Sustainability Plan

DEVELOPMENT AUTHORITY of the NORTH COUNTRY

January 2020

1.0 Introduction

In April 2008, Governor David A. Paterson signed Executive Order No. 4 Establishing a State Green Procurement and Agency Sustainability Program, which directs state agencies, public authorities and public benefit corporations to green their procurements and to implement sustainability initiatives. The Development Authority of the North Country's (Authority's) Sustainability Plan shall be used as a guide for planning and implementing initiatives that further the ideals of sustainability Authority-wide.

2.0 Sustainability Committee

The Authority Sustainability Committee is made up of employees from each of the divisions within the Authority. The committee meets on a quarterly basis.

The Authority was established with environmental stewardship as a guiding principle. The Sustainability Committee's mission is to provide leadership that will foster an environment of sustainability and environmental consciousness, ultimately guiding the Authority towards becoming the model of environmental stewardship within the North Country Region.

3.0 Environmental Policy Statement

The Authority's environmental policy commits the organization and employees to act as responsible stewards of the environment and to find ways to improve the environment and quality of life of the citizens in Jefferson, Lewis, and St. Lawrence counties through planning, design, construction, maintenance, and operation of its regional infrastructure. The primary environmental goal is to maintain excellence in environmental protection throughout the Authority's service area. The key elements of the Authority's environmental policy are to:

- Meet or exceed all environmental regulations applicable to the Authority's activities.
- Integrate environmental protection and enhancement into planning, design, procurement, construction, and operations.
- Minimize the environmental footprint of the Authority by incorporating the three Rs (Reduce, Reuse and Recycle) throughout the organization.
- Support advancement in environmental protection and sustainability through the use of innovative technologies.
- Leverage the Authority's existing partnerships to impact regional environmental improvements.

4.0 Environmental Case Statement

Operating the Authority as a sustainable organization not only benefits the environment, it also benefits the Authority's customers. The following case statements indicate some of the ways those benefits can be achieved:

- **Community Benefits**

  - As a regional organization, the Authority's activities have wide-ranging environmental, health, and safety impacts on the residents of Jefferson, Lewis, and St. Lawrence counties. It is the Authority's obligation to ensure that the organization is operating in a sustainable manner that will benefit the communities served now and into the future.

  - Developing infrastructure that incorporates environmental improvements is beneficial to the communities served and to the Authority. These projects create a positive image of the Authority as a regional organization and improve the quality of life of the residents in the communities served (i.e., the Kamik Nature Trail, Murray Trail and Education Center).

- **Saving Taxpayer Dollars**

  - Reducing energy losses and improving operational efficiencies lowers operating costs and saves Authority customers.

  - Retrofitting and upgrading aging infrastructure with more modern and efficient technology saves operating dollars in the years to come.

  - Finding other uses for scrap equipment, reducing waste generated from our facilities, and increasing recycling throughout our organization reduces operating costs.

- **Improving Employee Health**

  - Switching to green cleaning products and reducing the toxicity and number of chemicals in inventory will reduce exposure, improve indoor air quality by reducing airborne dust and chemical gases, and promotes a healthier environment, thereby, lowering sick days and absenteeism.

- **Saving Natural Resources**

  - "Purchasing a ton of paper made from 100% recycled paper saves the equivalent of 4100 kwh of energy (enough to power the average home for 6 months), 7000 gallons of water, 60 pounds of air emissions, 17 trees and 2.5 cubic yards of landfill space over purchasing non-recycled content paper". Source: http://www.recycleworks.org/paper/paper_wbr.html

  - Developing an innovative use for waste heat at the landfill will positively impact the carbon footprint of the North Country.

  - Strategically replacing Authority-owned vehicles with more fuel efficient vehicles would save significant dollars in fuel costs, while eliminating tons of greenhouse gases.

  - Reducing the amount of leachate generated at the Authority landfill by undertaking an initiative to clean shed more of the stormwater that falls directly on the waste mass is expected to create options for less expensive leachate treatment at the facility.

5.0 Sustainability Initiatives

Improving the Authority's commitment to sustainability requires planning, implementation and evaluating progress towards specific goals. The following initiatives have been identified by the Sustainability Committee as ways to improve the Authority's sustainability program and evaluate progress:

- Create a shared understanding of sustainability;
- Prevent waste at the source and encourage reuse;
- Track costs associated with recycling and composting programs;
- Reduce the use of toxic chemicals;
- Encourage reductions in energy use;
- Conserve natural resources;
- Greening procurement and meeting EO#4 reduction goals

5.1 Creating a shared understanding of sustainability

To move the Authority toward a more sustainable organization it is important, that all levels of the organization understand the principles of sustainability, why it is important and what roles they play in achieving sustainability goals. To this end, the Authority has developed a sustainability training that will be presented to new employees and scheduled every 3 years for all employees starting in calendar year 2018.

