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Railroad Retirement Board

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Section 1: Agency Policy and Strategy

I. Agency Policy Statement

The Railroad Retirement Board (RRB) is an independent agency in the executive branch of the Federal Government. The RRB's primary function is to administer comprehensive retirement-survivor and unemployment-sickness benefit programs for the nation's railroad workers and their families under the Railroad Retirement and Railroad Unemployment Insurance Acts. Approximately 900 employees work for the RRB, including about 250 in the agency's 55 field offices.

We are committed to reducing energy consumption and establishing policies that will ensure our compliance with all environmental and energy statutes, regulations, and executive orders and meet required energy reduction goals. These goals are established by Executive Orders 13514, 13423, and 13327, and the National Energy Conservation Act and Energy Policy Act of 2005 (NECA/EPACT).

Our headquarters is located in the William O. Lipinski Federal Building, a thirteen-story, 365,000 square-foot, historic building on North Rush Street in Chicago, Illinois. The agency's 55 field offices are either co-located with other federal agencies in office buildings managed by GSA or in other space that GSA leases.

The headquarters building is the only facility over which the RRB has operational control. As the primary tenant, the RRB operates and maintains the building through a delegation of authority agreement with the General Services Administration (GSA) established on April 1, 1986. Under this agreement, projects over \$50,000 in value and any capital improvements are funded and approved by GSA.

During this fiscal year (FY) we will continue to work with GSA in establishing energy-saving projects that will enhance the agency's mission and provide necessary energy reductions for the headquarters facility. For example, GSA has awarded a project to completely renovate the first floor lobby of the RRB facility. This lobby upgrade will include new entrances, doors, ceilings, wall treatments, and floor treatments. An energy efficient lighting control system will replace lighting in the main lobby and the elevator lobbies on the remaining floors. The project will also include a new heating, ventilating, and air-conditioning (HVAC) system for the main lobby.

Other important projects and investments planned for FY 2010 are highlighted in the following:

- The RRB intends to reduce water consumption throughout the Lipinski building. We will continue a program to replace 3 gallon-per-flush toilets with 1.25 gallon-per-flush toilets and automatic flush valves.
- GSA is planning to award funding for a detailed energy audit for the facility. Upon completion of this audit, additional energy conservation projects are planned in order to meet energy reduction goals.

- The RRB will continue to purchase renewable energy through a GSA Region 5 electric contract for its headquarters. This contract includes a component specifying that 5% of the electricity purchased be generated from renewable energy sources.

This Strategic Sustainability Performance Plan (SSPP) demonstrates RRB's commitment to meeting all the energy goals established by this SSPP. RRB will continue in its efforts to meet or exceed the goals established for 2020.

Henry Valiulis

Senior Sustainability Officer, RRB

Chicago, Illinois

II. Sustainability and the Agency Mission

The mission of the RRB is to accurately and efficiently administer retirement benefits and unemployment-sickness benefits to railroad employees and their families throughout the United States of America. In order to provide these services as efficiently and as cost effectively as possible, the RRB has made a commitment to sustainability. By meeting our planned sustainability goals, we will also reduce our energy costs and thus reduce the operating costs for meeting our mission goals. In addition, meeting these sustainability goals will serve to improve the safety and working environment of the agency workforce. Moving towards these goals will help to increase productivity and to make the RRB a more efficient and high quality work-producing agency serving the Federal Government.

The RRB has made several enhancements to management practices designed to improve agency operations and service to customers, but which also further its sustainability goals:

- Reduce the need for customer trips by providing access to customer service via telephone. In 2008 and 2009, the RRB completed implementation of a nationwide toll-free telephone service that enables dynamic routing of phone calls from one field office to another. This service enhances the agency's ability to balance workloads and route calls to representatives who can respond in the most timely, effective manner. This service also reduces some trips to RRB field offices, cutting greenhouse gas (GHG) emissions..
- Decreased use of paper and mail through document imaging. The RRB has expanded its document imaging system to the 55 field offices. This technology enables agency offices to quickly access documents processed in those offices. The imaging network also supports the agency's nationwide toll-free telephone service by providing documents online so staff in any office can access them promptly, respond to telephone inquiries, and provide better customer service. Finally, although electricity use increased for document imaging technology, fewer documents are mailed among RRB offices, reducing GHG emissions.
- Decreased CD-ROM use and mail by providing download. The RRB released an update of the RRB Employer Reporting Program on CD-ROM in January 2008, including the forms commonly used by employers to report service and compensation in an expanded format. The program also includes encryption and electronic transmittal capability. Beginning in 2009, employers have an option to log into a secure area of the Board's Web site and download the program, which eliminates the time and cost associated with distributing the program on hard media for those who select that option.
- Decreased use of paper and mail with EFT payments. The RRB has implemented an electronic funds transfer system that is used in 90% of payments to annuitants, and the percentage continues to grow. This means that fewer paper checks are printed and mailed, resulting in environmental benefits and energy savings. Additionally, RRB beneficiaries take fewer trips to financial institutions when they use electronic funds transfer.

- Decreased trips with increased use of teleconferencing. Appeals referees hold hearings by teleconference whenever possible. This measure reduces attorney travel significantly. The other party in the litigation can participate in the hearings at a local Kinkos store, reducing their need to travel far from their base location.
- Decreased travel with increased use of web-based training. A web-based training tool, RRB Vision, enables employees to receive training at their home office, which uses their time effectively and reduces the environmental impacts of traveling to a training site.

III. Greenhouse Gas Reduction Goals

As requested by Executive Order (EO) 13514, the RRB submitted the Scope 1 and 2 GHG reduction targets to the Office of the Environmental Executive on December 23, 2009. These targets were derived using the Development of Agency Reduction Targets (DART) tool. The RRB developed a total emissions baseline for Scope 1 and 2 GHG in FY 2008 of 3,940 metric tons (MT) of carbon dioxide equivalent (CO₂e). The agency's planned FY 2020 percentage reduction target from the current FY 2008 baseline is 27.2 %. RRB had a total emissions baseline for Scope 3 GHG emissions of 570 MTCO₂e. The agency's planned FY2020 percentage reduction target from the current FY 2008 baseline is 6.2%.

The overall plan for achieving GHG reduction goals depends on the following actions.

- Identifying and implementing energy-savings measures and technologies at the headquarters building
- Increasing the percent of purchased electricity generated from renewable energy sources at the headquarters building
- Expanding RRB's work-at-home program, when possible
- Increasing teleconferencing thereby reducing business travel
- Increasing electronic services and reducing 700,000 beneficiaries' need to travel to financial institutions and field offices.

IV. Plan Implementation

a. Internal Coordination and Communication

The Director of Administration/Senior Executive Officer, who is stationed at the RRB Chicago headquarters, serves as the Senior Sustainability Officer (SSO) for RRB. The SSO is responsible for administering RRB's initiatives described in this Strategic Sustainability Performance Plan (SSPP) and ensuring that all aspects of EO 13514 and other applicable executive orders and statutes are effectively implemented.

The Facility Manager is assigned the responsibility for carrying out building and operations- and maintenance-related measures. The Chief Information Officer will assist in implementing information technology-related measures. The Chief of Acquisition Management will engage in

implementing acquisition-related measures. Electronics disposal-related measures are the purview of the Communications and Property Manager.

b. Coordination and Dissemination of the Plan to the Field

The RRB will distribute the plan to all field offices as well as the headquarters facility by posting the plan on the agency intranet web site.

c. Leadership and Accountability

Presently, the SSO and the Facility Manager must meet performance standards that require the successful implementation of provisions of EO 13514. The successful implementation of this plan directly impacts their performance evaluations.

d. Agency Policy and Planning Integration

The RRB has issued plan and policy documents that relate to sustainability. These are described in the following paragraphs. Of these documents, Administrative Circular OA-14 and Basic Board Order (B.B.O.) 5 will be updated to reflect the requirements of EO 13514. The other policies sufficiently address the requirements of this EO.

Administrative Circular RRB-1 Energy Conservation (December 4, 2007)

Administrative Circular RRB-1 describes the agency's responsibilities for ensuring that appropriate efforts are made to conserve energy at the RRB headquarters building and field offices. The circular also addresses awareness of energy conservation among employees and policies and procedures for motor vehicle fuel conservation.

Administrative Circular OA-14 Procurement of Goods and Services (October 1, 2009)

Administrative Circular OA-14 summarizes the RRB's processes, procedures, and requirements for requesting and completing the procurement of goods or services. The requirements include provisions for giving favorable consideration to environmentally sound practices and environmentally friendly products as an evaluation factor in the procurement of goods or services.

