Sectoral Indicators and **Developments**

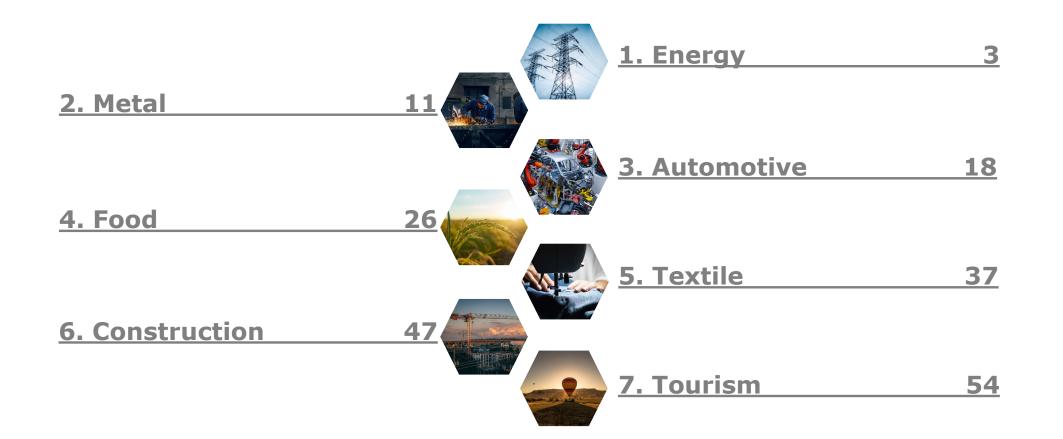
July 2023

JCR Eurasia Rating

Economic and Analytical Research



CONTENTS







ENERGY | Electricity

Electricity production continued to decrease in June

Electricity production decreased by 9.8% in June 2023 compared to the same month of the previous year. Due to the extreme weather conditions, the electricity produced from hydropower increased by 8.3%. Inversely, the rate of electricity produced from fossil fuels shrunk by 18.3%. Türkiye's total installed capacity, which was 103,809 MW at the end of December 2022, reached 104,800 MW as of June 2023.

In June 2023 compared to the same month of previous year

Electricity Generation

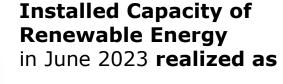
Electricity Generation from Renewable Sources







57,35



MW

Monthly Average PTF

Previous Month | June 2023 **1,907 1,624**

Maximum Settlement Price (TRY/MWh)

Previous Month June 2023

Domestic Coal

1,826

Imported Coal

1,800

1,800

1,660

Natural Gas

2,550 Other

1,700

2,553

1,724

ENERGY | Electricity | Production

In the first half of 2023, electricity production stood below that of the previous year.

49.8% of the total electricity production was generated from fossil fuels whilst renewable sources comprised of remaining 50.2% in June 2023. In the same period of the previous year, this ratio was 55.0% to 45% in favor of fossil fuels.

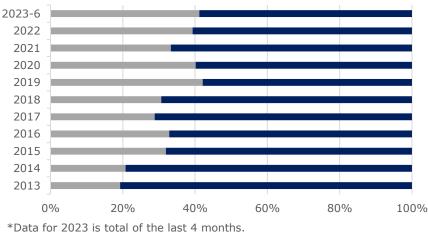
By sources, coal ranked as first in electricity production by its share of 38.8% and followed by natural gas with a share of 10.0% in June 2023. Wind increased its share to 9.7% in the mentioned period.

The weather conditions being outside the seasonal normals were effective in producing more energy from hydro sources compared to previous years.

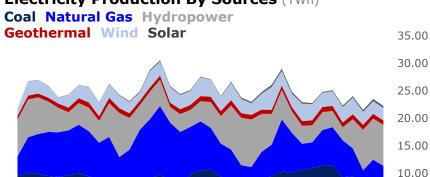
Türkiye's Electrici	ty Production	(TWh)	
Year/Period	Renewable	Fossil & Other	Total
2013	23.50	98.44	121.94
2014	51.55	196.48	248.03
2015	82.60	176.15	258.74
2016	88.65	181.26	269.91
2017	83.71	206.83	290.54
2018	89.43	202.43	291.86
2019	122.34	168.13	290.47
2020	116.82	174.10	290.93
2021	104.75	209.93	314.68
2022	122.41	188.88	311.29
2022 January-June	68.91	85.07	153.97
2023 January-June	59.88	85.49	145.37

Electriciy Prodcution By Sources

Renewable Sources Fossil Sources and Other



Electricity Production By Sources (TWh)





5.00

ENERGY | Electricity | Consumption

Electricity consumption, with a reduction of 8.7% on an annual basis and 5.0% on a monthly basis, amounted to 24,731 GWh in June 2023.

The 9-days of Eid al-Adha holiday was effective in the decline in June. In addition to the decrease in demand, the effects of the regulations were reflected in the market prices.

Mon	thly E	nerav	Cons	sumpl	tion (GWh)								2022		2023		
_	-	- 37				/								April		April		
Yıl	1	2	3	4	5	6	7	8	9	10	11	12	Type of Consumer	Amount	Share	Amount	Share	Change
2016	23,731	21,153	22,161	21,302	21,900	23,051	24,370	26,269	21,233	21,850	22,683	25,161		(MWh)	(%)	(MWh)	(%)	(%)
2017	25,103	22,452	23,586	21,953	22,854	22,304	27,776	27,522	23,808	23,162	23,861	25,594	Lighting	425	2.1	428	2.3	0.7
2018							28,266					•	Public and Private Services & Other	4,625	23.3	4,569	24.9	-1.2
2019	25,369	22,630	23,794	22,611	23,587	23,035	28,003	26,422	24,126	22,890	23,085	25,518	Household	5,105	25.7	5,169	28.1	1.3
2020	26,174	24,225	23,740	19,131	19,642	22,526	27,241	27,356	26,225	24,029	24,405	26,325	llousenoid	5,105	23.7	5,109	20.1	1.5
2021	26,895	24,194	27,605	25,618	24,779	26,438	30,243	32,128	27,328	26,109	26,536	28,922	Industry	9,256	46.6	7,809	42.5	-15.6
2022	28,323	25,441	28,257	25,729	25,189	27,088	28,612	31,475	27,187	25,111	24,743	26,653	Agricultural Activities	447	2.3	401	2.2	-10.2
2023	27,317	24,181	26,192	23,746	26,032	24,731							Total	19,858	100.0	18,376	100.0	-7.5



ENERGY Electricity | Prices

Prices both in TRY and USD terms declined after the new regulations.

In June, PTF decreased by 14.9% compared to the previous month and by 30.6% compared to the same month of the previous year. In June, the daily average PTF was realized between 705 TRY/MWh and 1,950 TRY/MWh. The average daily PTF in June was 1,623.9 TRY/MWh. The hourly data indicates that PTF was realized 97 hours in May and 9 hours in June at the level of 2,600 TRY/MWh, which is the maximum price limit.

In USD terms, the average PTF was realized as 70.3 USD/MWh in June. Compared to the same period of the previous year, PTF was 49.0% lower in USD terms. However, the effect of the recent increase in exchange rates may be reflected in electricity prices in the upcoming period.

JCR Eurasia Rating

For 6 months starting from 01/04/2023

Source Type	Initial Value of Maximum Settlement Price (TRY/MWh)
Domestic Coal	1,800
Imported Coal	1,800
Natural Gas/Fuel Oil/Naphtha/LPG/Diesel	2,550
Other Sources	1,700

5,000 4,500 4,000 3,500 3,000 2,500 2,000 1,500 1,000 500 02.23 12.22 01.23 03.23 04.23 05.23 06.23

Maximum Settlement Price (TRY/MWh)

Daily PTF (TRY/MWh)

Period	Month	Imported Coal	Domestic Coal	Natural Gas	Other
2022-4	April	2,500	1,200	2,500	1,200
2022-5	May	2,732	1,278	2,513	1,278
2022-6	June	3,062	1,370	2,896	1,370
2022-7	July	3,557	1,412	2,903	1,412
2022-8	August	3,427	1,453	3,172	1,453
2022-9	September	3,373	1,488	4,619	1,488
2022-10	October	2,750	2,050	4,500	1,540
2022-11	November	2,179	2,057	4,501	1,545
2022-12	December	2,494	2,059	4,501	1,546
2023-1	January	1,981	2,163	4,136	1,625
2023-2	February	1,669	2,180	3,548	1,638
2023-3	March	1,674	2,193	2,960	1,647
2023-4	April	1,800	1,800	2,550	1,700
2023-5	Мау	1,660	1,826	2,553	1,724

ENERGY | Electricity | Prices

On May 1, 2023, YEKDEM prices were updated.

	Production Facility Renewable Energy	YEKDEM Application Price (TL/MWh)	YEKDEM Base-Ceiling Price (USD/MWh)	Domestic Contribution Price (TL/MWh)
l lu reluce	Reservoir	1,440	67.5 - 82.5	288.0
Hydro	River	1,350	63.0 - 77.0	288.0
M/Const	Onshore	1,060	49.5 - 60.5	288.0
Wind	Offshore	1,440	67.5 - 82.5	384.5
	Waste	1,060	49.5 - 60.5	288.0
Biomass	Anaerobic Digestion	1,730	81.8 - 99.0	288.0
	Thermal Disposal	1,349	57.5 - 80.0	215.8
Geotherm	al	2,020	94.5 - 115.5	288.0
Solar		1,060	49.5 - 60.5	288.0
Wind & So	olar with Storage	1,250	58.5 - 71.5	384.5
	Storage Hydro	2,020	94.5 - 115.5	384.5
Wave or T		1,350	63.0 - 77.0	384.5

Type of Production Facility Based on Renewable Energy Source		Duration of YEK Support Mechanism Price (years)	Duration of Domestic Contribution Price (years)
Hudro	Reservoir	10	5
Hydro	River	10	5
Wind	Onshore	10	5
Wind	Offshore	10	5
	Waste	10	5
Biomass	Anaerobic Digestion	10	5
	Thermal Disposal	10	5
Geothermal		15	5
Solar		10	5
Wind & Sola	ar with Storage	10	10
Pumped Sto	orage Hydro	15	10
Wave or Tic	lal	10	10



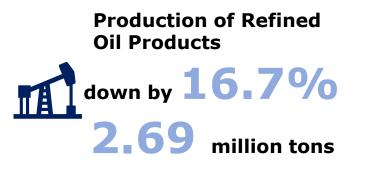
ENERGY | Oil

In April 2023, crude oil imports dropped by 13.99% and realized as 2.32m tons. Diesel imports rose by 61.0% and reached 1.06 thousand tons. Thus, Türkiye as of April 2023;

• produced a total of 2.69 million tons • imported a total of 3.54 million tons

of oil products.

