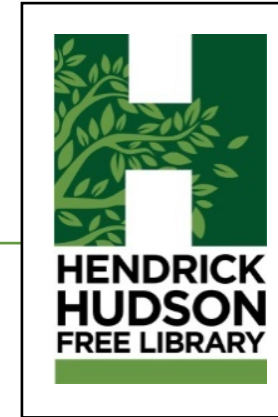


Hendrick Hudson Free Library

Sustainability Report 2018

Produced in partnership with Green Business Partnership



Green Business
Partnership

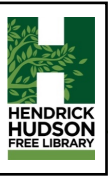
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Organizational Commitment



The **Hendrick Hudson Free Library** Board of Trustees and staff are proud to be part of the movement to make libraries economically feasible, environmentally sound, and in line with our community's core values to ensure that we remain vital, visible, and viable. We are doing this by being leaders in promoting sustainability.

Sustainability is more than green buildings and energy savings. It's the capacity to thrive. It's stable funding, environmental stewardship, and being community-driven. We want libraries to partner with and revitalize their communities and help them bounce back from any disruptions they might face such as severe weather, natural disasters, economic recession, power outages, or terrorism. We want libraries to help their communities to keep going and grow.

Awards that reflect our commitment to sustainability:



GREEN BUSINESS PARTNERSHIP AWARDS

Charles W. Brown, Jr., Sustainability Award, June 2017
Organizational Commitment Award, June 2014

The **Hendrick Hudson Free Library** has been chosen to receive the Charles W. Brown, Jr. Sustainability Award for Visionary Leadership and Commitment to Sustainability. The award was created in memory of Charlie Brown, a true visionary with a deep commitment to sustainability.



2016 JOSEPH SHUBERT LIBRARY EXCELLENCE AWARD for being the first library in Westchester County to be certified as a Green Business



WESTCHESTER COUNTY ECO AWARDS

Westchester County 2016 & 2018 Eco Awards were presented for being the first library in Westchester to be certified as a Green Business and establishing itself as a leader in promoting sustainability.



Environmental Policy



The **Hendrick Hudson Free Library** is committed to reducing our environmental footprint and promoting environmental stewardship at all levels of our organization. Our goal is to minimize our organization's impact and maximize future generations' ability to live, work, and play in our shared natural environment, with equal access to clean air, clean water, and natural resources.

We will strive to minimize pollution and waste, conserve energy and water, protect habitat, support renewable energy resources, buy environmentally friendly products, and encourage environmentally preferable transportation.

These efforts will extend to contractor and supplier relationships. We will encourage contractors and suppliers serving or otherwise acting on behalf of the organization to meet our standards of environmental performance.

Employee understanding and involvement are essential to the implementation of this environmental policy. All employees will receive a copy of this policy and be educated about our company's efforts to improve our environmental performance. Employees at all levels of the company will be involved in supporting our goals.

Adopted by the Board of Trustees, last update 02.24.18 (reviewed and approved annually)



Greenhouse Gas Emissions Overview



Scope 1 emissions from natural gas increased in 2017 and 2018 as a result of a new building addition to the children's room section increasing the building space by 1,470 square feet. In 2017 we installed 289 solar panels that reduced our Scope 2 emissions from purchased electricity by 68.6% in comparison to our 2013 baseline. The amount of avoided greenhouse gas emissions from alternate waste disposal increased considerably in 2018 due to improved signage, education, and the increased number of recycling bins throughout all public and staff areas.

Greenhouse Gas Emissions Inventory (Metric Tons of CO₂e)

	2013	2014	2015	2016	2017
Natural Gas	42.10	44.50	46.19	48.11	56.21
Total Scope 1	42.10	44.50	46.19	48.11	56.21
Purchased Electricity	49.78	44.46	44.75	40.39	29.56
Total Scope 2	49.78	44.46	44.75	40.39	29.56
Business Travel	0.62	0.65	0.61	0.61	0.33
Employee Commuting	22.02	18.48	16.88	14.92	12.65
Total Scope 3	22.64	19.14	17.49	15.53	12.97

Avoided Greenhouse Gas Emissions (Metric Tons of CO₂e)

	2013	2014	2015	2016	2017
GHG Emissions Avoided Due to 100% Renewable Energy	0.00	0.00	0.00	0.00	8.02
GHG Emissions Reductions from Alternate Waste Disposal	8.31	5.08	7.69	6.54	6.63
Total Avoided Emissions	8.31	5.08	7.69	6.54	14.66



The two primary energy sources at **Hendrick Hudson Free Library** are purchased electricity and natural gas. The biggest source of our greenhouse gas emissions is the heating of the building. Electricity is the second largest source of our greenhouse gas emissions.

