

# Town of Newtown, CT

3 Primrose Street, Newtown, CT

## THESE MINUTES ARE SUBJECT TO APPROVAL BY THE SUSTAINABLE ENERGY COMMISSION

The Sustainable Energy Commission held a regular meeting Thursday, October 19, 2017 in shared meeting room 3 of the Municipal Center located at 3 Primrose Street, Newtown, CT 06470.

The meeting was called to order by Chairman, Kathy Quinn at 7:00p.m.

**Present:** Chairman Kathy Quinn, Allen Adriani, Graham Clifford, Jeff Jorgenson, Tom Snayd, Dave Stout, Barbara Toomey

**Absent:** George Brown, Mark Sievel

**Also Present:** Fred Hurley

**Communications:** DPW is sponsoring a backyard composting workshop on Oct. 28. There is money from HRRA to promote this initiative.

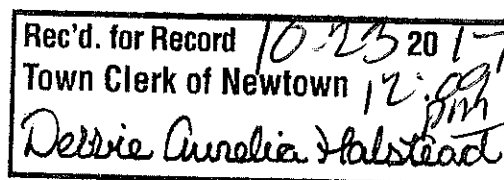
**Public Comments:** none.

**Acceptance of Minutes:** Mr. Clifford moved to accept the minutes of the regular meeting of September 21, 2017. Mr. Adriani seconded. All in favor.

### Business

#### Discussion and possible action:

- a. **Status of Landfill Solar Project:** there was a ribbon cutting at the landfill for this project. The major components will be delivered next week. This will be operational by February.
- b. **Reed School solar project:** the system is operational and running. Ms. Quinn shared a picture of the solar project (att.) used by Direct Solar as a case study. Mr. Hurley will verify Direct Energy can use the photo in marketing material. Mr. Graham questioned the 39% electricity offset; Mr. Hurley thinks the real savings will be substantially larger. The capacity credit authorization has been filed and will provide additional financial relief next year. Ms. Quinn suggested having the Bee do an article about this project so the residents will see what is on top of the building; the EV charging station can be included in the article as well.
- c. **New Project – Sandy Hook School Solar:** this project is underway and should be operational by February.
- d. **Solomon Solar project:** The Windham project - two megawatts might be available for the high school. The only proposal received on the RFP was from Alco. It has the interconnection agreements, lease and ZREC's; the only thing it does not have is the virtual net metering credits released by the Governor.
- e. **MLS Group – Nunnawauk Meadows – solar:** Nunnawauk has reached out to other companies that may be interested. They are having difficulty understanding the current offer.



- f. **Batchelder site – potential for solar:** this is at the phase 2 environmental stage. Mr. Sibley is heading this up; it is in its own way a virtual net metering project and moving along.
- g. **Grant Funds**  
**EV charging station:** Mr. Hurley said the unit has a 100 amp panel. Future systems will have 200 amps. Additionally, future systems will have direct charge. Mr. Jorgenson offered to give the commission step by step directions and answer any questions relative to the newly installed charging station. This took place directly following the meeting.  
**New Bright Ideas10K Grant:** Sensors for exterior lighting was discussed further. Mr. Hurley said the selectmen are aware the commission is interested in looking at lighting controls at Fairfield Hills, the schools, the fire houses, town properties.
- h. **Energy Savings program update:**  
**Public Works –** Mr. Hurley reported this has been worked out and it is coming through. The paperwork with the state and Eversource has been squared away.  
**Library –** no update.  
**New Construction projects – Community Center:** Ms. Quinn and Mr. Adriani attended the Design Team meeting prior to the Public Building & Site meeting. They gave Mr. Giacobbe, of Caldwell & Walsh, a list of items identified by the Sustainable Energy Commission. Mr. Adriani said they are using less efficient refrigerate systems which have higher maintenance cost but are less expensive to install. He suggested the commission be involved earlier with the police facility project. Mr. Jorgenson asked who the decision makers on the project is. Mr. Hurley talked about the uniqueness of the project. There were other pressures on what should and shouldn't be included which, in many cases, had an impact on the overall dollars, forcing technical decisions to make it work financially.  
**General plan for schools:** no update.
- i. **Microgrid feasibility study:** the discussion is focused on a fuel cell; storage can be used to balance the demand curve on some of the buildings. Mr. Stout has been working with a commercial greenhouse, 50-100 acre, one roof of glass. Direct Energy, controls the natural gas in the northeast and has installed natural gas engines to supply CO2 back into the greenhouses. Installation is free, they charge for electricity; natural gas and thermal is provided at no charge. This is similar to a PPA scenario. 4 megawatts will produce 40 million KW hours/yr. Ms. Quinn stated Mr. Faiella's next big project will be the high school and the middle school. Mr. Hurley said Plan B would be a fuel cell at the high school.
- j. **Street Lighting:** Mr. Hurley said the decision now is do we want to own the lights; is it cheaper to own or not? Ms. Quinn shared an article on LED streetlights (att.)
- k. **High School Sustainability Program – funding possibilities:** no update.
- l. **Dashboard for website (API keys):** the dashboard is working and any issues with the waste water treatment plant numbers have been fixed.
- m. **2018 Meeting Schedule:** Mr. Jorgenson moved to accept the 2018 meeting schedule as presented. Ms. Toomey seconded. All in favor.

