



## Railroad Retirement Board

# 2016 Strategic Sustainability Performance Plan

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**Agency Point of Contact**  
Scott Rush  
Facility Manager  
Railroad Retirement Board  
844 N. Rush Street  
Chicago, Illinois 60611  
E-Mail: Scott.Rush@rrb.gov

## POLICY STATEMENT

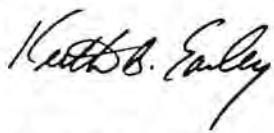
The Railroad Retirement Board (RRB) is an independent agency in the executive branch of the Federal Government. The RRB's primary function is to administer comprehensive retirement-survivor and unemployment-sickness benefit programs for the nation's railroad workers and their families under the Railroad Retirement and Railroad Unemployment Insurance Acts. Approximately 895 employees work for the RRB, including approximately 243 in the agency's 53 field offices.

The RRB operates and maintains its headquarters building through a longstanding delegation of authority agreement with the General Services Administration (GSA). The agency's field offices are either co-located with other federal agencies in GSA managed buildings, or located in GSA leased space. As such, the headquarters building in Chicago, Illinois, is the only facility of which the RRB has operational control. Along with improving the sustainable operations of its headquarters building, RRB also pursues mission-related projects that enhance the agency's overall sustainability.

We are committed to reducing energy consumption, meeting required energy reduction goals, and conducting our compliance with all applicable environmental and energy statutes, regulations, and executive orders. These energy and environmental goals are established by Executive Orders 13693 *Planning for Federal Sustainability in the Next Decade*; E.O. 13563 *Preparing the United States for the Impacts of Climate Change*; and E.O. 13327 *Federal Real Property Asset Management* and the National Energy Conservation Act and Energy Policy Act of 2005.

RRB is committed to enhancing its resiliency to climate change to comply with, or exceed, required climate change goals and objectives established in environmental and energy statutes, regulations, and executive orders. RRB supports the climate change adaptation goals established by Executive Orders 13693 and 13563. The RRB adopts the Interagency Climate Change Adaptation Task Force's guiding principles and framework for adaptation planning and is committed to enhancing the agency's resiliency to climate change by working with other federal agencies, the scientific community, and local stakeholders in the Chicago region to conduct proactive adaptation planning of common interest.

This Strategic Sustainability Performance Plan (SSPP) demonstrates RRB's commitment to meeting all the sustainability goals established by this SSPP. RRB will continue in its efforts to meet or exceed the goals established for 2025.



Keith B. Earley  
Director of Administration/Chief Sustainability Officer  
U.S. Railroad Retirement Board  
Chicago, Illinois

## EXECUTIVE SUMMARY

The mission of the Railroad Retirement Board (RRB) is to accurately and efficiently administer retirement and unemployment-sickness benefits to railroad employees and their families throughout the United States of America. Approximately 895 employees work for the RRB, including approximately 243 in the agency's 53 field offices. RRB headquarters, located in the William O. Lipinski Federal Building on North Rush Street in Chicago, Illinois, is the only facility over which the RRB has operational control. As the primary tenant, the RRB operates and maintains the thirteen-story, 365,000-square-foot historic building constructed in 1922 through a delegation of authority agreement with the General Services Administration (GSA). Under this agreement, established on April 1, 1986, projects over \$50,000 in value and any capital improvements for the headquarters building are generally funded and approved by GSA; however, certain projects including major energy improvement efforts have recently been funded directly by RRB. RRB has a history of actively and successfully pursuing projects that reduce energy and water consumption in its headquarters building. RRB also pursues mission-related projects that enhance the agency's overall sustainability.

### 1. VISION

By meeting our planned sustainability goals through implementation of the initiatives stated in this Strategic Sustainability Performance Plan (SSPP), we will reduce our energy costs and environmental impacts and, thus, our operating costs while continuing to execute our mission. Meeting these sustainability goals will also serve to improve the safety and working environment of the agency workforce and increase efficiency and productivity, thereby further enhancing RRB's high quality work serving the Federal Government.

### 2. LEADERSHIP

The Director of Administration serves as the Chief Sustainability Officer (CSO). The CSO is responsible for administering RRB's initiatives described in this SSPP and ensuring that all aspects of E.O. 13693 and other applicable executive orders and statutes are effectively implemented. The Facility Manager carries out building operations and maintenance (O&M) - related measures in alignment with the SSPP goals. The Chief Information Officer assists in implementing information technology-related measures. The Chief of Acquisition Management engages in implementing acquisition-related measures. Electronics disposal-related measures are the purview of the Communications and Property Manager. The successful implementation of the SSPP directly impacts the CSO's and the Facility Manager's performance evaluations.

