Prewave

Supply Chain Analysis
November 2026

Shovel Stoppers

Is the West's critical minerals pipeline breaking down?



Scope. This analysis covers 125 open investment, funding, permit, study and production decisions at Western-listed critical minerals companies tracked by Prewave, as rechecked in October 2026, with key developments updated to 5 November 2026. It draws on company releases and filings, government and official publications, established news agencies and trade press, and recognised industry-intelligence services.

Each source is named in the text where it is used, and all sources are listed at the end of the report.

Editor's note

What's mined isn't yours.

The West has spent three years announcing critical minerals strategies toward a clear goal: build a non-Chinese network and ensure security of supply for key industries.

That is a staggeringly complex task. Partly, that's why this report asks a simpler question: **how many of the mines behind those strategies are actually getting built?**

In July, we published Magnetic West, mapping just how deeply European industry depends on Chinese rare earth processing, and named the projects meant to change that. That analysis was deliberately broad, and its view of those projects was optimistic: it took company timelines largely at face value. This report looks much more concretely at what has happened to the Western pipeline since.

Since then, we have tracked those projects, and roughly 200 more, logging every promised investment decision, permit, funding close and production date, and every time one of them moves.

The pattern is hard to ignore. Deadlines slip, then slip again, then quietly disappear. Funding that was “nearing completion” in August is still nearing completion in November. Projects that governments have designated as strategic trade at the lowest prices in their history. None of this means the Western supply chain is doomed, but it does mean the timeline most procurement plans are built on is optimistic.

This report sets out what is stopping the shovels: **falling commodity prices, a lack of liquidity, environmental litigation and fractured shareholder registers.** It also looks at the handful of projects that are getting built, and what they have in common. It closes with a harder question about whether a sector made up mostly of micro-cap miners can deliver supply at the scale industry needs.

As ever, stay resilient.



Thomas George
Lead Risk Editor, Prewave

The headline numbers

The Western pipeline, by the numbers

60%

of pending Western FIDs we tracked have already slipped at least once (21 of 35)

Prewave analysis

30%

of open decisions have no date the company will commit to (37 of 125)

Prewave analysis

4

FIDs taken across the tracked universe so far in 2026, against 35 still pending

Prewave analysis

45%

of Western pre-production companies trade within 10% of their 52-week low (69 of 152)

Prewave analysis; Yahoo Finance

-50%

median 2026 share price fall for Western graphite developers; all eight near their lows

Prewave analysis; Yahoo Finance

~50%

fall in China's lithium carbonate price from its May 2026 peak

SMM; Bloomberg

US$14.6bn

Lynas and MP Materials combined, more than all 43 Western rare earth developers (US$12.9bn)

Prewave analysis; Yahoo Finance

72%

of Western rare earth developers are worth less than US$300m; 40% less than US$50m

Prewave analysis; Yahoo Finance

19%

median market value of 11 stalled developers as a share of the capital they still need

Prewave analysis; company disclosures

~US$4.5bn

of government-linked debt offered, approved or signed for nine projects, but undrawn

Prewave analysis; company filings

12 of 16

stalled projects on our watch list trade within 5% of their 52-week low

Prewave analysis; Yahoo Finance

US$150m

of Qatar-backed funding still owed to Pensana, seven months after the deal

Pensana

17.9 yrs

average discovery-to-production time for mines started in 2020 to 2023; 29 years in the US

S&P Global

US$6.5trn

of annual production outside China at risk if China fully enforces rare earth export controls

IEA

81%

of magnet-dependent European companies are exposed to the permanent magnet chain by Tier-5

Prewave, Magnetic West

Prewave



Part 1

The case for Western supply

Why Europe and North America need mines of their own, and why the pipeline is the plan.

Why the West needs its own mines

Not a geology problem

The pipeline is the plan



Part 1

Why the West needs its own mines

The West's industrial plans run on materials it does not control.

~70%
China's average share of refining across 19 of 20 energy minerals

84%
of magnet rare earth refining is in China

94%
of sintered permanent magnets are made in China

US$6.5trn
of production outside China at risk from export controls

China leads refining for 19 of the 20 energy-related minerals the International Energy Agency tracks, with an average share of about 70% (IEA via Mappr). For rare earths the concentration is sharper still: China holds 59% of mining and 84% of magnet rare earth refining, and makes roughly 94% of the world's sintered permanent magnets (BOFIT; Skillings).

The IEA now prices that exposure. **Full enforcement of China's rare earth export controls would put about US$6.5 trillion of annual production outside China at risk** (Investment Monitor).

This is not hypothetical. In October, Japan warned it could run out of yttrium within months (European Business Magazine, citing FT and Argus). Yttrium is used in heat-resistant coatings for jet engines and gas turbines, in advanced ceramics and in lasers, and almost all of it is refined in China.

Two prices for the same material

Yttrium oxide inside China

US$9/kg

Yttrium oxide outside China

US$1,150/kg

About 128 times more

Since China added yttrium to its export licensing regime in April 2025, little has left the country, so buyers elsewhere are competing for a small non-Chinese supply. For Western industry, that gap is the cost of dependency made visible: China's own manufacturers pay a fraction of what their foreign competitors pay, and they are the only ones assured of supply.

The dependency runs deeper than it looks

Magnetic West showed why this is hard to see from a procurement desk. Of 169 major European companies in automotive, energy, chemicals, machinery and defence, Prewave's supply chain graph found just one with a direct link to the core permanent magnet value chain at Tier-1. By Tier-3, 61% were connected; by Tier-5, 81%. Outside China, total sintered magnet capacity covers under 6% of global demand.

European companies connected to the permanent magnet value chain, by supplier tier



169 major European companies in automotive, energy, chemicals, machinery and defence. Source: Prewave, Magnetic West (July 2026)

Why it is hard

Not a geology problem

The bottleneck is not geology, and it is not only chemistry. Rare earths and other critical minerals are found across Europe, North America, Australia and Brazil, and Western companies have shown they can separate them.

The market data in this report points to something broader: problems at almost every stage, from the price a mine can expect, to the money it can raise, to the permits and court rulings it must survive, to the investors willing to back it.

> **China's dominance is an industrial fortress, built with patient state capital and a tolerance for "environmental and social costs no Western democracy will tolerate."**
>
> Marina Yue Zhang, University of Technology Sydney, writing in The Diplomat

Much of that is the cost of building mines in open societies. Analysts quoted by Al Jazeera make a similar point: China's state-led investment push was not held back by the environmental and feasibility tests that Western projects must pass (Al Jazeera). In the West, communities can object, courts can intervene and capital can walk away. Those are features of a democracy and a free market, not flaws, but they mean Western supply will take longer and cost more than Chinese supply did.

Communities can object
Consultation and permits add years before construction.

Courts can intervene
Approvals can be challenged and suspended after they are granted.

Capital can walk away
Private investors fund only what they expect to pay back.

The pipeline is the plan

Every strategy rests on projects being built on time

China's share of global rare earth refining



Source: IEA Global Critical Minerals Outlook 2026, via Investment Monitor

The IEA expects China's share of rare earth refining, which fell from above 90% in 2023 to 85% in 2025, to drop to about 70% by 2035, but only if planned projects proceed on schedule (Investment Monitor). Every Western strategy, from the EU's Critical Raw Materials Act to US price floors and Australia's critical minerals facility, rests on that condition.

The rest of this report tests it. History is not encouraging: according to S&P Global, mines that came online in 2020 to 2023 took an average of 17.9 years from discovery to production, up from 12.7 years for mines started in 2005 to 2009. In the United States, the average is 29 years (S&P Global).

Average years from discovery to production

12.7
mines started 2005 to 2009

17.9
mines started 2020 to 2023

29
United States average

Source: S&P Global

Prewave



Part 2

What is stopping Western miners?

Four forces stall Western mines between discovery and first production. This part measures each of them.

The road to production

Meet the Shovel Stoppers

Shovel Stoppers #1 to #4

The stalled list

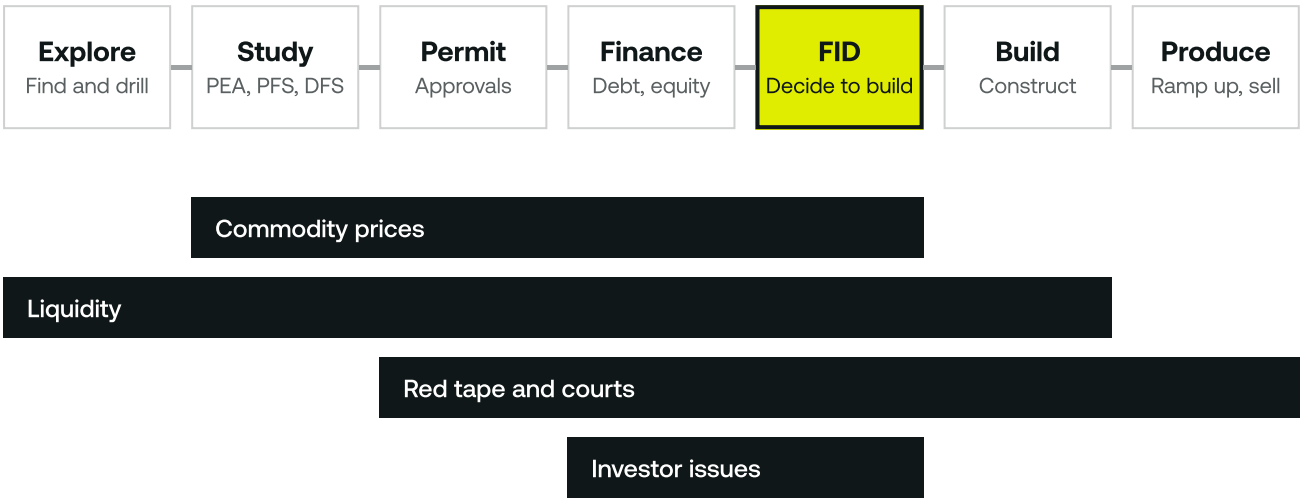
Part 2

The road to production

Every mine takes the same route, and stalls at the same points.



Mines that came online in 2020 to 2023 took 17.9 years on average from discovery to production (S&P Global). The dark bands show the stages where each of the four factors in this report most often stops a project we tracked. Courts can halt a mine even after it is built.



Source: S&P Global; Prewave analysis, rechecked 22 October 2026. 21 of 35 open FIDs have already moved.

The road to production

Seven steps, each one a gate

1 **Explore**

Geologists find a deposit and drill it to establish how much metal it holds and at what grade, reported as a mineral resource under codes such as JORC or NI 43-101. This stage is funded almost entirely by selling shares, because there is no revenue and nothing yet for a bank to lend against.

2 **Study**

The company tests whether the deposit can be mined profitably, through increasingly detailed studies: a scoping study or preliminary economic assessment (PEA), a pre-feasibility study (PFS) and finally a definitive feasibility study (DFS). The DFS sets out the mine plan, processing route, capital cost and expected returns at an assumed metal price, and is the document lenders rely on.

3 **Permit**

The project needs an environmental approval, a mining licence and a range of local permits for water, land use and construction. This usually involves public consultation, including with Indigenous communities where relevant, and the decision can be challenged in court once it is granted.

4 **Finance**

With a DFS and permits in hand, the company assembles its funding: debt from banks, export credit agencies or government lenders; equity from shareholders or a strategic partner; and offtake agreements, in which buyers commit to purchase the output, often with prepayments. Lenders generally will not commit until the equity and offtakes are in place.

5 **FID**

The final investment decision is the board's formal commitment to build, once funding is secured. It is the point at which money starts to be spent on construction at scale, and the single milestone most often delayed in our analysis.

6 **Build**

Construction of the mine, processing plant and infrastructure such as power, water and roads, followed by commissioning, when the plant is tested with ore. This is where cost overruns most often appear.

7 **Produce**

The mine begins selling product and ramps up towards its design capacity, which can take a year or more. Only now does the project generate the revenue on which all the earlier steps were financed.

Meet the Shovel Stoppers

If the pipeline were on track, most dates would hold

Part 1 set out the assumption behind every Western critical minerals strategy: that the projects already in the pipeline will be built roughly on schedule. Few people check that assumption project by project, and a handful of high-profile examples can tell a misleading story in either direction. That is why we set out to find and track as many Western projects as we could, rather than a selection, so the picture reflects the pipeline as a whole.

Our analysis covers 232 companies listed in Europe, North America and Australia that mine, refine or process critical minerals, or are developing projects to do so: rare earths, lithium, graphite, nickel, cobalt, copper, uranium, tungsten and antimony, plus a small number of precious-metals developers. Chinese-listed producers are included only as benchmarks. From those companies we logged every forward milestone they have publicly guided, whether or not it was on track, which gives the 125 open decisions analysed here. No project was added or removed because of how it was performing.

This part tests that assumption. We tracked each project's own targets for investment decisions, funding, permits and first production, and recorded every time one moved. If the pipeline were on track, most of those dates would hold.

They have not.

Half of the Western critical minerals decisions we tracked have already slipped at least once, and nearly a third no longer have a date at all. Of 125 open decisions, 63 have moved and 37 have no date the company will commit to.

Decision type	Open	Moved at least once	No date given
Final investment decision	35	21	9
Funding close	33	16	15
Permit or court ruling	19	9	11
Feasibility or other study	24	10	1
Production start	14	7	0

Source: Prewave analysis, rechecked 22 October 2026

Meet the Shovel Stoppers

Four forces, rarely acting alone

The pattern in the table matters. Studies and production starts mostly keep a date, because they depend largely on the company's own work. Funding and permits are the decisions most likely to lose a date entirely, because they depend on someone else: an investor, a lender, a regulator or a judge.

Four factors explain most of the delay. They rarely act alone: a falling price weakens the balance sheet, a weak balance sheet makes a company dependent on one strategic partner, and a long permit process gives that partner time to walk away. The chapters that follow take each in turn, then show how it plays out at a representative company.

Shovel Stopper #1 **Commodity prices**	How it stops a project Expected revenue falls below what lenders and equity investors will finance	What our analysis shows **Lithium developers down 43% in 2026 (median); two FIDs conditional on prices**
Shovel Stopper #2 **Liquidity**	How it stops a project Companies cannot raise the equity that unlocks government and bank debt	What our analysis shows **Stalled developers worth a median 19% of the capital they need; 15 funding closes with no date**
Shovel Stopper #3 **Red tape and environment**	How it stops a project Permits take years and courts can reopen them after approval	What our analysis shows **11 of 19 open permit decisions have no date; seven projects facing or recently through court challenges**
Shovel Stopper #4 **Investor issues**	How it stops a project Partners, sovereign backers and foreign investment rules delay or block capital	What our analysis shows **17 open decisions waiting on a partner or strategic investor**



#1

Commodity prices

When the metal is worth less than the plan assumed, lenders and investors stop writing cheques.

