



tphuang @tphuang

Apr 6, 2025 · 13 tweets · [tphuang/status/1909019060395794554](https://t.me/tphuang/status/1909019060395794554)

Back 15 yrs ago, Chinese development faced 2 distinct problems:

- 1) Energy dependence on Indian Ocean sea lane w/o Navy to defend it
- 2) Over dependence on Mkt access & Tech from Western countries.

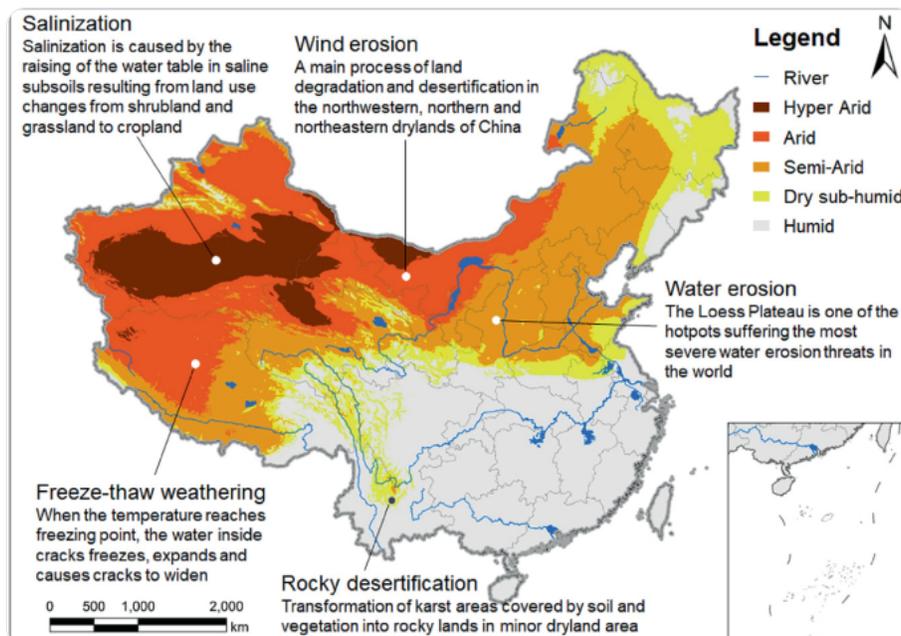
Focusing on 1) today, let's discuss what China is doing for energy independence.



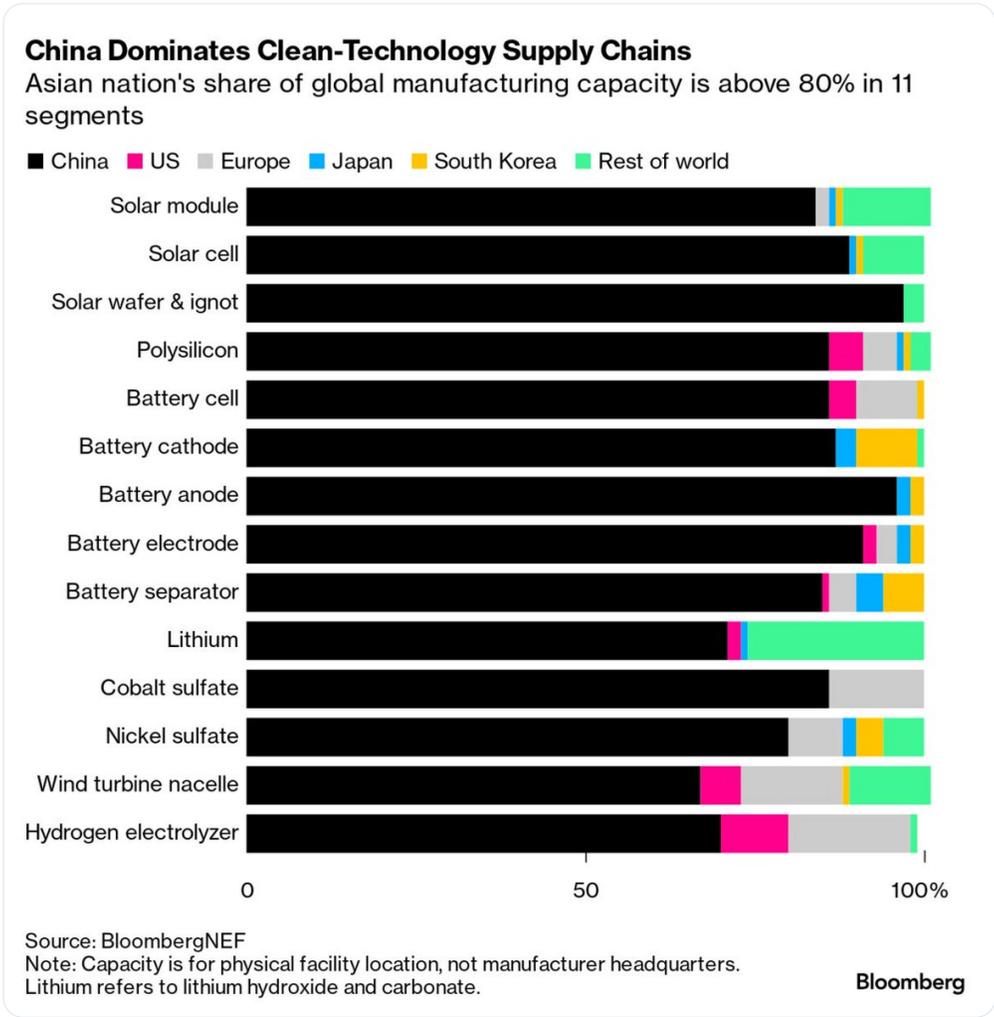
WCF saw that China was facing this energy issue when building BYD. He saw China had huge solar potential w/ vast amount of Arid, lowly inhabited land.

