2014 Strategic Sustainability Performance Plan



Agency Contact

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Nuclear Regulatory Commission

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UNITED STATES NUCLEAR REGULATORY COMMISSION WASHINGTON, D.C. 20555-0001

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 2013 GHG accounting for Scope 1 and Scope 2 emissions indicated a 31.6 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 2013 GHG accounting for Scope 3 emissions, the NRC reported a 14.6 percent decrease, 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 2013 GHG accounting report, the NRC reported a 46.4 percent decrease in energy intensity.

Fleet Management

The NRC continuously measures and evaluates various approaches for the Sustainability Plan. The NRC will continue to evaluate the progress, once the shuttle services and underutilized 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 local travel reimbursement by using privately owned vehicles and mass transit 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. The NRC completed a multiphase restroom renovation project during FY 2013 in the One White Flint building that involved the replacement of existing restroom fixtures with low-flow fixtures with increased efficiency.

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.

The NRC is limited in its approach to meeting its renewable energy goal. 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. Currently, the NRC purchases its electricity utilizing a General Services Administration (GSA) areawide contract. Through this agreement, 7.5 percent of the electricity that the NRC uses comes from renewable energy sources.

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 2013, the Pollution Prevention and Waste Reduction Program recorded a 64.4 percent 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. The Agency added an environmental clause to its 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 accomplished the following in 2013: (1) transitioned to a new acquisition system (Compusearch PRISM) in October 2013 that includes environmental-related Federal Acquisition Regulation and local contract clauses for all applicable solicitations and contracts, (2) reviewed compliance with green purchasing clauses as part of larger post-award quality assurance reviews, (3) increased Agency standardization for acquisition documents and processes, (4) established annual sustainability training for all acquisition professionals, and (5) disseminated information to employees regarding nominations for Federal awards 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 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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Table 1: Agency Size & Scope

Agency Size & Scope	FY 2012	FY 2013
Total Number of Employees as Reported in the President's Budget	3,976	3,830
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 Building 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	32	28
Total Number of Exempted-Fleet Vehicles (Tactical, Law Enforcement, Emergency, Etc.)	1	1
Total Amount Contracts Awarded as Reported in FPDS (\$Millions)	200.1	209.4

Evaluating Previous Strategies

Goal 1: Greenhouse Gas (GHG) Reduction – Scope 1 & 2

(A) Strategy	(B) Did you implement this strategy? (Yes/No)	(C) Was the strategy successful for you? (Yes/No)	(D) Will you use this strategy again next year? (Please explain in 1-2 sentences)
Use the FEMP GHG emission report to identify/target high emission categories and implement specific actions to resolve high emission areas identified	Yes	Yes	The NRC plans to continue using this strategy to identify areas with high emissions or areas that are not meeting annual targets.
Implement in EISA 432 covered facilities all lifecycle cost effective ECMs identified	Yes	Yes	NRC continues to identify and evaluate possible ECMs and wiill implement all lifecycle cost effective ECMs that are identified
Reduce grid-supplied electricity consumption by improving/upgrading motors, boilers, HVAC, chillers, compressors, lighting, etc.	Yes	Yes	NRC continues to audit its facilities to identify building systems that can be optimized or replaced to reduce the amount of electricity consumed
Employ operations and management best practices for energy consuming and emission generating equipment	Yes	Yes	NRC follows industry best practices for building operations and management. Industry best practices are kept current and revised as needed
Reduce on-site fossil-fuel consumption by installing more efficient boilers, generators, furnaces, etc. and/or use renewable fuels	No	No	The NRC consumes very little fossil-fuels on-site. Equipment that use fossil-fuel is either cost-prohibitive to replace or incapable of switching to renewable fuels.

