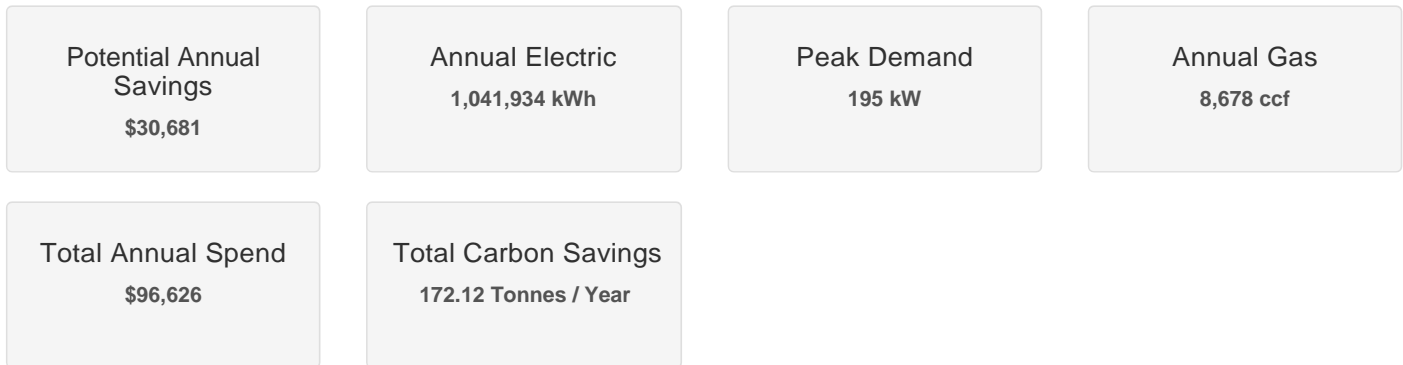


# Building Assessment Report

We analyzed your energy usage and determined that your building has a potential savings of **\$30,681** per year. To learn more about how to achieve these savings contact your Outreach Representative. Your Outreach Representative's role is to guide you through the incentive application process.

## Energy Usage

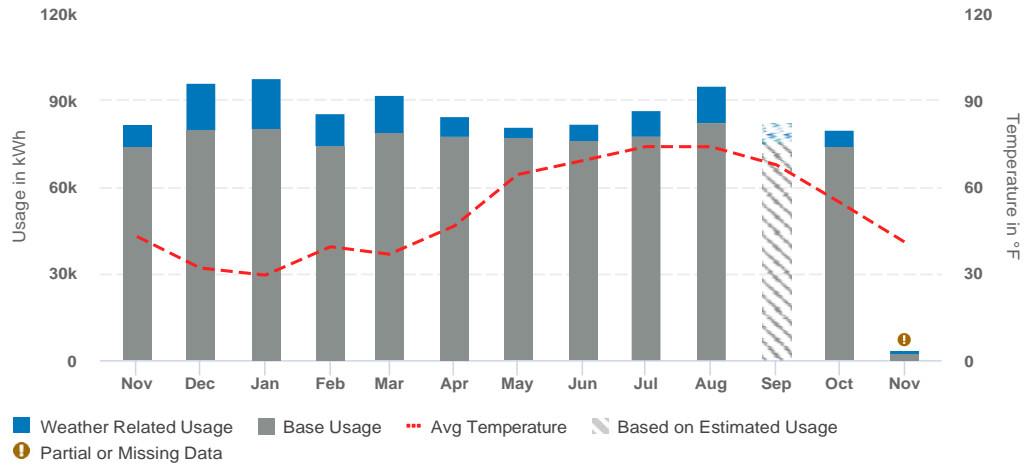


## Your Potential Energy Savings

Recommendation	Type	Energy Savings	% Savings	Annual Savings
Retrofit enhanced ventilation control	Electricity	89,815 kWh	9%	\$8,263
Install energy efficient lighting	Electricity	73,978 kWh	7%	\$6,806
Install efficient exterior lighting	Electricity	29,174 kWh	3%	\$2,684
Install lighting controls	Electricity	25,011 kWh	2%	\$2,301
Modify schedules during unoccupied hours	Electricity	22,924 kWh	2%	\$2,293
	Gas	2,141 ccf	24%	
Don't leave equipment on standby	Electricity	21,880 kWh	2%	\$2,013
Make use of daylight	Electricity	17,717 kWh	2%	\$1,630
	Gas	1,117 ccf	13%	
Modify night schedules	Electricity	13,543 kWh	1%	\$1,342
	Electricity	10,424 kWh	1%	
Clean ducts and fans	Electricity	10,424 kWh	1%	\$959
Use energy efficient motors	Electricity	10,424 kWh	1%	\$959
Modify weekend/holiday schedules	Electricity	9,380 kWh	1%	\$951
	Gas	1,024 ccf	11%	
Install energy efficient exit signs	Electricity	3,130 kWh		\$288
Install vending machines with motion sensors	Electricity	2,087 kWh		\$192

