

MINING ACTIVITIES IN TURKEY DURING 1959

I. MINES OPERATED BY ETİBANK *

Etibank was established on June 14, 1935 under the Law No. 2805 and set to work as of October 23, 1935.

The original capital was only 20,000,000 Turkish Liras which gradually increased, along with the Bank's activities and responsibilities until, on July 9, 1953, it reached 500,000,000 Turkish Liras.

At present Etibank owns and operates the following mines and ore refining installations:

1. Ergani Copper Mine
2. Murgul Copper Mine
3. Eastern Chromite Mine
4. Keçiborlu Sulphur Mine
5. Keban Lead Mine
6. Küre Pyrite Mine
7. Üçköprü Chromite Mine
8. Emet Colemanite Mine
9. Halıköy Mercury Mine

The starting of the ferro-chrome industry in Turkey was also sponsored by Etibank and a company set up, with a 5,000,000 Turkish Liras capital, is scheduled to produce 8000 tons of ferro-chrome and 4000 tons. of calcium carbide annually.

An important source of foreign exchange is the country's copper output. This output increased from 11,284 tons (value : TL. 14,980,000) in 1949 to

Year	Copper production (tons)			Copper sold		Cost of labour (TL.)			Per man shift	
	Blister	Refined	Total	Tons	TL.	Average number of workers	Wages paid	Social aid		Total
1941	8,100	910	9,010	1,693	1,447,985	1,430	700,000	—	700,000	1.16
1945	7,649	1,895	9,544	2,197	2,347,150	1,404	875,786	430,000	1,305,786	2.79
1950	11,700	—	11,700	13,413	18,588,159	1,667	1,697,813	846,816	2,544,629	4.11
1951	13,096	1,084	14,180	10,200	27,376,273	1,552	1,951,852	870,180	2,822,032	4.86
1952	14,985	—	14,985	14,386	35,725,945	1,635	2,466,944	1,157,612	3,624,556	6.01
1953	14,695	260	14,955	19,235	36,859,964	1,698	2,472,648	1,235,683	3,708,331	6.38
1954	16,030	681	16,711	16,601	33,769,529	1,558	3,385,619	1,391,447	4,777,066	8.40
1955	15,166	1,851	17,017	17,146	43,732,541	1,575	3,792,821	1,520,513	5,313,334	9.08
1956	17,390	328	17,718	17,026	43,697,203	1,609	4,869,515	1,814,179	6,683,698	11.35
1957	15,299	2,720	18,019	17,812	26,511,179	1,584	5,346,001	1,624,083	6,970,084	11.65
1958	15,583	2,537	18,120	18,091	52,028,506	1,535	6,167,358	2,204,870	8,372,228	14.95
1959	15,030	1,191	17,021	20,056	117,468,864	1,526	6,360,295	2,656,023	9,016,318	17.78

Murgul Copper Mine

Year	Blister copper produced (tons)	Copper sold		Average number of workers	Cost of labour (TL.)			Per man shift
		Tonnage	Total value (TL.)		Wages paid	Social aid	Total	
1951	3,346	1,678	3,924,536	1,516	1,339,135	534,590	1,873,725	4.42
1952	8,345	7,140	18,232,334	1,532	1,571,863	851,340	2,423,203	5.29
1953	8,802	10,723	19,513,409	1,528	1,933,732	934,412	2,868,144	6.37
1954	8,502	8,146	17,467,745	1,610	2,217,143	1,200,519	3,417,662	7.82
1955	6,783	7,655	21,915,959	1,612	2,372,849	1,325,707	3,698,556	8.34
1956	7,015	6,310	14,131,603	1,669	3,098,900	1,582,784	4,681,684	10.13
1957	6,382	5,581	13,624,461	1,942	4,054,026	1,862,322	5,915,348	11.62
1958	4,410	5,102	8,066,443	1,883	4,243,121	2,265,677	6,508,798	13.78
1959	8,015	7,218	38,200,000	1,624	5,198,876	2,874,216	8,073,092	19.78

