

The Opportunities and Challenges of the USA's Transition to Electric Vehicles

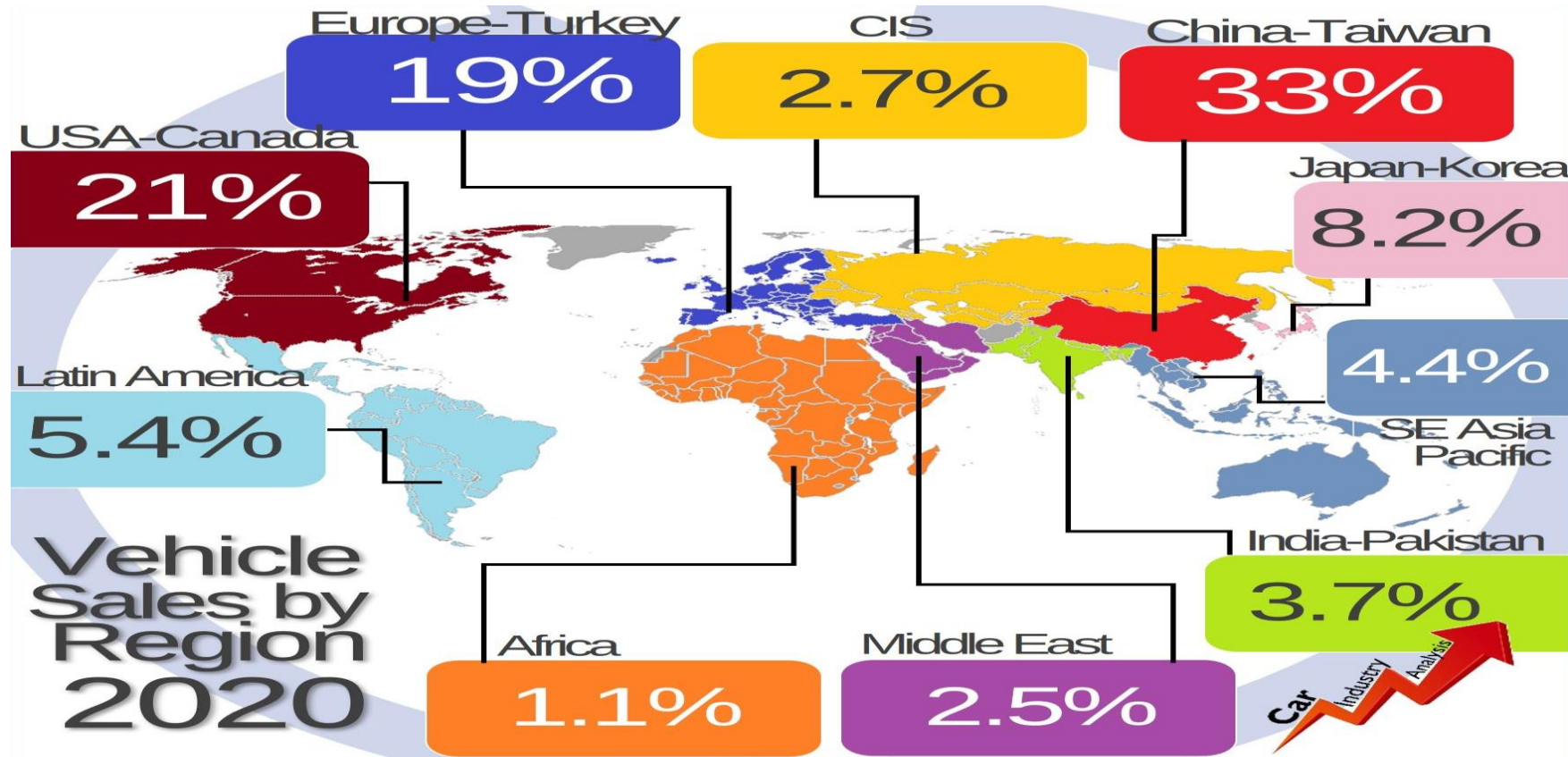
James Greenberger, Executive Director
NAATBatt International
October 18, 2022



