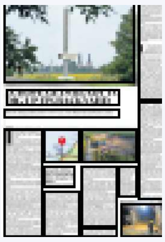


28 JUN, 2021

EUROPE GETS READY TO DIG UP ITS BACKYARD

Australian Financial Review, Australia

EUROPE GETS READY TO DIG UP ITS BACKYARD

Resources Surging demand for clean, ethical and non-Chinese materials could reinflate a domestic mining industry. But it won't be easy, writes **Hans van Leeuwen** in London.

In the heart of Finland, nestled into the pine-clad fringes of the Gulf of Bothnia, sits Kokkola, a compact port city of 48,000 souls.

For more than three centuries it was a shipbuilding centre, but these days it has a different claim to fame: it hosts one of the only large cobalt refineries outside China.

Some cobalt is mined in Finland's Lapland region, and the mining belt is only three to seven hours from Kokkola by road. But much of the raw material processed at the Kokkola refinery is shipped in from the Democratic Republic of the Congo, 8000 kilometres away as the crow flies.

Europe imports more than 80 per cent of its cobalt needs – and its needs are growing almost exponentially. Electric vehicle (EV) production in Europe is set to grow more than fivefold in the period to 2025, and cobalt is a critical component of an EV battery.

European demand for cobalt is predicted to hit at least 52,000 tonnes that year, which would eat up half of today's annual global output.

The continent finds itself wedged into an uncomfortable position. The end-users, such as the big European car makers, want sustainably and ethically sourced cobalt, which the Congo struggles to supply. And political leaders want to wean Europe off its dependence on the mines and refineries of an increasingly capricious China.

"This is a massive sector, and they are all moving down a technology path with some really glaringly obvious risks around supply," says Russell Delroy, Perth-based founder and investment manager at Nero Resource Fund.

"You need to find first-world sources of cobalt, and the cobalt market is going to have to send a price signal that incentivises first-world cobalt to be produced."

Delroy isn't talking from the sidelines. Nero backs an Australian-Finnish corporate venture, Latitude 66 Ltd, which is looking to launch two cobalt mines in the region's highly prospective mining belt. There are three cobalt mines already operating in Finland, one in development, three in the exploration phase and plenty more companies casting an eye over greenfield sites. Many also produce, or are looking to produce, nickel, zinc and copper.

AFRGA1 0036

And the action is not confined to Finland. Across Europe, the same forces are at play.

There's more demand, as the carbon transition gets under way. There's more concern about sourcing and supply chains, triggering more government support and investment. And there are the enticing surges in commodity prices – which, if it really is a super-cycle, could spur more exploration and investment.

"For a long time mining has felt like a dirty word in Europe," says Delroy. "That is changing very quickly."

Whether it's cobalt, lithium, nickel, zinc, copper or tin, European mining companies – and some Australian juniors – now wonder whether, often for the first time in decades, it makes sense to start digging up Europe's own backyard, rather than relying so heavily on minerals and metals from the world beyond.

"It's an extremely exciting time to be in the industry in Europe," says Mark Rachovides, president of the continent-wide industry group Euromines. "We will see new projects, I would say in the majority EU countries, in the next five years."

There are some relatively big established European miners, particularly in Scandinavia. But there's also room for nimble junior miners from beyond the bloc to jump in, and Latitude 66 is not the only Australian player on the diving board.

Among the ASX-listed players: Talga Resources mines graphite in Sweden and manufacturing anode for EV batteries, and is also sitting on a couple of cobalt and copper deposits there; Elementos has a tin mine planned in Spain; European Metals is progressing a lithium and tin project in the Czech Republic, while Vulcan Energy, European Lithium and Infinity have lithium projects in Germany, Austria and Spain, respectively.

"I'm seeing Australian companies also working in Europe," says Rachovides. "We used to have a lot of junior companies, some of whom had that sort of buccaneering swagger … Those guys are not around anymore. The juniors that are coming along have really learnt their lessons, both as individuals that make up the management and boards of those companies, and to an extent as companies."

The lesson is: mining in Europe is very different to operating in Australia, Africa or South America, but it's not necessarily any easier.

"If you're coming to Europe, you really believe in the project," says Rachovides. "Because if you want cheap, if you want the quick return, you're not coming to Europe, you're going elsewhere. So the companies that are working here are going to work to the highest standards willingly, and with open eyes."

Labour costs are obviously higher, but the big issue is getting permits, navigating red and green tape, and winning over wary communities who aren't sure they want a mine down the road.

"ESG [environmental, social and governance] standards, that's absolutely huge in all these metals," says Joe David, Elementos's Brisbane-based CEO.

"It's actually everyone in the value chain. The only people who don't have a defined hurdle we've got to clear are equity investors – they can just jump in because they like tin. But every bank we speak to, every private equity group, any investors whatsoever at a sophisticated level, say 'we will need to do an ESG audit on you guys'."

Klas Nilsson, communications director at Swedish mining group Boliden, says generous wages and exacting environmental standards are a given in Europe. The deeper problem is that when an application arrives on a European government's desk, the mandarins don't always take a holistic view.

"Different kinds of authorities basically bring their own demands without the wider perspective – demands regarding biodiversity, regarding water management – and when you add all these up, it gets really difficult to get a project going," he says.

And it's not just governments, it's also people. "For decades Europe could afford a not-in-my-backyard syndrome. We like new technology, we like new cars, modern societies; but we don't want the mines in our backyards, so we've been importing it instead," he says.

