



National Science Foundation
FY 2015 Strategic Sustainability Performance Plan

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Policy Statement

The National Science Foundation is an independent Federal agency created by the National Science Foundation Act of 1950 to promote the progress of science, advance national health, prosperity, and welfare, and secure national defense. The Foundation is committed to sustainability, including complying with Executive Order 13693 and all other applicable sustainability statutes and regulations for Federal agencies. Improving sustainability supports our mission by making us more efficient, allowing more resources to be applied to science rather than operational costs. In concert with our mission of advancing science in the service of the nation, the Foundation commits to achieving a better understanding of climate change and developing the best approach to improve resiliency against it. Our fiscal year 2015 Strategic Sustainable Performance Plan (SSPP) is a sign of our commitment to realize the many benefits sustainability offers.

A handwritten signature in black ink, appearing to read 'Joanne Tornow', is positioned above the printed name.

Joanne Tornow, Ph.D.
Chief Sustainability Officer

Office Head, Office of Information and Resource Management

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Executive Summary

Vision

The National Science Foundation (NSF) is an independent Federal agency created by the National Science Foundation Act of 1950 to promote the progress of science, advance national health, prosperity, and welfare, and secure national defense. The Foundation fulfills its mission primarily by issuing limited-term competitive grants and by sponsoring grantee organizations that conduct basic scientific research in the interest of the nation. Improving sustainability supports the Foundation mission by making better use of Foundation resources, including energy, supplies, and personnel.

The most significant advancement in the Foundation's sustainability will come with the new Headquarters (HQ) lease that will provide NSF with higher performing and more sustainable space. NSF is working with the General Services Administration (GSA) on a new GSA-leased building to be constructed consistent with GSA's new higher "green lease" standards. With the many facets of sustainability embodied in a higher performing building, the new lease will reduce the Foundation's environmental footprint and operating costs, while providing a healthier environment for employees by virtue of features such as building materials with low levels of volatile organic compounds. The Foundation estimates that it will occupy the new facility in fiscal year (FY) 2017.

In the meantime, NSF is making sustainability a part of its day-to-day operation. For the near future, the Foundation plans to accomplish this by focusing on sustainability measures that reduce expenses. Examples are acquiring only energy-efficient electronic products, and reducing disposal costs by recycling more of its solid waste. NSF is also actively expanding its teleworking program. In FY 2014, the Foundation issued new policy that increased the maximum number of days per week that an employee can telework. The policy increased the total number of hours teleworked in FY 2014 by 26% from the prior year, which was partially responsible for the sizeable reduction in NSF's FY 2014 energy and water consumption.

Leadership

The Foundation's Chief Sustainability Officer is responsible for the oversight and ultimate success of NSF's sustainability performance. Other senior management officials, including the Director of the National Science Foundation, have voiced their commitments to environmental sustainability as promulgated under Executive Order (EO) [13693](#), and associated orders and regulations. NSF employee performance plans address sustainability under the category of stewardship.

Performance Review

Scope of Facilities Covered by the SSPP

The footprint of NSF covers property under the direct use of NSF and its Office of Inspector General. This consists of two adjacent office buildings (Stafford Place I and II) in Arlington, VA and two warehouses in Alexandria, VA, all GSA leases. Only Stafford Place I, the main HQ building, is a lease that is not fully serviced, and therefore the water and energy performance reported here is only for this building. The Foundation has been successful in conveying to the lessor ways to improve energy and water efficiency, although as the lease comes to an end NSF anticipates that the lessor will not be conducive to implementing further improvements. Upon lease expiration, NSF will be able to greatly accelerate the environmental performance of its HQ since it is relocating to a new building leased by GSA, which will meet or exceed the criteria for a Silver rating by the U.S. Green Building Council Leadership in Energy and Environmental Design (LEED) program.

The Foundation provides financial assistance awards to organizations that conduct scientific research on behalf of the nation. The properties occupied by these organizations are not used, managed, or operated by the agency. NSF has no direct control over the business operations of its recipient organizations, and limited ability to influence the organizations' consumption of facility energy or water, or vehicle fuel. However, NSF is committed to working within the legal and logistical confines of its assistive funding instruments with the grantee organizations to improve their operational efficiency and sustainability. Each year, NSF tracks and analyzes the energy and water consumption of all facilities it owns having areas greater than 10,000 gross square feet (GSF).

Goal 1: Greenhouse Gas Reduction

The Foundation completes a comprehensive inventory of its greenhouse gas (GHG) emissions every year. NSF reduced its FY 2014 emissions from Scopes 1 and 2 sources by 29.2% from the FY 2008 baseline, and those from Scope 3 sources by 45.6%, far surpassing the targets. Figure ES-1 shows that the three main contributors to the FY 2014 inventory are employee business air travel, purchased electricity, and employee commuting, which combined account for more than 96% of the total.

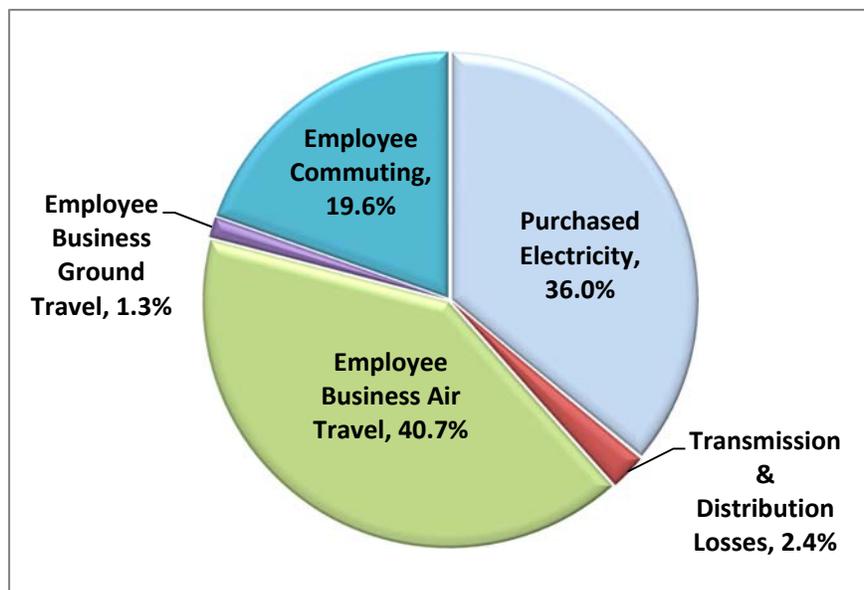


Figure ES-1. The Main Sources Contributing to the NSF FY 2014 GHG Inventory
(not including those categories accounting for less than 0.05% of the total)

The main path the Foundation is taking to reduce employee air travel is to increase the number of panelist grant review meetings conducted virtually. Figure ES-2 shows that this strategy is working, with emissions from employee business travel (both air travel and its associated ground travel) steadily dropping since FY 2011.

To reduce emissions from employee commuting, NSF is focusing on increasing participation in telework, since so many employees already avail themselves of the public transportation convenient to HQ. The emissions calculated for FY 2014 are overstated because, as per federal GHG accounting protocol, NSF only conducts its commuter survey every other year. Therefore, FY 2014 commuting data is not available, requiring that the reported emissions be based on FY 2013 data, normalized for the small decline in total employees. However, teleworking markedly increased in FY 2014, with total hours teleworked rising by more than 26% from FY 2013. The increased embrace of teleworking will be captured when NSF conducts its next commuter survey in the fall of 2015. The reduced use of NSF office

space due to teleworking contributed to the 13% drop in electricity consumption that occurred from FY 2013 to FY 2014 in the Stafford Place I building. Electricity consumption is discussed in more detail under Goal 2.

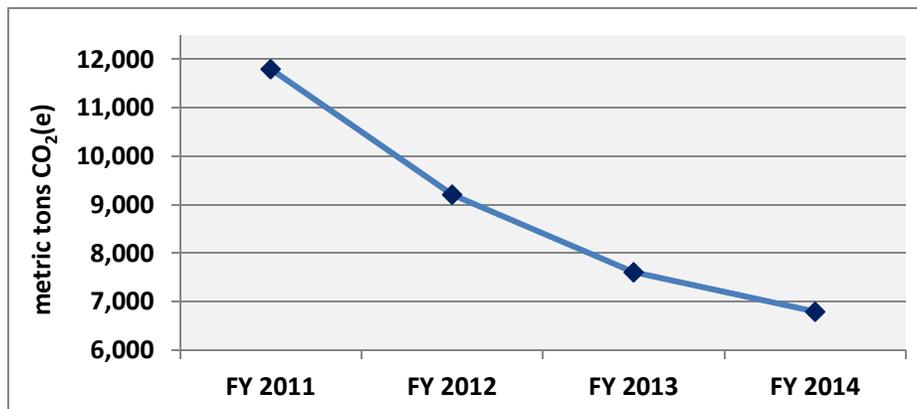


Figure ES-2. The Steady Decline in GHG Emissions from Employee Business Travel

Goal 2: Sustainable Buildings

The most important factor reflecting the sustainability of office space is usually its energy intensity. The FY 2014 energy intensity of the NSF Stafford Place I building was 25.2% lower than the FY 2008 baseline, as measured by utility meters. NSF data for FY 2003 is not available to make that year the Foundation's baseline, but a 20% reduction in FY 2014 intensity from FY 2008 is equivalent to the federal government goal for a 27% reduction from FY 2003. Therefore, NSF's 25% reduction in FY 2014 well exceeds the target. The two main factors driving the reduction from FY 2013 to FY 2014 were a shift from desktop computers to laptops, and the sharp rise in hours teleworked. Until HQ is relocated to more efficient space in FY 2017, continued improvements are likely to come mainly from these two factors.

In FY 2012, the Foundation eliminated the data center services contract it had been using, leaving NSF with one data center, located at its HQ. Since FY 2013, NSF has continued to increase the efficiency of its data center operations through virtualization and consolidation of agency servers and moving services to the cloud when appropriate. When NSF moves to its new location, NSF plans to maintain a much smaller data center infrastructure, with reduced space and more advanced metering.

Goal 3: Clean and Renewable Energy

At this time, NSF neither purchases energy generated from renewable sources nor generates any renewable energy of its own. The Foundation did evaluate the feasibility of rooftop solar photovoltaic energy for both Stafford Place I and II, but found it to be unsuitable for technical reasons. After the building envelope and systems are in place on the new building, NSF will investigate the possibility of a performance contract, including the potential for onsite renewable energy. Meanwhile, NSF will be investigating the feasibility of purchasing renewable energy certificates in an amount corresponding to 10% of its FY 2015 electricity consumption.

Goal 4: Water Use Efficiency & Management

The potable water intensity of the Stafford Place I building declined 28.1% in FY 2014, relative to the FY 2007 baseline, as determined from the building's water meter. This reduction is double the government target of 14%. Water consumption sharply declined from just last year, by 14%, presumably due to the pronounced rise in hours teleworked from FY 2013 to 2014.

The water used for the cooling tower (which is categorized as industrial water) was determined with a dedicated meter to be 27.5% lower than the FY 2010 baseline, well in excess of the government FY 2014 target of 8%. The water used by the cooling tower was almost 11% lower than in FY 2013, and only a small portion of this decline can be attributed to a reduced need for cooling due to a slightly cooler warm/hot season. The remaining decline presumably reflects the jump in teleworking from FY 2013 to 2014, which reduced the cooling load of the building by reducing the number of hours employees were in the building, as well as their use of heat-generating computers and other equipment.

Goal 5: Fleet Management

The NSF HQ vehicle fleet consists of only two leased vehicles. The vehicles used 40.5% less petroleum-based fuel in FY 2014 than in the FY 2005 base year, far surpassing the 18% target. NSF does not utilize alternative fuels in either vehicle. One of the vehicles, a minivan, is a dual-fuel vehicle capable of operating on E85 (a blend of 85% ethanol with 15% gasoline). However, E85 is not used in the vehicle because there are no fueling stations located sufficiently close to either HQ or its normal routes. NSF does not plan to drive the vehicle the appreciable added distance and time needed to acquire E85, since that will negate the environmental benefits of the E85.

Goal 6: Sustainable Acquisition

NSF is not a Scorecard agency, and therefore does not conduct a review of 5% of its contract actions for compliance with sustainable acquisition requirements. However, the Foundation is diligent about conducting its acquisition sustainably, and will continue to use procurement vehicles that adhere to sustainability requirements, and continue to strive to ensure that sustainability clauses are properly addressed in all relevant contracts.

Goal 7: Pollution Prevention & Waste Reduction

In FY 2013, of the total amount of non-hazardous solid waste generated by Stafford Place I and II, NSF used recycling to divert approximately 64% of solid waste from disposal (incineration in a municipal waste-to-energy facility). This diversion rate goes well beyond the 40% government target for FY 2014. The calculated diversion rate is approximate because the weight of recycled material is not provided by the vendor and must be estimated. However, the weight of solid waste disposed is monitored and has been declining every year since FY 2010, as shown in Figure ES-3. In FY 2014, 24% less waste was disposed than in FY 2010. NSF will continue to diligently manage its non-hazardous solid waste to minimize the quantity of waste collected for disposal.