Administrative Circular IRM-17 Headquarters Printing Policy (February 16, 2010)

Administrative Circular OA-14 addresses the economically efficient and environmentally sound use of printers and printing consumables by the RRB headquarters.

B.B.O. 5 – Procurement, Property, Supplies, and Service (July 9, 2008)

This policy addresses contracting with private sources for procurement of supplies and services. Section 2 incorporates an energy conservation program that is applicable to headquarters and the field offices. The program is intended to bring about reductions in the use of energy in all RRB operations, particularly in the areas of heating, ventilation, air conditioning, lighting, and motor vehicle fuel consumption.

Administrative Circular BSS-2 Tracking, Maintenance, and Disposal of Agency Accountable Property (June 5, 2003)

Administrative Circular BSS-2 describes the agency's use of the Computers for Learning program to dispose of surplus or excess computer equipment.

e. Agency Budget Integration

This section addresses GHG and energy consumption-reducing projects for the headquarters building. As mentioned above the balance of the RRB operations are conducted at 55 field offices, over which GSA or another lessor has operational control.

For the RRB headquarters building, the RRB allocates funds annually from the operations and maintenance budget for energy savings projects and does not directly receive funds for implementing capital improvements. Many of the energy savings projects implemented with the operations and maintenance budget tie into the agency SSPP because they improve the efficiency of building systems and reduce water and energy consumption.

The RRB will integrate this SSPP into its planning of the building operations and maintenance budget. The implementation measures described in the SSPP will be prioritized along with other necessary projects in terms of their return on investment (ROI), taking into account environmental and social factors on a qualitative basis in addition to standard economic factors.

The RRB will work with GSA to implement capital projects that are discussed in the SSPP. Capital projects are identified and selected per the following process. First, a Building Evaluation Report is generated through a top-to-bottom review of the building. A Prospectus Development Study follows in which individual projects are examined in greater detail and the life cycle cost is considered. Finally, projects are submitted to GSA portfolio management staff in Region 5 (Chicago). Prospectus projects must be selected and receive funding from Congress to proceed. RRB will work with GSA to guide capital projects through this process but their implementation is dependent upon selection by GSA Headquarters personnel and upon Congressional funding.

f. Methods for Evaluation of Progress

The RRB will use this SSPP as an environmental management system (EMS) to meet the EMS requirement in EO 13423. At the close of each fiscal year, RRB will assess whether the implementation measures described in that year's plan have been implemented. RRB will quantify the environmental improvements (e.g., reduced energy consumption, non-hazardous waste diverted from landfill) and ensure that targets specified in the SSPP tables are met. In the event that the target is not met, RRB will evaluate measures for the upcoming fiscal year that can move the agency to the planned target. In the event that it is not feasible to carry out an implementation measure, the agency will include a discussion in the annual update of the plan of barriers that arose and how implementation measures in the coming year will allow the agency to reach its SSPP targets.

Table 1: Critical Planning Coordination

Originating Report / Plan	Scope 1 & 2 GHG Reduction	Scope 3 GHG Reduction	Develop and Maintain Agency Comprehensive GHG Inventory	High-Performance Sustainable Design / Green Buildings	Regional and Local Planning	Water Use Efficiency and Management	Pollution Prevention and Waste Elimination	Sustainable Acquisition	Electronic Stewardship and Data Centers	Agency Specific Innovation
GPRR Strategic Plan (3-yr)	n/a	yes ¹	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a
IT Capital Plan	n/a	n/a	n/a	n/a	n/a	n/a	yes	n/a	yes	n/a
Annual Energy Data Report	yes	yes	n/a	yes	n/a	yes	n/a	yes	yes	n/a
EISA Section 432 Facility Evaluations/Project Reporting	yes	yes	n/a	n/a	n/a	yes	n/a	n/a	n/a	n/a
Budget	yes	yes	n/a	n/a	n/a	n/a	n/a	n/a	yes	n/a
Asset Management Plan / 3 Year Timeline	n/a	n/a	n/a	n/a	n/a	n/a	yes	n/a	n/a	n/a
Circular A-11 Exhibit 53s	yes	yes	n/a	n/a	n/a	n/a	n/a	n/a	yes	n/a
OMB Scorecards ²	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a
Data Center Consolidation Plan	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a
Green Purchasing Plan	n/a	n/a	n/a	n/a	n/a	n/a	n/a	no ³	yes	n/a

1. Per performance goals 1.B and 2.B in the GPRR Strategic Plan

2. OMB does not include RRB in its scorecard.

3. RRB's green purchasing plan addresses some aspects of sustainable acquisition but RRB will update it. See Goal 8 discussion.

V. Evaluating Return on Investment

This section describes the quantitative techniques RRB uses to evaluate the economic life cycle cost of projects and the qualitative means it uses to consider additional impacts (social, environmental, mission-specific) of projects. In FY2010, RRB will develop a checklist of social, environmental, and mission-specific criteria that will formalize the integration of these factors into a ROI evaluation for building-related projects.

a. Economic Lifecycle Cost / Return on Investment

The agency utilizes life cycle cost analysis techniques to select projects that will reduce electricity and water consumption and encourage waste reduction. Often, this analysis is coordinated with GSA, the agency that is responsible for the implementation of all projects exceeding \$50,000 per the current delegation of authority agreement.

RRB selects energy conservation projects below \$50,000 with the use of tools such as simple payback analysis and a building energy simulation modeling program provided by the Department of Energy (DOE) Federal Energy Management Program (FEMP). Other sustainability projects are evaluated on a cost-effectiveness basis as appropriate.

RRB will use life cycle cost analysis to identify and select energy consumption-reducing construction projects following a detailed GSA-funded energy audit planned for FY 2010. The life cycle cost analyses will be based on advanced building energy simulation modeling.

b. Social Costs and Benefits

To better serve its employees and customers, RRB also qualitatively considers social costs and benefits when implementing building projects that enhance sustainability. RRB will review checklists of qualitative criteria to optimize the inclusion of social costs and benefits in ROI considerations for building-related projects.

c. Environmental Costs and Benefits

RRB qualitatively considers the costs and benefits to the environment when it implements sustainability projects, both building alterations and mission-specific. For example, RRB recognizes that its digital documentation process yields environmental benefits from reduction of trips to the archives even though the GHG emissions reductions from these reduced trips were not factored quantitatively into the decision to implement this measure.

Further, per EO 13423 and other statutory requirements, RRB gives priority to projects that will reduce GHG emissions through reduction of energy intensity, reduction of water consumption, enhancement of the cost effectiveness and efficiency of waste prevention and recycling programs, enhancement of solid waste diversion, and reduction of the use of toxic chemicals. Going forward, RRB will review checklists of qualitative criteria to optimize the inclusion of environmental costs and benefits in ROI considerations for building-related projects.

d. Mission-Specific Costs and Benefits

RRB qualitatively considers how sustainability projects will impact its mission and how sustainability is incorporated into measures that traditionally would be viewed as solely mission-specific. For example, building improvements create a more comfortable work environment that enhances productivity. Measures such as enabling new employees to use web-based RRB Vision as a training tool are implemented to assist the agency in using the time of its new employees more effectively in addition to reducing travel costs. This increases the sustainability of the agency through reduced environmental impacts associated with travel. RRB Vision also reduces travel costs and increases the efficiency of RRB workers. Going forward, RRB will review checklists of qualitative criteria to optimize the inclusion of mission-specific costs and benefits in ROI considerations for building-related projects.

e. Operations and Maintenance and Deferred Investments

Deferred operations and maintenance projects are prioritized on a life cycle cost basis and per RRB's commitments under executive order and statutory requirements. ROI calculation methods, employed for select projects, are described in Section a above. Ensuring operations and maintenance projects are cost effective, using RRB internal labor whenever possible, for example, helps RRB implement deferred maintenance projects.

f. Climate Change Risk and Vulnerability

The agency's primary vulnerability to climate change lies in the heating and cooling of its headquarters building. More extreme temperatures will cause the energy intensity of maintaining building temperatures to increase. To mitigate this risk, RRB strives to implement energy-efficient heating and cooling technologies and to work with GSA to include these projects in prospectus development as described in Section 1, Subsection IV.a.

VI. Transparency

RRB will submit an updated SSPP annually to the Office of Management and Budget (OMB) and will post it on its website. Further, RRB will alert its employees to sustainability goals and implementation measures via an internal publication *All Aboard*.

