



# 2020 SUSTAINABILITY REPORT



**Pennsylvania  
Convention Center**  
PHILADELPHIA

AN  **MANAGED FACILITY**

## Fifth Year Anniversary

This year's report marks the five-year anniversary since the launch of the Pennsylvania Convention Center Authority and ASM Global Staff Green Team in 2016. Comprised of staff from the Pennsylvania Convention Center Authority and ASM Global, Convention Center stakeholders and service partners, the Green Team has improved and broadened the ASM Global Sustainability Best Practices that were brought to the Center as well as resource efficiency and cultural behavior.

Many of our customers have selected the Center based on our sustainability efforts. It has been our goal to focus on the customer's needs, educate them on our practices and partner with their events team to deliver green meetings with positive and tangible results.



## Sustainability Training

Annual Operations training was held on September 17, 2020 in a physically distanced setting. Jim Capanna from Republic Services briefed our staff on the latest recycling trends in the industry as well as reviewed our performance.



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PCCA & ASM GLOBAL  
**GREEN TEAM**

# OVERVIEW

The Pennsylvania Convention Center is committed to reducing the environmental impact of our operations and services by taking stewardship in using equipment, technology and products designed to reduce negative impacts while providing clean and efficient facility operations. Our goal is to serve as an industry leader in environmental program implementation and stewardship through a partnership with our guests, team members, partners and communities.

Since 2006, we have been using as the guideline GS-42 (green seal environmental standard for cleaning services). In 2020, we aligned our best-in-class disinfecting and sanitization practices to achieve the highest possible standards for cleaning, disinfection, and infectious disease prevention in the industry. Fueled by the ASM Global Venue Shield program and following the guidance from the Center for Disease Control (CDC) and the Pennsylvania Department of Health (PDOH) as well as other public health agencies, our re-activation operating framework outlines the enhancements to our standard operating procedures as a result of the pandemic.

Our commitment includes the use of safe-cleaning products, reduced water use, energy efficient LED lighting, a reflective roof, expanded recycling and HVAC, lighting, power, elevators and escalator upgrades. Using technology to 'go green' is critical to our customers and our effort to sustain the Commonwealth of Pennsylvania's investment for future generations.



# SUSTAINABLE EVENTS



HiJinx returned to the center in 2019 to ring in the new year at the Pennsylvania Convention Center. The lineup was comprised of heavy metal and bass artists along with an incredible light show. The center decided to remove antiquated HID lighting fixtures in the ceiling grid prior to the show to make way for show production needs. 6,812 pounds of the HID lighting was then recycled.



This year the American Library Association adopted sustainability as a core value of librarianship. ALA's leadership on sustainability efforts 2020 Midwinter Meeting in Philadelphia incorporated a "Reduce, Repurpose, Recycle" project to promote resource conservation and sustainable practices. The Center recycled 6.46 tons of construction & demolition material from this event.



The Philadelphia Auto Show was held from February 8-17, 2020 for car enthusiasts to enjoy the automotive industry's latest vehicles, all arranged by category on a 700,000 S.F. display floor. The Center recycled 8.62 tons of single stream and 17.47 tons of construction & demolition material from this event.



The Philadelphia Flower Show 2020 took place from February 29 through March 4 at the Center. The theme was "Riviera Holiday" with leading floral and garden designers transforming the show floor to the Mediterranean region. The Center recycled 7.69 tons of single stream and 20.43 tons of construction & demolition material from this event.

# ESCO PROJECT

The Energy Services Conservation Services (ESCO) project with the Pennsylvania Convention Center Authority (PCCA) in partnership with SIEMENS provided significant energy upgrades throughout the facility. The Center determined this project would not only reduce annual operating costs but also upgrade the facility with state-of-the-art energy efficient equipment. The project schedule was significantly expedited in 2020 as a result of unoccupied building spaces available during the pandemic. The overall investment of \$24 million by SIEMENS which was obtained through a guaranteed energy savings performance contract. Annual energy estimated savings over the life of the 20-year contract is \$14.4 million. The investment grade energy audit was completed by SIEMENS in July 2020 with projects currently underway.

