UNITED STATES DEPARTMENT OF COMMERCE
The Inspector General
Washington, D.C. 20230

December 6, 2013

The Honorable Henry A. Waxman
Co-Chair
Bicameral Task Force on Climate Change
2322A Rayburn House Office Building
U.S. House of Representatives
Washington, DC 20515

The Honorable Sheldon Whitehouse
Co-Chair
Bicameral Task Force on Climate Change
410 Dirksen Senate Office Building
U.S. Senate
Washington, DC 20510

The Honorable Bobby L. Rush
Co-Chair
Bicameral Task Force on Climate Change
2322A Rayburn House Office Building
U.S. House of Representatives
Washington, DC 20515

The Honorable Benjamin L. Cardin
Co-Chair
Bicameral Task Force on Climate Change
410 Dirksen Senate Office Building
U.S. Senate
Washington, DC 20510

The Honorable Earl Blumenauer
Co-Chair
Bicameral Task Force on Climate Change
2322A Rayburn House Office Building
U.S. House of Representatives
Washington, DC 20515

The Honorable Edward J. Markey
Co-Chair
Bicameral Task Force on Climate Change
410 Dirksen Senate Office Building
U.S. Senate
Washington, DC 20510

Dear Chairmen Waxman, Rush, Blumenauer, Whitehouse, Cardin, and Markey:

This letter responds to your February 25, 2013, request to review the Department of Commerce's policies, environmental programs, and activities to carry out requirements that federal agencies address climate change.

In the first part of your request, you asked OIG to identify the Department's existing requirements. To accomplish this, we met with the Commerce Office of Sustainable Energy and Environmental Programs (OSEEP);[1] reviewed existing requirements in law, regulation, executive order, and other directives applicable to Commerce; and reviewed relevant information and documentation related to Commerce's climate change requirements. We compiled a list of Departmental policies and statutory authorities and vetted the list with the Department's Office of General Counsel (OGC).

[1] OSEEP coordinates Commerce's implementation and oversight of federal mandates for facility energy conservation and environmental stewardship.

You also asked that we assess whether the Department is meeting those requirements and, if not, make recommendations for improving the Department's performance. To do this, we consulted with OSEEP and representatives from 10 of the Department's 12 bureaus[2] to inquire into their efforts to address climate change.

The second part of your request asked for our assessment of (1) the authorities Commerce has to reduce emissions of heat-trapping pollution; (2) the Department's authorities to make the nation more resilient to the effects of climate change; and (3) the most effective additional steps it could take to reduce emissions or strengthen resiliency.

Overall, we found that Commerce views federal sustainability directives and the pursuit of a robust sustainability policy as central to the Department's core values and mission. The *Commerce Strategic Sustainability Performance Plan*, issued June 2012,[3] put forth the following priorities and initiatives for Commerce:

- Update its greenhouse gas (GHG) inventory;
- Add six sustainable buildings to its real property portfolio;
- Publish a new, 32-chapter *Energy and Environmental Management Manual*;
- Enter into a memorandum of understanding with the Department of Justice and release a solicitation for a performance-based contract to acquire alternatively financed energy projects and increase the direct purchase of renewable energy at approximately 10 Commerce facilities;
- Ensure at least 5 percent of the Department's electricity comes from renewable energy;
- Continue to right-size its vehicle fleet;
- Empower employees to approach energy-conservation challenges creatively through energy working groups, employee "Green Teams," and energy-awareness campaigns;
- Maintain collaborative relationships with other federal agencies to leverage limited resources and take advantage of expertise across the federal government;
- Continue implementation of the Environmental Protection Agency's Energy Star® Portfolio Manager to track energy usage and overall building performance across DOC facilities; and
- Comply with all relevant environmental and energy statutes, regulations, and Executive Orders (EOs).

In addition, OSEEP has organized a Green Grant Program.[4] On a competitive basis, the program awards Commerce bureaus with matching funds, of up to 50 percent, that support efforts of

[2] See enclosure 5 for a complete list of responding and nonresponding bureaus.

[3] The plan is a requirement of Executive Order No. 13,514.