In April 2023 compared to the same month of previous year





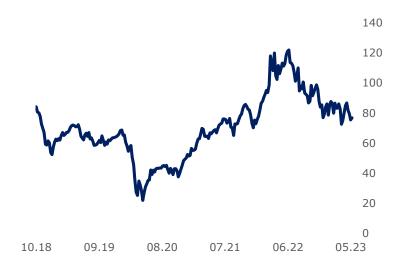
Crude Oil Import





Monthly Average Dealer Sales Price – Apr	il 2023
Fuel Type	Price
Unleaded Gasoline 95 Octane (It)	21.84319
Unleaded Gasoline 95 Octane (Other, lt)	21.89889
Diesel (It)	20.46175
Diesel (Other, It)	20.51133
Heating Oil (Sulfur content between 0.1%- 1.0%, kg)	17.28554
Fuel Oil (Sulfur content between 0.1%- 1.0%, kg)	14.99995
High Sulphur Fuel Oil (Sulfur content >%1, kg)	12.68369
Kerosene (lt)	19.56013

Brent Oil (USD)

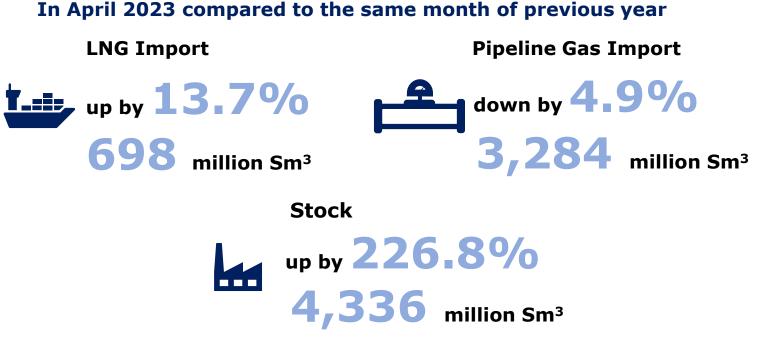




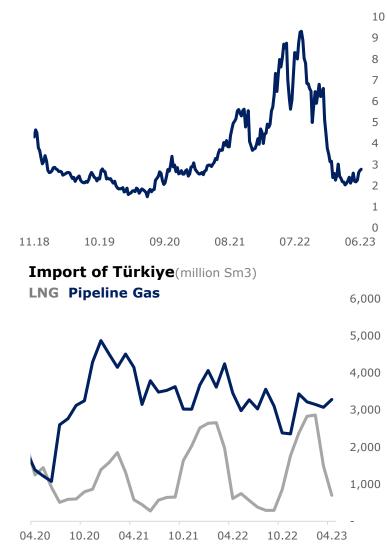
ENERGY | Natural Gas

Global natural gas demand is expected to remain flat in 2023.

According to the Q2-2023 Gas Market Report, published by the IEA, global consumption is forecasted to remain flat in 2023. In the report, it is stated that diminishing demand in Europe and North America regions is expected to be balanced by the demand from Asia-Pacific and Middle East. Declining natural gas prices, as it stated in the report, could rise again in 2023 as demand for LNG picks up in China.



Natural Gas Prices(USD)







METAL **Production**

The first half of the year was challenging for the Turkish steel industry

In April 2023, Türkiye's crude steel production was **2.7 million tons** with a 20.6% fall compared to the same month of the previous year, while total crude steel production in the first 4 months of 2023 decreased by 21.3% and regressed to **10.1 million tons**. In April, exports of steel products amounted to 675 thousand tons with a sharp decline of 55.2% YoY while it was shrunk by 59.9% on USD basis and realized as **USD 566 million.** Besides, Turkish steel imports realized as 1.7 million tons and USD 1.4 billion with increase rates of 30.4% and -0.2%, respectively.



Crude Steel Production

Product Export

down by 59.9%

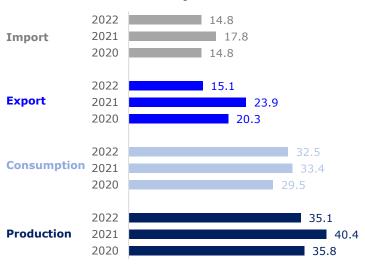


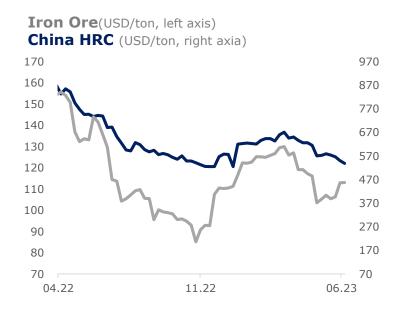


Base Metal Capacity Utilization Rate in May realized as 74.8%



Turkish Steel Industry (million tons)





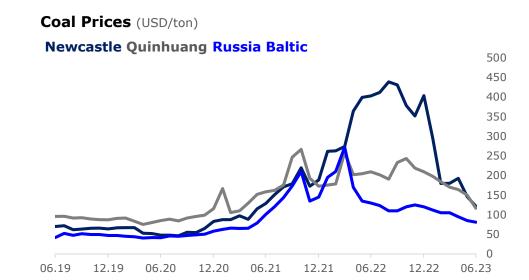
METAL | Production

Steel production in Türkiye decreased by 15.2% in Q1-2023 from **9.9 million tons** to **8.4 million tons**. Flat steel production fall from **3.8 million tons** to **2.8 million tons** while long steel production regressed from **6.1 million tons** to **5.6 million tons** in the mentioned period. Despite the decrease in production, steel consumption increased from **8.5 million tons** to **9 million tons**. The increase in demand was met by imports.

In Q1-2023 steel exports of Türkiye decreased from **4.3 million tons** to **2.2 million tons**, while imports increased from 4.0 million tons to 4.2 million tons.

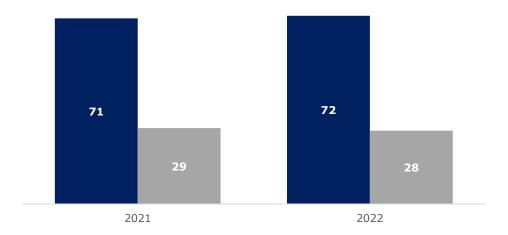
Turkish Steel Industry (million tons)





Distribution of Production by Facility (%)

Electric Arc Furnace Integrated Blast Furnace





METAL | Sales

Geopolitical developments continue to be influential in the global steel trade.

In addition to the reduction in demand in the EU after the Russia-Ukraine war, the protectionist policies of the EU and the USA caused a decline in the global steel trade. Besides, the increase in base metal prices caused the foreign trade deficit to be adversely affected in the first half of 2022. On the other hand, the attempts of the EU and the USA to hinder free trade by preventing scrap exports exacerbated the existing problems within the industry. However, in 2023, along with the pullback in energy and raw material prices, favorable international demand conditions support the positive outlook.



Non-domestic Turnover Index

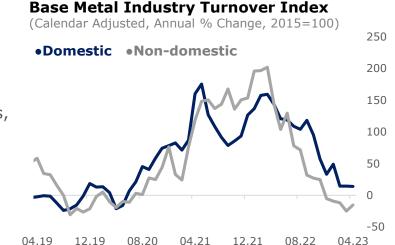
in **April** down by

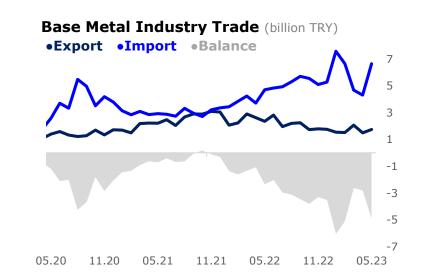


*Changes are expressed on an annual basis.

Base Metal Export in May down by 26.0%

Base Metal Import in May up by 41.5%

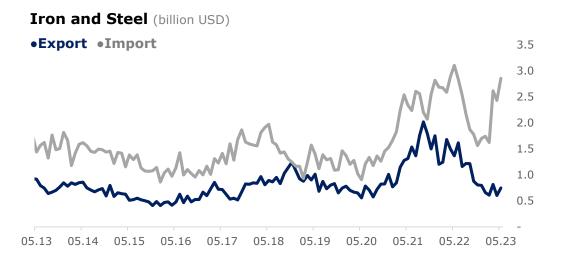




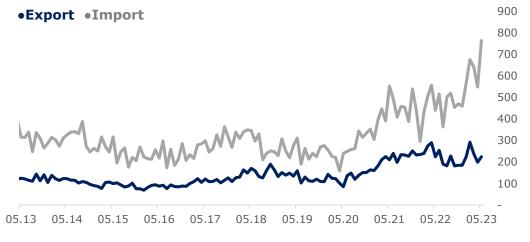


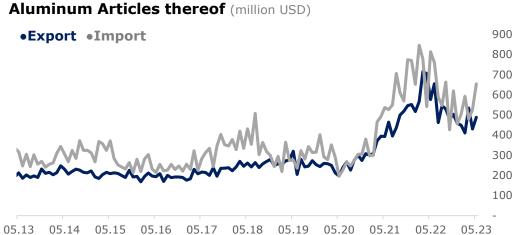
METAL | Foreign Trade

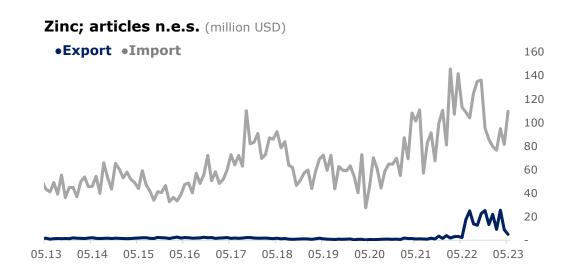
Türkiye's Foreign Trade by Chapter



Copper and Articles thereof (million USD)







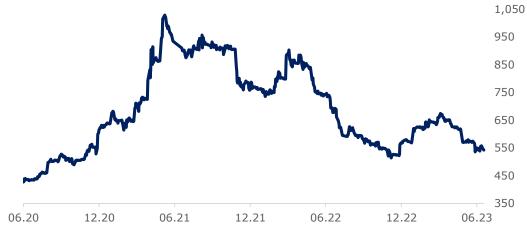


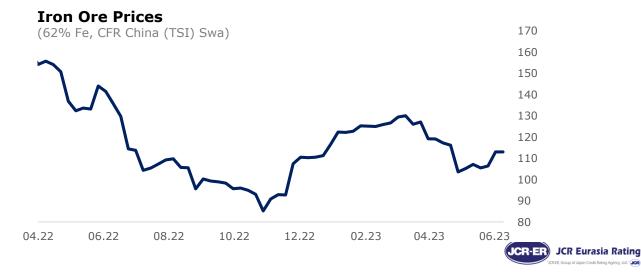
METAL | Prices

Changes in supply and demand conditions determine base metal prices.