The price a mine needs

Lithium: a boom that did not last

Rare earths: a two-tier market

Nickel and graphite: oversupply by design

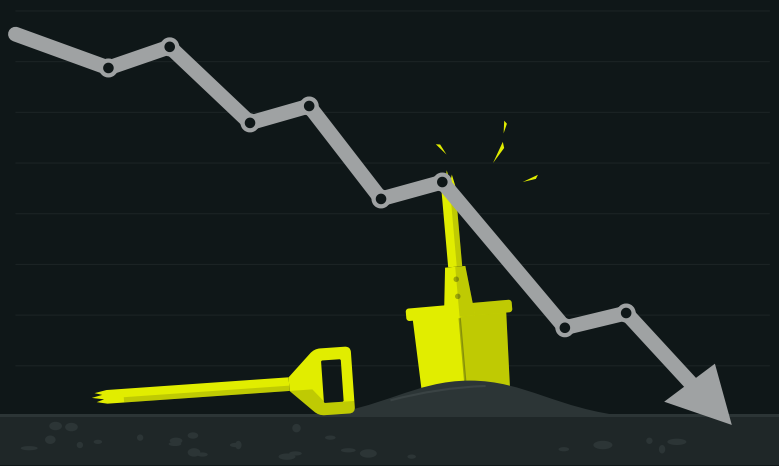
Who carries the price risk?

Case study: ioneer

Shovel Stopper #1

The shortage is political, not physical

When the metal is worth less than the plan assumed, lenders and investors stop writing cheques.



The most common reason a Western project stalls is that the metal it plans to sell is now worth less than when the project was planned.

That looks like a paradox. The West says it urgently needs these materials and has too few mines, so why would prices be too low to justify building one? The answer is that the shortage is political, not physical. The world is not short of lithium, graphite, nickel or light rare earths; the West is short of supply it controls.

Prices show it: lithium carbonate trades at roughly half its May peak, and nickel has been in surplus since Indonesia, where Chinese operators run much of the sector, grew to just over half of world output. Most of that supply is refined in China, which leads refining for 19 of the 20 energy minerals the IEA tracks.

Over the past decade, Chinese producers, backed by state finance and lower environmental and labour costs, built capacity ahead of demand. When electric vehicle sales outside China grew more slowly than forecast, that capacity turned into oversupply, and prices fell.

A low price suits a dominant supplier: Amanda Lacaze, chief executive of Lynas, has argued that a supplier holding most of the market can keep prices at a level that earns it a return while deterring anyone else from building capacity (The Oregon Group). A Western mine must compete with that price, not with the strategic value its government places on it.

In 2026, the Western developers of graphite, lithium and rare earths we tracked have lost between a third and a half of their market value (median share price change, Yahoo Finance), while the developers of gold and tungsten we track, where Western prices are strong, are roughly flat.

Median 2026 share price change, Western pre-production developers

-50%	-43%	-34%	-2%	-1%
Graphite (8 companies)	Lithium (23)	Rare earths (43)	Tungsten (8)	Gold (12)

Source: Prewave analysis; Yahoo Finance closes, 20 to 22 October 2026

The price a mine needs

A mine is financed on a price assumption. Before a final investment decision, a company commissions a feasibility study that tests the project against a long-term price deck, and lenders run their own, usually more conservative, case. If the project does not repay its debt at the lender's price, there is no loan, and without the loan most developers cannot raise the equity either.

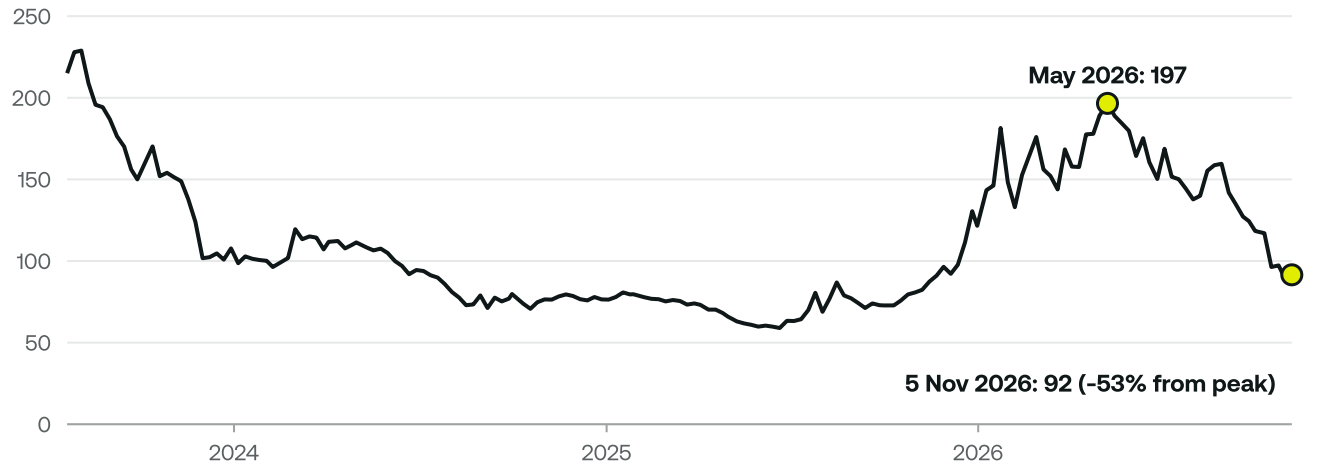
Two features of critical minerals markets make this harder than in copper or gold. First, many of them have no deep Western futures market, so a developer cannot lock in a price for its first years of output. Second, the marginal tonne is often produced in China, or by Chinese-operated plants in Indonesia, at costs and with state support that Western projects cannot match. When those producers expand, the world price falls, and the Western project's financing case falls with it.

Lithium: a boom that did not last

Lithium shows the mechanism most clearly. China's battery-grade lithium carbonate averaged about CNY104,400/t in mid-October, roughly half its May peak, and Guangzhou futures hit their weakest settlement since December 2025 on 12 October (Bloomberg; SMM). Australian spodumene concentrate fell 28.5% between 1 July and 9 October to US$1,695/t (S&P Global Platts).

Lithium carbonate has halved since its May peak

Guangzhou Futures Exchange main contract, weekly close, CNY thousand per tonne



Source: Guangzhou Futures Exchange via Sina Finance, to 5 November 2026

The 23 Western lithium developers we track are down a median 43% this year, and 15 trade within 10% of their 52-week low. In our analysis, the effect shows up as decisions that are no longer tied to a date:

- **Critical Metals and European Lithium (Wolfsberg, Austria):** the partners set an end-2026 FID "if prices remain robust". Carbonate was about CNY170,000/t when that condition was written in January; it is now about CNY100,000/t.
- **Lake Resources (Kachi, Argentina):** fully permitted since September 2026, but its 2026 FID guidance has not been repeated, and a strategic review of the company has run since May 2025.
- **Standard Lithium (South West Arkansas, US):** has its contracts, federal environmental clearance and, since September, offtakes for about 89% of planned output, but its debt package has slipped from the third quarter into the fourth and FID is now targeted for the end of the year.
- **Rock Tech Lithium (Guben, Germany):** production has moved from 2027 to 2029 at the earliest, despite €100 million in grants from Brandenburg and Deutsche Bahn.

The brief price recovery earlier this year did not change the picture. Lenders finance on long-term prices, not on a spike, and the spike was over before most of these companies could use it.

Rare earths: a two-tier market

Rare earths have split into two markets since China's export controls on heavy rare earths. Inside China, prices are low. Outside China, the same oxides can cost many times more.

Oxide	In China (US$/kg)	Outside China (US$/kg)	Premium outside China (log scale)
NdPr	97	110 US government floor, MP Materials only	**1.1x**
Dysprosium	188	2,500 to 3,500 Fastmarkets, 8 Oct	**13x to 19x**
Terbium	860	7,500 S&P Global, 2 Oct	**9x**
Yttrium	~9	~1,150 Argus, Oct	**128x**

Sources: Critical Minerals News, citing SMM (China prices, 30 Sep); Fastmarkets; S&P Global via Rare Earth Exchanges; European Business Magazine, citing Argus

On paper, the premiums favour Western heavy rare earth projects such as Browns Range, Victory Metals' North Stanmore and Aclara's Carina. In practice, a lender cannot bank a price that exists only because of a Chinese policy that could be relaxed.

China's magnet exports hit a 2026 high of about 6,165 t in September, up 23% on August, as trade talks progressed (SMM). A project financed on today's premium could find it gone by the time it produces. For light rare earths the problem is simpler: NdPr developers price against China, and only MP Materials has a guaranteed floor.

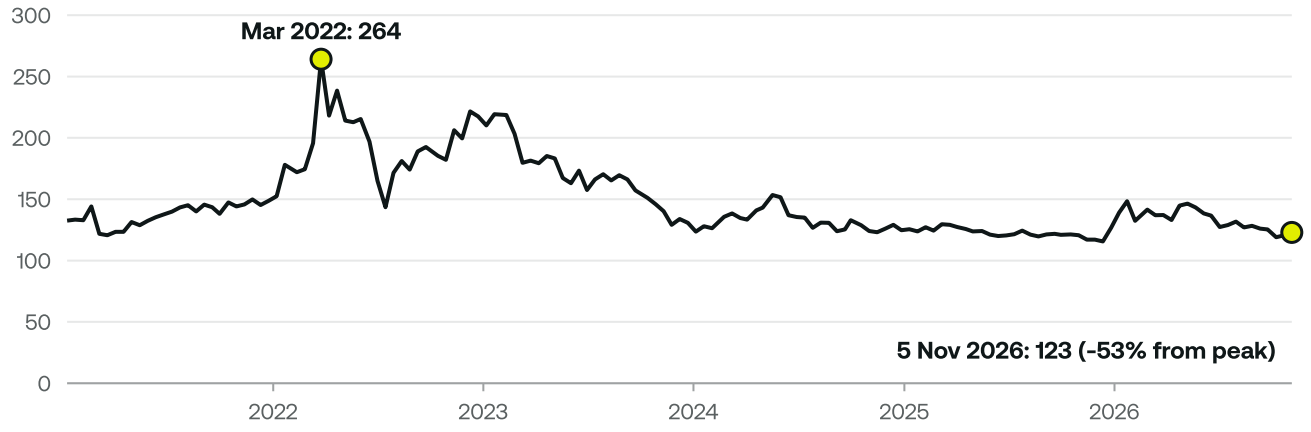
Nickel and graphite: oversupply by design

Nickel shows what happens to a Western industry when a state-backed supply surge runs its course. Indonesia, where Chinese operators control much of the sector, produced just over half of the world's nickel in 2024, and Macquarie expects that share to reach 75% by 2028 (Mining.com, Reuters column).

The resulting slump led BHP to suspend its Western Australian nickel operations in 2024, after Panoramic Resources collapsed and IGO halted its Cosmos mine (Mining.com). The new projects meant to replace them are struggling too: Centaurus Metals missed its September FID target for Jaguar in Brazil, and although Glencore and China's CNGR signed offtakes and US$40 million of equity in late October, its debt is not yet closed, and Canada Nickel has pushed its Crawford construction decision to mid-2027 with an equity gap of about US$1 billion. Western nickel and cobalt developers are down a median 33% this year.

Nickel trades at less than half its 2022 high

Shanghai Futures Exchange main contract, fortnightly close, CNY thousand per tonne



Source: Shanghai Futures Exchange via Sina Finance, to 5 November 2026. The 2022 spike followed Russia's invasion of Ukraine.

Graphite

Graphite is in worse shape. All eight Western graphite developers we tracked trade within 10% of their 52-week low, and their median share price has halved in 2026. Renascor's Siviour anode project was once guided to produce in 2024 and has no FID date; Westwater's US$150 million debt for its Alabama anode plant was expected to close in January 2025 and still has not; Syrah, which runs one of the largest graphite mines outside China, is negotiating to cure defaults on its US government loans.

8 of 8

Western graphite developers we tracked trading within 10% of their 52-week low

Who carries the price risk?

MP Materials (US)

US$110/kg

NdPr price floor guaranteed by the Pentagon

Tungsten West (UK)

Up to 50%

of Hemerdon's output available to the UK government

The projects that are moving have found someone else to carry the price risk. MP Materials has the Pentagon's US$110/kg NdPr floor. Tungsten West's Hemerdon restart came with the UK government's option to buy up to half of its output.

Western tungsten developers are down just 2% this year, the best of any group, because Western buyers and governments are paying for supply security. Everywhere else, developers carry the risk themselves, and the result is FIDs written with a price condition attached, or not written at all.

Case study · Commodity prices

ioneer

Rhyolite Ridge, Nevada · lithium and boron

Permits and government debt are not enough when the price case fails.

Rhyolite Ridge shows that permits and government debt are not enough when the price case fails. The project should be the easiest lithium mine in America to finance: its federal Record of Decision was issued in October 2024, a Nevada court has upheld the permit, and the US Department of Energy has closed a US$996 million loan for it (ioneer 6-K).

The price story broke it. Sibanye-Stillwater walked away as equity partner in February 2025, citing a weak pricing environment (Mining.com). ioneer launched a replacement search in June 2025, expecting it to take four months. Seventeen months later, with a September-quarter target for the process now passed, its only counterparties have signed non-binding memoranda, and the DOE loan cannot be drawn until an equity partner commits (Walnut Invest). Meanwhile the estimated capital cost has risen to about US$1.68 billion, more than double the 2020 estimate of US$785 million.

ioneer's shares closed at A$0.099 on 22 October, their 52-week low and half their value at the start of the year. The company is now worth about US$201 million, roughly an eighth of what it needs to build, which is why the price problem has become a funding problem.

Key facts

US$996m

DOE loan closed, but undrawable until an equity partner commits

17 months

spent searching for a partner after Sibanye-Stillwater walked away

US$1.68bn

estimated capital cost, more than double the 2020 estimate of US$785m

A$0.099

share price on 22 October, a 52-week low

~1/8

market value as a share of the cost to build

Prewave



#2

Liquidity

Developers cannot raise the equity that unlocks government and bank debt, so the money that exists never reaches the ground.

