

U.S. CLIMATE CHANGE POLICY

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PCAST

AGENDA

- **US-China Joint Announcement (Kelly)**
- **Lima Outcomes (Kelly)**
- **Transparency Mechanisms in UNFCCC (Rick)**
- **US Progress in Reducing Greenhouse Gas Emissions (Rick)**
- **Discussion (Joint)**

U.S.-CHINA JOINT ANNOUNCEMENT ON CLIMATE AND CLEAN ENERGY



UNFCCC CONFERENCE OF PARTIES (20TH) IN LIMA: OUTCOMES AND ROAD TO PARIS



UNFCCC Outcomes

Lima Call for Climate Action
“Elements for a Draft Negotiating Text”

U.S. Outcomes

Leadership position
US as co-chair
Multilateral assessment process
Achievement of goals for COP20

Road to Paris

INDCs
Info requirements
Elements text
Tech transfer
Climate finance
CBDR

TRANSPARENCY MECHANISMS IN UNFCCC

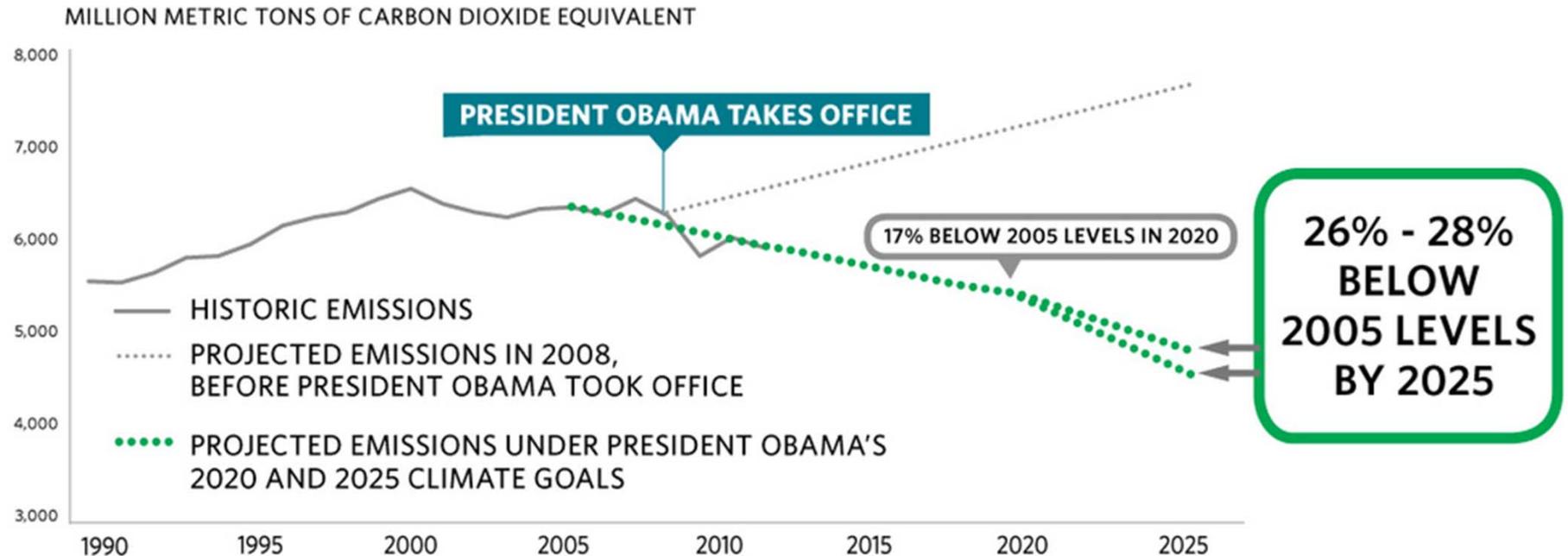
- In Copenhagen and Cancun, countries agreed to set goals, submit biennial reports, and participate in Multilateral Assessment of each others progress
- US submitted first-ever Biennial Report for public comment September of 2013 and published final in January 2014
- In Lima, US participated in first-ever Multilateral Assessment
- Key Lima Transparency Outcomes
 - Calls on those countries ready to do so - and that should include all major emitters - to put forward publicly their proposed "contributions" by March 31, 2015.
 - Agreed on a detailed set of information that Parties will submit with their contributions to ensure that they are clear and understandable.
 - Agreed that Parties can consider communicating their undertakings to become more resilient.