### 3. PERFORMANCE REVIEW OF GOALS

#### 3.a. Budget, Policy and Planning Integration

RRB will integrate this SSPP into its building operations and maintenance budget planning. 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 quantitative economic factors. For the headquarters building, RRB allocates funds annually based on budget availability for energy savings projects from the O&M budget. Many of the energy savings projects implemented with the O&M budget tie into the agency SSPP because they improve the efficiency of building systems operation and reduce both water and energy consumption. RRB will generally work with GSA to implement capital improvement projects that are discussed in this SSPP with a value greater than \$50,000; however, their implementation is dependent upon selection by GSA Headquarters personnel and upon Congressional funding. Unlike prior years, some projects with a value of greater than \$50,000 and initiated in fiscal year 2015 were funded directly by RRB with GSA approval. In future years, funding determinations are to be made on a case by case basis with careful ROI and other analysis regardless of the funding source.

The following RRB planning and policy documents relate to and incorporate sustainability measures and goals to address the requirements of E.O. 13693:

- Administrative Circular RRB-1 Energy Conservation (December 4, 2007)
- Administrative Circular OA-14 Procurement of Goods and Services (October 1, 2009)
- Administrative Circular IRM-17 Headquarters Printing Policy (February 16, 2010)
- B.B.O. 5 – Procurement, Property, Supplies, and Service (October 16, 2009)
- Administrative Circular BSS-2 Tracking, Maintenance, and Disposal of Agency Accountable Property (June 5, 2003)

### **3.b. Evaluation Measures**

At the close of each fiscal year, RRB will evaluate through preparation of the Annual GHG Inventory and Annual Energy Report whether the measures described in that year's plan have been implemented. RRB will also quantify the environmental improvements (e.g. reduced energy consumption, non-hazardous waste diverted from landfill, etc.) and evaluate progress towards targets specified in the SSPP tables. In the event that an SSPP target is not met, RRB will evaluate measures to meet the planned target in the upcoming fiscal year. In the event that it is not feasible to carry out an implementation measure, the agency will include a discussion of barriers that arose and how implementation measures in the coming year will allow the agency to reach its targets in the annual update of the SSPP.

### **3.c. Successes, Challenges, Lessons Learned, and Planned Actions by Goal Area(s)**

The RRB's progress towards its sustainability goals and planned actions are outlined below. It should be noted that the following challenges affect more than one of the goals and are thus summarized here. Additional challenges and planned actions specific to each goal, where appropriate, are included in the goal-specific sections that follow.

- Annual variations in seasonal temperatures affect the heating and cooling load in the headquarters building, thus affecting the building's greenhouse gas (GHG) emissions (Goal 1), energy intensity metrics (Goal 2) and water use (Goal 4). Per CEQ communications, RRB understands that guidance will be implemented by the CEQ regarding providing a weather normalization adjustment to the agency's energy use intensity in FY2016.
- Operation of existing equipment in the RRB headquarters building has been largely optimized and resulted in significant energy and water savings; however, significant capital improvement projects must be undertaken to further reduce energy consumption to meet the FY2020 Scopes 1 and 2 GHG emissions (Goal 1), energy intensity (Goal 2) reduction targets and water intensity (Goal 4) reduction targets. Per the RRB delegation of authority agreement with the GSA, funding of most prospective projects over \$50,000 in value is dependent upon GSA approval and Congressional funding. In recent years, certain elected projects have been handled internally and funded by RRB's own budget after careful return analysis and efficacy determinations along with GSA approval. With these funding options in place, the RRB's ability to implement strategies necessary to meet the FY2020 energy and water related goals is still largely dependent upon GSA and Congressional actions.

To address the aforementioned challenges, the RRB's planned actions include the following:

- RRB will continue to work with the GSA to identify priority energy and water conservation projects to implement at the headquarters building based on a comprehensive audit conducted in 2010. As the RRB has implemented several water-saving projects and significantly reduced water use in the building, the RRB will target energy efficiency including the following potential future projects:
  - Continue implementation of no- and low-cost recommendations from a FY2014 retro-commissioning study;
  - Improve efficiency of the building's air handling units (AHUs);
  - Continue effort to realign building cooling zones to properly cool the RRB on-site data center;
  - Retrofit the rest of the 5<sup>th</sup> floor with higher efficiency LED lights and fixtures;

- Retrofit and/or replace existing lighting fixtures with LED lights in the data center;
- Install and/or optimize occupancy sensors for lighting in bathrooms and the basement;
- Conduct retrofit of multiple restroom facilities including installation of LED lighting, lighting controls, low flow fixtures, and occupancy sensors;
- Replace aging and malfunctioning sinks and fixtures throughout the Facility.
- GSA, in conjunction with RRB, began development of the design for the Lipinski Building Modernization project in FY2013. The RRB will work with the GSA to incorporate sustainable design principles that address and further RRB's energy efficiency and intensity, water use efficiency and management, and climate change resilience goals. Construction for the modernization project is anticipated to begin in FY2019, dependent upon congressional funding.
- RRB will continue to collect and analyze annual energy data. The results of the RRB's energy efficiency measures should show an overall downward trend in the RRB's GHG emissions and energy intensity metrics despite impacts of annual temperature variations.

