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U.S. Nuclear Regulatory Commission

2013 Strategic Sustainability Performance Plan

June 28, 2013

Agency Contact

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U.S. NUCLEAR REGULATORY COMMISSION
CLIMATE CHANGE ADAPTATION POLICY
STATEMENT

The U.S. Nuclear Regulatory Commission's (NRC) mission is to license and regulate the Nation's civilian use of byproduct, source, and special nuclear materials, to ensure adequate protection of public health and safety, to promote the common defense and security, and to protect the environment.

It is the policy of the NRC to carry out its operations in such a way as to maintain a safe and healthy work environment for building occupants. The NRC will ensure that adequate building services are provided to maintain optimum operational readiness to conduct our mission. The NRC recognizes that planning for climate change in conjunction with meeting energy usage and greenhouse gas reduction targets will aid the Federal government in reducing the consequences of climate changes caused by our operations.

The NRC adaptation planning and implementation resources are integrated into the mission of the Office of Administration and will be directed through the Division of Facilities and Security. Actions taken will be done in coordination with other Federal agencies.

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EXECUTIVE SUMMARY

Sustainability is inherently integrated into the mission of the U.S. Nuclear Regulatory Commission (NRC). "The NRC licenses and regulates the Nation's civilian use of radioactive materials to protect public health and safety, promote the common defense and security, and protect the environment". The commitment to sustainability is not only present in the Agency's mission, but also in its operations. The NRC strives to conduct its operations and activities in an environmentally responsible and sustainable manner. The NRC recognizes that reducing and, where possible, eliminating the environmental impacts of business activities is an important part of its mission as stewards of public health and safety. The Agency views sustainability as a long-term approach to business planning and decisionmaking that balances the NRC's economic, environmental, and social responsibilities.

Vision for the Upcoming Fiscal Year

The NRC will continue to work on meeting and exceeding the goals set forth by Executive Order (EO) 13514. The NRC understands the importance of incorporating sustainability within its business operations and will continue to build on successful sustainability efforts, as well as initiate new efforts to reduce its environmental impacts.

Greenhouse Gas Reductions and Sustainable Buildings

The NRC is pleased to have exceeded its initial fiscal year (FY) 2020 reduction target goals for Scope 1 and Scope 2 greenhouse gas (GHG) emissions. The FY 2012 GHG accounting for Scope 1 and Scope 2 emissions indicated a 30.6 percent decrease from a FY 2008 baseline. This decrease significantly exceeds initial Agency reduction targets of 4.4 percent by FY 2020. The significant decrease in Scope 1 and Scope 2 GHG emissions is a direct result of the NRC's aggressive energy-savings program. The NRC has invested significant time and resources in evaluating Agency energy usage and identifying potential reduction measures. By integrating the energy-savings program within the Agency's Office of Administration, the NRC was able to seamlessly introduce energy-saving measures into its daily operations.

The NRC is also pleased to report a significant reduction in Scope 3 GHG emissions. In the Agency's FY 2012 GHG accounting for Scope 3 emissions, a 13.6 percent decrease was reported, compared to an FY 2008 baseline. This reduction in Scope 3 emissions significantly exceeds the Agency's original target of 5 percent by FY 2020. Despite the Agency's success in reducing Scope 3 emissions, the NRC has found it challenging to generate and implement reduction plans for this category. Because Scope 3 emissions are primarily associated with employee commuting and employee business travel using transportation services outside of the Agency's control, the NRC has fewer options available to it for reduction strategies. The NRC plans to continue reducing its Scope 3 emissions by increasing employee awareness of teleconferencing abilities, teleworking options, flexible work schedules, and transit subsidies.

The NRC has also been successful in meeting its reduction target for sustainable buildings. The NRC had a reduction target of 30 percent for facility energy intensity by FY 2015. In the Agency's FY 2012 GHG accounting report, the NRC reported a 41.5 percent decrease in energy intensity.

Although the NRC remains committed to reducing the environmental impact of its operations, the Agency anticipates increased difficulty in obtaining funding for energy-saving programs over the next few years as Federal budget concerns continue to decrease the money available to all Agencies. Despite the uncertainty of available funding, the Agency remains committed to reducing the environmental impact of its business operations and operating in a more sustainable manner.

Fleet Management

The NRC continuously measures and evaluates various approaches for the Sustainability Plan. The NRC will continue to evaluate its progress once its shuttle services and under-used vehicles have been eliminated. Eliminating shuttles and reducing the number of "u-drive-it" vehicles will be somewhat challenging for staff who require local transportation. Educating staff on mass transit and on local travel reimbursements for using privately owned vehicles will help reduce fleet costs.

Water Use Efficiency and Management and Renewable Energy

The NRC is finding it challenging to meet reduction targets for water use efficiency and management. The NRC has completed energy and water audits in both buildings located at its headquarters. It has identified very few areas in which Agency water usage can be reduced. One of the areas of water usage is wastewater associated with employee use of restrooms. To reduce the amount of water usage associated with wastewater, the NRC has focused on upgrading high-flow restroom fixtures with more efficient low-flow fixtures. Currently, there is a renovation project underway in the One White Flint building that involves the replacement of existing restroom fixtures with low-flow fixtures with increased efficiency. The project is approximately 70 percent complete and is on schedule to be finished in the first quarter of FY 2014.

The NRC is also focused on heating, ventilation, and air conditioning (HVAC) operation. The NRC sub-meters and monitors the water usage associated with its HVAC system, and it has adjusted some of its operations in an effort to reduce any excessive water usage. The Agency continues to monitor water usage associated with the HVAC system and will remain proactive in identifying excessive water usage in system operation.

Another area the NRC has identified for possible water-use reductions is facility irrigation. The NRC sub-meters and monitors water usage associated with irrigation. This allows the Agency to detect leaks within the irrigation system, as well as broken sprinkler heads and system malfunctions. The NRC has also worked with its landscape contractor to determine the best irrigation practices to avoid excessive water usage. The NRC will continue to evaluate the implementation of water-management technologies and research best operating practices in an effort to meet water use efficiency targets for FY 2015, as well as FY 2020.