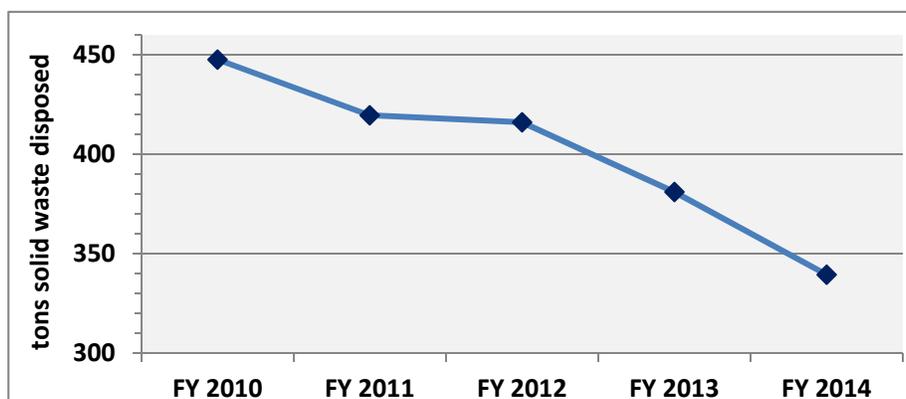


Figure ES-3. The declining amount of NSF solid waste disposed due to increased recycling

Goal 8: Energy Performance Contracts

Performance contracting is not relevant for NSF in the near term because the current GSA lease is coming to an end. The new GSA-leased building NSF will occupy starting in FY 2017 will be relatively high performing—with a LEED rating of at least Silver—but NSF will investigate the feasibility of a performance contract once the building envelope and systems are in place.

Goal 9: Electronic Stewardship

The Foundation uses Blanket Purchasing Agreements to ensure that 100% of its computers, laptops, and monitors comply with the requirements of the Electronic Product Environmental Assessment Tool (EPEAT) and EPA's ENERGY STAR rating. NSF ensures the environmentally sound disposition for 100% of its excess or surplus electronic products—either through donations for reuse, GSA Xcess, or certified recyclers.

Goal 10: Climate Change Resilience

The resilience of NSF HQ to climate change is built into existing procedures regarding extreme weather events and other circumstances that could affect employee health and safety and disrupt operations. The agency's separate FY 2015 Climate Change Adaptation Plan describes specific planned actions to improve NSF's resilience to the impacts of a changing climate.

Progress on Administration Priorities

Sustainable Locations for Federal Facilities

NSF worked with GSA to ensure that the new GSA leased building to be constructed in Alexandria meets all of the criteria in the *Implementing Instructions for Sustainable Locations for Federal Facilities*.

Sustainable Practices for Designed Landscapes

NSF has no landscaping in its current space, and will not have any grounds to landscape in the new building.

Water Efficiency and Management

NSF has reduced its energy intensity by more than 28% since the baseline, an average of 4% per year compared to the annual federal target of 2%. Water efficiency performance should improve even more once NSF occupies the new HQ building in FY 2017.

President's Performance Contracting Challenge

NSF is not subject to the Presidential Performance Contract Challenge, but it will evaluate the potential for performance contracting to improve the new GSA leased building it will occupy beginning in FY 2017.

Climate Change Adaptation Plan

The development of the NSF Climate Change Adaptation Plan is still in its infancy, as the Foundation lays the groundwork among senior management to develop the specific approaches to be used and to identify the stakeholders to engage.

The size and scope of NSF's operations are conveyed in Table 1.

Table 1: Agency Size & Scope

	FY 2013	FY 2014
Total # Employees as Reported in the President's Budget	1,657	1,611
Total Acres Land Managed	0	0
Total # Buildings Owned (as per the Federal Real Property Profile)	0	0
Total # Buildings Leased (GSA and Non-GSA Lease)	4	4
Total Building Gross Square Feet (GSF)	0.608	0.608
Operates in Number of Locations Throughout U.S.	1	1
Operates in Number of Locations Outside of U.S.	0	0
Total # Fleet Vehicles Owned	0	0
Total # Fleet Vehicles Leased	2	2
Total # Exempted-Fleet Vehicles	0	0
Total Amount Contracts Awarded as Reported in the Federal Procurement Data System (\$Millions)	\$437	\$454

Agency Progress toward (Prior) Sustainability Goals in EO 13514 and EO 13423

This section provides an overview of agency progress towards the sustainability goals established in EO 13514 and EO 13423. The subject of many of these goals has been carried over into EO 13693 and a review of past performance is useful to determine program effectiveness and development of strategies for future implementation.

Goal 1: Greenhouse Gas (GHG) Reduction

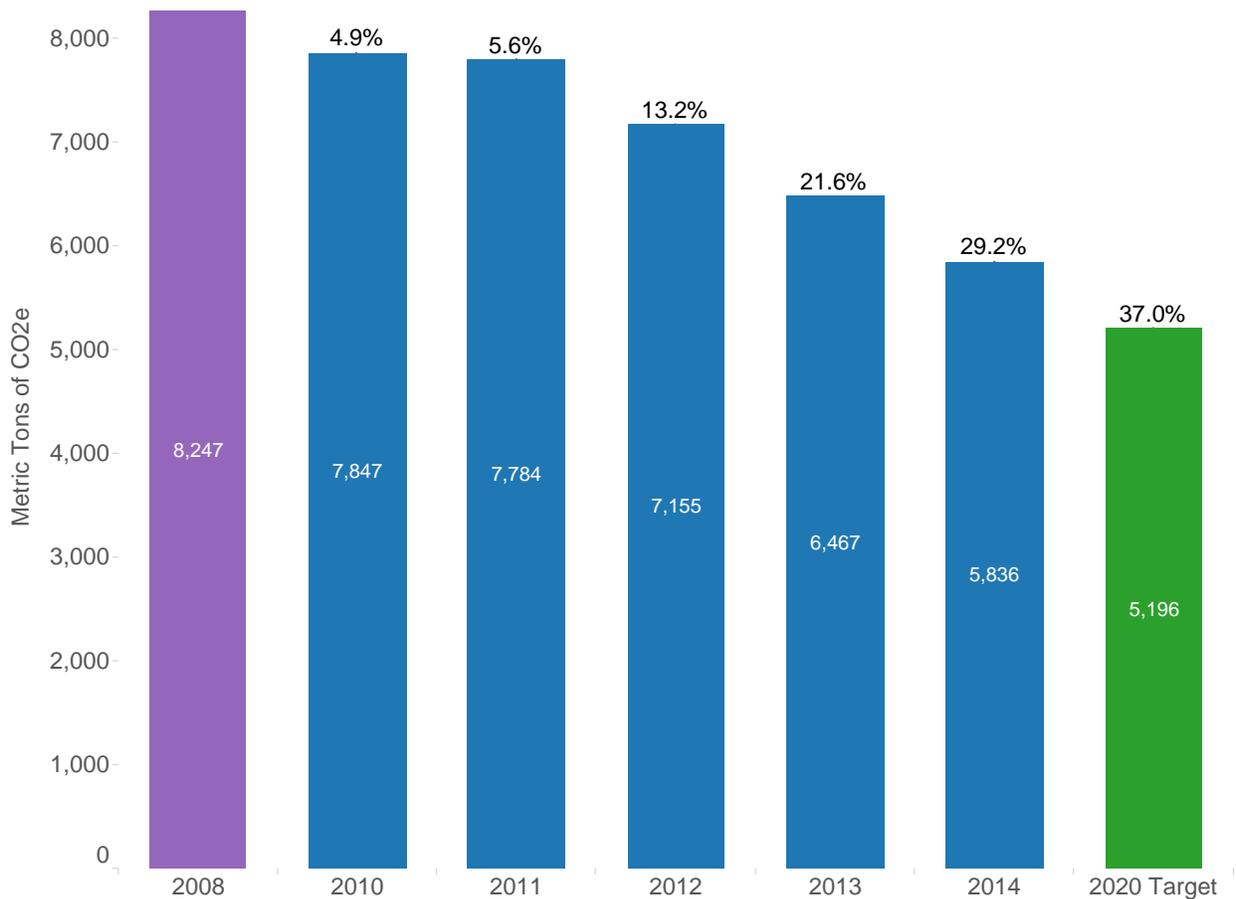
Agency Progress toward Scope 1 & 2 GHG Goal

EO 13514 required each agency establish a Scope 1 & 2 GHG emission reduction target to be achieved by FY 2020. The red bar represents the agency's FY 2008 baseline. The green bar represents the FY 2020 target reduction. The blue bars represent annual agency progress towards achieving this target. The percentage at the top of each bar represents the reduction from the FY 2008 baseline.

Figure 1-1

Instructions: Agencies should not amend or edit this figure. If changes are necessary, contact CEQ.

NSF Progress toward Scope 1 & 2 Greenhouse Gas Goals

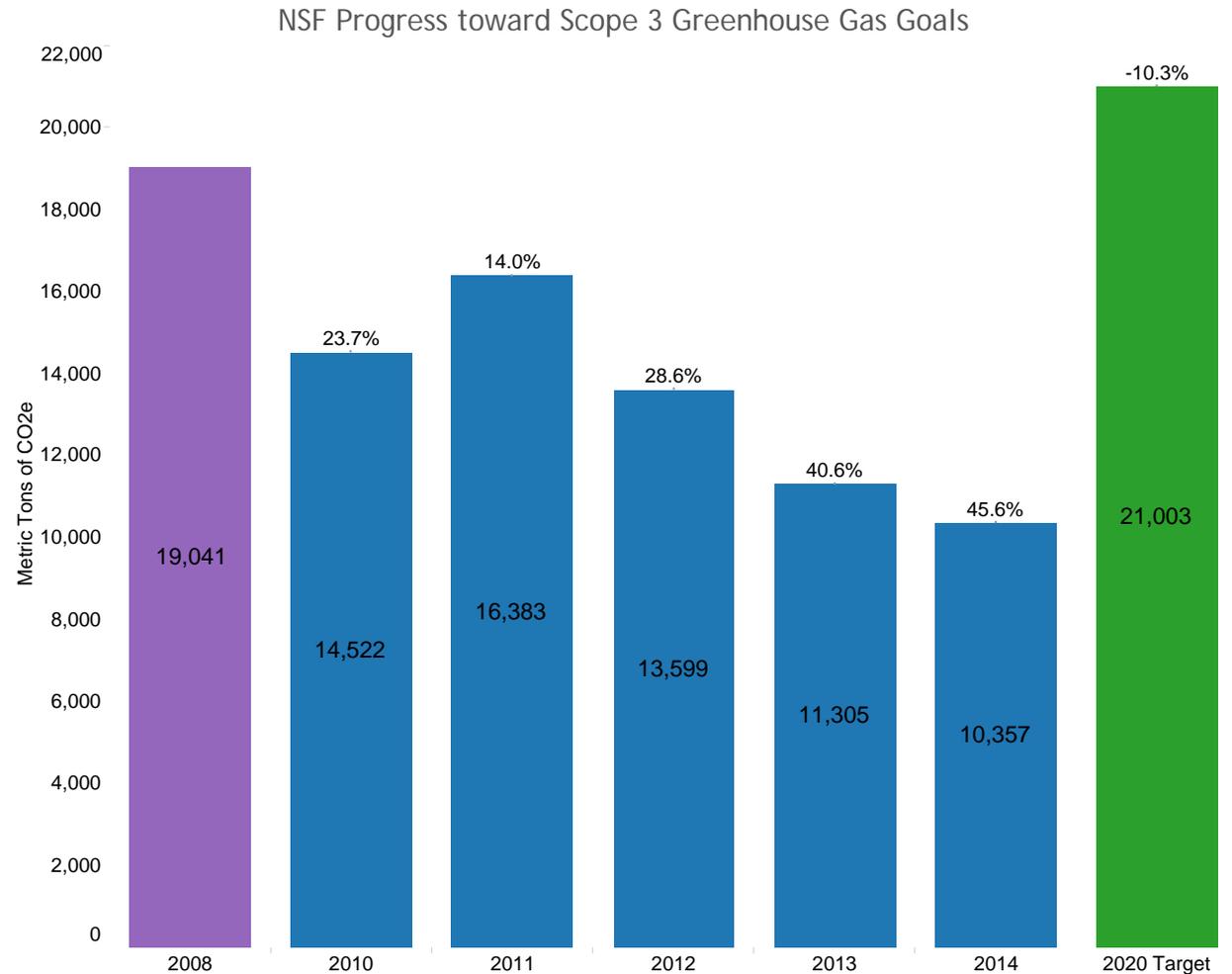


Agency Progress toward Scope 3 GHG Goal

EO 13514 required each agency establish a Scope 3 GHG emission reduction target to be achieved by FY 2020. The red bar represents the agency's FY 2008 baseline. The green bar represents the FY 2020 reduction target. The blue bars represent annual agency progress on achieving this target. The percentage at the top of each bar represents the reduction from the FY 2008 baseline.

Figure 1-2

Instructions: Agencies should not amend or edit this figure. If changes are necessary, contact CEQ.