The equity gap

Worth a fraction of what they need

Government money that cannot be drawn

Death by placement

Case study: VHM

Shovel Stopper #2

Not enough money to reach a decision

Liquidity: developers cannot raise the equity that unlocks government and bank debt.



Most Western critical minerals developers do not have the money to reach a construction decision, and cannot raise it on terms that make sense. The typical stalled developer we tracked is worth about a fifth of the capital its project still needs. This is not a handful of weak companies; it is the shape of the sector.

Most Western developers are micro caps with no revenue, and 45% of those we tracked trade within 10% of their 52-week low. Falling commodity prices shrink what investors will pay for a project, and a smaller market value means each dollar raised costs more of the company. Without a cash-generating parent, a government or a strategic partner willing to fill the gap, many projects simply wait.

The equity gap

A mine is rarely built with one cheque. Banks, export credit agencies and government lenders will usually lend against part of the cost, but only once the company has committed its own equity and signed the offtakes that will repay the debt.

For a producer, that equity comes from cash flow. For a developer with no revenue, it comes from selling shares.

That is where the market's verdict on prices becomes a funding problem. When a developer's share price halves, it must issue twice as many shares to raise the same amount, diluting existing investors until the raise is no longer worth doing. The debt then waits for equity that never arrives, and the project waits for both.

19%

median value of stalled developers versus the capital they need

2x

shares needed to raise the same money after a 50% share price fall

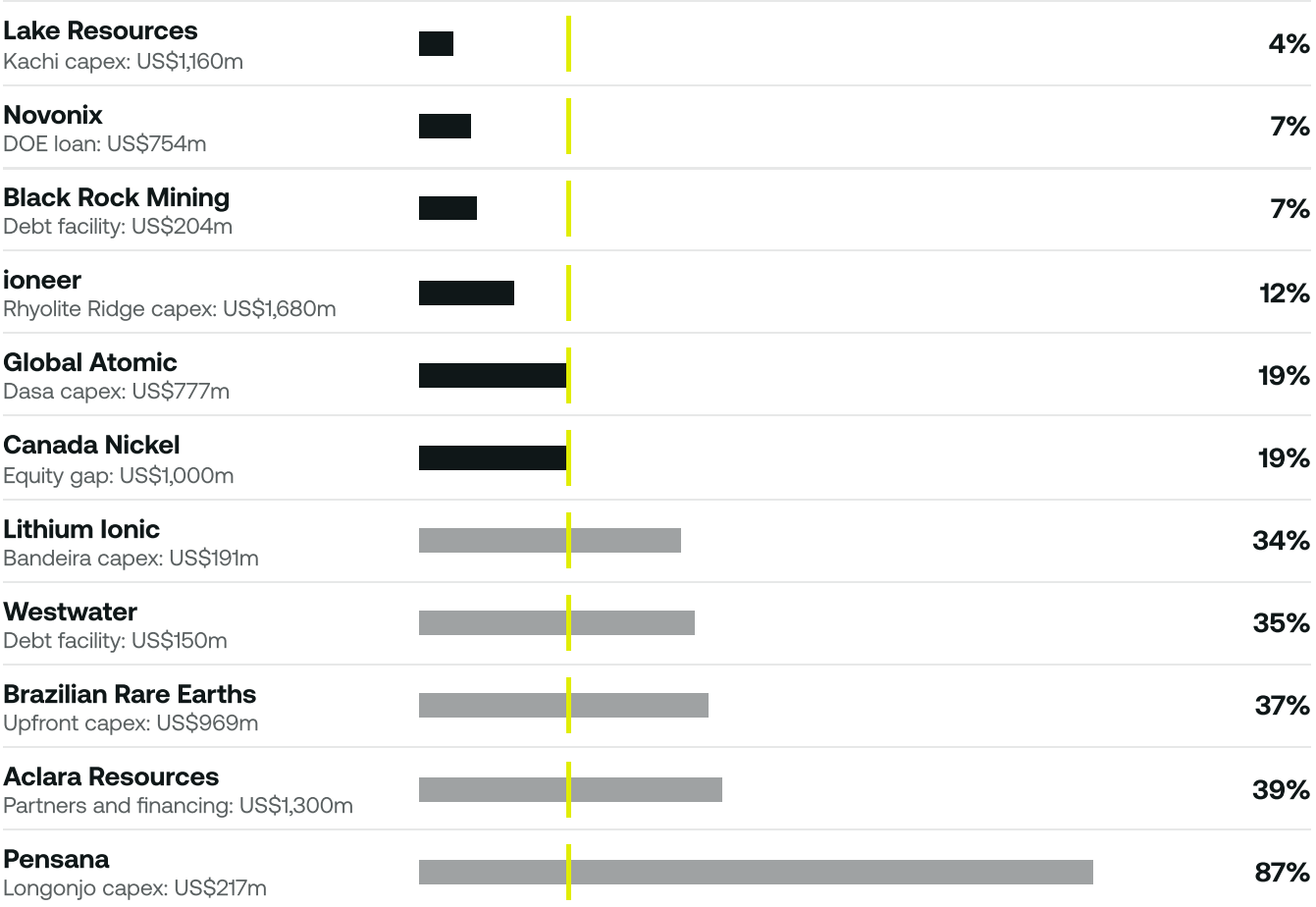
15

open funding closes we tracked with no date at all

Worth a fraction of what they need

Most stalled developers are worth a fraction of the money they need

Market value as a share of the capital each project still needs, as disclosed. The yellow line marks the median, 19%.



Source: Prewave analysis; company disclosures; Yahoo Finance closes, 20 to 22 October 2026

Ten of these eleven companies are worth less than 40% of the money their next step requires, and the median is about a fifth. Several of the gaps are larger than they look, because a construction budget usually grows once detailed engineering starts: Global Atomic's Dasa uranium capex has risen 74% to US$777 million, and ioneer's has more than doubled since 2020.

Government money that cannot be drawn

Billions offered, little drawn

Western governments have offered billions to these projects, but most of it is conditional, and the condition is usually private equity.

~US$4.5bn
offered, approved or signed, but undrawn, across nine projects

Company and lender	US$m	Status	What is missing
ioneer US Department of Energy	996	Loan closed	A binding equity partner
NioCorp US EXIM	800	Letter of support, Oct 2026	EXIM board authorisation
Novonix US Department of Energy	754	Conditional commitment	Loan close (expected H1 2026)
Sunrise Energy Metals US OSC and EXIM	467	Conditional loan, letter of interest	Offtake agreements
American Rare Earths US EXIM	456	Non-binding letter of interest	Pre-feasibility study, permits
Global Atomic US DFC	414	Approved, conditional	US$152.7m of equity
Northern Minerals US EXIM	230	Indicated	Funding package, clean register
VHM US EXIM	200	Non-binding letter	FID and equity
Pensana Absa, EXIM-guaranteed	160	Pending	Cascade's US$150m equity

This is not a failure of intent. Export credit agencies are designed to lend alongside private money, not instead of it. But it means that headline announcements of government support overstate how much capital is actually reaching Western mines.

Death by placement

While they wait, developers fund themselves a few million at a time. At their latest reported quarters, Black Rock Mining held A$2.1 million, EcoGraf A$3.8 million and Hastings Technology Metals A$3.76 million; each is trying to unlock a project worth hundreds of millions. Northern Minerals held A$20.5 million at the end of September, and its annual report flagged a material uncertainty over its ability to continue as a going concern.

Each top-up comes at a discount to the share price, and each discount sets the reference point for the next raise. The result is a slow erosion of value that leaves companies too small to fund the very projects their share price depends on.

Case study · Liquidity

VHM

Goschen, Victoria · rare earths and mineral sands

A strategically sound project can stall for want of working capital.

Goschen shows how a strategically sound project can stall for want of working capital. It is a rare earth and mineral sands deposit in a stable Australian state, with a binding offtake from Iluka, which is building the country's flagship rare earth refinery. It also has letters of support from Export Finance Australia (up to A$75 million) and US EXIM (up to US$200 million).

What it lacks is money in the bank. VHM raised A$10.3 million in November 2025 at a 25.5% discount, then A$5 million in April 2026 at a 19.4% discount ahead of a mid-2026 FID (Mining Weekly). In July, Iluka added a A$40 million convertible note alongside its offtake (ASX). The government letters remain non-binding, and the company reported A$11.2 million in cash.

The FID target has moved from 2025, to the first half of 2026, to mid-2026, and now to “later in 2026”, with first operations pushed to late 2027. VHM's shares closed at A$0.21 on 22 October, near their 52-week low of A$0.195, down 50% this year and 66% over twelve months. At about US$43 million, the company is worth a small fraction of what Goschen needs, so any further equity raise will be heavily dilutive, if it can be done at all.

Key facts

4 targets

FID guided for 2025, H1 2026, mid-2026, now “later in 2026”

A$11.2m

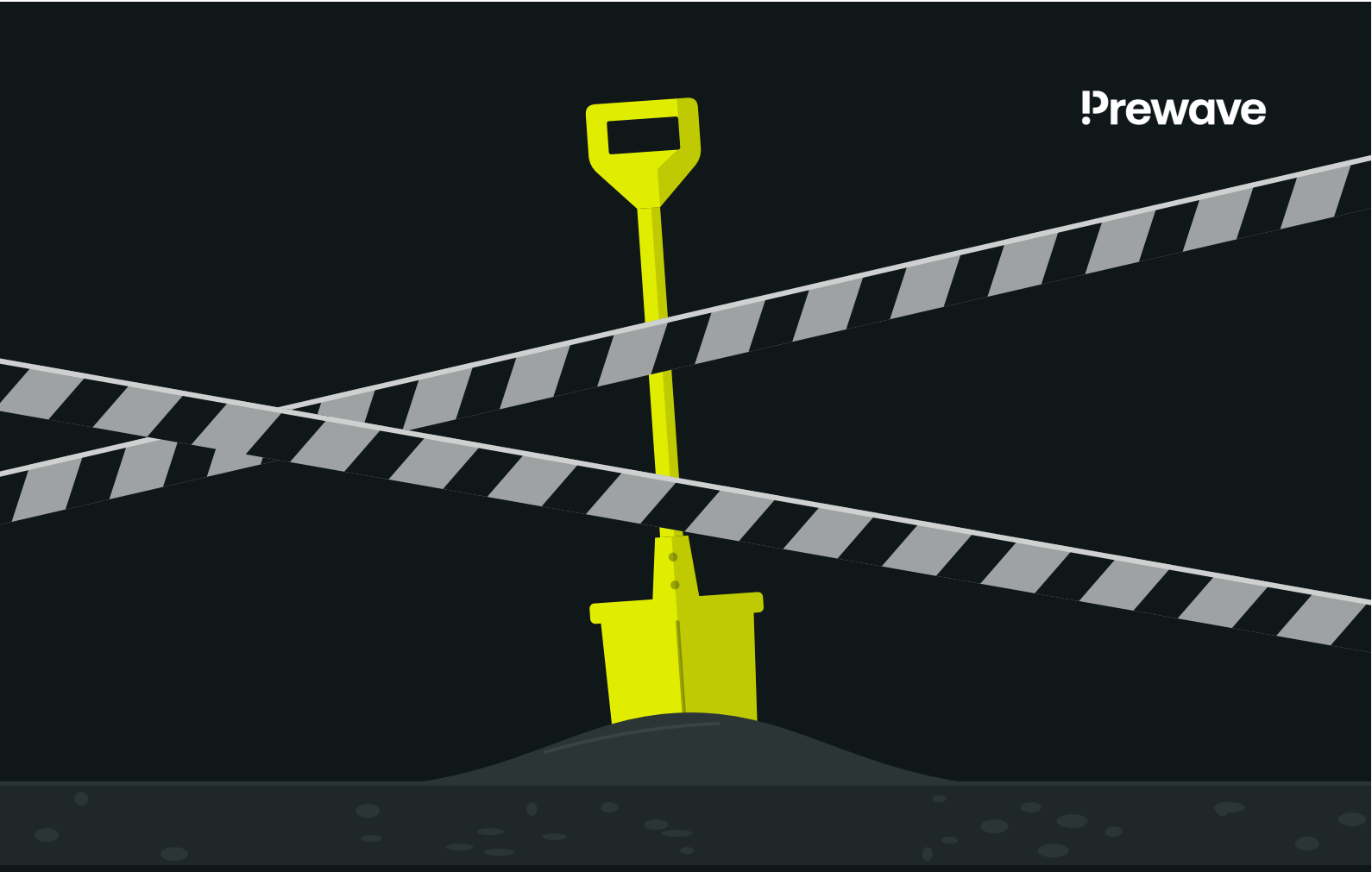
cash reported, against a project needing hundreds of millions

25.5%

discount on the November 2025 placement; 19.4% in April 2026

US$43m

market value; shares down 66% over twelve months



#3

Red tape, environmental and ESG issues

Permits take years, and courts can reopen them after approval.

The longest lead times in the world

The permitting queue

Courts as a second permit

Strategic status is not a fast track

Case study: Dateline Resources

Shovel Stopper #3

Slow to approve, open to challenge

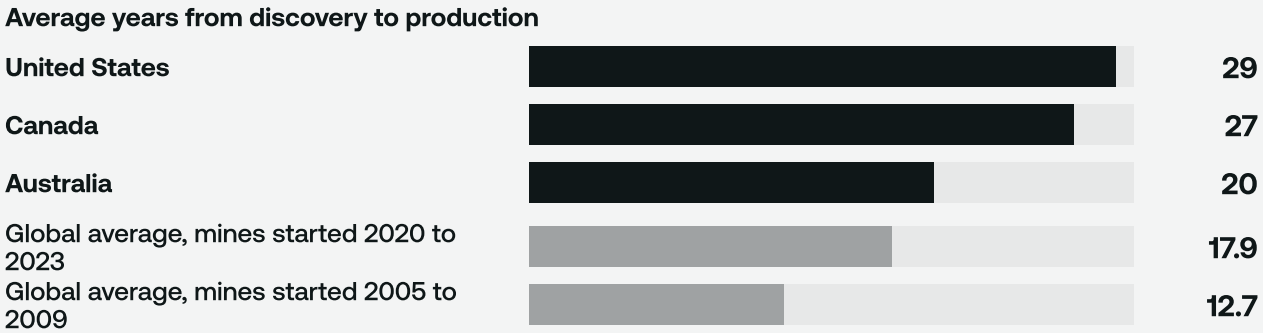
Red tape, environmental and ESG issues: permits take years, and courts can reopen them after approval.