[4] In collaboration with the Department's Office of Executive Budgeting, OSEEP assembled a panel of representatives from bureaus and staff offices within the Office of the Secretary to develop the Green Grant

facility managers throughout the Department to identify, plan, and implement sustainability projects. OSEEP also publishes a regular newsletter, recognizes Commerce employees with awards for energy and environmental stewardship, and operates a Green Store in the Commerce headquarters building, where Commerce employees can obtain unused or surplus supplies for office needs and can drop off excess, but still usable, office supplies.[5]

Regarding the second part of your request, we did not identify any other authorities Commerce may exercise to reduce emissions or make the nation more resilient to the effects of climate change, nor did the Commerce officials we contacted offer any additional steps that Commerce could take to reduce emissions or strengthen resiliency.

Despite notable initiatives undertaken by the Department in response to congressional and executive directives, we have concerns about the completeness of sustainability[6] data being reported. Even though the most recent Office of Management and Budget (OMB) Sustainability and Energy Scorecard shows the Department to be on track for 3 of the 7 federal sustainability goals, not all bureaus provide complete data.

Our answers to your questions are in enclosure 1, which includes a summary of bureau responses to our inquiry, a description of the data shortcomings we identified, and our recommendations for improvement. As a courtesy, we provided OSEEP officials a draft of this letter and considered their comments as we prepared this final document.

If you have any questions or require additional information, you or your staff may contact me at (202) 482-4661 or Ann Eilers, Principal Assistant Inspector General for Audit and Evaluation, at (202) 482-2754.

Sincerely,

Todd J. Zinser

Enclosures

Program. The program is funded by the revenue generated by the recycling of paper, plastic, and glass by Commerce employees. These funds are governed by the Consolidated Appropriations Act of 2012, P.L. 112-74, Div. C, Title VII, § 706.

[5] See also www.osec.doc.gov/oas/oseep.

[6] Sustainability refers to all environmental stewardship and energy efficiency programs.

Enclosure I: Responses to the Bicameral Task Force on Climate Change

Part I

(1) Identify the existing requirements in legislation, regulation, executive order, and other directives that apply to the Department of Commerce ("Department" or "Commerce").

We met with OSEEP and had the Department's Office of General Counsel (OGC) review the following list of existing legal requirements applicable to Commerce that address climate change:

- The **Energy Policy Act of 2005**[7] established a number of energy management goals for federal facilities and fleets. The act set federal energy management requirements in several areas, including metering and reporting, energy-efficient product procurement, energy savings performance contracts, building performance standards, renewable energy requirements, and alternative fuel use.

- The **Energy Independence and Security Act of 2007** (EISA)[8] established energy management goals and requirements, including energy reduction goals for federal buildings and performance standards for new buildings and major renovations. It also set requirements for energy-saving performance contracts, use of "smart" utility meters, procurement of energy-efficient products, OMB reporting, reduced use of fossil fuels, and an increased use of alternative fuels.

- **Executive Order No. 11,988,** Floodplain Management (1977),[9] requires federal agencies to avoid to the extent possible the long- and short-term adverse impacts associated with the occupancy and modification of flood plains and to avoid direct and indirect support of floodplain development wherever there is a practicable alternative.

- **Executive Order No. 13,423,** Strengthening Federal Environmental, Energy, and Transportation Management (2007),[10] set numerous federal energy and environmental management requirements in several areas, including but not limited to implementing instructions, reducing energy intensity, increasing use of renewable energy, reducing water consumption intensity, designing and operating sustainable buildings, and managing federal vehicle fleets.

- **Executive Order No. 13,514,** Federal Leadership in Environmental, Energy, and Economic Performance (2009),[11] directed federal agencies to reduce greenhouse gas emissions, improve energy efficiency, reduce fleet petroleum consumption, conserve water, reduce waste, support sustainable communities, leverage federal purchasing

[7] Energy Policy Act of 2005, Pub. L. No. 109-58.

[8] Energy Independence and Security Act of 2007, Pub. L. No. 110-140.

[9] Exec. Order No. 11,988, 42 Fed. Reg. 26951 (May 24, 1977).

[10] Exec. Order No. 13,423, 72 Fed. Reg. 3919 (Jan. 24, 2007).

[11] Exec. Order No. 13,514, 74 Fed. Reg. 52117 (Oct. 5, 2009).

power to promote environmentally responsible products and technologies, and issue an annual strategic sustainability performance plan.

- **Presidential Memorandum—Implementation of Energy Savings Projects and Performance-Based Contracting for Energy Savings** (2011), directed agencies to evaluate their facilities, identify potential savings, and leverage private- and public-sector funding to invest in comprehensive energy conservation projects that reduce energy costs.

