

TC CPI | Tompkins County Climate Protection Initiative

2019 TCCPI MEMBER ACCOMPLISHMENTS

Alternatives Federal Credit Union

- In 2019 we made 292 solar loans for a total of \$3,851,684. Solar loans increased 40% over the previous year.
- Our rooftop solar panels generated 26% of our electricity during the year, representing 15% of our total source of energy (electric and natural gas).
- Our partnership with Renovus Solar continued, furthering our work together for the good of the environment and local economy by expanding renewable energy usage.
- As one of the founding members of the Ithaca 2030 District, we participated in the District Partner quarterly meetings.
- The staff “Green Team” worked continually improve energy efficiency and reduce waste.

Center for Community Transportation

The Center for Community Transportation envisions a community where travel by shared and active transportation is healthy, safe, affordable, and convenient for all. The CCT's mission-focused services and activities include Ithaca Carshare, Bike Walk Tompkins (and its signature program Streets Alive! Ithaca), and Backup Ride Home, emphasizing social equity and environmental sustainability in this era of new transportation options and emerging mobility trends. CCT works with local transportation providers, educators, planners, decision-makers, advocates, and users to fulfill the mission of enhancing transportation access in our community while reducing its negative environmental and economic impacts.

- Launched a transportation guest speaker series with a well-attended public talk by Tim Papandreou (Director of Strategic Planning & Policy, San Francisco Municipal Transportation Agency) on “Preparing for our Transportation Future.”
- Began work in collaboration with the City of Ithaca and the Downtown Ithaca Alliance on the Go Ithaca commuter incentives program, and development of a Transportation Management Association, including key work with waterfront developers to put more environmentally and economically smart transportation systems in place.



Ithaca Carshare

- As a result of the shifted driving habits of members and higher than average fuel economy of the fleet, an estimated 11,272 gallons of gasoline and 103 metric tons of carbon dioxide were avoided.
- 596 new Ithaca Carshare members reported that they would sell or avoid the purchase of 113 vehicles.
- The Easy Access membership plan, now self-funded, continues to serve local individuals.
- 1,343 members took a combined 15,648 trips totaling 198,451 miles.
- Fleetwide fuel economy was 32 mpg, 20% above the 2019 national average of 25.5 mpg.

Bike Walk Tompkins

- Developed a Bike Education network, connecting schools to resources needed to design, fund, and implement bike education programming in 2nd grade curriculum.
- Acted as a community liaison with Lime on the Lime Access program, which offers subsidized access to the app based bikeshare service for people with low income, no smart phone, or no debit card.
- Hired 6 bike champions to be community ambassadors for biking. The bike champions hosted over a dozen new bike events in typically underserved communities, including learn to ride programs for seniors.
- Offered the first-ever complete schedule of learn-to-ride classes to the community, which enabled many adults, particularly women, to ride bicycles for the first time since their childhood.
- Organized the 14th and 15th editions of Streets Alive!, with each event closing 10-15 city blocks to cars and opening them up to people to bike, walk, roll, dance, play, etc. for 4 hours. Each event uses 50-80 volunteers and draws an estimated 2,500 participants.
- Hosted the 5th Streets Alive! Film Festival at Cinemapolis in March and launched a monthly bike film series with Cinemapolis in October.
- Convened meetings with community leaders about biking and continued the development of the Bicycling for Everyone Action Plan, slated for release in summer 2020.

Backup Ride Home

The Backup Ride Home program provides peace of mind for commuters who travel to work without a personal vehicle (bus, carpool, bike, etc.). Ithaca Carshare's on-call staff facilitates free alternate transportation home if something unexpectedly happens that makes an original commute plan home unfeasible. Enrollment in the program grew to 85, and 3 rides home were provided. CCT collaborated with the Downtown Ithaca Alliance's Go Ithaca commuter program to integrate Backup Ride Home enrollment for all participants.

City of Ithaca



- Adopted Green New Deal (GND) resolution, committing to an equitable transition to carbon neutrality by 2030
 - Convened GND transition team (internal), which developed Sustainability Director job description
 - Convened a GND Interim Advisory Group of community stakeholders
 - Released draft Ithaca Energy Code Supplement, which will mandate reduced GHG emissions in new construction
- Completed preliminary work on policies to reduce emissions in existing buildings
- Advanced LED streetlight upgrade project
- Worked with NYSERDA on Clean Energy Communities case study of Ithaca

Cornell Cooperative Extension – Tompkins County

Clean Energy Communities

Summary: One of our Energy Educators is the CEC Coordinator for the Southern Tier, working with municipal officials to save energy in their facilities and communities through targeted steps – communities become “designated” by tackling 4 of 10 “high-impact actions,” which makes them eligible to apply for grants to fund additional clean energy projects.

Impact: Fourteen more communities were designated in 2018, bringing the total to 36; there are a total of 78 active communities engaged through the program; and altogether these communities have 212 completed, high-impact actions. Grant funds have been used for such things as an LED streetlight changeout and residential LED program in Caroline; installation of air-source heat pumps in the Ulysses Town Hall; and improvements to the Danby Department of Public Works facility. In addition, we have facilitated energy code trainings for codes officials. Visit the Southern Tier CEC website for more information: <https://southerntiercec.org/>.

Ithaca 2030 District

Summary: Ithaca became an official 2030 District in mid-2016, and currently has more than 25 buildings represented in the District. CCETC serves on the Advisory Board and helps develop resources for District Member building owners.

Impact: Energy Team members have contributed to resources and provided input to development of the District, as well as moved the CCETC office to upgrade various building elements (e.g., windows throughout one of our two buildings) and install heat pumps (covering about 25% of the total heating/cooling load; other areas will be phased in during 2020).

Energy Smart Community

Summary: The ESC is a collaborative project focused on modernizing our electricity system through smarter infrastructure, reduced peak demand, and increased customer engagement. CCETC and Cornell University have partnered with New York State Electric and Gas (NYSEG), the local utility, to develop and test the technologies, educational approaches, and customer options that lead to greater adoption of cleaner and distributed energy sources; improved grid reliability, resilience and safety; and reduction of overall energy use and shifted use from peak demand times, achieved when businesses and residents have expanded choices and increased energy literacy.



Impact: In 2019, CCETC continued Community Energy Conversations, focusing on a regular monthly meeting at Salt Point Brewery in Lansing, NY involving customers with smart meters who are engaged in the changing landscape of energy issues in Lansing. We also participated in 7 of the more impactful festivals/events in the community and continued to offer presentations to various community groups. In 2019 we worked closely with local Sunrise Movement students to engage them in local energy issues and actions they could take, including work with New Roots Charter School students and staff to help their building reach 2030 District goals as a new member in 2019. We also continued to maintain the CCETC ESC website, <http://ccetompkins.org/esc>, which received a total of 1,276 unique page views. Toward the end of the year, our focus shifted to ensuring a strong collaborative process continued after the end of our contract. We ultimately secured a commitment from several key NYSEG staff, planners from many of the local municipalities and the county, TCAD, and others in a joint planning process to create a mechanism for close collaboration on major energy-related projects in the coming years.

Community Groups Support

Summary: The CCETC Energy Team has shifted its work over the past few years to work more “at scale,” influencing energy issues at the level of municipal officials, developers, and others.

Impact: In 2019 we also worked to support a variety of community groups in their work, including Mothers Out Front, Concerned Citizens of Lansing, City Outreach Planning and Education, and others, as well as serving on formal advisory groups including at the County and City of Ithaca.

Alliance for Non-Pipeline Alternatives

Summary: This is a diverse group of community members working to find alternatives to build-out of the natural gas pipeline (or other gas infrastructure), specifically in the Lansing gas moratorium area.

Impact: To date the group has succeeded in spurring NYSEG to propose a combination of measures to reduce overall gas consumption and pressure boosters to increase the pressure in the line. We continued to work with NYSEG on their RFI and RFP process to ensure the interests of the community are included. We submitted a proposal in the RFI process and will be submitting a full proposal in 2020.

EV Tompkins

Summary: In 2019, we continued to support the work started by Energetics, who led the EV Tompkins program to promote the use of electric vehicles and installation of EV chargers across the county.

Impact: CCETC helped educate residents about EV options and how EVs work through tabling events and presentations. We also began the process to install an EV charging station at CCETC.

Radon Awareness

Summary: In addition to energy programming, the Energy Team continued to provide information to residents about the dangers of radon, and, through a long-standing NYS Department of Health grant, hand out free radon test kits.

Impact: The Energy Team handed out 148 free radon test kits, received nearly 411 page views on the CCETC radon web site, and tabled with radon information at several community events.

Community Energy Engagement Program

Summary: In mid-2019, CCETC took over the Community Energy Engagement Program in the North Country (7 counties from Lewis and Jefferson in the western edge to Clinton and Essex in the far northeast).

Impact: Through a variety of efforts, we have greatly increased the capacity of Cooperative Extension associations in that region to take on energy-related work, directly helping residents access NYSERDA energy-related programs, especially those directed at low- and moderate-income residents.

Other programs

- Internet of Things / Things Network: working to network buildings across the county that can remote meter energy use (and other measurables)
- Building understanding about energy systems: helping community members understand how building energy systems work and how they can work to improve them
- CCETC Energy Team continued to add to and update its web site pages and printed resources

Cornell University

- 36% reduction of campus CO2 emissions compared to the 2008 baseline.
- Cornell is playing a key role in leading a consortium of over 20 State University of New York (SUNY) and private NYS higher education institutions working to catalyze the development of new, large scale renewable energy projects in New York and surrounding states. The [NY Higher Education LSRE Project](#) seeks to lower financial barriers to renewable energy procurement through combined purchases. The consortium plans to contract for up to 600,000 MWh/yr and achieve 100% renewable electricity goals for member campuses.



- The Association for the Advancement of Sustainability in Higher Education gave Cornell another gold rating, and recognized Cornell in the [2019 Sustainable Campus Index](#) as 1st in the United States for sustainability Coordination & Planning, and one of ten institutions recognized for accurate reporting. This year's rating maintains Cornell's standing as the longest running institution to have maintained a Gold status.

- [Residential Compost Managers](#). In 2018-2019, 45 student volunteers attended a 60-minute Compost Manager training that introduced sustainability at Cornell; covered climate change, food waste, and intersectional justice concepts; described volunteer expectations and provided volunteers with buckets, signage, and marketing materials to make composting accessible to every on-campus residential community with a volunteer (21 buildings). In the first year, Compost Managers diverted over 10,000 lbs of food scraps from the landfill; students used four central drop spots to send compost to our campus compost facility. In 2019-2020, 65 student volunteers attended training, and we have expanded the program to include interested co-ops, fraternities and sororities, graduate student housing, and limited off-campus student housing (as a pilot).
- [Four new Sustainability Teams launched across campus](#). The number of Green Teams has doubled in the last year, thanks to the dedicated staff who mobilized their departments and units to create a culture of sustainability in action.
- [Naomi Haber '20 Awarded New York State Student Sustainability Leadership Excellence Award](#). Naomi Haber '20 was selected as the recipient of this year's Student Sustainability Leadership Excellence Award presented by the New York Coalition for Sustainability in Higher Education (NYCSHE).

- [MUI HO FINE ARTS LIBRARY EARNS LEED GOLD CERTIFICATION](#). Cornell's Mui Ho Fine Arts Library in Rand Hall earned the U.S. Green Building Council's Leadership in Energy and Environmental Design (LEED) Gold certification in late January.
- [JOEY GATES RECOGNIZED AS STAFF SUSTAINABILITY CHAMPION](#). Joey was nominated for the [Staff Sustainability Champions](#) recognition by Cornell Law School Professor Gerald Torres for her work in creating the [Ithaca Dish Truck](#), a service that allows people to reduce their reliance on disposable, single-use items by substituting reusable dishes and silverware.
- [STAFF SUSTAINABILITY CHAMPIONS: MARC DALY, NICK VAN ECK, AND BOB WILSON](#). "...[T]he team came up with a vision for chambers that would have a streamlined mechanical design and a much smaller carbon footprint..."
- [UNIVERSITY SIGNS POWER-PURCHASE AGREEMENT FOR NORTH CAMPUS ROOFTOP SOLAR](#). Rooftop solar arrays on Cornell's North Campus Residential Expansion will generate around 35% of the buildings' power.
- [CASCADILLA COMMUNITY SOLAR FARM AT CORNELL UNIVERSITY CONNECTS TO NYSEG GRID](#). On Jan. 17, the [Cascadilla Community Solar Farm at Cornell University](#) received approval from the New York State Electric and Gas Corporation (NYSEG) to begin exporting clean solar power to the grid. The 18-megawatt solar farm is the university's sixth large-scale solar project developed in partnership with [Distributed Sun LCC](#) and will add over 30 gigawatt hours annually onto the grid to serve about 3,000 residential homes. Under New York's new community solar program, electricity from the farm is sold to NYSEG retail customers through [Solar Farms New York](#). With the renewable energy credits from this project, the equivalent of 20% of the Ithaca campus' annual electricity use is generated by renewables.
- [CORNELL JOINS CONSORTIUM TO 'GREEN' BUSINESS SUPPLY CHAINS](#). The university has new opportunities to champion greener consumer products, supply chains, and commercial trade, as the [Cornell Atkinson Center for Sustainability](#) on Jan. 13 began a partnership with The Sustainability Consortium (TSC).
- [LIGHTING UPGRADES SAVE CORNELL \\$2.9 MILLION, REDUCE CARBON FOOTPRINT](#). The Cornell [Energy Conservation Initiative](#) completed a multi-phase comprehensive lighting upgrade earlier this year which replaced lighting in indoor and outdoor spaces with energy-efficient LED bulbs and has saved the campus over 18,000 tons of carbon and \$2.9 million to date.
- [NEW COUNCIL TO GUIDE CAMPUS SUSTAINABILITY, CLIMATE EFFORTS](#). The Sustainable Cornell Council (SCC) will direct and coordinate Cornell's role as an international leader in addressing climate change and promoting sustainability by using the campus as a living laboratory and seeking regional and global partnerships to accelerate impact. The SCC will report to the provost and will provide progress updates to the Cornell community.
- [COLLEGE OF VETERINARY MEDICINE ACHIEVES GOLD, SILVER LEED CERTIFICATIONS IN NEW PROJECTS](#). "It's fair to say that this atrium is now the heart of our college – our 'living room,' so to speak – where everybody goes," said Wayne A. Davenport, director of facilities at the College of Veterinary Medicine. "The expansion has transformed us. Striving for LEED certification helped to create a strong sense of community in the center of our college."
- [CHRONICLE STORY FEATURES LIVING LAB RESEARCH BASED ON CAMPUS DATA AND MODELING SYSTEMS FOR LOW-CARBON ENERGY PERFORMANCE](#). New research conducted by Cornell researchers used campus data to create new models for hybrid energy systems using both heating and electricity. The study was inspired by the [Cornell Earth Source Heat project](#), in which faculty, students and staff are exploring geothermal energy as a sustainable method of heating the Ithaca campus.
- Cornell's Grounds Department solar trailer. Cornell University Sustainable Design (CUSD) is an interdisciplinary student-led project team that enables Cornell students to develop their skills,