Goal 1: Greenhouse Gas (GHG) Reduction – Scope 3
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(A) Strategy	(B) Did you implement this strategy? Yes/No	(C) Was the strategy successful for you? Yes/No	(D) Will you use this strategy again next year? (Please explain in 1-2 sentences)
Develop and deploy employee commuter reduction plan	Yes	Yes	The NRC will continue to promote alternate ways for employees to commute
Reduce employee business ground travel	Yes	Yes	There is an ongoing effort to reduce employee ground travel
Reduce employee business air travel	Yes	Yes	There is an ongoing effort to reduce employee business air travel
Use employee commuting survey to identify opportunities and strategies for reducing commuter emissions	No	No	Surveys were conducted using a smaller subset of employees. However, the NRC did not conduct an agency wide survey to identify strategy and opportunities for reducing commuter emissions
Increase number of employees eligible for telework and/or the total number of days teleworked	Yes	Yes	There is an ongoing effort to promote NRCs teleworking program

Goal 2: Sustainable Buildings

(A) Strategy	(B) Did you implement this strategy? Yes/No	(C) Was the strategy successful for you? Yes/No	(D) Will you use this strategy again next year? (Please explain in 1-2 sentences)
Redesign or lease interior space to reduce energy use by daylighting, space optimization, sensors/control system installation, etc.	Yes	Yes	The NRC continues to evaluate and modify spaces for energy savings using available technologies such as controls, occuapncy sensors, and daylighting technology.
Include in every construction contract all applicable sustainable acquisition requirements for	Yes 1	Yes 2	The NRC will continue to include contract language requiring contractors to utilize sustainable products

(A) Strategy	(B) Did you implement this strategy? Yes/No	(C) Was the strategy successful for you? Yes/No	(D) Will you use this strategy again next year? (Please explain in 1-2 sentences)
recycled, biobased, energy efficient, and environmentally preferable products			
Develop and deploy energy and sustainability training for all facility and energy managers	Yes	Yes	Facility and energy managers are encouraged to attend training sessions, trade shows, or other various opportunities throughout the year in order to stay up to date on best practices

Goal 3: Fleet Management

(A) Strategy	(B) Did you implement this strategy? Yes/No	(C) Was the strategy successful for you? Yes/No	(D) Will you use this strategy again next year? (Please explain in 1-2 sentences)
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)	Yes	Yes	The NRC fleet is evaluatied on a regular basis in order to maintain the proper amount of vehicles for business operations and eliminate any underutilized vehicles
Reduce miles traveled (e.g., share vehicles, improve routing with telematics, eliminate trips, improve scheduling, use shuttles, etc.)	Yes	Yes	As interim sites are consolidated, the use of shuttles in daily operations will be eliminated
Acquire only highly fuel-efficient, low greenhouse gas-emitting vehicles and alternative fuel vehicles (AFVs)	Yes	Yes	Continue working with GSA to secure AFVs and/or hybrid vehicles to incorporate into the fleet
Use a Fleet Management Information System to track fuel consumption	Yes	Yes	NRC continues to monitor 100% of fleet vehicle fuel consumption

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(A) Strategy	(B) Did you implement this strategy? Yes/No	(C) Was the strategy successful for you? Yes/No	(D) Will you use this strategy again next year? (Please explain in 1-2 sentences)
throughout the year for agency-owned, GSA-leased, and commercially-leased vehicles			
Optimize the required number of vehicles for NRC Fleet.	Yes	Yes	The NRC fleet is evaluatied on a regular basis in order to maintain the proper amount of vehicles for business operations and eliminate any underutilized vehicles

Goal 4: Water Use Efficiency & Management

(A) Strategy	(B) Did you implement this strategy? Yes/No	(C) Was the strategy successful for you? Yes/No	(D) Will you use this strategy again next year? (Please explain in 1-2 sentences)
Purchase and install water efficient technologies (e.g., Waterwise, low-flow water fixtures and aeration devices).	Yes	Yes	Low-flow fixtures and aeration devices were installed during last year's restroom renovation project. The renovation was completed in FY2013 and there are no further fixture replacement projects planned for the immediate future.

