

Powering Up

China's Global Quest for Electric Vehicle Dominance

LU+



About **Lux Capital**

Lux Capital is a New York- and Silicon Valley-based venture capital firm investing in companies on the edge of scientific and technological breakthroughs



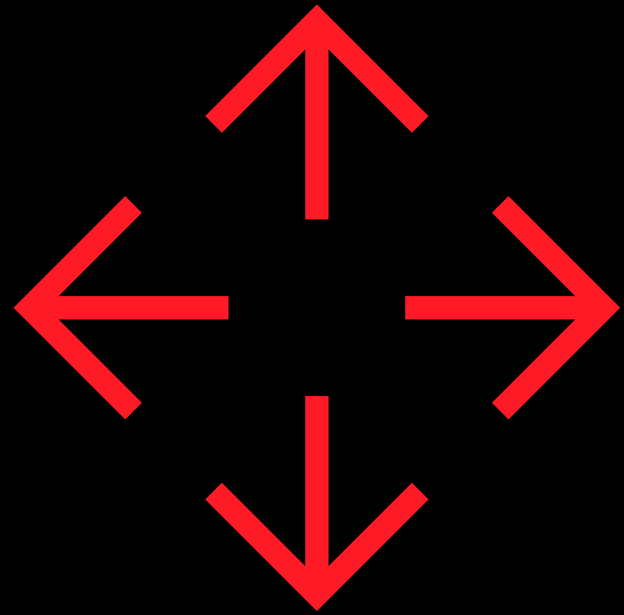
With 300 portfolio companies and more than 30 professionals, we have the versatility to invest at any stage, from \$100,000 to \$100 million

What is Riskgaming?



CHARACTER-DRIVEN STRATEGY

Players take on the role of richly-detailed characters who can strategically build or break trust with each other throughout the game.



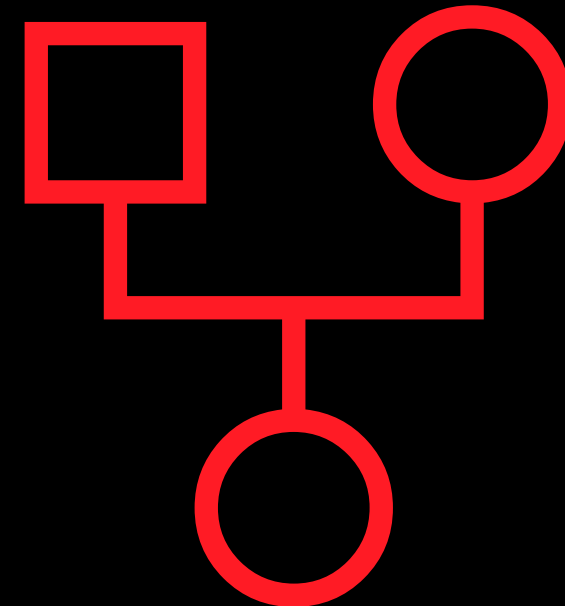
AUTONOMOUS DECISION-MAKING

All players select their actions independently of each other during a scenario, reflecting the autonomy of real-world decision-makers.



EMERGENT BEHAVIOR

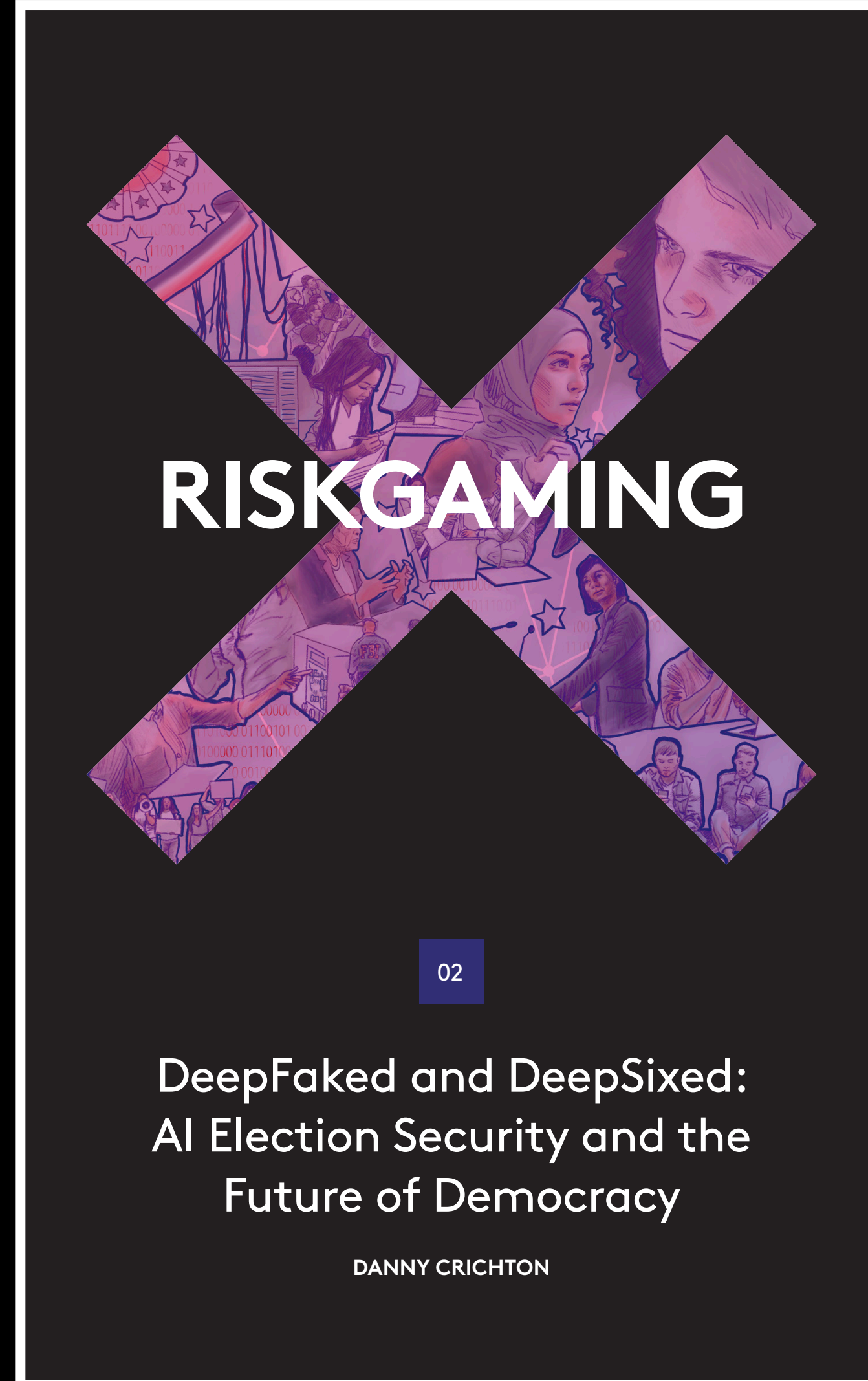
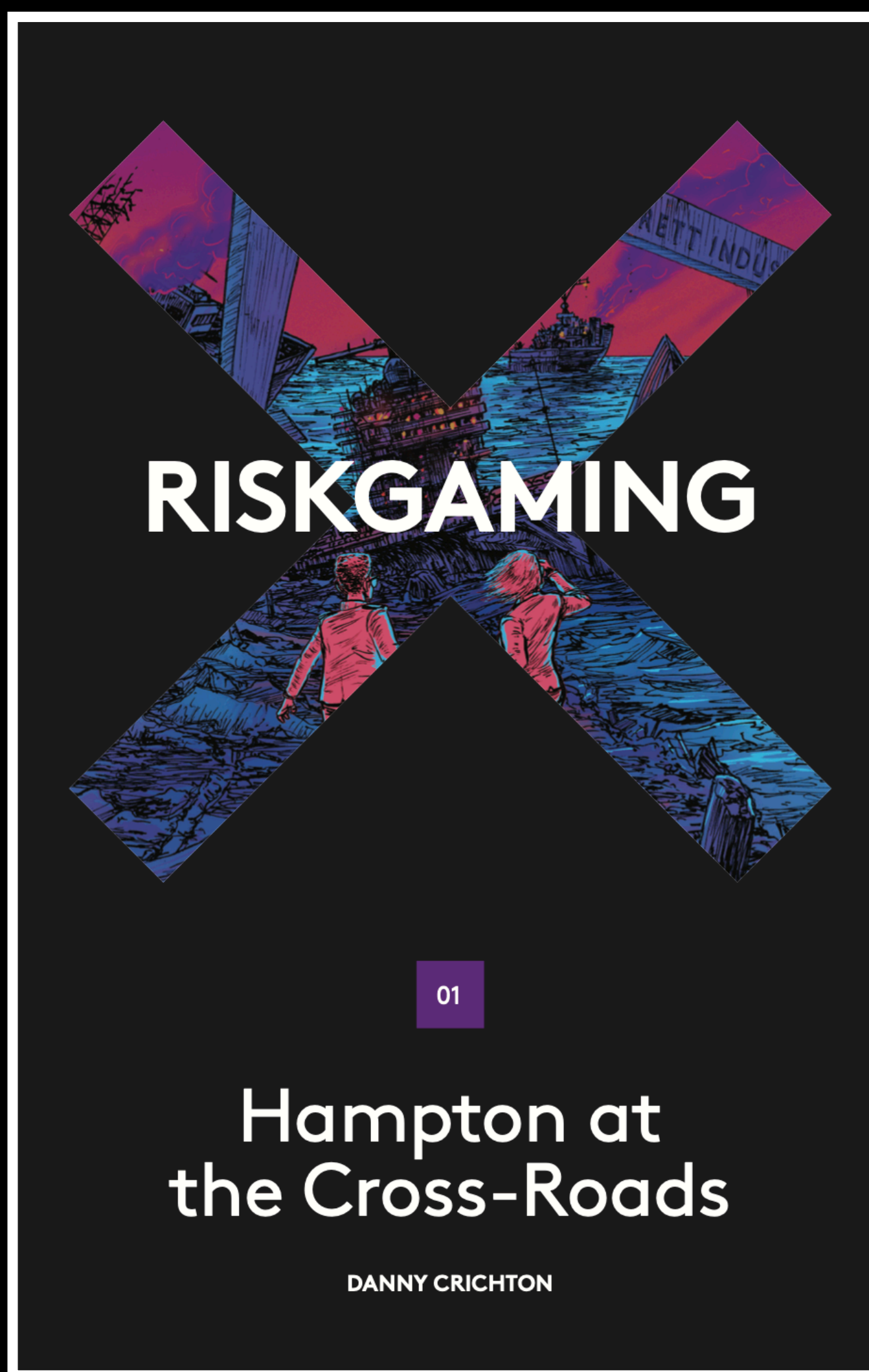
Players make strategic decisions influenced by personal and external incentives, allowing for spontaneity and surprise.



