

Unspeakeable People

Truth and Humanity in the Energy Transition

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Talk Outline

- Teaching ‘incident’
 - Lessons I learned
 - Wider lessons – for the Energy transition:
 - Threats to human rights
 - Threats to our everyday life
- Academic Freedom & Free Speech vital

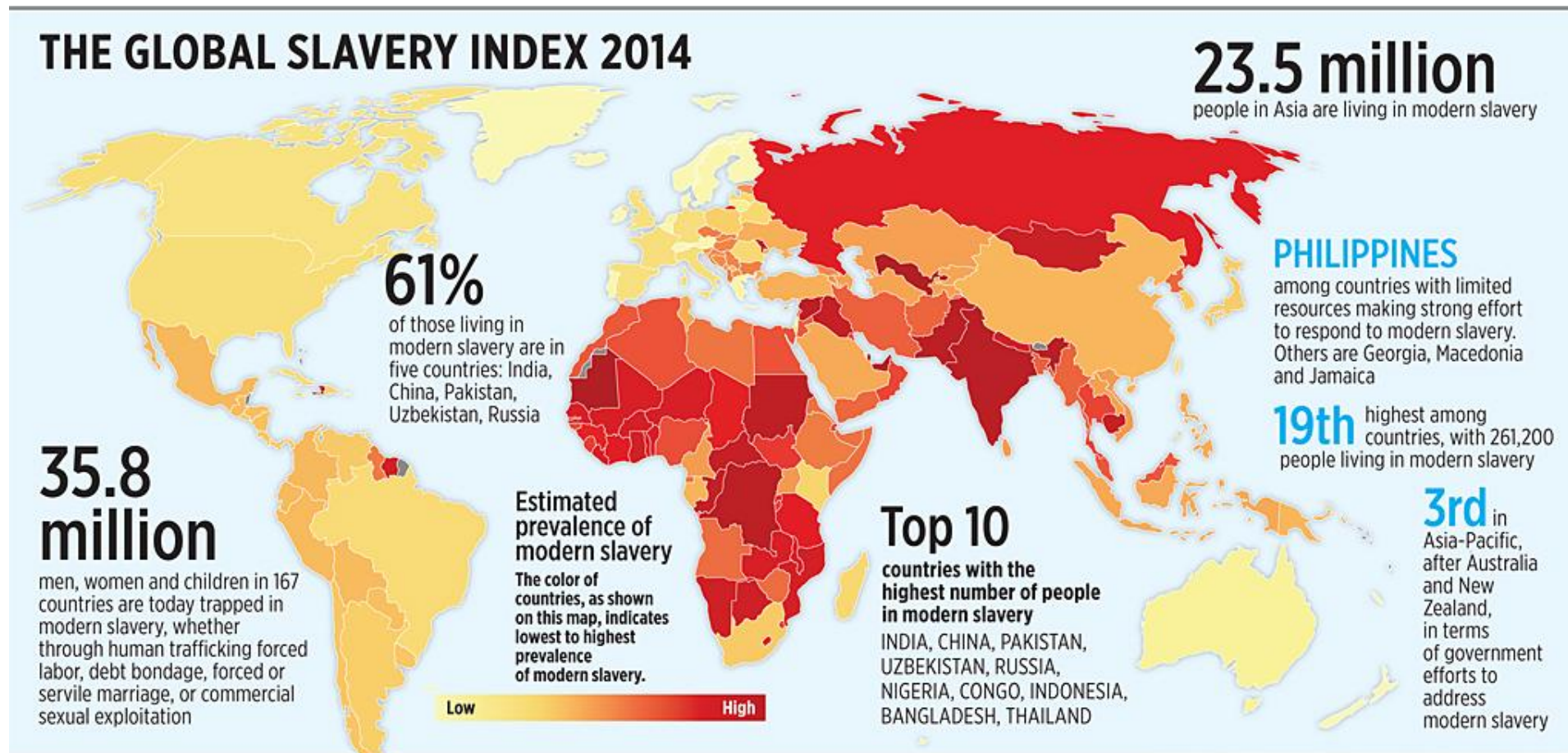


Shame the Teacher!

