

STRATEGIC SUSTAINABILITY PERFORMANCE PLAN

Executive Order 13514

Federal Leadership in Environmental, Energy, and Economic Performance



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POLICY STATEMENT

Since its inception, the people of the Tennessee Valley Authority (TVA) have established a proud record of environmental, energy, and economic development leadership. On May 18, 1933, the President signed the TVA Act into law to create an Agency that serves the Valley through its energy, environment and economic development mission. Sustainability resides at the heart of TVA's purpose. Its leaders continuously evaluate and adjust operations to ensure success — today and tomorrow.

TVA's Environmental Policy is to provide cleaner, reliable and affordable energy to support sustainable economic growth in the region while engaging in proactive environmental stewardship. TVA's pursuits in these areas benefit the well-being of the 9 million people we serve, employees, customers, and Valley natural resources.

TVA maintains a Sustainability Program designed to integrate the goals of Executive Order (EO) 13514, *Federal Leadership in Environmental, Energy, and Economic Performance* into everyday operations in all business units. As required by EO 13514, this comprehensive Strategic Sustainability Performance Plan (SSPP) addresses key aspects of TVA's energy, environmental, economic, and social resources and responsibilities.

As part of this SSPP, TVA established specific goals and periodically measures and reports its progress toward meeting them. These goals are an integral part of TVA's business practices and are tracked along with other business objectives. TVA's SSPP is driven by:

- the goals set forth in EO 13514, EO 13423 *Strengthening Federal Environmental, Energy, and Transportation Management*, the *Energy Policy Act of 2005 (EPAct05)*, and the *Energy Independence and Security Act (EISA) of 2007*;
- the [TVA Environmental Policy](#);
- the [TVA Integrated Resource](#) and [Natural Resource Plan](#); and
- best-business practices.

The budget for meeting the SSPP goals is based upon non-appropriated funds, solely through revenues from power sales, making this plan's proposed goals and projects subject to the availability of funding as TVA deems appropriate and practicable.

This SSPP is intended for the internal management of TVA only and is not intended to, nor does it, create any right or benefits, substantive or procedural, enforceable by law or equity against TVA or the United States, or their officials, employees or agents or any other person.

Signed,



Brenda E. Brickhouse
Senior Sustainability Officer

EXECUTIVE SUMMARY

OVERVIEW

Section 8 of EO 13514 *Federal Leadership in Environmental, Energy, and Economic Performance* directs Federal agencies to develop, implement, and annually update a multi-year Strategic Sustainability Performance Plan (SSPP). TVA submitted its first SSPP to the White House in June 2010. This document is the fourth annual update to the Plan.

VISION

The TVA Mission includes serving the Tennessee Valley through providing affordable and reliable energy, environmental stewardship, and economic development. Because these areas of service facilitate sustainability, achieving the EO 13514, EO 13423, EPAAct05, and EISA 2007 goals directly supports the broader TVA Mission.

Sustainability focuses on environmental, economic and social criteria, aspects that are already integral to TVA and its mission:

The TVA Environmental Policy and commitment to cleaner energy correlates with the environmental aspect of sustainability. TVA efforts to manage natural resources responsibly, reduce emissions, explore the use of renewable energy, all while providing affordable and reliable power, are central to this commitment.

TVA's economic development commitment mirrors the economic aspect of sustainability through goals of increasing capital investment and attracting and retaining good jobs for the people and businesses served by TVA.

The TVA mission is supported by its values, all of which reflect sustainability's social aspect: safety, diversity, integrity and respect, honest communication, accountability, teamwork, flexibility, and continuous improvement.

LEADERSHIP

Development and implementation of TVA's SSPP is guided by the following sustainability leaders:

- Brenda E. Brickhouse – TVA Vice President of Environment and TVA Senior Sustainability Officer
- John Myers – TVA Director, Environmental Policy and Performance
- Laura M. Duncan – TVA Sustainability Program Manager

TVA's Environment Group is the point of contact with the Office of Management and Budget and Council on Environmental Quality for sustainability reporting. TVA's Environment Group also leads TVA's Sustainability Program and governance structure, which includes subject matter experts (SMEs) and Sustainability Representatives from multiple business units working together and with TVA's Sustainability Program to provide leadership and focus for TVA's sustainability efforts. Each representative is tasked with aligning sustainability goals and initiatives into their annual business planning process. Business planning alignment ensures efficient resource utilization to maximize sustainability benefits. This group also acts as TVA's Energy Management Committee and includes Sustainability Program staff, Federal Working Group members, and representatives from pertinent TVA Business Units.

PERFORMANCE REVIEW

Table 1-0 shows agency size and scope of operations that are inclusive to this report. TVA provides electricity in parts of seven southeastern states at prices below the national average. TVA, which receives no taxpayer money and makes no profits, also provides flood control, navigation and land management for the Tennessee River system and assists utilities and state and local governments with economic development.

Table 1-0. SIZE & SCOPE of TVA OPERATIONS

Agency Size and Scope	FY 2012	FY 2013
Total Number of Employees as Reported in the President's Budget	12,457	12,696
Total Acres of Land Managed	328,000	335,549
Total Number of Buildings Owned ¹	2,304	2,5492
Total Number of Buildings Leased (GSA and Non-GSA Lease)	35	35
Total Building Gross Square Feet (GSF)	28.513 million	29.982 million
Operates in Number of Locations Throughout U.S.	7	7
Operates in Number of Locations Outside of U.S.	0	0
Total Number of Fleet Vehicles Owned	1,966	1,808
Total Number of Fleet Vehicles Leased	0	0
Total Number of Exempted-Fleet Vehicles (Tactical, Law Enforcement, Emergency, Etc.)	140	67
Total Amount Contracts Awarded as Reported in FPDS (\$Millions)	N/A	N/A ²

¹ Building information should be consistent with FY 2013 and FY 2014 data submitted into the Federal Real Property Profile (FRPP).

² TVA's vehicle fleet has been historically excluded from being subject to fleet management goals due to the nature of its make-up, use, and its connection to "the operation and maintenance of the TVA power system." In FY 2013, TVA agreed to apply the petroleum reduction goal and alternative fuel goals to its light duty vehicles.

Goal 1: Greenhouse Gas Reduction and Maintenance of Agency Comprehensive Greenhouse Gas Inventory

a. INTEGRATION

TVA continues to improve the quality and accuracy of its Greenhouse Gas (GHG) Inventory. Greenhouse gas reductions occur as a result of improved performance across Goals 2-10.

b. EVALUATION MEASURES

TVA compiles its Greenhouse Gas Inventory data in a manner consistent with the Federal Greenhouse Gas Reporting Guidance.

c. SUCCESS

TVA is meeting its GHG Scope 1 & 2 reduction targets. TVA is continuing to evaluate facilities to identify potential Energy Conservation Measures (ECMs) as required by EAct05 and EISA 2007. During FY 2013, TVA surveyed 11 EISA “covered facilities” accounting for 5,241,000 square feet. While TVA’s covered facilities are mostly excluded buildings under EAct05, TVA continues to survey and make energy and water improvements at both excluded and goal-subject buildings. In FY 2013, TVA implemented \$8.2M in improvements resulting in: 1) \$983,000 dollars in annual savings, 2) 11,940 MWh in energy savings, and 3) 22,880,000 gallons of water consumption savings at both covered and non-covered facilities.

d. CHALLENGES

Obtaining GHG Scope 3 emissions data for employee commuter travel is a challenge. In FY 2013, TVA surveyed employees to better collect data and increase awareness of the environmental and financial benefits of using alternative modes of commuting. We first tried using web-based software for data collection but discontinued this effort due to budget challenges.

TVA continues to improve with the FY14 implementation of commercial-grade greenhouse gas accounting software and projects the increased use of advanced Federal greenhouse gas accounting Scope 3 methodologies, instead of the Federal default methodologies (which are heavily dependent on the number of employees). This will allow for the collection of more accurate commuter data and better enable strategic actions directed at meeting Goal 1 targets.

Additionally, TVA's vehicle fleet has historically been excluded from fleet management goals due to the nature of its make-up, use, and its connection to “the operation and maintenance of the TVA power system.” In FY 2013, TVA agreed to apply the petroleum reduction goal and alternative fuel requirements to its light duty vehicles. Due to this late start, it is challenging to catch-up with the current requirement of a 14 percent reduction from 2005 baseline, but we are making progress.

e. LESSONS LEARNED

Reliance on the default Federal Greenhouse Gas Reporting Guidance methodologies does make it difficult to accurately show progress in meeting Scope 3 emissions goals. Results show TVA to be lagging mainly due to the need for better accounting of employee commuting. The standard methodologies assume set distances and an average type of vehicle used. Improved data collection will enable a more

accurate calculation for personal vehicle use and further enable TVA to better account for employees using alternative forms of transportation. TVA did show progress towards meeting the Scope 3 emissions goal through a number of ways, including reducing business travel, continued municipal solid waste reduction efforts, and through increased awareness via a commuter travel survey.

f. PLANNED ACTIONS

For Scope 1 & 2 GHG emissions related to buildings, TVA plans to continue EISA 2007 and goal-subject energy/water surveys and project upgrades to help meet GHG reduction targets. For Scope 1 GHG emissions related to fleet vehicles, TVA will continue to reduce petroleum use in fleet vehicles by reducing employee travel, increasing utilization of alternative fuel, and optimizing its fleet size. For Scope 3 GHG emissions related to commuter travel, TVA will continue its efforts to collect better data and increase awareness of the environmental and financial benefits of using alternative modes of commuting. For Scope 1, 2, & 3 GHG emissions inventory, TVA purchased an agency-wide commercial carbon accounting database in FY13 and is on track to complete its initial deployment effort by September 30, 2014.

Goal 2: Buildings, ESPC Initiative Schedule, and Regional & Local Planning

a. INTEGRATION

TVA will continue to review new building designs and major renovations for incorporation of the Sustainable Guiding Principles (SGPs) and work toward retrofitting the SGPs in FY15 into 15 percent of those buildings greater than 5,000 square feet. These efforts ensure that we meet:

- Goal 1 - GHG reduction through reduced building energy use;
- Goal 4 - water reduction by reducing water consumption;
- Goal 5 - pollution prevention and waste reduction through recycling of construction and demolition debris and recycling installed in new and existing buildings;
- Goal 6 – sustainable acquisition through the purchase of recycle content, biobased content and energy/water efficient products used in new and renovated buildings;
- Goal 7 - electronic stewardship and improvement of practices at data centers through the purchase and installation of EPEAT compliant computers, monitors and imaging equipment installed in buildings;
- Goal 8 – promotion of renewable energy through the use of HMOD, RECs and other renewable sources when found to be cost-effective; and
- Goal 9 - climate change resilience through reduced energy use reducing GHG emissions.

TVA is budgeting SGP work for new building construction and upgrades as identified through Business Unit Sustainability Representatives and site management.

b. EVALUATION MEASURES

TVA is using the Energy Star Portfolio Manager Sustainable Check List to track SGP progress for existing buildings and an internal database (Tririga) to track building energy/water use.

Note that “Total Number of Buildings Owned,” and “Total Building Gross Square Feet” (GSF) reported in the Agency Size and Scope table are from the TVA database and are the same as reported in the 2013

Annual Energy Management Report. Last year's Federal Real Property Profile (FRPP) reporting was done from the legacy Internal Energy Management Program (IEMP) database.

c. SUCCESSES

TVA must complete SGP retrofits on a total of 40 buildings to meet the 15 percent EO goal. TVA met the FY 2013 SSPP goal of completing the last of its evaluations and design work on a total of 40 smaller buildings. Twelve buildings have already been completed; 9 more will be completed for the Scorecard period ending June 30, 2014. TVA will continue to work towards the 15 percent goal by FY 2015 but has had some challenges in meeting some SGP goals (e.g., recycling) at some of our small and remote sites.

