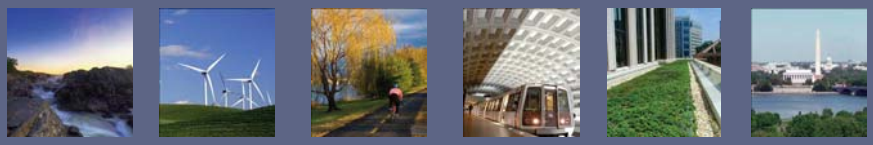
**ITEM 8 - Action**
September 17, 2008

Briefing on the Review Draft of the COG Climate Change Report, and Approval of TPB Comments on the Report

**Staff Recommendation:** Receive briefing on the findings of the COG Climate Change Report and approve enclosed TPB comments on the report for submission to the COG Board of Directors.

**Issues:** None

**Background:** The COG Climate Change Report was released for comment by the COG Board of Directors on July 9 and distributed to the TPB at its July 16 meeting. The report, which is available on the COG web site www.mwcog.org, includes significant greenhouse gas reduction goals for the region as well as 78 recommendations to help area leaders and citizens meet the targets.



# Climate Change Steering Committee's *Draft* Climate Change Report

**Presented to NCR Transportation Planning Board**
**September 17, 2008**

Joan Rohlfs
Chief, Air Quality Planning
Metropolitan Washington Council of Governments

## COG Board Action April 11, 2007

- **R31-07 creates COG Climate Change Steering Committee to:**
  - ❖ Prepare regional inventory of greenhouse gases
  - ❖ Identify best practices and policies
  - ❖ Examine climate change impacts
  - ❖ Recommend Regional greenhouse gas reduction goal(s)
  - ❖ Recommend governance structure for climate change initiative
  - ❖ Propose advocacy positions
  - ❖ Prepare report to COG Board

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# Climate Change Steering Committee

**Officers:**
**Chair: Hon. Nancy Floreen, Montgomery County Council**
**Vice-Chair: Hon. Gerry Connolly, Chairman, Fairfax County Board of Supervisors**
**Vice-Chair: Hon. Mary Cheh, Council of the District of Columbia**

**District of Columbia - Members**
Emeka Moneme, District Dept. of Transportation
George Hawkins, District Dept. of the Environment
Harriet Tregoning, District Office of Planning

**Maryland - Members**
Tad Aburn, Director, Air and Radiation Management, Maryland Dept. of the Environment
Hon. Roger Berliner, Montgomery County Council
Hon. Judith Davis, Mayor, Greenbelt
Hon. Camille Exum, Prince George's County Council

**Virginia - Members**
Hon. Paul Ferguson, Arlington County Clerk of the Circuit Court
Mercury Payton, Manassas Park City Manager
Hon. Andrea McGimsey, Loudoun County Board of Supervisors
Hon. Redella Pepper, Alexandria City Council
Hon. David Snyder, Falls Church City Council

**Other Regional/State Organizations - Members**

John Catoe, General Manager, Washington Metropolitan Area Transit Authority
Robert Grow, Director, Government Relations, Greater Washington Board of Trade
Nikki Rovner, Deputy Secretary of Natural Resources, Commonwealth of Virginia

**Alternates to Members**:

Zach Dobelbower (alternate to Ms. Tregoning)
Mark Rawlings (alternate to Mr. Moneme)
Rick Rybeck (alternate to Mr. Moneme)
Jack Werner (alternate to Mr. Hawkins)

Elizabeth Entwisle (alternate to Mr. Aburn)
Hon. John Foust (alternate to Mr. Connolly)

Nat Bottigheimer (alternate to Mr. Catoe)

**COG Staff:**

Department of Environmental Programs:
Stuart Freudberg, Director
Joan Rohlfs, Jeffrey King
George Nichols, Leah Boggs
Ted Graham, Tanya Spano