Goal 5: Pollution Prevention & Waste Reduction

(A) Strategy	(B) Did you implement this strategy? Yes/No	(C) Was the strategy successful for you? Yes/No	(D) Will you use this strategy again next year? (Please explain in 1-2 sentences)
Eliminate, reduce, or recover refrigerants and other fugitive emissions	Yes	Yes	Throughout the year, the NRC recovers and/or recycles refrigerant as needed as part of HVAC maintenance or equipment end of life

(A) Strategy	(B) Did you implement this strategy? Yes/No	(C) Was the strategy successful for you? Yes/No	(D) Will you use this strategy again next year? (Please explain in 1-2 sentences)
Reduce waste generation through elimination, source reduction, and recycling	Yes	Yes	The agency promotes waste reduction and recycling on an on-going basis in its facilities
Develop/revise Agency Chemicals Inventory Plans and identify and deploy chemical elimination, substitution, and/or management opportunities	Yes	Yes	Chemical inventory plans are updated annually

Goal 6: Sustainable Acquisition

(A) Strategy	(B) Did you implement this strategy? Yes/No	(C) Was the strategy successful for you? Yes/No	(D) Will you use this strategy again next year? (Please explain in 1-2 sentences)
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	Yes	The agency's acquisition directive was updated in May 2014. Further updates or directives will occur as needed
Include biobased and other FAR sustainability clauses in all applicable construction and other relevant service contracts	Yes	Yes	The agency recently created a clause selection tool to supplement the contract writing system to assist contract specialists in identifying those clauses applicable to their solicitations and contracts. The agency will conduct post-award quality assurance reviews to monitor the use of environmental clauses, and promote the use of the clause tool

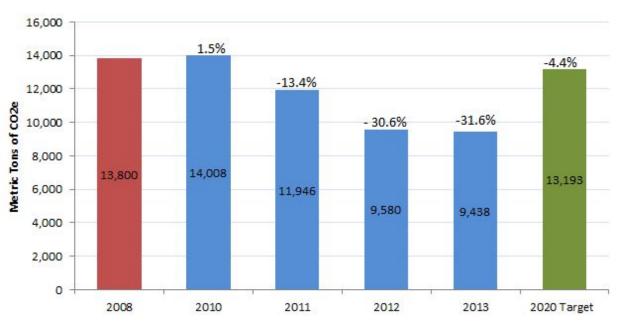
(A) Strategy	(B) Did you implement this strategy? Yes/No	(C) Was the strategy successful for you? Yes/No	(D) Will you use this strategy again next year? (Please explain in 1-2 sentences)
Review and update agency specifications to include and encourage biobased and other designated green products to enable meeting sustainable acquisition goals	Yes	Yes	The agency is in the process of revising its market research templates to explain environmental resources and applicability. This effort is expected to contribute to increased awareness and usage of green products over time
Update or deploy annual sustainability training for use in the agency.	Yes	Yes	The agency developed a 2-hour training module to promote awareness and use of Federal environmental programs. Acquisition professionals are required to complete the training by July 31, 2014
NRC Environmental Stewardship Award Program	Yes	Yes	The agency provides 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

Goal 7: Electronic Stewardship & Data Centers

(A) Strategy	(B) Did you implement this strategy? Yes/No	(C) Was the strategy successful for you? Yes/No	(D) Will you use this strategy again next year? (Please explain in 1-2 sentences)
Identify agency Core and Non-Core Data	Yes	Yes	No, this action is completed.
Consolidate 40% of agency non-core data centers	Yes	Yes	The NRC is in the process of consolidating its multiple data center locations.

(A) Strategy	(B) Did you implement this strategy? Yes/No	(C) Was the strategy successful for you? Yes/No	(D) Will you use this strategy again next year? (Please explain in 1-2 sentences)
Optimize agency Core Data Centers across total cost of ownership metrics	Yes	Yes	There is an ongoing effort to increase server virtualization.
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	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.
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	Yes	The NRC is in the process of revising agency policy to require power management and disposition of data center equipment.
Ensure acquisition of 95% EPEAT registered and 100% of ENERGY STAR qualified and FEMP designated electronic office products	Yes	Yes	NRC will continue efforts to purchase 95% EPEAT registered and 100% of ENERGY STAR qualified and FEMP designated electronic office products.

