deposits occur in the country. In 2011, the Government revoked South Africa-based Trans Hex Group Ltd.'s mining rights to the Fucaúma and the Luarica Mines, reportedly because Trans Hex had not performed any mining activities at these mines for a period of 3 years. Trans Hex, however, retained its 33% interest in the Somiluana Mine, which in 2012 produced a total of 45,869 carats compared with 27,662 carats in 2011. The average mining grade for the Somiluana Mine in 2012 was 19.16 carats per 100 cubic meters compared with an average grade of 18.36 carats per 100 cubic meters in 2011. The mine is located in Lunda Norte Province about 1,000 kilometers (km) from the capital city of Luanda. Trans Hex held a 33% interest in the mine in partnership with Government-owned Empresa Nacional de Diamantes de Angola E.P. (ENDIAMA) and expected to produce about 42,000 carats in 2013 (Angolan National Private

Investment Agency, 2013, p. 80; Trans Hex Group Ltd., 2013, p. 5, 12, 19–20, 23).

Escom Investimentos e Participações S.A. (Escom) of Angola in partnership with ENDIAMA planned to invest \$30 million to develop the Tchegi alluvial diamond deposit, which is located in Lunda Norte Province about 850 km east of the capital city of Luanda. The remaining interest in the project would be held by Angolan privately owned companies Consorico Mineiro Tchegi (16%), Hipergesta S.A. (6%), Somia Group (4%), and Ysakama (2%), and Oranizacoes BK Group of Brazil (7%). Escom and Endiama also planned to commission a feasibility study in 2014 to increase diamond production capacity at the Luo Mine, which is also located in Lunda Norte Province (Africa Mining Intelligence, 2012).

London-based DeBeers Group completed a resource evaluation study for the Mulepe-1 kimberlite pipe in November 2012. The results of the study determined that the project was uneconomical, however. In 2011, DeBeers had invested \$11 million to carry out the Mulepe-1 study, which included the relocation of communities residing in the town of Mulepe in Lunda Norte Province. Despite the negative results, the company planned to continue diamond exploration activities in Angola in 2013 (De Beers Group, 2013a, p. 8; 2013b, p. 52).

Phosphate Rock.—Minbos Resources Ltd. of Australia published a resource estimate for the Cabinda phosphate project of 304.1 Mt of indicated and inferred phosphate rock resources at an average grade of 11.5% P₂O₅. Minbos's concession area in Angola included various phosphate rock deposits located along the Congo basin in Cabinda Province, which the company planned to develop in partnership with Petril Projects Ltd. The first of the deposits to be developed was Cacata, which, as of yearend 2012, was at the definitive feasibility study stage. The company planned to develop Cacata as a stand-alone mine with a production capacity of about 800,000 t/yr of phosphate rock concentrate. Phosphate ore would be transported by road to the coastal port town of Cacongo, which is located about 90 km from the Cacata deposit. Other deposits included the Chibute, the Chivovo, the Mongo Tando, and the Ueca deposits (Minbos Resources Ltd., 2013, p. 4–10).

Mineral Fuels

Natural Gas.—About 60% of the estimated 1.2 billion cubic feet per day of natural gas produced in Angola was flared. The amount of natural gas lost to flaring was expected to decrease significantly with the commissioning of the Angola Liquefied Natural Gas Project (ALNG). The project consisted of the construction of a 5.2-Mt/yr liquefied natural gas plant and related 500-km-long high-pressure natural gas pipeline in Soyo. The ALNG was being developed by a consortium of companies led by Chevron Corp. of the United States (36.4%) and included Sonagol (22.8%), and BP p.l.c. of the United Kingdom, Eni S.p.A. of Italy, and Total S.A. of France (13.6% each). The project was expected to be commissioned in 2014. The United States was to be the main export market for the natural gas produced by the ALNG (Angolan National Private Investment Agency, 2013, p. 89; Chevron Corp., 2013, p. 5).

