

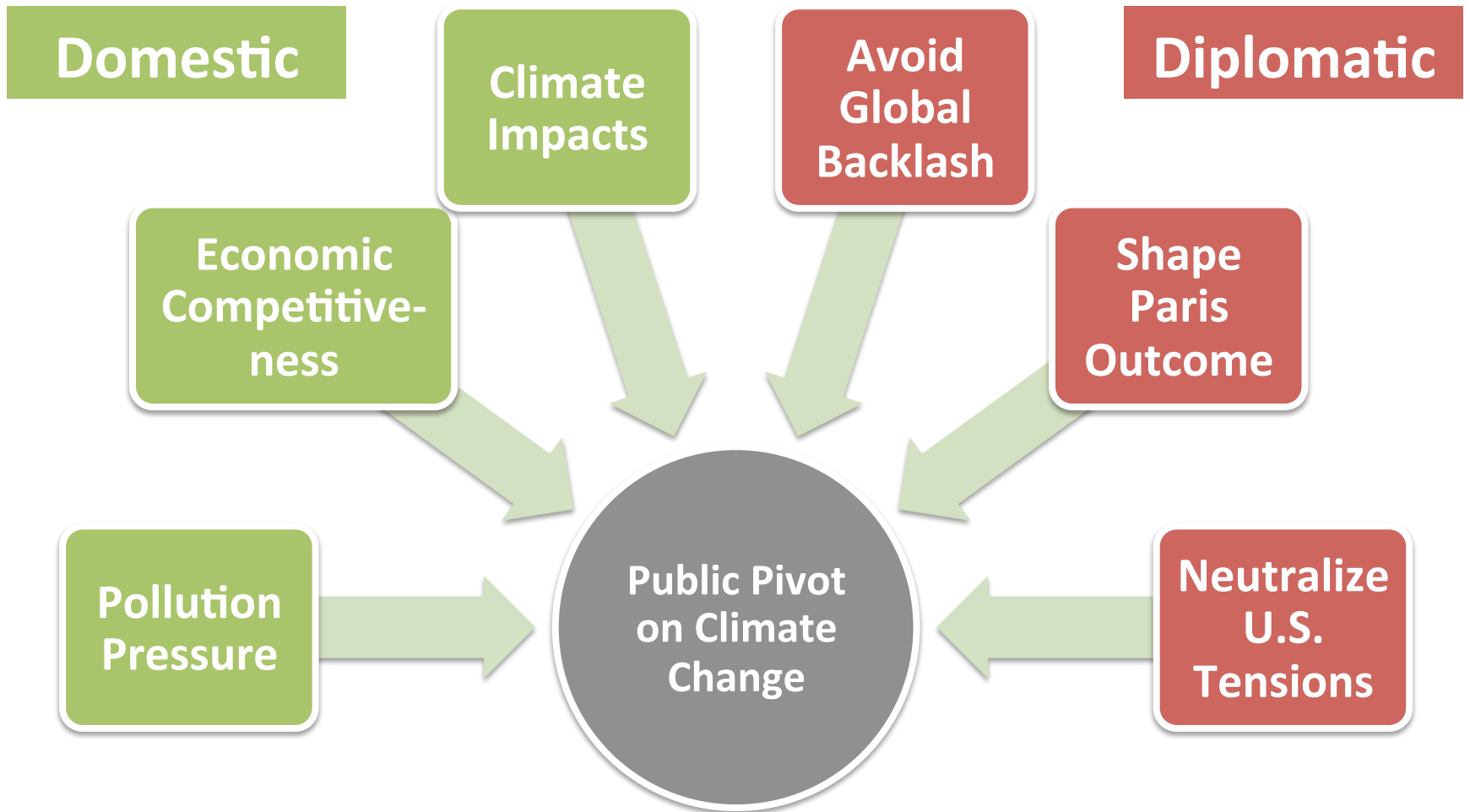
China's Climate Change Goals: Implications and Concerns

