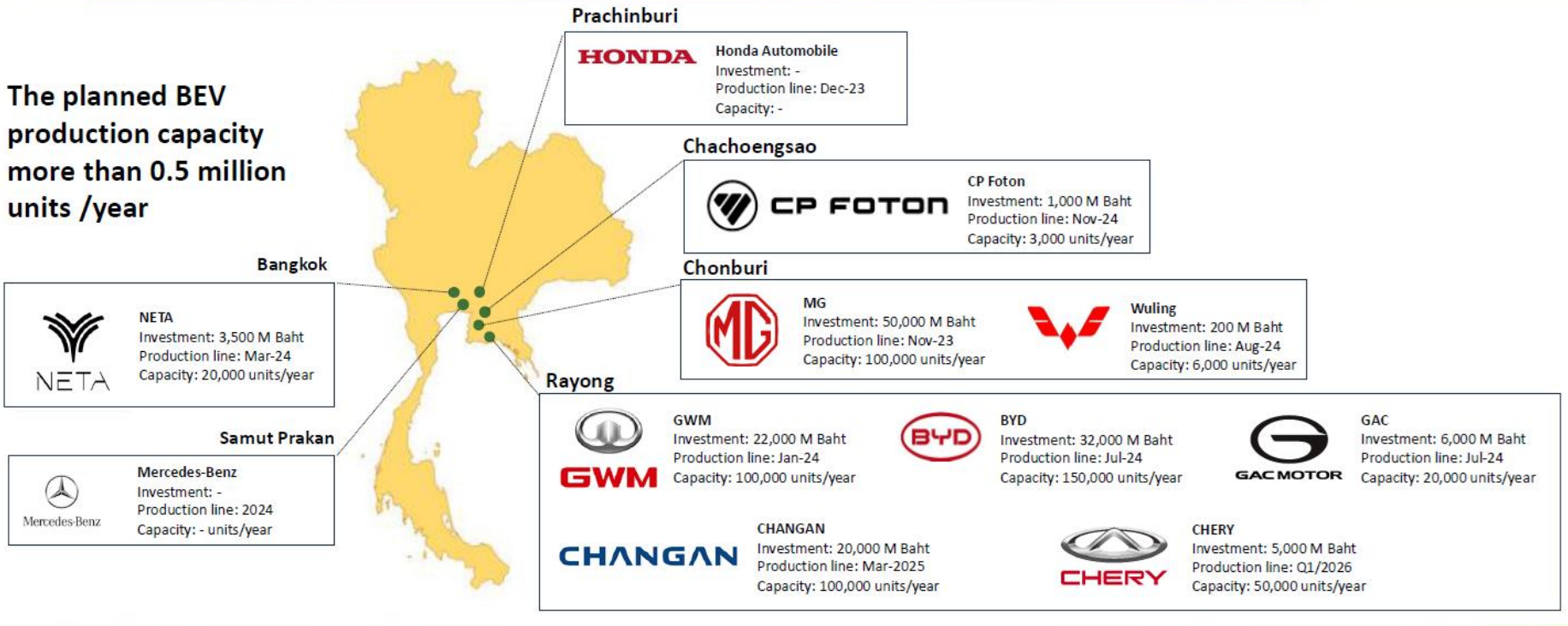
Can Chinese EV Investment contribute to Thailand's green transformation?

A starting point for more discussions

Ye Yuan, August 26 2025
Research fellow
Climate Finance Network Thailand
Center for Social Development Studies

- EV manufacturing investment in Thailand
- Changing Belt and Road Initiative focus
- Policy pointers

