

## Antimony Macro Note

### Don't expect Sb prices to pull back anytime soon!

Antimony (Sb) is one of the rarest and most geopolitically challenging critical minerals due to its intrinsic characteristics, uses with few substitutes and skewed geographical distribution of resources (ex-Western countries). China's recent export controls on Sb products and outright ban to the US have placed its supply/demand dynamics under the spotlight. Sb is a minor metal that is generally not well understood by many investors. We are seeing attractive returns from selected companies with Sb exposure and remain bullish over the medium term based on a perfect storm of factors driving structural deficits.

#### China tightens its hold on Sb exports as production declines, further dislocating supply chains and driving prices to record highs

Antimony production has historically been dominated by China, although Chinese mine production has decreased from 110kt in 2015 to 40kt in 2023. Key drivers for the decline in mine supply include depletion of higher-grade resources and tighter environmental controls (consolidation of small-scale mining). Strong demand growth, mainly from solar PV where China is market leader on global manufacturing and consumption, combined with: (i) no material new supply beyond Russia and Tajikistan and (ii) protracted military conflicts across Ukraine (dislocating Russian supply) and Middle East depleting strategic stockpiles and shifting the market into material structural deficits.

#### We see potential for Sb prices to remain high for 3-4 years...

China's export restrictions on Sb products are both economically driven (declining supply, growing demand) and geopolitically driven (reaction to CHIPS Act, US tariffs) as the CCP exerts influence in the global allocation of strategic metals. The relatively inelastic supply, depleted stockpiles and strong demand growth point to a persistent high price environment.

#### We prefer exposure to ASX-listed companies with near term production and/or potential for globally significant resources

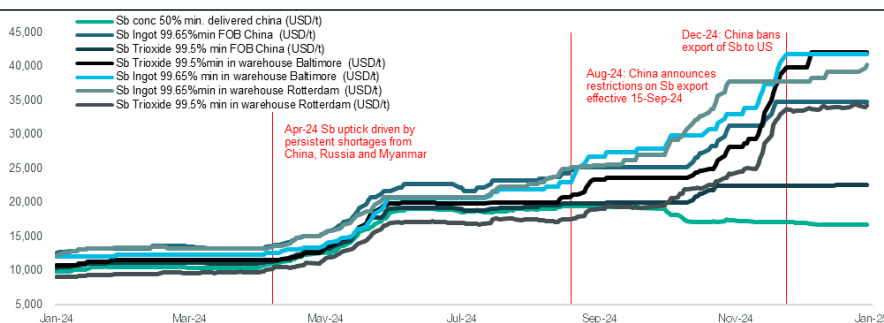
##### We cover:

- **Larvotto Resources (LRV.ASX, BUY TP \$0.89)** capital efficient mine re-start of Hillgrove Au-Sb mine and plant (NSW) early CY26 with the largest ASX Resource (93kt Sb), production of 5.4ktpa Sb, representing 7% of global mine production and
- **Southern Cross Gold (SXG.ASX, BUY TP \$3.55)** defining a Tier-1 Sb resource (VIC)

##### We also like:

- **Lode Resources (LDR.ASX)** high-grade Montezuma Sb-Ag project (TAS) with near term production potential and historic Magwood Sb mine (NSW) and
- **Felix Gold (FXG.ASX)** near term production from Scrafford Sb mine restart (Alaska)

Figure 1. Strong incentive prices, particularly ex-China



Source: Bloomberg

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#### Antimony (Sb): Key Facts

- Atomic #51: lustrous, silvery metalloid with a flaky texture, SG of 6.68 and melting point of 630°C
- Poor conductor of heat and electricity and imparts strength, hardness and corrosion resistance to numerous alloys
- Unlike most metals:
  - NOT malleable but hard, brittle and can be crushed to powder
  - Solid form is less dense vs liquid form so expands as it freezes, like water
- Greek for anti + monos: metal "not found alone" as typically found with other minerals (Au, Ag)
- Sb associated with precious metal deposits is typically vertically zoned: higher grades located near surface and decreasing at depth
- 83% of production and 55% of resources located in China, Russia and Tajikistan
- Primary mine supply 103kt Sb in 2023 with secondary supply from Pb-Sb battery recycling circa 45ktpa
- Key uses:
  - Flame retardant in clothing, plastics and fireproofing resins
  - Photovoltaic cells, wind turbines and liquid metal batteries
  - Defence including munitions, detonators, lasers and night vision sensors
  - Other applications, including semi-conductors, circuit boards, high clarity glasses and electric switches
- Key growth driver - Solar PV:
  - Each solar panel contains circa 40g Sb
  - 3.1m solar panels to generate 1 GW
  - In 2023, 400 GW of solar PV were installed, representing 49.6kt Sb or 60% of mine production that year
- Material depletion of strategic stockpiles across Russia, NATO, US and Israel following 3 years of war in Ukraine and +1 year in the Middle East, which we estimate to have consumed ~15kt Sb:
  - ~13kt Sb attributable to the Ukraine/Russia war with ~11.5kt Sb spent in ammunition
  - ~2kt Sb estimated in the Israel/ Middle East conflict based on similar high intensity conflict periods such as Operation Protective edge in 2014

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# Antimony Market Dynamics and Outlook