PROFOUND EXPERIENCES

Each scenario faithfully models the real world, allowing players to experience an alternate reality that informs our own.





+ AI & National Security, Water Security in Arizona, Xenotransplantation and more



RISKGAMING

01

Hampton at the Cross-Roads

DANNY CRICHTON



RISKGAMING

03

Powering Up: China's Global Quest for Electric Vehicle Dominance

IAN CURTISS



Meet the Designer

Ian Curtiss

- Founder of CSquared Partners
- Designs games, researches and advises on the interaction of geopolitics, innovation and corporate strategy
- Six years based in Beijing working and researching US-Chinese business and politics, including a master's degree from Peking University and fluency in Mandarin
- Four years overseeing Chinese business programs in China
- Nearly 20 years in government relations, strategy consulting, and executive education
- Associate Faculty at Arizona State University
- Over 25 years of gaming experience

Context



Bloomberg Businessweek

November 2024



CHINA'S EV OFFENSIVE

Why BYD's Stella Li
terrifies the auto industry

BYD Is Winning the Global Race to Make Cheaper EVs

By Gabrielle Coppola and Danny Lee

BUSINESS | AUTOS

What Scared Ford’s CEO in China

Jim Farley is changing strategy to combat what he calls an ‘existential threat’ from China’s electric carmakers

By [Mike Colias](#) [Follow](#)

Updated Sept. 14, 2024 at 12:00 am ET

 SAVE  SHARE  TEXT

1431 RESPONSES 

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Jim Farley had just returned from China. What the [Ford Motor](#) F 0.00% ▲ chief executive found during the May visit made him anxious: The local automakers were pulling away in the electric-vehicle race.

In an early-morning call with fellow board member John Thornton, an exasperated Farley unloaded.

The Chinese carmakers are moving at light speed, he told Thornton, a former Goldman Sachs executive who spent years as a senior banker in China. They are using artificial intelligence and other tech in cars that is unlike anything available in the U.S. These Chinese EV makers are using a low-cost supply base to undercut the competition on price, offering slick digital features and aggressively expanding to overseas markets.

“John, this is an existential threat,” Farley said.

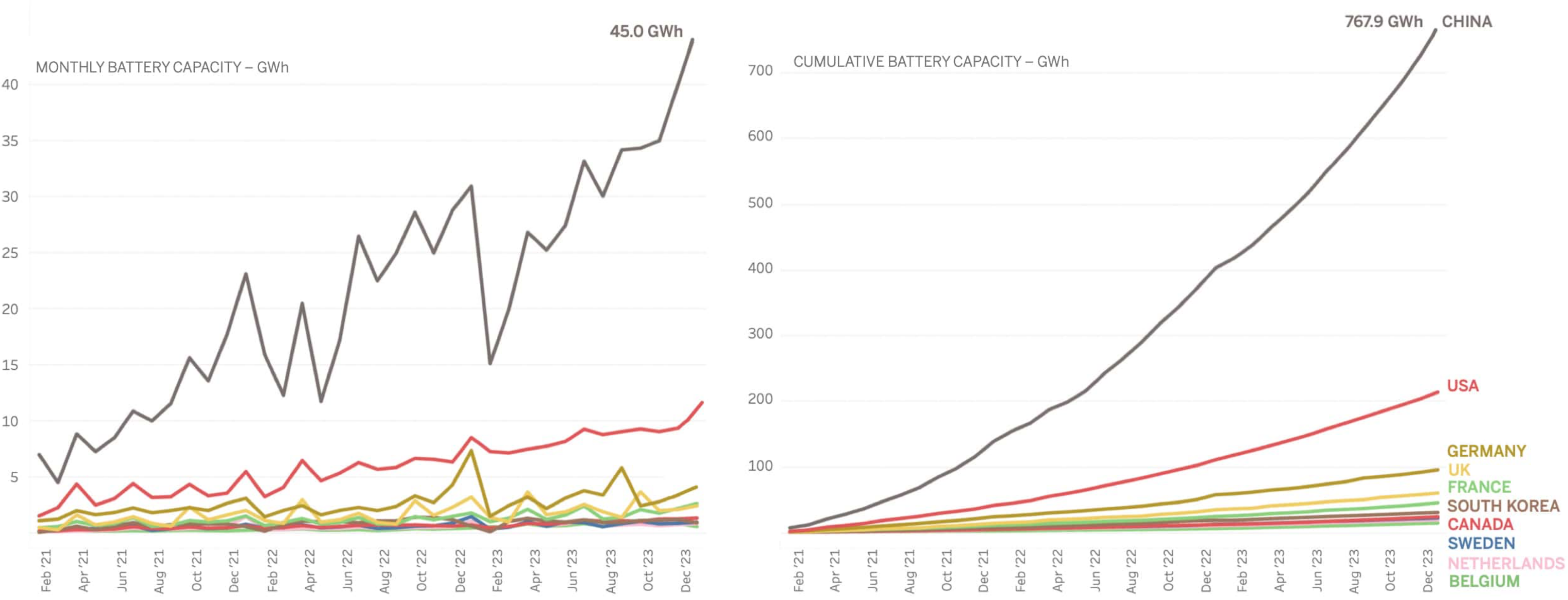
“John, this is an existential threat,” Farley said.