Thailand's EV sector has turned into a fiercely competitive market



Source: Shanghai Metal Market

Entry year	Company	Investment/production details
2012	SAIC Group (MG)	Joint venture with CP to establish SAIC-CP and build the Chonburi plant; production started in 2014 with annual capacity of 100,000 vehicles
2020	Great Wall Motors (Ora)	Fully acquired the factory in Rayong; production started in 2021 with initial capacity of 80,000 vehicles/year, increased to 120,000 vehicles/year in 2023
2022	BYD	Entered Thai market via complete vehicle imports; Rayong plant to start production in 2024 with annual capacity of 150,000 vehicles
2022	Neta Auto	Started production in January 2024
2023	GAC Motor	Rayong factory completed in July 2024
2023	Changan	Rayong factory planned to start production in 2025; Phase 1 capacity 100,000 vehicles/year
2024	Chery (Omoda & Jaecoo)	Rayong plant planned to start production in 2025
2024	Geely	Entered via complete vehicle exports; launching multiple sub-brands including Zeekr, and Radar
2024	Xpeng	Entered via complete vehicle exports; launching right-hand drive models including G6 and X9
2024	Leapmotor	Entered via complete vehicle exports

Source: Caixin

In August, BYD begins exporting EVs from its production base in Thailand for the first time.

So… why do Chinese companies come to Thailand?

Industrial strength

- Thailand has long been a regional powerhouse for automaking.

