

Tompkins County Sustainability Update

Report to the Legislature, May 16, 2017

Tompkins County has a tradition of reporting its sustainability-related activities from the previous year at a Legislature meeting each spring in honor of Earth Day. The County's 2016 activities, in addition to its efforts and those of its Sustainability Team over a number of years to advance sustainability principles and meet the County's greenhouse gas emissions (GHG) reduction commitment, have recently resulted in formal recognition by both the New York State Energy Research and Development Authority (NYSERDA) and the New York State Department of Environmental Conservation (DEC).

In March 2017 Tompkins County became the first municipality in the Southern Tier, and the second county in New York State, to be certified as a Climate Smart Community by the DEC.¹ In April 2017 Tompkins County became the first municipality in the Southern Tier to be designated a Clean Energy Community by NYSERDA. These recognitions are expected to provide opportunities for financial assistance for further reducing the County's GHG emissions and energy use, while also enhancing the community's resilience to climate change. The County's GHG emissions reduction commitment, Sustainability Strategy, Sustainability Team efforts, and many years of ongoing sustainability-related work were all instrumental in achieving these designations. Both recognitions and their respective benefits are detailed below, as are the County's recent sustainability activities.

2016 Tompkins County Sustainability Efforts

- In March the Legislature authorized a hydroelectric utility remote net metering agreement, between Tompkins County and Gravity Renewables, Inc., which is expected to produce electricity to meet roughly two-thirds of county government electricity needs through clean, local, and renewable generation.
- The Facilities Division continued to incorporate the County's Green Building Policy, incorporating LED lighting into the new Mental Health Building reception area and replacing exterior lights with LEDs at the Health Department and Recycling and Solid Waste Center. Additional insulation was added during roof replacements at the Old Jail, Building C, and Mental Health buildings. Five electric vehicle chargers were added at the Mental Health Building, with capacity to charge up to ten vehicles, in preparation for the arrival of the new Mental Health electric vehicles.
- The Planning Department completed the final Energy Roadmap report in March, evaluating local energy resources and developing scenarios to meet the County's 80% GHG emission reduction goal and projected energy needs through 2050.
- In September the Planning Department completed detailed GHG emissions and energy use inventories for both the community and County government using 2014 data, which went beyond traditional GHG accounting methods to show results of the latest climate science on methane emissions.
- The Planning Department worked with a consultant to develop a feasibility assessment of the technical design and system configuration for a proposed community microgrid for county facilities and nearby uses in and around the airport. Phase 1 of this work was completed in 2016.

¹ The DEC is planning a formal announcement, which may also include a press event, later in 2017.

Although much was learned about the energy system and potentials in the area, a decision was made to not proceed to Phase 2 at this time.

- The Planning Department and Ithaca-Tompkins County Transportation Council worked with a consultant to identify electric vehicle charging station needs and opportunities, which identified locations with the best potential for installation of public charging facilities.
- In partnership with TCAD, the Planning Department hired a consultant to structure an IDA Energy Incentives program to provide enhanced incentives for businesses that invest in energy efficiency and renewable energy systems to reduce their carbon footprint as part of a job-creating expansion. The final report was completed in 2016 and the first incentives were awarded in 2017.
- The Planning Department hired a consultant to conduct an inventory of pipeline stream crossings in the County and identify those of highest priority in order to advance measures to reduce risk to human health and the environment.
- In partnership with TCAD, the Planning Department worked with a consultant to develop an Energy Focus Area Strategy to provide for the energy needs of growing businesses while prioritizing renewable energy solutions and addressing energy concerns in key geographical areas of the county. Phase 1 was completed in 2016, including analysis of the projected energy demand for all four focus areas, and Phase 2 was launched, to look at ways to address energy constraints in a single focus area.
- In 2016, the County purchased five Chevy Volts for the Mental Health Department with funding assistance from a State grant, although the official purchase date ended up falling in January 2017. Five EV charging stations, each with 2 ports, were also installed at the Mental Health parking lot to charge the vehicles and allow for additional EV additions to the Mental Health fleet.
- Airport Terminal renovation plans were developed, with particular emphasis on energy upgrades. Proposed upgrades would reduce natural gas use at the terminal by at least 40%. The Airport has applied for grant funding to undertake terminal renovations including energy upgrades.
- The Ithaca 2030 District was officially launched in 2016 with Tompkins County joining as a founding member in this effort to reduce energy demand, transportation emissions, and water use in downtown commercial buildings, including County government facilities.
- As part of the parking lot improvements around the Courthouse Complex, covered bike racks were installed next to the Old Courthouse, Main Courthouse, and Old Jail for use both by County employees wishing to bike commute as well as members of the public served by these facilities.
- The Office for the Aging completed and submitted the Age Friendly Ithaca and Tompkins County Action Plan to AARP, an affiliate of the World Health Organization's Age-Friendly Cities and Communities Program. The Plan was approved by AARP in January and will help guide County sustainability-related efforts such as transportation and the built environment and encourage social equity considerations in these efforts.
- The Solid Waste Division received a \$355,000 grant award from the New York Department of Environmental Conservation's Climate Smart Communities program. The three-year grant will fund modifications to the Recycling and Solid Waste Center in order to create a centralized transfer area for food scraps and further reduce waste.
- The Recycling and Solid Waste Center added a collection station for liquid cooking fats, oils and grease (FOG) in 2016, collecting nearly 275 gallons of material in the program's first three months. The FOG will be processed and recycled into a renewable, biodegradable fuel.