Goal 2: Sustainable Buildings

Agency Progress toward Facility Energy Intensity Reduction Goal

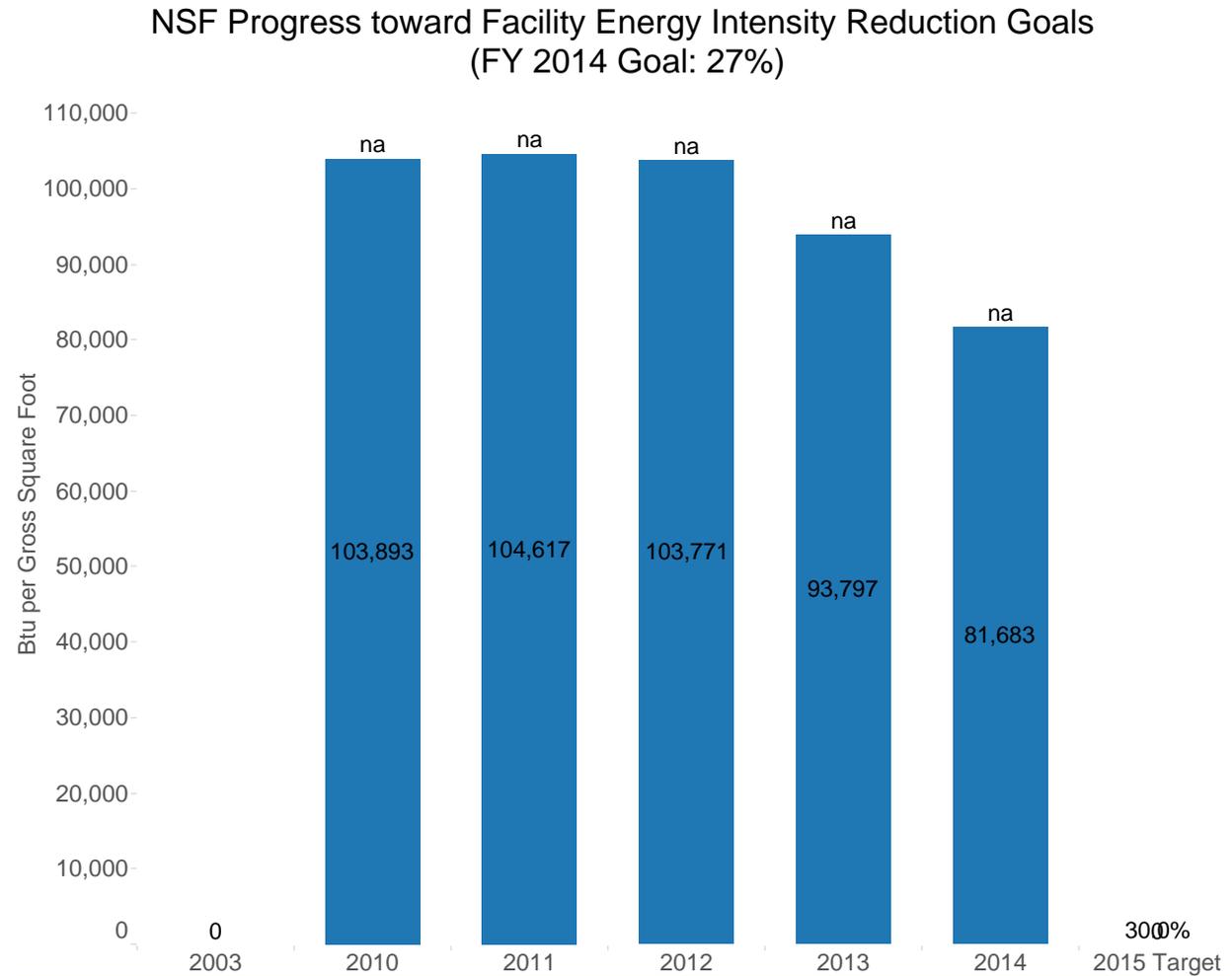
EO 13514 section 2 required that agencies consider building energy intensity reductions. Further, the Energy Independence and Security Act of 2007 (EISA) requires each agency to reduce energy intensity 30 percent by FY 2015 as compared to the FY 2003 baseline. Agencies are expected to reduce energy intensity by 3 percent annually through FY 2015 to meet the goal. The red bar represents the agency's

FY 2003 baseline. The green bar represents the FY 2015 target reduction. The blue bars show annual agency progress on achieving this target. The percentage at the top of each bar represents the reduction or increase from the FY 2003 baseline. A negative percentage value indicates that the energy intensity has decreased compared to the FY 2003 baseline.

Figure 2-1

Instructions: Agencies should not amend or edit this figure. If changes are necessary, contact CEQ.

Note for Reviewers: "na" shown rather than percentage reductions because NSF does not have the FY03 data used by the government as their baseline.



Agency Progress toward Total Buildings Meeting the Guiding Principles

EO 13514 required that by FY 2015, 15 percent of agencies' new, existing, and leased buildings greater than 5,000 square feet meet the Guiding Principles. In order to meet the FY 2015 goal, agencies should have increased the percentage of conforming buildings by approximately 2 percent annually from their FY 2007 baseline.

Figure 2-2: not applicable to NSF

Goal 3: Fleet Management

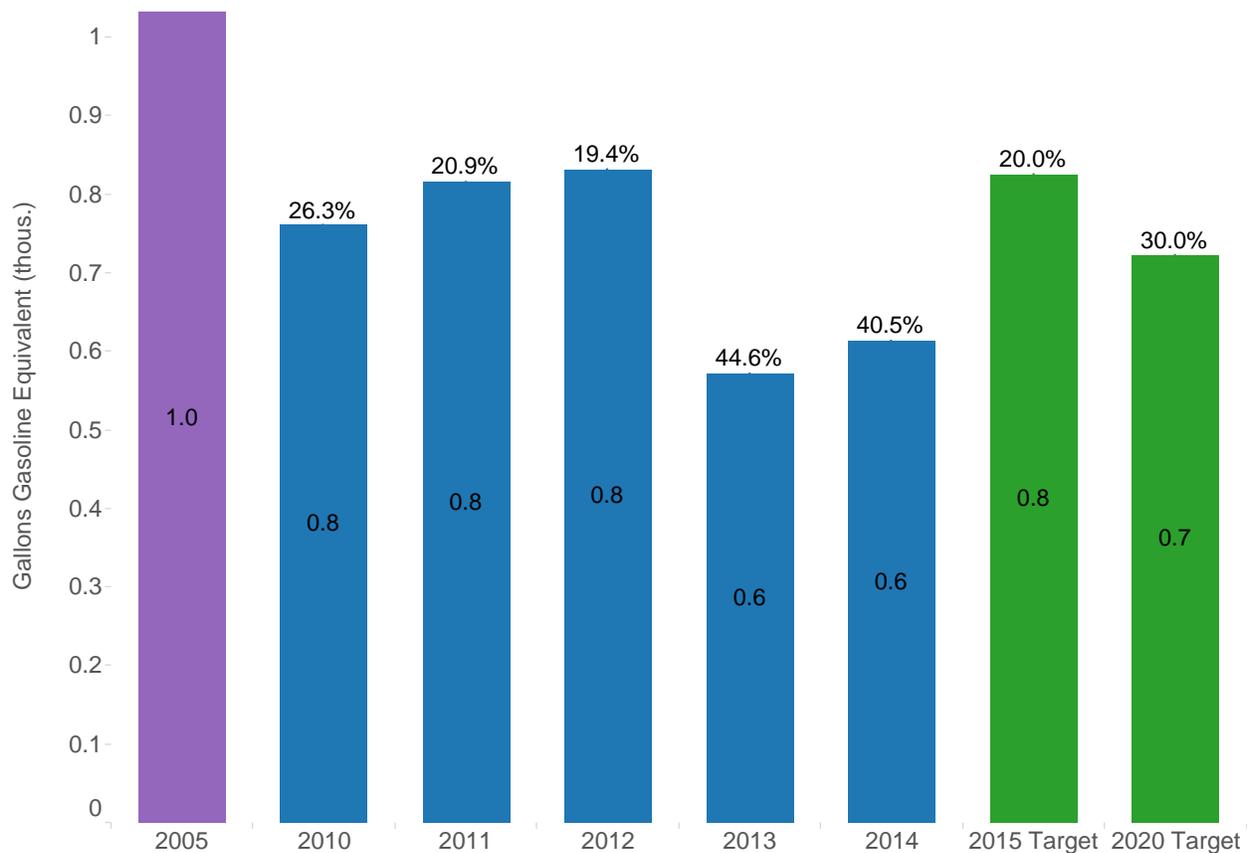
Agency Progress toward Fleet Petroleum Use Reduction Goal

EO 13514 required and the Energy Independence and Security Act of 2007 (EISA) requires that by FY 2015 agencies reduce fleet petroleum use by 20 percent compared to a FY 2005 baseline. Agencies were expected to achieve at least a 2 percent annual reduction. The red bar represents the agency's FY 2005 baseline. The green bars represent the FY 2015 target reduction. The blue bars represent annual agency progress on achieving these targets. The percentage at the top of each bar represents the reduction from the FY 2005 baseline.

Figure 3-1

Instructions: Agencies should not amend or edit this figure. If changes are necessary, contact CEQ.

NSF Progress toward Fleet Petroleum Reduction Goals
(FY 2014 Goal: 18%)



Agency Progress toward Fleet Alternative Fuel Consumption Goal

EO 13423 required that agencies increase total alternative fuel consumption by 10 percent annually from the prior year starting in FY 2005. By FY 2015, agencies must have increased alternative fuel use by 159.4 percent, relative to FY 2005. The red bar represents the agency's FY 2005 baseline. The green bar represents the FY 2015 target. The blue bars represent annual agency progress on achieving this target.

Figure 3-2: No Alternative Fuel Use for NSF

Goal 4: Water Use Efficiency & Management

Agency Progress toward Potable Water Intensity Reduction Goal

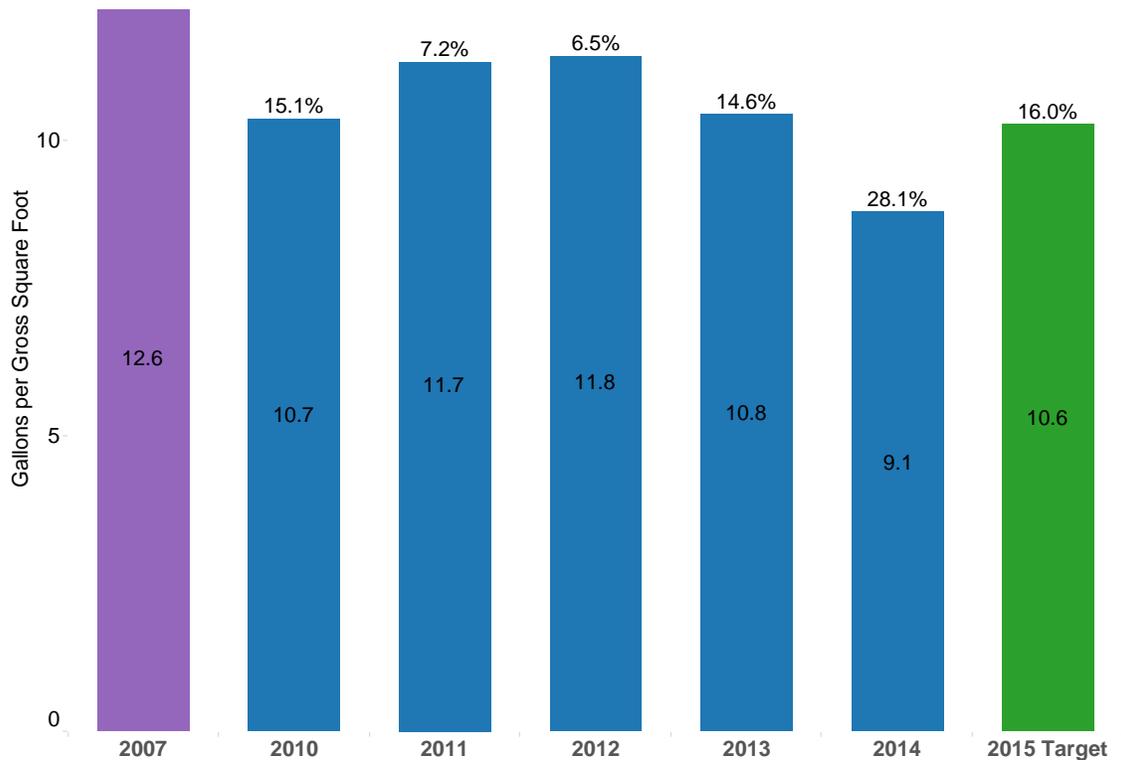
EO 13514 required agencies to reduce potable water intensity by 2 percent annually through FY 2020 compared to an FY 2007 baseline. A 16 percent reduction was required by FY 2015 and a 26 percent reduction was required by FY 2020. The red bar represents the agency's FY 2007 baseline. The green bars represent the FY 2015 and FY 2020 target reductions. The blue bars represent annual agency progress on achieving these targets. The percentage at the top of each bar represents the reduction from the FY 2007 baseline.

Agency data for progress towards the industrial, landscaping and agricultural water use reduction target is not available.

Figure 4-1

Instructions: Agencies should not amend or edit this figure. If changes are necessary, contact CEQ.