TVA has consistently met the subject building energy reduction goal, the EISA 2007 survey directives and the Scope 1 & 2 GHG goals. TVA continues to implement cost-effective energy-saving projects in both goal-subject and excluded buildings as funding is available.

d. CHALLENGES

TVA has been challenged in meeting the short-term yearly goals due to our initial plans to upgrade our two largest office buildings that represented 21 percent of its applicable square footage (to date there has been no avenue to obtain partial credit through FRPP reporting). However, to meet OMB's emphasis on numbers-of-buildings accounting, we had to switch emphasis to multiple smaller building starting in 2010. TVA has continued to apply the SGPs to its two largest office buildings; the Knoxville Office Complex (KOC) and the Chattanooga Office Complex (COC).

Together, these two buildings represent 21 percent of TVA goal-subject buildings (as defined by EAct05), using square footage accounting. To date, 85 percent of the SGP directives have been completed in the KOC and COC. If TVA could receive partial credit for this work, the agency would have exceeded the 15 percent by FY 2015 goal. TVA has also turned its attention to retrofitting a greater number of smaller buildings to try to meet the goal through numbers-of-buildings accounting. TVA continues to be challenged by funding constraints to meet these goals as TVA receives no appropriated dollars and is funded solely by revenues from power sales.

e. LESSONS LEARNED

TVA has learned that implementing recycling in many of its smaller buildings at remote locations has been challenging due to low occupancy and the lack of local recycling infrastructure and available markets. Eight buildings have been delayed in meeting this last directive. TVA is working with facility maintenance personnel and on-site employees to find ways to collect and transport recyclables to other locations with recycling infrastructure in place.

f. PLANNED ACTIONS

TVA plans to complete all SGP directives on 31 of the total 40 buildings within the next 12 months. TVA is also continuing to focus improvements on its two largest office complexes. TVA also plans to continue reviewing new building designs to ensure compliance with SGP directives. Additionally, TVA is developing a Strategic Real Estate Plan that will guide future building decisions and improvements.

Goal 3: Fleet Management

a. INTEGRATION

TVA recognizes that reduction in use of light duty vehicles and petroleum supports the Goal 1 directive to reduce GHG. TVA has developed and continually revises comprehensive vehicle specifications to ensure appropriate vehicles are utilized to support their intended mission.

b. EVALUATION MEASURES

TVA tracks purchases of E85 fuel, to the best of its ability and is implementing FleetDash in FY 2015 to improve tracking and reporting for all fleet fuel consumption.

c. SUCCESSES

TVA was successful in reducing the light duty fleet by 300 plus units during FY 2013. Petroleum consumption is declining and the usage of E85 continues to rise.

TVA has also maintained a Ridesharing Service's Vanpool Program since 1974. The program was developed in response to the energy crisis to alleviate traffic congestion and parking problems in the downtown Knoxville area. The program operates throughout the TVA region, and continues to operate for the purpose of reducing energy consumption, reducing traffic congestion, alleviate parking problems, and improve air quality. TVA's Ridesharing program is regarded as one of the oldest, largest, and most successful in the Nation.

d. CHALLENGES

TVA's light duty vehicles are spread across a seven-state service area and are often required to travel in rural areas (outside the major metropolitan areas) where alternative fuels are not readily available. Industry coding of alternative fuels also impacts correctly capturing all E85 purchases. TVA continues to focus on increasing the usage of E85, where practicable, and will implement the use of FleetDash as a way to increase the driver awareness and the consumption of E85 for its light duty fleet.

e. LESSONS LEARNED

(See "Challenges" above)

f. PLANNED ACTIONS

TVA will focus on methods to reduce petroleum consumption and increase the usage of E85 for its light duty fleet. TVA plans on further reductions in agency-owned vehicles and will focus on increasing the use of online technologies, such as remote conferencing, to reduce employee travel when possible. Additionally, TVA's business units are developing targeted initiatives to reduce travel. In this regard, Technical Training and Operations Support are both evaluating and moving towards regional training and support model to reduce travel.

Goal 4: Water Use Efficiency and Management

a. INTEGRATION

TVA considers water management plans as part of its normal operation and maintenance activities. It has several avenues to fund water improvements at its business units. Making water efficiency upgrades in TVA buildings helps meet Goal 2 – Sustainable Buildings, as many of the upgrades have occurred in buildings chosen to receive SGP upgrades. Reducing water use also helps reduce energy use related to heating demands, helping to meet Goal 1 - GHG targets.

b. EVALUATION MEASURES

Utility water bills are used to measure TVA progress in meeting the potable water reduction goal.

c. SUCCESSES

TVA finished FY 2013 with a 21.7 percent reduction in Gal/GSF compared to its FY 2007 base year. TVA's water use primarily went up this fiscal year due to major water leaks that were not detected and resolved immediately. Fortunately, this program has helped us identify and develop plans to resolve leaks and increase future water savings. During FY 2013, water surveys were conducted at multiple TVA sites covering 5.2 million square feet. TVA consumed 608.4 million gallons of potable water in FY 2013. To date, TVA has identified projects, from covered facilities surveyed, with a potential water savings of 20.13 million gallons.

d. CHALLENGES

TVA does not foresee major challenges to meeting this goal, considering it is already trending ahead of the annual targets. However, TVA's water use could fluctuate due to its aging water infrastructure.

e. LESSONS LEARNED

TVA has made several changes over the past several years that have improved the tracking and reduction of water use at its buildings. In FY 2011, TVA moved all of its building energy and water data from its IEMP database to a new commercially available, comprehensive database, which provided more accurate accounting and reporting flexibility. During this move, TVA combined its building data with TVA's facilities group so that all of TVA will be using the same basic building inventory data. TVA also undertook an extensive audit of all water data, looking at each month's data for each building for FY 2007 and FY 2011, making needed corrections. TVA has also been focusing on fixing major potable water leaks at its sites to reduce water consumption.

f. PLANNED ACTIONS

TVA as part of its normal business planning will implement cost-effective water-saving projects in its buildings to further reduce water use. TVA will strive to identify and repair major potable water leaks. TVA will also identify areas where potable water use can be diverted to non-potable water sources.

Goal 5: Pollution Prevention and Waste Reduction

a. INTEGRATION

TVA has implemented an agency-wide recycling program and will continue to seek opportunities for source reduction to work towards achieving 50 percent Non-hazardous Municipal Solid Waste (MSW) and Construction and Demolition (C&D) debris diversion rates by FY 2015. TVA recognizes that this work helps meet Goal 1 - GHG reduction through reduced waste generated and landfilled; Goal 2 - through recycling of construction and demolition debris and recycling installed in new and existing buildings; and Goal 6 - through efforts to identify and reduce waste streams and promote the elimination, substitution, and/or management opportunities for chemical acquisition.

b. EVALUATION MEASURES

Both MSW and C&D diversion rates are measured by conducting quarterly assessments of TVA's disposal log provided by TVA's primary waste management service provider. Additionally, mechanisms have been implemented to improve visibility and ensure consistent tracking of TVA's progress towards a 50 percent diversion rate. TVA continues to improve data collection for C&D projects where waste disposal is not handled by its primary service provider.

c. SUCCESSES

In FY 2011, TVA assessed its recycling program and identified facilities where recycling programs are needed. In FY 2013, TVA implemented 7 recycling programs at plants and office facilities. The implementation of recycling programs has improved the agency's recycling rate from 3.2 to 6.2 percent over the past two years. With source reduction, TVA's waste diversion rate has improved to a 19 percent landfill diversion rate as compared to FY 2008 baseline.

d. CHALLENGES

Since programs have been implemented at TVA locations where recycling is feasible and cost effective, the main challenge for achievement of a 50 percent MSW diversion rate is employee engagement for both source reduction and recycling practices. Additionally, TVA faces the challenge that opportunities to recycle at C&D recycling facilities are limited due to the lack of cost-effective local service providers.

e. LESSONS LEARNED

TVA has recognized that maintaining routine communication with employees has proven critical to the success of both MSW and C&D diversion processes. Additionally, the role of Supply Chain is vital to establishing contract terms and service processes that support source reduction.

f. PLANNED ACTIONS

TVA will increase awareness and outreach to support improvement of its MSW diversion rate. TVA will continue to work to identify practical and cost-effective opportunities to recycle C&D debris.

Goal 6: Sustainable Acquisition

a. INTEGRATION

Goal 6, Sustainable Acquisition, achievements significantly contribute to and support Goal 1 - GHG Reduction, Goal 2 - Building Energy Intensity, Goal 3 - Fleet Management, Goal 5 - Waste Reduction, and Goal 7 - Electronic Stewardship.

b. EVALUATION MEASURES

TVA Supply Chain conducts internal compliance reviews of agency sustainable acquisition policies, contract actions, documentation, and contractual language inclusion in order to assure practices and policies fully comply with the goals and directives of EO 13514.

Compliance review recommendations for improvement were implemented to improve agency's awareness of sustainable acquisition policies, green coding procurement, and reporting accuracy.

TVA does not use the Federal Procurement Data System (FPDS). All TVA biobased and other sustainable acquisitions are coded and tracked in TVA's Maximo system, which is the system of record for all TVA purchases of goods and services.

c. SUCCESSES

During FY13, TVA consistently demonstrated a sustainable acquisition rate of 95 percent as well as progress towards achieving the agency's biobased purchasing goals by updating classroom training and submitting revisions for the agency's online training module.

d. CHALLENGES

By the end of FY13, TVA started implementing an agency-wide organizational restructuring effort. The restructuring, which has extended into FY14, has impacted a significant number of Supply Chain employees as well as associated purchasing and contracting initiatives. As a result of the restructure, supply chain sustainability roles are changing and the schedule for green purchasing initiatives for FY13 and FY14 has been impacted. However, TVA continues to demonstrate progress towards Goal 6.

e. LESSONS LEARNED

(See "Challenges" above)

f. PLANNED ACTIONS

Participate in internal compliance reviews, including self-assessments of policies, contract actions, documentation, and/or contractual language inclusion in order to ensure sustainable acquisition practices and policies fully comply with the goals and directives of EO 13514. Additionally, TVA will conduct random five percent sampling of purchase order transactions which are coded green to verify sustainable acquisitions criteria are met. Increase biobased purchases through enhanced training, meetings with business units, and developing task-focused collaborations with internal stakeholders in FY15. TVA intends to continue both its recycled paper acquisition program and waste reduction pilot to reduce paper purchases at corporate offices.

