Entering the US Market: the Path to Success for Asian Companies

Michael Liu
Director of Research & Insights
Volta Foundation

in partnership with

Xinghua Meng Assistant Secretary General 常州市电池技术协会



Quantify the Opportunity of a US Market Entry Part 1

Understand Shifting Policies | Part 2 within the US |

Follow Best Practices in | Part 3

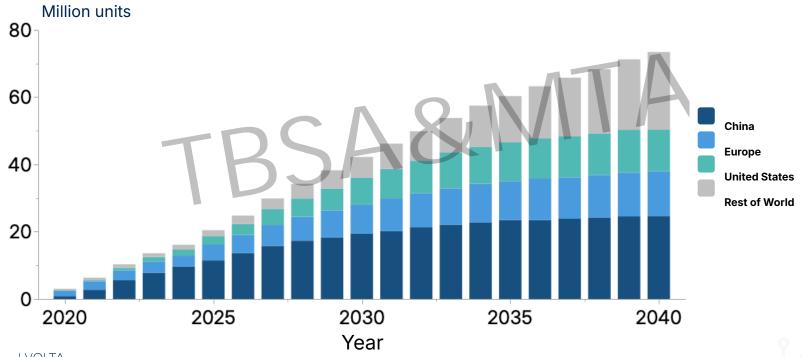


Quantify the Opportunity of a US Market Entry Part 1



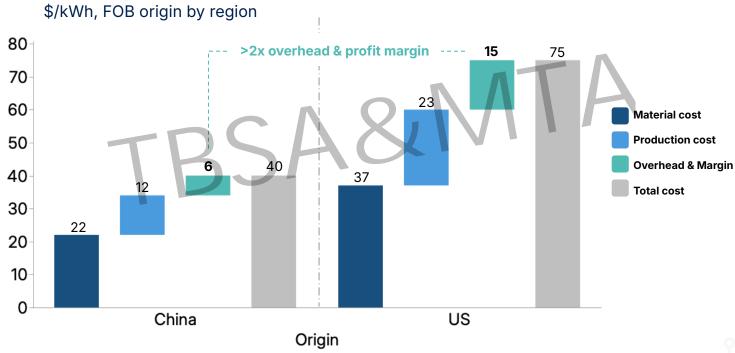
United States remains the second largest market for EVs outside of China

GLOBAL LONG-TERM PASSENGER EV SALES BY REGION



Profit margins in US are healthier compared to those in China

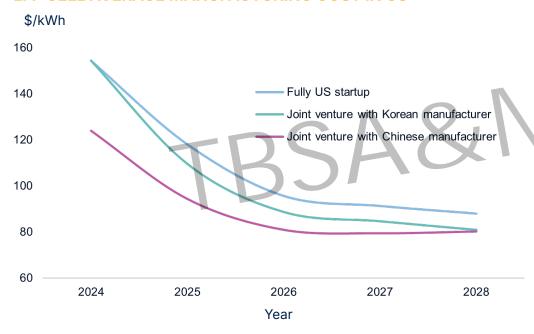
LFP CELL SPOT PRICE ESTIMATES





Joint Ventures open the US market to Asia & quickens profitability

LFP CELL AVERAGE MANUFACTURING COST IN US

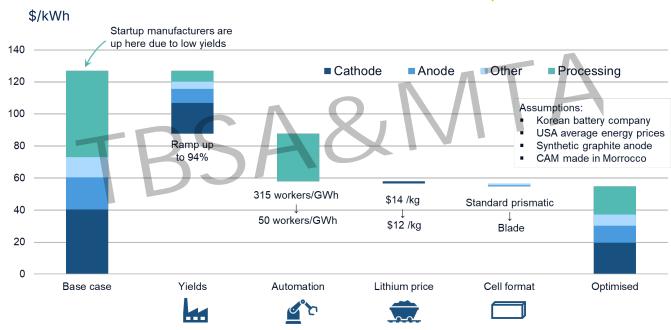


Cell manufacturing in the US formed by partnering US ↔ Asia outcompetes pure US companies in cost and potentially market share