NSF Progress toward Potable Water Intensity Reduction Goals
(FY 2014 Goal: 14%)



Goal 5: Pollution Prevention & Waste Reduction

Agency Progress toward Pollution Prevention & Waste Reduction

EO 13514 required that Federal agencies promote pollution prevention and eliminate waste. The EO required agencies to minimize the use of toxic and hazardous chemicals and pursue acceptable alternatives. It also required agencies minimize waste generation through source reduction, increase diversion of compostable materials, and by the end of FY 2015 divert at least 50% of non-hazardous and 50% of construction and demolition debris.

(CEQ is not tracking this metric this year.¹)

Goal 6: Sustainable Acquisition

Agency Progress toward Sustainable Acquisition Goal

EO 13514 required agencies to advance sustainable acquisition and ensure that 95 percent of applicable new contract actions met federal mandates for acquiring products that are energy efficient, water efficient, biobased, environmentally preferable, non-ozone depleting, recycled content, or are non-toxic or less toxic alternatives, where these products meet performance requirements. To monitor performance, agencies perform quarterly reviews of at least 5 percent of applicable new contract actions to determine if sustainable acquisition requirements are included.

Figure 6-1: None for NSF

Note for Reviewers: not applicable for NSF because it is not required to manually review 5% of its contracts for compliance with sustainable acquisition requirements.

Goal 7: Electronic Stewardship & Data Centers

Agency Progress toward EPEAT, Power Management and End of Life Goals

EO 13514 required agencies to promote electronics stewardship by: ensuring procurement preference for EPEAT-registered products; implementing policies to enable power management, duplex printing, and other energy-efficient features; employing environmentally sound practices with respect to the disposition of electronic products; procuring Energy Star and FEMP designated electronics; and, implementing best management practices for data center operations.

Figure 7-1: None for NSF

Note for Reviewers: CEQ does not track these metrics for NSF.

¹ Waste accounting guidance will be issued in spring of 2015. Agencies will be expected to begin implementation as soon as practicable. Accounting will begin in FY 2016.

Goal 8: Renewable Energy

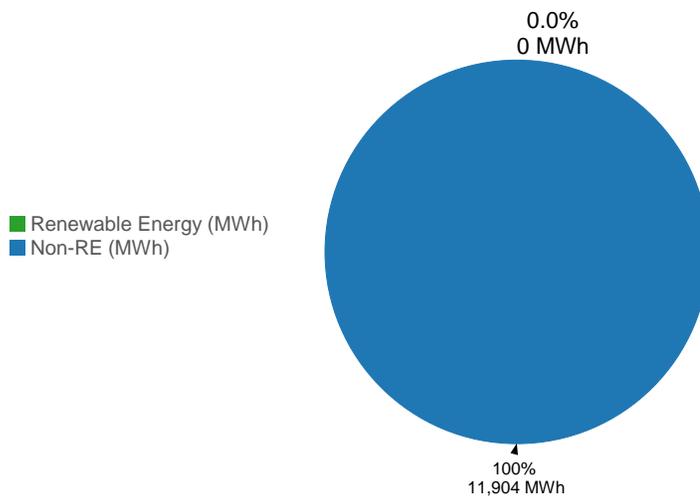
Agency Renewable Energy Percentage of Total Electricity Usage

EO 13514 requires that agencies increase use of renewable energy. Further, the Energy Policy Act of 2005 requires agencies to increase renewable energy use such that 7.5 percent of the agency's total electricity consumption is generated by renewable energy sources for FY 2014 and beyond. For FY 2012, the required target was 5 percent of an agency's total electricity consumption. In 2013, a Presidential Memorandum entitled *Federal Leadership on Energy Management* revised the Federal agency target for agency renewable energy percentage of total electricity usage to reflect a goal of 20% by 2020.

Figure 8-1)

Instructions: Agencies should not amend or edit this figure. If changes are necessary, contact CEQ.

NSF Use of Renewable Energy as a Percentage of Electricity Use
(FY 2014 Goal: 7.5%)



Goal 9: Climate Change Resilience

Agency Climate Change Resilience

EO 13514 required each agency to evaluate agency climate change risks and vulnerabilities to identify and manage the effects of climate change on the agency's operations and mission in both the short and long term.

This goal is addressed through qualitative commitments on the part of each agency and a summary of progress may be found in the Executive Summary at the beginning of this document.

Goal 10: Energy Performance Contracts

Agency Progress in Meeting President's Performance Contracting Challenge (PPCC) Goal

Goal 10 section is relevant only to agencies subject to the PPCC.

Figure 10-1: None for NSF

Agency Strategies to Meet Goals of EO 13693

To facilitate agency planning and reporting, the majority of the goals for EO 13693 take effect in the beginning of fiscal year 2016 (October 1, 2015) and are therefore appropriate for inclusion in this document. As noted previously many of the goals that agencies pursued under the previous executive orders have been carried over into EO 13693.

This section provides certain goal areas where "Required Strategies" are identified. Where an agency does not adopt those required strategies as an FY 2016 priority, the agency should explain the rationale for that decision in the strategy narrative. Also included are recommended strategies that represent strategies that have been successfully implemented by the Federal community and may also be adopted as priority strategies.

Goal 1: Greenhouse Gas (GHG) Reduction

Table 1-1: Goal 1 Strategies – Scope 1 & 2 GHG Reductions

Instructions: In Table 1-1 below, list ONLY the top five priority strategies that the agency will implement in FY 2016 to pursue Goal 1 Scope 1 & 2 GHG reductions. For each agency-level strategy listed below, select the appropriate response from the drop-down menu. If the selection is not applicable ("NA") or "No", an explanation must be provided in the Strategy Narrative column (C) as to why the agency will not implement this strategy. If the selection is "Yes", provide in column (C) a description on how the strategy will be implemented and in column (D) provide specific targets/metrics and milestones to measure agency progress/success. **DO NOT DELETE ANY STRATEGIES LISTED IN COLUMN (A).** Agencies may make minor changes to a column (A) strategy if needed to enable the agency to select that strategy as a FY 2016 priority. If necessary, agencies may add additional strategies into the blank rows provided in column (A) in order to present five priority strategies.

(A) Strategy	(B) Top Five? Yes/No /NA	(C) Strategy Narrative (100 word limit)	(D) Specific targets/metrics to measure success including milestones in next 12 months
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(A) Strategy	(B) Top Five? Yes/No /NA	(C) Strategy Narrative (100 word limit)	(D) Specific targets/metrics to measure success including milestones in next 12 months
(A) Required Strategy under EO 13693			
Use the FEMP GHG emission report to identify/target high emission categories and implement specific actions to resolve high emission areas identified.	Yes	The inventory shows that 99.9% of NSF's Scopes 1 and 2 GHG emissions are from purchased electricity, indicating electricity as the target for Scopes 1/2 GHG reductions. Until NSF occupies its new lease in FY 2017, the main path to continued reductions will be increasing teleworking.	Scopes 1 and 2 GHG emissions reduced 30% in FY 2015 relative to the FY 2008 baseline.
Identify alternative sources of data or alternative methods of analysis not set forth in EO 13693, but with the potential to support its goals.	No	This is not among NSF's top five priorities.	
Identify and support management practices or training programs that encourage employee sustainability and greenhouse gas consideration.	Yes	In FY 2014, NSF set up an internal SharePoint site with links to sources on information and guidance on sustainability, covering all topics in EO 13693. So far in FY 2015, NSF sent an e-mail to all employees announcing the site, and on Earth Day it developed a webinar on sustainability and posted it on the sustainability collaboration site. In the remainder of FY 2015, NSF plans to implement a more aggressive employee outreach program, with more communication, a webinar, and outreach events.	A more aggressive employee outreach program developed by the end of FY 2015.
Conceptualize the goals of EO 13693 within a projected cost-benefit framework to identify low-hanging fruit.	Yes	NSF has already been evaluating cost-effective energy efficiency options for the new facility being designed, which NSF will lease starting in FY 2017.	No measure feasible within the next 12 months, as NSF is not moving until 2017. However, NSF will set new targets for energy intensity reductions from the FY 2015 baseline.

(A) Strategy	(B) Top Five? Yes/No /NA	(C) Strategy Narrative (100 word limit)	(D) Specific targets/metrics to measure success including milestones in next 12 months
Isolate successful measures applied toward the goals of EO 13514 that could be expanded to meet the goals of EO 13693.	Yes	One of the main contributions to NSF's success in reducing its energy intensity, and therefore Scopes 1 and 2 GHG emissions, is teleworking. NSF will continue to focus on expanding telework participation.	A 10% decline in vehicle miles travelled for commuting, from FY 2013 to FY 2015 (when NSF will next conduct the biennial commuter survey).
Determine unsuccessful programs or measures to be discontinued to better allocate agency resources, human and otherwise.	No	99.9% of NSF's GHG emissions from Scopes 1 and 2 sources are from purchased electricity, and NSF cannot identify unsuccessful measures it as taken to reduce electricity consumption.	
Determine which goals set forth in EO 13693 represent unambitious targets given past agency performance, identify by how much they could be exceeded, and establish new within-agency target.	Yes	NSF will evaluate whether its energy intensity targets can be made more ambitious than those of EO 13693. <i>{Note for Reviewers: this is for energy intensity, not to be confused with the new GHG targets due June 17.}</i>	Decision made by the end of FY 2015 on NSF's internal agency targets for energy intensity reductions.
Employ operations and management best practices for energy consuming and emission generating equipment.	N/A	NSF only occupies two GSA-leased buildings, one of which is fully serviced.	

Table 1-2: Goal 1 Strategies – Scope 3 GHG Reductions

Instructions: In Table 1-2 below, list ONLY the top five priority strategies that the agency will pursue in FY 2016 to achieve Goal 1 Scope 3 GHG reductions. For each agency-level strategy listed below, select the appropriate response from the drop-down menu. If the selection is not applicable ("NA") or "No", an explanation must be provided in the Strategy Narrative column (C) as to why the agency will not implement this strategy. If the selection is "Yes", provide in column (C) a description on how the strategy will be implemented and in column (D) provide specific targets/metrics and milestones to measure agency progress/success. DO NOT DELETE ANY STRATEGIES LISTED IN COLUMN (A). Agencies may make minor changes to a column (A) strategy if needed to enable the agency to select that strategy as a FY 2016 priority. If necessary, agencies may add additional strategies into the blank rows provided in column (A) in order to present five priority strategies.

(A) Strategy	(B) Top Five? Yes/No /NA	(C) Strategy Narrative (100 word limit)	(D) Specific targets/metrics to measure success including milestones in next 12 months
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(A) Strategy	(B) Top Five? Yes/No /NA	(C) Strategy Narrative (100 word limit)	(D) Specific targets/metrics to measure success including milestones in next 12 months
(A) Required Strategy under EO 13693			
Reduce employee business ground travel.	No	Emissions from employee business ground travel are not a high priority because they account for only 1.3% of the agency's total GHG emissions (about 2% of Scope 3 emissions).	
Reduce employee business air travel.	Yes	The vast majority of NSF's air travel emissions are due to the business travel of its expert panelists for reviewing proposals. NSF provided all offices with video teleconferencing software and training, and is tracking avoided air travel and associated savings from reduced travel and panel reimbursement costs.	A 5% increase from FY 2014 to FY 2015 in the number of panel meetings where all participants are meeting virtually.
Develop and deploy employee commuter reduction plan.	Yes	NSF already has in place the mass transit subsidy program for the Metro system, which is widely used. NSF also has a program to promote teleworking (see telework strategy below).	A 10% decline in vehicle miles travelled for commuting, from FY 2013 to FY 2015 (when NSF will next conduct the biennial commuter survey).
Use employee commuting survey to identify opportunities and strategies for reducing commuter emissions.	Yes	NSF first used the GSA Carbon Footprint Tool Scope 3 Commuter Survey in FY 2011, and intends to repeat it every other year, as recommended. NSF used its analysis of the FY 2011 and FY 2013 results to inform its strategies for reducing commuting emissions, and will continue to analyze the results from commuter surveys to inform future strategies.	A 10% decline in vehicle miles travelled for commuting, from FY 2013 to FY 2015 (when NSF will next conduct the biennial commuter survey).
Increase number of employees eligible for telework and/or the total number of days teleworked.	Yes	In FY 2014, NSF issued new policy that increased the transparency of the process for approving the days a week that an employee can telework. Telework participation is expected to continue rising as more employees and their supervisors become comfortable with teleworking.	A 10% decline in vehicle miles travelled for commuting, from FY 2013 to FY 2015 (when NSF will next conduct the biennial commuter survey).

(A) Strategy	(B) Top Five? Yes/No /NA	(C) Strategy Narrative (100 word limit)	(D) Specific targets/metrics to measure success including milestones in next 12 months
Develop and implement bicycle commuter program.	N/A	NSF already encourages bicycle commuting, including providing a bicycle subsidy. The Foundation does not plan to expand the program because there is insufficient demand since most employees prefer to use mass transit, given the urban location of the facility and its distance one block from a Metro station.	
Provide bicycle commuting infrastructure.	N/A	NSF already provides secure bicycle parking for commuters.	
Plan to begin FY 2016: Report scope 3 greenhouse gas emissions for leases over 10,000 rentable square feet EO 3(h)(v)	Yes	Starting with the FY 2016 GHG Inventory, NSF HQ will include all of its leased space over 10,000 rentable square feet.	All leased HQ space over 10,000 rentable square feet included in the FY 2016 inventory.

