The Aluminium Sector in Lebanon: Resilience in the Face of Challenges

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So what do sapphires, rubies, soda cans, forks, knives, helicopters, airplanes, cars, and some electronics all have in common? They all contain aluminium, the third most abundant resource in the earth's crust.[1]

How Aluminium is made

The process of making this multi-purpose metal[2] starts with the mining of bauxite. Discovered for the first time in France in 1821, bauxite is a rock but more than that, it is the world's premier source of aluminium. The bauxite production giants are Australia (31%), China (16%), Brazil (14%), Indonesia (12%), Guinea (7%), India (6%), Jamaica (4%), Kazakhstan (2%), Russia (2%) and Suriname (1%).

After extraction, the bauxite is refined in order to obtain Alumina, also referred to as aluminium oxide. The next step consists of refining this alumina in order to turn it into liquid aluminium. The liquid aluminium is then casted in different molds depending on what the aluminium will be used for. The molds can either be Extrusion ingots, Sheet ingots or foundry alloys. In the extrusion technique, the aluminium billet is heated and pushed through a die, a tool that determines the shape of the aluminium profiles. If the aluminium is molded into sheet ingots, the purpose is to make rolled products such as plates, strip and foil. Whereas when foundry alloys are used in the process, the metal is usually destined to be used for car parts.

Global Aluminium Highlights

Aluminium is traded on the London Metals Exchange (LME), the bedrock of industrial metals trading. A premium is added to the LME Aluminium price and that premium depends on the delivery costs entailed when the metal is transported from one destination to the other.

According to the International Aluminium Institute, total primary aluminium production reached 50,602 thousand metric tons in 2013, 5% higher than 2012. China remained a heavyweight in primary aluminium production accounting alone for around 49% of the total, followed by 10% accounted for by North America and 8% for each the GCC region as well as East and Central Europe.

On a worldwide scale, big names in the aluminium industry are United Co. Rusal, Rio Tinto Group, Alcoa Inc, Aluminium Corp. of China, Norsk Hydro, Dubai Aluminium, China Power Investment Co, Weiqiao Pioneering Group Co, BHP Billiton Ltd., Shandong Xinfa Aluminum and Electricity Group and Aluminium Bahrain BSC.

A Middle Eastern company Dubai Aluminium most commonly referred to as Dubal is on that list and for a reason. Countries like Dubai have made good use of their cheap energy advantage to venture out in energy-intensive activities such as producing aluminium. In fact, it is important to note that the refining of the bauxite rather than its extraction is the energy intensive step of the process. 1 ton of extracted bauxite requires 1.5 kilograms of fuel oil and less than 5 Kwh of electricity whereas obtaining 1 ton of alumina (refined bauxite) requires 14.5 Gigajoules of energy and 150 Kwh of electricity.

[1] According to the Australian Aluminium Council

[2] According to Hydro Aluminium Company

Lebanese Aluminium Industry – The Extruders

In Lebanon, there is no production of aluminium only a transformation process. According to market aficionados, production of aluminium in Lebanon is not an option due to raw material insufficiency and due to the burdensome energy and labor costs. According to a top market player, the monthly energy bill for the 8 generators of his 24-hours running factory amounts to $90,000. Alternative energy resources such as solar and wind energy have been contemplated by some players but have been later ruled out as they were deemed too costly and unsuited for the needs of their factories.

However, the processes of extrusion, powder coating, anodizing, die manufacturing, are present in Lebanon. Lebanese aluminium industrials import unworked aluminium and then apply the extrusion process (explained above) to transform the unworked aluminium into profiles. Powder coating is a finishing step for aluminium where a spray gun is used to apply a powder made up of colored pigments, leveling agents and other additives to the aluminium. The powder can color the aluminium, give it a wood-effect all while protecting it from cold, heat or corrosion. As for anodizing, it is also another finishing process that creates a protective coat over the aluminium.

