

ENERGY SUBCOMMITTEE

As referred to above, the Energy Subcommittee of the Albany Sustainability Advisory Council established priorities during its initial year of formation (2014-2015) focusing on both energy efficiency and energy efficiency. These are the key components in reducing greenhouse gases while transitioning away from fossil fuels. Indeed, these goals are the cornerstones of New York State's Energy Plan¹, the Regional Greenhouse Gas Initiative (RGGI)² and the United States (EPA) Clean Power Plan. Another important priority of the Energy Subcommittee is to impart knowledge to the youth of Albany regarding energy efficiency, renewable energy and sustainability using a myriad of different approaches and venues. The Energy Subcommittee held six meetings between August, 2015 and July, 2016, with the meetings typically scheduled in the months in between the SAC meetings.

Initiative: Hiring of Energy Manager for City of Albany:

Status/Accomplishments: The Chair of the Energy Subcommittee along with the Sustainability Planner for the City of Albany and other members of the Albany SAC interviewed the various candidates for the position. It reached a decision to hire Kevin Luteran as the first Energy Manager for the City. The Energy Subcommittee subsequently invited Mr. Luteran to attend its January, 2016 meeting in which he described his initial plans for energy efficiency which entail installing measures with the quickest and easiest return on investment such as LED lighting in various City buildings. It should be noted again that the New York Power Authority is providing the funding of two years for Mr. Luteran's position and also providing another \$600,000 in funding for energy efficiency measures.

Initiative: Producing Energy from Within Water Mains

Status/Accomplishments: Subsequent to the creation of the Energy Subcommittee goals, another subcommittee of the SAC was created, the Water Committee headed by the Commissioner of the Albany Water Board, Joe Coffey. Mr. Coffey will continue management of this project and provide periodic updates on accomplishments.

Initiative: Development of Microgrids/Distributed Generation Utilizing Solar Energy

Status/Accomplishments: The Energy Subcommittee was notified that the Albany Affordable Housing Partnership (AHP) was applying for a grant from the New York State Energy Research and Development Authority under its "Cleaner Greener Communities" program. The proposal is referred to as the *Sheridan Hollow Eco-District Demonstration Project*. AHP requested assistance from the Energy

¹ <http://energyplan.ny.gov/-/media/nysenergyplan/2015-overview.pdf> See pg. 2 for references to energy efficiency and renewable energy

² http://www.rggi.org/rggi_benefits See sections on "Why Energy Efficiency" and "Why Renewable Energy" on this page.

Subcommittee in estimating the energy (kilowatt hours), demand (kilowatts) savings and carbon reductions for the duration of the measures installed. The project proposal involved installation of photovoltaic systems on 50 residential properties in Sheridan Hollow (and/or in other similar communities in Schenectady or Troy if necessary), two for-profit “visioning” buildings, and on three non-profit organization buildings. An important energy efficiency part of the grant involves repairing and sealing buildings and their respective roofs prior to PV system installation. The proposal also includes installation of LED lighting technology and electric vehicle (EV) charging stations in the AHP/Orange Street Incubator building. The energy savings and carbon reduction goals were the sections of the grant containing the highest percentage of points in the overall rating of the application. AHP was notified late in 2015 that its application had been approved and will be funded. The total grant including in-kind donations and NYERDA funding is approximately \$8.8 million.

Initiative: Participation in the Clean Energy Fund:

Status/Accomplishments: As a technical resource, the Energy Subcommittee is seeking to assist the City of Albany Planning Department and the Energy Manager in applying for funding from the newly enacted Clean Energy Fund established by NYSERDA – for energy efficiency and renewable energy projects. Due to involvement in the Sheridan Hollow Eco-District project, the Energy Subcommittee was unable to assist in applications from the CEF. However, with the Energy Manager now on board, and with the ongoing assistance of the Sustainability Planner, it is anticipated that funding from the CEF can be requested – either through National Grid or NYSERDA in the course of the next year. The Energy Manager is scheduled to attend an upcoming meeting of the Energy Subcommittee where initial strategies and funding priorities can be drawn up.

Initiative: Street Light Upgrades to LED/Solid State Lighting

Status/Accomplishments: The main objective of this initiative is to permit the City of Albany to take control of its street lighting infrastructure to enable it to deploy LED lighting and in the process reduce its energy consumption and significantly reduce costs. Toward that end, the Department of Planning sent out an RFP in January of 2016 requesting a *“comprehensive analysis of energy efficiency, ownership and operational opportunities associated with streetlights and park lights within Albany”*. It is anticipated that the analysis produced from the final product would be formerly presented to the NYS Department of Public Service which must approve of applications and the transfer of ownership of the street lighting from the utilities (National Grid) to the municipalities. In its role as a technical resource for the City, the Energy Subcommittee looks forward in 2016-2017 to providing guidance and recommendations regarding review of the final submittal to DPS. For example, one of the Energy Subcommittee recommendations regarding LED street lighting is that it contain “smart” LED

technology that is networked to enable it to communicate via sensors and automatic controls. This would for example, enable street lights to be dimmed and to better control their runtimes – leading to significantly reduced costs.

Initiative: Energy Efficiency for Municipal Buildings, Residences, and Businesses (Establishment of Residential Energy Conservation Ordinance -RECO, creation of Net Zero buildings and incorporating vehicle charging station infrastructure in residential and commercial buildings in Albany.)

Status/Accomplishments: Establishment of the RECO was one of the recommendations included in the New York Power Authority “Five Cities Energy Plan.” It would establish “*energy and water conservation standards for all types of residential properties, including single-family homes, mixed-use buildings, condominiums and multifamily properties.*” As stated in the original Annual Report, timeframes need to be established for each of the three parts of this initiative. Establishment of a RECO is a time-consuming process and the Energy Subcommittee will look to identify specific members who can take this project on. The same can be applied to the Net Zero housing/prototype part of this initiative. Regarding the electric vehicle charging station section, there should be significant knowledge gained during the implementation of these stations in the Sheridan Hollow Eco-District described above which will inform the Energy Subcommittee as it considers the regulatory and zoning issues involved in creating a permanent code change in Albany to make EV charging stations a requirement.

Initiative: Education on the Importance of Energy Efficiency, Sustainability, and Renewable Energy for the Next Generation of Citizens and Leaders in Albany

Status/Accomplishments: Two members of the Energy Subcommittee provided hands on education regarding energy efficiency and renewable energy at Albany High School in June of 2016. In total approximately 80 students – four different science classes received hands-on education on the actual operation of sealing materials and insulation, wind turbines, fuel cells, and photovoltaics. The SAC Energy Subcommittee has been invited back for the 2016-2017 academic year and will cover an expanded curriculum including the topic of jobs and technical training in energy efficiency and renewable energy.

In addition to the event described above, members of the SAC Energy Subcommittee along with colleagues from the Hudson Mohawk Group of the Sierra Club, established a booth at the Earth Day Expo in April in Washington Park. In addition to the distribution of educational literature regarding sustainable living, energy efficiency and renewable energy, solar powered race car models were available to engage youth in learning about solar power while enjoying the competition.