Spanish inquisition puts EU metals supply under the microscope

Steven Turner

Spain's mining sector was galvanised last month after the country's Parliament overwhelmingly voted to uphold laws that have been in place for nearly 50 years.

The landslide 283-36 vote was in response to an unsuccessful attempt by the democratic socialist Unidas Podemos party to impose stronger legacy responsibilities on existing and future miners, a move that would potentially make it more difficult to get a project off the ground.

Steven Turner, managing director of Spanish tin and tungsten explorer Rafaella Resources Ltd, believes the support from Parliament to sustain the laws was ironically symbolic of change.

"What is important about that vote is it was overwhelmingly from the whole Parliament," Turner told **Paydirt**. "It's a very rare occasion in Spain when opposition and government vote together. But this time they came tougher and, in that statement, recognised the importance of critical metals and mining."

Spain has a long history in tungsten mining that dates back through the 20th century. The metal is important for the auto industry and in the production of electrodes, cathode ray tubes and other high-density materials.

But Spain is no longer the poster child for the metal as up to 85% of the world's supply today comes from China, which also consumes half of that produce with Russia, Vietnam and greater Eastern Europe adding to the supply which eventually ends up being exported.

In 2021, up to 8,500t of raw tungsten was consumed in Europe and 20% of that was supplied from Russia.

In the wake of Russia's invasion of Ukraine – and the trade sanctions and supply chain disruptions which have followed – Turner said Spain could be experiencing a wake-up call right now to procure its own critical metals.

"Commodities like tungsten have been on the critical metals list for a long time because of its high concentration from China and a substantial amount from Russia," he said. "We feel that a domestic supply is the solution to Europe's issues. It mitigates that concentration of supply and it addresses where the source of the material is and that's important when you're looking at human rights and environmental considerations.

"We are hoping one of the positives coming out from all of the geopolitical risk is an acceleration of all [pro-mining] policies. If there's anything that's going to highlight the risk of critical minerals supply, the invasion of Ukraine should do that because we're seeing it across all sorts of commodities.

Bayrock Resources was seeking to complete a $12 million IPO at the time of print to fund battery metals exploration in Sweden

"We're seeing it on the food and energy side and we think we'll see it on the supply of raw critical metals. These are real, genuine risks that we have flagged for some time but the invasion of Ukraine – we imagine – should be a catalyst for moving people forward."

Since the uplift of demand for battery minerals such as lithium and nickel, the European Union has mobilised to better secure its supply, access and processing of such commodities.

Some of the European Commission's goals include making Europe more competitive as an industry for critical minerals supply, stimulating its production and recycling of metals, increasing awareness of the potential supply risks and negotiating stronger trade agreements for supply of critical metals.

Turner thinks strategies like the European Raw Materials Alliance (ERMA) could go a long way in streamlining the approvals process for mines and projects such as Rafaella's and those in the future like it.

"There's a big push from the EU and European Commission to try and address the supply of critical metals," he said. "I think the biggest thing being pushed for, which is coming from ERMA, is looking to elevate some of the approval mechanisms because that's where a lot of things are being bogged down.

"Our projects, for example, are approved locally in Galicia, so there's no strategic oversight. So if you have critical metals, that are critical to the whole Spanish economy,

where automobile manufacturing is big and needs tungsten…what's driving permitting is very different from perhaps what the country's requirements are.

"One thing I know ERMA would like to do is figure out a way to allow approvals of certain projects to go through in a more strategic position. They could pass projects they deem as critical."

Rafaella is currently chasing permitting for the open pit at its Santa Comba tungsten-tin project in Spain following a positive PFS released in mid-June.

On just the open pit alone, the PFS outlined a pre-tax NPV of $94.8 million and IRR of 32.6% with payback 2.3 years after commissioning.

Its proven and probable ore reserves are currently estimated at 7.48mt @ 0.15% tungsten for 12,374t of contained tungsten.

Santa Comba already came with a permit for underground works when Rafaella acquired the project, but Turner said an integrated approach will be the key to unlocking success.