NAATBatt International

- Organized in 2007 to Ensure that Lithium-Ion Batteries Would be Manufactured in the United States
- 250 Corporate and Research Institution Members
- In 2021, the U.S. Department of Energy asked NAATBatt to Co-Lead the Li-Bridge project

The Global Auto Market



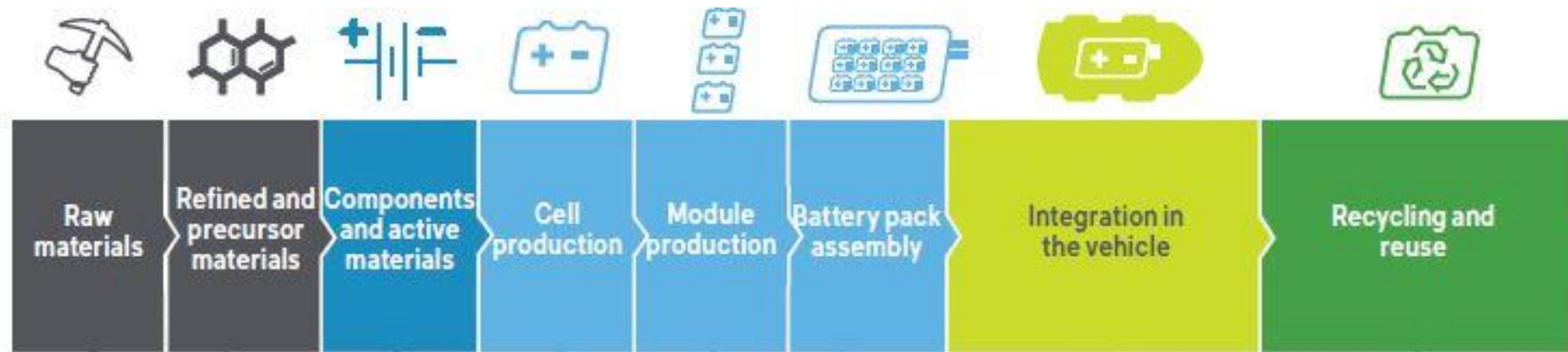
Source: Fiat Group World 2020

Why is Vehicle Electrification Happening?

- Governmental Mandates and Incentives
- Consumer Preferences
- Technological Change