engage with real world clients, and contribute to sustainable community development. CUSD partnered with Cornell's Grounds Department to build a solar trailer outfitted with solar panels, batteries, and charging ports to store, transport, and charge battery-operated landscape and grounds maintenance equipment. The solar powered trailer is a key tool needed to efficiently transition our grounds equipment from gas-powered to battery-powered. Cornell's Grounds crew has already expressed satisfaction with switching to electric weed whackers, leaf blowers, and other hand tools (i.e. no more inhaling fumes!), and additional roll outs are planned (e.g. lawn mowers). In addition, the solar trailer is wrapped with educational, sustainability-focused messaging – including Cornell's 2035 carbon neutrality goal. The trailer can also be used as an educational model, as well as a practical tool for events that require on-site, portable power. The solar panels are estimated to produce 1,151.2 kWh of energy over the course of the year, enough energy to power a normal 60 watt light bulb for 19,187 hours or 2.2 years. If the renewable energy is fully used every day, it would be roughly equivalent to replacing 33 gallons of gasoline and or diesel.

- [EnergySmackdown](#) is an annual six- week competition for the Cornell campus to reduce or eliminate energy use in our personal lives and between buildings, now in its sixth year.
- [Energy Setbacks during Break](#). Before leaving campus for winter break or spring break, and other holidays throughout the year, Cornell reminds the campus to unplug and unwind to help save energy on campus. You can save money and energy usage in your office, common areas, labs, residential rooms and spaces by following simple steps.
- [Second Annual Golden Gorge Awards recognizes student sustainability leadership](#). The ceremony included remarks by senior leaders and awards for students for sustainability innovation and lifetime service. The event also includes presentation of 'sustainability honors tassels' to graduating seniors who have committed themselves to a lifetime of sustainability service and learning.
- [Residential Sustainability Leaders Program Launches](#). The inaugural cohort of Residential Sustainability Leaders (RLS) arrived on campus early for training before official orientation. These students will be leading efforts to create a more sustainable campus and culture at Cornell. We are thrilled to have this new group helping shape our campus culture and activities.
- 33% of all faculty are involved in sustainability research, a 3% increase in the last two years
- 18% of all courses include sustainability topics, up 8% in the last two years, spread across 79 departments

Downtown Ithaca Alliance

- The DIA, in collaboration with Center for Community Center for Transportation and Tompkins Consolidated Area Transit (TCAT), is currently operating a Transportation Management Association (TMA) program called GO ITHACA aimed at helping employees and residents in the urban core forgo their single occupancy vehicles and instead use more efficient modes of transportation. This program will optimize downtown land use and taxpayer revenue by forestalling the construction of a new garage. It will also reduce carbon emissions by thousands of pounds and promote health, social engagement, and employee goodwill. New York State Department of Environmental Conservation grant funds were applied for to capitalize a project that will create individualized



transportation plans along with a suite of new transit services (including remote parking) to workers and residents in the urban core.

- Downtown projects such as the additional bike racks that were installed as a result of a grant from a local foundation will decrease dependency on automobiles and increase walkability and access to public transit.
- The completed City Centre project includes many green features such as energy efficient windows and lighting, and classic sustainable appliances like low-flow toilets. City Centre is also eliminating the need for venting to accompany clothes dryers, which are outfitted with heat pumps (standard practice in Europe, but a burgeoning innovation in the United States).

- The Harold's Square project, currently under construction, will be an energy-efficient building aligned with the values of the local community and offering apartments that are more efficient, cost effective, and comfortable. Designed per NYSERDA and ENERGY STAR® standards, Harold's Square will provide the following: efficient heating and cooling system and hot water heater; improved building envelope and air-tight compartmentalization of apartments; Energy Star appliances that use 10-30% less energy than conventional models; efficient LED lighting; water-saving fixtures; and investment in off-site 60.3 kilowatt solar farm to further offset fossil fuel-generated power usage. Overall the building will use at least 35% less energy than a similar type conventionally built building.
- Downtown Ithaca continues to be a “walker's paradise” where daily errands can be completed without the use of a vehicle, according to Walk Score. Walk Score is a tool that rates the walkability of more than 10,000 neighborhoods throughout the continent. The numerical Walk Score for the Ithaca Commons is 97 out of a possible 100, the same as 2018. Our Walk Score is just three percentage points shy of Greenwich Village; by contrast, Lansing's walk rating is 38, Trumansburg ranking is 37 and Cayuga Heights ranks in at 28.
- Solar trash compactors along The Commons help to reduce the carbon footprint. These compactors compress their contents to allow more trash per bag so they don't have to be emptied as often. Fewer collections mean cost-savings for labor, fuel and maintenance and reduced greenhouse gas emissions. Powered by the sun, these eco-friendly compactors operate in every kind of weather — snow, rain, or shine. The DIA has coordinated a shared recycling and trash compactor program to encourage proper disposal of recyclable materials generated by over 300 businesses and residents on and around the Commons.
- The DIA continues to work on a transit corridor plan to improve bus service between Downtown Ithaca, campus communities, and other cities. Downtown Ithaca is the regional transit hub for Tompkins Consolidated Area Transit (TCAT), which was recently recognized by its industry peers as being the best transit system of its size in North America. TCAT contributes greatly to the community, serving as an alternative to car ownership, thus reducing traffic congestion and greenhouse gas emissions. It saves the cost of building parking facilities. Its fleet currently includes eight electric-diesel hybrid buses.
- Downtown Ithaca is home to the headquarters of the Center for Community Transportation which houses Ithaca Carshare, a non-profit car sharing service with a growing fleet of fuel-efficient vehicles shared by over 1,500 members. Users can save hundreds of dollars per month in avoided gas, maintenance, and insurance costs while reducing traffic congestion, pollution, and space and money devoted to parking. Independent studies show that for each Carshare vehicle, over 15 privately-owned vehicles come off the road.
- To help reduce the use of plastic and paper bags in the urban core, The Downtown Ithaca Alliance, in 2019, started brainstorming ideas for the creation of a Downtown Ithaca branded reusable bag. The DIA plans to offer environmentally friendly bags to its businesses in 2020.
- Bike Walk Tompkins, a program managed by the Center for Community Transportation, has taken the lead on bringing a bike-share program to downtown Ithaca as part its Blueprint for Better Bicycling program. As the number of people who use this program bikeshare program increases, we'll see a reduced number of people using their vehicles to travel around downtown, thus reducing greenhouse gas emissions in our area.
- In 2019, the DIA started exploring the option of offering bike parking at its special events to help in local efforts to lessen the number of vehicles traveling into the urbanized core, thus reducing greenhouse gas emissions in the community.





- Press Bay Alley, two blocks southwest of the Ithaca Commons, serves as a pickup spot for the Full Plate Farm Collective CSA each Thursday. CSA (Community Supported Agriculture) is a cooperative relationship between a farmer and consumers; consumers commit to buying a crop “share” and growers commit to growing that amount of produce. Full Plate Farm Collective farms grow over 50 acres of organic vegetables and share the vision of building community, farming with integrity, and growing high quality food with fair prices for all involved.

- Downtown Ithaca is an important green retailing showcase with at least 14 independent, locally-owned stores that specialize in reused and recycled products. Such stores include Sheldon Hill Vintage & Estate Jewelry, SewGreen, The Vintage Industry, Pastimes Antiques, Trader Ks, Autumn

Leaves Used Books, and Home Green Home. Shopping at reuse stores means less additional energy was used to produce new goods. Another business, The Watershed, located in the Downtown Ithaca Business Improvement District, is committed to reducing environmental waste. Behind the bar, they use high-end citrus products instead of fresh fruit to decrease food waste without compromising on drink quality. In a standard bar, it takes about 4 pounds of ice to chill a glass and shake a cocktail, but at The Watershed many of the drinks are built in the glass to lessen the amount of ice and water used in the bartending process. With a menu constantly changing based on what’s available, Watershed opted for digital menu boards instead of going through a wasteful cycle of updating printed menus.

- Decorative lighting in Downtown Ithaca is energy efficient. The DIA uses LED lighting to decorate the poles on The Commons during the holiday season.
- Downtown living is sustainable living. According to the Center for Sustainable Economy, a couple living in an apartment in downtown Ithaca, using TCAT, and adopting excellent green habits (e.g. unplugging appliances, composting, buying organic food) would have a carbon footprint approximately 34 percent of the national average. A couple with the same commendable habits but residing in a single-family home outside of town and commuting in a mid-size car would be at 76 percent. Allowing for more vertical growth will allow more in our community to take part in this “green revolution.”
- The DIA has implemented composting and recycling systems for its major downtown events — Apple Harvest Festival, the Summer Concert Series, Chowder Cook-Off, and Chili Cook-Off — which are attended by over 100,000 locals and tourists. Local service organizations like the Master Composters from Cornell Cooperative Extension have helped to oversee these composting stations.
- The DIA also offers and encourages the use of reusable cups during the Summer Concert Series and offers reusable spoons and encourages attendees to bring their own reusable spoons and mugs for its Chowder Cook-Off and Chili Cook-Off.
- Downtown Ithaca is home to Coltivare, a farm-to-table restaurant and bar as well as a major culinary education facility. Coltivare, an initiative of Tompkins Cortland Community College, offers a unique hands-on experience alongside working professionals for students studying sustainable food systems and entrepreneurship. The team aims to find all their menu items within a 300-mile radius, with some food sourced from the college’s own farm. Its waste management system, which reduces food scraps to a grain-like compostable material to be used by the farm, is the first of its kind in the U.S.

EMPEQ

- More than tripled our customer base in 2019 - including welcoming back our first repeat customer [Syracuse Model Neighborhood Corp](#), an LMI housing agency in the City of Syracuse.

- We also completed two local projects at [Finger Lakes ReUse](#) (Roof Top Units) and [Museum of the Earth/PRI](#) (LED Lighting).
- Won a \$500,000 non-dilutive grant from [NYSERDA](#)
- Received an additional investment from [LaunchNY](#) and a new investment from the [Rochester Angel Network](#) (RAN)
- Participated in pitches in Silicon Valley at [Plug and Play](#)
- Participated in many pitches, including the [Founder Institute](#), at the NYSERDA [Green Innovation Showcase](#), [716 \(43North\) Start Up](#) Showcase, NECEC's [Clean Energy Pitch Event](#), and [Upstate Capital's](#) Upstate/Downstate Pitch event.
- Featured in the [Cornell Chronicle](#) and the [ACEEE's blog](#) and the November / December issue of [Diversity in Action](#) magazine.
- Received a full marketing strategy review by [Cornell Johnson EMBA](#) Class of 2020.
- Approved for [StartUp New York](#).
- Graduated from the [Vet-Tech/Plug and Play/ Founder Institute](#) accelerator.
- Chosen as a semifinalist in the global [43North](#) startup competition.
- Relocated their headquarters from NYC (5th Avenue in Manhattan) to [REV](#) in Ithaca.



Finger Lakes ReUse

In 2019 Finger Lakes ReUse continued to offer easy and accessible pathways to the public for unwanted or excess materials in the face of our growing global waste problem. We are continuing to refine efficiencies and expand capacity to manage the increasing flow of local materials (donations of items were up 67% in 2019 over 2018), to better match the volume of materials being unnecessarily lost daily to landfills.

