

Executive summary

- The Middle East is emerging as a significant region for primary aluminium production. In 2008 it produced 2.6 million tonnes of primary aluminium, accounting for around 6.5 per cent of world market share. MEED estimates that by 2010, assuming all planned projects are completed on time, aluminium production capacity in the Middle East and North Africa (MENA) region will be 4.3 million tonnes a year (t/y). This figure rises to 10.8 million t/y provided all the expansion projects at existing smelters and greenfield projects planned beyond 2010 proceed. This will mean that the MENA region will have about 19 per cent of world capacity by 2013-14.
- GCC producers will continue to account for a major part of the MENA region's aluminium production. Of the 6.5 million tonnes of potential

aluminium capacity planned beyond 2010, 4.4 million tonnes will be built in the GCC. In the longer term, MEED estimates that by 2020 the GCC alone will produce some 10 million t/y of aluminium, accounting for 20 per cent of global market share.

- The region's downstream aluminium industry is under developed. The Middle East consumes only 16 per cent of the domestically produced primary aluminium while exporting the remaining 84 per cent. The extrusion industry – manufacturing aluminium products from its primary form – accounts for almost 70 per cent of the aluminium demand in the Middle East, of which 90 per cent is allocated to the construction market. Due to low demand for finished aluminium products, there is a limited number of rolling and casting producers in the region. More

→ **“The MENA region will have about 19 per cent of world capacity by 2013-14”**

rolling and casting factories will need to be built for the aluminium industry to benefit from a sophisticated downstream market.

- Although the Middle East is currently attracting investments in new aluminium plants due to its energy feedstock advantage, securing affordable long-term power and bauxite supplies are two issues that need to be addressed for the region to ensure success in the industry. Competition for bauxite supplies is mainly expected to come from China, while securing sufficient gas to feed aluminium plants' power stations is becoming more difficult given the direct competition for gas from the Middle East's hydrocarbons, petrochemicals and utilities industries.
- Globally, aluminium consumption

growth averaged 6.1 per cent between 2000 and 2007. However, with the world economy entering a deep recession, there is uncertainty as to the short-to-medium-term growth path for aluminium demand. Large supply curtailments have been announced by producers across the world, in an effort to revive both prices and demand for aluminium.

- The slowdown in the global economy has led to a dramatic drop in aluminium prices. The cash price for aluminium on the London Metal Exchange (LME) traded at \$1,384 a tonne in late May 2009, down from the peak of \$3,300 in July 2008. The price slump reflects the large build-up of aluminium inventories and the drying up of demand due to low levels of construction and industrial activity.
- The price outlook for aluminium is mixed. According to Australia's Macquarie Research, the cash price for aluminium will average \$1,433 a tonne for 2009 and reach about \$2,000 a tonne in 2012. However, supply and demand may pick up towards the end of 2010, depending on how government fiscal stimulus packages affect economic activity in the short and long term. The determining factor in a price recovery will be how fast the consumer market can absorb the accumulated aluminium inventories

once global demand returns. This is particularly important for the Middle East region, as it exports the majority of its primary aluminium production to international markets.

→ **“The cash price for aluminium on the LME traded at \$1,384 a tonne in May 2009, down from the peak of \$3,300 in July 2008”**

Introduction

Aluminium production has traditionally been dominated by Western countries and Russia. However, the Middle East, with its abundant energy resources and focus on economic diversification away from oil, is becoming an increasingly important production centre. In 2008, the Middle East accounted for 6.5 per cent of world primary aluminium production, a figure that could reach almost 20 per cent by 2015. However, it still remains a marginal player by global standards. China, for example, accounts for 33 per cent of global output.

Although the aluminium market has enjoyed good average growth in recent years, the credit crisis, which began in 2007 and deteriorated further in 2008 with falling credit availability, declining consumer confidence and plummeting activity in the construction market has hit the industry hard. The plunge in the highly cyclical transportation and

construction industries across the US, Europe and Japan has led global demand for aluminium to fall significantly. The decrease in consumption has caused global aluminium inventories to reach record levels, while prices have plummeted. According to UK consultant CRU, the LME inventory level reached 3.3 million tonnes in February 2009, nearly 2.3 million tonnes more than levels in March 2008.

As a corrective measure to this unfavourable supply/demand balance, and in reaction to falling prices, several aluminium firms announced production cuts, totalling about 6.3 million tonnes in March 2009, with China taking the lead. The Aluminium Corporation of China (Chalco), the country's largest producer, announced cuts of 720,000 t/y in October 2008; the company has production capacity of 3.5 million t/y. In addition to the cuts, some producers, particularly in

↳ “While production is being curtailed and capacity closed across the world, aluminium producers in the MENA region are expanding”

Europe and the US, also announced the permanent closure of part of their smelter operations. High fuel costs and old energy-intensive capacity were the main factors behind the decommissionings.

While production is being curtailed and capacity closed across the world, aluminium producers in the MENA region are expanding. Primary aluminium production in the Middle East is projected to grow at a compound annual growth rate (CAGR) of 14 per cent up to 2013, according to Qatar Aluminium (Qatalum). However, the growth rate could be considerably higher. Assuming all the projects announced in the MENA region proceed over the coming five years, the CAGR will surge to 33 per cent. Even if only half go ahead, the rate of growth will still be over 20 per cent.

