A message from the County Executive

Before running for County Executive, I was a businessman whose company focused on saving water and energy. As County Executive, improving our sustainability was one of the charges I gave to the County Manager and department directors when I first took office. In those eight years, we've come a long way, but we have much further to go.

The county has not only reduced its reliance on fossil fuels, but also includes renewable sources in its mix of energy. We have reduced our carbon emissions and joined with other building owners in the community to work towards a common goal for 2030. We have made changes across the board to reduce our impact on the community and our environment while also taking steps to protect it. We have planted trees, used retentive grading in our parks, and invested in solar and new technologies that have improved our operations, our health, and our bottom line.

The newest challenge that I've given the administration is to move three of our nine county parks to net zero energy – something that I think is highly attainable and would be a significant step in "greening" our county parks. I'm proud of the work that we've done over the past eight years, and it is my privilege to share just a few of those accomplishments with you here.

Rich Fitzgerald

Rich Fitzgerald
County Executive

Tree planting in South Park (Allegheny County Photography)

Improving Air Quality

Allegheny County, in partnership with the Allegheny County Conservation District, Allegheny County Parks Foundation, Western Pennsylvania Conservancy, and Tree Pittsburgh, has planted 3,912 trees, as well as shrubs and herbaceous perennials, in county parks since 2012. More than 2,000 trees were planted last year alone. Each planted tree will annually absorb about 50 pounds of carbon dioxide (or the amount emitted from 55.6 miles driven by the average passenger vehicle).

We also have:
- Reduced the carbon emissions generated from our use of electricity, steam, bulk fuel, refrigerants, vehicles, streetlights, water, and waste. Between 2008-14, we cut our emissions by 13.8% and 10,526 tons of carbon dioxide annually (or the amount emitted by 2,045 passenger vehicles in one year); and

- Provided support for further trail development that can be used for recreation as well as alternative transportation, reducing the burning of fossil fuels and improving our air quality. Those efforts include our Active Allegheny Grant program that assists municipalities in the creation of projects that connect this region's growing bicycle and pedestrian infrastructure to important community destinations. Now in its third year, the program has awarded $581,667 to 24 different projects, 10 of which have been fully completed.

Meadow on Indian Hill in Boyce Park (Allegheny County Photography)

Managing Land and Water

Allegheny County converted a side of Indian Hill in Boyce Park into a beautiful meadow containing a mix of grasses and wildflowers that support thousands of diverse pollinators and wildlife. The meadow is estimated to eliminate about two million gallons of stormwater runoff annually (or enough water to fill 25,000 average residential bathtubs). Additionally, by not mowing the hillside, we are avoiding about 760 pounds of carbon dioxide (or the amount emitted from 845 miles driven by the average passenger vehicle). The success of Indian Hill has inspired meadow projects in North Park, South Park, Round Hill Park, Hartwood Acres, and another one in Boyce Park — all of which are expected to be completed by the end of this year.

We also have:

- Installed new sensors on the County Office Building's 8,400-square-foot green roof, which is the first of its kind on a public building in the county. It's covered in waterproof fabric, various insulating and water-trapping materials, as well as a mix of sedum, native plants, shrubs, and grasses. That allows it to hold between 20-100% of rainfall over a 24-hour period and prevent about 500,000 gallons of stormwater runoff annually (or enough water to fill 6,250 average residential bathtubs). The roof also naturally insulates the building, which saved the county $80,000 in energy costs during its first year;

- Invested — $10.5 million in 2017 alone — in the rehabilitation and development of brownfields, which makes possibly contaminated former industrial land safe again for productive use in our community and economy;

- Constructed a permeable paver parking lot in Deer Lakes Park that allows precipitation to naturally drain through to the subsurface. The lot is capturing about 95% of all stormwater runoff and is annually preventing about 600,000 gallons (or enough water to fill 7,500 average residential bathtubs) from entering Little Deer Creek;

- Teamed with the Allegheny County Conservation District to install 150-square-foot floating islands in a pond in Round Hill Park. The islands were vegetated with perennials and grasses that improve water quality and provide habitat for insects, birds, reptiles, and amphibians;

- Dug two 200-foot-long berms at the foot of Daffodil Hill in South Park to detain stormwater and allow it to slowly infiltrate the soil, annually preventing 20,108 gallons (or enough water to fill 251 average residential bathtubs) from entering a storm sewer; and

- Built environmentally friendly Naturally Engineered Waste Treatment (NEWT) systems in Round Hill Park and Deer Lakes Park that use the natural filtration properties of wetlands, as well as ultraviolet light disinfection, to treat the facilities' wastewater.

Fixing and upgrading bathroom plumbing at the County Office Building (Allegheny County Photography)

Cutting Utility Usage

Allegheny County is a proud member of the Pittsburgh 2030 District, a Green Building Alliance initiative started in 2012 that supports area building owners and managers in achieving 50% reductions in energy and water use as well as transportation emissions by the year 2030. We have six buildings and 1.9 million square feet committed. In the most recent report, four of those buildings used less site energy than they did the previous year, including a 14.8% reduction at the Health Department's administration building and a 7.5% decrease at the jail. The City-County Building's site energy use is 33.4% below the national average for properties of its type.