- **Instructions for Implementing Climate Change Adaptation Planning in Accordance with Executive Order No. 13,514** (2011), issued by the chair of the Council on Environmental Quality (CEQ), were created in response to the Executive Order. Based on CEQ's instructions, the Department of Commerce implemented DAO 216-18 (below).

- **Commerce Department Administrative Order 216-18,** Climate Change Adaptation Planning (2011), prescribed policies and established responsibilities and procedures for the Department to follow for integrating climate change adaptation planning and actions into Department operations, policies, and programs.

- **Commerce Department Administrative Order 217-16,** Energy and Environmental Management (2012), directs that Department operating units collaborate across all programs related to or affecting sustainability such that the Department is a good steward of the environment and a role model for other Federal agencies and the Nation.

- **Department of Commerce Energy and Environmental Management Manual** (2012), intended primarily as guidance for facility managers and their staffs who must comply with sustainability directives, was approved under the authority of DAO 217-16 and holds the same authority as a DAO.

(2) Assess whether Commerce is meeting the requirements.

In 2013, OMB issued a series of agency-by-agency scorecards to assess the efforts of federal agencies to meet sustainability goals. The scorecards employ a red, yellow, and green scoring system to indicate compliance. Scorecards for the Department and the bureaus are attached as enclosures 2 and 3, respectively. On the 2013 scorecard, Commerce is "on track," or green, for 3 of the 7 federal sustainability goals; "off track," or yellow, for two; and "below requirement," or red, for 2.

Based on our understanding of the process used to collect and report the data used to support the OMB scorecard, we have concerns regarding the data being used. In particular, the National Oceanographic and Atmospheric Administration (NOAA) does not report accurate or complete information. This is significant, given that current reporting shows NOAA to be responsible for 43 percent of energy intensity, or reportable energy consumption, at

Commerce.[12] By reducing confidence in compliance and reporting, the use of inaccurate or incomplete data to support the OMB scorecard undermines the credibility of the Department's sustainability efforts. (See section below, "NOAA does not report accurate or complete information for the OMB Scorecard.")

As described above, Commerce engages in Department-wide sustainability planning and implementation. The smaller bureaus responding to our inquiry generally stated they have little control over efforts to reduce greenhouse gases and lack the expertise to assess sustainability needs and requirements. Most bureaus reported that they encourage use of mass transit by employees and said that their employees take advantage of telework. Three bureaus reported efforts to reduce travel.

Three of the larger Commerce bureaus—the National Institute of Standards and Technology (NIST), NOAA, and the U.S. Patent and Trademark Office (USPTO)—provided more substantive responses, summarized in table 1 below.

Based on our discussions with OSEEP and NOAA, we have determined that NOAA does not report accurate or complete information for the OMB Scorecard.

The reasons for our determinations concerning NOAA's data include

- Inconsistencies in the reporting of energy consumption and square footage of its facilities;
- The inability to accurately determine its reporting universe; and
- Failure to fully use the Department's standard reporting tool, EPA's Energy Star® Portfolio Manager.[13]

The incomplete data affects the Departmental scores for 2 of the 7 reporting categories: scope 1 and 2 greenhouse gas emissions reduction (currently scored yellow by OMB) and energy intensity (currently scored green by OMB). Providing complete data could potentially affect the data reported to OMB.

The reasons for NOAA's inability to collect complete data include

- Historical records contain incomplete and estimated information;
- NOAA headquarters staff are unable to compel the bureau's operating units to comply with sustainability directives; and

[12] Energy intensity means energy consumption per square foot of building space. NOAA accounts for the largest share at Commerce, although its data is not fully supportable. NIST accounts for 33 percent, USPTO for 16 percent, and all others total 8 percent. See enclosure 4 for definitions of scorecard categories.

[13] The Energy Star Portfolio Manager® is an interactive software tool that, among other things, tracks building energy and water use and allows users to consistently record data and measure progress. Only two bureaus, NOAA and the Census Bureau, at 61 and 36 percent, respectively, show less than 100 percent utilization of this tool.

- Sustainability reporting is an additional duty beyond the typical work assignments for many NOAA staff members, which often results in inattention to implementation and reporting.