Yield improvement and automation enable JVs to turn a profit

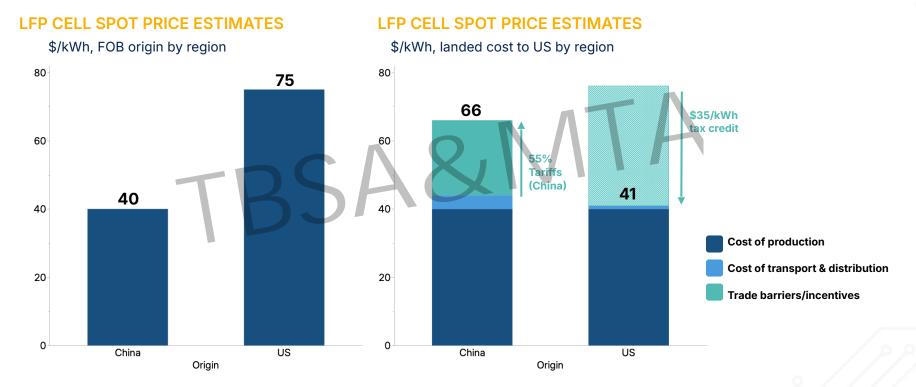
MODELED LFP BATTERY CELL MANUFACTURING COSTS IN US, 2024



Understand Shifting Policies Part 2 within the US



Battery cell production in US is very competitive from incentives & tariffs





Inflation Reduction Act Accelerated US Battery Industry Growth

Senate passes Inflation Reduction Act with \$369B in energy and climate spending

Section 45X of the Inflation Reduction Act: New Tax Credits Available to Battery Manufacturers

orrick

How Inflation Reduction Act Electric Vehicle Incentives Are Driving a U.S. Manufacturing Renaissance



Ford to announce \$2.5B battery plant in Marshall with Chinese partner

The Detroit News

LG-GM joint venture secures \$2.5b from US to fund EV battery plants



Chinese EV battery maker Gotion High-Tech picks Illinois for US\$2 billion factory, starts production in 2024





Inflation Reduction Act (IRA) passed in 2021 defined the term Foreign Entity of Concern (FEOC), placing restrictions on some tax credits

One Big Beautiful Bill (OBBB) passed by US government expands definition of FEOC, limiting ALL tax credits:

- Prohibited Foreign Entity (PFE)
- Specified Foreign Entity (SFE)
- Foreign Controlled Entity (FCE)Foreign Influenced Entity (FIE)

TBSA

Key Takeaway

Chinese companies can still benefit from US tax incentive policies by cooperating with US companies (Joint Ventures, licensing deals, etc.)



Policy in 2022

US supply-side incentives

US demand-side incentives

FEOC material limits



Policy in July 2025

US supply-side incentives



100% tax write-offs for R&D & Production equipment

Production Credits for US Manufacturing
10% of cost for critical minerals

10% of cost for critical minerals 10% of cost for cell components \$35 / kWh for cells \$10 / kWh for pack assembly

IMPACT

Chinese companies need to partner with US companies to earn credits

US companies are much more willing to buy state-of-art equipment



Cells made in the US must ramp down Chinese content over time

COST RATIO OF BILL OF MATERIALS (BOM) FOR CELLS

Percentage (%) by year



Material not from FEOC company

Material from FEOC company

To qualify for tax incentives in 2030, less than 15% of materials used in a cell made in the US can be from a FEOC company or its subsidiaries

Cost of equipment, manufacturing does **not** apply



Policy in July 2025

Consumer Rebate for EV Purchase \$7500 tax rebate for qualifying new EV purchases

IMPACT

US OEMs will not buy US-made batteries if they are not cost competitive

US demand-side incentives

Eliminated

New policy changes makes partnership the only way to earn credits

Eliminated demand-side incentive and transplanted its sourcing requirement to supply-side incentives