Western mines take longer to approve than almost anywhere else, and approval is no longer the end of the process. Of the 19 open permit decisions we tracked, 11 have no date, and seven projects are facing, or have recently been through, a court challenge.

Western mines are rightly held to stricter environmental and social standards than many of the operations in China and elsewhere they are meant to replace. The problem is not the standard but the process: slow, layered across several levels of government, and open to challenge long after a permit has been granted.

The longest lead times in the world



Source: S&P Global; Mining.com, citing S&P Global

According to S&P Global, mines that came online in 2020 to 2023 took an average of 17.9 years from discovery to production, up from 12.7 years for those started in 2005 to 2009, with permitting, studies and the wait for financing driving most of the increase. The United States averages 29 years, second only to Zambia; Canada averages 27 and Australia 20 (Mining.com, citing S&P Global). For projects still in development, S&P put the figure at nearly 30 years in June, with permitting delays and revocations pushing some planned start dates back by up to five years.

At that pace, a deposit discovered today in the US would produce in the 2050s. The policy targets for 2030 depend almost entirely on projects that have already been in the system for a decade or more.

The permitting queue

Waiting for a regulator

Many projects are simply waiting for a regulator, and some of those waits now outlast the company's cash.

Atalaya Mining, Touro (Spain): the Galician government's environmental decision on this copper project was expected in the second quarter, and officials said it would come “before summer”. In October it was still pending, even as the European Commission named Touro an EU strategic project on 9 October.

European Metals, Cinovec (Czech Republic): an EU Just Transition Fund grant required environmental approval by 30 June 2026. A cross-border review with Saxony was added in May, the deadline passed, and approval is now expected by the end of the year.

Infinity Metals, San José (Spain): its lithium mining licence application has been under technical review since September 2025, with no decision date; a new regional government in Extremadura took office in April.

Lithium Ionic, Bandeira (Brazil): the environmental and mining permit application has been pending since November 2023, after the Minas Gerais state committee deferred its vote in 2025. The shares are at their 52-week low, down 57% this year.

Serabi Gold, Coringa (Brazil): still waiting for a federal land-use approval and sign-off on its Indigenous component study, Serabi cut its 2026 production guidance on 21 October and its shares fell about 16% that day. Its temporary licence expires on 29 January 2027.

Leading Edge Materials, Norra Kärr (Sweden): holds a 25-year exploitation concession for its rare earth deposit, but still needs a separate Environmental Code permit, with no date.

Two patterns stand out

Permits now carry financial deadlines (Cinovec's grant, Serabi's temporary licence), so a regulator's delay can cost a company its funding. And social consultation, including with Indigenous communities in Brazil and Ecuador, is increasingly the longest step, which no amount of government urgency can shortcut.

Courts as a second permit

A permit is no longer the finish line

A permit used to be the finish line. It is now often the start of a second process in the courts, where opponents can challenge the decision and judges can suspend work while they hear the case.

Dateline Resources Colosseum (US)	Operations halted by a federal injunction since August (see the case study that follows).
ioneer Rhyolite Ridge (US)	A lawsuit against its federal permit continues, two years after approval.
Jindalee Lithium McDermitt (US)	Faces a lawsuit against its federal approval to drill, before it has even defined a mine.
European Lithium Wolfsberg (Austria)	An Austrian court overturned an environmental exemption, one reason production guided for early 2025 became an FID target for the end of 2026.
Highfield Resources Muga (Spain)	Construction of this potash mine has been on hold pending a Supreme Court appeal over its licences; the company is now worth about US$6 million.
Emerita Resources Aznalcóllar (Spain)	Has waited since January for an administrative court decision expected “in the coming months”.

The US cases share a twist. Federal agencies have fast-tracked approvals for critical minerals, but a faster approval can be a weaker one in court, and the injunction risk falls on the company, not the agency.

27

months: the EU permitting cap for strategic extraction projects (15 for processing)

Strategic status is not a fast track

The EU's Critical Raw Materials Act caps permitting for designated strategic projects at 27 months for extraction and 15 months for processing. That helps on paper, but the designation does not issue the permit or provide the finance. Rock Tech's Guben lithium converter in Germany is an EU strategic project and has slipped to 2029 at the earliest for want of funding; Euro Manganese's Chvaletice project, also designated, is still looking for financing partners. Touro became a strategic project while its regional permit was overdue. A strategic label is only as fast as the authority that has to sign the permit and the investor who has to fund the mine.

Shovel St

Case study · Red tape and environment

Dateline Resources

Colosseum, California · gold and rare earths

Federal backing does not remove environmental risk; it can concentrate it.

Colosseum shows that federal backing does not remove environmental risk; it can concentrate it. The former gold mine closed in 1993, a year before Congress created the Mojave National Preserve around it. Dateline bought it in 2021 and reframed it as a rare earth project, pointing to geological similarities with MP Materials' Mountain Pass deposit nearby (Skillings).

The Trump administration approved new mining at the site in April 2025, reversing the National Park Service's reclamation plans. The National Parks Conservation Association, represented by Earthjustice, sued in April 2026 and sought an emergency injunction in June, citing grading, bulldozing and road building inside the preserve (National Parks Traveler). On 10 August, a federal judge granted the injunction, halting new operations while the case proceeds (Earthjustice).

Dateline and the US Departments of Justice and War asked the court to suspend the injunction while they appeal. The judge heard the applications on 26 October and refused them; on 4 November, Dateline and the US Government filed fresh stay motions with the Ninth Circuit Court of Appeals (Dateline ASX announcements). Whatever the outcome, the case captures the tension at the heart of Western mining policy: Washington wants domestic rare earths urgently, and its own environmental laws make the most expedient sites the most exposed to challenge.

Key facts

10 Aug

federal injunction halts new operations inside the Mojave National Preserve

2 Nov

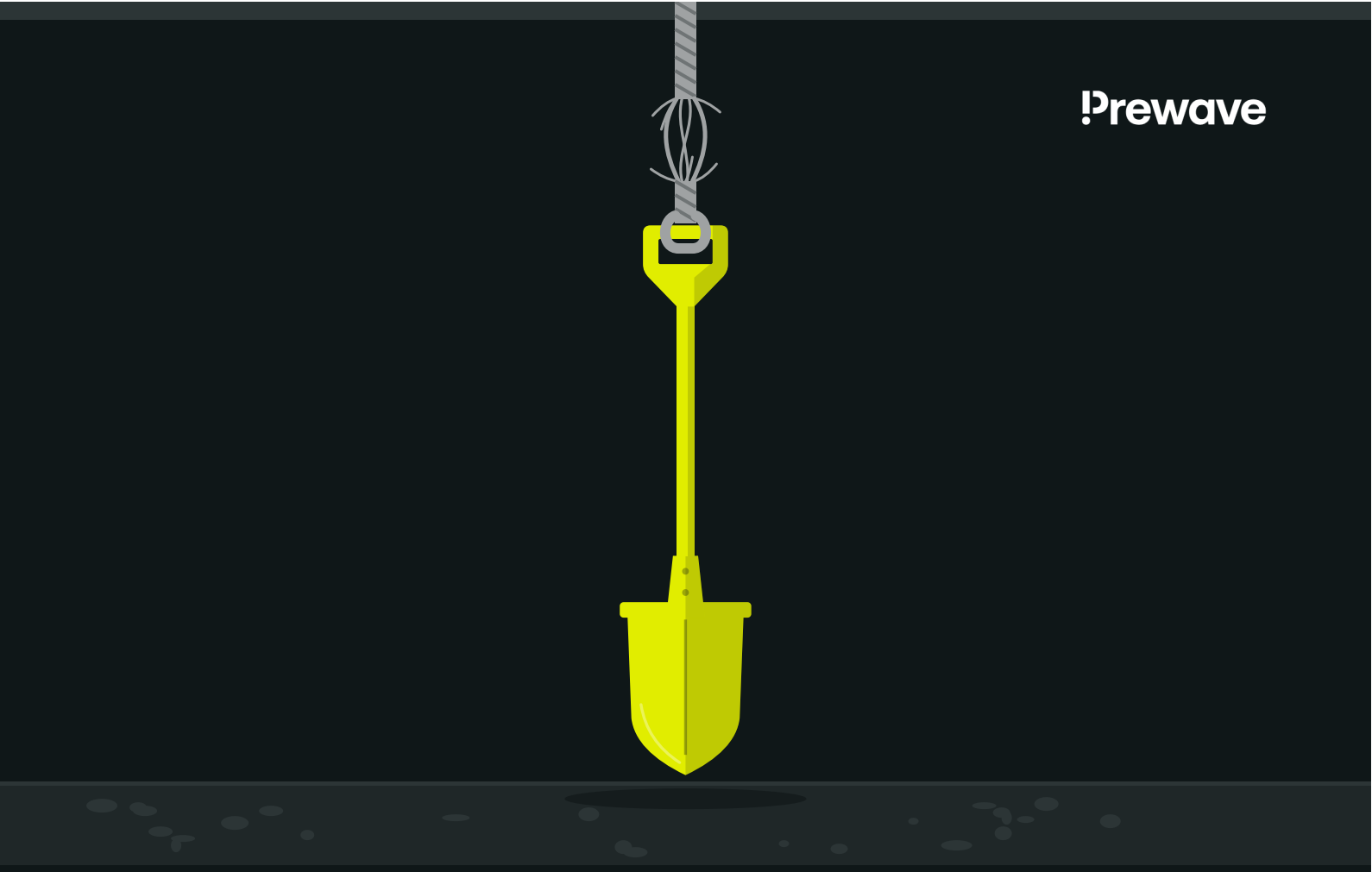
stay refused by the district court; Dateline and the US Government have taken it to the Ninth Circuit

1993

year the mine closed, before the preserve was created around it

-81%

share price change over twelve months



Prewave

#4

Investor issues

Where capital exists, it tends to come from a single large backer. When that backer hesitates, the project stops.

Waiting for a partner

When the backer changes course

Whose money?

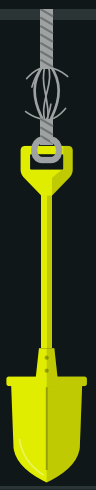
Case study: Northern Minerals

Case study: Pensana

Shovel Stopper #4

One backer, one point of failure

Investor issues: where capital exists, it tends to come from a single large backer.



Waiting for a partner

With public equity expensive, most developers look for a strategic partner: a major miner, a carmaker, a trading house or a sovereign fund that will take a stake in the project and often buy its output. The model works when the partner signs. Until then, the whole project rests on one negotiation, and partners can take years to commit or walk away at the last moment.

17

open decisions waiting on a partner or strategic investor

Hastings Technology Metals Yangibana, Australia	Wyloo is selling its 60% stake in the rare earth project through Bank of America; bids were due in May 2026 and no buyer has been announced. Hastings itself held A$3.76 million at the end of June.
Lake Resources Kachi, Argentina	A strategic review of a stake sale or the whole company has run since May 2025.
Brazilian Rare Earths Rocha da Rocha, Brazil	Needs a partner for an estimated US$969 million in upfront capital.
Aclara Resources Brazil, Chile and US	Is talking to partners for about US$1.3 billion across its heavy rare earth projects and a planned Louisiana separation plant, with no date.
Global Atomic Dasa, Niger	Has a conditional US$414 million DFC loan but must first find US$152.7 million of equity, and is weighing a joint-venture partner.
ioneer Rhyolite Ridge, US	Has spent 17 months seeking a replacement after Sibanye-Stillwater's exit (see the ioneer case study).

When the backer changes course

Even a signed backer can shift

Even a signed backer can shift. The risk is greatest where the backer is a state or state-linked fund, because its priorities can change with policy rather than with the project.

Talga Group
Vittangi, Sweden

Sweden refused the company's Industriklivet green industry grant, worth about A$180 million, in February 2026. The graphite anode project must now be financed “by other means”, and its 2026 FID has not been reaffirmed.

Pensana
Longonjo, Angola

Its Qatar-backed investor widened the scope of a US$165 million deal, then delayed most of the money (see the case study that follows).

European Metals
Cinovec, Czech Republic

When the Cinovec joint venture issued a €13 million cash call in September, partner ČEZ funded all of it, cutting European Metals' stake to 42.62%. It has until 13 November to pay €6.45 million to restore 49%, with no funding route announced and A$0.49 million in cash at the end of September.

Whose money?

Screening out risky capital also shrinks the pool

For years, Chinese and China-linked investors were among the most willing buyers of Western critical minerals equity. Governments now treat that capital as a security risk, with good reason. But screening it out narrows the pool of investors at the moment developers need it most, and cleaning up an existing register can take years. The clearest case is Northern Minerals.

Case study · Investor issues

Northern Minerals

Browns Range, Western Australia · heavy rare earths

Its problem is not the deposit. It is who owns the company.

Browns Range targets the hardest part of the rare earth problem: heavy rare earths such as dysprosium and terbium, of which China still supplied about 91% of global demand in late 2025, according to Reuters. It has a completed feasibility study and conditional support from Australian and US government lenders, including an indicated US$230 million from US EXIM.

Its problem is who owns it. In June 2024, Australia's Treasurer ordered five China-linked shareholders to sell down. In late 2025, Northern Minerals referred suspected breaches of those orders to the Foreign Investment Review Board, and asked the NSW Supreme Court for permission to delay its annual general meeting while FIRB investigated. In January 2026, a China-based shareholder holding about 6.8% tried to call a meeting to remove the executive chair, before withdrawing (Capital Brief).

In May 2026, the Treasurer ordered six foreign shareholders to divest a combined 17.6% of the company by 2 July, the fourth set of national security orders on the register in just over three years (SmallCaps). In July, interim directions froze voting rights on three holders' shares. The 2025 AGM was deferred from October 2025 to March, then June, then September 2026.

The chair has said plainly that a clean register is critical to securing funding. That funding has not arrived. FID was targeted for June 2026, then moved to no later than 30 September, and was then delayed again without a new date. In October, Browns Range received the last of the permits it needs to start construction; what it lacks is money, and the company's annual report flagged a material uncertainty over its ability to continue as a going concern.

Key facts

4

sets of national security orders on the share register in just over three years

17.6%

of the company ordered sold by six foreign shareholders in May 2026

~91%

of global heavy rare earth demand still supplied by China in late 2025

3 dates

for the FID: June 2026, 30 September, now none

Case study · Investor issues

Pensana

Longonjo, Angola · NdPr

One strategic investor, one delay, one stalled mine.