Renewable energy has also been a challenging target for the Agency to meet. The NRC has previously researched installing a photovoltaic (PV) system at its facilities. The NRC found that the space it had available for a PV system and the projected payback of the system was less than ideal. Additionally, the NRC has considered purchasing its electricity through an alternative energy supplier that produces its electricity using renewable resources. Because the NRC purchases its electricity using a Government Services Administration (GSA) areawide contract vehicle, purchasing energy directly through an alternative energy supplier would be difficult.

Pollution Prevention and Waste Reduction

The NRC continues to benefit from the robust recycling and waste-diversion program implemented at its facilities. The Agency educates its staff on the recycling program throughout the year using posters, bulletins, and recycling events. It also strives to make the recycling process as simple as possible for employees to encourage participation. In FY 2012, the Pollution Prevention and Waste Reduction Program recorded a 71 percent recycling and waste-diversion rate, significantly exceeding the original recycling and waste-diversion target of at least 50 percent by the end of FY 2015. The NRC plans to continue educating its staff on its recycling and waste- diversion program and to continue simplifying the recycling process to keep the program successful.

Sustainable Acquisition

The NRC is committed to meeting the Sustainable Acquisition mandates set forth in EOs 13423 and 13514. To facilitate the purchasing of green products and services, the NRC issued a **Green Purchasing Plan (GPP)** in September 2012 to serve as official Agency policy. An environmental clause was added to the Agency's contract-writing system to promote green purchasing by prime contractors and subcontractors. The Agency incorporated consideration for green purchasing into several contract templates, including statements of work and market research to increase awareness and usage of green products and services. Finally, an Agency iLearn course is in development to help educate employees on the NRC's GPP and available GSA Web site resources.

The Agency is planning to: (1) transition to a new acquisition system in October 2013 and will ensure that environmental Federal Acquisition Regulation and local contract clauses are included for all applicable solicitations and contracts, (2) conduct post-award quality assurance reviews, (3) increase Agency standardization for acquisition documents and processes and incorporate annual sustainability training for all acquisition employees and buyers, and (4) provide recognition for employees who have demonstrated exceptional leadership in planning or implementing programs that include environmental considerations and green purchasing.

Electronic Stewardship and Data Centers

The NRC has completed construction of a new data center that was designed to include green initiatives. These initiatives include the installation of redundant rack power distribution units (PDUs) that use 3-phase, 220-volt power. The NRC chose a 220-volt bus-way because it offers an increased efficiency over a 110-volt bus-way. Additionally, the Agency installed metering capability on all switched and metered PDUs, breaker panels, HVAC equipment, and uninterrupted power supply units. Currently, the NRC is working to connect the data center's equipment to the Building Management System (BMS). The building design did not include low-voltage cabling for power and environmental metering, and most breaker panels were not configured correctly to report to the BMS.

In FY 2014, the Agency is planning to (1) install a data center infrastructure management (DCIM) system and wiring for all low-voltage equipment, (2) implement blade technology in the new data center, and (3) continue to virtualize servers with an organizational goal of 40 percent by the end of the next fiscal year.

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Agency Climate Change Resilience

Table 9: Goal 9 Strategies – Climate Change Resilience

Size & Scope of Agency Operations

Table 1: Agency Size & Scope

Agency Size & Scope	FY 2011	FY 2012
Total Number of Employees as Reported in the President's Budget	3042	2967
Total Acres of Land Managed	5.2	5.2
Total Number of Buildings Owned	0	0
Total Number of Buildings Leased (GSA and Non-GSA Lease)	2	2
Total Buildings Gross Square Feet (GSF)	998,000	998,000
Operates in Number of Locations Throughout U.S.	6	6
Operates in Number of Locations Outside of U.S.	0	0
Total Number of Fleet Vehicles Owned	1	1
Total Number of Fleet Vehicles Leased	33	32
Total Number of Exempted-Fleet Vehicles (Tactical, Law Enforcement, Emergency, Etc.)	1	1
Total Amount Contracts Awarded as Reported in FPDS ($Millions)	206.4	200.1

Goal 1: Greenhouse Gas (GHG) Reduction

Agency Progress toward Scope 1 & 2 GHG Goals

E.O. 13514 requires 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 or increase from the FY 2008 baseline. A negative percentage value indicates that the emissions have decreased compared to the 2008 baseline.
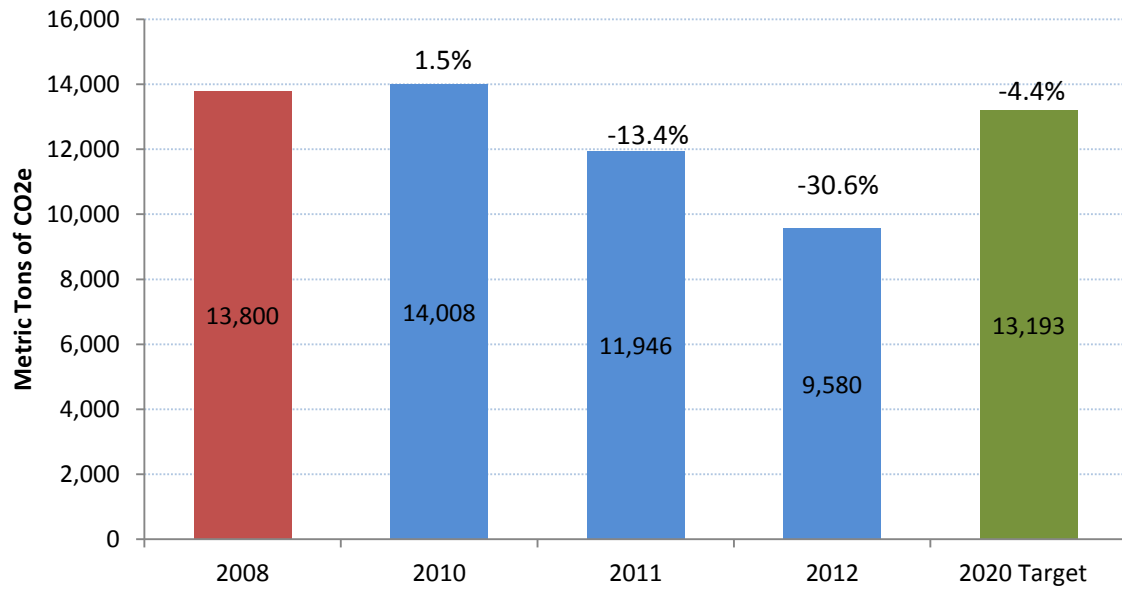
Table 1-1: Goal 1 Strategies - Scope 1 & 2 GHG Reductions