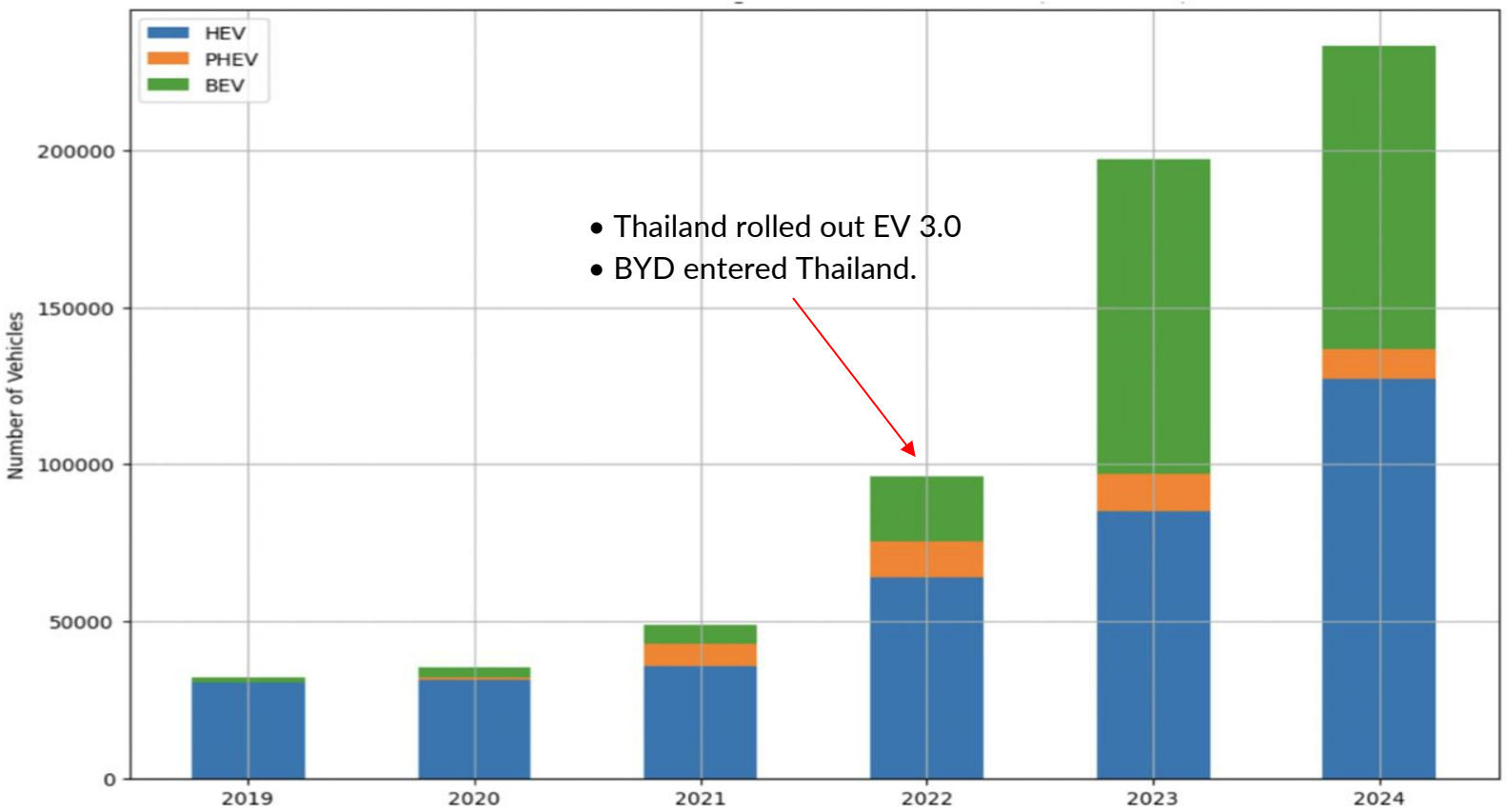
Policy support & subsidy

- **30@30**: By 2030, Thailand aims to achieve a 30% share of zero-emission vehicles (ZEVs) in total production and a 50% adoption rate domestically.

Trade frictions