Section 2: Performance Review and Annual Update

I. Summary of Accomplishments

RRB has a history of actively pursuing projects that will reduce energy and water consumption in its headquarters building, which was built in 1922 and is owned by the GSA but operated by RRB under delegation authority. RRB also pursues mission-related projects that enhance the agency's sustainability. The following is a summary of recently completed or ongoing projects that align with the agency's goal to become more sustainable.

- In FY 2010 a freight elevator modernization project was completed that included the installation of new elevator equipment and new microprocessor-based controls. The outcomes of this project are increased freight elevator reliability and efficiency.
- This fiscal year the RRB will continue to purchase renewable energy through a GSA Region 5 electric contract. This contract stipulates that 5% of purchased power is generated from renewable energy.
- In FY 2008, the RRB facility boiler plant was upgraded through the installation of new tubes and burner assemblies in the existing boilers along with a new microprocessor-based draft control system for the existing boiler plant.
- RRB has an ongoing program to conserve water in which RRB is replacing 3 gallon-per-flush toilets with 1.25 gallon-per-flush toilets and automatic flush valves.
- RRB actively implements an Affirmative Procurement program.
- For the past two fiscal years, RRB has worked through GSA's Computers for Learning program to donate unneeded computers.

II. Goal Performance Review

RRB is unique in two key ways that impact the goals discussed in this section. First, RRB operates its headquarters building under delegation authority from GSA as previously described.

Second, RRB will not enter into any energy service performance contract (ESPC) or other alternative investments unless authorized by GSA. The comparatively small size of potential contracts available to RRB because of the delegation of authority agreement with GSA, make ESPCs unavailable for procurement by RRB. Therefore alternative financing agreements are not included in the following discussion.

RRB does not address field office operations except for in Goal 2, Scope 3 GHG emissions which are impacted by field office employee travel. RRB will work in concert with GSA to implement aspects of GSA's SSPP that impact RRB field offices. Additionally, RRB will continue to modify business practices to increase efficiency and customer service while reducing GHG emissions from its field office operations.

GOAL 1: Scope 1 and 2 Greenhouse Gas (GHG) Reduction

Scope 1 GHG emissions are generated from equipment or operations within the RRB organizational boundary, either through fugitive or combustion sources. Scope 1 emissions result from natural gas-fired boilers that make low-pressure steam. Some of this steam is sold to commercial building tenants. Scope 2 GHG emissions are indirect emissions and include those associated with the consumption of purchased or acquired electricity, steam, heating, or cooling. The only Scope 2 emissions applicable to RRB is the purchase of electricity.

RRB has no reportable fleet vehicles and therefore implementation measures to reduce vehicle emissions are not discussed in this plan. RRB field employees do use their own or rental vehicles, however, as reviewed in the discussion of Goal 2.

1.a. Goal Description

As requested by EO 13514, RRB submitted the Scope 1 and 2 GHG reduction targets on December 23, 2009. Agency reduction targets were derived using the DART tool. RRB had a total emissions baseline for Scope 1 and 2 GHG in FY 2008 of 3,940 mtCO₂e for headquarters operations. The agency's planned FY 2020 percentage reduction target from the current FY 2008 baseline is 27.2 %.

RRB has set the following Scope 1 and 2 emission reduction goals:

- Reduce energy intensity in its headquarters facility by 30% by 2015.
- Continue purchase of renewable energy through a GSA Region 5 electric contract. This contract stipulates that 5% of purchased power is generated from renewable energy. RRB will increase its portion of electricity purchased from renewable energy sources to 7 ½ % in FY 2013.

1.b. Agency Lead for Goal

The SSO has oversight responsibility in meeting this RRB goal. The Facility Manager is assigned the responsibility for implementing measures for this goal.

1.c. Implementation Methods

RRB plans to reduce energy intensity in its headquarters facility by implementing various energy conservation measures (ECM). RRB anticipates that ECMs will be identified through an FY 2010 GSA-funded detailed energy audit that will focus on operations and maintenance practices. Based upon audit results, RRB will work with GSA to select ECMs for upcoming years that will enable RRB to meet its target reductions in Goal 1.

For FY 2010, GSA has awarded a project utilizing ARRA funds to completely renovate the first floor lobby of the William Lipinski Federal Building (RRB headquarters facility). This lobby upgrade will include all new entrances, doors, ceilings, wall treatments, floor treatments, lighting, heating, ventilation and other state-of-the art equipment. This project will incorporate a new energy efficient lighting control system as well as replace lighting in the main lobby and all the elevator lobbies throughout the facility.

In FY 2010, the RRB will continue to purchase renewable energy through a GSA Region 5 electric contract. This contract stipulates that 5% of purchased power is generated from renewable energy RRB will increase its portion of electricity purchased from renewable energy sources to 7 ½ % in FY 2013.

In FY 2010, RRB is piloting the replacement of T12 task lights at work stations with alternative energy efficient lighting.

RRB works with GSA to develop a five-year plan for building improvements that include energy efficiency projects, the completion of which will move RRB towards achieving its Goal 1 targets. The projects in the five-year plan are not guaranteed to occur but must go through a funding review process. The current five-year plan includes the following projects.

- Improve hot water circulation in building to reduce the time water must run to become hot (FY 2010 and FY 2011)
- Upgrade loading dock facilities including installing air curtains that will isolate the dock from the remainder of the building, high-efficiency dock doors, energy-efficient dock lighting, and a door brake to the side door (FY 2012)
- Convert stairwell lights to LED (FY 2015)

The following projects are in the planning stages and must undergo the process described in Section I, Subsection IV.e before they are implemented.

- Replacing HVAC
- Ceiling lighting replacement
- Upper floor lobby renovations that will incorporate energy efficient lighting
- Upgrades of electrical components including installing new switchgear and transformers and an emergency power source
- Replacing and/or retrofitting windows

RRB has also proposed the following energy efficiency projects to GSA. Estimated costs are provided when available. The schedule for these projects is unknown.

- Installation of a new digital lighting control system along with new energy efficient lighting in all lobby areas throughout the facility. This will include new occupancy sensors in all public restrooms and private offices throughout the facility as well.
- Replacing air conditioning units in the data center with more energy efficient direct digital controls, providing upgraded control sequences, and tying into the existing building automation system.

- Converting system from constant-volume to variable air volume for floors 2 and 12 and the basement. This project was recommended during a building energy audit by Architectural Energy Corp. for FEMP on Nov. 19, 2002.
- Upgrading building automation controls for the air conditioning units serving the 13th floor elevator machine room, which currently do not have proper control and are not tied in to the existing building automation system.
- Removing and replacing packaged air conditioning units. Replacing water-cooled packaged units with new HVAC units and interface controls with existing building automation system.
- Installing a new energy management tracking and control system to track and monitor, at a minimum, existing electrical meters and the HVAC system.
- Providing air curtains in both the Rush Street and Pearson Street vestibule areas.
- Replacing existing windows, which are not air-tight.
- Converting steam radiator perimeter heat to a hot water perimeter heating system.
- Replacing all air handling units (AHU) and ductwork within the facility and converting it to a complete variable air volume (VAV) system. The work includes but is not limited to demolition of units, asbestos abatement, removal of return fans and exhaust fans, and sound attenuation. Installing new VAV boxes, grilles, registers, diffusers, duct work, duct insulation, concrete pads, variable speed drives, and AHUs. This ECM was suggested by Architectural Energy Corp. in the 2002 energy audit.

1.d. Positions

The Facility Manager with the oversight of the SSO will carry out the implementation measures for this goal. No new full-time equivalent (FTE) will be requested nor will FTE be diverted from other tasks.

1.e. Planning Table

	SCOPE 1 & 2 GHG TARGET	Unit	FY 10	FY 2011	FY 2012	FY 2013	FY 2014	FY 2015	FY 2016	....	FY 2020
Buildings	Energy Intensity Reduction Goals (BTU/SF reduced from FY03 base year)	%	15%	18%	21%	24%	27%	30%	hold	....	hold
	Planned Energy Intensity Reduction (BTU/SF reduced from FY03 base year)	%	6%	10%	13%	15%	18%	30%	hold	....	Hold
	Renewable Electricity Goals (Percent of electricity from renewable sources)	%	5%	5%	5%	7.5%	hold	hold	hold	hold	hold
	Planned Renewable Electricity Use (Percent of electricity from renewable sources)	%	5%	5%	5%	7.5%	hold	hold	hold	hold	Hold
	Scope 1 & 2 - Reduction Target (reduced from FY08 base year)	%	10%	13%	16%	hold	hold	20%	25%	...	27.2%

1.f. Agency Status

RRB continually seeks out projects that will lower energy consumption during building operation. From FY 2003 to FY 2009, energy consumption has decreased from 103,877 Btu/gross square foot to 98,278 Btu/gross square foot. The following two projects are provided as examples of recent accomplishments.