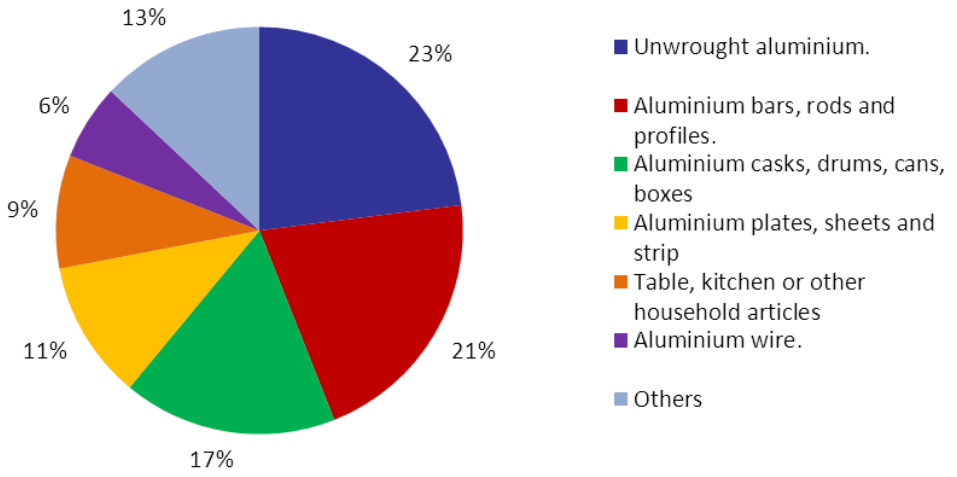
The most prominent names in the extrusion of Aluminium industry are Sidem, Alutex, Aluxal and Alexco. It is believed that Sidem alone accounts for around 40% of the market.

The Lebanese Trade of Aluminium

Trade figures from 2010 to 2013 show that the balance of trade for aluminium products is constantly in the red. In 2013, aluminium exports totaled $70.52M while the imports amounted to $203.33M making the balance stand at -$132.82M.

When asked, all market players linked this to competition from foreign products which are 20-25% cheaper. According to a market source, while the price tag for Lebanese aluminium profiles falls in the range of $4,000-$7,500 per ton, a ton of Egyptian profiles costs only $3,200. According to market sources, a tariff of 10% is applied only on 2 out of 6 aluminium import segments. Market players have deemed this an insufficient measure to protect the Lebanese aluminium extruders.

Constitution of Lebanon's Aluminium Imports, 2013



Source: Lebanese Customs

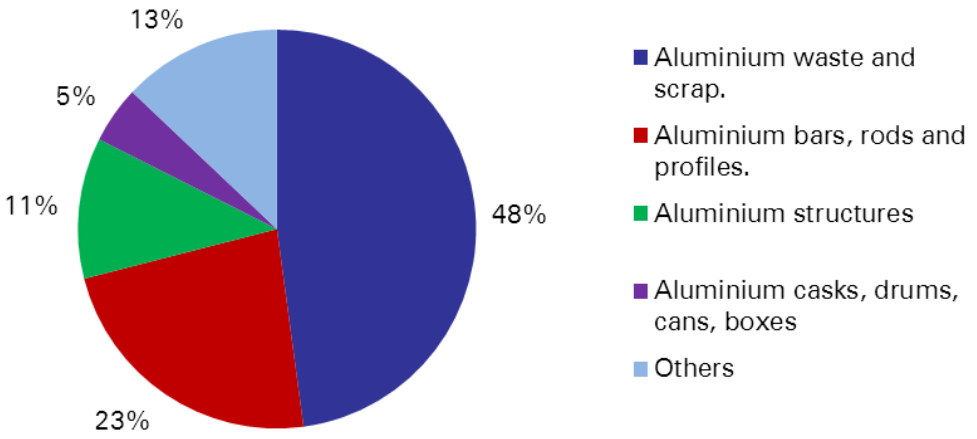
Unwrought or unworked aluminium holds the largest share in Lebanese aluminium imports. According to customs figures, 20,512 tons of unwrought aluminium were imported in 2013. In 2013, the value of unwrought aluminium imports amounted to $46.92M, of which 99% came from the United Arab Emirates.

Aluminium bars, rods and profiles hold the second biggest share in Lebanese aluminium imports of 21%. In 2013, our imports of bars, rods and profiles amounted to $42.45M while our exports were less than half at $16.38M. 44% were imported from the United Arab Emirates, 21% from Saudi Arabia and 19% from Egypt.

The Syrian crisis and its subsequent spillovers on Lebanon have added another set of challenges for aluminium extruders. A lot of ink has been poured to convey that the Syrian crisis had a dampening effect on the Lebanese economy, and the aluminium industry is no exception. According to a market source, the Syrian crisis has disrupted trade routes and compelled Lebanese extruders to transport their raw material by sea instead of by land. Not only did this switch push costs upwards but it also delayed delivery times: "the raw material we used to receive in one week we now receive in one month" they said. With such changes in delivery times, aluminium extruders have been forced to increase their stocks of raw material, yet another factor pulling costs upwards.

