

Other FY 2016 Evidence

Title and Evaluator	Purpose and Brief Description	Results and Conclusions	Recommendations, Response, and/or Significance
<p>Lean Rapid Assessment</p> <p>Evaluator: Office of the Administrator</p> <p>Completion Date: October 2015</p>	<p>To determine opportunities and barriers in expanding the use of Lean approaches at EPA.</p>	<ul style="list-style-type: none"> • Lean project teams need time, management support, and additional mentoring to implement projects. <p>OSEM identified the following needs: implementation training; a standardized approach for Lean projects; and additional project support.</p>	<p>OSEM took the following steps in response to the Lean Rapid Assessment:</p> <ul style="list-style-type: none"> • Established a project support team to provide direct assistance to Lean project teams. • Developed and deployed implementation training. • Established a standardized process for Lean projects that can be used by Lean project teams. <p>Dedicated significant contract resources to support Lean projects.</p>
<p>Capitalization of Software</p> <p>Evaluator: Office of the Chief Financial Officer</p> <p>Completion Date: March 2016</p>	<p>The purpose of this Lean event is to improve the process to inventory, manage, and account for software applications across the agency.</p>	<p>Total number of process steps reduced by 12%.</p>	<p>Clarified roles and responsibilities and standardized work processes.</p>
<p>End-of-Year Performance Reporting and Analysis</p> <p>Evaluator: Office of the Chief Financial Officer</p> <p>Completion Date: March 2016</p>	<p>The purpose of this Lean event is to apply Lean practices to eliminate redundancies, achieve efficiencies, and reduce workload while maintaining accountability.</p>	<p>Total number of process steps reduced by 34%.</p>	<p>Clarified roles and responsibilities and improved customer satisfaction.</p>
<p>Resource Conservation and Recovery Act (RCRA) Facilities</p>	<p>The RCRA FIRST approach is designed to improve the</p>	<p>On March 18, 2016, ORCR transmitted the RCRA FIRST</p>	<p>In addition to using the RCRA FIRST approach to</p>

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<p>Investigation and Remedy Selection Track (FIRST) Lean Approach</p> <p>Evaluator: Office of Enforcement & Compliance Assurance</p> <p>Completion Date: March 2016</p> <p>https://www.epa.gov/hw/tool-box-corrective-action-resource-conservation-and-recovery-act-facilities-investigation-remedy#approach</p>	<p>efficiency of the RCRA Corrective Action program. Specifically, the approach is intended to expedite RCRA Facility Investigations (RFIs) and remedy selections.</p>	<p>Tool Box to the Regions. OSRE reviewed and commented on the tool box, which is a user manual on how to implement RCRA FIRST.</p>	<p>expedite Corrective Action at RCRA permitted facilities, it also is starting to be used in the RCRA Corrective Action orders context.</p> <p>The new approach is designed to reduce the average time to complete an investigation from 14 years to less than four years.</p>
<p>Quality Assurance Project Plan (QAPP) Template Streamlining Lean</p> <p>Evaluator: Office of Enforcement & Compliance Assurance</p> <p>Completion Date: September 2016</p>	<p>To Lean the Region 6 Enforcement Division Quality Assurance Project Plan (QAPP) Template to reduce errors that could hinder enforcement and reduce product development time.</p>	<p>The resulting streamlined template has decreased QAPP development time more than 50%. It has also reduced management and Quality Assurance Officer review time by 50%. It has vastly improved customer satisfaction with the QAPP development process.</p>	<p>The implementation of the template has improved the process for sampling and data collection by substantially reducing the time inspectors devote to developing, and managers/QA Officers spend reviewing, Quality Assurance Project Plans, while still ensuring that high quality data are collected.</p>
<p>Emergency Planning and Community Right-to-Know Act (EPCRA) Enforcement Lean Project</p> <p>Evaluator: Office of Enforcement & Compliance Assurance</p> <p>Completion Date: September 2016</p>	<p>To Lean the Region 6 EPCRA Enforcement process to processing time of inspection reports and integrate into existing Enforcement Division protocols.</p>	<p>Reduced inspection report development time by 33%, conformed to existing 6EN protocols, streamlined list of records in request, reduced time period of review from 5 years to 3 years, and incorporated the CBI notice which substantially reduces CBI claim substantiation process time.</p>	<p>The streamlined EPCRA process will result in expedited, real-time enforcement and increased transparency for the EPCRA Program. Metrics to be tracked include number of inspections completed in <60 days and number of case settlements closed within 270 days.</p>