5.2 Prevent waste at the source and encourage reuse.

The reuse program was updated in FYE 2018 to include the "Interoffice Reuse Program Listing". In the first year 94 lbs. of office supplies were reused. In FYE 2019 the Authority increased reuse to 157 lbs. a 67% increase in reuse for the year.

5.2.1 Paper Reduction:

- Set printer and copier defaults to double-sided printing
- Review draft documents electronically instead of printing
- Establish specified decreased margin widths
- Replace fax with email transmittals whenever possible
- When faxing is necessary use a fax label instead of a full cover sheet
- Encourage electronic filing of e-mails to reduce printing of e-mails
- Encourage copies of reports and other documents be submitted electronically
- Use company websites instead of paper catalogs
- Install warm air hand dryers in bathrooms to reduce paper towel waste, when feasible

- Cancel duplicate catalogs and subscriptions
- Don't print multiple copies of handouts for meetings; let attendees bring their own
- Use projectors for meetings to avoid needing multiple printouts
- Transition from employees manually signing off on policy changes and other documents to electronic system when feasible.
- Perform a review and document specific paper reduction efforts annually (e.g. ECMS changes, increased division use of electronic documentation for specific projects) Document these changes in the EO4 Tracking SOP.
- Filing documentation electronically using NexGen and OnBase.

5.2.2 Purchasing:

- Purchase of copy paper, janitorial paper, and other paper supplies (note pads, envelopes, paper towels, etc.) shall be composed of 100% post-consumer recycled content whenever possible
- All copy and janitorial paper shall be process chlorine-free
- Purchase green office supplies, like soy based ink pens, pens/pencils made with recycled content, etc.
- Only purchase cleaning products listed on the Approved Cleaning Products list
- Disposable kitchen products will not be purchased by the Authority; employees are encouraged to bring their own reusable kitchenware
- Document changes to green cleaning products list with costs over time in the EO4 Tracking SOP.

5.2.3 Printing:

- All Authority publications shall be printed on 100% post-consumer recycled content paper
- All necessary printing for internal use will be double-sided, where practical
- Set printer and copier defaults to black and white printing

5.2.4 Reuse:

- Reuse file folders and binders
- Reuse training materials and books
- Return spent toner cartridges to supplier
- Set up a reuse areas in main offices where employees can drop off and pick up office supplies
- Utilize trade-in or take-back programs when making purchases
- Utilize the Authority interoffice reuse program that documents office items and furniture for reuse, and tracks materials diverted from waste stream

5.2.5 Shipping and Mailing:

- Reuse boxes, mailers, etc.
- Reuse polystyrene foam packing peanuts
- Avoid large mailings by sending out notification post cards or emails
- Use internal mail instead of mailing documents between facilities whenever possible

5.2.6 Cleaning and Maintenance:

- Use refillable plastic containers for cleaning supplies
- Reuse mop heads and cleaning cloths
- Use concentrated cleaners

- Do not mandate plastic liners in trash cans
- Avoid the use of hazardous pesticides within facilities
- Ensure cleaners use green cleaning products in our facilities
- Lease shop rags that are reusable

5.2.7 Recycling:

- Authority facilities will be equipped with recycling bins and staff will recycle paper, cardboard, plastics, metals, glass, plastic films and any other materials for which a recycling program exists.
- An audit will be completed to identify efficiencies and document costs in the recycling and composting efforts at the MMF and at Warneck.

5.2.8 Furniture:

- Buy new furniture from sustainably managed forests
- Refurbish equipment and office furniture for reuse
- An inventory of furniture available will be listed in the Authority interoffice reuse program mentioned above under Reuse.

5.2.9 Tracking/Reporting:

- The WQ and MMF Division Managers will ensure that all items required per the EO#4 Tracking SOP are updated on a monthly basis
- Changes to the recycling and composting programs will be documented annually in the EO4 Tracking SOP. The benefits or challenges realized from the changes will be documented in subsequent years for reporting.
- The annual chemical inventories will be reviewed for cleaning products not included on the approved list and discussed at the sustainability committee meeting to approve for listing.
- The approved cleaning products purchases are documented and costs will be compared to similar products not meeting the standard. This and other aspects of green cleaning will be documented in the EO4 Tracking log to document changes in costs for reporting.
- Results of waste audits will be documented and progress reported at committee meetings by the Environmental Coordinator.

5.2.10 Power Conservation

- All non-essential workstation PCs will be "shut down" on a nightly basis to conserve energy; system hibernation and standby are not allowed as these modes still consume electricity
- When replacing equipment and appliances EnergyStar certified products will be purchased when available.
- Setting building temperature control ranges will reduce heating and cooling costs.
- Annual audits will be performed at the Warneck and Materials Management Facilities to document efforts to conserve power and provide suggestions for further reductions.
- Upgrade older lighting to LED lighting when appropriate (i.e., Exit signs, compact fluorescents)
- Tighten building envelopes; check weather-stripping on doors, overhead doors, and windows.
- Install 7 day timers on water heaters.