(A) Will the agency implement the following strategies to achieve this goal?	(B) Top 5? Yes/No/NA	(C) Strategy Narrative	(D) Specific targets/metrics to measure strategy success including milestones to be achieved in next 12 months
Use the FEMP GHG emission report to identify/target high emission categories and implement specific actions to resolve high emission areas identified.	Yes	Use the annual FEMP GHG emission report to identify high emission categories and areas that are not meeting annual targets.	The NRC uses the FEMP GHG emission report to evaluate progress on emission categories. High emissions categories or areas that are not meeting annual targets are examined to determine if specific actions can be taken to address the areas of concern. By 2nd quarter FY2014, the NRC will have evaluated the FY2013 GHG emissions and use the data to set goals for the upcoming year.
Ensure that all major renovations and new building designs are 30% more efficient than applicable code.	NA	The NRC does not design or build new buildings. Additionally, the NRC does not have any major renovations planned for FY 2014.	NA
Implement in EISA 432 covered facilities all life-cycle cost effective ECMs identified.	Yes	The NRC has two EISA 432 covered facilities and both have had extensive energy audits. A list of all possible ECMs was generated from the energy audits and determined whether or not they would be cost effective ECMs.	NRC will continue to evaluate possible ECMs. In the next 12 months, NRC plans to (1) Install VFDs on large building system motors in OWFN. (2) Begin installation of a new control system starting with the building infrastructure as well as the major mechanical equipment in OWFN.
Reduce on-site fossil-fuel consumption by installing more efficient boilers, generators, furnaces, etc. and/or use renewable fuels.	No	The NRC consumes very little fossil-fuel on-site. Our consumption of fossil-fuel is limited to cooking equipment, emergency generators and domestic water heaters. All of these systems operate minimally and converting	NA

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(A) Will the agency implement the following strategies to achieve this goal?	(B) Top 5? Yes/No/NA	(C) Strategy Narrative	(D) Specific targets/metrics to measure strategy success including milestones to be achieved in next 12 months
		to renewable fuels is cost prohibitive.	
Reduce grid-supplied electricity consumption by improving/upgrading motors, boilers, HVAC, chillers, compressors, lighting, etc.	Yes	1) Install VFDs on motors.. 2) Install energy efficient lighting.	(1)The NRC will begin installing VFDs on all major equipment motors in OWFN as part of a controls upgrade project. This project is scheduled to begin in FY2014. (2)Complete the conversion of outdoor lighting from high wattage fixtures to LED lighting. This project is scheduled to be completed in the 1st quarter of FY2014.
Employ operations and management best practices for energy consuming and emission generating equipment.	Yes	1) Identify and evaluate energy consuming and emission generating equipment.. 2) Research and implement best practices for operations and management.	(1)The NRC will continue to evaluate all equipment within the facilities for proper performance, maintenance and best practices. (2)Evaluate new industry recommendations for operating and maintaining facility equipment to increase the performance and reduce the emissions of them. This is an ongoing effort.
Install building utility meters and benchmark performance to track energy and continuously optimize performance.	No	The NRC has previously installed upgraded utility meters that are capable of interval metering. The NRC has also benchmarked OWFN and TWFN energy usage and continues to input energy usage periodically and compare building performance with the benchmarked baseline.	NA

Agency Progress towards Scope 3 GHG Goal

E.O. 13514 requires 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 or increase from the FY 2008 baseline. A negative percentage value indicates that the emissions have been decreased compared to the FY 2008 baseline.
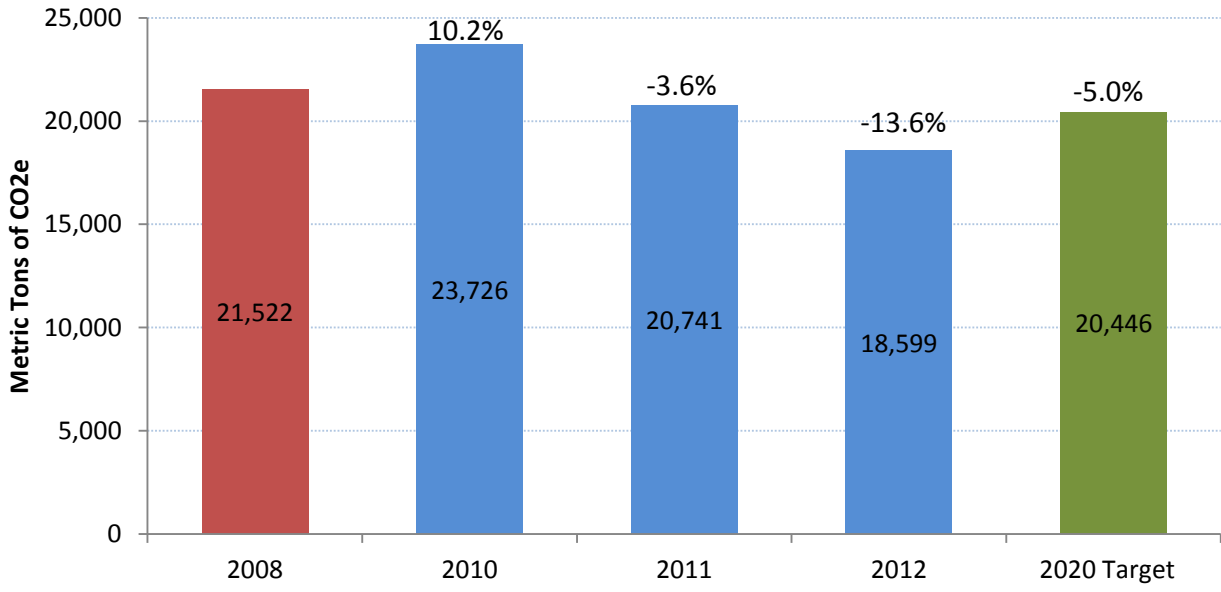
**Table 1-2: Goal 1 Strategies - Scope 3 GHG Reductions**