Goal 1: Greenhouse Gas (GHG) Reduction



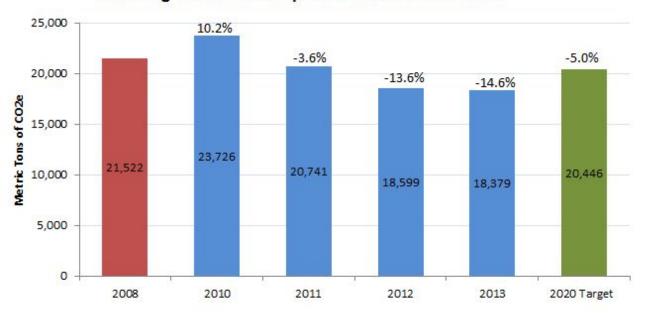
NRC Progress toward Scope 1 & 2 Greenhouse Gas Goals

(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.
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 2015	N/A
Implement in EISA 432 covered facilities all lifecycle 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	NA	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	N/A

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
		and converting to renewable fuels is cost prohibitive.	
Reduce grid-supplied electricity consumption by improving/upgrading motors, boilers, HVAC, chillers, compressors, lighting, etc.	Yes	The NRC evaluates potential ECMs on an on-going basis for energy savings possibilities. Equipment life expectancy, potential energy savings, replacement/upgrade costs, and feasibility are all taken into consideration during ECM evaluation.	The following projects are currently underway: (1) Installation of VFDs on all major equipment motors in OWFN. (2) Upgrade existing large motors to new, higher efficiency motors capable of use with VFDs. (3) Replacement of the existing control system in OWFN with a newer DDC system, capable of advanced energy saving control strategies
Employ operations and management best practices for energy consuming and emission generating equipment	Yes	The NRC: (1) Identifies and evaluates energy consuming and emission generating equipment. (2) Researches and implements industry best practices for operations and management.	There is an ongoing effort to: (1) Evaluate all equipment within the facilities for proper performance, maintenance and best practices. (2) Evaluate industry recommendations for operating and maintaining facility equipment to increase the performance and reduce the emissions of them.
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	

(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
		performance with the benchmarked baseline.	



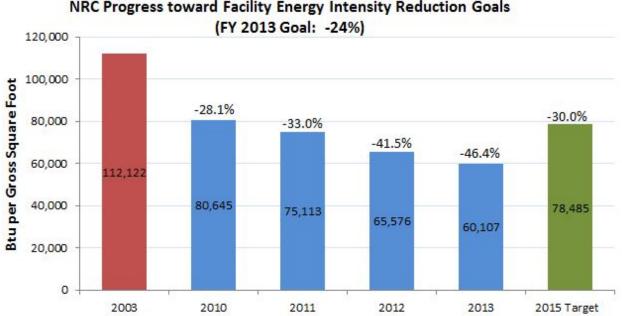
NRC Progress toward Scope 3 Greenhouse Gas Goals

(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 the next 12 months
Develop and deploy employee commuter reduction plan	Yes	The agency offers many options to help reduce employee commuting. Employees are offered transit subsidies, rideshare incentives, bike racks and locker room facilities, and flexible work options. The agency also has virtual meeting capabilities.	There is an ongoing agency effort to (1) Increase awareness of virtual meeting capabilities, conduct training sessions on this technology, and increase the number or workstations with virtual meeting capabilities. (2) Promote alternate commuter options for employees such as transit subsidy benefits, rideshare incentives, biking facilities, and flexible work options.
Reduce employee business ground travel	Yes	Increase the use of virtual meeting capabilities for meetings, webinars and training.	There is an on-going agency effort to increase awareness of virtual meeting capabilities, conduct training sessions on this technology, and increase the number or workstations with virtual meeting capabilities.
Reduce employee business air travel	Yes	Increase the use of virtual meeting capabilities for meetings, webinars and training.	There is an on-going agency effort to increase awareness of virtual meeting capabilities, conduct training sessions on this technology, and increase the number or workstations with virtual meeting capabilities.
Develop and deploy employee commuter reduction plan	Yes	The agency offers many options to help reduce employee commuting. Employees are offered transit subsidies, rideshare	There is an ongoing agency effort to (1) Increase awareness of virtual meeting capabilities, conduct training sessions on