5.3 Recycling and Composting

The Authority utilizes single-stream recycling programs as detailed in the Authority's Recycling Guidance & Procedure and has established composting programs at the Water Quality and Materials Management facilities. In FYE 2019, 2.6 tons of office waste was recycled and composted while sending 1.06 tons to the landfill. A new metric has been established in Appendix A to measure the effectiveness of recycling, composting and reuse programs. Waste diversion is a measurement of the portion of wastes generated that are not sent to the landfill. The new metric paired with waste audits will aid in determining where improvements can be made in recycling, composting and overall waste reduction. A set of quarterly office waste audits were conducted in FYE 2019. The results were documented and will be used as a baseline to compare against future annual waste audits. The results will be documented and recommendations provided to improve recycling and composting at Authority facilities. Along with the waste audits the committee will be looking at improvements in the waste measurement process and creating quarterly progress reports to track metrics to report out at Managers meetings.

5.4 Reduce the Use of Toxic Chemicals

The Authority utilizes 3E Online service as a compliance tool for compliance with 29 CFR 1910.1200 (Hazard Communication standard) and as a tool to help manage the Authority's chemical inventory. Subject Matter Experts have been designated in the Health and Safety Manual and trained annually to manage the inventories at Materials Management, Water Quality, Admin and Technology to ensure that each division is purchasing green options when possible and reducing the number of hazardous chemicals managed at their facilities. An annual summary of chemical inventory reductions will be included in the EO4 Tracking SOP.

5.5 Encourage Reductions in Energy Usage

Studies have shown that documenting environmental performance can encourage conservation. To document information required for Executive Order #4 reporting, the amount of electricity purchased from renewable resources (purchased or generated by wind turbines, solar, solar thermal, hydroelectric or renewable energy credits) will be documented and trending provided in Appendix A of this plan. As part of the annual budget setting process, the Finance Department (with assistance from the Sustainability Committee) will evaluate opportunities to increase the amount of renewable energy purchased annually to reduce the Authority's carbon footprint.

Energy utilization is tracked at Warneck Pump station, Materials Management Facility and Technology divisions to document usage and goals for reduction. Using Microsoft Excel's Predicated Analysis Tool, Microsoft Forecaster, and based off past year's trend data, the Authority has set a lofty but achieveable goal to increase renewable energy utilized in FYE2020 4.74%, totaling a target rate goal of 29.29% of total energy consumed in FYE2021.

5.6 Conservation of Natural Resources

Preplanning for projects should include sustainable practices, to include opportunities for water quality protection such as porous asphalt, sustainable landscaping, use of organic fertilizers, low flow plumbing fixtures, gray water collection, rainwater collection and use of non-potable water. The Engineering division will document sustainable practices implemented in projects annually for reporting. .

5.7 Greening Procurement and Meeting EO#4 Reduction Goals

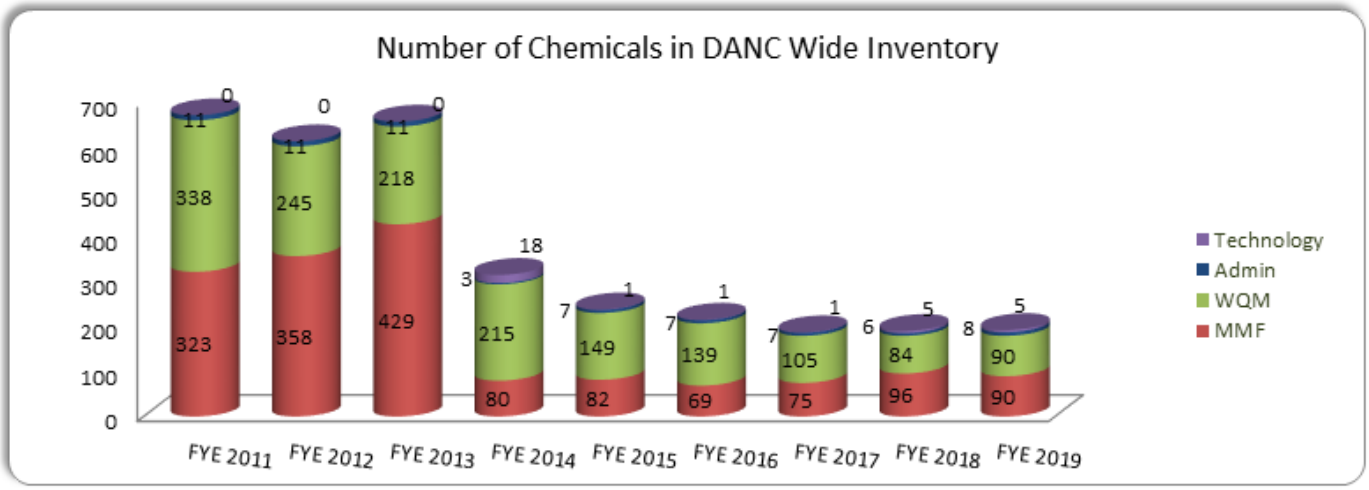
Tracking purchases of green products was established in 2011 using net requisitions. An annual review of the list shall be completed to include additional items that could be tracked. This has the potential to reduce the effort required for completing the recycling logs and including any additional items now listed in Executive Order #4 reporting. The goals established under Executive Order #4 include a 10% reduction in waste generated from year to year. To achieve this goal the Authority must continually look to improve procurement, recycling and composting efforts.