Eastern Chromite Mines

Year	Production run of mine and concentrate (tons)	Marketable chromite		Average number of workers	Cost of labour (TL.)			Per man shift
		Tonnage	Total value (TL.)		Wages paid	Social aid	Total	
1941	63,996	63,946	2,031,295	250	87,000	—	87,000	1.05
1945	89,869	40,141	2,863,391	392	347,662	115,000	462,662	3.46
1950	165,968	144,037	17,119,455	401	410,520	244,404	654,924	4.55
1951	159,623	156,245	17,644,556	563	553,030	346,572	899,602	4.67
1952	179,503	149,659	17,595,228	520	705,632	461,215	1,166,847	6.22
1953	174,244	182,012	24,223,917	550	799,324	501,644	1,300,968	6.38
1954	121,579	78,434	10,246,156	530	912,490	604,738	1,517,228	7.27
1955	173,150	184,019	22,996,802	600	1,172,700	770,700	1,943,400	7.75
1956	272,440	229,522	28,606,237	1,155	2,243,421	1,191,116	3,434,537	10.34
1957	313,910	202,190	27,204,150	1,403	4,414,596	1,609,488	6,024,084	11.76
1958	194,406	174,585	29,175,009	1,661	5,825,683	2,202,118	8,027,800	13.08
1959	109,301	143,899	45,485,326	955	3,445,734	1,784,937	5,200,671	12.92

Keçiborlu Sulphur Mine

Year	Sulphur produced (tons)	Sulphur sold		Average number of workers	Cost of labour (TL.)			Per man shift
		Tonnage	Total value (TL.)		Wages paid	Social aid	Total	
1941	1,951	3,930	455,598	282	129,000	—	129,000	1.19
1945	3,779	3,739	1,497,849	350	232,813	180,127	412,940	3.30
1950	6,002	4,715	1,365,771	339	314,390	102,324	416,714	3.88
1951	7,390	7,636	2,178,138	282	375,232	99,557	474,789	4.68
1952	8,368	8,154	2,186,168	286	479,468	159,555	639,023	6.26
1953	9,775	9,365	2,483,059	284	436,764	251,180	687,944	6.93
1954	10,000	9,373	2,385,118	285	462,434	199,207	661,641	6.90
1955	11,500	9,678	2,513,446	297	618,559	259,037	877,596	8.26
1956	13,900	16,338	5,582,711	297	753,078	318,276	1,071,354	10.09
1957	13,100	12,367	3,973,927	342	789,857	384,306	1,184,163	9.95
1958	12,825	12,509	4,241,390	336	1,133,362	485,078	1,618,440	13.62
1959	13,385	11,583	1,753,683	373	1,535,776	824,928	2,360,704	18.17

Keban Lead Mine

<i>Year</i>	<i>Production (tons)</i>		<i>Average number of workers</i>	<i>Cost of labour (TL.)</i>			<i>Per man shift</i>
	<i>Lead concentrate</i>	<i>Zinc concentrate</i>		<i>Wages paid</i>	<i>Social aid</i>	<i>Total</i>	
1954	1,577	200	205	273,177	73,787	346,964	5.96
1955	1,588	1,517	197	252,650	138,257	390,907	7.22
1956	1,502	1,287	239	356,601	116,085	472,686	7.17
1957	1,355	1,129	245	408,098	102,309	510,407	7.87
1958	1,205	1,773	251	455,306	129,875	585,181	8.41
1959	1,070	2,129	257	533,726	193,107	746,833	7.60

22,530 tons (value: TL. 80,361,187) in 1958.

At the copper works, salaries paid out to workers amounted to TL. 2,473,103 in 1949, whereas in 1958 this was boosted up to TL. 9,577,456.