The following summary provides information regarding RRB's progress toward meeting reduction targets established in E.O. 13693, the actions RRB has implemented to meet those targets over the previous 12 months, and planned actions the RRB will take over the next 12 months to continue to achieve success. The subject of many of these goals has been carried over from E.O. 13514 and 13423 which were revoked by E.O. 13963 which took effect in the beginning of fiscal year 2016 (October 1, 2015).

### **GOAL 1: GREENHOUSE GAS (GHG) REDUCTION**

RRB Scope 1 emissions result from on-site combustion of natural gas in boilers that make low-pressure steam for building tenants. The only Scope 2 emissions category applicable to RRB is the purchase of electricity. RRB has a Scopes 1 and 2 GHG emissions baseline of 4,099 mtCO<sub>2</sub>e for headquarters operations in FY2008. The agency's FY2020 target commitment under E.O. 13514 was 27.2 percent. The agency's planned FY2025 percentage reduction target from its FY2008 Scopes 1 and 2 baselines under E.O. 13693 is 40 percent.

With the publication of E.O. 13693 in 2015, RRB set an overall reduction target of 20 percent by FY2025 (revised from a FY2020 goal of 6.2 percent) from the FY2008 baseline for the following six Scope 3 emissions categories (with target reductions presented for each category). At this time, RRB does not plan to voluntarily add emission categories to its Scope 3 emissions analysis.

- Federal employee business Air Travel (31 percent)
- Federal employee business Ground Travel (60 percent)
- Federal Employee Commuting (19 percent)
- Contracted Solid Waste Disposal (40 percent)
- Contracted Wastewater Treatment (28 percent)
- Transmission and Distribution (T&D) Losses from Purchased Energy (31 percent)

RRB maintains an annual GHG emissions inventory for Scopes 1, 2 and 3, which it will continue to refine in order to monitor progress against its emission reduction goals.

#### **Goal 1-1 Agency Progress – Scopes 1 & 2 GHG Reduction**

RRB has reduced its Scopes 1 and 2 GHG emissions by approximately 26.4 percent compared to the FY2008 baseline. To improve energy efficiency, the RRB has continued implementation or commissioned the following measures since June 2015:

- Completed lighting retrofit on the 5<sup>th</sup> floor including replacement of fluorescent lighting with LEDs and use of daylight harvesting throughout the 5<sup>th</sup> floor office areas in tandem with installation of new control systems (motion sensors, control bridges, wiring, etc.) tied to the building automation system (BAS);

- Space optimization pilot project on the 5<sup>th</sup> floor including installation of new furniture systems and lighting retrofit mentioned above;
- Updated control sensors for Facility heating, cooling, and lighting equipment;
- Executed a new services contract with electrical utility to obtain 20%, up from 15%, of electrical power from renewable sources;
- Planning a boiler system upgrade to install high efficiency burner equipment to allow for more efficient operation;
- Installation of high efficiency LED lighting in the loading dock area;
- Installation of a variable frequency drive (VFD) for the cooling tower fan system;
- Conducted a Phase II data center redesign plan development, including isolating the data center air-conditioning system compartment from surrounding office areas; and,
- Completed remodel pilot of the 9<sup>th</sup> floor men's and women's bathrooms to include LEED design elements and set a new building standard for bathrooms. Three additional floors will be remodeled in FY2016.

#### ***Goal 1-1 Challenges and Lessons Learned – GHG Scopes 1 & 2***

While in FY2015 the RRB's purchased electricity consumption as well as consumption of natural gas decreased by 2% and 17% respectively compared to FY2014, this reduction is highly attributable to a mild winter weather season. While this is a sizeable difference, it remains to be seen if the trend of overall reductions in Scopes 1 & 2 GHG development can continue in an inclement season.

As noted above and in its Goal 1 Planned Actions summary below, RRB is increasing the efficiency of the building boiler systems which will help reduce Scope 1 emissions due to RRB's limited ability to make major building envelope improvements. The increase in the percentage of renewable energy purchased at the headquarters building from 15 to 20 percent starting in FY2015 through a new Renewable Energy Certificate (REC) contract is slated to continue and should prove an effective tool for decreasing Scope 2 GHG emissions. In addition, energy efficiency measures described above are aimed at decreasing purchased electricity and may be successful in further mitigating the impacts of variable year-over-year temperatures on reported GHG emissions.

Future guidance and methods issued by the CEQ for conducting a weather normalization adjustment to the agency's energy use intensity will also provide a clearer picture of RRB's year-over-year progress on increasing energy efficiency at the RRB headquarters building.

#### ***Goal 1-1 Planned Actions – GHG Scopes 1 & 2***

The following actions are planned in the remainder of FY16 and FY17:

- Implement project to repair the cooling tower variable frequency drive (VFD) controls tied to the BAS system to reduce delays in adjustment of fan speed in accordance with cooling tower activity;
- Complete installation of high efficiency boiler equipment;
- Continue project to repair air-handling unit (AHU) controls for heating coils to ensure the units are not overheating;
- Complete design of retrofit of data center air-conditioning zones and controls; and,
- Continue lighting fixture retrofit for installation of LEDs and space optimization on three additional floors of the headquarters building.