(A) Will the agency implement the following strategies to achieve this goal?	(B) Top 5? Yes/No/NA	(C) Strategy Narrative	(D) Specific targets/metrics to measure strategy success including milestones to be achieved in next 12 months
Reduce employee business ground travel.	Yes	Increase the use of virtual meeting capabilities for meetings, webinars and training.	Increase awareness of virtual meeting capabilities, conduct training sessions on this technology, and increase the number or workstations with virtual meeting capabilities. This is an ongoing effort.
Reduce employee business air travel.	Yes	Increase the use of virtual meeting capabilities for meetings, webinars and training.	Increase awareness of virtual meeting capabilities, conduct training sessions on this technology, and increase the number or workstations with virtual meeting capabilities. This is an ongoing effort.
Develop and deploy employee commuter reduction plan.	Yes	1) Increase webinar usage for training and meetings. 2) Increase the number of employees using public transportation and ride-sharing.	(1) Increase awareness of virtual meeting capabilities, conduct training sessions on this technology, and increase the number or workstations with virtual meeting capabilities. This is an ongoing effort. (2) Promote the transit subsidy benefits program through an awareness as well as employee training. This is an ongoing effort.
Use employee commuting survey to identify opportunities and strategies for reducing commuter emissions.	Yes	Conduct an agency wide survey on employee commuting to determine agency commuting habits.	Review data gathered from survey to identify opportunities that may exist for reducing commuter emissions. The employee survey will be completed in the 1st quarter of FY2014.
Increase number of employees eligible for telework and/or the total number of days teleworked.	Yes	Increase the number of employees teleworking	Promote NRCs teleworking program through program awareness and employee training. This is an ongoing effort.

(A) Will the agency implement the following strategies to achieve this goal?	(B) Top 5? Yes/No/NA	(C) Strategy Narrative	(D) Specific targets/metrics to measure strategy success including milestones to be achieved in next 12 months
Develop and implement bicycle commuter program.	No	The NRC currently provides the necessary facilities to allow employees who wish to commute to work by bicycle to do so.	
Provide bicycle commuting infrastructure.	No	The NRC has previously installed bicycle commuting infrastructure.	

Goal 2: Sustainable Buildings

Agency Progress toward Facility Energy Intensity Reduction Goal

E.O. 13514 Section 2 requires 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 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 been decreased compared to the FY 2003 baseline.
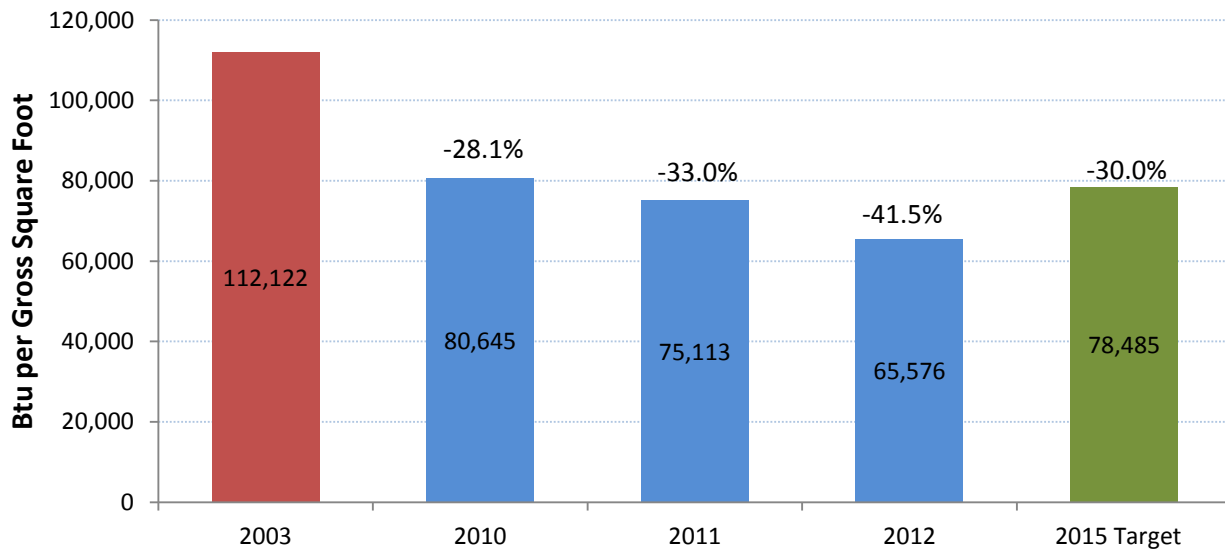
Agency Progress toward Total Buildings Meeting the Guiding Principles

E.O. 13514 requires 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. The green bar represents the FY 2015 target. The blue bars represent annual agency progress on achieving this target.

Figure 2-2

Table 2: Goal 2 Strategies – Sustainable Buildings

(A) Will the agency implement the following strategies to achieve this goal?	(B) Top 5? Yes/No/NA	(C) Strategy Narrative	(D) Specific targets/metrics to measure strategy success including milestones to be achieved in next 12 months
Incorporate green building specifications into all new construction and major renovation projects.	NA	Agency has no plan to build or lease new facilities in the next fiscal year.	
Redesign or lease interior space to reduce energy use by daylighting, space optimization, sensors/control system installation, etc.	Yes	Install a new control system and control sensors	A control system upgrade project is planned to begin in FY2014 for OWFN.
Deploy CEQ's Implementing Instructions - Sustainable Locations for Federal Facilities.	No	Agency has no plan to build or lease new facilities in the next two fiscal years.	
Include in every construction contract all applicable sustainable acquisition requirements for recycled, biobased, energy efficient, and environmentally preferable products.	Yes	Require the use of recycled, biobased, energy efficient and environmentally preferable products.	Develop contracting language and include it in all construction contracts to require sustainable acquisition to the maximum extent possible.
Develop and deploy energy and sustainability training for all facility and energy managers.	Yes	Require facility and energy managers to keep up to date on industry best practices.	Throughout the year there are many training sessions, trade shows, and studies that provide energy and sustainability information. The NRC will encourage facility and energy managers to participate in events and stay up to date on industry best practices.

