

# THE MINERAL INDUSTRY OF

# TURKEY

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Turkey's economic crisis continued in 1997 owing to a combination of factors, such as public sector debt, rapid devaluation of the Turkish lira, a new Government, and associated high levels of political uncertainty, inflation, and unemployment (Barham, 1997). The primary mineral sector's contribution to the economy traditionally has been slightly more than 1% of the gross domestic product (GDP) that totaled about \$191.5 billion<sup>1</sup> in 1997, value-added secondary mineral commodities, including refined petroleum products, steel, cement, glass, and certain inorganic chemicals, however were estimated to account for about 70% of the value of the nation's manufacturing output. Total (primary plus secondary) mineral industry revenues were estimated to be about 15% of the GDP.

The geology of Turkey is extremely complex and is reflected in the diversity of its mineral deposits. Best known for its industrial minerals, Turkey was a major producer of barite, boron minerals, celestite (strontium), emery, feldspar, limestone, magnesite, marble, perlite, and pumice. A wide variety of primary metallic minerals were produced as well. Chromite was the most significant mineral in the metal sector. Turkey was a major world producer of processed mineral commodities, including refined borates and related chemicals, cement, ceramics, and glass, and was a significant producer of ferrochromium and steel.

## Government Policies and Programs

In 1997, the Turkish economy was burdened by inflation that had reached 99% on an annual basis, compared with an annual inflation rate of 80% in 1996. Despite the continued divestment of state-owned minerals sector holdings to domestic and foreign investors, the Government remained a significant factor in most sectors of the Turkish minerals industry through various parastatal (state-owned) industrial corporations and shareholdings in a number of private companies. The privatizations of most of the state's petroleum refineries, its remaining cement plant, and a number of electrical powerplants, in addition to the partial privatization of three steel plants, were under negotiation at yearend. The private sector component has continued to grow, especially since the passage of Mining Law No. 3213 in 1985. Hydrocarbon activities were regulated under Law No. 6326 of 1952, Law No. 6556 of 1955, Law No. 6987 of 1957, Law No. 1702 of 1973, and Law No. 2808 of 1983.

## Environmental Issues

Rapid growth of industry, increasing urbanization of the population, and improved communications have led to increased awareness of and emphasis on environmental issues. Lignite was used in thermal powerplants that provided more than 50% of the country's electricity. Environmental, legal, and political considerations were affecting the Government's plans to address the growing electricity shortages in the country through the construction of new powerplants. Imported natural gas and liquefied natural gas (LNG) replaced lignite for domestic heating in the Ankara and the İstanbul metropolitan areas, thereby greatly reducing traditional wintertime air pollution. The gas pipeline network was being extended to other cities, and new pipelines to transport natural gas through eastern Turkey from Iran, Russia, and Turkmenistan were being considered.

Environmental issues have become a factor in Turkey's foreign relations. Proposed petroleum development in Kazakstan and other landlocked Turkic Republics pose the risk of oil spills or other shipping hazards if crude petroleum was to be pumped through the existing pipeline from Baku, Azerbaijan, to Novorossiisk, Russia, and then transshipped by supertankers via the Black Sea and the narrow Bosphorus and Dardanelles Straits. This path is currently the most economical transportation option. The Turkish Ministry of the Environment reported that during 1997, in addition to heavy local passenger ferry traffic, 50,492 ships passed through the Bosphorus and 35,543 ships transited the Dardanelles (Anadolu Ajansi, August 26, 1998, It is not like a strait but a motorway, accessed August 26, 1998, at URL <http://www.turkishpress.com/aa/index.html>). As a crude oil transportation alternative, Turkey began construction of a 1,625-kilometer (km) pipeline from the eastern border to the Ceyhan oil terminal at Yumurtalık on the Mediterranean.

A major mining issue in Turkey was the local opposition to the development of gold mines near the tourist areas along the Aegean coast. The controversy centered over the use of sodium cyanide in heap-leaching extraction methods and the potential adverse impact on the farming and tourist industries if cyanide were to leak into the streams and aquifers. In October, an The İzmir administrative court annulled the Ministry of the Environment's "letter of non-objection" upon which subsequent permits at the Ovacık property had been issued.

## Trade

As shown in table 1, Turkey produced a wide variety of mineral commodities. Mineral commodities accounted for about 12% of total exports, which were valued at \$26.2 billion in 1997

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<sup>1</sup>Where necessary, values have been converted from Turkish lira to U.S. dollars at the rate of TL152,578=US\$1.00 for 1997 and at the rate of TL81,699=US\$1.00 for 1996.

compared with \$23.2 billion in 1996. Turkey was a major exporter of steel and ferrochromium and exported limited quantities of chromite, copper, and zinc ores and refined metals. Aluminum exports increased to \$205.8 million in 1997 compared with \$179.4 million in 1996. Copper exports increased to \$205.2 million in 1997 compared with \$179 million in 1996. Jewelry exports, primarily gold, more than doubled to 1,130 metric tons (t) valued at \$71.7 million in 1997 from 477 t in 1996 valued at \$43.9 million. Iron and steel exports increased to 7.2 million tons (Mt) valued at \$2.3 billion in 1997 compared with 6.6 Mt valued at \$2.1 billion in 1996. Steel bars accounted for nearly 47% of Turkey's steel exports (İstanbul Ferrous and Non-Ferrous Metals Exporters' Association, 1998).

The United States was the major individual market, in terms of value, for Turkish metals in 1997, with imports valued at about \$325 million, an increase of 96% from that of 1996. Singapore followed with metal imports valued at \$288 million; Italy, \$236 million; and Hong Kong, \$199 million. Regionally, Europe and Central Eurasia received \$1.02 billion; Asia and the Pacific, \$718 million; and the Middle East, \$612 million.

In contrast with metals, Turkey exported a wide variety of industrial minerals and derived chemicals, the value of which increased to \$613 million in 1997 compared with \$542 million in 1996. Ceramic products, glass, and glassware exports in 1997 were valued at \$604 million compared with \$512 million in 1996 (State Institute of Statistics, March 6, 1998, Provisional foreign trade figures—December 1997, accessed March 16, 1998, at URL <http://www.die.gov.tr/ENGLISH/SONIST/DISTICIST/060398.html>).