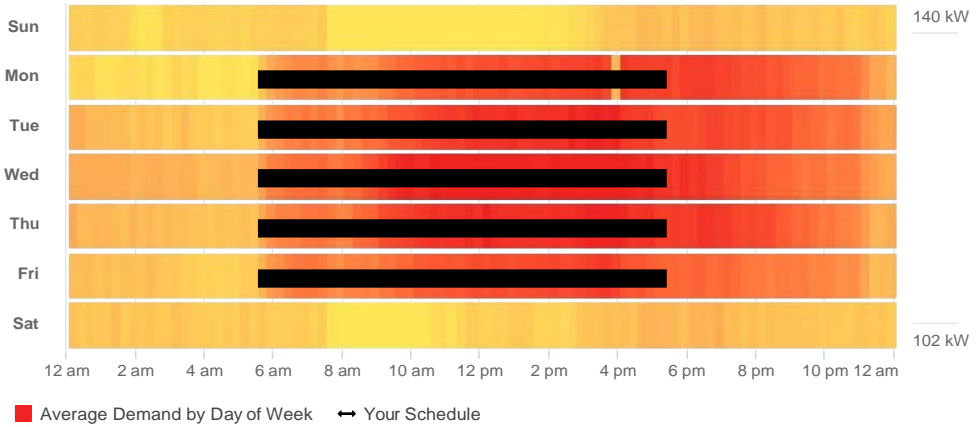
## Weather Impact - Electricity

We've done some analysis showing how weather changes impact your energy usage to help you decide if you want to make changes to your equipment or set points.



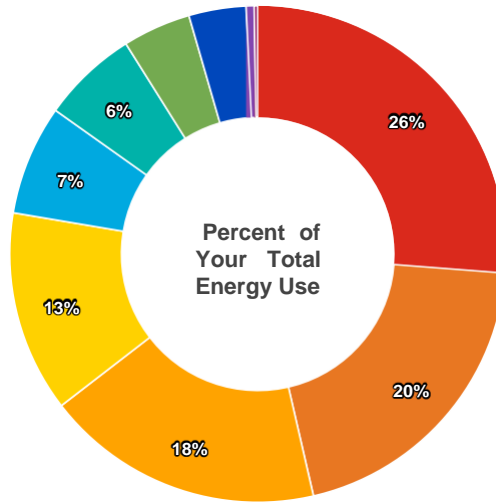
## Operating Schedule

Your energy use compared with your operational hours. Startup/shutdown time may present opportunities for operational savings.



**End Uses - Electricity**  
 End-Use Analysis shows a breakdown of the major contributing components of the Facilities consumption.

