

**22nd OREFORM Group Meeting, Salzburg – August 26 – 31, 2018**  
**Energy Democracy and Climate Change Policy**

# **Energy Transition and Democracy in China**

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# CHINA Paradox !?

**If democracy and energy transition is positively-correlated, is China democratic country!?**

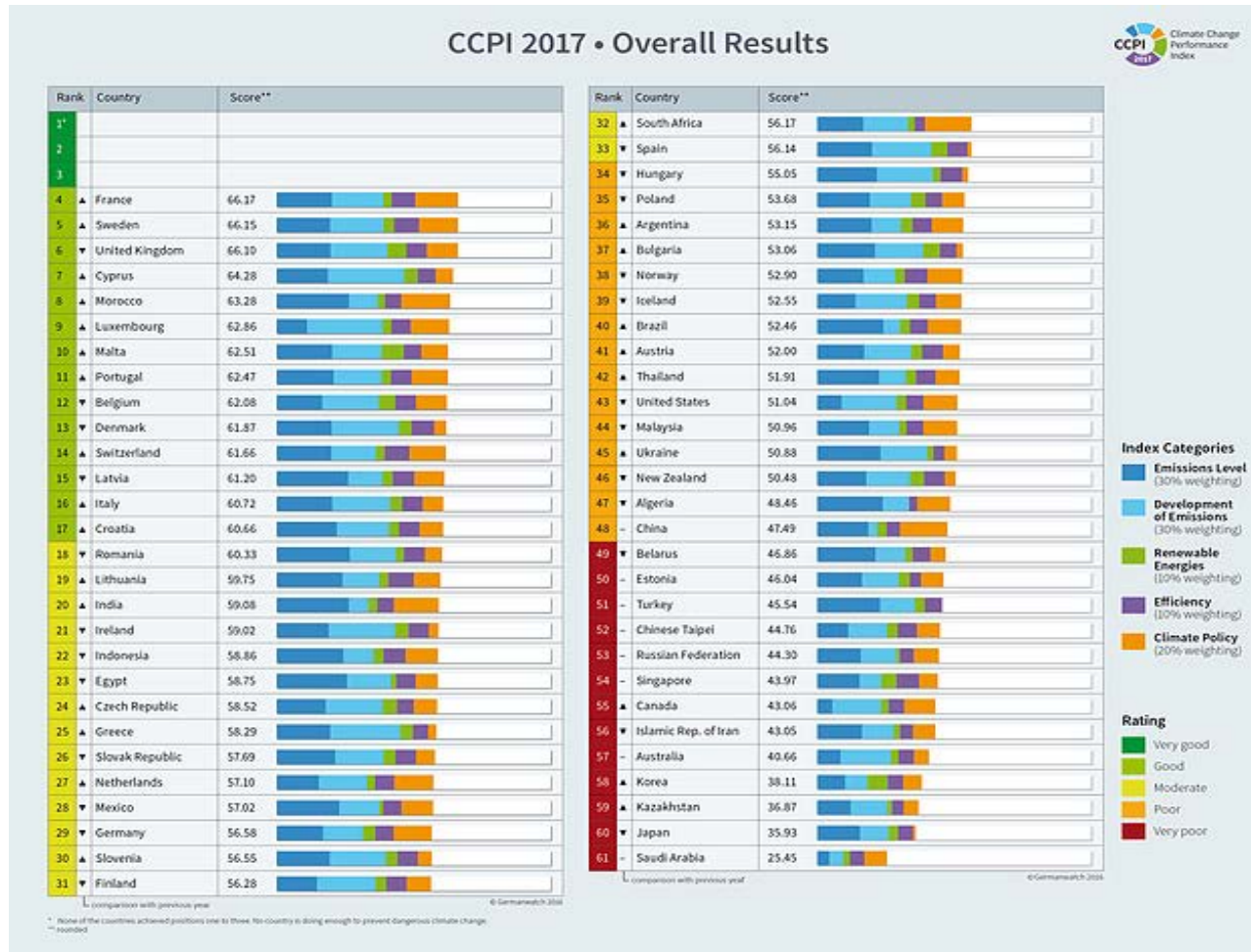


# Democracy can do everything!?

**Zeynep Clulow** “Democracy, electoral systems and emissions: explaining when and why democratization promotes mitigation”, *Climate Policy*, 18 Jul 2018.