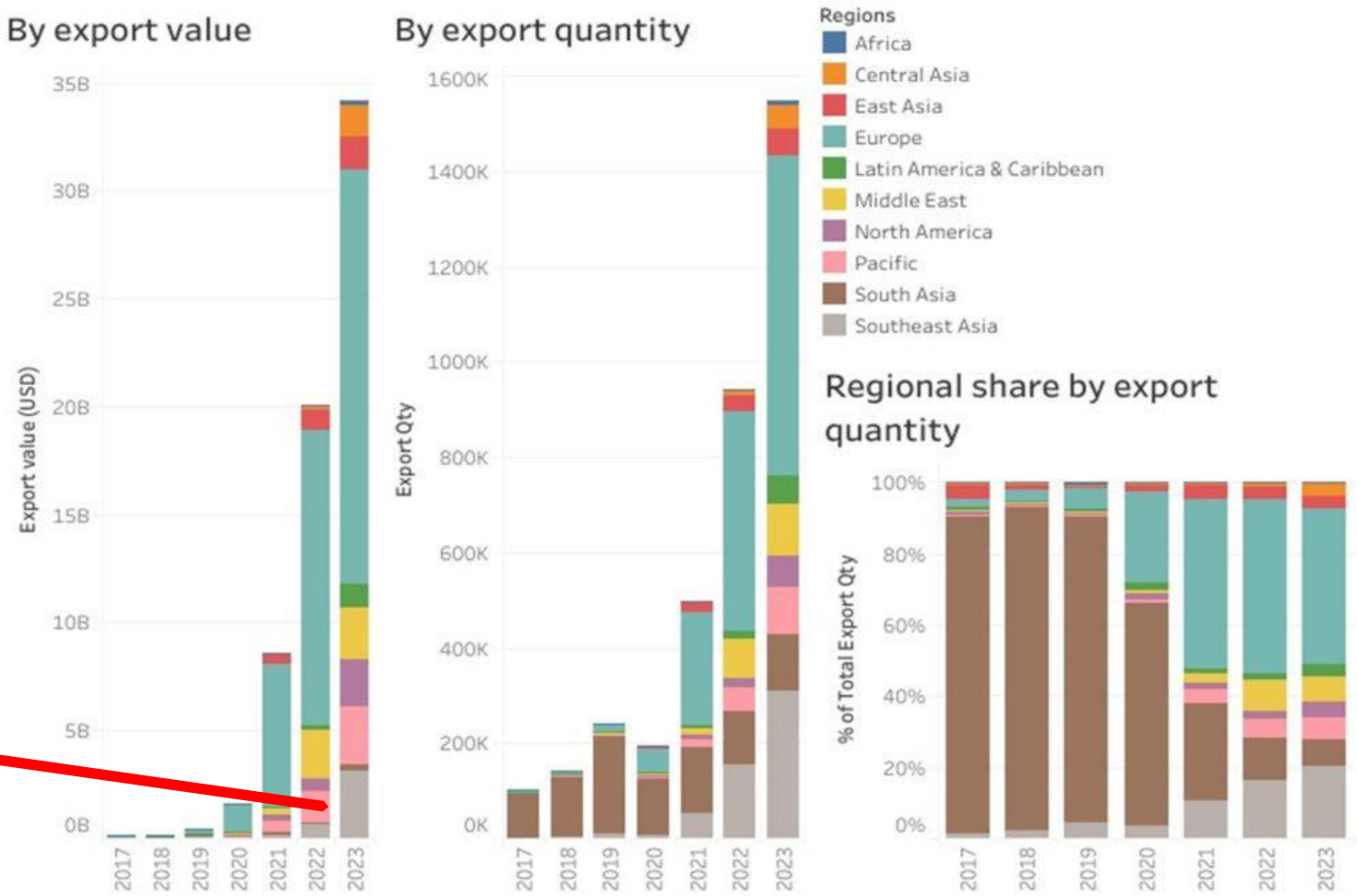
- By now, the US, Europe, and Japan have all taken measures to restrict imports of Chinese electric vehicles to their markets. Facing overcapacity and slim price margins at home, these EV makers need to diversify their markets.

