

United States Postal Service  
**2018**  
**SUSTAINABILITY**  
**IMPLEMENTATION PLAN**



## Executive Summary

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Our mandate is to provide universal postal services to the nation. We are subject to numerous federal, state and local laws and regulations. We are governed by a Board of Governors consisting of the Postmaster General, Deputy Postmaster General and nine independent governors appointed by the President of the United States. We serve a diverse customer base of retail and commercial customers in the United States as well as international customers, and our operations are funded through the sale of our products and services — not with tax dollars. Whenever feasible, we voluntarily set specific goals and adopt internally binding policies that seek to meet requirements applicable to Federal agencies.

We are embracing innovation and implementing initiatives to reduce our costs and provide the highest quality service to our customers. Our strategic initiatives and continuous improvement efforts are guided by our [Future Ready: Fiscal Years 2017 to 2021, U.S. Postal Service Five-Year Strategic Plan](#). As a business entity that delivers almost half of the world's mail — and as a presence in every community in our country — we provide the best possible service to our customers to remain competitive.

This report highlights key initiatives for our approach to Presidential Executive Order 13834 - Efficient Federal Operations. We also publish an [Annual Sustainability Report](#) detailing sustainability efforts and our approach to sustainability that includes examining economic, environmental and social aspects of our business. Further information about our sustainability initiatives can be found at [usps.com/green](https://usps.com/green).

Operational resiliency has become a greater focus because of natural disasters and severe weather events, including flooding and extreme hot and cold temperatures.

Major hurricanes and historic flooding in Texas, Florida and Puerto Rico devastated communities and caused disruptions in our operations and services. Additionally, wildfires in California tested the resiliency of our organization. In the aftermath of these events, service was suspended at several facilities due to infrastructure damage. In an effort to restore service and a sense of normalcy to communities, we resumed delivery service in areas that were deemed safe and offered pickup mail service for residents. Service updates were provided through our USPS Service Alerts webpage to provide important notification to employees and customers about their mail.

Not only did the Postal Service focus on quickly restoring service, our employees were on-site at local shelters, helping displaced customers reconnect with their mail by helping them complete temporary change-of-address forms and directing them to alternate Post Offices to get their mail.

Through our initiatives, we were able to reduce facility energy intensity, greenhouse gas emissions, and water consumption. We achieved this despite the challenges of a rapidly evolving business environment, a highly competitive marketplace and constraints to our current business model.

The report is a testament that through the elimination of waste, reductions in energy use, we were able to significantly lower our carbon footprint, and drive down costs -- practices that are good for the environment and also good for business.

Today and for the future, we pledge to the American public that we will continue to pursue environmental stewardship as part of our immediate and long-term strategic plans and policies. With every delivery, the Postal Service is committed to making a positive impact on the environment – doing our part to ensure that future generations enjoy a healthy planet.

## Implementation Summary

### 1. Facility Management:

#### FACILITY ENERGY EFFICIENCY

FY 2017 Status: 34% reduction (Btu/GSF)