Solar required battery to deal w/ intermittency issues.

By electrifying cars, buses & trucks, China reduces its oil dependence.

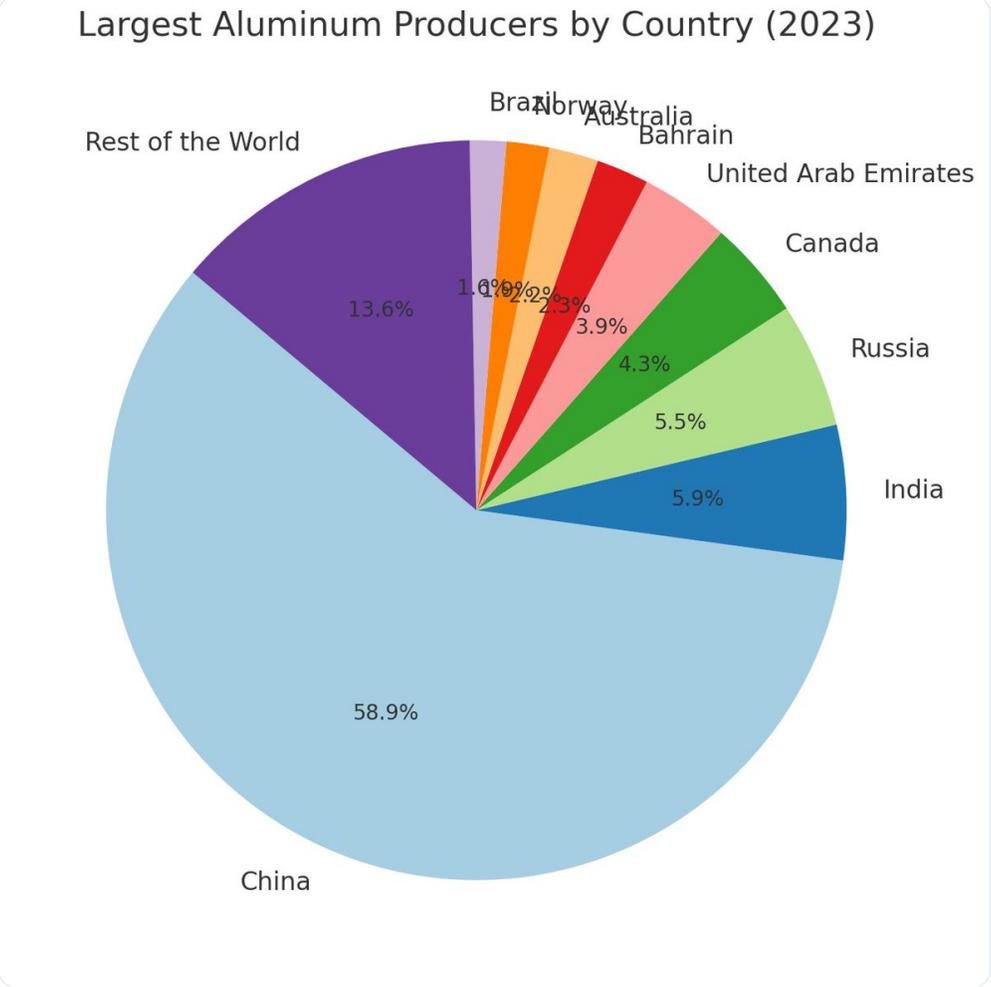
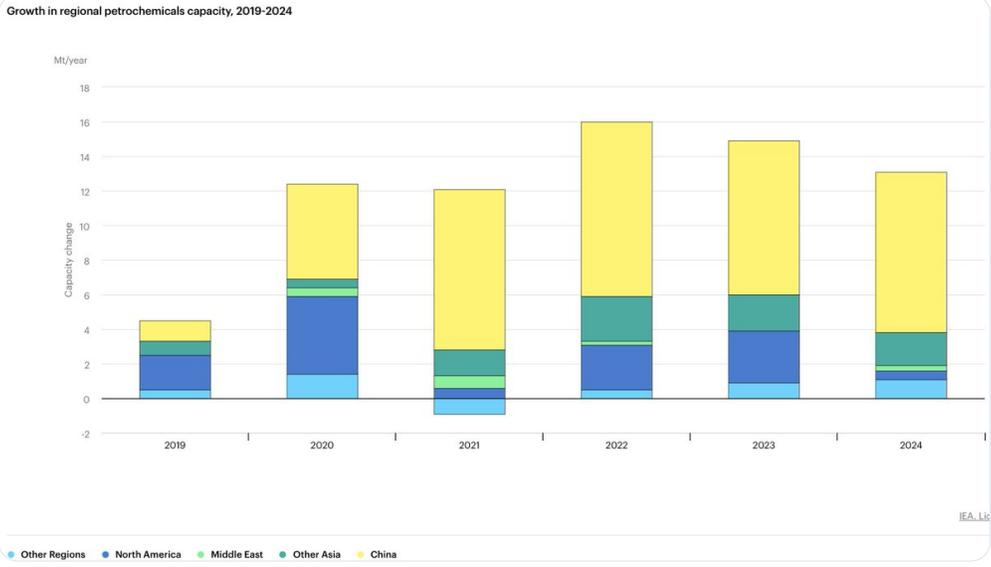