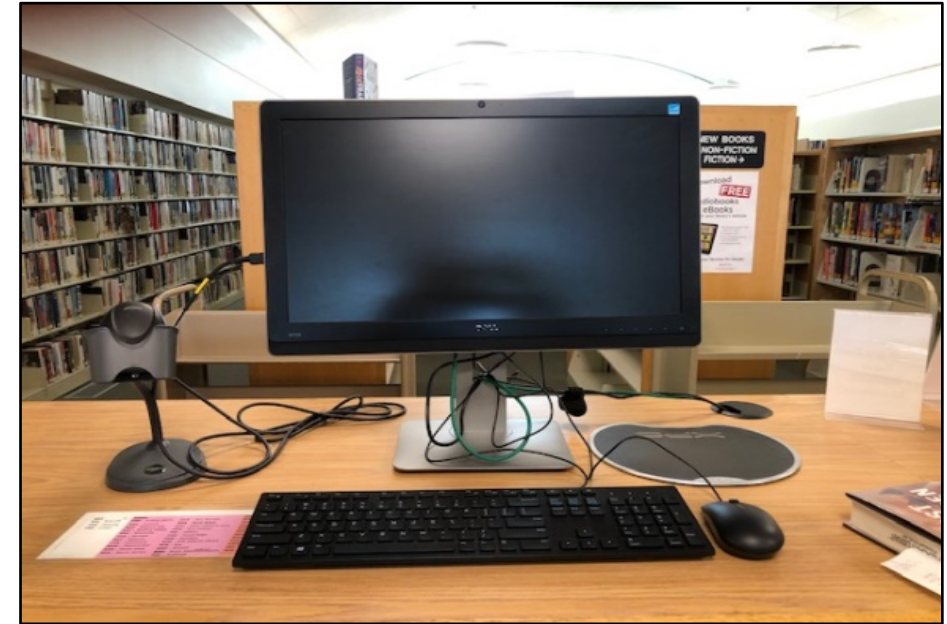
We successfully converted 99% of the building to LED lights. To save even more energy, the bathroom light fixtures have an auto on-off sensor. The LED light conversion resulted in 42% decrease kWh usage since 2012.

In addition to the LED lighting in the building, all parking lot lights were converted to LED's as well. All of the thermostats in the library are set on timers with pre-set temperatures. A ceiling cassette with is controlled by software is installed in the circulation and children's room areas for heating/cooling so as not to keep the main unit running unnecessarily. We installed a variable frequency drive to the main air handler to reduce energy draw.



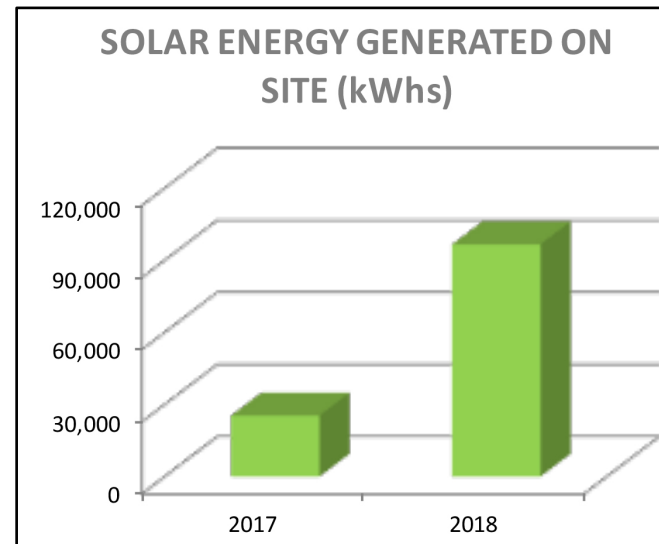
99% OF THE LIGHTS CONVERTED TO LED

The **Hendrick Hudson Free Library** uses seven thin client computers with a virtual desktop environment that replaced traditional desktops. Since thin clients have no hard drive or local storage, all applications and data are stored on a central server. In the past 12 months, the thin clients saved the library 6,927.6 kWhs of electricity which is about \$1,500 annually. Furthermore, all computer equipment has been plugged into power strips that are shut off when not in use to yield even deeper savings.



