

A vertical photograph on the left side of the slide showing several wind turbines in a field. The sky is a mix of blue and orange, suggesting sunset or sunrise. The turbines are white and their blades are in motion.

# Driving to Zero

## *Roles for the U.S., China, and EU*

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# Near-term actions are crucial

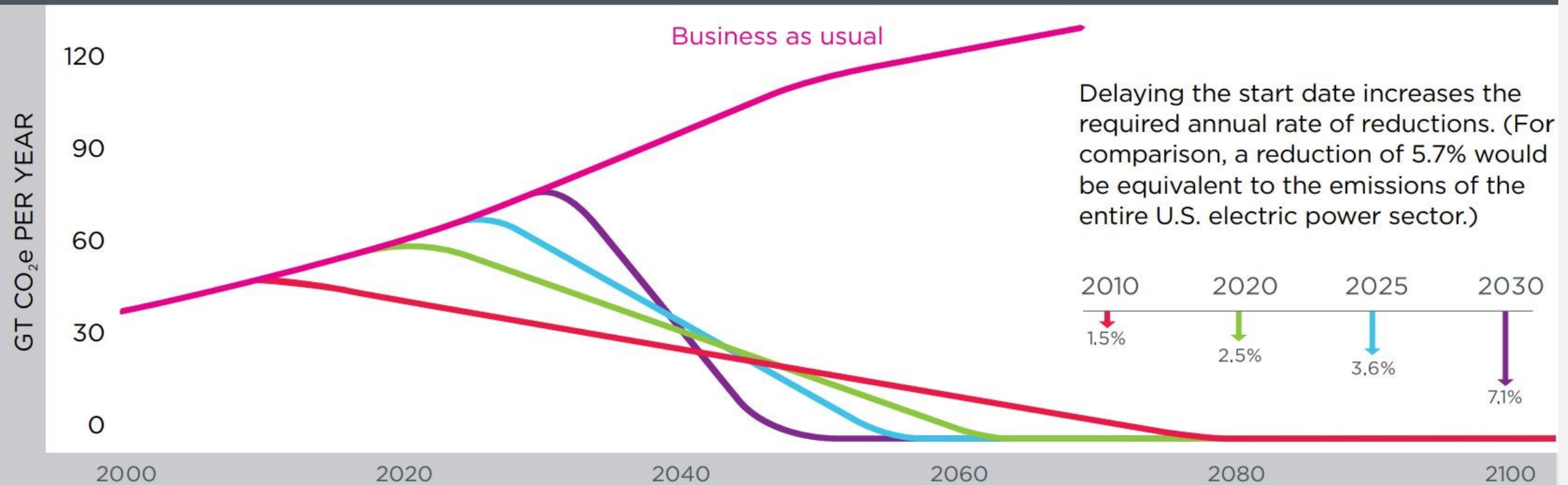
- 2050 sets a quantitative path, but NOT a near-term plan
  - *Perhaps California is the only jurisdiction with a plan that is well underway*
- **Interim goals matter – a LOT**
  - *Pay attention to 2025, 2030, 2035*



# Interim goals matter – a LOT

- Pay attention to 2025, 2030, 2035 on road to 2050

**FIGURE 4: DIFFERENT PATHWAYS TO 450 PPM**





# What makes a plan credible?

- Clear pathway to zero for each sector
  - *Power sector – drive to zero by 2035*
  - *Transportation – accelerate EVs*
  - *Buildings – electrify with codes and standards*
  - *Industry – cover all major realms: steel, concrete, chemicals, fertilizer*
  - *Back it all up with near-term national policy*