# Ranking of the climate policy

## Climate Change Performance Index

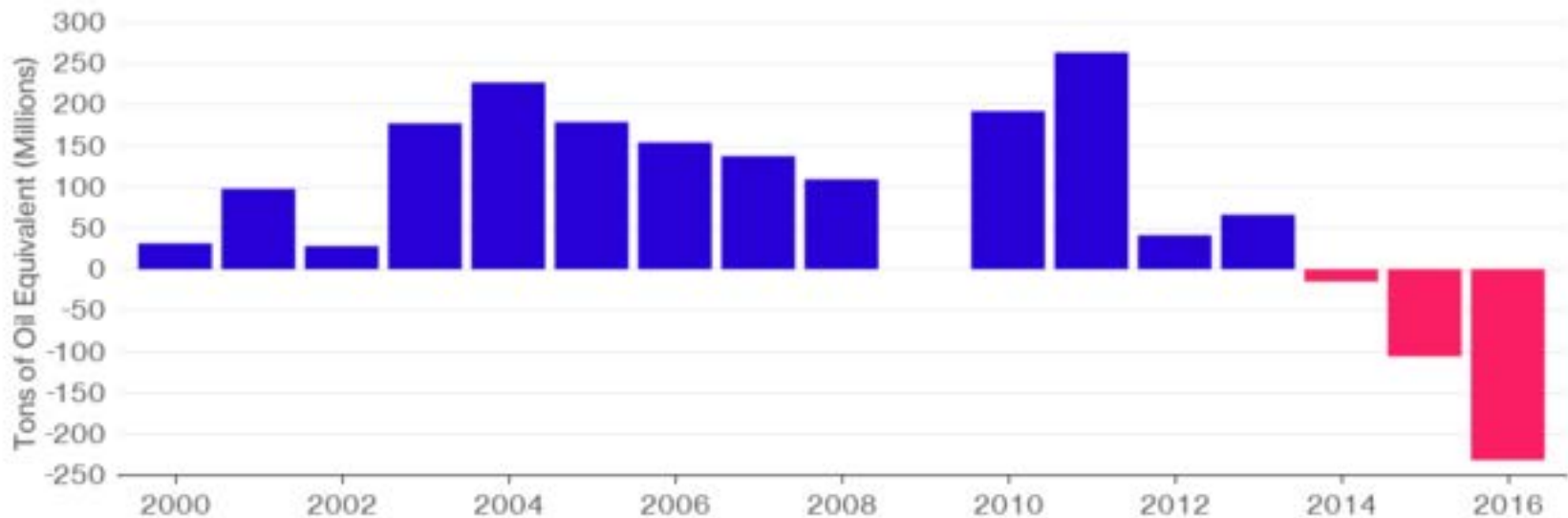


# Carbon (Coal) Crash

## Carbon Crash

Production of coal fell the most on record last year as consumers turned to cleaner energy