Turkey's mineral imports were dominated by crude oil and refined mineral fuels valued at \$6.1 billion, as well as a variety of metallic ores, steel, ferrous scrap, and other metals. The Turkish steel industry depended on imported scrap as feed for the country's many electric-arc minimills, and the unmet demand for flat steel products resulted in the valuation of iron and steel imports increasing to \$2.71 billion in 1997 compared with \$2.69 billion in 1996 (State Institute of Statistics, March 6, 1998, Provisional foreign trade figures—December 1997, accessed March 16, 1998, at URL <http://www.die.gov.tr/ENGLISH/SONIST/DISTICIST/060398.html>).

In December, setback to increased trade with Europe took place when the European Union (EU) approved a multiyear timetable for negotiating EU membership with 11 Central and Eastern European nations. Turkey, an associate member of the EU, was placed in a separate category, and proposed negotiation dates were not addressed.

### Structure of the Mineral Industry

The mining sector has been estimated to comprise between 750 and 800 mining "establishments," a term roughly equivalent to "company" or "company division." These owned and/or operated about 3,000 mines. About 6,000 workshops processed gold jewelry.

Among the state-owned minerals corporations, the various subsidiaries of Etibank Genel Müdürlüğü dominated or produced the country's entire output of aluminum, boron minerals and chemicals, and ferrochrome. Turkish hard coal was mined by

Türkiye Taş Kömürü Kurumu Genel Müdürlüğü, and almost 90% of Turkey's total lignite output was accounted for by Türkiye Kömür İşletmeleri Kumumu. About 78% of Turkey's total output of crude petroleum and all its natural gas were produced by Türkiye Petrolleri Anonim Ortaklığı (TPAO) and its subsidiaries. The pipeline company, Boru Hatları ile Petrol Taşıma A.Ş. (Botas), controlled virtually all the pipeline transport of mineral fuels. Türkiye Petrol Rafinerileri A.Ş. was by far the largest oil refiner in the country. Until recently, cement production was dominated by the parastatal Türkiye Çimento ve Toprak Sanayii T.A.Ş., but most of its plants have been successfully privatized.

Maden Tetkik ve Arama Genel Müdürlüğü was the state agency responsible for geologic exploration and research in Turkey.

### Commodity Review

#### Metals

**Aluminum.**—In 1997, bids were requested for the expansion of Etibank's Seydişehir aluminum smelter from 60,000 metric tons per year (t/yr) to 100,000 t/yr. The \$315 million contract for a 4-year smelter modernization and upgrade program was canceled by Etibank in September 1997, and a new request for bids was issued in November.

The expansion of the capacity at the Assan aluminum mill of Kibar Dis Ticaret A.Ş. from 20,000 t/yr to 70,000 t/yr continued during 1997 with the installation of two sheet mills. Kibar planned to commission the second sheet mill at the İstanbul mill early in 1998.

**Chromite.**—The Kromsan Plant of Soda Sanayii A.Ş., a member of the Türkiye Sise ve Cam Fabrikaları A.Ş. Group (Sisecam) began building a 6,000-t/yr chromic acid plant at Mersin. Chromic acid demand in Turkey was such that much of the production was to be exported.

**Copper.**—Karadeniz Bakır İşletmeleri A.Ş. (KBİŞ), Turkey's largest producer of copper ore and concentrates, was a candidate for privatization. At KBİŞ's Murgul operations, near Artvin, copper ore from the Çakmakkaya open pit was processed at the Çakmakkaya concentrator. The concentrate was sent via slurry pipeline to Hopa, dried, and shipped to the Samsun smelter. The Damar open-pit mine and concentrator and the 10,900-t/yr smelter at Murgul were not operational. Mining at the Kutlular Mine in Trabzon Province ceased in 1995 when the reserves were depleted. KBİŞ continued to explore the Kutlular area for economic copper deposits.

In addition to the concentrate feed produced at Murgul, KBİŞ processed domestic and imported copper concentrate at its 38,760-t/yr-capacity flash smelter at Samsun. The smelter also had a capacity to produce 282,000 t/yr of sulfuric acid from the smelter's offgases.

Etibank Küre Bakır İşletmesi Müessesesi Müdürlüğü was producing copper and pyrite concentrates at the mine at Küre. The company was winding down operations at the copper mine at Ergani because of depleted reserves.

To improve zinc recovery, Çayeli Bakır İşletmeleri A.Ş. added flotation cells to its ore-treatment circuit. In 1997, Çayeli

produced and exported 29,000 t of copper in concentrate and 35,500 t of zinc in concentrate. The company initiated a limited exploration program near the mine.

Also mining copper were Ber-Oner Madencilik San. ve Tic. A.Ö. and Demir Export A.Ö. Cominco Madencilik Sanayi A.Ö., a subsidiary of Cominco Ltd. of Canada, was exploring the Agi Dagi copper prospect.

Turkey had an electrolytic copper production capacity of about 162,000 t/yr. Sarkuysan A.Ö., with a production capacity of 70,000 t/yr, was the country's leading copper refiner.

**Gold.**—Eurogold Madencilik Ticaret ve Ltd. A.Ö., a joint venture of Mine Or S.A. of France (66.7%) and Inmet Mining Corp. of Canada (33.3%), continued to have problems at the Ovacık prospect, near Bergama. Eurogold completed construction of the \$49 million operation in December 1997 despite a month-long suspension of activity in April triggered by protests concerning the proposed use of sodium cyanide. Legal problems continued to entangle the property when the Izmir administrative court ruled to annul the Ministry of the Environment's "letter of non-objection". The final operating certificate was pending at yearend. Eurogold was also exploring the Mastra property.

The permitting uncertainties encountered by Ovacık also affected other proposed gold projects in Turkey. Additionally, because of the drop in the price of gold during 1997, Tüprag Metal Madencilik San. ve Tic. Sti., a subsidiary of Eldorado Gold Corp. of Canada, revised the feasibility and environmental studies of its Küçükdere prospect. Tüprag completed the feasibility study on the Kaymaz deposit and began pre-feasibility work on the Efemçukuru (WT) project. Tüprag also acquired the Kisladag gold prospect and began exploration of the deposit in 1997.

Yeni Anadolu Mineral Madencilik San. ve Tic. Ltd. Sti., a subsidiary of Anatolia Minerals Development Corp. of the Cayman Islands, was exploring for gold on the Armutbeli, Black Sea Region, Keban, Saimbeyli, Yenipazar, and Yolustu-Atizi Properties. At year-end, Woodco Resources Inc. of Canada was engaged in a take-over bid of Anatolia.