Figure 1: Registered xEVs in Thailand, 2019-2024



Source: Department of Land Transport, Thailand

Solar PV, lithium-ion batteries & EVs now make China's 'New Three' exports.



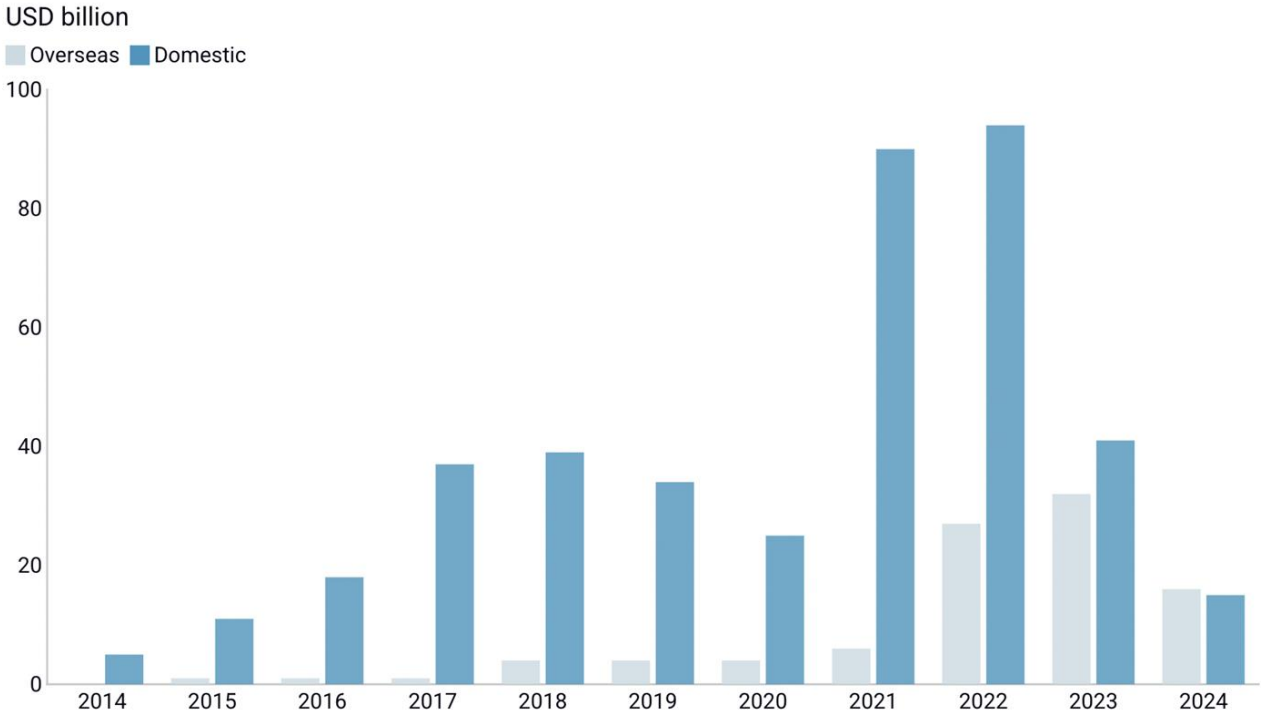
Explosive growth of export to SEA 2022-23