Goal 7: Electronic Stewardship and Data Centers

a. INTEGRATION

Goal 7 achievements contribute to and support Goal 2 - Building Energy Intensity and Goal 6 - Sustainable Acquisition.

b. EVALUATION MEASURES

TVA achieved 97% EPEAT and 98% Energy Star compliance. TVA is not yet 100% power-management-enabled. TVA uses PC monitors that are actively power-managed. TVA records shipments to Oak Ridge National Labs R2 certified recycling center.

c. SUCCESSES

TVA purchased 6,887 environmentally preferred (EPEAT registered) PC's and monitors, printers, and TV's, achieving a 97.4 percent EPEAT purchase rate (EPEAT goal is 95 percent). TVA donated or recycled 100 percent of its end-of-life electronic equipment using the R2 certified Oak Ridge National Lab facility. TVA uses agency-wide policies and procedures to procure and configure agency printers to print in duplex mode. In addition, print release (badged printing) has deployed 211 devices to date and is on track to surpass 300 devices by the end of FY2014.

d. CHALLENGES

Technical complexity, evolving infrastructure, economics, and agency security requirements have presented challenges regarding PC Power Management. TVA is not yet 100% power management enabled.

e. LESSONS LEARNED

To achieve our 97.4 percent plus EPEAT purchase rate, TVA IT initiated additional pre-purchase reviews by technical staff. The consolidation of data centers at TVA was not achievable due to the complexity of data center locations.

f. PLANNED ACTIONS

TVA will invest in the newest, energy efficient processor technology to significantly reduce the power consumption of PC's while they are in use. TVA is also implementing a new strategy to consolidate and reduce the number of agency PC's while expanding the use of low power, thin client and mobile devices. Print release (badged printing) is in the implementation stage and being deployed across TVA as a more efficient alternative to current print management strategies. In addition, the managed print initiative will provide just in time consumable delivery and proactive device maintenance through a managed print provider to reduce TVA costs.

Goal 8: Renewable Energy

a. INTEGRATION

A large part of TVA's renewable energy used to meet its goal subject building energy reduction goal (Goal 2) and GHG targets (Goal 1) is the result of hydro modifications (HMODs), which are generated and used on-site. In addition to HMOD, TVA also purchases renewable energy credits (RECs) for its large office buildings through local power suppliers which participate in TVA's Green Power Switch Program. These REC purchases are budgeted and funded through TVA's facilities group, which also pays utility bills.

b. EVALUATION MEASURES

TVA's Reservoir Operations and Renewables Group implements and tracks HMOD improvements at its various hydro sites and provides HMOD data to the Internal Energy Management Program (IEMP). IEMP only uses a small portion of this available renewable energy, which combined with RECs meets the renewable goal. The TVA Renewables Group has purchased a dedicated database program to account for all renewable energy used both internally and externally by TVA customers to better account for all renewables.

c. SUCCESSES

TVA exceeded the renewable energy goal of 7.5 percent finishing at 9.4 percent for FY 2013. TVA is on track toward meeting the 20 percent by 2020 renewable energy goal established by the December 5, 2013 Presidential Memo.

d. CHALLENGES

TVA does not anticipate any challenges in meeting the renewable energy goal.

e. LESSONS LEARNED

TVA has recognized the need to evolve from the practice of using multiple spreadsheets for accounting of renewables to the use of a more efficient database program which is being implemented this FY to track all renewables and streamline reporting.

f. PLANNED ACTIONS

TVA's planned actions are to maintain current progress having already exceeded the FY 2013 renewable goal.

Goal 9: Climate Change Resilience

(See “Progress on Administration Priorities”)

Goal 10: Energy Performance Contracts

a. INTEGRATION

TVA, as an energy provider, has its own Federal Energy Services Program that provides Utility Energy Service Contracts (UESC) to Federal direct-served and Federal non-direct-served customers in its region at special request by local power distributors. As such, TVA recognizes the value in these contracts and has chosen to fund its own projects to provide more value. TVA receives no appropriations and uses revenue from power sales to fund energy, water and sustainability projects to meet Goals 1, 2 and 4.

b. EVALUATION MEASURES

TVA tracks its projects through an Internal Energy Management Program and reports its progress in meeting Goal 10 through MAX Collect and the EISA Section 432 Compliance Tracking System.

c. SUCCESSES

TVA awarded \$17.4 million in Energy Performance Contracts, exceeding its December 31, 2013 target of \$17.0 million. TVA met its commitment through the implementation of projects identified by its energy, water, sustainability surveys.

d. CHALLENGES

TVA’s business planning and prioritization process determines the energy, water and sustainability projects that will be prioritized and funded in the future. Moving forward, TVA will rely on projects funded by specific TVA business units that carry budgets for renovations, operation and maintenance, and modernization efforts. Projects covered under general operations are ranked for economic benefit compared to other TVA projects to determine funding availability and implementation status and are funded mainly through the capital budgeting process. The biggest challenge will be influencing and capturing the energy and water benefits of these projects.

e. LESSONS LEARNED

Since TVA is not doing ESPCs in the traditional sense, TVA has no lessons learned to report.

f. PLANNED ACTIONS

TVA, as a provider of utility-based ESPCs, will continue to self-fund its own energy, water and sustainability projects. For FY 2014, TVA committed to awarding \$5.5 million in projects, bringing the total TVA commitment to \$22.5 million.

PROGRESS ON ADMINISTRATION PRIORITIES

CLIMATE CHANGE ADAPTATION PLAN

Consistent with the ‘Federal Agency Climate Change Adaptation Planning Support Document,’ the goal of TVA’s Adaptation Planning process is to sure the Agency continues “to achieve its mission and program goals and to operate in a secure, effective and efficient manner in a changing climate.” TVA has, in accordance with the goals and directives of EO 13514 and EO 13653 *Preparing the United States for the Impacts of Climate Change* updated its Statement on Climate Change Adaptation and its Adaptation Action Plan.

TVA utilizes its environmental management processes to direct our efforts to understand, prepare for, and respond to how climate change may impact its mission, programs, and operations. Its primary planning processes are the IRP and NRP. As a Federal agency, TVA must also comply with the National Environmental Policy Act (as well as applicable Executive Orders). Environmental goals are an integral part of TVA’s business operations and are tracked with other business objectives. TVA has updated its Statement on Climate Change Adaptation and its Adaptation Action Plan consistent with the Third National Climate Assessment and the December 19, 2013 guidance, preparing Federal Agency Climate Change Adaptation Plans in Accordance with EO 13653.

TVA is continuing its Climate Change Sentinel Monitoring (CCSM) program started in April 2013, with 18 stations being monitored by TVA and partners throughout the Tennessee River watershed. TVA worked with the Southeast Monitoring Network to select long-term monitoring stations and establish agreed upon monitoring protocols for the program. The goal of the program is to assess potential biological, ecological, and hydrological responses of aquatic ecosystems related to climate change. This program will assist TVA’s compliance with EO 13514 and EO 13653 that direct federal agencies to participate in a nationally integrated strategy toward sustaining quality of life considering risks related to climate change. Further, CCSM is a component of TVA’s Natural Resources Plan, which outlines TVA’s resource stewardship responsibilities for the future.

FLEET MANAGEMENT PLANS

TVA has reduced its fleet size and will continually analyze the size and cost to operate a light duty fleet. Due to TVA’s mission and infrastructure, drastic reductions cannot be obtained; however, TVA is working diligently to reduce petroleum consumption and increase the consumption of alternative fuels.

ENERGY SAVINGS PERFORMANCE CONTRACTS

TVA awarded \$17.4 million in Energy Performance Contracts, exceeding its December 31, 2013 target of \$17.0 million. TVA committed to awarding an additional \$5.5 million in energy, water and sustainability project commitments. Please note that TVA, as a provider of utility based Energy Savings Performance Contracts (ESPCs), will fund its own projects. Over the 3-year period ending December 31, 2016, TVA plans on meeting its \$22.5 million commitment to implement energy, water and sustainability projects through its own implementation process.

BIOBASED PURCHASING STRATEGIES

TVA will develop and implement a targeted purchasing pilot for select corporate sites in order to create an agency-wide program designed to drive future purchases of biobased cleaning products. (See Section 3, Goal 6, paragraph f. “Planned Actions”)

EVALUATION OF PREVIOUS YEAR'S STRATEGIES

Goal	Strategy	Strategy implemented ? Yes/No	Strategy successful? Yes/No	Will you use this strategy again next year?
Goal 1: Scope 1&2 GHG Reductions	Use the FEMP GHG emission report to identify/target high emission categories and implement specific actions to resolve high emission areas identified.	Yes	Yes	Yes, TVA was successful in using this strategy and will continue to monitor/identify high emission categories with a goal to reduce them.
	Ensure that all major renovations and new building designs are 30% more efficient than applicable code.	Yes	Yes	Yes, as part of TVA's normal procedures it will continue to review and incorporate designs that are 30% more efficient than the applicable code.
	Implement in EISA 432 covered facilities all lifecycle cost effective ECMs identified.	Yes	Yes	Yes, as part of TVA's normal business planning we will implement cost-effective projects. ECMs identified by EISA covered facilities surveys have been the main way cost effective projects have been identified and implemented.
	Reduce on-site fossil-fuel consumption by installing more efficient boilers, generators, furnaces, etc. and/or use renewable fuels.	Yes	Yes	Yes, continue making Hydro Modernization improvements at its Hydroelectric Dams to reduce on-site fossil-fuel consumption.
	Reduce grid-supplied electricity consumption by improving/upgrading motors, boilers, HVAC, chillers, compressors, lighting, etc.	Yes	Yes	Yes, TVA will continue making building upgrades that result in reduced electricity consumption.
	Employ operations and management best practices for energy consuming and emission generating equipment.	No	No	No, TVA will consider implementing this strategy if needed.
	Install building utility meters and benchmark performance to track energy and continuously optimize performance.	Yes	Yes	Yes, continue to add metering to buildings in accordance to its metering plan, which it will be reviewing and updating over the next year.
	Reduce petroleum use in Scope 1 fleet vehicles.	Yes	Yes	Yes, continue to reduce petroleum use in its size & scope of agency operations fleet by using alternative fuels and by trying to enhance its car sharing program.

Goal	Strategy	Strategy implemented? Yes/No	Strategy successful? Yes/No	Will you use this strategy again next year?
Goal 1: Scope 3 GHG Reductions	Reduce employee business ground travel.	Yes	Yes	Yes, continue to look into ways of using technology and better planning to reduce the need for employee business ground travel.
	Reduce employee business air travel.	Yes	Yes	Yes, continue to limit air travel to only critical meetings in an effort to also reduce cost.
	Develop and deploy employee commuter reduction plan.	No	No	No, TVA will consider implementing this strategy if needed.
	Use employee commuting survey to identify opportunities and strategies for reducing commuter emissions.	Yes	Yes	No, TVA plans on conducting an employee commuting survey every other year.
	Increase number of employees eligible for telework and/or the total number of days teleworked.	No	No	No, TVA will consider implementing this strategy if needed.
	Develop and implement bicycle commuter program.	No	No	No, TVA will consider implementing this strategy if needed.
	Provide bicycle commuting infrastructure.	Yes	Yes	Yes, continue to maintain support for the bicycle infrastructure.
	Reduce contracted waste disposal.	Yes	Yes	Yes, continue to pursue increased recycling and diversion in an effort to reduce cost and associated GHG emissions.

Goal	Strategy	Strategy implemented? Yes/No	Strategy successful? Yes/No	Will you use this strategy again next year?
Goal 2: Sustainable Buildings	Incorporate green building specification into all new construction and major renovation projects.	Yes	Yes	Yes, continue to use this strategy not only because it is required for our goal subject buildings but because it makes good business sense.
	Redesign or lease interior space to reduce energy use by daylighting, space optimization, sensors/control system installation, etc.	Yes	Yes	TVA is embarking on another round of space optimization limiting energy efficiency improvements to its core space including daylighting controls. TVA will be reducing its underutilized or non-core space.
	Deploy CEQ's Implementing Instructions - Sustainable Location for Federal Facilities.	No	No	The majority of new buildings are built at plant sites to support the TVA mission. The sustainable location for Federal Facilities will be considered for non-power plant located buildings.
	Include in every construction contract all applicable sustainable acquisition requirements for recycled, biobased, energy efficient and environmentally preferable products.	Yes	Yes	Yes, continue to ensure that federally-mandated sustainable acquisitions are included in all relevant procurements and services.
	Develop and deploy energy and sustainability training for all facility and energy managers.	Yes	Yes	Yes, continue to conduct sustainable building training for TVA project managers, architects and interior designers involved in new construction and renovation.