Goal 2: Sustainable Buildings

Building Energy Conservation, Efficiency, and Management

Section 3(a) of EO 13693 states that agencies will promote building energy conservation, efficiency, and management. Section 3(a)(i) requires agencies to reduce building energy intensity by 2.5% annually through the end of FY 2025 (measured in British thermal units per square foot), relative to a FY 2015 baseline and taking into account agency progress to date, except where revised pursuant to section 9(f) of EO 13693.

Building Efficiency Performance, and Management

Section 3(h) of EO 13693 states that agencies will improve building efficiency, performance, and management.

Section 3(h)(iii) requires that agencies identify, as a part of the planning requirements of section 14 of this order, a percentage of the agency's existing buildings above 5,000 gross square feet intended to be energy, waste, or water net-zero buildings by FY 2025 and implementing actions that will allow those buildings to meet that target.

CEQ recognizes that any FY 2016 agency projections for this goal are rudimentary estimates. Agencies will be only expected to share lessons learned in implementing this goal and will not be scored or graded on outcomes towards the target established for FY 2016.

Please input the percentage here: 95% (on a square footage basis; otherwise 33% in terms of number of buildings).

Table 2-1: Goal 2 Strategies – Sustainable Buildings

Instructions: In Table 2-1 below, list ONLY the top five priority strategies that the agency will pursue in FY 2016 to achieve Goal 2. For each agency-level strategy listed below, select the appropriate response from the drop-down menu. If the selection is not applicable ("NA") or "No", an explanation must be provided in the Strategy Narrative column (C) as to why the agency will not implement this strategy. If the selection is "Yes", provide in column (C) a description on how the strategy will be implemented and in column (D) provide specific targets/metrics and milestones to measure agency progress/success. DO NOT DELETE ANY STRATEGIES LISTED IN COLUMN (A). Agencies may make minor changes to a column (A) strategy if needed to enable the agency to select that strategy as a FY 2016 priority. If necessary, agencies may add additional strategies into the blank rows provided in column (A) in order to present five priority strategies.

(A) Strategy	(B) Top Five? Yes/No /NA	(C) Strategy Narrative (100 word limit)	(D) Specific targets/metrics to measure success including milestones in next 12 months
(A) Required Strategy under EO 13693			
Use remote building energy performance assessment auditing technology 3(a)(A)	No	This is not among NSF’s top five priorities.	
Participate in demand management programs 3(a)(B)	No	This is not among NSF’s top five priorities.	
Ensure that monthly performance data is entered into the Environmental Protection Agency (EPA) ENERGY STAR Portfolio Manager 3(a)(C)	No	NSF enters its monthly energy and water data in the GSA Carbon Footprint Tool.	
Where feasible: Incorporate Green Button data access system into reporting, data analytics, and automation processes 3(a)(D)	No	NSF might use Green Button data (Dominion Virginia Power) to monitor its electricity data and benchmark its energy intensity, but this is not among our top five priorities.	
Implement space utilization and optimization practices and policies 3(a)(E)	No	This is not among NSF’s top five priorities.	
Identify opportunities to transition test-bed technologies to achieve the goals of this section 3(a)(F)	N/A	NSF does not test new technologies.	
Where feasible: Conform to city energy performance benchmarking and reporting requirements 3(a)(G)	No	Since NSF will be occupying newly constructed, high performance space as of 2017, its energy performance will presumably be superior to any City of Alexandria benchmark.	

(A) Strategy	(B) Top Five? Yes/No /NA	(C) Strategy Narrative (100 word limit)	(D) Specific targets/metrics to measure success including milestones in next 12 months
Begin planning for FY 2020 requirement: Ensure all new construction of Federal buildings greater than 5,000 gross square feet that enters the planning process be designed to achieve energy net-zero and, where feasible, water or waste net-zero by FY 2030 3(h)(i)	Yes	NSF will strive to have its new GSA-leased HQ facility be net zero waste.	Determination made by FY 2016 as to whether composting organic waste will be feasible in the new space.
In all new agency lease solicitations over 10,000 rentable square feet, include criteria for energy efficiency as a performance specification or source selection evaluation factor 3(h)(iv)	N/A	GSA is presumably doing this for the new construction of NSF's new HQ, but NSF is not handling the contracting.	
In all new agency lease solicitations over 10,000 rentable square feet, include requirements for building lessor disclosure of carbon emission or energy consumption data for leased portion of building 3(h)(iv)	No	GSA, at the urging of various agencies including NSF, has already succeeded in ensuring that all agencies with new leased buildings over 10,000 GSF pay for their own utilities directly.	
In planning new facilities or leases, include cost-effective strategies to optimize sustainable space utilization and consideration of existing community transportation planning and infrastructure, including access to public transit 3(h)(vi)	Yes	NSF has ensured that its new GSA-leased facility is in close proximity to a Metro station.	Siting of new GSA-leased facility in close proximity to a Metro station.
Ensure that all new construction, major renovation, repair, and alteration of agency buildings includes appropriate design and deployment of fleet charging infrastructure 3(h)(vii)	Yes	NSF's new building will have chargers for electric vehicles. The responsible party for the infrastructure will originally be the building owner, until NSF is settled into the new building, shifting into the future to NSF and GSA. The framework and timeline for formulating the infrastructure policy and plan are in development, given the early stage of the project.	Policy and plan for electric vehicle charging infrastructure in place by the end of FY 2016 for electric vehicle charging stations to be installed in the garage of the new NSF HQ building.

(A) Strategy	(B) Top Five? Yes/No /NA	(C) Strategy Narrative (100 word limit)	(D) Specific targets/metrics to measure success including milestones in next 12 months
Include climate resilient design and management into the operation, repair, and renovation of existing agency buildings and the design of new buildings 3(h)(viii)	No	This is not among NSF's top five priorities.	
(A) Recommended Strategy			
Deploy CEQ's Implementing Instructions –Sustainable Locations for Federal Facilities.	Yes	GSA has already followed the principles of the Sustainable Locations for Federal Facilities in selecting the new NSF HQ lease.	New site for the NSF HQ lease meeting the criteria for Sustainable Locations for Federal Facilities
Install and monitor energy meters and sub-meters as soon as practicable.	Yes	The new GSA-leased facility that NSF will occupy starting in FY 2017 will have zoned smart meters.	Smart sub-meters included in the plans for the new NSF HQ building.
Collect and utilize building and facility energy use data to improve building energy management and performance.	No	Not among NSF's top five priorities, but it is assumed that the energy manager of the new facility will do so as part of their duties.	
Incorporate green building specifications into all new construction and major renovation projects.	No	The new lease requires that the facility be certified to at least a LEED Silver level, but in general NSF HQ does not conduct new construction or major renovation projects, since it occupies only space leased by GSA.	
Redesign or lease interior space to reduce energy use by implementing daylighting, space optimization, sensors/control system installation, etc.	No	NSF is relocating to new high performance leased space in 2017, so it is not redesigning its current leased space.	
Develop and deploy energy and sustainability training for all facility and energy managers.	N/A	NSF's HQ requires only one energy manager, who is employed by the landlord and already trained.	
Include in every construction contract all applicable sustainable acquisition requirements for recycled, biobased, energy efficient, and environmentally preferable products.	N/A	GSA is presumably doing this for the new construction of NSF's new HQ, but NSF is not handling the contracting.	

Table 2-2: Goal 2 Strategies – Data Center Efficiency

Section 3(a)(ii) of EO 13693 states that agencies must improve data center efficiency at agency facilities. Section 3(a)(ii)(C) requires that agencies establish a power usage effectiveness target in the range of 1.2-1.4 for new data centers and less than 1.5 for existing data centers.

Instructions: In Table 2-2 below, list ONLY the top five priority strategies that the agency will pursue in FY 2016 to achieve Goal 2. For each agency-level strategy listed below, select the appropriate response from the drop-down menu. If the selection is not applicable ("NA") or "No", an explanation must be provided in the Strategy Narrative column (C) as to why the agency will not implement this strategy. If the selection is "Yes", provide in column (C) a description on how the strategy will be implemented and in column (D) provide specific targets/metrics and milestones to measure agency progress/success. DO NOT DELETE ANY STRATEGIES LISTED IN COLUMN (A). Agencies may make minor changes to a column (A) strategy if needed to enable the agency to select that strategy as a FY 2016 priority. If necessary, agencies may add additional strategies into the blank rows provided in column (A) in order to present five priority strategies.

(A) Strategy	(B) Top Five? Yes/No /NA	(C) Strategy Narrative (100 word limit)	(D) Specific targets/metrics to measure success including milestones in next 12 months
(A) Required Strategy under EO 13693			
Ensure the agency chief information officer promotes data center energy optimization, efficiency, and performance 3(a)(ii)(A)	Yes	Data center modernization and related optimization activities are included in the agency’s Information Resources Management Strategic Plan, with associated projects.	Data center-related initiatives included in the Information Resources Management Strategic Plan.
Install and monitor advanced energy meters in all data centers by fiscal year 2018 3(a)(ii)(B)	Yes	NSF plans to provide metering capability in the new agency facility to better capture energy utilization and identify potential areas for optimization.	Plans finalized for energy distribution system in new facility.
(A) Recommended Strategy			
Optimize agency data centers across total cost of ownership metrics.	Yes	NSF strives to optimize the total cost of ownership for agency systems and services through ongoing efforts to increase virtualization and decrease data center operational costs.	Increased virtualization of agency servers demonstrated.
Improve data center temperature and air flow management.	Yes	NSF continually works to improve data center temperature and air flow through optimizing the layout of the data center and consolidating/removing servers and equipment. NSF plans to further improve air flow management by employing hot air containment techniques.	Plans finalized for environmental controls and management systems in new facility.

(A) Strategy	(B) Top Five? Yes/No /NA	(C) Strategy Narrative (100 word limit)	(D) Specific targets/metrics to measure success including milestones in next 12 months
Identify and consolidate obsolete and underutilized agency computer servers into energy efficient data centers.	Yes	NSF has already identified and consolidated servers to reduce the agency's data center footprint, leading to more energy efficiency in the existing data center. We will continue this consolidation as we move toward a new facility.	Continued consolidation of agency servers demonstrated.

Goal 3: Clean & Renewable Energy

Agency Clean Energy Share of Total Electric and Thermal Energy Goal

EO 13693 3(b) requires that, at a minimum, the percentage of an agency's total electric and thermal energy accounted for by renewable and alternative energy shall be not less than: 10% in FY 2016-17; 13% in FY 2018-19; 16% in FY 2020-21; 20% in FY 2022-23; and 25% by FY 2025.

Agency Renewable Energy Share of Total Electricity Consumption Goal

EO 13693 3(c) sets a second schedule that addresses specifically renewable energy. It requires that renewable energy account for not less than 10% of total electric energy consumed by an agency in FY 2016-17; 15% in FY 2018-19; 20% in FY 2020-21; 25% in FY 2022-23; and 30% by 2025.

Table 3: Goal 3 Strategies – Clean and Renewable Energy

Instructions: In Table 3 below, list ONLY the top five priority strategies that the agency will pursue in FY 2016 to achieve Goal 3. For each agency-level strategy listed below, select the appropriate response from the drop-down menu. If the selection is not applicable ("NA") or "No", an explanation must be provided in the Strategy Narrative column (C) as to why the agency will not implement this strategy. If the selection is "Yes", provide in column (C) a description on how the strategy will be implemented and in column (D) provide specific targets/metrics and milestones to measure agency progress/success. DO NOT DELETE ANY STRATEGIES LISTED IN COLUMN (A). Agencies may make minor changes to a column (A) strategy if needed to enable the agency to select that strategy as a FY 2016 priority. If necessary, agencies may add additional strategies into the blank rows provided in column (A) in order to present five priority strategies.

(A) Strategy	(B) Top Five? Yes/No /NA	(C) Strategy Narrative (100 word limit)	(D) Specific targets/metrics to measure success including milestones in next 12 months
Lease land for renewable energy infrastructure.	N/A	NSF does not own any land that can be leased.	

(A) Strategy	(B) Top Five? Yes/No /NA	(C) Strategy Narrative (100 word limit)	(D) Specific targets/metrics to measure success including milestones in next 12 months
Install agency-funded renewable on-site and retain corresponding renewable energy certificates (RECs) or obtaining replacement RECs 3(d)(i)	Yes	The GSA contract to construct the new GSA-leased building NSF will occupy starting in FY 2017 does not include any renewable energy. However, after the building envelope and systems are in place for the new facility, NSF will investigate the feasibility of installing building-integrated renewable energy.	
Contract for the purchase of energy that includes installation of renewable energy on or off-site and retain RECs or replacement RECs for the term of the contract 3(d)(ii)	N/A	NSF's energy usage is too small to justify contracting for energy.	
Purchase electricity and corresponding RECs or obtain equal value replacement RECs 3(d)(iii)	No	NSF does not have the ability to purchase renewable energy directly since the only regional provider does not offer it.	
Purchase RECs 3(d)(iv)	Yes	NSF plans to purchase unbundled RECs in a quantity sufficient to satisfy the requirements on EO 13693.	RECs purchased in FY 2015 to cover 10% of NSF FY 2015 electricity consumption.
Install thermal renewable energy on-site at Federal facilities and retain corresponding renewable attributes or obtain equal value replacement RECs 3(e)(i)	N/A	Neither the current NSF HQ nor the new facility are suitable for thermal forms of renewable energy.	
Install combined heat and power processes on-site at Federal facilities 3(e)(ii)	N/A	NSF does not have on-site power generation suitable for supporting combined heat and power.	
Identify opportunities to install fuel cell energy systems on-site at Federal facilities 3(e)(iii)	No	NSF's critical operations do not require sufficient back-up power to justify fuel cells as its form of back-up power supply, and it is not cost-effective to install fuel cells as a primary power source.	
Identify opportunities to utilize energy from small modular nuclear reactor technologies 3(e)(iv)	N/A	A nuclear reactor in Alexandria, VA is a not feasible option.	