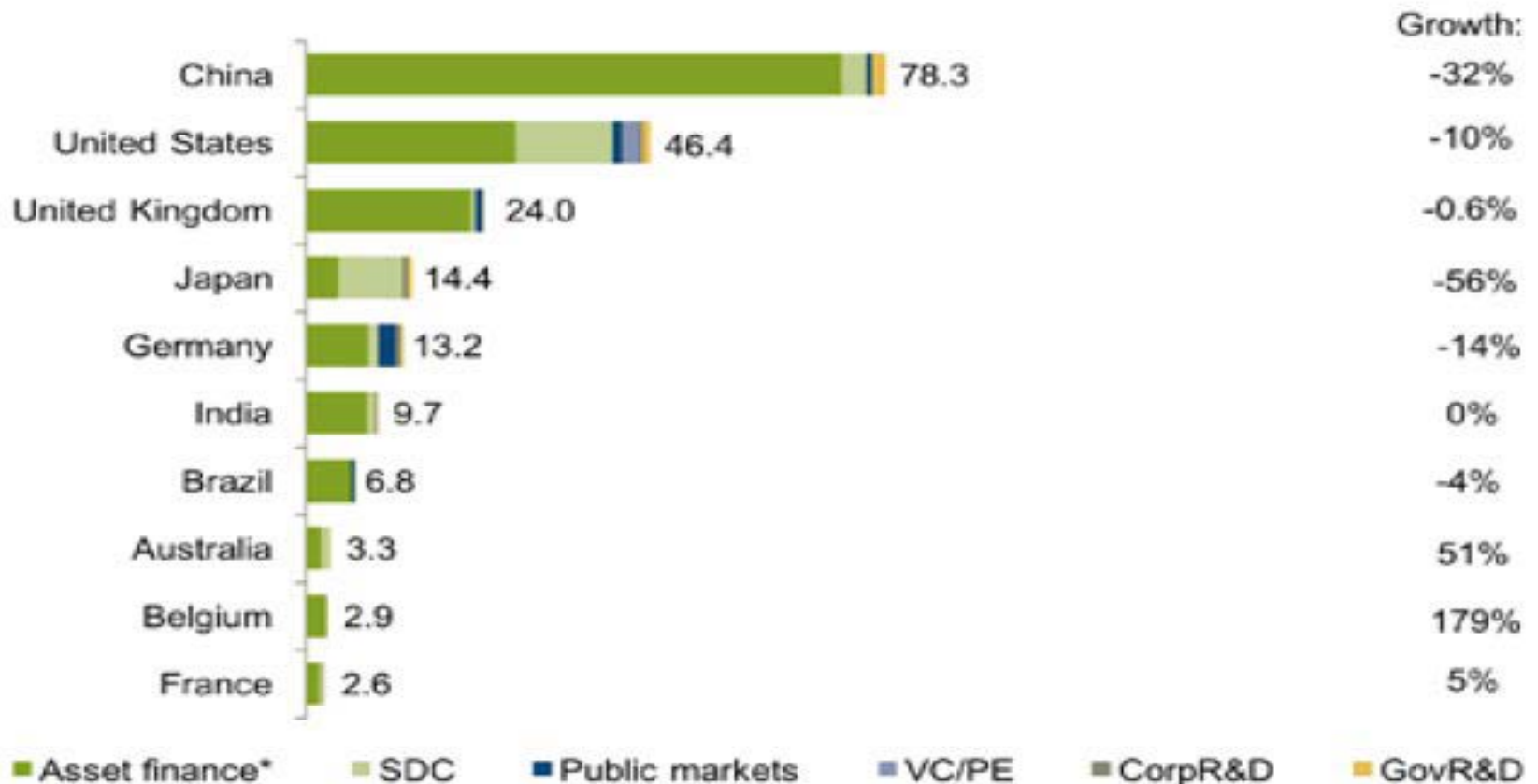
■ Expansion in Coal Production   ■ Decline in Coal Production