More information on Executive Order #4 compliant contracts, environmentally preferable contracts, and approved specifications can be found on the OGS website at: https://ogs.ny.gov/greenny

APPENDIX A –
STATISTICS & PERFORMANCE TRENDS

1. Reducing the Use of Toxic Chemicals

To reduce the use of toxic chemicals the Authority established the Pesticide Use Policy (2010) and Green Cleaning Products Use Policy (2011). In 2011 the Authority designated employees at three divisions as Subject Matter Experts (SMEs). The SMEs are trained annually and tasked with reviewing and approving the purchase of products that may be hazardous and maintaining the Hazard Communication Inventories. The goal of these initiatives and policies are the purchase of products that are better for employee health, more environmentally friendly and reduce the use of toxic chemicals.

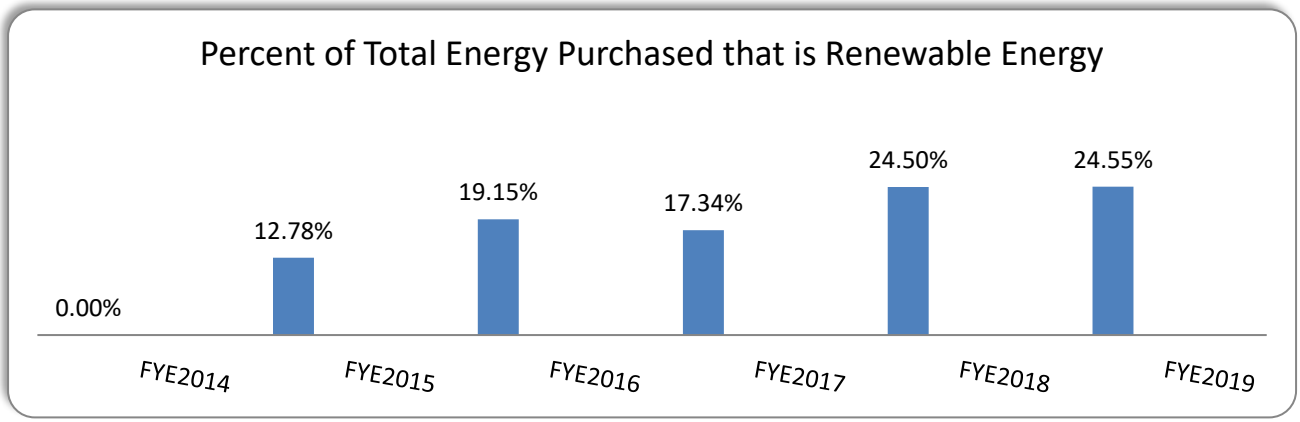


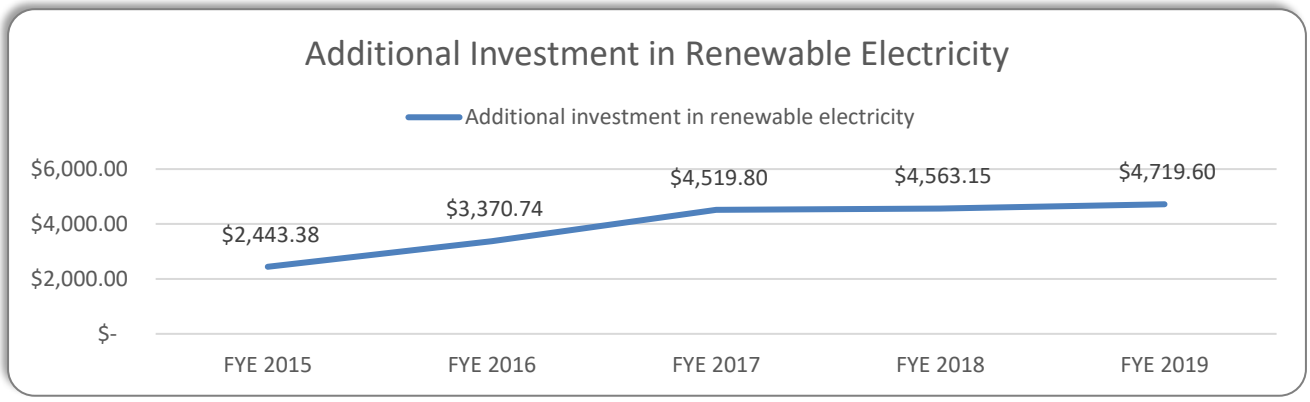
In 2019 the Warneck Pump station completed a $513,000 capital project that eliminated the use of chlorine gas by transitioning to sodium hypochlorite. This project continues the Authority's committment to an overall reduction in the use of toxic chemicals.