Some of the projects underway are:



## LED Lighting Retrofits

LED lighting fixtures and lamps replaced dated inefficient lighting throughout the exhibit halls, hallways, offices and back of house areas. Electricity usage is expected to be reduced by approximately 4.6 million kilowatts per year.

## East Central Plant and West Central Plant Hot Water and Chilled Water Loop Interconnection

Hot water and chilled water lines were installed to connect the Center's two central plants. The interconnect will allow the Center to run one plant rather than two plants reducing utility costs and run-hours on the central plant equipment. Electricity usage will decrease by approximately 1.2 million kilowatts per year.



## Chilled Water and Hot Water Pump and Variable Frequency Drive Upgrades

The east central plant underwent hot water and chilled water pump replacements and variable frequency drives were added. This initiative will reduce energy usage by approximately 1/2 million kilowatts per year.



In addition to the energy savings benefits from the ESCO project, all construction and electronic waste is being recycled.

# CAPITAL PROJECT RECYCLING

In 2020, the Pennsylvania Convention Center's Capital Program consisted of upgrades to the facility including restroom renovations, escalator modernization, ballroom upgrades, and carpet and equipment replacement. Projects were able to be expedited as a result of the COVID-19 pandemic resulting in availability of unoccupied spaces for construction and renovation work. The Center required its capital project contractors to recycle construction and demolition (C&D) materials, electronic waste (E-waste) and retired equipment. Below are capital projects featured this year with the associated recycling tonnage captured.

On the capital project side, new for this year, recycling includes:

## Lighting Electronic E-Waste

Fluorescent T-8, T-12, and various fixtures with wattage ranging from 26 to 1000 watts, and metal halide lamps and ballasts were recycled equaling 29.55 tons of E-waste.



## Renovation Construction C&D

Various other projects including restroom renovations and operable partition wall replacements recycled from these projects equated to 79.74 tons of construction and demolition.

## Carpet Recycling

11,956 square yards of carpet was replaced at the Center in Ballroom A & B and the 100 level concourses resulting in 17.29 tons of recycled carpet.

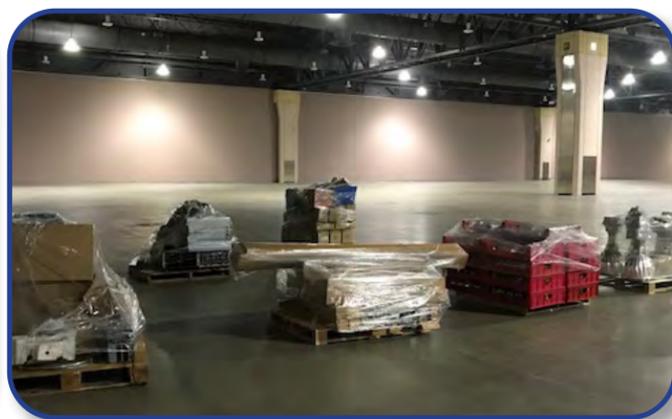
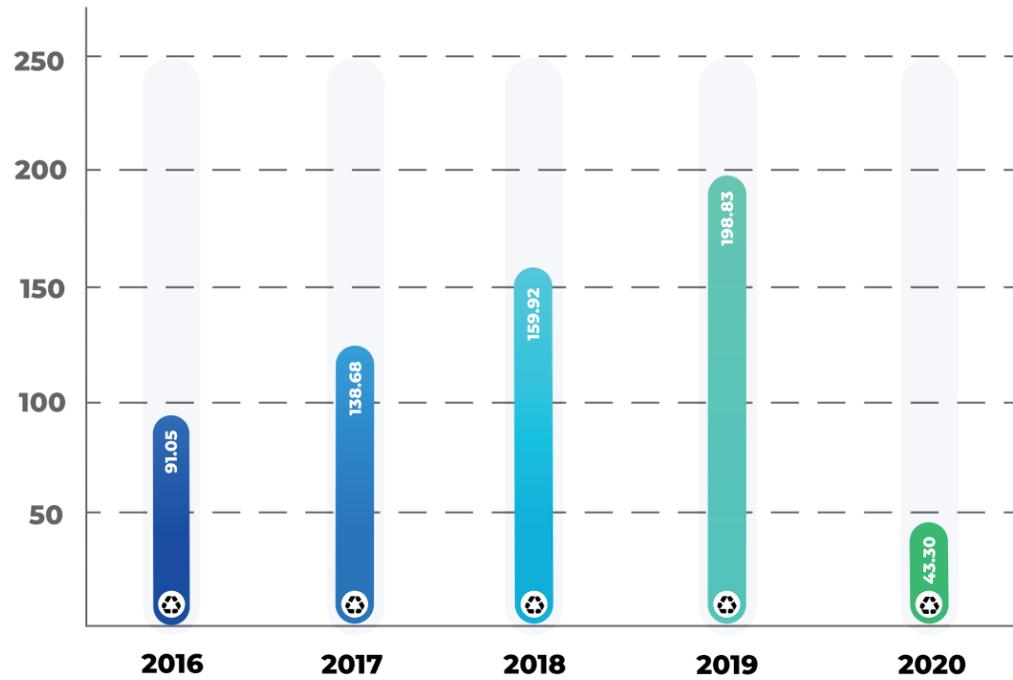