Michelle Patron

November 10, 2015

Drivers Behind China's Climate Goals

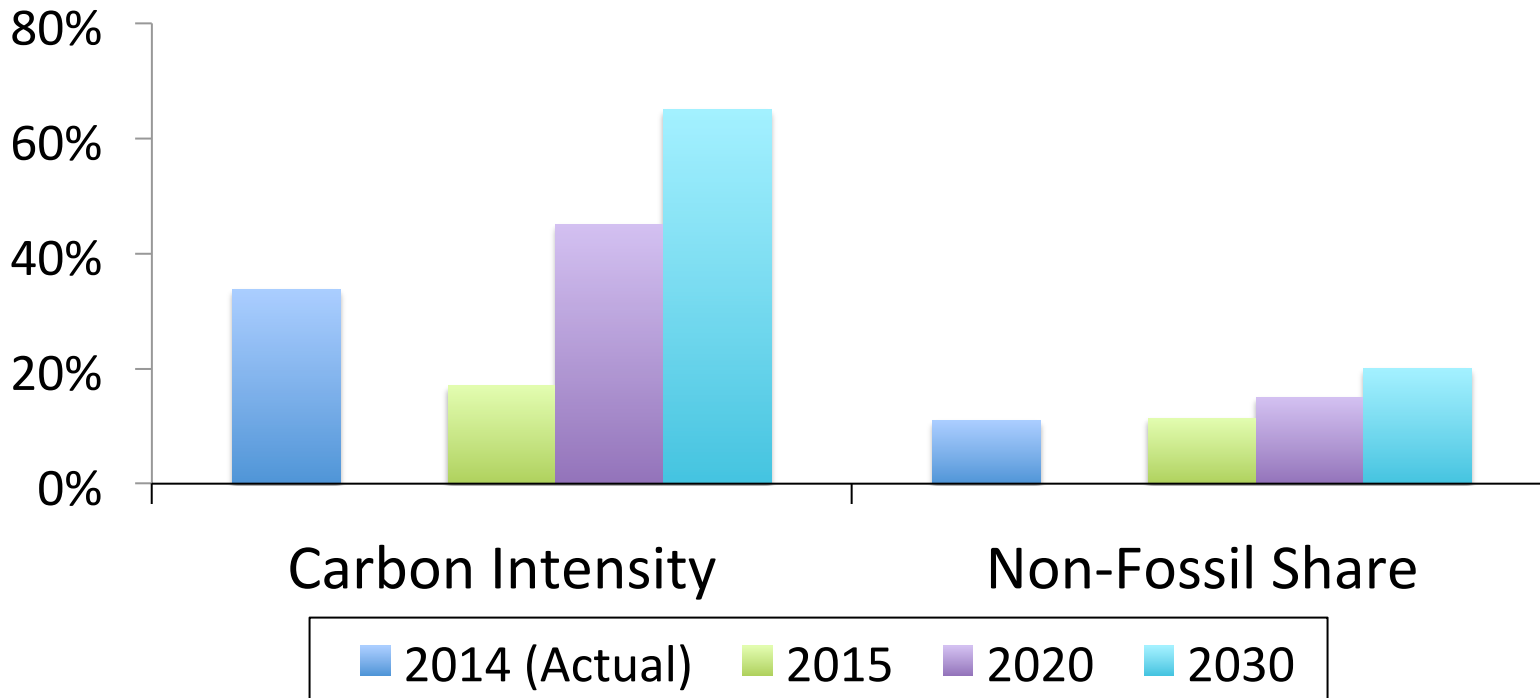
Domestic and Diplomatic Factors Converge



