

# Clarification of the U.S. Economy-Wide Target

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# U.S. economy-wide target

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As announced by President Obama and captured in FCCC/SB/2011/INF.1/Rev.1:

***In the range of 17%  
below 2005 levels by 2020***

# Clarifying the U.S. target: Basics

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- ***Base year:*** 2005
- ***GWP values:*** 100-year GWPs from IPCC AR4
- ***Gases:*** CO<sub>2</sub>, CH<sub>4</sub>, N<sub>2</sub>O, HFCs, PFCs, SF<sub>6</sub>, NF<sub>3</sub>
- ***Sectors:*** All IPCC sectors and categories
- ***Other assumptions/conditions:*** in conformity with U.S. law

# Clarifying the U.S. target: LULUCF

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- **2005** base year
- **Net-net** approach
- **Production accounting** for harvested wood products
- **Under consideration:** approaches for addressing natural disturbances

*This comprehensive approach is the most technically robust way to describe and report what the “atmosphere sees”. It is consistent with the most recent IPCC Guidelines (2006).*

# Frequently Asked Questions

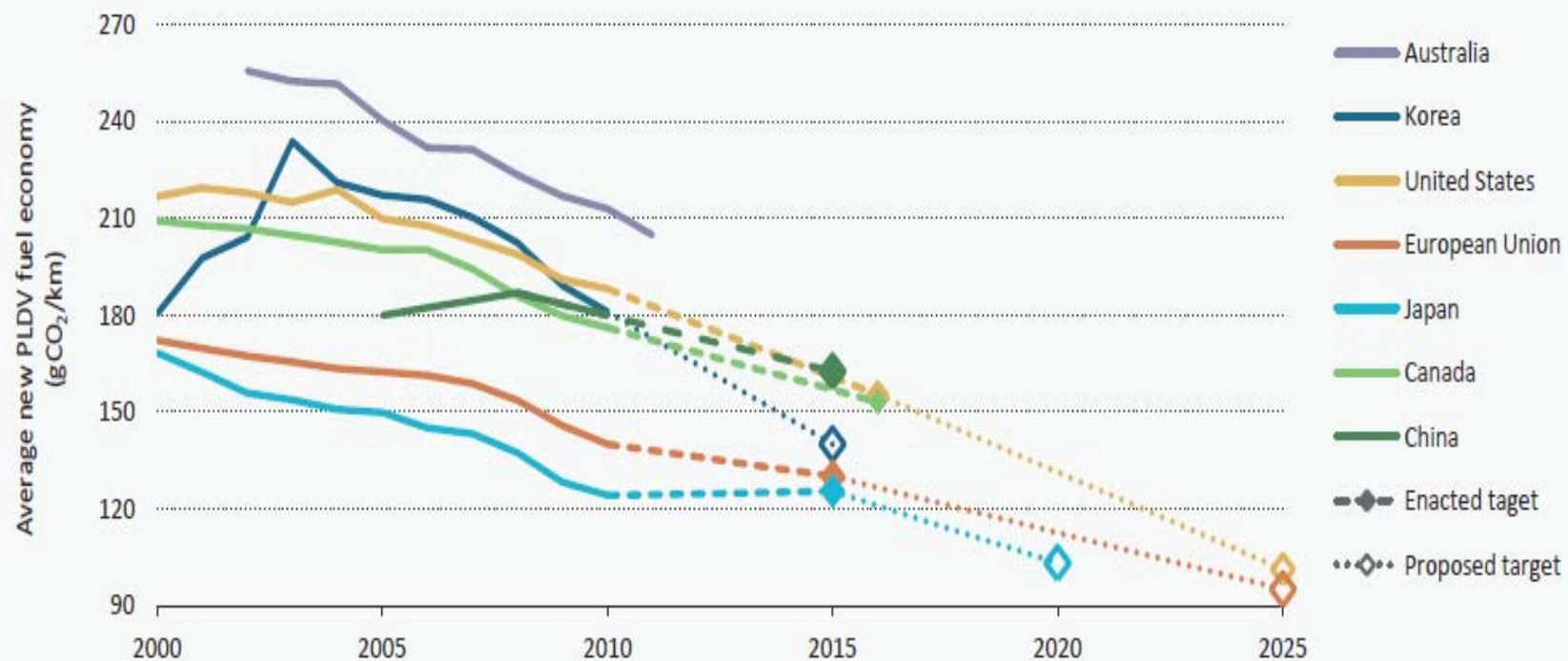
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# What is the US doing domestically? Mobile Sources

- **Light-duty vehicle standards:** Model years 2012-2016 (finalized) and 2017-2025 (proposed). Reduce average to 163 gCO<sub>2</sub> per mile (~54.5 miles per gallon) by 2025.

Figure 1.26

## Vehicle fuel economy, enacted and proposed standards



Note: United States and Canada LDVs include light-commercial vehicles, SUVs and passenger vehicles.