2003 Baseline: 103,820 (Btu/GSF)

Implementation Status	Operational Context	Priority Strategies & Planned Actions
<p>In an effort to reduce energy consumption and waste, we performed energy audits at over 300 facilities in the past 2 Fiscal Years. During that same timeframe, we awarded contracts for installation of energy conservation measures at 140 buildings, resulting in more than \$40 million of investment in energy efficient infrastructure. These projects delivered an internal rate of return exceeding twenty percent.</p> <p>An example of these efforts is our 880,000 square foot network distribution center in Springfield, MA. Upgrades include replacing the electric heating system with high-efficiency gas-fired boilers, updating more than 50 pump and fan motors with high efficiency models, and upgrading the HVAC control system in older areas of the building. Based on project cost, utility rates and a performance rebate, we anticipate this project will deliver a 30 percent return on investment.</p> <p>Our Enterprise Energy Management System (EEMS) and Utility Management System help us inventory, analyze and report our annual facility energy use.</p> <p>EEMS consolidates and standardizes energy-related data and provides a platform for tools to easily access the information. This system provides us with the ability to locally and remotely monitor energy consumption and equipment data to better manage</p>	N/A	<p>We work to operate more efficiently and save energy across the organization by making use of emerging technologies. We focus on reducing our impact across our operations including at our facilities, with our vehicle operations and within our supply chain. Our facilities require a large amount of energy to carry out our mailing and shipping operations. We are taking advantage of renewable technologies to reduce our impact and implementing innovative energy savings projects to reduce emissions as well as produce cost savings.</p> <p>USPS will utilize the following strategies during the 2019 and 2020 fiscal years to reduce our energy usage:</p> <p>Audit owned buildings greater than 20,000 SF.</p> <p>Using prior audits to identify and re-audit buildings &gt; 75,000 SF where LED lighting and mechanical system upgrades appear promising.</p> <p>Invest approximately \$20 M per year on energy conservation measures that meet an internal rate of return of at least 20%.</p> <p>Replace worn or damaged building components with energy efficient systems that are life cycle cost effective.</p> <p>Continue to update our Building Design Standards to incorporate energy efficient technologies that become cost effective as they mature.</p>

and realize cost and consumption savings. We are expanding our EEMS network by installing digital communication control and monitoring devices at our facilities. In 2015, we monitored 426 facilities; in 2017, we expanded to 726 facilities.		
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## **EFFICIENCY MEASURES, INVESTMENT, AND PERFORMANCE CONTRACTING**

ESPC and UESC investment / number of projects FY 2017: N/A

The Postal Service does not receive appropriations for its operations. Instead, USPS operations are funded by revenue from sales of products and services.

## **RENEWABLE ENERGY**

FY 2017 Status: N/A

<i>Implementation Status</i>	<i>Operational Context</i>	<i>Priority Strategies &amp; Planned Actions</i>
In 2017, we installed nearly 35,000 solar panels (13-megawatt direct current system) at the Los Angeles, CA Processing and Distribution Center. The panels will avoid an estimated 18.8 million pounds of carbon dioxide emissions annually — the equivalent of 2,000 cars — and will generate energy equal to providing power to 2,420 typical American homes annually. The project is part of a unique plan to enhance our participation in the alternative energy arena and reduce our organization's carbon footprint. In addition, the opportunity allows the Postal Service to accrue savings from a 1.3-megawatt portion of the installation that is dedicated to providing the facility with solar energy equivalent to 6 percent of its consumption while also generating revenue from power available to others from the 11.7-megawatt portion of the installation.	N/A	<p>USPS continues to evaluate opportunities and pursue the installation of renewable energy systems at USPS facilities, such as the construction of the Los Angeles solar generating system. Installations such as these are intended to generate significant out year revenue for USPS, while also meeting a portion of our electricity needs at a considerable discount compared to grid prices.</p> <p>In April of 2018, USPS issued a request for proposal for renewable energy generation at 4 of our large mail processing and distribution centers. The vendor proposals are currently under evaluation. USPS plans to continue issuing solicitations for the installation of renewable energy generating systems at USPS facilities.</p> <p>We assign priority to proposed capital investments. Initiatives with a high return on investment and a short payback period are highly considered.</p>

## **WATER EFFICIENCY**

FY 2017 Status: 50% reduction in potable water (Gal/GSF)

2007 Baseline: 17.5 (Gal/GSF)

<i>Implementation Status</i>	<i>Operational Context</i>	<i>Priority Strategies &amp; Planned Actions</i>
While water use is not a major input for our operations, we are committed to improving impacts from our operations by reducing water consumption at our facilities and complying with water use restrictions for landscaping. Through these practices, we are contributing to the sustainability of our community environments. Water is consumed primarily through employee use and facility maintenance and we are proud to report continuous reductions in water consumption since 2008.	N/A	USPS will invest in water-saving upgrades that are identified during audits and HVAC upgrades that meet an internal rate of return of at least 20%. Plumbing fixtures that are beyond their useful lives will be replaced with equipment that meets or exceeds U.S. Environmental Protection Agency (US EPA) WaterSense criteria. Landscape irrigation is largely prohibited in USPS, except where required by local ordinance.