**Steel.**—In 1997, Turkish total crude steel production reportedly increased slightly to 13.6 Mt despite reduced world market demand. Ereğli Demir ve Çelik Fabrikaları T.A.Ö. (Erdemir) was the sole flat products producer. Erdemir embarked on a new two-stage production capacity expansion in 1997. The initial \$2.2 billion segment would expand production capacity from 3 million metric tons per year (Mt/yr) to 4.5 Mt/yr. The attempted partial divestment of the state's interest in Erdemir was thrown out by the Ankara administrative court. During 1997, the state proposed privatisation of Türkiye Demir ve Çelik İşletmeleri Genel Müdürlüğü and Sivas Demir-Çelik İşletmeleri A.Ö. Sivas has been idled since December 1996.

Çukurova Çelik Endüstrisi A.Ö. installed a 600,000-t/yr-capacity rolling mill in 1997 and began the expansion of its crude steel production capacity.

### **Industrial Minerals**

**Barite.**—As part of the company's preparations for the

production of micronized barite, BaÖer Maden Sanayi ve Ticaret A.Ö. renovated its washing and screening plant and installed two ball mills. Micronized barite production capacity was projected to be 8,000 t/yr. BaÖer's plant at Sarkikaraagac, near Isparta, had a barite grinding capacity of 90,000 t/yr and was fed by production from the company's 120,000-t/yr-capacity mining operations. In 1997, the company also completed a treatment plant to recover up to 25,000 t/yr of filler-grade barite from an accumulated resource of 500,000 t of barite slimes.

**Boron.**—Etibank increased run-of-mine boron production to 2.6 Mt in 1997 compared with 2.4 Mt in 1996 and 1.8 Mt in 1995. Etibank produced a significant proportion of the world's boron.

**Cement.**—Rumeli Çimento Sanayi ve Ticaret A.Ö. acquired Ergani Çimento San. Tic. A.Ö. from the Privatisation High Council for \$46.7 million. Bids for Kurtlan Çimento San. Tic. A.Ö. were not accepted, leaving it as the only remaining Government-owned cement plant. The Government had owned 24 cement plants prior to the divestments beginning in 1989.

The Set Group reorganized its Turkish cement operation, combining Set Ankara Çimento Fabrikası, Set Balıkesir Çimento San. ve Tic. A.Ö., and Set Trakya Çimento Fabrikası to form Set Çimento Sanayi ve Ticaret A.Ö. Set increased its interest in Set Afyon Çimento San. ve Tic. A.Ö. from 53% to 73%. Also in 1997, the Set Group discontinued the production of clinker at Set Anadolu Çimentoralı Ticaret A.Ö. in Kartal, 20 km east of İstanbul, and installed a 700,000-t/yr crushing plant at its Ambarlı marine terminal.

**Clay.**—Kale Madencilik Endüstriyel Hammaddeleri San. ve Tic. A.Ö. commissioned a 40,000-t/yr kaolin processing plant. Kale Madencilik was primarily an exporter of ceramic raw materials with an annual raw clay production capacity of about 2.5 Mt.

**Feldspar.**—Esan Eczacıbaşı Endüstriyel Hammaddeleri San. ve Tic. A.Ö. installed an additional sodium feldspar flotation unit. The company had a crushing capacity of about 530,000 t/yr. Kale Madencilik had a production capacity of 400,000 t/yr of sodium feldspar in addition to 20,000 t/yr of potassium feldspar. During 1997, Kaltun Madencilik Ticaret A.S. added new drying, screening, and magnetic separation units to its plant. Matel Hammaddeleri San. ve Tic. A.Ö., Toprak Madencilik, and four other companies also produced feldspar in Turkey (Bozdoğan, 1997).

**Glass.**—A major producer of glass products was the Sisecam Group, which accounted for about 1.5% of the world's glass supply (Sims, 1997). The Group included Cami Madencilik A.Ö., a mining company; Soda Sanayii A.Ö., a soda ash/chromium chemicals producer; three flat glass producers; two glass container companies; three glassware producers; and a cast iron company. The company continued a modernization and capacity expansion program in 1997, with the renovation of the Number 1 float line at Trakya Cam Sanayii and the installation of a second furnace at the Mersin glassware plant of Pasabachçe Cam San. ve Tic. A.Ö. The Group's Anadolu Cam Sanayii operation, plant

Number 10 was rebuilt, and a new glass plant was commissioned. Total glass production capacity for the company was 1.4 Mt at yearend. The company exported primarily to Europe (57% of the company's production) and the Far and Middle East (22%).

**Magnesite.**—Despite the drop in Turkey's magnesite production and the cancellation of the November 1996 privatization tender of Konya Krom Magnezit Tu<sup>TM</sup>la Sanayii A.Ö. after the Government received only one bid for the company, there was a burst of activity in the raw magnesite operations sector. Comag Continental Madencilik Sanayii Tic. A.Ö. began commercial operations at its \$3 million, 120,000-t/yr raw magnesite preparation plant in EskiÖehir. Plant feed was to be supplied by the Kumbet-EskiÖehir Mines. Kümas-Kütahya Manyezit Isletmeleri A.Ö. continued the installation of a crushed magnesite screening operation with five sizers being installed in mid-1997.

**Soda Ash.**—Soda Sanayii A.Ö., a member of the Sisecam glass group, increased its soda ash production capacity to 633,000 t/yr from 613,000 t/yr in 1997. The company planned to complete the production capacity expansion to 750,000 t/yr in 1998.

### *Mineral Fuels*

Although the Government has been promoting the consumption of natural gas as a clean-burning substitute for lignite, Turkish natural gas reserves were considered to be inadequate to supply demand, estimated to be from 6 billion to 8 billion cubic meters per year of natural gas (Middle East Economic Digest, 1995). Turkey has been importing about 6 billion cubic meters per year of natural gas from Russia via a pipeline through Bulgaria, Romania, and Ukraine, but the amount of gas supplied by this route also was considered to be insufficient to meet long-term demand, which was expected to increase significantly. In 1997, Turkey signed an agreement to import an additional 24 billion cubic meters per year from Russia for 25 years and agreed to import 3 billion cubic meters per year from Turkmenistan.

Turkey was importing LNG from Algeria and Australia via the 6-billion-cubic-meter-per-year-capacity LNG storage and regasification plant at Marmaraere-Hisi. Botas had contracted to import LNG from Nigeria and natural gas from Iran, Egypt, Qatar, and Yemen, primarily under long-term contracts starting in 1999.