Source: Enacted and proposed targets: GFEI, 2011; IEA analysis and data.

# What is the US doing domestically?

## Mobile Sources

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- **Medium- and heavy-duty trucks:** Standards for model years 2014-2018, will reduce GHG emissions 10 to 20 percent across vehicle types (finalized 2011).
- **Electric Vehicles:** Supported 30 new advanced battery and electric vehicle component plants. By 2015, able to produce enough for one million hybrid and electric vehicles.
- **Biofuels:** National Renewable Fuels Standard (RFS) supports growing renewable fuels industry (in 2011, 8% of total US highway vehicle fuel). 2011 goal of breaking ground on at least four commercial scale cellulosic or advanced biorefineries by 2013 met one year ahead of schedule, nearly 100 million gallons per year of biofuels capacity.
- **Aviation:** Improved fuel efficiency from aircraft operations and advanced technologies by 2015. Support R&D for alternative biofuels, expected to contribute to carbon neutral aviation growth by year 2020.

# What is the US doing domestically?

## Stationary Sources

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- **New Source Performance Standards:** (March, 2012) EPA proposed the first ever national standards for CO<sub>2</sub> emissions from new power plants. Would require new fossil fuel-fired units >25MW to meet an output-based standard (1,000 pounds of CO<sub>2</sub>/MWh).
  - New baseload natural gas-fired plants already meet this standard.
  - New coal-fired plants can comply with technology to reduce CO<sub>2</sub> emissions, such as CCS.
- **Clean Air Act permitting program:** (Jan 2011) GHG emissions from the largest stationary sources were, for the first time, covered by PSD and Title V permitting programs (under the CAA), through requirements for best available control technologies (BACT).
- **Greenhouse gas reporting rule:** Mandatory Reporting of GHGs Rule requires reporting of GHG data from large sources and suppliers. Facilities that emit 25,000 metric tons or more per year of GHGs are required to submit annual reports to EPA.



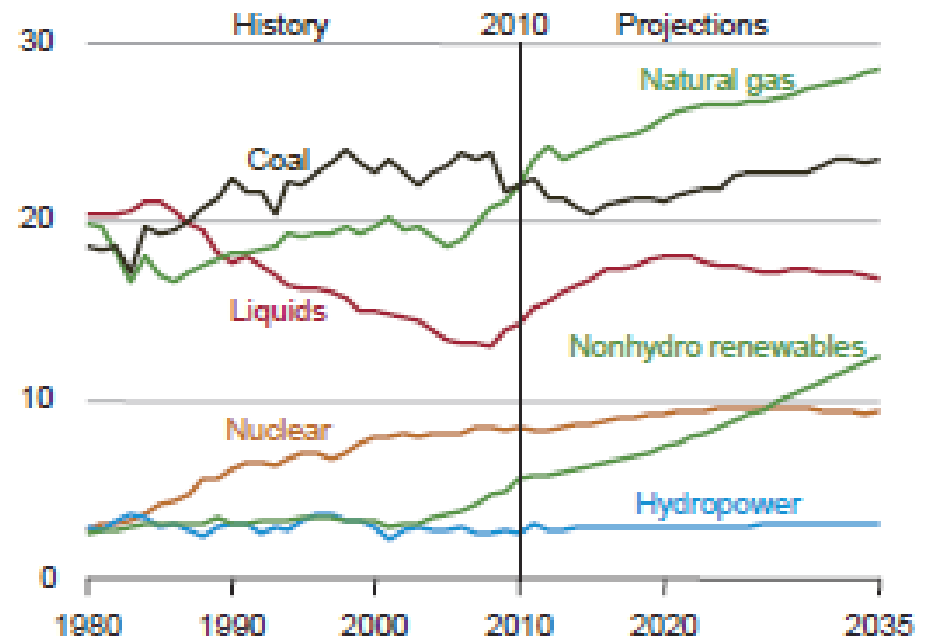
# What is the US doing domestically?

## Clean Energy

- **Clean energy support:** American Recovery and Reinvestment Act (ARRA) invested >\$90 billion in clean energy and energy efficiency - the United States has nearly doubled renewable energy generation from wind, solar, and geothermal sources since 2008.

From 2008 to 2011:

- wind grew by 116.3%
  - solar by 110%
  - hydropower by 28%
  - geothermal by 13%, and
  - biomass by 3%.
- **Tax Incentives:** including the Production Tax Credit for wind and other renewables and 48C manufacturing credit
  - **DOE Loan Program:** nearly 40 clean energy projects
  - **Nuclear energy:** 2010 conditional commitment for loan guarantee for first commercial U.S. nuclear reactors in more than three decades



# What is the US doing domestically?

## Energy Efficiency

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- **Energy efficiency standards for appliances:** >50 kinds of appliances and equipment categories covered by efficiency standards (82% of home energy use, 67% of commercial building energy use, and about 50% of industrial energy use). Save 7% of all U.S. electricity use – this equals offsetting the need for nearly 100 coal-fired power plants.
- **Residential energy efficiency and weatherization:** Energy upgrades in > one million homes. On average, these upgrades save American families more than \$400 on their heating and cooling bills in the first year alone.
- **EPA Energy Star program for buildings:** By 2011, ~16,500 Energy Star certified buildings across America have saved \$2.3 billion in annual utility bills and prevent GHG emissions equal to the annual energy use of >1.5 million homes.
- **Better buildings Initiative for commercial buildings:** (2011) combining administrative actions, a challenge to the private sector, and legislative proposals, to improve energy efficiency in commercial buildings by 20 by 2020.