Chinese policy makers helped w/ BRI & such, but private business like BYD also saw the need & opportunity so they rushed in & invested to build the formidable supply chain that we see today all the way down to critical minerals, RE magnets, battery materials & solar ingots.



Along the way, China industrialized across all metal & chemical sectors. It now has the most petrochem capacity as well as Aluminum, steel, Titanium & many other building blocks needed by renewable industry.

And it's building up huge power IC & MCU needed by EVs & renewable grid.



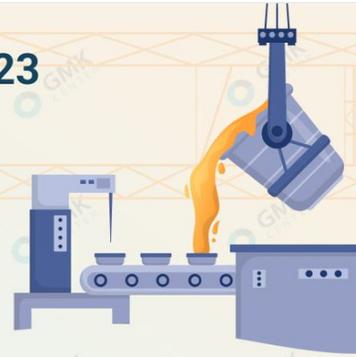
# Global steel production in 2023

**135.7** mnt

of steel were produced in December 2023  
**-5.3%** y/y  
**-6.7%** m/m

**1.85** blnt

of steel were produced in 12 months of 2023  
**-0.1%** y/y



## Top 10 steel-producing countries in 2023, mln t



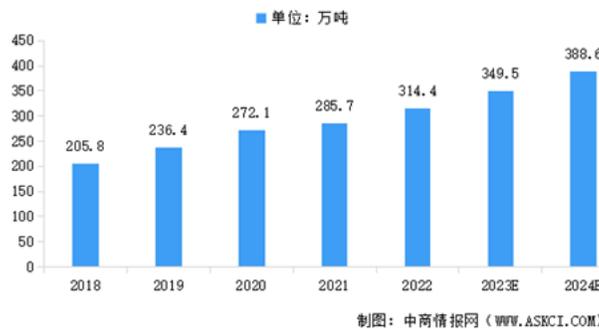
### Regions – producers of steel, mln t

- |                             |                         |
|-----------------------------|-------------------------|
| 1. Asia and Oceania – 1 367 | 5. Middle East – 53.2   |
| 2. European Union – 126.3   | 6. South America – 41.5 |
| 3. North America – 110      | 7. Other Europe – 41.7  |
| 4. CIS+Ukraine – 88.1       | 8. Africa – 22          |

Data source: WorldSteel Association



2018-2024年中国钛矿产量预测趋势图



制图: 中商情报网 (WWW.ASCEI.COM)

We now reach the point where they have 2TW of non-fossil fuel power generation w/ 1460GW being solar & wind. All while its electricity demand has exploded to being well over 2x that of US.

Gasoline & diesel demand has plateaued. This addresses about 45% of China's crude demand.

