**SWOT (Strengths, Weaknesses, Opportunities, and Threats) Analysis: Lithium Supply Chain, North America.**

**Lithium Supply Chain in North America:**

North America’s **Strengths** in Lithium Supply Chain

1. North America’s biggest strength is the availability of Lithium Deposits of about 1,280,000 MT.
2. Immense support from the government through Incentives and Tax credits aimed at accelerating domestic mining of raw materials of EV Battery.​
3. The ability of companies like Albemarle Corporation and Piedmont Lithium to pour money and resources into starting new or developing existing mining operations in North America.

North America’s **Weaknesses** in Lithium Supply Chain

1. Very limited supply chain and thus severe dependency on foreign nations for supply of EV battery materials. The USA alone imports over **2500 MT** of Lithium Carbonate Equivalents (LCEs) per year, spending over $**80 Million.**
2. Lack of infrastructure and technical experience and expertise in Lithium processing. About only 1% percent of Lithium chemicals are processed in North America, and 79% being processed by China and Chinese companies.

North America’s **Opportunities** in Lithium Supply Chain

1. The USA would alone require about 360,000 MT of LCE by 2050 to meet its EV demands.
2. With only one operational Lithium mining plant in USA, two other sites such as the Thacker Pass in Nevada and Tin-Spodumene belt in North Carolina provide a great opportunity for improving domestic supply chain.
3. The opportunity to drastically reduce the overall cost of EV batteries through a domestic supply chain thus improving the economy and market share of North America in the EV battery market.

North America’s **Threats** in Lithium Supply Chain

1. Diplomatic issues and a potential war with North America’s major EV battery materials supplier: China poses a serious threat to the supply chain in North America and the North American economy.
2. Threats to the supply chain impose a lack of secure access to EV battery raw materials.
3. North America’s stringent environmental policies that prevent companies to start domestic mining and processing of Lithium which is aided by the weakness: lack of infrastructure to process Lithium.

**Key Performance Indicators (KPIs):**

1. **Overall Cost** of Lithium chemicals.
2. **Research and Development** for Lithium mining and processing infrastructure.
3. **Yearly Metric Tonnes turnover** of Lithium Chemicals from North America.
4. **Yearly revenue turnover** of Lithium mining and processing companies in North America.
5. Forecast accuracy, order cycle time, delivery performance against date, logistics and transportation costs, inventory turnover, supply variance, demand variance, and planned performance are some of the important **Supply Chain KPIs**.