Naomi Friedman, Assistant Executive Director

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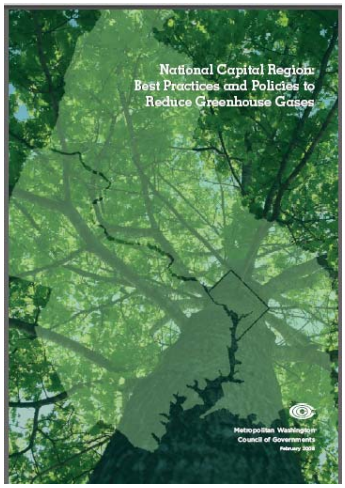
# Best Practices Guide




**HIGHLIGHTS:**

- Over 2/3 of local governments in the region purchase renewable energy
- Over 1⁄2 of the jurisdictions have adopted energy efficiency measures
- Nearly 90% of the communities in the region have embarked on transit oriented development and over 80% have "walkable community" initiatives
- About 70% of communities have green space protection and green infrastructure programs
- All communities in the region have recycling programs.

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# Energy and Climate Change Advocacy Positions

## Federal Energy Legislation

- Promoted strengthening CAFÉ standards
- Supported "green collar" job programs
- Supported Energy efficiency block grants to local governments

## Federal Climate Legislation

- Promoted the role of local governments/regional entities

## Regional Climate Program

- Endorsed Cool Capital Challenge
- Sent letter of concern re proposed coal-fired power plant in Wise County, Virginia

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# Climate Change Report – July 9, 2008

**I. Facing Facts, Taking Stock and Taking Aim**

*Climate Change, Potential Impacts on Region;*
*Current & Projected Regional Greenhouse Gas Emission Inventory;*
*Regional Targets*

**II. Taking Action**

*Energy Consumption;*
*Transportation and Land Use;*
*Economic Development; Preparing for Impacts, Financing; Outreach and Education.*

**III. Moving Forward**

*COG Climate Change Program*

**IV. Reference Information**


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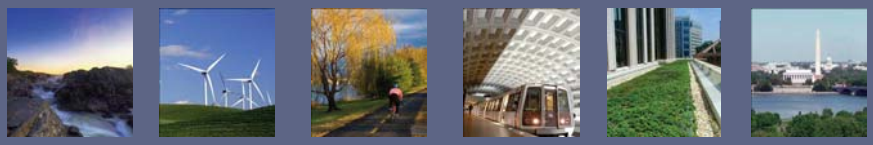

# Facing Facts, Taking Stock and Taking Aim

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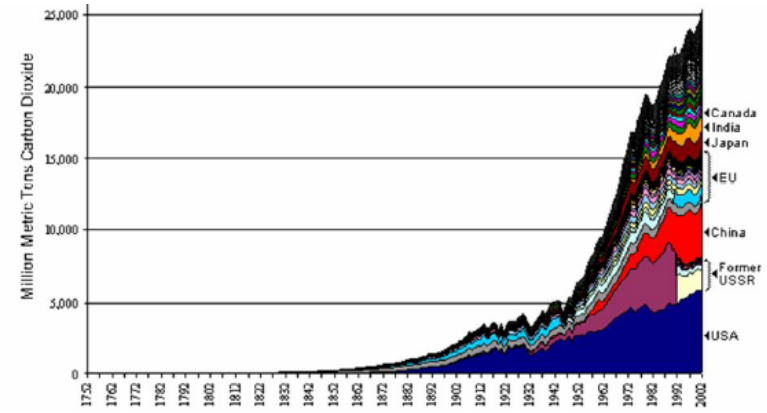
# Global $CO_2$ Emissions Since 1752




Source: Carbon Dioxide Information Analysis Center, U.S. Dept. of Energy

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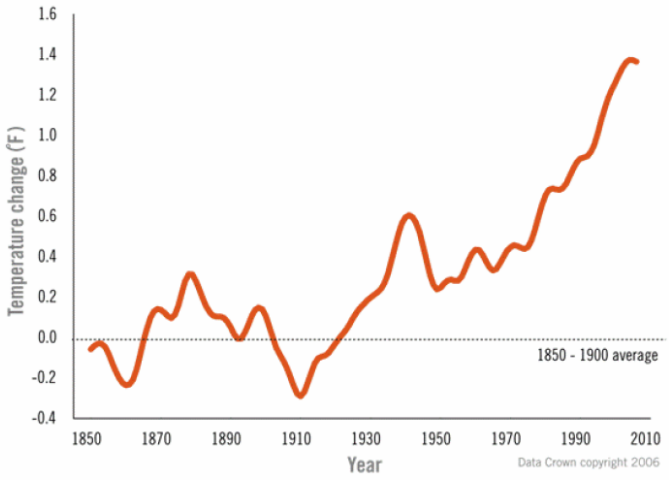
## Increasing Global Surface Temperature