For base metal prices, in which geopolitical developments play a major role, have started to increase again with the expectations of improvement in global demand conditions with the reopening of China, recently.

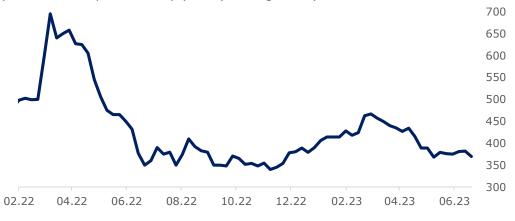
China HRC







Türkiye Scrap Steel Prices (LME Steel Scrap CFR Turkey (Platts) Closing Prices)

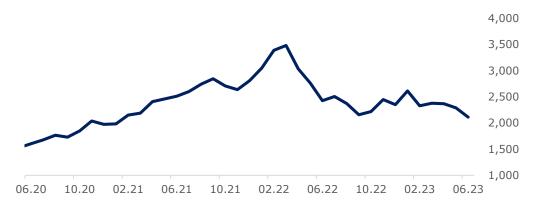


Source: Refinitiv, Financial Times, JCR-ER

METAL | Prices

Aluminum Prices

(LME, 99.7% Cash USD/MT)



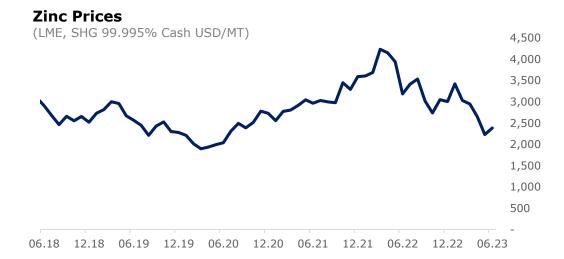
 Cooper Prices (LME, A Cash U\$/MT)
 11,000

 9,000
 9,000

 8,000
 7,000

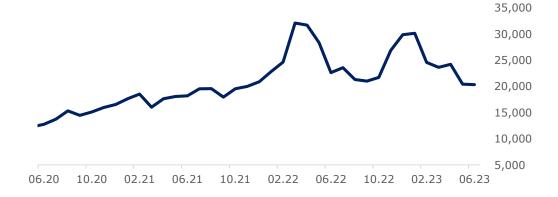
 6,000
 5,000

 06.20
 10.20
 02.21
 06.21
 10.21
 02.22
 06.22
 10.22
 02.23
 06.23



Nickel Prices

(LME, Cash USD/MT)





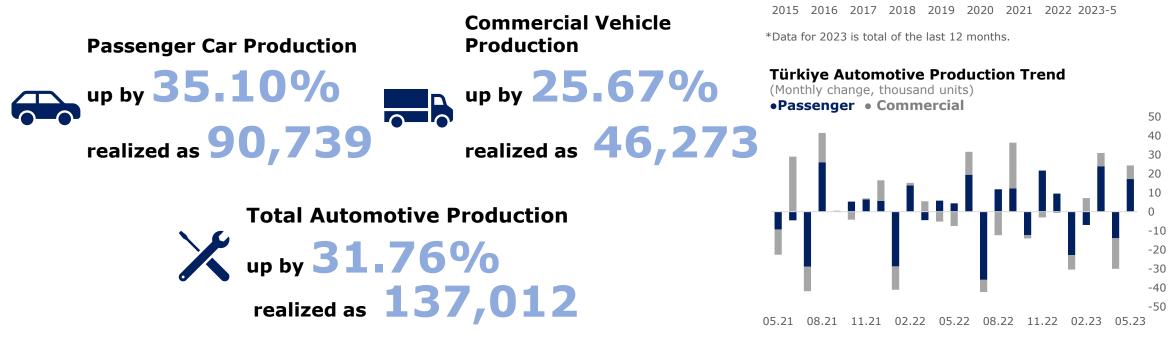


AUTOMOTIVE | Production

As of the first five months of 2023, total automotive production increased by 31.8% and exports by 9.8%.

In the January-May period of 2023, total automotive production rose by 20% and automobile production by 30% compared to the same period of the previous year. In May, total production was **137 thousand 012 units** and automobile production was at the level of **90 thousand 739 units**.

In May 2023 compared to the same month of previous year





1,800

1,600 1,400

1,200

1,000 800

600

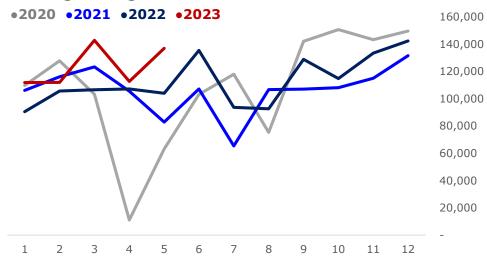
400 200

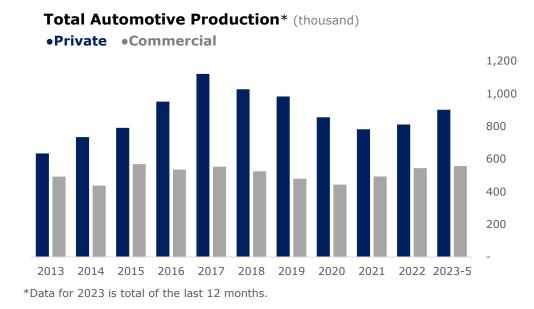
Total Automotive Production

(thousand)

AUTOMOTIVE | Production

Passenger & Light Commercial Vehicle Production





Total Auto	motive Pro	duction											
Year/Mon	January	February	March	April	May	June	July	August	September	October	November	December	Total
2013	83,808	93,519	99,819	93,308	96,918	101,975	111,992	47,288	111,516	88,579	113,646	83,166	1,125,534
2014	75,042	83,140	97,308	98,991	101,495	108,101	98,146	57,278	116,281	100,977	113,093	120,593	1,170,445
2015	102,574	109,012	123,119	120,388	88,048	124,451	112,728	76,977	116,534	132,977	126,236	125,752	1,358,796
2016	97,644	120,691	127,791	123,205	125,342	131,268	110,851	78,087	118,341	145,866	150,681	156,115	1,485,882
2017	128,121	138,369	157,729	149,020	154,758	141,161	148,974	71,463	134,247	156,303	163,460	130,079	1,673,684
2018	124,347	141,372	159,464	138,504	148,304	131,194	143,729	47,175	132,931	131,231	128,875	122,993	1,550,119
2019	109,871	119,473	132,189	127,913	136,517	109,116	133,883	52,242	136,236	132,155	135,951	135,775	1,461,321
2020	109,783	127,882	103,350	11,164	63,145	103,173	118,030	75,341	142,129	150,746	143,264	149,614	1,297,621
2021	106,176	116,088	123,427	105,496	82,860	107,219	65,418	106,748	107,029	108,078	115,078	131,557	1,275,174
2022	90,523	105,646	106,575	107,180	103,984	135,424	93,659	92,625	128,872	114,835	133,469	142,314	1,355,106
2023	111,837	111,959	142,799	112,733	137,012								616,340



AUTOMOTIVE Sales

Automotive sales increased in May 2023.

In May 2023, the Turkish automobile and light commercial vehicle total market went up by 70.9% compared to the same month of the previous year, amounting to **111,356**. In the January-May period of 2023, it increased by 60.5% compared to the same period of the previous year, amounting to **445,006**. The automobile and light commercial vehicle market increased by 69.1% compared to the average sales in May for the last 10 years.

In May 2023 compared to the same month of previous year

Passenger Car Sales up by 68.54% realized as **87,218 Electric Car Sales** up by **589.4%**

realized as 2,592

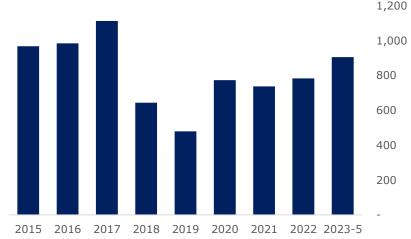
Light Commercial Vehicle Sales

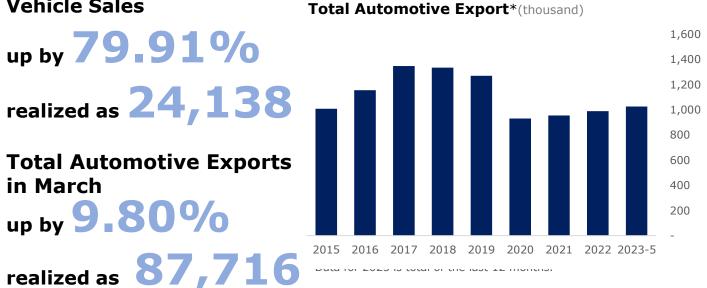
up by **79.91%**

realized as **24,138**

Total Automotive Exports in March up by **9.80%**

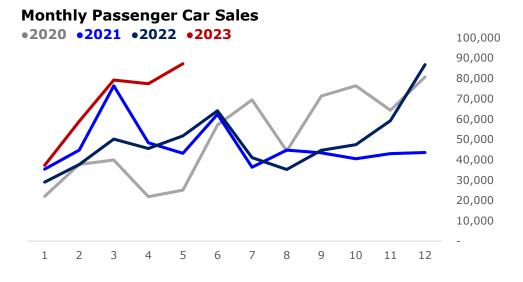
Total Automotive Sales* (thousand)

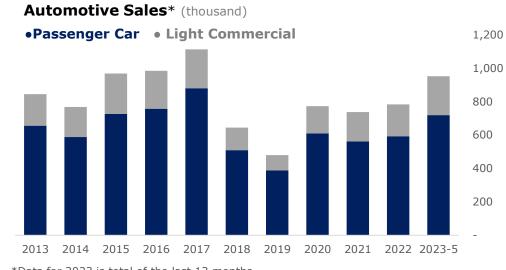






AUTOMOTIVE | Sales



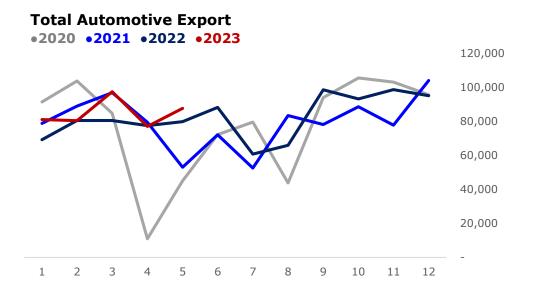


*Data for 2023 is total of the last 12 months.