The Cultural Revolution goes global

Why does China have so many slaves?

Worst Countries for Modern Day Slavery



Data Detectives

Module Description

This module provides students with the essential skills required to commission and critique research, and become **critical consumers of secondary data and models using that data**. It also prepares students to develop a clear research question and research design, select appropriate **methods and samples** and undertake a critical literature review – all essential skills for undertaking their dissertations.

Who is a slave?

How do you count slaves?



Neil Howard

The Guardian

13 Jan 2014

- Contradicts field research in Benin
- Slavery research: “everyone citing each other's publications in a merry-go-round that doesn't actually centre on genuine empirical data”
 - Some countries wrongly tarred
 - Criminalise poors’ work strategies [Definition of slavery]
 - Don’t discuss economic forces sustaining poverty & exploitation

Do we count slaves in every country?



Anne Gallagher
The Guardian
 28 Nov 2014

- Data from 19 countries extrapolated to remaining 148
 - 10 countries – Walk Free primary data
 - 9 countries – secondary sources
- Divided surveyed countries into **six “clusters” for extrapolation purposes**
- South Africa calculation:
 70% like western Europe + 30% like Africa
- China: note little reliable information so base on other E. Asian nations e.g. South Korea, Taiwan, Japan

Can we **Trust Country Rankings?**

Global Slavery Index Example



Helen Joyce
The Economist

More or Less
BBC Radio 4
14 Nov 2014

- Egregious example of index sins
- Go beyond using small samples, out of date figures, incomparable figures
- **Actually use data for some countries based on other countries**
- Terribly inaccurate way to determine best & worst countries
- Terribly inaccurate way to determine country rankings

Global Slavery Index

Dataset Problems with Data

- Definition of Slavery
- Primary Data
 - Amount insufficient
 - Quality inadequate
- Secondary Data
 - Empirical foundations uncertain

Global Slavery Index

Problems with Modelled Data

- Proxy for missing data – sometimes OK
- GSI model assumptions are inappropriate...
We don't know that Country X \approx Country Y
on the variable of interest
- Compares modeled “data” – sometimes OK
- **Forgets it is *modeled* “data”**
→ **draws inappropriate conclusions**

Global Slavery Index

Inference Problems

- Compares primary, secondary & modeled data
- Forgets they are not comparable
- Results likely to be an artefact of the range of methods used

→ Remember the limitations of your data!



天以后 依然存在·他们...
要和我们作殊死斗争·
我们决不可以轻视这些

——毛泽东

反革命修正主义分子
王一伦

Lessons Learned

Transnational Repression
Tiananmen Square goes global





Intelligence and Security
Committee of Parliament

China

Chairman:

The Rt Hon. Sir Julian Lewis MP

Presented to Parliament pursuant to sections 2 and 3
of the Justice and Security Act 2013

Ordered by the House of Commons to be printed on
13 July 2023

“Chinese Students and Scholars Associations...ostensibly exist to look after the interests of Chinese students in the UK...[but are also] used by the Chinese state to monitor Chinese students overseas and to exert influence over their behaviour...resulting in a culture of fear and suspicion among Chinese students in the UK.”



HUMAN
RIGHTS
WATCH

“They Don’t Understand the Fear We Have”

How China’s Long Reach of Repression Undermines
Academic Freedom at Australia’s Universities



“ON MY CAMPUS, I AM AFRAID”

CHINA’S TARGETING OF OVERSEAS STUDENTS STIFLES
RIGHTS

AMNESTY
INTERNATIONAL 

PRC-CCP Indoctrinate Chinese Students

The Chinese Ministry of Education has required, since 2018, all schools and universities to emphasise Xi thought, support the CCP and take care to not say or do anything that could undermine the CCP's perspective on anything.

Professor Steve Tsang & Dr Olivia Cheung (2023)

The Political Thought of Xi Jinping

PRC-CCP Create Ultra “Nationalists”

“Xi Jinping...has nurtured a new generation of nationalists who are intolerant of any criticism of the CCP regime and...hypersensitive to any perceived insults to China.”