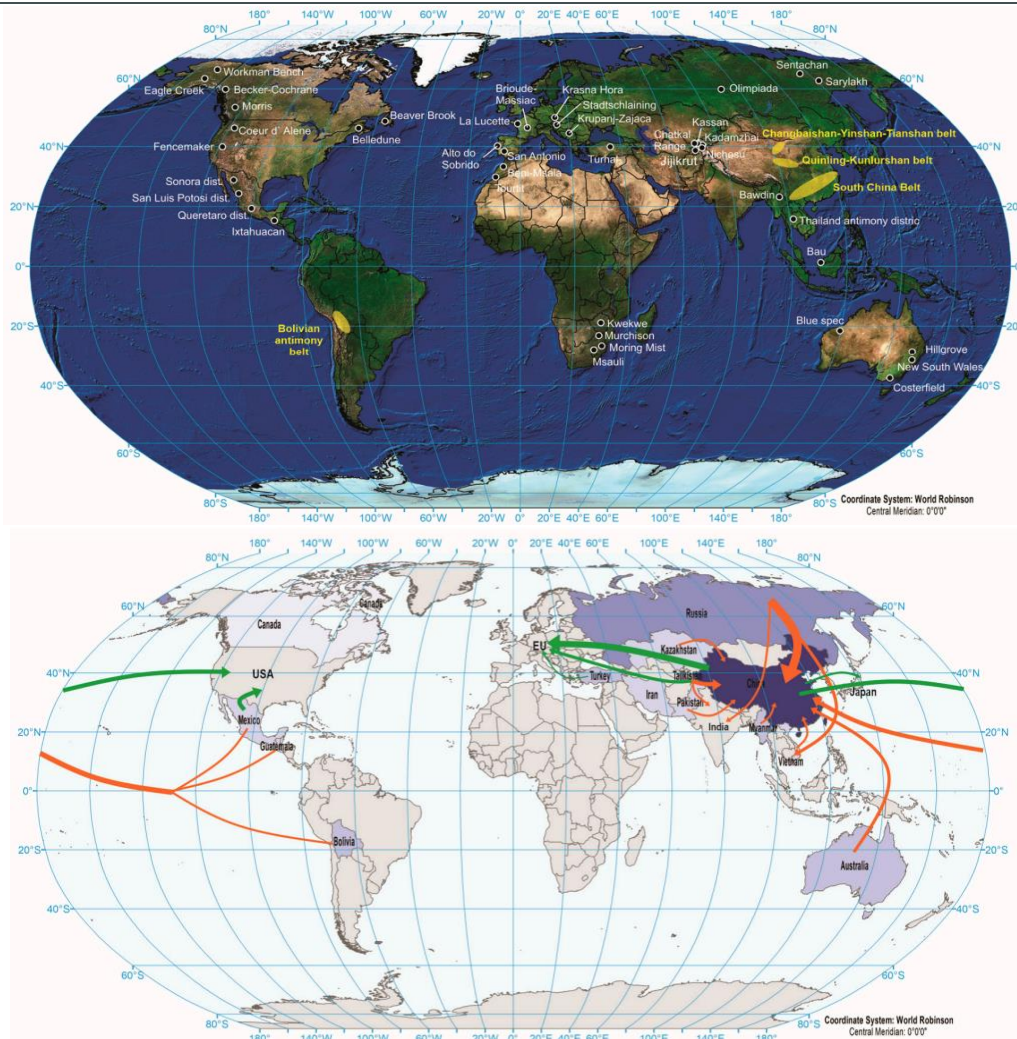
## Background

Antimony is a critical metal with one of the most skewed resource endowment distributions outside of Western countries, including many countries that are openly hostile to US economic and defence interests.

Most antimony deposits occur as simple intrusive-related vein systems such as Woxi and key Australian deposits in the East Coast (Hillgrove, Costerfield, Sunday Creek, Montezuma, Magwood), as disseminated type deposits such as Stibnite-Yellow Pine (Idaho, US) and as replacement deposits in carbonate rocks such as Xikuangshan. The largest deposits in the world are those of carbonate replacement and disseminated styles located in China. In Australia and Alaska, the only operating Sb mine and key brownfield + greenfield deposits that could be re-started or developed in the near term tend to be high grade intrusive-related vein systems.

As with other critical metals, China has historically had a dominant position as primary producer and also across the supply chain with strong processing capabilities. China's largest and highest-grade deposits are located in the Hunan Province as well as in the Guangxi Zhuang autonomous Region and Yunnan Province. China is also the leading global producer of antimony metal and oxides, the leading importer of antimony ore and concentrates and the leading exporter of antimony metal and oxide. Russia also has material resources and supply but due to sanctions following from the invasion of Ukraine and key use of Sb in munitions, its supply has been and could be expected to remain dislocated over the near term. Tajikistan has been a key emerging producer over the last decade, while Bolivia, Myanmar, Turkey and Australia also have material resources and some production.

Figure 2. Global distribution of major known antimony deposits and global trade flows



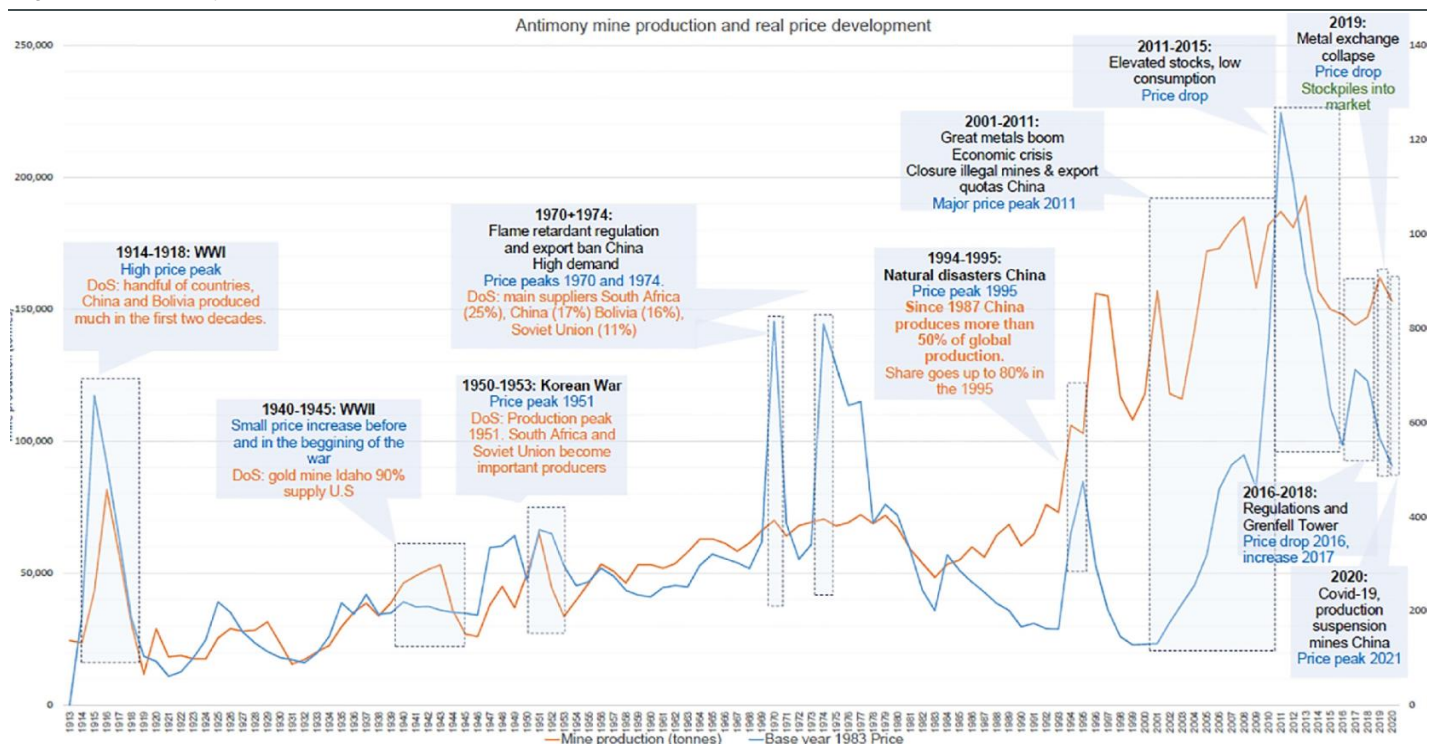
Source: Antimony's Significance as a Critical Metal, Kanellopoulos, Sboras, Voudouris, Soukis and Moritz.