Table 1. Sustainability Efforts at NIST, NOAA, and USPTO

Bureau	Challenges	Progress	Research
NIST	Meeting scopes 1 and 2 of OMB's greenhouse gas reduction goals[a]	• Implementing performance-based energy services agreements • Conducting energy efficiency assessments • Making facility, equipment upgrades • Instituting training for facilities personnel	• Conducting energy conservation research in the areas of o Technology for the home, o Fuel cell technology, o Solar energy, and o Smart grid
NOAA	• Providing accurate and complete energy use data • Managing an extensive real estate inventory • Ensuring consistency despite a decentralized administrative structure • Meeting scopes 1 and 2 of OMB's greenhouse gas reduction goals	• Improving record keeping • Implementing performance-based energy services agreements • Met scope 3 greenhouse gas reduction goals[b] • Reducing energy intensity • Instituting Leadership in Energy and Environmental Design (LEED) Silver requirements for new construction[c]	Not applicable
USPTO	• Reducing energy intensity • Increasing use of renewable energy	• Reducing scope 3 greenhouse gas emissions • Maintaining energy intensity while increasing workforce • Maintaining energy efficient campus—3 Energy Star ratings	Not applicable

Source: NIST, NOAA, USPTO

[a] Scope 1 means direct greenhouse gas emissions from sources that are owned or controlled by the federal agency. Scope 2 means direct greenhouse gas emissions resulting from the generation of electricity, heat, or steam purchased by a federal agency.

[b] Scope 3 means greenhouse gas emissions from sources not owned or directly controlled by a federal agency but related to agency activities such as vendor supply chains, delivery services, and employee travel and commuting.

[c] Leadership in Energy and Environmental Design (LEED) is a program providing third-party verification of green buildings. Its rating system includes Platinum, Gold, Silver, and Bronze designations. LEED is managed by the U.S. Green Building Council, a membership organization. See *www.usgbc.org*.

NOAA reports that its Energy Database Improvement Initiative is attempting to correct problems with its historic energy recordkeeping and to improve energy data management in the future. The Initiative entails using a website to collect records and alleviate some of the workload borne by facilities personnel, for whom sustainability reporting is an additional duty.

(3) Make recommendations for improving Commerce performance.

Senior Commerce officials must provide strong leadership and central direction in order to uniformly implement sustainability directives across the Department. We recommend that the Deputy Assistant Secretary for Administration ensure that bureaus provide accurate and complete data to OSEEP. These measures should result in greater transparency to the public and provide reliable data for policy makers, thereby improving sustainability planning and implementation.

We also recommend that the Deputy Assistant Secretary ensure that NOAA develops (1) a strategy and plan of action for the implementation and reporting of sustainability initiatives that includes sufficient resources and incentives to ensure a uniform approach throughout the bureau and (2) training, especially of staff members for whom facilities management and sustainability reporting are an additional duty.

Part II

(1) The authorities Commerce has to reduce emissions of heat-trapping pollution.

We identified authorities applicable to Commerce in part 1 of this request. We did not identify any other authorities Commerce may exercise to reduce emissions from heat-trapping pollution.

(2) Authorities to make the nation more resilient to the effects of climate change.

As noted in our response above, we identified no authorities separate from those identified in part 1 of this request.