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<p>New Mexico Environment Department (NMED) Petroleum Storage Tank Bureau (PSTB) Lean Project to improve compliance with the Energy Policy Act of 2005</p> <p>Evaluator: Office of Enforcement & Compliance Assurance</p> <p>Completion Date: May 2016</p>	<p>Region 6 and the New Mexico Environment Department (NMED) collaborated on a Lean Project aimed solely at reducing A/B Operator violations, reducing the amount of Owner contacts, and reducing the amount of data entry time.</p>	<p>The NMED believes that the current UST A/B Operator Training Tracking process could be more efficient. The current process results in 34% of facilities being in violation of A/B operator training requirements.</p> <p>NMED PSTB currently has 1,211 facilities with at least one active or TOS tanks attached, 415 of these facilities do not have a designated A/B Operator. NMED expects to reduce this amount by 20% to 332 facilities in the first year. NMED also expects to reduce the amount of Owner contacts from 5 yearly contacts to 2.</p>	<p>The Energy Policy Act (EPACT) of 2005 requires every active facility that has petroleum underground storage tanks (USTs) to be inspected once every three years. NMED has approximately 1,211 UST facilities.</p> <p>These proposed changes will allow NMED to more efficiently meet the requirements of the EPACT of 2005.</p>
<p>State Inspector Credential Renewal Lean Event to improve Compliance with FIFRA</p> <p>Evaluator: Office of Enforcement & Compliance Assurance</p> <p>Completion Date: July 2015</p>	<p>During FY 2016, the Region 6 Pesticide Enforcement program continued implementation, in collaboration with the State Lead Agencies (SLAs), of a Lean project to reduce the time required to renew federal enforcement credentials issued to state inspectors. The renewal process was cumbersome and lengthy, taking around 57 days and over 28 steps to complete.</p>	<p>The new process should take 21 days and 20 steps to complete, improving the process by 63% and 29%, respectively. Using the new process of 20 steps, the first batch of credentials after the Lean project took an average of 45 days to complete, which is an improvement of 27%.</p>	<p>These proposed changes will help Region 6 State Lead Agencies maintain a consistent number of properly trained, federally credentialed inspectors who can perform compliance inspections on behalf of the EPA.</p>
<p>Underground Injection Control (UIC) Financial Responsibility Lean Process Improvement to reduce process variance in the UIC well permitting process in regards to financial assurance (FA).</p>	<p>The current state of the UIC well permitting process was analyzed by project participants through a number of self- and group-driven mapping events to highlight variance and turn-around times. Areas for improvement were noted in</p>	<ul style="list-style-type: none"> • A formalized work flow was developed to guide practitioners on agreed upon process steps. • Number of steps in work flow were reduced from 31 to 19—a near 39% reduction. 	<ul style="list-style-type: none"> • Standardization of steps helps to deliver uniform and quality service to the regulated community. • The EPA will be better able to track the nearly \$80M in UIC financial assurance mechanisms.

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<p>Evaluator: Office of Enforcement & Compliance Assurance</p> <p>Completion Date: May 2016</p>	<p>how the regulated community is informed about FA regulations and how financial instruments are reviewed. Through further group driven exercises, process steps were assessed and either consolidated, improved or removed depending on need.</p>	<ul style="list-style-type: none"> • Expected 35% reduction in lead time to complete the UIC well permitting FA process. 	<ul style="list-style-type: none"> • Reduced risk to the agency in regards to UIC financial assurance instruments by way of controlled process. <p>As part of the UIC program, this process will positively impact the protection of underground sources of drinking water (USDWs) by better enabling the EPA to track and maintain FA mechanisms for use in the plugging and abandonment of UIC wells if an owner / operator becomes unable to do so.</p>
<p>Scientific and Technological Achievement Awards (STAA) Program Lean event</p> <p>Evaluator: Office of Research and Development</p> <p>Completion Date: September 2016</p>	<p>Office of Research and Development (ORD), in cooperation with the Science Advisory Board, sponsors the agency's annual Scientific and Technological Achievement Awards (STAA) program. These awards acknowledge outstanding publications by EPA scientists and engineers that are recognized as a major achievement within their discipline or field of study. The current STAA award application and review process is very onerous, time consuming and prone to errors.</p>	<p>The goal of the Lean effort was to streamline both the application and the award process. The result would be timelier acknowledgement of the agency's scientific achievements. The STAA Intranet site provides procedures and guidelines and link to a new nomination portal for 2016 submissions.</p>	<p>An initial investment of \$327K was provided to develop an online system for nomination entries. Implementation of the Leaned process was initiated for the 2016 STAA Award cycle and, with the cycle about 60% complete, the savings so far are a reduction in time by 30% and process steps by 50%. The streamlined nomination system also greatly reduced the error rate for nominations submitted from >50% to 2%. Total savings will be determined after the awards are processed. After the trial year in 2016, an additional investment is needed to complete development of the system and the return on the investment is projected to be 3 years. Portions of the new Leaned process were also</p>