Goal	Strategy	Strategy implemented? Yes/No	Strategy successful? Yes/No	Will you use this strategy again next year?
Goal 3: Fleet Management	Optimize/Right-size the composition of the fleet (e.g., reduce vehicle size, eliminate under-utilized vehicles, acquire and locate vehicles to match local fuel infrastructure).	Yes	Yes	Yes, continue to require business units to validate their need for an owned vehicle.
	Reduce miles traveled (e.g., share vehicles, improve routing with telematics, eliminate trips, improve scheduling, use shuttles, etc.).	No	No	No
	Acquire only highly fuel-efficient, low greenhouse gas-emitting vehicles and alternative fuel vehicles (AFVs).	No	No	No
	Increase utilization of alternative fuel in dual-fuel vehicles.	Yes	Yes	No, the implementation of FleetDash will be the primary focus in FY 2015
	Use a Fleet Management Information System to track fuel consumption throughout the year for agency-owned, GSA-leased, and commercially-leased vehicles.	No	No	No
	Increase GSA leased vehicles and decrease agency-owned fleet vehicles, when cost-effective.	Yes	Yes	Yes, GSA leased sedans will be placed into service in FY 2015.

Goal	Strategy	Strategy implemented? Yes/No	Strategy successful? Yes/No	Will you use this strategy again next year?
Goal 4: Water Use Efficiency & Management	Purchase and install water efficient technologies (e.g., Waterwise, low-flow water fixtures and aeration devices).	Yes	Yes	Yes, as part of TVA’s normal business planning we will implement cost-effective water-saving projects using water efficient technologies.
	Develop and deploy operational controls for leak detection including a distribution system audit, leak detection, and repair programs.	Yes	Yes	Yes, continue to use its internal leak detection plan to identify water leaks and continue to conduct leak detection assessments.
	Design, install, and maintain landscape to reduce water use.	Yes	Yes	Yes, TVA considers making improvements to landscape irrigation as part of its sustainable guiding principle building projects.
	Design and deploy water closed-loop, capture, recharge, and/or reclamation systems.	No	No	No, consider implementing this strategy if needed.
	Install meters to measure and monitor (non-potable) industrial, landscaping and, agricultural water use.	No	No	No, the vast majority of TVA non-potable water is already metered.
	Reduce non-potable water use through conversion of wet fly ash storage to dry storage.	Yes	Yes	Yes, continue non-potable water reduction through the conversion of wet fly ash to dry ash storage; this strategy has been successful to date.

Goal	Strategy	Strategy implemented? Yes/No	Strategy successful? Yes/No	Will you use this strategy again next year?
Goal 5: Pollution Prevention & Waste Reduction	Eliminate, reduce, or recover refrigerants and other fugitive emissions.	No	No	No, TVA has set a Scope 1 & 2 GHG emissions reduction target of 17% by FY 2020, relative to the emissions in FY 2008.
	Reduce waste generation through elimination, source reduction, and recycling.	Yes	Yes	Yes, continue to reduce waste landfilled through recycling and source reduction.
	Implement integrated pest management and improved landscape management practices to reduce and eliminate the use of toxic and hazardous chemicals/materials.	No	No	No, TVA will consider implementing this strategy if needed and practical.
	Establish a tracking and reporting system for construction and demolition debris.	Yes	Yes	Yes, continue with efforts to integrate databases and launch an internal Waste Dashboard metric.
	Develop/revise Agency Chemicals Inventory Plans and identify and deploy chemical elimination, substitution, and/or management opportunities.	Yes	No	Yes, TVA will target corporate facilities to promote biobased cleaning products. Additionally, will increase sustainable acquisition purchases through enhanced training, meetings with business units, and developing task focused collaborations with internal stakeholders.
	Implement non-hazardous municipal solid waste recycling programs.	Yes	Yes	No, programs have been implemented at TVA locations where recycling is feasible and cost effective.

Goal	Strategy	Strategy implemented? Yes/No	Strategy successful? Yes/No	Will you use this strategy again next year
Goal 6: Sustainable Acquisition	Update and deploy agency procurement policies and programs to ensure that federally-mandated designated sustainable products are included in all relevant procurements and services.	Yes	Yes	Yes, continue to review and provide necessary updates to procurement policies and programs to ensure designated federally mandated sustainable products are included in all relevant contracts where appropriate and practical.
	Deploy corrective actions to address identified barriers to increasing sustainable procurements with special emphasis on biobased purchasing.	Yes	No	Yes, TVA will target corporate facilities to promote biobased cleaning products. Additionally, TVA will increase sustainable acquisition purchases through enhanced training, meetings with business units, and development of task focused collaborations with internal stakeholders.
	Include biobased and other agency sustainability clauses in all applicable and relevant contracts.	Yes	No	Yes, continue to implement biobased clauses and promote the usage of checklists to ensure all applicable Request for Proposals and Request for Quotes, as well as appropriate contracts include additional sustainability clauses where appropriate and practical.
	Review and update agency specifications to include and encourage biobased and other designated green products to enable meeting sustainable acquisition goals.	No	No	Yes, continue to review and provide necessary updates to procurement policies and programs to ensure designated federally mandated biobased products are included in relevant contracts where appropriate and practical.
	Use Federal Strategic Sourcing Initiatives, such as Blanket Purchase Agreements (BPAs) for office products and imaging equipment, which include sustainable acquisition requirements.	No	No	Yes, continue outreach efforts and leverage partnerships with business development agencies to create awareness and identify ways to increase sustainable products, including biobased products, from small businesses.
	Report on sustainability compliance in contractor performance reviews.	No	No	Yes, conduct performance reviews for key suppliers as appropriate.
	Implement an agency-wide initiative which encourages source reduction and the procurement and wise-usage of 30% to 100% recycled and/or biobased paper.	Yes	Yes	TVA intends to continue both its paper acquisition program and reduction pilot project and will support biobased purchases as well as the agency's recycling goals.

Goal	Strategy	Strategy implemented? Yes/No	Strategy successful? Yes/No	Will you use this strategy again next year?
Goal 7: Electronic Stewardship & Data Centers	Identify agency "Core" and "Non-Core" Data.	Yes	Yes	Yes, continue to identify the core and non-core data centers and make updates as necessary.
	Consolidate 40% of agency non-core data centers.	No	No	No, we are unable to consolidate non-core data centers, but will continue to reduce non-core data centers at sites that are decommissioned.
	Optimize agency Core Data Centers across total cost of ownership metrics.	Yes	Yes	Yes, continue to implement the T-BLOCK infrastructure in order to recognize benefits in this area.
	Ensure that power management, duplex printing, and other energy efficiency or environmentally preferable options and features are enabled on all eligible electronics and monitor compliance	Yes	Yes	(1) Print release management will continued to be deployed in FY2015, plan to complete 300 devices by the end of FY2014. (2) Shifting to new strategy of reduction of PCs and replacement with low power thin client and mobile devices.
	Update and deploy policies to use environmentally sound practices for disposition of all agency excess or surplus electronic products, including use of certified eSteward and/or R2 electronic recyclers, and monitor compliance.	Yes	Yes	Yes, this will be an ongoing requirement.
	Ensure acquisition of 95% EPEAT registered and 100% of ENERGY STAR qualified and FEMP designated electronic office products.	Yes	Yes	TVA Supply Chain has standard contract language requiring EPEAT and ENERGY STAR compliance for electronic purchases. TVA-IT additionally reviews and approves non-standard purchases.

Goal	Strategy	Strategy implemented? Yes/No	Strategy successful? Yes/No	Will you use this strategy again next year?
Goal 8: Renewable Energy	Purchase renewable energy directly or through Renewable Energy Credits (RECs).	Yes	Yes	Yes, continue to purchase RECs for its large office buildings.
	Install onsite renewable energy on federal sites.	Yes	Yes	Yes, continue to make hydro modifications (HMOD) as this has proven to be cost-effective to the agency.
	Lease land for renewable energy infrastructure.	No	No	No, TVA will consider this strategy if presented with a viable project.
	Develop biomass capacity for energy generation.	Yes	Yes	This FY, TVA, in partnership with a local power company implemented a project to burn methane gas from a landfill at one of TVA's Fossil plants.
	Utilize performance contracting methodologies for implementing ECMs and increasing renewable energy.	No	No	TVA, as a provider of utility based ESPCs is self-financing ECMs to meet the President's Challenge. The renewable goals are being met through the purchase of RECs and use of on-site renewable energy (e.g., HMOD).
	Work with other agencies to create volume discount incentives for increased renewable energy purchases.	No	No	Possibly – TVA is considering marketing HMOD renewable RECs now that a formal process will be available through the use of a dedicated database to track their creation and use.

Goal	Strategy	Strategy implemented? Yes/No	Strategy successful? Yes/No	Will you use this strategy again next year?
Goal 9: Climate Change Resilience	Ensure climate change adaptation is integrated into both agency-wide and regional planning efforts, in coordination with other Federal agencies as well as state and local partners, Tribal governments, and private stakeholders.	Yes	Yes	Yes, maintain a list of existing partnerships that collaboratively advance TVA's water resource improvements, and also serve as potential sources of shared funding.
	Update agency emergency response procedures and protocols to account for projected climate change, including extreme weather events.	No	No	No
	Ensure workforce protocols and policies reflect projected human health and safety impacts of climate change.	No	No	No
	Update agency external programs and policies (including grants, loans, technical assistance, etc.) to incentivize planning for, and addressing the impacts of, climate change.	Yes	Yes	1) Maintain matrix of public outreach topics, materials (existing or to be developed) and target audiences. 2) Update existing and prepare new outreach materials and presentations. 3) Integrated plan for delivering water resource outreach.
	Ensure agency principals demonstrate commitment to adaptation efforts through internal communications and policies.	Yes	Yes	Yes. TVA just completed a major reorganization and will continue to review the high-level process map created in FY13 and continue to identify internal processes to coordinate internal adaptation planning with partners.
	Identify vulnerable communities that are served by agency mission and are potentially impacted by climate change and identify measures to address those vulnerabilities where possible.	No	No	No
	Ensure that agency climate adaptation and resilience policies and programs reflect best available current climate change science, updated as necessary.	Yes	Yes	1) Continue to review and participate in the National Climate Assessment process and incorporate its findings. 2) Continue TVA NRP Climate Sentinel Monitoring Program.
	Design and construct new or modify/manage existing agency facilities and/or infrastructure to account for the potential impacts of projected climate change.	Yes	Yes	Yes, continue implementation of TVA's Internal Energy Management Program.
	Incorporate climate preparedness and resilience into planning and implementation guidelines for agency-implemented projects.	No	No	No

GOAL 1: GREENHOUSE GAS (GHG) REDUCTION

Agency Progress toward Scope 1 & 2 GHG Goal

EO 13514 requires each agency establish a Scope 1 & 2 GHG emission reduction target to be achieved by FY 2020. The red bar (see Figure 1-1) represents the agency's FY 2008 baseline. The green bar represents the FY 2020 target reduction. The blue bars represent annual agency progress towards achieving this target. The percentage at the top of each bar represents the reduction or increase from the FY 2008 baseline. A negative percentage value indicates that the emissions have decreased compared to the 2008 baseline.