Pensana shows what happens when a project depends on one strategic investor. With its planned expansion, Longonjo would produce up to 4,400 t a year of NdPr oxide, about 5% of current world production (Engineering News). Construction is more than 30% complete.

In March, Qatar-backed Cascade Natural Resources agreed to invest US$165 million, which Pensana needed both to build the mine and to unlock a US$160 million, EXIM-guaranteed debt package from Absa (Pensana). The first US$15 million arrived in April. The remaining US$150 million has not.

In August, Pensana said the delay was partly due to Qatar widening the scope of its investment, and its chair conceded it would affect the construction schedule (Pensana RNS). On 26 October it said Cascade expected to deploy a significant tranche within 14 days, while moving commissioning to January 2028 and full production to September 2028 (Pensana RNS).

The market has drawn its own conclusion. Pensana's shares closed at 39.65p, within a penny of their 52-week low, 71% below their 52-week high of 135.5p and down 55% since January. For a project that could supply around one in twenty tonnes of the world's NdPr, the gap between strategic value and investor confidence could hardly be wider.

Key facts

US$150m

of US$165m from Cascade still outstanding

~5%

of world NdPr production at full expansion

30%+

of construction complete

-71%

from the 52-week high of 135.5p

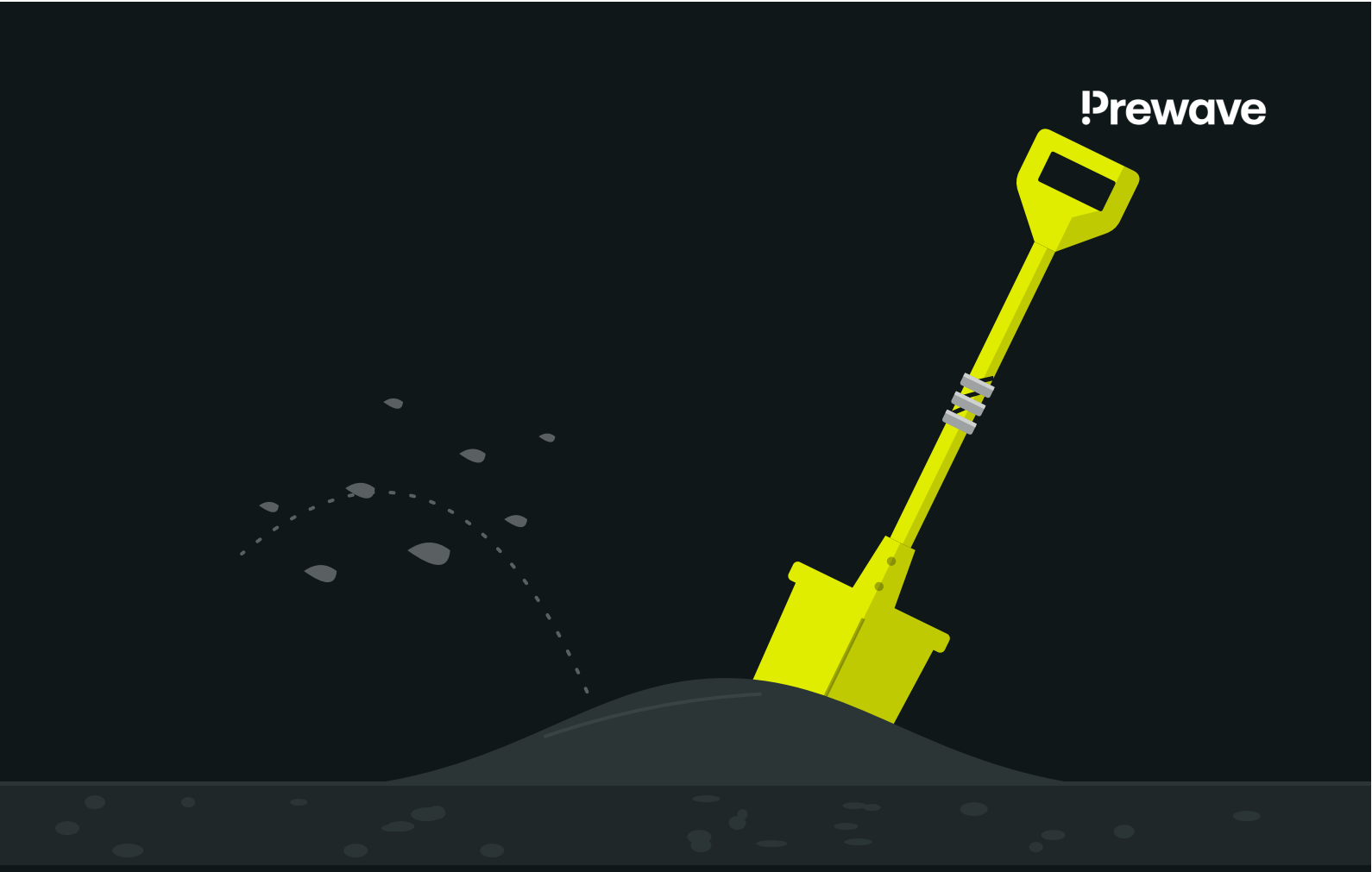
The stalled list

Sixteen projects that missed a key milestone

12 of 16 trade within 5% of their 52-week low

Company and project	Main obstacle	Original target	Status now	Above 52-week low
ioneer Rhyolite Ridge (US)	Equity partner; lithium price	FID in 2025	No binding partner; DOE loan undrawn	0%
Lake Resources Kachi (Argentina)	Funding; strategic review	FID in 2025	Permitted Sep 2026; FID undated	0%
Standard Lithium South West Arkansas (US)	Debt and offtakes	FID early 2026	Financing slipped into Q4 2026	9%
Rock Tech Lithium Guben converter (Germany)	Financing gap	Production 2027	Production 2029 at the earliest	8%
Deep Yellow Tumas (Namibia)	Weak equity markets	FID Mar 2025	Q4 2026 target withdrawn 16 Oct	0%
VHM Goschen (Australia)	Liquidity	FID in 2025	“Later in 2026”	8%
Black Rock Mining Mahenge (Tanzania)	Liquidity	Production 2026	Debt close deadline 30 Nov 2026	0%
Novonix Enterprise South (US)	DOE loan not closed	Loan close H1 2026	Not closed; no new date	0%
Canyon Resources Minim Martap (Cameroon)	Lender suspended drawdowns	First shipment H1 2026	Shipment target withdrawn	5%
NioCorp Elk Creek (US)	EXIM approval	Financing Q2 2026	Letter of support only	3%
Talga Group Vittangi (Sweden)	Swedish grant refused	Grant decision Q1 2026	Refused Feb 2026; refinancing	3%
Dateline Resources Colosseum (US)	Court injunction	Restart 2026	Halted since 10 Aug; stay refused, appeal ongoing	22%
European Metals Cinovec (Czech Republic)	Environmental review	EIA by 30 Jun 2026	EIA now end 2026	0%
Lithium Ionic Bandeira (Brazil)	State permit	Application filed Nov 2023	Decision targeted end 2026	0%
Northern Minerals Browns Range (Australia)	Share register; funding	FID by Jun 2026	30 Sep target missed; no date	4%
Pensana Longonjo (Angola)	Strategic investor delay	Second tranche “due shortly” (Aug 2026)	US$150m still outstanding	1%

Projects that have missed, withdrawn or indefinitely deferred a key milestone. Last column: share price above the 52-week closing low, 20 to 22 October 2026 closes. Source: Prewave analysis; Yahoo Finance.



Part 3

Digging a way out of trouble

Some Western projects are getting built. What they have in common, what the market makes of them, and where the sector is heading.

What success looks like

The general trend: too many micro-miners?

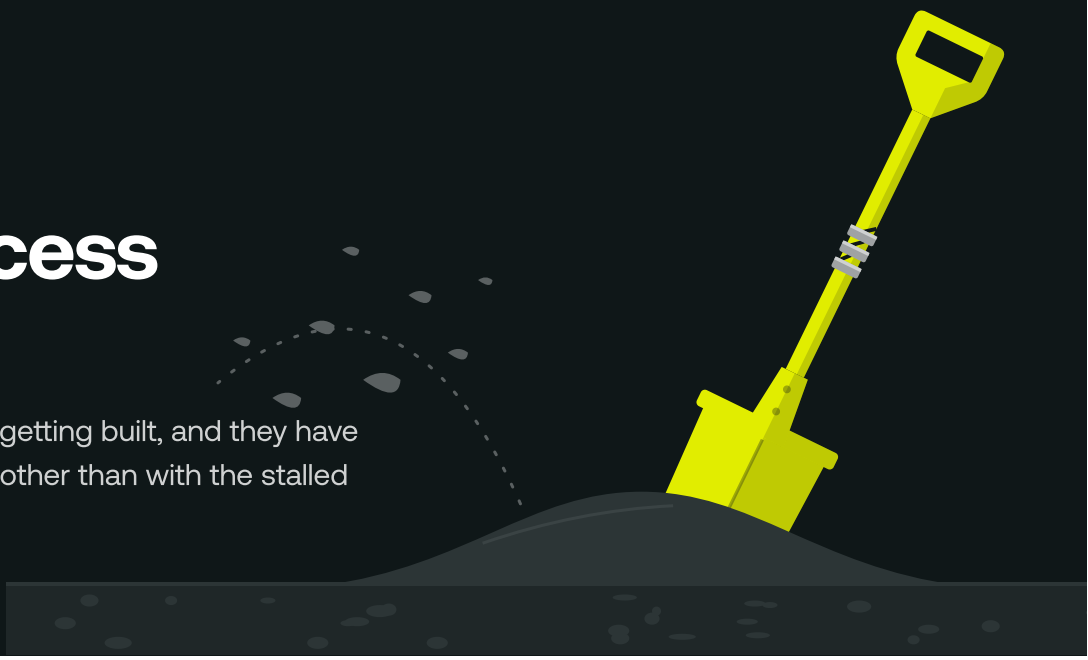
Where the sector is heading

What to watch

Part 3

What success looks like

Some Western projects are getting built, and they have more in common with each other than with the stalled majority.



Most are restarts of old mines with infrastructure already in place; most have a government as lender, shareholder or buyer; and most signed binding offtakes before they asked for construction money.

Restarts
of old mines with infrastructure already in place

Government
as lender, shareholder or buyer

Binding offtakes
signed before asking for construction money

Tungsten West (Hemerdon, UK)

Hemerdon in Devon, one of the world's largest tungsten deposits, supplied the UK in both World Wars and has been closed for most of the past decade. In August, the government's National Wealth Fund committed up to £71 million: £36 million in equity at 36p a share, a £25 million loan and a £10 million uncommitted accordion (AJ Bell, Alliance News). The government also won an exclusive window to buy up to half of Hemerdon's tungsten.

The company says it is now fully funded and reached first production in the third quarter of 2026 (Tungsten West results), with full production targeted by the first quarter of 2027. Its shares have roughly tripled this year. Hemerdon is the clearest Western example of a state acting as anchor investor, anchor customer and timetable-setter at once.

£71m
National Wealth Fund package that took Hemerdon from stalled to producing in 2026

~3x
share price this year

Larvotto Resources (Hillgrove, Australia)

Hillgrove in New South Wales closed in 2014 when antimony prices collapsed. Larvotto bought it, signed a seven-year antimony offtake with Wogen Resources and a gold offtake with Glencore, and funded the restart with a US$105 million bond and equity.

First concentrate came in late August; on 14 October the first 68 tonnes of antimony concentrate left site (Mining Weekly). At nameplate, Hillgrove will produce about 4,900 t of antimony a year, around 7% of global supply (Business News).

~7%

of global antimony supply at nameplate

68 t

first concentrate shipped, 14 October

Other projects moving forward

Neo Performance Materials · Estonia
Its Narva plant has produced sintered magnets since May 2025 at a nameplate 2,000 t a year, Europe's only operating sintered magnet plant. Its shares are up 59% this year.

Iluka Resources · Australia
The Eneabba rare earth refinery is fully funded by a A$1.65 billion non-recourse government loan, with commissioning targeted for mid-2027.

Arafura Rare Earths · Australia
Took FID on Nolans in May 2026 with a A$350 million placement, after years of delay.

Lindian Resources · Malawi
Expects grid power at Kangankunde in early November and first monazite concentrate in December.

Ucore Rare Metals · US
Produced its first NdPr oxide at its Louisiana plant in June 2026, part-funded by the US Department of War.

Allied Critical Metals · Portugal
Won a favourable environmental decision for the Borralha tungsten project in January and EU strategic project status in October.

Success is not always rewarded

The market does not always pay for progress. Larvotto's shares closed at their 52-week low on 22 October, a week after its first shipment. Vulcan Energy drew down its €2.2 billion package for Germany's first lithium project in July, yet its shares are down 75% this year. Nouveau Monde Graphite is building its Québec mine and is down 65%. Arafura trades 42% below the price at which it raised its FID money.

That matters for the wider pipeline. If even funded, building projects lose value, the next developer in line finds it harder to raise equity, and the gap between strategic ambition and private capital widens.

The general trend

Too many micro-miners?

The Western rare earth pipeline is wide but shallow. Our analysis covers 47 listed Western rare earth companies: four established producers and 43 developers, refiners in construction and pre-production miners. Together they are worth about US$30.6 billion, roughly the same as China's two state-controlled leaders, China Northern Rare Earth and China Rare Earth Group (US$27.4 billion). But the value is concentrated: Lynas and MP Materials alone are worth US$14.6 billion, more than all 43 developers combined (US$12.9 billion).

Market value is also not output: China still mines about 59% of the world's rare earths and refines about 84% of magnet rare earths. The West has two companies operating at scale and a long tail of small ones hoping to join them.

The distribution matters more than the total. Thirty-one of the 43 developers (72%) are micro caps worth less than US$300 million, and 17 (40%) are worth less than US$50 million. Thirty-two are down this year, with a median fall of 34%, and 27 trade at less than half their 52-week high. A single mid-sized rare earth mine and processing plant typically costs several hundred million dollars; few of these companies could raise that without handing over control.