Some smelters operate outside of China and/or can be expanded/brought back online if consistent feedstock becomes available (Belgium, India, Mexico, Oman, US, Vietnam). The ex-China supply chain is expected to become key following Chinese export restrictions and US ban. In the US, only the small Thompson Falls smelter (Montana) remains. It is owned and operated by United States Antimony Corporation (UAMY.NYSE). In March 2024, UAMY announced the closure of its antimony mines and Madero plant in Mexico, due to operational losses and making the US operation reliant on third-party feedstock. However, in December 2024, UAMY was looking to restart the Mexican Madero smelter with concentrate supply from Thailand and Australia, where miners seek to secure higher Sb payabilities from the US market. The key US near term producer is expected to be Perpetua Resources (PPTA.NASDAQ), with support from US Department of Defence, seeking to restart its Stibnite Gold Mine (Idaho) and likely to process its Sb concentrate at Sunshine Silver Mining & Refining’s silver plant (Idaho).

## Structural deficits driven by perfect storm, supporting strong prices

Historically, material antimony price spikes have been observed during periods of prolonged wars (WWI, WWII and Korean War), during periods of strong economic expansion (early 2000s driven by China’s economic growth and consolidation of small Sb mines within Hunan) as well as periods of structural demand change (fire retardant regulation, lead-antimony batteries) or supply shocks (Covid-19) with price reductions correlated with periods of stronger supply and material stockpiles (2011-15 and 2019 under Metal Exchange collapse).

Figure 3. Antimony production and price from 2013-2020



Source: Resilience in the Antimony Supply Chain, van den Brink, Kleijn, Sprecher, Mancheri and Tukker.

We are currently observing a historic price rally in antimony, particularly ex-China, driven by a perfect storm of:

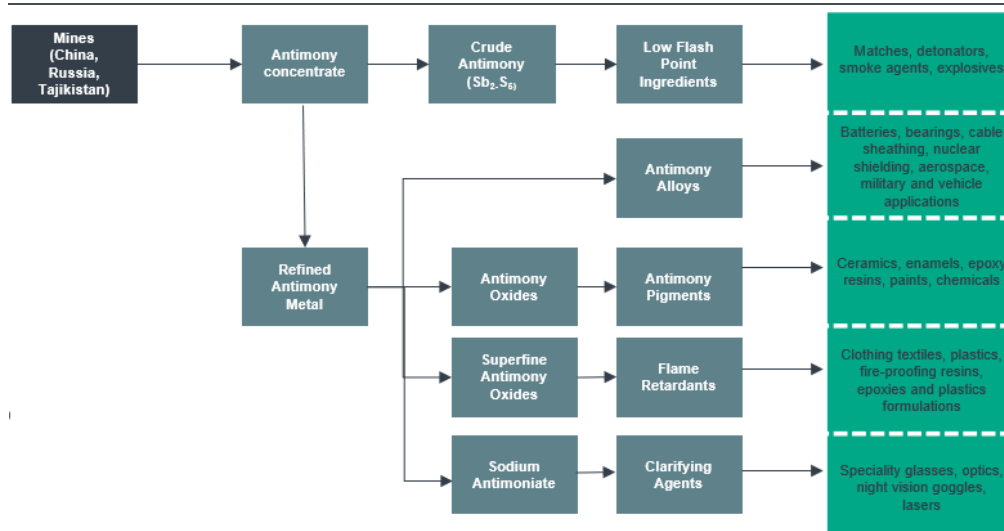
- declining production, particularly from Chinese large scale Sb mines experiencing lower grade and output
- dislocated supply:
  - sanctions into Russia following its invasion of Ukraine and
  - export restrictions and ban (to US) from China driven by higher domestic (and global) consumption and lower production + stockpiles as well as geopolitical considerations
- growing demand, mainly driven by strong growth of solar PV installations and higher demand for military supplies being deployed across Ukraine and Middle East
- depletion of strategic stockpiles due to major active wars with US supporting Ukraine and Israel vs Russia and Iran proxies.



## Demand: very strong growth drivers

Antimony is a critical component across military, manufacturing and renewable energy applications, particularly solar PV. There are two primary forms of antimony for sale: metallic antimony, which is used primarily as a hardening agent in manufacturing solder, ammunition, castings and pewter; and antimony trioxide (ATO), which is used in flame retardants and increasingly as a clarifying agent in solar glass which is key to increase solar panel efficiency. The industrial supply chain is illustrated below.

Figure 4. Industrial supply chain for antimony



Source: Perpetua Resources

Total antimony demand is estimated to be circa 160ktpa. Short term growth drivers in the demand for antimony include strong growth of solar PV as key foundation of a policy driven energy transition with strong focus on renewables, regulation that requires flame retardant properties in building materials, and extended warfare across Ukraine and the Middle East.