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			implemented in 2016 and contributed to a more rapid completion of the 2015 STAA Awards cycle.
<p>Office of Research and Development (ORD) Technical Qualifications Board (TWB) Lean event</p> <p>Evaluator: Office of Research and Development</p> <p>Completion Date: June 2016</p>	<p>ORD has a policy requiring Labs, Centers and Offices to establish peer review panels, known as Technical Qualifications Boards (TQBs) to review and evaluate the qualifications and contributions of its candidates for promotion to senior (GS-14/15) levels.</p>	<p>The goal of the Lean effort was to develop a single process for administration of the TQBs across ORD. The Lean event was held in June, 2016.</p>	<p>Implementation is underway. The team is currently working on developing an electronic flow process for the submission and tracking of candidate packages, restructuring the candidate package, and developing an ORD-wide candidate pool. It is anticipated that the new review format will be implemented Spring 2017 with the electronic flow process to follow at a later date. The new process will reduce administrative burden, administrative costs, and process time.</p>
<p>National Health and Environmental Effects Research Laboratory Research Planning and Approval Process Lean event</p> <p>Evaluator: Office of Research and Development</p> <p>Completion Date: May 2016</p>	<p>Numerous documents are required prior to the start of a research project (Quality Assurance, health and safety, animal care, etc.). These documents create a lot of administrative burden on the researchers and often include redundant information. The goal of this Lean effort was to streamline and automate the approval process from original concept of an idea all the way through to the completion of a research project resulting in more time for research and less time spent on paperwork. The lean event was held in May, 2016. Pilot Website:</p>	<p>The outcome of the Lean Event was a phased approach starting with the Phase I development of the RAPID (Research Approval Planning Implementation Dashboard) website which includes links to the major forms and components that are required to navigate research planning, approval, and publication.</p>	<p>Phase II will be an automated ORD enterprise system that links the individual components of Phase I, reduces redundancy across modules, and streamlines the approval process.</p>

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	http://intranet.ord.epa.gov/p2/nheer/research-approval-planning-implementation-dashboard-rapid-0		
<p>Leaning Integrated Risk Information System (IRIS) – Implementation of “Step 1” Lean Event</p> <p>Evaluator: Office of Research and Development</p> <p>Completion Date: August 2015</p>	<p>This Lean project focused on the internal phases of the IRIS assessment development process. The development of a draft assessment, “step 1” in the IRIS process (https://www.epa.gov/iris/basic-information-about-integrated-risk-information-system), encompasses numerous steps that culminate in a draft assessment that is submitted for review. This was reviewing a complex multi-year process, comprised of some steps that could themselves be subject to Lean-ing. The Lean event occurred in August FY 2015 and implementation has been underway throughout FY 2016.</p>	<p>Most components of the implementation plan are major projects, including development of standard operating procedures such as a Handbook for assessment development, obtaining contractual support to improve project and program management in the IRIS Program, and identification of options for streamlining access to technical contractor support. The implementation of Lean event recommendations is well underway and is increasing the effectiveness and efficiency of developing IRIS development across the National Center for Environmental Assessment’s (NCEA) 4 divisions and 3 locations.</p>	<p>Implementation of the Step 1 Lean event is ongoing and will continue through FY 2017. Nonetheless, increased programmatic efficiency is already evident in the IRIS Program. We have demonstrated improved productivity in FY 2016, with 2 final IRIS assessments being released at the end of FY 2016, 2 assessments targeted for completion in early FY 2017, and anticipated release of several assessments for peer review this Fall. In addition, NCEA is working with ORD and EPA senior management on approaches that will make the review phases of the IRIS process (Agency review, Interagency review, public comment and peer review) more efficient and value-added.</p>
<p>ORISE Recruitment Process Lean event</p> <p>Evaluator: Office of Research and Development</p> <p>Completion Date: April 2016</p>	<p>The Oak Ridge Institute for Science and Education (ORISE) provides a mechanism for ORD to provide research training opportunities in science, technology, engineering, and mathematics (STEM) to faculty members, postdoctoral scientists, postgraduate interns (recent college graduates),</p>	<p>The Lean event resulted in the elimination of 5 redundant review cycles improving timeliness of recruitment process</p>	<p>The outcome of the Lean event was: the identification of enhanced tools to guide mentors through recruitment process; the clarification of roles and responsibilities to ensure tracking of funds as needed by labs and centers; the recommendation of the</p>