- In FY 2010 a freight elevator modernization project was completed at a cost of 900,000. The project included the installation of new elevator equipment and new microprocessor-based controls. The outcomes of this project are increased freight elevator reliability and efficiency.
- In FY 2009, new high-efficiency motors and variable frequency drives were procured for the four existing cooling tower fans.

This fiscal year, GSA will conduct a building audit to identify the most promising energy efficiency projects to implement in the upcoming years. Additionally, the lobby renovation project described in Section 2, Subsection 1.c. will be completed.

GOAL 2: Scope 3 Greenhouse Gas Reduction

2.a. Goal Description – Scope 3 GHG Reduction

The Railroad Retirement Board (RRB) used the Scope 3 emissions calculation tool provided by the Office of the Federal Environmental Executive (OFEE) to determine its Scope 3 emissions in the following six categories. After each category name, RRB identifies the percent reduction target for that category in parentheses. The overall reduction target for Scope 3 GHG emissions is 6.1%.

- Transmission and Distribution (T&D) Losses from Purchased Energy (2.5%)
- Contracted Solid Waste Disposal (14%)
- Contracted Wastewater Treatment (5%)
- Business Air Travel (5%)
- Business Ground Travel (5%)
- Federal Employee Commuting (n/a)

Calculation of GHG emissions from each of these categories are provided in the Scope 3 GHG tool. Further, RRB has provided a document outlining the data and assumptions that underpin GHG emissions estimates for Scope 3 and the establishment of reduction targets for each category.

2.b. Agency Lead for Goal

The SSO has oversight responsibility in meeting this RRB goal. The Facility Manager is assigned the responsibility for implementing measures for this goal.

2.c. Implementation Methods

Federal employee travel

Scope 3 emissions in this sub-target stem from business air and ground travel and employee commuting. Total GHG emissions from business air and ground travel in base FY 2008 are 271 mtCO₂e, excluding emissions from employee commuting which have not yet been estimated. To obtain reliable data on the modes of transportation employees use and the distances traveled, RRB will conduct a commuter survey with the tool to be released by the Council on Environmental Quality (CEQ). It is expected that this survey will occur in FY 2010.

RRB is implementing several measures to reduce GHG emissions from business travel. First, RRB plans to increase videoconferencing beyond the current application of this technology in which Hearings and Appeals attorneys hold hearings via videoconferencing. Second, the agency has developed a video training web site called RRB Vision. This training web site allows agency personnel to obtain training without having to travel. RRB will use this tool when possible to reduce training-related travel.

Additionally, RRB implements several measures that reduce GHG emissions from employee commuting. First, RRB has an active work-at-home program that may be expanded when possible. Second, the agency participates in a transit voucher program that provides employees pre-tax savings for utilizing mass transit to commute to work. This program could be

expanded in the future to provide for additional transit reimbursement if funding is available. Finally, agency policy currently allows alternative work schedules.

Further, a 5% reduction in RRB employees by 2020 will reduce the amount of federal employee travel and commuting.

RRB has established a reduction target goal of 5% for this emissions category. When the commuter survey is completed, RRB will revisit this goal and adjust it as necessary.

Contracted waste disposal

Scope 3 emissions in this sub-target stem from contracted solid waste disposal and wastewater treatment. Total GHG emissions from this category in base FY 2008 are 126 mtCO₂e. The overall reduction target for waste disposal activities is 13.5%.

RRB is implementing several measures to reduce GHG emissions from contracted waste disposal. To reduce the amount of waste landfilled, the agency is presently evaluating increasing the amount of paper recycled at the Lipinski building by providing individual recycling containers at each employee's desk. Employees would carry the paper in these containers to centralized paper recycling receptacles on every floor of the facility.

To reduce the volume of wastewater requiring treatment, RRB is taking steps to reduce water consumption at the Lipinski building, installing low-flush toilets and undertaking a building audit that will identify further water conservation measures. Decreasing water usage will reduce GHG emissions from wastewater treatment as will the anticipated 5% reduction in RRB employees by 2020.

Transmission and Distribution (T&D) losses from purchased energy

Total GHG emissions in base FY 2008 and reduction target for this category are 173 mtCO₂e and 2.5%, respectively.

To meet its reduction target in this category, the agency plans to increase its purchase of renewable energy from off-site sources from 5% of purchased electricity in FY 2008 to 7.5% by FY 2013. Energy efficiency measures described elsewhere in this plan, for example in Goals 1 and 9, will also serve to move RRB towards its 2.5% reduction target.

Other, as defined by RRB

RRB does not include other Scope 3 GHG emissions in its SSPP.

Planned agency activity or policy implementation to improve data accuracy and/or collection and analysis methods

To improve its estimate of GHG emissions from employee commuting, RRB will conduct a commuter survey with a tool to be released by the Council on Environmental Quality (CEQ) likely in FY 2010.

Further, RRB will work with its waste hauler contractor in FY 2010 to consider possibilities for improving the estimate of the fraction of total RRB-generated waste removed from the building. As described in the memo regarding Scope 3 GHG calculations that accompanies this SSPP, calculation of Scope 3 GHG emissions from contracted waste disposal are directly proportional

to the amount of waste landfilled. Therefore, improving the estimate of the fraction of waste attributable to RRB will improve the accuracy of the estimated GHG emissions from contracted waste disposal.

2.d. Positions

The Facility Manager with the oversight of the SSO will carry out the implementation measures for this goal. No new full-time equivalent (FTE) will be requested nor will FTE be diverted from other tasks.

2.e. Planning Table

SCOPE 3 GHG TARGET	Units	FY 10	FY 11	FY 12	FY 13	FY 14	....	FY 20
Overall Agency Scope 3 Reduction Target (reduced from FY08 base year)	%	0.8%	1.4%	2.4%	3.5%	4.2%		6.1%
Sub-Target for Federal Employee Travel	%	0%	1%	...	2%	2.5%	....	5%
Sub-Target for Contracted Waste Disposal ¹	%	3%	...	6%	8%	10%	....	13.5%
Sub-Target for Transmission and Distribution Losses from Purchased Energy	%	0.5%	1%	2%	2.5%	hold...	....	2.5%
Other, as defined by agency	%	n/a	n/a	n/a	n/a	n/a	....	n/a

1. This sub-target includes contracted waste disposal and wastewater treatment.

2.f. Agency Status

RRB employs a number of strategies to minimize Scope 3 GHG emissions including operating a headquarters without parking facilities located in an urban area serviced by a strong public transportation network. RRB also implements a work-at-home program, provides pre-tax savings for commuting via mass transit, taps videoconferencing technology, and employs web-based employee training.

GOAL 3: Develop and Maintain Agency Comprehensive Greenhouse Gas Inventory

3.a. Goal Description

RRB relied on utility records (electricity, natural gas) and the DART tool to determine Scope 1 and Scope 2 GHG emissions for FY 2008. RRB used the tool provided by the OFEE as described in the discussion of Goal 2 to estimate FY 2008 Scope 3 emissions. In FY 2010, RRB aims to improve its estimates of FY 2008 Scope 3 GHG emissions through the implementation methods discussed in 3.c. RRB will also develop a GHG inventory for FY 2010 by January 31, 2011. At this time, RRB does not plan to voluntarily add emission categories to its analysis of Scope 3 emissions.

3.b. Agency Lead for Goal

The SSO has oversight responsibility in meeting this RRB goal. The Facility Manager is assigned the responsibility for implementing this goal.

3.c. Implementation Methods

By January 31, 2011 RRB will use the DOE-developed GHG Reporting Portal to report its GHG emissions for both the baseline year (FY 2008) and FY 2010. This Portal is described in draft Federal Greenhouse Gas Accounting and Reporting Guidance dated May 19, 2010.

The baseline year inventory will use utilities data identical to that reported in the DART tool to generate Scope 1 and 2 emissions. It will use data identical to that reported in the OFEE Scope 3 tool to serve as the basis for Scope 3 emissions.