In 2019, Finger Lakes ReUse:

- Proudly became a member of the [Ithaca 2030 District](#), committed to achieving the goals of the District including an overall reduction of greenhouse gas emissions through energy and water use by all member organizations.
- Worked with [EMPEQ](#) to install 4 high-efficiency Rooftop HVAC units at our Ithaca ReUse Center. These units are energy-efficient and cost-effective!
- Diverted an estimated 575 tons of materials (542,000 items) through our two community *ReUse Centers*, including furniture, building materials, housewares, electronics, books, textiles.
- Created 9 new living wage jobs, increasing our staff to 43 people.
- Worked with over 30 local human service agencies through our *ReUse Materials Access Program*, supported by contributions to the *ReUse Community Fund*, providing materials for over 300 households in need.
- Trained 20 people through our *ReSET (ReUse Skills and Employment Training)* program, including 6 reentry participants.
- Worked alongside 172 new individual volunteers, with over 14,000 hours of volunteer labor logged total.
- Volunteer repairers in the [Ithaca Fixers Collective](#) successfully fixed an estimated 720 items, many brought in by community members looking to extend the life of their own materials and avoid buying a new one.
- Provided 61 free events this year at the Ithaca ReUse Center (Creative reuse workshops, film screenings, Ithaca Fixers Collective) and a Creative ReUse gallery event featuring work by 15 local artists.
- Worked with 146 local youth through projects connecting ReUse to global issues, including tours of our facilities, several academic projects, and a ReUse fashion show.

Fossil Free Tompkins

Cayuga Power Plant: Victory!!! After seven years and two attempts by the owners of the coal plant to convert it to burn gas, in June 2019 the plant owners announced their intent to “mothball” the plant and convert it to a data center, and in Sept. 2019 they burned their last chunk of coal and went offline. We are crossing our fingers that this is the last time the plant will burn fossil fuels, but they are holding on to their air emissions permit in case conditions change. And Trump is hellbent on permitting LNG by rail. So while we’re certainly celebrating, we’re also keeping one eye open. Furthermore, data centers are not without their own set of issues. They consume ENORMOUS amounts of energy. Cayuga envisions



100MW load for this data center and another 250MW for Somerset coal plant in Barker NY, also owned by Cayuga’s owners, that is closing with the intent to implement the same business plan. Fossil Free Tompkins (FFT) joined with Sierra Club and 30 other organizations to contact the DEC, NYPA, and and Empire State Development regarding the proposed data center. We asked that in exchange for the support requested by Cayuga for the transition (\$65 million, 25MW) Cayuga be required to surrender their air-emissions permit, put in place a solid worker transition plan, develop an ongoing, funded monitoring plan for the toxic materials on the site, install utility-scale solar, and use energy-efficiency best practices for the data centers, including exploring work with some of the 76-West prizewinners=clean energy start-up companies in the Southern Tier. NYPA awarded Cayuga 2MW of the 25MW requested, and 2.5MW of the 50MW requested for the Somerset site. The State’s newly passed energy siting law for large-scale renewables prioritizes old generation sites for renewable siting, so hopefully we’ll see Cayuga’s new owners take advantage of that opportunity. FFT also helped guide the formation of a Citizen’s Advisory Committee to the Lansing Town Board to oversee what happens with the site and data center over time.

Lansing Non-Pipe Alternative: This long-term project is creeping forward at a snail’s pace. It took NYSEG a year to develop a revised RFP for “non pipe alternatives” to address thermal energy needs in the Lansing area. The revised RFP was issued in fall 2019. We worked with HeatSmart Tompkins to host a community event for businesses in the Lansing area to let them know about the NPA opportunity and to provide opportunity for heat-pump and energy efficiency vendors to meet interested businesses. We understand NYSEG received many good responses to the RFP and we look forward to the announcement of accepted projects in Summer 2020. Meanwhile, Fossil Free Tompkins led discussions with Dept of Public Service staff and with PSC Chair John Rhodes to attempt to address issues with the RFP and other constructs concerning gas moratoria. We were told that these matters should be addressed in the rate case. So...

NYSEG Rate Case: ...in May 2019, NYSEG (and RG&E) filed their proposed gas and electric rate cases with the PSC. It has been a real slog. Thousands of pages of reading, 3-5 Albany based meetings (2-6 hours each) a week since Sept. 2019 to negotiate terms of agreement with 30+ parties representing a range of interests – low and fixed income, fractivists, industry, large commercial, geothermal advocates, EV charging groups, among others. We were nearing completion of a joint agreement when COVID-19 struck, upsetting the economy and energy demands, and so we went back to the drawing board. We’re approaching the end of negotiations again now. We’ll see where it goes.

Get Your GreenBack Tompkins

The Powerhouse

We closed the year with plans and funding for the construction of a “Powerhouse,” a Tiny Home on wheels, whose purpose is to engage thousands of residents around energy-related topics, and encourage them to take action. It is seen as the entry point to our Energy Advising program, which is already helping

many hundreds of people learn about and access local, state, and federal programs and connect them to



local contractors who can help them with energy-related improvements. This advising program has the potential to serve many more people, and we believe the Powerhouse can help with effective outreach.

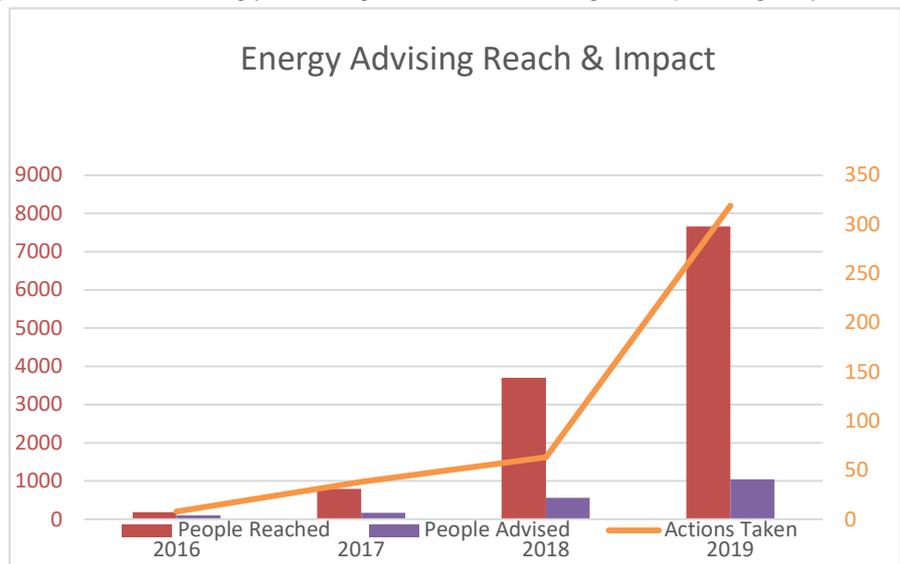
Much of the design work was carried out during 2018 and 2019 by over 20 student participants in the Cornell University Sustainable Design Club. They prepared the initial designs for the tiny home structure, as well as for the eight exhibits that will be inside the home. They also designed a

companion website, a draft of which can be found at www.tinypowerhouse.org. The architectural design was brought to a more professional close by local firm Stream Collaborative (a draft of which was included in our proposal to the Park Foundation submitted this fall), who were compensated with funds from NYSEG and NYSERDA.

Towards the end of 2019 we were delighted to win \$100,000 in competitive funding from NYSERDA to finalize the design and complete the Powerhouse in the spring of 2020. We then intend to take the Powerhouse to a score of events and locations around the county to reach Get Your GreenBack’s focus audiences: people with limited income, people of color, people living in rural areas, and in general those who don’t already identify as environmentalists. We also intend to use the Powerhouse to engage middle and high school students, and provide energy-related education to this segment of the population. A separate proposal to the Park Foundation will be submitted requesting one-time support to hire a part-time coordinator for this initiative, a position that we intend to sustain through fee-for-service work with school districts in the region.

Energy Navigators & Energy Advising

Get Your GreenBack (GYGB) has been increasingly focusing its work on building and operating a system of energy advising to help hundreds—and we hope eventually thousands—take high-impact steps that reduce their carbon emissions and energy use, save money, and contribute to a stronger local economy. The system includes outreach mechanisms, including volunteer peer educators (“Energy Navigators”), systematic follow up using Customer Relationship Management (CRM) software, connections to contractors and incentive programs, and evaluation.



This last year has seen a significant increase in the impact of this system both in Tompkins County and throughout the Southern Tier region, as can be seen in the chart here.

As of November 2019, we have reached over 7,500 people for the present year, providing advising to over 1,000 of those, and supporting close to 320 to take significant action. This multiplies our previous year's accomplishments by over five times, close to doubles our main goal of 100 high-impact actions a year, and shows that the system is entering a new period of maturity.

[GYGB staff person] was very helpful in explaining my options for community solar and in answering my specific questions about how using community solar differed from signing up for a green energy plan from an ESCO. The information he sent me was also very helpful in choosing a community solar provider.

There are a number of things we have learned that has led to this marked increase in impact:

- Where to go to connect with people with limited incomes who are interested in taking steps to reduce their energy use and transition to renewables. Food lines in rural areas have proven to be one particularly fertile venue.
- We have developed stronger relationships with local energy contractors, which have facilitated the experience for the customers we both are trying to support. We are able to provide a more “seamless” experience for customers as we connect them to certified contractors who are able to help them get the work done, and take advantage of the various state, federal and local programs that help pay for the work, sometimes covering all expenses.
- We have developed close relationships with key partner organizations that are able to help connect us to interested residents. Some key organizations include the Ithaca Housing Authority and the Broome County Health Department, where our staff have helped create a partnership that connects low-income families receiving lead abatement work to weatherization providers who are able to do the work simultaneously or in a coordinated fashion.
- We have learned to provide better support and training to our volunteer Energy Navigators, who so far this year have helped over 40 people take a high-impact action, compared to only 21 the previous year. The support includes tools for engaging their contacts, like a scripted home energy walkthrough checklist, as well as support connecting them to public outreach opportunities and interested residents.
- We can better appreciate the value of customer support offered over a long period of time. Using our CRM software to track the progress of residents' actions, we have seen a number of them take over a year, and some more than two years, to go from their initial expression of interest to action.



Energy Navigator Training (left); Navigator engaging a resident at a festival in the Town of Caroline over the summer

We have been fortunate to be able to count on continued backing from NYSEG for the Energy Navigator program, enabling us to offer financial support in the form of “mini-grants” to some Navigators (most of whom are low-income), purchase materials Navigators can give to residents for direct installs (such as LED lightbulbs and plastic coverings for windows), as well as provide operating support to GYGB. NYSEG won the 2019 award for serving underserved markets

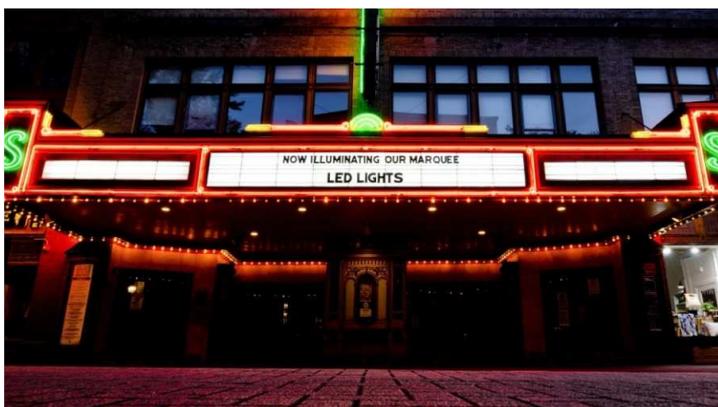
from the Smart Energy Consumer Collaborative for their work with Energy Navigators.

In addition, our expanded work in the Southern Tier through the NYSERDA Community Energy Engagement Program grant has led us to create a new website and materials under the “Smart Energy Choices” brand, while we continue to use GYGB materials for the Tompkins County area. The Smart Energy Choices branding has been used not only in the Southern Tier, but also in seven counties in Northern NY and another seven counties in the mid-Hudson region.

In 2020, NYSERDA will be funding an expansion of the Energy Navigator program to five other counties in these regions. The GYGB coordinator will be revising the curriculum to make it applicable to any county throughout the state, and training a group of volunteer coordinators from various Cooperative Extension associations, who will then train cohorts of Energy Navigator volunteers in their respective counties. The GYGB coordinator will continue to provide support and guidance to these volunteer coordinators throughout the year.

In addition to our person-to-person outreach at events, food lines, and through volunteers, we have reached tens of thousands of people through our website, flyers, brochures, mailings, presentations, and radio and television advertising, paid for with funds from NYSERDA

And while our focus has been on helping residents, we also serve commercial building owners and



managers, helping connect non-profits and small businesses to programs that can help them with energy-reducing work. Some of the organizations we have supported include Incodema, YMCA, as well as the CCE-Tompkins office. We worked with the State Theater and the Chamber of Commerce as well to let other commercial building owners and managers know about the different programs and incentives available to them, and published a short article in their November 19 Chambergram newsletter. The article used the above

photo of the State Theater that was taken with help from the GYGB coordinator.

HOLT Architects

- HOLT continued championing and participating in the efforts of TCCPI and its flagship project, the Ithaca 2030 District, through:
 - In-kind contribution of Andrew Gil's time serving on the TCCPI Steering Committee.
 - In-kind contribution of Andrew Gil's time serving on the Ithaca 2030 District Advisory Board, and reviewing/contributing to the submission requirements of the NYSERDA Grant for establishing the Ithaca 2030 District,
 - HOLT hosting the Ithaca 2030 District Quarterly Building Owner's meetings in the first three of the quarterly meetings.
- HOLT has continued to investigate methodologies for better understanding the energy needs of its 619 West State Street offices as well as potential actions for lowering the overall energy use. HOLT used the real-time monitoring from the "Internet of Things" monitoring, along with a one-month data



collection/recording device installed on rooftop Air Handling Units to help analyze if, and how, the HVAC mechanical equipment at 619 West State Street might be more efficiently operated.