Source: Pew Center on Global Climate Change

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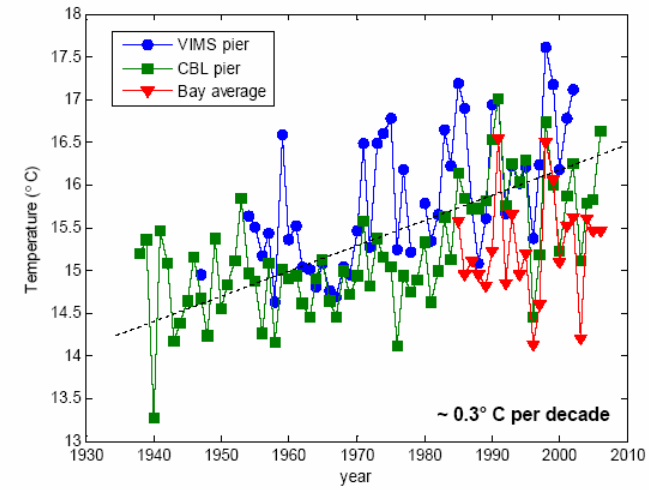
## Measured Temperature Changes in Chesapeake Bay Surface Waters




Source: Virginia Institute of Marine Science

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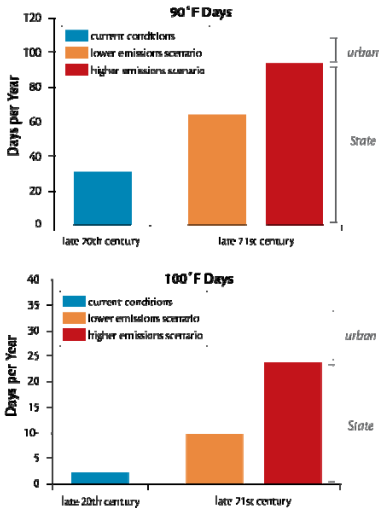
# Milder Winters, Much Hotter Summers




Source: Dr. Donald Boesch, University of Maryland

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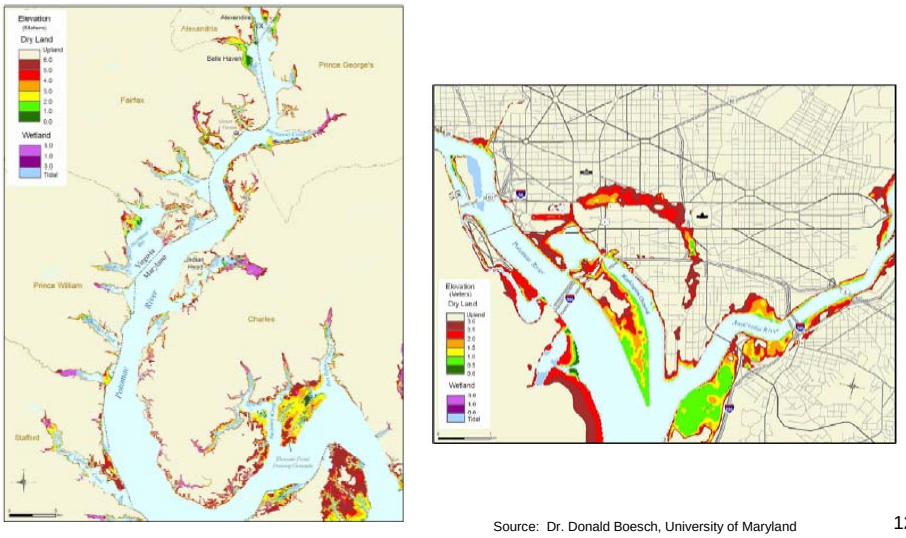
# Sea-level Rise Vulnerability in DC Area