## **HIGH PERFORMANCE SUSTAINABLE BUILDINGS (HPSB)**

FY 2017 Status: N/A

As an independent establishment with a unique mission, that does not take appropriations for its operations, USPS is not required to meet the HPSB goals, and, as such, does not have a formal program to track compliance. Our Building Design Standards incorporate many of the Guiding Principles (e.g., energy & water conservation, indoor air quality, storm water management, environmentally preferred products, paper recycling, and floodplain avoidance), which we utilize to design new space and retrofit projects.

## WASTE MANAGEMENT AND DIVERSION

FY 2017 Status: 54.1% waste diverted

<i>Implementation Status</i>	<i>Operational Context</i>	<i>Priority Strategies &amp; Planned Actions</i>
<p>The majority of USPS non-hazardous recyclable solid waste is managed as part of our National Recycling Operation (NRO) program. The majority of this material consists of discarded lobby mail, undeliverable standard mail, cardboard and shrink-wrap plastics. USPS has been aggressively investing in its recycling infrastructure at key recycling hub sites where these recyclables are consolidated. In FY17, infrastructure improvements such as the installation of state of the art recycling compactors and hamper dumpers were made to an additional 43 hub sites, which brought the total to 140 NRO recycling hub sites nationwide. USPS expects to accomplish even more in FY18 and efforts underway are on track to exceed our FY17 accomplishments.</p> <p>The U.S. Environmental Protection Agency recognized our Northeast and Great Lakes areas with 2017 WasteWise Regional awards for their efforts in reducing waste by diverting it from landfills and recycling. Candidates for this award are evaluated on annual improvements of waste diversion, overall waste performance and waste prevention. This is largely attributed to our National Recycling Operation that focuses on broadening recycling in a standardized approach. In one year, the accomplishments from these areas saved thousands of dollars and generated revenue for our operations. The Great Lakes Area alone has reduced trash management and removal costs by \$1.6 million since 2013 and this year avoided over \$3.4 million by diverting over 32,000 tons of waste. The Northeast Area in 2017 avoided over \$4.3 million in disposal costs by diverting 43.5 thousand tons of waste, mostly comprised of mixed paper, cardboard and plastic.</p>	N/A	<p>USPS will continue to use the following priority programs in FY19 and beyond to further our efforts to reduce waste at the source and to divert at least 50% of the remaining solid waste from landfills:</p> <p>National Recycling Operations Program improvements via expansion of our backhaul efforts and additional infrastructure development.</p> <p>Agency wide participation in US EPA WasteWise and Federal Green Challenge Programs.</p> <p>The Green Survey is sent to Postal employees every two years. The survey is designed to capture feedback from employees on how to conserve our limited resources, expand adoption of sustainable business practices in the Postal Service and invite volunteers to step up as champions at their facility to promote green projects.</p> <p>Pollution Prevention process management improvements.</p> <p>Increased availability and use of environmentally preferable products.</p>