China is all-in on EVs

CHINESE EVs PULL AWAY FROM RIVALS

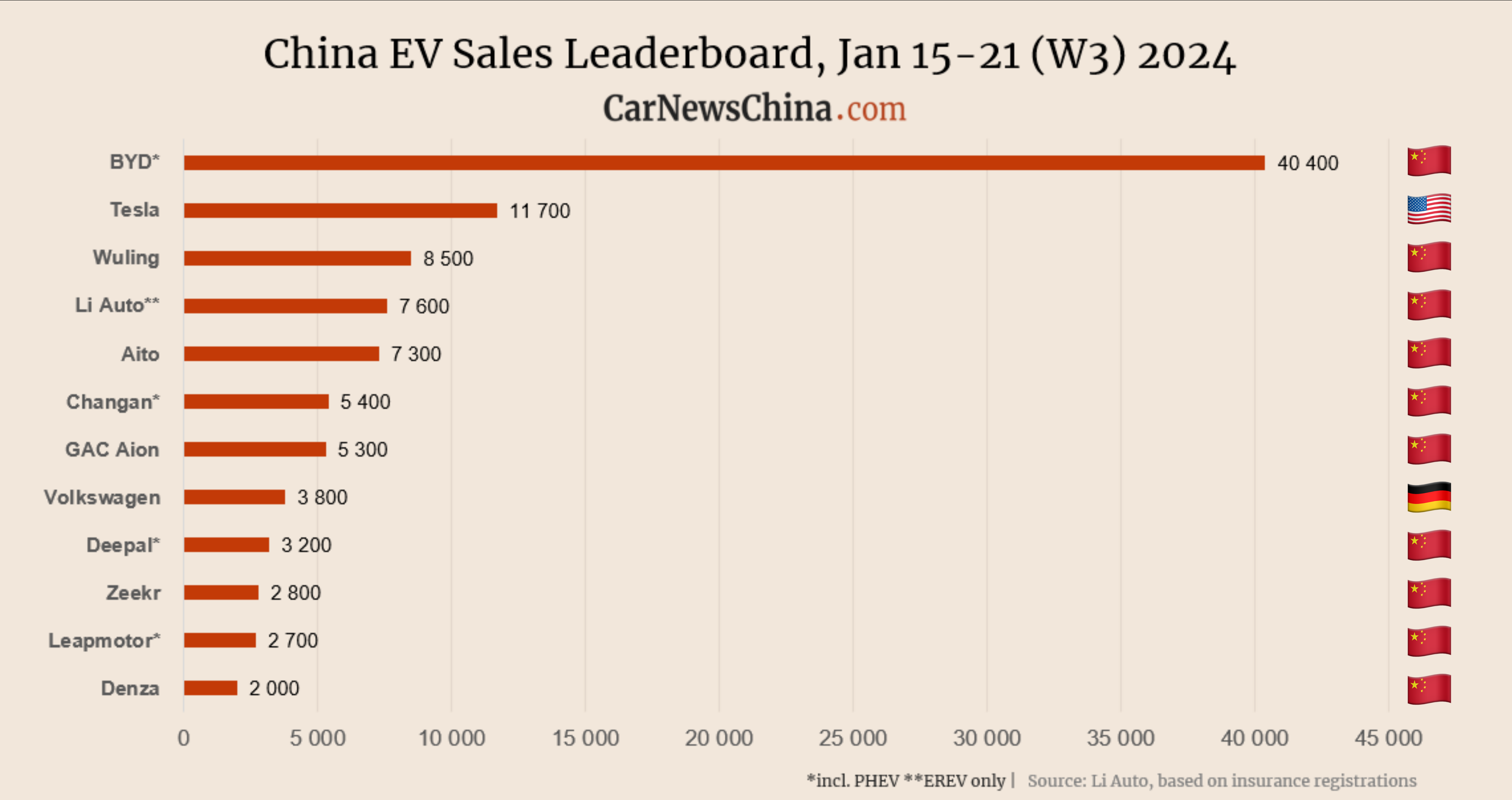


Combined battery capacity of all EVs, including hybrids, sold in top 10 markets 2021– 2023 (GWh)

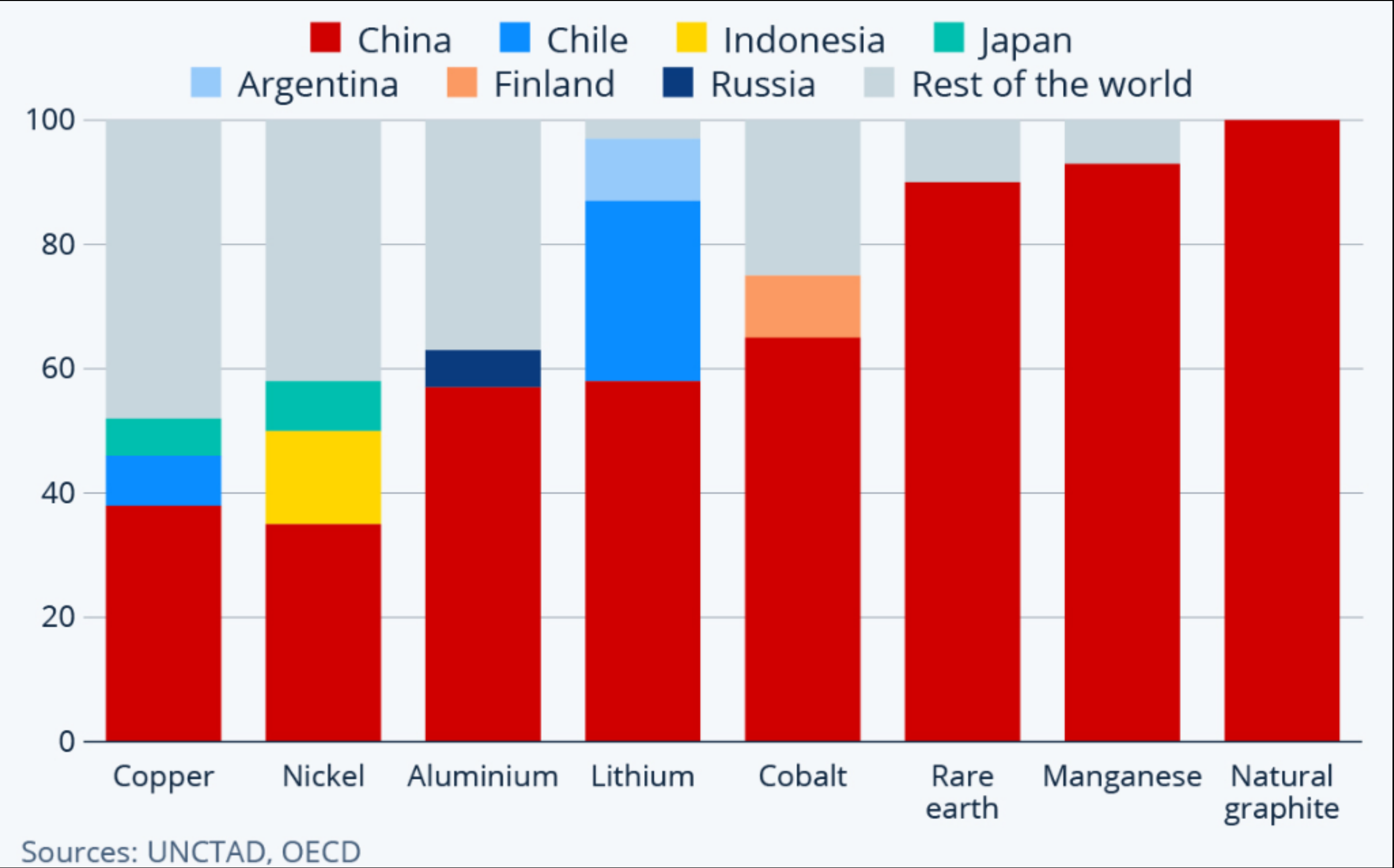
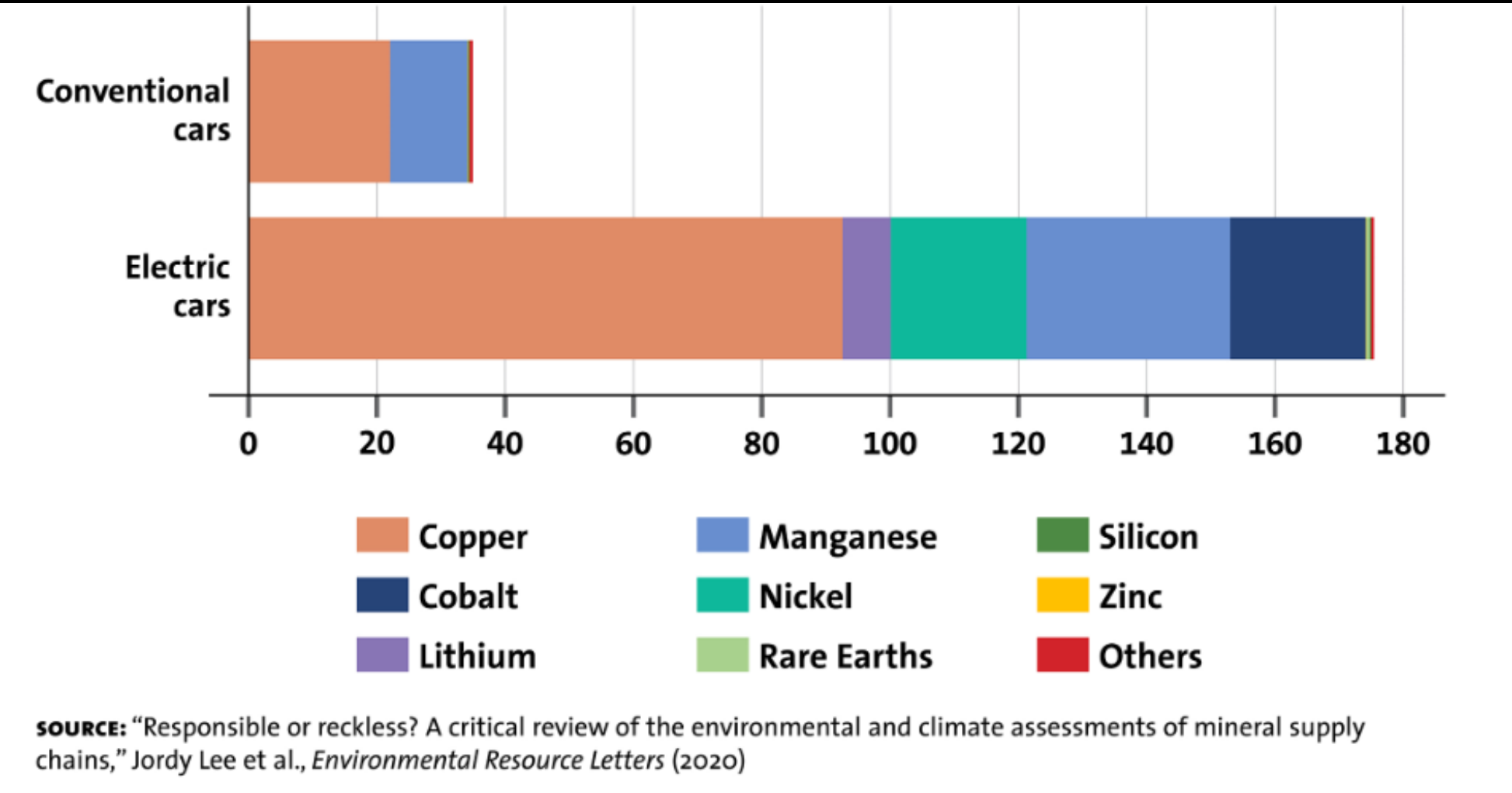