Source: Dr. Donald Boesch, University of Maryland

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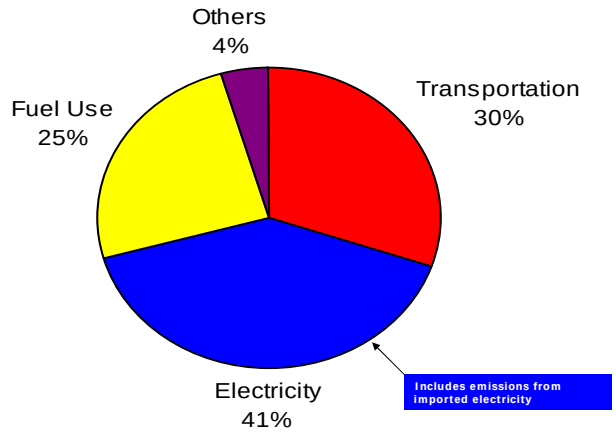
# Major Sources of Washington Region's Greenhouse Gas Emissions




Source: Metropolitan Washington Council of Governments

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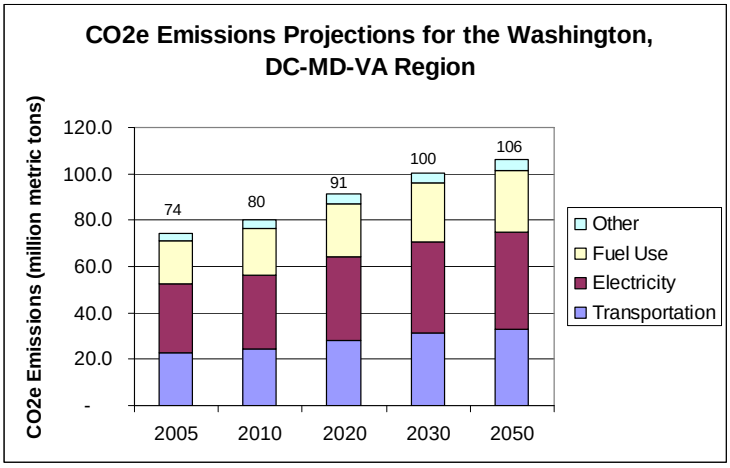
# Projections of Regional Greenhouse Gas Emissions: 2005-2050




Source: Metropolitan Washington Council of Governments

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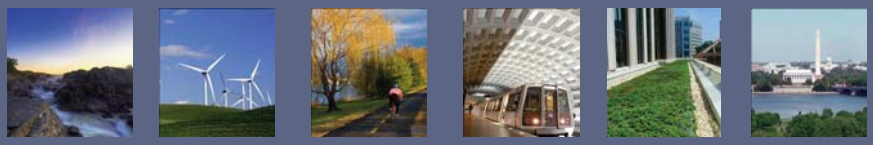

# Recommendations for Taking Action:

- Regional Reduction Goals
- Energy
- Transportation and Land Use
- Economic Development
- Adaptation
- Financing
- Outreach & Education
- COG Climate Change Program

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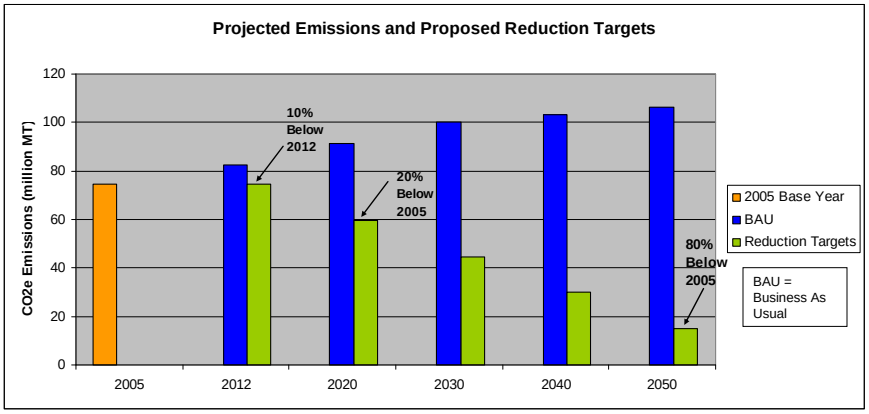
# Proposed Regional Reduction Goals

| | |
|---|---|
| **2012:** | **10% Below Business as Usual** |
| **2020:** | **20% Below 2005** |
| **2050:** | **80% Below 2005** |