#### ***Goal 1-2 Agency Progress – GHG Scope 3 Reduction***

RRB remained successful in FY2015 in continuing to exceed the agency's FY2020 goal of a 6.2 percent reduction for Scope 3 GHG emissions as well as continuing moving towards its FY 2025 Scope 3 GHG reduction target of 20%. Compared to RRB's FY2008 baseline, RRB Scope 3 GHG emissions in the six categories identified have changed as shown below:

- Federal Employee Business Air Travel - 31% reduction;

- Federal Employee Business Ground Travel - 60% reduction;
- Federal Employee Commuting - 19% reduction;
- Contracted Solid Waste Disposal - 40% reduction;
- Contracted Wastewater Treatment - 28% reduction; and,
- T&D Losses from Purchased Energy - 31% reduction.

Overall, RRB has reduced Scope 3 emissions by approximately 13.8%. RRB's greatest reductions in Scope 3 GHG emissions resulted from:

- A decrease in emissions calculated from wastewater treatment based upon decreased water usage;
- A continued increase in the use of video- and tele-conferencing technologies in lieu of air travel, reducing employee air travel emissions; and,
- A decrease in the total number of RRB employees at the headquarters building over the last few years, which in turn has resulted in a decrease in emissions calculated from employee commuting and contracted wastewater treatment.

#### ***Goal 1-2 Challenges – GHG Scope 3***

RRB's federal employee commuting and contracted wastewater treatment emissions continue to decrease due to a reduction in staff at the headquarters building. Due to limited resources, RRB has not reissued a federal employee commuting survey since 2010; therefore, existing employee commuting emissions are calculated using the 2010 survey data relative to the number of employees in place during the current reporting year. In addition, RRB uses the default calculation method for Scope 3 wastewater emissions, which is based on the number of employees. Therefore, RRB emissions in these categories will continue to be tied to the RRB employee count.

As the majority of employees working at the headquarters building are long-time employees, the overall commuting habits of RRB employees are not expected to change significantly without major changes to the RRB teleworking programs. However, as RRB implements an expanded teleworking program, installs new optimized floor plans that benefit teleworkers, and as staff retire and a younger, more mobile workforce increases, RRB assumes that commuting habits will change. Therefore, RRB will conduct another commuter survey once the telecommuting program and new optimized floor plans have been established in the RRB headquarters building.

Business-related ground travel in FY2014 was greatly reduced, though not sustained in FY2015. However, the overall trend continues to be a great reduction in the emissions from the FY2008 baseline. As the use of tele-conferencing and other collaboration technologies becomes more familiar, it is expected that the need for some of these trips will be reduced.

#### ***Goal 1-2 Lessons Learned – GHG Scope 3***

RRB's Scope 3 emissions are expected to benefit from the RRB's continuing efforts to modernize the agency's work processes, including increasing the use of tele- and video-conferencing as well as increasing opportunities for teleworking.

#### ***Goal 1-2 Planned Actions – GHG Scope 3***

As the percentage of GHG emissions from employee commuting is by far the largest of RRB's Scope 3 GHG emissions, RRB will continue to target reductions in this category through the following actions:

- RRB is expanding the RRB telework program to ensure an expanded program is consistent with RRB IT security as well as job duty requirements; and
- RRB will continue to educate employees regarding the Regional Transportation Authority/Chicago Transit Authority (RTA/CTA) Transit Benefit Program. Under this pre-tax salary offset program, commuting costs claimed by employees are collected prior to application of federal and local taxes on

their paychecks, thereby increasing the incentive to use various available modes of public transportation.

In addition, RRB will continue to implement and expand the video- and teleconference options for internal and external operations to reduce the number of car rentals and air segments flown. The teleconference program has resulted in significantly fewer air and ground travel, and RRB anticipates this trend to continue in the near future.

## **GOAL 2: SUSTAINABLE BUILDINGS**

### ***Goal 2-1 Agency Progress Challenges and Planned Actions – Facility Energy Conservation Goal***

E.O. 13693 requires agencies to reduce building energy intensity by 2.5% annually through the end of FY2025 (measured in British thermal units per square foot), relative to a FY 2015 baseline.

Since 2003, RRB has reduced its energy intensity (Btu/GSF) at the headquarters building by 16.2 percent, missing the FY2015 energy intensity reduction goal of 30 percent. As noted previously, the RRB natural gas consumption is tightly linked to the number of colder weather days as the RRB is in control of only the single headquarters facility which can cause relatively large fluctuations in energy intensity year to year. As existing boilers are largely optimized and the RRB must get approval from GSA and Congressional funding for projects over \$50,000, the RRB is currently limited in its ability to reduce natural gas consumption. However, RRB is committed to targeting reductions in purchased electricity. See Planned Actions under Goal 1 – Scopes 1 and 2 GHG emissions for details.