- Mr. Graham Gillespie, President of HOLT Architects, served on the TCAD and Tompkins County “Energy and Economic Development Task Force,” the community-based work group charged with making recommendations to the Tompkins County Legislature to meet the community’s energy and economic development goals in concert with meeting the Tompkins County Legislature’s goals for GHG emissions reductions.
- HOLT completed a three-year LEED certification design and documentation process for HOLT’s new offices at 619 West State Street, occupied in the spring of 2016. HOLT was awarded a LEED Gold Certification in April 2019.
- HOLT organized and conducted two Green Building Charrettes, both for prospective large medical facilities, one a potential six-story addition to a large hospital, and the other a new construction medical office building.
- HOLT Principal Associate Cindy Kaufman, together with LEED APs Andrew Gil and Catherine Blakemore and Well Building-Accredited Architect Krysta Schell, established a committee to research known harmful chemicals in building products and materials, specifically to:
 - Identify harmful chemicals by category of harm (e.g. mutagenic, carcinogenic, etc.) and to develop or adopt a system that identifies those that are considered to be most harmful and therefore help identify those products that would be banned from projects designed by HOLT Architects.
 - Investigate/analyze/develop a means of identifying those products and materials that incorporate those chemicals identified as posing significant risk to occupants of buildings.
- HOLT aided three clients with proposed building projects to be located in the City of Ithaca through the City of Ithaca’s Ithaca Green Building Policy’s Energy Code Supplement review process.

Ithaca 2030 District

- We added five new property owners to the District in 2019, making a total of 21 owners, 23 buildings, and a total of 286,534 square feet of committed space. The members added in 2019 included:
 - Autumn Leaves Used Books
 - Finger Lakes ReUse Center
 - New Roots Charter School
 - PRI/Museum of the Earth
 - Petrone
- We continued to collect monthly utility data for the property owners and uploaded to Portfolio Manager to determine EnergyStar scores and we carried out our second annual commuter transportation survey of member buildings.
- We developed new, interactive building performance dashboards for the property owners and managers to replace the old building performance reports. The dashboards track progress regarding energy and water consumption as well as commuter transportation emissions at both the individual building and district levels.
- We completed the NYSERDA Cleaner, Greener Communities grant and submitted our final report. Final tasks carried out in 2019 included development of an energy efficiency services report and project benefits and metrics report as well as holding benefits workshops and Portfolio Manager training sessions. We also updated our financing guide.
- We held monthly Advisory Board meetings and four District Partner meetings as well as published four issues of the e-newsletter. The District Partner meetings bring together the property owners and other stakeholders to discuss issues of mutual concern and provide updates on the progress of the 2030 District.



- The executive director and assistant director attended the 2030 Districts Network Summit in Philadelphia, where the assistant director presented the new building performance dashboard she developed for the District.

Ithaca College

Office of Facilities

- 2.9 MW solar farm celebrated its third anniversary and, to date, has produced 10.2 GWh of electricity for the College and prevented approximately 7,000 MT of CO₂e emissions.
- Completed the CNS Second Floor LED lighting upgrade project, with the third floor scheduled for completion in early 2020.
- Replaced the 50 year-old Job boilers with a much more efficient, albeit still, natural gas burning system.



Office of Energy Management & Sustainability

- Achieved AASHE STARS Gold rating with our Dec. 2019 report.
- Reached our 50% carbon neutral goal six years early.
- Continued to support an expedited carbon neutrality date, an integral part of the Ithaca Forever comprehensive strategic plan development.
- Attended and presented at the annual AASHE, NYCSHE, NYAPPA, and other professional conferences.
- Further refined our Scope 3 emissions assessment with help from Parking Services and Travel Services.
- Awarded a \$500,000 NYSERDA C&I Carbon Challenge Grant for a potential regional geothermal plant to heat and cool CNS, Williams, and Park Communications.
- Remained actively engaged with the NY Higher Ed Large Scale Renewable (NYHE LSRE) consortium, a public-private higher-education partnership looking to develop a number of large scale renewable energy sites to meet our varied environmental commitments.
- Installed additional electricity sub-meters to help further identify usage patterns.
- Continued operating two, dual port EV charging stations on campus that are free and open to the public – providing over 20 MWh in 2019.
- Continued the Eco Reps and OEMS Intern programs, hiring 14 students throughout the year.
- Utilized Staples funding to support sustainability internship positions and special events within the School of Business and Environmental Studies.
- Hosted the third annual Sustainability Luncheon, which included faculty, staff, and students from across disciplines discussing the problems and opportunities associated with current American diet trends.

Engagement

- Significant student, faculty, and staff participation in the Climate Strike with support from the President and Senior Leadership Team.
- Continued the Ithaca College Natural Lands (ICNL) Sequestration Research, a joint faculty and student research project.
- Helped support the Ithaca Sunrise Movement.
- Started the Climate Action Plan Group, one of many engaged Strategic Planning Teams.
- Commenced a student, faculty, and staff research project to more fully identify and quantify our complete Dining System carbon footprint.
- Expanded the Cupanion's "Fill It Forward" campaign, a nation-wide program focused on eliminating single-use plastics, approximately 15,000 fewer plastic water bottles to date.
- Chestnut Living Lab – Added new point-of-use water meters for the apartments. Student research is capturing and comparing results from a sustainably designed apartment compared to the traditional apartment.



- Participated in Accepted Student, Orientation, and First Year Residential Experience (FYRE) events. Hosted G.R.E.E.N. Tour, a Jump Start program for incoming freshmen.
- Eco Reps continued sorting compost, recycling, and trash at football games in Butterfield Stadium, which will continue every fall.
- Sponsored the NWF EcoCareers Conference which prepares students and young professionals for wildlife and sustainability careers by providing information on the latest EcoCareer trends from leading analysts and employers.
- Developed and presented content for the Ithaca College Seminar Series (ICSM), Choices for a Sustainable Future.
- Supported the local Mobile Food Pantry by providing free reused/recycled kitchen supplies to students and community members in need.
- Continued the successful South Hill Forest Products, a student-run business dedicated to providing high quality, all natural non-timber forest products to the community, using the natural resources within the Ithaca College Natural Lands.
- Eco Reps assisted Ithaca Children's Garden with seasonal projects.
- Partnered with the School of Business for the third annual IC Sustainability Week, including keynote addresses from Stephen Ritz and Dr. Natalie Mahowald (lead IPCC author).
- Continued enhancing the partnership between our Eco Reps and the FYRE (First Year Residential Experience) Community Council.
- College Circles Energy project provided the Circles apartment residents with water, electricity, and gas bills highlighting actual usage, costs, and CO2 equivalents.
- Presented monthly Student Leadership Initiative (SLI) discussions geared at engaging students in a new sustainability dialogue surrounding the monthly themes: Waste, Transportation, Water, Food, Energy, Health, Social Justice, Business, and Climate Change.
- Strengthened the Student Housing Energy Reduction Program (SHERP), one that started several years ago with support from Cornell Cooperative Extension (CCE).
- Developed content and presented as guest-lecturer(s) for a number of courses.
- Hosted monthly events to engage students in sustainability dialogue surrounding monthly themes.
- Increased circulation and improved monthly "Installments," a quick read posted in campus restrooms that highlight global sustainability issues.
- Expanded campus composting that now includes College Circle Apartments, Emerson, Terrace, and Garden Apartments.
- Continued Take It Or Leave It (TIOLI), a free program that encourages students to donate and reuse gently used dormitory and school supplies. TIOLI also includes an end-of-year clean-up of campus residential buildings, with items donated to Ithaca Reuse.
- Created a student-edited online annual journal covering issues related to the climate crisis and environmental health. This fall's issue focused on micro plastics as obesogens and as correlated to global low sperm count. A smaller section on the health of bees was also included.
- Facilitated internship relationships for IC students with Greensprings Burial, Cornell projects, and TCCPI. In addition, supported a design and resource charrette created by students to collect resources on green burial and cremation for a future website.
- As part of the Ithaca Forever project, initiated a climate action strategic working group to explore a range of issues related to climate change and climate justice.



Transportation

- Utilized an electric and solar vehicle, informally known as the Eco Mobile and Eco Bug, for major public events and general, every day use by students and staff, now approaching 1,000 miles.



- Supported sustainable transportation through partially-subsidized TCAT bus passes.
- Supported ride-sharing through the Finger Lakes Ride Share Coalition, in partnership with a number of local higher educational institutions and ZimRide.
- Improved accessibility of Ithaca College Natural Lands by building turnpike-style paths and reducing rainwater run-off.
- Supported and promoted the annual Bike to Work day.

Dining Services

- Received recognition from the Humane Society of the U.S. for exceptional plant-based options.
- Supported student organization, Stop Wasting Ithaca's Food Today (SWIFT), which packages surplus meals for donation to the Rescue Mission.
- Planned and promoted the "Ugly Food Event," scheduled for Feb. 2020.
- Increased our local sourcing, in partnership with Cornell University Dining and other food suppliers.
- Made improvements to portion control for catered and dining hall meals to further eliminate food waste.
- Increased plant-based menu options by 10% and reduced animal protein menu options by 10%.
- Opened a new on-campus Food Pantry.
- Dramatic reduction in purchases of plastic straws.
- Carried out fundraising for the Food Bank of the Southern Tier's "Backpack Program."
- Increased the reusable mug discount at coffee shops from 15 cents to 25 cents.
- Continued our back-of-house composting program.
- Expanded messaging to encourage use of reusable items in dining halls and retail dining locations.
- Continued to collect used cooking oil for biofuel purposes.
- Celebrated the 25th anniversary of our Composting Program.



Ithaca Neighborhood Housing Services

- **Green Housing Development:** INHS is a national leader in the development of green affordable housing. Over the past 5 years, INHS completed the construction of over 150 new rental and homeowner housing units that incorporate cutting edge green technology. In Tompkins County the 63-unit 210 Hancock Apartments, which is certified by Enterprise Green Communities and is one the few LEED (Gold) and Energy Star certified apartment buildings in New York state, features solar panels, air source heat pumps, Energy Star appliances, and water conserving landscape design. The apartment complex also hosts an EV charging station, an Ithaca CarShare spot with discounted membership to tenants, and a multi-use trail, the result of repurposing an underused one block side street. Stone Quarry Apartments, another outstanding multi-unit building INHS added to its portfolio, is LEED and Energy Star certified.
- **Village Grove Apartments:** In 2019, under the first round of the Buildings of Excellence Competition, INHS was awarded a \$932,280 prize for its extremely energy-efficient, affordable housing development in the Village of Trumansburg, Village Grove Apartments. The proposed project consists of a forty-unit multifamily rental building and is expected to be INHS' greenest project to date. The building will achieve NetZero standing through the use of ground source heat pumps, Passive House certification, and the purchase of off-site community solar.
- **Energy Efficient Rental Housing:** Over the past 3 years INHS has undertaken a massive, \$20 million energy efficiency upgrade of its scattered site rental portfolio. Insulation, air sealing, high efficiency lighting, Energy Star appliance upgrades, reduced water consumption, and heat pumps



are the primary tools used to retrofit these 100+ year-old buildings. The INHS program has been cited as a model for other rental property programs throughout New York. All of INHS' newly built multi-family buildings have at least one national green building designation. For instance, Breckenridge Place Apartments has been certified as LEED Platinum, as has Stone Quarry Apartments.

- **Permanently Affordable “Green” Housing:** In 2010, INHS launched its Community Housing Trust program, which guarantees that the homes that it sells to buyers with modest incomes remain permanently affordable to future homebuyers. The Community Housing Trust produces high quality, energy efficient homes that are sold at below-market prices. Deed restrictions ensure that the valuable public subsidies that enhance affordability are utilized to their maximum benefit and that these homes remain community assets. Houses developed by INHS incorporate new construction methods and are being monitored for long-term energy performance. All of these homes are built to the highest efficiency standards, and many of them have been awarded LEED Gold certifications. For instance, Holly Creek Townhomes subdivision in the Town of Ithaca was awarded a Department of Energy Challenge Innovation Award for affordable housing, and all of the townhomes at 210 Hancock are LEED Gold certified.
- **House Recycling and Rehab:** Over 40 years ago INHS began “recycling” houses in downtown Ithaca, acquiring the worst houses in the City, rehabbing them, and either selling them to those of modest means or renting them as high quality affordable units. Additionally, through leveraging grants, low interests loans, NYSERDA matching funds, and numerous other means, INHS Construction Services Department has performed thousands of energy retrofits for existing owner occupied homes in Tompkins County.
- **Green Organization Certification:** INHS has been certified by the national non-profit NeighborWorks America as a NeighborWorks Green Organization. This designation certifies that INHS complies with green standards across all aspects of its operations, including everything from the purchase of office supplies to pesticide free lawn care. The NeighborWorks network consists of 240 non-profit housing organizations that work in all 50 states. To date, only a handful have achieved the NeighborWorks Green Organization status.
- **Non-Profit Leadership:** Under Executive Director Johanna Anderson INHS staff has been active at the national, state, and local levels in the creation of new tools and new programs to promote green, energy-efficient housing.
- **More to Come:** Over the next three years INHS has an ambitious pipeline of over 300 new or renovated housing units, nearly all of which will be LEED certified. INHS is committed to smart growth principles so its new housing is built in places with full municipal services; easy access to public transportation; and close to shopping, recreation, and jobs.



Ithaca-Tompkins County Transportation Council

- The ITCTC continued to coordinate the efforts of the Finger Lakes Rideshare Coalition, including an evaluation of the current service and plans for possible changes – see www.fingerlakesrideshare.org.