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 the next 12 months
		incentives, bike racks and locker room facilities, and flexible work options. The agency also has virtual meeting capabilities.	this technology, and increase the number or workstations with virtual meeting capabilities. (2) Promote alternate commuter options for employees such as transit subsidy benefits, rideshare incentives, biking facilities, and flexible work options.
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 a commuter survey to identify opportunities that may exist for reducing commuter emissions. The employee survey will be completed in the 1st quarter of FY2015.
Increase number of employees eligible for telework and/or the total number of days teleworked	Yes	Increase the number of employees teleworking	There is an ongoing agency effort to promote NRCs teleworking program through program awareness and employee training.
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

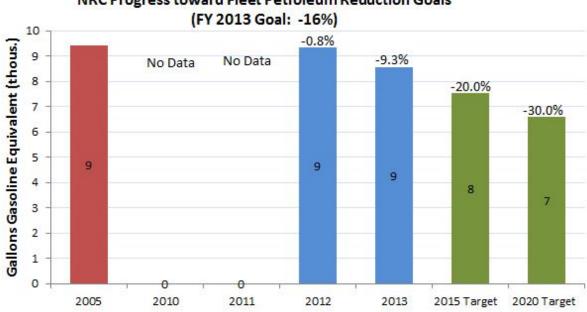


NRC Progress toward Facility Energy Intensity Reduction Goals

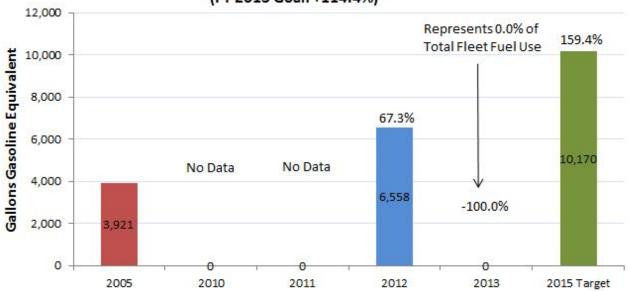
Table 2: Goal 2 Strategies	Sustainable Buildings
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(A) Will the agency implement the following strategies to achieve this goal?	(B) Top 5? Yes/No/NA	(C) Strategy narrative	(D) Specific targets/metrics to measure strategy success including milestones to be achieved in the 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.	The NRC continues to evaluate and modify spaces for energy savings using available technologies such as controls, occuapncy sensors, and daylighting technology.
Deploy CEQs 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.	The NRC will continue to 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.	Facility and energy managers are encouraged to attend training sessions, trade shows, or other various opportunities throughout the year in order to stay up to date on best practices

Goal 3: Fleet Management



NRC Progress toward Fleet Petroleum Reduction Goals

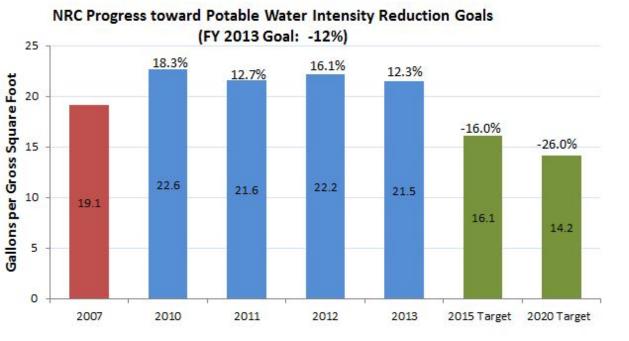


NRC Progress toward Fleet Alternative Fuel Consumption Goals (FY 2013 Goal: +114.4%)