For the FY 2010 inventory, Scope 1 and 2 emissions will be developed from utility records (electricity purchased, natural gas consumed). Scope 3 emissions for the following categories will be reported.

- Federal employee business air travel
- Federal employee business ground travel
- Federal employee commuting
- Contracted solid waste disposal
- Contracted wastewater treatment
- Transmission and distribution losses associated with purchased electricity

The agency will improve its Scope 3 emissions estimates as calculated with the Scope 3 tool through the following implementation measures planned for FY 2010.

- RRB will improve its estimate of commuter-generated GHG emissions. RRB employees travel to the headquarters location by many methods, including commuter rail, public transportation (subway, bus), bike, and by foot. RRB will conduct a commuter survey.
- Solid waste from RRB is mixed with commercial waste from first-floor restaurants. RRB will work with its waste hauler contractor in FY 2010 to consider possibilities to improve

the estimate of the fraction of total waste removed from the building that is RRB-generated.

RRB will use its GHG inventory to prioritize projects that will move the agency closer towards its targets for Goals 1 and 2.

3.d. Positions

The facility manager with the oversight of the SSO will carry out the implementation measures for this goal. No new FTE will be requested nor will FTE be diverted from other tasks.

3.e. Agency Status

RRB successfully estimated its baseline (FY 2008) Scope 1, 2, and 3 emissions for this SSPP. RRB will implement the measures described in Section 3.c. above to refine its baseline inventory and to develop an inventory for FY 2010.

GOAL 4: High-Performance Sustainable Design/Green Buildings

4.a Goal Description

The RRB has operational control over the William Lipinski Federal Building at 844 N. Rush Street. RRB also has 55 field offices in federal or leased buildings over which GSA or another lessor has operational control. Field offices are not addressed in RRB's SSPP. RRB will work with GSA to implement GSA's SSPP as appropriate to meet the objectives of EO 13514 at those facilities. The following sub-targets fall under Goal 4.

Sub-target a) - Beginning in FY 2020, all new Federal buildings are designed to achieve zero-net energy by FY 2030.

Sub-target b) - All new construction, major renovation or repair and alteration of federal buildings complies with "Guiding Principles for Federal Leadership in High Performance and Sustainable Buildings (Guiding Principles)."

Sub-target c) – RRB's headquarters building meet guiding principles by FY 2015.

Sub-target d) - Demonstrate annual progress toward 100% conformance with Guiding Principles for RRB headquarters.

Sub-target e) - Demonstrate use of cost-effective, innovative building strategies to minimize energy, water and materials consumption.

Sub-target f) - Manage existing building systems to reduce energy, water and materials consumption in a manner that achieves a net reduction in agency deferred maintenance costs.

Sub-target g) - Optimize performance of the agency's real property portfolio – examine opportunities to decrease environmental impact through consolidation, reuse and disposal of existing assets prior to adding new assets.

Sub-target h) - Ensure use of best practices and technology in rehabilitation of historic Federal properties.

4.b. Agency Lead for the Goal

The SSO has oversight responsibility in meeting this RRB goal. The Facility Manager is designated the responsibility to carry the implementation measures for this goal.

4.c. Implementation Methods

Sub-target a) - Beginning in FY 2020, all new Federal buildings are designed to achieve zero-net energy by FY 2030.

This sub-target is not applicable to RRB because it will not occupy or construct any new Federal buildings in FY 2010.

Sub-target b) - Ensure that all new construction, major renovation, or repair and alteration of Federal buildings comply with the Guiding Principles.

GSA implements major renovations in the RRB headquarters building and follows the guiding principles in carrying out these projects. For example, GSA calculates baseline energy consumption prior to renovation with American Society of Heating, Refrigerating and Air-Conditioning Engineers (ASHRAE) methods and then sets a goal of improving that baseline energy consumption by 30%.

Sub-target c and d) - Ensure RRB's headquarters building meets the Guiding Principles by FY 2015 and that the agency makes annual progress toward 100% conformance with the Guiding Principles for its building inventory.

As renovations are completed at the headquarters building, RRB will move annually towards operating a facility that is 100% in conformance with the Guiding Principles.

Sub-target e) - Demonstrate use of cost-effective, innovative building strategies to minimize energy, water, and materials consumption.

RRB continually pursues the use of cost-effective, innovative building strategies to reduce energy, water, and materials consumption at its headquarters facility, the only building over which the agency has operational control. Examples of building management strategies are provided in the discussion of Goals 1, 6, and 7.

Sub-target f) - Manage existing building systems to reduce the consumption of energy, water, and materials, and identify alternatives to renovation that reduce existing assets' deferred maintenance costs.

RRB upgrades building systems with the intent of reducing existing assets' deferred maintenance costs. For example, the retrofit of the cooling tower fans with variable frequency drives will reduce maintenance costs on these fans because the retrofit translates into less wear and tear on the fans due to soft starts. Similarly, the air conditioning upgrade that will occur during the lobby renovation will entail using soft starts and will tie the air conditioning system in with the building automation system to optimize air conditioner operation, thereby reducing total run time and maintenance costs.

Sub-target g) - When adding assets to the agency's real property inventory, identify opportunities to consolidate and dispose of existing assets, optimize the performance of the agency's real-property portfolio, and reduce associated environmental impacts.

This sub-target is not applicable to RRB because it operates only one building and will not consolidate those operations or dispose of assets.

Sub-target h) - Best practices and technology in rehabilitation of historic Federal properties.

There are various ways historic preservation practices are used to support RRB's sustainability goals. The lobby renovation project on the first floor is designed to retain some of the original materials that, if removed, would be sent to a landfill. The original marble floors are being reused and incorporated into the new design. The marble wainscoting on the walls is to be retained. Some of this will be exposed as part of the new design; other portions will be covered over. In all cases, the original fabric would be saved. Light fixtures for the lobby will appear appropriate to the period of the building but will be energy efficient and utilize state of the art controls that allow for dimming, daylight harvest, and other energy saving measures. The

existing entries to the building are not original. Although the new entries will not restore the doors to their original location or configuration, efforts were made to design a new door configuration that would have been appropriate to the period as well as providing a vestibule that reduces waste in heating and cooling.

RRB building management is working to establish building standards for the elevator lobbies and other public areas on the upper floors. Most of the original marble wainscoting on these floors is intact and will be saved in any future renovations thus reducing waste sent to landfill. Similarly, existing original wood doors in the upper lobby areas will remain. New doors will be made to match the existing doors. The future lighting will appear appropriate to the period but be energy efficient and have state of the art controls that allow for further energy savings.

4.d. Positions

The Facility Manager with the oversight of the SSO will carry out the implementation measures for this goal. No new FTE will be requested nor will FTE be diverted from other tasks.

4.e. Planning Table

SUSTAINABLE HIGH PERFORMANCE BUILDINGS (Buildings Meeting Guiding Principles)	Units	FY 10	FY 11	FY 12	FY 13	FY 14	FY 15
Leased Facilities Targets ¹	%	NA	NA	NA	NA	NA	NA

1. RRB does not own any facilities and operates one building under GSA delegation. RRB will work with GSA to implement the measures under this goal.

4.f. Agency Status

RRB continues to work with GSA to implement renovation projects that move the headquarters building closer to 100% compliance with the Guiding Principles. In the discussion of Goals 1 and 6 RRB provides examples of projects planned for this fiscal year that enhance the sustainability of the William Lipinski Federal Building.

GOAL 5: Regional and Local Planning

5.a. Goal Description

RRB's headquarters facility, which does not include parking facilities, is located in downtown Chicago and is served by a strong network of public transportation. Employees who live in the suburbs generally take commuter rail into the city and then walk or take public transit to the facility. Other employees may live close enough to bike or walk to work.

RRB is not currently involved in planning activities for Chicago as public transit service around the headquarters building and other factors that would impact employee commuting are unlikely to change. RRB does not foresee participating in regional transportation or energy planning and does not plan to construct or occupy new or expanded Federal facilities.

For these reasons, RRB's SSPP does not address Goal 5.

GOAL 6: Water Use Efficiency and Management

6.a. Goal Description

This goal is a directive under the EO 13514 to advance water use efficiency and management. The following are the four sub-targets identified in the EO for this goal:

Sub-target a) - Reduce potable water use intensity by at least 26% by FY 2020.

Sub-target b) - Reduce industrial, landscaping, and agricultural water use by at least 20% by FY 2020.

Sub-target c) - Identify and implement water reuse strategies.