### Photovoltaic is the key growth driver

Photovoltaic demand is expected to reach ~50kt of Sb, accounting for about one-third of consumption, according to the Chairman of the leading Chinese antimony producer Hsikwanshan Twinkling Star Co Ltd. A simple back of the envelope calculation illustrates how these volumes are achieved and where these could go in the near term if demand for solar PV continues to grow at double digit rates:

- Solar glass typically contains 0.2%-0.3% of Sb and each solar PV module has a front glass weighting circa 16 kg, so the antimony content is 32-48 grams of Sb per module (i.e. 40 grams Sb average)
- In 2023, global installed capacity of solar PV grew from 1.2TW to 1.6 TW with an estimated annual growth of 400 GW (235 GW in China vs 35 GW in US and 60 GW in EU)
- To generate 1 GW of energy, 3.125 million solar panels are required on average
- **400 GW x 3.1m solar panels x 40 grams of Sb = 49.6kt Sb**

While antimony is not contained across all solar panels (Project Blue estimates glass applications currently represent 17% of the market), it is used as a clarifying agent (Sb removes microbubbles making glass more transparent) to enhance the performance of patterned solar glass, ultimately improving solar PV efficiency (inherently low vs other forms of generation) and therefore has significant value in use. We understand Chinese smelters have increased imports of Sb ore and metal to produce sodium antimonate for solar PV customers who tend to be more price inelastic. As China is the global leading manufacturer of solar panels (80% market share) and global growth of solar PV remains strong (circa 16% in 2024 vs 2023 and 10% expected in 2025), we believe that antimony will remain a key strategic metal for China (i.e. producing low cost and more efficient solar panels) beyond other strategic applications and geopolitical considerations.

Figure 5. Photovoltaic demand



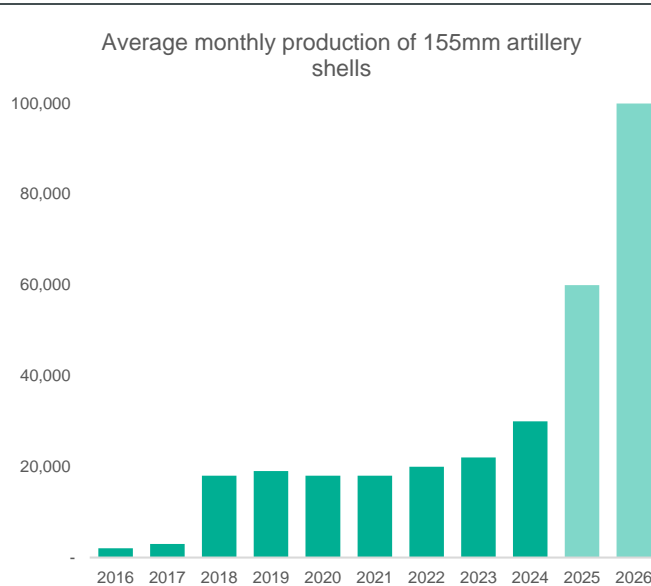
Source: Rocky Mountain Institute, BloombergNEF, IEA

**Depletion of strategic stockpiles a key issue over the short term**

The extended wars across Ukraine/Russia, going into its 3<sup>rd</sup> year, and Israel/Hamas, Hezbollah, Houthis and Iran, under its 2<sup>nd</sup> year, has had a material impact on stockpiled munitions, shells and missiles as well as demand for antimony to increase production to sustain ongoing warfare and down the track to replace strategic stockpiles.

Following Russia’s invasion of Ukraine in 2022, munition stockpiles have been materially depleted across Russia, Ukraine, Europe and the US. The US military and its NATO allies have been struggling to replace munition with the US currently producing ~36,000 155mm shells a month, an increase from historical levels of below 20,000 per month. The US is targeting manufacturing 100,000 shells a month by the end of 2025 to contribute to NATO’s goal of producing ~2 million 155mm shells per year. Russia has already increased its production of 155mm shells to 3 million annually, representing a 3x increase to pre-war production as it has been estimated that Russia has been firing at a much higher rate (3-5 times) than Ukraine and has been determined to weaponize its economy!

Figure 6. US shell production



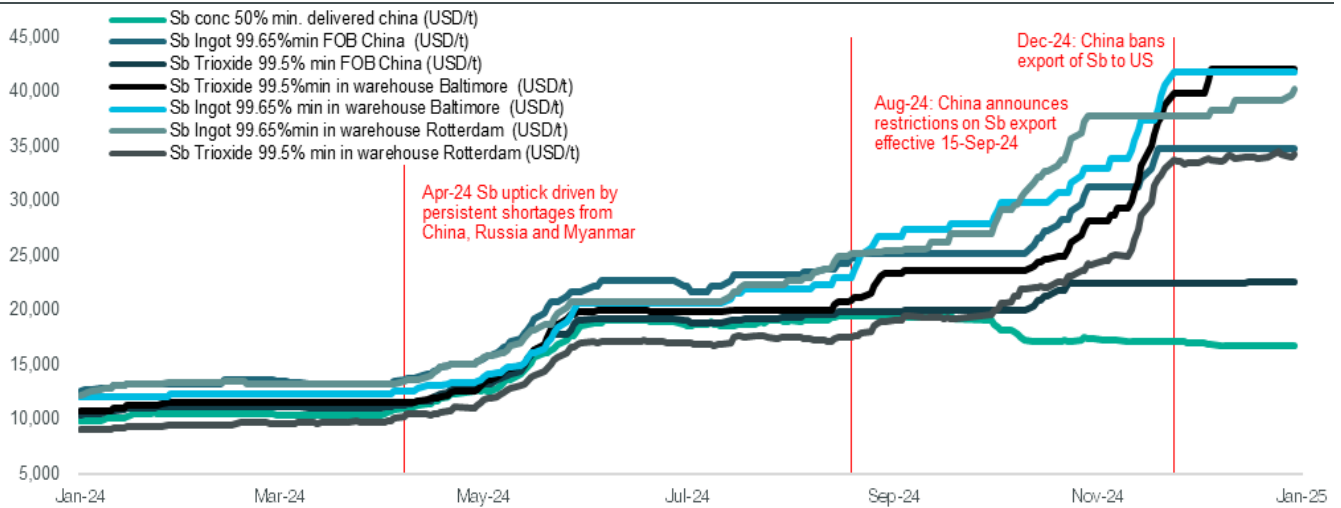
Source: Reuters

We estimate depletion of Sb from military applications across Russia, Ukraine, NATO, US and Israel following 3 years of war in Ukraine and +1 year in the Middle East, to be ~15kt Sb:

- ~13kt Sb attributable to the Ukraine / Russia war with ~11.5kt Sb used in ammunition
- ~2kt Sb estimated to be consumed in the Israel / Palestine conflict based on similar high conflict periods such as Operation Protective edge in 2014
- Our estimate takes into account Sb military applications (ammunition, lead batteries in vehicles and drones)

As a result of growing global demand and declining primary production combined with the strain on stockpiles, China imposed its first export controls in September 2024, escalating to an outright ban to the US in December 2024. Following these export restrictions, antimony prices surged by 250% in Europe and the US, while domestic prices in China rose by 70%. Although China is reliant on imports with nearly all volumes of ingot consumed domestically, China was a major exporter of ATO, primarily to the US. In the US, only the Thompson Falls smelter remains in operation, which relies on third-party feedstock after closing its Mexican operations, although it is planning to restart its Madero smelter with supplies from Thailand and Australia. The US is urgently seeking to replace circa 15ktpa of ATO previously supplied by China. Although demand eased in China at the end of 2024, global demand, particularly from solar PV and military, is expected to continue driving ex-China prices, where supply chains remain constrained.