## 2. Fleet Management:

### TRANSPORTATION / FLEET MANAGEMENT

FY 2017 Status: 24 % increase in petroleum and 0.4% increase in alternative fuel

2005 Baseline: Petroleum – 144,300,000 GGE (Gasoline Gallon Equivalent)

Alternative Fuel – 509,200 GGE

<i>Implementation Status</i>	<i>Operational Context</i>	<i>Priority Strategies &amp; Planned Actions</i>
<p>USPS strategy is to work to ensure that only the most accurate asset level data (ALD) is recorded and reported. We have weekly meetings to discuss ALD status and data quality improvements. USPS will continue providing vehicle data to FleetDash as in the past and will continue to use the USPS official FMIS – SEAM.</p> <p>Solution for Enterprise Asset Management (SEAM) is an Oracle web-based application designed to improve inventory tracking and visibility; implement forecasting and automatic replenishment capabilities; and standardize asset tracking and maintenance/repair functions.</p>	N/A	<p>For mail delivery, we rely on efficient and effective vehicle operations. We are focusing on initiatives that use new technologies that will accommodate a diversifying mail mix, improve safety and service, reduce emissions and produce operational savings. We will continue to conduct testing of prototype vehicles to allow us to make informed decisions about the future of our vehicle fleet.</p> <p>The Postal Service is testing three Nissan Leaf and three Chevrolet Bolt electric vehicles for mail delivery in Northern Virginia. Through testing, we can collect data on maintenance, performance, battery condition and employee feedback. Early results show reductions in vehicle emissions and fuel costs. We will continue to test new technologies as they appear in the marketplace.</p> <p>Our research and development efforts with autonomous cars, trucks and vans suggest the technology increases safety, reduces fuel costs and improves worker productivity. By integrating innovative autonomous vehicle technology into our fleet, improvements in delivery efficiency and driver safety are expected. Applying it to long distance mail transportation operations can improve efficiency, schedule reliability and safety as well as reduce fuel consumption. The Postal Service will continue research, development and testing of new innovative autonomous technologies to apply them where they make the best economic sense for the business.</p>

		<p>Although the Postal Service continues to make its delivery routes more efficient, petroleum usage has increased since 2005. This is partially due to increases in the amount of delivery points, even as mail volume goes down. In 2017, we delivered to 157.3 million delivery points. In addition, most of the delivery vehicles in the fleet are over 30 years old.</p>
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### 3. Cross-Cutting:

#### SUSTAINABLE ACQUISITION / PROCUREMENT

FY 2017 Status: Three (3) bio based purchasing contract actions for \$530,000

<i>Implementation Status</i>	<i>Operational Context</i>	<i>Priority Strategies &amp; Planned Actions</i>
<p>We are committed to being a leader when it comes to product and service responsibility. We encourage and require our key national suppliers to provide environmentally preferable products (EPP) for purchase using our online catalog eBuy2 ordering system. Each year we have a goal to continuously improve on the number of EPP items offered and purchased. In 2017, we purchased more than \$401 million of EPPs, weighing over 202,046 tons. We also provide environmentally preferred Priority Mail and Priority Mail Express boxes and envelopes — containing post-consumer recycled content and that are 100 percent recyclable — to our customers at no charge. Postal expedited mailing paper products are also made with either Forest Stewardship Council or Sustainable Forestry Initiative certified materials. We will continue our commitment to responsible products and services by using a suite of Postal Service developed tools and resources, while ensuring the best value for sustainable product availability for our customers.</p>	N/A	<p>USPS will continue to promote the integration of sustainability into its supply chain using the following priority strategies:</p> <p>Increased use of sustainability contract clauses in USPS contracts.</p> <p>Increasing the availability of environmentally preferred products in its eBuy2 online ordering system.</p> <p>Maintaining and improving upon its supplier EPP reporting and tracking system.</p>



## ELECTRONICS STEWARDSHIP

FY 2017 Status: 100% equipment acquisition meeting EPEAT requirements, 100% equipment with power management & 100% compliance with disposal guidelines