# WASTE MANAGEMENT

The five-year historical information shows landfill tonnage was reduced while construction and demolition and single stream tonnage increased. Landfill tonnage produced by the Pennsylvania Convention Center is sent to Republic Services Conestoga Landfill. The landfill material is decomposed and generates landfill gas. The landfill gas is sent to its Morgantown Gas Compressor Station, which produces methane gas for beneficial use to serve its Philadelphia customers. For Philadelphia, this energy plant offsets CO<sub>2</sub> emissions equivalent to 2.8 million gallons of gasoline.



Single Stream Tonnage

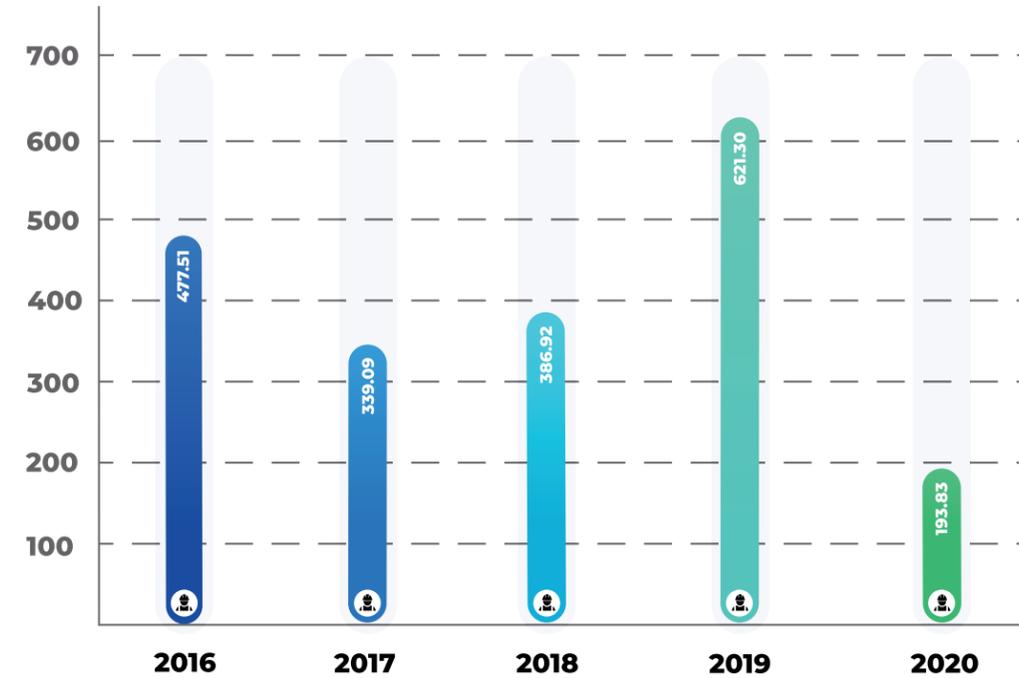


