

Concord Energy and Environment Advisory Committee
August 6, 2020
Virtual Meeting
7:00 PM

Present: Councilor Robert Werner (Chair), Nick Babladelis, Carl Cooley, Dorothy Currier, Jessica Forrest, Meredith Hatfield (City Councilor), Henry Herndon, Chuck Willing, Kelsey Sullivan,

Guest: Laurie Rauseo and David Rauseo (Interchange Development), Amina Grant (UNH Sustainability Fellow)

I. Welcome and Introductions

Rob Werner: Opened meeting at 7:08 pm

- Individual introductions.
- Rob read the electronic meeting authorization

Rob Werner: *Motion to accept the July Minutes. Minutes accepted.*

II. Municipal Properties Update:

Hall Street solar project implementation

Rob Werner provided update:

Financial issue was the need to construct a gate to protect the solar installation

Tom Aspell and Revision Energy worked out an arrangement in which maintenance of solar panels would be taken care of by Revision and they would pay for the service.

So, installation of a 2nd fence inside the exterior Hall Street fence is not necessary

Contract has been finalized and signed

- Just under ½ MW
- Will be completed by the end of the year.

III. Concord Crossing Development Update (Exit 17)

Proposal presented by David and Laurie Rauseo (Interchange Development). Laurie is a traffic engineer and David is a mechanical engineer by training.

- EV Charging Stations, Market Basket, NH Liquor and Wine outlet, Retail
- Existing gas station

- Energy Efficiency (buildings)

Rob Werner: Asked David and Laurie to present the proposal, to be followed by questions and comments.

Laurie and David Rauseo presented details:

- Exit 17, off route 4, Hoit road, around incinerator, Right next to Wheelabrator Plant
- Development plans: Market Basket with attached retail
- 12,000 sq. foot NH Liquor Outlet (they are building for the state)
- Existing Gas and Dunkin Donuts
- Other retail and restaurant space
- 11 acres would remain open space near a brook
- They are building the liquor store for the state

- EV charging proposed along route 4 corridor
- TESLA likes to be visible from highway
- Complementary uses... get something to eat while charging
- Along Market Basket North wall, there will also be EV charging. First time they've thought of this and they want to provide for it.
- They are considering energy of projects during planning.

- Can connect to all buildings on a sidewalk and walk.
- TPAC committee: Walk or bicycle up Whitney Road to the site

- Working with Tesla universal high speed dc charging
- Good site because Hooksett is already built out
- This one will be there and prominent from the highway
- Level 2 charging...
- Locations for transformers

Rob Werner: State proposals are arduous on EV charging infrastructure development

Dave Rauseo: VW has been penalized and state can spend 20% of money on EV charging. However, NH requirements were too arduous, and no one actually responded. State asked people that did not respond. Tim White of DES to issue new RFP shortly that is easier to follow

Rob Werner: Asked about design features of the buildings.

Laurie Rauseo: Market Basket design submitted for design review

- There is an attached tenant next door

- Vegetables are on the on the north side so they can have windows there to provide natural light. Can't have natural light in dairy aisle. So, they flipped layout to have light in veg areas.
- Asking liquor commission if they do rooftop solar
- May mean removing the east/west facing dormers or putting them elsewhere.
- All NH liquor are going to have a review to look at energy. State does have a program to look at for all buildings, leased or owned.
- White roof, not black roof.
- Wood frame building. Interior steel column that is minimal. More sustainable in terms of GHG storage than artificial materials.
- Aesthetic wood structure on south facing roof/entrance composed of Vermont wood. Has become the NH state liquor store "brand."
- Stumps and topsoil removed for foundations will be used on site to form a berm between the facility and the Wheelabrator property.

Meredith Hatfield: Liquor store- are they open to not having the aesthetic wood structure on the south facing roof if it would allow solar?

David Rauseo: Thinks it will be a tough sell.

Meredith Hatfield: They pay own utilities. Is that an angle?

David Rauseo: Can ask

Laurie Rauseo: Parking lot lights will be LEDs

Rob Werner: What about putting solar ON the market basket roof?

David Rauseo: Worth talking to them about it.

Dot Currier: Question about toxic emissions/soils from Wheelabrator

David Rauseo:

- Prevailing winds are toward Wheelabrator
- Wheelabrator has scrubbers
- Berm is 50 feet tall at center- Down to 10 ft at sides
- Wheelabrator's capacity is spoken for
- If an industrial engineer could possibly use steam

- Phase I environmental studies indicate no contamination on the site.
- Trucks pull into garage space before dumping trash.

Question about truck traffic:

- Heavy truck traffic
- Could be a backup
- Truckers sometimes go to DD's and hang out.

Laurie / David Rauseo:

- We have evaluated this and thought about traffic flow particularly to the plant
- There will be no parking marked along the street to the development (Section 4 to driveway will have "No Parking" signs).
- No trucks will be allowed to park within the facility.
- Roundabout proposal-emissions would be less

Chuck Willing: Where are you in the development process?

David Rauseo:

- Cleared the land
- Now hydroseeded
- Next spring things will begin again
- Then all under construction at same time.
- Liquor store will be open next fall.
- Fully open in 2022

Chuck Willing: Can they get solar on smaller buildings, energy storage

David Rauseo: Can CEEAC research the energy storage option?

Chuck Willing: Yes

Dot Currier: How necessary is it to have the structural branding on the liquor store facing south, interfering with solar panels?

David Rauseo: State thinks it's necessary. Huge revenue generator

Meredith Hatfield: Would be good to include a request for no idling. Huge emissions. DES has a program.

Overall plan – it looks like people will need to drive from one store to another. Will there be a way to navigate on foot?