Figure 7. Strong incentive prices, particularly ex-China



Source: Bloomberg

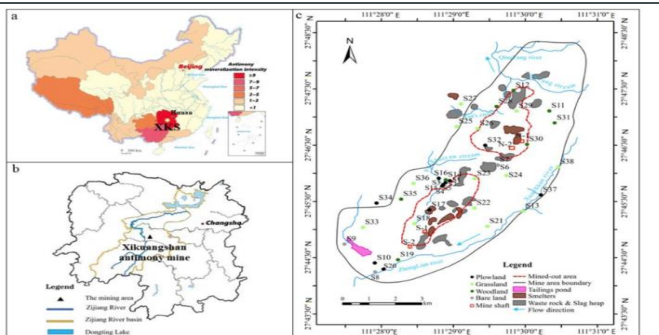
## Fundamentals driving global supply decline

### China is a net importer of antimony ore although the main processor and exporter of finished products

For decades, China has been the largest antimony producer. In 2015, China accounted for 77% of global antimony mining (110kt Sb). Production has since declined to 40kt Sb (representing 40% of primary Sb production) in 2023 as a result of declining grades in Hunan, the main antimony province, and stricter environmental protection and safety regulations.

Following from a period of consolidation (from prior to the Beijing Olympics and in the early 2010s), the supply of antimony has been concentrated mainly within state-owned enterprises. Both state-owned and private companies have faced decreasing Sb resources and lower grades. There are close to 70 Sb producers in China, of which Hsikwangshan Twinkling Star (the largest Sb mine, owned by Minmetals), Hunan Gold Corporation Limited, Guangxi China Tin Group, China Antimony Corporation, Guizhou Dongfeng Mining Group Co. contribute more than 80% of the country's total production. We understand Chinese antimony producers are holding historically low levels of stock with inventory levels (i.e. Hunan producers) holding <500t Sb ingot stock (50% reduction from previous normal levels in the past) and <3kt of ATO at trioxide plants. Limited stocks held by antimony producers in China is believed to be a key driver for stronger Sb prices since late 2023.

Figure 8. Hsikwangshan Twinkling Star



Source: Heavy Metals in Soil around a Typical Antimony Mine Area of China, Li, et al.

Despite China's dominance in ore output, it is a net importer of antimony concentrates and depends on ore from other countries including Thailand, Myanmar and Russia. This has resulted in China implementing restrictions in September 2024 and later banning antimony exports to the US in December 2024.

### Inconsistent and restricted supply from Russia

Russia's largest Sb resources are Zhipkozinsky and Solonechensky deposits in the Sakha Republic (Far East) and Olimpiadinskoe deposit in Krasnoyarsk, Siberia. In 2018, Polyus entered the antimony market with the Olimpiada gold mine (one of the world's top 5 largest gold mines), becoming the world's largest antimony mine (Polyus 2023 Annual Report indicates it produced 27kt of Sb). However, antimony is produced as a gold by-product at Olimpiada (Sb accounted for only circa 2% of the company's revenue, despite 2023 production representing 25% of global Sb supply), antimony production has been inconsistent (1H24 8.6kt Sb vs 1H23 13.6kt Sb) and expected to decline further as gold production is maximized. In addition, following from Russia's invasion of Ukraine in 2022, Western countries (US and UK) have placed sanctions, including on antimony concentrates that originated in Russia, and we understand Chinese Sb smelters have generally been compliant.

Figure 9. Olimpiada East



Source: Polyus



### Supply from Tajikistan has grown

Tajikistan contains material Sb resources and currently supplies in the order of 20% of antimony mined globally with production growing from 2ktpa in 2012 to 21ktpa in 2023. The major supplier has been an Au-Sb mine owned by TALCO Gold, jointly owned by Tajik Aluminium Co. and China's Tibet Huayu Mining Co. Ltd. In addition, the Anzob mine (owned by United States' Comsup Commodities Inc.) has been a major supplier of low-cost concentrates to China.

### Small-scale Sb mining in Bolivia despite significant reserves

Bolivia was once a major antimony producer, mining about a fifth of the world's supply in the late 1980s, but its production has declined to 3kt in 2023. Private companies, particularly the United Mining Company (Empresa Minera Unificada), dominated production, controlling the largest mines at Chilcobija and Caracota in Potosí. Since the 1980s, production has declined, with most large mines ceasing operations and current output coming mainly from small-scale miners. Despite significant reserves estimated at 310kt, Bolivia's production remains inefficient and irregular, with nationalization efforts (Empresa Metalúrgica Vinto Antimonio, an antimony smelter owned by Sinchi Wayraa, a Glencore subsidiary in 2010) and ongoing legal disputes over past operations.