Sub-target d) - Achieve objectives established by EPA in Stormwater Guidance for Federal Facilities.

6.b. Agency Lead for Goal

The SSO has oversight responsibility in meeting Goal 6 for the RRB. The Facility Manager is assigned the responsibility for implementing this goal.

6.c. Implementation Methods

Sub-target a) - Reduce potable water consumption by 2% per year from FY 2008 through FY 2020 (total 26% reduction) with base starting year of FY 2007.

RRB takes a holistic approach to water management in its headquarters building and has planned several initiatives for 2010 that will reduce water consumption.

In FY 2010 the RRB will replace 24 three gallon-per-flush with 1.25 gallon-per-flush toilets and automatic flush valves throughout the facility.

RRB also proposed to GSA removing and replacing several packaged air conditioning units. Water-cooled packaged units would be replaced with new, energy- and water-efficient HVAC units.

The energy audit to be conducted in FY 2010 (see Goal 1) will include a review of water efficiency measures that RRB could implement.

Sub-target b) - Reduce industrial, landscaping, and agricultural water use by at least 20% by FY 2020.

This subtarget is not addressed in Section 6.c. because it is not applicable to RRB, which does not use water for industrial, landscaping, or agricultural purposes.

Sub-target c) - Identify and implement water reuse strategies.

RRB has limited opportunities to reuse water at its headquarters facility. The agency proposed a rooftop rainwater capture and harvesting system to GSA in which the captured rainwater would be treated with chlorine and used to flush toilets and urinals. This system would require installation of a new piping system. This project is under consideration but has no target implementation date.

Sub-target d) - Achieve objectives established by EPA in Stormwater Guidance for Federal Facilities.

If the agency, in partnership with the owner of the headquarters building, GSA, undertakes a redevelopment project of the headquarters building that would impact the ability of the facility to manage or improve stormwater management, RRB would encourage GSA to implement the measures described in the technical guidance document to the maximum extent technically feasible.

RRB has requested a rainwater harvesting project, as described in the discussion of sub-target c.

6.d. Positions

The Facility Manager with the oversight of the SSO will carry out the implementation measures for this goal. No new FTE will be requested nor will FTE be diverted from other tasks.

6.e. Planning Table

WATER USE EFFICIENCY & MGMT	Units	FY 10	FY 11	FY 12	FY 13	FY 14	FY 15	....	FY 20
Potable Water Reduction Targets (gal/SF reduced from FY 2007 base year)	%	6%	8%	10%	12%	14%	16%	....	26%
Planned Potable Water Reduction (gal/SF reduced from FY 2007 base year)	%	16	18	20	...	22	24	...	26%

6.f. Agency Status

RRB has decreased water consumption from 16.1 gallons/gross square foot in FY 2007 to 13.7 gallons/gross square foot in FY 2009. Several recent initiatives, described below, continue to decrease water consumption at the headquarters building.

- In all the bathroom and lavatories in the headquarters building, the sinks and urinals have automatic faucets and flush valves with reduced consumption type diaphragms.
- In FY 2009, RRB completed replacement of 3 gallon-per-flush toilets with 1.25 gallon-per-flush toilets and automatic flush valves on three floors. In addition, the RRB purchased 24 additional low flush toilets and automatic flush valves. Installation of these additional toilets and automatic flush valves is planned for FY 2010.
- RRB completed the installation of additional small re-circulating pumps in various bathrooms in FY 2009 to reduce the run time of faucets before sufficiently hot water is delivered to facility users.

- Two ice machines were retrofitted with air-cooled condensing units, which are more water- and energy-efficient than the water-cooled units previously on the machines.

GOAL 7: Pollution Prevention and Waste Elimination

7.a. Goal Description

The following are the 11 sub-targets identified in the EO for this goal:

Sub-target a) - Increase source reduction of pollutants and waste.

Sub-target b) - Divert at least 50% non-hazardous solid waste by FY 2015, excluding construction and demolition (C&D) debris.

Sub-target c) - Divert at least 50% C&D materials and debris by FY 2015.

Sub-target d) - Reduce printing paper use.

Sub-target e) – Increase use of uncoated printing paper containing at least 30% post-consumer fiber.

Sub-target f) - Implement integrated pest management and landscape management practices to reduce and eliminate the use of toxic and hazardous chemicals and materials.

Sub-target g) - Increase the diversion of compostable and organic material from the waste stream.

This sub-target is not addressed in Section 7.c. because an insignificant amount of this type of waste is generated by RRB headquarters employees.

Sub-target h) - Implement integrated pest management and other appropriate landscape management practices.

This sub-target is not addressed in Section 7.c. because RRB headquarters are located in an urban area and no landscape management occurs.

Sub-target i) - Increase agency use of acceptable alternative chemicals and processes.

This sub-target is not addressed in Section 7.c. because, aside from cleaning and pest management products, which are addressed under sub-target a, RRB does not use chemicals.

Sub-target j) - Decrease agency use of chemicals to assist agency in achieving FY 2020 GHG reduction targets as described in Goals 1 and 2.

Sub-target k) - Report in accordance with Sections (301-313) of the Emergency Planning and Community Right-to-Know Act (EPCRA) of 1986).

RRB does not address this sub-target in Section 7.c. because RRB is not subject to this reporting. RRB does maintain MSDS sheets for cleaning compounds, provided by the cleaning contractor, in use at the facility on-site.

7.b. Agency Lead for Goal

The SSO has oversight responsibility in meeting this RRB goal. The Facility Manager is assigned the responsibility for implementing this goal.

7.c. Implementation Methods: Summary

Sub-target a) - Increase source reduction of pollutants and waste.

The primary source of pollutants used at RRB headquarters is cleaning products. The contracted cleaner is Green Seal Certified and continuously seeks to reduce its environmental impact. All cleaning products are phosphate-free. The company is piloting the use of garbage can liners that are made from recycled soft drink bottles.

Pest management chemicals are also employed at RRB headquarters. RRB will encourage the vendor to use more benign chemicals whenever possible.

Sub-target b) - Divert at least 50% non-hazardous solid waste by FY 2015, excluding construction and demolition (C&D) debris.

RRB's Basic Board Order 5 (July 9, 2008), "Procurement, Property, Supplies, and Service" contains a commitment to "cost-effective waste reduction and recycling of reusable material from wastes generated in all of its operations and facilities." The section references EO 13423 and will be updated to reference EO13514.

RRB is considering providing recycling containers for each RRB headquarters employee to encourage them to recycle at their desk, then bring their container to paper recycling receptacles located on their floor.

RRB has recycled plastic bottles since FY 2008. RRB recycles metal cans, shredded and unshredded paper, and printer cartridges. In FY 2009, RRB diverted 36% of solid waste through these recycling activities.

Sub-target c) - Divert at least 50% C&D materials and debris by FY 2015.

RRB does not typically generate significant quantities of C&D materials and therefore is not adopting formal implementation methods for this sub-target. During this fiscal year's lobby renovation, however, RRB will work with GSA to identify opportunities to divert C&D materials.

Sub-target d) - Reduce printing paper use.

RRB Administrative Circular IRM-17 (February 16, 2010) is the headquarters printing policy, which also impacts the field offices. It states the following policies that reduce printing paper use at the agency.

- All printers with duplex capability are encouraged to use duplex printing as a default.
- When possible, employees are encouraged to use the multiple screens per page option in RRB applications when printing.
- New network printers will be duplex capable.
- Less efficient desktop printer usage is restricted to executives, those who must print confidential information, and employees who receive a policy exception, possibly as a result of a reasonable accommodation request.

Print jobs sent to the print center are processed as duplex unless specified otherwise by the job requestor. If the print center receives an order for a single-sided job, staff confirms by phone the justification for a single-sided job such as color bleed-through or document format requirements (e.g., formal letter).

Beyond enforcement of the printing policy and maximizing duplex jobs at the print center, RRB does not plan to adopt further implementation measures for this sub-target.

Sub-target e) – Increase use of uncoated printing paper containing at least 30% post-consumer fiber.

RRB uses 97% uncoated printing paper with at least 30% post-consumer fiber. The remaining 3% of printing paper, which has a lower recycled content, must be used on high-speed copiers which do not function properly when fed paper with 30% post-consumer fiber.

Sub-target f) - Implement integrated pest management and landscape management practices to reduce and eliminate the use of toxic and hazardous chemicals and materials.

RRB is in conversation with its pest control vendor to understand chemicals used in pest management at RRB and encourages the vendor to use less-toxic alternatives whenever possible.

