

AGENDA
CHESHIRE ENERGY COMMISSION
MONDAY, AUGUST 29, 2022, 7:00 PM
Via Zoom

*Public access made available through live streaming on YouTube at
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I. CALL TO ORDER

II. DETERMINATION OF QUORUM

III. PLEDGE OF ALLEGIANCE

IV. APPROVAL OF MINUTES

A. July 25, 2022

V. COMMUNICATIONS

VI. OLD BUSINESS

A. Energy Efficiency Projects

1. CHP at Cheshire Community Pool - operating rate (utilization)

B. Benchmarking

1. Energy Star Portfolio Manager – database input and maintenance; Chris Smith meeting with Amy Thompson

C. Publicity/Education/Outreach

1. News articles and letters to the editor
2. Outreach advertisement – Chris Smith
3. Fall Festival – participation, theme, volunteers

D. Clean Energy

1. New municipal energy efficiency/cost savings opportunities
2. SAM/Virtual Net Metering Project – response to Dean Fiske

E. PBC Projects

F. Grants, Rebates, & Utility Programs

1. Early involvement of Eversource in all town building projects
2. Spreadsheet of important dates – programs and grants – Chris Smith

G. Energy Reliability Program

1. Update on tree trimming

H. Coalition for Sustainable Cheshire

1. Benchmark and Track Energy Use – Chris Smith to work with Amy Thompson on report for Silver Status for Sustainable CT

I. School Modernization – resources for high performance schools

1. Phase 2+ of Next Generation Schools plan – consider another ESPC?
2. Modern Schools Letter – Dan Knudsen

VII. NEW BUSINESS

CHESHIRE ENERGY COMMISSION
MEETING MINUTES
July 25, 2022 - VIRTUAL ZOOM

I. CALL TO ORDER

Chairman Ogurick called the meeting to order at 7:06 p.m.

II. DETERMINATION OF QUORUM

A quorum was present.

Commission Members Present:

Mr. Rich Ogurick, Chairman

Mr. David Gavin

Mr. Dan Knudsen

Mr. Ryan O'Grady

Staff Members Present: Mr. Daniel Bombero

Others Present: None

III. PLEDGE OF ALLEGIANCE

All present pledged allegiance to the flag of the United States of America.

IV. APPROVAL OF MINUTES

MOTION by Mr. O'Grady to approve the June 27, 2022 meeting minutes with the following correction:

- Clarify that under VII.,D.1 "roof top units" refers to "mounted solar panels" at the Waste Water Treatment Plant and not "HVAC" units.

SECONDED by Mr. Knudsen

VOTE unanimous by all those present and voting

V. COMMUNICATIONS

There were no communications discussed.

VI. OLD BUSINESS

A. Energy Efficiency Projects

1. CHP at Cheshire Community Pool – operating rate (utilization); letter to Sean Kimball

Chairman Ogurick shared that he emailed Town Manager, Sean Kimball, regarding the cogeneration unit at the Community Pool. He inquired about which staff member(s) was directly responsible for monitoring and maintaining the unit. Chairman Ogurick shared Mr.

Kimball's email response with the group. The Town Manager stated that Aegis is contracted for monitoring the unit and John Gawlak, Director of Recreation, along with Sheila Adams, Pool Director, are responsible for the overseeing Aegis and making sure that the company is meeting the terms of their contract and the unit is running efficiently. Although Mr. Bombero has no direct oversight of the Town Pool operations, he was asked to work with management to assist John Gawlak and Sheila Adams in trouble-shooting the issues with the cogeneration unit. In addition, Mr. Bombero was asked to meet with Mr. Gawlak, Ms. Adams and Aegis to review the terms of the contract and discuss monitoring, reporting and routine maintenance of the system. The group engaged in a brief discussion about how to best monitor the system, so it runs at its optimal efficiency.

B. Benchmarking

1. Energy Star Portfolio Manager- database input and maintenance

Mr. Bombero shared that he worked with Mr. Smith to obtain data from Mr. Clavet from the Board of Education, and Mr. Milano from the Waste Water Treatment Plant in order to update the database. Fiona Pearson from Sustainable CT will need 2 years of data from the Portfolio Manager Database. Chairman Ogurick will be in touch with Amy Thompson from UCONN to make sure that Ms. Pearson receives the information she needs in order for her organization to obtain Silver Status.

C. Publicity/Education/Outreach

1. News Articles and Letters to the Editor

None

2. Outreach Advertisement – Chris Smith

It was reported that Mr. Smith is continuing to work on outreach and advertisement.

3. Fall Festival

Chairman Ogurick polled the group to find out who would be able to volunteer at the Energy booth on the day of the Fall Festival. He asked that Mr. Bombero secure a tent/table for the Energy and Environmental Commissions to share at the event. A brief discussion took place about the hand-out being developed for the day of the Festival.

4. Net-zero letter – Dan Knudsen

Mr. Knudsen agreed to forward a copy of the Net-zero letter to members of the Commission to review. Mr. O'Grady confirmed that he will post the final copy of the letter on the Cheshire Forum.