With 631 active wells, TPAO accounted for about 77% of domestic oil production (Türkiye Petrolleri Anonim Ortaklı-2, 1998, Petroleum activities in Turkey, accessed February 1, 1999, at URL <http://www.tpao.gov.tr/rprte/activities.htm>). Most of Turkey's oil exploration and production were in the southeastern region where the armed rebel Kurdish Workers Party was operative. In 1997, TPAO drilled about 43 wells, of which 2, Lilan-1 and EskitaÖ-1 in the Adlyaman Region, were field discoveries. Other operators drilled an additional 12 wells in Turkey. TPAO brought the Kuzey Marmara natural gas field, its first offshore gasfield, on-stream in October. The five-well platform was in 43 meters of water.

About 138 million barrels per year (Mbb/yr) of Iraqi oil was exported through Turkey's Ceyhan oil terminal in 1997 under the United Nations oil-for-food exchange program (Resolution 986).

In addition to normal imports, an estimated 11 Mbb/yr of diesel fuel was reportedly brought across the border from Iraq into Turkey at Habur (Washington Times, 1995).

### **Reserves**

Turkey's mineral inventory is diverse and large, but many of the deposits, especially for metallic minerals, are small by world standards (Erseçen, 1989). Resources of metallic commodities minable by large-scale methods are known for bauxite, chromite, copper and copper-zinc, gold, iron, and silver. Turkey is better known for its deposits of industrial minerals, most significant of which are barite, boron, clays, limestone and marble, magnesite, perlite, pumice, strontium, and trona. The country has large lignite reserves. The crude oil reserves of about 330 million barrels were hosted in a large number of small fields. Natural gas reserves were estimated at 9.3 billion cubic meters (Turkish Daily News, July 28, 1998, Turkey's oil reserves diminish, accessed July 29, 1998, at URL [http://www.turkishdailynews.com/free\\_daily\\_tdn/latest/econ.htm](http://www.turkishdailynews.com/free_daily_tdn/latest/econ.htm)).

### **Infrastructure**

Turkey's extensive road and railroad infrastructure was heavily used for the transport of mineral commodities. Turkey had 2,092 km of crude petroleum and 2,321 km of refined petroleum products pipelines. The longest stretch of pipeline was the 641-km twin line connecting Iraq with the Ceyhan oil-loading facility at Yumurtalı. Ceyhan was also the terminus for a 447-km pipeline to the refinery in Kızılkale. The oil port at Dörtöyöl, 28 km north of İskenderun, was the terminus of a 494-km pipeline from the oil refinery at Batman, with shorter spurs from this line to the oilfields near Batman (Öelmo) and around Adlyaman. Turkey had about 900 km of natural gas pipeline, which was used to import natural gas from Russia.

The new Russian natural gas supplies were to be transported via a \$13.5 billion, 1,200-km pipeline to be built through the Black Sea from Izobilnoye, Russia, to landfall at Samsun, Turkey, and on to Ankara. Two Turkmen gas pipeline routes were proposed—one through Iran, and the other through Azerbaijan.

Turkey had many ports capable of handling mineral commodity shipments. Major coal-importing ports included İskenderun and Ereli. Chromite was shipped from various Anatolian ports on the Marmara coast, as well as from Antalya and İskenderun, which handled all Turkey's ferrochrome exports. Iron ore, steel, and steel scrap imports also were handled at many ports, particularly Aliaa, Ereli, İskenderun, and Mersin and at various sites in the İstanbul-İzmit area. Turkey's boron minerals and chemicals were exported from Bandırma. Copper concentrates, ore, and blister were shipped from Samsun, and copper concentrates, from Hopa, Rize, and İskenderun. Marine terminals at Ambarlı were used to ship cement.

Because electrical power demand has been growing at an estimated 8% to 10% per year, Turkey was in the process of greatly expanding its electrical generating capacity. The Government planned to privatize existing hydroelectric and thermal powerplants through operation and maintenance leases and to have new hydroelectric, nuclear, and thermal powerplants

built by the private sector. In October 1997, the Government leased eight thermal plants with an electrical generating capacity of 4,269 megawatts for \$1.24 billion. The leases were under review by the Danişay, the administrative court that rules on privatization and build-own-transfer power station contracts.

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TABLE 1  
TURKEY: PRODUCTION OF MINERAL COMMODITIES 1/

(Metric tons unless otherwise specified)

