

Mandatory GHG Reporting Rulemaking



USDA Agricultural Air Quality Task Force
May, 2008



Appropriations Language



FY2008 Consolidated Appropriations Amendment:

- “... not less than \$3,500,000 shall be provided for activities to develop and publish a draft rule not later than 9 months after the date of enactment of this Act, and a final rule not later than 18 months after the date of enactment of this Act, to require mandatory reporting of greenhouse gas emissions above appropriate thresholds in all sectors of the economy...”

Accompanying Explanatory Statement:

- The Agency shall "use its existing authority under the Clean Air Act" to develop a mandatory GHG reporting rule. "The Agency is further directed to include in its rule reporting of emissions resulting from upstream production and downstream sources, to the extent that the Administrator deems it appropriate. The Administrator shall determine appropriate thresholds of emissions above which reporting is required, and how frequently reports shall be submitted to EPA. The Administrator shall have discretion to use existing reporting requirements for electric generating units under Section 821 of the Clean Air Act...."

Purpose and Scope



Objective(s) of the Program – to provide data that will inform and support development of national climate policy

Scope of Coverage provided by Congress

- Both upstream and downstream
 - Upstream: Fuel and Chemical producers/importers (e.g., oil refineries, natural gas processors, HFC producers)
 - Downstream: GHG emitters (e.g., power plants, iron and steel plants, cement manufacturers)