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# Energy Recommendations

## Improve Energy Efficiency

- ***Regional Example:*** Identify best practices for improving energy efficiency of existing buildings.
- ***Local Government Leading By Example:*** Regional Green Building Policy – LEED Silver for all new local government buildings

## Reduce Energy Demand

- ***Regional Example:*** Explore regional energy audit and retrofit program
- ***Local Government Leading By Example:***
  - Reduce Energy Use by 15% by 2012
  - Regional Street Light Replacement Program

## Develop Clean Energy Alternatives

- ***Regional Example:*** Support 20% Renewable Portfolio Standard
- ***Local Government Leading by Example:*** Adopt 20% Renewable Energy Purchase by 2015

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# Transportation Recommendations

## Increase Fuel Efficiency

- ***Regional Example:*** Support California Low Emission Vehicle Standards
- ***Local Government Leading by Example:*** Promote transit supportive street designs

## Reduce Vehicle Miles Traveled

- ***Regional Example:*** Shift short trips (less than 3 miles) from car to other modes
- ***Local Government Leading by Example:*** Fully fund bicycle/pedestrian paths as outlined in regional plan

## Use Alternative Fuels

- ***Regional Example:*** Promote adoption of regional Green Fleet goal
- ***Local Government Leading by Example:*** Accelerate adoption of efficient clean fuel vehicles

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# Land Use Recommendations

## Smart Growth

- ***Regional Example:*** Promote walkable communities and affordable housing near transit
- ***Local Government Leading by Example:*** Research regional goals for directing development to activity centers

## Tree Canopy Preservation

- ***Regional Example:*** Establish regional goal of no net loss of tree canopy
- ***Local Government Leading by Example:*** Consider density and height requirements for buildings to foster tree canopy goal

## Comprehensive Planning

- ***Regional Example:*** Evaluate LEED-ND Standards for guiding new development
- ***Local Government Leading by Example:*** ID best practices for including GHG reduction as part of local comprehensive planning

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# Additional Recommendations

## Financing and Economic Development

- •Clean Energy Fund
- •Offset Fund for Tree Planting and Canopy Management
- •Funding for Building Retrofits
- •Cooperative Purchasing
- •Energy Performance Contracting

## Outreach and Education

- Regional Outreach Partnerships: Clean Air Partners and Commuter Connections
- •Climate Action Week
- •Climate Leaders Awards

## Adaptation

- Partner with university to develop 2050 regional climate impacts report/adaptation strategy

## COG Climate Program

- Establish COG Board *Climate and Energy Policy Committee*
- •Prepare plan to achieve 2012 goal by June, 2009.

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## Implementation Steps

- External Review by COG Members, Stakeholders and Public
- Development of Detailed Climate Action Work Program
  - ❖ Regional Plan for achieving 2012 goal
  - ❖ Analysis of Immediate Priority Recommendations
  - ❖ Reduction Tracking System
  - ❖ Advocacy Positions
  - ❖ Identification of Funding and/or Partnerships for selected initiatives including outreach and education
- Coordination with Greater Washington 2050

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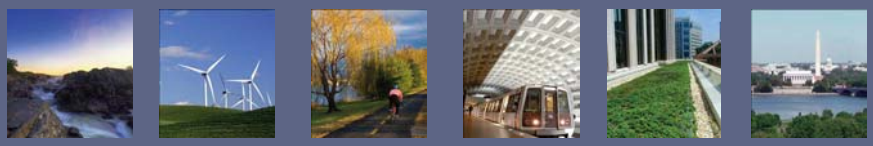

## Schedule for Review and Final COG Board Action

- **Now through September 30:**
  - – Comment Period for COG members, stakeholders and general public
- **November 2008:** COG Board acts on final report

