

Domestic Battery Material Production Strategy



Leapfrog Technology For Sustainable Production of Battery Material

6K UniMelt[®] microwave plasma technology is transforming the way we produce battery material by collapsing the production process time by 95% resulting in over **50% reduction in conversion costs** - EVEN IN THE US.

With 6K's UniMelt technology we take a multiple step process down to a one-step, closed-loop process driving the overall cost of the material down. Our unique technology allows for multiple materials to be produced in the same plant offering complete flexibility for future expansion.



Sustainability of UniMelt Vs. Co-precipitation

The UniMelt process is highly sustainable in comparison to the current co-precipitation process, creating virtually no waste byproducts. The current co-precipitation process generates large amounts of pollutants, consumes huge amounts of water and uses energy-intensive processes that take 2-3 days for production. The UniMelt process produces zero hazardous waste, ten times reduction in water usage and two times reduction in power usage.



Secure Domestic Supply Chain

6K Energy's battery material production in the United States would significantly reduce dependence on foreign made battery material and increase our domestic supply. Domestic production reduces the national security risk, increases jobs on US soil and provides significant value in offering battery material sustainably at a lower cost. 6K Energy's plan for domestic sourcing of material will decrease the national dependency on raw material suppliers and will ensure a stable, secure source of feedstock for our future electrification needs.

6K Energy Production Plans Start with PlusCAM™

6K Energy's battery material production plans start with our PlusCAM plant as our production model. This plant is partially funded by the DOE Bipartisan Infrastructure Law grant that was put in place to supercharge US manufacturing of batteries for electric vehicles and electric grid.

PlusCAM will be the the world's first plasma cathode plant, providing low cost, ultra sustainable production of battery material for localized supply chains in the US. This plant will be the first in a series of CAM plants in the US providing a blueprint to easily replicate.



Closed Loop Production Process

6K's UniMelt process takes a complex, multistep cathode production process down to a single step. The nitrate-based precursors drive the overall cost of material down and allow for a closed-loop system to maximize environmental benefits. NOx that is generated during production will be converted into nitric acid, which can be used in regenerating the nitratebased precursor, thereby closing the production loop.

6K will partner with a nitric acid production or technology partner for its battery material factories and will co-locate the production of nitric acid.

Key Initiatives for PlusCAM include:

Diversity and Inclusion Initiatives

- Local workforce development and training
- Support of local DBE and minority owned firms
- Work with HBCUs to foster research and development
- Hiring and training residents of disadvantaged communities
- Community outreach and betterment

Sustainability Initiatives

- Renewable sources for energy where possible
- Following LEED standards for design and operation
- Environmentally friendly building and process improvements
- Community tree planting
- Transporation improvements to reduce congestion





6K COMPANY OVERVIEW

Headquartered in North Andover, Massachusetts, 6K is accelerating the industrial transformation of advanced material production and redefining sustainable manufacturing through the world's first industrial microwave plasma platform, their UniMelt system. It is positioned to replace today's traditional manufacturing processes with significantly lower cost and a much cleaner, more sustainable process.

KEY FACTS

4 Business Divisions 6K, 6K Additive, 6K Energy and 6K Next 260+ Employees with aggressive expansion plans \$325M* Funding secured & committed *second close in process

Patents granted/in-process across portfolio of products

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