**Additional Items for discussion:**

- 1. **Sustainable CT:** no update.
- 2. **Newtown Forward:** no update
- 3. **Municipal Energy Plan:** no update.

4. **Energy Star Portfolio Manager:** no update.
5. **Web Site:** no update
6. **Organic Recycling:** The town is looking to start a pilot program with four to five restaurants for commercial organic recycling and to possibly expand to schools and grocery stores. Ms. Toomey noted the new greenery teacher at the high school has expressed interest as well.
7. **Fracking Waste:** no update.

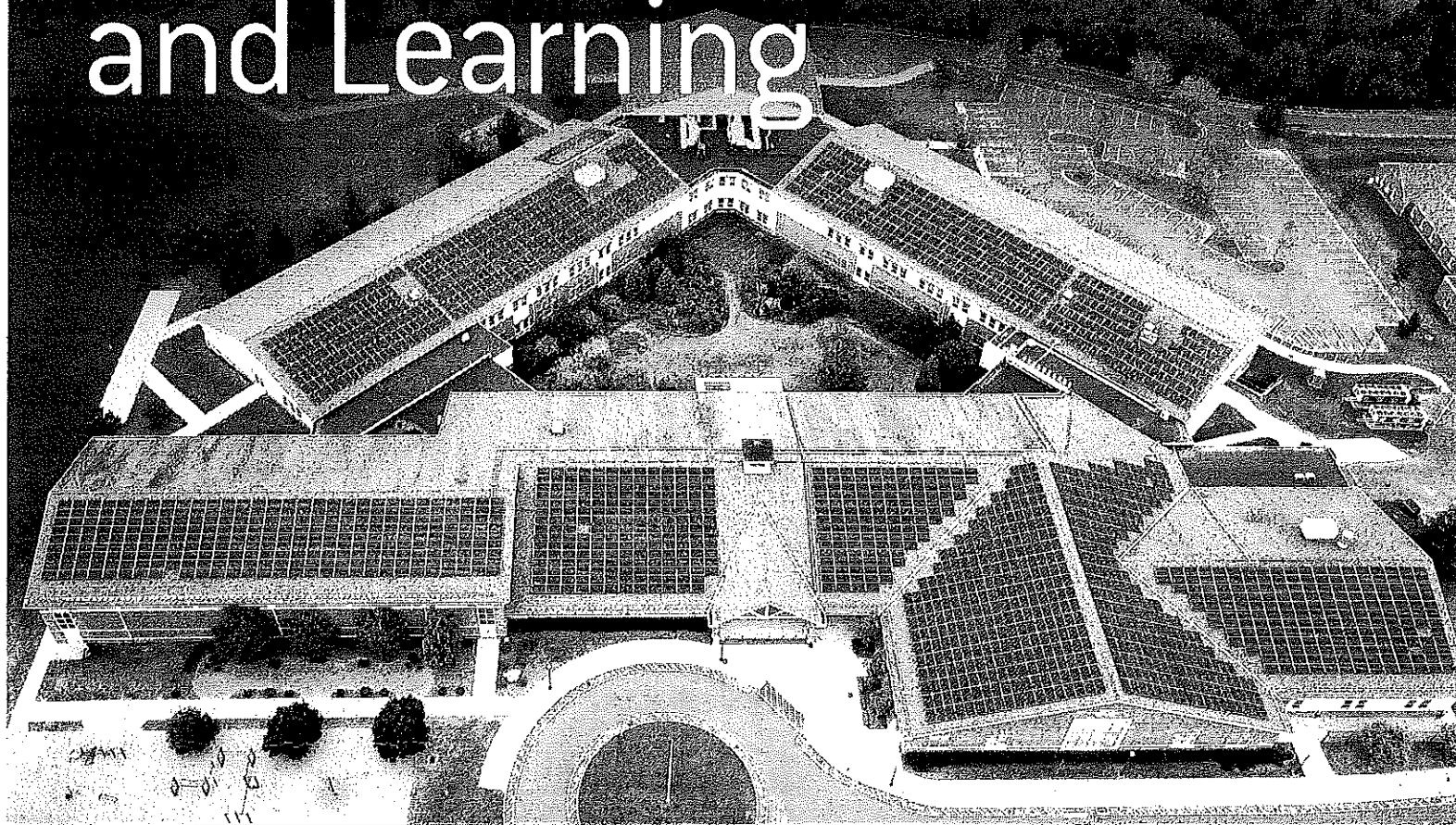
**Adjournment:** Having no other business, Mr. Adriani moved that the Sustainable Energy Commission adjourn their regular meeting at 8:00p.m. Mr. Jorgenson seconded. All in favor.