Professor Suisheng Zhao (2023)
in the China Leadership Monitor

PRC-CCP Support Student Informants

“After Xi Jinping took power in 2013...the recruitment of student informants [has] become more systematic and institutionalized...students are now publishing and circulating their reporting on professors online, doing so with pride.”

Jue Jiang (2022) Academic Freedom in China: An Empirical Inquiry through the Lens of the System of Student Informants (xuesheng xinxiyuan). *New Threats to Academic Freedom in Asia*. D. Gueorguiev. Arbor, MI, USA, Association for Asian Studies. (p. 107-8).

PRC-CCP Weaponise Fees

“Chinese authorities use the size of their student body in the UK for leverage; the former ambassador had a record of threatening vice-chancellors by saying that Chinese students could be stopped from going to universities deemed unfriendly to the state.”

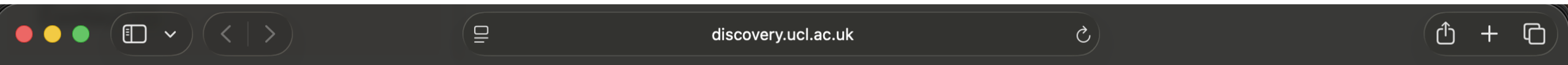
Professor Steve Tsang (SOAS) 2023 in The Times

PRC-CCP Weaponise Racist Label

→ Self-censorship

Research in the US found academics were unwilling to criticise the PRC publicly due to concern that this might be perceived as 'racist'.

Clive Hamilton & Mareike Ohlberg (2022) *Hidden Hand: Exposing How the Chinese Communist Party is Reshaping the World* London, Hardie Grant Books.



Written Evidence (TRUK0131) to the UK Parliament Joint Committee on Human Rights Inquiry into Transnational repression in the UK

Shipworth, Michelle; (2025) Written Evidence (TRUK0131) to the UK Parliament Joint Committee on Human Rights Inquiry into Transnational repression in the UK. [Digital scholarly resource]. <https://committees.parliament.uk/writtenevidence/1...> 

Abstract

This submission is of my experience of what I believe to be transnational repression at my UK university, although I am not the main victim. My submission understands my story through reference to relevant literature and ends with doable steps the committee could take now.



Lessons for the Energy Transition

Slaves to our Transition!

PRC-CCP human rights abuses
of ethnic and religious minorities



IN BROAD DAYLIGHT

Uyghur Forced Labour and Global Solar Supply Chains

LAURA T. MURPHY & NYROLA ELIMÄ

**Sheffield
Hallam
University**

Helena Kennedy
Centre for
International Justice



Forced Labour in Xinjiang, China

- 2.6 million Chinese citizens – mostly **Uyghurs**
- Coercion via threat of re-education / internment

Solar Supply Chains Involvement

- Manufacturers in Xinjiang-Uyghur:
 - 45% of global solar-grade polysilicon
- Research Found:
 - 11 companies engaged in forced labour transfers
 - 90 companies with affected supply chains

Uyghur slaves a footnote for IEA 2026

Heading: Variations in input costs

The balance of wages and productivity varies by sector and by region. For example, labour productivity¹ in car manufacturing in 2024 was higher in both the European Union and the United States than in China. By this measure, these regions held a competitive advantage. Yet when labour costs are factored in, the advantage shifts in the opposite direction, illustrating how competitiveness depends on the combined effect of multiple drivers.²