2. Energy

Renewable Energy

The Authority began purchasing renewable energy credits in FYE 2015 with a goal of 20% of the total electricity purchased annually from renewable sources. The goal was met in 2018 and stands at 24.55%



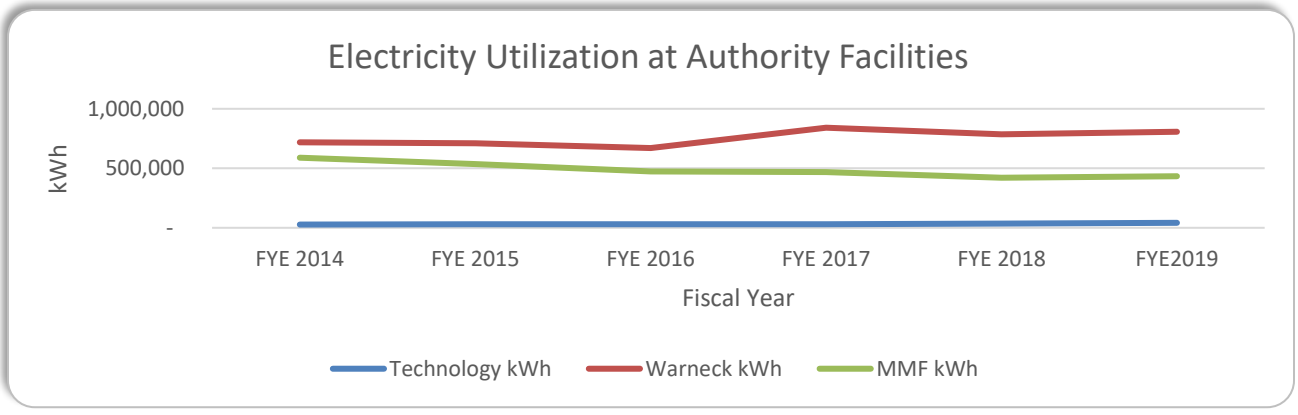


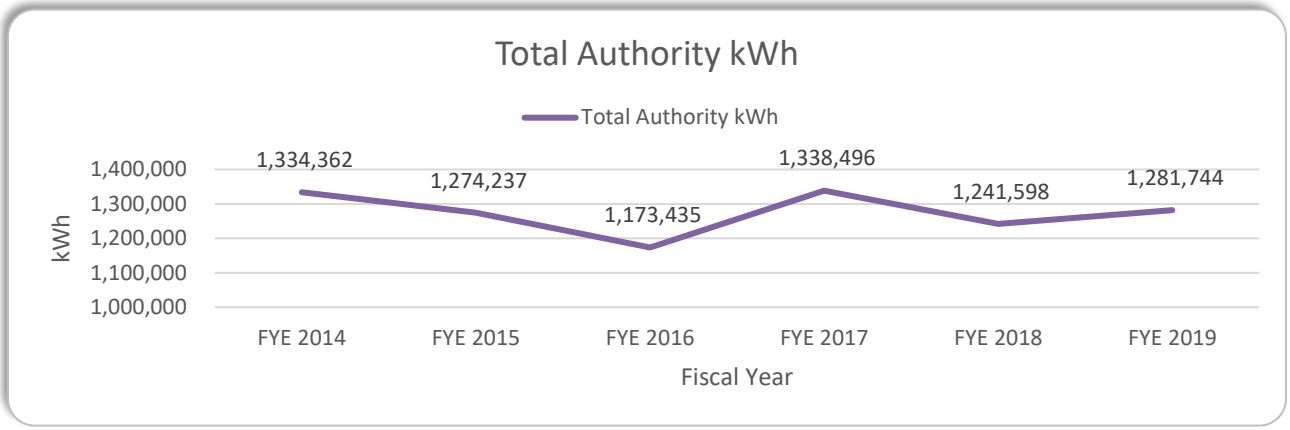
The Authority pays an additional $.015 per kWh for renewable service. The chart above shows the investment in renewable energy annually since the program began.

Electricity Utilization

The Authority operates industrial facilties that protect the environment by managing waste and wastewater. These facilities operate large pumps to move wastewater. Temperature and precipitation play a significant role in the amount of electricity utilized at these facilities. The Authority also owns a telecommunications network that connects the region to the world using more than 1,800 miles of fiber optic network.

The steady downward trend from 2014-2016 is a direct result of the Authority's commitment to an overall decrease in electricity utilization. The spike in 2017 which resulted in an increase of 171,086 kWh at Warneck Pump Station, can be directly attributed to an abnormally high amount of yearly precipitation in the region. As a potential solution to reduce energy costs, it may be beneficial to pursue investments in green technology such as solar panels, to offset demand changes during peak operational periods.



