

# CLIMATE CHANGE MITIGATION

EPA'S ROLE IN PRESIDENT OBAMA'S ACTION PLAN  
U.S. Environmental Protection Agency

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# PRESIDENT OBAMA'S CLIMATE ACTION PLAN

- Calls on the federal government to work together with states, tribes, cities, industries, consumers and the international community to address one of the greatest challenges of our time.
- Reinforces the federal commitment to:
  - Cutting harmful pollution,
  - Protecting our country from the impacts of climate change, and
  - Leading an international effort to address a changing climate



# SCIENTIFIC FOUNDATION FOR EPA ACTIONS UNDER THE CLIMATE ACTION PLAN

- GHG actions under the Clean Air Act are rooted in the science-based endangerment finding, leveraging:
  - IPCC
  - National Research Council
  - U.S. Global Change Research Program (USGCRP)
  - EPA’s Office of Research and Development
- Continue to use the major scientific assessments to inform EPA actions
- Engage in IPCC and USGCRP processes
- Communicate and engage the public and scientific experts throughout the process

# CARBON POLLUTION IS THE BIGGEST DRIVER OF CLIMATE CHANGE



## U.S. GREENHOUSE GAS POLLUTION INCLUDES:



### CARBON DIOXIDE (CO<sub>2</sub>)

Enters the atmosphere through burning fossil fuels (coal, natural gas, and oil), solid waste, trees and wood products, and also as a result of certain chemical reactions (e.g., manufacture of cement).

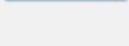
84%



### FLUORINATED GASES

Hydrofluorocarbons, perfluorocarbons, and sulfur hexafluoride are synthetic, powerful greenhouse gases that are emitted from a variety of industrial processes.

2%



### NITROUS OXIDE (N<sub>2</sub>O)

Emitted during agricultural and industrial activities, as well as during combustion of fossil fuels and solid waste.

5%

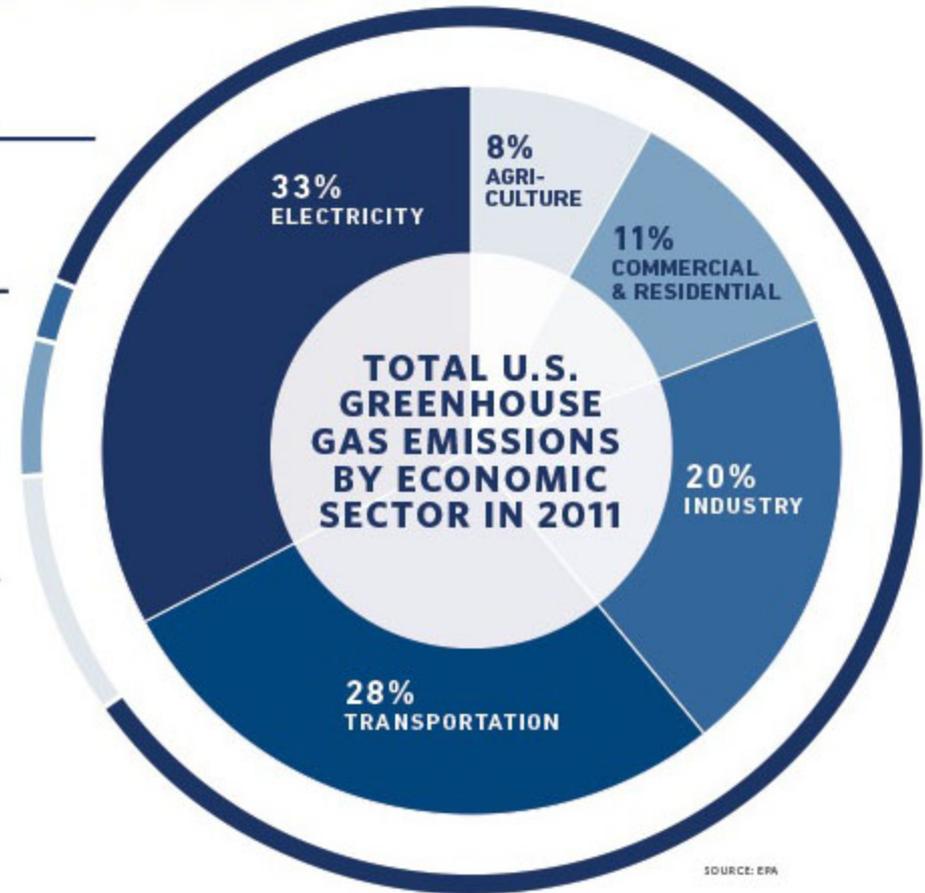


### METHANE (CH<sub>4</sub>)

Emitted during the production and transport of coal, natural gas, and oil as well as from landfills.