# 我国非化石能源发电装机 首次达20亿千瓦

中国电力企业联合会最新统计数据显示

截至2月底  
我国非化石能源发电装机规模  
首次达到20亿千瓦



“十四五”以来  
非化石能源发电装机规模  
实现翻番

累计增长了  
**103.1%**

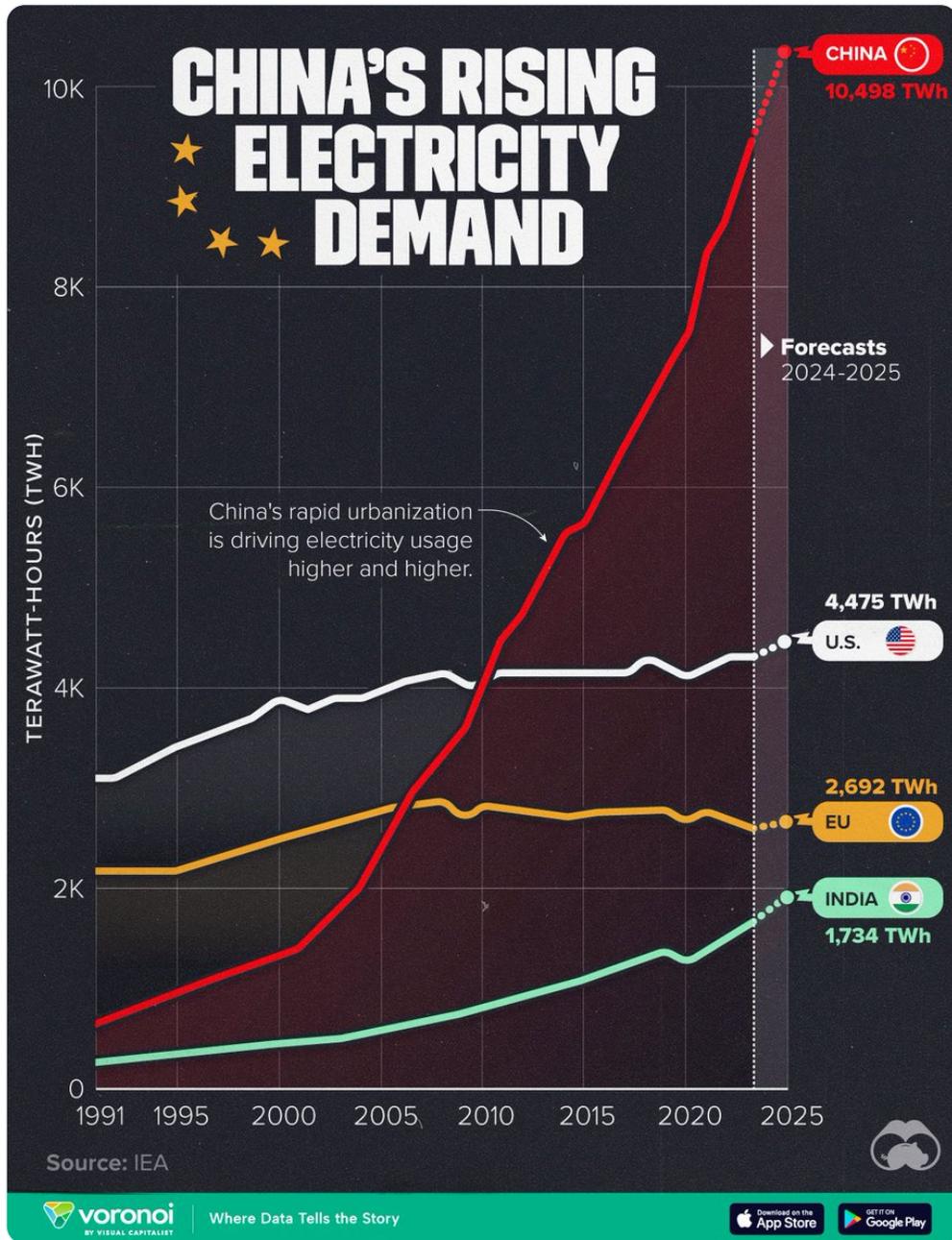


2025年2月底  
全国非化石能源发电装机  
占全国总发电装机比重**达到58.8%**

其中

以风电和太阳能发电为代表的  
新能源装机**达到14.6亿千瓦**

占全国总发电装机比重**达到42.8%**



How does China deal w/ the huge petrochemical sector which accounts for 45% of its demand?

Green methanol/ammonia is a major part of this.

Announced green methanol & ammonia projects already meet 43% & 19% of their current need respectively.

Growing rapidly, game changers.