Source: Griffith Asia Institute

- BRI remains China's flagship project, now focusing on more on "green cooperation".
- China's growing green economy: in 2024, clean tech sectors contributed a record 10% of China's GDP.
- BRI financing represents just a small portion of China's overseas direct investments.

FIGURE 1

Value of announced Chinese manufacturing investment in the ZEV supply chain



Source: Rhodium Group China Cross-Border Monitor, Global Clean Investment Monitor. • Overseas investments include FDI only. All USD figures are historical. Data is preliminary.

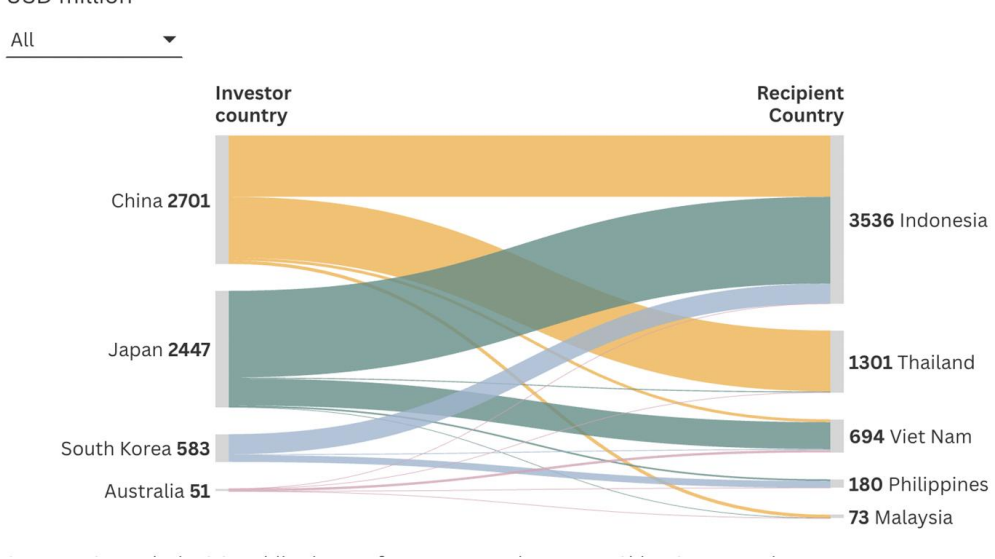
Opportunity for Thailand towards green economy

Economic opportunities: a major step to helping Thailand regain its place as a key regional manufacturing and export hub.

Neighbors including Indonesia and Vietnam are all accelerating efforts to forge industries centered around EVs.

Investors look for reassurance of policy signals. Intentional & transparent policy can signal to investors that Thailand is committed to energy transition.

Fig. 1. Bilateral public financing for clean energy from Australia, Japan, South Korea and China to selected ASEAN countries (2013-2023)



Source: Zero Carbon Analytics

Thailand plans NDC 3.0 to achieve Net Zero emissions by 2050.

By 2035
Target Reduction
(Exclude LULUCF)

109.2 $MtCO_2e$ (28.8%)
from 2019

Thailand aims to reduce its emissions to 270.0 $MtCO_2e$ by 2035, a decrease of 109.2 $MtCO_2e$ from 2019 levels. This target reflects Thailand's best efforts to align with the 1.5°C pathway. By 2035, net emissions are projected to reach 152 $MtCO_2e$, representing a net reduction of 135.2 $MtCO_2e$, or 47%, compared to 2019, in line with the global 1.5°C goal.