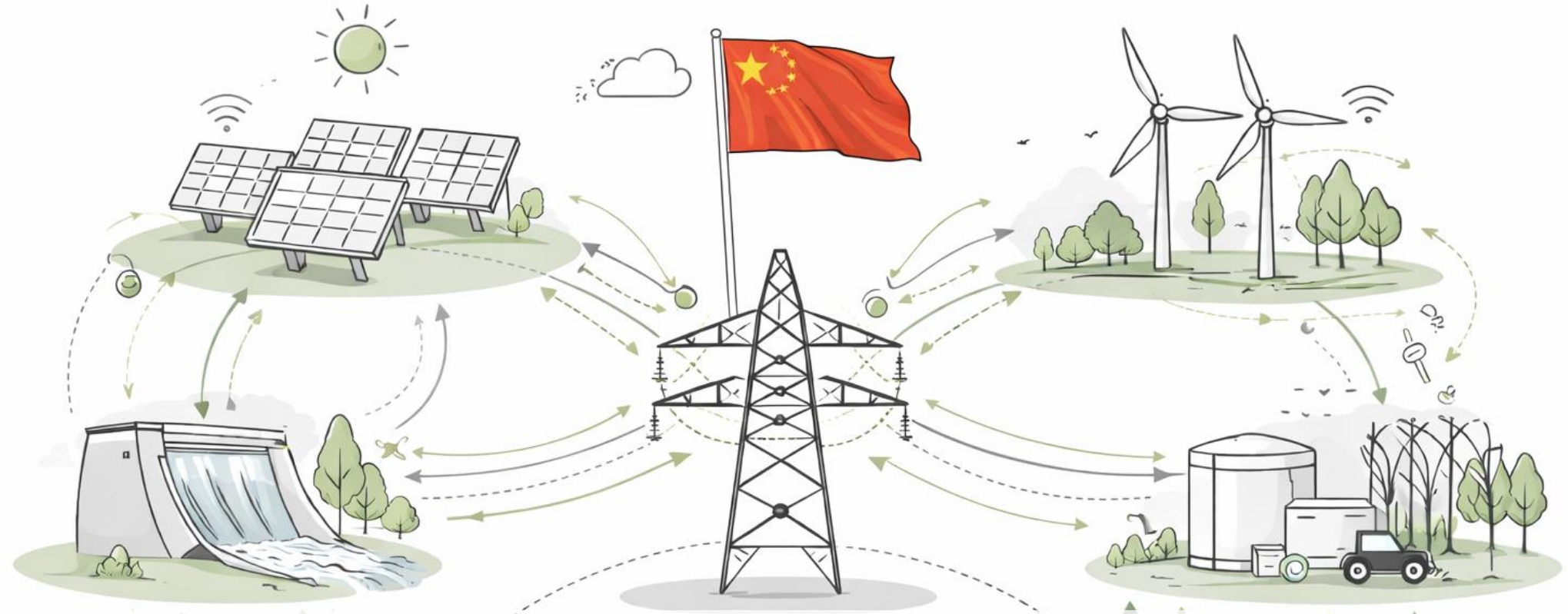
¹ Defined as gross value added (the value of output minus the value of intermediate inputs to production) per worker.

² Lower labour costs can be associated with forced labour or other unethical practices; for example, specific forced labour incidents have been reported in China (International Labour Organization, 2025).

Why our solar panels are inseparable from Chinese slave labour

Mario Ledwith | Friday March 28 2025, 6.40pm GMT, The Times





Threatening Everyday Life

PRC-CCP weaponising everyday technology



Charles Parton OBE

Lead Expert

Charlie spent the majority of his diplomatic career working in or on China, Hong Kong and Taiwan.

He was seconded to the EU Delegation in Beijing as First Counsellor, where he advised the EU and Member States on Chinese politics and internal developments. In 2017, he returned to Beijing as Adviser to the British Embassy to cover the Communist Party's 19th Congress.

In 2017 he set up his own advisory company, China Ink, and was chosen as the UK Parliament's Foreign Affairs Committee Special Adviser on China. He is an associate fellow at three tanks: the Council on Geostrategy, the Royal United Services Institute, and the Berlin-based Merics.





Royal United Services Institute
for Defence and Security Studies

Occasional Paper

China–UK Relations

Where to Draw the Border Between Influence
and Interference?