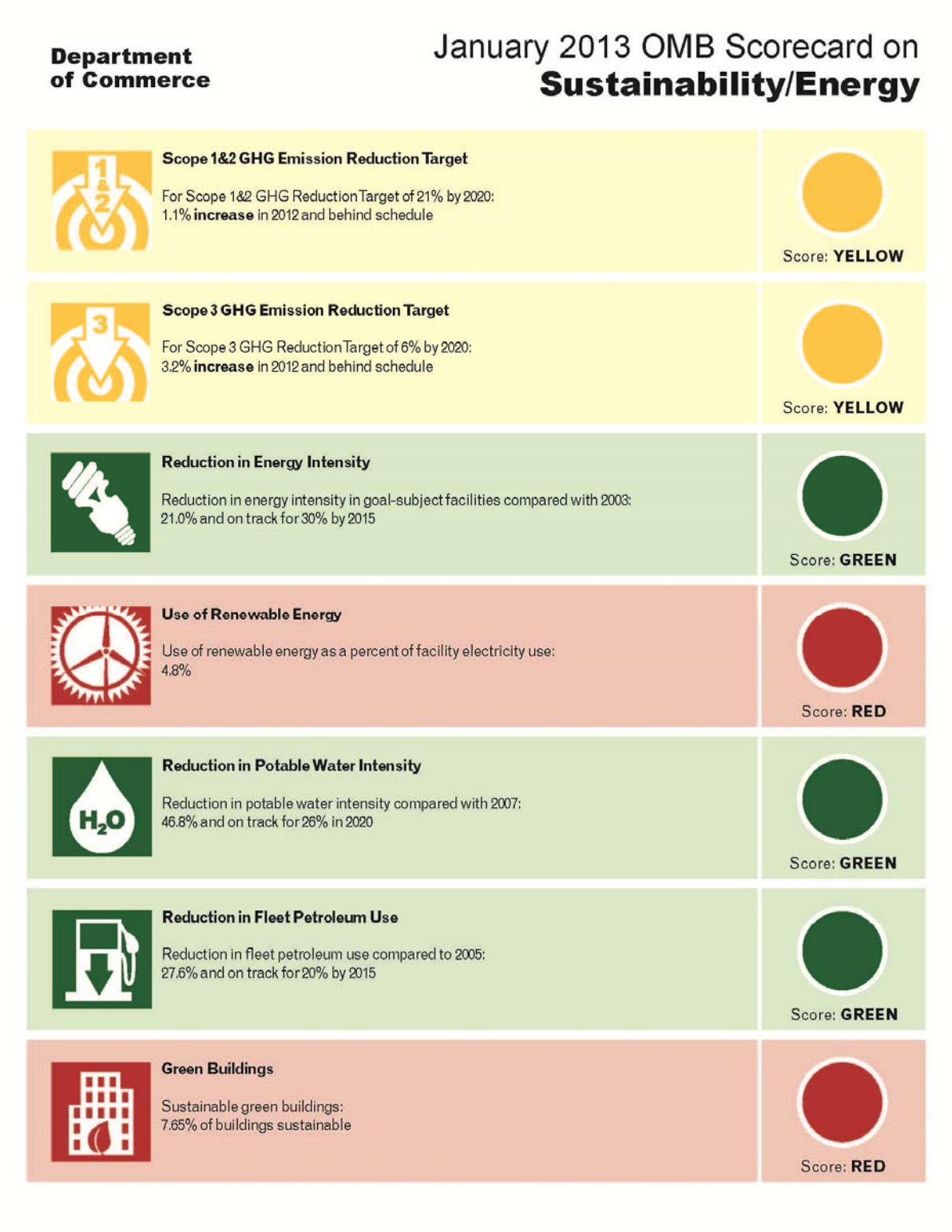
(3) The most effective additional steps Commerce could take to reduce emissions or strengthen resiliency.

Commerce officials we contacted did not offer any additional steps that the Department could take to reduce emissions or strengthen resiliency. However, as we note above, Commerce must provide more reliable data in its measurement of scopes 1 and 2 greenhouse gas emissions and energy intensity. Without accurate and complete data, it is difficult to make reliable assessments, decisions, or plans. In addition, the OMB scorecard shows the Department to be "below requirement" (or red) in the implementation of Green Buildings principals[14] and the use of renewable energy, and "off track" (or yellow) in the reduction of Scope 3 greenhouse gas emissions.

[14] See enclosure 4.

We recommend that the Deputy Assistant Secretary take action to improve the Department's sustainability performance and the accuracy and completeness of Commerce's data in order to identify ways to reduce emissions or strengthen resiliency throughout the Department.

Enclosure 2: January 2013 OMB Scorecard on Sustainability/Energy for the Department of Commerce



Enclosure 2—continued

Standards for Success — *Red Standard, Yellow Standard, Green Standard*

Scope 1&2 GHG Emission Reduction Target

GREEN: Achieved its 2012 Sustainability Plan proposed reduction for GHG Scopes 1&2 and is on track to achieve its 2020 target.

YELLOW: Achieved at least half of its 2012 Sustainability Plan proposed target for GHG Scopes 1&2.

RED: Did not achieve at least half of its 2012 Sustainability Plan proposed target for GHG Scopes 1&2 or did not provide trajectory for 2020.

Scope 3 GHG Emission Reduction Target

GREEN: Achieved its 2012 Sustainability Plan proposed reduction for GHG Scope 3 and is on track to achieve its 2020 target.

YELLOW: Achieved at least half of its 2012 Sustainability Plan proposed target for GHG Scope 3.

RED: Did not achieve at least half of its Sustainability Plan proposed target for GHG Scope 3 or did not provide trajectory for FY 2020.

Reduction in Energy Intensity

GREEN: Reduced energy intensity (Btu/GSF*) in EISA goal-subject facilities by at least 21 percent compared with 2003 and is on track for 30 percent reduction by 2015.

