# U.S. INDC

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**United States Department of State** 

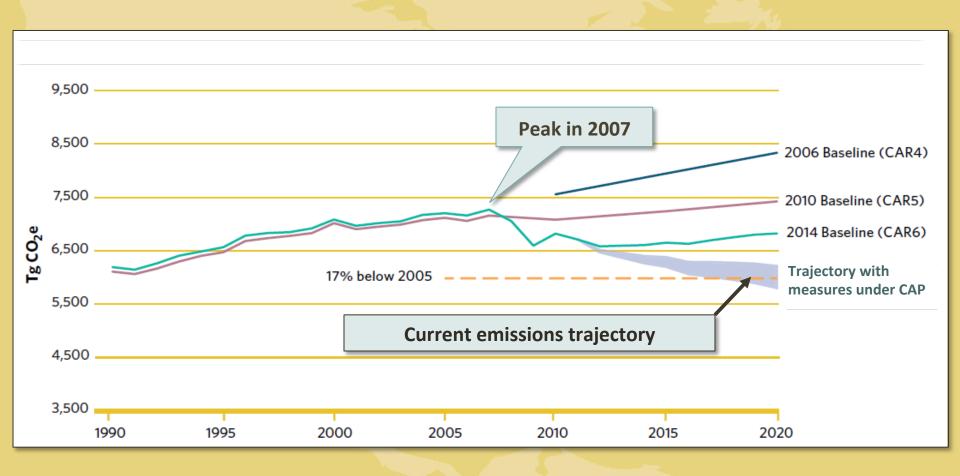
# REMINDER: 2020 TARGET

Table 1 Ke	y Parameters of	the U.S. Economy	y-wide Emission Reductio	n Targets
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Parameters	Targets	
Base Year	2005	
Target Year	2020	
Emission Reduction Target	In the range of 17 percent below 2005 levels.	
Gases Covered	CO <sub>2</sub> , CH <sub>4</sub> , N <sub>2</sub> O, HFCs, PFCs, SF <sub>6</sub> , and NF <sub>3</sub> .	
Global Warming Potential	100-year values from the IPCC Fourth Assessment Report (IPCC 2007).	
Sectors Covered	All IPCC sources and sectors, as measured by the full annual inventory (i.e., energy, transport, industrial processes, agriculture, LULUCF, and waste).	
Land Use, Land-Use Change, and Forests (LULUCF)	Emissions and removals from the LULUCF sector will be accounted using a net-net approach and a 2005 base year, including a production approach to account for harvested wood products. The United States is considering approaches for identifying the impact of natural disturbances on emissions and removals.	
Other	To be in conformity with U.S. law.	

Note:  $CH_4$  = methane;  $CO_2$  = carbon dioxide; HFCs = hydrofluorocarbons; IPCC = Intergovernmental Panel on Climate Change;  $N_2O$  = nitrous oxide; NF<sub>3</sub> = nitrogen trifluoride; PFCs = perfluorocarbons; SF<sub>6</sub> = sulfur hexafluoride.

## WE ARE ON TRACK TO HIT OUR 2020 GOAL



# INDC DEVELOPMENT PROCESS

- White House-led, high-level interagency process
- Building on existing efforts under President Obama's
   Climate Action Plan
- Each agency asked to identify and assess mitigation opportunities under existing law/authority
- Also considered additional reductions achievable through voluntary programs and public-private partnerships
- Looked for ambitious and achievable opportunities across all sectors and gases
- Wide-ranging consultations with public and private sector stakeholders

## INDC DEVELOPMENT PROCESS

- Quantified projected emission reductions from:
  - Continued, growing impact of current and planned policies, and
  - Implementation of new and expanded policies under existing law + implementation of voluntary actions
- Drew on existing GHG inventory and models

## UNITED STATES INDC

#### Intended nationally determined contribution

The United States intends to achieve an economy-wide target of reducing its greenhouse gas emissions by 26%-28% below its 2005 level in 2025 and to make best efforts to reduce its emissions by 28%.

- Represents a substantial acceleration of the pace of U.S. domestic GHG reductions, to 2.3-2.8% annually (from 1.2% under our 2020 target)
- Consistent with a straight line emission reduction pathway from 2020 to deep, economy-wide emission reductions of 80% or more by 2050.

