

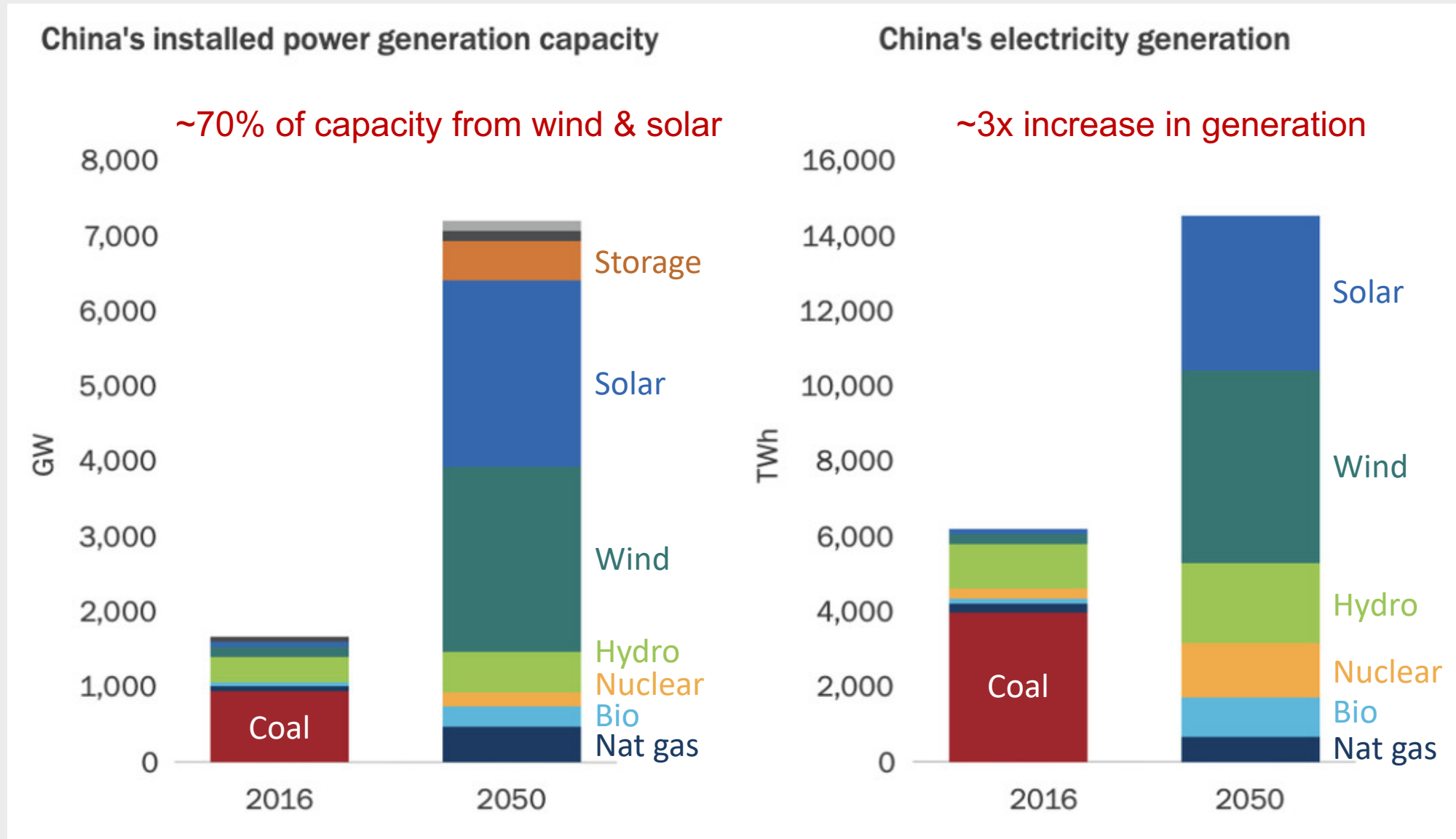
A solid red silhouette of the map of China is positioned on the left side of the slide, set against a solid black background. The map includes major islands and coastlines.