Figure 1-1. TVA Progress toward Scope 1 & 2 Gas Goals

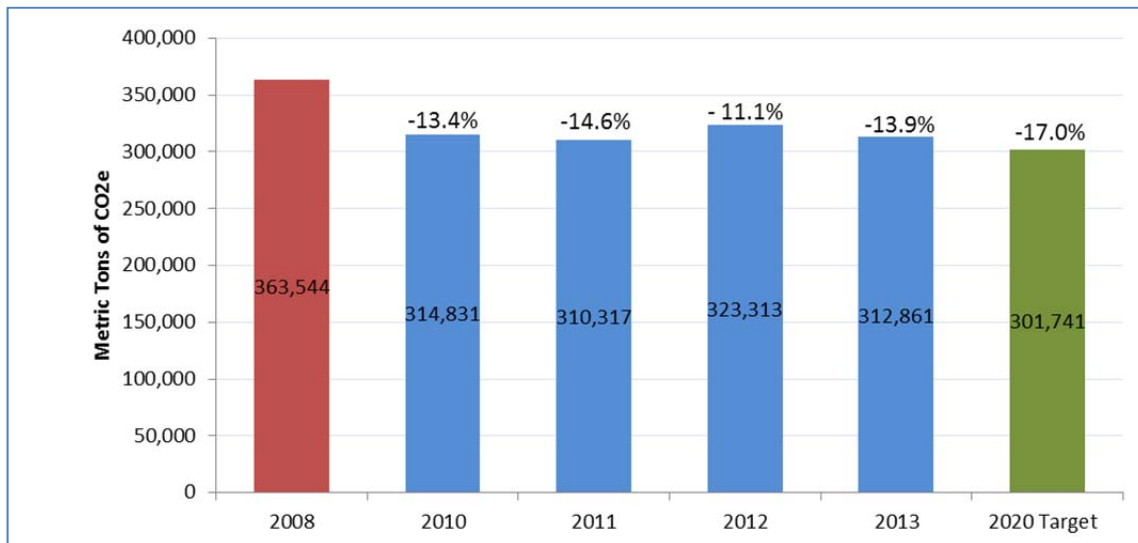


Table 1-1: Goal 1 Strategies – Scope 1 & 2 GHG Reductions

Will the agency implement the following strategies to achieve this goal?	Top Five? Yes/No or NA	Strategy Narrative	Specific targets/metrics to measure strategy success including milestones to be achieved in next 12 months
Ensure that all major renovations and new building designs are 30% more efficient than applicable code.	Yes	Continue to implement internal processes, TVA-SPP-05.20 - Internal Environmental and Energy Sustainability Process and TVA-SPP-05.21 - Resources Efficient Building Design Process, to guide project managers, architects and interior designers incorporating sustainability into all new construction and renovation projects.	TVA does not build many new buildings each year, but for those that are planned, design and construction will be reviewed for incorporation of applicable Sustainable Guiding Principles (SGPs).
Implement in EISA 432 covered facilities all lifecycle cost-effective ECMs identified.	Yes	TVA plans to continue EISA 2007 surveys and project upgrades to help meet its GHG reduction targets.	1) Complete new/follow-up EISA surveys for 25% of covered facilities to verify past performance and identify any new projects. 2) Implement cost-effective projects ending June 30, 2015.
Reduce on-site fossil-fuel consumption by installing more efficient boilers, generators, furnaces, etc. and/or use renewable fuels.	Yes	Continue to purchase RECs and to make hydro modifications (HMODs) as this has proven to be cost-effective to the agency. Additionally, TVA plans to reduce natural gas consumption by implementing cost-effective projects identified by EISA 2007 and goal-subject building surveys.	TVA's current rate of purchases combined with renewables generated and used on site has exceeded the 7.5% goal.
Reduce grid-supplied electricity consumption by improving/upgrading motors, boilers, HVAC, chillers, compressors, lighting, etc.	Yes	TVA will continue to do this as part of its EISA 2007 and goal subject building energy and water surveys.	Implement in EISA 432 covered facilities all lifecycle cost-effective ECMs identified" target above.
Employ O&M best practices for energy consuming and emission generating equipment.	No	Consider if needed.	N/A
Install building utility meters and benchmark performance to track energy and continuously optimize performance.	Yes	TVA plans to add meters to its buildings in accordance to its existing metering plan. TVA also will begin to assess its current metering plan and update it to reflect the intent of the latest guidance.	1) Update TVA's metering plan. 2) Continue to benchmark all possible covered facilities and sustainable guiding principle buildings.
Reduce petroleum use in Scope 1 fleet vehicles.	Yes	TVA plans to reduce petroleum use in fleet vehicles by increasing utilization of alternative fuel and optimizing its fleet size.	(1) Show a 50% increase in alternative fuel use over FY12 by October 2013. (2) Enhance car sharing program.

Agency Progress toward Scope 3 GHG Goal

EO 13514 requires each agency establish a Scope 3 GHG emission reduction target to be achieved by FY 2020. The red bar (see Figure 1-2) represents the agency’s FY 2008 baseline. The green bar represents the FY 2020 reduction target. The blue bars represent annual agency progress on achieving this target. The percentage at the top of each bar represents the reduction or increase from the FY 2008 baseline. A negative percentage value indicates that the emissions have been decreased compared to the FY 2008 baseline.

Figure 1-2. TVA Progress toward Scope 3 Greenhouse Gas Goals

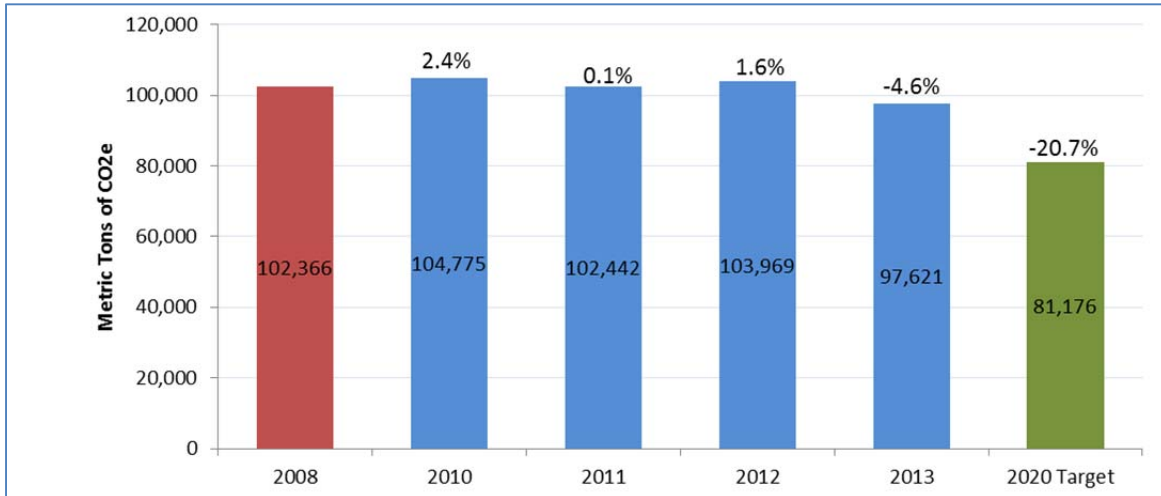


Table 1-2: Goal 1 Strategies – Scope 3 GHG Reductions

Will the agency implement the following strategies to achieve this goal?	Top Five? Yes/No or NA	Strategy Narrative	Specific targets/metrics to measure strategy success including milestones to be achieved in next 12 months
Reduce employee business ground travel.	Yes	TVA generally encourages the use of carpooling between corporate offices and when possible for general business travel.	N/A
Reduce employee business air travel.	Yes	TVA generally encourages reduced business air travel	N/A
Develop and deploy employee commuter reduction plan.	No	TVA is currently focused on data collection and improving data accuracy to assess its commuter program needs	N/A

Use employee commuting survey to identify opportunities and strategies for reducing commuter emissions.	Yes	TVA will review its previous survey effort and assess available methodologies going forward.	Identify an accurate and sustainable methodology that will be compatible with the new carbon accounting database by December 31, 2014.
Increase number of employees eligible for telework and/or the total number of days teleworked.	No	TVA is currently focused on improving the Telework Program's implementation and documentation of participants in order to assess program needs.	N/A
Develop and implement bicycle commuter program.	No	TVA will continue to offer bicycle commuter benefits and reimbursements as a means to support this healthy activity and mode of alternative transportation, however, an official program will not be developed at this time.	N/A
Provide bicycle commuting infrastructure.	Yes	TVA will continue to maintain its bicycle infrastructure by annual assessing physical condition and utilization	1) Bicycle data will be included in commuter data collection activities. 2) Collaborate with Facilities to maintain waiting list and promote utilization.

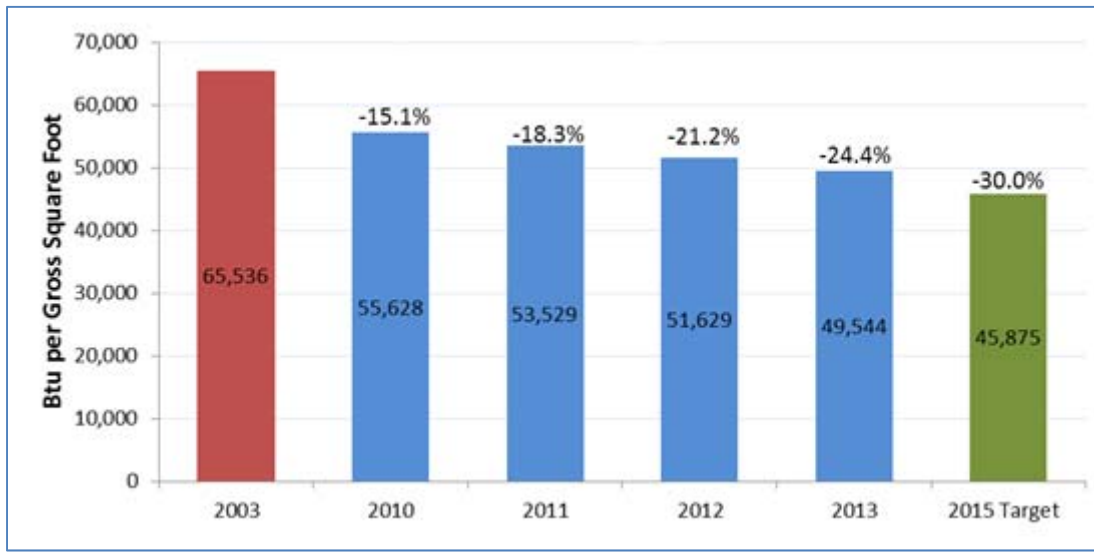
GOAL 2: SUSTAINABLE BUILDINGS

Agency Progress toward Facility Energy Intensity Reduction Goal

Section 2 of EO 13514 requires that agencies consider building energy intensity reductions. Further, the Energy Independence and Security Act of 2007 requires each agency to reduce energy intensity 30 percent by FY 2015 as compared to the FY 2003 baseline. Agencies are expected to reduce energy intensity by 3 percent annually to meet the goal.

The red bar (see Figure 2-1) represents the agency's FY 2003 baseline. The green bar represents the FY 2015 target reduction. The blue bars show annual agency progress on achieving this target. The percentage at the top of each bar represents the reduction or increase from the FY 2003 baseline. A negative percentage value indicates that the energy intensity has been decreased compared to the FY 2003 baseline.