(A) Strategy	(B) Top Five? Yes/No /NA	(C) Strategy Narrative (100 word limit)	(D) Specific targets/metrics to measure success including milestones in next 12 months
Identify opportunities to utilize energy from a new project that includes the active capture and storage of carbon dioxide emissions associated with energy generation 3(e)(v)	N/A	NSF does not generate its own electricity.	
Implement other alternative energy approaches that advance the policy set forth in section 1 and achieve the goals of section 2 of EO 13693 3(e)(vii)	No	No other alternative energy approaches are relevant for NSF.	
Consider opportunities to install or contract for energy installed on current or formerly contaminated lands, landfills, and mine sites.	N/A	NSF has no such sites, and is not adjacent to any.	

Goal 4: Water Use Efficiency & Management

Potable Water Consumption Intensity Reduction Goal

EO 13693 section 3(f) states that agencies must improve water use efficiency and management, including stormwater management. EO 13693 section 3(f)(i) requires agencies to reduce potable water consumption intensity by 2% annually through FY 2025 relative to an FY 2007 baseline (measured in gallons). A 36% reduction is required by FY 2025.

ILA Water Consumption Reduction Goal

EO 13693 section 3(f)(iii) also requires that agencies reduce their industrial, landscaping and agricultural (ILA) water consumption measured in gallons by 2% annually through FY 2025 relative to a FY 2010 baseline.

Table 4: Goal 4 Strategies – Water Use Efficiency & Management

Instructions: In Table 4 below, list ONLY the top five priority strategies that the agency will pursue in FY 2016 to achieve Goal 4. For each agency-level strategy listed below, select the appropriate response from the drop-down menu. If the selection is not applicable ("NA") or "No", an explanation must be provided in the Strategy Narrative column (C) as to why the agency will not implement this strategy. If the selection is "Yes", provide in column (C) a description on how the strategy will be implemented and in column (D) provide specific targets/metrics and milestones to measure agency progress/success. **DO NOT DELETE ANY STRATEGIES LISTED IN COLUMN (A).** Agencies may make minor changes to a column (A) strategy if needed to enable the agency to select that strategy as a FY 2016 priority. If necessary, agencies may add additional strategies into the blank rows provided in column (A) in order to present five priority strategies.

(A) Strategy	(B) Top Five? Yes/No /NA	(C) Strategy Narrative (100 word limit)	(D) Specific targets/metrics to measure success including milestones in next 12 months
(A) Required Strategy under EO 13693			
Install appropriate green infrastructure features to help with storm- and wastewater management (such as rain gardens, rain barrels, green roofs, or impervious pavement) 3(f)(iv)	N/A	NSF's HQ has a negligible amount of grounds around its buildings.	
Install and monitor water meters; collect and utilize building and facility water data for conservation and management 3(f)(ii)	Yes	NSF's water consumption is already metered and NSF analyzes its water consumption annually.	FY 2015 water consumption data analyzed in Spring 2016.
(A) Recommended Strategy			
Install high efficiency technologies (e.g., WaterSense).	Yes	NSF only occupies two GSA-leased buildings, one of which is fully serviced, but it will continue to encourage the lessor of the building that is not fully serviced to implement the water efficiency recommendations from an audit conducted in 2010.	At least a 16% reduction in potable water intensity from FY 2007 by the end of FY 2015.
Prepare and implement a water asset management plan to maintain desired level of service at lowest life cycle cost (for best practices from the EPA, go to http://go.usa.gov/KvbF).	N/A	NSF HQ does not own any water consuming assets.	
Minimize outdoor water use and use alternative water sources as much as possible.	N/A	NSF does not irrigate at its HQ facility.	
Design and deploy water closed-loop, capture, recharge, and/or reclamation systems.	N/A	NSF has no landscaping at its HQ to irrigate with reclaimed water. Apart from the cooling towers, which recirculate water, NSF HQ has no industrial systems to offer opportunities for savings through closed-loop systems or reclaimed water.	

(A) Strategy	(B) Top Five? Yes/No /NA	(C) Strategy Narrative (100 word limit)	(D) Specific targets/metrics to measure success including milestones in next 12 months
Install advanced meters to measure and monitor (1) potable and (2) industrial, landscaping and agricultural water use.	No	Standard mechanical meters are already installed to measure consumption by both NSF HQ indoor space and the NSF HQ cooling towers. Being in leased buildings, NSF will not have control over this until it moves into new space, anticipated for FY 2017. NSF has no other industrial, landscaping or agricultural water use to measure.	
Develop and implement programs to educate employees about methods to minimize water use.	Yes	In FY 2014, NSF set up an internal SharePoint site with links to sources on information and guidance on sustainability, covering all topics in EO 13693. So far in FY 2015, NSF sent an e-mail to all employees announcing the site, and on Earth Day it developed a webinar on sustainability and posted it on the sustainability collaboration site. In the remainder of FY 2015, NSF plans to implement a more aggressive employee outreach program, with more communication, a webinar, and events.	A more aggressive employee outreach program developed by the end of FY 2015.
Assess the interconnections and dependencies of energy and water on agency operations, particularly climate change's effects on water which may impact energy use.	No	Although energy is needed in the supply and distribution of water, NSF's water consumption is too small to have an appreciable impact on energy consumption.	
Consistent with State law, maximize use of grey-water and water reuse systems that reduce potable and ILA water consumption.	No	NSF uses no potable water except indoors.	
Consistent with State law, identify opportunities for aquifer storage and recovery to ensure consistent water supply availability.	No	Groundwater supply is not yet a serious issue in the metropolitan Washington area to make this a priority.	

(A) Strategy	(B) Top Five? Yes/No /NA	(C) Strategy Narrative (100 word limit)	(D) Specific targets/metrics to measure success including milestones in next 12 months
Ensure that planned energy efficiency improvements consider associated opportunities for water conservation.	No	Since NSF's current lease is coming to an end, few energy efficiency improvements will be made. NSF expects energy intensity to continue to decline due to continued increases in hours teleworked.	
Where appropriate, identify and implement regional and local drought management and preparedness strategies that reduce agency water consumption including recommendations developed by Regional Federal Executive Boards.	No	Water scarcity is not a serious enough issue in the metropolitan Washington area to make this a priority.	

Goal 5: Fleet Management

Agency Progress toward Fleet Per-Mile Greenhouse Gas Emissions Goal

EO 13693 section 3(g) states that agencies with a fleet of at least 20 motor vehicles will improve fleet and vehicle efficiency and management. EO 13693 section 3(g)(ii) requires agencies to take actions that reduce fleet-wide per-mile greenhouse gas emissions from agency fleet vehicles relative to a new, FY 2014 baseline and sets new goals for percentage reductions: not less than 4% by the end of FY 2017; not less than 15 % by the end of FY 2020; and not less than 30% by then end of FY 2025.

EO 13693 section 3(g)(i) requires that, as a part of the Sustainability Planning process agencies should determine the optimum fleet inventory, emphasizing eliminating unnecessary or non-essential vehicles. This information is generally available from the agency Vehicle Allocation Methodology (VAM) process that is completed each year. To satisfy this requirement for 2015, please include the VAM results and the appropriate agency fleet management plan to the appendix of this document. Future versions of this plan will require similar submissions by agencies.

Table 5: Goal 5 Strategies – Fleet Management

Instructions: In Table 5 below, list ONLY the top five priority strategies that the agency will pursue in FY 2016 to achieve Goal 5. For each agency-level strategy listed below, select the appropriate response from the drop-down menu. If the selection is not applicable ("NA") or "No", an explanation must be provided in the Strategy Narrative column (C) as to why the agency will not implement this strategy. If the selection is "Yes", provide in column (C) a description on how the strategy will be implemented and in column (D) provide specific targets/metrics and milestones to measure agency progress/success. **DO NOT DELETE ANY STRATEGIES LISTED IN COLUMN (A).** Agencies may make minor changes to a column (A) strategy if needed to enable the agency to select that strategy as a FY 2016 priority. If necessary, agencies may add additional strategies into the blank rows provided in column (A) in order to present five priority strategies.

(A) Strategy	(B) Top Five? Yes/No /NA	(C) Strategy Narrative (100 word limit)	(D) Specific targets/metrics to measure success including milestones in next 12 months
(A) Required Strategy under EO 13693			
Collect and utilize agency fleet operational data through deployment of vehicle telematics – as soon as is practicable, but not later than two years after date of order 3(g)(iii)	N/A	Not practical given that NSF has only two vehicles.	
Ensure that agency annual asset-level fleet data is properly and accurately accounted for in a formal Fleet Management System as well as submitted to the Federal Automotive Statistical Tool reporting database, the Federal Motor Vehicle Registration System, and the Fleet Sustainability Dashboard (FLEETDASH) system 3(g)(iv)	Yes	NSF annually reports its vehicle data into the Federal Automotive Statistical Tool reporting database. The other systems are not relevant given that NSF has only two vehicles.	NSF vehicle data reported annually into the Federal Automotive Statistical Tool.
Plan for agency fleet composition such that 20% of passenger vehicle acquisitions are zero emission or plug-in hybrid vehicles by 2020, and 50% by 2025. Vehicles acquired in other vehicle classes count double toward this target 3(g)(v)	N/A	NSF HQ has no plans to acquire more vehicles of any type.	
Plan for appropriate charging or refueling infrastructure for zero emission or plug-in hybrid vehicles and opportunities for ancillary services to support vehicle-to-grid technology 3(g)(vi)	Yes	The new NSF HQ facility will have charging stations for employee electric vehicles.	Charging stations in the plans for the new HQ facility.
(A) Recommended Strategy			
Optimize/Right-size the composition of the fleet (e.g., reduce vehicle size, eliminate underutilized vehicles, acquire and locate vehicles to match local fuel infrastructure).	No	NSF only has two vehicles. NSF tried to find a suitable hybrid vehicle to replace the GSA-leased Lincoln Continental Town Car used for the Office of the Director. It was unsuccessful because of the limited options available through GSA.	

(A) Strategy	(B) Top Five? Yes/No /NA	(C) Strategy Narrative (100 word limit)	(D) Specific targets/metrics to measure success including milestones in next 12 months
Increase utilization of alternative fuel in dual-fuel vehicles.	No	One of NSF HQ's two vehicles is an E85 dual-fuel vehicle, but it uses no E85 because there is no fueling station located sufficiently close to either HQ or its normal routes. NSF does not plan to drive the vehicle the appreciable added distance and time needed to acquire E85, since that will negate the environmental benefits of E85.	
Use a Fleet Management Information System to track fuel consumption throughout the year for agency-owned, GSA-leased, and commercially-leased vehicles.	N/A	NSF does not have a fleet, just two vehicles.	
Increase GSA leased vehicles and decrease agency-owned fleet vehicles, when cost effective.	N/A	NSF's two vehicles are GSA leases, and it has no plans to acquire more vehicles.	
Implement vehicle idle mitigation technologies.	N/A	The role for NSF's two vehicles involves minimal idling.	
Minimize the use of "law enforcement" vehicle exemption and implementing the GSA Bulletin FMR B-33, <i>Motor Vehicle Management, Alternative Fuel Vehicle Guidance for Law Enforcement and Emergency Vehicle Fleets</i> of November 15, 2011.	N/A	NSF has no such vehicles.	
Where State vehicle or fleet technology or fueling infrastructure policies are in place, conform with the minimum requirements of those policies.	N/A	NSF has only two vehicles.	
Reduce miles traveled (e.g., share vehicles, improve routing with telematics, eliminate trips, improve scheduling, use shuttles, etc.).	N/A	Having only two vehicles, which are devoted to specific, mission-related uses, a strategy to reduce miles travelled would yield negligible benefit. In terms of vehicle occupancy, most trips are made with groups of people.	

Goal 6: Sustainable Acquisition

Sustainable Acquisition Goal - Biobased

EO 13693 section 3(i) requires agencies to promote sustainable acquisition by ensuring that environmental performance and sustainability factors are considered to the maximum extent practicable for all applicable procurements in the planning, award and execution phases of acquisition.

Sections 3(iv) and 3(iv)(A) also require that agencies act, as a part of the implementation and planning requirements of section 14 of EO 13693, until agencies have achieved at least 95 percent compliance with the BioPreferred and biobased purchasing requirement, to establish an annual target for the number of contracts to be awarded with BioPreferred and biobased criteria and dollar value of BioPreferred and biobased products to be delivered and reported under those contracts in the following fiscal year.