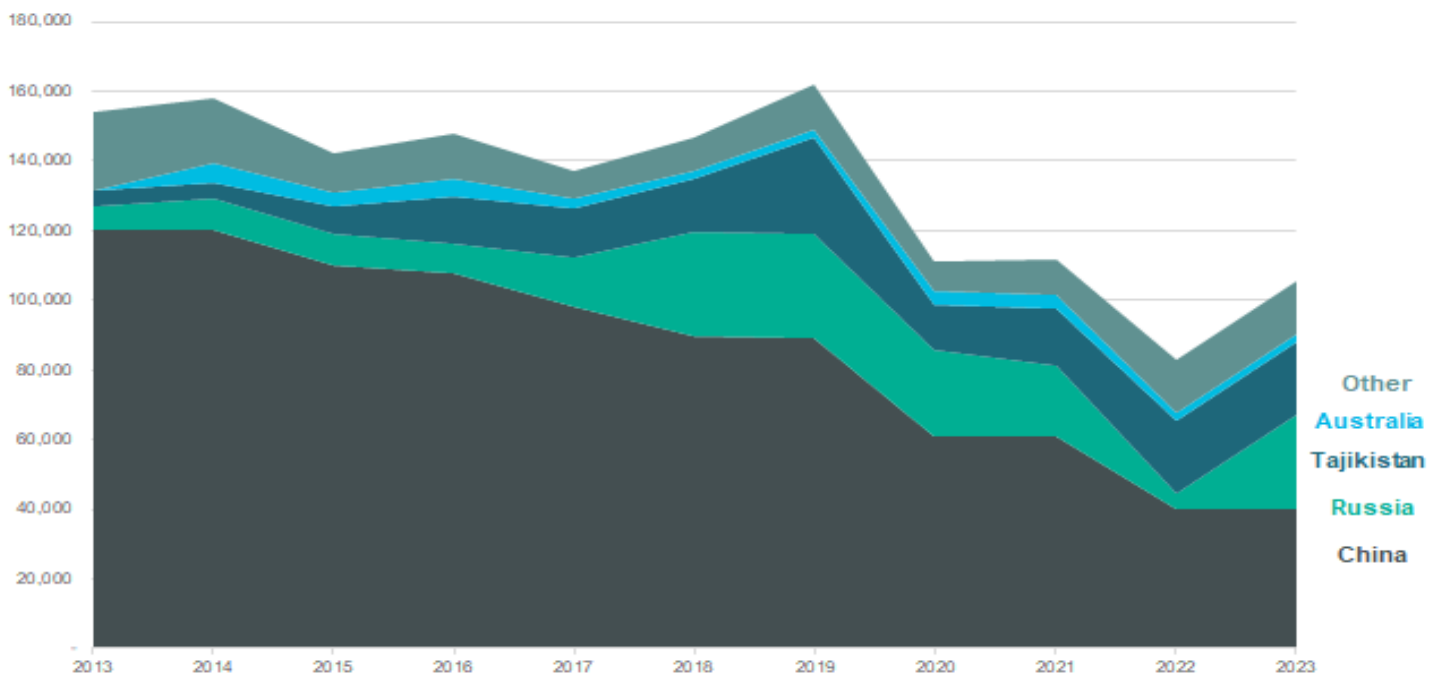
### Turkey's Sb production increases

Turkey's antimony production has increased in recent decades (6kt in 2023 vs 1.4kt in 2010) due to higher foreign and local investment in exploration and development, with current reported Sb reserves of 99kt. Despite political unrest potentially affecting supply stability, concentrates are primarily exported to China and Belgium.

### Myanmar is a key producer to filling China's Sb shortfall

In 2023, Myanmar produced 4.6kt of antimony. To address a growing deficit, state-owned Chinese companies have partnered with the Myanmar government in recent years to explore and develop resources in the Kayha State. Despite ongoing conflict affecting direct trade routes, China has sourced additional feedstock from Myanmar, with most antimony concentrates reaching Chinese roasters and refiners via Thailand, near the southern mines, giving China effective control over this supply.

Figure 10. Antimony mining by country: China's declining market share

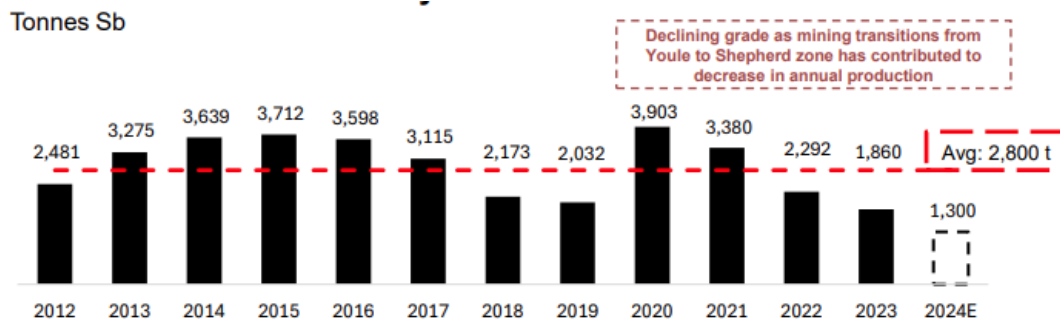


Source: USGS, Polyus 2023 Annual Report

### Limited short-term pipeline of Western supply ahead of Perpetua

**Mandalay Resources (MND:TSX)** operates the Costerfield Au-Sb mine, the only antimony producer in Australia. However, Sb production at Costerfield has declined as mining transitions to a deeper zone with lower Sb grade.

Figure 11. Declining antimony production at Costerfield



Source: Mandalay Resources November 2024 investor presentation

**Perpetua Resources (PPTA:NASDAQ)** is planning to be in production by 2028 via restarting the Stibnite Gold Mine in Idaho, US. This mine historically supplied 90% of US antimony consumption (closed in the 1990s due to environmental regulations) although at current demand levels and forecast production would only cover 35% on average, over its initial 6 years of production. The Department of Defence has contributed US\$24.8m to the project and a letter of interest for a US\$1.8bn loan. Perpetua Resources has announced a Memorandum of Understanding with Sunshine Silver Mining & Refining Company to process antimony concentrate from the Stibnite project at its silver plant. PPTA seeks to finalise permits and FID in 2025.

**Larvotto Resources (LRV:ASX)** is planning to be in production early 2026 via restarting the Hillgrove Gold Antimony Mine in NSW. LRV holds Australia's largest Sb resource, one of the world's Top 10 Sb resources and has a proven and improved flowsheet which targets production of 5.4ktpa Sb concentrate after the plant is expanded to 0.5Mtpa. LRV has entered into an Sb offtake with Wogen, a specialist trading group based in London, and is close to completing feasibility work to support FID to restart Hillgrove.

**Felix Gold (FXG:ASX)** is planning to be in production late 2025 via restarting the historic and high-grad Scrafford Gold Antimony Mine in Alaska. It is possible that FXG could fast track small scale production and gain support from the US Government as Scrafford provided a strategic source of Sb to the US during WWI and WWII.

**Lode Resources (LDR:ASX)** has potential to undertake pilot production at its Montezuma Project late 2025 / early 2026 due to the high-grade Sb mineralisation and plant footprint in Tasmania. LDR also holds the historically high-grade Magwood Sb mine in NSW, which produced circa 5kt Sb in the early 1900s at average grades of 8.4% Sb and has had no modern exploration.

### Limited smelters adding volatility to the supply chain

The majority of antimony smelters are located in China although smelting capacity, mainly to produce Sb ingots, is located in a range of countries that cater for Western customers including Vietnam, Tajikistan, Thailand, Belgium and Mexico. The recent announcement that China has banned antimony exports to the US adds pressure to find alternative processing destinations ex-China.