## What Affects My Energy Usage?

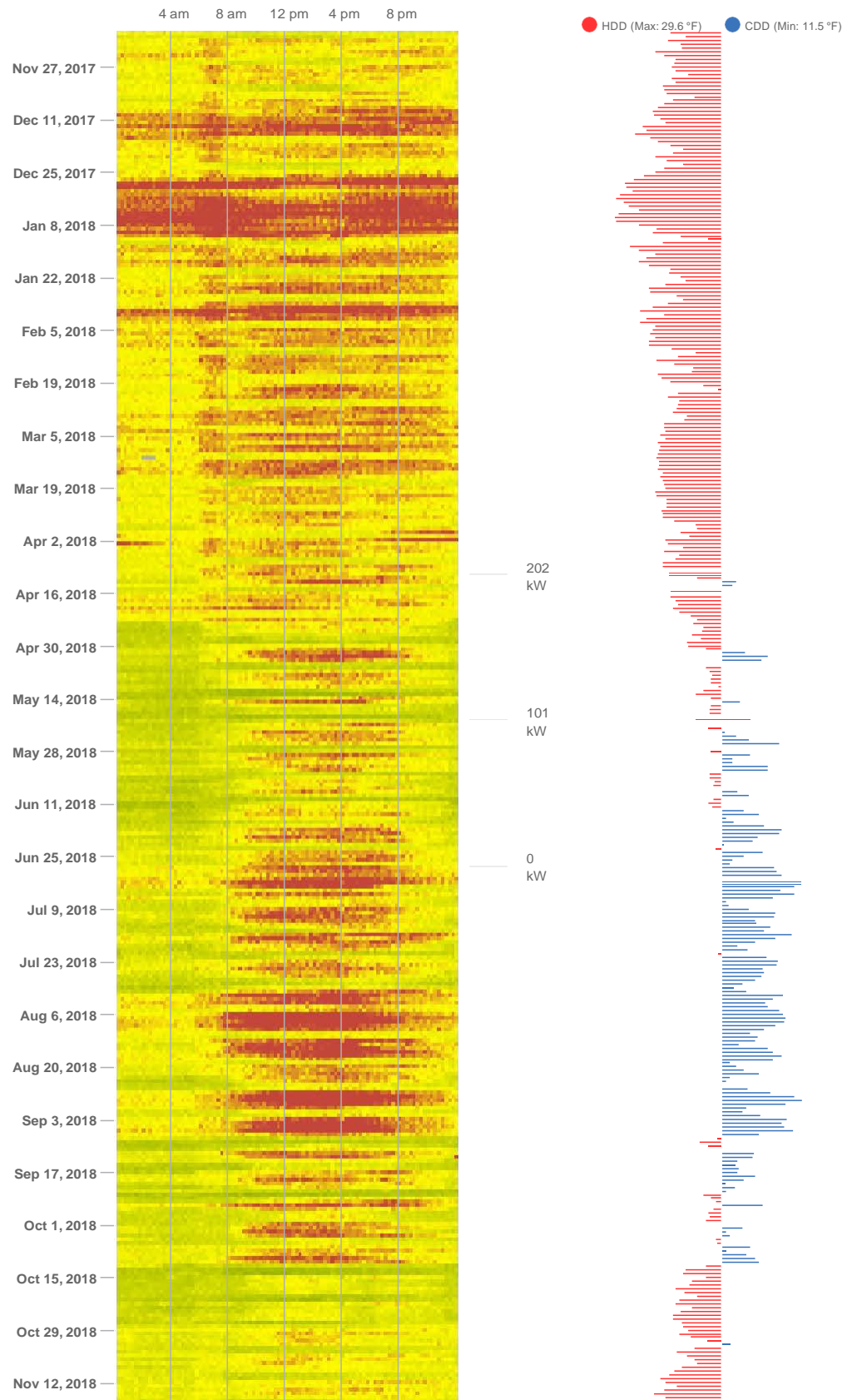


End Use	Usage (kWh)	You (kWh / sq ft)	Similar Sites (kWh / sq ft)	Efficient Sites (kWh / sq ft)
Computing	276,854	6.68	2.05	0.69
Other and Process Loads	213,358	5.15	1.58	0.53
Lighting	192,828	4.65	2.61	0.95
Ventilation	130,893	3.16	2.03	0.93
Space Heating	74,735	1.8	0.03	0
Office Equipment	65,284	1.57	0.46	0.16
Refrigeration	46,107	1.11	0.4	0.13
Space Cooling	38,911	0.94	1.12	0.36
Cooking	5,291	0.13	0.13	0.04
Water Heating	2,440	0.06	0.07	0.02

Based on the information you have provided, your Government Office is 41,458 sq ft in size and located in WAYNE, PA. Here is how its consumption compares to similar Facilities over the past 12 months. To update this information, please update your [Facility Profile](#)

## Annual Demand Intensity - Electricity

See energy usage for each interval throughout the year to visualize your building's profile. Determine if the profile aligns with expectations or requires further investigation. Heating/cooling degree days (HDD/CDD) help correlate the pattern with temperature.



### Retrofit enhanced ventilation control

Enhanced Ventilation Control retrofit kits add multiple efficiency measures to existing packaged HVAC units. The measures include variable frequency drives on HVAC fans, demand controlled ventilation, and advanced digital economizer control (ADEC).

Constant speed fans run continuously whether needed or not. Variable speed drives

Potential Savings  
**\$8,263 / Year**

Carbon Savings  
**40.54 Tonnes / Year**

can match the speed of fans to current demand, cutting consumption during mild weather or low occupancy.

The digital controls also allow use of an outdoor air economizer to be more precise. Demand controlled ventilation reduces the amount of outside air brought in when the space is occupied by fewer people than the design capacity. A CO2 sensor tells the ADEC system how many people are inside the space. Used together, all of these measures optimize control of the building's HVAC.



### Install energy efficient lighting

Light-emitting diode (LED) and compact fluorescent lamps (CFLs) use about a third of the energy of incandescent lamps and last about ten times longer. Modern fluorescent tube lighting can save about a quarter when compared to their older vintage equivalents.

Lighting replacements are also available for display cases, refrigerated cases, exit signs, and other applications. As well as lower energy bills, these changes could enhance lighting quality while reducing air conditioning needs because they give off less heat than older lights.

Potential Savings  
**\$6,806 / Year**

Carbon Savings  
**33.39 Tonnes / Year**



### Install efficient exterior lighting

Many buildings currently use older high-pressure sodium (HPS) or metal halide (MH) lamps for exterior lighting. LED or induction fixtures typically use half the energy of these older lights or even less. In many cases, the color and quality of light can also be improved by LEDs which have a much longer life than HPS or MH lamps.