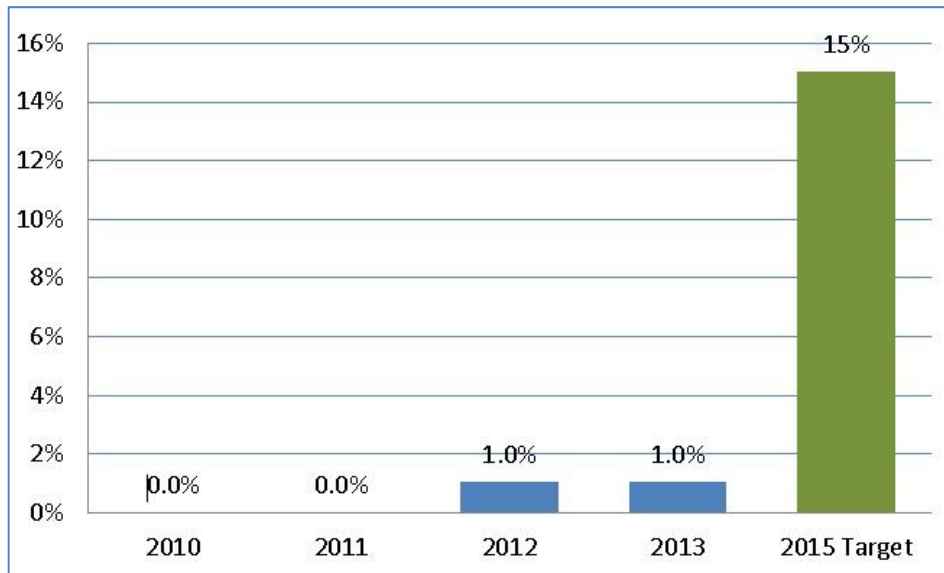
Figure 2-1. TVA Progress toward Facility Energy Intensity Reduction Goals (FY13 Goals: -24%)



Agency Progress toward Total Buildings Meeting the Guiding Principles

EO 13514 requires that by FY 2015, 15 percent of agencies’ new, existing, and leased buildings greater than 5,000 square feet meet the Guiding Principles. In order to meet the FY 2015 goal, agencies should have increased the percentage of conforming buildings by approximately 2 percent annually from their FY 2007 baseline. The green bar (see Figure 2-2) represents the FY 2015 target. The blue bars represent annual agency progress on achieving this target.

Figure 2-2³. Percentage of Total Buildings Meeting the Guiding Principles



³ TVA’s FY13 progress was at 4% completion towards the FY15 target. Due to an error in the FRPP database this performance was not reflected.

Table 2: Goal 2 Strategies – Sustainable Buildings

Will the agency implement the following strategies to achieve this goal?	Top Five? Yes/No or NA	Strategy Narrative	Specific targets/metrics to measure strategy success including milestones to be achieved in next 12 months
Incorporate green building specifications into all new construction and major renovation projects.	Yes	TVA will continue to implement its two internal Energy and Water Sustainable processes, TVA-SPP-05.20 - <i>Internal Environmental and Energy Sustainability Process</i> and TVA-SPP-05.21 - <i>Resources Efficient Building Design Process</i> , to guide TVA project managers, architects and interior designers in incorporating sustainability into all new construction and major renovation projects.	TVA does not build many new buildings each year, but for those that are planned, design and construction methods will be reviewed for incorporation of applicable Sustainable Guiding Principles (SGPs) in its “Goal Subject” buildings. TVA, many years ago in its Sustainable Building Plan, stated that applying the SGPs to its excluded buildings (those used to generate, transmit and control power) was not practical or cost effective.
Redesign or lease interior space to reduce energy use by daylighting, space optimization, sensors/control system installation, etc.	Yes	TVA is in the process of upgrading 40 buildings to incorporate the SGPs to meet the 15% retrofit goal. TVA is doing this by a process of evaluation, followed by design changes needed to meet SGP criteria, followed by construction modifications and documentation.	1) Complete all SGP criteria on 31 of the 40 total buildings in the next 12 month period. 2) By the end of FY 2015, TVA anticipates having all 40 buildings completed.
Deploy CEQ's Implementing Instructions –Sustainable Locations for Federal Facilities.	N/A	The majority of new buildings are built at plant sites to support the TVA mission. The sustainable location for Federal Facilities will be considered for non-power plant located buildings.	N/A
Include in every construction contract all applicable sustainable acquisition requirements for recycled, bio-based, energy efficient and environmentally preferable products.	Yes	TVA will continue to ensure that federally-mandated sustainable acquisitions are included in all relevant procurements and services.	Continue green procurement training to all applicable personnel.
Develop and deploy energy and sustainability training for all facility and energy managers.	Yes	TVA will continue to conduct sustainable building training for TVA project managers, architects and interior designers involved in new construction and renovation.	Review and update past training and provide updated instructions to applicable personnel.

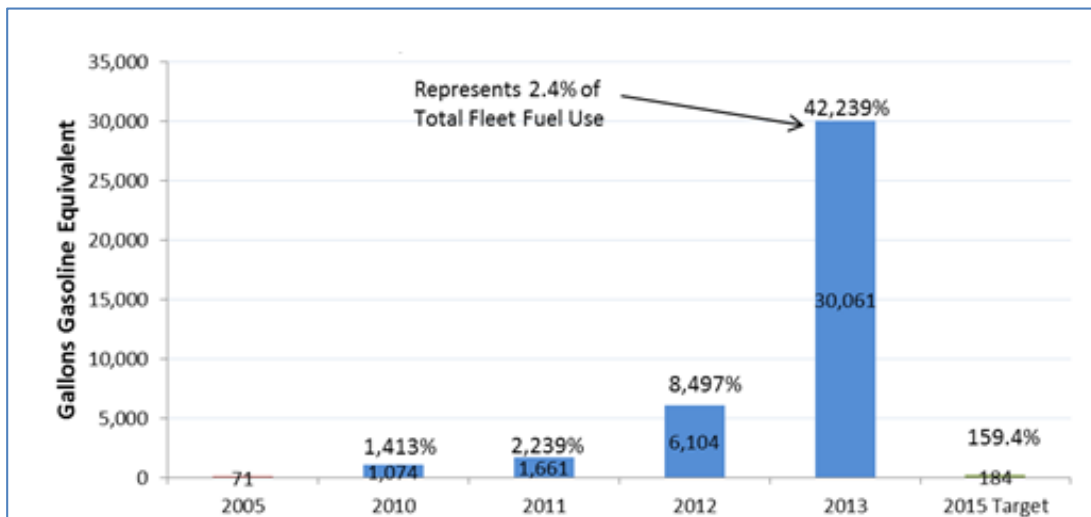
GOAL 3: FLEET MANAGEMENT

Agency Progress toward Fleet Petroleum Use Reduction Goal

EO 13514 and the EISA require that by FY 2015 agencies reduce fleet petroleum use by 20 percent compared to a FY 2005 baseline. Agencies are expected to achieve at least a 2 percent annual reduction and a 30 percent reduction is required by FY 2020.

The red bar (see Figure 3-1) represents the agency's FY 2005 baseline. The green bars represent the FY 2015 and FY 2020 target reductions. The blue bars represent annual agency progress on achieving these targets. The percentage at the top of each bar represents the reduction or increase from the FY 2005 baseline. A negative percentage indicates an decrease in fleet petroleum use.

Figure 3-1. TVA Progress toward Fleet Alternative Fuel Consumption Goals (FY13 Goal: + 114.4%)



Agency Progress toward Fleet Alternative Fuel Consumption Goal

EO 13423 requires that agencies increase total alternative fuel consumption by 10 percent annually from the prior year starting in FY 2005. By FY 2015, agencies must increase alternative fuel use by 159.4 percent, relative to FY 2005. The red bar (see Figure 3-2) represents the agency's FY 2005 baseline. The green bar represents the FY 2015 target. The blue bars represent annual agency progress on achieving this target. The percentage at the top of each bar represents the reduction or increase from the FY 2005 baseline. A negative percentage indicates a decrease in fleet alternative fuel use.

Figure 3-2. TVA Progress toward Fleet Petroleum Reduction Goals (FY13 Goals: -16%)

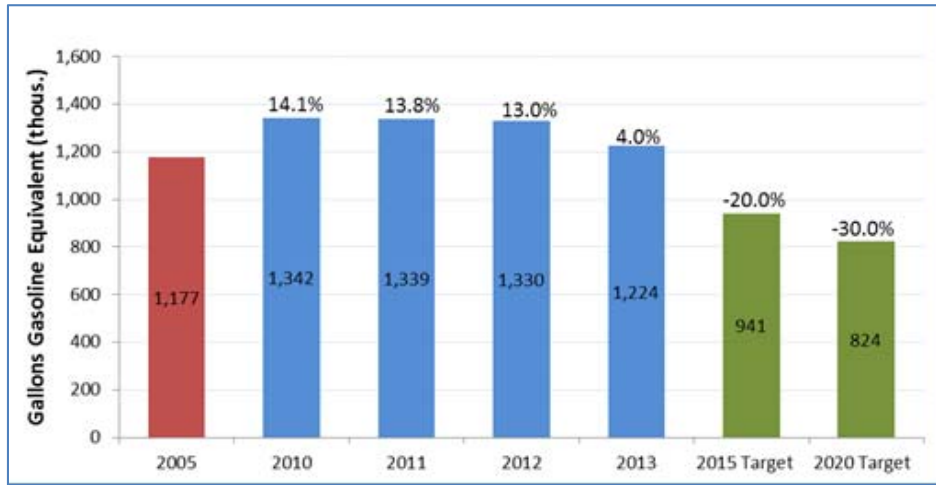


Table 3: Goal 3 Strategies – Fleet Management

Will the agency implement the following strategies to achieve this goal?	Top Five? Yes/No or NA	Strategy Narrative	Specific targets/metrics to measure strategy success including milestones to be achieved in next 12 months
Optimize/Right-size the composition of the fleet (e.g., reduce vehicle size, eliminate underutilized vehicles, acquire and locate vehicles to match local fuel infrastructure).	Yes	Focus on methods to track and identify vehicle utilization.	(1) Determine if telematics is a cost-effective tool for managing vehicle utilization by 03/2015. (2) Conduct an idle mitigation systems pilot by 12/2014.
Reduce miles traveled (e.g., share vehicles, improve routing with telematics, eliminate trips, improve scheduling, use shuttles, etc.).	Yes	Focus on optimizing vehicular travel by focusing on the increased utilization of on-line technology.	Establish a cross-functional agency team to develop recommendations for reducing employee travel.
Acquire only highly fuel- efficient, low greenhouse gas- emitting vehicles and alternative fuel vehicles	Yes	Modify the Fleet Mgt. System and related processes to capture EISA 141 data.	Develop and implement a monthly metric to proactively track compliance by 10/2014.
Increase utilization of alternative fuel in dual-fuel vehicles.	Yes	Increase utilization of E85 in flex-fuel vehicles.	Utilize the FleetDash application to increase driver knowledge and purchase of E85 by 10/2014.
Use a Fleet Mgt. System to track fuel consumption throughout the year for agency-owned, GSA-leased, and commercially-leased vehicles.	N/A	TVA has an agency-wide fleet management system that meets current data requirements.	N/A
Increase GSA-leased vehicles and decrease agency-owned fleet vehicles, when cost effective.	Yes	Implement the leasing of GSA-provided sedans in FY 2015.	(1) Finalize the MOA by 10/2014. (2) Place vehicle orders by 12/2014. (3) Place leased sedans into service 04/2014.