Source: BP Statistical Review of World Energy

Bloomberg

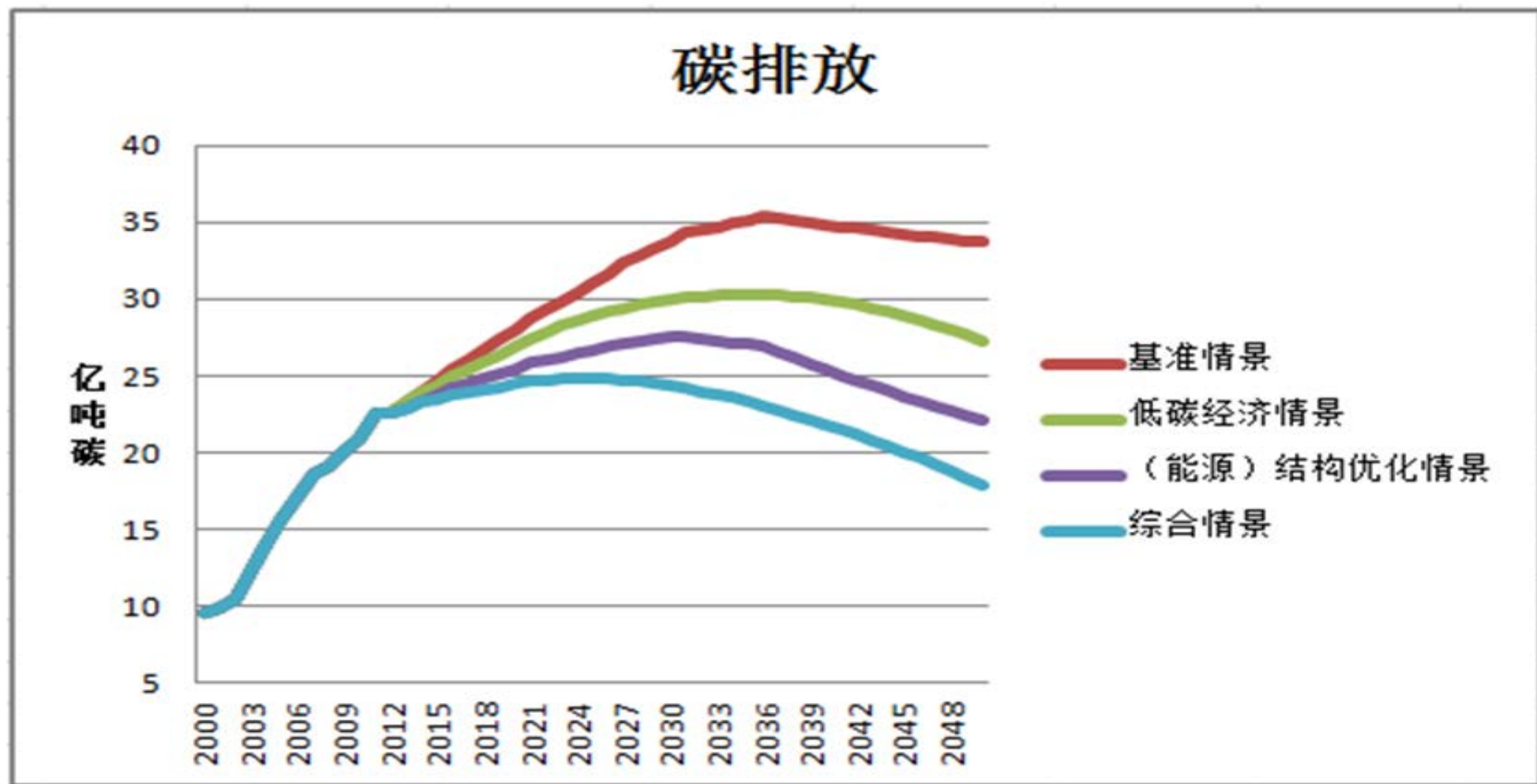
# Investment on renewables (2016)



Top 10 countries. \*Asset finance volume adjusts for re-invested equity. Includes corporate and government R&D

Source: UN Environment, Bloomberg New Energy Finance

# CO<sub>2</sub> Emission Scenario



各种情景下碳排放的比较

出典: Jiang et al. (2015)

$PM_{2.5} \sim 300 \mu g/m^3$



出典: He (2016)