Sub-target j) - Decrease agency use of chemicals to assist agency in achieving FY 2020 GHG reduction targets.

Currently, R-22 refrigerant is used in the chillers in RRB’s air conditioning system. The chillers will likely be replaced in approximately 2015. In the interim, the contractor who maintains the chillers conducts monthly leak checks and repairs the chillers if necessary to prevent leaks.

When the chillers are replaced, RRB will evaluate which refrigerant best meets the goals of this SSPP. For example, RRB will review EPA guidance on this topic. Until the chillers’ replacement, RRB seeks to maintain the existing chillers to minimize refrigerant leaks.

7.d. Positions: Summary

The facility manager with the oversight of the SSO will carry out the implementation measures for this goal. No new FTE will be requested nor will FTE be diverted from other tasks.

7.e. Planning Table: Summary

POLLUTION PREVENTION & WASTE ELIMINATION	Units	FY 10	FY 11	FY 12	FY 13	FY 14	FY 15
Non-Hazardous Solid Waste Diversion Targets (non C&D)	%	36%	...	36%	41%	45%	50%

7.f. Agency Status: Summary

Goal 7 of this SSPP is integrated into RRB's policies and procedures.

The agency has an active recycling program (cans, paper, printer cartridges) that has expanded to include bottles. Further, RRB works with a Green Seal Certified cleaning contractor and implements policies to reduce paper usage.

GOAL 8: Sustainable Acquisition

8.a. Goal Description – Sustainable Acquisition

The following are the two sub-targets identified in the EO for this goal:

Sub-target a) Ensure 95% of new contract actions, including task and delivery orders under new contracts and existing contracts, require the supply or use of products and services that are energy efficient (Energy Star or FEMP-designated), water efficient, bio-based, environmentally preferable (excluding EPEAT-registered products), non-ozone depleting, contain recycled content, or are non-toxic or less toxic alternatives.

Sub-target b) Update agency affirmative procurement plans (also known as green purchasing plans or environmentally preferable purchasing plans), policies and programs to ensure that all Federally-mandated designated products and services are included in all relevant acquisitions.

8.b. Agency Lead

The SSO has oversight responsibility in meeting Goal 8 for the RRB. The Chief of Acquisition Management is assigned the responsibility for implementing this goal. The Chief of Acquisition management oversees purchasing for both the headquarters facility and field offices.

8.c. Implementation Methods

Sub-target a) Ensure 95% of new contract actions, including task and delivery orders under new contracts and existing contracts, require the supply or use of products and services that are energy efficient (Energy Star or FEMP-designated), water efficient, bio-based, environmentally preferable (excluding EPEAT-registered products), non-ozone depleting, contain recycled content, or are non-toxic or less toxic alternatives.

RRB has a history of purchasing environmentally preferable products and has formalized purchasing requirements that will enable RRB to meet this sub-target in Basic Board Order (B.B.O.) 5 (July 9, 2008), which describes RRB's Affirmative Procurement program. This program meets the requirements of Section 6002 of the Resource Conservation and Recovery Act (RCRA). B.B.O. 5 promotes the purchase of recovered materials and non-ozone depleting substances. Administrative Circular OA-14 describes the implementation of this policy and states that the RRB will "where practicable, give favorable consideration to environmentally sound practices or environmentally friendly products/components...".

RRB procurement language incorporates federal acquisition regulation (FAR) clauses that enable the agency to purchase goods and/or services that are energy efficient, water efficient, bio-based, environmentally preferable, non-ozone depleting, and non-hazardous.

These policies facilitated the purchase of the following bio-based material-containing items in FY 2009 as part of support services contracts.

- Penetrating lubricants
- Greases

- Floor strippers
- Bathroom and spa cleaners
- Glass cleaners
- Hand cleaners and sanitizers
- Carpet

Recently-purchased toilets and automatic flush valves were WasterSense-labeled as described in the discussion of Goal 6.

Further, RRB contracts with a janitorial services provider that is Green Seal Certified.

RRB's commitment to training acquisition personnel on green purchasing policies and procedures is critical to the agency's success in meeting this sub-target. In FY 2009, 100% of acquisition personnel received documented training that covered the following topics.

- EPA-designated recycled content products
- ENERGY STAR products
- Bio-based and USDA-designated bio-preferred products
- Environmentally preferable products and services
- WaterSense and other water-efficient products
- Non-ozone depleting substances

RRB tracks purchases in the Federal Procurement Data System (FPDS) and reports its sustainable acquisition practices each fiscal year in compliance with RCRA requirements. This tracking system will be used to assess whether 95% of contract actions meet the requirements of this goal.

Adherence to RRB's affirmative procurement and green purchasing training programs are the measures that RRB will take to achieve sub-target a of Goal 8.

Sub-target b) Update agency affirmative procurement plans (also known as green purchasing plans or environmentally preferable purchasing plans), policies and programs to ensure that all Federally-mandated designated products and services are included in all relevant acquisitions.

B.B.O. 5 and Administrative Circular OA-14 will be updated to reflect the requirements of EO 13514 including the purchasing of water-efficient, bio-based, and non- or less-toxic alternatives.

8.d. Positions

The Facility Manager with the oversight of the SSO will carry out the implementation measures for this goal. No new FTE will be requested nor will FTE be diverted from other tasks.

8.e. Planning Table

The table below presents a summary of the Sustainable Acquisition sub-goals and the investments needed to implement these sub-goals.

SUSTAINABLE ACQUISITION	Units	FY 2010	FY 2011	FY 2012	....	FY 2020
New Contract Actions Meeting Sustainable Acquisition Requirements	%	90%	95%	hold	hold	hold
Energy Efficient Products (Energy Star, FEMP-designated, and low standby power devices)	%	90%	95%	hold	hold	hold
Water Efficient Products	%	90%	95%	hold	hold	hold
Biobased Products	%	90%	95%	hold	hold	hold
Recycled Content Products	%	90%	95%	hold	hold	hold
Environmentally Preferable Products/Services (excluding EPEAT)	%	90%	95%	hold	hold	hold
SNAP/non-ozone depleting substances	%	90%	95%	hold	hold	hold

8.f. Agency Status: Summary

RRB has a strong history of green purchasing. Updating of agency policy to reflect the requirements of EO 13514 and tracking contract actions through FPDS will enable RRB to meet this goal's targets. Further, RRB will continue to train acquisition personnel on green purchasing principles.

GOAL 9: Electronic Stewardship and Data Centers

The following are the six sub-targets identified in the EO for this goal:

9.a. Goal Description

Sub-target a) Establish and implement policy and guidance to ensure use of power management, duplex printing, and other energy efficient or environmentally preferred options and features on all eligible agency electronic products.

Sub-target b) Update agency policy to reflect environmentally sound practices for disposition of all agency excess or surplus electronic products.

Sub-target c) Update agency policy to ensure implementation of best management practices for energy efficient management of servers and Federal data centers.

Sub-target d) Goals should identify how the agency intends to meet technology energy consumption reduction goals in its data centers.

Sub-target e) Discuss how the agency is planning on meeting the technology energy reduction goals in data centers. Include details on the investment plan, covered vs. non-covered facilities, and how the agency identified the covered facilities.

Sub-target f) Discuss how the agency will increase the quantity of electronic assets disposed through sound disposition practices. Include in the discussion how your agency is using or plans to use programs such as disposal through GSA Xcess, recycling through Unicor, donation through GSA's Computer for Learning (CFL) or other non-profit organizations, and/or recycling through a private recycler certified under the Responsible Recyclers (R2) guidance or equivalent.

9.b. Agency Lead for Goal

The Senior Sustainability Officer has oversight responsibility in meeting Goal 9 for the U.S. Railroad Retirement Board. The Chief Information Officer and the Facility Manager are assigned the responsibility for implementing this goal.

9.c. Implementation Methods

Sub-target a) Establish and implement policy and guidance to ensure use of power management, duplex printing, and other energy efficient or environmentally preferred options and features on all eligible agency electronic products.

Existing policies at RRB assist the agency in meeting sub-target a of Goal 9. First, the Desktop Configuration Policy mandates that personal computers go into standby mode after three minutes of inactivity. Second, as described in Section 7.c. under sub-target d, agency policy encourages duplex printing. Third, B.B.O 5 specifies that all microcomputers and other electronic computing devices must meet EPA Energy Star requirements. It states that users of these computers will be made aware of their energy-saving features during computer training classes. As a result of this policy, RRB included requirements to supply EPEAT-registered computer products in 95% of FY 2009 solicitations, contracts, and leases for IT equipment. RRB will maintain this level of environmentally-preferable purchasing in FY 2010 and beyond.

