



# ESSENTIAL ZINC

MORE THAN NATURAL. IT'S ESSENTIAL.

All organisms depend on the presence of zinc and due to its general availability and unique characteristics, it has become an essential component for many metabolic processes that sustain life. Additionally, zinc plays an integral role in supporting global agriculture and safeguarding the world's infrastructure.

## ZINC AND...



### Health

Unfortunately, more than two billion people across the globe don't receive enough zinc in their daily diets. A lack of the nutrient hampers the immune system, leaving those affected prone to:



Growth Retardation



Infections



Hair-loss



Skin Rashes



### World Agriculture

Although zinc occurs naturally within the environment, many regions lack the element in sufficient concentrations to support healthy crop quality and yields. In fact, **half of the world's cereal crops are grown in zinc deficient soils.**

As the global population continues to climb (**estimates top 9 billion people by 2050**), agricultural output must expand by 70 percent to meet the world's nutritional needs.

To achieve this level of production, focus has turned to the potential adoption of zinc fertilizers to help boost crop yields. **In China, trials on rice crops have been impressive, demonstrating 20 percent increase in yields and a 40 percent in the nutritional content.**



### Energy

One of zinc's greatest properties is its ability to protect steel from corrosion. **For decades, zinc has played an integral role in safeguarding the core our nation's electrical infrastructure**—from the largest transmission towers to the most critical distribution components.

**Zinc is helping renewable power become 24-hour power.**

Zinc-based energy storage systems have tremendous advantages including high specific energy, recyclability, safety, low cost and zero emissions.