

Achieving Economies of Scale for New Battery Supply Chain Manufacturing Facilities

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Learn more about our Regional Clean Economies initiative and our series on *Securing the Critical Battery Materials Supply Chain in the Southeast*

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Establishing a new industry in the United States will be more expensive than continuing to offshore the production of batteries. First-of-a-kind factories are more expensive but pave the way for economies of scale in subsequent construction once supply chains are established in North America. These initial high costs are a barrier to entry for companies looking to locate their facilities near U.S. customers and limit the competitiveness of American-made inputs. Offtakers are more hesitant to contract with domestic suppliers building first-of-a-kind facilities than with established foreign suppliers due to higher costs and unfamiliarity with their products. Subsequently, investors are cautious to provide capital for these initial facilities without long-term offtake agreements.

What Participants Said

The first-of-a-kind American facilities to produce battery materials and components are more expensive to construct than subsequent facilities since they must be purpose-built. At present, it costs three times more to build a cathode facility in the United States than to build one in Korea and five times more than to build one in China.

Policy Solutions

Near Term

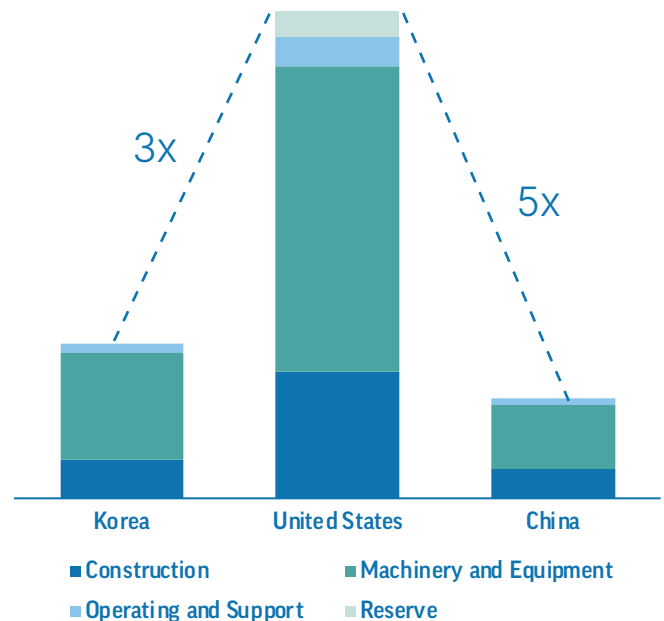
Congress and the administration should provide federal funding support for first-of-a-kind cathode factories to reduce barriers to entry for companies looking to site facilities in the United States.

Longer Term

The federal government should provide a limited term price guarantee for materials produced at new facilities in the United States to promote competitiveness with foreign suppliers.

States should provide support to connect local offtakers with new midstream suppliers looking to locate in the area.

FIGURE 1: RELATIVE COSTS TO CONSTRUCT A NEW BATTERY MATERIALS FACTORY



Source: LG Chem