Petroleum.—In 2012, Angola accounted for 10% of Africa’s total proven petroleum reserves and was the continent’s second-ranked petroleum producer after Nigeria. The country produced petroleum from both onshore and offshore deposits, including offshore the enclave of Cabinda. International petroleum companies operating in Angola included BP, Chevron, Eni, Exxon Mobil Corp. of the United States, and Total. In December 2012, BP announced the starting of petroleum production from the Plutão, Saturno, Venus, and Marte (PSVM) project on Block 31 offshore Angola. Initial petroleum production, which was from the Plutão oilfield only, averaged 60,000 barrels per day (bbl/d). The development of the PSVM project was expected to continue in 2013, when production would be ramped up to 150,000 bbl/d. The majority of Angola’s petroleum was refined at the Fina Petróleos de Angola refinery in Luanda. Petroleum was also refined at the Malongo refinery in Cabinda Province for domestic use only. The Government planned to build another refinery with a capacity to produce about 200,000 bbl/d of petroleum. The refinery, which would be located in Lobito, would process heavy crude oil from Angola’s Dalia and Kuito oilfields (Angolan National Private Investment Agency, 2013, p. 87; BP p.l.c., 2013a, 67, 69; 2013b, p. 6, 8).

Outlook

Angola’s GDP is projected to increase by 8.2% in 2013, driven mostly by an increase in petroleum and natural gas production. Export revenues from the petroleum and natural gas sectors are expected to generate as much as \$65.7 billion in 2013 and \$62.7 billion in 2014 (AfricanEconomicOutlook.org, 2013, p. 3–4). The nonfuel mineral sector is also likely to become a significant contributor to Government revenues as new iron ore and phosphate rock projects come online in the near future. The country’s electrical capacity deficit, however, will likely remain a deterrent to foreign direct investment in the sector.

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TABLE 1
ANGOLA: ESTIMATED PRODUCTION OF MINERAL COMMODITIES^{1,2,3}

Commodity		2008	2009	2010	2011	2012
INDUSTRIAL MINERALS						
Cement:						
Hydraulic	thousand metric tons	1,780	1,800	1,500	1,500	1,600
Clinker	do.	500	500	500	500	500
Diamond ^{4,5,6}	thousand carats	8,907	9,238 ^r	8,362	8,329	8,331
Granite	cubic meters	50,000	50,000	50,000	60,000 ^r	80,000
Gypsum	metric tons	--	120,000	200,000	200,000	200,000
Salt	do.	35,000	35,000	50,000	40,000	40,000
MINERAL FUELS AND RELATED MATERIALS						
Petroleum:						
Crude ^{4,7}	thousand 42-gallon barrels	693,865	658,460 ^r	679,995 ^r	629,990 ^r	651,160
Refinery products ^{4,8}	do.	13,000	13,700	15,000	15,180 ^r	21,900

^rRevised. do. Ditto. -- Zero.

¹Estimated data are rounded to no more than three significant digits.

²Table includes data available through January 27, 2014.

³Angola also produced gold and marble, but information was inadequate to make reliable estimates of output.

⁴Reported figure.

⁵Production was approximately 90% gem quality and 10% industrial grade.

⁶Source: Kimberley Process Certification Scheme.

⁷Source: BP p.l.c.

⁸Includes asphalt and bitumen.

TABLE 2
ANGOLA: STRUCTURE OF THE MINERAL INDUSTRY IN 2012

(Metric tons unless otherwise specified)