### ***Goal 2-1 Agency Progress, Challenges and Planned Actions– Total Buildings Meeting the Guiding Principles***

Section 3(h) of E.O. 13693 requires that agencies will improve building efficiency, performance, and management and requires that agencies identify a percentage of the agency's existing buildings above 5,000 gross square feet intended to be energy, waste, or water net zero buildings by FY 2025 and implementing actions that will allow those buildings to meet that target. As RRB only manages a single facility RRB's 2025 target is not applicable. RRB will continue to pursue as much savings in energy, waste, and water reduction related projects as practicable but it is unlikely given the environment of the RRB facility that a net zero impact will be reached by 2025. As indicated above, RRB allocates money annually from the headquarters building O&M budget for energy savings projects and does not directly receive funds for implementing capital improvements. Many of the energy savings projects implemented with O&M budget tie into the agency SSPP because they improve the efficiency of building systems and reduce water and energy consumption. The RRB will work with the GSA to incorporate sustainable design principles that meet the Guiding Principles into the Lipinski Building Modernization design that address and further RRB's energy efficiency and intensity, water use efficiency and management, and climate change resilience goals.

## **GOAL 3: CLEAN AND RENEWABLE ENERGY**

### ***Goal 3-1 Agency Progress – Clean Energy Goal***

Section 3(b) of E.O. 13693 requires that, at a minimum, the percentage of an agency's total electric and thermal energy accounted for by renewable and alternative energy shall be not less than 10% in FY 2016-17; 13% in FY 2018-19; 16% in FY 2020-21; 20% in FY 2022-23; and 25% by FY 2025. RRB has proactively pursued renewable sources of electrical power for a number of years and beginning in a portion of FY2015, the facility implemented a new services contract to utilize electrical power consisting of no less than 20% power generated by renewable sources.

### ***Goal 3-1 Challenges***

As of the writing of this report, no reasonably available sources of renewable or clean thermal energy are available in the geographic region of the RRB headquarters. RRB has dedicated significant manpower and funds to optimizing the heating and cooling systems to most efficiently use the thermal energy

available and will continue to do so. In the future, RRB will continue to consider alternative heating and thermal energy opportunities for the Facility.

#### ***Goal 3-1 Lessons Learned***

RRB will continue to pursue all available efficiency gains available via maintenance and tuning as well as installation of variable frequency drives within the heating systems.

#### ***Goal 3-2 Agency Progress – Renewable Electric Energy Goal***

Section 3(c) of E.O. 13693 requires that, at a minimum, the percentage of an agency's total electric energy consumption accounted for by renewable energy shall be not less than 10% in FY 2016-17; 15% in FY 2018-19; 20% in FY 2020-21; 25% in FY 2022-23; and 30% by FY 2025. As stated, RRB has implemented a new services contract to utilize electrical power consisting of no less than 20% power generated by renewable sources. This agreement serves to exceed the requirements for FY 2016 through 2019 and meet the declared goal for FY2020-21.

#### ***Goal 3-2 Challenges***

RRB has effectively met the stated goals for each year through FY 2021. While this is a success, each potential opportunity for energy savings will continue to be analyzed as any complete reduction in consumption will continue to be economically advantageous for RRB.

#### ***Goal 3-2 Lessons Learned***

Electrical service offered under the newly implemented REC continues to serve the facility with a reliable source of electrical power to meet and exceed the present facility goals.

### **GOAL 4: WATER USE EFFICIENCY & MANAGEMENT**

#### ***Goal 4-1 Agency Progress – Potable Water Consumption Intensity Reduction Goal***

Section 3(f) of E.O. 13693 requires agencies to reduce potable water intensity by 2% annually through FY2025 compared to an FY2007 baseline. A 36% reduction is required by FY2025. RRB has consistently implemented water conservation measures in the RRB headquarters building, including replacing 3 gallon-per-flush toilets with 1.25 gallon-per-flush toilets, replacing 1.5 gallon/flush urinals with 0.5 gallon/flush urinals, adding automatic flush valves, as well as improving the hot water circulation system throughout the building. These projects have resulted in a 30.2 percent decrease in water consumption in FY2015 in the headquarters building as compared to the FY2007 baseline. Additional efforts including repairs to an aging cooling tower unit and continued retrofit of aging water fixtures will continue this trend towards meeting the FY2025 goal.

#### ***Goal 4-1 Challenges***

As indicated above, RRB is limited by available funding. An example of this is that RRB submitted a proposal to the GSA for American Recovery and Investment Act (ARRA) funding for a roof water capture system that was refused; as RRB was at the time exceeding the (then present) FY2020 and FY2025 water reduction goal, implementation of such a system is not a top priority. Although the water usage did increase from FY 2014 to FY 2015, this increase is expected to be remedied by repair of aging cooling units. Anticipated improvements to chillers and cooling towers included in the FY2019 building renovation should contribute to additional water reductions.