YELLOW: Reduced energy intensity (Btu/GSF) in EISA goal-subject facilities by at least 18 percent compared with 2003.

RED: Did not reduce energy intensity (Btu/GSF) in EISA goal-subject facilities by at least 18 percent compared with 2003.

Use of Renewable Energy

GREEN: Uses at least 5 percent electricity from renewable sources as a percentage of facility electricity use & at least 2.5 percent of facility electricity use comes from new sources (post-1999). (Thermal and mechanical renewable can be included in the 2.5 percent new requirement, but not the 5 percent goal; i.e., an agency meets all new sources requirement with thermal or mechanical energy (2.5 percent) but would still need an additional 5 percent from renewable electricity sources.)

YELLOW: Uses at least 5 percent renewable energy from electric, thermal or mechanical sources to power facilities and equipment; but less than half was obtained from new sources (post-1999) or part of the requirement was met with thermal and mechanical renewable energy.

RED: Did not use at least 5 percent renewable energy from electric, thermal or mechanical sources to power facilities and equipment.

Reduction in Potable Water Intensity

GREEN: Reduced water intensity by at least 10 percent from final approved 2007 baseline and is on track for 26 percent reduction by 2020.

YELLOW: Reduced water intensity by at least 8 percent from final approved 2007 baseline.

RED: Did not reduce water intensity by at least 8 percent from final approved 2007 baseline.

Reduction in Fleet Petroleum Use

GREEN: Achieved a 14 percent reduction in petroleum use in its entire vehicle fleet compared to 2005 and is on track for 20 percent reduction by 2015.

YELLOW: Achieved at least 12 percent reduction in petroleum use in the entire vehicle fleet compared to 2005.

RED: Did not achieve at least 12 percent reduction in petroleum use in its entire vehicle fleet since 2005.

Green Buildings

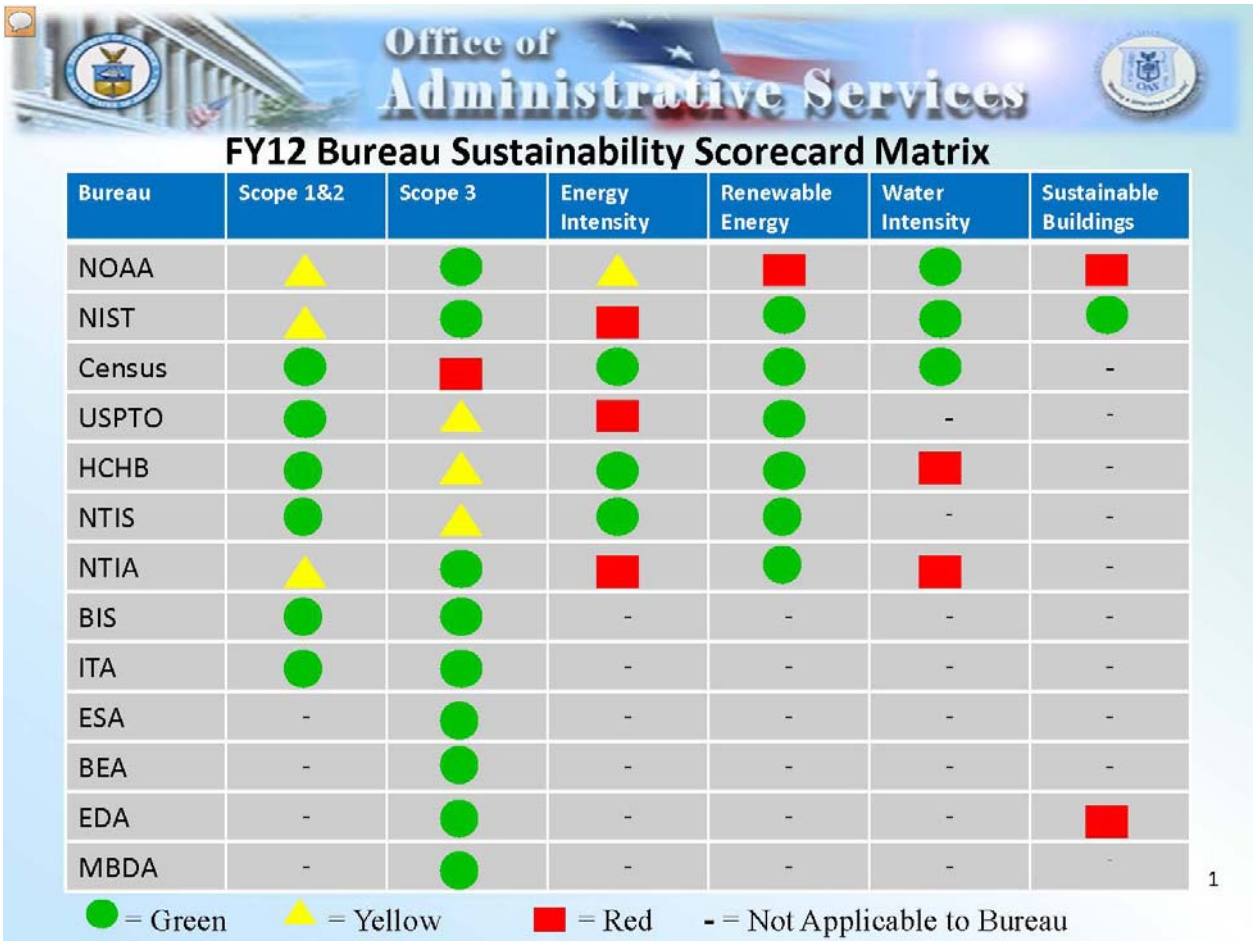
GREEN: Demonstrates implementation of Guiding Principles for Federal Leadership in High Performance and Sustainable Buildings (GP) for new, existing and leased buildings; and is on track to meet 15% goal by 2015 by reporting that at least 9% of buildings >5,000 GSF meet GP as reported in the Federal Real Property Profile (FRPP).