Table 3: Goal 3 Strategies Fleet Management

(A) Will the agency implement the following strategies to achieve this goal? Optimize/Right-size the	(B) Top 5? Yes/No/NA	(C) Strategy narrative Consider whether or not	(D) Specific targets/metrics to measure strategy success including milestones to be achieved in the next 12 months Monitor the use/purpose for
composition of the fleet (e.g., reduce vehicle size, eliminate underutilized vehicles, acquire and locate vehicles to match local fuel infrastructure)	Yes	large executive vehicles can be replaced with mid-size vehicles. It is also the agency's goal to optimize the total number of fleet vehicles.	trips to determine "rightsizing" the type of vehicle. NRC will be reducing the number of vehicles in the current fleet by 2.
Reduce miles traveled (e.g., share vehicles, improve routing with telematics, eliminate trips, improve scheduling, use shuttles, etc.)	Yes	Eliminating daily shuttle routes by centrally locating staff	Not applicable, as the shuttle service will be eliminated.
Acquire only highly fuel-efficient, low greenhouse gas-emitting vehicles and alternative fuel vehicles (AFVs)	Yes	Work with GSA to secure available hybrid vehicles that reduce greater greenhouse gas (GHG) emissions. E85 Flex-Fuel is now available to be used from a local alternative fueling station	Employ hybrid vehicles by 2016 to replace some of the larger fleet vehicles. Using the alternative fueling station will reduce the Federal fleet's petroleum consumption.
Increase utilization of alternative fuel in dual-fuel vehicles	No	Use alternative fuel where possible to reduce agency petroleum consumption	Encourage the use of E85 Flex-Fuel in dual-fuel capable vehicles
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	The NRC currently has only 1 agency-owned vehicle.	N/A

Goal 4: 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 the next 12 months
Purchase and install high efficiency technologies (e.g., WaterSense)	No	Install low-flow fixtures in facility restrooms.	The NRC has upgraded all restroom fixtures in OWFN to low-flow fixtures. There are no additional high efficiency technology water installations planned for the upcoming year
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)	Yes	The agency water management plan is currently handled by internal measures as well as external water management contractor	The agency's water management plan is reviewed on an on-going basis and will continue to be monitored both internally and externally
Minimize outdoor water use and use alternative water sources as much as possible	No	The agency will continue to utiilize its irrigation control system to minimize outdoor water usage. At this time, the agency does not have alternative water sources for outdoor usage	
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 advanced meters to measure and monitor (1) potable and (2) industrial, landscaping and agricultural water use	No	The NRC has previously installed separate meters to monitor water usage associated with landscaping.	
Develop and implement programs to educate employees about methods to minimize water use	No	There is no current program in development to educate employees about methods to minimize water use	
Assess the interconnections and dependencies of energy and water on agency	No 3	The effect of climate change on water does not have any forseeable impacts on	

(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 the next 12 months
operations, particularly climate changes effects on water which may impact energy use		agency operations or energy usage	

Goal 5: Pollution Prevention&Waste Reduction

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 the 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 from 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.
Implement integrated pest management and improved landscape management practices to reduce and eliminate the use of toxic and hazardous chemicals/materials	NA	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	No	The NRC updates its Chemical Inventory Plans annually. The next inventory submission will occur in the 1st quarter of FY2015.	

(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 the next 12 months
Take inventory of current HFC use and purchases	Yes	Track and record HFC purchases and usage within NRC facilities	The NRC tracks and records the purchase and use of HFCs for its facilities.
Require high-level waiver or contract approval for any agency use of HFCs	No	High-level waivers are currently not required for agency use of HFCs. There are no immediate plans for the implementation of a waiver system.	
Ensure HFC management training and recycling equipment are available	No	All individuals responsible for the installation and recycling of HFCs are contractors. Per contract requirements, installation and recycling of HFCs must be done by properly certified technicians.	