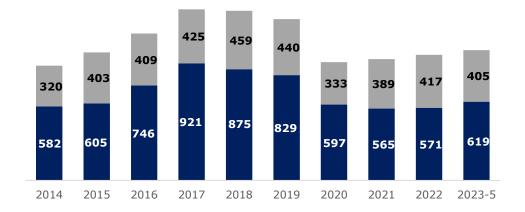
Total Automo	Total Automotive Sales												
Year/Month	January	February	March	April	Мау	June	July	August	September	October	November	December	Total
2013	35,523	48,307	68,774	73,575	81,468	74,096	62,486	65,043	67,963	58,014	79,301	129,718	844,268
2014	32,800	35,021	47,581	53,305	58,121	60,163	59,907	60,199	66,531	66,573	80,621	146,989	767,811
2015	34,615	55,331	83,302	91,602	81,542	86,158	83,836	82,577	64,025	64,255	84,601	156,173	968,017
2016	32,713	52,825	82,948	84,887	93,904	91,540	58,533	71,556	67,593	83,000	122,309	141,912	983,720
2017	35,323	46,965	73,802	75,988	85,422	83,658	104,640	92,464	91,975	115,703	128,675	178,053	1,112,668
2018	44,990	59,876	76,345	71,126	72,755	51,037	52,734	34,346	23,028	21,571	58,204	77,706	643,718
2019	14,373	24,875	49,221	30,971	33,016	42,688	17,927	26,246	41,992	49,075	58,176	90,500	479,060
2020	27,273	47,122	50,008	26,457	32,235	70,973	87,401	61,533	90,619	94,733	80,141	104,293	772,788
2021	43,728	58,504	96,428	61,488	54,734	79,819	47,849	58,454	57,141	56,746	60,216	62,243	737,350
2022	38,131	49,652	64,267	60,035	65,167	80,652	52,206	48,336	62,084	65,222	82,311	115,220	783,283
2023	50,894	81,148	103,929	97,679									333,650



AUTOMOTIVE | Export



Automotive Export* (thousand units) •Passenger •Commercial & Tractor



*Data for 2023 is total of the last 12 months.

Year/Month	January	February	March	April	Мау	June	July	August	September	October	November	December	Total
2020	91,430	103,796	84,765	10,997	45,086	72,230	79,564	43,801	93,976	105,523	103,142	95,723	930,033
2021	78,793	88,977	96,945	79,469	53,078	72,147	52,558	83,488	78,174	88,591	77,823	104,010	954,053
2022	69,261	80,488	80,497	77,535	79,884	88,239	60,803	65,945	98,598	93,194	98,711	95,080	988,235
2023	81,099	80,462	97,497	77,092	87,716								423,866



AUTOMOTIVE | Recent Developments

Precautionary actions are taken in response to price increases.

According to the BRSA, auto loans can be used in 48-month terms for up to 70% of the electric vehicle prices with a final invoice of TRY 900 thousand and below.

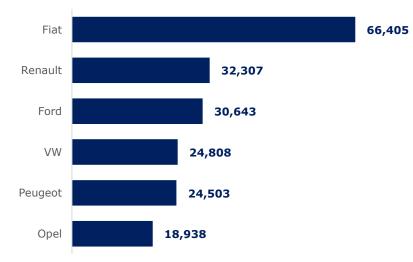
The Ministry of Trade announced that the implementation period of the "6 months/6 thousand kilometers" restriction has been extended for 6 months.

In his statement, the Minister of Trade stated that he talked to online sales sites, that second-hand vehicle prices cannot exceed the prices of new vehicles and that if prices do not stabilize, additional measures will be taken.(masculine)

		Januar 20		January 202	-	
Engine Capacity	Engine Type	Unit	Share (%)	Unit	Share (%)	Change (%)
<= 160 kW	Elektrik	575	0.4	5,295	2.1	820.9
> 160 kW	Elektrik	813	0.5	2,232	0.9	174.5
Total		1,388	0.9	7,527	3.0	442.3

January-April Automobile market by engine type;

- Gasoline automobile sales with **231,260** units, **68%** share,
- Diesel automobile sales with 58,843 units, 17.3% share,
- Hybrid automobile sales with **35,348** units, **10.4%** share,
- LPG automobile sales with 4,420 units, 1.3% share,
- Electric automobile sales with **10,166** units, share **3.0%**.

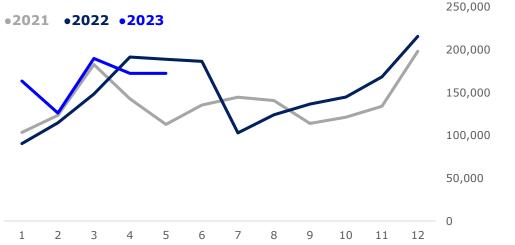


Top Selling Brands (January-April 2023)



AUTOMOTIVE | Used Car Market

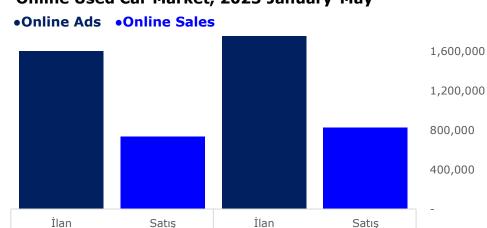
According to data from INDICATA, in May 2023, a total of **326,372** vehicles were advertised in online used passenger and commercial vehicle market in Türkiye. Thus, it is observed that the number of advertisements increased by 1% compared to May of the previous year and 53% of those vehicles were sold. **172,434** sales were realized in March 2023, up by 12% compared to the same period of the previous year. While Volkswagen was the best-selling brand in the used car market with 23,004 units in May, Renault became the fastest selling brand with an average sales velocity of 27 days.



Online Passenger and Commercial Vehicle Sales in Used

Car Market





2023

Online Used Car Market, 2023 January-May

2022



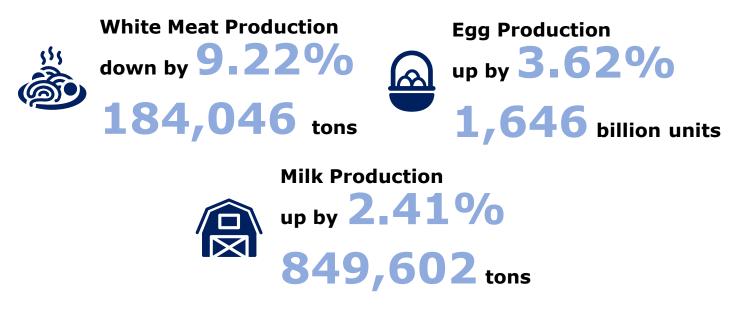


FOOD | Production

As of 2022, arable land has fallen by 9.7% in the last 20 years, while the number of farmers has diminished by 43.1% for the same period. The number of farmers insured was 490 thousand 004 as of March 2023.

In April 2023, chicken meat production decreased by 9.4% compared to the same period of the previous year, while turkey meat and egg production increased by 0.3% and 3.6%, respectively. In addition, milk production also increased by 2.4%. In February, total white meat production for the last 12 months was 2.4 million tons and egg production was 20 billion 53 million units. Milk production was 9.9 million tons.

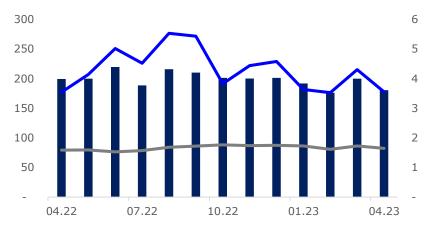
In April 2023 compared to the same month of previous year

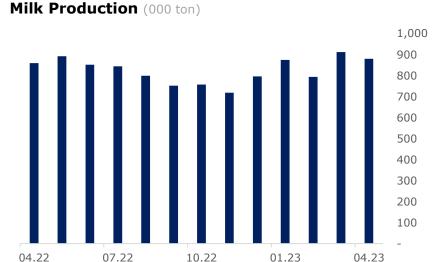


JCR-ER JCR Eurasia Rating

White Meat and Egg Production

Chicken Meet (000 tons) Turkey Meat (000 tons) Chicken Egg (billion units, right axis)

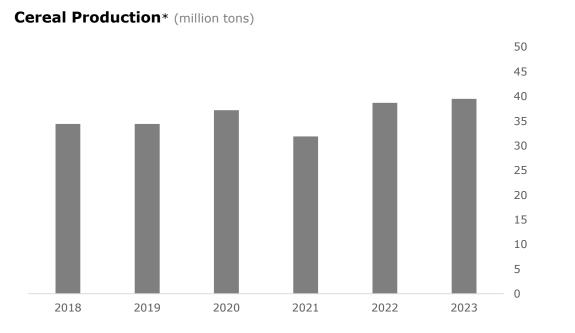


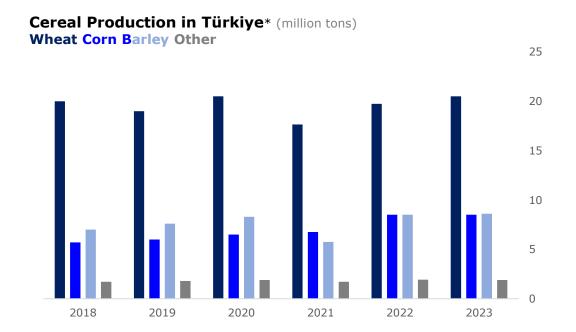


FOOD | Production and Self-Sufficiency

In 2023, cereal production in Türkiye is estimated to increase by 2.1% in 2023 compared to the previous year and reach a total level of 39.5 million tons.

Wheat production, which has the highest share in cereal production with 51.1% as of 2022, is expected to increase to 20.5 million tons in parallel with the increase in cereal production. In addition, it is predicted that the production of barley, which is one of the most important inputs of the feed industry, will increase by 1.2% in 2023 and will reach 8.6 million tons.