Commodity		Major operating companies and major equity owners	Location of main facilities	Annual capacity
Cement		Companhia de Cimento do Lobito S.A. (TecnoSecil Investimentos e Participações SARL, 51%, and Government, 49%)	Lobito, Benguela Province	250,000.
Do.		Nova Cimangola S.A. (Government, 89%, and private investors, 11%)	Capital city of Luanda	1,800,000; 540,000 clinker.
Do.		Cimenfort Industrial Lda. (Genea Angola Group)	Catumbela, Benguela Province	720,000.
Diamond	thousand carats	Associação em Participação Chitotolo [Empresa Nacional de Diamantes de Angola E.P. (ENDIAMA), 45%; ITM Mining Ltd., 40%; LUMANHE Lda., 15%]	Chitotolo alluvial mine, 95 kilometers southeast of Dundo	28.
Do.	do.	Empresa Nacional de Diamantes de Angola E.P. (ENDIAMA), 51%; New Millenium Resources Ltd., 34%; Mombo Lda., 15%	Rio Lapi Mine, 45 kilometers northeast of Saurimo, Lunda Sul Province	240.
Do.	do.	Luó-Sociedade Mineira do Camatchia-Camagico [Empresa Nacional de Diamantes de Angola E.P. (ENDIAMA) and Escom Investimentos e Participações S.A.]	Lunda Norte Province	18.
Do.	do.	Sociedade de Desenvolvimento Mineiro de Angola S.A.R.L. (SDM) [Empresa Nacional de Diamantes de Angola E.P. (ENDIAMA), 50%, and Odebrecht Mining Services Inc., 50%]	Luzamba alluvial mine, Cuango Valley, Lunda Norte	70.
Do.	do.	Sociedade Mineira de Catoca Lda. [Empresa Nacional de Diamantes de Angola E.P. (ENDIAMA), 32.8%; ALROSA S.A., 32.8%; Daumonty Financing Co. B.V., 18%; Odebrecht Mining Services Inc., 16.4%]	Catoca kimberlite mine, 36 kilometers south of Saurimo, Lunda Sul Province	6,500.
Do.	do.	Sociedade Mineira do Cuango [Empresa Nacional de Diamantes de Angola E.P. (ENDIAMA), 41%; ITM Mining Ltd., 38%; LUMANHE Lda., 21%]	Cuango alluvial mine, Cuango Valley, Lunda Norte Province	31.
Do.	do.	Sociedade Mineira do Lucapa Ltd. (SML) [Empresa Nacional de Diamantes de Angola E.P. (ENDIAMA), 51%, and Sociedade Portuguesa de Empreendimentos, 49%]	Mufuto Norte alluvial mine	25.
Do.	do.	Sociedade Mineira do Lucapa Ltd. (SML) [Empresa Nacional de Diamantes de Angola E.P. (ENDIAMA), 51%, and Sociedade Portuguesa de Empreendimentos, 49%]; LUMANHE Lda.; ITM Mining Ltd.	Calonda alluvial mine, Lucapa, Lunda Norte Province	27.
Do.	do.	Trans Hex Group Ltd., 35%, and Empresa Nacional de Diamantes de Angola E.P. (ENDIAMA), 40%	Fucauma Mine, northeastern Angola	120.
Do.	do.	Trans Hex Group Ltd., 32%, and Empresa Nacional de Diamantes de Angola E.P. (ENDIAMA), 40%	Luarica Mine, northeastern Angola	90.
Do.	do.	Sociedade Mineira, S.A.–Angola (Kwanza) [Trans Hex Group Ltd., 33%]	Somiluana Mine, 1,000 kilometers northeast of Luanda, Lunda Norte Province	46.
Granite	cubic meters	Angostone	Lubango, Huíla Province	14,000.
Do.	do.	Coreangol	Nzeto municipality, Zaire Province	35,000.
Do.	do.	Emanha	Lubango, Huíla Province	80,000.
Do.	do.	Rodang	do.	6,300.
Do.	do.	Metarochas	do.	2,200.
Gypsum	thousand metric tons	Fábrica de Gesso do Sumbe	Gypsum plant, city of Sumbe, Cuanza Sul Province	200.
Petroleum	thousand 42-gallon barrels per day	AP Moller-Maersk A/S, 50%; Occidental Petroleum Corp., 30%; Sociedade Nacional de Combustiveis de Angola (Sonangol), 20%	Block 8, offshore	NA.

See footnotes at end of table.

