

# INTERVIEW: Atlas Lithium studying production at Brazil's lithium valley in 2024



Author **Adriana Carvalho** ✉  
 Editor **Dan Lalor** ✉  
 Commodity **Metals**

## HIGHLIGHTS

**Spodumene cost at \$300-\$400/mt FOB Vitoria port**

**No midstream expansion in the near term**

US-based mineral explorer Atlas Lithium is on course to become the second high-grade lithium concentrate producer at the Minas Gerais mineral-rich Jequitinhonha Valley, supplying hard-rock spodumene "at the most competitive cost", chairperson and CEO Marc Fogassa told S&P Global Commodity Insights.

Equipment for the modular plant was on the way to be assembled on site, Fogassa said in a recent interview, with phase one being studied to begin ramp-up in the third quarter of 2024. It will be capable of producing 150,000 mt/year of 5.5%-6% spodumene by using dense medium separation technology.

Such investment is to be potentially implemented by acquiring the plant in modules. "This modular system enables us to consider duplicating the plant by 2025 or even quadruplicating in the future if demand justifies such investment," Fogassa said.

The company has been sought by companies in Japan, China and the US and Fogassa will fly to Asia in the coming days to discuss potential partnerships and/or offtake agreements.

Last December, the miner signed a memorandum of understanding with Mitsui & Co. formalizing its interest in purchasing future lithium concentrate output from Atlas' 100%-owned project in Minas Gerais and stipulating a potential investment of about \$65 million towards the project.

"But over time we also received other offers ... it is a competitive situation, and we will do what is best for our shareholders," Fogassa said.

Brazil: Lithium mining projects								
Owner(s)	Project	Commercial production startup	City	State	Development Stage	Products	Capacity (in mt/per year)	Additional info
AMG Lithium	Volta Grande	2018	Nazareno, Minas Gerais	Minas Gerais	Operating	Spodumene	90,000 (2023), expanding to 150,000 (2024)	Construction of Lithium Carbonate plant in Brazil is projected to start in June 2024. The target capacity is 16.5 kMT annually.
Atlas Lithium Corp.	Minas Gerais	Q3-24*	Jequitinhonha Valley	Minas Gerais	Target Outline	Lithium	150,000 (Q3-24), 300,000 (Q3-25)	
Companhia Brasileira de Lito	Cachoeira	1993	Jequitinhonha Valley	Minas Gerais	Operating	Spodumene, Lithium Carbonate, Lithium Hydroxide	45,000 mt spodumene	
Cougar Metals NL, MMH Capital Ltd.	Ceara	2030*	Solonópole	Ceará	Exploration	Spodumene		
Latin Resources Ltd.	Colina	2026*	Jequitinhonha Valley	Minas Gerais	Prefeas/Scoping	Spodumene		Phase 1 production commencing in 2026 with Phase 2 average production of 525,000 mt/y SC5.5 and 159,000 mt/y SC3 commencing 2029.
Lithium Ionic Corp.	Itinga and Salinas	2025*	Jequitinhonha Valley	Minas Gerais	Prefeas/Scoping	Spodumene		
Oceana Lithium Ltd.	Solonópole	2026-27*	Solonópole	Ceará	Target Outline	Spodumene		
Sigma Lithium Corp.	Grota do Cirilo	Apr-23	Jequitinhonha Valley	Minas Gerais	Operating	Spodumene	270,000	Targeting to produce 130,000 mt in 2023
Solis Minerals Ltd.	Estrela and Mina Vermelha	2027*	Borborema	Rio Grande do Norte	Target Outline	Spodumene		

(\*) estimated

Source: Companies' reports, S&P Global Commodity Insights

## Brazilian spodumene

Based on recent studies and tests, Atlas Lithium's Minas Gerais lithium project has demonstrated its technical simplicity and remarkable economic viability, placing it among the lowest-cost spodumene concentrate producers globally.

"Our production cost was calculated at \$300-\$400/mt FOB Vitoria port, compared to \$1,100/mt of Australian-based producers," Fogassa said.

Rodrigo Menck, an advisor at Atlas Lithium and a former CFO at Sigma Lithium and at Nexa Resources, said that when in full production each metric ton of spodumene generates about one mt tailings, which holds 1.5% of lithium.

"This lower grade spodumene (SC 1.5) has currently some liquidity ... yielding 10% of the final market price," Menck e said, adding that if SC 5.5 spodumene was selling at \$2,000/mt FOB, a lower grade material will sell at \$200/mt, partly covering the estimated cost and, thus, generating robust cash flow in the short term to finance the duplication of the plant, and also reducing the carbon footprint by means of avoiding the accumulation of dry-stacked tailings.

In terms of market prices, both executives agreed spodumene was unlikely to rise back to the peak of \$8,000/mt seen in November 2022, but a range of \$1,800-\$2,500/mt FOB was most likely and a healthy area for producers.

However, "the world has not yet managed to make the competitiveness of Brazilian lithium tangible," Fogassa said.

For him, there was still no understanding in the financial market about the potential of the Brazilian industry and how green the production route in the nation was compared to brine-led processes in the rest of South America.

"In the US, soon, people will drive their EVs and will want to know where the minerals that make up that battery came from, and whether they were produced sustainably. And Brazilian lithium is fantastic, with minimal impact. Green lithium," Fogassa said.

## No midstream expansion near term

The executives said Brazil had a healthy climate for doing business, citing federal and state governments giving the necessary space to the private sector.

However, before considering moving production to lithium hydroxide, talks need to evolve about the basics of infrastructure to promote mining on site, they said.

Moreover, they said Brazil lacks the technology and expertise, plus the cost for implementing such a plant is high, at around \$600 million to \$1 billion. "Not to mention the potential cost overrun during the construction period," Menck said.

The US, one of Brazil's major trading partners, needs to advance on a hydroxide production plant to process the material to be produced in Brazil. "The plants [in the US] are half-built. There is a delay in licensing," Fogassa said.

Nevertheless, the exponential growth of EVs sales in the US painted a promising outlook for lithium suppliers.

According to Fogassa, 25% of all vehicles sold in California in 2023, for instance, were EVs. "This share was only expected to happen in 2025 and came two years earlier."

Atlas's project consists of 54 mineral rights spread over 240 square km and primarily in the municipality of Aracuai in the Lithium Valley.

The company also has a second area of interest for a lithium project, in Brazil's Northeast region.

The so-called Lithium Valley, which holds Brazil's largest lithium reserves, comprises 14 municipalities: Aracuai, Capelinha, Coronel Murta, Itaobim, Itinga, Malacacheta, Medina, Minas Novas, Pedra Azul, Virgem da Lapa, Teofilo Otoni e Turmalina, Rubelita and Salinas, Minas Gerais said in a statement.