

# Sayona set to charge Authier



Sayona has a pipeline of exploration projects in Canada and Western Australia

Seasoned mining executive Dan O'Neill has travelled the world extensively during his four-decade career developing resources projects, including a diamond mine in Botswana and multiple coal assets in Australasia.

However, it is the prospect of building a new lithium mine in Canada which is driving his potential career swansong.

"I'm in my mid-60s so I've worked on a lot of projects, but what's good about this project is that we're producing something that the world, particularly the Northern Hemisphere, wants which is clean energy," O'Neill told **Paydirt**.

"They want lithium for their lithium batteries to power their cars, their phones. It's perhaps not as prevalent in Australia with our small population and big areas to drive, but if you go to China or Europe the lithium story over there is huge.

"Volkswagen plans to invest \$US84 billion to bring on 300 new electric vehicle models by 2030. Volvo, Toyota, all of the major automakers are on board because it's all being mandated by governments, because ultimately the people they are serving want that clean energy."

A founding director of Orocobre Ltd, O'Neill is now managing director of Sayona Mining Ltd which is looking to develop the Authier lithium project, about 45km northwest of the mining-focused city of Val d'Or, Quebec.

The recently completed DFS on Authier found the project could support production of 87,400 tpa lithium concentrate over the life-of-mine (18 years) for an initial development capex of \$C89.9 million, plus life-of-

mine capital costs totalling \$C83.6 million.

Authier is projected to generate a pre-tax NPV of \$C184.8 million, IRR of 33.7% and average annual revenue of \$C80 million. Payback is estimated at 2.6 years.

Mine gate cash costs of \$C416/t and FOB cash costs of \$C482/t (\$US366/t) have also been flagged. An average spodumene price of \$US675/t was assumed in the DFS.

Sayona has forecast 150 jobs will be created during the construction phase and up to 160 personnel required on site during operations. First production is slated for 2020, pending successful project finance and permitting.

O'Neill said the company would have no trouble locking away development capital for Authier.

"I just got back from a trip to New York and Canada and six weeks ago I was in China and met with a whole range of companies there which are very interested in lithium, so I'm quite confident that we won't have any problem financing the project," O'Neill said.

"There is strong interest from offtakers in China and I've had discussions with debt financiers and royalty companies that want to get involved. We're quite comfortable at this point there's demand for our product."

To date, Sayona has only signed a non-binding MoU with Chinese battery materials manufacturer Hunan Changyuan Lico Co Ltd, a subsidiary of Minmetals Group, for the potential purchase of all Authier concentrates.

Sayona could also look to strike a partnership with the Quebec Government which is understood to be very keen to see Authier brought to life.

The recent appointment of former Rio Tinto Ltd strategic communications executive Alexis Segal as vice-president, corporate affairs, of Sayona's Quebec-based subsidiary, is seen as a critical step in the company's proposed development of the project.

"Quebec is a first world province in a first world country, but one still has to take into account community expectations and all the other stakeholders involved and so Alexis will be integral in helping us with that," O'Neill said.

"He's got excellent communication skills, he knows the mining industry, he knows the Quebec people. He will be our access for talking to government officials and dealing with the locals. As we all know, you need to bring the community with you through this process."

Sayona will soon begin detailed engineering work which O'Neill said will make the project metrics "even more attractive" to investors, while exploration will continue at its Tansim project, about 80km south-west of Authier, where 9km of pegmatite systems with good grades and widths have been identified.

Feasibility studies on a potential downstream option for Authier are also ongoing, with the company exploring opportunities to produce a lithium carbonate or lithium hydroxide product using conventional processing technology.

A scoping study released in August 2017 found downstream production of lithium hydroxide would generate a pre-tax NPV of \$C795 million with an IRR of 44%. Cheap available power of 5c/kWh was also highlighted.

"The scoping study indicated this was a positive way to go," O'Neill said. "Is it time to be doing it now? Well, it will be a three-year feasibility-cum-construction timeframe, so now is the time to be looking at a PFS [on a downstream option]. That will be out in another 12 months or so and we'll know then whether we should spend more money in doing a full feasibility study."

Sayona also has several exploration tenements in Western Australia's Pilbara region and was awaiting results from a recent drilling programme at the time of print.

O'Neill said the company had no plans to divest its Pilbara lithium assets despite the advanced status of Authier.

– Michael Washbourne



A DFS indicates Sayona can develop the Authier lithium project for just \$C90 million