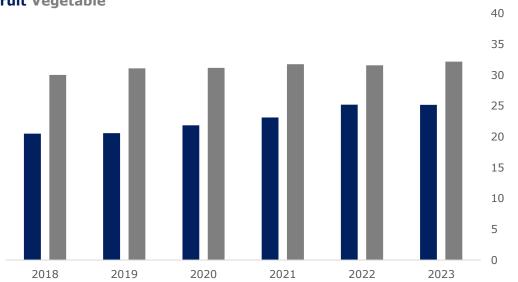


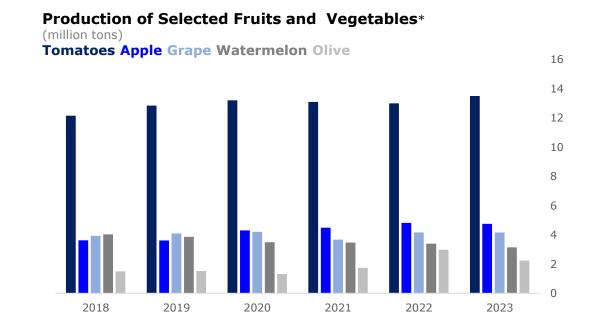
* 2023 verileri 2023 bitkisel üretim 1. tahminidir.



FOOD | Production and Self-Sufficiency

In 2023, fruit production is expected to decrease by 0.1% compared to the previous year and realize at the level of 25.2 million tons, while vegetable production is expected to increase by 1.9% to 32.2 million tons, the highest level of recent years. It is estimated that the production of apple, which has the highest production share in fruit production, will be 4.8 million tons with a decrease of 1.3% on an annual basis, while the production of tomatoes, which has the highest production share in vegetable production, will be 13.5 million tons with an increase of 3.8%. An increase of 14.3% is expected in the citrus fruits group, which includes fruits such as orange, tangerine, lemon and grapefruit.





Fruit and Vegetable Production* (million tons) Fruit Vegetable

* 2023 verileri 2023 bitkisel üretim 1. tahminidir.

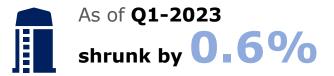


FOOD | Production and Growth

The growth in the agricultural sector in Türkiye shrunk by 3.8% year-on-year in 1Q23, and remained below the GDP growth for the 10 consecutive quarters.

In the Industrial Production Index, there have been fluctuations observed in food products, beverages and tobacco products. While demand-driven seasonality stands out especially in beverage production, CUR rises in parallel with this in summer months. Food products, beverages and tobacco products manufacturing CCRs were 73.61%, 80.62% and 82.39%, respectively, as of June 2023.

Agriculture Sector

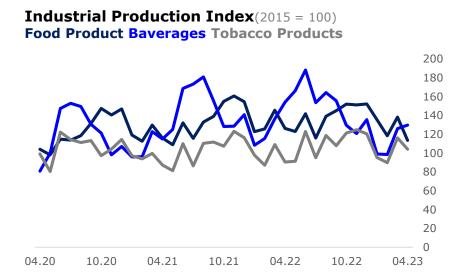


Food Products

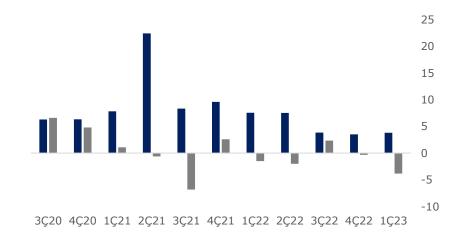








Quarterly GDP Change (annual change, %) GDP Agriculture-GDP



FOOD | Food Inflation

After the sharp rise in food prices in the world in the 2020 – 2022 period, while global food prices decreased significantly, it was relatively slow in Türkiye.

According to data in May, food and non-alcoholic beverages inflation continued to rise with 52.52%, more than the increase in CPI. On a monthly basis, the highest increase in selected basic foods occurred in potatoes and some tuber plants with 37.10%.

Food and Non-Alcoholic Beverages Group in May

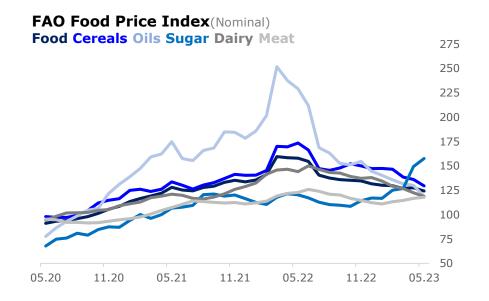


^{YoY up by} 52.52%

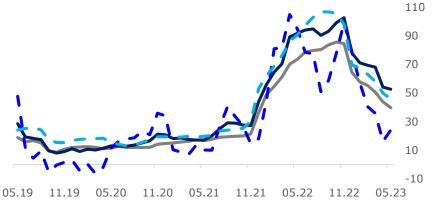
Contribution of the main expenditure groups to the total change







Consumer Price Index(Annual change, %) CPI Food and Non-Alcoholic Baverages Fresh Fruits and Vegetables Bread and Cereals





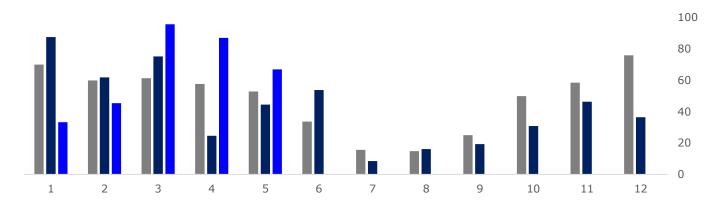
FOOD | Food Inflation and Drought

Since the agricultural sector, especially cereals, is dependent on imports, the exchange rate fluctuations have an important role. Due to the depreciation of the Turkish Lira in June, a slight increase is expected in June agricultural-PPI and agricultural input price indices.

In May, the rainfall in Türkiye in general was above the season normals and May of the previous year. However, in October 2022 – May 2023 period rainfalls decreased by 9% compared to seasonal normals and 3% compared to the same period of the previous year.

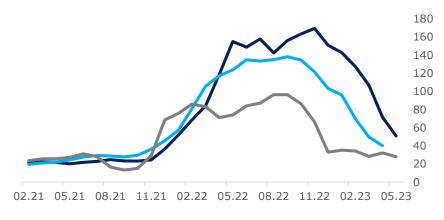
On the other hand, as of June, the Ministry of Agriculture and Forestry reported that the active occupancy rate in the irrigation dams was 51%.





External Dependence in Agriculture

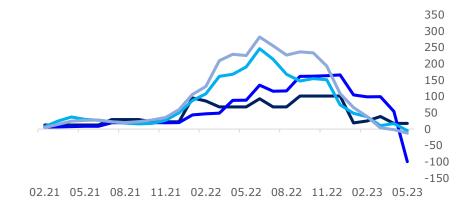
(Annual Change, %) Agriculture-PPI Agricultural Input Price Index Currency Basket (1/2 USD + 1/2 EUR)



CPI-Energy and Commodities (Annual Change , %) Electricity Natural Gas Gasoline Diesel

120

JCR Eurasia Rating



FOOD | Export

Total exports of food products increased by 1.5% compared to 2022 and reached up to USD 19.0 billion in May 2023 (total of last 12 months), while crop and animal production, hunting and related service activities grew by 4.3%, reaching to USD 6.2 billion. When exports in May 2023 are compared to the same month of the previous year, there was an increase of 36.3% in food products and 8.9% in crop and animal production, hunting and related service activities. While the export of vegetables and fruits, which were the products with the highest export volume in the food products segment, was USD 5.3 billion, Germany were Türkiye's largest export market with a share of 17.6%.



*Data for 2023 is total of the last 12 months.



2023 May Export of Vegetables and Fruits USD 5.3 billion

*Data for 2023 is total of the last 12 months.





2023 May Export of Crop and Animal Production, Hunting and Related Service Activities USD 6.2 billion



2023 May Export of Cereals (Except Rice), Leguminous Crops and Oil Seeds USD 1.3 billion

*Data for 2023 is total of the last 12 months.

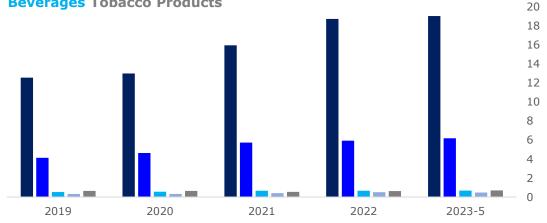


The Biggest Market Middle East | Iraq



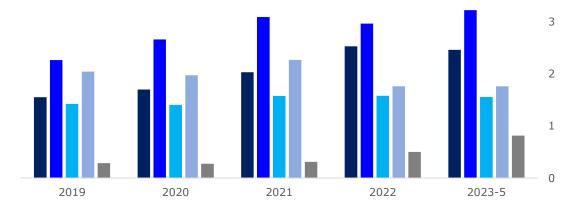


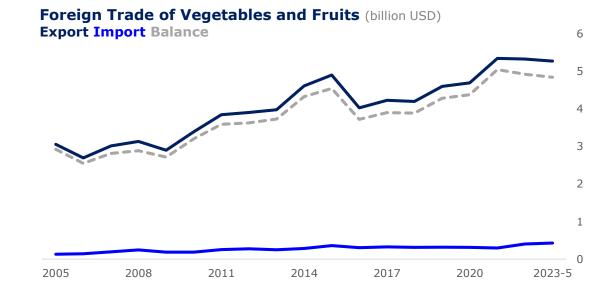
Export of Food and Tobacco Products* (billion USD) Food Products Crop and Animal Production, Hunting and Related Service Activities Fishing and Aquaculture Beverages Tobacco Products



Export of Selected Products* (million USD) Fruit and Vegetable Products Fresh Fruits and Vegetables Dried Fruit Products Hazelnut Products

Olive and Olive Oil





Export of Vegetables & Fruits by Country* (billion USD)

	2021	2022	2023-5	Share (%)
Germany	0.98	0.94	0.93	17.61
USA	0.41	0.49	0.48	9.13
Italy	0.64	0.47	0.45	8.51
Iraq	0.24	0.40	0.31	5.91
United Kingdom	0.29	0.28	0.28	5.31
Netherlands	0.29	0.25	0.25	4.75
France	0.30	0.25	0.28	5.29
Russian Federation	0.07	0.17	0.20	3.79
Poland	0.16	0.12	0.13	2.55
Canada	0.11	0.12	0.11	2.10
Other	1.86	1.83	1.85	35.05
Total	5.34	5.32	5.27	100.00

*Data for 2023 is total of the last 12 months.