D. Clean Energy

1. New Municipal Energy Efficiency/Cost Savings Opportunities

There was no new news to report on this agenda item.

2. Opportunities for Additional Solar Car Ports or PV Arrays, Charging Stations

There was no discussion on this item.

3. SAM/Virtual Net Metering Project – response to Dean Fiske

There was no discussion on this item.

E. PBC Projects

There was no discussion on this item.

F. Grants, Rebates & Utility Programs

1. Early Involvement of Eversource in all Town Building Projects

There was no discussion on this item.

2. Spreadsheet of Important Dates – programs and grants

There was no discussion on this item.

G. Energy Reliability Program

1. Update on Tree Trimming

Mr. Bombero reported that tree trimming is ongoing in town.

H. Coalition for Sustainable Cheshire

1. Benchmark and Track Energy Use – information on Portfolio Manager for Silver Status for Sustainable CT

This item was discussed earlier under agenda item G.1. Mr. Smith is working with Dan Bombero and Professor Amy Thompson to update the data base, while simultaneously assisting Sustainable CT with achieving Silver Status for their organization.

I. School Modernization

1. Phase 2+ of Next Generation Schools plan – consider another ESPC?

There was no discussion on this item.

VII. NEW BUSINESS

A. DOE: \$13 million for community geothermal – geogrids or clean thermal energy districts

There was no discussion on this item.

VIII. ADJOURNMENT

Mr. O'Grady motioned to adjourn the meeting at 7:43 PM, seconded by Mr. Knudsen and the meeting was adjourned.

ATTEST:



Anne McBain, Acting Secretary

(Attachment)

Lower Initial Construction Costs Could Translate into Higher Taxes

As Cheshire residents may be aware, the town has been working on a school modernization plan called "Next Generation Schools," which will require a referendum for resident approval of what is expected to be a very significant investment. The Cheshire Energy Commission, an advisory body to the Town Council, comprised of appointed volunteers, wants to ensure that planning for the new school buildings in the initial phase, and the renovation of existing school buildings in subsequent phases takes a close look at the operational energy costs that our tax dollars will be committed to pay for in the foreseeable future. The proper way to think about a long term investment such as this is to consider its Life Cycle Cost.

Life Cycle Cost is the total cost of ownership over the life of an asset. So, while one may think that our taxes will be less if we go with the cheapest design and the lowest bid, the opposite is more likely to be true. The Operations and Maintenance cost of a municipal building over its estimated useful life, generally 50 years, could easily total 3 - 4 times that of the initial construction cost. Energy consumption represents the second highest operational expense to schools, second only to salaries. Each year, a significant portion of taxpayer dollars is spent on school utility expenses such as electricity, natural gas, fuel oil, water, etc. Therefore, it is vitally important to consider these potential costs in the initial design phase, and not as an afterthought.

The Energy Commission has recommended to the BOE and the Town Council that net-zero energy construction be considered for its new school buildings. Several CT towns have built net zero energy schools recently, which use technologies that consume between 65%–80% less energy than conventionally-constructed schools, and generate the remaining energy required onsite using renewable energy sources like solar power. While these more energy-efficient technologies do increase the initial construction cost, the incremental amount can often be paid back through energy savings in a matter of just a few years, and then save the town money for 30 or more years, thereby reducing residents' property taxes.

Some energy technologies that the town should carefully consider are:

- Heating and cooling using ground source heat pumps, which are not only energy efficient, but also eliminate the use of fossil fuels and reduce our carbon footprint. We will be taking the environmentally responsible path by reducing our greenhouse gas output. Also, in the future, there will be a trend toward increased electrification of buildings, including their heating systems. We don't want to build something now that will be obsolete in 5 years
- Consider roof-mounted solar panels and solar carports in the design phase, so they can be added later, if they are not installed during the initial construction
- Maximize Indoor Air Quality (IAQ) by installing appropriate sensors and controls, plus include heat recovery on the ventilation systems
- Install LED lighting and associated controls (occupancy sensors and dimming). Lighting should be accessible by a ladder and not require special equipment for maintenance
- Take advantage of daylighting to the greatest extent possible. but not at the expense of having excessive glass surfaces that might look modern from the outside, but can cause large heat losses and difficulty cleaning
- Install maximum R-value insulation and highly rated windows
- Include a Building Automation System (BAS), which is web accessible and integrated with other BAS installations in town

- **Equip exterior lighting with photocells or timers, and use step-dimming technology that keeps them from running at their full brightness at night when it is not necessary**
- **Install efficient water technologies such as low flow electronic valves on toilets and sinks, and tankless hot water heaters**
- **Install energy efficient equipment in kitchens and cafeterias (heating, cooling, and refrigeration)**
- **Integrate energy security and resiliency technologies into future school buildings**
- **Assure that a Computerized Maintenance Management System (CMMS) is implemented**

It is important that these concerns, which are both important to our quality of life and cost of living in Cheshire be considered and implemented to the extent possible in the Next Generation School plan.

Cheshire Energy Commission