Two Western producers outweigh 43 developers

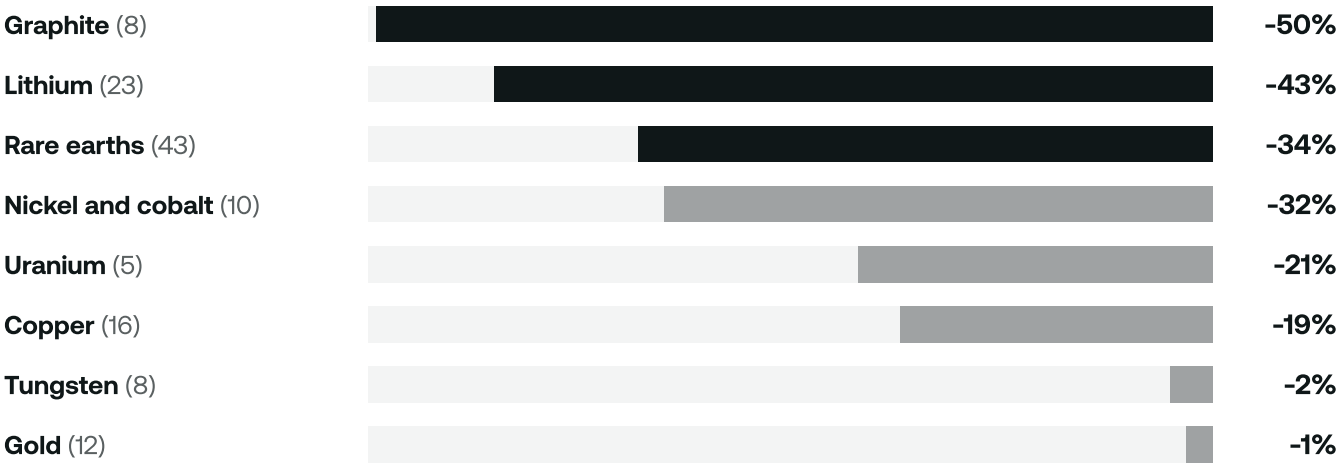
Market capitalisation, US$, closes of 20 to 22 October 2026. Grey: Chinese state-controlled companies.



Source: Prewave analysis; Yahoo Finance. Solvay is left out as a diversified chemicals group.

Graphite, lithium and rare earth developers have fallen furthest in 2026

Median share price change since 1 January, 125 Western pre-production developers (number of companies in brackets)



Source: Prewave analysis; Yahoo Finance. Excludes established producers and Chinese-listed companies.

The weakness is not limited to rare earths, and it follows a pattern. Developers of battery and magnet materials, where Chinese oversupply has pushed prices down, have fallen hardest; those in metals with strong Western prices, such as gold and tungsten, are roughly flat. Across all 152 Western pre-production companies we tracked, the median share price is down 33% this year, and 69 (45%) trade within 10% of their 52-week low.

Why fragmentation hurts

Each micro-miner must separately fund its own studies, permits, offtake negotiations and, eventually, its own processing route. Many will never reach production, and the ones that do may be small. Even Arafura's Nolans, one of the larger fully permitted Western projects, would supply about 4% of global NdPr demand at full capacity.

Lynas, the only non-Chinese separator operating at scale, can recover at most 35 to 67 tonnes a year of dysprosium and terbium, against a forecast non-Chinese shortfall of around 3,000 tonnes by 2035 (Magnetic West).

Fragmentation also spreads scarce public money thin. Export credit agencies have issued letters of interest to dozens of the projects we tracked, from Northern Minerals and VHM to American Rare Earths (up to US$456 million, non-binding) and NioCorp (up to about US$800 million, still awaiting board authorisation). Letters of interest are not loans, and private lenders typically wait for them to become binding before committing their own money.

Where the sector is heading

Consolidation, not hundreds of small mines

The projects that are moving share a common feature: a large balance sheet behind them, usually a government's. MP Materials has a US$400 million Pentagon equity stake and a price floor. Iluka's Eneabba refinery is funded by a A$1.65 billion non-recourse government loan. USA Rare Earth, with about US$1.5 billion in cash and a CHIPS award, has been buying assets, including Serra Verde's Pela Ema mine in Brazil and Less Common Metals in the UK.

The likelier future, then, is not hundreds of small miners each reaching production. It is consolidation, with a handful of state-backed platforms absorbing the best deposits and leaving the rest stranded. Mergers such as European Lithium's pending combination with Critical Metals point the same way.

For buyers relying on a broad Western pipeline to reduce China exposure before 2030, the realistic pool of suppliers is far smaller than the number of projects suggests.

What the numbers add up to

60%

of pending FIDs have already slipped at least once

Timelines are softer than strategies assume

~US$4.5bn

of government-linked debt is offered but undrawn

Public money waits for private equity

US$14.6bn

Lynas and MP Materials are worth more than 43 developers combined

Supply will come from a few large platforms

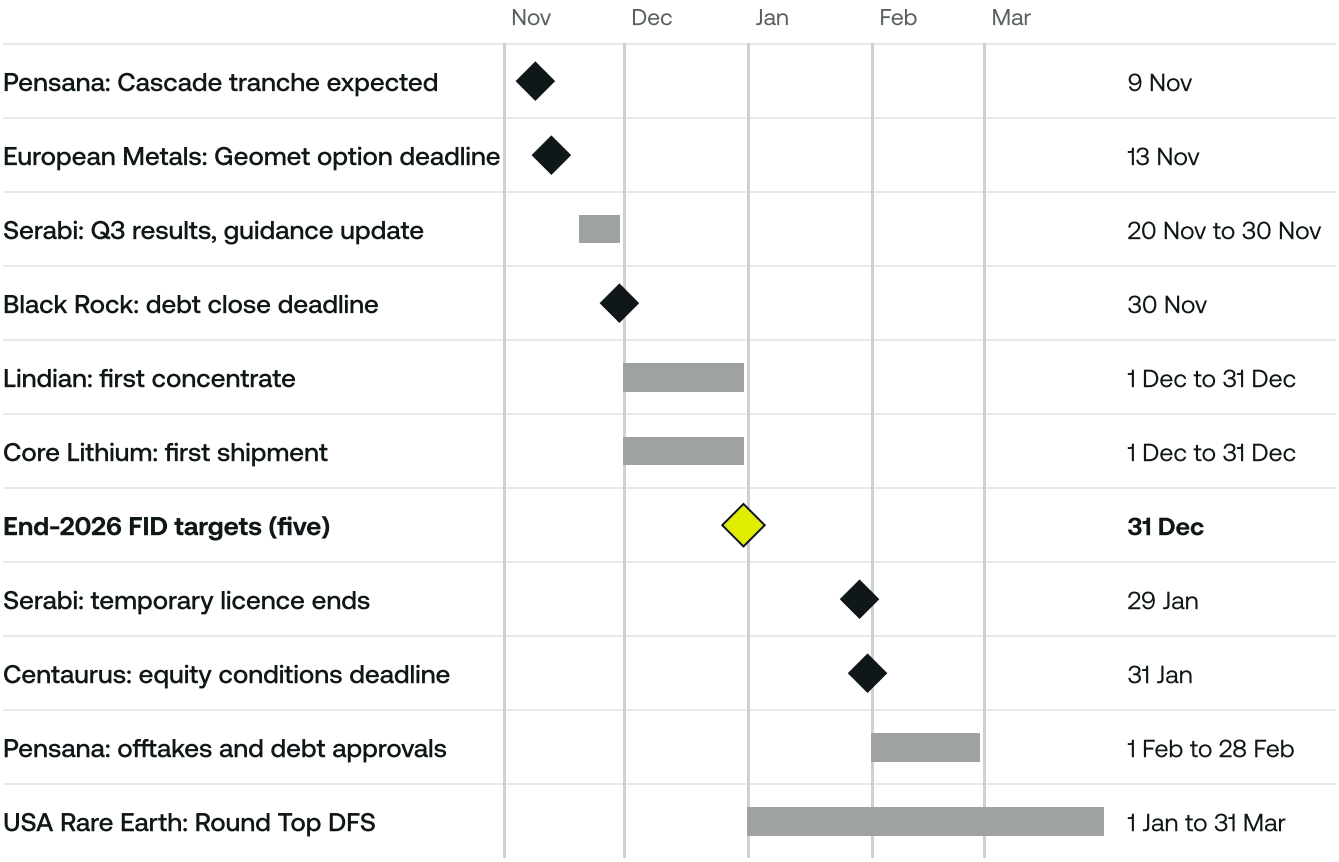
What to watch

Five FID targets fall due at the end of 2026

The next five months will show whether 2026's targets were plans or placeholders. The projects we tracked face a run of hard dates: two financing deadlines in November, two first-production targets in December and, at the end of the year, five FID targets that companies have so far kept on the books. Dateline's appeal to the Ninth Circuit could be decided at any time.

The five end-2026 FID targets belong to ioneer (Rhyolite Ridge), Standard Lithium (South West Arkansas), Critical Metals and European Lithium (Wolfsberg), VHM (Goschen) and Marimaca Copper. Each has already slipped at least once. We will update this report as each date passes.

Dated decisions to watch, November 2026 to March 2027



Source: Prewave analysis, rechecked 5 November 2026

Methodology

Figures come from Prewave's analysis of 232 listed miners, refiners and processors and 168 dated milestones (FIDs, funding closes, permits, studies, production starts). Each milestone records the company's original target and every subsequent revision, taken from company filings and reputable trade press.

“Western” means companies listed in Europe, North America or Australia, including those developing projects in Africa and South America; Chinese-listed companies are excluded except as benchmarks. A slip is any public movement of a target date or withdrawal of a target. Share prices and market capitalisations are Yahoo Finance closes from 20 to 22 October 2026; micro caps are companies worth less than US$300 million.

The full list of open decisions and dated events follows in the appendix.

Sources

IEA Global Critical Minerals Outlook 2026, as reported by Investment Monitor, BOFIT, Mappr and Skillings

S&P Global: Average lead time almost 18 years; Mine development times: the US in perspective; From discovery to delay (June 2026)

Prices: Bloomberg on lithium; Critical Minerals News on NdPr (citing SMM); European Business Magazine on yttrium (citing FT and Argus); S&P Global Platts; SMM; Fastmarkets; Guangzhou and Shanghai Futures Exchanges via Sina Finance

ioneer: 6-K shareholder letter; Mining.com; Walnut Invest

VHM: Mining Weekly; Iluka agreement (ASX); VHM quarterly (19 July 2026)

Dateline Resources: ASX announcements of 27 Oct, 2 Nov and 4 Nov 2026; Earthjustice; National Parks Traveler; Dateline stay motion (Newswire); Skillings

Northern Minerals: ASX announcements of 21 Nov 2025, 30 Apr 2026 and 14 Jul 2026; September 2026 quarterly; Capital Brief; SmallCaps; Quartr FY26 summary

Pensana: Cascade investment (4 Mar 2026); financing and mine development update (26 Oct 2026); Cascade update (6 Aug 2026); Engineering News

Tungsten West: annual results RNS (3 Sep 2026); AJ Bell, Alliance News

Larvotto Resources: Mining Weekly (14 Oct 2026); Business News

Nickel: Mining.com and Reuters column on BHP and Indonesia; Mining.com on Australia's nickel sector

Commentary: The Diplomat (Marina Yue Zhang); Al Jazeera; The Oregon Group (Amanda Lacaze)

Lead times by country: Mining.com, citing S&P Global

Prewave: Magnetic West (July 2026); Prewave analysis of Western critical minerals projects (rechecked 22 October 2026)

Working draft for accuracy review. Market data as of the 20 to 22 October 2026 closes unless stated; project milestones rechecked between 16 and 22 October 2026, with key developments updated to 5 November 2026. Prewave does not provide investment advice.

Appendix

Open decisions we tracked

125 open FIDs, funding closes, permits, studies and production starts across 88 Western-listed companies, sorted by company. 63 have moved at least once; 13 are overdue, delayed or deferred (highlighted). Snapshot as rechecked on 22 October 2026, with key rows updated to 5 November 2026.

Company	Decision	Status and expected	How it has moved
Aclara Resources ARA.TO	Funding · Partners and financing for Carina (Brazil), Penco (Chile) and Louisiana separation plant (about US$1.3bn)	**Pending** No date; talking to project partners	No change recorded
Allied Critical Metals ACM.CN	Production · First tungsten concentrate from Borralha (Portugal), pending approvals	**Company target** Q4 2026, pending approvals (RECAPE and licensing)	No change recorded
Almonty Industries ALM	Production · Gentung Browns Lake tungsten (Montana) production readiness	**Company target** Second half of 2026	No change recorded
Alpha HPA A4N.AX	Production · HPA First Project Stage 2 commissioning (Gladstone)	**Company target** 2027	No change recorded
American Rare Earths ARR.AX	Study · Halleck Creek pre-feasibility study and Wyoming permit-to-mine submission	**Delayed** PFS targeted late Q3 2026; timeline under review	PFS 2026, late Q3 target passed
Ariana Resources AAU.L	Study · Dokwe (Zimbabwe) definitive feasibility study	**Company target** Q1 2027; first gold targeted 2028	No change recorded
Arianne Phosphate DAN.V	Funding · Lac à Paul construction financing (fully permitted since 2015)	**Pending** No date	No change recorded
Arverne Group ARVEN.PA	Funding · €50m qualifying financing for Lithium de France (converts Equinor/Arverne loan)	**Pending** No date set	No change recorded
Astral Resources AAR.AX	Study · Mandilla definitive feasibility study	**Company target** Q1 2027	June quarter 2026, then Q1 2027
Astral Resources AAR.AX	FID · Mandilla final investment decision	**Company target** After the DFS (no date)	Q3 2026, now after a Q1 2027 DFS
Atalaya Mining ATYM.L	Permit · Touro environmental impact declaration, then FID	**Pending** Awaiting Xunta; company says environmental review is close to complete; no date	Expected Q2 2026; Galician government said 'before summer'; still pending in Oct 2026, described as near completion
Black Rock Mining BKT.AX	Funding · Mahenge financial close and fully funded FID (US$204m debt facility deadline)	**Company target** Debt facility financial-close deadline extended to 30 Nov 2026; A$2.1m cash at 30 Sep	Deadline extended; production once guided 2026