China's key role in scaling low carbon energy technologies

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A carbon neutral China by 2050: the challenge of SCALE



China is the global leader in the **mass production** of low carbon energy technologies

Solar Panels:	From 1% to 66% (2001-2018)
Wind Turbines:	1/3 of global supply (2018)
Electric Vehicles:	53% of global sales (2018)
Lithium-ion Batteries:	69% of global production (76% by 2025)
Nuclear Reactors:	From 45 to 88 plants by 2030

How did China become the global leader
LCET mass production?

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Institutional support for
manufacturing

How did China become the global leader LCET mass production?

Institutional support for
manufacturing

Development of innovative
manufacturing capabilities

We're running out of time

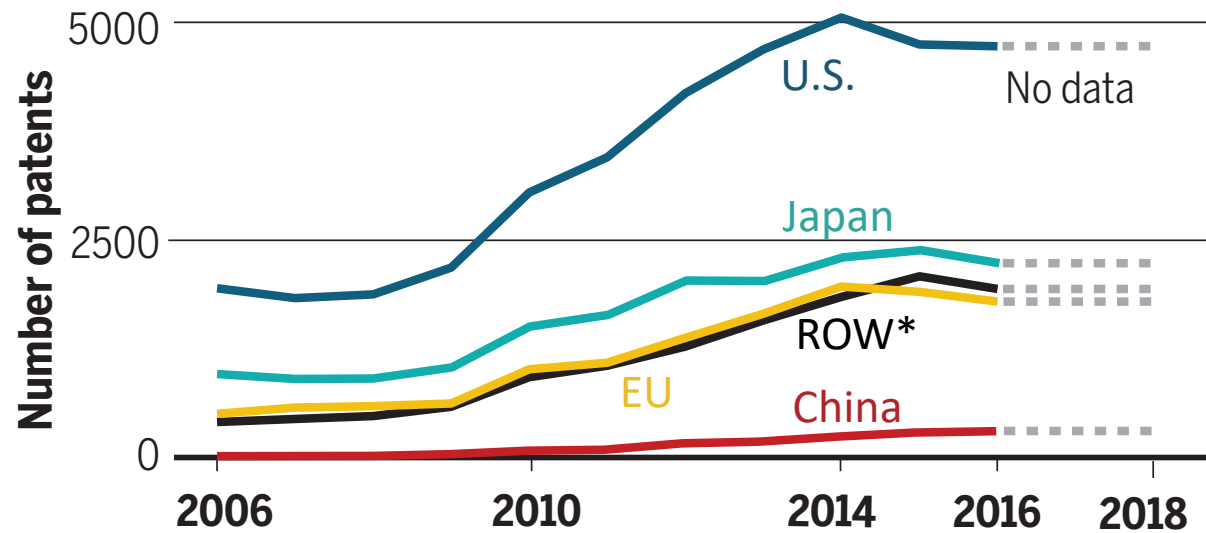
“It is unrealistic to expect that another nation will be able to rival China’s capabilities in LCET scale-up in the time frame needed to limit climate change to below 2°C.”

