

HERMOSA PROJECT OVERVIEW:



Putting Arizona in the Driver's Seat of the Clean Energy Race

The United States has set bold decarbonization targets to reduce greenhouse gas emissions and compete in the global economy. But achieving these goals will require major investments in the nation's infrastructure and domestic supply chain.

South32 is a global metals and mining company, headquartered in Perth, Australia. Located in an historic mining district in the Patagonia Mountains of Southern Arizona, our Hermosa Project is the only advanced mine development project in the United States as of 2023 that could produce **two federally designated critical minerals—manganese and zinc**—which are essential minerals for powering the nation's clean energy future.

South32 aspires for this project to **strengthen the domestic supply chain** of critical minerals, **set a new standard** for **sustainable mining**, **grow the local economy**, and **improve lives** in a region that currently has higher than average rates of poverty and unemployment.



STRENGTHENING THE US DOMESTIC SUPPLY CHAIN OF CRITICAL MINERALS

The United States is currently highly reliant on imports and overseas supply chains for the resources found at Hermosa, including those needed to power the nation's clean energy future. President Biden's early 2022 invocation of the Defense Production Act and passage of the Inflation Reduction Act, which contains a commitment to increase US domestic supply of critical minerals, highlights the urgent need to wean America off its dependence on foreign supply chains for these minerals. These policies also pave the way for a vast expansion in electric vehicles (EVs), batteries, and renewable power production infrastructure.

MANGANESE

- US Critical Mineral
 - Used for electric vehicle batteries, steel, and by the US military
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- About 97 percent of manganese metal in North America is imported from China, and the US is now 100 percent reliant on foreign sources for manganese.
 - There has been no manganese mining in the US since the 1970s, and there is no manganese metal production in all of North America.
 - One of only five minerals included in the 2022 Defense Production Act.

ZINC

- US Critical Mineral
 - Used in battery storage, solar panels, wind turbines, electric vehicles, and other infrastructure
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- The US produces only 6 percent of the world's zinc and is highly reliant on China and Peru for this metal.
 - Supply of zinc from recycling falls dramatically short of answering demand, due to technical challenges and limited supply of scrap steel containing zinc.

The Hermosa mineral resource also contains silver, which is essential for solar panel coating, and lead, which is used in battery storage and electric vehicles. The United States is reliant on foreign supply chains for both of these metals, and recycling cannot meet demand.

Hermosa is the only advanced manganese project in the United States as of 2023 that could produce battery-grade manganese to supply domestic demand and includes one of the world's largest undeveloped zinc resources.



SETTING A NEW STANDARD FOR MINING THROUGH OUR COMMITMENT TO SUSTAINABILITY

South32's long-term goal* is to achieve net zero operational greenhouse gas emissions by 2050. To support this, we're applying low-carbon principles in our design and engineering plans for Hermosa. This includes designing Hermosa to enable power supply from renewable energy, which could underpin new renewable energy capacity and infrastructure across the local region, and planning for an all-electric vehicle fleet powered by renewable energy to reduce noise, improve working conditions, and support delivery of South32's operational greenhouse gas reduction targets and goals.

In 2020, South32 completed a US \$30 million voluntary cleanup of mine waste left by a previous miner in the last century, restoring the natural environment, stopping heavy metals from polluting local waterways, and saving Arizona taxpayers millions of dollars. In the process, we opted to build the nation's first new dry-stack tailings facility, which limits surface disturbance and offers the highest standard of safety and water conservation.

Lastly, the surface footprint for South32's Hermosa Project is just 600 acres. That's a fraction of the footprint of other mining projects, which often stretch for thousands of acres. We are targeting an underground mining method that will also involve backfilling the stopes as we progress. This advanced method greatly reduces the volume of stored tailings on the surface while all but eliminating subsidence of earth at the surface.