The next regular meeting will be held on November 16, 2017.

Submitted, Susan Marcinek, clerk

Att: Reed solar project; streetlight article

# A Win-Win for Dollars and Learning

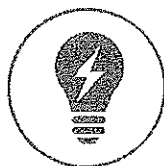


Reed Intermediate School in Newtown, CT serves students in the fifth and sixth grades. In an effort to lower energy costs and do their part to help the environment, they partnered with The Newtown Sustainable Energy Commission to bring the largest solar installation to date to Newtown. They selected Direct Energy Solar to install the massive system while working under a unique schedule. The school now boasts a 617 kW system that the students can directly see in their daily lives as they come to school every day.



**39%**

Electricity Offset  
with Solar Power



**43%**

Reduction in  
Energy Costs



**\$1.5** MILLION

Projected Savings  
Over 25 Years

System Description		System Size	System Production	Environmental Benefits
LG 285 watt panels	Solaredge 20 kW and 10 kW Inverters	Roof Mount	617 kW	756,205 kWh annually
				196 tons of waste recycled instead of landfilled each year <sup>1</sup>



<sup>1</sup>[www.epa.gov/energy/greenhouse-gas-equivalencies-calculator](http://www.epa.gov/energy/greenhouse-gas-equivalencies-calculator)



# Reed Intermediate School

Newtown, CT

## Reed Intermediate School Was Looking to Help the Environment

Reed Intermediate School in Newtown, Connecticut educates and inspires students in the fifth and sixth grades to excel. Providing a quality education to hundreds of students uses a lot of electricity [1,958,098 kWh a year!]. That's when the Newtown Sustainable Energy Commission stepped in.

The commission was founded in 2005 to identify, implement, and support renewable energy, energy efficiency, and energy conservation programs for Newtown's residents, businesses, and town agencies. Having already installed solar on several other town facilities, The Newtown Sustainable Energy Commission identified Reed Intermediate School as an opportunity for their biggest installation to date. Schools are perfect candidates for solar, as it reduces the operating expenses and provides students with a first-hand look at taking positive steps for the environment. It's a win-win for dollars and a win-win for teaching.