The subdued economy has also weighed negatively on the construction sector which inevitably weakened demand for aluminium profiles. With costs on the up and with lower demand, the Lebanese aluminium extruders fell under the strains of a lower turnover.

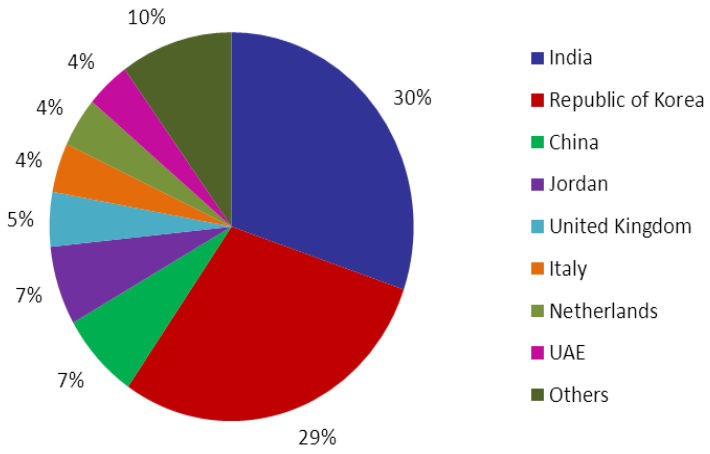
Constitution of Lebanon's Aluminium Exports, 2013



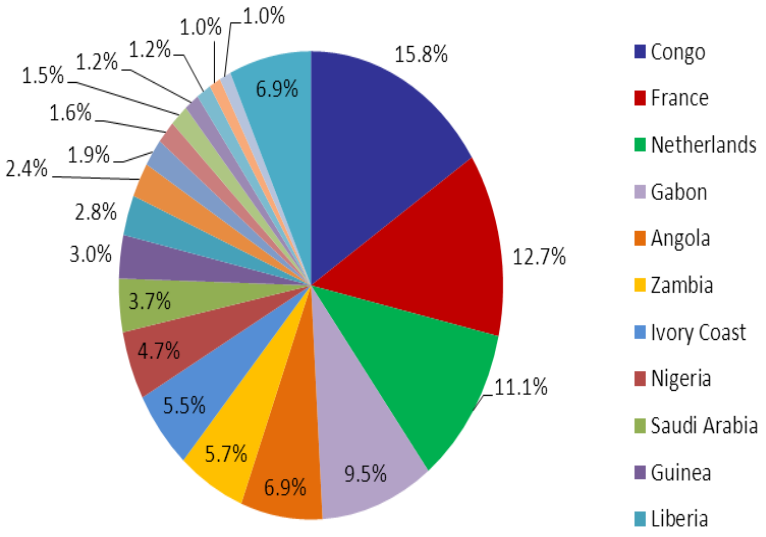
Source: Lebanese Customs

According to a market player, the big extruders in Lebanon usually recycle their scrap. This makes sense since the US Department of Energy affirms that the secondary aluminum production is far more energy efficient than the primary production. Therefore the exports of waste and scrap ought to emanate from the installers of aluminum.

Export Destinations for Waste and Scrap, 2013



Export Destinations for bars, rods and profiles, 2013



Source: Lebanese Customs

Lebanese Aluminum Industry – The Installers

According to market sources, the prices charged by installers have remained stable for many years now. However, in 2008-2009 when the Lebanese economy was booming, demand was buoyant profit margins were wide. Now, demand has shrunk and competition has increased as all market players are after the scarce demand.

According to a market player, when talking market shares one must dissect the market into high-end and medium end. Glassline and Alumco dominate 90% of the high-end segment whereas 90% of the medium-end segment is dominated by players such as Bifem-Paralu, Alubatec, Stal, Algeco, AG Najwal...etc.

Two German brands are used in the high-end segment: Wicona and Shuco. The most commonly installed profiles in the medium-end are Technal, with an installation cost of $220/square meters and Sidem 2000 costing $140/square meter.

Overall, the aluminum industry in Lebanon shows signs of resilience and awareness to the challenges it is up against. Market players are fighting to weather the storm although they all agree that the government must do more to protect the Lebanese aluminum industry.

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