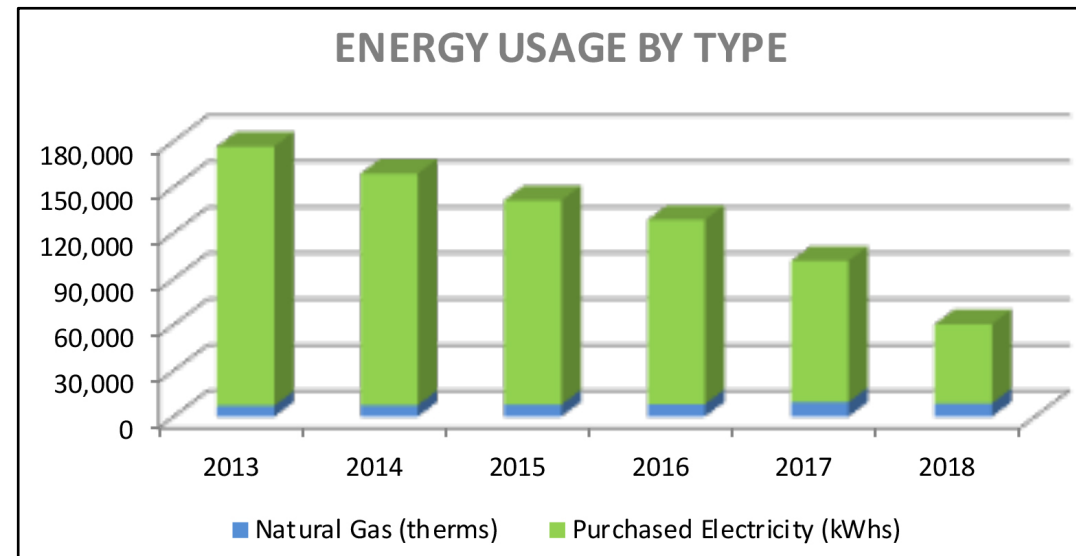
42% ELECTRICITY USAGE DECREASE SINCE 2012

In 2017, the library installed 289 solar panels that produce 84% of the site's energy. This significant upgrade in the library's energy use is expected to save over \$11,000 in 5 years and will significantly reduce the library's environmental footprint.



84% OF THE BUILDING ENERGY USAGE POWERED BY SOLAR

Natural gas is expected to increase in the future as a result of a new building addition to the children's room section. The amount of purchased electricity dropped significantly in 2018 with the generation of our own solar energy.



Materials Management Waste & Recycling

At the library we pay close attention to the amount of waste we produce. We reduced garbage by requiring recycling of paper and comingled items by staff and encouraging it among our patrons. We placed recycling bins throughout all public and staff areas. We eliminated the purchase of plastic water bottles and encourage the use of re-usable water bottles by staff and patrons. Our green team is always on the lookout for more ways to implement recycling – e.g. recycling k-cups with the “Recycle A Cup” product. We have eliminated the purchase of disposable dishes and utensils for staff and most programming.

Any paper products that we purchase must have a minimum of 30% post-consumer recycled content. We repurpose scrap paper and when printing is necessary, double sided print is used. Notifications and newsletters to library patrons are delivered electronically to reduce paper usage.



Materials Management Waste & Recycling

The cleaning products used in the library are Certified Green Seal with no chlorine, phosphates, acids, caustics or petroleum-based ingredients. We aim to use all-natural soaps, buy cleaners in concentrated formulas and eliminate the use of aerosol sprays.

Libraries have a unique opportunity to not only be sustainable within its operations, but also have an impact on educating the public about making the right sustainable choices. All books that cannot be reused through book sales are recycled. In 2018 the library donated 8,800 pounds of books to Discover Books for resale and recycling.