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# For further information…

- To obtain an electronic copy of the report:
  - https://www.mwcog.org/environment/climate/Documents/Climate_Change_Report_Public_Review_Draft%207_9_08.pdf
- To comment on the report:
  - http://www.mwcog.org/environment/climate/public/
- Questions?
  - Stuart A. Freudberg, COG Environmental Director
    - sfreudberg@mwcog.org, 202/962-3340

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# National Capital Region Transportation Planning Board

777 North Capitol Street, N.E., Suite 300, Washington, D.C. 20002-4290 (202) 962-3310 Fax: (202) 962-3202


**D R A F T**

September 2, 2008

Honorable Michael Knapp
Chairman, Board of Directors
Metropolitan Washington Council of Governments
777 North Capitol Street, NE, Suite 300
Washington, DC 20002-4290

Dear Chairman Knapp:

The National Capital Region Transportation Planning Board (TPB) appreciates the opportunity to participate in the timely climate change discussion that has been initiated by the Metropolitan Washington Council of Governments (COG) Climate Change Steering Committee. TPB staff was pleased to provide quantitative forecasts of greenhouse gas emissions from the transportation sector for inclusion in the draft National Capital Region Climate Change Report, released for public comment by the COG Board of Directors on July 9, 2008. The July 9 draft report provides a much needed introduction to climate change issues that previously was unavailable to citizens and decision-makers in the region. It also builds an important foundation for the region to identify and eventually implement strategies that address greenhouse gas (GHG) emissions. It provides a comprehensive list of such strategies across sectors that can help planners and policymakers to develop an appropriate course of action for the region.

In response to the request by the COG Board of Directors for comment on the July 9 draft of the Climate Change Report, the TPB is pleased to provide comment on the following five points regarding GHG emission reduction strategies:

- Timeframe for implementation
- Relevance of the current regional conformity process
- Implementation costs, cost effectiveness, and cost/benefit relationships
- Ongoing analysis of transportation strategies in the TPB's " What Would It Take?" Scenario Study
- Proposed governance structure for ongoing COG Climate Change Initiative

A key consideration for further study is the <u>timeframe for implementation</u> for the strategies listed in the Climate Change Report. Experts have asserted that because greenhouse gases remain in the atmosphere for many decades, early GHG emissions

reductions will be necessary in order to effectively stabilize GHG emissions and avoid the most severe impacts of climate change. This will become increasingly apparent if emissions are examined cumulatively across the 50 year horizon rather than on an annual basis, since early emissions reductions will have a compounding effect upon future emissions levels. Further work should look into the implications of measuring cumulative emissions with regard to reductions targets and assessment of emissions reduction measures.

The July 9 draft report recommends that the Climate Change Steering Committee "collaborate with TPB to evaluate how a regional process modeled after the current regional conformity process for air quality planning might be adapted to address greenhouse gas emissions." This conformity process is the required means of implementing the Clean Air Act within the transportation sector. On July 30, 2008 the EPA released its Advance Notice of Proposed Rulemaking (ANPR) regarding the potential application of the Clean Air Act to GHG regulation. The ANPR and accompanying interagency communications outline various considerations and issues which demonstrate that there are still significant concerns and uncertainty over whether the 1990 Clean Air Act provides an appropriate mechanism for GHG regulation. (The attached letter of July 9 from the United States Departments of Agriculture, Commerce, Transportation, and Energy is one of several interagency communications raising such concerns.) The TPB therefore does not support pursuing a regional conformity process for greenhouse gas emissions at this time, but is open to further discussion and examination of the issue as more information becomes available about the applicability of Clean Air Act provisions for GHG regulation. In the meantime, the TPB believes that the transportation sector in this region can be proactive in pursuing GHG reductions through the evaluation of alternative reduction strategies with cost-effectiveness and cost/benefit approaches which do not rely upon a regional conformity process.

The July 9 draft report clearly states the need for "further economic benefit analysis," pointing to the next step of assessing implementation costs, cost-effectiveness, and cost/benefit relationships by categorizing the comprehensive list of strategies provided according to their emissions reduction potential and implementation cost. The report references the 2007 McKinsey & Company study, which identifies a price threshold of $50 per ton of carbon dioxide abated. This threshold signals the point at which McKinsey & Company believe that the nation's emissions reduction goals can be met, and suggests that strategies with cost-effectiveness values far above this point would incur unnecessarily high costs unless they generate significant other benefits. While this cost effectiveness threshold developed by McKinsey & Company may well be revised as further information becomes available, it provides a useful initial "value per ton of carbon dioxide reductions" for use in cost-effectiveness and cost/benefit analyses.