Policy	Incentive	Restrictions	Timeline	Incentive	Restrictions	Timeline
30D	\$7500	FEOC material restrictions	Credit ends after 2032	Eliminated	NXA	N/A
45X: Critical Minerals	10% of cost	None	Phase-out to 25% after 2033	Unchanged	FEOC recipient & material restrictions	Phase out to 0% after 2033
45X: Components	10% of cost	None	Phase-out to 0% after 2033	Unchanged	FEOC recipient & material restrictions	Unchanged
45X: Battery Cells	35 \$/kWh	None	Phase-out to 0% after 2033	Unchanged	FEOC recipient & material restrictions	Unchanged
45X: Battery Modules	45 \$/kWh	None	Phase-out to 0% after 2033	Unchanged	FEOC recipient & material restrictions, stricter definition	Unchanged



Joint Venture partnerships are heavily favored in new policy

US-ASIA BUSINESS MODELS & THEIR 45X QUALIFICATION

July 2025 - Present

Low risk High risk

Business Type

Licensing Agreement with US Company

US Subsidiary of Asian Company

Restrictions*

Total FEOC ownership <40%

Joint Venture with

US Company

FEOC partner cannot exercise "effective control" of key decisions over company

Parent company cannot be linked to an FEOC

Example

Amplify JV
EVE, Daimler, PACCAR, Accelera
LFP Cell Factory
Marshall, Mississippi

Ford, CATL LFP Cell Factory Marshall, Michigan

Blue Oval

LFP CAM Plant Big Rapids, Michigan

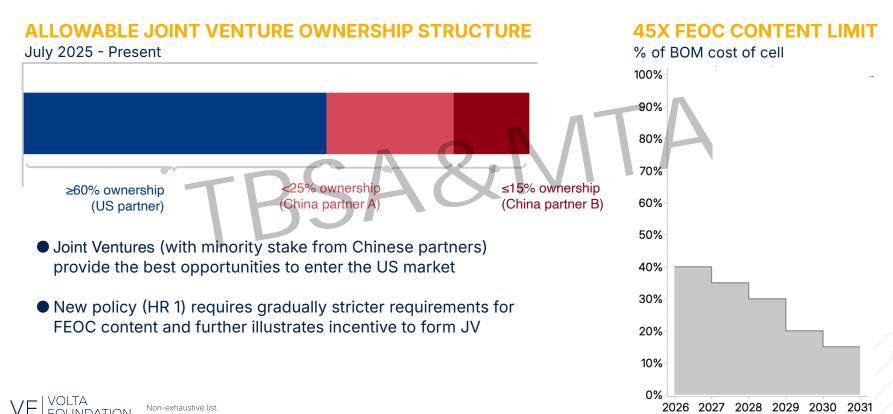
Gotion

Likely qualifies for tax incentives

May be challenged on eligibility for tax incentives

Likely does not qualify for tax incentives

Cooperation Between US and Asia is Critical for Success: JV Example



Year

Follow Best Practices in Entering the US Market Part 3

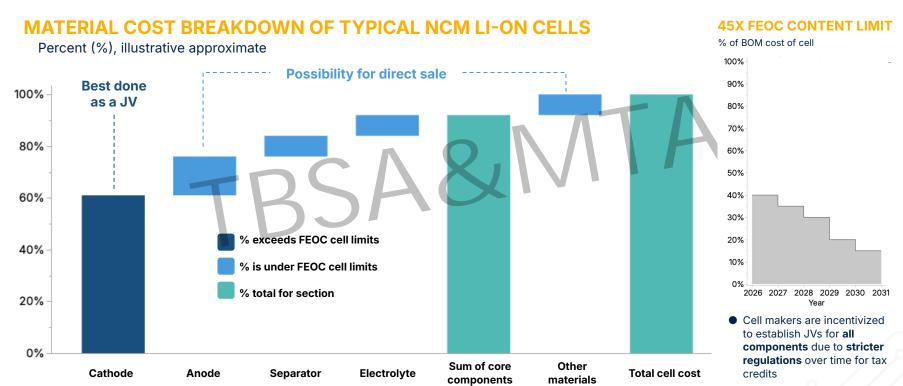


Invest in the right partnership with a US company





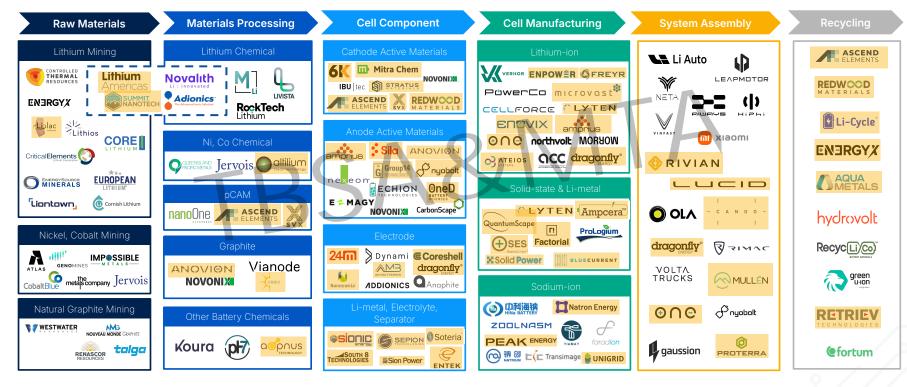
Determine if your company should sell directly or form a JV today



Find the right US company to partner with



Find the right US company to partner with



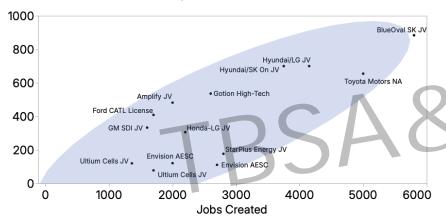
Build factories in states with Republican government