Commodity	1993	1994	1995	1996	1997 e/
<b>METALS</b>					
<b>Aluminum:</b>					
Bauxite 2/	538,439	445,020	232,278	544,513	373,397 3/
<b>Alumina:</b>					
Gross weight	169,195	155,299	171,978	159,298	164,333 3/
Al content	88,195	80,952	91,000 e/	83,000 e/	86,000
Metal, smelter	58,503	59,750	61,514	60,000 e/	62,019 3/
<b>Antimony:</b>					
<b>Ore, mine output:</b>					
Gross weight	2,100	1,415	7,856	5,384 r/	5,000
Sb content	111	75	416	285 r/	250
<b>Concentrates:</b>					
Gross weight	93	90 e/	1,163	700 r/	500
Sb content	59	55 e/	291	175 r/	125
Cadmium	31	22	23 e/	42 r/	45
<b>Chromite:</b>					
Gross weight (34% to 43% chromic oxide)	767,313	1,270,431	2,080,043	1,279,032 r/	1,863,878 3/
Salable product	642,376	501,851	1,460,000 e/	1,171,000 e/	1,300,000
<b>Copper:</b>					
<b>Mine output (exclusive of pyrite):</b>					
Gross weight	3,343,532	3,346,490	3,185,628	3,518,754 r/	3,181,515 3/
Cu content of ore	39,163	34,902	40,085	33,792 r/	35,000
Cu content of pyrite e/	350	350	2,100	3,800 r/	2,500
<b>Concentrates (exclusive of pyrite):</b>					
Gross weight	140,165	139,919	141,000 e/	133,350 r/	130,000
Cu content	23,879	28,891	24,000 e/	29,580 r/	25,000
<b>Metal:</b>					
Smelter output (primary + secondary)	39,638	30,400	33,700 e/	38,600 e/	32,491 3/
Refined e/	92,400	82,700	98,500	120,000	120,000
Gold, byproduct of base metals refining e/ 4/ kilograms	1,110	996	1,200	1,000 r/	1,000
<b>Iron and steel:</b>					
<b>Iron ore:</b>					
Gross weight thousand metric tons	6,480	5,755	4,931	6,404	6,321 3/
Fe content e/ do.	3,324	3,148	2,750	3,500	3,500
<b>Metal:</b>					
<b>Pig iron and ferroalloys:</b>					
Ferrochromium	90,030	97,585	94,251	101,450	95,000
Ferrosilicon	4,680	4,930	4,900	4,460 r/	4,500
Pig iron and other ferroalloys thousand metric tons	4,353	4,604	4,363	5,263	5,567 3/
Steel, crude including castings do.	11,838	12,074	12,744	13,382	13,644 3/
<b>Lead:</b>					
<b>Mine output, Pb and Pb-Zn ores:</b>					
Gross weight	179,731	232,140	253,100	234,541 r/	261,968 3/
Pb content	11,448	11,158	10,376	10,971 r/	12,000
<b>Concentrates:</b>					
Gross weight	8,021	5,683	5,318	4,494 r/	6,000
Pb content	2,571	1,279	1,196	3,140 r/	3,500
Metal, refined e/	5,000	5,100	4,000	4,000	7,000
Manganese ore, gross weight 5/	37,491	34,500	37,000 r/	37,000 e/	35,000
Silver, mine output, Ag content e/ 6/ kilograms	103,000	65,000	70,000	70,000	90,200
<b>Zinc:</b>					
<b>Mine output, Zn and Pb-Zn ore:</b>					
Gross weight	231,756	297,252	73,110	104,819 r/	91,754 3/
Zn content	20,500 e/	26,300 e/	9,118	14,921 r/	12,500
<b>Concentrates: e/</b>					
Gross weight	23,000	30,000	9,760	9,981 r/ 3/	9,200
Zn content	8,000	10,000	5,774 3/	5,529 r/ 3/	5,000
Metal, smelter, primary	18,500	18,567	17,050	22,392 r/	35,000

See footnotes at end of table.

TABLE 1--Continued  
TURKEY: PRODUCTION OF MINERAL COMMODITIES 1/

(Metric tons unless otherwise specified)

Commodity	1993	1994	1995	1996	1997 e/	
<b>INDUSTRIAL MINERALS</b>						
Aluminum sulfate (alunite)	13,500	12,165	9,763	6,625 r/	6,600	
Barite, run of mine	118,367	116,220	153,719	104,872 r/	140,872 3/	
<b>Boron minerals:</b>						
Run of mine	1,892,356	2,092,032	1,768,919	2,400,635 r/	2,606,267 3/	
Concentrates	1,079,135	1,139,980	1,143,994	1,446,697 r/	1,600,000	
Cement, hydraulic	thousand metric tons	31,241	29,493	33,153	35,214	36,035 3/
<b>Clays:</b>						
Bentonite	456,597	516,187	602,499	515,452 r/	500,000	
Kaolin	210,356	179,775	489,635	449,561 r/	500,000	
Other	665,351	956,012	1,649,192	6,405,377 r/	6,400,000	
Emery	10,988	12,000	14,149	11,092 r/	12,000	
Feldspar, run of mine	366,166	502,608	760,250	910,814 r/	900,000	
Fluorspar	4,000 e/	6,671	8,873	4,828 r/	5,000	
Glass, crude e/	thousand metric tons	1,300	1,300 r/	1,150 r/	1,133 r/ 3/	1,369 3/
Graphite, run of mine e/	20,000	20,000	20,000	20,000	15,000	
Gypsum, other than that for cement	492,705	596,962	596,967	754,277 r/	700,000	
Lime 7/	thousand metric tons	1,767	1,800 e/	897	1,023 r/	1,000
Magnesite, run of mine	525,640	1,279,614	1,928,064	2,339,138 r/	1,409,768 3/	
Meerschaum	kilograms	3,050	2,350	1,000	500	400
Nitrogen, N content of ammonia	325,800	350,000 e/	366,000	518,800 e/	558,000 e/	
Perlite, run of mine	147,864	164,582	171,058	157,580 r/	160,000	
Phosphate rock (salable product)	77,671	--	--	--	--	
Pumice 8/	1,224,114	947,174	1,125,820	774,000 r/	800,000	
Pyrites, cupreous, gross weight	50,000 e/	50,000 e/	307,992	538,140 r/	350,000	
Silica sand, gross weight 9/	thousand metric tons	506	741	755	779	1,253 3/
<b>Sodium compounds:</b>						
Salt, NaCl, all types	do.	1,526	1,353	1,444	2,068 r/	2,000
Soda ash (trona) e/	do.	385	385	385	400	500 3/
Sodium sulfate, concentrates	170,680	307,049	314,192	328,953 r/	300,000	
<b>Stone:</b>						
Dolomite	376,518	378,004	425,877	981,683 r/	900,000	
Limestone, other than for cement	thousand metric tons	10,852	11,000 e/	20,496	40,456 r/	40,000
Marble e/	do.	730	750	272	1,287 r/	1,500
Quartzite	1,205,694	1,350,299	1,364,558	2,807,279 r/	2,800,000	
<b>Strontium minerals, celestite: e/</b>						
Run of mine	68,000	45,000	50,000	50,000	50,000	
Concentrates	43,700	25,000	30,000	30,000	30,000	
<b>Sulfur: e/</b>						
Native, other than Frasch	17,400	16,673 3/	17,000	--	--	
S content of pyrites	26,758 3/	27,000	163,000 r/	255,000 r/	186,000	
<b>Byproduct:</b>						
Petroleum	21,000 3/	25,000	26,000	25,000	20,000	
Other	5,000	5,000	20,000 r/	25,000 r/	20,000	
Total	70,158	73,673	226,000 r/	305,000 r/	226,000	
Talc e/	4,000	4,000	4,000	4,000	4,000	
<b>MINERAL FUELS AND RELATED MATERIALS</b>						
Asphalt, natural	309,348	108,364	219,848	126,751	125,000	
Carbon black e/	34,878 3/	35,000	39,975	39,273 r/	39,000	
<b>Coal:</b>						
Hard coal, run of mine	thousand metric tons	4,609	4,211	3,377	3,582 r/	4,366 3/
Lignite, run of mine	do.	51,359	55,038	56,031	57,532 r/	58,168 3/
Coke and semicoke	do.	2,899	2,799	3,021	2,297 r/	3,186 3/
<b>Gas:</b>						
Natural, marketed	thousand cubic meters	199,739	198,630	181,515	203,967	250,804
Coal, manufactured e/	do.	35,000	35,000	35,000	37,000	35,000

See footnotes at end of table.