Goal 6: Sustainable Acquisition

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 the next 12 month
Update and deploy agency procurement policies and programs to ensure that federally-mandated designated sustainable products are included in all relevant procurements and services	No	The agency's Management Directive (MD) 11.1, "NRC Acquisition of Supplies and Services" was updated to include information on Federal environmental programs, and was signed on May 9, 2014. The NRC met its 2013 Sustainability Plan goal of publishing MD 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 the knowledge base and barriers.	
Include biobased and other FAR sustainability clauses in all applicable construction and other relevant service contracts	Yes	The agency recently created a clause selection tool to supplement the contract writing system that includes FAR, NRCAR and local contract clauses to assist contract specialists in identifying those clauses applicable to their solicitations and contracts. It is expected that this tool will facilitate the use of environmental FAR and local clauses. The agency will conduct post-award quality assurance reviews by reviewing our acquisition system periodically to monitor the use of	The agency will monitor compliance over the next 12 months and provide appropriate feedback to contract specialists and purchasing agents.

(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 the next 12 month
		environmental clauses, and promote the use of the clause tool.	
Review and update agency specifications to include and encourage biobased and other designated green products to enable meeting sustainable acquisition goals	Yes	The agency will revise its market research template to explain environmental resources and applicability. This effort is expected to contribute to increased awareness and usage of green products over time.	Template will be updated over the next 12 months to clarify green purchasing requirements and resources.
Use Federal Strategic Sourcing Initiatives, such as Blanket Purchase Agreements (BPAs) for office products and imaging equipment, which include sustainable acquisition requirements	Yes	The agency will be using the OS3 BPAs.	The agency anticipates using these contract vehicles in the next 12 months.
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.	
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	Over the next 12 months, identify and recognize employees for accomplishments in 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 the next 12 month
		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.	
Update acquisition guidance in support of federally environmental programs	Yes	The Agency will review and revise NRC's Acquisition Instruction (AI) #2011-09 (Green Purchasing), as necessary, to remain current.	By 12/31/2014, revise the AI to incorporate any procedural changes in identifying planned green purchases in contractors' proposals (in response to Agency solicitations).
Annual sustainability training	Yes	The agency developed a 2-hour training module to promote awareness and use of Federal environmental programs. This training is required for acquisition professionals and is available in the Agency's official training system (iLearn).	Acquisition professionals in Headquarters and Regional Offices are required to complete the training by July 31, 2014.

Goal 7: Electronic Stewardship&Data Centers

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 the next 12 months
Identify agency Core and Non-Core Data	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.	
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 in FY 2014.
Ensure acquisition of 95% EPEAT registered and 100% of ENERGY STAR qualified and FEMP	Yes	NRC will purchase 95% EPEAT registered and 100% of ENERGY STAR qualified and FEMP	NRC will purchase 95% EPEAT registered and 100% of ENERGY STAR qualified and FEMP

(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 the next 12 months
designated electronic office products		designated electronic office products.	designated electronic office products.

Goal 8: Renewable Energy

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 the next 12 months
Purchase renewable energy directly or through Renewable Energy Credits (RECs)	No	The NRC is not planning on purchasing any RECs during the next fiscal year.	
Install onsite renewable energy on federal sites	No	The NRC has evaluated the installation of renewable energy generation systems on its site, however, it is not economically feasible at this time.	
Lease land for renewable energy infrastructure	No	At this time, the agency does not plan to lease land for renewable energy infrastructure during the next fiscal year.	
Develop biomass capacity for energy generation	No	At this time, the agency does not plan to develop biomass capacity for energy generation during the next fiscal year.	
Utilize performance contracting methodologies for implementing ECMs and increasing renewable energy	No	At this time, the agency does not plan to utilize performance contracting methods during the next fiscal year.	
Work with other agencies to create volume discount incentives for increased renewable energy purchases	Yes	The NRC purchases our electricity through a GSA areawide utility contract.	The NRC receives 7.5% of the electricity supplied to the agency from renewable energy sources per the GSA areawide contract. NRC will use the GSA areawide utility contract to purchase electricity over the next fiscal year.