# Northern big cities (2+26) including Beijing, coal use is banned



# Price of blue sky

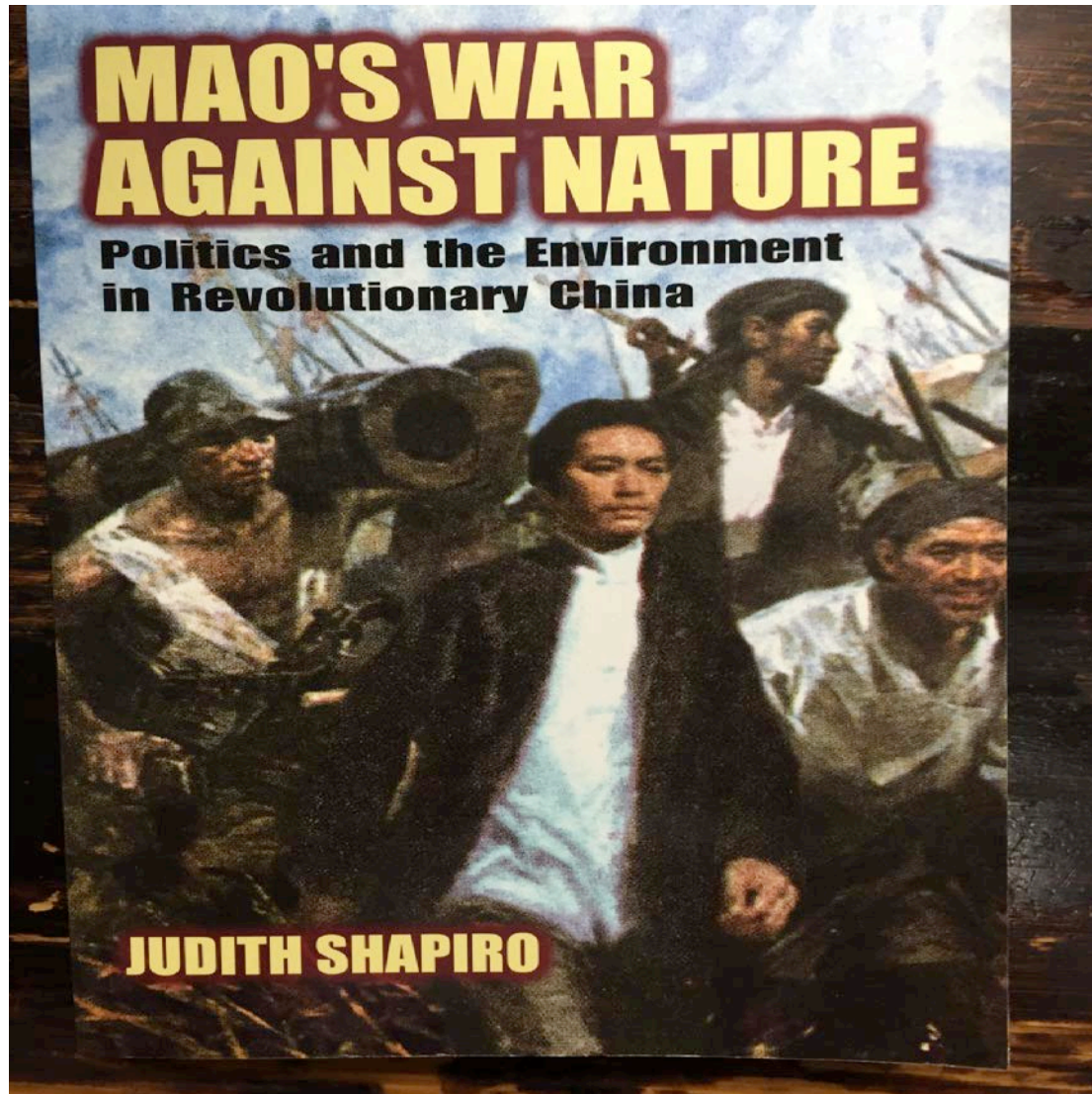
**“In 2016, we shifted the labor force of 726,000 coal and steel industry already to other industries. In 2017 another 500 thousand people will be shifted ]**

**(comment by the Ministry of labor and welfare in March, 2017)**

## **Price of blue sky (cont'd)**

**Millions of people did not  
have the heating in the  
winter of 2017/2018**

# Environmental authoritarianism?



# Anti-nuclear movement in Guangzhou (July.14, 2013)



# Conclusion

- 1. CO<sub>2</sub> plateauing or peaking: Decoupling is certainly happening**
- 2. Renewable: Super-massive investment**
- 3. Mix of (super-stringent) command & control and market mechanism**
- 4. Nuclear power: Lagging behind the plan**
- 5. Anyway, China may be different in many senses and is interesting**