BATTERY CELL/COMPONENT JV COUNT IN THE US MAP OF US⇔ASIA JV FACTORIES (2021-present) Major cell and component manufacturing Sized by amount invested in facility 22% 78% 14 factories 4 factories ABLE OF SELECTED US⇔ASIA PARTNERSHIPS Sites planned, under construction, or complete **US Partner Asian Partner Amount Invested** Location Kentucky (#4) \$11.4B Tennessee (#5) CATL \$1.6B Michigan (#6) Ohio (#7) \$6.7B Tennessee (#8) Michigan (#9) **NESC** \$3B South Carolina (#3) STELLANTIS \$5.7B Indiana (#11) Republican-leaning state DAIMLER **Democratic-leaning state** TRUCK **EVE** PACCAR \$3B Mississippi (#18) Non-exhaustive list accelera.

Win state and local government support (\$) by creating local jobs

JOBS CREATED & GOV'T INCENTIVE PACKAGE

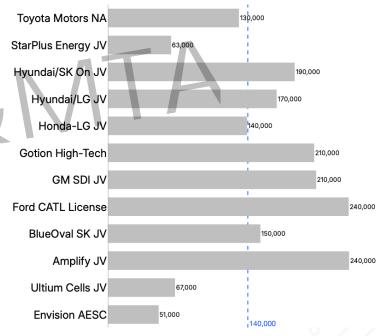
State/local tax incentives, \$MM USD



- State and local governments determine size of incentives (tax abatements, grants, etc.) by the number of jobs created in their jurisdictions.
- Factory proposals that cost less than \$140,000 of tax incentives per job created are considered cost competitive.

STATE TAX INCENTIVES / JOB CREATED

\$/direct job created, cell manufacturing





Invest time & resources into surrounding community

These EV 'Battery Belt' Towns Are Betting Trump Won't Ditch Them

Ford, Hyundai, other carmakers cranking up new EV battery factories while uncertainty looms over Biden-era subsidies for them

THE WALL STREET JOURNAL.

Redwood Materials establishing operations in Berkeley County with largest economic development announcement in state history

Four GOP senators resist IRA tax-credit repeal pv magazine

What to know: The new Ford BlueOval City plant poised to reshape West Tennessee

TENNESSEE LOOKOUT

SUPERCHARGING EDUCATION: Toyota Invests \$2 Million In North Carolina Schools



Red States to Reap the Biggest Rewards From Biden's Climate Package Bloomberg

Join Volta Foundation to gain access to critical resources and markets

MISSION

CHAMPIONING THE GROWTH OF THE BATTERY INDUSTRY

025 + 🚓

MARKET Sociod to

Scaled to 75,000 professionals and 200 membe companies

2024



ADVOCACY & EDUCATION

Introduced Women in Batteries, hosted first in-person conference, and launched Webinar programs

2023



GROWTH AND IMPAC

15 high impact projects reaching 50,000+ professionals globally

2022



GLOBAL REACH

Battery Forums entered Europe and Asia, creating regional focused dialogues around the world.