**Finger Lakes
RIDESHARE**

- Completed update of the five-year Transportation Improvement Program listing all federally-funded surface transportation projects in Tompkins County. Municipal and

community partners were successful in securing federal funds for several multiuse trail projects that will help expand and advance the implementation of a countywide trail network. These include the Black Diamond Trail Bridge over Flood Control Channel, the trail connecting Cayuga Heights to Ithaca High School and Boynton Middle School, and the Dryden Trail Phase 2-Bridge over Rt.13. The 2020-2024 TIP can be found at: <http://tompkinscountyny.gov/itctc/tip> .

- The ITCTC completed its update of the 20-year Long Range Transportation Plan for Tompkins County. The LRTP includes a variety of issues related to transportation, including environmental concerns (p.72) and strategies for a more sustainable future in transportation (p.82). The plan is also a great source of descriptive data and information regarding transportation systems in Tompkins County. The 2014 plan can be found at: <http://tompkinscountyny.gov/itctc/lrtp> .

Learn@EcoVillage Ithaca

- We launched a weekly food hub at EcoVillage in August where community members can drop off items and pick up things they need in an effort to reduce food waste and increase sharing.



- We held a two-day workshop with faculty and students from SUNY Potsdam, SUNY Geneseo, and Clark University in October, providing them with hands-on, real-life demonstrations of how communities can reduce their carbon footprint without sacrificing quality of life.

- We also had visits from SUNY Oneonta and Elmira College classes during the fall and the Mohawk

Nation Housing Authority at Akwesasne, who were interested in learning more about our energy-efficient green buildings.

- The Eco-Gap Program continued its second year with a student intern from Allegheny College interested in regenerative agriculture and sustainable communities.
- We held a two-hour program for the American Institute of Architects, Southern Tier about green building and design at EcoVillage which was accredited by the AIA.
- Nathan Scott stepped in as the Learn@EVI director upon Liz's retirement at the end of 2019, exploring new strategic directions and reaching out to faculty and administrators at Cornell and Ithaca College.
- As part of a new focus on community resilience, EVI held a weekend workshop in December with Sarah Nahar from Syracuse University on "The Work That Reconnects."

Local First Ithaca

- Held our first annual Independents Week from July 1 to 7, joining dozens of partner organizations and thousands of independent businesses nationwide in celebrating the local independent businesses and shops that exemplify the uniqueness of our hometown.
- Produced our 9th Annual Guide to Being Local.
- Continued our work with the Ithaca 2030 District and Tompkins County Climate Protection Initiative Steering Committees.
- Sponsored "Plaid Friday" and "Small Business Saturday" in November to encourage community members to shop locally during the holiday season and experience what our home grown, independent businesses have to offer.

New Roots Charter School

A New Roots education empowers young people as leaders and entrepreneurs for the 21st century. Our focus on environmental stewardship, social justice, and sustainable economics gives youth the skills of hands, heart, and mind they will need to get ahead of the curve and create a successful adult life and career in this new century of dramatic technological, social, and environmental change. New Roots features a unique four-year learning sequence that fully integrates Education for Sustainability (EfS) standards and interdisciplinary, community-based projects featuring sustainability themes while meeting all New York State graduation requirements. Our lower school program (grade 9-10) cultivates foundational understandings and skills that prepare students to become actively involved in their school and local community as leaders, entrepreneurs, and activists when they move into the upper school program (grades 11-12).

- The summer of 2019 was the first of 4 years of the Cayuga Wetlands Restoration Project, in partnership with Sachem (Chief) Samuel George of Cayuga Nation and New York State Department of Environmental Conservation (DEC). Based on grant dollars, \$10,000 from the

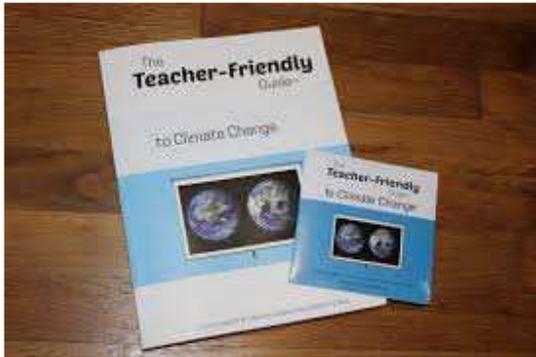
Park Foundation, and \$38,745 from the New York State DEC, students were hired for summer employment through our youth conservation corps that empowers students to learn ecosystem restoration skills while providing the labor to develop wetlands sites to protect and improve our waterways in New York State. Students launched canoes from the site of one of our partners, Puddledockers, in the Cayuga Inlet. They cleaned out garbage ranging from shopping carts to lightly used boats before identifying appropriate sites for wetland cultivation. At various sites throughout the inlet, students planted indigenous wetland species including calamus, arrowhead, and cattail. They also routinely tested the water quality and provided before and after samples to the DEC in support of their statewide clean water initiative. Students who participated along with many more that didn't are applying to participate in the summer of 2020, which will be year 2 of the 4-year project.

- The Green Schools National Network and the Center for Green Schools at the U.S. Green Building Council (USGBC) recognized New Roots as a winner of Transformation in the "Best of Green Schools" Class of 2019 based on the Cayuga Wetland Restoration Project! The transformation award recognizes "investments of time, energy and resources to transform a school, school community, event or policy into an exemplary model for the green schools movement."
- New Roots joined Ithaca's 2030 District, which is an interdisciplinary public-private collaboration working to create a groundbreaking high-performance building district in Downtown Ithaca. A project of the Tompkins County Climate Protection Initiative (TCCPI), the Ithaca 2030 District is part of a larger effort in Tompkins County to dramatically reduce local greenhouse gas emissions.
- Students and staff on the New Roots Green Team have been focused on assessing and improving the energy efficiency of our historic building. The Green Team is leveraging data from the 2030 District dashboard to determine the most effective and efficient ways to help us meet the goals of the 2030 district.
- Science classes collaborated with CCE's Energy Smart Community Educator, providing curriculum and projects to learn about our local energy system. This collaboration helped to increase student's "Energy Literacy" by providing information on a range of relevant issues from climate change and the Green New Deal, to new "smart grid" technologies and DIY things everyone can do to reduce their carbon footprint.
- Students and staff partnered with Ithaca's local chapter of the Sunrise Movement, hosting their General Body meetings and trainings in the school lobby, as well as participating in multiple local climate and social justice rallies. Crew Leaders (teachers) helped students to learn safe and effective ways to make their voices heard on issues that they're passionate about.
- A team of New Roots teachers, students, and administrators collaborated with schools with environmental stewardship missions across the Northeast as part of Teaching Our Cities, an EPA-funded project. The mission of the project is to develop and refine curriculum that engages students with a study of the environmental and human landscape of their cities and regions.
- New Roots expanded the Sense of Place Program, dedicating multiple days throughout the school year investigating the relationship between people and the natural environment in our region through the lens of Education for Sustainability (EfS) standards.
- All New Roots students enjoy a free breakfast and lunch featuring fresh, locally-sourced ingredients from our Farm to School meal program, every day! The Youth Farm, an organic farm run by local middle and high school students, is a primary source of our produce. Our staff also enjoys a free lunch with our students daily. Healthy food for all is at the root of sustainable education and sustainable communities.



Paleontological Research Institution, Museum of the Earth, and Cayuga Nature Center

- In 2019, PRI joined the Ithaca 2030 District. We are taking steps to reduce our emissions, in addition to the step we took several years ago of installing solar panels on the roof of the Museum of the Earth. We have switched from fluorescent to LED light bulbs in the Museum of the Earth, the Cayuga Nature Center, and Palmer Hall. We also conducted an energy audit of our buildings. We hosted free Drawdown workshops for the public at the Museum of the Earth from April to June 2019. The workshops were led by Nancy Kasper from the Rochester, NY chapter of the Pachamama Alliance.



- We continued our crowdfunding campaign to raise money to send *The Teacher-Friendly Guide to Climate Change* to teachers across country. The campaign is online at <http://bit.ly/TeachClimateScience> , and we have raised over \$140,000.

- We conducted sessions on climate change education at national and regional conferences such as annual conferences of the Geological Society of America and the Science Teachers Association of New York State. We also conducted teacher professional development workshops on climate and energy

literacy.

- We continue to develop and run climate change education programs for children, teens, and adults at the Cayuga Nature Center, the Museum of the Earth, and other locations. These programs include summer camp activities, guided walks, climate change workshops at schools, and webinars.

Park Foundation

- The Environment Program disbursed 31 grants that had a climate and energy focus totaling \$1,615,000.
- The Sustainable Ithaca Program disbursed \$190,000 in climate-related grants in 2019.
- The Foundation filed five shareholder resolutions seeking reports on carbon asset risk (Anadarko, Chevron), net-zero greenhouse gas emissions (Amazon, Cooper) and climate-related water risk (Energen).

Sciencenter

- We opened two new custom-designed exhibitions, built in-house:
 - Energy Labs encourages guests to explore three natural resources – water, wind, and sun – and how they can be harnessed to generate electricity. Each of the three stations provides interactions with, and information about, renewable sources of electricity.
 - Changing Skies allows guests to interact with and learn about weather. Guests learn how weather patterns are impacted by topography. Guests are also invited to share stories about changing weather patterns to illustrate the impacts of climate change.
- Over 1100 students from Tompkins and Cayuga Counties worked on an engineering challenge to develop their own windmill while learning about renewable energy and climate change in free field trips. These field trips include interactive discussions of where energy comes from and ways we can reduce our environmental impact.



Solar Tompkins/HeatSmart Tompkins

- Solar Tompkins transitioned from promoting solar pv installations to HeatSmart advocating for energy efficiency projects (building envelope improvements and heat pumps) in 2015-2016. After early adopters made our initial program highly successful, there was a decline in such investments for the two programs that followed. In 2019 we completely reversed this trend and saw more heat pumps installed than at any other point in our history.
- Additional funding through NYSERDA’s Clean Energy Action Plan (CEAP) was essential in this expansion. Although the funds were centered around increasing our efforts in the gas-constrained Town of Lansing, there were major benefits throughout Tompkins County. Paid advertising could be pursued much more strenuously with radio, movie theater, and digital ads online as well as bus and highway billboards. In addition, a second full-time person, Lisa Marshall, was hired to be the Lansing HeatSmart Coordinator.
- In addition to this direct stimulation of the standard HeatSmart program, we also realized major benefits from a collaboration between Sustainable Tompkins (lead organization in implementation) and Solar Tompkins (qualified to submit the funding request) to make heat pumps accessible to LMI residents. This resulted in a major grant from NYSERDA to specifically augment the HeatSmart program by making it more accessible to LMI residents. New funding allowed us to coordinate the ongoing work of the Finger Lakes Climate Fund (FLCF) with additional new incentive grants. This effort has been highly successful.

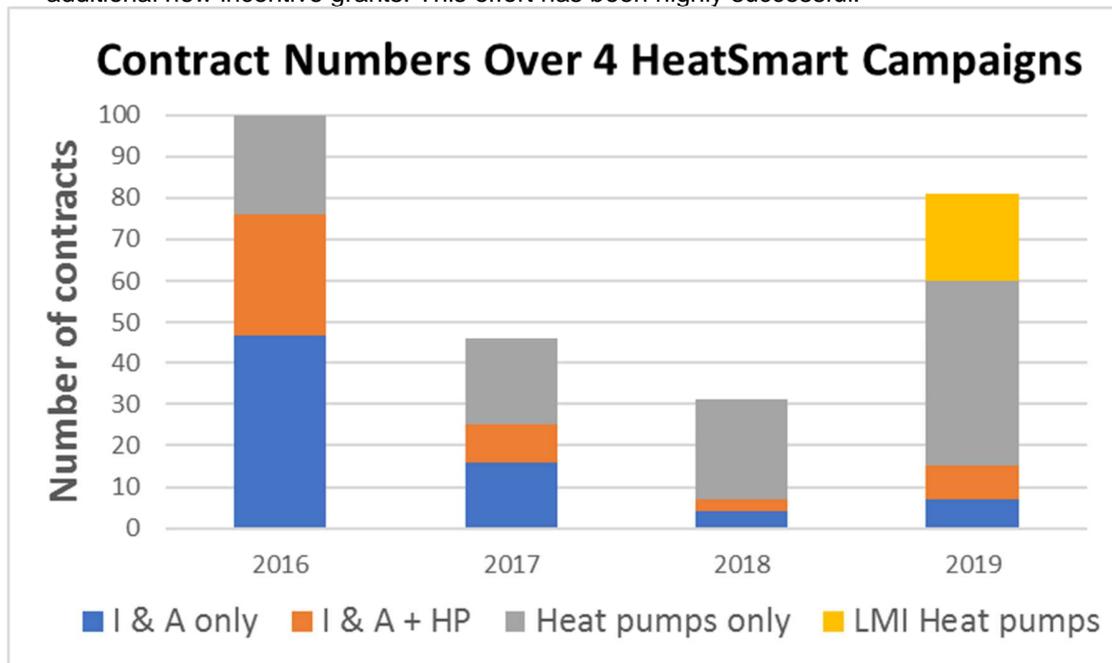


Fig. 1. A graphic showing the number of heat pump contracts (HP) and building shell efficiency projects (I & A) from 2016 till 2019. The years refer to the year a particular campaign began, but each spanned into the following year. LMI residents getting heat pumps through the collaborative effort with Sustainable Tompkins are shown in yellow.

- Two key features in Fig. 1 are, first, the leap up in total heat pump installation, and second, the large decrease over time in people undertaking building shell improvements. While our efforts in 2019 allowed us to double shell work as well as heat pumps, they are still in similar proportion to 2018, and we do not see a recovery to anything like the 2016 levels. This is interpreted to be a reflection of larger market forces. Low fuel prices decrease the monetary reward of doing such work. Equally important, however, is the fact that our clients are largely on renewable energy, low-carbon paths. We encourage them to start with the building shell, and indeed many did, such that many of the residents enrolling in 2019-2020 had already done substantial shell work in previous years.