Before South32 cleanup of historic mine waste

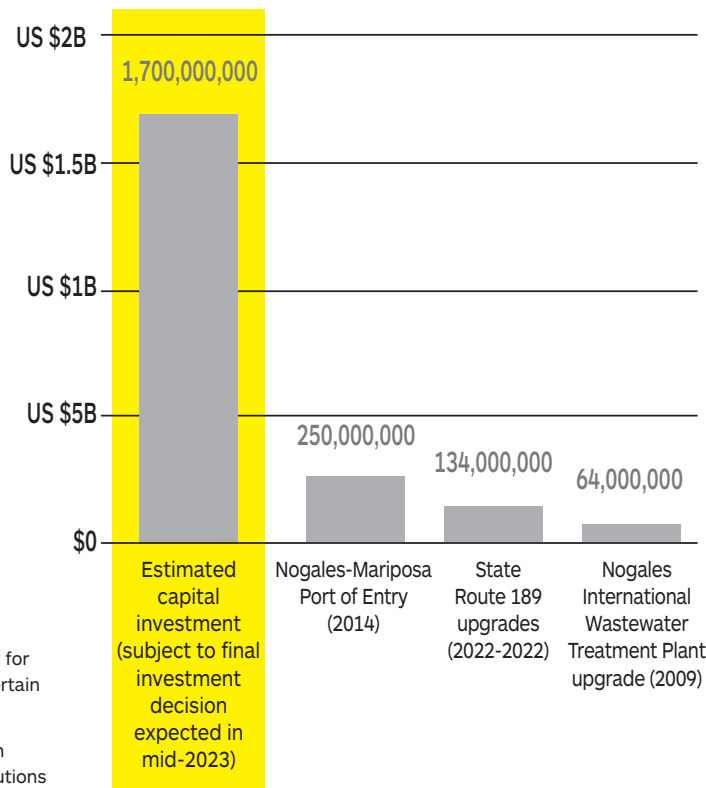


After South32 cleanup of historic mine waste

READYING FOR A TRANSFORMATIVE US \$1.7B INVESTMENT INTO THE LOCAL ECONOMY

Santa Cruz County, where Hermosa is located, boasts a more than 80 percent Latino population and is home to growing opportunities. The county seat of Nogales serves as one of the largest US-Mexico ports of entry, with almost 50 percent of the nation's produce passing through its gateways each year. Yet nearly 25 percent of Santa Cruz residents live below the poverty line, and the county's unemployment rate is consistently 50 percent above the state average. South32 is still studying how to best develop battery-grade manganese at Hermosa, but a decision on proceeding with development of the zinc-lead-silver resource is expected in mid-2023 and would involve a US \$1.7 billion capital investment. This would represent the largest potential investment in the economy to date as of 2023 and, based on a recent economic impact study**, would bring renewed prosperity to local suppliers and create more than a thousand jobs in one of Arizona's most economically undiversified regions. Each Hermosa job will generate labor income equal to 2.5 times the average household income in Santa Cruz County. A mine at Hermosa would nearly double the county's property tax base, which is nearly US \$14 million. Our contributions to the county's GDP and economic output would equal about 20 percent of the current GDP and economic output.

LARGEST POTENTIAL INVESTMENT IN THE LOCAL ECONOMY AS OF 2023



*Goal means an aspiration to deliver an outcome for which we have not identified a pathway for delivery, but for which efforts will be pursued towards achieving that outcome, subject to certain assumptions or conditions.

**For further details in relation to the figures above (including key underlying assumptions in relation to forward looking statements), refer to the report titled "Economic and tax contributions of the Taylor Development at the Hermosa Project" dated March 2022 prepared by EY.

CREATING A POSITIVE DIFFERENCE IN OUR COMMUNITIES

South32's aims for the Hermosa Project to make a lasting contribution through social investment, improving people's lives in nearby communities. We are:

- Developing a homegrown workforce with the next-gen skills needed to bring the Hermosa Project to life and support our broader community for generations to come by prioritizing local hiring and laying the groundwork for workforce development with the region's secondary and post-secondary institutions and with local tribal communities.
- Investing resources to set up and have an independent party facilitate a community advisory panel comprised of community leaders with diverse perspectives and strong networks.
- Facilitating the donor-advised South32 Hermosa Community Fund which helps support nonprofits based in Santa Cruz County. As of late 2022, the Fund has awarded US \$686,450 to 42 different non-profit organizations for 81 projects. South32 has also invested over US \$2 million in key infrastructure and social service improvements in Hermosa's neighboring communities, which include road upgrades and support for STEM education programs for school-age children.
- Working to build strong relationships with local tribes that have historic affiliation to the project area and neighboring lands. While we are not currently engaged in any federal permitting process, establishing transparency and building trust are our top priorities, so we host site tours with local tribes, have discussed with them our project plans to understand any historic connections to the project area and surrounding region, and voluntarily conduct culture resource surveys on our claims in the accompaniment of tribal monitors.