Source: Adamas Intelligence EV Battery Capacity and Battery Metal Tracker

Chinese brands are seizing the Chinese market



China has monopolized the EV supply chain



The Big Read German economy

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Is Germany's business model broken?

All three of the country's major industries are in crisis, and the economy is flatlining. Are politicians finally waking up?

An upended relationship with China is at the root of some of Germany's current woes. The Asian giant's transformation from lucrative import market to producer and exporter in its own right is stretching some of the mainstays of the German economy beyond breaking point. While China gobbled up 8 per cent of all German exports in 2020, this year the figure is likely to be 5 per cent. "Instead of importing German capital goods, Chinese manufacturers have turned into competitors," says DWS economist Elke Speidel-Walz.



© FT montage/Getty Images

German Woes

China Has a New Playbook to Counter Trump: 'Supply Chain Warfare'

A series of swipes at American companies show how China could take the initiative in a new trade war, using its economic dominance to exact pain.

Listen to this article · 7:32 min [Learn more](#) [Share full article](#)



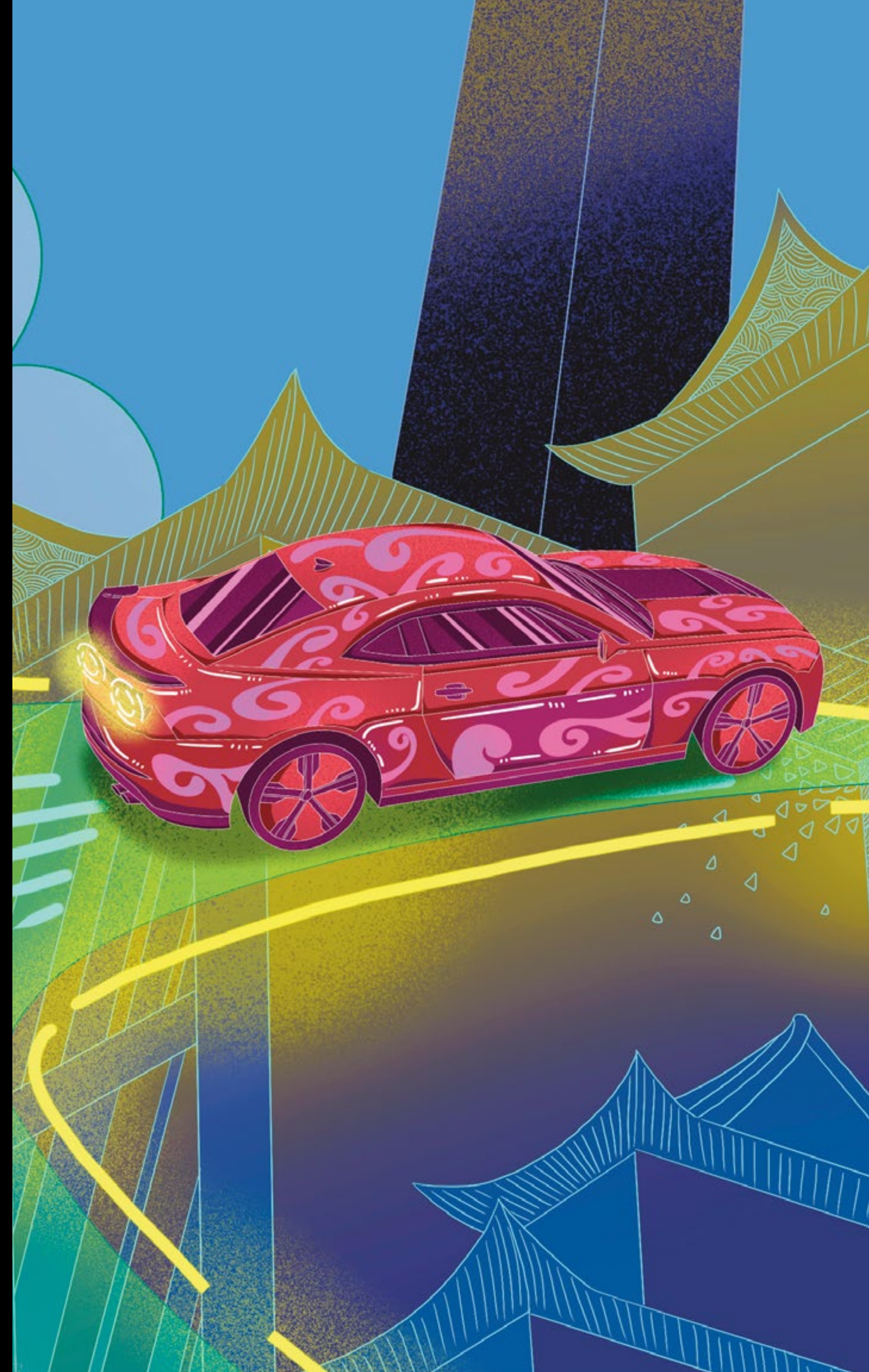
Skydio offered autonomous drones free of China's supply chain risks. However, days before the U.S. election, Chinese sanctions cut off its vital battery supplies, exposing its vulnerabilities. Laura Morton for The New York Times

American Woes

Collectively, the strategy marks a calculated shift to counter Mr. Trump's expected policies when he takes office. The fallout could significantly disrupt operations for American companies.