To establish this target, agencies shall consider the dollar value of designated BioPreferred and biobased products reported in previous years, the specifications reviewed and revised for inclusion of BioPreferred and biobased products, and the number of applicable product and service contracts to be awarded, including construction, operations and maintenance, food services, vehicle maintenance, and janitorial services.

Please input the number of contracts targeted for FY 2016 here 00 and dollar value here \$00.

Table 6: Goal 6 Strategies – Sustainable Acquisition

Instructions: In Table 6 below, list ONLY the top five priority strategies that the agency will pursue in FY 2016 to achieve Goal 6. For each agency-level strategy listed below, select the appropriate response from the drop-down menu. If the selection is not applicable ("NA") or "No", an explanation must be provided in the Strategy Narrative column (C) as to why the agency will not implement this strategy. If the selection is "Yes", provide in column (C) a description on how the strategy will be implemented and in column (D) provide specific targets/metrics and milestones to measure agency progress/success. DO NOT DELETE ANY STRATEGIES LISTED IN COLUMN (A). Agencies may make minor changes to a column (A) strategy if needed to enable the agency to select that strategy as a FY 2016 priority. If necessary, agencies may add additional strategies into the blank rows provided in column (A) in order to present five priority strategies.

(A) Strategy	(B) Top Five? Yes/No /NA	(C) Strategy Narrative (100 word limit)	(D) Specific targets/metrics to measure success including milestones in next 12 months
(A) Required Strategy under EO 13693			
Meet statutory mandates that require purchase preference for recycled content products designated by EPA 3(i)(i)(A)	No	This is not among NSF's top five priorities.	
Meet statutory mandates that require purchase preference for energy and water efficient products and services, such as ENERGY STAR qualified and FEMP-designated products, identified by EPA and DOE 3(i)(i)(B)	No	This is not among NSF's top five priorities.	

(A) Strategy	(B) Top Five? Yes/No /NA	(C) Strategy Narrative (100 word limit)	(D) Specific targets/metrics to measure success including milestones in next 12 months
Meet statutory mandates that require purchase preference for Biopreferred and biobased designated products designated by the USDA 3(i)(i)(C)	No	This is not among NSF's top five priorities.	
Purchase sustainable or products and services identified by EPA programs such as the ones outlined in 3(i)(ii)	No	This is not among NSF's top five priorities.	
Purchase Significant New Alternative Policy (SNAP) chemicals or other alternatives to ozone-depleting substances and high global warming potential hydrofluorocarbons, where feasible 3(i)(ii)(A)	N/A	Since it only occupies GSA-leased office space, NSF does not use ozone-depleting substances or high global warming potential hydrofluorocarbons, and building refrigeration equipment is under the control of the building owner. NSF is responsible for its fire extinguishers and pantry refrigerators, but any HFC releases from these are negligible.	
Purchase WaterSense certified products and services (water efficient products) 3(i)(ii)(B)	No	This is not among NSF's top five priorities.	
Purchase Safer Choice labeled products (chemically intensive products that contain safer ingredients) 3(i)(ii)(C)	Yes	NSF will ensure that relevant cleaning supplies used in its HQ have the Safer Choice label.	
Purchase SmartWay Transport partners and Smartway products (fuel efficient products and services) 3(i)(ii)(D)	N/A	NSF operations do not involve freight transportation.	
Purchase environmentally preferable products and services that meet or exceed specifications, standards, or labels recommended by EPA that have been determined to assist agencies in meeting their needs and further advance sustainable procurement goals of this order 3(i)(iii)(A)	No	This is not among NSF's top five priorities.	
Meet environmental performance criteria developed or adopted by voluntary consensus standards bodies consistent with section 12(d) of the National Technology Transfer and Advancement Act of 1995 3(i)(iii)(B)	N/A	This strategy is not relevant for NSF.	

(A) Strategy	(B) Top Five? Yes/No /NA	(C) Strategy Narrative (100 word limit)	(D) Specific targets/metrics to measure success including milestones in next 12 months
Ensure contractors submit timely annual reports of their BioPreferred and biobased purchases 3(i)(iv)(B)	N/A	Biobased purchasing is not relevant for the research grants made by NSF.	
Reduce copier and printing paper use and acquiring uncoated printing and writing paper containing at least 30 percent postconsumer recycled content or higher as designated by future instruction under section 4(e) of EO 13693 3(i)(v)	No	This is not among NSF's top five priorities.	
(A) Recommended Strategy			
Update and deploy agency procurement policies and programs to ensure that federally- mandated designated sustainable products are included in all relevant procurements and services.	Yes	The NSF green purchasing plan and NSF Contracting Manual include policies and procedures for ensuring that sustainable acquisition requirements are incorporated into agency procurements through specification reviews and inclusion of applicable FAR clauses relating to sustainability. NSF commits to updating its green purchasing plan and Contracting Manual as needed.	Modification of the plan and manual as needed to ensure that NSF internal documentation is consistent with all new FAR guidance.
Deploy corrective actions to address identified barriers to increasing sustainable procurements with special emphasis on biobased purchasing.	No	This is not among NSF's top five priorities.	
Include biobased and other FAR sustainability clauses in all applicable construction and other relevant service contracts.	Yes	NSF already provides sample language pertaining to FAR sustainability clauses for use in preparing contracts, but the agency will provide additional training materials on sustainable acquisition, possibly to include a webinar.	Additional training materials provided in FY 2015.
Review and update agency specifications to include and encourage biobased and other designated green products to enable meeting sustainable acquisition goals.	N/A	NSF does not develop product specifications.	

(A) Strategy	(B) Top Five? Yes/No /NA	(C) Strategy Narrative (100 word limit)	(D) Specific targets/metrics to measure success including milestones in next 12 months
Use Federal Strategic Sourcing Initiatives, such as Blanket Purchase Agreements (BPAs) for office products and imaging equipment, which include sustainable acquisition requirements.	No	NSF already has BPAs that include sustainable acquisition requirements for computers (both desktops and laptops) and monitors. NSF strongly encourages the use of the GSA Federal Strategic Sourcing Initiative Office Supply BPA.	
Report on sustainability compliance in contractor performance reviews.	N/A	This strategy is not relevant for NSF.	
Ensure that agency purchase-card holder policies direct the exclusive use of the GSA Green Procurement Compilation where desired products are listed in the Compilation.	No	This is not among NSF's top five priorities.	
Employ environmentally sound disposal practices with respect to agency disposition of excess or surplus electronics.	Yes	NSF ensures the environmentally sound disposition for 100% of its excess or surplus electronic products—either through donations for reuse, GSA Xcess, or certified recyclers—and it will continue to do so.	No end-of-life electronics disposed through non-Certified Recyclers.
<i>Additional NSF Strategy:</i> Participation in the DOE/FEMP GreenBuy Award Program sustainable strategic sourcing contest.	Yes	NSF will explore with relevant senior management the possibility of incentivizing sustainable acquisition within the agency by participating in the FEMP GreenBuy Award Program.	Decision made by the end of CY 2015 on whether NSF will participate in the FEMP GreenBuy Award Program.

Goal 7: Pollution Prevention & Waste Reduction

Agency Progress toward Pollution Prevention & Waste Reduction

EO 13693 section 3(j) requires that Federal agencies advance waste prevention and pollution prevention. EO 13693 section 3(j)(iii) requires agencies to annually divert at least 50% of non-hazardous construction and demolition debris and section 3(j)(ii) requires agencies to divert at least 50% of non-hazardous solid waste, including food and compostable material, and to pursue opportunities for net-zero waste or additional diversion.

Table 7: Goal 7 Strategies – Pollution Prevention & Waste Reduction

Instructions: In Table 7 below, list ONLY the top five priority strategies that the agency will pursue in FY 2016 to achieve Goal 7. For each agency-level strategy listed below, select the appropriate response from the drop-down menu. If the selection is not applicable ("NA") or "No", an explanation must be provided in the Strategy Narrative column (C) as to why the agency will not implement this strategy. If the selection is "Yes", provide in column (C) a description on how the strategy will be implemented and in column (D) provide specific targets/metrics and milestones to measure agency progress/success. DO NOT DELETE ANY STRATEGIES LISTED IN COLUMN (A). Agencies may make minor changes to a column (A) strategy if needed to enable the agency to select that strategy as a FY 2016 priority. If necessary, agencies may add additional strategies into the blank rows provided in column (A) in order to present five priority strategies.

(A) Strategy	(B) Top Five? Yes/No /NA	(C) Strategy Narrative (100 word limit)	(D) Specific targets/metrics to measure success including milestones in next 12 months
(A) Required Strategy under EO 13693			
Report in accordance with the requirements of sections 301 through 313 of the Emergency Planning and Community Right-to-Know Act of 1986 (42 U.S.C 11001-11023) 3(j)(i)	N/A	The Emergency Planning and Community Right-to-Know Act is not relevant to NSF for this strategy.	
Reduce or minimize the quantity of toxic and hazardous chemicals acquired, used, or disposed of, particularly where such reduction will assist the agency in pursuing agency greenhouse gas reduction targets established in section 2 of EO 13693 3(j)(iv)	N/A	The only potentially harmful chemicals used as a part of NSF's operations are cleaning supplies, and these have no bearing on GHG emissions.	
(A) Recommended Strategy			
Eliminate, reduce, or recover refrigerants and other fugitive emissions.	N/A	Apart from potential negligible HFC releases from NSF fire extinguishers and pantry refrigerators, the only fugitive emissions would be from the HQ heating, ventilation and cooling (HVAC) equipment, which is operated and maintained by the building owner.	

(A) Strategy	(B) Top Five? Yes/No /NA	(C) Strategy Narrative (100 word limit)	(D) Specific targets/metrics to measure success including milestones in next 12 months
Reduce waste generation through elimination, source reduction, and recycling.	Yes	All facilities occupied by NSF HQ staff have active recycling programs. No solid waste from HQ is disposed in landfills because all of it is incinerated by a waste-to-energy facility. The agency will seek to improve elimination, source reduction, and recycling through more extensive employee outreach.	At least 50% diversion for FY 2015, defined as the amount of material diverted from the waste stream divided by the total amount generated.
Implement integrated pest management and improved landscape management practices to reduce and eliminate the use of toxic and hazardous chemicals/materials.	N/A	NSF HQ does not manage landscaping. Any pest control activities for the GSA-leased HQ buildings are handled by the landlord per the lease in accordance with the integrated pest management standards established by GSA.	
Establish a tracking and reporting system for construction and demolition debris elimination.	N/A	NSF HQ does not conduct construction and demolition activities.	
Develop/revise Agency Chemicals Inventory Plans and identify and deploy chemical elimination, substitution, and/or management opportunities.	N/A	NSF HQ does not have a Chemicals Inventory Plan because it does not routinely use significant quantities of toxic or hazardous chemicals.	
Inventory of current hydrofluorocarbon (HFC) use and purchases.	Yes	NSF will work with its HQ lessor to identify and quantify the sources of fugitive refrigerants.	Inclusion of HFCs (if any used) in the FY 2015 GHG inventory
Require high-level waiver or contract approval for any agency use of HFCs.	N/A	The only use of HFCs by NSF HQ is in the HVAC equipment for the leased buildings occupied by HQ. The equipment is operated and maintained by the building owner.	
Ensure HFC management training and recycling equipment are available.	N/A	All HFCs are handled by the lessor's HVAC service provider.	

Goal 8: Energy Performance Contracts

Agency Progress on Energy Performance Contracting

EO 13693 section 3(k) requires that agencies implement performance contracts for Federal buildings. EO 13693 section 3(k)(iii) also requires that agencies provide annual agency targets for performance contracting to be implemented in FY 2017 and annually thereafter as part of the planning of section 14 of this order.

Table 8: Goal 8 Strategies – Energy Performance Contracting

Instructions: In Table 8 below, list ONLY the top five priority strategies that the agency will pursue in FY 2016 to achieve Goal 8. For each agency-level strategy listed below, select the appropriate response from the drop-down menu. If the selection is not applicable ("NA") or "No", an explanation must be provided in the Strategy Narrative column (C) as to why the agency will not implement this strategy. If the selection is "Yes", provide in column (C) a description on how the strategy will be implemented and in column (D) provide specific targets/metrics and milestones to measure agency progress/success. DO NOT DELETE ANY STRATEGIES LISTED IN COLUMN (A). Agencies may make minor changes to a column (A) strategy if needed to enable the agency to select that strategy as a FY 2016 priority. If necessary, agencies may add additional strategies into the blank rows provided in column (A) in order to present five priority strategies.