Goal 9: Climate Change Resilience

(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 the 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.	

Table 9: Goal 9 Strategies - Climate Change Resilience

(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 the 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.	

Goal 10: Energy Performance Contracts

Table 10: Goal 10 Strategies - Energy Performance Contracting

(A) Will the agency implement the following strategies to achieve this goal?	(B) Top Five? Yes/No/NA	(C) Strategy Narrative	(D) Specific targets/metrics to measure strategy success including milestones to be achieved in next 12 months
Evaluate 25% of agencys most energy intensive buildings for use with energy performance contracts	No	The agency has evaluated the use of energy performance contracts in its facilities. At this time, the agency is not utilizing energy preformance contracts.	
Prioritize top ten projects which will provide greatest energy savings potential	Yes	The agency routinely prioritizes potential projects by energy savings potential and necessity.	
Cut cycle time of performance contracting process by at least 25%	NA	At this time the agency is not utilizing performance contracting.	
Assign agency lead to participate in strategic sourcing initiatives	NA	The agency is not currently utilizing performance contracting.	
Devote 2% of new commitments to small buildings (<20k sq. ft.)	NA	The NRC does not own or operate small buildings.	
Identify and commit to include 3-5 onsite renewable energy projects in energy performance contracts	No	The agency has evaluated the installation of renewable energy projects at its facilities and has found them to be economically unfeasible at this time.	
Ensure relevant legal and procurement staff are trained by FEMP ESPC/ UESC course curriculum	NA		
Provide measurement and verification data for all awarded projects	NA		

(A) Will the agency implement the following strategies to achieve this goal?	(B) Top Five? Yes/No/NA	(C) Strategy Narrative	(D) Specific targets/metrics to measure strategy success including milestones to be achieved in next 12 months
Enter all reported energy savings data for operational projects into MAX COLLECT (max.gov)	NA		

U.S. NUCLEAR REGULATORY COMMISSION CLIMATE CHANGE ADAPTATION PLAN June 30, 2014

Purpose

The U.S. Nuclear Regulatory Commission (NRC) is committed to achieving its mission for many years to come. To ensure the NRC will remain effective in current and future climate conditions, the Agency has established a Climate Adaptation Plan to help identify, reduce, and mitigate potential disruptions to its operations, policies, and programs resulting from the negative effects of climate change.

Agency Mission

The NRC licenses and regulates 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.

Preparedness, Adaptation, and Resilience

The NRC believes that the effects of climate change will have little to no impact on how the Agency fulfills its mission to license and regulate nuclear materials. The NRC recognizes that climate change could have an adverse impact on its daily operations if the environment in which its offices are located experiences negative effects that impact normal building services, such as water and electricity. To successfully mitigate any adverse climate change effects, the Agency will monitor any changes to the environment that may affect the reliability or availability of adequate building services. If the NRC identifies any changes in the environment that could affect these services, the NRC would request the General Services Administration (GSA) to identify and procure office space in a new location that would be better suited for the Agency to carry out its regulatory mission.

The NRC is committed to reducing the effects that its own operations have on the environment. The Agency will continue to look for ways to reduce energy consumption and greenhouse gas emissions associated with its operations. This reduction will help reduce the negative impact that Agency operations may have on the environment. The NRC will continue to evaluate its efforts toward climate adaptation and resilience. The NRC will remain vigilant to new developments relating to climate change and will work collaboratively as needed with other agencies to address them. The NRC's adaptation planning is integrated into the mission of the Office of Administration and will be directed through the Division of Facilities and Security.