That raises the stakes for businesses and the economy as the new U.S. administration readies its first salvo in what could become a more ruthless second round of trade conflict between the United States and China.

Gameplay



Three Learnings



Auto industry and
EV transition



Chinese political
economy



New global trade
war

Preliminaries

Chatham House "Plus": No one should attribute a quote to any specific individual

Everyone is role-playing other characters and not representing themselves

Everyone here plays a character different from their day job

The goal is to learn a different way of thinking

Fictional Story

While Powering Up is modeled after real life, all companies and events that take place are strictly fictional

Game Structure

Powering Up takes place over 6-7 scenes, with each scene representing one fiscal quarter (3 months) of time

All players have visible victory conditions, and some players have hidden bonuses and victory conditions

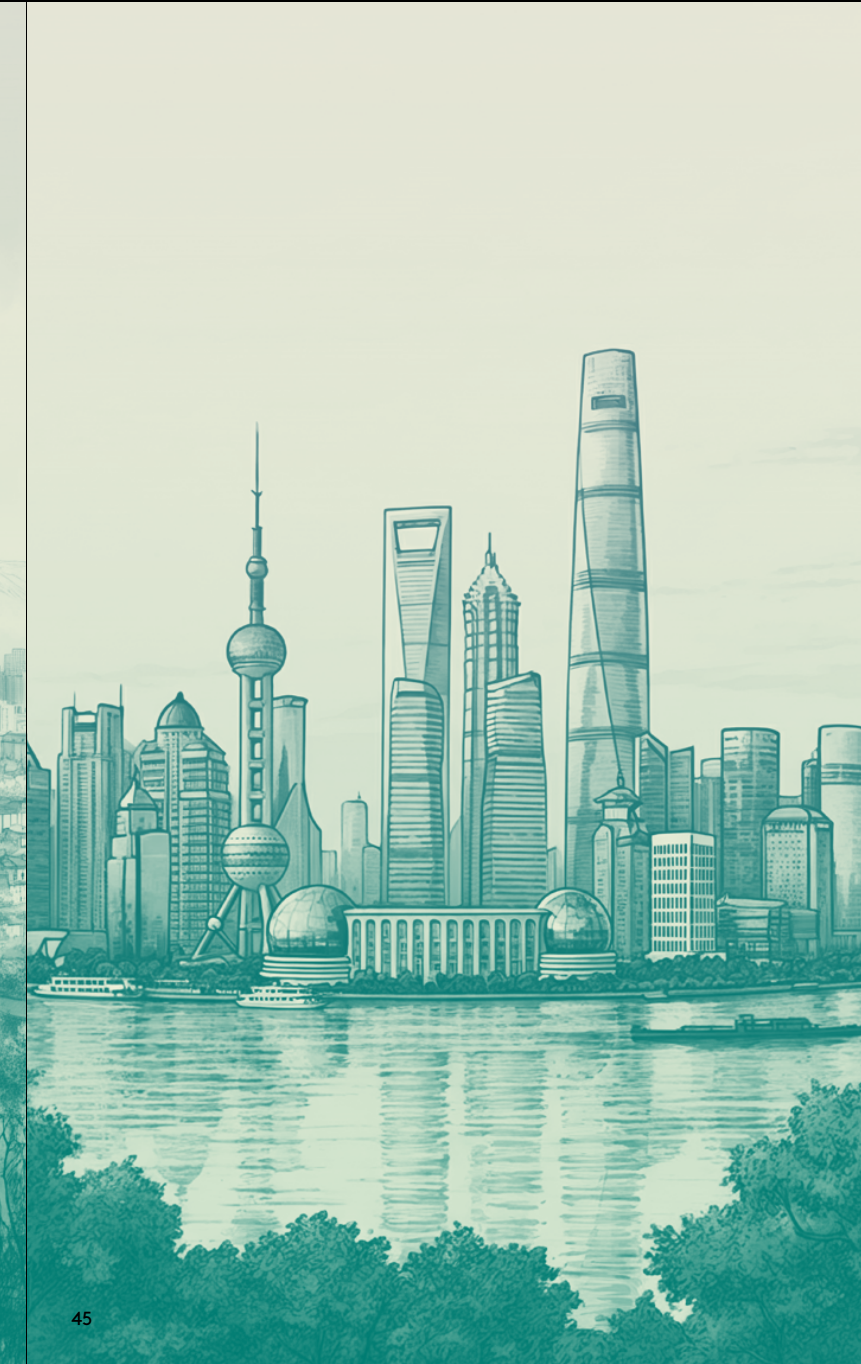
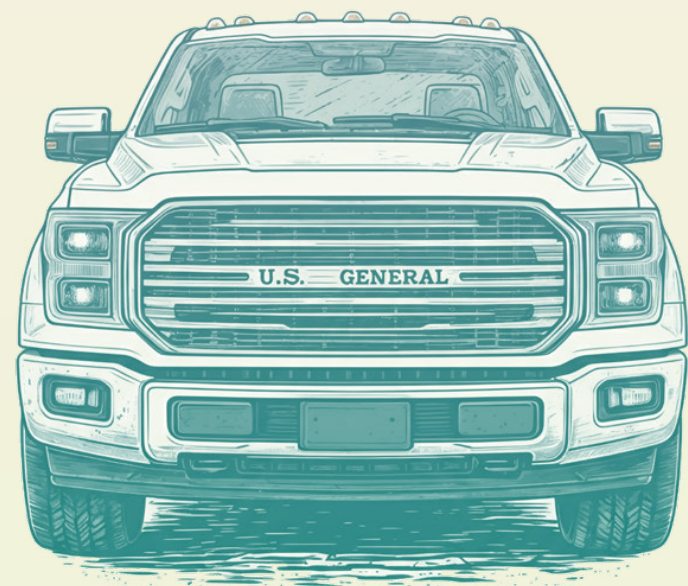
The **highest score wins the game**. Points range 10-25 with an average of 18

Six Characters

Automakers

Vice Mayors

Consultant



Currencies

Capital & Retained Earnings



\$1B Money

Only Firms use capital

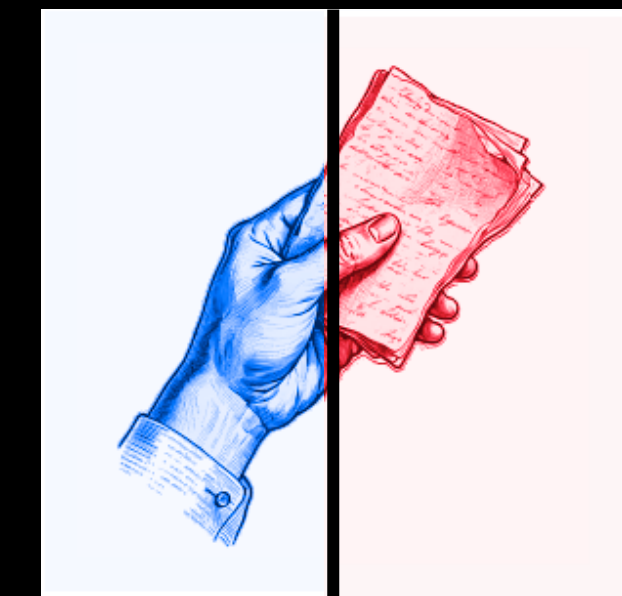
Social Capital



Influence

*Only valuable if
shared with others*

Information(s)



Knowledge and Data

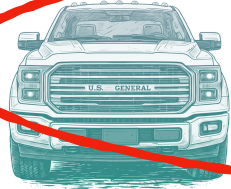
*Important to everyone
but in different ways*

Public Board

Currencies

5 TO START	0 TO START	2 TO START	1.5 TO START
 US/EU INFORMATION 1 PER SCENE	 CN INFORMATION	 SOCIAL CAPITAL	 CAPITAL 1 PER SCENE

Character



PATTY/PATRICK WONG
US GENERAL, CHINA PRESIDENT

Use up to 3 months per scene:

UNLIMITED	TAKES 1 MONTH	TAKES 2 MONTHS
Give ● ● Information to Foreign Consultant	Give ● ● Information to Chengdu and Shanghai Vice Mayors	Give ● Capital to Chengdu and Shanghai Vice Mayors
Give ● Social Capital to Foreign Consultant	Shanghai Car Company China R&D	Headquarters Portfolio

Transactions

Public
Victory Conditions

 VICTORY CONDITIONS:

☐ Gain as much Revenue and US/EU Market Share Points as possible

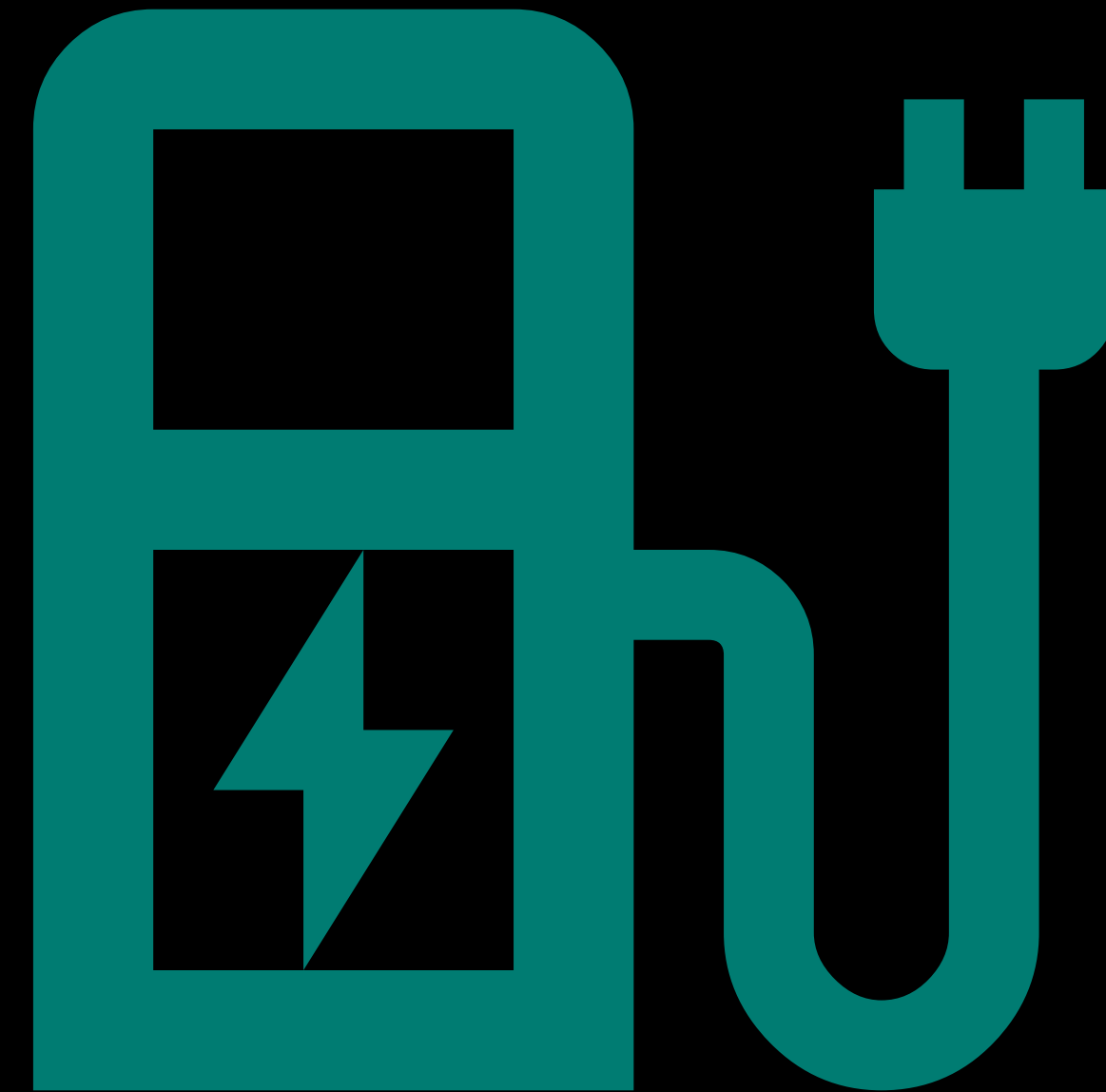
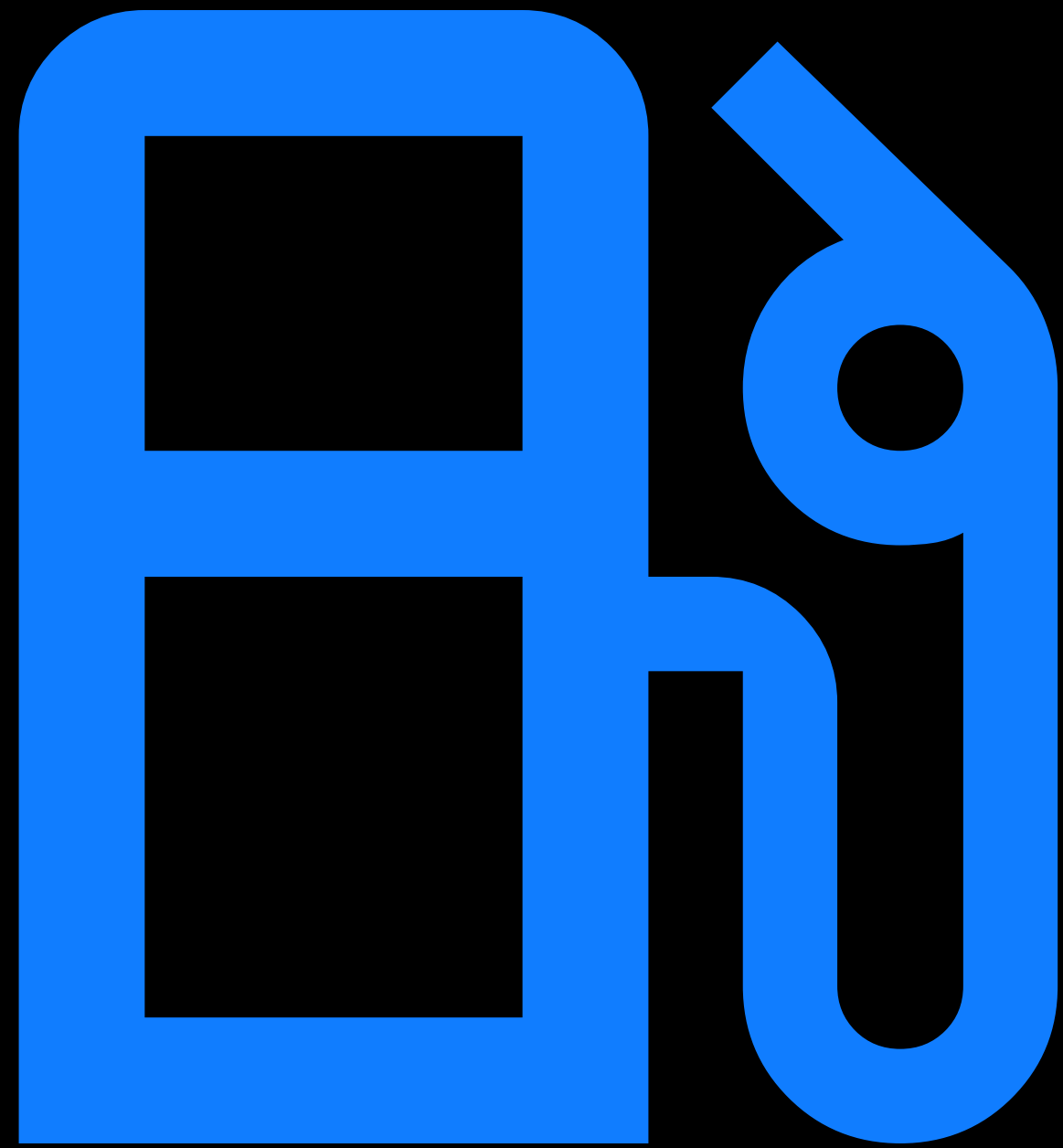
☐ Make at least 1 investment in China