Charles Parton



Council on
Geostrategy

Report

Strong Britain Initiative
No. SBIR01
July 2021

Empty threats? Policymaking amidst Chinese pressure

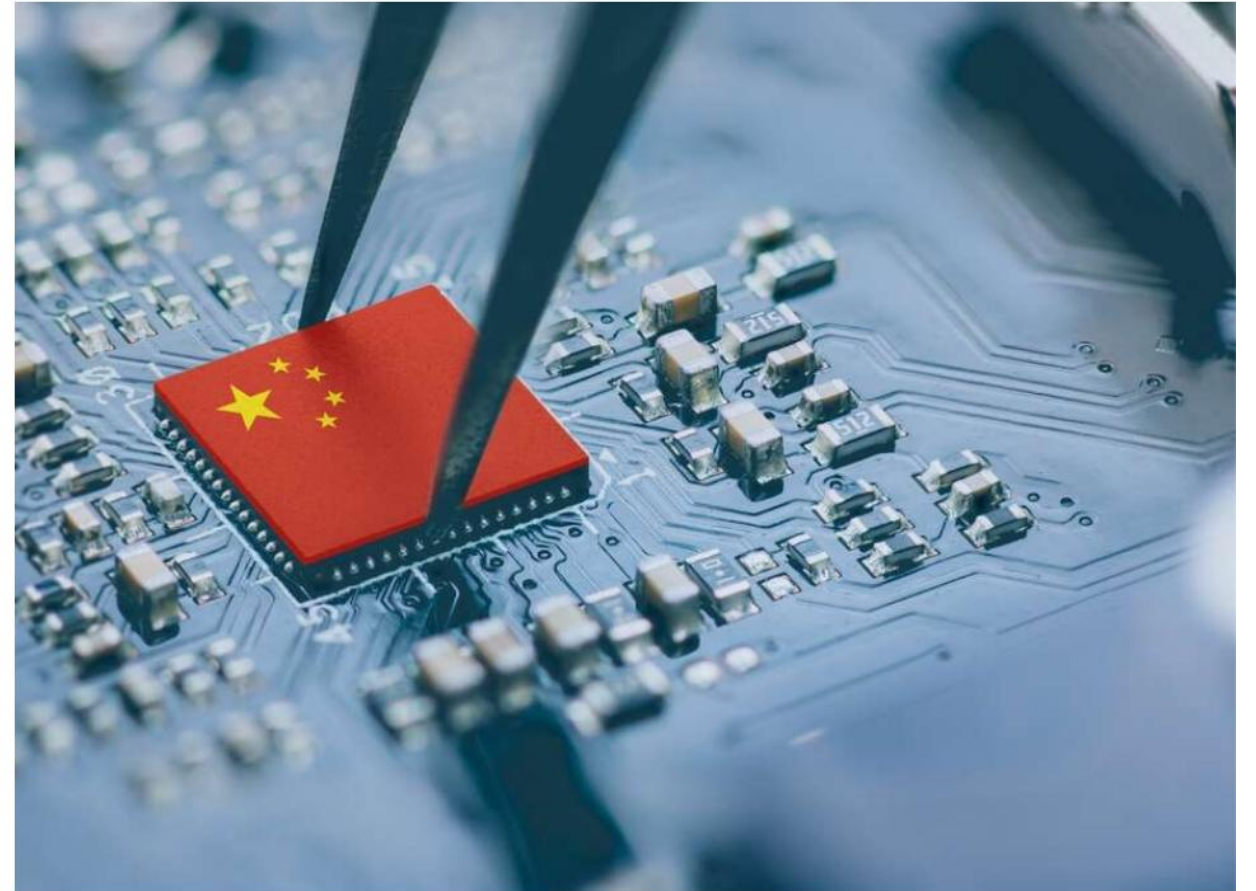
By Charles Parton

PRC-CCP is Different (not just in size)

- Binds citizens and organisations to Xi's aims
- 'Weaponises' ethnically Chinese diaspora
- Tries to control the narrative about China abroad
- Increasingly uses economic carrots and sticks

The Infrastructure Threat from Chinese Cellular (IoT) Modules (CIMs)

Charles Parton OBE



CIMs (Cellular IoT Modules)

- In many devices - EG smart meters, batteries
- Monitor and control systems
- Control critical national infrastructure - EG power.
- Collect vast amounts of data and metadata.