During the same two years, namely 1949 and 1958, annual output at the Eastern Chromites went up from 172,689 tons (value: TL. 19,780,347) to 194,466 tons (value: TL. 24,869,710) respectively. Likewise salaries paid showed an increase from TL. 414,490 to TL. 5,825,683.

The 1958 output of marketable sulphur at the Keçiborlu Sulphur Mine

and Refining Plant reached 12,825 tons (value: TL. 4,241,390) where the establishment can contemplate selling abroad. The figure in 1949 was only 3043 tons.(value: TL. 1,519,549). During the same period of time salaries paid to workers went up from TL. 235,170 to TL. 1,256,940.

The planning for the extension of Ergani Copper Works, which required a TL. 140,000,000 investment, having been completed and approved, its application is already underway.

Furthermore the task of the investigation of known chalcopyrite deposits throughout Turkey is carefully taken up.

II. TURKISH STATE COAL EXPLOITATION

A. Ereğli Coal Exploitation

Ever since the discovery of coal by one Uzun Mehmet at the location called Köşeağzı (Ereğli-Black Sea) in 1829, up until 1940 the Zonguldak Coal Basin held an important place in the Turkish economy and was exploited both by Turkish and foreign companies, as well as by private miners.

As a result of an agreement signed on November 20, 1935 between the Government and the Ereğli Coal Company, a French firm, buying off of the Company by the State was made possible and a law (No. 3241) was passed in that connection. Coal mines thus made a State property were subsequently operated by Etibank until the date of January 3, 1938 when they were turned over to Ereğli Coal Exploitation, established by this latter as a management with limited responsibilities.

Later on — under the Law No. 3867 and the decision reached by the Council of Ministers on October 13, 1940 (No. 2/14547) — the purchase of all the mining properties within the coal basin of Zonguldak was started and by December 1940 the entire private holdings were acquired by Etibank who then turned them over to the Ereğli Coal Exploitation.

Kandilli coal district displayed certain geological features of its own and was rather far from Zonguldak, which caused its slow development. So, at a Directors meeting on December 13, 1956, Etibank decided (decision No. 1456/1) to have that district operated separately.

This was how the Armutçuk Coal Exploitation came to be (an administration similar to Ereğli Coal Exploitation, with limited responsibilities) and took over as of January 1, 1957. The decision was approved by the Ministry of Exploitation under articles 27 and 28 of Law No. 3460.

The Law No. 6574, which came in effect beginning August 31, 1957, placed the four independent operations—namely, Ereğli Coal Exploitation, Armutçuk Coal Exploitation, Western Lignite Exploitation, and Coal Sale and Distribution Office—under the control and direction of the Turkish State Coal Exploitation.

Ereğli Coal Exploitation is presently engaged in extracting coal from a stretch of land 40 km long and 7 km wide along the Black Sea coast between Çatalağzı and Kireçlik. It conducts three different operations: a) Gelik-Kilimli district in the east, lying between Çatalağzı and Kilimli; b) Üzülmöz district, stretching from collieries in the town of Zonguldak toward the valley of Üzülmöz; and, finally, c) the district of Kozlu.

When the extension plan is ready, these operations will constitute two groups instead of three; namely, the Zonguldak group comprising Kozlu, Çaydamar and Üzülmöz collieries and Çatalağzı group taking in collieries at Gelik and Karadon.

Zonguldak harbor is rebuilt to a point where ships now can get loaded at the rates of 1350 - 1620 tons of coal

per hour. It has three sections: a) in the first, coal coming through washeries goes into the ships; b) in the second, pit-props are being unloaded; while c) the third section is reserved to commercial shipping. There is a large enough area to hold a 30,000-ton coal stock in reserve.

The 50-year old railway going through the town of Zonguldak was taken off in 1957 and the harbor tied in with the State Railways network, the construction of additional bridges and other railroad facilities having been completed in the same year.