Other key activities for HeatSmart Tompkins in 2019-2020 included:

- Actively participated in meetings and conferences with affiliated statewide organizations such as Renewable Heat Now and NY-GEO.
- Mentored the newly approved NYSERDA clean heating and cooling community campaigns and did a presentation for them at a joint meeting in Schenectady.
- Collaborated with Tompkins County Area Development and the County's Department of Planning and Sustainability to create a Business Energy Advisor Lansing program for commercial and industrial facilities.
- With the support of NYSERDA and NYSEG sponsored a forum for the business community at the Clarity Inn in Lansing.
- Recognized the owners of Purity Ice Cream with an Earth Stewardship Award for their early adoption of a geothermal energy system.
- Developed a Workforce Training program for the clean energy workforce, Air Source Heat Pump Installations Without Call-Backs.

Snug Planet

- In 2019, Snug Planet continued to scale up our operations, with an increased focus on low-income work and on strategic electrification.
- We added a second HVAC crew, a second insulation/air sealing crew, and sales/support staff, growing our team to 18.
- We completed over 130 insulation and air sealing projects for low-income homeowners through the EmPower NY program.
- We also installed over 70 air source heat pumps through the NYSERDA Air Source Heat Pump program.
- Snug Planet became an International Ground Source Heat Pump Program accredited installer.
- Snug Planet President Jon Harrod began an active research program on best practices for refrigerant management and leak prevention in residential heat pumps.

Sunrise Movement Ithaca Hub 2019

Sunrise Ithaca was founded in January 2019 and is the local chapter of the national Sunrise Movement, a youth-led organization fighting to stop climate change and create millions of good jobs in the process.

- We organized a mass letter-writing campaign demanding Mayor Myrick adopt an Ithaca Green New Deal and expedite the city's existing climate neutrality date.
- Participated in the fossil fuel divestment rally at Cornell in support of Climate Justice Cornell
- Traveled to Albany for Youth Lobby Day, where we met with state legislators and campaigned for climate action and a Green New Deal.



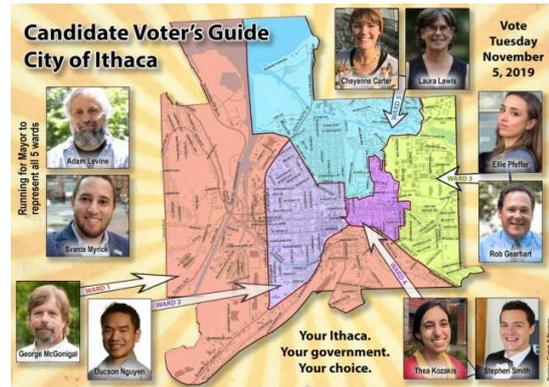
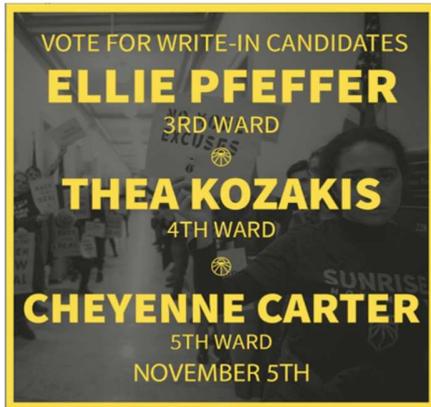
- Hosted a Green New Deal Town Hall with speakers representing diverse sectors, including government, agriculture, skilled workers, scientists, and activists, Mayor Myrick closed the event by announcing that he would propose a Green New Deal to Common Council.



- Participated in the Global Strike for Future, a strike organized by Ithaca High School students
- Hosted #FridaysForFuture Rallies on the Commons throughout the summer.
- Provided public comment throughout the Ithaca Green New Deal approval process.
- Organized and hosted the Day of Music for Climate Action in Stewart Park, which showcased local musical and artistic talent.
- Hosted #ChangeTheDebate Watch Parties to build public support for a Climate Debate and increase climate change-related questions in the presidential debates.
- Trained 30 young people in an Organizing 101 four-hour training.
- Organized the September Climate Strike, which was attended by nearly 2,000 students from the local K-12 schools, colleges, and community members.



- Campaigned for full funding of the Ithaca Green New Deal during budget season.
- Launched three separate Common Council write-in campaigns.



Sustainable Tompkins

Finger Lakes Climate Fund

- Our partnership with [HeatSmart Tompkins](#) and NYSERDA is in full swing with new contractors joining us in the process of making offsets and converting to clean heating and cooling. We have a new partnership with Colgate University, and will be working to create offset campaigns with Wells College, SUNY Cortland, and Ithaca College in 2020. Our [new suite of videos](#), plus local and national media coverage, has resulted in a steady stream of requests for information and for staff to speak at events. We also have serious interest in



franchising our carbon calculator and web interface in other states.

- Marisa Lansing, our new part-time FLCF Program Coordinator, is learning quickly and has become quite adept at social media marketing. We recently awarded our 50th offset grant to a family in Trumansburg, and have collectively kept 4,300 tons of CO₂ from entering our atmosphere by helping local families with more than \$80,000 in [Climate Fund](#) grants to help make their homes more energy efficient and ready to run on renewable energy. In 2019, we received 252 carbon offsets totaling \$26,848.
- We are pleased to be recognized as an essential local and regional player in Ithaca's Green New Deal as well as NYS's Climate Action plan, with projects in 8 counties thus far and partnerships with three other HeatSmart teams in the region underway.

Taitem Engineering

- A theme for 2019 has been greening the grid and moving away from fossil fuels to reach New York's GHG reduction goals.
- Taitem has been working with Tompkins County to provide technical assistance through the Business Energy Advisors (BEA) program.
- Taitem's Energy + Sustainability and Quality Assurance departments continue to provide a broad range of services through the New York State Energy Research and Development Authority (NYSERDA). These include:
 - Statewide Quality Assurance services for NYSERDA's Multifamily Buildings division
 - Technical review and inspections of ground source heat pump applications to NYSERDA
 - Stretch code training for municipal code officials under NYSERDA's Innovative Energy Efficiency and Clean Energy Market Development Programs, with the goal of increasing construction for zero-energy commercial, multifamily, and single-family buildings
 - Energy studies for small businesses and not-for-profits through the Green Jobs/Green NY program. Recent energy studies include Hollenbeck's Cider Mill, Ithaca Community Recovery, and Binghamton's Ross Park Zoo.
 - Flexible Technical Assistance (FlexTech), studies for larger customers considering capital improvements to increase their facilities' efficiency and mitigate their carbon footprint. In 2019, Taitem completed a study for domestic hot water improvements for the

Sullivan County Care Center which recommended an air source heat pump with low-GWP (global warming potential)

- o Energy consulting for new buildings, including building energy modeling, through



NYSERDA's New Construction Program. Regional projects include Upstate Medical University's new Health and Wellness Center in Syracuse and Library Place in downtown Ithaca. Another exciting energy modeling project was the new student residence at

SUNY Polytechnic Institute in Utica. This will be SUNY's first zero-energy dormitory.

- Taitem is also involved with several research projects demonstrating the energy-saving potential of new heat pump technologies when retrofitted in existing New York buildings.
- Taitem continues its consulting role in NYSEG's Energy Smart Community, currently focused on improving the landscape for EV drivers who charge their vehicles at home.
- Taitem's Design Department continues its work on green buildings. Two projects, INHS Village Grove apartments in Trumansburg and Perdita Flats in Ithaca, were recognized as NYSERDA Buildings of Excellence. The highly energy-efficient GreenStar is nearing completion, and the Ithaca Arthaus is in construction. Moving farther afield, the team began work on design for a new mixed-use/commercial-multifamily building for the Allen Neighborhood Center in Lansing, Michigan, whose goal is Passive House certification.

Tompkins Community Action

- Tompkins Community Action, Inc. has been the designated U.S. Department of Energy/NYS Homes and Community Renewal Weatherization Assistance Program (WAP) provider for Tompkins County for thirty-seven years. Working closely with the New York State Energy Research and Development Agency (NYSERDA) as a Home Performance with Energy Star contractor, we provide Assisted Home Performance and EmPower NY Programs.
- As a Building Performance Institute (BPI) Goldstar Contractor, members of TCA's Energy Services Department hold multiple BPI Certifications including Auditor, Heating Professional, Envelope Professional, Manufactured Home Professional, Building Analyst and Quality Control Inspector. We partner with numerous municipal entities, not for profits, and private sector organizations to leverage funding associated with weatherization, energy efficiency, and other types of home repair and housing rehabilitation programs.
- We carried out the following projects in 2019:
 - 50 jobs completed through the Weatherization Assistance Program
 - 16 HP (heating & shell measures) jobs completed through the EmPower NY Program
 - 13 ER (electric reduction only) jobs completed through the EmPower NY Program
 - 15 households received heating equipment repairs or replacements (HERR) through the HEAP/HERR benefit
 - 18 households received clean & tune services through the HEAP Clean & Tune benefit
 - 2 GJGNY energy audits were completed
 - TCA also developed a new energy efficient Supportive Housing Program called Amici House. The five-story building, completed in one year, contains 23 studio apartments for homeless youth from 18 to 25 years of age, with or without children. The apartments come with private bathrooms, are furnished, and include



supplies such as linen, towels, and kitchen utensils. As an MPP participant in the NYSERDA Energy Star Partnership, we received a NYSERDA award for our energy efficiencies in construction.

Tier Energy Network

- The Tier Energy Network (TEN) is a regional network of industry, government, community, and higher education supporting the development of the energy strategy for New York State's Southern Tier. The Tier Energy Network was founded through the efforts of local business leaders in 2014 and currently has close to 180 members and participants. TEN's intent is to develop and promote the Southern Tier of NY for clean energy business growth, creation of clean energy jobs, energy conservation and efficiency adaptation, development and adoption of renewable and energy storage technology and services, and fostering a venture capital friendly environment for energy innovators.
 - TEN began a Workforce Development Committee in Broome County in 2018. The committee has grown and morphed into a large network of educators from the K-12 and higher education levels. TEN was instrumental in helping SUNY Broome and Binghamton University with their successful applications to NYSERDA for PON 3981 Energy Efficiency and Clean Technology Training program. SUNY Corning and SUNY Broome conferred with us as they developed Mechatronics curriculums. A Project that has resulted from this effort is the Siemens Collaborate EcoSystem of NY for STEM education.
- TEN was instrumental in helping SUNY Broome and Binghamton University with their successful applications to NYSERDA for PON 3981 Energy Efficiency and Clean Technology Training program. SUNY Corning and SUNY Broome conferred with us as they developed Mechatronics curriculums for students interested in pursuing a career in clean energy technology.



The Tier Energy Network has much planned for 2020 including:

- Work with Clean Energy Technology Resources, LLC to develop a data base of clean energy companies, support services and service companies, clean energy projects, research centers, laboratories, start-up companies, small business, large corporations and service providers across the 11-county region (Broome, Chemung, Cortland, Delaware, Otsego, Schoharie, Schuyler, Steuben, Tioga, and Tompkins Counties).
- Interview clean energy companies and affiliated organizations to gather data on their business services, and current and projected levels of employment, noting any barriers to business growth, and develop one or more employment forecasts by job category.
- Incorporate results of state energy plan forecast.
- Identify barriers and develop plans to reduce impact of barriers to the clean energy technology industry.
- Meet with representatives from the New York State Public Service Commission, New York State Energy Research and Development Authority (NYSERDA), New York BEST (Battery and Energy Storage Technology), and New York Independent System Operator (NYISO).
- Convene and regularly meet with project partners to discuss project goals and timelines, including leaders in regional clean energy companies, 76 West/New York State Energy Research and Development Authority, educational institutions, IDAs, and Chambers. Set action items to meet goals and to assess progress.
- Work with Customized Energy Solutions (CES) to document New York State's Energy Plan and its impact on the Southern Tier.
- Work with Clean Energy Technology Resources to assess the Current Ecosystem for Clean Energy Start-Up Companies in the Southern Tier.
- Explore opportunities to improve entrepreneurial skills in our small towns and cities.

Tompkins County

- **Business Energy Advisors New Construction Program** – This program is designed to assist businesses/organizations in making energy decisions for new construction, renovations, and

expansion projects. Since its launch in 2018, the program has participated in 26 introductory meetings, produced 23 energy options reports, and participated in 23 energy charrettes, which



have led to at least five businesses applying to financing programs offering more assistance to implement energy efficiency measures in their buildings. Thus far, three participating building projects have obtained their building permits and are under construction. Participating business sectors have included manufacturing, retail,

multifamily, R&D (technology), non-profit, and government.