	Energy	Transport	IPPU	Agriculture	Waste
Domestic Implementation **76.4 $MtCO_2e$ (70%)** *Unconditional Target*	**48.1** $MtCO_2e$ (63.0%)	**16.6** $MtCO_2e$ (21.7%)	**1.5** $MtCO_2e$ (2.0%)	**5.1** $MtCO_2e$ (6.7%)	**5.1** $MtCO_2e$ (6.7%)
International Support **32.8 $MtCO_2e$ (30%)** Conditional Target	**20.0** $MtCO_2e$ (61.0%)	**6.0** $MtCO_2e$ (18.3%)	**2.7** $MtCO_2e$ (8.2%)	**2.5** $MtCO_2e$ (7.6%)	**1.6** $MtCO_2e$ (4.9%)

Source: DCCE (2024). Presentation of NDC 3.0 Public Consultation.

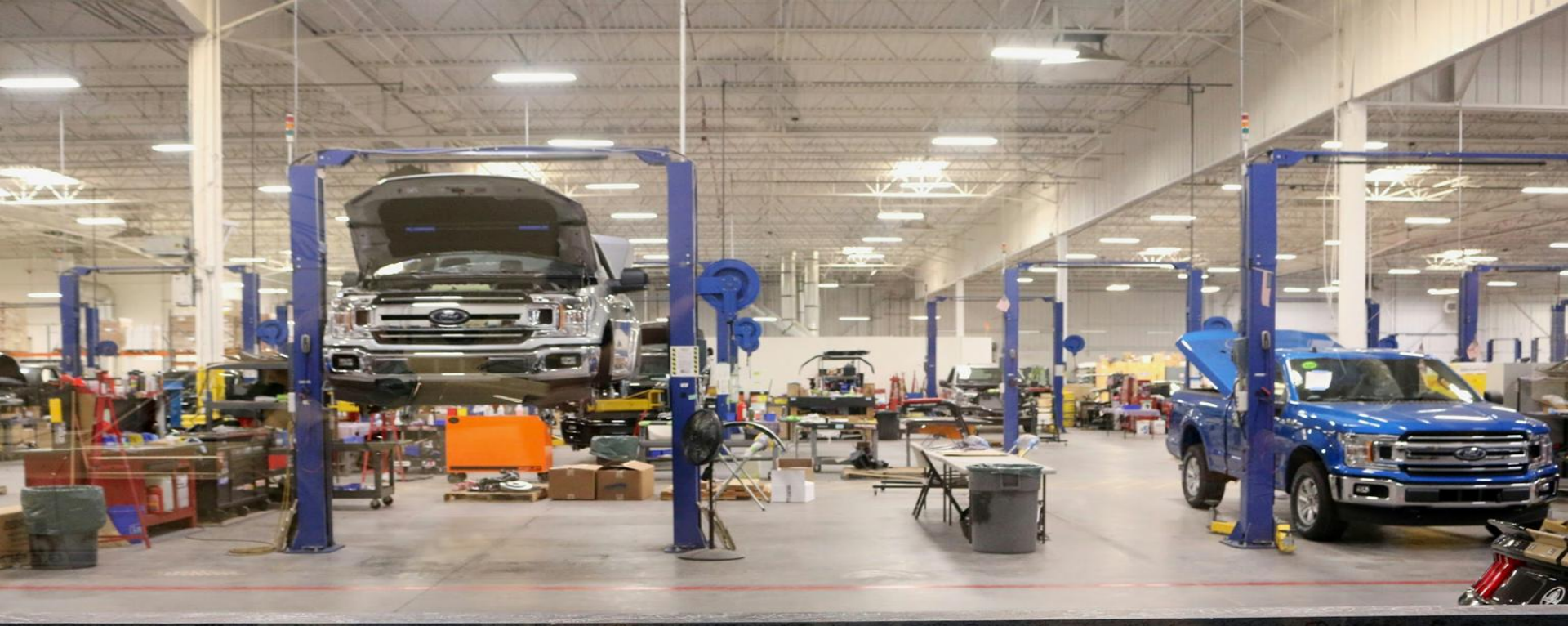
Lessons learned from China’s EV growth

EV playbook in summary

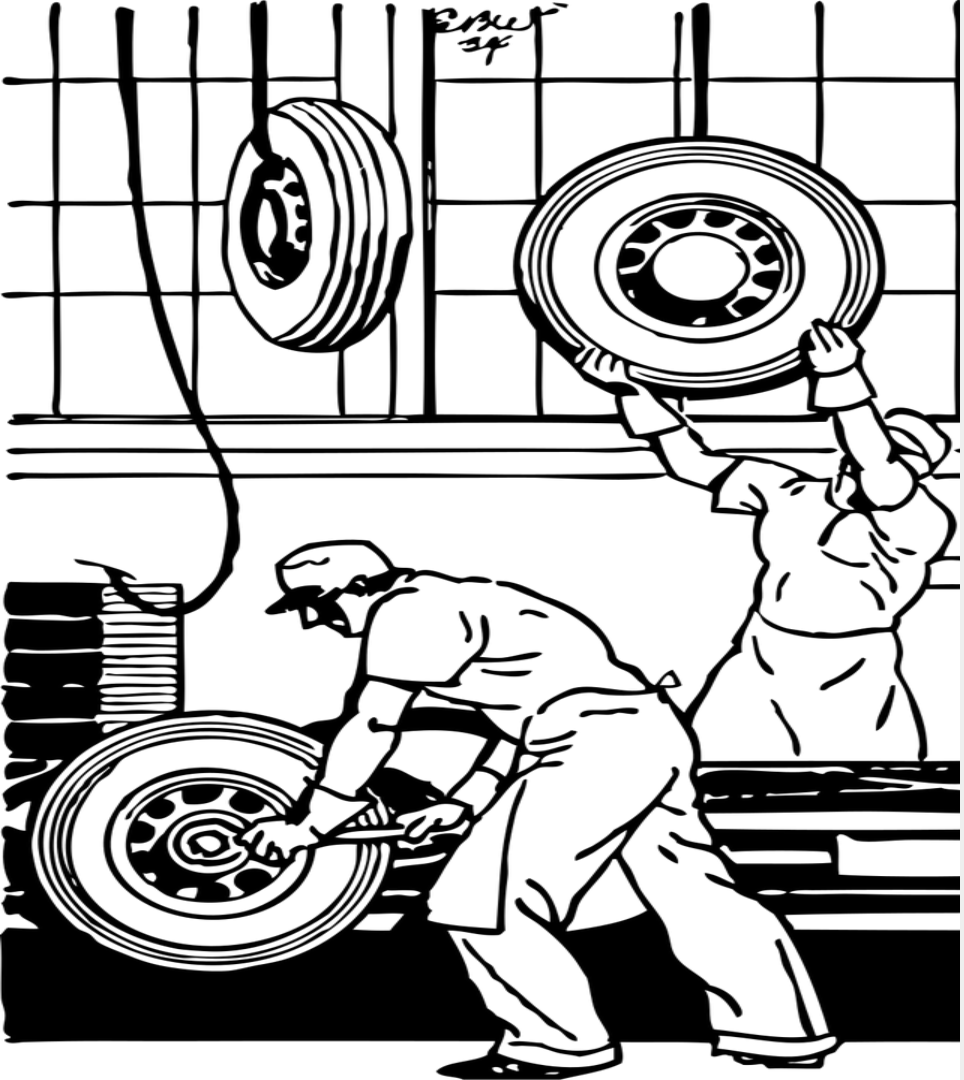
- Fast-mover advantage
- The product of technocratic responses to discrete issues
- The deep infrastructure & manufacturing capacity built on “self-sufficiency”
- Caution: Overcapacity, “involution” & unhealthy price wars

Supply chain management

- Battery recycling & lifecycle emissions management
- Access to renewable power
- Extractives



Automotive represents 11-15% of Thailand's national GDP, employing around 750,000 workers.