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	graduate students, and undergraduate students. The goal of this Lean event was to automate and streamline the ORISE recruitment and budget tracking process resulting in a faster onboarding process and better utilization of extramural funds. The Lean Event was held in April, 2016. http://intranet.ord.epa.gov/p2/extramural-services/orise-research-participation-program		adoption of the NERL-BED developed tracking spreadsheet on ORISE Inter-agency Agreements to achieve optimal funds allocation, management, and payment; and the recommendation of development of financial reporting SOPs. Implementation is ongoing.
Streamlining the Special Government Employee Process Lean event Evaluator: Office of Research and Development Completion Date: December 2015	5 U.S.C. 3109 provides the authority for agencies to bring individuals from the private sector into the Federal Service for brief periods of need as experts and consultants based on their highly specialized knowledge and skills.	The goal of this Lean event was to streamline the process for reviewing and approving SGE candidates. The Lean event was held in December, 2015.	ORD has implemented a portion of the recommended change and is striving to have the final recommendation on a comprehensive SOP done by the end of the calendar year. The changes that have been implemented are: removing the Office of Program Accountability and Resource Management (OPARM) from the ORD Emeritus review process, eliminating the Office of Administrative Resource Support (OARS) cover memo for standard Special Government Employee appointments, and eliminating OARS review above the Branch Chief level.
Leaning the STAR Grant Program Evaluator: Office of Research and Development	The Science to Achieve Results (STAR) grant program awards research grants to top scientists and research teams across the	The work of the team focused first on the middle phase of the process and resulted in 13 recommendations (mostly for no cost). If fully implemented, these improvements would	The goal of the Lean effort is to make the internal processes leading up to award more efficient. A series of Lean events were held in Spring 2016 and

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<p>Completion Date: Spring 2016 (multiple Lean events)</p>	<p>nation through a rigorous and competitive process.</p>	<p>result in a simpler process (16% of steps eliminated), taking up to 150 fewer days (about 30% faster). Work is currently in progress to streamline the initial phase of the STAR grant process, while the final phase will be targeted in the Spring of 2017.</p>	<p>the implementation efforts are ongoing.</p>
<p>Property value impacts of high-profile underground storage tank releases and cleanups</p> <p>Evaluator: Office of the Administrator</p> <p>Completion Date: March 2016</p>	<p>Use statistical methods and property value data to measure some of the benefits of EPA regulations to eliminate, reduce, and clean up leaks from underground storage tanks.</p>	<p>Property values decline after a high-profile release from an underground storage tank, but rebound after cleanup.</p>	<p>The study provides upper-bound estimates of the benefits to nearby residents from programs that prevent and cleanup leaking underground storage tank releases. To the extent programs prevent high-profile situations, through prevention or early detection, these estimates reflect the average avoided property value loss. These results could allow for monetary valuation of the benefits of underground storage tank cleanup policies, which can help policymakers choose optimal policies that balance marginal benefits with marginal costs.</p>
<p>Stated preference study of the Chesapeake Bay</p> <p>Evaluator: Office of the Administrator</p> <p>Completion Date: November 2015</p>	<p>Measure the benefits of the Chesapeake Bay Total Maximum Daily Load policy</p>	<p>Households, including non-users, have a substantial marginal willingness to pay for improved water quality in the Chesapeake Bay and freshwater lakes in the watershed.</p>	<p>The study provides monetary benefits estimates for improving water quality in the Chesapeake Bay and improving habitat for several key species. It also allows monetary valuation of benefits from improving water quality in freshwater lakes in the Chesapeake Bay watershed resulting from</p>