CLIMATE ACTION PLAN (CAP)

The President's Climate Action Plan (2013) consists of executive actions across three key pillars, grounded in existing legal authorities:

1. Reduce U.S. GHG Emissions
2. Prepare for the Impacts of Climate Change
3. Lead in International Efforts to Combat Global Climate Change

PRESIDENT OBAMA JUST ANNOUNCED A NEW TARGET TO CUT U.S. CARBON POLLUTION BY 26-28% BY 2025.



[WH.GOV/CLIMATE-CHANGE](https://www.whitehouse.gov/climate-change)

#ActOnClimate

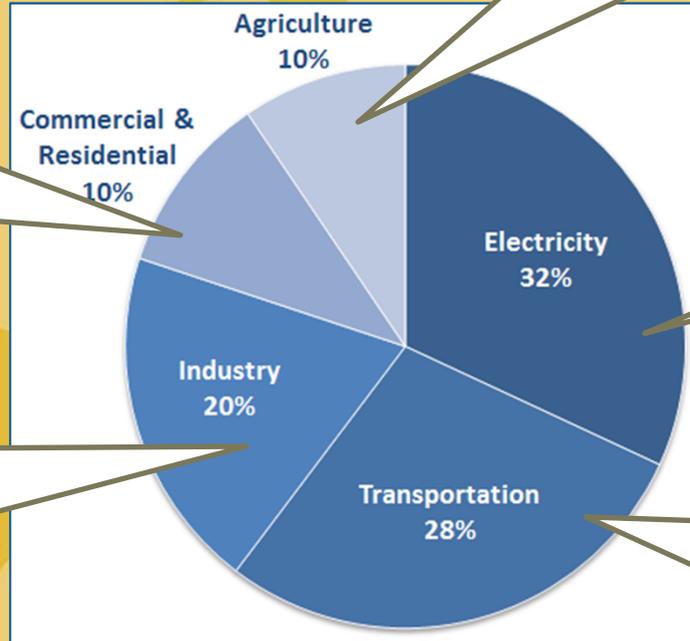
- Robust action brings us in range of 26-28% below 2005 levels by 2025
- Doubling of decarbonization pace
- Consistent with reductions of >80% by 2050

POLICIES ADDRESS ALL SECTORS AND GASES

- Interagency Methane Strategy
- Agricultural programs

- Appliance & Equipment standards
- Building codes
- Green Mortgages
- Other measures

- HFCs including SNAP
- Oil & Gas Methane
- Efficiency standards and programs
- Other measures



- Clean Power Plan
- Building codes
- Appliance & equipment standards
- Other measures

- Fuel economy standards
- Biofuels
- Reduced VMT
- Other measures

Sector Breakdown of 2012 Emissions

- The U.S. is driving substantial reductions in all sectors and gases through existing and new policies.
- Enhanced policies to bolster sinks through reforestation and conservation will further contribute to reaching our 2025 goal

CUTTING GREENHOUSE GAS EMISSIONS THROUGH CLEAN ENERGY

- **Develop carbon pollution standards for new and existing power plants**
 - Delivered Proposed Standards for new power plants in Sep 2013
 - Delivered Proposed Standards for existing power plants in June 2014
 - Final rules by summer 2015
- **Double electricity generation from solar and wind in the U.S. again by 2020**
 - Builds on previous doubling from 2009 to 2012
 - New 20 percent by 2020 renewables procurement target for the Federal government
- **On-going research, development and deployment**
 - **Sunshot:** Less than four years into decade-long SunShot Initiative, the solar industry is already more than 68% to cost target of \$0.06 per kilowatt-hour for utility-scale PV
 - **EV Batteries:** Reduced modeled, high volume cost of EV battery production from \$1000/kWh in 2008 to \$325/kWh in 2013, with a goal of \$125/kWh by 2022
 - **Biofuels:** Reduced modeled mature cost of cellulosic ethanol from over \$13 per gallon to about \$2 per gallon
 - **Wind:** PPAs signed in 2013 show wind energy available at competitive rates as low as 2.5 cents/kWh