The TPB plans to support future work of the Climate Change Steering Committee through ongoing analysis of the transportation strategies in the TPB's "What Would It Take?" Scenario Study. This scenario will examine the different

scale and combinations of transportation strategies that would be needed to meet the GHG goals outlined in the draft Climate Change Report. It will also analyze measures for cost-effectiveness, cost/benefit and timeframe for implementation. For example, initial analysis by the TPB staff has shown that the TPB Commuter Connections program, which promotes car pooling, transit, telecommuting, and other alternatives to single occupancy automobile commuting, is highly cost-effective at around $20 per ton of carbon dioxide abated. By comparison, the replacement of conventional diesel buses with hybrids or CNG buses appears to be relatively less effective at over $500 per ton.

With regard to the proposed governance structure for an ongoing COG Climate Change Initiative discussed in the July 9 draft report, the TPB recommends that any new committee established to address climate change should include at a minimum all of the member agencies and jurisdictions of the Metropolitan Washington Air Quality Committee (MWAQC). Coordination between TPB and MWAQC has been accomplished effectively over several years in part because of the inclusive membership structure of MWAQC in which all of the state air agencies and state departments of transportation are members. A similarly inclusive structure should provide for good ongoing coordination in addressing GHG emissions.

The TPB appreciates the opportunity to comment on this important report, and looks forward to continued collaboration with the COG Climate Change Steering Committee in addressing greenhouse gas emissions reduction strategies for the Washington region.

Sincerely,

Phil Mendelson
Chairman
National Capital Region Transportation Planning Board

United States Department of Agriculture | United States Department of Commerce | United States Department of Transportation | United States Department of Energy

July 9, 2008

The Honorable Susan E. Dudley
Administrator
Office of Information and Regulatory Affairs
Office of Management and Budget
Washington, D.C. 20503

Dear Administrator Dudley:

The Departments of Agriculture, Commerce, Transportation, and Energy have serious concerns with the draft Advance Notice of Proposed Rulemaking "Regulating Greenhouse Gas Emissions under the Clean Air Act" ("draft") submitted by the Environmental Protection Agency to the Office of Management and Budget on June 17, 2008.

Climate change is a significant issue for both our environment and our economy, and the nations of the world must act together to address greenhouse gas ("GHG") emissions. The United States currently is working with the world's major emitting economies to devise a new international framework to replace the one that expires in 2012. In addition, since 2001 our agencies have committed billions of dollars and have taken other actions to confront climate change through the development and deployment of new technologies; through rulemakings to increase fuel economy, energy efficiency, and the production and use of alternative fuels; and through significantly increased investment in new climate science research. These and other serious efforts to address climate change must continue.

The EPA staff now has prepared a draft suggesting that the Clean Air Act can be both workable and effective for addressing global climate change by regulating GHG emissions from stationary and mobile sources of virtually every kind. Our agencies have serious concerns with this suggestion because it does not fairly recognize the enormous—and, we believe, insurmountable—burdens, difficulties, and costs, and likely limited benefits, of using the Clean Air Act to regulate GHG emissions.

First, the Clean Air Act is fundamentally ill-suited to the effective regulation of GHG emissions. Indeed, the draft acknowledges that "the [Clean Air Act] was not specifically designed to address GHGs." Instead, the Clean Air Act is premised on the idea that controlling emissions in the United States will improve air quality in the United States, and that a State or region can improve its air quality by controlling emissions in that area. This is not true in the case of GHGs. Controlling GHG emissions in the United States will reduce atmospheric concentrations of those gases only if our emissions reductions are not simply replaced with emissions increases elsewhere in the world. Moreover, under the Clean Air Act, emissions requirements generally are related to a health-based or public-welfare-based air quality standard. Yet there is no such

standard for GHGs in the Act or elsewhere, and thus the draft seems to take the approach of seeking emissions reductions with no precise idea of exactly what goal is being pursued or what GHG concentration-level objective is to be achieved.