## Direct Energy Solar's Custom Solution

Many of the students at Reed Intermediate School experienced the tragedy at Sandy Hook Elementary in 2002, and so it was extremely important to the selection committee that their solar installer accommodate a sensitivity to loud noises and limit work to evenings, weekends, and during school breaks. They chose Direct Energy Solar because, not only was the team happy to accommodate their special request, but they were **very experienced with this type of project** and provided the **most comprehensive solution at a competitive price**. Direct Energy Solar designed the school's impressive system and worked diligently during the requested hours to complete this massive project on time.

## The Results

Reed Intermediate School's motivation for going solar was more of an effort for the building to go green than to save money on electricity. However, they are benefiting from lower electricity bills while doing their part to help the environment. They financed their system with a Power Purchase Agreement with the Connecticut Green Bank, which offers an opportunity for building owners to go solar with no upfront costs, delivering immediate savings on electricity. Going solar enabled Reed Intermediate School to reduce their energy consumption by 43% and the electricity generated from their system has a 25-year average cost of \$.059/kWh versus \$.104/kWh—a 43% reduction in electricity costs! Their total solar investment is projected to save them \$1.5 million over 25 years, which is a lot of money to reinvest into their students' education!

“ This project is a large array and has opened many eyes as to just how big this whole alternate energy industry can be. More importantly it has sparked interest among the students as to the possibilities. ”

FRED HURLEY | Public Works Director—Newtown Connecticut



[directenergysolar.com/commercial-solar](http://directenergysolar.com/commercial-solar)

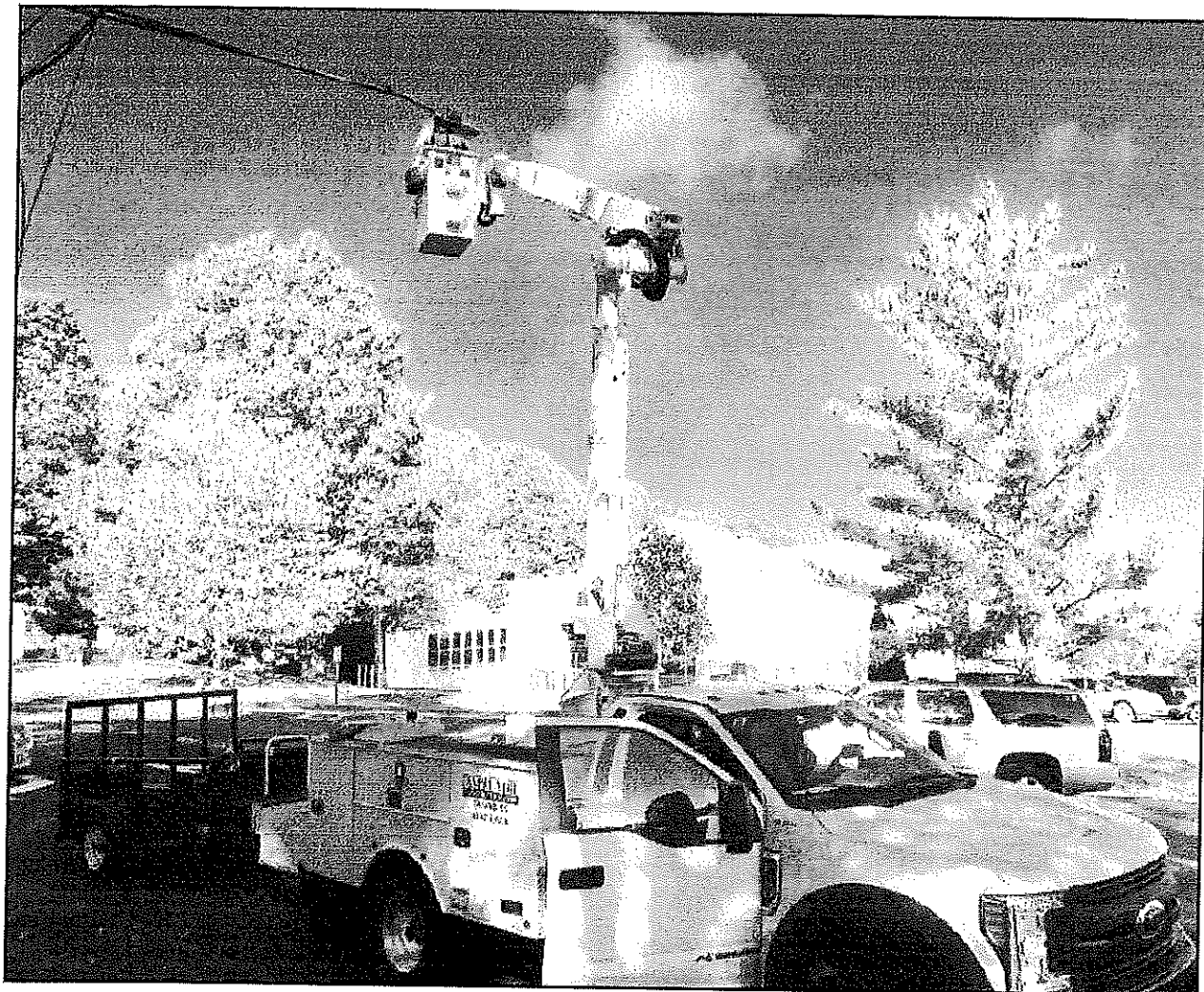
Offers and financing are available to customers who qualify, vary by location, and are not available in all areas. We customize our solar power system specifically for your facility, therefore pricing, savings, utility bill, solar bill amounts and actual returns vary based on different factors including but not limited to your location, system size, available solar incentives and local utility rates. See terms and conditions for more details. CA CSLB 092952, CT HIC 0628993/ELEC 0200993-E1, DC HIC 42021000150/ELEC 01902554, MD MHC No. 132642, MA HIC 068228/ELEC 24555, NJ HIC 1344050289007 Electrical Contractor Bus. Permit # 34E101125760, Suffolk 548124/H51050-ME, Nassau H-2409620000, Westchester ELC 1253/1250, Putnam HIC PC6169, Orange ELC 494, Buckland H-12400-40-00-00, PA HIC PA023535, RI Registration Number 39884 © 2012 Direct Energy. All Rights Reserved.