Goal 3: Fleet Management

Agency Progress toward Fleet Petroleum Use Reduction Goal

E.O. 13514 and the Energy Independence and Security Act of 2007 (EISA) require that by FY 2015 agencies reduce fleet petroleum use by 20 percent compared to a FY 2005 baseline. Agencies are expected to achieve at least a 2 percent annual reduction and a 30 percent reduction is required by FY 2020. The red bar represents the agency's FY 2005 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 or increase from the FY 2005 baseline. A negative percentage indicates a decrease in fleet petroleum use.
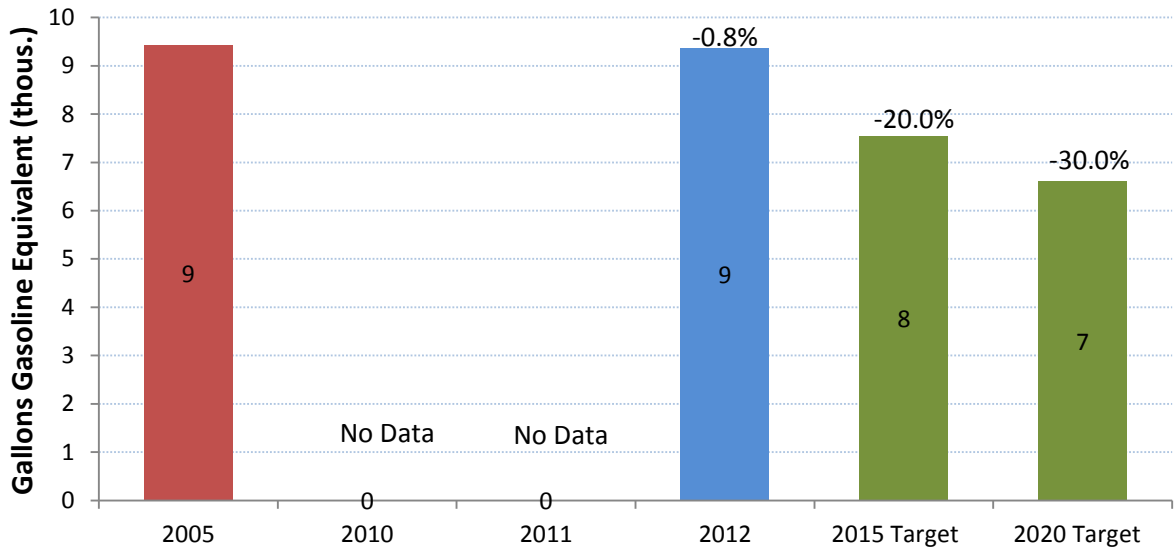
Agency Progress toward Fleet Alternative Fuel Consumption Goal

E.O. 13423 requires that agencies increase total alternative fuel consumption by 10 percent annually from the prior year starting in FY 2005. By FY 2015, agencies must increase 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. The percentage at the top of each bar represents the reduction or increase from the FY 2005 baseline. A negative percentage indicates a decrease in fleet alternative fuel use.
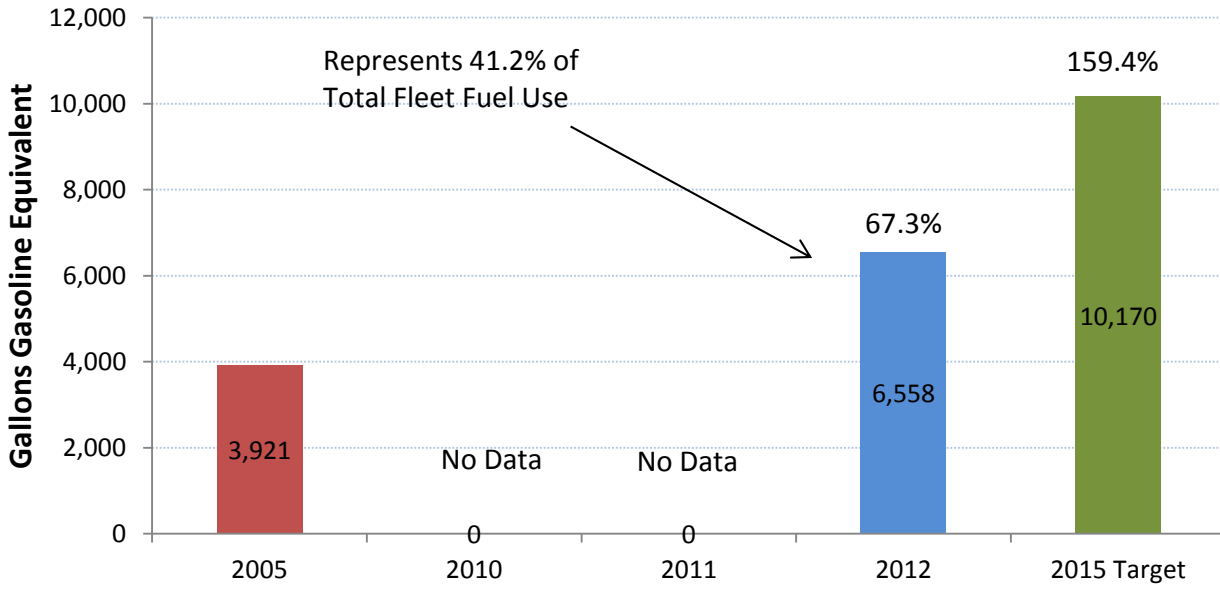
Table 3: Goal 3 Strategies – Fleet Management