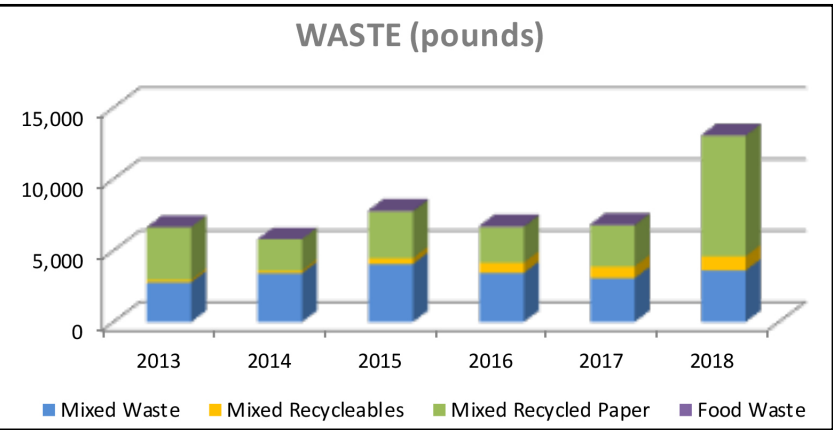
8,800 lbs OF BOOKS DONATED

Materials Management Waste & Recycling



In addition to our own comprehensive recycling system, Hendrick Hudson Free Library provides a Mobile Shredder 2-3 times a year for the public to bring their personal documents for shredding and recycling. In addition, we participate in the Call2Recycle battery and cell phone recycling program and are a drop off location for the public. We also collect CFL light bulbs. In 2018, we collected 2,613 pounds of paper from the public, 150 pounds of batteries for recycling, and 10 pounds of CFL bulbs.

We have a composting bin on-site. In 2017, the library composted 50.18 pounds of food waste and 37.22 pounds in 2018.



150 lbs OF BATTERIES AND **10 lbs** OF CFL BULBS COLLECTED FROM THE PUBLIC

Materials Management Green Purchasing

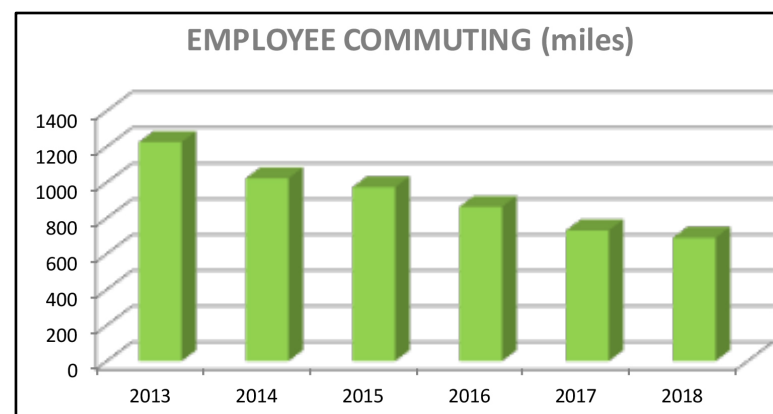
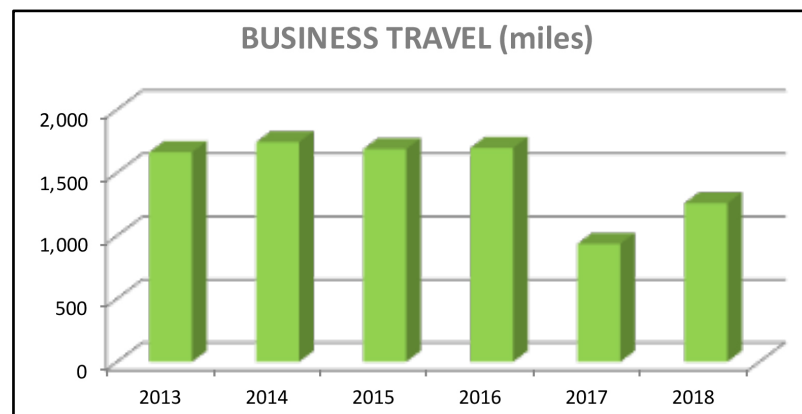
As a not for profit organization with a limited budget, we pay close attention to the products we buy. We are committed to buying quality products with a long life span that provide a healthy and safe environment for our employees and patrons.

In 2017, we built a 1,200 square foot addition to the children's room. The new addition was built with green design in mind. Low environmental impact and positive health effect on our youngest patrons were the most important aspects of the project. The new children's room addition features no VOC paints, cork walls (cork is naturally renewable material, no trees are cut down to make cork), carpets made of recycled materials with fluorine-free topical soil resistance formula, low VOC rubber floor, low VOC and non-toxic bench upholstery with recycled content, ceiling tiles with 94% bio-based content, and recyclable wall coverings printed with water-based inks. Most of the materials used were packaged in recycled materials and are recyclable upon the end of their useful life.