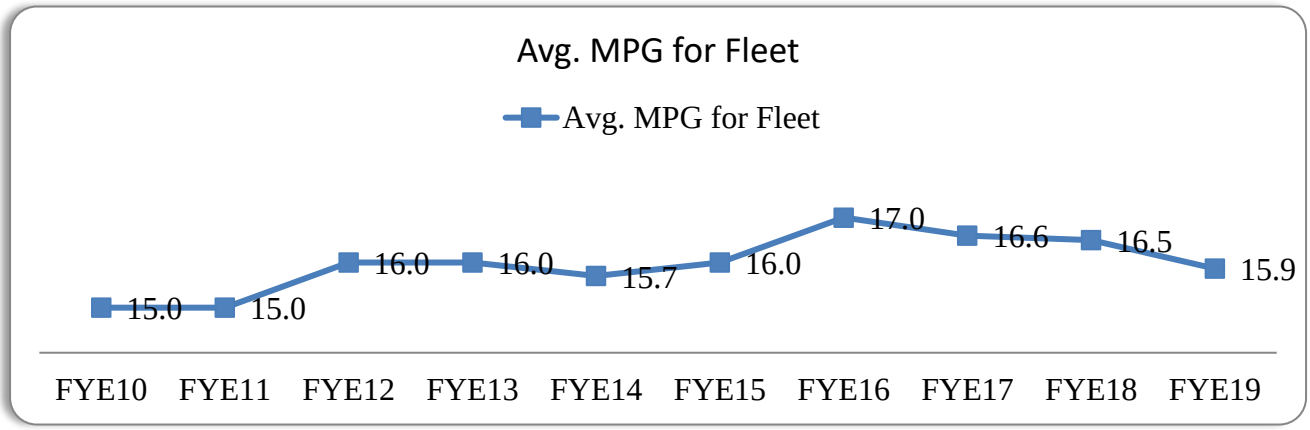


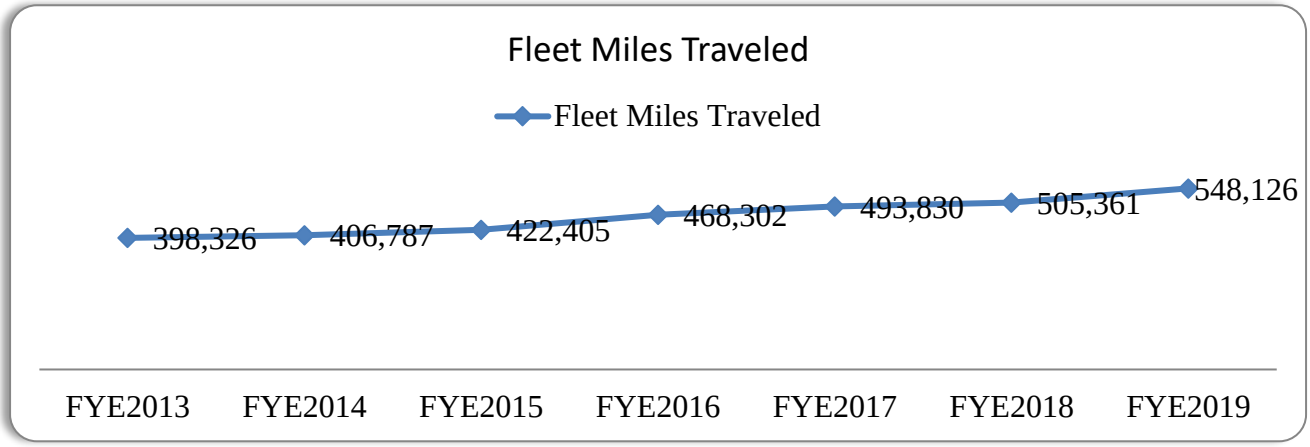
3. Transportation

The drop in average miles per gallon this past year is attributed to a growing customer base resulting in an increase in miles driven by the lower fuel mileage vehicles at both Technology and Water Quality divisions. The Technology division increased mileage by 9,225 miles and the Water Quality division by 8,000 miles in FYE 2019.

The addition of the lower miles per gallon Escape vehicles at Materials Management increased the divisions average to 18.7 miles per gallon which otherwise would have been 16.5