4

FOOD | Import

The total import of food products and crop and animal production, hunting and related service activities in May 2023 (total of last 12 months) went up by 9.0% and 6.4%, respectively, compared to 2022, and reached to USD 8.8 billion and USD 14.6 billion USD. Compared to the same month of the previous year, exports in May 2023 rose by 34.8% and 29.9%, respectively. Imports of cereals (except rice), leguminous crops and oil seeds, which are the products with the highest imports in the crop and animal production, hunting and related service activities, reached an all-time high with 9.7 billion USD, while the share of Russia and Ukraine in total hit 69.0%.



*Data for 2023 is total of the last 12 months.



2023 May Import of Vegetable and Animal Oils and Fats USD 3.7 billion

*Data for 2023 is total of the last 12 months.





2023 May Import of Crop and Animal Production, Hunting and Related Service Activities USD 14.6 billion

*Data for 2023 is total of the last 12 months.



2023 May Import of Cereals (Except Rice), Leguminous Crops and Oil Seeds USD 9.7 billion

*Data for 2023 is total of the last 12 months.

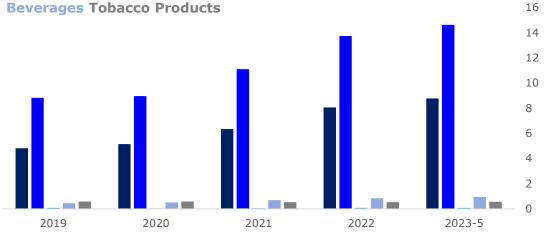


The Biggest Importer Asia | Russia

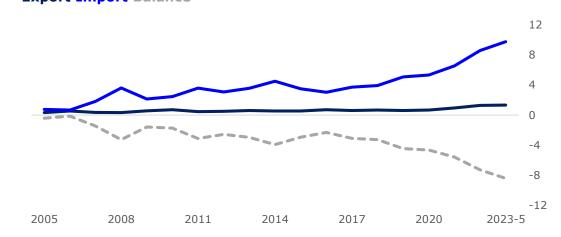


FOOD | Import

Import of Food and Tobacco Products* (billion USD) Food Products Crop and Animal Production, Hunting and Related Service Activities Fishing and Aquaculture Beverages Tobacco Products







Import of Cereals (Except Rice), Leguminous Crops and Oil Seeds* (billion USD)

	2017	2018	2019	2020	2021	2022	2023-5
Russian Federation	1.04	1.44	1.72	2.06	2.34	3.18	3.88
Ukraine	0.48	0.51	1.05	0.66	1.11	2.23	2.85
Other	2.18	1.98	2.29	2.61	3.09	3.18	3.02
Total	3.70	3.93	5.07	5.33	6.53	8.58	9.75
Change (%)	-	6.30	28.85	5.12	22.68	31.37	13.57
Share (R + U) (%)	41.11	49.53	54.76	51.00	52.72	63.00	69.01

*Data for 2023 is total of the last 12 months.





TEXTILE | Manufacturing, Employment, Costs



Manufacturing PMI | 05/23 Textiles: 53.2

Clothing and Leather Products: 53.9



Industrial Production Index | 04/23

Textiles: - 11.24%

Wearing Apparel: 1.09% Leather Products: 14.81%



Employment | 03/23



*Covers the manufacture of textiles, wearing apparel and leather products



Manufacturing CUR | 06/23 Textiles: 70.75% Wearing Apparel: 77.26% Leather Products: 69.47%



Industrial Turnover Index | 04/23

Textiles: 22.88%

Wearing Apparel: 39.14%

Leather Products: 79.50% * Seasonal and Calendar Adjusted

Cotton Price | 05/23



USD 0.80 (Per Pound) * Closing price on 01/05/23.

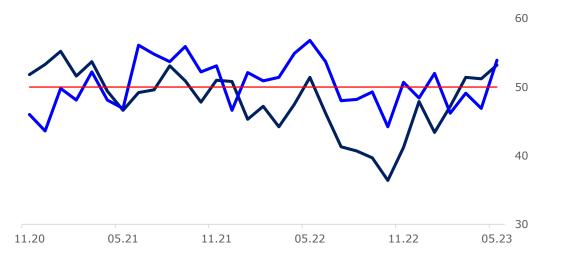


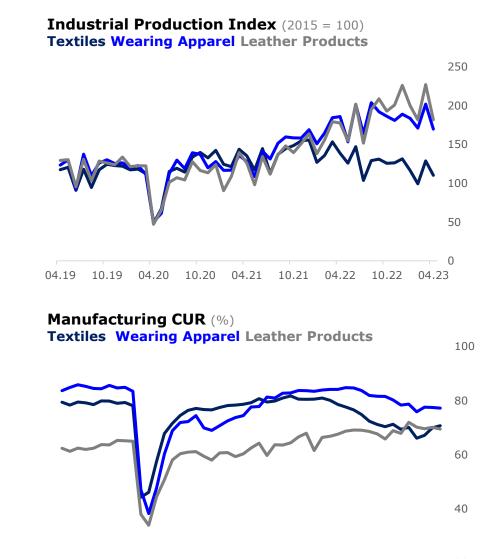
TEXTILE | Manufacturing Indicators

The textile products manufacturing PMI data achieved to stay above the 50 threshold for the third time with a wind of the recovery after the earthquake and improvement in demand . However, the weak industrial production and the low rate of capacity utilization rates (CUR) on an annual basis display the negativity in the sector.

On the other hand, high inflation and costs of labor, have caused the Turkish clothing sector to lose its competitiveness. Development in EU which is one of the main markets for the sector, will be effective in industries' outlook.

Türkiye PMI Textile Clothing and Leather Products



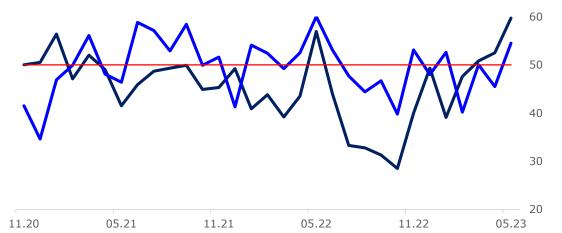


^{06.19 12.19 06.20 12.20 06.21 12.21 06.22 12.22 06.23}

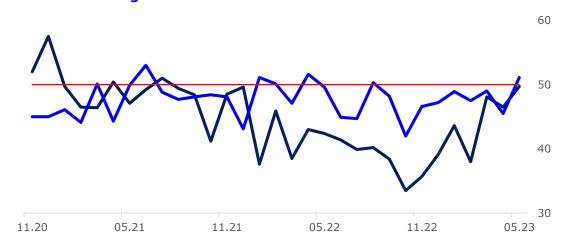


TEXTILE | Manufacturing Indicators

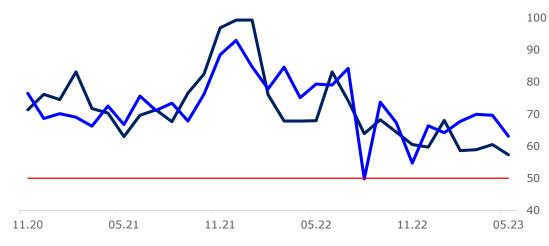




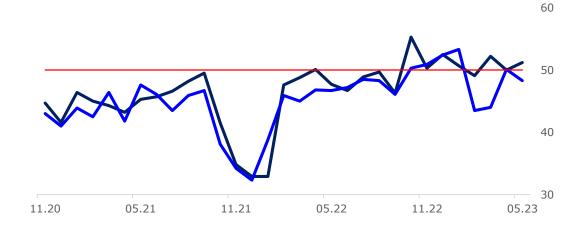
Backlogs of Work Textiles Clothing and Leather Products



Input Prices Textiles Clothing and Leather Products



Suppliers' Delivery Times Textiles Clothing and Leather Products





TEXTILE | Turnover Indices

While the textile and apparel industry continued to have difficulties in reflecting their costs to the consumers, the textile, clothing and footwear retail turnover index continued to rise in March and April due to the increase in consumer expenditures created by the inflationary environment after the fall in February due to the earthquake.

In the industrial turnover index, which represents the income generated by industrial companies from domestic and international sales, the rise continued in all three segments in March and April, after the decline experienced in February due to the effect of the earthquake.



* Seasonal and Calendar Adjusted

Industrial Turnover Index*(2015 = 100)



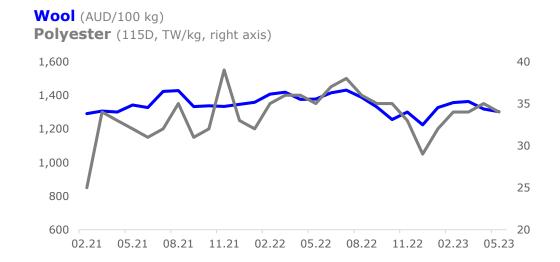
* Seasonal and Calendar Adjusted



TEXTILE | Costs

Global cotton prices have fluctuated between USD 0.8 - 0.9 per pound since November 2022. In Türkiye, farmers began to sow cotton seed as of April. Additionally, increased water levels in the dams were observed with the rainfall above normal in the last months. On the other hand, while a contraction is expected in cultivation areas this year due to the decrease in prices despite increasing costs, last year's products are still in stock.





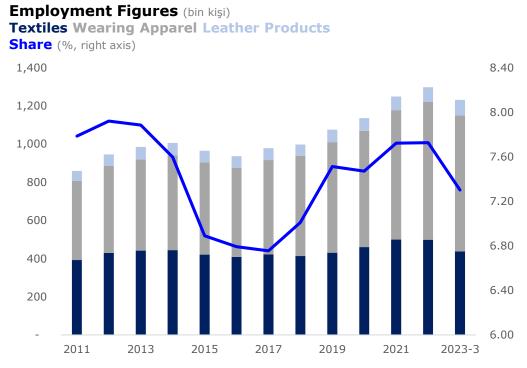
FBX Global Container Index (USD)



TEXTILE | Employment

In March 2023, the number of workers insured in the manufacture of textiles, wearing apparel and leather products decreased by 66,721 compared to 2022 and realized as 1,230,456. The decrease in the manufacture of textiles was 12.3%, while the decrease in wearing apparel was 1.3%.