9%

SOURCE: EPA

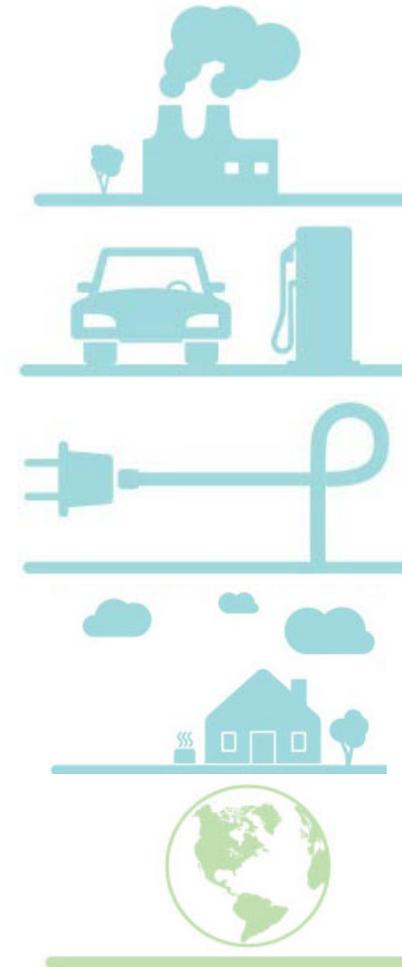


SOURCE: EPA



# EPA MITIGATION ACTIONS UNDER PRESIDENT OBAMA'S PLAN

- Reducing carbon pollution from power plants
- Building a 21<sup>st</sup> century transportation sector
- Cutting energy waste in homes, businesses, and factories
- Reducing methane and HFCs
- Leading international efforts to address global climate change





# CARBON POLLUTION STANDARDS— NEW POWER PLANTS

- Carbon pollution standards for new power plants—111(b)
  - New proposal issued on September 20, 2013
    - Sets separate standards for different types of new power plants
    - Reflects more than 2.5 million public comments and recent trends in the electric power sector
    - Maintains similar level of environmental protection
    - Withdraws April 2012 proposal in a separate action
  - More information at:  
<http://www2.epa.gov/carbon-pollution-standards>





# CARBON POLLUTION GUIDELINES— EXISTING POWER PLANTS

- Carbon pollution guidelines for existing power plants—111(d)
  - Clean Air Act calls for EPA to work in partnership with states to address pollution from the existing fleet
    - Federal guidelines will build on states’ leadership and experience with programs that reduce GHGs
    - States will develop plans that set standards for existing sources
  - Unprecedented outreach to stakeholders will inform guidelines
    - Meetings with states, industry and other stakeholders
    - 11 public listening sessions
  - Will follow EPA’s normal, open and transparent regulatory process to develop guidelines for existing power plants
    - Proposal: June 2014
    - Final: June 2015
    - State 111(d) Plans: June 2016





# BUILDING A 21ST CENTURY TRANSPORTATION SECTOR

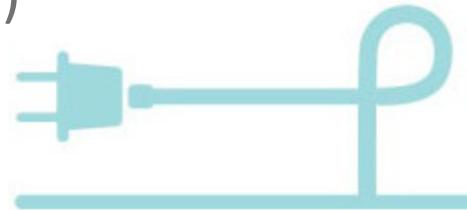
- **Continuing the momentum for the future**
  - In partnership with industry leaders and other stakeholders, EPA and DOT will issue GHG and fuel efficiency standards for post-2018 trucks
  - Continued support for renewable fuels standard
  - Continued support for public/private partnerships such as SmartWay





# CUTTING ENERGY WASTE IN HOMES, BUSINESSES, AND FACTORIES

- **Continuing the momentum for the future**
  - ENERGY STAR will:
    - Continue to boost ENERGY STAR performance levels for appliances and products
    - Provide information to homeowners to improve energy efficiency
    - Support interagency efforts to increase efficiency of multifamily housing
    - Promote EPA's Portfolio Manager Tool and develop and deliver other tools and support
    - Encourage combined heat and power (CHP)





# REDUCING METHANE AND HFCs

- **Continuing the momentum for the future**
  - **Methane**
    - Interagency methane strategy
    - Look for opportunities to reduce methane from key sectors to reduce emissions, enhance economic productivity, and improve public health
  - **HFCs**
    - Address HFCs through domestic action
    - Continue international diplomacy





# LEADING INTERNATIONAL EFFORTS TO ADDRESS GLOBAL CLIMATE CHANGE

- **Continuing the momentum for the future**
  - Expand bilateral cooperation
  - Combat Short-Lived Climate Pollutants
    - Climate and Clean Air Coalition
    - Arctic Council
    - Global Alliance for Clean Cookstoves
  - Global Methane Initiative (GMI)
  - Partner to implement ENERGY STAR internationally