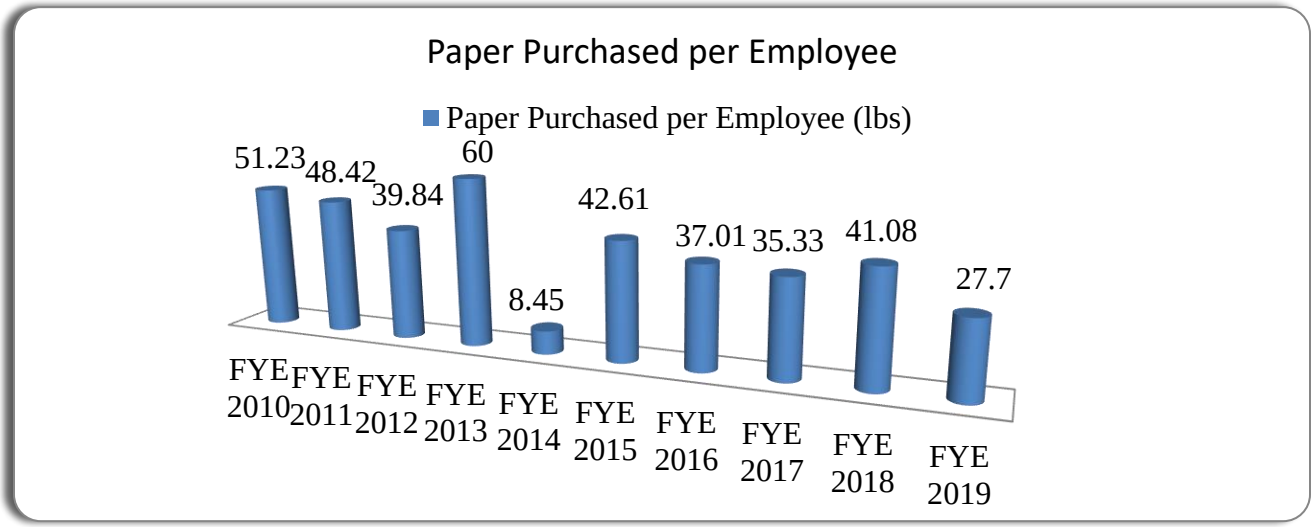
The Authority has also established GPS monitoring in all fleet vehicles. The system provides alerts on erratic operation and also allows managers to monitor the system monthly.





4. Office Paper Reduction

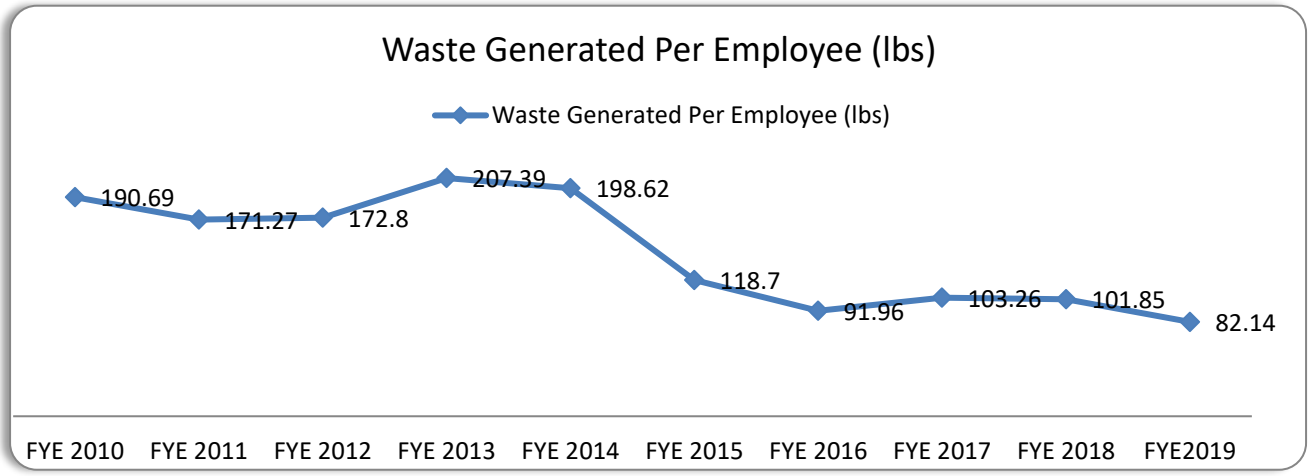
This section monitors the amounts of copy paper purchased and calculates the year over year change. The paper purchased in pounds for FYE2019 currently sits below the median amount for all the years since this tracking was established. The decrease in total paper purchased per employee is attributed to payroll processing, expense payments, and electronic content management system transitioning to 100% paperless operation.



5. Office Waste Reduction

This section monitors the amount of recyclables, compost and waste disposed to calculate the amount of waste generated per employee and progress toward the waste reduction goal. **EO#4 calls for a *10% reduction*** in the amount of office waste generated per employee compared to the previous year.