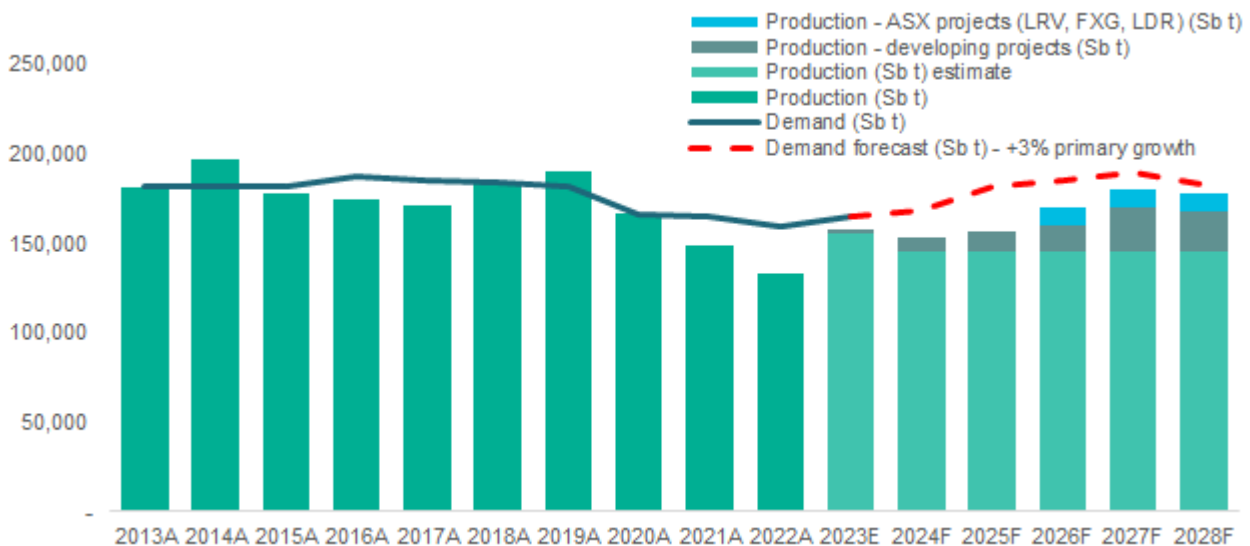
**The Oman Antimony Roaster (OAR)** facility targeting treating ~40kt pa of Sb-Au concentrates to produce ATO and ~20kt pa Sb metal. The facility struggled to find feed at an economic level and is not currently operating.

**United States Antimony Corporation (USAC)** currently has the only Sb processing facility the US located in Montana, with capacity to produce 10ktpa of Sb products.

## Is supply too inelastic to close the gap in the near term?

We see structural deficits in the Sb market over the short to medium term driven by moderate to strong demand growth (solar PV and strategic stockpiles) and limited supply response. While strong incentive prices, particularly ex-China, are expected to drive a supply response, the current gap seems to be material enough to be closed in the short term. We expect brownfield re-starts as well as higher levels of production from existing producers, many of which are restricted due to resource and grade depletion or focused on optimisation of gold production, to be required to bridge the gap.

Figure 12. Antimony supply/demand balance and estimated structural deficits



Multiple sources including: USGS, China Research, Project Blue, Argus, Fastmarkets Company websites, Blue Ocean Equities estimates from FY24

## Potential swing factors over the medium term

### Russia

- Polyus' Olimpiada mine is one of the world's largest gold mines and antimony producer
- Polyus 2023 Annual Report indicates Olimpiada produced 27kt of Sb, being a key swing asset in the global supply/demand balance as it produced 40% less in 1H24 (8.6kt) vs 1H23 (13.6kt)
- However, Russian supply of Sb has been dislocated due to trade sanctions and we understand Chinese Sb smelters have tended to respect these sanctions
- Over the near term, we expect most Sb supply from Russia to likely remain within Russia, even under a scenario where peace with Ukraine is negotiated under the Trump Administration, due to the significant amount of Sb spent in munitions since the invasion of Ukraine

### China

- We see China as the key swing factor due to the possibility of smaller Sb deposits being re-opened to arrest decline in domestic production
- While it is difficult to assess the potential extent of increases in production from China, we understand that the environmental trade-offs remain a key consideration
- We also note recent Asian Markets interviews with executives of key Chinese Sb producers point to low levels of stockpiles of Sb metal and ATO

### Solar PV growth disappoints

- It is possible we've seen peak growth in new solar PV installations
- Notwithstanding, even at single digit growth rates on solar PV the impact on Sb demand remains material (i.e. 5% growth = 5kt Sb or the targeted annual production for LRV's Hillgrove). However, a sudden decline in new and replacement of solar panels could free Sb supply for alternative uses

### **Discovery of Tier 1 gold deposits with associated Sb mineralisation**

- Antimony is typically a bi-product within intrusive precious metal systems and some disseminated gold deposits so a discovery of a Tier 1 Au-Sb deposit could swing supply/demand into surplus
- However, bringing a greenfields discovery into production would not happen over the short/medium term
- Our supply estimates incorporate expected supply growth from Talco Gold in Tajikistan (10kt Sb in 2025 and 15kt Sb by 2030) as well as Perpetua's Stibnite Gold Project in US (13kt Sb in 2027)

## Actionable Opportunities: BOEQ's Preferred Antimony Exposure on the ASX

We believe that companies with projects close to production and/or with potential for globally significant resources are best placed to capture the benefits of the current Sb price environment.

The table below illustrates our preferred exposure, including LRV and SXG which we cover as well as LDR and FXG which we like, and a wider list of selected companies with Sb projects.

