Please note that this presentation was given during the United Nations Climate Change Conference (COP-15) in Copenhagen, December 7-18, 2009 for more information please visit http://www.cop15.state.go



US EPA Domestic Climate Change Activities

Leif Hockstad Office of Air and Radiation U.S. Environmental Protection Agency

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Recent EPA Actions



- Mandatory GHG Reporting Rule.
 - Facility level GHG emissions reporting across large industrial sources.
 - Final rule published October 30, 2009.
- Endangerment and Cause or Contribute Findings under the Clean Air Act.
 - GHG emissions and public health and welfare, and contribution of on-road vehicles.
 - Finalized December 7, 2009.

Background of the GHG Reporting Rule



- Directed by Congress in 2008 Appropriations Act.
- Proposal signed March 10, 2009.
- Public Comment Period (April 10 June 10, 2009).
- Final rule signed September 22, 2009.
- Published in Federal Register October 30, 2009.

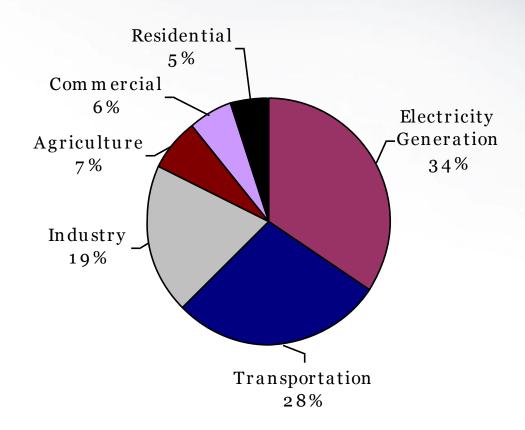
Purpose of the GHG Reporting Rule



- Requires reporting of greenhouse gas (GHG) emissions from all sectors of the economy in the United States.
- Provides accurate and timely data to inform future climate change policies and programs.
 - Better understand relative emissions of specific industries, and of individual facilities within those industries.
 - Better understand factors that influence GHG emission rates and actions facilities could take to reduce emissions.
- Does not require control of GHGs.

U.S. GHG Emissions (CO₂e) Allocated to Economic Sectors (2007)





Key Elements of the Rule



- Reporting of 6 GHGs.
 - CO₂, CH₄, N₂O, HFCs, PFCs, SF₆ (plus other fluorinated gases).
- Approximately 85% of total U.S. greenhouse gas emissions covered by GHG reporting rule (about 10,000 reporters).
- Annual reporting of GHGs by:
 - 25 source categories.
 - 5 types of suppliers of fuel and industrial GHGs.
 - Motor vehicle and engine suppliers (except light duty sector).
- 25,000 metric tons CO₂e per year reporting threshold for most sources; capacity-based thresholds where feasible.

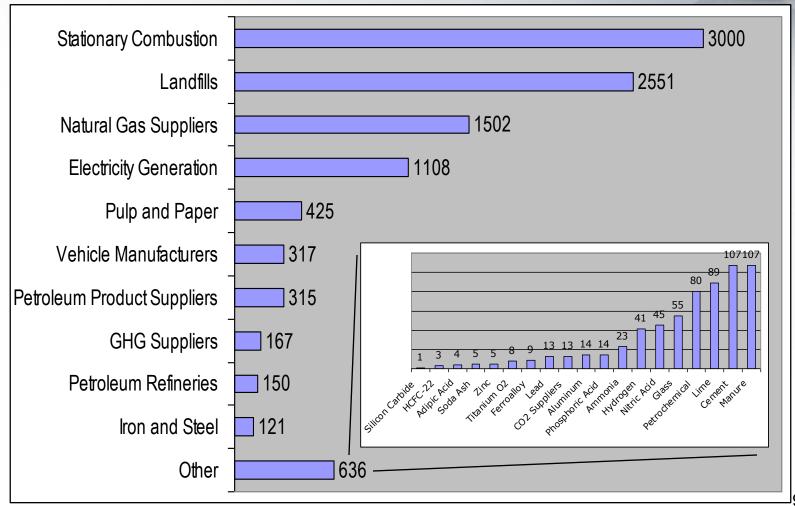
Source Categories in the Final Rule*

Upstream Sources	 Suppliers of Petroleum Products Suppliers of Coal-based Liquid Fuels Suppliers of Natural Gas and Natural Gas Liquids Suppliers of Industrial GHGs Suppliers of Carbon Dioxide (CO₂) 	
Downstream Sources	 General Stationary Combustion Fuel Sources Electricity Generation Adipic Acid Production Aluminum Production Ammonia Manufacturing Cement Production Ferroalloy Production Glass Production HCFC-22 Production and HFC-23 Destruction Hydrogen Production Iron & Steel Production Lead Production 	 Lime Manufacturing Miscellaneous Uses of Carbonates Nitric Acid Production Petrochemical Production Petroleum Refineries Phosphoric Acid Production Pulp and Paper Manufacturing Silicon Carbide Production Soda Ash Manufacturing Titanium Dioxide Production Zinc Production Municipal Solid Waste Landfills
Mobile Sources	• Vehicles and engines outside of the light-duty sector (light-duty in NPRM to Establish Light-Duty GHG Emissions Standards and Corporate fuel Economy Standards)	