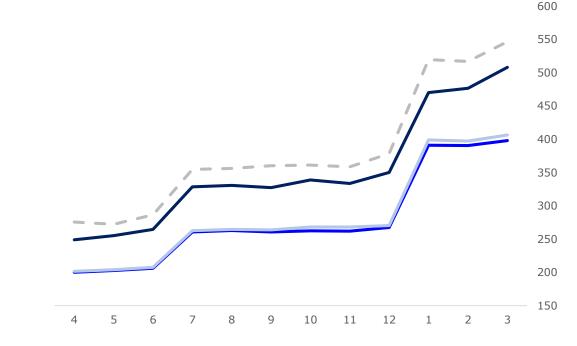
In parallel, the share of employment in the manufacture of textiles, wearing apparel and leather products, which was 7.7% in 2022, in total employment decreased to 7.3% as of March this year.



* 2022 data is calculated as annual average

Average Daily Earning in the Last 12 Month (TRY)







TEXTILE | Foreign Trade

The total export of textiles, wearing apparel and leather products in May 2023 (total of last 12 months) decreased by 2.4% compared to 2022 and realized as USD 34.4 billion. Textiles and wearing apparel contracted by 4.9% and 1.0%, respectively, while leather products grew by 1.3%. When exports in May 2023 are compared to the same month of the previous year, textiles, ready-made clothing and leather products went up by 15.4%, 25.9%, and 15.7%, respectively.



2023 May Export of Textiles, Wearing Apparel and Leather Products

USD 34.4 billion

*Data for 2023 is total of the last 12 months.



2023 May Export of Wearing Apparel USD 19.0 billion

4.5 billion pieces 1.0 billion KG

*Data for 2023 is total of the last 12 months



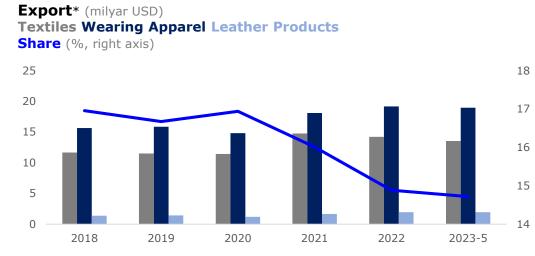
2023 May Share of Textile and Raw Materials Export in 11 Provinces Affected by Earthquake 29.9%







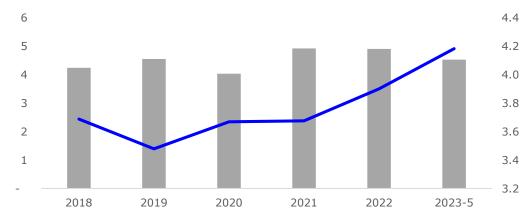
TEXTILE | Export



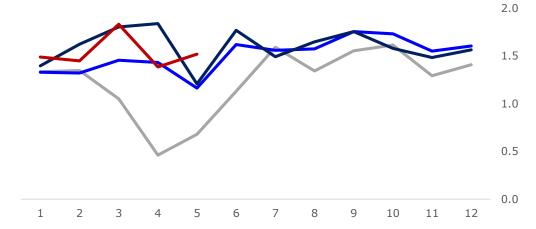
* The data for 2023 represents the total of the last 12 months and the share shows the share of exports of textiles, wearing apparel and leather products in total exports.

Export of Wearing Apparel* (billion)

Piece Per Piece (right axis)

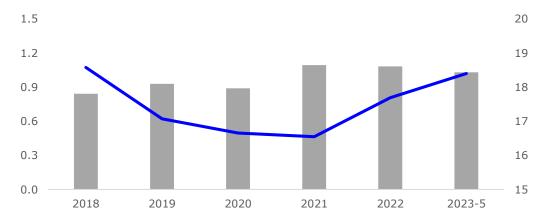


Monthly Export of Wearing Apparel (billion USD) 2020 2021 2022 2023



Export of Wearing Apparel (billion)

KG Per KG (right axis)





TEXTILE | Export

	2021	2022	2023-5	Share (%)
Germany	2.94	3.21	3.00	15.81
Spain	2.63	2.49	2.47	13.02
United Kingdom	1.98	1.93	1.72	9.09
Netherlands	1.40	1.60	1.59	8.38
France	0.89	1.02	1.03	5.44
USA	0.69	0.82	0.81	4.25
Italy	0.57	0.68	0.67	3.55
Iraq	0.51	0.47	0.46	2.42
Israel	0.47	0.47	0.43	2.24
Denmark	0.43	0.46	0.39	2.06
Other	5.59	6.00	6.40	33.75
Total	18.09	19.15	18.96	100.00

Export of Wearing Apparel* (billion USD)

	2022	Share (%)	2023-5	Share (%)							
İstanbul	4.32	41.73	4.34	43.40							
Gaziantep	1.71	16.52	1.58	15.82							
Bursa	1.27	12.21	1.27	12.70							
Kahramanmaraş	0.87	8.39	0.72	7.19							
Adana	0.60	5.84	0.55	5.53							

15.31

100.00

1.54

10.00

15.36

100.00

3 out of the top 5 provinces with the highest textile and raw materials export are the ones affected by the earthquake. The total textile and raw materials exports in these 3 provinces in March declined by 29.8% on an annual basis.

1.59

10.36



Other

Total



CONSTRUCTION | Housing

Housing sales continue to decline.

While the housing price index keeps its rise alive, house sales are losing momentum. The second-hand sales decreased in May due to the earthquake whilst the increase in loan rates is seen among the factors affecting housing demand.





1000

800

Housing price index continues to increase by

Türkiye İstanbul Ankara İzmir (Level)

accelerating

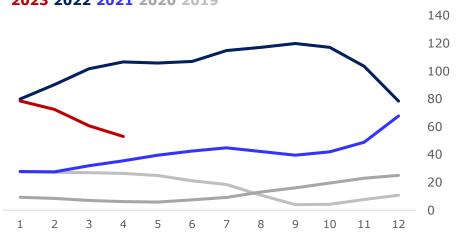
CONSTRUCTION | Housing

The rate of increase in construction costs continues to lose momentum...

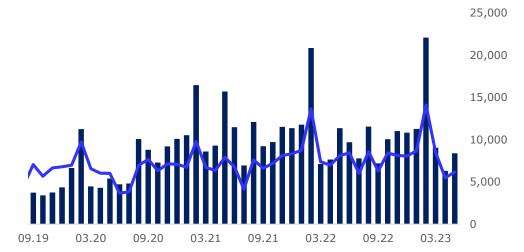
The slowdown in the increase in the construction cost index, which started in the last quarter of 2022, continued in April 2023. The index rose by 53.0% year-on-year to 873.9 in April. The effect of the minimum wage increase realized for the second half of 2023 in the labor-intensive construction sector on labor costs will be monitored for the second half of the year.

Construction permits were granted to 23,743 buildings in the first quarter of 2023, while new constructions decreased by 9.2% compared to the same period of the previous year. Building occupancy permits, on the other hand, decreased by 10.4% compared to the same period of the previous year and amounted to 20,130.

The annual rate of increase in the construction cost index has slowed down since the last quarter of 2022. 2023 2022 2021 2020 2019







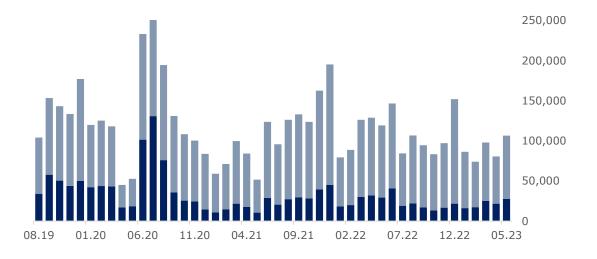


CONSTRUCTION | Housing

The share of mortgaged sales in total sales is at about 24%.

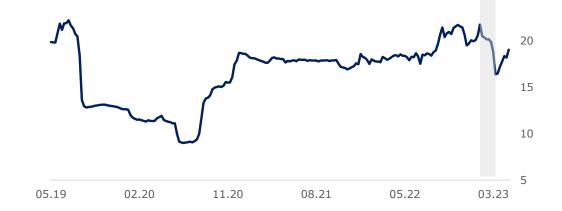
Whilst mortgage rates continue to increase, mortgaged housing sales figures are also decreasing. In May 2023, although the share of mortgage sales in total sales was 24.3%, the number of houses sold decreased by 6.3% compared to the same month of the previous year, while the low average loan amounts were reflected in the sales figures.

The share of mortgage sales in total sales is low. Mortgaged Sales Other Sales (Level)





Interest rates for home loans, which began to fall with "My New Home" campaign, started to rise again as of the last week of March. Mortgage Rate(%)





25

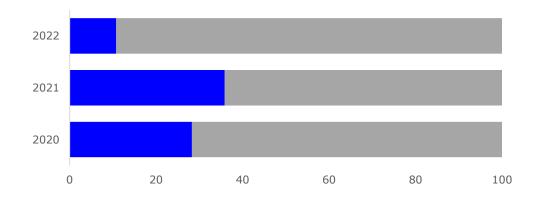
CONSTRUCTION | Contract

Turkish contractors undertook projects worth USD 6.5 billion in the first 5 months of 2023.

The total project cost undertaken by Turkish contractors in the international arena increased by USD 2.4 billion monthly to USD 6.5 billion. The cost of the project undertaken from 1972 to the end of May 2023 was USD 479.5 billion.

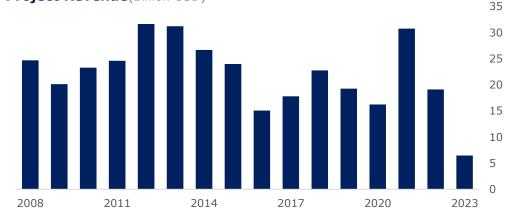
Russia's share in total contract work declined with the beginning of war.

Russia Other (%)

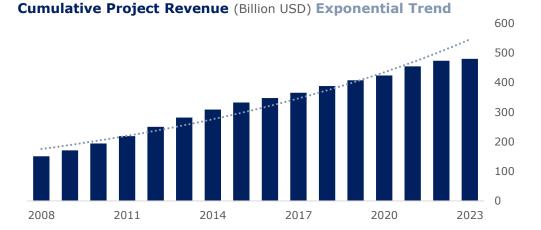


The effects of the ongoing war between Russia and Ukraine were reflected in the business volume of the Turkish Contracting sector.

Project Revenue(Billion USD)



The total cost of the projects undertaken in international contracting transactions between 1972-20223 reached USD 479 billion.