(A) Will the agency implement the following strategies to achieve this goal?	(B) Top 5? Yes/No/NA	(C) Strategy Narrative	(D) Specific targets/metrics to measure strategy success including milestones to be achieved in next 12 months
Optimize/Rightsize the composition of the fleet (e.g., reduce vehicle size, eliminate underutilized vehicles, acquire and locate vehicles to match local fuel infrastructure).	Yes	Eliminating under- utilized vehicles.	By eliminating under utilized vehicles, this will reduce NRC's current fleet by 7.4%.
Reduce miles traveled (e.g., share vehicles, improve routing with telematics, eliminate trips, improve scheduling, use shuttles, etc.).	Yes	Eliminating daily shuttle routes by using mass transportation. Using telematics to improve routing for current driving assignments.	Decreasing 98% of shuttles and using mass transit to and from HQ interim sites. Provide portable GPS units to provide best driving routes.
Acquire only highly fuel-efficient, low greenhouse gas-emitting vehicles and alternative fuel vehicles (AFVs).	Yes	Requests for future vehicle replacements will be AFV only.	100% of all vehicles request will be for AFVs.
Increase utilization of alternative fuel in dual-fuel vehicles.	NA		
Use a Fleet Management Information System to track fuel consumption throughout the year for agency-owned, GSA-leased, and commercially-leased vehicles.	Yes	Currently use the tool provided by GSA to track fuel consumption throughout the year.	100% of all vehicles are monitored for fuel consumption.
Increase GSA leased vehicles and decrease agency-owned fleet vehicles, when cost effective.	NA		
Optimize the required number of vehicles for NRC Fleet.	Yes	Decrease total number of fleet vehicles.	NRC is reducing by 2 the number of vehicles in the current fleet.

Goal 4: Water Use Efficiency & Management

Agency Progress toward Potable Water Intensity Reduction Goal

E.O. 13514 requires agencies to reduce potable water intensity by 2 percent annually through FY 2020 compared to an FY 2007 baseline. A 16 percent reduction is required by FY 2015 and a 26 percent reduction is 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 or increase from the FY 2007 baseline. A negative percentage value indicates that portable water use intensity has decreased compared to the FY 2007 baseline.
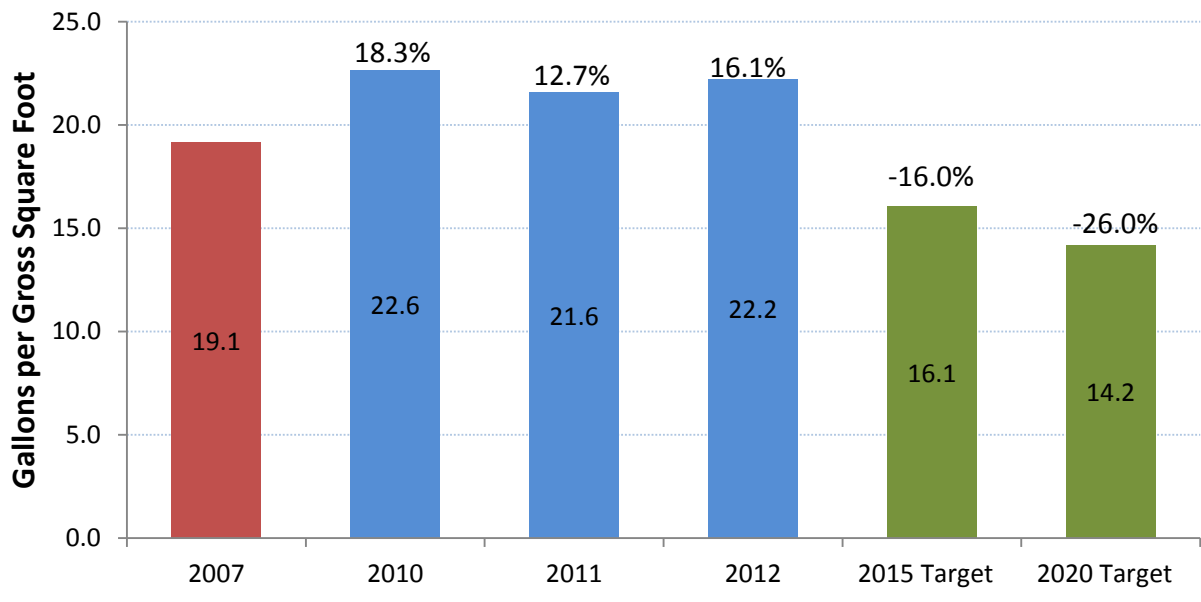
Table 4: Goal 4 Strategies – Water Use Efficiency & Management

(A) Will the agency implement the following strategies to achieve this goal?	(B) Top 5? Yes/No/NA	(C) Strategy Narrative	(D) Specific targets/metrics to measure strategy success including milestones to be achieved in next 12 months
Purchase and install water efficient technologies (e.g., Waterwise, low-flow water fixtures and aeration devices).	Yes	Install low-flow fixtures in facility restrooms.	The NRC has upgraded all restroom fixtures in TWFN to low-flow fixtures. Currently, the NRC is completing a restroom renovation in OWFN and installing low-flow fixtures. This project has a completion date in the 1st quarter of FY2014.
Develop and deploy operational controls for leak detection including a distribution system audit, leak detection, and repair programs.	No	Leak detection and repair is handled as routine maintenance.	
Design, install, and maintain landscape to reduce water use.	No	The NRC does not plan to undergo any significant landscaping projects in the next fiscal year.	
Design and deploy water closed-loop, capture, recharge, and/or reclamation systems.	No	The NRC does not currently have any projects to install capture, recharge or reclamation systems.	
Install meters to measure and monitor industrial, landscaping, and agricultural water use.	No	The NRC has previously installed separate meters to monitor water usage associated with landscaping.	

Goal 5: Pollution Prevention & Waste Reduction

Agency Progress toward Pollution Prevention & Waste Reduction

E.O. 13514 requires that Federal agencies promote pollution prevention and eliminate waste. The E.O. requires agencies to minimize the use of toxic and hazardous chemicals and pursue acceptable alternatives. It also requires

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.