Open decisions, continued

Company	Decision	Status and expected	How it has moved
Blue Moon Metals MOON.V	Permit · Springer tungsten mine restart permitting and financing (Nevada)	**Pending** No date; restart targeted Q4 2027 (about US$50m)	No change recorded
Brazilian Rare Earths BRE.AX	Funding · Strategic partner and funding for Rocha da Rocha (about US$969m needed)	**Pending** No date; Aug 2026 scoping study puts upfront capex at US$969m	No change recorded
Brazilian Rare Earths BRE.AX	Study · Pre-feasibility study	**Company target** Through 2027	No change recorded
Brazilian Rare Earths BRE.AX	FID · Rocha da Rocha final investment decision	**Company target** Targeted mid-2029	No change recorded
Canada Nickel CNC.V	Funding · Crawford financing package (EDC term sheet, bank process, tax-credit bridge)	**Company target** Q1 2027: tax-credit facility, full financing package, fleet agreements and First Nation fleet financing (Oct 2026 investor presentation)	'Financing initiatives' Oct-Nov 2026, now full package Q1 2027
Canada Nickel CNC.V	FID · Crawford construction decision	**Company target** Mid-2027	Year-end 2026, now mid-2027
Canyon Resources CAY.AX	Funding · Replacement funding after AFG Bank suspended loan drawdowns (offtake-linked, prepayment or strategic)	**Pending** No date; first-shipment target withdrawn	First shipment H1 2026, then Q3, then Q4 2026, now withdrawn
Caravel Minerals CVV.AX	Study · Caravel DFS release	**Company target** Q4 2026	H1 2026, then Sep 2026, then Q4 2026
Caravel Minerals CVV.AX	Study · Environmental Review Document resubmission to the WA EPA and public comment period (company filing, not a decision)	**Company target** Q4 2026; Ministerial approval targeted end 2027	Public comment was scheduled for Q3 2026; ERD resubmission mid-2026, now Q4
Caravel Minerals CVV.AX	FID · Caravel Copper Project final investment decision	**Company target** End of 2027	FID in 2026 (Adani MoU, Nov 2025), then end 2027
Centaurus Metals CTM.AX	FID · Jaguar nickel project FID and debt package (offers up to US$320m)	**Overdue** Q3 2026 target passed; Glencore and CNGR offtakes plus US$40m equity signed 28 Oct; debt still to close; equity conditions deadline 31 Jan 2027	H1 2026, then end Q3 2026
Chalice Mining CHN.AX	FID · Gonneville palladium-nickel-copper FID	**Company target** H1 2028; environmental review documents due Q4 2026	Late 2026 (2024 guidance), now H1 2028
Cobalt Blue COB.AX	FID · Kwinana cobalt refinery FID (with Iwatani), after binding offtakes	**Pending** No date; production targeted 2028	No change recorded

Open decisions, continued

Company	Decision	Status and expected	How it has moved
Core Lithium CXO.AX	Production · Finniss restart: first spodumene concentrate shipment	**Company target** December 2026	First concentrate once targeted Sep quarter 2026
Critical Elements Lithium CRE.V	Funding · Rose lithium-tantalum project financing package	**Pending** No date; fully permitted, awaiting financing	No change recorded
Critical Metals Corp CRML	FID · Wolfsberg decision to mine and FID (Critical Metals with Obeikan)	**Company target (last reaffirmed Jan 2026)** By end 2026 'if prices remain robust and financing options are available' (Jan 2026, when carbonate was ~¥170k/t; now ~¥100k/t)	Production once guided for Q1 2025; FID moved to end 2026
Dateline Resources DTR.AX	Permit · US District Court hearing on stay of the Colosseum injunction (motions by Dateline and the US Departments of Justice and War)	**Delayed** Stay refused by the District Court (announced 2 Nov); Dateline and the US Government filed stay motions with the Ninth Circuit on 4 Nov; no ruling date	No change recorded
Deep Yellow DYL.AX	FID · Tumas uranium project final investment decision (Namibia)	**Deferred (no date)** Q4 2026 target withdrawn on 16 Oct 2026 due to weak equity markets; no replacement date	Mar 2025, then deferred to market conditions, then Q4 2026, now withdrawn
Defense Metals DEFN.V	Funding · Natural Resources Canada grant (up to C$32m) for the Wicheeda processing feasibility programme	**Pending** Full proposal invited Aug 2026; no decision date	DFS start once H1 2026
EcoGraf EGR.AX	Funding · Epanko debt (up to US$105m KfW IPEX-Bank) and remaining financing ahead of FID	**Pending** No date; 'finalising debt financing process'	Binding debt offer expected early 2026
Electra Battery Materials ELBM	Production · Ontario cobalt sulphate refinery commissioning	**Company target** 2027	Construction stalled 2023–2025
Emerita Resources EMO.V	Study · Iberian Belt West pre-feasibility study	**Delayed** Guided for Q3 2026; publication not confirmed	June 2026, then Q3 2026
Emerita Resources EMO.V	Permit · Andalusian environmental authorisation (AAU) for Iberian Belt West	**Pending** Public comment closed Jul 2026; review usually takes a few months; no date	No change recorded
Emerita Resources EMO.V	Permit · Aznalcóllar administrative court decision	**Pending** No date	Expected 'in the coming months' since Jan 2026
Euro Manganese EMN.AX	Funding · Strategic financing partners and offtakes for Chvaletice (EU strategic project)	**Pending** No date; Orion royalty restructured Jul 2026; PEA May 2026	No change recorded

Open decisions, continued

Company	Decision	Status and expected	How it has moved
European Lithium EUR.AX	FID · Wolfsberg decision to mine and FID (Critical Metals with Obeikan)	**Company target (last reaffirmed Jan 2026)** By end of 2026, subject to lithium prices and financing	Production once guided for Q1 2025; FID moved to end 2026 after an Austrian court overturned an environmental exemption
European Metals Holdings EMH.L	Permit · Cinovec environmental impact assessment decision	**Company target** By end of 2026	EU Just Transition Fund grant required EIA approval by 30 Jun 2026; a cross-border review with Saxony was added in May; now expected by end 2026
European Metals Holdings EMH.L	Funding · Geomet project funding (majority needed towards end 2026)	**Company target** Geomet issued a €13m cash call (29 Sep); ČEZ paid it all, cutting EMH to 42.62%; tunnel kiln approved in principle by Geomet (23 Oct); EMH held A$0.49m cash at 30 Sep	No change recorded
European Metals Holdings EMH.L	Funding · Exercise option to restore 49% of Geomet (€6.45m) after ČEZ covered the €13m cash call	**Scheduled** On or before 13 Nov 2026; no funding route announced	No change recorded
European Metals Holdings EMH.L	FID · Cinovec final investment decision	**Pending** After EIA and mining permits; no date	2026, now after permits
Fortune Minerals FT.TO	FID · NICO project financing and construction decision (mine plus Alberta refinery)	**Pending** No date; feasibility study update in progress	No change recorded
Frontier Lithium FL.V	FID · PAK lithium project FID (Ontario, Mitsubishi JV)	**Company target** 2028 target	FID 'within 24 months' of Feb 2025 DFS
Global Atomic GLO.TO	Funding · Fund the remaining US$152.7m equity requirement before the DFC loan can be drawn	**Pending** No date; options under review (JV partner, nuclear-sector investors)	First yellowcake now H2 2028
Graphite One GPH.V	Permit · Ohio EPA air permit for the Conneaut synthetic anode plant (technical review)	**Pending** Application complete 16 Jul 2026; no decision date	No change recorded
Guardian Metal Resources GMET.L	FID · Pilot Mountain final investment decision (after DFS)	**Company target** Q2 2027	No change recorded
Hastings Technology Metals HAS.AX	Funding · Wyloo sale of its 60% Yangibana stake (new JV partner to fund build)	**Pending** Wyloo's 60% stake marketed by Bank of America (bids were due May 2026); no buyer announced	No change recorded

Open decisions, continued

Company	Decision	Status and expected	How it has moved
Hastings Technology Metals HAS.AX	Production · First production from Thai MREC plant (49% stake)	**Company target** Q1 2027	No change recorded
Highfield Resources HFR.AX	Permit · Spanish Supreme Court appeal over Muga licences (construction on hold)	**Pending** No date; appeal brief filed	Construction start once H1 2025
Hot Chili HCH.AX	Study · Huasco Water EIA submission	**Company target** Late 2026	No change recorded
Hot Chili HCH.AX	Study · Costa Fuego EIA submission	**Company target** Q2 2027	No change recorded
Iluka Resources ILU.AX	Production · Eneabba rare earths refinery commissioning	**Company target** Mid-2027	First production once 2025, then 2026, now mid-2027
Imagine Lithium ILI.V	Study · Fall 2026 drill results (Casino Royale, Ruth Pegmatite)	**Pending** Fall 2026 program; no results date given	No change recorded
Imagine Lithium ILI.V	Study · NI 43-101 resource update using new drilling	**Pending** After drill results; no date	No change recorded
Infinity Metals INF.AX	Permit · San José (Spain) mining licence application, under technical review	**Pending** Submitted Sep 2025; no date; new Extremadura government formed Apr 2026	No change recorded
ioneer INR.AX	FID · Rhyolite Ridge final investment decision, after strategic equity partner	**Company target** H2 2026 target; no binding partner yet (KIND and Hyundai LOIs non-binding); federal lawsuit against the BLM permit continues	Partner process targeted H1 2026; FID once guided 2025
Ionic Rare Earths IXR.AX	Funding · Belfast funding package, then pre-FID contract awards	**Company target** Q4 2026: funding package after due diligence, then pre-FID contract awards; FID was once targeted Sep 2026	FID by Sep 2026, now pre-FID awards Q4 subject to funding
Ionic Rare Earths IXR.AX	Funding · Makuutu strategic review outcome	**Pending** Strategic review continuing; no date	No change recorded
Ionic Rare Earths IXR.AX	Permit · Belfast City Council planning decision on commercial plant	**Scheduled** Q1 2027 (Planning Performance Agreement with Belfast City Council)	No change recorded
Jindalee Lithium JLL.AX	Study · First McDermitt Phase 1 drill results (lawsuit against BLM drilling approval pending)	**Company target** December 2026 quarter	Drilling start subject to fire risk easing

Open decisions, continued

Company	Decision	Status and expected	How it has moved
KEFI Gold and Copper KEFI.L	Funding · Tulu Kapi project debt first drawdown (US$240m senior debt; conditions precedent)	**Company target** Q4 2026 'trigger' (4 Aug update); funding package complete, construction under way	Financial close targeted Feb 2026; debt drawdown now Q4 2026
KEFI Gold and Copper KEFI.L	FID · Jibal Qutman (Saudi Arabia) Stage 1 FID	**Company target** H2 2026	No change recorded
KEFI Gold and Copper KEFI.L	Production · Tulu Kapi first gold	**Company target** Q2 2028 (Edison model)	Late 2026 commissioning in earlier models
Lake Resources LKE.AX	FID · Kachi final investment decision (US$1.16bn, after environmental approval)	**Pending** After FEED, which starts now; 2026 FID guidance from Feb not reaffirmed	FID once guided 2025
Leading Edge Materials LEM.V	Permit · Norra Kärr Environmental Code permit (after 25-year exploitation concession granted)	**Pending** No date; may reapply for EU strategic project status	No change recorded
Leading Edge Materials LEM.V	Study · Updated Norra Kärr pre-feasibility study	**Company target** Second half of 2026	No change recorded
Lindian Resources LIN.AX	Production · First production from Kangankunde stage 1	**Company target** Front-end commissioning late Oct, practical completion mid-Nov, first concentrate targeted Dec 2026	No change recorded
Lindian Resources LIN.AX	Study · Kangankunde Stage 2 feasibility study (4.0 Mtpa)	**Company target** December 2026	No change recorded
Lithium Ionic LTH.V	Permit · Bandeira environmental and mining permits (application pending since Nov 2023)	**Company target** By end 2026; Minas Gerais state committee (Copam) vote expected to start within about two months	Copam vote deferred in Feb-Mar 2025 (request for review); application pending since late 2023
Lithium Ionic LTH.V	FID · Bandeira FID and debt-led financing close (US$191m capex)	**Company target** Second half of 2026, after permits	No change recorded
Lodestar Minerals LSR.AX	Study · Ned's Creek maiden JORC gold resource	**Company target** Calendar 2026	No change recorded
Lodestar Minerals LSR.AX	Study · Pacifico (Chile) maiden drilling programme	**Company target** By Q2 2027	No change recorded
Marimaca Copper MARI.TO	Permit · SERNAGEOMIN sectorial permits for the Marimaca Oxide Deposit	**Company target** Q4 2026	No change recorded

Open decisions, continued

Company	Decision	Status and expected	How it has moved
Marimaca Copper MARI.TO	Funding · Project debt financing package (capex about US$587m)	**Company target** Final funding strategy to be announced in Q4 2026 (debt term sheets were targeted for Q3)	Debt term sheet targeted Q3 2026
Marimaca Copper MARI.TO	FID · Marimaca Oxide Deposit final investment decision	**Company target** End of 2026	H2 2026, now end of 2026
Mkango Magnetic Materials MKA.L	FID · HyProMag USA build decision after feasibility study	**Pending** Texas Hub detailed design (Class 2 estimate) under way; no build date; possible US listing of HyProMag USA late 2026 or early 2027	No change recorded
NioCorp Developments NB	Funding · EXIM final commitment for Elk Creek (up to about US$800m)	**Delayed** EXIM chairman signed a letter of support on 15 Oct 2026; board authorization still pending, no date	Financing targeted for Q2 2026; feasibility study completed Aug 2026
Northern Minerals NTU.AX	FID · Browns Range final investment decision	**Overdue** Annual report (30 Sep): FID delayed beyond Sep 2026 pending funding; no new date	Q4 FY26 (by Jun 2026), then 30 Sep 2026, then missed
Nouveau Monde Graphite NMG	FID · Bécancour battery material plant final investment decision	**Company target** H2 2026 (reaffirmed in Q2 2026 MD&A); capex C$374m; financing not yet secured	No change recorded
Nova Minerals NVA.AX	Production · Port MacKenzie antimony refinery commissioning and first antimony trisulfide	**Company target** H1 2027	Antimony production once targeted 2026
Novonix NVX.AX	Funding · Close the US$754m DOE loan for the Enterprise South synthetic graphite plant	**Overdue** Expected H1 2026; not closed	H1 2026 target passed
Pensana PRE.L	Funding · Cascade (Qatar-backed) US$150m outstanding tranche	**Delayed** Still only US$15m of US$165m received; on 26 Oct Pensana said Cascade expects to deploy a significant tranche within 14 days; Ozango equity need put at US$75-90m	Tranche delayed; scope widened
Pensana PRE.L	Funding · US EXIM debt for Longonjo (about US$160m)	**Pending** US$160m ABSA debt, EXIM-guaranteed; depends on Cascade equity closing; binding offtakes and debt approvals targeted by Feb 2027; commissioning now Jan 2028	No change recorded