- The County's food scraps recycling drop spots continued to increase, receiving over 475,500 pounds of material.
- During the summer drought in 2016, the Health Department worked closely with the City of Ithaca, Cornell University, and Bolton Point Water System to ensure a community approach to address issues created by the drought, and to urge all community members to conserve water.
- ITS updated the Facilities & Department Locator Map (<https://geo.tompkins-co.org/html/?viewer=tcfl>) to include the solar panels located on County facilities.

First-Quarter 2017 Tompkins County Sustainability Efforts

- Among the County Charter changes approved by the Legislature in January 2017, the Planning Department and its Commissioner were designated the Department/Commissioner of Planning and Sustainability and the Solid Waste Division became a department and was renamed the Department of Recycling and Materials Management. Both name changes reflect the County's ongoing commitment to sustainability.
- The Mental Health Department's five Chevy Volt electric vehicles (EVs) were placed into service in January 2017.
- In 2017 the Department of Planning and Sustainability's pipeline inventory project is entering the field-work phase and is expected to be completed by year-end.
- The Department of Recycling and Materials Management expanded its food scraps recycling program with three new food scraps recycling drop off spots in January 2017.
- The Information Technology Services Department is in the process of replacing storage network devices with SAN storage devices based on flash drives with lower energy use, drastically shrinking the physical space and cooling needed for the County's data centers. Work is underway to reduce or eliminate the need to maintain a data center at 55 Brown Road by consolidating into a more efficient data center at the Emergency Response Center, and NYSERDA incentives are being explored to help fund this work.
- The Recycling and Materials Management and the Facilities Departments have been working together to install and service new recycling bins in public spaces at the Human Services Building and the Courthouse Complex. These attractive combination bins have been well-received and used by the public.
- The Recycling and Materials Management Department is partnering with Friendship Donations Network to explore development of a new Climate Smart Communities grant application, and to discuss opportunities to have County buildings serve as food hubs that enable people to donate excess produce.

Climate Smart Community Certification (NYS DEC)

New York State's Climate Smart Communities (<http://www.dec.ny.gov/energy/50845.html>) is a network of New York communities engaged in reducing greenhouse gas emissions and improving climate resilience. Tompkins County joined this network by adopting the Climate Smart Communities (CSC) pledge in 2009. More recently, the DEC debuted a CSC Certification Program (<http://www.dec.ny.gov/energy/96511.html>) that provides local governments with a robust framework to guide their climate action and enables high-performing communities to achieve recognition for their leadership. The CSC Certification Manual describes more than 120 individual action communities can take to earn points toward certification. Recertification of completed action will be required every five years.

Working with a Cornell Cooperative Extension intern, the County submitted documentation to achieve certification. The County received a large performance bonus in its scoring for its actual reduction in GHG emissions from government owned facilities, vehicles, and operations, as well as for the reduction community-wide from buildings. The County's GHG emissions inventories were critical in documenting these achievements. The County also achieved points for each of the ten pledge elements, with higher scores in:

- Setting Goals, inventorying emissions, developing a plan
- Planning for adaptation to unavoidable climate change
- Pledging to combat climate change by becoming a Climate Smart Community
- Decreasing energy demand from local government operations
- Realizing benefits of recycling and other climate smart solid waste management practices

In addition to the benefits of formal recognition, this certification is expected to increase the County's competitiveness for funding opportunities, such as the \$355,000 Climate Smart Communities grant award which is currently funding modifications to the Tompkins County Recycling and Solid Waste Center in order to create a centralized transfer area for food scraps and further reduce waste.

Clean Energy Community Designation (NYSERDA)

NYSERDA's Clean Energy Communities (CEC) initiative (<https://www.nyserda.ny.gov/All-Programs/Programs/Clean-Energy-Communities>) supports local government leaders across the State to implement energy efficiency, renewable energy and sustainable development projects in their communities. Clean Energy Communities advances the Governor's Reforming the Energy (REV) strategy by demonstrating the importance of communities in helping New York reach its Clean Energy Standard mandate requiring 50 percent of the state's electricity to come from renewable energy resources by 2030. Communities that complete at least four of ten high impact actions and meet all eligibility requirements are both designated by New York State as a Clean Energy Community and are eligible to apply for grants to fund additional clean energy projects. Each region has a CEC Coordinator designated to assist communities with the program, with Cornell Cooperative Extension of Tompkins County serving as the Coordinator for the Southern Tier.

Each region of New York State has a limited number of grant awards available for communities. As the first in its region, Tompkins County is eligible to apply for an award at the maximum funding level of \$250,000 to further advance its work in reducing GHG emissions and energy use.

NEXT STEPS

2017 promises to be a year rich with sustainability-related activities for Tompkins County. The County is in the process of preparing its CEC grant application. The Tompkins County Sustainability Team has met and discussed plans to meet more frequently and seek new members to help advance its efforts, with a particular emphasis on (1) the County's fleet and (2) informing and educating County employees about sustainability-related resources and their opportunities to make an impact. A new Energy Task Force is now in place to provide advice for the County Legislature and Department of Planning and Sustainability regarding energy, climate change, and energy-related economic development. Tompkins County will continue working towards sustainable government operations at every level, from individual employees through departments, the larger organization, and its broader community.