China's 2030 Climate Targets

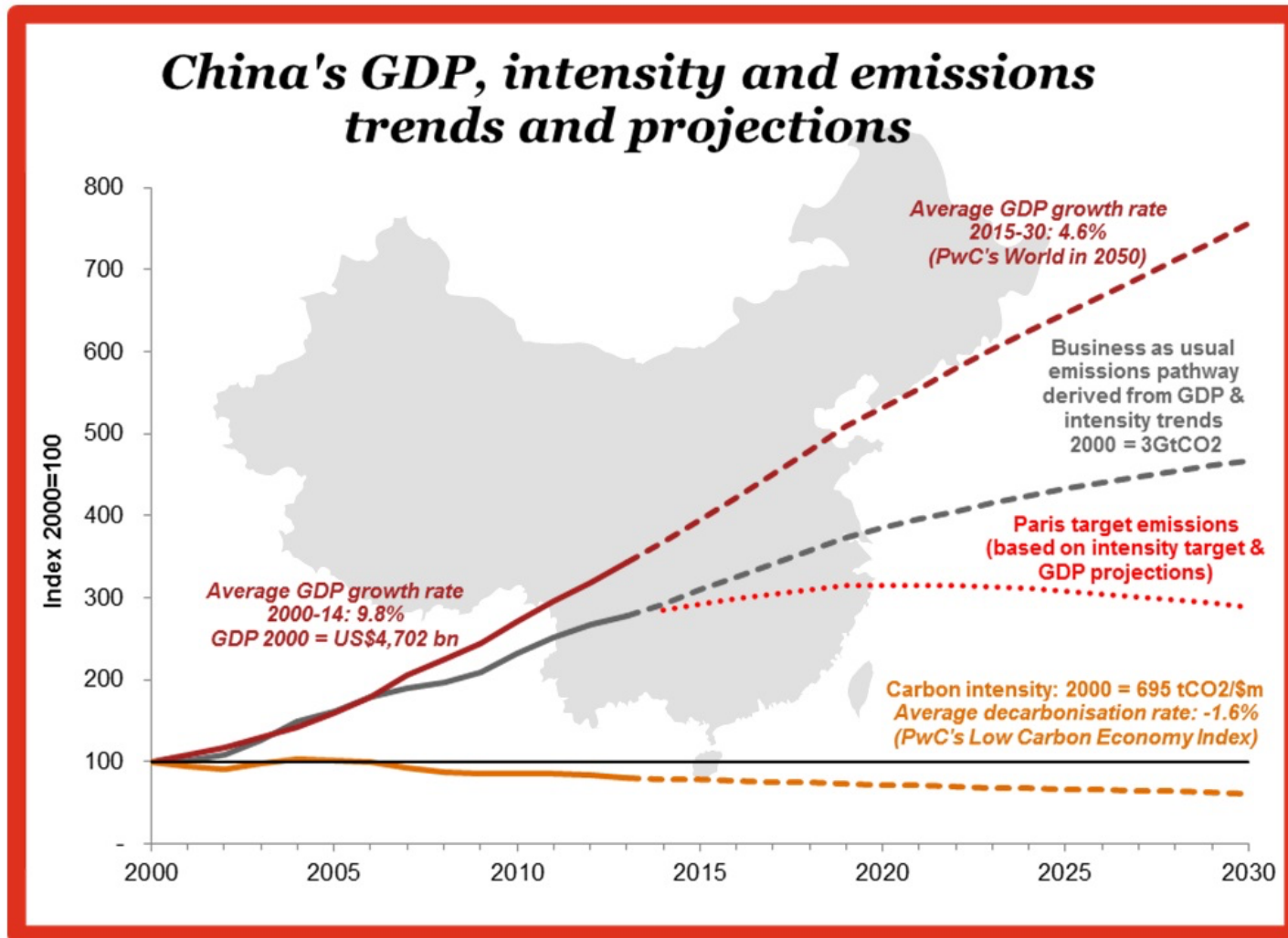
Builds on Progress to Date

1. Peak CO₂ emissions around 2030 & best effort to peak early
2. Reduce carbon intensity of GDP by 60-65% vs. 2005
3. Increase non-fossil share of primary energy to around 20%
4. Increase forest carbon stock by ~4.5 bcm above 2005