Collaborative commercialization

Collaborative commercialization

US: Leader in LCET Innovation

Annual USPTO patents in clean energy technologies

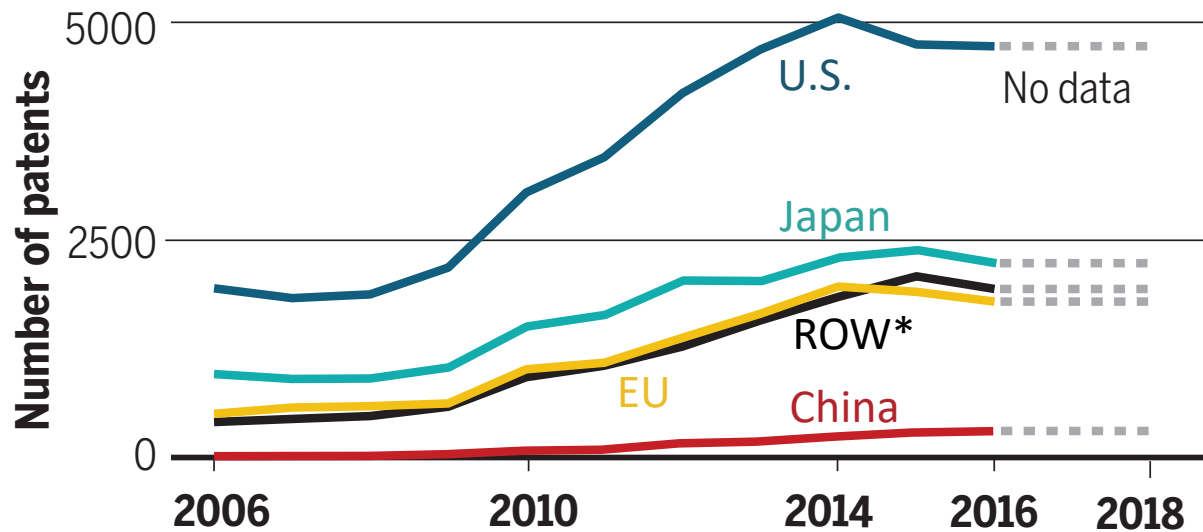


Data source: 2018 U.S. National Science Foundation
Science & Engineering Indicators

Collaborative commercialization

US: Leader in LCET Innovation

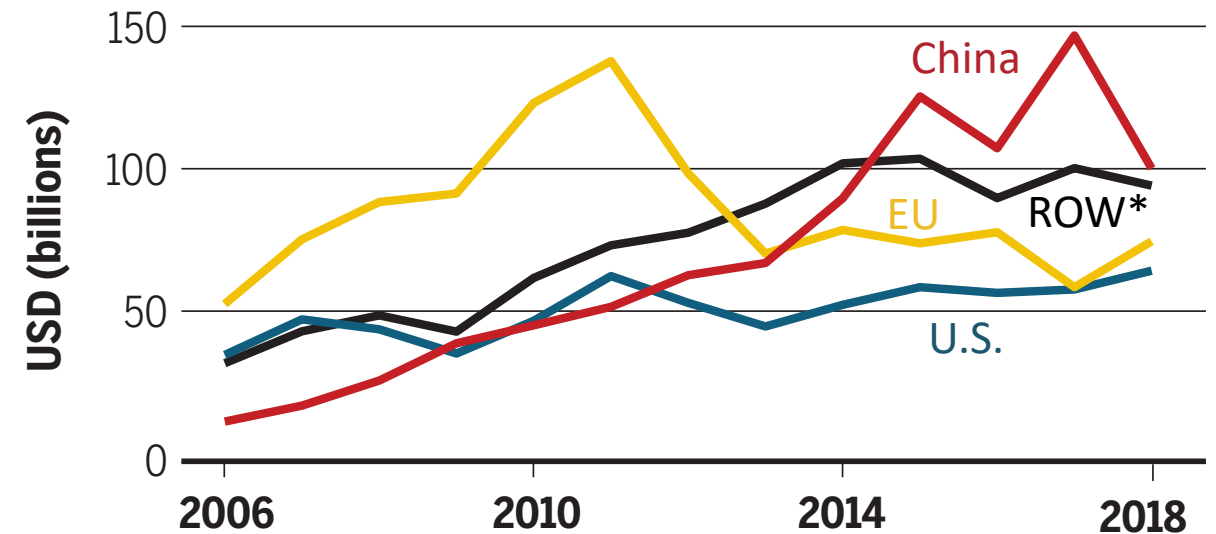
Annual USPTO patents in clean energy technologies



Data source: 2018 U.S. National Science Foundation
Science & Engineering Indicators

China: Largest LCET investor w/innovative manufacturing capabilities

New investment in clean energy technologies



Data source: Bloomberg New Energy Finance

Making progress on climate

China

- Allow foreign firms fair access to its domestic market

Making progress on climate

China

- Allow foreign firms fair access to its domestic market

U.S.

- Rejoin the Paris agreement
- Maintain a regular dialogue with China on progress
- Support domestical scale up and demonstration projects for emerging LCETs.

Making progress on climate

China

- Allow foreign firms fair access to its domestic market

Both

- Establish partnerships around clean energy
- “Green” development assistance for other developing nations

U.S.

- Rejoin the Paris agreement
- Maintain a regular dialogue with China on progress
- Support domestical scale up and demonstration projects for emerging LCETs.

Thanks!

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Link to charts:

<https://github.com/jhelvy/charts>