#### ***Goal 4-1 Lessons Learned***

The building water use savings achieved through replacement of toilets, urinals, flush valves and faucets, as well as improvements in the hot water circulation system have been significant; however a majority of the fixtures have been replaced at the Facility. Future reductions in consumption will be based upon more efficient controls and elimination of faults which cause leaks, drips, or excess use of water.

***Goal 4-2 Industrial, Landscaping and Agricultural Water Goal***

RRB presently does not utilize water for these purposes and the goal is not expected to be applicable to the facility in coming years.

***Goal 4 Planned Actions***

E.O. 13693 requires a 36% reduction by 2025 relative to a 2007 baseline, which RRB has already exceeded in previous years. As RRB has dedicated significant budget and labor towards water reduction measures in the last several years and has achieved significant success, RRB is directing increased funding towards energy efficiency measures in coming years. However, to continue to build on its previous successes, the RRB has planned the following water reduction action for implementation in FY2016:

- RRB is replacing faucets throughout the building with new, more effective sensor technology and maintaining the previously installed low flow equipment.
- RRB has continued to maintain and repair cooling towers to reduce overall water usage.

**GOAL 5: FLEET MANAGEMENT**

RRB has no reportable fleet vehicles.

**GOAL 6: SUSTAINABLE ACQUISITION**

In FY2015, at least 95 percent of RRB's applicable new contract actions meet federal mandates for acquiring products that are energy efficient, water efficient, biobased, environmentally preferable, non-ozone depleting, recycled content, or are non-toxic or less toxic alternatives, where these products meet performance requirements.

RRB's performance and actions regarding bio-preferred product procurement are no different from the other attributes listed above. One example of RRB's transition to biobased products is that since FY2009, RRB has required support services to use the following biobased products in the headquarters building: penetrating lubricants, greases, floor strippers, bathroom and spa cleaners, glass cleaners, hand cleaners and sanitizers, and carpet.

***Goal 6-1 Agency Progress – Sustainable Acquisition Goal***

Section 3(i) of E.O. 13693 requires agencies to promote sustainable acquisition by ensuring that environmental performance and sustainability factors are considered to the maximum extent practicable for all applicable procurements in the planning, award and execution phases of acquisition. RRB procurement language incorporates Federal Acquisition Regulation (FAR) clauses to purchase goods and/or services that are energy efficient, water efficient, bio-based, environmentally preferable, non-ozone depleting and non-hazardous, and contain recycled content. It should be noted that RRB generally fulfills its green product delivery orders through GSA contracted vendors, significantly reducing the number of contracts issued directly by RRB for such products.

RRB's commitment to training acquisition personnel on green purchasing policies and procedures is critical to the agency's success in meeting this goal. RRB conducts green procurement training on a biennial basis. In FY2014 and 2015, 50 percent of acquisition personnel received documented training that covered 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, and non-ozone depleting substances. By the end of calendar year 2015, all RRB acquisition personnel will receive training that covers the above topics.

***Goal 6-1 Challenges***

RRB has encountered instances of ENERGY STAR™ certified servers not meeting the necessary performance requirements.

***Goal 6-1 Lessons Learned***

The extended analysis of certain projects has lead to further optimization of RRB budgeting with regard to future sustainability related savings and consumption reductions.

***Goal 6-2 Agency Progress – Biobased Purchasing Targets***

The Agricultural Act of 2014 requires that agencies establish a targeted biobased-only procurement requirement. Section 3(iv) of E.O. 13693 requires agencies to establish an annual target for increasing the number of contracts to be awarded with BioPreferred and biobased criteria and the dollar value of BioPreferred and biobased products to be delivered and reported under those contracts in the following fiscal year.

For FY2017, RRB has established a target of 95% contracts and budgetary spending in products to be delivered.

***Goal 6-2 Challenges***

As with the pursuit of any newly instituted goal, effective training and communication will be paramount to success of the biobased purchasing target goal. While many of the initiatives will build on already instituted policies within RRB such as the requirement for support service contractors to utilize biobased cleaners and other substances, effective tracking and pursuit of products and services which meet this goal will be another required consideration for each RRB acquisition pursuit.

***Goal 6-2 Lessons Learned***

As the goal is a new pursuit, lessons identified in analyzing and meeting previous goals will be implemented.

***Goal 6 Planned Actions***

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

- Use the Federal Procurement Data System (FPDS) to assess whether 95 percent of RRB new applicable contract actions meet the requirements of this goal. RRB already uses FPDS to track purchases over \$3,000 and report their recycled content, in compliance with RCRA requirements.
- Adhere to RRB's sustainable acquisition training programs including training all acquisition personnel on green purchasing policies and procedures on a biennial basis.
- Provide training class for IT staff on procurement requirements, including how these requirements affect the procurement of servers.