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			management practices developed by States to meet the Chesapeake Bay TMDL. These estimates can be used to evaluate a wide range of policy outcomes in the Chesapeake Bay watershed.
<p>Our Nation’s Air: Status and Trends through 2015</p> <p>Evaluator: Office of Air and Radiation</p> <p>Completion Date: July 2016</p> <p>https://gispub.epa.gov/air/trendsreport/2016/</p>	<p>This annual report presents the trends in the nation's air quality, and summarizes the detailed information found at EPA's AirTrends website.</p>	<p>Nationally, concentrations of the criteria air pollutants have dropped significantly since 1990. During this same period the U.S. economy continued to grow, Americans drove more miles and population and energy use increased.</p>	<p>Annual emissions estimates are used as one indicator of the effectiveness of the air program. Between 1980 and 2015, gross domestic product increased 153 percent, vehicle miles traveled increased 106 percent, energy consumption increased 25 percent, and U.S. population grew by 41 percent. During the same time period, total emissions of the six principal air pollutants dropped by 63 percent.</p>
<p>“Smart Location” collaboration with GSA</p> <p>Evaluator: Office of the Administrator</p> <p>Completion Date: December 2015</p>	<p>Office of Policy’s Office of Sustainable Communities has an on-going collaboration with GSA on “Smart Location” for Federal real estate investments. This effort allows these key decision making organizations to evaluate the greenhouse gas emissions associated with facility location choices and look for opportunities to shift their real estate portfolio toward buildings that generate less emissions per employee commute trip.</p>	<p>GSA and EPA have begun delivering assistance to state facility management agencies using the Smart Location Calculator tool that was jointly developed. This program was recently implemented, and as such does not yet have environmental outcome results.</p>	<p>EPA plans to work with GSA and state agencies to collect data to quantify whether more leases are in efficient locations and to assess the location-efficiency of their overall real estate portfolio.</p>

<p>Third Report to Congress: Highlights of the Diesel Emission Reduction Program</p> <p>Evaluator: Office of Air and Radiation</p> <p>Publication Date: February 2016</p> <p>https://www.epa.gov/cleandiesel/clean-diesel-reports-congress</p>	<p>This Congressionally-required report describes the progress of the program and quantifies diesel emission reductions.</p>	<p>From 2009 to 2013, EPA awarded \$520 million to retrofit or replace 58,800 engines in vehicles, vessels, locomotives or other pieces of equipment. EPA estimates that these projects will reduce emissions by 312,500 tons of NOX and 12,000 tons of PM2.5 over the lifetime of the affected engines.</p>	<p>Analysis of the program's results has informed several lessons learned that the program has implemented. For example, EPA conducted an analysis of the State grant program and found that State clean diesel projects could be more cost effective if they adhered to the DERA National program requirements. In 2014, EPA began requiring States to follow the requirements in the DERA National Program RFP for model years, technologies, cost-share and other factors.</p>
<p>2011 National Air Toxics Assessment (NATA)</p> <p>Evaluator: Office of Air and Radiation</p> <p>Publication Date: December 2015</p> <p>https://www.epa.gov/national-air-toxics-assessment/2011-nata-assessment-results</p>	<p>The purpose of NATA is to identify and prioritize air toxics, emission source types, and locations that are of greatest potential concern in terms of contributing to population risk.</p>	<p>The 2011 NATA assessment includes emissions, ambient concentrations, and exposure estimates for 180 of the 187 Clean Air Act air toxics, plus diesel particulate matter.</p>	<p>EPA uses NATA to set priorities for improving data in emissions inventories, to work with communities in designing their own local-scale assessments, and to help direct priorities for expanding and improving air toxics monitoring.</p>
<p>Screening Chemicals for Estrogen Receptor Bioactivity Using a Computational Model [ToxCast ER Model for Bioactivity]</p> <p>Evaluator: Office of Chemical Safety & Pollution Prevention</p> <p>Publication Date: June 2015</p>	<p>The use of high-throughput and computational methods dramatically increases EPA's ability to rapidly screen chemicals for endocrine bioactivity, and provide an alternative to animal-based Endocrine Disruptor Screening Program (EDSP) Tier 1 Estrogen Receptor (ER) binding and uterotrophic assays. The</p>	<p>EPA is accepting ToxCast ER model data for 1,812 chemicals as alternatives for the EDSP Tier 1 ER binding, ER transactivation, and uterotrophic assays.</p>	<p>EPA is moving towards using this model to replace portions of the EDSP Tier 1 battery. The pivot to implementation of high throughput screening and CompTox approaches resulted in our ability to screen 2,000 chemicals for the androgen pathway, and 3,000 chemicals for the</p>