YELLOW: Incorporates Guiding Principles into all new design contracts for construction, major renovations and leases and at least 9 percent of GSF of its building inventory over 5,000 GSF meets GP as reported in FRPP.

RED: Cannot demonstrate compliance with GP on new construction, major renovations, or leases; and/or less than 9 percent of building inventory, either by number of buildings or GSF, over 5,000 GSF meets GP as reported in FRPP.

**GSF = Gross Square Footage*

Enclosure 3: FY 2012 Sustainability Scorecard for Department of Commerce Bureaus



Enclosure 4: OMB Scorecard on Sustainability and Energy—Definitions

Metric	Definition
Scope 1	Direct greenhouse gas emissions from sources that are owned or controlled by the federal agency
Scope 2	Direct greenhouse gas emissions resulting from the generation of electricity, heat, or steam purchased by a federal agency
Scope 3	Greenhouse gas emissions from sources not owned or directly controlled by a federal agency but related to agency activities such as vendor supply chains, delivery services, and employee travel and commuting
Energy Intensity	Energy consumption per square foot of building space, including industrial or laboratory facilities
Renewable Energy	Energy produced by solar, wind, biomass, landfill gas, ocean (including tidal, wave, current, and thermal), geothermal, municipal solid waste, or new hydroelectric generation capacity achieved from increased efficiency or additions of new capacity at an existing hydroelectric project
Potable Water Intensity	Water consumption per square foot of building space
Reduction in Fleet Petroleum Use	Measures that increase alternative fuel use and decrease petroleum fuel use
Sustainable Green Buildings	Buildings that (1) are compliant with the Five Guiding Principles for High Performance and Sustainable Buildings,[a] or (2) were designed prior to October 1, 2008, and are Leadership in Energy and Environmental Design (LEED)-certified

Source: Executive Order 13514; Department of Commerce Executive Dashboard.

[a] The Five Guiding Principles are: (1) employ integrated design principles, (2) optimize energy performance, (3) protect and conserve water, (4) enhance indoor environmental quality, and (5) reduce environmental impact of construction materials. See *High Performance Sustainable Buildings*, U.S. Department of Energy (2008).

Enclosure 5: Department of Commerce Bureaus Responding to Inquiries on their Climate Change Policies

Responded

Bureau of Economic Analysis (BEA)
Bureau of Industry and Security (BIS)
Census Bureau (Census)
Economics and Statistics Administration (ESA)
International Trade Administration (ITA)
National Institute of Standards and Technology (NIST)
National Oceanographic and Atmospheric Administration (NOAA)
National Technical Information Service (NTIS)
National Telecommunications and Information Administration (NTIA)
U.S. Patent and Trademark Office (USPTO)

Did Not Respond

Economic Development Administration (EDA)
Minority Business Development Agency (MBDA)