<i>Implementation Status</i>	<i>Operational Context</i>	<i>Priority Strategies &amp; Planned Actions</i>
<p>We enable and maintain power management on all eligible electronics; measure and implement automatic duplexing and other print management features on all eligible agency computers and imaging equipment.</p> <p>We also ensure environmentally sound disposition of all agency excess and surplus electronics, consistent with Federal policies on recycling &amp; disposal of electronic assets.</p> <p>We embrace green principles at our Information Technology centers to help us save money on maintenance while improving energy efficiency, reducing waste and saving natural resources. At centers in Raleigh, NC, San Mateo, CA, and Eagan, MN, the Postal Service saved more than \$750,000 through updates to cooling systems and restructuring of maintenance services.</p>	N/A	<p>All electronic equipment deployed by Desktop Computing will have active power management except where power management lacks centralized assurance of use, for example laptop and tablet devices outside of USPS control. All USPS printers on catalog meet EPEAT Bronze at minimum; therefore, no additional actions are planned.</p> <p>We work to ensure that we responsibly dispose of electronics. Our corporate mobile devices are returned to an R2 certified recycler and our toner and ink cartridges are recycled via the USPS BlueEarth® Federal Recycling Program, which aims to maximize the empty ink and toner cartridge capture rate to increase landfill avoidance. USPS BlueEarth® Federal Recycling Program supports waste reduction efforts of government agencies by providing a secure way to recycle empty printer cartridges and small electronics free of charge.</p>

## GREENHOUSE GAS EMISSIONS

FY 2017 Status: 21.1% reduction in Scope 1 & 2 emissions

2008 Baseline: 5,285,000 Metric Tons of CO<sub>2</sub>e (Carbon Dioxide Equivalent)

<i>Implementation Status</i>	<i>Operational Context</i>	<i>Priority Strategies &amp; Planned Actions</i>
<p>Our operations and processes emit GHGs, which contribute to changes in the earth's atmosphere. As sustainability leaders, we are pursuing ambitious goals to conserve natural resources and reduce our GHG emissions. We conduct annual GHG inventories and report our results to the Federal government, International Postal Corporation and The Climate Registry. These reports help us maintain transparency while measuring progress toward our goals and developing emission reduction strategies. Each year, we measure</p>	N/A	<p>Work with suppliers to decrease petroleum consumption by increasing the number of highway contract route alternative fuel vehicles. We currently have 402 alternative fuel vehicles running 40.7 million miles in our highway contract carrier fleet.</p> <p>USPS developed a Green Initiative Tracking Tool (GITT) that captures key sustainability performance metrics at the facility, district, area and national levels. These include facility energy and water use, petroleum consumption, consumable materials, solid waste</p>

our progress against established reduction goals.		disposal costs and recycling revenue. Most of these performance metrics affect GHG emissions, directly or indirectly. Our established Green Team members and registered facility managers can monitor progress using the GITT to add transparency and engage employees in the process. The GITT is available to any Postal employee who requests access to it. We also issue a quarterly newsletter to increase awareness of sustainability topics that and engage our field offices and employee stakeholders. Online sustainability training tailored to the USPS workplace is available to employees. Examples of training topics include Green Team Orientation, Lifecycle Analysis, National Recycling Operation Deployment, and Green IT.
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#### 4. Agency Identified Priorities:

##### Notable Projects and Highlights

On Feb. 16, we commissioned the first hydrogen fuel cell system at the Washington, DC, Network Distribution Center. This is the first step in replacing the lead-acid battery system at the facility with a safer, greener and more productive solution to fuel its fleet of powered industrial vehicles (PIVs). We operate over 23,000 PIVs in processing and distribution centers nationwide, and hydrogen fuel cells provide us with an opportunity to positively transform our operations.

Hydrogen fuel cells are a superior solution to lead-acid batteries due to their operational characteristics. Lead acid batteries have limited run-time capabilities and long recharging cycles, and are costly to operate and maintain. These batteries also pose environmental, health and safety risks that hydrogen fuel cells do not. Hydrogen fuel cells provide the Postal Service several benefits including increased maintenance intervals, shortened refueling times, reliable voltages and clean operations.

In the first year of the pilot, the hydrogen fuel cell system provided operational, environmental and cost-savings benefits. The technology demonstrated its value for us through increases in equipment availability and PIV operator productivity and decreases in electricity consumption and maintenance costs. In the first year alone, PIV operator productivity increased by approximately 10 percent and led to over \$1 million in labor savings at the facility.

In 2018, we will be evaluating the scalability of the technology to additional processing and distribution centers based on the pilot's positive results.

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