In FY 2010, RRB will investigate means of increasing the effectiveness of its policies that address this sub-target. For example, RRB may include in its Energy Conservation Policy (Administrative Circular RRB-1, December 4, 2007) that desktop computers be turned off at night. RRB will consider implementing an automated shut down to ensure this policy's effectiveness.

Sub-target b) Update agency policy to reflect environmentally sound practices for disposition of all agency excess or surplus electronic products.

For the past two fiscal years, RRB has implemented a program that requires all computer equipment is excessed in an environmentally sound manner. The first choice for divesting of computers that RRB will no longer use is GSA's Computers for Learning (CFL) program. This approach is formalized in Administrative Circular BSS-2 (June 5, 2003). If no school can or will take the excess computers, RRB sells them through GSA's Xcess. If neither of these options are possible, RRB investigates using Unicor in Kansas City or a local certified recycler, considering which option is more cost effective. This consideration includes transportation costs. CRT terminals and controllers that are past their useful life are recycled by a certified recycler. RRB policy already addresses environmentally sound disposition of all agency excess or surplus electronic products and will not be updated.

Sub-target c) Update agency policy to ensure implementation of best management practices for energy efficient management of servers and Federal data centers.

RRB operates one data center with about 300 servers and a single mainframe computer. RRB will update its Energy Conservation Policy (Administrative Circular RRB-1, December 4, 2007) to specifically include the on-site data center. The policy will mandate that lights be turned off after hours. This measure will help regulate the temperature in the data center and reduce cooling needs.

In FY 2011, RRB will consider the cost and feasibility of installing automatic controls to regulate lighting and climate in the data center.

Sub-target d) Goals should identify how the agency intends to meet technology energy consumption reduction goals in its data centers.

In FY 2010 and FY 2011, RRB will use updated policy as a primary tool to achieve its energy consumption reduction goals in the data center. For example, operating certain areas of the data center in a "lights out" environment will help reduce energy consumption.

In FY 2010, RRB will examine energy usage in the data center through a combination of engineering calculations and data analysis.

Sub-target e) Discuss how the agency is planning on meeting the technology energy reduction goals in data centers. Include details on the investment plan, covered vs. non-covered facilities, and how the agency identified the covered facilities.

RRB has only one data center at its headquarters facility that will be the focus of Goal 9. RRB does not plan to eliminate this essential data center. RRB will meet the technology energy reduction goals in this data center first through development and enforcement of policy as described above. Second, RRB will collect data about energy consumption patterns in the data

center to assist RRB in identifying and implementing technology-based solutions for reducing energy consumption. Sub-metering of the data center has been proposed to GSA as an energy conservation project. In the interim, UPS devices may be able to provide estimates of up to 80% of the power drawn in the data center. RRB will work with the UPS maintenance contractor to develop an estimate of power consumption in the center in FY 2010. In FY 2011, RRB plans to use the data to identify and implement energy-saving measures in the data center.

RRB has considered using cloud computing to reduce energy consumption, but concerns about data privacy have precluded RRB's tapping this technology. GSA plans to build a cloud computing center that RRB and other agencies could use that would be compliant with the Privacy Act. The schedule for the completion of this center is uncertain, but RRB will work with GSA to assess how RRB can best use the facility when it is complete.

The table in Section 9.e. below demonstrates that RRB already meets several mandated goals. Footnotes to the table describe RRB's strategies to meet the goal not already achieved.

Sub-target f) Discuss how the agency will increase the quantity of electronic assets disposed through sound disposition practices. Include in the discussion how your agency is using or plans to use programs such as disposal through GSA Xcess, recycling through Unicor, donation through GSA's Computer for Learning (CFL) or other non-profit organizations, and/or recycling through a private recycler certified under the Responsible Recyclers (R2) guidance or equivalent.

All electronic property disposition occurs via one of these options as described in sub-target b.

9.d. Positions

The Chief Information Officer, Facility Manager, and the Communications and Property Manager, with the oversight of the SSO will carry out the implementation measures for this goal. No new FTE will be requested nor will FTE be diverted from other tasks.

9.e. Planning Table

ELECTRONIC STEWARDHIP & DATA CENTERS	Units	FY 10	FY 11	FY 12	FY 13
% of device types covered by current Energy Star specifications that must be energy-star qualified	%	90%	90%	95%	hold
% of electronic assets covered by sound disposition practices	%	100%	100%	100%	100%
% of cloud activity hosted in a data center ¹	%	NA	NA	NA	hold
% of agency data centers independently metered or advanced metered and monitored on a weekly basis ²	%	0%	TBD	TBD	hold
% of agency, eligible electronic products with power management and other energy-environmentally preferable features (duplexing) actively implemented and in use	%	90%	95%	100%	hold
% of agency data centers operating with an average CPU utilization of 60-70% ³	%	100%	100%	100%	hold
% of agency data centers operating at a PUE range of 1.3 – 1.6 ⁴	%	TBD	TBD	TBD	hold
% of covered electronic product acquisitions that are EPEAT- registered	%	90%	95%	95%	hold
% of agency data center activity implemented via virtualization ⁵	%	50%	50%	50%	hold

1. RRB currently can not use cloud computing because of possible non-compliance with the Privacy Act.
2. RRB is investigating calculating data center energy use from UPS data in FY 2010.
3. RRB’s data center typically operates in this range.
4. RRB will gather data on the typical PUE of the data center and examine energy savings measures to reduce PUE.
5. A majority of RRB computing operations run in a virtual environment.

9.f. Status

Characteristics of RRB computing enable it to meet several of the goals in the table above. In other cases, RRB must gather data, such as energy use in the data center, to identify strategies for reducing energy consumption. The agency has identified several opportunities to update policies that will reduce energy consumption. RRB’s acquisition policy ensures that Energy Star and EPEAT products are purchased. Finally, the agency has disposed of electronic property through Computers for Learning, GSA Xcess, or a certified recycler for two fiscal years and will continue this program.

Section 3: Agency Self Evaluation

Does your plan provide/consider overarching strategies and approaches for achieving long-term sustainability goals?	Yes
Does your plan identify milestones and resources needed for implementation?	Yes
Does your plan align with your agency's 2011 budget submission?	Yes
Is your plan consistent with your agency's FY 2011 budget and appropriately aligned to reflect your agency's planned FY 2012 budget submission?	Yes
Does your plan integrate existing EO and statutory requirements into a single framework and align with other existing mission and management related goals to make the best use of available resources?	Yes
Does your plan provide methods for obtaining data needed to measure progress, evaluate results, and improve performance?	Yes

In July-December 2010, RRB will implement the following measures.

- Identify energy and water conservation measures through a GSA-funded detailed energy audit that will focus on operations and maintenance practices.
- Completely renovate the first floor lobby of the William Lipinski Federal Building (RRB headquarters facility), incorporating energy-efficient features.
- Purchase renewable energy through a GSA Region 5 electric contract.
- Pilot the replacement of T12 task lights at work stations with alternative energy efficient lighting.
- Improve its estimate of commuter-generated GHG emissions.
- Work with RRB's waste hauler contractor to consider possibilities to improve the estimate of the fraction of total waste removed from the building that is RRB-generated.
- Replace 24 three gallon-per-flush with 1.25 gallon-per-flush toilets and automatic flush valves throughout the facility.
- Maintain the chillers to minimize refrigerant leaks.

Investigate means of increasing the effectiveness of its policies that address this sub-target 9a. For example, RRB may include in its Energy Conservation Policy (Administrative Circular RRB-1, December 4, 2007) that desktop computers be turned off at night.

Work with the UPS maintenance contractor to develop a profile of power consumption in the headquarters data center in FY 2010.

From January – June 2011, RRB will implement the following measures.

- Provide additional recycling containers for RRB headquarters employees to encourage recycling in the workplace.
- Update B.B.O. 5 and Administrative Circular OA-14 to reflect the requirements of EO 13514 including the purchasing of water-efficient, bio-based, and non- or less-toxic alternatives.
- Update the Energy Conservation Policy (Administrative Circular RRB-1, December 4, 2007) to include the on-site data center.
- Consider the feasibility of installing automatic controls to regulate lighting and climate in the data center.
- Use power consumption data from the data center to identify and implement energy-saving measures in the data center.