2021



FIRST BATTERY REPORT

The first State of Battery Report received 40,000+ views, widely cited and shared among academic, industry and financial audiences

2020



FIRST BATTERY BITS

Written first-hand by industry professional, this publication has developed to a staff of 10+ editors, accumulating 250,000+ views

2019



FIRST BATTERY BRUNCH

First in-person brunch was held in San Francisco with 10 members, which quickly became a series of virtual events for battery professionals.



VOLTA FOUNDATION



















PDF/SOLUTIONS"

























































































































♣ Gridmatic











J.P.Morgan



E^xponent







(DARASÎS



FLUENCE



FORGE



gelion





GPET



Honeywell



(II) IONIC

























































































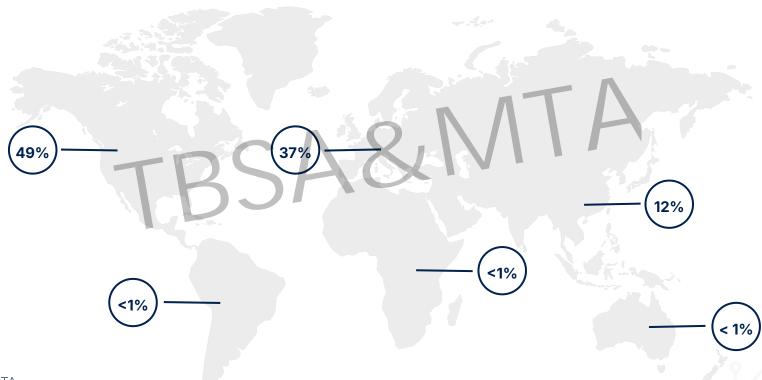
Volta Programs





35000 GLOBAL PROFESSIONALS

PROFESSIONALS' LOCATION BY CONTINENT





Volta Foundation Battery Report 2024: open access





Thank You

www.volta.foundation



Michael Liu Director of Research & Insights



Linkedin



微信



Xinghua Meng Assistant Secretary General 常州市电池技术协会



Linkedin







New definitions of prohibited entities under OBBB

Specified Foreign Entity

- Entities designated as a foreign terrorist organization by the Secretary of State
- Entities included on the specially designated nationals and blocked persons list maintained by the Treasury Department's Office of Foreign Assets Control
- Entities alleged by the Attorney General to have engaged in conduct for which a conviction was obtained under certain laws
- Entities determined by the Secretary of Commerce, in consultation with the Secretary of Defense and the Director of National Intelligence, to be engaged in unauthorized conduct that is detrimental to U.S. national security or foreign policy
- Chinese military companies operating in the United States
- Entities listed under the Uyghur Forced Labor Prevention Act
- Certain battery-producing entities

Foreign Controlled Entity

- The government of a covered nation (e.g., China, Russia, Iran, or North Korea)
- An agency or instrumentality of such government
- A citizen or national of a covered nation without U.S. status
- An entity organized under the laws of, or with a principal place of business in, a covered nation
- Entities controlled by any of the above, including subsidiaries (based on >50% ownership or other beneficial interest)

Foreign Influenced Entity

 An entity is classified as a "foreign influenced entity" if it meets at least one of the following conditions:

During the taxable year:

- A specified foreign entity has authority to appoint a board member, executive officer, or similar individual
- A single SFE owns ≥25%
- Multiple SFEs collectively own ≥40%
- One or more SFEs hold ≥15% of the entity's debt

During the prior taxable year the entity made an "applicable payment" to an SFE under an agreement that gives the SFE "effective control" over:

- Any qualified facility or energy storage technology, or
- The extraction, processing, or recycling of any critical mineral or production of an eligible component