Second, the use of the Clean Air Act to regulate GHG emissions unilaterally as envisioned in the draft would harm America's international competitiveness. Applying Clean Air Act regulations to U.S. businesses in order to address global climate change—outside of any international framework that brings together all of the world's major economies, both developed and developing—would simply export economic activity and emissions to less-regulated countries and might not generate any net reduction in worldwide GHG emissions. According to the Energy Information Administration, carbon dioxide emissions in non-OECD (Organization for Economic Cooperation and Development) nations already surpass those of OECD nations and are estimated to exceed them by 72 percent in 2030. The draft does not take account of these realities, and instead builds a regime that would impose enormous costs on U.S. consumers, workers, and businesses without addressing the fundamental shift in emissions growth from the developed world to the developing world.

Third, while acknowledging that "the complexity and interconnections inherent in [Clean Air Act] regulation of GHGs" has caused EPA staff to "not believe that all aspects of the Act are well designed for establishing the kind of comprehensive GHG regulatory program that could most effectively achieve the GHG emission reductions that may be needed over the next several decades," the draft nevertheless suggests that regulating GHGs under the Clean Air Act would be workable. We disagree. The draft offers a number of legal constructs to support its position, but there is no certainty of how those theories will work in actuality, or whether they would be upheld by the courts. Such legal uncertainty simply emphasizes the risk to the Nation's energy, economic, and environmental security of seeking to shoehorn a GHG regulatory program into the Clean Air Act. Moreover, some might read the draft's discussion of an array of GHG regulatory constructs to prejudge the question of endangerment, even though there are critical open issues that must be addressed and resolved in making that legal determination and which must be decided before GHG emissions can be regulated under the Clean Air Act.

Even if the Act could support all of the legal theories outlined in the draft, the suggested permitting regimes would be extraordinarily intrusive and burdensome. In fact, the draft recognizes that regulation of GHG emissions under the Clean Air Act would likely extend permitting requirements and emissions controls to many sources not previously subject to Clean Air Act regulation, such as large buildings heated by natural gas. This could lead to EPA exercising de facto zoning authority through control over thousands of what formerly were local or private decisions, impacting the construction of schools, hospitals, and commercial and residential development.

Fourth, although the draft sets forth data and analysis that could be useful in the overall debate about GHGs, our agencies disagree with many of the assumptions in the draft about the costs of controlling GHGs, the technologies currently available and potentially available in the future, the timeline for the development of some of those technologies, and the potential harm from and benefits of controlling GHG emissions from specific sources. Moreover, there are important

differences between the draft and the peer-reviewed reports recently issued by the U.S. Climate Change Science Program—an interagency program in which EPA has been a key participant.

Finally, the draft suggests approaches to control GHG emissions that would needlessly duplicate newly passed laws and effectively ignore regulatory initiatives currently underway. For example, the Department of Transportation is already conducting a rulemaking to update fuel economy standards for light trucks and automobiles, pursuant to the recently enacted Energy Independence and Security Act of 2007. The draft suggests the possibility of an overlapping regulatory mandate using the Clean Air Act, potentially creating inconsistent regulatory mandates and uncertainty for U.S. industries and consumers, with minimal if any improvements in U.S. greenhouse gas emissions.

In sum, global climate change presents a serious challenge, and a workable and meaningful approach must be crafted to address that challenge. Unfortunately, using the Clean Air Act is not such an approach, as the draft sometimes acknowledges, but does not realistically address. In the enclosures with this letter, our respective agencies have provided brief analyses of some of the key technical, economic, and analytical difficulties with the draft, and our agencies may supplement these comments at a later date.

Sincerely,

Edward T. Schafer
Secretary
U.S. Department of Agriculture

Carlos M. Gutierrez
Secretary
U.S. Department of Commerce

Mary E. Peters
Secretary
U.S. Department of Transportation

Samuel W. Bodman
Secretary
U.S. Department of Energy

Enclosures

U.S. Department of Transportation
U.S. Department of Energy
U.S. Department of Commerce
U.S. Department of Agriculture