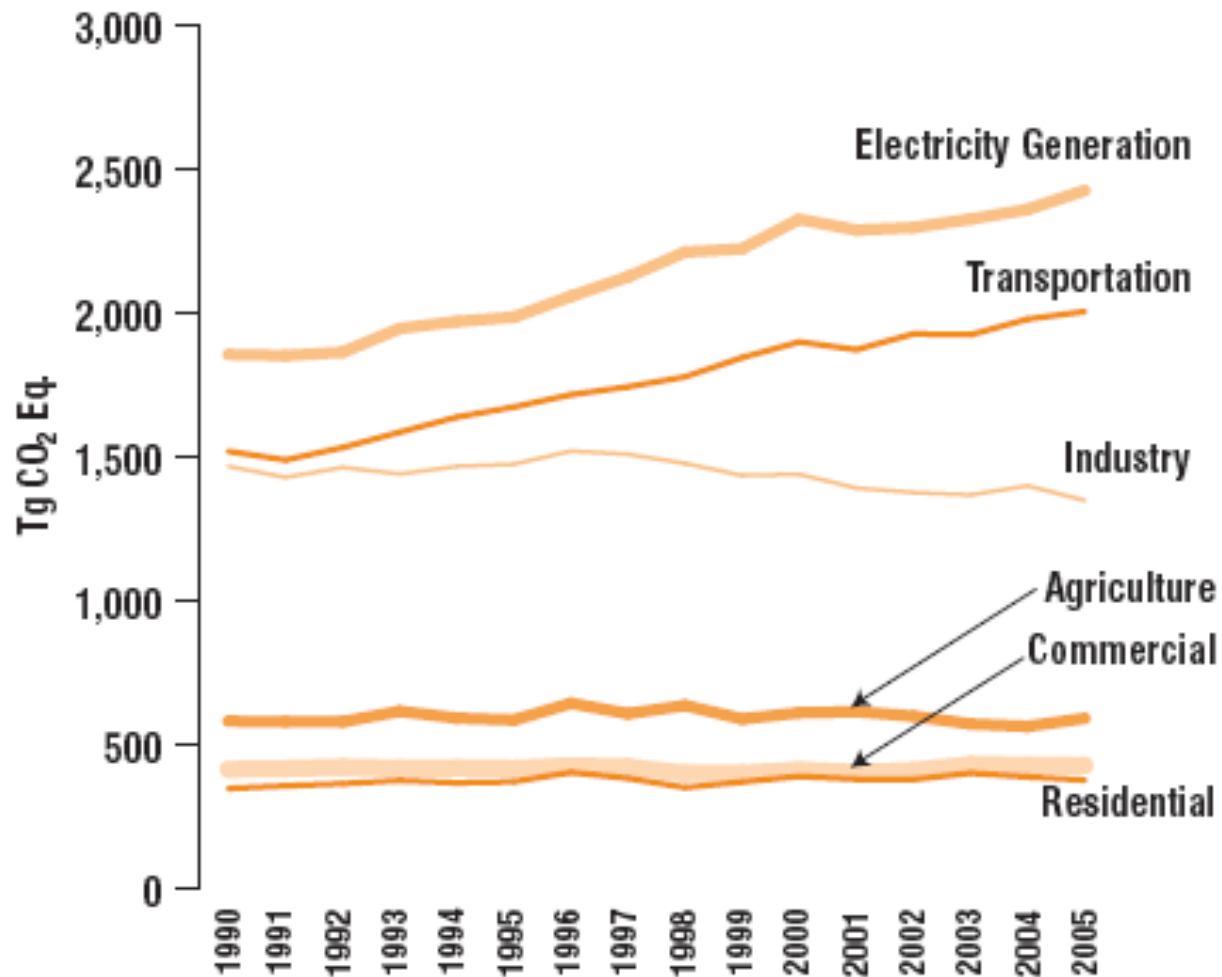
Methods

- Will build on methods from existing mandatory and voluntary reporting systems
 - Federal reporting programs- e.g., NEI (Title IV), Climate Leaders, 1605(b), National Greenhouse Gas Inventory
 - State Programs- e.g., California, The Climate Registry, RGGI, other state programs
 - Corporate Programs- e.g., WRI/WBCSD
 - Industry Protocols- e.g., API Compendium, CSI Protocol (cement), International Aluminum Institute

U.S. 2005 GHG Emissions



Emissions Allocated to Economic Sectors



Timeline and Process



January 2008- September 2008	Establish EPA workgroup, develop rule and supporting analyses, stakeholder outreach, inter- and intra-Agency review
September 2008	Proposal
October 2008 – June 2009	Public comment period and hearings, review stakeholder comments, develop final rule and supporting analyses, inter- and intra- Agency review
June 2009	Final Rule

Advanced Notice of Proposed Rulemaking (ANPR) on Regulating Greenhouse Gases under the Clean Air Act





Introduction: *Why an ANPR now?*

- EPA is obligated to respond to the Supreme Court's decision in *Massachusetts v. EPA*.
- The Energy Independence and Security Act (EISA) changed the policy, but not the legal or scientific, context for that response.
 - DOT received new authority and mandate from Congress to tighten CAFE standards in coordination with EPA. EPA will consider that change in evaluating Clean Air Act (CAA) motor vehicle standards.
 - EPA received new authority and mandate from Congress to strengthen the existing CAA renewable fuels standard (RFS).





Introduction, continued

- We also need to consider what additional CAA regulation would or could follow from CAA vehicle standards.
 - *In carrying out the mandate of the Supreme Court, it is critically important for EPA to make sense of and manage the broader CAA implications of regulating GHGs under the Act.*
- The ANPR is the best single vehicle for presenting:
 - our work to date
 - the numerous CAA issues arising from action under the Act
 - approaches to addressing various issues
 - an opportunity for public comment and input on CAA strategies
 - information to Congress as it develops climate change legislation



Pending Clean Air Act Actions Related to GHGs



- Response to *Massachusetts* decision: Remand of ICTA petition for motor vehicle GHG standards
- Other mobile source actions:
 - RFS revisions per EISA
 - petitions for rulemaking to set standards for:
 - aircraft
 - ships
 - other non-road engines (e.g., construction)





Massachusetts v. EPA

2 Key Holdings:

- **Greenhouse gases are “air pollutants”**
“Because greenhouse gases fit well within the Clean Air Act’s capacious definition of ‘air pollutant,’ we hold that EPA has the statutory authority to regulate the emission of such gases from new motor vehicles.”
- **Agency must consider “endangerment”**
On remand, the Agency must pursuant to CAA Section 202(a): (1) Make a positive endangerment finding; (2) Make a negative endangerment finding; or (3) offer a “reasonable explanation as to why it cannot or will not exercise its discretion to determine whether they do.”

Current Status: Remand of ICTA petition for motor vehicle GHG standards under section 202 of the Clean Air Act (September 14, 2007)



Pending Clean Air Act Actions, continued



- Stationary source actions
 - NSPS reviews under court deadline or in response to court remand
 - Refineries
 - Utility & industrial boilers
 - Portland cement
 - Other proposals
 - Several PSD permits pending or on appeal before the EAB
- Other actions
 - Mandatory GHG reporting rule





Clean Air Act Endangerment Language (a sampling)

- Section 202 (motor vehicle standards) [language at issue in *Massachusetts* case]:
 - *“The Administrator shall . . . prescribe . . . standards applicable to the emission of any air pollutant from any class or classes of new motor vehicles or new motor vehicle engines, which in [the Administrator’s] judgment cause, or contribute to, air pollution which may reasonably be anticipated to endanger public health or welfare”*
- Section 108 (listing pollutants for national ambient air quality standards):
 - *“[T]he Administrator shall . . . publish, and shall from time to time thereafter revise, a list which includes each air pollutant (A) emissions of which, in his judgment, cause or contribute to air pollution which may reasonably be anticipated to endanger public health or welfare . . . ” [2 other criteria must also be met]*



Clean Air Act Endangerment Language, continued



- Section 111 (listing source categories for new source performance standards):
 - “[The Administrator] shall include a category of sources in such list **if in his judgment it causes, or contributes significantly to, air pollution which may reasonably be anticipated to endanger public health or welfare**”
- Section 213 (nonroad engine standards, including ships):
 - “If the Administrator determines that any emissions not referred to in paragraph 2 [regarding CO, NO_x and VOC emissions] from new nonroad engines or vehicles significantly contribute to **air pollution which may reasonably be anticipated to endanger public health or welfare, the Administrator may promulgate**” standards.
- Section 231 (aircraft standards):
 - “The Administrator shall . . . issue proposed emissions standards applicable to the emission of any air pollutant from any class or classes of aircraft engines **which in his judgment causes, or contributes to, air pollution which may reasonably be anticipated to endanger public health or welfare.**”