TABLE 2—Continued
ANGOLA: STRUCTURE OF THE MINERAL INDUSTRY IN 2012

(Metric tons unless otherwise specified)

Commodity		Major operating companies and major equity owners	Location of main facilities	Annual capacity
Petroleum— Continued	thousand 42-gallon barrels per day	AP Moller-Maersk A/S, 50%; Sociedade Nacional de Combustíveis de Angola (Sonangol), 20%; Devon Energy Corp., 15%; Odebrecht S.A., 15%	Block 16, offshore	NA.
Do.	do.	AP Moller-Maersk A/S, 50%; Occidental Petroleum Corp., 30%; Sociedade Nacional de Combustíveis de Angola (Sonangol), 20%	Block 23, offshore	NA.
Do.	do.	BP p.l.c., 50%, and Sonangol-Sinopec International, 50%	Block 18, offshore	200.
Do.	do.	BP p.l.c., 26.67%; Exxon Mobil Corp., 25%; Sociedade Nacional de Combustíveis de Angola (Sonangol), 20%; Statoil ASA, 13.33%; Marathon Oil Corp., 10%; Total S.A., 5%	Block 31, offshore	150.
Do.	do.	Canadian Natural Resources, 100%	Block 4, Kiame field, offshore	NA.
Do.	do.	Chevron Corp., 31%; Eni S.p.A., 20%; Sociedade Nacional de Combustíveis de Angola (Sonangol), 20%; Total S.A., 20%; Galp Energia, 9%	Block 14, offshore	100.
Do.	do.	China Petroleum and Chemical Corp., 40%; Petróleo Brasileiro S.A. (Petrobrás), 30%; Sociedade Nacional de Combustíveis de Angola (Sonangol), 20%; Falcon Oil Holding Angola S.A., 5%; Gema Group Angola, 5%	Block 18/06, offshore	180.
Do.	do.	Eni S.p.A., 35%; Sonangol-Sinopec International, 20%; Sociedade Nacional de Combustíveis de Angola (Sonangol); 15% Total S.A., 15%; Falcon Oil Holding Angola S.A., 5%; Petróleo Brasileiro S.A. (Petrobrás), 5%; Statoil ASA, 5%	Block 15/06, offshore	NA.
Do.	do.	Eni S.p.A., 50%; Total S.A., 25%; Galp Energia, 10%; Ina-Industrija Nafta, 7.5%	Block 1, offshore	NA.
Do.	do.	Exxon Mobil Corp., 45%; Sociedade Nacional de Combustíveis de Angola (Sonangol), 20%; Total S.A., 15%; Falcon Oil Holding Angola S.A., 10%; Galp Energia, 5%; Naphtha-Israel Petroleum Corp. Ltd., 5%	Block 33, offshore	NA.
Do.	do.	Exxon Mobil Corp., 40%; BP p.l.c., 26.67%; Eni S.p.A., 20%; Statoil ASA, 13.33%	Block 15, offshore	700.
Do.	do.	Petróleo Brasileiro S.A. (Petrobrás), 80%, and Sociedade Nacional de Combustíveis de Angola (Sonangol), 20%	Block 26, offshore	NA.
Do.	do.	Petróleo Brasileiro S.A. (Petrobrás), 40%; Sociedade Nacional de Combustíveis de Angola (Sonangol), 20%; InterOil Exploration & Production ASA, 20%; Falcon Oil Holding Angola S.A., 10%; Initial Oil, 10%	Block 6, offshore	NA.
Do.	do.	Roc Oil Co. Ltd., 60%; Force Petroleum Group Ltd., 20%; Sociedade Nacional de Combustíveis de Angola (Sonangol), 20%	Cabinda South, onshore	NA.
Do.	do.	Sociedade Nacional de Combustíveis de Angola (Sonangol), 100%	Area A (Kwanza), onshore	NA.
Do.	do.	do.	Block 3, Canuka field, offshore	NA.
Do.	do.	do.	Block 4, Kiabo field, offshore	NA.
Do.	do.	Sociedade Nacional de Combustíveis de Angola (Sonangol), 83.6%, and Chevron Corp., 16.4%	Area B (Soyo), onshore	NA.

See footnotes at end of table.