- **Business Energy Advisors (BEA) Lansing for Existing Buildings** – This is a one-year pilot program designed to assist existing commercial and industrial facilities over 10,000 square feet in size, located within the Lansing natural gas moratorium area. It was established from a NYSERDA grant received by Solar Tompkins, Inc. Solar Tompkins contracted with TCAD to provide support for BEA *Lansing for Existing Buildings* which, in turn, hired Tompkins County to manage the program as a sister program for the current BEA *New Construction*. Up to \$80,000 in funding is available to hire energy consultants to work with businesses participating in the BEA *Lansing for Existing Buildings* program. Outreach for this program was kicked off at a September 2019 workshop on *Clean, Renewable Heating and Cooling*.
- **Energy Task Force** – The Energy Task Force completed its three-year term by providing guidance to the Department of Planning and Sustainability on Energy Strategy development. The ETF also recommended to the Legislature that an equivalent advisory board continue in 2020.
- **Climate and Sustainable Energy Advisory Board** – The County Legislature established this new advisory board in December. Its work will focus on assisting the County to develop capacity and expertise to engage with a variety of leaders and stakeholders to meet greenhouse gas emission reduction goals.
- **Energy Strategy** – In a significant update to the 2010 Strategy, the County Legislature adopted a Strategy that calls on Tompkins County government to lead by example and determine a financially sound path to net-zero emissions for its facilities and fleet in the shortest time possible. It also calls on the County to lead the community by supporting and facilitating community work to reduce fossil fuel dependency and reduce greenhouse gas emissions.
- **Resiliency and Disaster Recovery Plan** – Selected consultant to utilize NYS Department of State and FEMA funds to develop a plan to reduce risk associated with hazards in the changing climate and prepare the community to take the actions necessary, including those that build economic resilience to bounce back from a disaster should it occur.
- **Tompkins County Comprehensive Plan** – Tompkins County updated its 2015 Comprehensive Plan and reinforced its commitment to its three overarching principles of sustainability, regional cooperation, and fiscal responsibility. One of the sections of the report, Energy and Greenhouse Gas Emissions, continues its focus on the principle that “Tompkins County should be a place where the energy system meets community needs without contributing additional greenhouse gases to the atmosphere.”
- **County Government Electric Vehicle Fleet** – Staff worked with a consultant to provide advice to five County Departments in purchasing electric vehicles. Eight new EVs from these Departments were acquired in 2019. The consultant finalized the EV charging infrastructure report that inventoried existing County charging infrastructure and provided guidance for development of EV infrastructure at various County sites. Work began on a fleet management report; it was paused, however, to better integrate with County energy initiatives to green its fleet based on the new Energy Strategy.
- **Foster infill development** – Incremental Development Alliance (IncDev) made four trips to Tompkins County in 2019. Work completed included a broad public presentation on the topic of incremental development, a training seminar for small-scale developers, trainings for planning board, BZA, and planning staff, and two zoning analysis exercises. Several small development projects that received focused mentorship from IncDev staff are continuing to move forward, and

several municipal boards continue discussion on zoning and policy in light of their work with IncDev.

Tompkins County Climate Protection Initiative

- The Ithaca 2030 District continued in 2019 to be the flagship program of TCCPI. Fifty percent of the coordinator's hours are committed to this project. The 2030 District is vital to achieving two important strategic goals for TCCPI: 1) strengthening the involvement of the business community in efforts to reduce the community's carbon footprint; and 2) establishing a process for collecting building performance data in downtown Ithaca and benchmarking it against both national and local baselines. For more details, see the Ithaca 2030 District report above.
- The TCCPI monthly general meetings continued to be very well attended, with an average of 23 participants. That the meetings continue to attract a sizeable number of community leaders and activists after almost eleven years, together with the high number of requests made to present at the meetings (at least two-thirds of the agenda topics come about this way) and the fact that the agendas for the meetings are usually set several months in advance, suggest interest in TCCPI remains strong.
- Topics in 2019 included:
 - **COP24 and Talanoa Dialogue Report** – Allison Chatrchyan, Director of Cornell Institute for Climate Smart Solutions
 - **The Energy Navigators Program** – Karim Beers, Coordinator of Get Your Greenback Tompkins
 - **The Federal and State Green New Deals** – Guillermo Metz, Energy Team Leader for Cornell Cooperative Extension of Tompkins County
 - **Energy Innovation and Carbon Dividend Act** – Nancy Jacobson, Ithaca College and Tompkins Chapter of the Citizens Climate Lobby
 - **A Green New Deal for Ithaca** – Nick Goldsmith, Sustainability Coordinator for City of Ithaca, and Sara Culotta, Local Climate Activist
 - **Reenvisioning the County Energy Strategy** – Katie Borgella, Tompkins County Planning and Sustainability Commissioner
 - **Tompkins County Long-Term Transportation Plan** – Fernando de Aragón, Executive Director of the Ithaca-Tompkins County Transportation Council
 - **The Debate over Carbon Neutrality** – Anthony Ingraffea, Dwight C. Baum Professor of Engineering Emeritus, Cornell University
 - **Climate Smart Communities Program** – Terry Carroll, Energy Educator, Cornell Cooperative Extension – Tompkins County
 - **The Green Building Policy Project** – Nick Goldsmith, Sustainability Coordinator for the City and Town of Ithaca
 - **Sunrise Ithaca** – Marisa Lansing and Cheyenne Carter, Co-Founders
 - **The Extinction Rebellion Movement** – Art Weaver, Co-Founder
- The [TCCPI Newsletter](#), which comes out every two months, had a subscriber base in during this grant period of about 430, very similar to the previous period. The average open rate during 2019 remained at 39% for its six issues. In March 2019 this high open rate again earned the TCCPI Newsletter a "Constant Contact All Star Award," which the company presents to only 10% of its users; it marked the seventh year in a row that our newsletter has been recognized in this way.



- The TCCPI [website](#), which has become a rich resource on climate change and clean energy issues, was updated on a monthly basis. All of the meeting notes, annual reports, and newsletters can be found archived on the site, dating back to 2009. The website attracted, on average, monthly hits of over 2,700 in 2019.
- On the social media front, regular postings were made on TCCPI's Facebook page, including articles from the TCCPI Newsletter, and we increased our "likes" from 382 to 406 during the year. In addition, the TCCPI coordinator continued to post information about energy, climate change, and sustainability issues on Twitter, and has over 2,500 followers.



- TCCPI collaborated with faculty and students at the Cornell Institute for Climate Smart Solutions to contribute a submission on local climate efforts to the Talanoa Dialogue for the UN COP24 Climate Talks.

- The coordinator published an essay on the climate movement in the U.S. in a British collection of essays in American Studies and a commentary in the *Ithaca Voice* (March 15, 2019) on the need for the City of Ithaca to pursue more aggressive climate action.

- Successful efforts to get the word out about TCCPI's work included a cover story in the Ithaca Times (June 20, 2019) and participation in an oral history project on climate change and its impact, "The Warmest Years on Record" carried out by Rachel Cole, a Brooklyn artist and documentarian.

- The TCCPI coordinator served on the steering committee

of Get Your GreenBack and regularly attended its meetings this past year. Articles on GYGB appeared in each issue of the TCCPI Newsletter.

- The coordinator was also on the boards of the Groundswell Center for Local Food and Farming, New Roots Charter School, PRI/Museum of the Earth/Cayuga Nature Center, and EcoVillage at Ithaca, Inc.

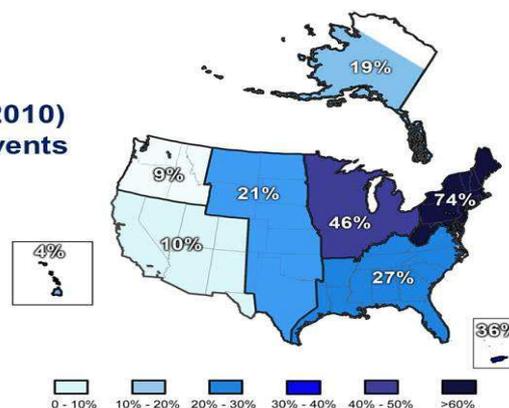
Tompkins County Environmental Management Council

Climate Adaptation Committee

- The Climate Adaptation Committee had a year of growth. As a relatively new committee, we have needed some time to find our footing. We have taken up the broad issue of flooding and continue to see this as a priority.
- As average temperatures continue to rise, rainfall patterns change. For New York State this means more precipitation and an increase in what we now call "rain events" where 2 or more inches of rain fall in a limited period of time. This has been known by experts for some time but is gradually becoming part of residents' shared experience and understanding of weather and seasons. What had been a rarity, in short, is now becoming more common.

Regardless of Shifts in Total Annual Rain More of It Is Coming in Heavy Downpours

**Percent Increase (1958-2010)
in Heavy Precipitation Events
(>2inch/48 hr)**



NOAA, provided by A. DeGaetano, NERCC, Cornell

- To address flooding risk and lake pollution, we decided to generate an informational brochure for residents and municipalities. We compiled and distilled information in a brochure which will be widely distributed to residents this spring.
- The brochure describes several related activities: rain gardens, bioswales, soil improvement, and gardening with native plants and trees. We see this as a fruitful first step, providing county residents with the tools to take flood mitigating action on their own in the near term.

Re-centering

- As we researched and discussed topics for the brochure, we also worked on the committee itself.
- We developed a better working understanding of the CAC's purpose. First, track and understand global climate change as it affects our county. Second, having considered this information, advise the county legislature and the county residents on how to mitigate and adapt to these changes. Ultimately, by providing timely and useful information and promoting useful actions for county residents, we endeavor to promote resilience.

Learning and gathering information

- Committee members shared their own knowledge with one another and undertook further study and research and identified reliable information sources.
- To learn more about flooding and mitigation, committee members also attended talks and presentations by experts and other organizations addressing these issues.



For example, we learned about the topography of the county and the types of soils found here. We also learned about how the land use has changed over time, for example, up to 90% of our wetlands are gone and stream buffers have declined. Our lake is increasingly plagued with harmful algal blooms linked to increasing temperatures and increased nutrients

such as fertilizers.

Enhancing connections and cooperation

- We are forming and enhancing communication with area groups and organizations addressing flooding and related issues; this will help us to share knowledge, remain abreast of events, and avoid unnecessary duplication of efforts.
- The climate continues to change in ways expected and unexpected and our committee is committed to help our county legislature and residents adapt to it.

Education Outreach

- The Outreach working group was added as a special committee to the slate of standing committees at the end of 2017. In 2019, we continued with the positive momentum achieved with our 2018 outreach sessions and met our goal of creating both a spring and fall outreach program to help increase the visibility and relevance of the EMC in Tompkins County.
- Both programs in 2019 brought about 70 people to the Tompkins County Public Library on topics relevant to current trends related to the environment. In addition, the chairs of each of the EMC standing committees provided a brief update on the work of the Council to attendees.

- Topics for 2019 included:

Spring Forum, "The Green New Deal: Pathway to Ecological Sustainability." Speakers included:

- Michael Hoffman, Executive Director of the Cornell Institute for Climate Smart Solutions
- Guillermo Metz, Energy Team Leader at the Cornell Cooperative Extension of Tompkins County
- Francis Vanek, Senior Lecturer and Research Associate in Cornell's School of Civil and Environmental Engineering
- David Kay, Senior Extension Associate with the Community and Regional Development Institute

Fall Forum, "Development with the Earth In Mind." Speakers included:

- Nick Goldsmith, Director of Sustainability for the City and Town of Ithaca

- David West, Senior Planner- Housing, TC Department of Planning and Sustainability
- Lauren Gabuzzi, Transportation Demand Management Program Mgr, Downtown Ithaca Alliance/Go Ithaca
- Brent Katzmann, Associate Broker, Office Manager, Warren Real Estate
- Noah Demarest, Principal Architect with Stream Collaborative
- George Frantz, Associate Professor of the Practice Department of City & Regional Planning, Cornell University

Environmental Review

- The Committee reviewed whether the proposed Cascadilla Creek dredging and the cleaning out of the sediment trap would have a significant adverse environmental impact. The action involves the dredging of Cascadilla Creek between its confluence with Cayuga Inlet to the West and the pedestrian bridge at adjacent to NYS Route 13 to the east. The length of the creek corridor to be impacted is approximately 1,700 feet and between 12-18,000 cubic yards of sediment will be removed. The Committee decided no action on our part was warranted.
- PFOA is commonly found in the blood of representative cross-sections of people in the US. It is also found in dust in homes and in food and water. It is of increasing concern in NYS. A major contamination of PFOA exists at the closed Seneca Army Depot. Tom Parsons the Ithaca Fire Chief reported that the Ithaca Fire Department has never used large amounts of AAAF-Alcohol resistant foam (the type of foams that had high concentrations of PFOA and PFOS) at the training center due to its cost. Information about the Department's foam use and inventory was reported to the DEC when they surveyed the fire training facilities back in 2013. Class A and Class B Foams relied upon by the IFD today do not contain PFOA/PFOS.
- The Committee continued to support the adoption of an appropriate Environmental Stewardship Plan by the Lansing Rod & Gun Club for the siting of shooting activities a suitable distance from Salmon Creek and the adjacent wetlands. There is concern that the residual lead pellets discharged at the site for the past 60 years pose an environmental hazard. The ultimate resolution of the issue left many neighbors and local ecologists dissatisfied.
- The Committee participated in a presentation to the PEEQ Committee encouraging the County Legislature to lead with the development of net zero energy buildings for County facilities. Such buildings produce as much energy during the year as they use. (Note that the 2021 Budget reflects the County's support for this proposal).
- The Committee and the EMC membership discussed passing a resolution in support of the Environmental Bill of Rights (A.2064/S2072)). Given that the NYS Legislature passed the bill while we were discussing how to best promote it locally, efforts to encourage the municipalities and the County to pass supportive resolutions can be deferred. Since it is a proposal for a constitutional amendment, it will need to pass the NYS Legislature again during its next session. Then it will be placed on the election ballot to be approved by voters.
- The Committee continued to support the request that an EIS be conducted on Cargill's Shaft #4 construction project. The litigation is currently before the NYS Appellate Division 3rd Department. The primary legal issue under review is: Did the Supreme Court err in finding that it was not necessary for the lead agency to take a hard look at the cumulative, short-term and long-term effects of the construction of Shaft No. 4 on Cayuga Lake?
- An environmental review of the proposed NYSDOT facility to be located adjacent to the Ithaca Tompkins Regional Airport was conducted by the Committee. We advocated that the siting be slightly adjusted to avoid the impacts of noise and light pollution on the nearby neighbors as well as for the adoption of an energy system that was consistent with Executive Order 88 (Build Smart NY). A geothermal energy system would provide a high Coefficient of Performance for heating both the offices and the garage; at least 3-5 times as



efficient as propane. When the doors are opened frequently in the winter, a supplemental heating unit could be added to address peak load needs.

