
# Turkey: Growing aluminium industry

## Summary review by the imap Institute

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## Introduction

The Turkish economy has gained great dynamism and potential in the past few years. Since 2002, the annual gross domestic product increased by 7% and exports by 10%. Inflation levels remain below 10%. Consequently, Turkey is becoming ever more attractive for internationally trading companies. Economic experts predict an annual growth rate of more than 5% by the year 2015, despite the rate for 2008 being calculated at 3% due to the global financial crisis. Based on Turkey's large and young population Turkey has promising outlooks for the future. On a global level, Turkey belongs to the so-called "next eleven" that possibly may become the world's largest economies – next to the BRICs.

The positive outlooks apply to a large array of industrial sectors. Car manufacturing, engineering, production of white and brown goods and the entire chemical industries and health branch are regarded as especially promising.

With regard to foreign trade, Turkey is becoming ever more linked globally. Export capacities have multiplied throughout the past few years. The European Union and especially Germany are the most important trading partners. Thus, Turkey offers great commercial opportunities for German and other European enterprises.

Economic dynamism and increasing global networks change the quality awareness of Turkish companies and consumers. Low-cost production facilities in Asia have pressurised these companies to improve the quality of production by a large degree. This process developed in tandem with the expansion of exports, in particular to the European Union.

As a result, the demand and design conceptions with regard to packaging of goods have changed. Turkish exporting companies try and adapt to the standards and tastes of the destination countries. In addition, tastes within the domestic market change with advancing industrialisation which entails urbanisation, population growth, rising educational levels, an orientation towards Europe and different consumption patterns.

## Current aluminium market

The Turkish aluminium industry has been booming since 2002. Production levels, domestic sales and imports and exports are continuously rising. The growth of the Turkish aluminium sector is stimulated by the expansion of important consuming industries such as the automobile industry and housing construction, and the demand for semi-finished and finished aluminium products for the packaging industry as well as electric household devices.

**Turkish foreign trade with aluminium products (in Mil. USD)**

| Year | Imports | Exports |
|---|---|---|
| 2000 | 548,2 | 289,4 |
| 2001 | 417,9 | 321,0 |
| 2002 | 525,9 | 346,7 |
| 2003 | 715,2 | 497,3 |
| 2004 | 960,8 | 649, 5 |
| 2005 | 1.120,6 (January-November) | 898,0 (January-November) |

**Aluminium exports of Turkey**

| | 2004 | 2005 | 2006 | 2007 |
|---|---|---|---|---|
| Quantity (1,000 tons) | 218 | 277 | 325 | 381 |
| Value (Mil. USD) | 685 | 898 | 1.283 | 1.673 |

According to the Turkish association of aluminium producers *Türkiye Alüminyum Sanayicileri Dernegi* (Talsad) the annual Turkish market volume for aluminium products amounted to approximately 3 Bn. USD in 2007. Housing construction is booming due to low interest rates. Although demand is increasingly met by PVC-products, the construction of shopping and leisure centres and other commercial objects with modern façades necessitates an increased quantity of aluminium and glass. Export potentials in this sector are great as Turkish contracting companies also undertake such projects abroad. In the electronics sectors, exports are also becoming ever more important.

The packaging sector expands annually by 10% and thus has an increased requirement of aluminium foil for foodstuffs and pharmaceuticals. Increased consumption levels and modernisation of the retail industry lead to higher demands regarding packaging. The export-orientation of the foodstuffs sector boosts demand which profits local producers as well as import companies for packaging materials. Although most of metal packaging imports of an estimated 500,000 t are steel products, a small percentage of aluminium containers, barrels and canisters for compressed and liquefied gases, under 300 litres volume, are imported.

The Turkish automobile manufacturing sector displays an increasing demand for parts and accessories made of aluminium in order to reduce weight and corrosion. This industry is highly export-orientated. In the year 2005, total output amounted to 951 000 vehicles and increased slightly in the following year. In June 2006, Hayes Lemmerz Inci, a joint venture between Hayes Lemmerz International and Inci Holding, opened the doors to its third 35 Mil. USD production plant for aluminium wheels for automobiles. More than two-thirds of the produce is designated for export.

According to Talsad, per-head aluminium consumption rose from 3,8 kg to 6,5 kg between the years 2000 and 2007. In comparison, the populations in OECD countries use 33 kg of aluminium per head. Such numbers paired with increased industrialisation and modernisation of the country demonstrate a high sales potential within the domestic market.

The Turkish aluminium industry comprises around 500 companies with a total of 18,000 employees. To a large extent they are small-sized enterprises with low capacities. Below table shows the largest and partially expansionist companies that control the domestic market and also exports.