GOAL 4: WATER USE EFFICIENCY & MANAGEMENT

Agency Progress toward Potable Water Intensity Reduction Goal

EO 13514 requires agencies to reduce potable water intensity by 2 percent annually through FY2020 compared to an FY 2007 baseline. A 16 percent reduction is required by FY 2015 and a 26 percent reduction is required by FY 2020. The red bar (see Figure 4-1) represents the agency's FY 2007 baseline. The green bars represent the FY 2015 and FY 2020 target reductions. The blue bars represent annual agency progress on achieving these targets. The percentage at the top of each bar represents the reduction or increase from the FY 2007 baseline. A negative percentage value indicates that potable water use intensity has decreased compared to the FY 2007 baseline.

Figure 4-1. TVA Progress toward Potable Water Intensity Goals (FY13 Goal: -12%)

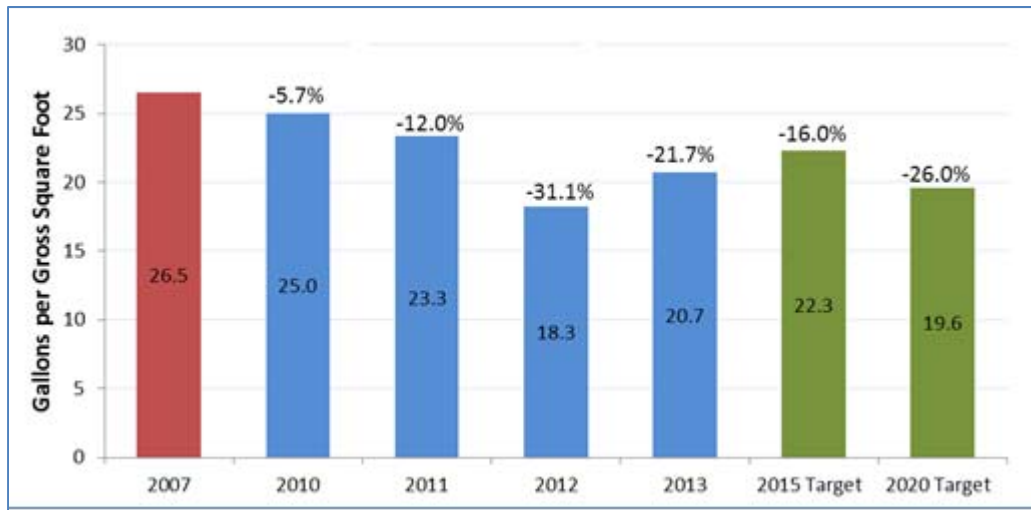


Table 4: Goal 4 Strategies – Water Use Efficiency & Management

Will the agency implement the following strategies to achieve this goal?	Top Five? Yes/No or NA	Strategy Narrative	Specific targets/metrics to measure strategy success including milestones to be achieved in next 12 months
Purchase and install high efficiency technologies (e.g., WaterSense).	Yes	TVA will continue to conduct EISA water surveys and identify water efficiency measures at its buildings and will continue to implement cost-effective measures.	Complete water efficiency projects as part of normal business planning if cost-effective.

Prepare and implement a water asset management plan to maintain desired level of service at lowest life cycle cost (for best practices from the EPA, go to http://go.usa.gov/KvbF).	No	Consider if needed.	N/A
Minimize outdoor water use and use alternative water sources as much as possible.	N/A	Consider if needed.	N/A
Design and deploy water closed-loop, capture, recharge, and/or reclamation systems.	N/A	Consider if needed.	N/A
Install advanced meters to measure and monitor (1) potable and (2) industrial, landscaping and agricultural water use.	No	Consider if needed.	N/A
Develop and implement programs to educate employees about methods to minimize water use.	No	Consider if needed.	N/A
Assess agency water strategy to determine the impact of water use on the agency's energy use and efficiency.	Yes	TVA currently incorporates this strategy as part of its ongoing energy and water surveys. Whenever a water system is eve.	Continue to identify energy savings associated with reduced water consumption.
Improve and deploy operational controls for leak detection including a distribution system audit, leak detection, and repair programs.	Yes	TVA plans to continue to improve its leak detection plan and continue to perform leak detection assessments.	Complete one leak detection assessment at a TVA power plant site.
Reduce non-potable water use through conversion of wet fly ash storage to dry storage.	Yes	TVA has developed plans to eliminate all wet ash and gypsum storage in the system by converting units at the 10 operating coal-fired power plants to dry storage or retiring coal-fired plant units. The movement away from wet fly ash systems will significantly reduce the overall use of non-potable water in TVA power generation facilities.	Bull Run Fossil bottom ash sluice recycle startup in early 2015 will result in a forecasted reduction of 584 MGY.

GOAL 5: POLLUTION PREVENTION & WASTE REDUCTION

Agency Progress toward Pollution Prevention & Waste Reduction

EO 13514 requires that Federal agencies promote pollution prevention and eliminate waste and also to minimize the use of toxic and hazardous chemicals and pursue acceptable alternatives. It also requires agencies minimize waste generation through source reduction, increase diversion of compostable materials, and by the end of FY 2015 divert at least 50% of non-hazardous and 50% of construction and demolition debris.⁴

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

Will the agency implement the following strategies to achieve this goal?	Top Five? Yes/No or NA	Strategy Narrative	Specific targets/metrics to measure strategy success including milestones to be achieved in next 12 months
Eliminate, reduce, or recover refrigerants and other fugitive emissions.	No	TVA has set a Scope 1 and 2 GHG emissions reduction target of 17% by FY20, relative to the emissions in FY08.	N/A
Reduce waste generation through elimination, source reduction, and recycling.	Yes	TVA will continue to promote source reduction and recycling practices through outreach and awareness initiatives.	1) Collaborate with TVA Supply Chain's Acquisition Program to encourage source reduction and recycling in contracts and services. 2) TVA will deploy employee focused messaging on the benefits of source reduction and recycling.
Implement integrated pest management and improved landscape management practices to reduce and eliminate the use of toxic and hazardous chemicals/materials.	No	Consider as practical	N/A

⁴ Waste guidance will be issued in mid-late FY 2015, and agencies will be expected to begin implementation in FY 2015. Next year's SSPP will include strategies as appropriate, and accounting will begin in FY 2016.

Establish a tracking and reporting system for construction and demolition debris elimination.	Yes	TVA will continue with efforts to integrate databases and launch an internal Waste Dashboard.	<ol style="list-style-type: none"> 1) Integrate manual data entry form database with TVA IT database containing vendor's data. 2) Finalize report view for integrated databases. 3) Make database internally accessible to TVA employees.
Develop/revise Agency Chemicals Inventory Plans and identify and deploy chemical elimination, substitution, and/or management opportunities.	No	TVA's Supply Chain will target corporate facilities to promote biobased cleaning products and continue focus on sustainable acquisition through enhanced training, meetings with business units, and developing task focused collaborations with internal stakeholders.	N/A
Take inventory of current HFC use and purchases	No	TVA will be including HFC data in its agency-wide carbon accounting database.	N/A
Require high-level waiver or contract approval for any agency use of HFCs	No	Consider this strategy as practical and necessary.	N/A
Ensure HFC management training and recycling equipment are available	Yes	TVA will continue to implement HFC management training as part of its Technical Training Program. Additionally, measures will be taken to ensure that recycling equipment/contracted services are available at appropriate locations.	<ol style="list-style-type: none"> 1) Continue EPA Technical Training Certification for refrigerants to appropriate personnel. 2) Coordination with appropriate business units to ensure HFC recycling equipment/contracted services are available as appropriate.

GOAL 6: SUSTAINABLE ACQUISITION

Agency Progress toward Sustainable Acquisition Goal

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

Table 6: Goal 6 Strategies – Sustainable Acquisition

Will the agency implement the following strategies to achieve this goal?	Top Five? Yes/No or NA	Strategy Narrative	Specific targets/metrics to measure strategy success including milestones to be achieved in next 12 months
Update and deploy agency procurement policies and programs to ensure designated federally mandated sustainable products are included in all relevant procurements and services.	Yes	TVA will continue to review and provide necessary updates to procurement policies and programs to ensure designated federally mandated sustainable products are included in all relevant contracts where appropriate and practical.	Participate in an annual internal compliance review, including self-assessments of policies, contract actions, documentation, and/or contractual language inclusion review, in order to ensure sustainable acquisition practices and policies fully comply with the Executive Order goals and directives.
Deploy corrective actions to address identified barriers in an effort to increase sustainable procurements with special emphasis on biobased purchasing.	Yes	Increase sustainable acquisition purchases through enhanced training, meetings with business units, and developing task focused collaborations with internal stakeholders.	Develop and implement a targeted purchasing initiative for one or more corporate sites in order to create an agency wide program for driving future purchases of biobased cleaning products.

<p>Include biobased and other sustainability clauses in all applicable and relevant clauses.</p>	<p>Yes</p>	<p>TVA will continue to promote the usage of checklists to ensure all applicable Request for Proposals and Request for Quotes as well as appropriate contracts, include biobased and sustainability clauses where appropriate and practical.</p>	<p>1) Increase biobased purchases through enhanced training, meetings with business units, and developing task focused collaborations with internal stakeholders in FY 2015. 2) TVA will conduct random sampling of 5 percent of purchase order transactions coded as green products to verify sustainable acquisition criteria is being met.</p>
<p>Review and update agency specifications to include and encourage biobased and other designated green products to enable meeting sustainable acquisition goals.</p>	<p>N/A</p>	<p>TVA will continue to review and provide necessary updates to procurement policies and programs to ensure federally mandated biobased products are included in relevant contracts where appropriate and practical.</p>	<p>1) Increase biobased purchases through enhanced training, meetings with business units, and developing task focused collaborations with internal stakeholders in FY2015. 2) TVA will conduct random sampling of 5 percent of purchase order transactions coded as green products to verify sustainable acquisition criteria is being met.</p>
<p>Use Strategic Sourcing Initiatives, such as Blanket Purchase Agreements for office products and imaging equipment, which include sustainable</p>	<p>N/A</p>	<p>TVA will continue outreach efforts and leverage partnerships with business development agencies to create awareness and identify ways to increase sustainable products, including biobased products, from small businesses.</p>	<p>N/A</p>
<p>Report on sustainability compliance in contractor performance reviews.</p>	<p>N/A</p>	<p>TVA will conduct performance reviews for key Suppliers where appropriate and practical.</p>	<p>N/A</p>
<p>Implement an agency wide initiative which encourages source reduction and the procurement and wise usage of 30% to 100% recycled paper.</p>	<p>Yes</p>	<p>TVA intends to continue both its paper acquisition program and reduction pilot project to also support biobased purchases, as well as the agency's recycling goals.</p>	<p>1) Increase recycled paper purchases up to 2%. 2) Implement pilot project to reduce up to 1% of paper purchases at corporate sites.</p>

GOAL 7: ELECTRONIC STEWARDSHIP & DATA CENTERS

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

EO 13514 requires agencies to promote electronics stewardship by: ensuring procurement preference for EPEAT-registered products; implementing policies to enable power management, duplex printing, and other energy-efficient features; employing environmentally sound practices with respect to the disposition of electronic products; procuring Energy Star and FEMP designated electronics; and, implementing best management practices for data center operations. Figure 7-1 shows TVA status in meeting EPEAT, Power Management, and End-of-life disposal goals.