Hauling of the coal between the Gelik and Çatalağzı washeries is greatly facilitated after the opening of the Karadon branch line of the State Railways, which permits a direct loading.

Coal coming from Kozlu collieries goes through a tunnel, via normal gauge rail, to Zonguldak washery.

The installations and equipment controlled by the Ereğli Coal Exploitation may be divided into two groups :

Underground, are coal extraction machinery, belt and chain conveyors leading to main loading points, loading and unloading facilities, locomotive for underground haulage, auxiliary compressors and fans, garages, stables (for mules used under ground), explosives storerooms, pumping stations, installations in the vertical as well as inclined shafts used for production, elevators for men, electrical installations, compressed air pipes network, etc.

Above ground, these include coal sorting and washing facilities, main ventilation stations to supply air for men and machinery under ground, loading and unloading facilities, railroad connection network, linking the collieries to the harbor which is used for

transporting coal, repair and maintenance shops, electric power, coke, briquette, brick, and oxygen plants, harbor loading and transportation facilities, including tugboats, warehouses, hospitals, living quarters and homes for mine workers and employees, recreation centers with theater-house, fields for sportive activities, etc.

B. Armutçuk Coal Exploitation

As mentioned above, Armutçuk Coal Exploitation under the control of Turkish State Coal Administration operates mines on a stretch of land 10-15 km long and 7 km wide along the Black Sea Coast. Now only Armutçuk district is taken up, but in the near future Kireçlik district will also be developed and brought within the circle of operations. Coal produced in the Armutçuk district is transported to the harbor of Ereğli, via normal-gauge railway, where it is transferred to the ships.

Underground installations and equipment of the Armutçuk Coal Exploitation include: coal extraction machinery, belt and chain conveyors to haul the run of mine to underground loading points, carts and wagonnets used for the same purpose, necessary installations at these points, special locomotives for such underground haulage, auxiliary compressors and fans, garages, stables (for mules), storerooms for explosives, vertical and inclined shafts for production equipped with necessary means and machinery, elevators, underground electric installation, transformers, compressed air pipes network, etc.

Installations and equipment above ground include: a washery to clean the run of mine coal, main compressors to supply air both for men and machinery in the collieries, surface loading and unloading facilities, aerial tramway, normal-gauge railway network, repairs

Ereğli Coal Mines (E.K.I.)

Year	Production (tons)		Coal sold		Average number of workers	Cost of labour (TL.)		Per man shift	
	Run of mine	Marketable coal	Tonnage	Total value (TL.)		Wages paid	Social aid		Total
1941	3,019,626	2,124,995	1,851,721	17,672,004	21,738	9,422,000	1,333,000	10,755,000	1.65
1945	3,718,772	2,524,056	2,233,474	48,182,898	29,605	22,362,122	13,310,819	35,672,941	3.49
1950	4,360,598	2,832,243	2,650,979	76,170,702	27,061	30,989,403	14,243,245	45,232,648	4.85
1951	4,729,589	2,987,846	2,711,604	81,417,587	26,389	31,648,041	15,467,113	47,115,154	5.15
1952	4,846,342	3,010,312	2,915,847	89,451,865	28,648	35,778,225	18,121,686	53,899,911	5.94
1953	5,654,326	3,664,314	3,539,665	101,722,808	31,089	43,080,840	26,077,453	69,158,293	6.95
1954	5,711,253	3,690,125	3,572,264	102,333,513	33,191	57,565,003	30,159,782	87,724,785	8.09
1955	5,495,697	3,500,219	3,384,739	118,246,848	33,900	67,832,058	35,274,779	103,106,837	9.24
1956	5,888,308	3,717,718	3,566,594	134,968,296	34,440	94,788,660	40,660,023	135,448,683	11.82
1957	5,610,441	3,547,777	3,386,276	126,969,705	30,237	89,223,377	45,156,118	134,389,495	13.39
1958	5,891,571	3,613,182	3,232,963	208,479,231	28,078	107,575,896	54,746,142	162,322,038	16.53
1959	5,967,948	3,561,434	3,354,621	328,442,630	29,175	125,738,356	75,821,025	201,549,381	20.65