## ENERGY EFFICIENCY

# LED streetlights to brighten towns' roads

**Municipalities expect to save money with lower energy costs**

*By Anna Quinn*



Contributed photo

New Fairfield's old streetlights were replaced last week by LED lights through a partnership with Eversource. The utility hopes to convert most of the towns it serves to LED streetlights through a program launched this year.

## LED conversion in Danbury-area towns

### COMPLETED TOWNS

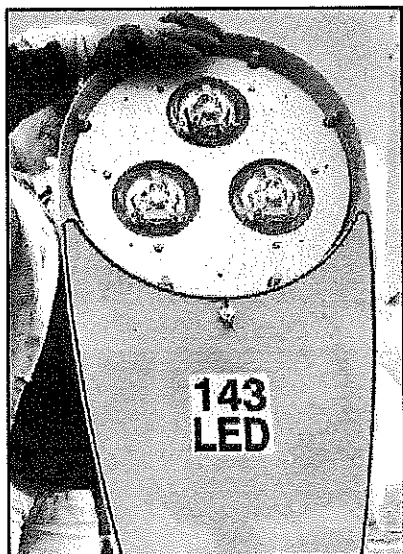
New Fairfield Brookfield Roxbury Southbury Sherman

### WORK TO START SOON

Bethel

### BY THE YEAR'S END





Bridgewater Kent Ridgefield Washington

NEW FAIRFIELD — Eighty of the town's streetlights got a little brighter last week after workers replaced the standard sodium-vapor lights with new LED technology.

The change adds the town to a list of 30 municipalities, four in the Danbury area, installing the energy-efficient lights this year as part of Eversource's LED conversion program.

Eversource will run the program over the next five years in all towns where it owns streetlights — about 119 of the 149 towns where it supplies electricity, spokesman Mitch Gross said.

"This is all about helping the towns manage their energy needs," Gross said. "LEDs use less energy, helping the towns with their energy costs, they burn cooler and last longer, which reduces maintenance costs. And the light they give off definitely helps reduce visibility issues."