E-Waste Recycling

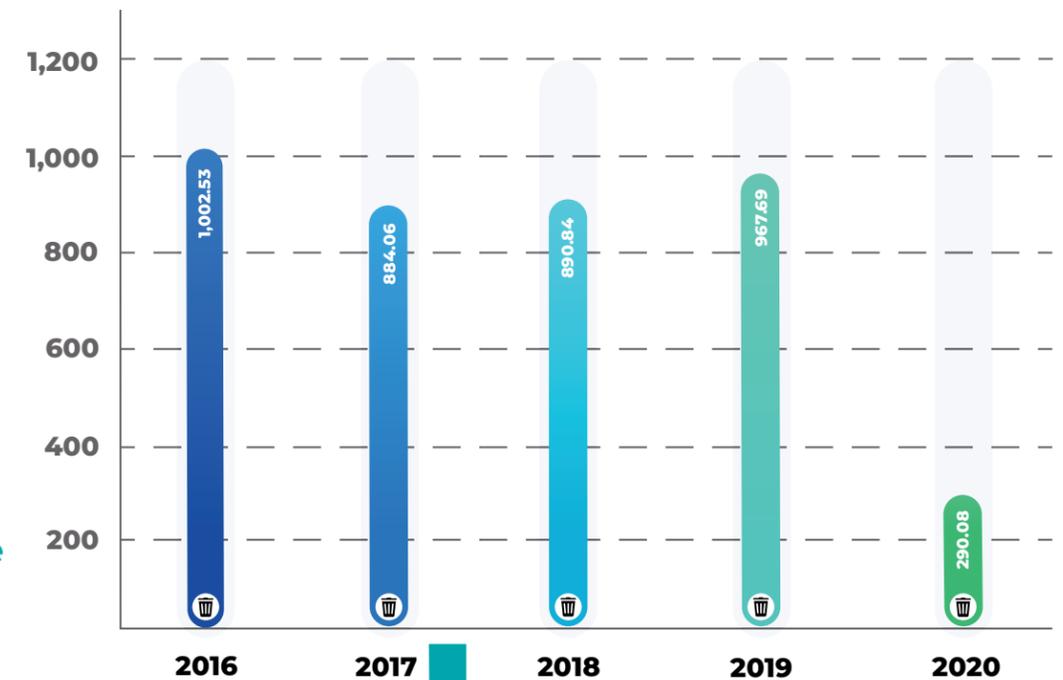
E-Waste Total: 28.31 tons



Landfill Tonnage

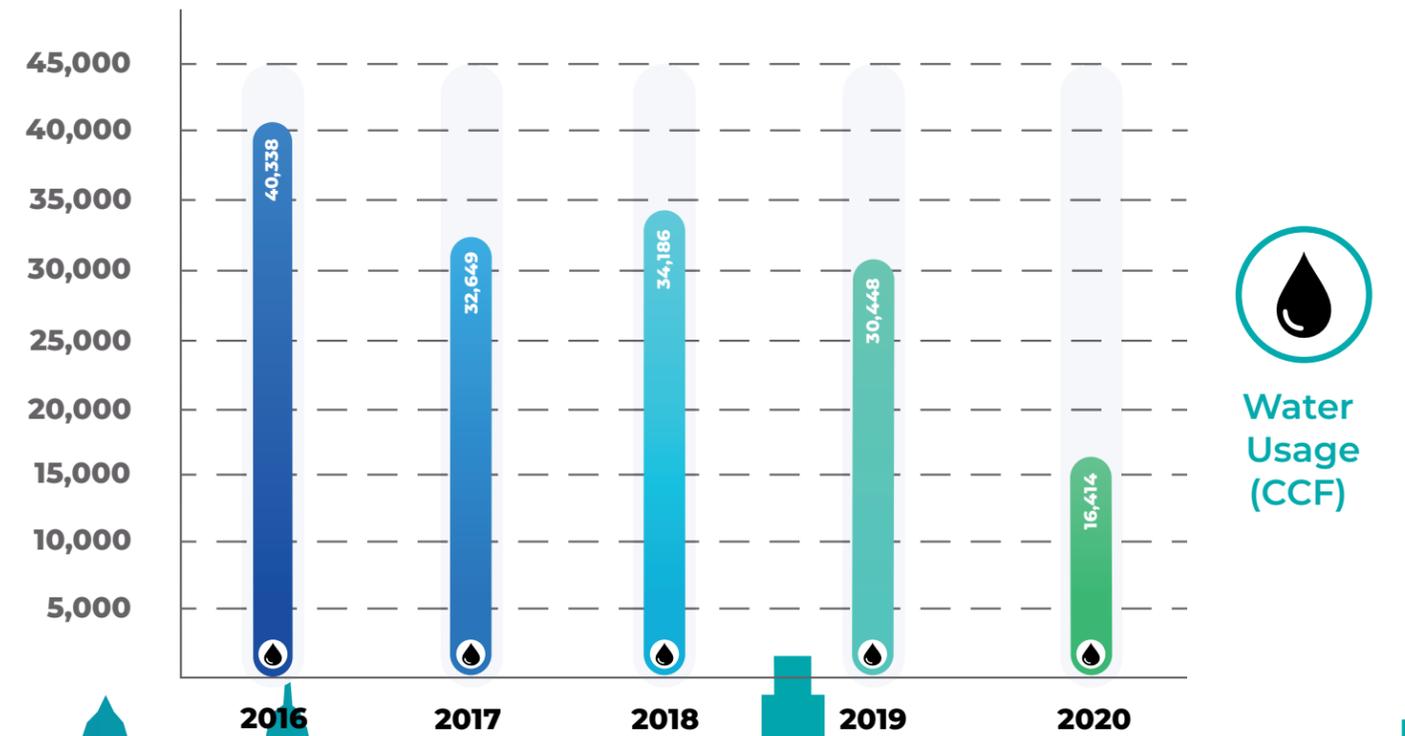
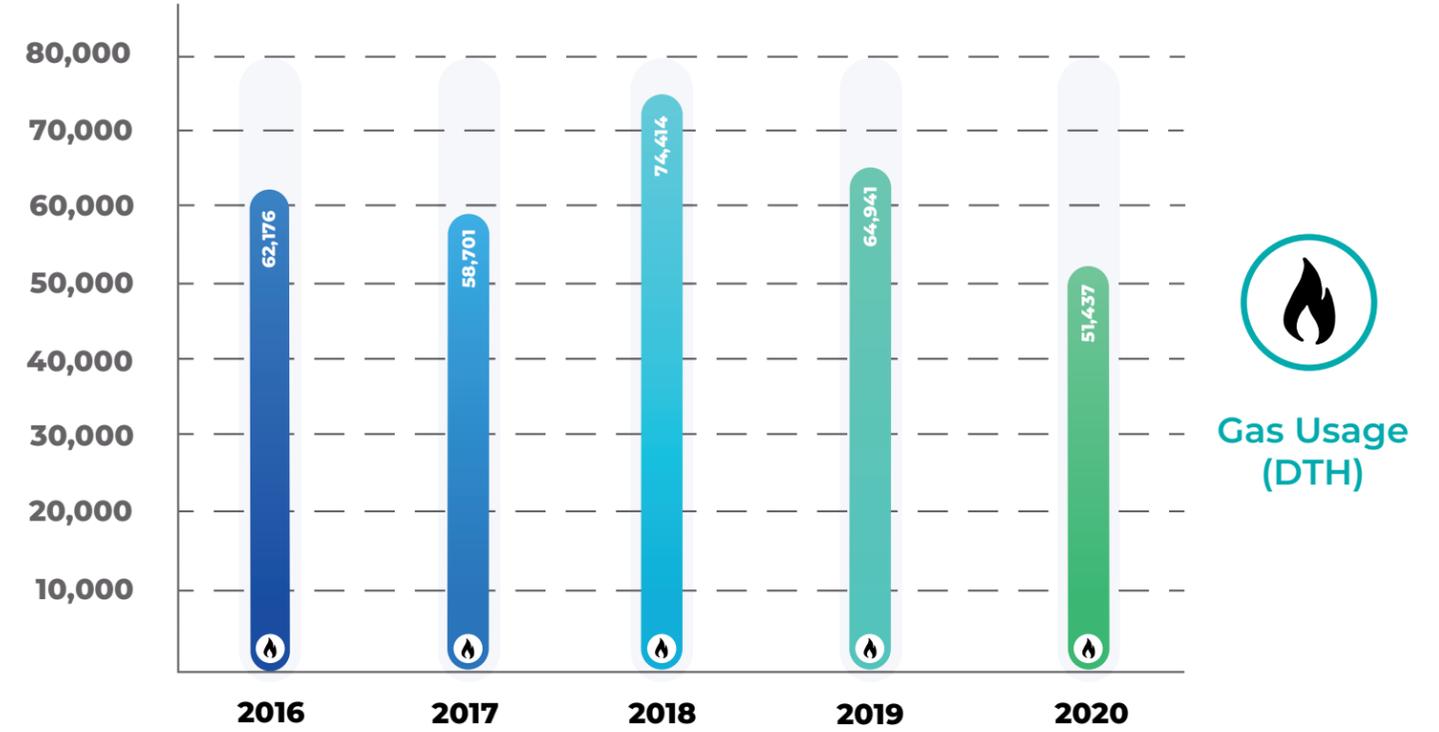
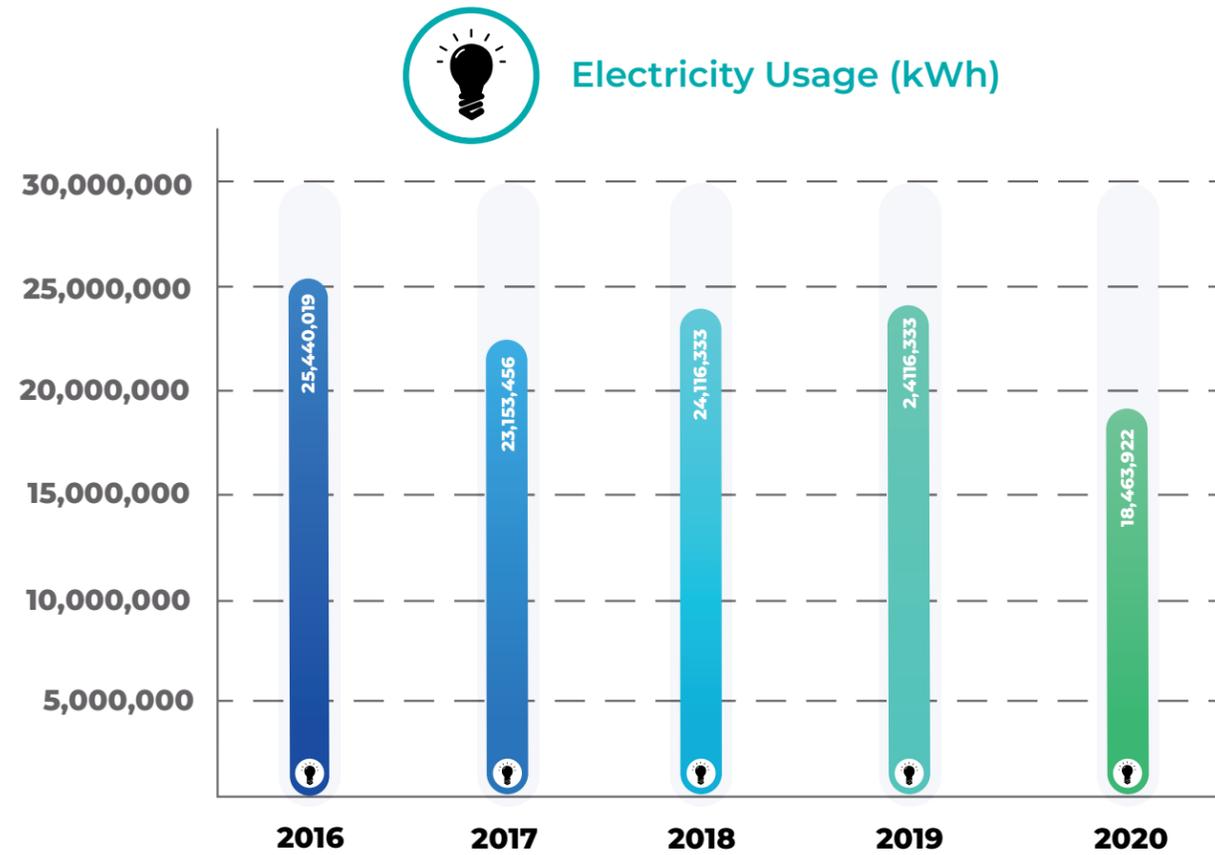