Figure 7-1. TVA Progress toward EPEAT, Power Management & End of Life Goals




GOAL	EPEAT	POWER MANAGEMENT	END-OF-LIFE
CURRENT STATUS			
COMMENTS	97% or more of TVA Monitors and PCs/Laptops purchased in FY 2012 were EPEAT Compliant	TVA is not yet Power Management compliant	100 % of TVA electronics at end-of-life disposed are recycled

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

Will the agency implement the following strategies to achieve this goal?	Top Five? Yes/No or NA	Strategy Narrative	Specific targets/metrics to measure strategy success including milestones to be achieved in next 12 months
Identify agency “Core” and “Non-Core” Data Centers.	Yes	Identify and classify all IT-owned data centers as either “Core” or “Non-Core”.	Completed identification of core and non-core data centers.
Consolidate 40% of agency non-core data centers.	No	The complexity of TVA’s mission requires data centers located at generating plants, which cannot be consolidated.	NA
Optimize agency Core Data Centers across total cost of ownership metrics.	Yes	Continue development of the T-block componentized compute infrastructure containing server, network, and storage in one rack for rapid deployment. Goal: reduced total cost of operations, and more efficient cooling and power utilization.	(1) Finalize production environment for completion in summer 2014. (2) Deploy as standard 2015 onward.
Ensure that power management, duplex printing, and other energy efficiency or environmentally preferable options and features are enabled on all eligible electronics and monitor compliance.	Yes	(1) Continue deployment of print release throughout agency, initiative already begun in FY14 and improvements in Chattanooga, Knoxville, Sequoyah, and Nashville. (2) Continue the transition to a managed print provider versus internal delivery method. (3) Initiate new strategy to reduce PCs and replace with low power thin client devices and low power mobile devices.	(1) Complete implementation of print release at remaining identified TVA locations in FY15. (2) Ensure managed print solution encompasses intelligent devices in an effort to create a more efficient break/fix process, just in time consumable delivery, and proactive device maintenance. (3) Retire and consolidate PCs. Deploy additional thin client devices. (4) Invest in energy efficient processor technology to reduce PC power consumption.
Update and deploy policies to use environmentally sound practices for disposition of all agency excess or surplus electronic products, including use of certified eSteward and/or R2 electronic recyclers, and monitor compliance.	Yes	TVA will continue to utilize R2 certified recyclers using environmentally sound disposition processes.	TVA will monitor the amount of electronic equipment surplus and record shipments sent to recycler.
Ensure acquisition of 95% EPEAT registered and 100% of ENERGY STAR qualified and FEMP designated electronic office products.	Yes	TVA Supply Chain has standard contract language requiring EPEAT and ENERGY STAR compliance for electronic purchases. TVA-IT additionally reviews and approves non-standard purchases	TVA will manage, monitor and report agency wide compliance.

GOAL 8: RENEWABLE ENERGY

Agency Renewable Energy Percentage of Total Electricity Usage

EO 13514 requires that agencies increase use of renewable energy. Further, EPACT 2005 requires agencies to increase renewable energy use such that 7.5 percent of the agency’s total electricity consumption is generated by renewable energy sources for FY13 and beyond. For FY12, the required target was 5 percent of an agency’s total electricity consumption. Figure 8-1 shows TVA’s percentage of renewable energy use of electricity used.

Figure 8-1. TVA Use of Renewable Energy as a Percentage of Electricity Use n(FY2013 Goal: 7.5%)

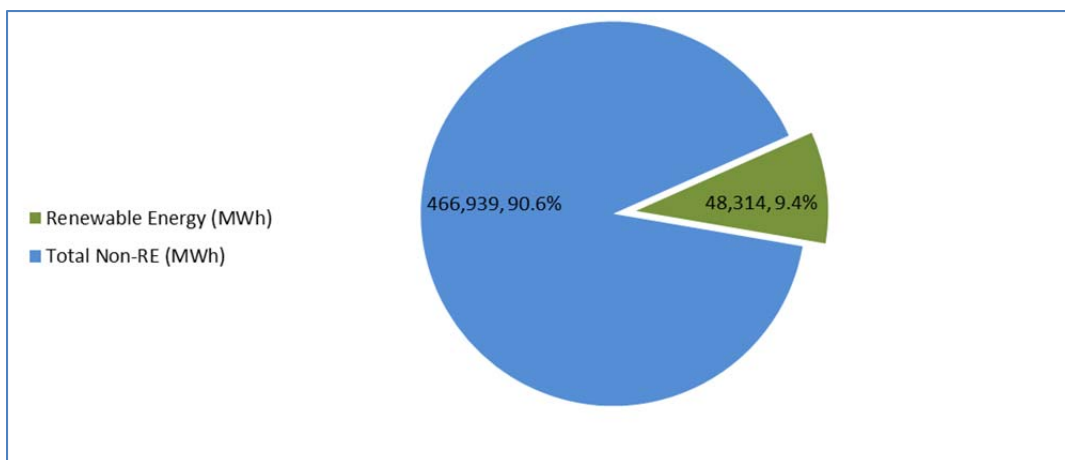


Table 8: Goal 8 Strategies – Renewable Energy

Will the agency implement the following strategies to achieve this goal?	Top Five? Yes/No or NA	Strategy Narrative	Specific targets/metrics to measure strategy success including milestones to be achieved in next 12 months
Purchase renewable energy directly or through Renewable Energy Credits (RECs).	Yes	Yes - TVA will continue to purchase RECs for its large office buildings.	TVA’s current rate of purchases combined with renewables generated and used on site has exceeded the 7.5% goal. TVA will continue to work toward the 20% goal by 2020.
Install on-site renewable energy on federal sites.	Yes	TVA will continue to make hydro modifications (HMOD) as this has proven to be cost-effective to the agency.	TVA’s current rate of purchases combined with renewables generated and used on site has exceeded the 7.5% goal. TVA will continue to work toward the 20% goal by 2020.
Lease land for renewable energy infrastructure.	No	TVA will consider this strategy if presented with a viable project.	N/A

Develop biomass capacity for energy generation.	No	TVA will consider this strategy if presented with another viable project.	N/A
Utilize performance contracting methodologies for implementing ECMs and increasing renewable energy.	N/A	TVA, as a provider of utility based ESPCs, is funding it's own ECMs to meet the President's Challenge. The renewable goal has already been met through the purchase of RECs and use of on-site renewable energy (HMOD).	N/A – TVA is already on track to exceed the next 12 month goal.
Work with other agencies to create volume discount incentives for increased renewable energy purchases.	N/A	TVA will consider this strategy if presented with a viable project.	N/A

GOAL 9: CLIMATE CHANGE RESILIENCE

Agency Climate Change Resilience

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

Table 9: Goal 9 Strategies – Climate Change Resilience

Will the agency implement the following strategies to achieve this goal?	Top Five? Yes/No or NA	Strategy Narrative	Specific targets/metrics to measure strategy success including milestones to be achieved in next 12 months
Ensure climate change adaptation is integrated into both agency-wide and regional planning efforts, in coordination with other Federal agencies as well as state and local partners, Tribal governments, and private stakeholders.	Yes	TVA's NRP Strategic Partnership Planning Program focuses on building strong partnerships with other Federal agencies, States, and regional NGOs, to address stewardship issues of mutual importance and drive measurable improvement of health of the region's natural resources.	Maintain a list of existing partnerships that collaboratively advance TVA's water resource improvements, and also serve as potential sources of shared funding.
Update agency emergency response procedures and protocols to account for projected climate change, including extreme weather events.	N/A	Consider as needed.	N/A
Ensure workforce protocols and policies reflect projected human health and safety impacts of climate change.	Yes	TVA will conduct a high-level identification of barriers that discourage investments or other actions to increase the Nation's resilience to climate change while ensuring continued protection of public health and the environment.	High-level identification of significant adaptation investment/action barriers in FY14 – FY16.

Update agency external programs and policies (including grants, loans, technical assistance, etc.) to incentivize planning for, and addressing the impacts of, climate change.	Yes	TVA will conduct a high-level identification of opportunities to support and encourage smarter, more climate-resilient investments by States, local communities, and tribes, including by providing incentives through Agency guidance, grants, technical assistance, performance measures, safety considerations, and other programs.	1) Identification of opportunities to support and encourage climate resilient stakeholder investment. 2) NRP Water Resource Outreach Campaign Program focuses on increasing public awareness and involvement through the promotion of water resource protection and improvement best practices.
Ensure agency principals demonstrate commitment to adaptation efforts through internal communications and policies.	Yes	Identify processes necessary to ensure the needed capacity and organizational structures to effectively assess agency specific climate change risks and opportunities and to implement appropriate actions.	1) Maintenance of a high-level process map. 2) Continue to identify internal processes to coordinate internal adaptation planning with partners.
Identify vulnerable communities that are served by agency mission and are potentially impacted by climate change and identify measures to address those vulnerabilities where possible.	N/A	Consider as needed.	N/A
Ensure that agency climate adaptation and resilience policies and programs reflect best available current climate change science, updated as necessary.	No	Continue implementation of the TVA NRP Climate Sentinel Monitoring Program and to review, participate in, and incorporate findings of the National Climate Assessment process.	N/A
Design and construct new or modify/manage existing agency facilities and/or infrastructure to account for the potential impacts of projected climate change.	Yes	Continue Implementation of TVA's Internal Energy Management Program.	1) Building water and energy use reductions. 2) Continue to apply Sustainable Guiding Principles to new/existing a building which reduces greenhouse gas emissions. 3) For non-potable water, TVA's work to eliminate wet ash and gypsum handling and storage will cut non-potable water use. The target for 2020 is 23,000 million cumulative gallons of reduced non-potable water consumption.
Incorporate climate preparedness and resilience into planning and implementation guidelines for agency-implemented projects.	N/A	Consider as needed.	N/A

GOAL 10: ENERGY PERFORMANCE CONTRACTS

Agency Progress Toward Goal

Energy Performance Contracts, including both Energy Savings Performance Contracts (ESPCs) and Utility Energy Service Contracts (UESCs), enable agencies to obtain energy efficiency investments in buildings and deploy on-site renewable energy through long-term contracts with the private sector, which are in turn paid through savings derived from those investments.⁵

Agency Awarded Energy Performance Contracts

TVA tracks its projects through its Internal Energy Management Program and reports its progress in meeting Goal 10 through MAX Collect and the EISA 432 Compliance Tracking System.

Table 10: Goal 10 Strategies – Energy Performance Contracts

Will the agency implement the following strategies to achieve this goal?	Top Five? Yes/No or NA	Strategy Narrative	Specific targets/metrics to measure strategy success including milestones to be achieved in next 12 months
Evaluate 25% of agency's most energy intensive buildings for use with energy performance contracts.	Yes	TVA's Internal Energy Management Program will lead the EISA energy and water surveys to identify cost-effective measures that may be implemented.	Complete surveys that total 25% of TVA's most energy intensive buildings.
Prioritize top projects which will provide greatest energy savings potential.	Yes	TVA will continue to prioritize projects that have the greatest energy savings potential. This strategy has been used in the past to help efficiently allocate funds to the best projects.	Maintain an updated list of potential conservation measures identified through ongoing surveys.
Cut cycle time of performance contracting process by at least 25%.	N/A	Consider if needed.	N/A
Assign agency lead to participate in strategic sourcing initiatives.	N/A	Consider if needed.	N/A
Devote 2% of new commitments to small buildings (<20k sq. ft.).	N/A	Consider if needed.	N/A

⁵ Goal 10 Section is relevant only to agencies subject to the PPCC.

Identify and commit to include 3-5 onsite renewable energy projects in energy performance contracts.	N/A	Consider if needed.	N/A
Ensure relevant legal and procurement staff are trained by FEMP ESPC/ UESC course curriculum.	N/A	Consider if needed.	N/A
Provide measurement and verification data for all awarded projects.	N/A	Consider if needed.	N/A
Enter all reported energy savings data for operational projects into MAX COLLECT (max.gov).	Yes	TVA will continue to input energy savings for ESPC projects that are implemented as part of its commitment.	Input energy savings from ESPC projects into MAX COLLECT.