Transactions

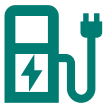
5 TO START	0 TO START	2 TO START	1.5 TO START
UNLIMITED	TAKES 1 MONTH	TAKES 2 MONTHS	
Give ●● Information to	Give ●● Information to	Give ● Capital to	
Foreign Consultant	Chengdu and Shanghai Vice Mayors	Chengdu and Shanghai Vice Mayors	
Give ● Social Capital to	Shanghai Car Company	Headquarters Portfolio	
Foreign Consultant	China R&D		
★ Transactions occur <u>during</u> the scene Time is borne by player <u>initiating</u> the transaction			

🏆 VICTORY CONDITIONS: ☐ Gain as much Revenue and US/EU Market Share Points as possible ☐ Make at least 1 investment in China

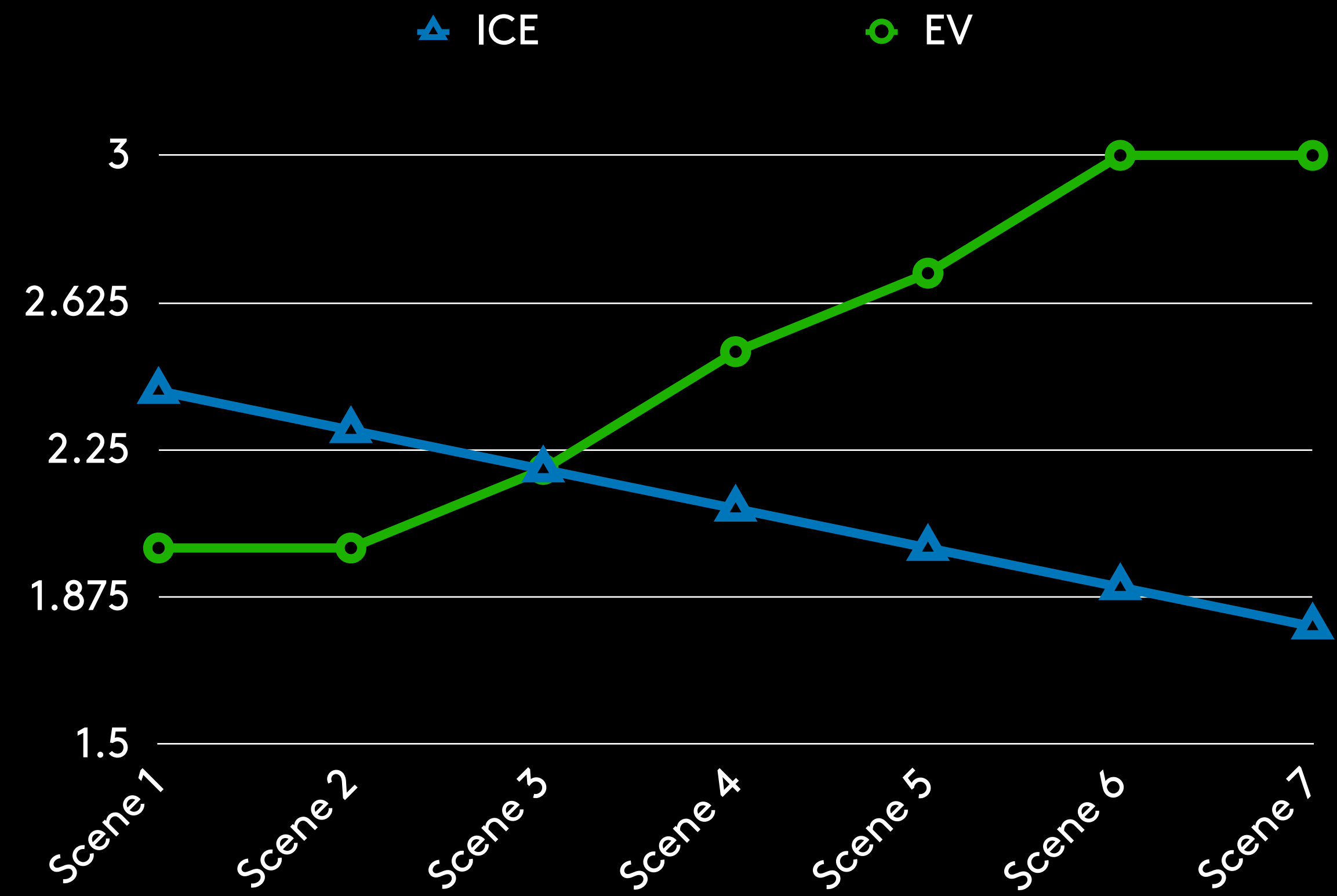
Investments



ICE to EV Transition

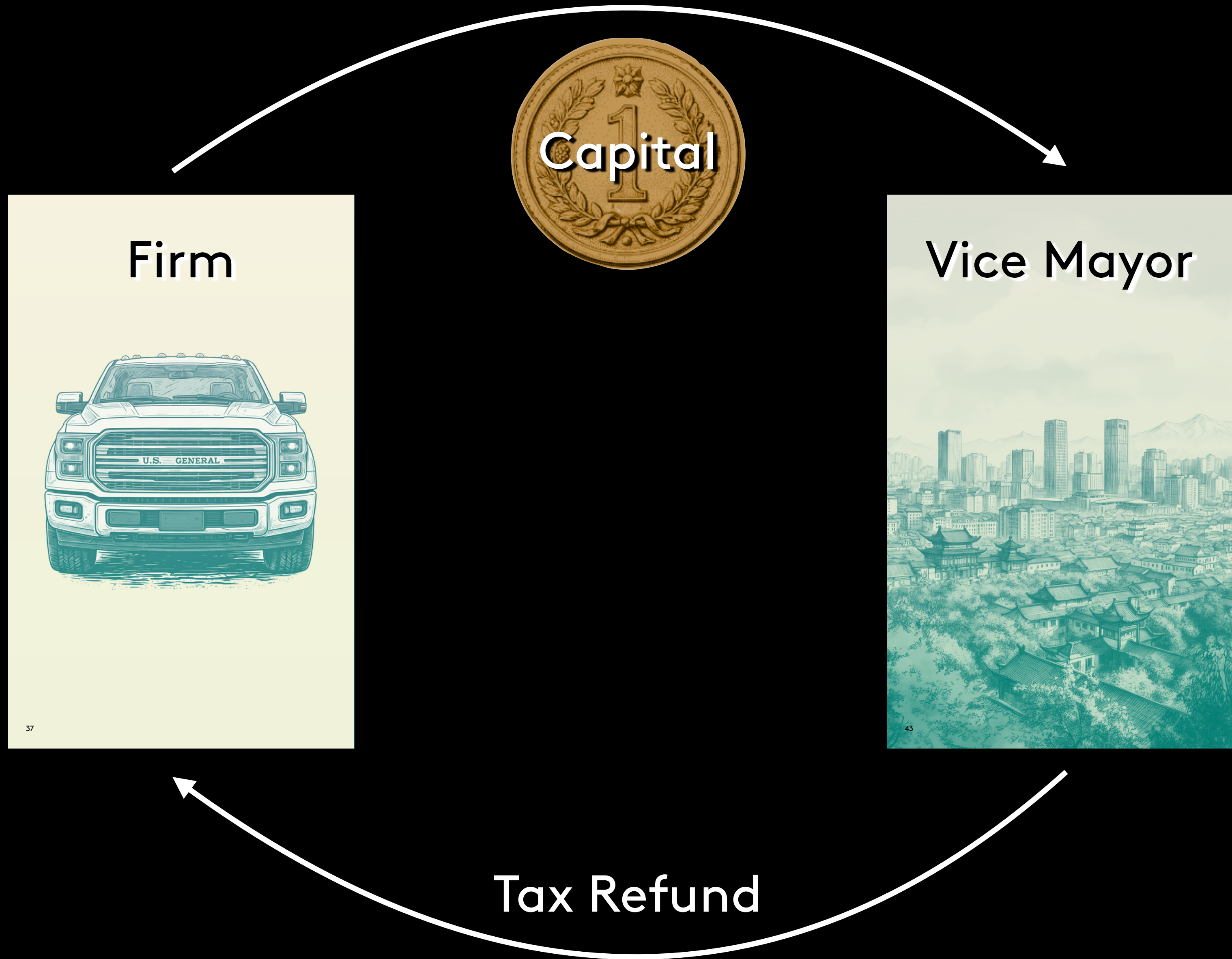
	EXPECTED CHINA REVENUE MULTIPLIER						
	SCENE 1	SCENE 2	SCENE 3	SCENE 4	SCENE 5	SCENE 6	SCENE 7
 ICE	2.4	2.3	2.2	2.1	2.0	1.9	1.8
 EV	2	2	2.2	2.5	2.7	3	3