TABLE 1--Continued  
TURKEY: PRODUCTION OF MINERAL COMMODITIES 1/

(Metric tons unless otherwise specified)

Commodity	1993	1994	1995	1996	1997 e/	
<b>MINERAL FUELS AND RELATED MATERIALS--Continued</b>						
<b>Petroleum:</b>						
Crude	thousand 42-gallon barrels	27,871	26,399	24,124	25,015 r/	24,509 3/
<b>Refinery products:</b>						
Liquefied petroleum gas	do.	8,197	8,503	9,185	9,580	9,265 3/
Gasoline	do.	27,808	29,521	31,746	30,950	33,607 3/
Naphtha	do.	10,617	10,761	12,110	13,227 r/	13,473 3/
Jet fuel	do.	9,015	10,380	12,119	11,324	13,477 3/
Kerosene	do.	1,282	819	605	726	560 3/
Distillate fuel oil 10/	do.	54,103	55,197	59,556	55,838	55,249 3/
Lubricants e/	do.	2,000	2,000	2,000	2,000	800
Residual fuel oil	do.	57,981	50,640	52,043	49,459	48,012 3/
Asphalt	do.	7,812	5,389	5,940	7,233	8,029 3/
Unspecified e/ 11/	do.	6,700	6,700	6,700	4,000	2,500
Total	do.	185,515	179,910	192,004	184,337 r/	184,972

e/ Estimated. r/ Revised.

1/ Table includes data available through January 7, 1998. Large quantities of construction materials (clay, sand and gravel) are quarried. Also quarried are basalt, diabase, granite, onyx, sandstone, serpentine, slate, and travertine for building stone and limestone and gypsum for cement manufacture; information is, however, inadequate to make estimates of output levels.

2/ Data are for public sector only. Data for private-sector production are not available, but production is believed to be approximately 30,000 metric tons per year.

3/ Reported figure.

4/ Data are estimated content of Turkish copper refinery tankhouse slimes.

5/ Does not include manganiferous iron ore from the Deveci Mine, production of which amounts to several hundred thousand tons per year and has a manganese content of 3% to 5%.

6/ Includes estimated content of base metals refinery tankhouse slimes.

7/ Data are lime produced for steel production and do not include the widespread artisanal production of lime for whitewash and sanitation purposes.

8/ Turkish pumice production is officially reported in cubic meters and has a density reported to range from 0.5 to 1.0 metric ton per cubic meter. Values in this table have been converted by using 1 cubic meter=0.75 ton.

9/ Previously reported as estimated production of washed silica sand, in metric tons: 1993--350,000; 1994--415,000; 1995--310,000; and 1996--385,000.

10/ Diesel fuel and special heating oil.

11/ Includes refinery fuel and losses.



TABLE 2  
TURKEY: STRUCTURE OF THE MINERAL INDUSTRY IN 1997

(Thousand metric tons unless otherwise specified)

Major commodities	Major operating companies and major equity owners <sup>1,2</sup>	Location of main facilities	Annual capacity
Aluminum and bauxite	Etibank Milas Boksit Şirketleri Müdürlüğü (Etibank, 100%)	Open pit mine at Milas, 127 kilometers southwest of Denizli	150 diaspore.
Do.	Etibank Seydişehir Alüminyum Tesisleri Müessesesi Müdürlüğü (Etibank, 100%)	Do-ankuzu and Mortaşa bauxite mines at Madenli, 25 kilometers south of Seydişehir	450 bauxite.
Do.	do.	Alumina refinery and aluminum smelter at Seydişehir	200 alumina, 60 aluminum.
Barite	Barit Maden Türk A.Ş.	Mines near Sivas and Adana	220 ground barite. <sup>3</sup>
Do.	Baser Maden Sanayi ve Ticaret A.Ş.	Mines at Isparta and Konya	90 ground barite.
Do.	Emas Endüstri Mineralleri A.Ş.	Mine at Muğla	100 ground barite.
Do.	Etibank Beyşehir Barit Şirketi (Etibank, 100%)	Mine at Beyşehir, 72 kilometers southwest of Konya	70 barite ore.
Do.	Antalya Elektrometalurji Sanayi Şirketi Müessesesi Müdürlüğü (Ado Mining, 100%)	Grinding plant at Antalya	100 ground barite.
Do.	Polbar Barit Endüstrisi A.Ş.	Mine near Antalya	120 ground barite.
Boron minerals	Etibank Bigadiç Madencilik Şirketleri (Etibank, 100%)	Bigadiç, 38 kilometers southeast of Balıkesir	400 colemanite concentrate, 128 ulexite concentrate.
Do.	Etibank Emet Kolemanit Şirketleri (Etibank, 100%)	Espey and Hisarcık Mines near Emet, 62 kilometers west-southwest of Kütahya	500 colemanite concentrate.
Do.	Etibank Kestelek Kolemanit Şirketleri (Etibank, 100%)	Kestelek, 80 kilometers west-southwest of Bursa	100 colemanite concentrate.
Do.	Etibank Kırka Boraks Şirketleri Müessesesi Müdürlüğü (Etibank, 100%)	Kırka, 61 kilometers north of Afyon	600 tincal concentrate.
Cement	Adana Çimento Sanayii T.A.Ş. (Ordu Yardımlaşma Kurumu Genel Müdürlüğü, 48.74%)	12 kilometers east of Adana	3,643.
Do.	Akçansa Çimento Sanayi ve Ticaret A.Ş. (Sabancı Holdings Group, 50%; Cimenteries CBR S.A., 50%)	Büyükçekmece, 30 kilometers west of İstanbul and Mahmutiye, 40 kilometers south of Çanakkale	6,000.
Do.	Aslan Çimento A.Ş. (Lafarge Coppée, 86%)	Darıca, 40 kilometers southeast of İstanbul	1,600.
Do.	Batı Anadolu Çimento Sanayii A.Ş.	Bornova, 10 kilometers northeast of İzmir	1,800.
Do.	Bolu Çimento Sanayii A.Ş.	Çaydurt	2,100.
Do.	Çimento Sanayi ve Ticaret A.Ş. (Sabancı Holdings A.Ş.)	Mersin and Kayseri	2,700.
Do.	Nuh Çimento Sanayii A.Ş.	Near Hereke 30 kilometers west of Zmit	3,750.
Do.	Rumeli Çimento Sanayi ve Tic. A.Ş.	Bartın, Ergani, Gaziantep, Ladik, Trabzon, and Vanlırfa plants	5,000 <sup>e</sup>
Do.	OYAK Group	4 plants	2,280.
Do.	Set Çimento Sanayi ve Ticaret A.Ş. (Soc. des Ciments Français, 100%)	Ankara, Balıkesir and Trakya plants	2,980.
Do.	Türkiye Çimento ve Toprak Sanayii T.A.Ş. (ÇİTOSAN) (Government, 100%) <sup>d</sup>	Kurtlan	510.
Do.	Yibitola Lafarge Group (Yibitola Holdings A.Ş., 50%; Lafarge Coppée, 50%)	Ankara, Çorum, Sivas and Yozgat plants	2,473.

