



“An investment that makes us very happy.”

AMAG CFO, Gerald Mayer, on the topic of the Alouette smelter in Canada, its ecological qualities and why he personally very much likes the location.



Michel Gagnon, Vice-President Finance and Administration, Alouette (left) and Gerald Mayer, CFO, AMAG

AMAG has had a 20 per cent holding in the Alouette smelter in Canada since 1997. What role does this investment play within the group?

As a result of this holding, we have direct access to 20 per cent of current plant output, or 115,000 t/y, which provides us with a secure raw material basis. In turn, this means that for our customers we constitute a stable partner within the framework of long-term business relationships. Moreover, during the difficult months of 2009, the investment had a steadying influence and made a sizeable contribution to AMAG's successful result.

What is special about the Alouette smelter?

The Alouette (French for lark) smelter is the largest facility of its type in North America and is one of the world's most efficient and modern industrial plants. At present, a workforce of around 1,000 produces 575,000 t of primary aluminium annually at the location in Sept Iles, Quebec.

The Sept Iles location is not so easy to find on the map. It is 670 km away from Québec and 900 km from Montreal. Therefore, why was it chosen?

The location was selected primarily due to the availability of hydropower and the further advantage of a deepwater port on the plant site. Production commenced in June 1992 and in spring 2003 a second enlargement phase commenced, which was successfully concluded in September 2005.

What are the technical highlights in Sept Iles?

The smelter uses 594 Pechiney AP-30 technology cells and specific DC power consumption is extremely low at around 12,800 kWh / t of primary aluminium produced.

A further 18 fully-fledged electrolysis cells are available for the further development of production technology at minimum risk. This testing facility serves the optimization of both anode and cathode linings, and operational parameters. For example, work is continuing at present on an increase in electrical current strength and in addition, environmental issues relating

to production are the object of intensive consideration. We employ an in-house waste gas analysis system and the resulting data is then integrated into the optimization process.

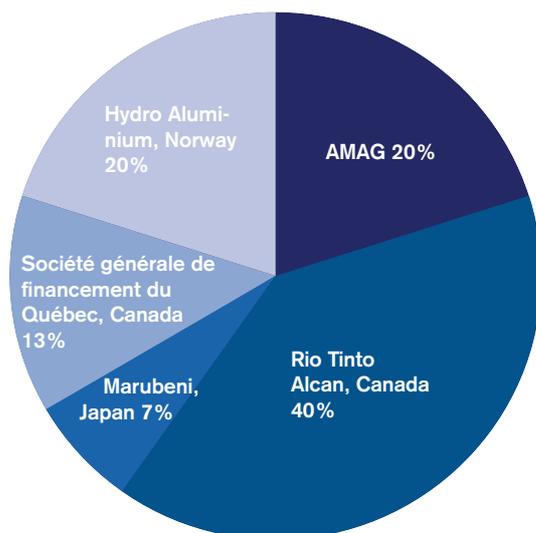
Which brings us to an important topic. How is the smelter to be evaluated from an ecological perspective?

Naturally enough, smelters require very large amounts of electricity. For example, Alouette has a connected load of 895 MW and annual consumption of 7 TWh, which corresponds with Vienna's power requirement for six months. Alouette obtains its electrical energy from highly efficient hydropower plants in the local area. Our supplier, Hydro Quebec, operates hydropower plants in the vicinity of Sept Iles with current output of around 38 GW and additional hydropower capacity is already in the planning phase, which means that basically sufficient "clean" energy will also be available for future expansion schemes. At a time of growing environmental awareness, this is of increasing importance, especially as many of the smelters that are currently undergoing construction are based on fossil fuel energy generation and therefore have a poor CO₂ balance, something that in particular applies to projects in the Arab World.

Transport routes are of decisive importance to any environmental balance. How are raw materials supplied to Sept Isles and how is the aluminium delivered to the customer?

The delivery and dispatch of raw materials and goods at Alouette involves mini-





Aluminerie Alouette/Canada – Shareholding ratio

mum environmental impact. Alumina from the Atlantic area and South America, and petrol coke from the Gulf of Mexico are supplied directly using Panamex vessels. Pitch is transported from Rotterdam and the return transport of primary metal to Europe takes place by means of the special ship, “Jaeger Arrow”. In this connection, it is also interesting to note that our “Alouette Spirit”, a ferry with a capacity of 11,000 t, is employed for the transport of primary metal via the St. Lawrence waterway to the Great Lakes, which saves roughly 15,000 truckloads annually. Furthermore, we also have the possibility of direct loading onto the railways via a roll-on/roll-off ferry.

It is well-known that Canadian environmental legislation is very strict. Does this offer advantages to industrial companies?

Definitely, because as a result of permanent monitoring and continual improvements, we are able to set a very high environmental standard. Accordingly, Alouette constitutes a global benchmark with regard to the ecological production of aluminium.

Alouette not only stands out due to its responsible approach to the environment, but also the excellent working conditions for the workforce. Could you tell us about some of these?

Work safety tops the list of priorities. Since the smelter started operations, the total recordable injury frequency rate has been considerably reduced and has now stabilized at around one accident per 200,000 working hours. This is a top branch figure

and recently the so-called “Ouf!” proactive health & safety tool was introduced, which provides every employee with an opportunity to prevent future accidents through the direct communication of identified dangers, the corresponding corrective measures and possible solutions.

In closing, could you also give us an insight into Alouette’s expansion plans?

Together with our partners, we are currently planning the expansion phase III, which will involve an increase in production to 900,000 t. The forecasts concerning primary aluminium consumption are thoroughly positive and for example, the CRU market research institute anticipates volume growth of around 40 per cent in the coming five years and by 2025 demand could double. Against this background and in view of the availability of “clean” electricity from hydropower, intensive work is under way on the preparation of the required documentation for approval.

Do you have any personal remarks to make about Alouette?

Alouette is a financially attractive investment, which above all proved to be a stabilizing factor for AMAG during the 2009 crisis. Alouette also fulfils increasingly stringent ecological requirements and is a benchmark with regard to energy and cost efficiency. Aluminium produced on an ecologically favourable basis at Alouette is an important part of our AMAG Green Alu Products. And put simply, Alouette is an investment that makes us very happy.

Thank you for the interview. ■