Construction & Demolition Tonnage



# UTILITY MANAGEMENT

The five-year trend for utilities has decreased with favorable usage reductions for water, natural gas and electricity. The Facilities Department monitors the daily energy profile to conserve utility usage. Our building automation and control system maximizes efficiency while improving comfort and has minimized energy consumption and reduced operational costs.



# ENERGY CONSERVATION

Energy conservation is an integral part of the Pennsylvania Convention Center's overall sustainability plan.

The Facilities Engineering team has been committed to developing and adhering to the Energy Management Standard Operating Procedures for the Pennsylvania Convention Center. Event and Dark House Operations are constantly monitored by the building management and lighting controls systems and engineering staff to achieve the utmost energy efficiency.

## Demand Response

The Center has been enrolled in a Demand Response Program for several years. Demand Response (DR) provides for an opportunity for the Center to reduce electricity usage to support electrical grid operation during peak demand periods. In turn, financial incentives are paid to enrolled customers for the amount of reduced electrical demand. Demand Response events typically occur during heat waves or winter deep freezes in order for the electrical grid to minimize potential blackouts. During the last five years, the Center's participation earned us \$135,061. In 2020, there were four DR events for the Pennsylvania Convention Center, all of which occurred over the summer months.

## Demand Response PCCA Summary



### Since 2013:

Earned over **\$157,316** in DR revenue

Delivered **15,171 kW** across **27** DR events

Reduced **58,957 kWh**, the equivalent of **42** metric carbon tons or **103,437** miles driven by a car

### In 2020:

Earned over **\$22,000** in DR revenue plus a **\$5,000** bonus

Delivered **5,167 kW** across **6** DR events

Reduced **12,526 kWh**, the equivalent of **8.9** metric carbon tons or **21,976** miles driven by a car

Carbon offsets from: <https://www.epa.gov/energy/greenhouse-gas-equivalencies-calculator>

# COVID-19 IMPLICATIONS

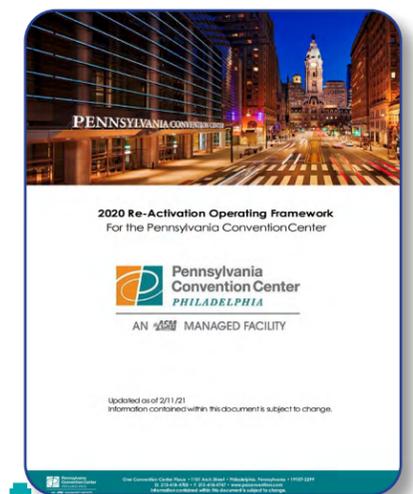
The impact of COVID-19 on Philadelphia and the Pennsylvania Convention Center has changed our day-to-day operations for the short term. Some significant results of the pandemic have been positive for Philadelphia's overall air quality. With many employees and businesses working from home, the reduction of fossil fuel emissions and the use of electronic and virtual protocol are in part here to stay. The Center utilized this year to submit and receive GBAC accreditation coupled with the launch of ASM Global's Venue Shield program. This time allowed improvements to be made to the building for re-occupancy. The Pennsylvania Convention Center serves as an ongoing COVID-19 vaccination site for the City of Philadelphia.

