10 Years of TRIMET France: A Success Story

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https://doi.org/10.71659/icsoba2024-kn002

Abstract

It has been now 10 years since the German family-owned aluminium producer TRIMET took over the historical French production sites of Saint-Jean-de-Maurienne and Castelsarrasin from Rio Tinto.

Throughout this period, a strong industrial plan has been executed and over 200 million euros have been invested in increasing potroom production and recycling, diversifying casthouse products, reducing logistic costs, improving environmental footprint, energy efficiency, electrical consumption flexibility and operational performance.

At the same time, a solid human resources development plan has been implemented, with 480 new recruits over the period including 160 new positions, the creation of an in-house apprentices program, and a particular focus on safety and job training.

The strong and consistent actions taken over the last 10 years have allowed to put both sites on the track of long-term sustainability and have enabled them to successfully deal with the multiple crisis that have arisen during the period.

Keywords: TRIMET France, French aluminium, Recycling, Environmental footprint and sustainability, Recruitment.

1. TRIMET France: Two Centenary Sites at the Forefront of Technology

The company TRIMET France is made of two plants: the Saint-Jean-de-Maurienne smelter (Savoie) and the Castelsarrasin casthouse (Tarn-et-Garonne). Together, the two plants employ 630 people and produce around 150 000 tonnes of value-added products every year.

The Saint-Jean-de-Maurienne smelter started in 1907 (Figure 1), its location being due to the development of hydroelectric power generation in the Alpine valleys. Today, it is one of the oldest aluminium smelters in the world still in operation. There were five other aluminium smelters in the Maurienne valley, all of which closed at the end of their technical or environmental life. The Saint-Jean-de-Maurienne smelter is the one that has been expanded and modernised several times (Figure 2). It has benefited from synergies with the neighbouring Pechiney LRF research centre, where all AP cell technologies were developed. The current smelter's two potlines are semi-industrial demonstration lines for AP18 technology ("F-line", 60 cells, started in 1979) and AP30 technology ("G-line", 120 cells, started in 1986). The smelter produces its own anodes in the carbon department, whose installations and equipment (paste plant, baking furnace and rodding shop) date mainly from the 1980s. In the early 2000s, investments were made in the casthouse to develop production of electrical wire rod, which has since accounted for 2/3 of the production. Today, the casthouse operates three rod mills, two DC-casting pits and one ingot line. Alumina is supplied to the smelter by trains departing daily from the port of Marseille, where TRIMET has two silos and unloading facilities.

The Castelsarrasin casthouse started in 1856, even before the invention of aluminium production, and produced a variety of metals in its early years. For many years it belonged to Pechiney Rhenalu as a rolling plant. After the rolling mills were shut down, it joined the Saint-Jean business unit in 1999, due to technical synergies, since its only remaining production was mechanical rod.

Like most ex-Pechiney sites, the plants were successively taken over by Alcan in 2003 and Rio Tinto in 2007. During the 2009 economic crisis which led to a sharp fall in aluminium prices, F-line was shut down and G-line was kept running at 100 cells, resulting in a total reduction in production capacity of 30 %.





Figure 1. The smelter in 1910.

Figure 2. The smelter today.

2. The Takeover (2013)

Saint-Jean-de-Maurienne has been supplied for around 30 years by a long-term electricity contract signed by Pechiney with French energy supplier EDF in 1984. This contract was to expire in 2014 and a new agreement had to be found. In addition, the small-scale, high costs smelter was no longer in line with Rio Tinto's strategy, and decision was taken to look for a new owner or alternatively shutdown the smelter. This decision has caused considerable concern and awareness in the community where the smelter operates, due to its significant impact on the local economy (Figure 3).

The process took around 18 months and in March 2013 Rio Tinto entered into exclusive negotiations with the German family-owned aluminium producer TRIMET. Founded in 1985 as a trading company, TRIMET has gradually grown by taking over distressed assets for which major aluminium producers saw no future.

An agreement was reached between all parties in July 2013 (Figure 4) and TRIMET France was created in December 2013. The agreement included an electricity supply for 10 years from EDF, which became a 35 % shareholder in the company to ensure a fair sharing of risks and profits.



Figure 3. The mobilisation of local elected in 2012 to attract awareness.



Figure 4. Binding offer July 2013.

There was no impact on employment, and the staff surplus has been used for additional training, executing the projects or preparing the restart. Restart has been completed within 3 months, with a 98 % success rate (Figure 21). 20 % of the cells were completely relined, with the remaining 80 % restarted on metal pad after burners preheating.

The rapidity of the decision and execution of the shutdown was a key factor in the success of our negotiations with EDF for an extension of our electricity supply contract beyond 2023, which was signed in June 2023 (Figure 22).



Figure 21. F-line restart in 2024.



Figure 22. Power contract signature June 2023.

8. Conclusion

TRIMET's takeover of the Saint-Jean-de-Maurienne smelter and Castelsarrasin casthouse has been a renaissance for both plants, involving significant investments in assets and employees.

The success of this takeover is further proof that aluminium production in Europe can be sustainable, provided it is associated with a business model that hedges risks and aims to secure margins rather than being totally exposed to the markets.

Thanks to the investments in assets and people realized in the last 10 years, both plants are well prepared to face their future challenges of decarbonisation, digitalization, competitiveness and people attractiveness.

9. References

[1] Maenner Loïc, Contribution of an Aluminium Smelter to Power Grid Stability, 12th Australasian Aluminium Smelting Technology Conference, Queenstown, December 2018.