US Climate Policy & Global Implications

Michael Davidson MIT Joint Program Climate Change Lecture Series IAP 2017

Goals and Outline

Goals

- An historical perspective on US climate policy under different administrations
- Understanding of interplay between domestic and international policy developments

Outline

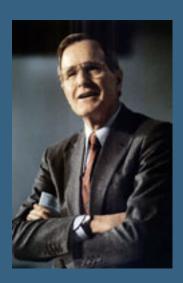
- Early UNFCCC and Kyoto Protocol (Bush I, Clinton)
- Kyoto's Successor and Domestic Institutions (Bush II)
- Copenhagen, US-China, and Climate Action Plan (Obama)
- Paris and US international targets
- Prospects for 2020, 2025 and beyond

Early UNFCCC (Bush I)

- 1990 Clean Air Act amendments tackles several new environmental issues including acid rain
- US signs on to UN climate convention (UNFCCC) and several other environmental treaties in Rio (1992)

"The United States fully intends to be the world's preeminent leader in protecting the global environment."

– George H.W. Bush, 1992



Kyoto Protocol (Clinton)

- Clinton departure from Bush:
 - Agreed to binding commitments to reduce emissions (over disagreements among agencies)
 - "BTU tax" ~ main carbon policy
- ...and despite warning signs that it wouldn't work politically
 - BTU tax defeated early on
- 1993 Climate Change Action Plan
 - 2000 emissions return to 1990 levels
- Kyoto Protocol negotiations concluded in 1997, commitments strictly to developed countries (Annex 1) only
- Byrd-Hagel Senate resolution (1997): treaty must require developing country action, and no serious harm to US economy

Domestic Institutions (Bush II)

Internationally:

Formally reject Kyoto Protocol

Domestically:

- Climate Change Plan (2002)
 - Energy intensity 18% ♥ by 2012
- Energy Policy Act (2005)
 - Complex bill...fossil fuels, energy efficiency, and tax credits for renewable energies
- Massachusetts v. EPA (2007)
 - GHGs considered as air pollutant and EPA must review previous decision not to regulate
- Pledge to stop GHG emissions growth by 2025 (announced 2008)

Kyoto's Successor at Bali

 Soon after Kyoto came into effect (2005), recognition of need for new treaty

• US is major focus of international criticism during Bali climate talks (2007)

"But if for some reason you are not willing to lead, leave it to the rest of us. Please get out of the way."

- Papua New Guinea delegate

 Bali Roadmap eventually agreed: 2-year plan to new treaty (to conclude in 2009), w/o requirements of commitments

US-China (Obama)

- Obama and Hu meeting prior to Copenhagen (2009)
 - Precedence for cooperation from Bush II
 - But, 2009 climate change joint commitments were departures for both countries



- Obama and Xi meetings
 - Annual announcements of initiatives
 - 2014 climate change commitments for Paris

US Climate Action Plan (2013)

- Waxman-Markey cap-and-trade bill failed (2010)
- CAP approach: focus on sector by sector, mostly regulatory (i.e., without new laws)
 - fuel economy standards for vehicles
 - biofuels mandate
 - building codes and other energy efficiency programs
 - tax credits, loan guarantees, and R&D subsidies for renewable energy, nuclear
 - "Super greenhouse gases" HFCs
 - Clean Power Plan: rules targeting coal-fired power plants

Paris (2015)

- US presence and other key actors (China, EU, France)
- Culmination of negotiating round driven by US objectives of full participation and developing country pledges

Interlude: Last-minute text change and US domestic law

- As closing plenary about to start on final Saturday, delay as US team noted some changed wording:
 - "Developed country Parties <u>shall</u> continue taking the lead by undertaking economy-wide absolute emission reduction targets..."
- Legal interpretation to avoid new Senate ratification:
- All legally-binding language in Paris must already be included in the UNFCCC treaty (e.g., reporting requirements). Anything additional must be voluntary (e.g., "should")

Marrakech (2016)

- US election in first week: many countries "wait and see"
- Head of US delegation says "farewell" to standing ovation of gathered NGOs



IG @mitenergy

US International Climate Targets

Will US be able to meet its international climate commitments?

What follows is pure speculation...

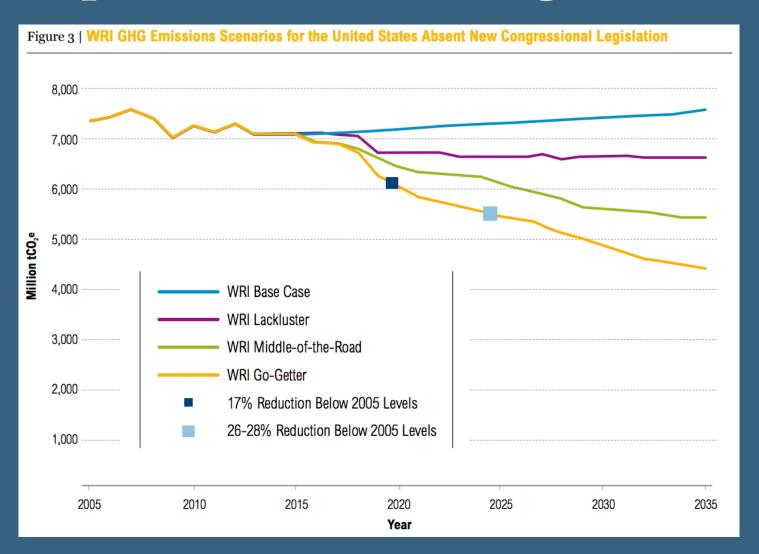
...and represents solely my views and interpretation

Prospects for 2020 Target

2020 (Copenhagen): ♥ 17% relative to 2005 levels

- Overall, many pieces already in place
- Many regulatory measures already in force for awhile (vehicle, appliance efficiency)
- Gas outlook strong in short-term (EIA)
 - 36 GW new capacity in next two years
 - Futures / forecast prices relatively stable
- Federal renewable energy subsidies extended in 2015
 - Wind production tax credit (at declining rate) through 2020
 - Solar investment tax credit through 2019, declining thereafter

Prospects for 2020 Target



Side note on difference between regulation and legislation

- Regulation = authority given by Congressional legislation to federal agencies to make rules and policy
 - Requirements for rule-making processes, which can > 1 year
 - Eg, EPA uses wide authority under Clean Air Act (as interpreted by courts) to create Clean Power Plan
 - "Rule-unmaking" same process as rule-making (with exception for Congressional Review Act)
- Legislation = Congressional acts to set and achieve goals
 - May specify policies to achieve them
 - Eg, Waxman-Markey sets cap and other details of cap-and-trade
 - Repealing legislation can be done immediately

Want to learn more?

IDS.430 (Fall) Environmental Law, Policy, and Economics. Ashford, Caldart.

Prospects for 2025 and Beyond

2025 (Paris): **4** 26-28% relative to 2005 levels

- Outcomes less clear without new action
- More recent regulatory measures can be changed
 - Congressional Review Act (CRA, 1996): rarely used, can overturn agency rules made recently, without formal rule-making process
 - → Could target methane rules for oil and gas
 - Negotiated resolution of remaining CPP after court review
- A new renaissance for coal?
- Under Paris Agreement, US should submit 2030 pledge by 2020

Climate Policy under Republican Administrations

- Breathe
- Some win-win items
 - Energy security
 - Renewable energy in red states
 - Natural gas (at least for now)
- Courts
- States and cities
 - E.g., Massachusetts currently debating two carbon pricing bills (HD 1504, SD 1021)

THANK YOU!