Figure 13. BOEQ's Preferred ASX-listed Sb exposure and wider list of opportunities

Company, Project(s)	Ticker	Market Cap	Comments	Location
<b>Preferred Sb exposure</b>				
Larvotto Resources: Hillgrove	LRV	A\$294m	<ul style="list-style-type: none"> <li>Mine and plant re-start with low capex requirement</li> <li>+5.4ktpa Sb production early CY26 circa 5% of global primary supply</li> <li>Historic producer of Sb concentrate, optimised flowsheet</li> <li>+\$200m infrastructure in place</li> <li>Antimony resource of 93kt Sb with significant exploration target ranging from 36kt Sb to 75kt Sb</li> <li><b>BOEQ recommendation: BUY, TP \$0.89</b></li> </ul>	NSW
Southern Cross Gold: Sunday Creek	SXG	A\$805m	<ul style="list-style-type: none"> <li>Comparable system to Costerfield and Fosterville</li> <li>Exploration target of 3Moz AuEq, representing an estimated 92kt of contained Sb</li> <li>Potential for discovery to extend from current 1.2km drilling strike to circa 10km!</li> <li><b>BOEQ recommendation: BUY, TP \$3.55</b></li> </ul>	VIC
Lode Resources: Montezuma, Magwood	LDR	A\$15m	<ul style="list-style-type: none"> <li>Montezuma acquisition in Tasmania has small scale production potential in the near term due to its very high-grade mineralisation and existing plant footprint</li> <li>Drillholes being updated to JORC standard</li> <li>Magwood in NSW was a historic high-grade producer with no recent drillholes</li> </ul>	TAS + NSW
Felix Gold: Scrafford, Goodwin	FXG	A\$36m	<ul style="list-style-type: none"> <li>Historic producer, including supplying the DOD during WW1 and WW2</li> <li>Resource to JORC underway and historic feasibility being updated</li> <li>Production target of 5ktpa late CY25</li> </ul>	Alaska, US
<b>Other companies with Sb exposure</b>				
Black Cat Syndicate	BC8	A\$425m	<ul style="list-style-type: none"> <li>Gold producer, Sb potential at Paulsens</li> </ul>	WA
Nova Minerals	NVA	A\$110m	<ul style="list-style-type: none"> <li>PFS underway for Estelle Gold Project</li> </ul>	Alaska, US
Sun Silver	SS1	A\$100m	<ul style="list-style-type: none"> <li>Sb in historic core at Maverick Springs project</li> </ul>	Nevada, US
Warriedar Resources	WA8	A\$45m	<ul style="list-style-type: none"> <li>Ricciardo deposit (945koz Au) has Sb mineralisation</li> </ul>	WA
Trigg Minerals	TMG	A\$45m	<ul style="list-style-type: none"> <li>Achilles, Spartan, Taylors Arm Sb exploration projects</li> </ul>	NSW
Legacy Minerals	LGM	A\$18m	<ul style="list-style-type: none"> <li>Potential Sb at Drake project in New England Fold Belt</li> </ul>	NSW
Kalamazoo Resources	KZR	A\$16m	<ul style="list-style-type: none"> <li>Exploring Sth Muckleford Project in Victorian Goldfields</li> </ul>	VIC
Nagambie Resources	NAG	A\$15m	<ul style="list-style-type: none"> <li>Exploration at Antimony Gold Project at Nagambie Mine</li> </ul>	VIC
Critical Resources	CRR	A\$15m	<ul style="list-style-type: none"> <li>Mayview: potential Hillgrove-style antimony-gold system</li> </ul>	NSW
Octava Minerals	OCT	A\$8m	<ul style="list-style-type: none"> <li>Sb exploration at Yallalong prospect</li> </ul>	WA
Thunderbird Resources	THB	A\$8m	<ul style="list-style-type: none"> <li>Acquired Au-Sb exploration package in New England</li> </ul>	NSW
Iltani Resources	ILT	A\$8m	<ul style="list-style-type: none"> <li>Re-examining Antimony Reward project</li> </ul>	QLD



Source: Company websites, Iress (Market Caps at 10/01/25), Blue Ocean Equities

We also highlight that the impact that strong Sb prices have on gold equivalencies is material as illustrated for each 1% Sb on AuEq for SXG and LRV, based on our assumed recoveries and payabilities.

Figure 14. Strong leverage to Sb prices: 1% Sb grade to Au equivalent (g/t)

	Sb price (US\$/t)	SXG AuEq (g/t)	LRV AuEq (g/t)
BOEQ LT	22,250	1.7	1.9
	30,000	2.3	2.6
Spot	40,000	3.0	3.5
	50,000	3.8	4.3

Note: Estimates based on BOEQ's assumed recoveries of 90% Sb and 95% Au and payabilities of 65% Sb and 95% Au for SXG and recoveries of 86% Sb and 83% Au and payabilities of 65% Sb and 91% Au for LRV.

Figure 15. Map of BOEQ's preferred antimony exposure on the ASX: NSW, VIC, TAS

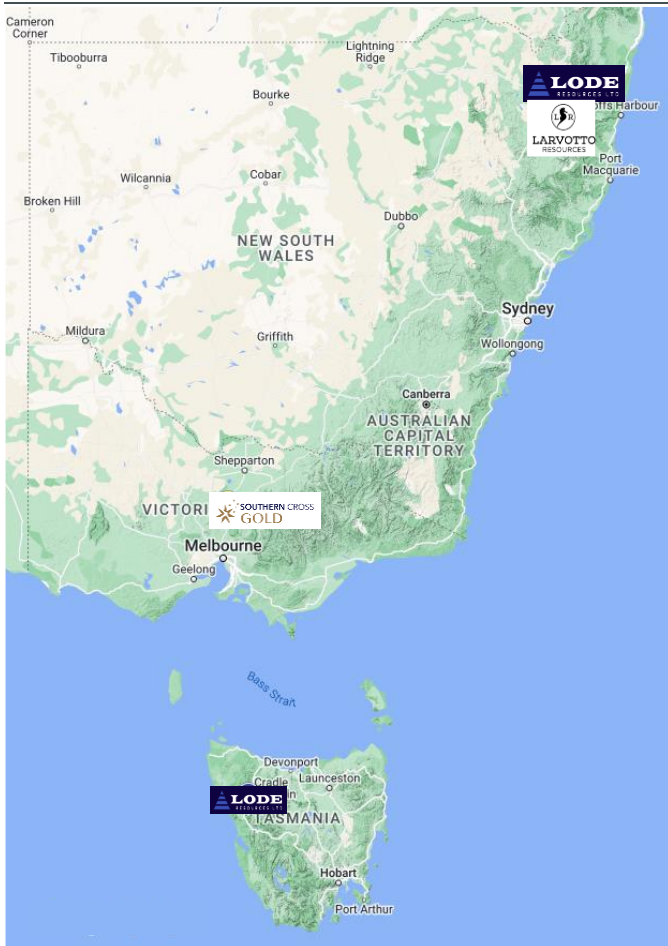


Figure 16. Map of BOEQ's preferred antimony exposure on the ASX: Alaska, US



Source: Blue Ocean Equities

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**One of authors of this report owns shares in LDR, LRV and SXG.**