Table 5: Goal 5 Strategies – Pollution Prevention & Waste Reduction

(A) Will the agency implement the following strategies to achieve this goal?	(B) Top 5? Yes/No/NA	(C) Strategy Narrative	(D) Specific targets/metrics to measure strategy success including milestones to be achieved in next 12 months
Eliminate, reduce, or recover refrigerants and other fugitive emissions.	Yes	Recover refrigerants and other fugitive emissions as needed.	The NRC recovers refrigerant on HVAC equipment as needed for maintenance or equipment end of life. This is an ongoing effort that occurs as needed throughout the year.
Reduce waste generation through elimination, source reduction, and recycling.	Yes	Promote NRCs recycling program.	The NRC routinely promotes waste reduction activities and recycling. Employees are provided with information on acceptable recycling procedures. NRC plans to revise and distribute education materials related to waste reduction by 3rd quarter FY2014.
Implement integrated pest management and improved landscape management practices to reduce and eliminate the use of toxic and hazardous chemicals/materials.	No	The NRC currently utilizes an integrated pest management approach. The NRC also does not use toxic or hazardous chemicals for landscaping.	
Establish a tracking and reporting system for construction and demolition debris elimination.	No	The NRC currently tracks and records construction and demolition debris elimination and recycling.	
Develop/revise Agency Chemicals Inventory Plans and identify and deploy chemical elimination, substitution, and/or management opportunities.	Yes	Update Agency Chemical Inventory Plans.	The NRC updates its Chemical Inventory Plans annually. The next inventory submission will occur in the 1st quarter of FY2014.

Goal 6: Sustainable Acquisition

Agency Progress toward Sustainable Acquisition Goal

E.O. 13514 requires agencies to advance sustainable acquisition and ensure that 95 percent of applicable new contract actions meet 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

Federal Procurement Data System Standard Reports on Biopreferred Procurement Actions

The Federal Procurement Data System (FPDS) is used by federal agencies to record and manage contract actions. On the pie chart below, the blue area represents the total number of contract actions reported by the agency in FPDS in FY 2012 that are "applicable" to the sustainable procurement requirements. Applicable contract actions are new domestic contracts, task and delivery orders, excluding weapons systems and those actions that are unlikely to use biobased products (e.g., research and social development contracts, education and training, social services, and the lease or rental of equipment). The green area represents the total number of applicable contract actions that the agency reported in FPDS as containing biobased product requirements.

28

1.12% = 3

■ Total # FPDS Reported
Applicable Contract Actions

■ Total # FPDS Reported Contract
Actions that include
Biopreferred Requirements
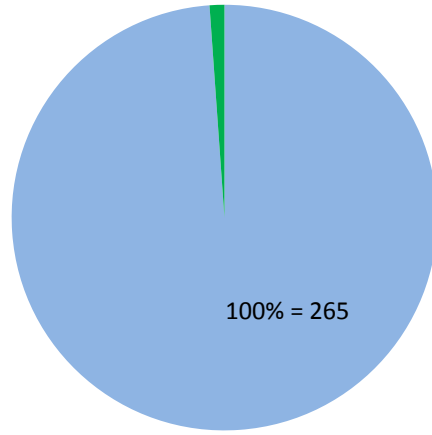
100% = 265

Table 6: Goal 6 Strategies – Sustainable Acquisition

(A) Will the agency implement the following strategies to achieve this goal?	(B) Top 5? Yes/No/NA	(C) Strategy Narrative	(D) Specific targets/metrics to measure strategy success including milestones to be achieved in next 12 months
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	Update the agency's Management Directive (MD) 11.1, "NRC Acquisition of Supplies and Services" to include brief information on Federal environmental programs and considerations during source selection.	Publish revised Management Directive by May 30, 2014.
Deploy corrective actions to address identified barriers to increasing sustainable procurements with special emphasis on biobased purchasing.	No	The agency is developing standardized templates to focus on all Federal programs equally to increase knowledge base and reduce barriers.	
Include biobased and other FAR sustainability clauses in all applicable construction and other relevant service contracts.	Yes	Contracting Officers will include environmental FAR and local clauses in solicitations and contracts for energy-efficient, water-efficient, biobased, environmentally preferable, non-ozone depleting, and products made with recovered materials. The agency will conduct post-award quality assurance reviews.	Increase compliance with environmental clause usage from 50% in 2nd quarter in FY11 to 70% by the same period in 2014 in applicable solicitations and contracts.
Review and update agency acquisition templates to include and encourage biobased and other designated green products to enable meeting sustainable acquisition goals.	Yes	To enhance familiarity with and increase usage of green products and services, agency acquisition templates will include environmental considerations and information. Templates will be located in the agency's new "NRC Enterprise Acquisition Toolset" (NEAT) on-line portal for access by the NRC acquisition community.	Templates will be updated periodically over the next 12 months as part of a larger effort to increase agency standardization for acquisition documents and processes.
Use Federal Strategic Sourcing Initiatives, such as Blanket Purchase Agreements	No	The agency is currently developing new Enterprisewide contracts (IDIQs/BPAs) that may fulfill these needs. However, it	

(A) Will the agency implement the following strategies to achieve this goal?	(B) Top 5? Yes/No/NA	(C) Strategy Narrative	(D) Specific targets/metrics to measure strategy success including milestones to be achieved in next 12 months
(BPAs) for office products and imaging equipment, which include sustainable acquisition requirements.		is undetermined at this time what approach the agency will be taking.	
Report on sustainability compliance in contractor performance reviews.	No	While this is an important area, the agency 's focus at this time is primarily to familiarize its acquisition workforce about Federal environmental programs and available green products and services to increase agency usage.	
Update or deploy annual sustainability training for use in the agency.	Yes	The agency will incorporate annual sustainability training in iLearn.	The goal is that all acquisition employees in the Division of Contracts and buyers in NRC Regional Offices complete the training by December 2013.
NRC Environmental Stewardship Award Program	Yes	Provide recognition (non-monetary awards) to employees who have demonstrated exceptional leadership in planning or implementing programs that include environmental considerations and green purchasing in support of NRC's Affirmative Procurement Program. The idea is to use this program to not only recognizing deserving employees, but also use it as a platform to bring greater attention to the importance of green purchasing.	The agency established its award program in September 2012 and will identify and recognize deserving employees over the next 12 months.