Putting China's Target in Context

Sharp Emissions Reduction vs. Business as Usual



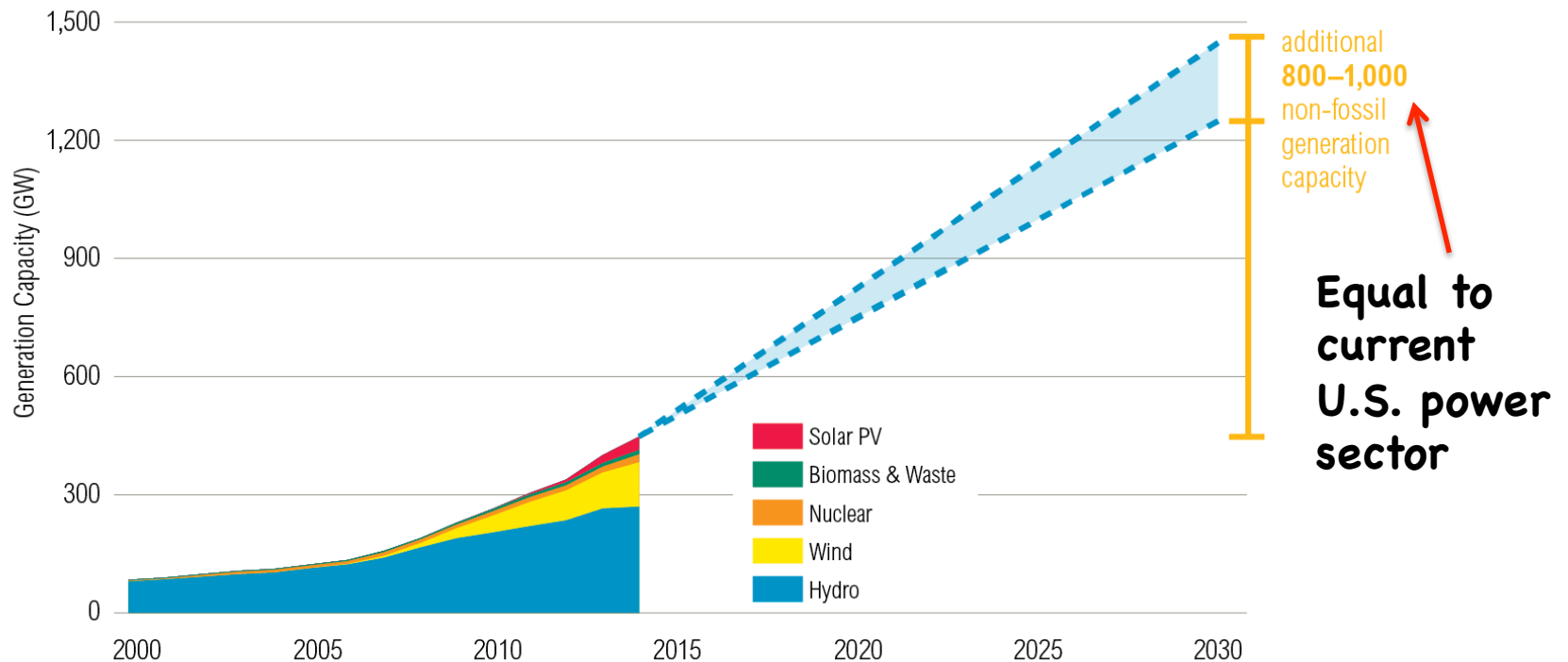
Sources: BP, International Energy Agency, Energy Information Administration, World Bank, IMF, PwC data and analysis.

(a) GDP is measured on a PPP basis. (b) Based on PwC's Low Carbon Economy Index methodology which focuses on historic and projected changes in carbon intensity or emissions per million dollars of GDP.

Putting China's Target in Context

Massive Infrastructure Build Out Required

China Non-Fossil Capacity Growth, with Estimated Additions by 2030



Sources: Bloomberg New Energy Finance; White House
Note: Marine, Solar Thermal Electric Generation and Geothermal have been excluded from this graph due to their relatively small historic values