- Some other notes of interest. NYS Legislation was adopted to prevent the construction of a mega solid waste incinerator in Romulus. The Federal Government approved the shipment of LNG by rail. This is of concern locally as the rail line that extends through the LNG manufacturing facility in Wyalusing, PA also connects to the Ithaca RR line that passes through the City of Ithaca. The environmental impacts of the proposed Freese Road bridge replacement of a one-lane with a two-lane bridge in the Village of Varna continue to be of concern. Although the Cayuga Power Plant was recently closed, efforts to require additional environmental remediation of the Coal Combustion Residuals Landfill still require the Committee's attention.
- Continued support for NYS legislation to reform SEQR to establish a generalized harm standard for legal standing is required. Without such a standard, large projects that substantially increase greenhouse gas emissions are not capable of being litigated because no individual may be able to assert that they are harmed more than the public at large. The potential impacts of 5-G networks have been insufficiently studied. Compared to today, there would be an almost unbelievable increase in the possible data volume by a factor of 100. The NYSEG/RGE Rate Case remains in negotiation. The outcome will have a major impact on the reliability and resiliency of the electric grid. Transitioning to a policy of beneficial electrification and heat pumps requires public confidence in reduced outages and the reliability that gas currently provides. The construction of Accessory Dwelling Units (ADUs) encourage infill that reduces the size of living units and decreases transportation distance for those who may move from the suburbs into the City. Although, if planned appropriately, ADUs are environmentally beneficial, the issue has become highly controversial in the City.

Unique Natural Areas

- Robert Wesley and Karen Edelstein continued to serve as paid consultants with generous funding provided by Tompkins County and support from the Planning Department to assist with our UNA Update efforts.
- Activity of the UNA Committee in 2019 included:
 - Sponsored two public presentations at the Tompkins County Public Library on County-Owned Forest Management options.
 - Updated boundaries to 44 UNA's, the final batch of revisions that we began in 2012.

Management of the Tompkins County-Owned Forests

- At the request of County Legislators, the Unique Natural Areas Committee volunteered to prepare a report on the County-owned forest lands.
- Our member, David Weinstein, produced an extensive 100-page report, "Evaluation of Options for the Potential Management of the Tompkins County-Owned Forests."



- The County forests comprise 543 acres on 34 parcels in Newfield and Caroline, acquired by the County decades ago as part of a state-wide program to "reforest" abandoned farmland.
 - Over the course of 2019, the UNA Committee conducted a literature search, spoke with several local forestry experts, conducted a public meeting on June 12 at the Tompkins County Public Library (TCPL) to discuss the scope of a draft report, and produced a draft report. The UNA Committee solicited public comment through a press-release and at a December 18, 2019 public meeting.
- The goal of this report is to provide the members of the Legislature a more complete understanding of the existing science regarding the management of forests like those owned by the County, along with a more complete picture of how the County-owned forests fit into the greater picture of forest condition and dynamics in central New York. A resolution to approve

submission of this report to the Tompkins County Legislature's Planning, Energy, and Environmental Quality (PEEQ) Committee passed in January 2020.

UNA Boundary Revisions

- We have completed the revisions to all 195 UNAs. We began this process in 2012, and this year concluded the final batch of 44. These boundary changes decrease the acreage of these UNA's from 3526 acres to 3350 acres, a net decrease of 5%. This batch included 24 unnamed Department of Environmental Conservation (DEC) mapped wetlands, which we have now named.
- Resolution-2019-1_ Recommending an Amendment to the UNA Inventory Document consisting of Boundary Revisions to 44 UNAs was passed by the EMC in November.
- Property owners will receive postcards from the County Planning Department alerting them to these new boundary changes. All Municipalities will soon receive the final updated maps and a CD detailing all of these revisions.

Waste Reduction

- The Waste Reduction Committee's completed its first full year in 2019. The committee membership has remained the same, consisting of five EMC members and associate members along with our Legislature's representative. Several student and community members participated over the course of the year as well.
- The Committee's focus this year has been public education regarding the single-use, thin-film plastic bag ban going in to effect in March 1, 2020, in support of the efforts of Recycling and Materials Management to implement the new law. To this end we have developed a two-sided, trifold brochure on the bag ban and the reduction of consumer single-use plastics in general, a one-page flier on the bag ban, and tabling events, including the Apple Festival and Newfield Old Home Days.
- The Waste Reduction Committee received \$1,000 in funding from the County Legislature. This funding is being spent on the purchase of 700 reusable bags to be distributed to low- and middle-income households in Tompkins County, primarily through organizations serving these county residents and at tabling events. Distribution sites include town and village halls, Finger Lakes Library System branches, food banks, Ithaca Free Clinic, and similar institutions. The Cornell Lab of Ornithology and Wegmans have also donated several hundred bags for the distribution program. The one-page educational flier is also being distributed with the free bags.
- Other activities included the sponsorship of a showing of the film "Plastic Ocean" at Cinemapolis, a discussion on ending the use of single-use coffee cups at Gimme Coffee, review of the study of microplastics in Cayuga Lake, and review of the new projects being developed by the local waste water treatment plant.
- An emerging new focus involves a ban on Styrofoam food service items—coffee cups, clam shells for takeout food, plates, etc. We hope to develop and promote local legislation later this year supporting a ban on Styrofoam. Other areas of interest are food waste reduction and recycling and fabric waste reduction, and we hope to develop programs in these areas over time. We also began planning a public educational event on waste reduction to be held at the Tompkins County Public Library in April.
- Topics and educational programs to be developed in the coming year include:
 - Continued public education around the plastic bag ban,
 - Support for a pending state-wide ban on single use Styrofoam food service and packaging items,
 - Research on mattress recycling, possibly to support a proposed state-wide program,
 - Research on getting more reusable water bottle filling stations around the County
 - Research on a possible County-wide ban on several plastic food service, single-use items under one piece of legislation.
- The Committee's extended goals remain to be:
 - Plastic use reduction, specifically plastic packaging of all kinds,



- o Food waste reduction and recycling

Town of Caroline

- In 2019 Caroline received NYSERDA's Climate Smart Community Bronze certification. Caroline pledged to become a Climate Smart Community in 2012. The certification recognizes a long history of persistent, creative efforts by town officials and community volunteers. Notable achievements include construction of an energy-efficient office building in 2010 with geothermal heating and cooling, rooftop solar PV, and light tubes for passive indoor illumination; installation of geothermal in the Historic Town Hall in 2019; achievement of Clean Energy Community status that qualified the Town for a \$100,000 grant that is supporting our Brighten Up Caroline Program, implementation of Solarize Tompkins SE that has grown to the countywide Solarize and HeatSmart Programs, and natural stream stabilization projects on Six Mile Creek and tributaries that have enhanced resilience stormwater resilience. The achievement of Climate Smart Community designation was greatly facilitated by the able assistance of our Clean Energy Communities Coordinator Terry Carroll and intern Osamu Tsuda. Not only did they help us pull together the necessary documentation, but they facilitated the creation of very useful materials, such as a Natural Resources Inventory.
- Brighten Up Caroline was initiated with distribution of LED light bulbs at various community events. There was a huge volunteer effort to sew bags with donated materials for the bulbs and information packet. COVID-19 has put a pause on our plans, but we will be regrouping to complete the town-wide LED conversion of residential lighting. We are working with NYPA for LED streetlight conversion. We will be purchasing our streetlight facilities from NYSEG, which will yield significant savings in our long-term operating costs and provide control greater control of maintenance.
- Key players from the Town's energy committee (Energy Independent Caroline) continue to partner with the Solar Tompkins Inc. HeatSmart Program, promoting home energy efficiency and heat pumps for space heating and cooling. EIC was instrumental in the original efforts of Solar Tompkins that led to its incorporation as a non-profit organization serving all of Tompkins County and surrounding areas, and continues to work closely to implement the program in Caroline. Caroline has consistently out-paced other townships in terms of the percentage of residents moving forward with home energy efficiency. 2019 was a very successful year for Solar Tompkins, with a 2.67-fold jump in contracts for insulation, air-sealing, and heat pumps. There was a significant number of heat pumps contracted for LMI households, a result of partnership between Solar Tompkins and Sustainable Tompkins and an increase in approval of heat pumps through NYSERDA's Assisted Home Performance Program. HeatSmart has now been modeled by NYSERDA and programs are propagating throughout the state. HeatSmart Tompkins has received two more years of funding from NYSERDA and the program has developed an innovative advertising campaign.
- Halco Energy installed a 5-ton geothermal system at the Historic Town Hall. The ducted system provided comfortable heating through the winter and will be cooling and dehumidifying the building this summer. We will be making improvements to the building's envelope in the next couple of years. We are ready to construct the bioretention feature in the loop field to treat stormwater runoff from the town hall parking lot. The infiltration of water from this area will enhance function of the loop field.



Town of Dryden

The Town of Dryden advanced several initiatives in 2019 to reduce GHG emissions. These efforts received broad support in the community, which we attribute to effective communication, engaged residents, and tremendous work by volunteers.

- Dryden certified as a Bronze Level New York State Climate Smart Community, one of 31 statewide. Bronze status is given to municipalities that have taken steps to implement climate-smart policies and projects.
- Dryden initiated an extensive comprehensive plan update. The new plan will address energy use and climate change. Information about the plan can be found at: Dryden2045.org
- Solar crosswalks for rail trail install -- A Tompkins County Parks and Trails grant enabled the



purchase of two solar-powered crossing pedestrian operated crossing lights for the trail at the Springhouse and George Road crossings.

- Solar charging station -- Dryden was pre-approved for an \$8,000 NYSERDA grant covering the cost of two EV charging stations at the Town Hall parking lot. Installation costs will be covered under a previously approved \$5000 Clean Energy Community grant.

- Dryden was awarded \$1.5 million from NYS to build a pedestrian bridge over Rt. 13, which will provide a critical link for the 10.5 mile Dryden Rail Trail. In addition to recreational uses, the project will improve options for non-vehicle commuters.

Town of Ithaca

- Began discussion of adopting a Green New Deal
- Released draft Ithaca Energy Code Supplement, which will mandate reduced GHG emissions in new construction
- Completed preliminary work on policies to reduce emissions in existing buildings
- Advanced LED streetlight upgrade project
- Purchased two plug-in hybrid electric vehicles for codes department and installed electric vehicle charger at Town Hall

Town of Ulysses

- The Town of Ulysses continues to provide free electricity for its electric vehicle charging station at the Town Hall. In the last year, 600 sessions contributed to our total lifetime savings of 3,814 kg of greenhouse gases.
- The Town finalized its design to install heat pumps in Town Hall in order to reduce use of natural gas (part of a Clean Energy Communities grant). In March 2020, the contract was approved, but construction was delayed by NYS COVID-9 "Pause." It will begin in mid-May 2020.
- The Town Hall lights will be converted to LED bulbs (part of a Clean Energy Communities grant).
- The Town Supervisor led a county-wide effort to convert streetlights to low power LED bulbs.
- Authorized the conversion of Town streetlights to LED through NYPA.
- The Town continues to pay for half the cost of a bus pass for employees.
- A Natural Resources Directory developed by CCETC was reviewed the Town's Conservation and Sustainability Committee and adopted by the Town Board.
- Adopted a Wetlands Map for use by the Town of Ulysses.
- The Town Board collaborated with the Jacksonville Community Association to re-design its community park and improve amenities to expand public use.
- The Town contracted with DEC to monitor an inactive landfill site located at the Town Barn to assure no harmful chemicals are leaching into the water table.



- Advocated for a NYS Environmental Bill of Rights.
- Supported Article 78 Appeal proceeding objecting to the DEC permitting of the Cargill Mine expansion without proper environmental review.
- The zoning for large-scale solar was updated to include glare study analysis as part of the site plan review.
- Advocated for a county-wide Water Quality staff person to coordinate and focus efforts to protect and improve water quality in Cayuga Lake and its watershed.
- The Ulysses zoning was adopted in December 2019, adhering to nodal development concepts; adding design standards to reduce the negative environmental impacts of CAFOs by better managing animal waste storage; and expanded stream setbacks and buffers for improved water quality.
- The Town's purchase of a wetland natural area was developed into a nature preserve with marked trails, signage, and a small parking area to accommodate hikers without creating problems for neighbors.
- Worked with the Water Resources Council and the Intermunicipal Organization to monitor and reduce harmful algal blooms (HABs) and protect the Cayuga Lake Watershed and trained HABs spotters.
- Sought and received funding to improve water quality in the Town's public water district in Jacksonville.
- Town Board was trained in flood plain management by the Town's Environmental Planner.
- Email news is sent to residents bi-monthly, often including tips on energy saving measures. The list includes 1000+ emails in a town with a population of ~5,000.
- The Town continues to recycle and has a composter outside of Town Hall, all in an effort to reduce the need to transport waste.
- The new sidewalks installed through a joint grant for Ulysses and Trumansburg have encouraged a more walkable community.
- A Town-developed trails website was migrated to Tompkins County for continued public access.