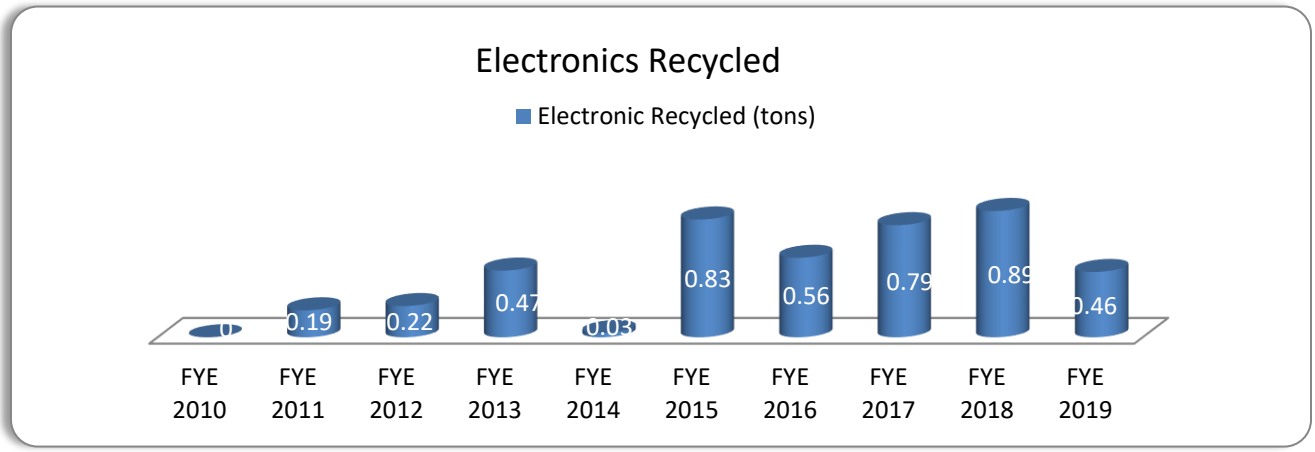
The divisions estimated the amount waste and recyclables until FYE 2014 when weighing the compost, recyclables and waste disposed began. The establishment of the EO4 Tracking SOP in FYE 2015 standardized how the Authority tracks office waste and non-office waste across the divisions. These improvements positively affected the waste generated numbers but more



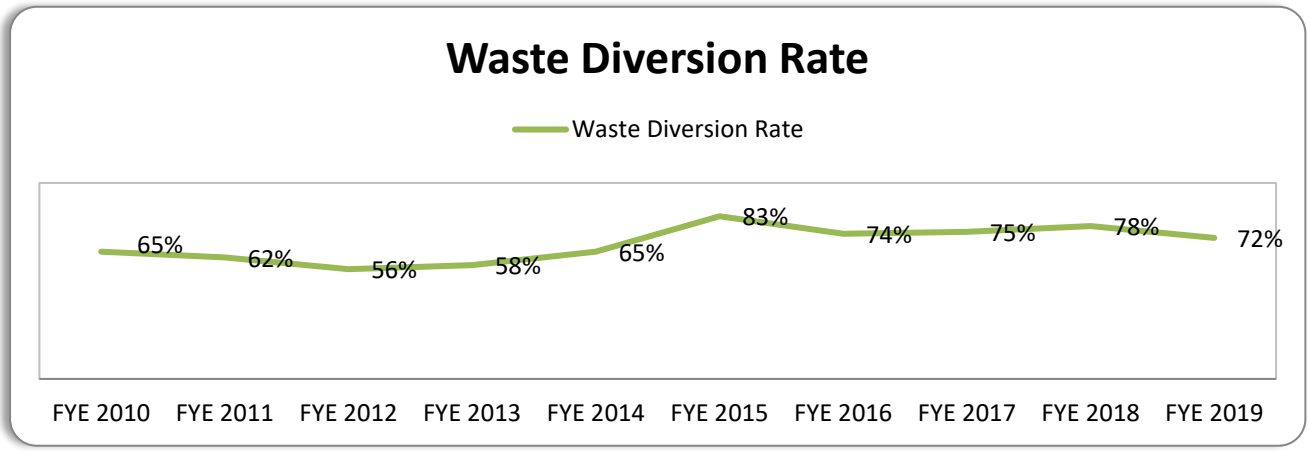
importantly provided more reliable trending moving forward. Quarterly waste audits were completed in fiscal year ending 2019. These audits were used to establish the baseline that annual waste audits will be compared to identify challenges and successes of awareness intiatives.

6. Electronics Recycled

The upward trend in electronics recycling continues at the Authority. Recycling of electronics regularly ensures recyclers get the useful parts that enable the circular economy. The process for recycling electronics was updated in FYE 2014, prior to that the divisions accumulated electronics and decided independently when to recycle them. The process was updated in FYE 2015 and documented in the Recycling Guidance and Procedure. Computers and Cell phones are delivered to the IT department for processing prior to recycling. All electronics are collected at the Warneck Pump Station for recycling at the County transfer station, where weights are provided.



7. Waste Diverted from Landfill



Waste diversion is a measurement of the portion of wastes generated that are not sent to the landfill. It is a measure of the effectiveness of Reuse, Recycling, and Composting Programs. The Authority has always diverted more waste than it sent to the landfill. This is a major goal of the Authority and significant changes have been implemented, to include the transition to Single Stream Recycling which promotes education and participation, as well as regularly scheduled Waste Audits to track data necessary to ensure these changes have the intended effect on the direct outcome of this goal. The drop in the diversion rate from FYE 2018 to FYE 2019 can be attributed to an inverse relationship between tons of waste disposed and tons of material recycled. With that said, these tonnages are within the historical range of the metric but will be evaluated in the coming years to identify trends that may highlight areas of improvement at individual facilities.