<http://bit.ly/1emydFk>

Key Pathways to China's Target

China Will Use Mix of State & Market Tools

Power

- Sector Targets
- Coal Caps
- Green Dispatch
- Power Reform

Transport

- Efficiency Standards (Car/HDV)
- Electric Vehicle Targets
- Public Transport

Industry

- Green Buildings
- Appliance Efficiency
- Industrial Standards

Market

- Carbon Market in 2017
- Subsidy Removal
- Fuel Taxes

Challenges in Meeting China's Target

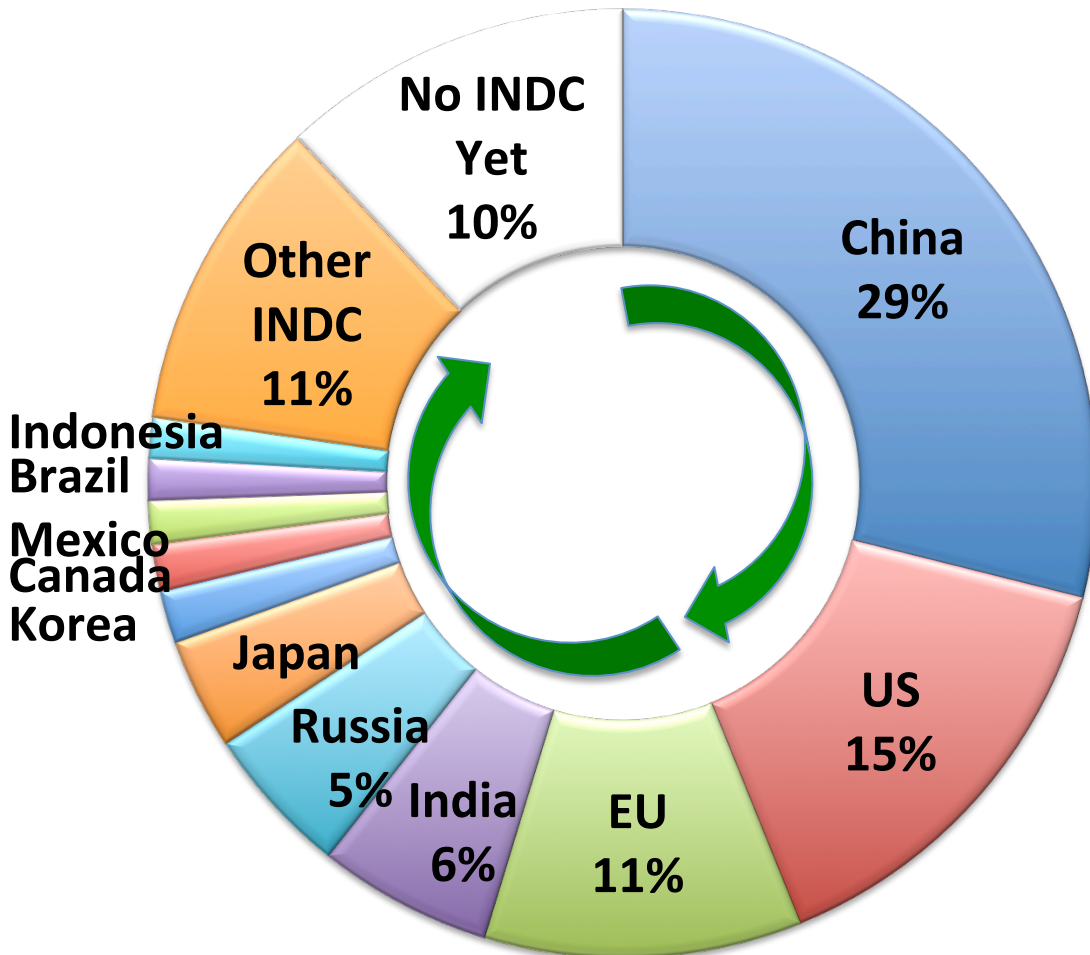
Technical, Financial and Political Obstacles

- Scale
- Stranded Assets
- Level of Peak & Post Peak Path
- Consistency with Overseas Activity

China & U.S. Sparked Global Momentum

150+ Countries (90% of Emissions) Submit Plans

Share of Global CO₂ Emissions



EU	40% below 1990
India	40% non-fossil
Mexico	CO ₂ Peak ~2026
Brazil	Absolute CO ₂ cut, 45% renewable, 2x non-hydro
Korea	37% below BAU
Japan	26% below 2013 Nuclear: 20/22% RE: 22-24%