See footnotes at end of table.

TABLE 2—Continued  
TURKEY: STRUCTURE OF THE MINERAL INDUSTRY FOR 1997

(Thousand metric tons unless otherwise specified)

Major commodities	Major operating companies and major equity owners <sup>1,2</sup>	Location of main facilities	Annual capacity
<b>Chromium:</b>			
Chromite ores and concentrates	Etibank Çark Kromlazma İşletmesi Müessesesi Müdürlüğü (Etibank, 100%)	Mines at Güleman, 40 kilometers southeast of Elazığ	150 lump ore, 70 concentrate.
Do.	Etibank Üçköprü Maden İşletmesi Müessesesi Müdürlüğü (Etibank, 100%)	8 mines in Göcek District, west of Fethiye	15 lump ore, 30 concentrate.
Do.	Birlik Madencilik Ticaret ve Sanayi A.Ş.	Mines in Kayseri, Erzurum, and Erzincan Provinces	240 lump ore.
Do.	Akpaş Madencilik ve Paz. ve Ticaret A.Ş.	Mines in Erzurum, Erzincan, and Kayseri Provinces	200 lump ore, 70 concentrate.
Do.	Bilfer Madencilik A.Ş.	Mines in Kayseri and Sivas Provinces	350 lump ore.
Do.	Türk Maden İşletmesi A.Ş.	Mines at Köyceğiz, 56 kilometers northwest of Fethiye, and at Eskişehir	24 lump ore, 88 concentrate.
Do.	Dedeman Madencilik Turizm Sanayi ve Ticaret A.Ş.	Kayseri Province	120 lump ore.
Do.	Egmetal Madencilik A.Ş.	Mines in Bursa, Mersin, Eskişehir, and Erzurum Provinces	250 lump ore, 40 concentrate.
Do.	Pinar Madencilik ve Turizm A.Ş.	Mines in Kayseri and Adana Provinces	25 lump ore, 14 concentrate.
Do.	Akdeniz Madencilik Ticaret ve Sanayi A.Ş.	Adana	25 lump ore. <sup>e</sup>
Do.	Other private producers (9)	Mines in Köyceğiz, Bursa, Adana, Şkenderun, and Eskişehir Provinces	114 lump ore, 12 concentrate.
Ferrochrome	Etibank Elazığ-Ferrokrom İşletmesi (Etibank, 100%)	Ferrochrome smelter, 50 kilometers east of Elazığ	150 high-carbon ferrochrome.
Do.	Etibank Antalya Elektrometalurji Sanayi İşletmesi Müessesesi Müdürlüğü (Etibank, 100%)	Ferrochrome smelter at Antalya	11 low-carbon ferrochrome.
<b>Coal:</b>			
Hard coal	Türkiye Taş Kömürü Kurumu Genel Müdürlüğü (TTK) (Government, 100%)	Coalfields near Zonguldak	7,000. <sup>e</sup>
Lignite	Türkiye Kömür İşletmeleri Kurumu (TKİ) (Government, 100%)	Mines throughout Turkey	50,000. <sup>e</sup>
Do.	Private-sector producers	About 200 small mines throughout Turkey	9,000. <sup>e</sup>
Copper	Etibank Küre Bakır Pirit İşletmesi Müessesesi Müdürlüğü (Etibank, 100%)	Open pit copper and pyrite mine at Küre, 14 kilometers south of Şebolu	55 copper concentrate, 460 pyrite concentrate.
Do.	Çayeli Bakır İşletmeleri A.Ş. (Inmet Mining Corp., 49%; Etibank, 45%; Gama Endüstri, 5%; and Gama Holding, 1%)	Çayeli Mine, 85 kilometers east of Trabzon	29 copper concentrate.
Do.	Karadeniz Bakır İşletmeleri A.Ş. (Etibank, 99.97%) <sup>4</sup>	Çakmakkaya mining operations and concentrator at Murgul near Artvin	132 copper concentrate 130 pyrite concentrate.
Do.	do.	Damar mining operation and concentrator at Murgul	37 copper concentrate, 35 pyrite concentrate. <sup>3</sup>
Do.	do.	Smelter at Murgul	11 blister copper. <sup>3</sup>
Do.	do.	Smelter and acid plant at Samsun	39 blister copper.
Do.	Sarkuysan Elektrolitik Bakır Sanayii ve Ticaret A.Ş.	Gebze, 40 kilometers west of Izmit	70 refined copper.
Do.	Rabak Elektrolitik Bakır ve Mam. A.Ş.	İstanbul	35 refined copper.
Do.	Hes Kablo	Kayseri	31 refined copper. <sup>5</sup>

See footnotes at end of table.