Firm Private Board



Every Investment must be for
either ICE or EV

Investments



Investments

		TAX REVENUE GAINS FROM INVESTMENT					
		YOU GIVE 0%	YOU GIVE 20%	YOU GIVE 40%	YOU GIVE 60%	YOU GIVE 80%	YOU GIVE 100%
IF THEY INVEST	0.5 CAPITAL	0.5	0.4	0.3	0.2	0.1	0
	1 CAPITAL	1	0.8	0.6	0.6	0.2	0
	1.5 CAPITAL	1.5	1.2	0.9	0.6	0.3	0
	2 CAPITAL	2	1.6	1.2	0.8	0.4	0

Vice Mayor Private Board

Firm Revenues

Revenues are calculated by:

1. Investments into Vice Mayors
2. Revenue Multipliers by ICE and EV
3. China R&D

TAKES 1 MONTH

Give ●● Information to

Chengdu and Shanghai Vice Mayors

Shanghai Car Company

China R&D

Special Investment: Joint Venture

One Joint Venture is allowed in the entire game between a Foreign Firm (US General or Autobauer) and the Shanghai Car Company

Requirements

1. The Foreign Firm and the Shanghai Car Company give Capital to the same Vice Mayor and publicly agree it's a Joint Venture.
2. Foreign Firm must give Information to the Shanghai Car Company in the same Scene.

Global Market Share

Firms have Market Share in the United States and Europe

US General/
Autobauer

Shanghai Car Company

TAKES 2 MONTHS

Give ● Capital to

Chengdu and Shanghai Vice Mayors

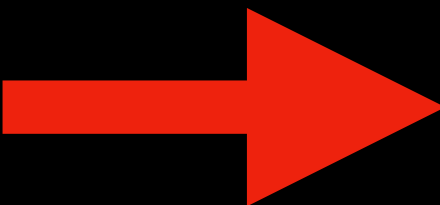
Headquarters Portfolio

TAKES 2 MONTHS

Give ● Capital to

Chengdu and Shanghai Vice Mayors

International Expansion



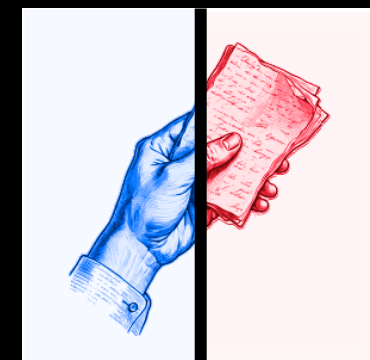
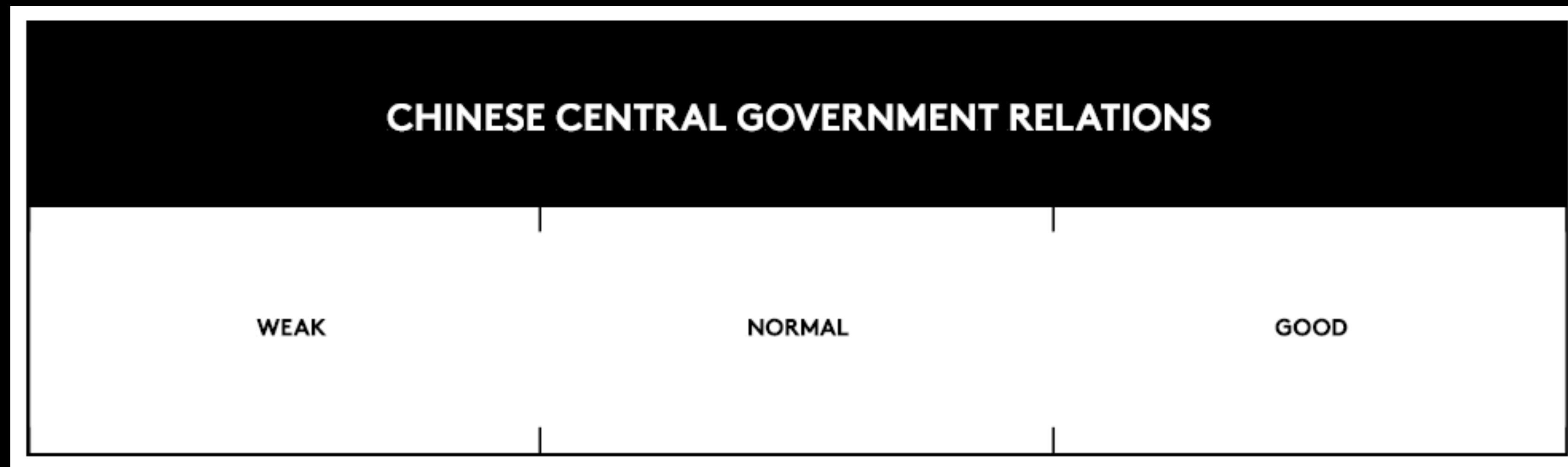
	MARKET SHARE & POINTS		
	START	CURRENT	FINAL SCORE
 US	0%	%	
 EU	0%	%	
Calculate final score: Add current market shares • Divide by 3 • Round down			

Firm Private Board

Foreign Firms get 1/3 of a Victory Point point for total Market Share, and the Shanghai Car Company gets full points.

Central Government

All players have different levels of **Chinese Central Government Relations**, which will impact their effectiveness in the game



Vice Mayors: You must meet your Information quotas each scene to the Central Government

Foreign Consultant

Foreign Consultant has more
affordable ways of moving **Social
Capital and Information** around to
all players

+

Unique Research Capabilities

RESEARCH CAPABILITIES (2 MONTHS)		
OPTION 1	OPTION 2	OPTION 3
See everyone's ranking and impacts on the Chinese Central Government Relations	Peek at all of the event(s) in the current and upcoming scene	Review Investment calculations and inputs

Remember: Knowledge is Power



Victory Conditions

US General

🏆 VICTORY CONDITIONS: ☐ Gain as much Revenue and US/EU Market Share Points as possible ☐ Make at least 1 investment in China

Autobauer

🏆 VICTORY CONDITIONS: ☐ Gain as much Revenue and US/EU Market Share Points as possible ☐ Make at least 1 investment in China

Shanghai Car
Company

🏆 VICTORY CONDITIONS: ☐ Gain as much Revenue, US/EU Market Share Points, and ● Social Capital from others as possible

Chengdu
Vice Mayor

🏆 VICTORY CONDITIONS: ☐ Gain as much Revenue and ● Social Capital from others as possible

Shanghai
Vice Mayor

🏆 VICTORY CONDITIONS: ☐ Gain as much Revenue and ● Social Capital from others as possible

Foreign
Consultant

🏆 VICTORY CONDITIONS: ☐ Gain as much ● Social Capital from others as possible

5 Minutes

Read your boards and ask any questions

Let's



RISK GAMING

Play

03

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Electric Vehicle Dominance

IAN CURTISS

Final Thoughts

- **Decision-making in uncertain environments versus analysis of uncertain environments.** Decision-making is a trained skill, requiring agility and timing of information.
- **A rising tide lifts all boats.** Everyone generally makes money.
- **Information is critical to hold and use.** The pressure for Foreign Firms to give it up is constant.
- **No one leaves a negotiation “happy”.** The business environment is often difficult.
- **Market interactions are exponentially complex.** The political economy, and the distinct Information markets, create frictions and gaps, with important “breakthrough” transaction moments.
- **Vice Mayors are squeezed.** Tax breaks ruin their revenues, yet Central Government mandates are ever-changing.
- **Consultants are critical to put the pieces together.** Silos and opaqueness force professionals to simplify a complicated market: a nearly impossible task.