

Meeting Minutes for Essex Energy and Climate Committee

Nov 13, 2024 7:00 PM, 81 Main Street and via Zoom

In attendance: Will Dodge, Chair, Geetha Ganesan, Dottie Bergendahl, Shawn McNamara, Mukesh Kumar, Natalee Braun; Guests: Debbie New (Vermont Community Thermal Networks), Ann Janda (CCRPC), Katherine Sonnick (Community Development Director), John Dunn, Betsy Dunn, Emily Eckert (EVT)

Full Video of the Meeting:

<https://us06web.zoom.us/rec/share/fe3ms52sOYeamunf60Yp0niYDinkk2sL41vu4ToPrGF05vk4-LSKexBgkEijqMNC.PrP-VsaFxpqtEJ5>

Passcode: z2n73.YX

Minutes of 10/30/2024

Discussion regarding the corrections needed in the minutes from the last meeting, including: (1) replacing instances of "Essex" with "Will" to ensure accuracy in documentation; and (2) ensuring proper identification of gender pronouns in the document.

The decision was made to postpone approval of the minutes until the next meeting on 12/11/2024 to guarantee that all necessary corrections are accurately reflected.

Presentation by Debbie New re: Energy Thermal Networks and Potential Applications at Upper Main Street

Debbie New presented an overview of the Vermont Community Thermal Networks (VCTN), emphasizing the focus on using thermal energy derived from advanced technologies, such as ground source heat pumps, which utilize stable underground temperatures as a renewable heat source. Vermont Community Thermal Networks is a small organization that does education, advocacy, and community organizing helping communities plan for a thermal energy network project. VCTN brings experts in from around Vermont and Efficiency Vermont is working with us on this. We also have regional partners who are working on thermal energy solutions and bring their knowledge to the table.

Debbie highlighted the significance of community engagement in designing energy systems, pointing out the necessity of understanding local needs, preferences, and potential resistance points.

Debbie solicited input from meeting participants regarding their vision for Essex. Key interests included:

1. Densification of housing and infrastructure.
2. Identification of borders and natural land features to enhance community identity.
3. Respect for the land and environmental considerations in future planning.

4. Incorporation of electric vehicle charging infrastructure to promote sustainable transportation options.
5. Stressing the importance of ensuring connectivity and flexibility in the design of thermal energy networks capable of linking multiple buildings for both heating and cooling, hence optimizing energy use across the community.
6. Consideration of development that offers a distinct character for the Essex community

Debbie provided an explanation of ground source heat pumps: detailing their functionality in extracting stable underground temperatures for heating during winter months and cooling during summer months, significantly reducing dependency on fossil fuels. The attendees were given an overview of thermal networks' capability to utilize various sources of heat, including wastewater heat recovery, using excess heat generated from buildings or industrial processes, thereby enhancing overall energy efficiency. Examples of local and regional thermal energy network projects were presented.

Discussed benefits of thermal energy networks include:

1. Reliability: providing a stable and continuous heat source.
2. Safety: reducing risks associated with traditional heating systems.
3. Affordability: potential reduction in energy costs for consumers.
4. Cleanliness: minimal environmental impact through renewable sources.
5. Local energy independence: reducing reliance on external energy supplies and fostering local economic growth.

Following the overview, the presentation shifted to participant engagement and input on the Upper Main Street Project as it relates to thermal energy networks. This offered an open forum for individuals to voice their visions for Essex, emphasizing the essential role community involvement plays in energy planning.

It was noted that Upper Main Street had received diverse input from community members regarding preferred infrastructure and community characteristics, leading to richer discussion and understanding of local interests. The conversation then moved to an in-depth discussion regarding potential funding models for implementing thermal energy networks, including considerations for:

- Third-party financing which may offer innovative funding solutions without immediate tax burdens.
- Municipal ownership as a means of ensuring community control over energy resources.
- Mention of existing tax credits available for geothermal energy solutions, encouraging exploration of these options for cost savings.
- Strategies discussed aimed at maintaining cost efficiency in energy bills for residents, highlighting the need for transparent pricing structures.
- Consideration of integrating thermal networks with community development projects, advocating for synchronous installation of infrastructure alongside other utility upgrades, thus maximizing financial and logistical efficiencies.

Future Steps and Collaboration

The presentation ended with an emphasis on the need for ongoing collaboration among local businesses, community members, and regional energy planning organizations to inform and guide future energy strategies with respect to Upper Main Street.

The suggestion was made to organize a workshop with industry experts and local developers / owners to explore the design and implementation of thermal networks locally, allowing for practical, hands-on learning opportunities.

Essex Energy and Climate Committee Discusses VECAN Report

The EECC members reviewed some of the key diagrams and points from the Energy Action Network (EAN) 2024 report related to renewable energy, EV adoption, carbon footprint, and other important considerations. The main takeaway was to potentially use some of the information for upcoming presentations / info tables.

The meeting adjourned at approximately 9:00pm. The next meeting is scheduled for Wednesday, December 19th at 7:00pm.