Transportation at Hendrick Hudson Free Library has a minimal impact on our environmental footprint. Our business travel has increased slightly but it is still lower than in previous years. Employees only occasionally use passenger cars and rail for business purposes.

We also track employee commuting in our greenhouse gas inventory. Most employees are local with only a few traveling a distance greater than 15 miles round trip. While we do not have a direct impact on employee commuting behaviors, we educate employees about the choices they make when commuting to and from work. We encourage carpooling and alternate methods of transportation, e.g. bicycling and walking.



Water and Land Use

While water has a minimal impact at the Hendrick Hudson Free Library, we employ water saving measures and promote awareness. Water is mainly used in the restrooms and for landscaping. We are monitoring the water meter on a weekly basis. We installed auto-shut off faucets in all restrooms and posted signs in the kitchen reminding staff and patrons to be sure they turn off faucets completely. Installation of a water fountain which allows for bottles to be refilled saved 1,800 bottles in 2018.

In 2018, a gutter system was installed to collect all of the rainwater from the building's roof and deposits it in a beautiful water garden that can be enjoyed by visitors from inside or out.

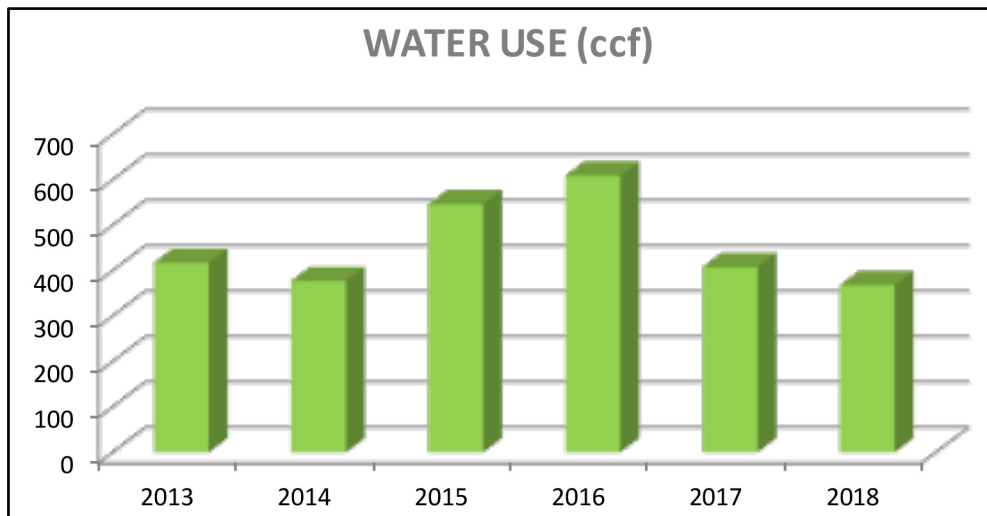


1,800 WATER BOTTLES DIVERTED FROM LANDFILL



Water and Land Use

The library property is maintained by our in-house custodian and an outside landscaping company. The landscaping contractor uses only environmentally safe products for plant maintenance and pest control. They also maintain the irrigation system which works on a timer with moisture sensors so they don't come on if it has recently rained. Weekly mowing in the spring and summer months allows for clippings to be recycled into the soil. In the fall, leaves are gathered and placed in piles to decompose naturally into soil. The plantings on the property are maintained and weeded on a regular basis. All beds are mulched every spring for optimum moisture and weed control.



Energy

- Battery storage to reduce the demand charges if producing excess energy from the solar, working with solar installer, Sunrise Solar Solutions LLC.
- Upgrades to our public restrooms with energy saving lights and plumbing.

Water and Land Use

- Install additional low flush toilets
- Introduce drought tolerant plants to reduce sprinkler use



About Green Business Partnership

Using a comprehensive, customized digital toolkit and a propriety emissions tool, the Green Business Partnership (GBP) helps organizations become sustainable in all areas of operation, achieve green business certification, and get recognized for their commitment. The program, accessible from any computer or smartphone, is open to businesses or nonprofits of any size that lease or own commercial or industrial space. Once certified, custom sustainability reports show your customers, employees and the rest of the world that your organization has taken action and is making a measurable difference.

Learn more at www.greenbusinesspartnership.org.



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