In comparison to their European and US counterparts, Middle East producers have

a clear advantage in cost factors such as energy and labour – making them highly competitive. When Bahrain’s aluminium smelter was built in 1971, a 20-year gas supply contract was agreed at \$0.50 a million BTU. Aluminium Bahrain (Alba) was not alone in enjoying rock-bottom gas prices. Dubai Aluminium (Dubal) secured a similar price for its smelter, commissioned in 1979. More recent entrants to the Middle East market have had to pay more, generally in the range of \$0.75-1.25 a million BTU: Qatalum is believed to be paying \$1 a million BTU. Even so, such feedstock prices are still among the most competitive in the world, and equally are fixed on a long-term basis. They compare favourably with energy prices in developed countries. In the US for example, Henry Hub gas futures contract prices, as traded on the New York Mercantile Exchange, averaged \$3.90 a million BTU in 2009. In June 2008, futures prices peaked at \$13.50 a million BTU, more than 13 times the price paid by Qatalum.

Although MENA and particularly the GCC is seen as a natural hub for primary aluminium production, existing and prospective producers face challenges, especially in the drive to achieve supply chain security. They need to secure affordable power supplies by negotiating long-term gas contracts. Ideally, they should acquire stakes in bauxite reserves to guarantee supplies and nurture

downstream companies that can consume their hot metal process.

With a small, under-developed downstream industry, the Middle East has always been a net exporter of primary aluminium. Production of primary aluminium in the Middle East reached 2.6 million tonnes in 2008, of which only 16 per cent was used by the domestic market to produce profiles, sheet and coils, forged and coated products. By building up a stronger downstream industry, Middle East producers will reduce some of the risk inherent in exporting the majority of their aluminium.

Investment in greenfield projects and new capacity, at a time when other aluminium plants are shutting down around the world, are serving to increase the region’s importance. MENA is projected to account for almost 20 per cent of total aluminium capacity by 2014, on the back of capacity additions in the GCC and North Africa. Two low-cost operators, Qatalum and the UAE’s second producer, Emirates Aluminium (Emal), are due to come on stream by the end of 2009 and mid-2010 respectively. They will add significantly to the region’s current capacity of 2.6 million t/y. Qatalum will produce 575,000 t/y in its first phase and Emal’s first phase will add 700,000 t/y to the region’s output. They are set to be followed in the Gulf by Saudi Arabian Mining Company’s (Maaden’s) integrated

↳ **“With a small, under-developed downstream industry, the Middle East has always been a net exporter of primary aluminium”**

project in Saudi Arabia which will produce in its first phase 720,000 t/y.

North Africa has ambitions to become a major producer too, with both Algeria and Libya looking to monetise their large reserves of natural gas. In January 2008, the UK’s Klesch & Company finalised an estimated \$8bn joint venture agreement with the Libyan African Investment Portfolio for the construction of a 725,000-t/y smelter, to be completed by 2011. Nine months later, Russia’s UC Rusal and the Libyan State Economic & Social Development Fund signed a memorandum of understanding (MoU) for the development of a 600,000-t/y smelter and a 1,500-MW gas-fired power station. In Algeria, Emal announced plans in 2007 to build a 700,000-t/y smelter at Beni Saf, in joint venture with national oil company Sonatrach.

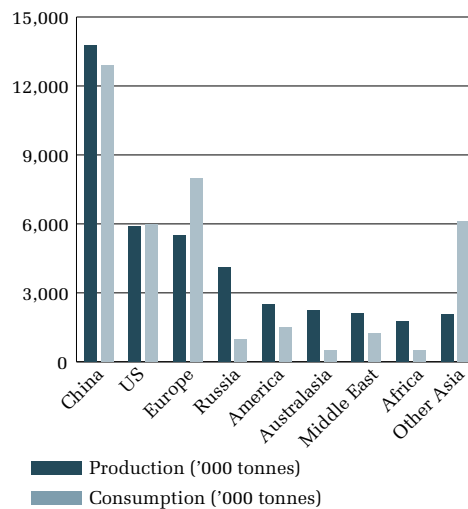
While new MENA producers will enjoy energy cost advantages over their counterparts in Western Europe, the Middle East still faces two long-term challenges in its bid to become a major centre for aluminium production. Firstly, Saudi Arabia is the only country in the Middle East with significant deposits of bauxite, which are refined to produce alumina – other countries depend on imports.

Secondly, the downstream industry in the Middle East is under developed.

Although growing, it is not keeping up with the expansion of the upstream sector. A well-developed and diversified downstream sector would not only increase value-added exports and create more jobs, but it would also reduce the exposure of upstream producers to the international market.

↳ “A well-developed and diversified downstream sector would not only increase value-added exports and create more jobs, but it would also reduce the exposure of upstream producers to the international market”

World aluminium production and consumption, 2008



Sources: CRU Q1 2009; S&BD; Qatalum