TABLE 2—Continued
ANGOLA: STRUCTURE OF THE MINERAL INDUSTRY IN 2012

(Metric tons unless otherwise specified)

Commodity		Major operating companies and major equity owners	Location of main facilities	Annual capacity
Petroleum— Continued	thousand 42-gallon barrels per day	Sociedade Nacional de Combustíveis de Angola (Sonangol), 41%; Chevron Corp., 39.2%; Total S.A., 10%; Eni S.p.A., 9.8%	Block 0, offshore Cabinda	340.
Do.	do.	Sociedade Nacional de Combustíveis de Angola (Sonangol), 52.5%; Petróleo Brasileiro S.A. (Petrobrás), 27.5%; Chevron Corp., 20%	Block 2/85, offshore	NA.
Do.	do.	Sociedade Nacional de Combustíveis de Angola (Sonangol), 70%, and Sociedade Petrolífera Angolana, 30%	Block 2/05, offshore	NA.
Do.	do.	Sociedade Nacional de Combustíveis de Angola, (Sonangol), 90%, and Sociedade Petrolífera Angolana, 15%	Block 3/05, Bufalo, Impala, Impala SE Pacassa, and Palanca fields, offshore	NA.
Do.	do.	Sociedade Nacional de Combustíveis de Angola (Sonangol), 51%; Soco Cabinda Lda., 17%; Teikoku Oil Co., 17%; Angola Consulting Resources, 15%	Cabinda North, onshore	NA.
Do.	do.	Sociedade Nacional de Combustíveis de Angola (Sonangol), 50%; Statoil ASA, 20%; Angola Consulting Resources, 15%; Sociedade Petrolífera Angolana, 15%	Block 4/05, Gimboa field, offshore	60.
Do.	do.	Statoil ASA, 50%; Petróleo Brasileiro S.A. (Petrobrás), 30%; Sociedade Nacional de Combustíveis de Angola (Sonangol), 20%	Block 34, offshore	NA.
Do.	do.	Total S.A., 50%; Eni S.p.A., 15%; Sociedade Nacional de Combustíveis de Angola (Sonangol), 6.25%	Block 3/91, Oombo field, offshore	NA.
Do.	do.	Total S.A., 50%; Eni S.p.A., 15%; Sociedade Nacional de Combustíveis de Angola (Sonangol), 6.25%; Ajoco Exploration Company Ltd., 12.5%; Ina-Industrija Nafta, 5%	Block 3/85, Cobo and Pambe fields, offshore	NA.
Do.	do.	Total S.A., 30%; Marathon Oil Corp., 30%; Sociedade de Combustíveis de Angola (Sonangol), 20%; Exxon Mobil Corp., 15%; Galp Energia, 5%	Block 32, offshore	NA.
Do.	do.	Total S.A., 30%; Sociedade Nacional de Combustíveis de Angola (Sonangol) 30%; Sonangol-Sinopec International, 27.5%; Angola Consulting Resources, 5%; Falcon Oil Holding Angola, S.A., 5%; Partex (Angola) Corp., 2.5%	Block 17/06, offshore	NA.
Do.	do.	Total S.A., 40%; Statoil ASA, 23.33%; Exxon Mobil Corp., 20%; BP p.l.c., 16.67%	Block 17, offshore	700.
Do.	do.	Tullow Oil plc., 50%; Sociedade Nacional de Combustíveis de Angola (Sonangol), 20%; Prodoil SARL, 20%; Force Petroleum Group Ltd., 10%	Block 1/06, offshore	NA.
Do.	do.	Vaalco Energy Inc., 40%; InterOil Exploration & Production ASA, 40%; Sociedade Nacional de Combustíveis de Angola (Sonangol), 20%	Block 5, offshore	NA.
Petroleum refinery products	do.	Fina Petróleos de Angola [Total S.A., 61%, and Sociedade Nacional de Combustíveis de Angola (Sonangol), 39%	Petroleum refinery, Luanda	57,500.
Do.	do.	Sociedade Nacional de Combustíveis de Angola (Sonangol)	Malongo refinery, Cabinda Province	12,500.
Steel		Chung Fong Holding Co., 51%, and Government, 49%	Relaunching of steel plant (under development)	36,500.
Do.		Grupo Ferpinta	Two pipe mills at Viana, 30 kilometers east of Luanda	6,000.

Do., do. Ditto. NA Not available.