***GOAL 7: POLLUTION PREVENTION & WASTE REDUCTION******Goal 7 Agency Progress – Pollution Prevention & Waste Reduction Goal***

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

The RRB headquarters building has seen a reduction in non-hazardous solid waste generation of approximately 33.6 percent since FY2008, putting RRB well on its way to meeting the E.O. 13693

requirement to divert at least 50% of non-hazardous and 50% of construction and demolition debris via source reduction and increased diversion of compostable materials. RRB employs the following programs to reduce waste generation and divert solid waste from the landfill:

- RRB has partnered with Staples® through the waste recycling company Terracycle to contribute to the Writing Instrument Brigade, which creates new products from used writing implements;
- RRB participates in an Ability One program for reuse or recycling of shredded paper;
- RRB provides adequate receptacles for recycling of paper, cardboard, aluminum, glass and plastic throughout the headquarters building (including a container at each desk for paper) to encourage employees to recycle. Approximately 10 to 15 percent of the solid waste collected each month consists of bottles, cans, and corrugated cardboard that is diverted for recycling; and
- RRB maintains a printing policy to reduce paper use at the agency consisting of the following steps:
  - Setting duplex printing as the default for existing capable equipment, and ensuring new network printers are duplex capable;
  - Encouraging the use of the multiple pages per sheet option when printing; and,
  - Restricting less efficient desktop printer usage to executives, those who must print confidential information, and employees who receive a policy exception, such as a reasonable accommodation request.

It should be noted that RRB does not currently use or purchase hydrofluorocarbons (HFCs) in the Lipinski building.

#### ***Goal 7 Challenges***

As the RRB shares waste disposal facilities with tenants on the first floor, RRB's ability to accurately measure the RRB's contribution to building solid waste and recycling tonnage each year is limited to an estimation of percentage based on observations of the contents of on-site dumpsters (RRB's contribution is estimated to be 60 percent of total). As such, RRB's ability to accurately account for reductions in solid waste generation resulting from changes to RRB pollution prevention and waste reduction programs may be impacted.

#### ***Goal 7 Lessons Learned***

RRB is finding creative ways to divert waste from the landfill through existing programs with Staples®. In addition, more specific information on RRB versus tenant waste generation is needed to better evaluate RRB waste minimization program effectiveness.

#### ***Goal 7 Planned Actions***

- RRB will conduct an on-site waste audit by the end of FY2016 to assess RRB versus tenant waste generation.

### **GOAL 8: ENERGY PERFORMANCE CONTRACTS**

#### ***Agency Progress, Lessons Learned and Planned Actions – Performance Contracting Goal***

Section 3(k) of E.O. 13693 requires that agencies implement performance contracts for Federal buildings. Section 3(k)(iii) of E.O. 13693 also requires that agencies provide annual targets for performance contracting.

Based upon the relatively small footprint, both environmentally and physically, this requirement is not expected to be applicable to the RRB headquarters facility. While intended as a procurement vessel to allow for savings related to utility consumption reduction to pay for capital improvements without upfront costs to agencies, the performance contract performance is not a viable option for a facility the size of RRB. As the agency only manages a single facility housing fewer than 900 employees, the opportunity for cost savings is not likely to be large enough to allow for consideration by an energy service company.

RRB will continue to pursue energy reduction related projects utilizing funding from the RRB budget, as well as through its agreement with the GSA for selected projects of a greater value. As such, the RRB does not foresee any future energy performance contracts and has not made a goal for FY2017 and FY2018.

### **GOAL 9: Electronics Stewardship & Data Center**

Section 3(l) of E.O. 13693 requires that each agency promotes electronics stewardship, including procurement preference for environmentally sustainable electronic products; establishing and implementing policies to enable power management, duplex printing, and other energy efficient or environmentally sustainable features on all eligible agency electronic products; and employing environmentally sound practices with respect to the agency's disposition of all agency excess or surplus electronic products. RRB has an established policy of purchasing electronic equipment equipped with these features whenever possible.

#### ***Goal 9-1a – Agency Progress – Procurement Goal***

As dictated in Section 3(l) of E.O. 13693, each facility is to pursue a goal of procuring at least 95% of monitors, PCs, and laptops which meet environmentally sustainable electronics criteria. For FY2015, RRB succeeded in meeting this goal by procuring only units meeting these requirements and phasing out older units which do not.

#### ***Goal 9-1a – Challenges***

As stated with regards to *Goal 6-1*, RRB has encountered instances of ENERGY STAR™ certified servers not meeting the necessary performance requirements but as technology has progressed, this has become a less frequent event.

#### ***Goal 9-1a – Lessons Learned***

The extended analysis of certain equipment purchases has lead to further optimization of RRB budgeting with regard to technology purchases and costs savings related to consumption reductions.

#### ***Goal 9-1a – Planned Actions***

The RRB will continue, when practicable, to purchase electronics meeting the necessary requirements. As technology continues to develop, it is expected that the specifications of certified units will continue rise and will be able to more easily meet the requirements and demands of certain high demand electronics such as servers.