We also are:

- Repairing leaks and installing low-flow restroom fixtures. Between 2010-17, that cut our annual water use at the Courthouse, County Office Building, Family Law Center, and the jail by 26.6% and 49.1 million gallons (or enough water to fill 613,750 average residential bathtubs), saving the county $569,247 each year;

- Replacing incandescent and fluorescent light fixtures with high-efficiency LED lights. That's resulting in an average electricity use reduction of 412,406 kWh (or enough to power 40 homes for a year) and savings of $27,446 each year. It's also helping us avoid 292 metric tons of carbon dioxide annually (or the emissions produced from 713,040 miles driven by the average passenger vehicle); and

- Buying our energy in a consortium where 35% of the purchases are a combination of certified renewable solar and wind power.

Additionally, we recently:

- Installed solar crosswalks and solar path light fixtures in North Park and South Park, and in Boyce Park, one of the shelters is now powered by solar panels;

- Renovated the South Park ice rink and wave pool. Those projects have resulted in energy savings of up to 50%; and

- Installed 217 room-occupancy sensors in county buildings that can cut lighting electricity costs by as much as 30%.

BOASTING CLEAN-ENERGY JOBS

Allegheny County has 11,950 jobs in the wind, solar, energy-efficiency and clean-vehicle industries, the highest number of clean-energy jobs in Pennsylvania, according to an analysis from the advocacy group Environmental Entrepreneurs. The number of jobs in those industries increased by 8,100 in the county between 2017 and 2018, with most of that growth coming from increases in construction and the energy-efficiency needs associated with it.

Receiving recognition

We're proud of the work we've done on green projects and sustainability initiatives. It's particularly rewarding to have that work recognized.

During the most recent Sustainable Pittsburgh Challenge, we were named the Top Performer in the Large Municipal category for the fifth straight year, and we also claimed eight ribbons related to engagement, energy use, water use, and social equity. The challenge is a friendly competition where companies and institutions are encouraged to take sustainable actions that earn them points. We received the most points for transportation by participating in the Sustainable Pittsburgh Transportation Survey, documenting how employees are commuting to work via that survey, and performing outreach to promote the use of alternative transportation.

We also have been honored by the Pennsylvania Resources Council three times with Zero Waste Awards for our efforts related to waste avoidance, reuse, recycling, and composting.

Reducing Waste

Allegheny County has contracted with a new recycling hauler, RoadRunner Recycling, that uses a web-based application to communicate hauling routes to small-fleet truck drivers who have empty truck beds and downtime, making waste and recycling operations more efficient. Since we began working with RoadRunner in July 2018, we have recycled 216,879 pounds of cardboard, 60,793 pounds of commingled materials, and 20,913 pounds of mixed paper — the equivalent of almost 700 trees.

We also have:

- Reduced paper waste by digitizing applications for grants and employment, streamlining our contracting process, and using e-signatures:
  - Human Resources processed nearly 11,000 fewer paper job applications in 2017 than it did in 2013 — a 764% decrease — and almost all were processed online;
  - Community Development Block Grant applications sent to Economic Development went digital last year, saving about 2,000 sheets of paper annually;
  - The Medical Examiner's Office last year transferred 16 processes from paper to electronic, cutting the use of about 22 storage boxes worth of paper each year; and
  - In Human Services, 811 contracts were completed last year through a new digital process, saving 53,193 pages from being printed, and the transition to e-signatures reduced paper waste by 900 pounds annually.

- Held staff outreach sessions about recycling at various county facilities. Each time that has occurred, the recycling rate at that building has increased by at least 60%. The recycling rate at the Health Department's administrative building nearly doubled, and the rate at the County Office Building increased 234%; and

- Helped fund the Pennsylvania Resources Council's Household Chemical Collection and Household Hazardous Waste Collection events at locations within county parks. At those events in 2017, more than 339,000 pounds of e-waste, refrigerant appliances, batteries, and tires (or about the weight of a single-story house) were collected and recycled. Additionally, 234,000 pounds of household chemicals (or about the weight of 800 refrigerators) were collected.

Office of Sustainability providing educational materials in the Courthouse courtyard (Allegheny County Photography)

Educating the Public

Allegheny County offers extensive outreach to employees and the public on topics related to sustainability and the environment.

The Sustainability Office in the Department of Facilities Management:

- Talks to thousands of employees and residents annually about the importance of energy, water, and waste efficiency and what they can do to make a difference; and

- Meets regularly with more than 35 local partners and the county's Green Action Team, and it recruits employees to become Green Team members or Green Champions who promote sustainability throughout the region.

The Parks Department:

- Conducted 578 programs between 2015-18 that promoted sustainability and natural-resource protection, reaching 4,194 participants; and

- Organized and led 64 volunteer projects between 2015-18 involving 2,061 participants. The projects ranged from tree plantings and riparian restorations to sustainably designed and maintained trails.

FOR MORE INFORMATION

Office of Sustainability in the Department of Facilities Management

412-350-6527

bit.ly/AlleghenyCoSustainability