Updating exterior lighting can have huge benefits, especially if the business has large exterior walking, driving, and/or parking areas.

Potential Savings  
**\$2,684 / Year**

Carbon Savings  
**13.17 Tonnes / Year**



### Install lighting controls

Timers and occupancy sensors help you to stop lighting an empty or unoccupied space. Installing these types of sensors can pay for itself in a short period of time.

These sensors often take the place of conventional wall switches, or may be mounted on the ceiling to control larger areas.

Potential Savings  
**\$2,301 / Year**

Carbon Savings  
**11.29 Tonnes / Year**



### Modify schedules during unoccupied hours

It is apparent that equipment in the building remains operational during unoccupied periods. The schedule should be modified to properly mimic the operating profile of the building.

Potential Savings  
**\$2,293 / Year**

Carbon Savings  
**22.04 Tonnes / Year**



### Don't leave equipment on standby

Many plugged in devices consume electricity even when they are not in use. Advanced power strips can reduce the power consumed by plug loads for items like lighting, computer accessories, fans and space heaters.

For example, many of us turn off the computer and leave our desks, without unplugging the printer, fax, and other devices that continue to draw energy when not in use. Some advanced power strips can also cut power to all of these other devices when the computer is turned off.

Potential Savings  
**\$2,013 / Year**

Carbon Savings  
**9.88 Tonnes / Year**



### Make use of daylight

Daylight as a free light source is often overlooked. Opening blinds, using daylight controls and taking advantage of natural light can offset the use of electric lights, thereby reducing energy costs.

Skylights or large south- and north-facing windows will have the most impact because they allow in relatively even, natural light, while minimizing glare and heat gain. East- and west-facing windows are usually less ideal, but can provide daylight in either the morning or the evening.

Potential Savings  
**\$1,630 / Year**

Carbon Savings  
**8 Tonnes / Year**



### Modify night schedules

It is apparent that equipment in the building remains operational throughout the night. Nights are likely unoccupied and the schedule should be modified to properly mimic the operating profile of the building.

Potential Savings  
**\$1,342 / Year**

Carbon Savings  
**12.21 Tonnes / Year**



### Clean ducts and fans

Dust and debris can build up over time, making fans work harder to move air. Cleaning ducts and fans will reduce pressure in the system, making it run up to 40% more efficiently.

Duct cleaning will also improve the air quality in your building, and help ensure a safe working environment for employees. Consider hiring a professional duct cleaning company as they will typically perform an inspection of your system for a nominal fee.

Potential Savings  
**\$959 / Year**

Carbon Savings  
**4.71 Tonnes / Year**



### Use energy efficient motors

Go for a high standard: motors are generally efficient devices (85% to 95% in most cases), but as their power to cost ratio is high, choosing a higher standard of motor that offers better performance can pay back very quickly.

Using energy efficient motors for your heating or cooling systems will yield the best annual savings, particularly on motors which are running continuously. Motors that run for long hours can cost more in annual energy use than their initial cost, making increases in efficiency worthwhile.

Potential Savings  
**\$959 / Year**

Carbon Savings  
**4.71 Tonnes / Year**



### Modify weekend/holiday schedules

It is apparent that equipment in the building is starting up and remaining operational throughout the weekend. Weekends are likely unoccupied and the schedule should be modified to properly mimic the operating profile of the building.

Potential Savings  
**\$951 / Year**

Carbon Savings  
**9.83 Tonnes / Year**



### Install energy efficient exit signs

Exit signs need to be lit all of the time for safety and use more energy than you think. Efficient LED models can last up to ten years and help you use less than a quarter of the energy of older models while still meeting safety requirements.

Instead of replacing the whole sign, consider more affordable LED retrofit kits. These plug into older exit signs and convert them to an energy efficient model.

Potential Savings  
**\$288 / Year**

Carbon Savings  
**1.41 Tonnes / Year**



### Install vending machines with motion sensors

Vending machines keep their lights and refrigeration on even when no one is using them. Install motion sensors to shut off lights and cycle compressors less frequently when no one is around, and power up the machine when someone approaches.

A typical vending machine uses 7 to 14 kWh of electricity per day so they can significantly impact your building's energy use - especially if you have multiple vending machines. [According to ComEd workpaper, a beverage vendimizer uses 9.6 kWh/day and a snack vendimizer uses 2.04 kWh/day]

Installing vending machine occupancy sensors can save 30% [46% energy savings according to ComEd workpaper] of the energy required to keep it cool. The exact amount of savings depends on how often the machine is used. Remember that controllers should not be used in machines that vend milk, sandwiches, or other foods that can spoil.

Potential Savings  
**\$192 / Year**

Carbon Savings  
**0.94 Tonnes / Year**

Please verify program eligibility for specific measures by contacting your Outreach Representative.