

SODA ASH

*By Stephen Harriman
Harriman Chemsult Ltd*

In global terms, the natural production of soda ash accounted for almost 24 Mt in 2000, which represented about two thirds of total supply. The US remains the principal producer, with production of 10.2 Mt, from a capacity of 14.2 Mt/y. The main development on the supply side was the commissioning of the new soda ash plant at Piceance Creek in Colorado. American Soda commissioned its 600,000 t/y plant in October, which was ahead of schedule. The plant also has a 150,000 t/y sodium carbonate unit, and full capacity at the plant could be raised to 3.0 Mt/y.

Other changes to capacity focused on the expansion by Solvay Minerals of its joint venture operation with Asahi Glass at Green River. Capacity was increased from 2.07 Mt/y to 2.43 Mt/y. The increased capacity will be split between the two owners, with Asahi Glass' portion being exported to Japan to accommodate the closure of the Kitakyushu plant at the end of March 2001. There were no changes to ownership, but IMC Global retained its interest to divest its salt business, which could be in conjunction with its soda ash and boron business.

It was not a vintage year for soda ash demand in North America. Very low caustic soda prices in late 1999 and into 2000 resulted in decreasing attraction of soda ash as an alkali source. However, the surge in caustic soda prices in the final quarter of 2000 meant that the year ended on a more positive note, though sellers were locked into low prices. Domestic consumption was 6.39 Mt in 2000, which was down by 40,000 t from the previous year. There were no major changes to the end use pattern.

Consumption by the glass sector dropped by about 100,000 t, due principally to the fall in offtake by the container and fibre sectors. Flat

glass production recorded a minor increase. Weak alkali prices resulted in reduction in consumption of soda ash in the soap and detergent, water treatment, flue gas and pulp sectors. By contrast there was a rise in sales to the chemical sectors, due to a surge in offtake in the second half of 2000. The slower domestic market was partially compensated for by increased exports. These rose by 160,000 t to 4.01 Mt but these were still below the peak of 4.19 Mt of 1997. The main changes in the export destinations were decreases to Canada and Europe. However, all the other major destinations recorded substantial increases, especially Korea which saw an increase of over 160,000 t.

Production levels at the other major natural ash manufacturers in Botswana and Kenya both recorded minor reductions in 2000, to 190,000 t and 225,000 t, respectively. There were also increases in production of natural soda ash in China, which has a capacity of 0.54 Mt.

Synthetic Product

There was little change in the West European soda ash market in 2000. Production levels dipped slightly due to a series of mechanical problems, especially in the second half of 2000, and the fact that caustic soda was a much more attractive alkali source for those

World Soda Ash Production ('000 t)		
	1999*	2000 ^P
Western Europe	6,450	6,200
Eastern Europe	4,360	4,850
North America	10,800	10,750
South America	310	285
Africa/Mid East	1,105	975
Asia/Oceania	11,010	11,600
World	34,035	34,660

* Revised

^P Provisional

accounts able to switch in the first six months of 2000. The main company to suffer production problems was Brunner Mond, which was subjected to flooding (which damaged its power unit and water treatment plant) in the December quarter. The disruption obliged the company to call *force majeure*, which added to the tighter feel that had begun to emerge in 2000.

There were no changes to capacity or ownership in 2000 other than the scheduled closure of the 300,000 t/y Matthes and Weber soda ash plant in January 2000. Although there were no quantum changes in capacity, there was still ongoing investment, and Solvay upgraded its containerisation facilities at its plant at Dombasle in France. The company had at one stage proposed an increase of 200,000 t to 900,000 t/y. The decision hinged on the costs of building a pipeline to take the wastewater. The project for the pipeline was to be done in conjunction with the nearby soda ash plant at Nancy. While there was limited change in supply in Western Europe, there was an increase in market share by local suppliers. Exports of US soda ash in 2000 dropped by nearly 50% to 169,000 t, due mainly to cuts in imports by Spain and Belgium.

There continued to be progress in production in soda ash in Eastern Europe. Production in Russia increased by 15% to nearly 2.2 Mt, due principally to the increase at Sterlitamek. There was also an increase in Ukrainian production which rose to 575,000 t, an increase of 25%. Of the other suppliers in the region, Solvay made considerable progress with the production in Bulgaria, ensuring reliable supplies of raw materials when it acquired equity in three principal upstream businesses, TEZ (utilities), Geosol (brine) and Limestone Extraction Works (lime).

The year was another strong one for the Chinese industry. Production hit record levels of over 8 Mt. This was due to the steady increase in Chinese soda ash capacity, with a number of expansions commissioned in

2001. These include the renovation of the Tianjin Complex in early 2000. Other investments in the year included a 200,000 t/y plant for Sinopec Nanjing Chemical Industrial Corp., a 40,000 t/y expansion at Fuzhou Yaolong Chemical Industry Group to 100,000 t/y and Tangshan Sanyou completed its renovation of its 600,000 t/y soda ash plant. There was an interesting additional development with the latter plant, and the US company, General Chemical Corp., announced a joint venture with the company in late 2000 in which it would provide technical and operational expertise. Domestic consumption in China reached 7 Mt in 2000, with exports of just under 1 Mt.

There were no major changes in the Japanese market in 2000. Production was almost 670,000 t. With due allowance for inventory changes, apparent consumption in 2000 was 1.06 Mt. Production is scheduled to fall in the future as Asahi Glass announced that it plans to close its 350,000 t/y soda ash plant by March 2001. Imports of soda ash increased by nearly 25% to nearly 395,000 t, sourced almost exclusively from the US and China.

The anti-dumping issues against several soda ash suppliers rumbled on in India through 2000, coming to a climax in the final quarter with the introduction of duties on Chinese soda ash. There was no resolution to the ongoing dispute about imports via ANSAC, which was settled in 2001. The Indian market moved to increased capacity in March 2000 with commissioning of the 420,000 t/y plant of Nirma in Gujarat. The production was dedicated to detergent production.

In Pakistan there were also plans announced for increases in capacity. A two stage expansion was proposed, 35,000 t to be followed by a further 75,000 t, which would ultimately raise capacity to 335,000 t/y. The first stage was scheduled for completion by the end of 2001.

In Indonesia, PT Pupuk Kaltim sought loans to complete the commissioning of the 150,000 t/y soda ash plant. Construction on the project ceased following the political and economic turmoil in Indonesia

The Brazilian soda ash market grew in 2000 by around 8% to 605,121 t. However, local production dipped slightly from just over 200,000 t to 190,616 t. Imports therefore accounted for a larger proportion of the market at 414,500 t.

Market Place

Soda ash prices in the North American market recorded a slight increase in 2000. In late 1999 producers had nominated increases of up to US\$5 per short ton. However, with the weaker caustic soda balance and pressure on prices, soda ash suppliers were only able to push through increases of up to US\$3 per short ton. This resulted in an average price of US\$78 per short ton ex-plant, which despite

the increase, was below the levels of 1997 and 1998.

The conditions prevalent at the beginning of 2000 were not conducive to a price rise in Western Europe, and therefore prices were rolled over. With a significant number of prices set for the annual contracts, a number of buyers were able to secure competitive prices through the year. Representative prices were rolled over at around DM275/t fd or around €140/t fd.

The deep-sea markets remains very competitive. However, as the year progressed there were some higher prices reported. In the Asian market, prices opened the year at between US\$120-145/t cif. However changes in balance in the bigger alkali picture resulted in upward movement, and prices ended the year at between US\$135-150/t cif.