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<p>https://cfpub.epa.gov/si/si_public_record_report.cfm?dirEntryId=308931, and, http://pubs.acs.org/doi/abs/10.1021/acs.est.5b02641</p>	<p>application of these innovative tools for screening chemicals for endocrine bioactivity represents the first step in a paradigm shift for chemical safety testing, and the first systematic application of ToxCast data in an EPA regulatory program.</p>		<p>estrogen pathway for Tier 1 screening.</p>
<p>Improve Contract Tracking</p> <p>Evaluator: Office of Administration & Resources Management</p> <p>Completion Date: August 2016</p>	<p>Identify and track contract expiration dates to assist Program Offices and Contracts Office during end of fiscal year processing.</p>	<p>Reviewed four (4) years of contracts, purchase orders, and task/delivery orders to identify recurring needs and current expiration dates and optional periods available. The review determined that there are recurring needs requests that are often submitted late which creates pressure on the contracting office to make awards before expiration dates.</p>	<p>Developed a database to identify all current contracts, purchase orders, and task/delivery orders with their expiration dates and option periods.</p> <p>Provided database to Program Offices for planning purposes.</p> <p>Contracts Office maintains the database and adds new awards to be tracked. Also contacts program offices regarding plans for expiring items well in advance so that procurement packages are received will in advance of expiration dates.</p>
<p>Reduce Scope 3 Green House Gas generated by employee commute to/from Sam Ninn Atlantic Federal Center (SNAFC)</p> <p>Evaluator: Office of Administration & Resource Management</p> <p>Completion Date: August 2016</p>	<p>Monitor/track telework (TW) hours per pay period in order to calculate Scope 3 Green House Gas (GHG) averted.</p>	<p>As of pay period ending 8/20/2016, participation in the R4 Telework program (56% of our eligible population) has accounted for 257 metric tons of CO2 equivalent (MTCO2e) or 13% aversion, exceeding the EPA National Target of 161 MTCO2e or 8% aversion, with still 2 pay periods remaining in FY2016.</p>	<p>Crafted database tracking TW performance since FY2012. Metric is based on 3 Agency wide commuter surveys and empirical/numerical calculation of Carbon Footprint reduction.</p>