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# (PAGE 1)

Party: United States of America

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Information provided in order to facilitate clarity, transparency, and understanding

#### Scope and coverage:

Gases:

The U.S. target covers all greenhouse gases included in the 2014 Inventory of United States Greenhouse Gas Emissions and Sinks: carbon dioxide ( $CO_2$ ), methane ( $CH_2$ ), nitrous oxide ( $N_2O_2$ ), perfluorocarbons (PFCs), hydrofluorocarbons (HFCs), sulfur hexafluoride ( $SF_6$ ), and nitrogen trifluoride ( $NF_2$ ).

Sectors

The U.S. target covers all IPCC sectors.

Percentage of total greenhouse gas emissions:

The United States intends to account for 100 percent of U.S. greenhouse gas emissions and removals for the base year 2005 as published in the Inventory of United States Greenhouse Gas Emissions and Sinks, on a net-net basis.

Quantifiable information on the reference point, time frames, assumptions and methodological approaches including those for estimating and accounting for anthropogenic greenhouse gas emissions and removals:

Timeframe and reference point:

The U.S. target is for a single year: 2025. The base year against which the target is measured is 2005.

#### Accounting approach for land sector:

The United States intend space in include all categories of emissions by sources and removals by smiss, and all pools and gases, as reported in the invention you United States Gerenhouse Gas Emissions and Sinks; to account for the land sector using a net-net approach, and to use a "production and promose" to account for the land products consistent with IPCC guidance. The United States may also exclude emissions from natural disturbances, consistent with available IPCC usidance.

There are material data collection and methodological challenges to estimating emissions and removals in the land sector. Consistent with IPCC Good Practice, the United States has continued to improve its land sector generhouse gas reporting, which involves updating its methodologies. The base year and target for the U.S. INDC were established on the basis of the methodologies used for the land sector in the 2014 Inventory of United States Greenhouse Gas Emissions and Sinks and the United States 2014 Binnnal Report.

#### Metric:

The United States intends to use 100-year global warming potential (GWP) values to calculate CO<sub>2</sub> equivalent totals. The United States intends to report emissions totals using Fourth Assessment Report values, and will consider future updates to GWP values from the IPCC.

#### se of market

At this time, the United States does not intend to utilize international market mechanisms to implement its 2025 target.

Domestic laws, regulations, and measures relevant to implementation:

Several U.S. laws, as well as existing and proposed regulations thereunder, are relevant to the implementation of the U.S. target, including the Clean Air Act (42 U.S.C. §7401 et seq.), the Energy Policy Act (42 U.S.C. §13201 et seq.), and the Energy Independence and Security Act (42 U.S.C. § 17001 et seq.).

Since 2009, the United States has completed the following regulatory actions:

- Under the Clean Air Act, the United States Department of Transportation and the
  United States Environmental Protection Agency adopted fuel economy standards for
  light-duty vehicles for model years 2012-2025 and for heavy-duty vehicles for model
  years 2014-2018.
- Under the Energy Policy Act and the Energy Independence and Security Act, the
  United States Department of Energy has finalized multiple measures addressing
  buildings sector emissions including energy conservation standards for 29 categories

of appliances and equipment as well as a building code determination for commercial buildings.

 Under the Clean Air Act, the United States Environmental Protection Agency has approved the use of specific alternatives to high-GWP HFCs in certain applications through the Significant New Alternatives Policy program.

#### At this time

- Under the Clean Air Act, the United States Environmental Protection Agency is moving to finalize by summer 2015 regulations to cut carbon pollution from new and existing power plants.
- Under the Clean Air Act, the United States Department of Transportation and the United States Environmental Protection Agency are moving to promulgate post-2018 fuel economy standards for heavy-duty vehicles.
- Under the Clean Air Act, the United States Environmental Protection Agency is developing standards to address methane emissions from landfills and the oil and gas sector.
- Under the Clean Air Act, the United States Environmental Protection Agency is
  moving to reduce the use and emissions of high-GWP HFCs through the Significant
  New Alternatives Policy program.
- Under the Energy Policy Act and the Energy Independence and Security Act, the
  United States Department of Energy is continuing to reduce buildings sector
  emissions including by promulgating energy conservation standards for a broad range
  of appliances and equipment, as well as a building code determination for residential
  buildings.