Armutçuk Coal Mines

Year	Production (tons)		Coal sold		Average number of workers	Cost of labour (TL.)		Per man shift	
	Run of mine	Marketable coal	Tonnage	Total value (TL.)		Wages paid	Social aid		Total
1957	648,616	463,717	439,163	15,755,573	3,388	9,988,671	6,201,107	16,189,778	13.44
1958	658,647	461,705	471,962	37,202,838	3,608	12,349,901	6,671,881	19,021,782	15.76
1959	547,200	380,045	376,112	42,191,739	3,745	14,448,272	9,448,088	23,896,360	19.88

Western Lignite Mines

Year	Production (tons)		Lignite sold		Average number of workers	Cost of labour (TL.)			Per man shift
	Run of mine	Marketable lignite	Tonnage	Total value (TL.)		Wages paid	Social aid	Total	
1941	199,333	176,789	171,090	954,984	1,090	528,000	126,000	708,000	1.84
1945	588,615	523,194	444,093	7,275,955	5,396	2,744,630	1,264,959	4,009,589	3.03
1950	980,226	746,553	701,316	12,342,458	5,117	4,962,600	2,848,919	7,811,519	4.19
1951	994,294	751,020	681,026	12,714,834	4,997	5,509,771	3,542,159	9,051,930	4.96
1952	1,081,497	764,653	724,295	15,478,276	5,208	6,027,863	3,585,082	9,612,945	5.80
1953	1,314,083	942,321	893,088	20,054,502	5,100	6,917,693	4,018,730	10,936,423	6.61
1954	1,656,932	1,085,225	1,022,101	25,099,750	5,489	8,092,572	5,147,348	13,239,920	7.84
1955	1,805,381	1,188,305	1,060,744	28,789,004	5,737	9,072,967	4,964,187	14,038,154	8.30
1956	2,070,937	1,316,685	1,291,755	34,293,278	5,019	13,059,706	6,523,633	19,583,339	10.74
1957	2,516,059	1,705,684	1,674,019	47,301,415	5,318	15,718,942	8,485,725	24,204,667	12.50
1958	2,602,319	1,724,696	1,724,745	71,501,284	5,019	16,703,261	8,214,046	24,917,307	13.96
1959	2,513,431	1,644,327	1,620,592	82,294,901	4,973	20,203,958	10,312,102	30,516,060	17.03

and maintenance shops, warehouses, hospital, living quarters and homes for workers and employees, bakery, theater house, field for sportive activities, etc.

C. Western Lignites Exploitation

Lignite deposits of Değirmisaz, Soma and Tunçbilek—regarded as the three most important lignite deposits of Western Anatolia—have been separately developed by Etibank since 1937.

On December 10, 1939, when Western Lignites Exploitation (a state-controlled establishment with limited responsibilities) was founded, the operations mentioned above were turned over to this new management, Law No. 6974, in effect since August 31, 1957, has brought Western Lignites Exploitation, together with three others, under the control of the Turkish State Coal Exploitation.

Tunçbilek lignite operations are located near Küçükilet, Gurağaç, Bozbelen and Beyeköy villages in Tavşanlı, vilayet of Kütahya, with mining installations on the banks of Kocasu (Adranoz River) on the Tavşanlı-Domaniç

highway, near Küçükilet village, 14 km north of the town of Tavşanlı.

They occupy a rather flat stretch of land surrounded by pine trees on a plateau 800-840 m above sea level. A 13 km rail connection links Tunçbilek to the State Railways network at Tavşanlı. Tunçbilek and Kütahya are 79 km apart by rail.