Open decisions, continued

Company	Decision	Status and expected	How it has moved
Perpetua Resources PPTA	Funding · Close the US$2.9bn EXIM loan (documents and conditions)	**Company target** Second half of 2026	No change recorded
Perpetua Resources PPTA	FID · Stibnite final investment and construction decision	**Company target** Second half of 2026	No change recorded
Platinum Group Metals PLG	FID · Waterberg PGM construction decision, financing and offtake	**Pending** No date; 'near-term objective'	No change recorded
PMET Resources PMET.TO	Study · Updated CV5 feasibility study and CV5+CV13 PEA (lithium, caesium, tantalum)	**Company target** Q4 2026	No change recorded
PMET Resources PMET.TO	FID · Shaakichiuwaanaan FID	**Company target** Second half of 2027	No change recorded
Premier African Minerals PREM.L	Funding · Canmax prepayment and offtake: extension of long-stop date	**Pending** No date; talks ongoing since Jul 2026	No change recorded
Rainbow Rare Earths RBW.L	Study · Phalaborwa pre-feasibility study	**Company target** Q4 2026	DFS H1 2025, then end 2025, then 2026; now PFS first
Rainbow Rare Earths RBW.L	Funding · Phalaborwa project finance (about two-thirds debt; DFC US$50m committed)	**Pending** After DFS (H1 2027); PFS due Q4 2026; Neo Performance MoU for NdPr and SEG+ (Sep 2026)	No change recorded
Rainbow Rare Earths RBW.L	Study · Phalaborwa definitive feasibility study	**Company target** H1 2027	No change recorded
Rapid Critical Metals RCM.AX	Study · First Prophet River gallium-germanium drill results	**Expected** Guided for Q3 2026; drilling began late July	Q3 2026 guidance passed
Renascor Resources RNU.AX	FID · Siviour battery anode material project FID	**Pending** No current date found	Production was guided for 2024
Rock Tech Lithium RCK.V	FID · Guben lithium hydroxide converter FID (Germany, EU strategic project)	**Delayed** No date; financing gap, production now realistic 2029	Production 2027, now 2029 at the earliest
Rock Tech Lithium RCK.V	FID · Red Rock converter FID (Ontario)	**Company target** By end of 2026	No change recorded
Savannah Resources SAV.L	Funding · Second lithium offtake partnership	**Company target** This quarter (CEO, 7 Oct 2026): 'very final shortlist' of candidates	No change recorded
Savannah Resources SAV.L	Funding · Project finance close	**Company target** Conditional project finance offers by end 2026; close end Q4 2026 to early Q1 2027	No change recorded

Open decisions, continued

Company	Decision	Status and expected	How it has moved
Savannah Resources SAV.L	FID · Barroso final investment decision	**Company target** Early 2027; construction 2027, first production 2028	Before end 2026 (Mar 2026), then early 2027 (Sep 2026)
Serabi Gold SRB.L	Permit · Coringa permanent Installation Licence (LI); temporary GUIA licence expires 29 Jan 2027	**Delayed** Still pending on 21 Oct: needs INCRA change-of-land-use approval and FUNAI sign-off on the Indigenous component study; temporary licence ends 29 Jan 2027	Targeted Q4 2026; Q3 transport allowance exhausted; 2026 guidance cut on 21 Oct
Sigma Lithium SGML	Production · Restart of second expansion phase (to ~580kt/yr concentrate)	**Company target** 2027	Greentech 2 commissioning once summer 2025
Silver Mines SVL.AX	Permit · NSW Independent Planning Commission redetermination of Bowdens consent	**Pending** No decision timeframe announced; biodiversity report submitted Jul 2026, DPHI assessment pending	Original 2023 consent set aside by Court of Appeal in Aug 2024
Solaris Resources SLS.TO	FID · Warintza copper project FID (Ecuador)	**Company target** By year-end 2026 (guided Apr 2025; 'FID in 2026' reaffirmed in 2026 materials)	No change recorded
Solaris Resources SLS.TO	Permit · Government-led Free, Prior and Informed Consultation and environmental licence for Warintza	**Pending** No date; follows EIA technical approval (Apr 2026)	No change recorded
St George Mining SGQ.AX	Study · Araxá large-scale niobium-rare earths pilot plant start	**Company target** Commissioning Dec 2026, first operation Jan 2027	Late Q4 2026, then Jan 2027
Standard Lithium SLI	Funding · SWA project debt and remaining offtakes (over US$1bn ECA interest incl. EXIM, Eksfin)	**Company target** Offtakes complete (about 89% of output contracted); ECA-led debt targeted to close ahead of a year-end FID	Q3 2026 target for offtake and financing
Standard Lithium SLI	FID · South West Arkansas project FID (Smackover Lithium JV with Equinor)	**Company target** 2026: two of four pre-FID items done (construction contracts, NEPA FONSI); offtakes and financing remain	Early 2026, then later 2026
Sunrise Energy Metals SRL.AX	FID · Syerston scandium final investment decision	**Company target** Second half of 2026, after offtake agreements	Mid-2026, then Q3 2026, now H2 2026
Syrah Resources SYR.AX	Funding · Strategic funding package and cure of DOE/DFC loan defaults	**Pending** No date; proposals from DFC, DOE and AustralianSuper received	No change recorded

Open decisions, continued

Company	Decision	Status and expected	How it has moved
Syrah Resources SYR.AX	Production · First commercial anode material sales from Vidalia (Louisiana)	**Company target** Half ending Dec 2026	Sales once expected in 2025
Talga Group TLG.AX	Funding · Vittangi financing package after the Industriklivet 2 grant was refused; binding Hanwa offtake and possible investment	**Company target** Hanwa binding agreements targeted Q4 2026; financing to be completed 'by other means'	IK2 grant decision due Q1 2026: refused
Talga Group TLG.AX	FID · Vittangi Anode Project FID (Luleå refinery, Sweden)	**Pending** After FEED completion; 2026 FID not reaffirmed since the grant refusal	No change recorded
Thor Explorations THX.V	Permit · Douta (Senegal) mining convention and concession, then construction start	**Overdue** Mining convention was expected in Q3 2026 with FID; on 14 Oct still 'working towards finalising'; no new date	Q3 2026 target passed
Tungsten West TUN.L	Production · Hemerdon full plant commissioning (steady state targeted H2 2027)	**Company target** Q1 2027	No change recorded
Ucore Rare Metals UCU.V	Production · First heavy rare earth processing at Louisiana plant (RapidSX Machine #1)	**Company target** Machine A (about 600 t/y TREO, part-funded by US$18.4m DoW award) then Line 1 (3,000 t/y; capex with Machine A US$135m); NdPr oxide samples shipped Jun 2026; 2026 processing start not yet confirmed	No change recorded
USA Rare Earth USAR	Study · Round Top definitive feasibility study (completion Q4 2026, publication Q1 2027)	**Company target** Publication Q1 2027	Round Top PFS had been guided for end Q3 2026
VHM VHM.AX	FID · Goschen final investment decision	**Overdue (guided later in 2026)** 'Later in 2026' after the capex refresh; mid-2026 target passed; operations now late 2027	2025, then H1 2026, then mid-2026
Victory Metals VTM.AX	Funding · First offtake agreements for North Stanmore heavy rare earth concentrate	**Pending** No date; samples with buyers in Australia, Japan and US since Jul 2026	PFS moved from mid-2026 to Aug 2026
Vizsla Silver VZLA	FID · Panuco construction decision	**Company target** Immediately after MIA environmental approval; permits now targeted late 2026 or early 2027	Construction decision H2 2026; permits mid-2026, then H2 2026, now late 2026 or early 2027

Open decisions, continued

Company	Decision	Status and expected	How it has moved
Vizsla Silver VZLA	Permit · Panuco MIA environmental approval (submitted Feb 2025)	**Company target** Late 2026 or early 2027	Mid-2026, then H2 2026
Volta Metals VLTA.CN	Study · Springer preliminary economic assessment (PEA)	**Company target** 2027	No change recorded
Western Copper and Gold WRN.TO	Permit · YESAB sufficiency decision and start of panel review for Casino	**Pending** Responses submitted 15 Jul 2026; no date	No change recorded
Westwater Resources WWR	Funding · Kellyton graphite plant debt financing close (US$150m)	**Overdue** Expected Jan 2025; delayed, no newer date found	Q4 2024, then Jan 2025, then undated
Wildcat Resources WC8.AX	Study · Tabba Tabba definitive feasibility study	**Company target** Second half of 2026	No change recorded

Appendix

Dated events

Decisions, milestones and setbacks already announced by tracked companies, newest first.

Date	Company	Type	What happened
4 Nov 2026	**Dateline Resources**	Permit	Dateline and US Government file stay motions with the Ninth Circuit
2 Nov 2026	**Dateline Resources**	Permit	District Court refuses to stay the Colosseum injunction
28 Oct 2026	**Centaurus Metals**	Funding	Glencore and CNGR sign Jaguar offtakes and US$40m equity
26 Oct 2026	**Pensana**	Funding	Longonjo commissioning moved to Jan 2028; Cascade tranche expected within 14 days
23 Oct 2026	**European Metals Holdings**	Study	Geomet approves tunnel kiln for Cinovec in principle
22 Oct 2026	**Northern Minerals**	Permit	Final construction approval granted for Browns Range
21 Oct 2026	**Serabi Gold**	Permit	2026 guidance cut as Coringa licence approvals remain outstanding
19 Oct 2026	**Volta Metals**	Exploration	Springer indicated resource more than doubled
16 Oct 2026	**Deep Yellow**	FID	Tumas FID deferred; Q4 2026 target withdrawn
15 Oct 2026	**NioCorp Developments**	Funding	EXIM chairman signs letter of support during Elk Creek visit
14 Oct 2026	**Ionic Rare Earths**	Permit	Belfast planning filed, funding still open
14 Oct 2026	**Thor Explorations**	Corporate	Production guidance cut on Segilola rainfall; Douta convention still pending
14 Oct 2026	**Larvotto Resources**	Production	First antimony concentrate shipment to Wogen
9 Oct 2026	**Atalaya Mining**	EU	CRMA strategic project designation
9 Oct 2026	**Mkango Magnetic Materials**	EU	CRMA strategic project designation
9 Oct 2026	**Arverne Group**	EU	CRMA strategic project designation
9 Oct 2026	**Allied Critical Metals**	EU	CRMA strategic project designation
9 Oct 2026	**Viscaria**	EU	CRMA strategic project designation
9 Oct 2026	**Sigma Lithium**	Permit	Appeals court reinstates licences; operations resume
5 Oct 2026	**Critical Metals Corp**	Permit	Greenland approves Tanbreez mining
30 Sep 2026	**Northern Minerals**	FID	FID target missed
30 Sep 2026	**Ionic Rare Earths**	FID	Belfast FID target (end of September quarter) passes without FID
29 Sep 2026	**Lake Resources**	Permit	Kachi environmental impact declaration (DIA) granted

Dated events, continued

Date	Company	Type	What happened
29 Sep 2026	**European Metals Holdings**	Funding	Geomet €13m cash call; ČEZ funds it all and EMH is diluted to 42.62%
28 Sep 2026	**Dateline Resources**	Permit	US Justice and War departments file motion to stay the injunction
18 Sep 2026	**Savannah Resources**	FID	FID guidance moved to early 2027
16 Sep 2026	**Global Atomic**	Funding	DFC approves US$414m Dasa loan (conditional)
15 Sep 2026	**Tungsten West**	Production	Hemerdon enters production
3 Sep 2026	**USA Rare Earth**	Corporate	Serra Verde acquisition completed (Pela Ema mine, Brazil)
31 Aug 2026	**Larvotto Resources**	Production	Hillgrove first gold and antimony production
25 Aug 2026	**Tungsten West**	Funding	UK National Wealth Fund £71m package
10 Aug 2026	**Dateline Resources**	Permit	Court grants preliminary injunction halting Colosseum
6 Aug 2026	**Pensana**	Funding	Cascade tranche delayed, scope widened
5 Aug 2026	**Ionic Rare Earths**	Funding	A$8m placement at A$0.26 for Belfast
30 Jul 2026	**Group 6 Metals**	Funding	Reinstated to ASX after A$81m debt recapitalisation
29 Jul 2026	**Imagine Lithium**	Funding	CA$3m convertible and 2,800 m drill program announced
15 Jul 2026	**Vulcan Energy**	Funding	First strategic drawdown on €2.2bn package
2 Jul 2026	**VHM**	Funding	Iluka offtake and A$40m convertible note
30 Jun 2026	**Guardian Metal Resources**	Exploration	Pilot Mountain PFS released
22 Jun 2026	**Ucore Rare Metals**	Production	First NdPr oxide produced; samples to magnet makers

Dated events, continued

Date	Company	Type	What happened
17 Jun 2026	**European Metals Holdings**	Permit	Cinovec EIA public hearing
17 Jun 2026	**Viscaria**	Funding	SEK 1.7bn directed share issue
21 May 2026	**Arafura Rare Earths**	FID	FID taken, A$350m placement at A$0.26
15 May 2026	**Nouveau Monde Graphite**	FID	Matawinie mine FID declared
27 Apr 2026	**Blue Moon Metals**	FID	Nussir FID and C$150m equity raise
22 Apr 2026	**VHM**	Funding	A$5m placement at 19.4% discount ahead of mid-2026 FID
14 Apr 2026	**Atalaya Mining**	Permit	Court voids old negative Touro decision
9 Apr 2026	**Solaris Resources**	Permit	Warintza EIA technical approval
31 Mar 2026	**Rainbow Rare Earths**	Funding	£11.1m subscription incl. Traxys
20 Mar 2026	**Atlantic Lithium**	Permit	Ghana Parliament ratifies Ewoyaa mining lease
18 Mar 2026	**Core Lithium**	FID	Finniss restart FID and A$290m funding
5 Mar 2026	**NexGen Energy**	Permit	CNSC grants Rook I construction licence
19 Feb 2026	**Talga Group**	Funding	Industriklivet 2 grant (~A$180m) refused
19 Jan 2026	**Imagine Lithium**	Exploration	Ruth Pegmatite channel samples, 1.34% Li2O over 9.1 m
13 Jan 2026	**Allied Critical Metals**	Permit	Borralha favourable environmental impact declaration (DIA)
21 Nov 2025	**VHM**	Funding	A$10.3m placement at 25.5% discount