In addition, since 2008 the United States has reduced greenhouse gas emissions from Federal Government operations by 17 percent and, under Executive Order 13693 issued on March 25<sup>th</sup> 2015, has set a new target to reduce these emissions 40 percent below 2005 levels by 2025.

#### Relationship with inventory

This approach, and the definitions and metrics used, are fully consistent with our greenhouse gas inventory. The United States intends to continue to improve its greenhouse gas inventory over time, and may incorporate these improvements into its intended antionally determined contribution accordingly. Additional information on the greenhouse gas inventory, including calculations, models, data sources, and references can be found here:

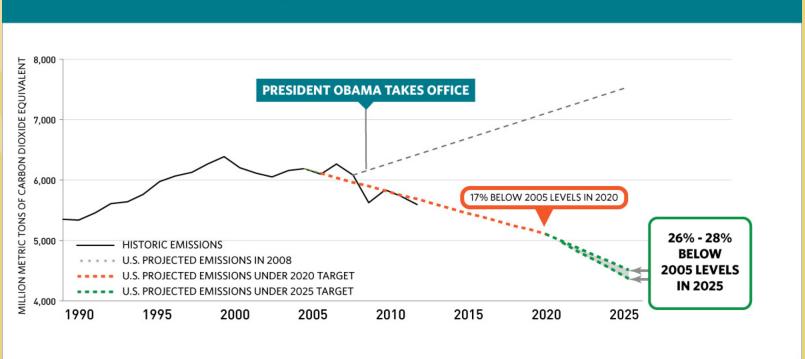
www.epa.gov/climatechange/ghgemissions/usinventorvreport.html#about

## ESTIMATING PROGRESS TOWARDS CONTRIBUTION

- Our accounting approach simple based on our national GHG inventory
- Base year is 2005. Target year is 2025.
- Our contribution will be achieved through domestic action
- We will account using a net-net approach, including for the land sector
- We will be comprehensive in our treatment of the land sector:
  - We intend to include all categories of emissions by sources and removals by sinks, and all pools and gasses, as reported in our GHG Inventory.
- We will account for Harvested Wood Products using a Production Approach, consistent with IPCC guidance.
- We may exclude emissions from natural disturbances, consistent with IPCC guidance

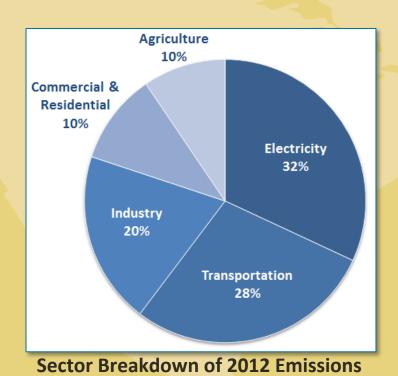
# 2025 TARGET

#### **U.S. EMISSIONS UNDER 2020 AND 2025 TARGETS**



- Our target is a 26-28% reduction below 2005 levels in 2025, making best efforts to achieve a 28% reduction
- This goal is ambitious and achievable, grounded in an intensive analysis of what can be done under existing law
- Doubles our decarbonization pace and is consistent with reductions of >80% by 2050

# Policies to Achieve Target Address All Sectors and Gases



... and 2012 Removals

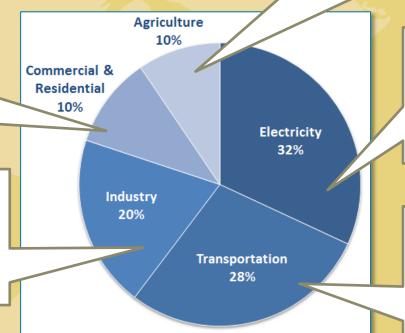
**Forests/and Other Land** 

Remove 12%

# POLICIES TO ACHIEVE TARGET ADDRESS ALL SECTORS AND GASES • Interagency Methane Strategy

Agricultural programs

- Appliance & Equipment standards
- Building codes
- 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
- Other measures
- We are driving substantial reductions in all sectors and gases through existing and new policies.