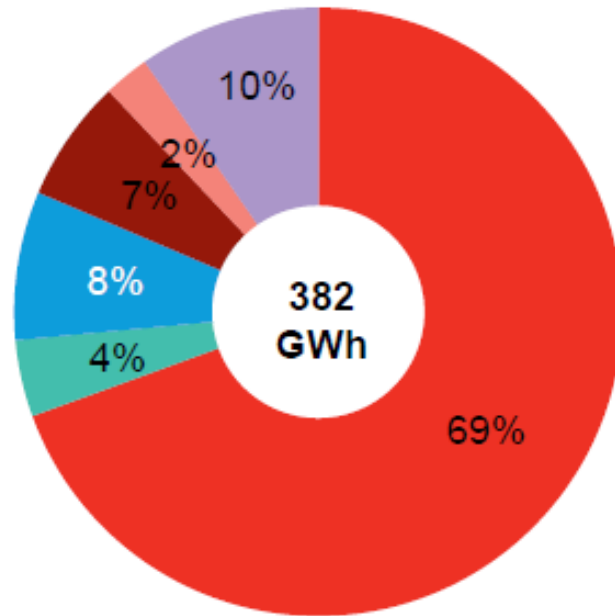
The Lithium-Ion Battery Supply Chain



Source: Propulsion Quebec, 2020

China Dominates the Manufacture of Lithium-Ion Battery Cells

Commissioned manufacturing capacity, January 2020

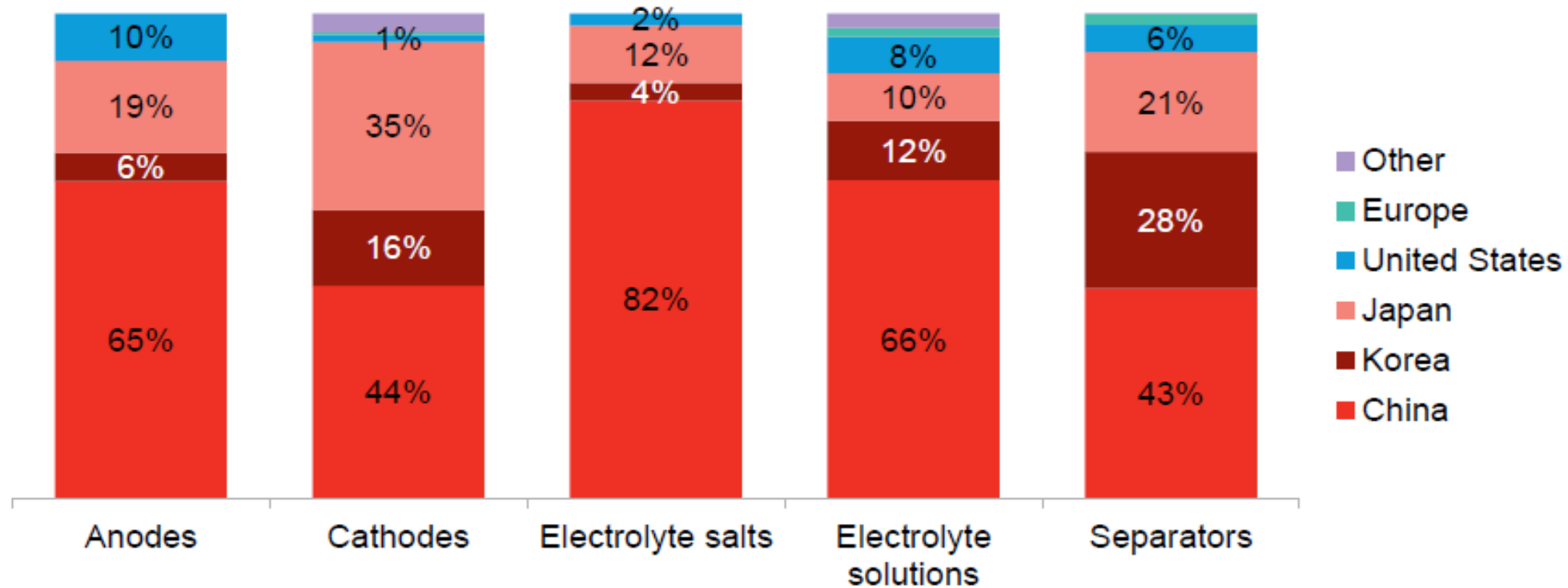


Source: BloombergNEF

■ China ■ Japan ■ Korea, Republic of ■ United States ■ Europe ■ Other

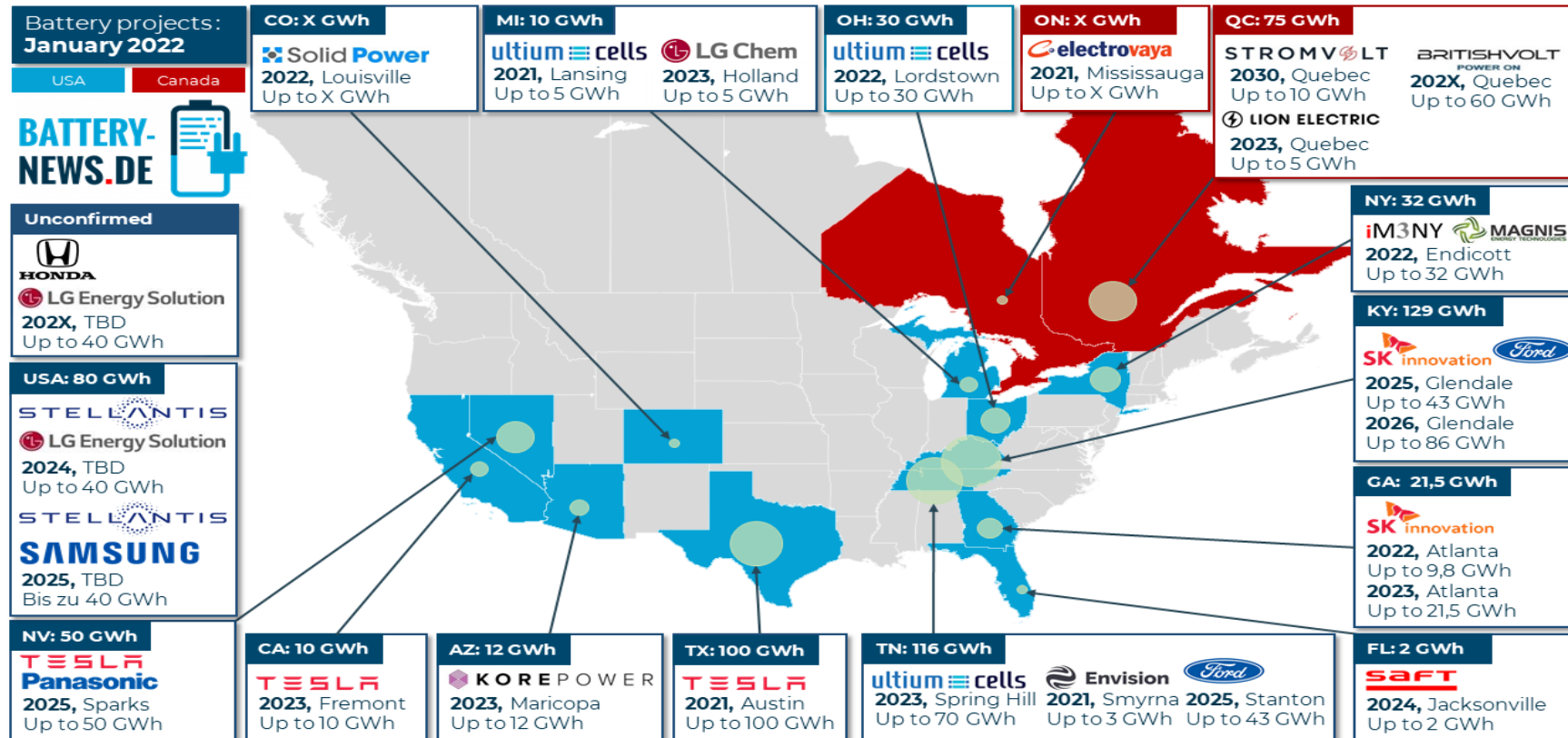
Source: BloombergNEF

The U.S. is a Minor Player in Battery Component Manufacture



Source: BloombergNEF

The Lithium-Ion Battery Land Rush



What Are They Looking For?

- Power, Water, Gas
 - Easy Access to Customers – The value of clustering
 - A Rational Regulatory Environment
 - Access to a Trained Workforce
 - Low Carbon Power
 - Government Officials Who will be There for Them
- When the Rubber Hits the Road

What Do We Want from Them?



What We Should be Asking For

- Localization of Supply Chains
- Tooling and Equipment Acquisition
- Hire U.S. Engineers
- Localization of R&D and Product Development
- Become Part of the Community

Thank You

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The logo for NAATBatt International features a stylized icon of three horizontal lines on the left, followed by the text "NAATBatt" in a bold, sans-serif font. "NAAT" is in dark blue and "Batt" is in green. Below this, the word "INTERNATIONAL" is written in a smaller, spaced-out, dark blue font.