
April 19, 2011

**Smithsonian Institution
2010 Scorecard on Sustainability and Energy Performance**

Below is the Smithsonian Institution's fiscal year 2010 scorecard on sustainability and energy performance. Using this scorecard as a benchmark, the Smithsonian will identify and track the best opportunities to reduce pollution, improve efficiency and cut costs.

Under Executive Order 13514, President Obama directed federal agencies to lead by example. The Smithsonian is a trust instrumentality of the United States¹, and although not an executive branch of the U.S. government, the Smithsonian is committed to the strategic objectives and goals of Executive Order 13514, which set sustainability goals for federal agencies and focuses on making improvements in environmental, energy and economic performance.

In 2010, the Smithsonian had more than 30 million visits to facilities, exhibits and lectures. The Smithsonian's mission is the increase and diffusion of knowledge. This public mission includes energy- and resource-intensive activities such as providing and maintaining environments suitable for storing and preserving collections and historic buildings; operating food service, museum shops, theatres and other services for visitors; hosting hundreds of special events each year; and conducting specialized scientific research.

The Smithsonian is meeting goals to decrease potable water use per square foot; decrease fleet petroleum use; establish inventories of direct and indirect greenhouse gas emissions; and, increase renewable energy use. The Smithsonian exceeded the fleet petroleum goal by reducing its fleet size, installing bio-diesel fueling equipment, piloting an idle reduction system, and deploying both alternative-fuel and hybrid vehicles. The Smithsonian fulfilled the renewable energy goal by purchasing green power from wind and biomass sources.

Areas showing a need for improvement include decreasing energy use per square foot and incorporating sustainable building practices. In these areas, Smithsonian efforts include an award-winning \$20 million project that improved energy efficiency at the National Museum of American History and National Museum of Natural History. Also, more than a dozen design and construction projects are under way to achieve sustainable building certifications. Additional sustainability efforts are detailed in the Smithsonian Sustainability Performance Plan, which is also posted on the Policies & Reports page of the Institution's website. Based on scorecard benchmarks, the Smithsonian will update its Sustainability Plan in June as required by Executive Order 13514.

¹ Recognized as a tax-exempt organization under Section 501(c)(3) of the Internal Revenue Code



Scope 1&2 GHG Emission Reduction Target

Submitted comprehensive inventory as 2008 baseline for Scope 1&2 GHG Reduction Target of 32% by 2020¹



Score: **GREEN**



Scope 3 GHG Emission Reduction Target

Submitted comprehensive inventory as 2008 baseline for Scope 3 GHG Reduction Target of 11% by 2020¹



Score: **GREEN**



Reduction in Energy Intensity

Reduction in energy intensity in goal-subject facilities compared with 2003: 4.8% **increase** and not on track



Score: **RED**



Use of Renewable Energy

Use of renewable energy as a percent of facility electricity use:
Total of 9.2% from renewable electricity sources including at least 2.5% from new sources (thermal, mechanical, or electric)



Score: **GREEN**



Reduction in Potable Water Intensity

Reduction in potable water intensity compared with 2007: 39.0% and on track for 26% in 2020



Score: **GREEN**



Reduction in Fleet Petroleum Use

Reduction in fleet petroleum use compared to 2005: 43.9% and on track for 20% in 2015



Score: **GREEN**



Green Buildings

Sustainable green buildings:
0.00% of buildings sustainable
0.00% GSF of inventory sustainable



Score: **RED**

¹ Agency status on achieving GHG metrics in FY2010 will be assessed in July 2011

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

Scope 1&2 GHG Emission Reduction Target



GREEN: Developed a base year and a complete, comprehensive 2010 GHG inventory for Scopes 1&2 and submitted to CEQ and OMB by 1/31/2011.



YELLOW: Developed a base year and 2010 GHG inventory for Scopes 1&2 but was unable to deliver completed inventory on time to CEQ and OMB.



RED: Did not develop a base year and 2010 GHG inventory for Scope 1&2.

Scope 3 GHG Emission Reduction Target



GREEN: Developed a base year and a complete, comprehensive 2010 GHG inventory for Scope 3 and submitted to CEQ and OMB by 1/31/11.



YELLOW: Developed a base year and 2010 GHG inventory for Scope 3 but was unable to deliver completed inventory on time to CEQ and OMB.



RED: Did not develop a base year and 2010 GHG inventory for Scope 3.

Reduction in Energy Intensity



GREEN: Reduced energy intensity (Btu/GSF*) in EISA goal-subject facilities by at least 15 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 12 percent compared with 2003.



RED: Did not reduce energy intensity (Btu/GSF) in EISA goal-subject facilities by at least 12 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.)

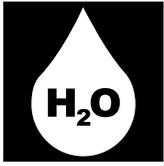


YELLOW: Uses at least 5 percent renewable energy from electric, thermal or mechanical sources to power facilities and equipment; but less than half was obtained from new sources (post-1999) or part of the requirement was met with thermal and mechanical renewable energy.



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 6 percent from final approved 2007 baseline and is on track for 26 percent reduction by 2020.



YELLOW: Reduced water intensity by at least 4 percent from final approved 2007 baseline.



RED: Did not reduce water intensity by at least 4 percent from final approved 2007 baseline.

Reduction in Fleet Petroleum Use



GREEN: Achieved a 10 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 8 percent reduction in petroleum use in the entire vehicle fleet compared to 2005.



RED: Did not achieve at least 8 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 5% 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 5 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 5 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