Sector Breakdown of 2012 Emissions

 Enhanced policies to bolster sinks through reforestation and conservation will further contribute to reaching our 2025 goal

### CUTTING GREENHOUSE GAS EMISSIONS

# Examples of actions that will contribute emissions reduction:

- Develop carbon pollution standards for new and existing power plants
- Double electricity generation from solar and wind in the U.S. again by 2020
- Major fuel economy standards for cars and light trucks
- Comprehensive buildings sector efficiency measures
- Domestic actions to reduce short-lived climate pollutants

# CUTTING GREENHOUSE GAS EMISSIONS & INCREASING SEQUESTRATION FROM THE LAND SECTOR

- New approaches to protect and restore forests, grasslands and wetlands to bolster our carbon sinks
  - In April, U.S. Department of Agriculture announced suite of 10
     programs to reduce GHG emissions, increase carbon sequestration
     and expand renewable energy production in the agricultural and
     forestry sectors.
  - These efforts are expected to reduce net emissions and enhance carbon sequestration by over 120 million metric tons of CO<sub>2</sub> equivalent (MMTCO2e) per year about 2% of economy-wide net greenhouse emissions by 2025.
  - This is the equivalent of taking 25 million cars off the road!
  - Information available at:

http://www.usda.gov/documents/climate-smart-fact-sheet.pdf

# CUTTING GREENHOUSE GAS EMISSIONS & INCREASING SEQUESTRATION FROM THE LAND SECTOR

- 10 Building Blocks protect and restore forests, grasslands and wetlands to bolster our carbon sinks (1)
  - **Soil Health**: Promote conservation tillage and no-till systems, planting crop cover, manage organic inputs, etc.
  - Nitrogen stewardship: Focus on the right timing, placement, and quantity of nutrients.
  - Livestock partnership: Encourage broader deployment of anaerobic digesters, lagoon covers, composting, and and solids separators to reduce emissions from livestock.
  - Conservation of sensitive lands: Through the Conservation Reserve Program and the Agricultural Conservation Easement Program, reduce emissions through riparian buffers, tree planting, and the conservation of wetlands and organic soils.
  - Grazing and pasture lands: Support rotational grazing, improve management of forage, soils, and grazing livestock.

# CUTTING GREENHOUSE GAS EMISSIONS & INCREASING SEQUESTRATION FROM THE LAND SECTOR

- 10 Building Blocks protect and restore forests, grasslands and wetlands to bolster our carbon sinks (2)
  - Private forest growth and retention: Through the Forest Legacy Program and the Community Forest and Open Space Conservation Program, protect almost 1 million additional acres of working landscapes.
  - **Stewardship of federal forests**: Reforest areas disturbed by wildfires, insects, and disease, and increase resilience to these disturbances.
  - Promote use of wood products: Increase use of wood as a building material, to store carbon while reducing use of higher-emission materials.
  - Urban forests: Encourage tree planting in urban areas.
  - Energy efficiency and renewable energy: Promote renewable energy, including, develop additional renewable energy, bioenergy and biofuel opportunities, improve on-farm energy efficience.

## LESSONS LEARNED

- Start as early as possible.
- High-level buy-in is necessary.
- Use existing systems, data and information where possible.
   (We used our GHG inventory and existing models.)
- Be creative look for emissions reductions and sequestration opportunities that are relevant for a country.
- Have one small team responsible for coordinating information. Different experts and stakeholders will contribute different pieces of the puzzle. One team needs to have the mandate to bring this together.
- Make sure assumptions and projections are consistent across sectors.
- Keep it simple. This shouldn't be overwhelming!

## SUPPORT FOR INDC PREPARATION

### Direct support for INDCs

- Providing support for the preparation of INDCs in more than 20 countries
- Building on existing development programs where relevant
- Clean Energy Solutions Center provided no-cost policy consultation in response to more than 100 requests

### Support for Technical Dialogues

 Provided support and participated in the series of regional technical dialogues that UNDP and UNFCCC have been holding, building capacity

### U.S. and international response

- Donor community is coordinating on these efforts plurilaterally to maximize support and reduce redundancy.
- U.S. has been able to positively respond to every request we have received with direct support or a referral to another resource.

# THANK YOU!



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