#### ***Goal 9-1b – Agency Progress – Power Management Goal***

As dictated in Section 3(l) of E.O. 13693, each facility is to equip or enable 100% of computers, laptops, and monitors with power management features. For FY2015, RRB succeeded in meeting this goal, as all units are equipped with power management features.

#### ***Goal 9-1b – Challenges***

While units are equipped with these features, it is unknown how well these features are utilized by individual users and whether systems are set up to most effectively reduce electrical consumption.

#### ***Goal 9-1b – Lessons Learned***

The extended analysis of certain equipment purchases has led to further optimization of RRB budgeting with regard to technology purchases and costs savings related to consumption reductions.

#### ***Goal 9-1b – Planned Actions***

RRB will continue to purchase equipment equipped with power management hardware or software. RRB will instruct IT to ensure that these features are utilized on all newly purchased units.

#### ***Goal 9-1c – Agency Progress – End-of-Life Goal***

As dictated in Section 3(l) of E.O. 13693, each facility is to dispose of 100% of electronics using environmentally sound methods. At present, RRB meets this goal by disposing of 100% of electronic equipment through CEC Environmental. This arrangement, or a similar arrangement with a qualified recycling facility, will be maintained in future years.

#### ***Goal 9-1c – Challenges***

While units are equipped with these features, it is unknown how well these features are utilized by individual users and whether systems are set up to most effectively reduce electrical consumption.

#### ***Goal 9-1c – Lessons Learned***

The extended analysis of certain equipment purchases has lead to further optimization of RRB budgeting with regard to technology purchases and costs savings related to consumption reductions.

#### ***Goal 9-1c – Planned Actions***

RRB will continue to purchase equipment equipped with power management hardware or software. RRB will instruct IT to ensure that these features are utilized on all newly purchased units.

#### ***Goal 9-2 – Agency Progress – End-of-Life Goal***

As dictated in Section 3(l) of E.O. 13693, each facility is to dispose of 100% of electronics using environmentally sound methods. At present, RRB meets this goal by disposing of 100% of electronic equipment through CEC Environmental. This arrangement, or a similar arrangement with a qualified recycling facility, will be maintained in future years.

#### ***Goal 9-2 – Challenges***

RRB has succeeded in identifying which waste streams are appropriate for beneficial recycling. Continuing the trend of reduction of waste generation will require careful analysis of the intended lifecycle and costs associated with electronic equipment purchases.

#### ***Goal 9-2 – Lessons Learned***

The extended analysis of various rated specifications for electronics adds another element to the determination of appropriate acquisitions. Appropriate disposal costs should be considered as well as any change in expected life cycle when purchasing new electronics.

#### ***Goal 9-2 – Planned Actions***

RRB will continue to dispose of all applicable electronics via arrangements with a qualified recycling entity. Additionally, waste reduction measures such as equipment upgrades will be considered.

### **GOAL 10: CLIMATE CHANGE RESILIENCE**

RRB is committed to enhancing its resiliency to climate change and conducting operations that comply with and exceed required goals and objectives with all environmental and energy statutes, regulations, and executive orders.

#### ***Goal 10 – Agency Progress***

Section 3(h)(viii) of E.O. 13693 required each agency to evaluate agency climate change risks and vulnerabilities to identify and manage the effects of climate change on the agency's operations and mission in both the short and long term. RRB conducted a climate change adaptation assessment for the headquarters building using a URS Corporation, an AECOM company, proprietary tool (the Adapting to Climate Change Application or ACCA Tool). The assessment enabled RRB to identify short-, medium- and long-term adaptation strategies to address anticipated impacts on the building from increases in temperature extremes and storminess. RRB is using this assessment to assist in prioritizing actions related to building renovations. RRB provided public access to the RRB Climate Change Adaptation Plan on its website; to date RRB has not received public comments with respect to the Plan.

***Goal 10 – Challenges***

Recommended actions from the ACCA Tool assessment include large-scale capital improvement projects. As previously stated, RRB is limited in its ability to implement projects over \$50,000.

***Goal 10 – Lessons Learned***

RRB programs that address water and energy conservation at the RRB headquarters not only help RRB meet its reduction goals, but also improve RRB's resilience in meeting future challenges posed by anticipated climate change in the Chicago area. As RRB climate change planning has shown, increased extremes in temperature and storminess, as well as longer periods of drought, are expected to impact the Chicago area. By reducing water and energy consumption, RRB will more likely be able to meet increased heating and cooling demands with existing systems, and reduce RRB's vulnerability to regional drought and the resulting higher water prices.

***Goal 10 – Planned Actions***

The RRB will work with the GSA to incorporate sustainable design principles into the Lipinski Building Modernization design that address and further RRB's energy efficiency and intensity, water use efficiency and management, and climate change resilience goals.

**4. PROGRESS ON ADMINISTRATION PRIORITIES**

Where applicable, RRB's progress on administration priorities is included in Section 3 above.