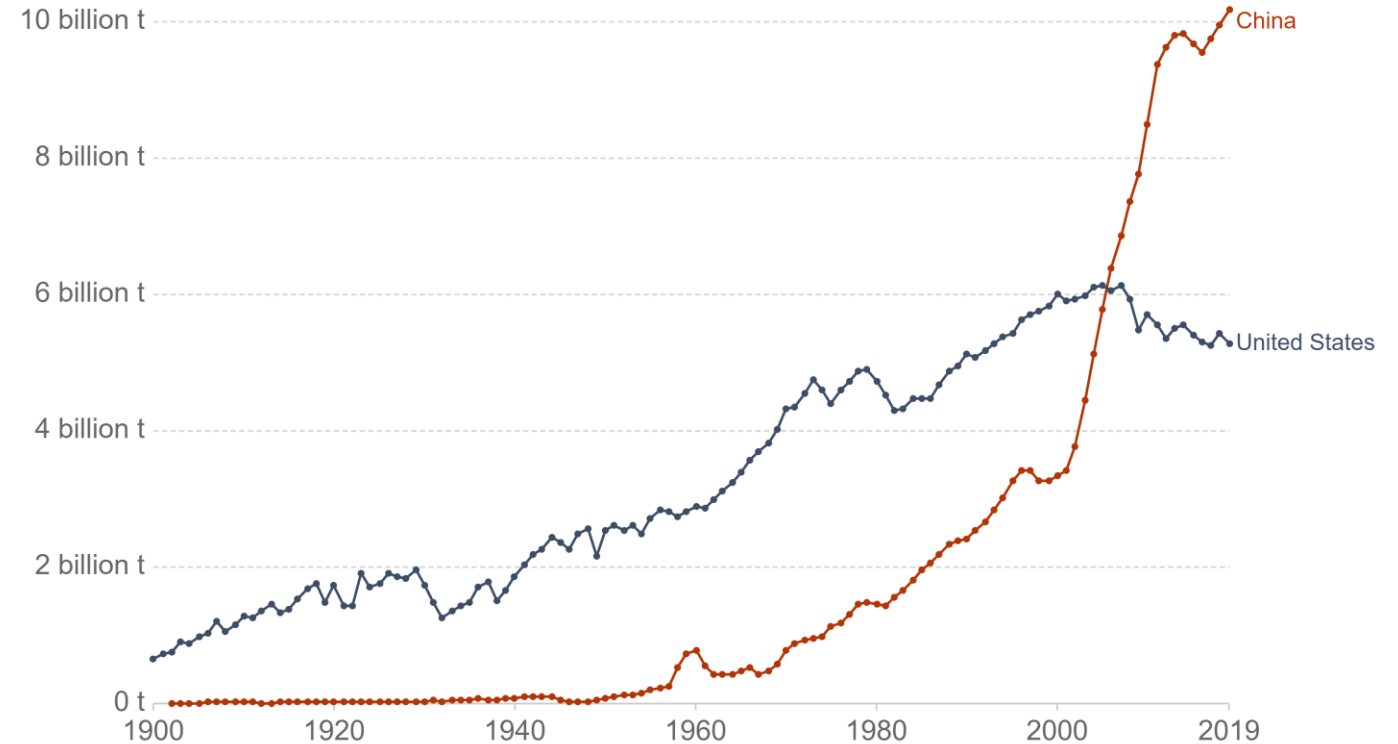
# Key jurisdictions: E.U., U.S., China

- Prioritize largest emitting countries, biggest decarbonization opportunities
- Target specific policy decisions with largest avoided emissions potential

## Annual CO<sub>2</sub> emissions

Carbon dioxide (CO<sub>2</sub>) emissions from the burning of fossil fuels for energy and cement production. Land use change is not included.

Our World  
in Data



Source: Global Carbon Project; Carbon Dioxide Information Analysis Centre (CDIAC)

Note: CO<sub>2</sub> emissions are measured on a production basis, meaning they do not correct for emissions embedded in traded goods.  
[OurWorldInData.org/co2-and-other-greenhouse-gas-emissions/](https://OurWorldInData.org/co2-and-other-greenhouse-gas-emissions/) • CC BY



# United States

- Biden's American Jobs Plan would go a long way – Clean Energy Standard is critical
- But politics are complicated – the U.S. Senate
- Requires regulatory agenda, state action
- 25 states with 55% of U.S. population have clean energy targets – must be locked in regardless of federal action



# China

- Peak coal generation by 2024
- Peak total emissions by 2025 or 2027
- No more coal financing – in China or internationally
- 2,000 GW clean power capacity by 2030
- Accelerate EV deployment, phase out internal combustion engines



# European Union

- Serious grid decarbonization – no coal by 2030
- Efficiency directives on buildings, automobiles
- EV incentives, transition mandate
- Vigilance on ETS – prices will start to hurt
- Accelerate industrial transformation – lead the way





## Joint action

- **Minamata Treaty to ban fluorescent lighting**
- **Global policy support**
  - *Deeply informed*
  - *Prompt*
  - *Practical*
- **Shared pathways for tough sectors**
  - *Concrete*
  - *Steel*
  - *Chemicals*
  - *Fertilizer*





This is the inflection point.  
We win together or lose together.



# Moving forward

- This is not about compelling others
- Allocation of burden sours the prospects
- Greater ambition, shares of new markets is approach







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