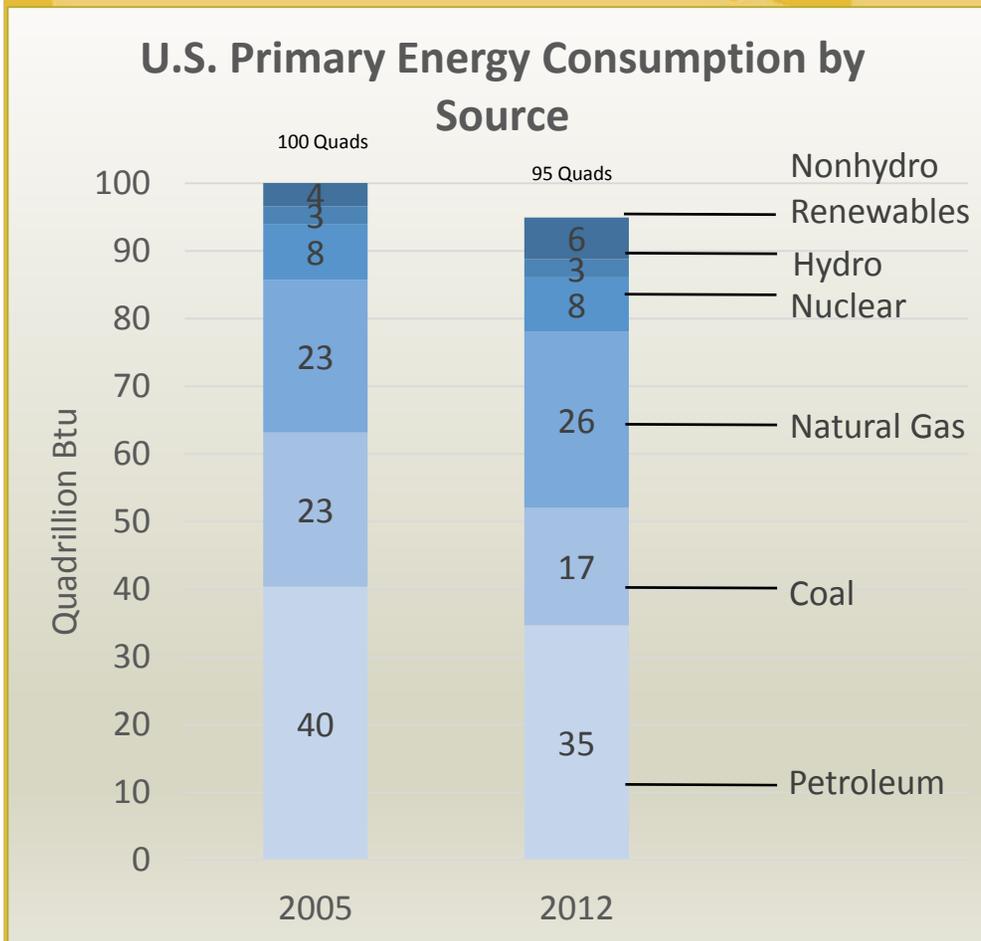
ENERGY EFFICIENCY POLICIES ALSO DRIVING DOWN EMISSIONS

- **Major fuel economy standards for cars and light trucks**
 - New standards will double the efficiency of cars and trucks by 2025, reducing over 6,000 Mt of CO₂ over life of program
 - First-ever national fuel economy and greenhouse gas emission standards for commercial trucks, vans, and buses for model years 2014-2018
 - New post-2018 fuel economy standards planned for heavy-duty vehicles
- **Comprehensive buildings sector efficiency measures**
 - The US Department of Energy (DOE) completed 10 final appliance standards in just 2014. On track to goal of 3,000 Mt of cumulative abatement through 2030
 - Through Better Buildings Challenge over 2 billion square feet of commercial and industrial buildings on track to be at least 20 percent more energy efficient by 2020
 - Completed energy efficiency upgrades in more than 100 million homes, saving many families more than \$400 on their heating and cooling bills in their first year alone

CUTTING GREENHOUSE GAS EMISSIONS BEYOND THE ENERGY SECTOR

- **Domestic actions to reduce short-lived climate pollutants**
 - On September 16, 2014, White House announced new executive actions and private sector commitments to reduce cumulative global consumption of HFCs by the equivalent of 700 million metric tons of CO₂e through 2025, or 1.5% of the world's 2010 GHG emissions
 - In 2014 the Environmental Protection Agency proposed two new rules under the Significant New Alternatives Policy (SNAP) program that will reduce 31-42 million metric tons of CO₂e
- **New approaches to protect and restore forests, grasslands and wetlands to bolster our carbon sinks**
 - October 2014 release of Priority Agenda to manage and enhance lands sector carbon sinks

POLICIES ARE ALREADY DELIVERING RESULTS



- Since 2005, fuel economy standards, appliance efficiency standards, building codes, private sector innovation, and state and local action have driven down energy consumption by 5%, even as real GDP increased by 9%
- From 2009 to 2012, electricity generation from wind and solar power more than doubled
- Shift from coal to natural gas, largely in the power sector

Source: EIA data