TABLE 2—Continued  
TURKEY: STRUCTURE OF THE MINERAL INDUSTRY IN 1997

(Thousand metric tons unless otherwise specified)

Major commodities	Major operating companies and major equity owners <sup>1,2</sup>	Location of main facilities	Annual capacity
<b>Iron and steel:</b>			
Iron ore	Türkiye Demir ve Çelik İşletmeleri Genel Müdürlüğü (TDÇİ) (Government, 100%)	Divriği Mines, 115 kilometers northwest of Elazığ	3,000 ore; <sup>e</sup> 1,100 pellets; 600 concentrate; 500 lump ore.
Do.	do.	Deveci Mine at Hekimhan, 112 kilometers west of Elazığ	750 ore. <sup>e</sup>
Do.	Bilfer Madencilik A.Ş.	Mines near Divriği	1,500 ore.
Steel	Ereğli Demir ve Çelik Fabrikaları T.A.Ş. (Erdemir) (Government, 51.66%; <sup>4</sup> others, 48.34%)	Ereğli	3,000 crude steel.
Do.	Türkiye Demir ve Çelik İşletmeleri Genel Müdürlüğü (TDÇİ) (Government, 100%) <sup>4</sup>	İskenderun	2,200 crude steel.
Do.	Karabük Demir ve Çelik A.Ş. (Employees, 52%)	Karabük	1,000 crude steel.
Do.	Çolakolu Metalurji A.Ş.	Gebze, 40 kilometers west of İzmit	650 crude steel, 1,050 semifinished steel.
Do.	Çukurova Çelik Endüstrisi A.Ş.	Aliağa, 40 kilometers north-northeast of İzmir	2,000 semifinished steel.
Do.	Diler Demir Çelik Endüstri ve Ticaret A.Ş.	İzmit	310 semifinished steel.
Do.	Ekinçiler Demir ve Çelik Sanayi A.Ş.	Arc furnace and rolling mill at İskenderun. Rolling mills at Adana, Karabük, and near İskenderun (Payas)	600 semifinished steel.
Do.	Habaş Sınai ve Tıbbi Gazlar Üstisi A.Ş.	Aliağa	Do.
Do.	İzmir Demir Çelik Sanayi A.Ş. (İDÇ) (İBakansi, 60%)	do.	550 semifinished steel.
Do.	Kroman Çelik Sanayi A.Ş.	Gebze, 40 kilometers west of İzmit	420 semifinished steel.
Do.	Metaİzmir Metalurji Fabrikası T.A.Ş.	İzmir	450 special and semifinished steel.
Do.	Sivas Demir-Çelik İşletmeleri A.Ş. (Government, 99.98%) <sup>4</sup>	Sivas	400 semifinished steel. <sup>3</sup>
Magnesite	Konya Krom Magnezit Tünel Sanayii A.Ş. (Government, 100%) <sup>4</sup>	Konya	40 dead-burned magnesite, 38 bricks, 20 mortar.
Do.	Kümaş Kütahya Manyezit İşletmeleri A.Ş. (Zeytinolu Holding A.Ş., 97.44%)	Kütahya	144 dead-burned magnesite, 46 bricks.
Do.	Comag Continental Madencilik Sanayii Tic. A.Ş.	Mines at Tavşanlı, 40 kilometers northwest of Kütahya, near Bursa, and near Eskişehir. Plant at Eskişehir.	100 dead-burned magnesite.
Do.	Magnesit A.Ş. (Veitscher Magnesitwerke AG, Austria)	Mine at Marglı, 50 kilometers northeast of Eskişehir	80 dead-burned magnesite.
<b>Petroleum and natural gas:</b>			
Crude petroleum thousand 42-gallon barrels	Türkiye Petrolleri Anonim Ortaklığı (TPAO) (Government, 100%)	Production from 41 fields, mostly in Diyarbakır, Gaziantep, and Siirt Provinces	19,500. <sup>e</sup>
Do.	do.	Perenco Plc.	Production from 27 fields in Diyarbakır and Siirt Provinces
Do.	do.	Other producers (private sector and in joint venture with TPAO)	Production from 27 fields, mostly in Diyarbakır, Gaziantep, and Siirt Provinces

See footnotes at end of table.

TABLE 2—Continued  
TURKEY: STRUCTURE OF THE MINERAL INDUSTRY IN 1997

(Thousand metric tons unless otherwise specified)

Major commodities		Major operating companies and major equity owners <sup>1,2</sup>	Location of main facilities	Annual capacity
Petroleum and natural gas—Continued:				
Refined petroleum	do.	Türkiye Petrol Rafinerileri A.Ş. (TÜPRAŞ) (Government, 100%) <sup>4</sup>	Refinery at Batman	7,700 crude input.
Do.	do.	do.	Refinery at Aliağa	70,000 crude input.
Do.	do.	do.	Refinery at İzmit	91,000 crude input.
Do.	do.	do.	OAR refinery at Kızıldere	35,000 crude input.
Do.	do.	Anadolu Tasfiyehanesi A.Ş. (ATAŞ)	Refinery at Mersin	30,800 crude input.
Natural gas thousand cubic meters		Türkiye Petrolleri Anonim Ortaklığı (TPAO) (Government, 100%)	Çamurlu Field, Siirt Province	25,000.
Do.	do.	do.	Demirörenköy Field in Thrace	80,000.
Do.	do.	do.	Hamitabat Field in Thrace	100,000.
Silver	kilograms	Etibank 100. Yıl Gümüş Madeni İşletmeleri Müessesesi Müdürlüğü (Etibank, 100%)	Aktepe Mine near Gümüşköy, 20 kilometers west-northwest of Kütahya	105,000. <sup>e</sup>
Strontium		Barit Maden Türk A.Ş.	Mine at Akkaya, 25 kilometers south of Sivas	100 celestite concentrate. <sup>e</sup>
Sulfur		Keçiözümlü Kükürt İşletmesi Müessesesi Müdürlüğü (Etibank, 100%)	Mine at Keçiözümlü, 30 kilometers northwest of Isparta	55.
Do.		Türkiye Petrol Rafinerileri A.Ş. (TÜPRAŞ) (Government, 100%) <sup>4</sup>	Recovery plants at company oil refineries	23.
Zinc		Çayeli Bakır İşletmeleri A.Ş. (Inmet Mining Corp., 49%; Etibank, 45%; Gama Endüstri, 5%; Gama Holding, 1%)	Çayeli Mine, 85 kilometers east of Trabzon	36 zinc concentrate.
Do.		Çinko Kurumun Metal Sanayii A.Ş. (ÇANKUR) (Kayseri Maden Metal Tic. A.Ş., 85%)	Zinc-lead smelter at Kayseri	34 zinc, 125 tons cadmium.

<sup>e</sup>Estimated.

<sup>1</sup>Turkish private-sector ownership unless otherwise noted.

<sup>2</sup>Etibank refers to the 100% Government-owned group administered by Etibank Genel Müdürlüğü.

<sup>3</sup>Facility was idle in 1997.

<sup>4</sup>Shares are held by the Public Participation Fund Administration for eventual privatization.

<sup>5</sup>Refined copper output is dedicated to the company's cable and wire operations.