Goal 7: Electronic Stewardship & Data Centers

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

E.O. 13514 requires 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

Table 7: Goal 7 Strategies – Electronic Stewardship & Data Centers

(A) Will the agency implement the following strategies to achieve this goal?	(B) Top 5? Yes/No/NA	(C) Strategy Narrative	(D) Specific targets/metrics to measure strategy success including milestones to be achieved in next 12 months
Identify agency "Core" and "Non-Core" Data Centers.	Yes	NRC has already identified Core and Non-Core data centers.	No action necessary. This item has already been completed.
Consolidate 40% of agency Non-Core Data Centers.	Yes	NRC is planning to close the HPC non-core data center in FY2014.	NRC plans to close OWFN data center in FY2015, and TWFN data center in FY2016.
Optimize agency Core Data Centers across total cost of ownership metrics.	Yes	NRC is making good progress in server virtualization, continuing an effort which started in FY 2010.	NRC expects to reach a virtualization rate of 40% by end of FY2014.
Ensure that power management, duplex printing, and other energy efficiency or environmentally preferable options and features are enabled on all eligible electronics and monitor compliance.	Yes	NRC is in the process of installing a Data Center Infrastructure Management (DCIM) tool to monitor the power utilization in the 3WFN core data center.	DCIM tool will be installed during FY2014.
Update and deploy policies to use environmentally sound practices for disposition of all agency excess or surplus electronic products, including use of certified eSteward and/or R2 electronic recyclers, and monitor compliance.	Yes	Revise agency policy requiring power management and disposition of data center equipment.	NRC will update power management and disposition documentation for the 3WFN core data center by June 2014.

(A) Will the agency implement the following strategies to achieve this goal?	(B) Top 5? Yes/No/NA	(C) Strategy Narrative	(D) Specific targets/metrics to measure strategy success including milestones to be achieved in next 12 months
Ensure acquisition of 95% EPEAT registered and 100% of ENERGY STAR qualified and FEMP designated electronic office products.	Yes	NRC will purchase 95% EPEAT registered and 100% of ENERGY STAR qualified and FEMP designated electronic office products.	Review IT purchases and leases to ensure all IT acquisitions follows NRC policy for going green.

Goal 8: Renewable Energy

Agency Renewable Energy Percentage of Total Electricity Usage

E.O. 13514 requires that agencies increase use of renewable energy. Further, EPACT 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 2013 and beyond. For FY 2012, the required target was 5 percent of an agency's total electricity consumption.

Figure 8-1

Table 8: Goal 8 Strategies – Renewable Energy

(A) Will the agency implement the following strategies to achieve this goal?	(B) Top 5? Yes/No/NA	(C) Strategy Narrative	(D) Specific targets/metrics to measure strategy success including milestones to be achieved in next 12 months
Purchase renewable energy directly or through Renewable Energy Credits (RECs).	NA	The NRC uses a utilities contract from GSA to purchase energy.	
Install onsite renewable energy on federal sites.	NA	The NRC has looked into renewable energy projects onsite, however, they were cost prohibitive.	
Lease land for renewable energy infrastructure.	NA	The NRC does not own any land.	

(A) Will the agency implement the following strategies to achieve this goal?	(B) Top 5? Yes/No/NA	(C) Strategy Narrative	(D) Specific targets/metrics to measure strategy success including milestones to be achieved in next 12 months
Develop biomass capacity for energy generation.	NA	The NRC does not have enough space available for biomass energy generation.	
Utilize performance contracting methodologies for implementing ECMs and increasing renewable energy.	NA	The NRC does not have any plans to utilize a performance contract in the next fiscal year.	
Work with other agencies to create volume discount incentives for increased renewable energy purchases.	NA	The NRC uses a utilities contract from GSA to purchase energy.	

Goal 9: Climate Change Resilience

Agency Climate Change Resilience

E.O. 13514 requires 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.

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Table 9: Goal 9 Strategies – Climate Change Resilience

(A) Will the agency implement the following strategies to achieve this goal?	(B) Yes/No/NA	(C) Strategy Narrative	(D) Specific targets/metrics to measure strategy success including milestones to be achieved 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.	No	Climate change will continue to be monitored for any needed adaptation for the Agency to fulfill its mission.	
Update agency emergency response procedures and protocols to account for projected climate change, including extreme weather events.	No	The NRC has previously addressed emergency response procedures and protocols for extreme weather events.	
Ensure workforce protocols and policies reflect projected human health and safety impacts of climate change.	No	Climate change will continue to be monitored for any needed adaptation to workforce protocols for the human health and safety impacts of climate change.	
Update agency external programs and policies (including grants, loans, technical assistance, etc.) to incentivize planning for, and addressing the impacts of, climate change.	NA	This strategy is not applicable to the NRC.	
Ensure agency principals demonstrate commitment to adaptation efforts through internal communications and policies.	No	Climate change will continue to be monitored for any needed adaptation efforts. At this time, no adaptation efforts are needed.	

(A) Will the agency implement the following strategies to achieve this goal?	(B) Yes/No/NA	(C) Strategy Narrative	(D) Specific targets/metrics to measure strategy success including milestones to be achieved in next 12 months
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.	NA	Identifying vulnerabilities and identifying measures to address those vulnerabilities is inherent in the agency mission.	
Ensure that agency climate adaptation and resilience policies and programs reflect best available current climate change science, updated as necessary	NA	Climate change will continue to be monitored for any needed adaptation policies and programs. At this time, no adaptation efforts are needed.	
Design and construct new or modify/manage existing agency facilities and/or infrastructure to account for the potential impacts of projected climate change.	No	Climate change will continue to be monitored for any needed modifications to NRC facilities and/or infrastructure. At this time, no modifications are needed.	
Incorporate climate preparedness and resilience into planning and implementation guidelines for agency-implemented projects.	NA	Climate change will continue to be monitored and climate preparedness and resilience will be incorporated into project planning and implementation as needed.	

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(A) Will the agency implement the following strategies to achieve this goal? (B) Top 5? Yes/No/NA (C) Strategy Narrative (D) Specific targets/metrics to measure strategy success including milestones to be achieved in next 12 months 0 0

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