The Pennsylvania Convention Center remains committed to re-opening safely. We have gone to great lengths to ensure guest safety while maintaining the highest levels of customer service in a hospitable environment. To that effect, the Center has instituted new policies and procedures as part of this re-activation operating framework and has received the Global Biorisk Advisory Council (GBAC) STAR accreditation. The re-activation operating framework is fueled by the ASM Global VenueShield™ program and following the guidance from the Center for Disease Control (CDC) and the Pennsylvania Department of Health (PDOH) and other public health agencies, this operating framework outlines enhancements to our standard operating procedures in six categories: environmental hygiene, food service, the customer journey, workforce & training, technology & equipment and public awareness.

VenueShield and the larger PHL Health Pledge gives meetings planners, exhibitors, and attendees the ability to return to the Pennsylvania Convention Center with confidence. Through the Philadelphia Convention and Visitors Bureau's PHL Health Pledge initiative, meeting planners can access expert medical advice from the PHLCVB's Chief Health Advisor, Dr. David Nash. An acclaimed national leader in population health, Dr. Nash, Dean Emeritus of the Jefferson College of Population Health, provides guidance on best practices for safe events and works closely with the PHL Health Advisors, a 19-person medical advisory task force.



**UN\*STOPPABLE**  
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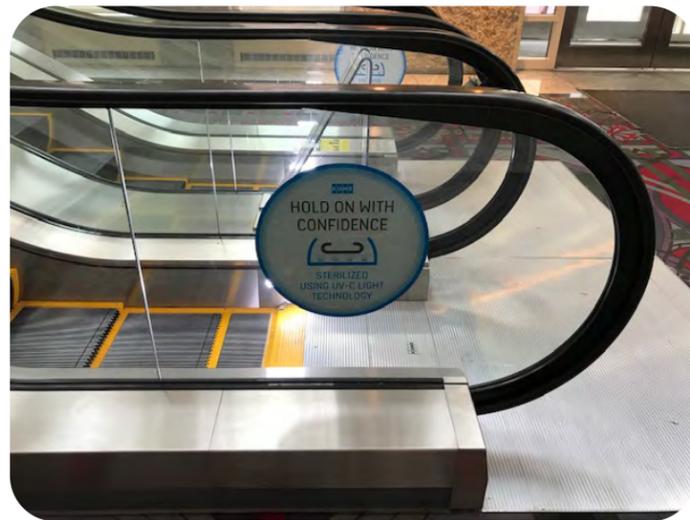
# GBAC ACCREDITATION

The Pennsylvania Convention Center received the Global Biorisk Advisory Council (GBAC) STAR accreditation on outbreak prevention, response and recovery in 2021. Recognized as the gold standard of safe venues, the Center is one of the largest venues in the northeast to receive the GBAC STAR™ accreditation.

GBAC STAR Facility Accreditation identified the Pennsylvania Convention Center as a showcase example of commitment to ensuring a clean, safe, and healthy environment for its employees, customers, and stakeholders. This accomplishment also demonstrates the Center's leadership in transforming the cleaning industry into an essential part of any business. Some of the GBAC associated projects completed include:

## Escalator Handrail UV Sterilization Technology

This UV-C handrail sterilization light can eliminate harmful bacteria and viruses. The escalator handrail passes through its modules, giving it constant exposure to UV-C light while the escalator is running.



## Bi-Polar Ionization For Air Filtration

This project entails installing air purification and filtration, with forty (40) air handling units completed in the Center. The equipment eliminates biological growth and musty odors by providing stable outside air intake and ION technology that targets contaminants at the molecule level. It also saves energy.