"What we need to take this mine forward is an integrated mine; underground and open pit," he said. "The open pit resource is potentially very large. All the lower grades would be a larger bulk mining operation and then you've got the underground high-grade selective mining that would complement the feed.

"Our focus has very much been on advancing the open pit to get to a point where we can move the overall development forward in an integrated way."

Meanwhile in Europe's north, the Nordic regions have come under increased interest from Australian explorers to secure battery minerals.

In July, Finnish explorer Nordic Nickel Ltd released a maiden 133.6mt @ 0.21% resource for its Pulju project just over one month after listing.

Nordic managing director Todd Ross said there was still significant upside to be seen at the project.

"Gaining access to the high quality historical drill core at Hotinvaara from Outokumpu has not only confirmed the extensive disseminated nickel sulphide mineralisation and the scale of the Pulju nickel system, but it has also highlighted the potential to discover bonanza grade massive sulphides at depth which is the focus of our upcoming drill programme," he said in a market release.

In Sweden, Bayrock Resources Ltd is seeking to complete a $12 million IPO to list on the ASX and fund exploration for nickel, copper, cobalt and palladium in the country's north.

Bayrock managing director Ian Pringle said Sweden was a no-brainer to explore as glacial cover has locked away prospective geology for decades.

"Sweden has undeveloped nickel-cobalt deposits," he told **Paydirt**. "It's somewhere you can develop a deposit relatively quickly, an area where there hasn't been a lot of exploration and where nickel and cobalt have been particularly overlooked.

The Vuostok target provides potential exploration upside for Bayrock to complement the existing resource at its flagship Lainejaur project

"We're currently getting approvals in place for an airborne SkyTEM survey. We want to fly as many areas as we can of our ground with that system to provide some really good geophysical information.

"[Because of the cover] there's not a lot of outcrop and it's one of the reasons prospectors in the past haven't found these things, they didn't have systems like SKYTEM available to them at the time."

The company's flagship Lainejaur project in the Skelleftea mining district already has a JORC-compliant resource of 460,000 @ 2.2% nickel, 0.7% copper, 0.15% cobalt, 0.68 g/t palladium, 0.2 g/t platinum and 0.65 g/t gold.

Pringle, who previously explored for cobalt near Broken Hill in New South Wales under Broken Hill Prospecting (today called American Rare Earths Ltd), is eager to spend the majority of the IPO money "in the ground".

"We've got drilling approvals to drill test the depth extent of Lainejaur," he said. "We can push the button on that very quickly as soon as we get funding in the bank.

"We've got more approvals in the train and the approvals process for drilling typically takes around six weeks if there's no complications. We'll be drilling some other targets; we've got some really nice shallow targets at Vuostok with some really good hits around 10-20m undercover. There's a light shallow rig there we can mobilise pretty quickly."

Pringle will also practice what he preaches with plans to use Scandinavian-made electric-powered drill equipment which will contain the very metals he's exploring for.

And just like Turner, Pringle echoes the same sentiment that Europe's inhouse investments into procuring and producing battery metals will go a long way in fostering the mining industry into the future.

Pringle is particularly keen to see product from Lainejaur find its way to gigafactories – facilities that produce EVs from raw material to product in one location – with the helping of local green energy like hydroelectricity and nuclear.

"[The EU] have dozens of gigafactories planned, they'll be needing nickel and cobalt in the next few decades," he said. "Hopefully we'll have some things in the production stream for them. Sweden also produces pretty much all of its electricity from hydroelectricity and nuclear. It's very low carbon and we'll be looking at some of the Swedish and Scandinavian developments in electrifying mining equipment.

"We're talking to several, large European battery manufacturers that are planning gigafactories. We are getting a lot of interest and gigafactories take a number of years to build. There will be factories coming onstream in the next 3-4 years and they'll be looking to get their nickel and cobalt within the EU.

"We'll bring a competitive advantage to producing something in house. A lot of nickel is produced out of Russia. The European trend continues to cut imports from Russia so that supply will be affected.

"We've got everything we need; we've got smelters and refineries all around the Nordic coast within a very close distance to where we are."

– Fraser Palamara