Labor challenges

- BYD, GMW, GAC Aion etc have invested in talent cultivation by partnering with local technical schools.
- ICE factories are affected by economic loss.

Pressure facing Thai parts suppliers

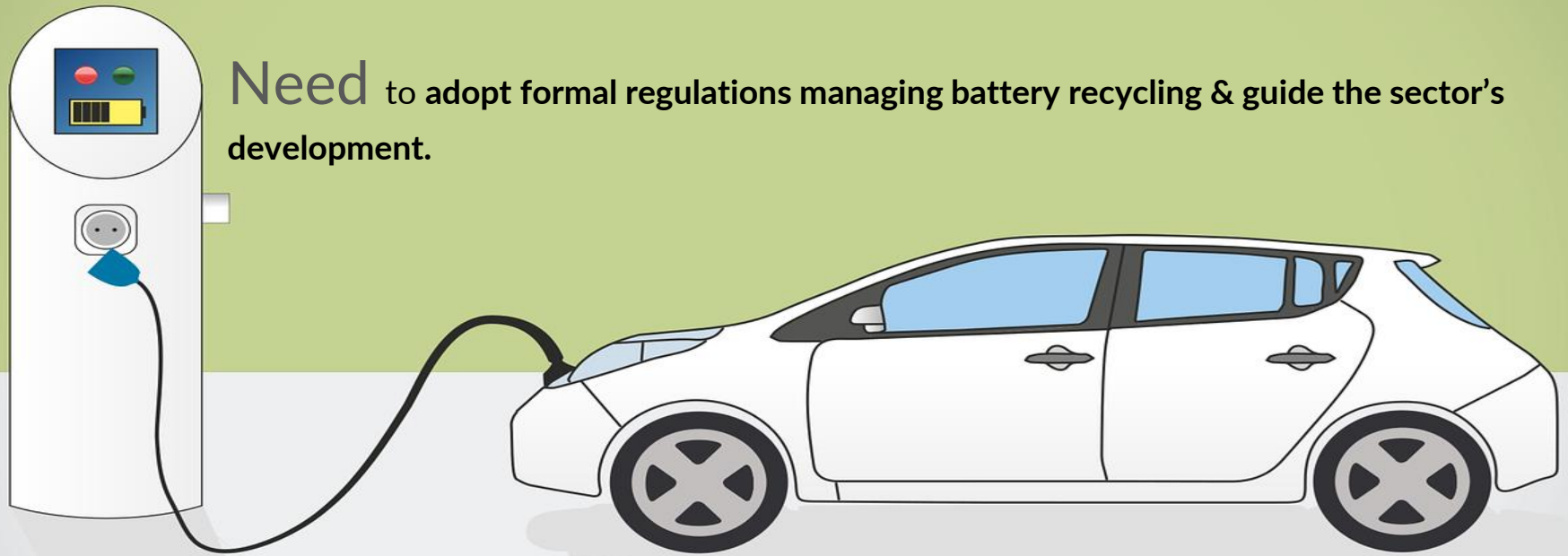
- Many Tier-2 & Tier-3 Thai suppliers are facing survival pressure.
- Chinese EV companies often have an established supply chain ecosystem and are cost-sensitive.

Oversupply looms

- Panned production capacity in Thailand now exceeds 500,000 units a year, far more than current demand for EV.

Need to encourage EV plants and charging stations **access clean energy & green power**.

Need to **adopt formal regulations managing battery recycling & guide the sector's development.**



Need to **set clear definitions for local content procurement** to ensure real local gains.

Need to **involve more inclusive governance with community participation.**

Thank you for listening :)