



KEY SERVICE:  
**CATHODE ACTIVE MATERIAL  
(CAM) MANUFACTURE DEFINITION**

## **WHY CONSIDER CAM MANUFACTURING SUPPORT?**

Cathode active material (CAM) is the key raw material that drives performance and cost of a battery. The demand for this critical material is increasing exponentially as automotive OEMs and battery cell manufacturers are expanding their production capacity to meet the emerging EV and Energy Storage application market needs. CAM materials are continuously being developed further with energy density, capacity, service life and fast-charging capability being decisive factors, without neglecting safety and environmental compatibility. The CAM production process is very complex with multi-chemical transformation stages involving solid, liquid and gaseous products to get a pure mix of active materials and requires higher investment costs and a high energy intensive operating costs. CAM production complexity like high safety and environmental requirements, high degree of automation and quality standard demand for extensive planning and design of a new facility with foreseeing insights to make it viable and profitable.

## **WHY HSSMI?**

HSSMI is a sustainable manufacturing innovation consultancy with expertise and capabilities in manufacturing engineering, scale up facility design for battery technologies. Our extensive knowledge and expertise around battery scale up facility design makes us unique in providing customized solutions to meet the new challenges that may arise building a new technology production facility.

## **HOW HSSMI CAN HELP**

Our support is based on in house expertise with extensive knowledge of current and innovative products, process in battery technologies, engagement with a wide network of equipment vendors, industry leaders, subject-matter experts and a deep understanding facility delivery programs.

These are some of the areas HSSMI can support with:



**Product and Process Specification**



**Capital and Operational Expenditure Models**



**Site requirements and Location Assessment**



**Market Assessment**



**Business Case Review and recommendations**

Our experienced consultants are able to provide tailored solutions to your business that will enable your organization to achieve your manufacturing objectives within the proposed timeframe.