New Fairfield's First Selectman Susan Chapman said energy savings and cost

benefits were a main reason to change, but can't say yet how much the town's \$15,000 yearly streetlight budget will be reduced.

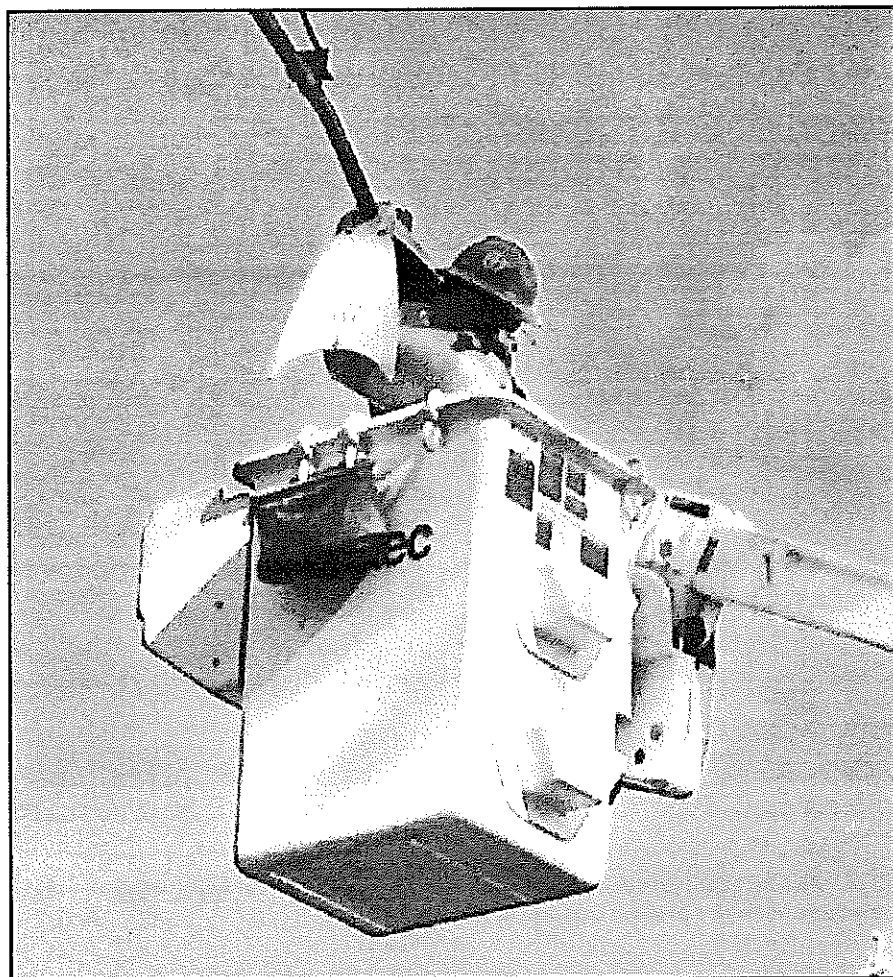
She has already noticed the change in visibility, however, which she hopes will help keep drivers safe when they travel at night.

"I have to tell you, they're so much brighter," she said. "The community will probably appreciate the better visibility, especially with the dark winter months coming."

Roxbury, Brookfield, Southbury and Sherman are among the towns converted earlier this year.

Gross said 29 other towns are scheduled to switch by the end of 2017, including Ridgefield, Bridgewater, Kent and Washington.

"Eversource came in last year and said, 'We want to do this,' and we said, 'Go ahead,'" Brookfield First Selectman Steve Dunn said. "It's a little greener and cost is down for everyone. It was a no-brainer, really."



Contributed photo

A workman replaces an old New Fairfield streetlights with an LED light fixture last week.

Brookfield's nearly 80 streetlights were finished in late summer.

Bethel is likely to make the change,

First Selectman Matt Knickerbocker said. He plans to meet with the finance department this week and has heard from other selectmen who likely are on board.

Knickerbocker agreed with Chapman saying replacing the town's 500 to 600 lights will increase visibility. He said the atmosphere would be improved because LED lights are clearer and more tightly focused, eliminating the yellowish tint and