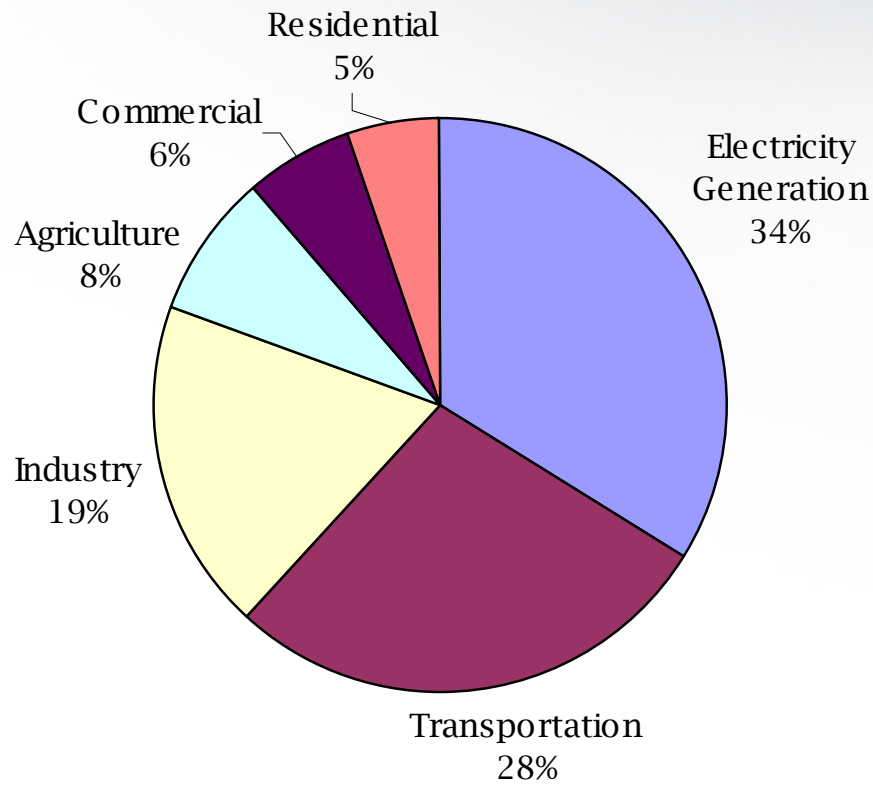
One Ramification of Clean Air Act Regulation of GHGs - - PSD Permitting



- Prevention of Significant Deterioration (PSD) permits: Regulation of GHGs under any CAA provision (except section 112) could immediately and automatically trigger PSD permitting for a significant number of new major stationary sources and some modifications at existing major stationary sources not previously regulated under the Clean Air Act, with the following implications --
 - PSD coverage could expand to cover sources never before subject to CAA permitting, including large commercial and residential buildings (e.g., 100,000 square feet or more) that are heated by natural gas or oil
 - Sources already subject to PSD based on other emissions could be required to address GHG emissions in the context of permitting
 - PSD permit requirements would be triggered by changes increasing GHG emissions by any amount at existing major sources until a “significance” threshold is established by rule



GHG Emissions Sources



Sector/Source	2005 Emissions (MMTCO ₂ e)
Electricity Generation	2,429.8
Transportation	2,008.9
Industry	1,352.8
Agriculture	595.4
Commercial	431.4
Residential	380.7



Other EPA Climate- Related Activities



- **Underground Injection Control rule** - EPA plans to propose a rule under the Safe Drinking Water Act on the underground injection of CO₂ by this summer
- **Analyses of climate bills** - EPA has been conducting economic analyses of climate bills upon request of bill authors
- **Major Economies initiative** - EPA is assisting the Administration's efforts
- **Ongoing voluntary programs** (e.g., Energy Star, Methane to Markets, Climate Leaders, SmartWay Transport)
- **Review of CAFE standards** - EPA is reviewing and commenting on DOT's draft CAFE proposal, as required by EISA



What the ANPR will present and seek comment on



- Best available science on effects of GHGs relevant to making an endangerment finding
- Broad implications of the Supreme Court's *Massachusetts* decision:
 - Vehicle standards under CAA 202
 - Additional CAA regulation that vehicle standards could automatically trigger
 - Other potential CAA regulation that could ensue in view of similar endangerment triggers in other CAA provisions, etc.
- Analysis/work to date on endangerment finding and vehicle standards under CAA 202
- Technologies and strategies to address GHG emissions from mobile and stationary source categories
- Approaches to CAA regulation of GHGs in recognition of various provisions with similar statutory language and in light of past practice