**Largest enterprises of the Turkish aluminium industry**

| **Company** | **Net turnover 2004 (in Mil. YTL)** |
|---|---|
| Assan Alüminyum | 541,6 |
| Eti Alüminyum | 198,5 |
| CMS Jant ve Makina | 159,6 |
| Asas Alüminyum | 119,3 |
| Has Celik Halat | 97,8 |
| Kale Oto Radyatör | 89,7 |
| Saray Döküm | 80,5 |
| Sahinler Metal | 77,4 |
| Cevher Döküm | 65,7 |
| Fenis Alüminyum | 50,6 |
| Erdoganlar Alüminyum | 45,7 |

Large problems arise from the scarcity of resources in the country, the high costs for energy and qualified labour and heightened environmental standards. Despite this, Turkey manages to remain competitive due to modernisations and expansions of their facilities in the past few years which yielded two-digit growth rates for exports.

**Primary aluminium**

Turkish imports consist first and foremost of primary aluminium. Imports originate from Russia and other CIS states and northern European countries. Only a small portion of raw aluminium used in production originates from smelting in Turkey. There is only one facility for the production of primary aluminium in Seydisehir (Province of Konya), owned by Eti Alüminyum, and it is limited to 60,000 tons. As a result, up to 75 percent of the necessary raw aluminium is imported.

In 2005, large aluminium companies were partly privatised. Eti Alüminyum was bought by Ceka Insaat for 305 Mil. USD. Eti Alüminyum's facilities in Seydisehir are being modernised with 220 Mil. New Turkish Lira to reach an annual capacity of 340,000 t aluminium hydroxide, 200,000 t aluminium oxide, and 35,000 t aluminium sulphate. Assan Alüminyum has also been privatised partly. Kibar Holding A.S. bought the facility in Dilovasi-Gebze (Marmara region) and is currently planning investments to expand production from 30,000 t of aluminium to 109,000 per year. Continuous thin-slab casting shall be introduced to increase productivity and efficiency. In total, the modernisation investments require approximately 197 Mil. USD.

Bauxite reserves in Turkey which qualify for aluminium production range at 87 Mil. tons. The repositories are situated in Konya-Seydişehir, Antalya- Akseki, Mersin-Silifke-Taşucu and Zonguldak-Kokaksu. Apart from producing aluminium, Bauxite has become a component of aluminium-cement in recent years.

For the year 2006, 350,000 tons of primary aluminium and 15,000 tons of secondary aluminium were brought into the country. 570,000 tons of primary and secondary aluminium as well as 22,000 tons of scrap aluminium were imported in 2007. The scrap metal was used to produce 70,000 tons of secondary aluminium.

**Semi-finished and finished products**

To the largest part, Turkish aluminium companies produce semi-finished and finished products. In total, the annual capacity is estimated at 700,000 tons. For  semi-finished and pre-manufactured products Talsad estimates output at 400,000 to 450,000 tons, of which 200,000 to 220,000 tons are extrusion produces, 150,000 tons are rolled products and 180,000 tons are smelting products.

More than half of the Turkish aluminium produce is exported. Exports of aluminium products amounted to 1,673 Mil. USD in 2007. Aluminium rods and profiles are mainly exported to Germany, Great Britain and Bulgaria. Sheets and slabs go to Italy, Spain and Germany. Kazakhstan, Germany and Russia receive products for the building and construction industry.

**Future growth of aluminium market**

Total annual production by approximately 500 aluminium producing companies ranged at 750,000 tons in 2007. An output of 1,000,000 tons is the medium-term goal. Talsad expects an annual growth of at least 15% for the next few years. Despite high costs for raw materials, Turkish aluminium producers are expanding their production capacities and are investing in the modernisation of their facilities. The largest producer in the country with 137.000 tons output in 2007, Assan Alüminyum, managed to increase their production levels by 14% compared to the previous year. Further casting techniques are planned to increase their capacities by 60,000 to 70,000 tons within the current year.

Despite investments in the sector, Turkish supply capacities have not been able to balance out the rising demand in recent years, especially as a result of high energy consumption levels for aluminium production. All expectations today lie in the intended construction of three atomic power plants and installation of further hydro-electrical plants.

**Unternehmensdarstellung**

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- Integrationsarbeit
- Interkulturelle Trainings

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Das imap Institut unterstützt deutsche und ausländische Unternehmen bei ihren außenwirtschaftlichen Aktivitäten in der Türkei, dem Iran und der arabischen Welt. Imap zeichnet sich dabei durch ein individuelles, passgenaues Portfolio an Dienstleistungen für seine Kunden aus. Schließlich ermöglichen die maßgeschneiderte wirtschaftliche und rechtliche Beratung gemeinsam mit der interkulturellen Expertise einen erfolgreichen Geschäftsabschluss.

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