CONSTRUCTION | Contract

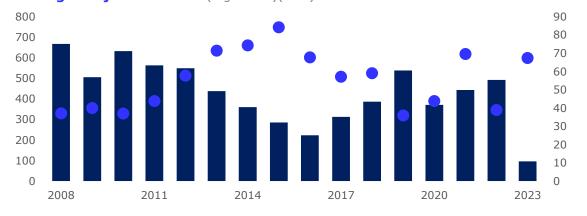
New geographies...

As of the end of May 2023, Turkish contractors have committed to 96 projects, with an average project cost of USD 67.3 million.

According to the Turkish Contractors Association, the industry is expanding into new markets. In its latest bulletin, the Association stated that the projects started or to be started in the Gulf countries would create new markets for the sector.

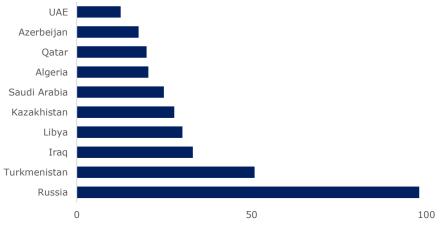
In the first five months of 2023, 96 international contracting works were undertaken by Turkish contractors, with an average project cost of USD 67.3 million.

Number of Project(Left Axis) (Number) Average Project Revenue (Right Axis)(USD)

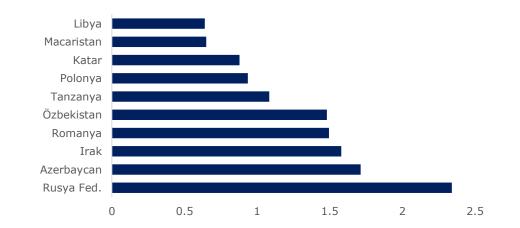


Between 1973 and 2023, nearly USD 100 billion projects were undertaken in Russia.





Project revenue by country in 2022 Project Revenue (Billion USD)



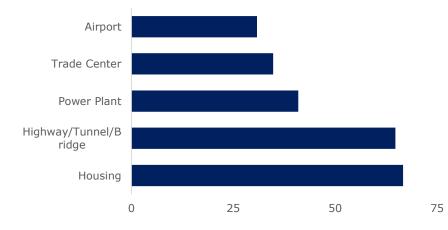


CONSTRUCTION | Contract

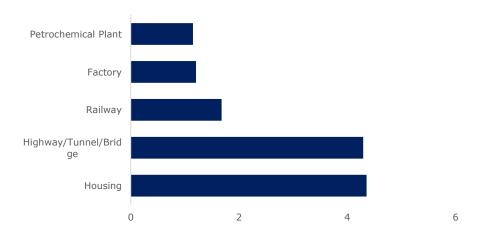
Housing and infrastructure projects come to the fore...

According to the note published by the Ministry of Trade, housing and infrastructure projects come to the fore in the sectoral distribution of the projects undertaken. The Turkish contracting industry undertaking housing projects worth of 4.36 billion USD in 2022 undertook road/tunnel/bridge projects worth of 4.34 billion USD.

In the period between 1972-2023, housing and infrastructure projects came to the fore. Project Revenue (billion USD)



Housing projects had the highest share, followed by infrastructure projects in 2022. Cost of Project (billion USD)



While there were no difference observed in the top two ranks in the distribution of international contracting transactions by building type in the previous period, the cost of power plant and airport projects undertaken in the recent period drew attention.





TOURISM | Introduction

International Tourist

Months of 2023

up by **23.6%**

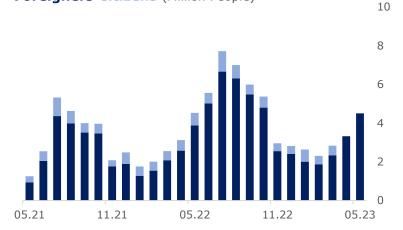
Arrivals

The tourism industry gives positive signals.

According to the May tourism data, 14.03 million foreign tourists visited Türkiye in the first five months of the year. Russian tourists took the first place in the number of foreign tourists by nationality, while German tourists took the second place.

14.03 million visitors entered the country in the first five months of 2023

Foreigners Citizens (Million People)



In the first quarter of 2023, tourism revenues soared by 70% compared to the same period of 2019. Tourism Revenue (billion USD)



In the First Five



Tourism Revenue



Number of Tourists by Nationality

In the fist five month

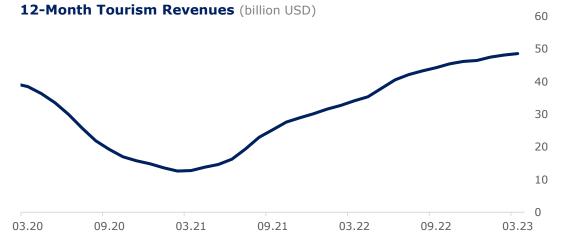


Russian tourists hosted



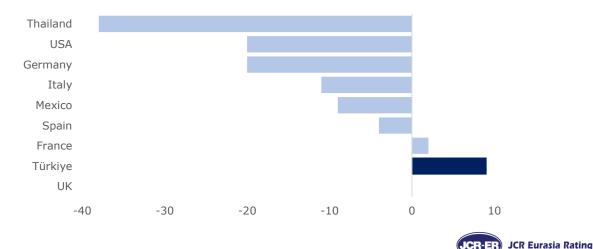
TOURISM | Number of Visitors

As of the first quarter of the year, the upward trend in 12month tourism revenues continued.

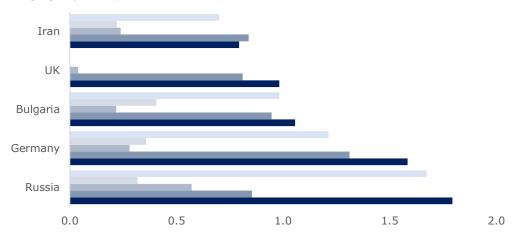


According to the number of foreign tourists in the top 10 destinations compared to the pre-Covid-19 period, Türkiye was the destination that showed the most recovery.

Recovery Compared to Pre-Pandemic (%)

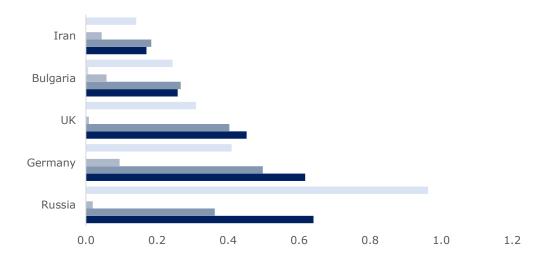


In the January-May period, the number of Russian visitors, which declined in 2022 due to the war, bounced back in 2023 2023 2022 2021 2020 2019



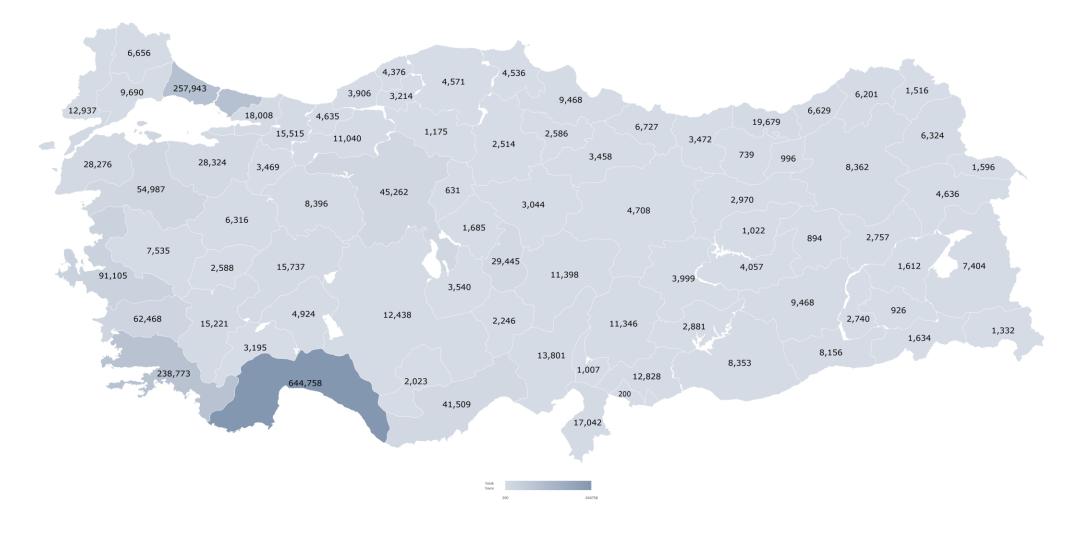
Visitor Comparison for May in the Last 5 Years 2023 2022 2021 2020 2019

pup of Japan Credit Rating Agency. Ltd."



TOURISM | Tourist Facilities

As of May 2023, the total bed capacity in 20,814 tourist facilities approved by the Ministry was 1.94 million.





TOURISM | Tourist Facilities

Hospitality (Hotel) Statistics for January-May Period (5 Month)

				AD	R* (Euro)		REVPAR** (Euro)								
	2019	2020	2021	2022	2023	2019	2020	2021	2022	2023	2019	2020	2021	2022	2023
İstanbul	69	41	32	67	58	80	73	74	104	134	56	30	24	70	78
Ankara	61	33	28	48	52	55	57	53	58	83	33	19	15	28	44
Antalya	59	33	36	53	47	52	42	61	70	101	31	14	22	37	48
Anatolia	53	33	35	49	46	37	37	32	37	64	20	12	11	18	29
Türkiye	63	36	33	60	53	66	58	62	84	112	41	21	20	50	59
Europe	68	36	26	55	64	106	96	76	114	130	72	35	20	62	84

* Daily Average Price

**Revenue per Room

Hospitality (Hotel) Statistics for May Period

				AD	R* (Euro)		REVPAR** (Euro)								
	2019	2020	2021	2022	2023	2019	2020	2021	2022	2023	2019	2020	2021	2022	2023
İstanbul	58	13	23	79	65	82	39	74	126	148	48	5	17	99	97
Ankara	57	10	19	55	59	56	64	64	59	87	32	6	10	33	51
Antalya	57	14	31	67	60	72	35	120	102	137	41	5	37	69	82
Anatolia	47	13	26	57	52	36	29	31	40	66	17	4	8	23	35
Türkiye	55	13	25	71	61	69	35	83	103	125	37	5	21	72	76
Europe	75	13	32	70	73	115	76	86	130	149	87	10	27	91	108

* Günlük Ortalama Fiyat

**Oda Başına Gelir





Economic and Analytical Research

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