

# ZINC:

## THE BACKBONE OF AMERICA'S FUTURE

A key ingredient for both renewable energy and national defense technology, zinc is best known for its ability to galvanize steel, making it an essential ingredient for wind turbines, solar panels, and other energy infrastructure like transmission routinely exposed to the elements.

Emerging applications like energy storage technology important to powering the grid during renewable down times are making zinc ever more important for powering and protecting America's future.

### FAST FACTS

- Primary demand growth expected to outpace production by ~4Mt to 2033<sup>1</sup>.
- 94% of zinc mining occurs outside the United States.
- In 2022, the U.S. government named zinc a critical mineral.

### CLEAN ENERGY



Protects wind turbines and solar panels from weathering.



Key ingredient for steel in energy transmission infrastructure.



Powers extreme temperature-resistant batteries.

### NATIONAL SECURITY



Provides protective coatings for military equipment.



Strengthens bolts, screws, and fasteners on military kit.



Powers long-lasting batteries for submarines and remote artillery.

### ARIZONA CAN HELP MEET GROWING DEMAND:

The Hermosa project is home to one of the largest undeveloped zinc deposits in the world. South32 is investing \$2.16 billion to develop zinc at Hermosa, setting up the potential to generate a reliable, domestic supply of this critical resource long into the future.



**DID YOU KNOW?** Hermosa's zinc deposit has been the only major zinc discovery made in the past decade in the world. In fact, the equivalent of three Hermosa zinc-sized projects would need to be developed each year to meet projected global demand.<sup>2</sup>

<sup>1</sup>Wood Mackenzie Global Zinc Investment Horizon Outlook Q4 2024

<sup>2</sup>Based on zinc feasibility study annual steady state payable zinc production of 132kt