^{*} We delayed inclusion of the following source categories as we consider the comments and options: Electronics Manufacturing, Ethanol Production, Fluorinated GHG Production, Food Processing, Magnesium Production, Oil and Natural Gas Systems, Sulfur Hexafluoride (SF6) from Electrical Equipment, Underground Coal Mines, Industrial Landfills, Wastewater Treatment, Suppliers of Coal

About 10,000 U.S. Facilities Covered





Reporting Methodologies



- Hybrid of direct measurement and facilityspecific calculation.
 - Facilities already collecting and reporting emissions data (e.g., Acid Rain Program) must use direct measurement of emissions.
 - Other source categories can use facility-specific calculations.
 - Generally, vehicle/engine manufacturers will use existing certification and test protocols.
 - Industrial gas suppliers and fossil fuel suppliers will use direct reporting of gas or fuel produced, imported and exported.

Reporting Frequency & Verification



- Annual Reporting to EPA.
- Data collection will begin January 1, 2010 with first reports submitted to EPA March 31, 2011.
- Exception: Those facilities already reporting quarterly for existing mandatory programs (e.g., Acid Rain Program) will continue to report quarterly.
- Emissions verification by EPA.
- Reporters will self-certify and submit emissions and activity data necessary for verification.
 - Electronic verification and targeted audits.
- EPA can take enforcement action for noncompliance.
- Approach consistent with most EPA Programs.

Mobile Source Requirements



- Emissions from mobile sources will be captured by reports from fuel suppliers and manufacturers of vehicles and engines (outside of the light-duty sector).
- No requirements for fleet operators or state and local governments.
- Manufacturers of vehicles and engines—including heavy-duty trucks, motorcycles, and nonroad engines—will report CO₂ starting with model year 2011 and other GHGs in subsequent model years.
- Rule amends existing mobile source regulations to integrate GHG reporting into long-standing criteria emissions testing and certification programs.

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Rule Outreach Process



- EPA Providing Technical Assistance.
- On-line applicability tool:
 - Assists potential reporters in assessing whether they are required to report.
- Technical assistance materials (e.g., Information Sheets, Monitoring Checklists, and Response to Comments on rule subparts).
- EPA hosting trainings and webinars.
- Telephone hotline.
- Full EPA effort to prepare future reporters for their data collection beginning on January 1, 2010.

Endangerment and Cause or Contribute Findings under the Clean Air Act



- Endangerment Finding: The Administrator finds that the current and projected concentrations of the mix of six key greenhouse gases—carbon dioxide (CO2), methane (CH4), nitrous oxide (N2O), hydrofluorocarbons (HFCs), perfluorocarbons (PFCs), and sulfur hexafluoride (SF6)—in the atmosphere threaten the public health and welfare of current and future generations.
- Cause or Contribute Finding: The Administrator finds further that the combined emissions of these greenhouse gases from new motor vehicles and motor vehicle engines contribute to the atmospheric concentrations of these key greenhouse gases and hence to the threat of climate change.

Endangerment Under the Clean Air Act - Background



- On April 2, 2007, in Massachusetts v. EPA, 549 U.S. 497 (2007), the Supreme Court found that greenhouse gases <u>are air pollutants</u> covered by the Clean Air Act.
- The Court held that the Administrator must determine whether or not emissions of greenhouse gases from new motor vehicles <u>cause or contribute</u> to air pollution which may reasonably be anticipated to <u>endanger public health or welfare</u>, or whether the science is too uncertain to make a reasoned decision.
- In making these decisions, the Administrator is required to follow the language of section 202(a) of the Clean Air Act. [motor vehicles].
- The Supreme Court decision resulted from a petition for rulemaking under section 202(a) filed by more than a dozen environmental, renewable energy, and other organizations.

Endangerment - Scientific Basis



- The EPA Administrator concludes that the science compellingly supports a positive endangerment finding for both public health and welfare.
- In her decision, the EPA Administrator relied heavily upon the major findings and conclusions from recent assessments of the U.S. Climate Change Science Program and the Intergovernmental Panel on Climate Change.
- The Administrator finds endangerment after considering both observed and projected future effects of climate change, key uncertainties, and the full range of risks and impacts to public health and welfare occurring within the United States.
- The scientific evidence concerning risks and impacts occurring outside the United States, including risks and impacts that can affect people in the United States, provides further support for this endangerment finding.

Endangerment – Process Leading to Finding & Next steps



- EPA issued its proposed findings in April 2009.
- Held a 60 day public comment period; received over 380,000 comments.
 - All comments were carefully reviewed, considered and responded to by EPA
 - 11 volumes of the Response to Comments document
- This finalized action does not impose any requirements on industry or other entities.
 - Allows EPA to finalize GHG standards proposed earlier this year on new light-duty vehicles.
- While this finding shows the US is moving forward to control GHG emissions, both President Obama and Administrator Jackson have repeatedly indicated their support for comprehensive legislation to address this issue and create the framework for a clean energy economy.

Thank you



For more information

www.epa.gov/climatechange

Mandatory GHG Reporting Rule

www.epa.gov/climatechange/emissions/ghgrulemaking.html

Endangerment and Cause or Contribute Findings under the Clean Air Act

www.epa.gov/climatechange/emissions/endangerment.html