"Sooner or later, we're going to have to come around to the idea that if we're going to have low-carbon societies we're going to have to accept more mines inside Europe. But of course, it's going to be a bumpy ride, a challenging ride."

Delroy says companies planning to mine in Europe have to bake that in. "The reindustrialisation of Europe and the US has to occur in a very modern way. That means proper planning, sequential land use, and thinking about what the land will look like when we finish," he says.

"It will cost more money to extract these raw materials in the right way. That is a fundamental premise that we're all going to have to get our heads around, as a society and as an industry."

One way to soften the costs and navigate the potential for community opposition is to revisit old mines, where mining has sometimes been going on since Roman times, and both the landscape and the locals are used to it.

"Re-entering a historic mine is clearly a lot easier to permit, a lot easier to get the support of the populace to develop that, rather than breaking new ground," Keith Coughlan, executive chairman of European Metals, said in a recent YouTube presentation.

Rachovides says there are thousands of sites where previously uninteresting or uneconomic wastes, tailings or slag can be revisited using new technology, from which value can be readily extracted.

"That's exciting because, from a capital perspective, it's usually far less than opening a large bulk mine. Everything from lithium projects, all sorts of projects ranging from gold, copper, lithium, potash even – it's fascinating some of the projects that are being looked at."

Local support can't always be counted on, but it helps if the project is in an existing mining region. The Elementos tin mine is planned for an old coal community in the Spanish province of Andalusia, which David says means locals are up for it.

"They've got very high unemployment in the area, so they're super-supportive of any industry coming in. Andalusia has a number of major mines operating in it. It's not a province where it's the first mine in a very long time."

Another way into European soil is along the cheaper, less stringently regulated frontiers.

Canadian-listed Black Iron is developing an iron ore project in Shymanivske, an area not far from Odessa in southern Ukraine that has been a mining centre since Soviet times.

"It's a bulk commodity, so access to rail, port, power and skilled labour is what makes or breaks the economics of a project," says Toronto-based CEO Matt Simpson.

He has a government-owned railway nearby, servicing half a dozen other mines, which connects to several ports. That means a junior miner can play, because they don't need to sink swaths of capital into building infrastructure.

Ukraine's nuclear-sourced energy is cheap. Skilled electricians, mechanics and welders are available for $US10,000 ($13,000) a year, a fraction of the cost of Australia. Still, Simpson admits that "Ukraine is not for everyone".

"Ukraine is not an easy country to work in. Ukraine is very much a country in transition. It still has corruption. Enforceability, rule of law, is still sometimes an issue in this country," he says.

"You can still get things done. But it takes longer. And you don't have those issues necessarily in places like Sweden, or Australia or Canada. In order to invest in a project in Ukraine like ours, the net economics need to outweigh the headaches that you face."

Black Iron is moving pretty quickly compared with some of the players in the heart of Europe. But it isn't planning to sell into Europe, so it's not part of the solution to the continent's supply-demand problem.

Brussels, and governments in countries like Finland in particular, are keen to get more happening, sooner rather than later.

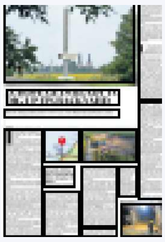
Most players report strong support from bureaucrats, and from the public-private funding bodies that are mushrooming across the landscape to meet the capital needs of the bloc's hugely ambitious timetable for energy transition.

But Delroy says that for all the Europeans' enthusiasm, the continent is still pretty much in the starting blocks.

"We haven't yet seen concrete action. They are going to have to move pretty rapidly beyond arm-waving to some pretty radical solutions," he says.

"They have to do so much more just to

AUTHOR: Hans van Leeuwen SECTION: GENERAL NEWS ARTICLE TYPE: NEWS ITEM AUDIENCE : 38,015
PAGE: 36 PRINTED SIZE: 1163.00cm² REGION: National MARKET: Australia ASR: AUD 23,499
WORDS: 1896 ITEM ID: 1463865808



28 JUN, 2021

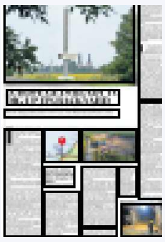
EUROPE GETS READY TO DIG UP ITS BACKYARD

Australian Financial Review, Australia

For a long time mining has felt like a dirty word in Europe. That is changing very quickly.
Russell Delroy, founder and investment manager at Nero Resource Fund

discover these assets, and then it's eight to 10 years to get into production. It's a mountain to climb and, although awareness is building, I don't think they've grasped the scale of the task in front of them." AFR

isentia
AUTHOR: Hans van Leeuwen SECTION: GENERAL NEWS ARTICLE TYPE: NEWS ITEM AUDIENCE : 38,015
PAGE: 36 PRINTED SIZE: 1163.00cm² REGION: National MARKET: Australia ASR: AUD 23,499
WORDS: 1896 ITEM ID: 1463865808



28 JUN, 2021

EUROPE GETS READY TO DIG UP ITS BACKYARD

Australian Financial Review, Australia

Top: An iron ore operation in Ukraine. Above left: Kokkola in Finland hosts the largest cobalt refinery outside China. Above: A Latitude 66 exploration site in Finland. Below: Inside a new Cornish tin mine operated by Strongbow Exploration. PHOTOS: GETTY, BLOOMBERG

Electric vehicle production in Europe is set to grow more than fivefold by 2025, and cobalt is a critical component of an EV battery.