Değirmisaz operations are also in the vilayet of Kütahya, within Emet, near the village of Kızılbük, with installations located on the hills stretching toward Kızılbük village 520-540 m above sea level. They begin at the Değirmisaz railroad station on the Kütahya-Balıkesir railroad and go up toward Kızılbük village on both banks of Emet River.

Soma operations are in the vilayet of Manisa, within Soma (an administrative subdivision of the vilayet of Manisa), near village of İdil. Installations are set at a location, 7 km south of the village of Soma, some 740-840 m above sea level, Soma is 8 km away by a rather steep road. This road has a junction with a stretch of road between the town of Soma and Soma railroad station.

III. IRON AND STEEL WORKS OF TURKEY
1958 -1959 PRODUCTIONS

<i>Commodity</i>	<i>1958 (tons)</i>	<i>1959 (tons)</i>
Iron ore	536,000	468,500
Melted raw iron	114,111	155,984
Pig iron	114,084	80,194
Steel	159,876	213,717
Rolled products	141,882	165,263
Pipe	30,990	29,652
Coke and coke powder	556,724	547,242
Sulfuric acid (60° Bé)	17,281	20,066
Sulfuric acid (66° Bé)	6,374	6,798
Superphosphate	5,130	14,048
Copper sulphate	174	10
Ammonium sulphate	4,383	2,995
Anthracene	86	46
Benzol	5,043	4,475
Creosote	4,865	4,523
Anti-malarial oil	10	5
Naphthalene	668	596
Pitch	10,072	9,951
Road tar	11,130	—
Solvent naphtha	49	25
Toluol	249	265
Xylol	129	127

IV. TABLE SHOWING OUTPUT AND SHIPPED TONNAGE
OF MINERAL PRODUCTS IN 1959

<i>Commodity</i>	<i>Production (Tons)</i>	<i>Shipped Tonnage</i>
<i>Asbestos (Private Enterprise)</i>	373	334
<i>Ore</i>	15,503	1,218
<i>Antimony (Private Enterprise)</i>		
<i>Concentrates</i>	1,304	1,368
<i>Regulus</i>	85	—
<i>Copper (State)</i> {		
<i>Ore</i>	242,785	—
<i>Blister</i>	23,845	24,442
<i>Refined</i>	1,191	832
<i>Barium (Barite) (Private Enterprise)</i>	2,280	401
<i>Boracite (Private Enterprise)</i>	73,336	79,867
<i>Mercury [1] (Private Enterprise)</i>	553	626
<i>Zinc (State) Concentrates</i>	2,130	4,775
<i>Zinc (Private Enterprise)</i>	2,908	1,400
<i>Iron (State) Metal</i>	468,457	397,420
<i>Iron (Private Enterprise) Run of mine</i>	404,432	357,098
<i>Fluorite (Private Enterprise)</i>	68	32
<i>Phosphorous salts (Private Enterprise)</i>	78	52
<i>Lignite (State) Run of mine</i>	2,513,431	1,620,591
<i>Lignite (Private Enterprise) Run of mine</i>	1,149,523	1,089,116
<i>Chromite (State) Run of mine</i>	109,301	118,937
<i>Chromite (Private Enterprise) Run of mine</i>	278,361	200,967
<i>Lead (State) Concentrates</i>	1,071	3,149
<i>Lead (Private Enterprise) Run of mine</i>	3,104	3,600
<i>Sulphur (State)</i>	7,944	11,584
<i>Manganese (Private Enterprise)</i>	35,690	32,734
<i>Mineral water [2] (Private Enterprise)</i>	6,394,100	6,418,355
<i>Pyrite (State) (obtained from copper ore)</i>	6,675	16,430
<i>Pyrite (State)</i>	82,000	62,077
<i>Sodium salts (Private Enterprise)</i>	88,675	78,507
<i>Coal (State) Run of mine</i>	6,523,882	3,744,767
<i>Emery (Private Enterprise)</i>	4,829	7,360