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<p>Green power purchasing</p> <p>Evaluator: Office of Administration & Resource Management</p> <p>Completion Date: January 2016</p>	<p>Procurement of green power to offset GHG emissions</p>	<p>EPA continued to be a leader among federal agencies by purchasing green power and Renewable Energy Credits (RECs) equal to 100 percent of its estimated FY 2015 electricity use.</p>	<p>OARM regularly assesses the agency's progress in green power purchasing. Based on metering data, EPA is funding more than 227 million kilowatt hours (kWh) of RECs through a blanket purchase agreement (BPA) to maintain our progress.</p>
<p>Water use reduction</p> <p>Evaluator: Office of Administration & Resource Management</p> <p>Completion Date: January 2016</p>	<p>Reducing EPA's water use</p>	<p>In FY 2015, EPA reduced its water use by 41.7 percent compared to its FY 2007 baseline, greatly exceeding the EO 13514 goal for the year of 16 percent.</p>	<p>OARM continues to rely on advanced facility metering to make outcome-focused resource decisions to achieve water use reductions.</p>
<p>Solid waste recycling</p> <p>Evaluator: Office of Administration & Resource Management</p> <p>Completion Date: January 2016</p>	<p>Enhancing EPA's recycling rate of non-hazardous solid waste</p>	<p>EO 13514 required federal agencies to meet a non-hazardous solid waste recycling rate of 50 percent by FY 2015, and the Agency set its own internal recycling goal of 60 percent. EPA exceeded both requirements by achieving a recycling rate of 65.2 percent in FY 2015.</p>	<p>Facility managers regularly assess evidence in real time to adapt the agency's non-hazardous solid waste recycling practices to meet the agency's goal.</p>
<p>Environmental Data Platform (EDP)</p> <p>Evaluator: Office of Environmental Information</p> <p>Completion Date: July 2015</p>	<p>The EDP is a powerful prototype Open Source infrastructure tool in the Amazon cloud, which allows the EPA to consume and benefit from collected environmental data. The EPA is further developing EDP and its capabilities for collecting large quantities of data for analysis.</p>	<p>Benefits of three recent EDP projects with EPA programs:</p> <ul style="list-style-type: none"> Office of Research and Development (ORD) is now able to manage and analyze very large harmful algal bloom (HAB) datasets in support of the multi-agency Cyanobacteria Assessment Network (CyAN) project, which is a partnership with EPA, NASA, NOAA, and USGS. The EDP will save the Agency an estimated 	<p>The EDP has already enabled the Agency to perform data analyses that were not previously possible. It is also providing significantly lower data storage and processing costs because it is in the cloud and we are also leveraging it to modernize the Envirofacts data warehouse and consolidate several Agency data-level services including search.</p>

		<p>\$1.0M per year in storage alone.</p> <ul style="list-style-type: none"> • Office of Air and Radiation (OAR) has also used the prototype EDP to assist in the analysis of large amounts of ship tracking data from the Coast Guard to assess air emissions associated with commercial shipping. Hosting the 15TB of data at RTP would cost over \$350K per year, yet only \$3,500 in the EDP. • ORD is utilizing the EDP to assist in the management and analysis of large data stores associated with bioinformatics. 	
<p>EPA Safety and Health Management System (SHMS)</p> <p>Evaluator: Office of Research and Development</p> <p>Completion Date: August 2015</p>	<p>SHMS is a part of the organization's overall management system used to develop and implement safety and health policy and manage its safety and health risks. The goal of the Lean effort was to evaluate and streamline the Agency's current Safety and Health Management System. The Lean event was held in August, 2015</p>	<p>The event resulted in the development of an implementation plan that will help ORD apply the Agency's system more efficiently and effectively. An implementation plan has been created for seven ORD remote laboratories that will help guide the rest of the SHMS Program Implementation. It includes the identification of personnel at remote ORD labs to help administer the implementation, creation of procedures to guide the management of SHMS in the future, identification of program elements in need of standardization, solidification of roles and responsibilities of personnel at each location involved with SHMS implementation. It also identified the need to develop an electronic version of documents and procedures as</p>	<ul style="list-style-type: none"> • The implementation plan is an evolving plan that is programmed to take approximately 16 months to complete.

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		well as the monitoring and measurement of program effectiveness.	
<p>Streamlined RMS business processes</p> <p>Evaluator: Office of Research and Development</p> <p>Completion Date: April 2016</p>	<p>In FY 2016, ORD implemented recommendations resulting from a cross-ORD workgroup convened to assess the efficiency and effectiveness of the business processes for the Research Management System (RMS), a tool to improve communication of ORD's research portfolio.</p>	<p>The workgroup recommended that responsibilities of data input and updates be streamlined and clarified, reducing the number of users who are responsible for these tasks. The workgroup identified fields that were no longer relevant and proposed removal of such fields, and identified fields to be consolidated and clarified, reducing the administrative burden on those responsible for maintaining RMS. Finally, the workgroup recommended a series of actions to improve communication within ORD about the RMS process.</p>	<p>Workgroup recommendations resulted in: improved communication on organizational roles and responsibilities for performance and data updates within RMS; strengthened RMS SOPs that clarified areas of confusion about user access, timing of access in the budget cycle, and responsibility for data updates, and; system enhancements, including improvements to reporting capabilities that result in more efficient and effective use of the system. In the near future, as part of a larger effort to integrate ORD's research support systems and improve the user experience, ORD will hold outreach sessions with targeted user communities, both internal and external to ORD, to solicit feedback and dialogue.</p>