(A) Strategy	(B) Top Five? Yes/N o /NA	(C) Strategy Narrative (100 word limit)	(D) Specific targets/metrics to measure success including milestones in next 12 months
(A) Required Strategy under EO 13693			
Utilize performance contracting to meet identified energy efficiency and management goals while deploying life-cycle cost effective energy and clean energy technology and water conservation measures 3(k)(i)	Yes	Performance contracting is not relevant to NSF in the near term because the GSA lease for its HQ is coming to an end. The new GSA-leased building NSF will occupy starting in FY 2017 will have a LEED rating of at least Silver but, after the building envelope and systems are in place for the new facility, NSF will investigate the feasibility of a performance contract.	N/A for the next 12 months, but feasibility will be evaluated once the building envelope and systems are in place for the new facility.
Fulfill existing agency performance contracting commitments towards the \$4 billion by the end of calendar year 2016 goal established as part of the GPRM Modernization Act of 2010, Climate Change Cross Agency Priority process 3(k)(ii)	N/A	NSF has no existing performance contracting commitments.	
(A) Recommended Strategy			
Evaluate 25% of agency's most energy intensive buildings for use with energy performance contracts	N/A	NSF has only one HQ location.	

(A) Strategy	(B) Top Five? Yes/N o /NA	(C) Strategy Narrative (100 word limit)	(D) Specific targets/metrics to measure success including milestones in next 12 months
Prioritize top ten projects which will provide greatest energy savings potential	N/A	This is not possible in the near term because the GSA lease for its HQ is coming to an end.	
Cut cycle time of performance contracting process by at least 25%	N/A	NSF does not yet have a process for performance contracting.	
Assign agency lead to participate in strategic sourcing initiatives	Yes	The NSF Sustainability Officer will take the lead in cooperation with the CSO and senior leadership in assessing whether NSF should participate in the DOE/FEMP sustainable strategic sourcing GreenBuy Award Program.	Decision made by the end of CY 2015 on whether NSF will participate in the GreenBuy Award Program.
Devote 2% of new commitments to small buildings (<20k sq. ft.)	N/A	NSF has no such buildings other than two warehouses that are fully serviced GSA leases.	
Identify and commit to include 3-5 onsite renewable energy projects in energy performance contracts	Yes	NSF cannot have renewable energy installed on its current facility because its GSA lease is coming to an end. The new GSA-leased building NSF will occupy starting in FY 2017 will have a LEED rating of at least Silver, but after the building envelope and systems are built NSF will investigate the possibility of a performance contract, including the potential for onsite renewable energy.	N/A for the next 12 months, but feasibility will be evaluated once the building envelope and systems are in place for the new facility.
Ensure relevant legal and procurement staff are trained by FEMP ESPC/ UESC course curriculum	Yes	The NSF Sustainability Officer already has FEMP ESPC training, and will continue training in this area via the DOE/FEMP Whole Building Guide online courses.	Additional performance contracting training completed by the end of FY 2015.
Provide measurement and verification data for all awarded projects	N/A	NSF currently has no performance contracts.	
Enter all reported energy savings data for operational projects into MAX COLLECT (max.gov)	N/A	NSF currently has no performance contracts.	

Goal 9: Electronic Stewardship

Agency Progress on Electronic Stewardship

EO 13693 section 3(l) requires that agencies promote electronics stewardship and requires ensuring procurement preference for environmentally sustainable electronic products as established in section 3(i); (ii) establishing and implementing policies to enable power management, duplex printing, and other energy-efficient or environmentally sustainable features on all eligible agency electronic products; and (iii) employing environmentally sound practices with respect to the agency's disposition of all agency excess or surplus electronic products.

Table 9: Goal 9 Strategies – Electronic Stewardship

Instructions: In Table 9 below, list ONLY the top five priority strategies that the agency will pursue in FY 2016 to achieve Goal 9. For each agency-level strategy listed below, select the appropriate response from the drop-down menu. If the selection is not applicable ("NA") or "No", an explanation must be provided in the Strategy Narrative column (C) as to why the agency will not implement this strategy. If the selection is "Yes", provide in column (C) a description on how the strategy will be implemented and in column (D) provide specific targets/metrics and milestones to measure agency progress/success. DO NOT DELETE ANY STRATEGIES LISTED IN COLUMN (A). Agencies may make minor changes to a column (A) strategy if needed to enable the agency to select that strategy as a FY 2016 priority. If necessary, agencies may add additional strategies into the blank rows provided in column (A) in order to present five priority strategies.

(A) Strategy	(B) Top Five? Yes/No /NA	(C) Strategy Narrative (100 word limit)	(D) Specific targets/metrics to measure success including milestones in next 12 months
(A) Required Strategy under EO 13693			
Establish, measure, and report procurement preference for environmentally sustainable electronic products 3(l)(i)	Yes	NSF already has BPAs that include sustainable acquisition requirements for computers (both desktops and laptops) and monitors.	The BPAs assure that 100% of computer and monitor purchases are sustainable acquisitions. NSF will continue to report compliance with sustainable computer and monitor acquisition requirements in the annual SSPP.
Establish, measure, and report policies to enable power management, duplex printing, and other energy-efficient or environmentally sustainable features on all eligible agency electronic products 3(l)(ii)	Yes	For print management, NSF is exploring the idea of a managed print services system with centralized printing, where duplex printing is the default and most desktop printers will be eliminated.	The target date to have the Managed Print Services system in place has been postponed until NSF moves into its new facility in FY 2017.

(A) Strategy	(B) Top Five? Yes/No /NA	(C) Strategy Narrative (100 word limit)	(D) Specific targets/metrics to measure success including milestones in next 12 months
Establish, measure, and report sound practices with respect to the agency's disposition of excess or surplus electronic products 3(l)(iii)	Yes	NSF ensures the environmentally sound disposition for 100% of its excess or surplus electronic products—either through donations for reuse, GSA Xcess, or certified recyclers—and it will continue to do so.	No end-of-life electronics disposed through non-Certified Recyclers. NSF will continue to report compliance on end-of-life electronics disposition in the annual SSPP.
(A) Recommended Strategy			
Update and deploy policies to use environmentally sound practices for disposition of all agency excess or surplus electronic products and monitor compliance.	Yes	NSF ensures the environmentally sound disposition for 100% of its excess or surplus electronic products—either through donations for reuse, GSA Xcess, or certified recyclers—and it will continue to do so.	No end-of-life electronics disposed through non-Certified Recyclers.

Goal 10: Climate Change Resilience

Table 10: Goal 10 Strategies – Climate Change Resilience

Instructions: In Table 10 below, list ONLY the top five priority strategies that the agency will pursue in FY 2016 to achieve Goal 10. For each agency-level strategy listed below, select the appropriate response from the drop-down menu. If the selection is not applicable ("NA") or "No", an explanation must be provided in the Strategy Narrative column (C) as to why the agency will not implement this strategy. If the selection is "Yes", provide in column (C) a description on how the strategy will be implemented and in column (D) provide specific targets/metrics and milestones to measure agency progress/success. DO NOT DELETE ANY STRATEGIES LISTED IN COLUMN (A). Agencies may make minor changes to a column (A) strategy if needed to enable the agency to select that strategy as a FY 2016 priority. If necessary, agencies may add additional strategies into the blank rows provided in column (A) in order to present five priority strategies.

(A) Strategy	(B) Top Five? Yes/No /NA	(C) Strategy Narrative (100 word limit)	(D) Specific targets/metrics to measure success including milestones in next 12 months
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(A) Strategy	(B) Top Five? Yes/No /NA	(C) Strategy Narrative (100 word limit)	(D) Specific targets/metrics to measure success including milestones in next 12 months
(A) Required Strategy under EO 13693			
Update agency external programs and policies (including grants, loans, technical assistance, etc.) to incentivize planning for, and addressing the impacts of, climate change. (In column C, identify names of agency programs or policies)	N/A	NSF’s external programs and policies consist of grants for basic scientific research conducted by independent research institutions. It is not an appropriate role for NSF to incentivize these institutions to improve resilience to climate change.	
(A) Recommended Strategy			
Update agency emergency response procedures and protocols to account for projected climate change, including extreme weather events.	Yes	NSF HQ emergency management is based on hazard assessments that use the Northern Virginia Hazard Mitigation Plan Update. This Plan is updated every five years, with the last version finalized in December 2011. The latest version discusses climate change as a present threat and slow-onset disaster that amplifies existing hazards, and it concludes that “future updates to this plan might consider including climate change as a parameter in the ranking or scoring of natural hazards.”	When the next version is published, NSF will follow any climate change guidelines contained in the plan.
Ensure workforce protocols and policies reflect projected human health and safety impacts of climate change.	Yes	It is NSF policy to follow the regional recommendations for the Washington, D.C. area regarding matters affecting employee health and safety, such as code red air pollution days. Weather extremes that could impact employee health and safety are addressed by NSF’s emergency management protocols.	Currently the existing protocols are sufficient.
Update agency external programs and policies (including grants, loans, technical assistance, etc.) to incentivize planning for, and addressing the impacts of, climate change.	N/A	NSF’s external programs and policies consist of grants for basic scientific research conducted by independent research institutions. It is not an appropriate role for NSF to incentivize these institutions to improve resilience to climate change.	

(A) Strategy	(B) Top Five? Yes/No /NA	(C) Strategy Narrative (100 word limit)	(D) Specific targets/metrics to measure success including milestones in next 12 months
Ensure agency principals demonstrate commitment to adaptation efforts through internal communications and policies.	Yes	FY 2015 is the first year NSF submitted its Climate Change Adaptation Plan.	Climate Change Adaptation Plan distributed internally among senior management by the end of FY 2015.
Identify vulnerable communities that are served by agency mission and are potentially impacted by climate change and identify measures to address those vulnerabilities where possible.	N/A	NSF’s mission is to serve the nation through basic scientific research, which is conducted by independent research institutions under NSF sponsorship.	
Ensure that agency climate adaptation and resilience policies and programs reflect best available current climate change science, updated as necessary.	Yes	NSF has secured contractor support, with option years through 2017, to assist with climate change adaptation. The assistance includes expertise in evaluating scientific projections of climate change impacts to ensure that NSF climate change resiliency decisions are made using the best available science. NSF will also track the progress of the Federal government in its efforts to provide this information to agencies, and NSF will make use of these resources as they become available.	All vulnerability and risk assessments conducted by NSF will be based on recent scientific projections of climate change.
Design and construct new or modify/manage existing agency facilities and/or infrastructure to account for the potential impacts of projected climate change.	Yes	NSF conducted a flooding risk analysis of the future Alexandria site in September 2014, and found the closest potential 500-year flood zone to be sufficiently removed from the site in terms of distance and elevation.	Flood risk assessment conducted.
Incorporate climate preparedness and resilience into planning and implementation guidelines for agency-implemented projects.	N/A	In the case of NSF, “agency-implemented projects” means basic scientific research conducted by independent research institutions. It is not an appropriate role for NSF to provide these institutions with planning and implementation guidelines on improving resilience to climate change.	

(A) Strategy	(B) Top Five? Yes/No /NA	(C) Strategy Narrative (100 word limit)	(D) Specific targets/metrics to measure success including milestones in next 12 months
Ensure climate change adaptation is integrated into both agency-wide and regional planning efforts, in coordination with other Federal agencies as well as state and local partners, Tribal governments, and private stakeholders.	N/A	NSF conducts no such planning efforts, as it occupies only one GSA-leased HQ and will not be expanding the extent of its space.	

Appendix A. Multimodal Access Plan for Commuters

Many NSF employees commute using public transit because NSF is currently conveniently located near a Metro subway station. Many will continue to use the Metro system once NSF Headquarters relocates in FY 2017, since that building will also be close to a Metro station. Therefore, the NSF Multimodal Access Plan for Commuters focuses on three alternatives to commuting via either public transit or a vehicle powered with fossil fuels:

1. teleworking
2. bicycling
3. driving in an electric vehicle (EV).

Teleworking

NSF is successfully expanding its teleworking program, with the total number of hours teleworked in FY 2014 26% higher than the prior year. This was made possible by a new policy NSF issued in FY 2014 that increased the maximum number of days per week that an employee can telework. NSF expects telework participation to continue rising as more employees and their supervisors become comfortable with teleworking.

Workplace Charging

The garage of NSF's new building, to be occupied during FY 2017, will have chargers for electric vehicles. Details such as the number of charging stations are not yet available, but GSA and NSF will be developing the infrastructure policy and plan in the near future.

Bicycling

There is little demand for bicycle commuting, since most employees prefer to use mass transit given the urban location of the facility and its distance one block from a Metro station. However, NSF does encourage bicycle commuting by providing a reimbursement for those commuting by bicycle, and it does provide a secure area for bicycle parking. In addition, the Arlington County Bikeshare program has stations approximately two blocks from the building which can be used as needed by participating employees and visitors.

Appendix B. Acronyms

BPA	Blanket Purchasing Agreement
CEQ	Council on Environmental Quality
CSO	Chief Sustainability Officer
DOE	Department of Energy
EISA	Energy Independence and Security Act of 2007
EO	Executive Order
EPA	Environmental Protection Agency
EPEAT	Electronic Product Environmental Assessment Tool
ESPC	energy saving performance contract
FAR	Federal Acquisition Regulation
FEMP	Federal Energy Management Program
FY	fiscal year
GHG	greenhouse gas
GSA	General Services Administration
GSF	gross square foot/feet
HFC	hydrofluorocarbon
HQ	Headquarters
HVAC	heating, ventilation and cooling
LEED	Leadership in Energy and Environmental Design
N/A	not applicable
NSF	National Science Foundation
PPCC	President's Performance Contracting Challenge
REC	renewable energy certificate
SSPP	Strategic Sustainable Performance Plan
UESC	utility energy service contract