Chinese CIMs

- PRC-CCP key industry - state supported
- Over 70% of global market
- Chinese companies must obey CCP

Risks of Chinese CIMs

(Over and above those for IoT generally)

- **Dependency** – leverage for CCP demands
- **Degradation / Disruption / Destruction** via:
 - Embedded malware
 - Firmware updates
- **Data & meta-data** acquisition.

How might **CCP** weaponise **CIMs**?

- Use (meta) data to reveal vulnerabilities in:
 - VIPs
 - Organisations
 - Governments
 - Society
- Disrupt transport / industry / payments
- Knock out electricity grid via smart meters

Chinese Inverter Backdoors: A Renewable Energy Cybersecurity Wake-Up Call



Supply Chain Security in Energy: Assessing the "Ghost in the Machine" Risk
An in-depth analysis for executive leadership and board members on undisclosed communication devices in Chinese-manufactured inverters, and why immediate action is required to safeguard grid resilience.

Maya Security Summary

Facts

- Cellular radios found in Chinese-made inverters and batteries
- Components not listed in specs

Risks

- Covert data exfiltration
- Malicious firmware updates
- Remote disablement
- Coordinated grid disruption

Embedded Chinese tech ‘could freeze cars and traffic lights’

The former head of MI6 has warned MPs that Chinese-made microchips in UK infrastructure could be exploited to cause blackouts and ‘immobilise London’

Matt Dathan, Home Affairs Editor

Wednesday May 14 2025, 12.01am, The Times



China could use microchips to disable our smart meters, MP warns

Graeme Downie said reliance on Chinese-made cellular IoT modules makes technologies such as EV chargers in British homes vulnerable to being remotely shut down

• NEW

[Matt Dathan](#), Home Affairs Editor

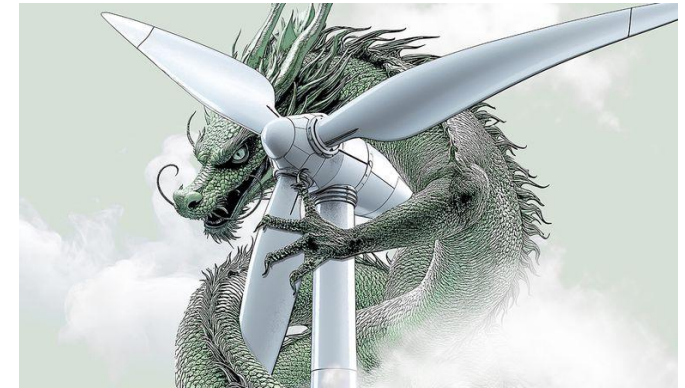
Tuesday December 30
2025, 5.24pm GMT,
The Times



ENERGY

From the December 2025 issue

China and the risks of renewables



Beijing's dominance of clean energy technology offers an escape from dependence on fossil fuels—and a new kind of danger