# How does the U.S. LULUCF approach compare to the Kyoto approach?

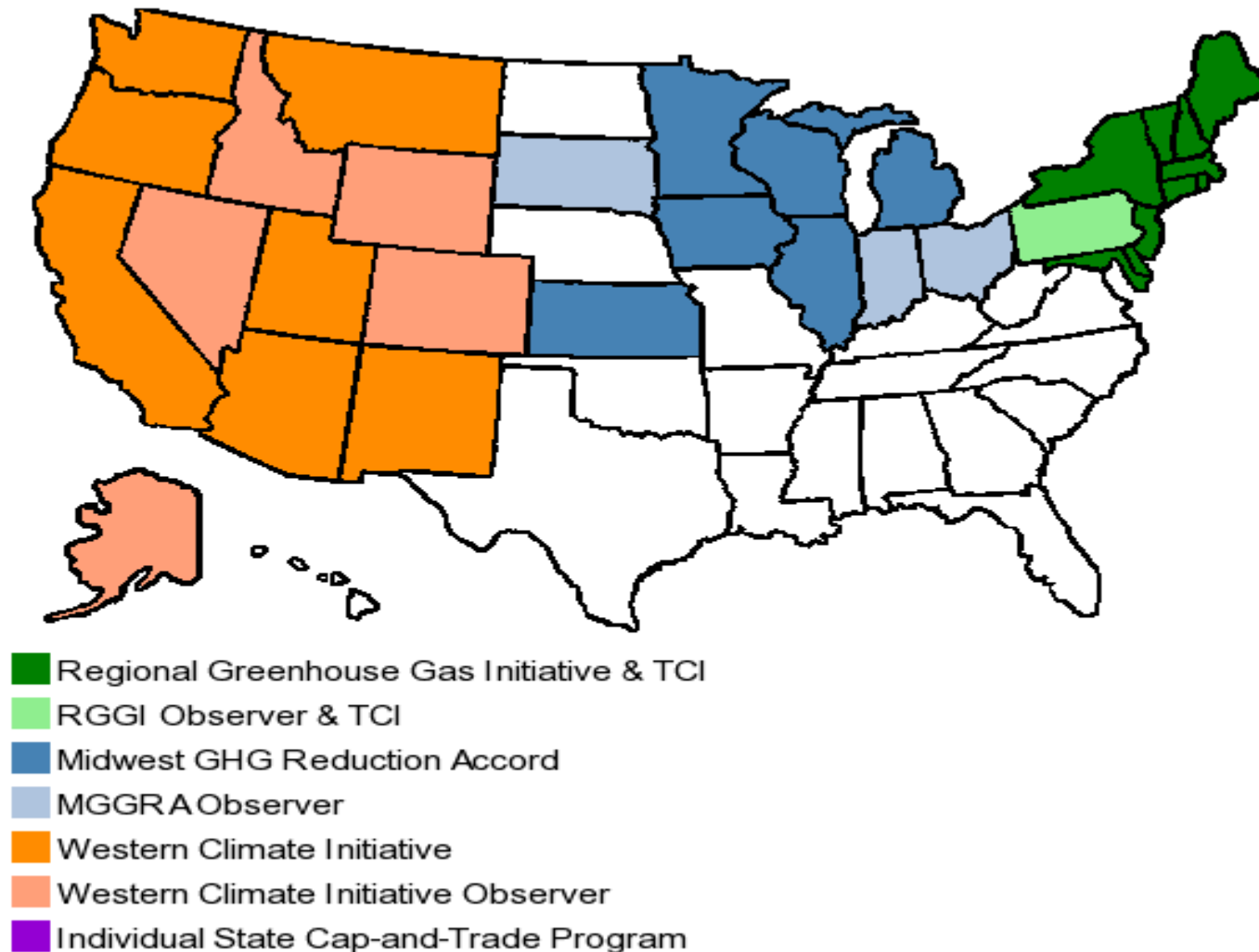
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As compared to the Kyoto activities based approach, we have chosen a comprehensive, net-net, land-based approach because:

- It is more consistent with what the atmosphere sees;
- It provides more consistent, long-term incentives for the sector; and
- It counts all forest management, cropland management, grazing land management and revegetation (only forest management is required under Kyoto);

# How will U.S. state level action contribute?

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# Next Steps

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- US
- UNFCCC