By Isabel Hilton

November 8, 2025

OPINION

It's Time to Treat China's Connected Energy Systems As a National Security Risk

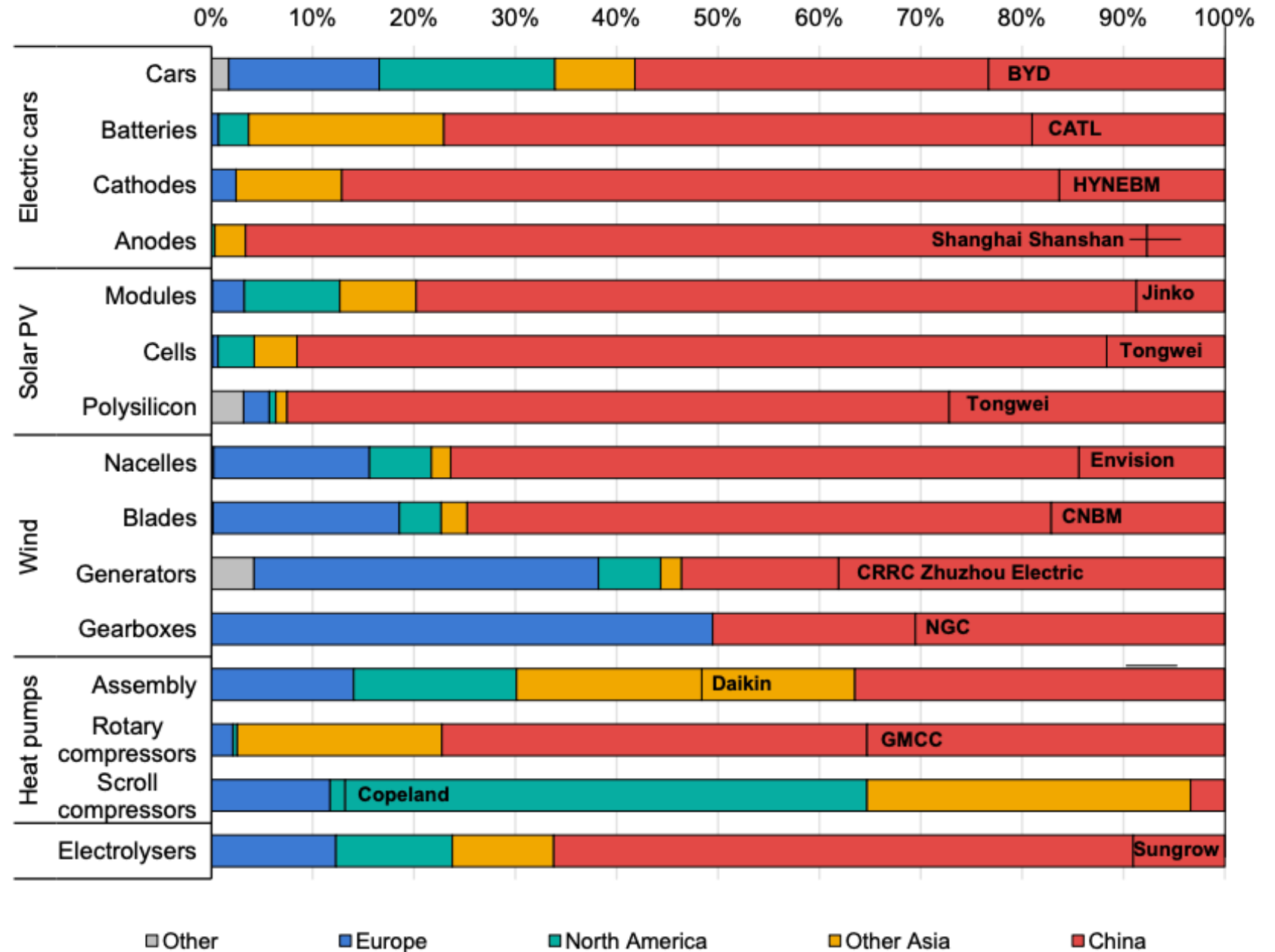
Governments need to make a concerted effort to make sure they retain ultimate control over the energy systems.

BY FRANCESCA GHIRETTI AND CONLAN ELLIS — JANUARY 18, 2026

IEA Energy Technology Perspectives 2026

Figure 6.2
Production capacity of selected clean energy technologies and components by region of company headquarters, 2024

China dominates







Stand for Freedom

Parton's Prescription for **Resisting PRC-CCP**

- **Knowledge** of how PRC-CCP works
- **Transparency** - especially of funding
- **Publicity** when PRC or proxies act inappropriately

UCL bans lecturer from China course to protect its 'commercial interests'

Associate professor says she wants to 'expose' how UK universities are 'conceding to censorship demands of some Chinese students'



Robert Mendick
Chief Reporter

Related Topics

University College London (UCL),
China, Further education,
International students, Freedom of
speech

08 March 2024 9:15pm GMT



626



China 'pressured' UK university into ditching forced labour report

Sheffield Hallam could face prosecution as counterterrorism police investigate claims that it bowed to threats from Beijing to halt an academic's work

3 November 2025

A just energy transition needs **Freedom**

- **Free Speech**

to enable the marginalized to argue for their rights

- **Academic Freedom**

to enable the search for truth and knowledge