Laurie Rauseo: Make sure all buildings are up against roads. Once there, people can walk.

Jessica Forrest: Is it possible to have awnings over cars in parking lot for solar power generation, with the idea of approaching carbon neutrality for the facility?

David Rauseo: Can look into it.

Nick Babladelis: Buildings should be as high efficiency as possible.

Water – how is it being managed? Has there been discussion of water flow issues?

David Rauseo: We won't be introducing more water off-site as a result of the development. No new paving. This was formerly an industrial zone anyway. Surface pond in west part captures flows.

Charlie Niebling (Guest, Boscawen resident): Heating and Cooling questions

What is done here is going to set precedent – it's a significant development in the area

Heating and cooling load will be a large proportion of energy utilization

Will it be pipeline natural gas? Oil?

Have you given thought to newer technologies that are more efficient?

Get in touch with Resilient building group

There is also a National group that gives help on best practices for supermarket design with sustainability in mind (google it)

Has Market Basket had interaction with this group for their design?

David Rauseo:

Natural gas: Asked Liberty Utilities no feasible to extend line to this neighborhood 1.25 miles, would negatively impact Penacook

Propane and oil are the options...

Charlie Niebling: More expansive solar + heat pumps or ground-based heat pumps as alternatives

- Wheelabrator makes a lot of waste heat, but maybe you can tap into their heat energy through heat exchange.
- May not want to hitch yourself to the facility- 25 years old, heavily subsidized
- In Europe this is definitely how they would do it.

David Rauseo:

Life cycle analysis has been done on the design and construction of the facility, including the material and energy use that goes into the building

Laurie Rauseo: liquor store will be wood frame construction. Captures and stores carbon in materials. Better the concrete and steel which requires a large amount of energy input.

Other buildings are more standard building materials (not wood).

Dot Currier: Black pavement absorbs a lot of heat. How about white.

David Rauseo: will look into it.

Rob Werner: Thanks for time. We are willing to be a resource for your questions. Thinks making a sustainable facility can be a marketing tool in itself.

V. UNH Sustainability Institute Project

- GHG Emissions Inventory update (Amina Grant)
- City Council Presentation (August 10th) prep

Amina Grant presented results of GHG emissions inventory. Main takeaways:

- In 2019, the Concord community released an estimated 495,905 metric tons carbon dioxide equivalent (MT CO₂e). For context, a metric ton is about the weight of a small car.
- Major findings indicate that the commercial sector (which also includes public and private institutions and industrial uses) accounted for 50% of the community's emissions, the residential sector accounted for 48%, and the local government operations accounted for 2%.
- Community-wide, fuel used to heat and cool buildings (such as natural gas, propane, oil, and wood pellets) was the largest source of emissions (35%), followed by transportation fuel (28%), electricity use (18%), and industrial processes (15%). Other sources of emissions included solid waste generation, wastewater treatment, and fertilizer use.
- Tree cover from forests in Concord comprised a carbon sink, offsetting nearly 12,500 (MT CO₂e) in 2019. The city's Sustainable Tree Program contributed to this by adding 50 trees in 2019, or 279 trees since the program began.
- For the city to meet GHG emissions reduction targets that scientists say are necessary to avoid the worst effects of climate change (45% of 2010 GHG emissions reductions by 2030), the community should pursue multiple strategies simultaneously beginning now and over the next decade. These include weatherization and improving energy efficiency in all buildings, transitioning electricity systems to solar and wind, and the electrification of heating systems and cars. The City should also work to implement other options such as improving walkability and bike-ability and improving transit systems.

Discussion:

Reach out to top 20 commercial users in the city as mentors, leaders in reduction

2 reports – long and brief report

Similar presentation to city council August 10

Chuck Willing: You asked about ideas for folding justice into the plan. Not sure we answered the question well. We'd like to hear what you think we might do?

Amina Grant: There is a section on diversity, equity and inclusion (DEI) in the longer report. Talked with Amy from Ascentria, Matt Thorne, etc. to understand what is already being done. Elevate the community action energy program for low income people. Focused on 3 vulnerable populations: New Americans, low income, senior citizens. Concord area transit – has there been a study of accessibility to surrounding areas? How can it be expanded within concord too.

Rob Werner: Weatherize campaign should be reinitiated based on results

Meredith Hatfield: renters should be considered as a vulnerable population. At mercy of landlord. Hard for them to benefit.

Reducing energy use in facilities is a major ways to cut costs in addition to emissions

Henry Herndon: Would like Amina to do a similar webinar for NH energy stakeholders and other municipalities and businesses. Can market this through Clean Energy NH.

Jessica Forrest: Can connect with Henry to coordinate the Clean Energy NH presentation

VI. Solid Waste Advisory Committee Referral

- Update on City Department conversations
- Policy options and process

Rob Werner: What is the current process for acquiring single-use plastics in the city?

Meredith Hatfield and Kelsey Sullivan have been working on this

Meredith Hatfield: Is there a single system to track plastic cups? Brian LeBrun (Finance) and Adam Clarke (Solid Waste Manager) are interested in working on this. Meredith Hatfield will continue to work on sourcing.

Kelsey Sullivan: Nick Babladelis shared a memo on the St. Paul's School material use framework as relevant to single use plastics.

VII. New Business/Announcements

Henry Herndon: Community Power NH is interviewing law firm on community power, October. Vendors to be ready for 2021 operations.

Nashua and Cheshire County are creating a Community Power plan– not necessarily for the whole county but as a vehicle for small towns to do this.

VIII. Rob Werner motions to adjourn. Meredith, Nick – Second. Meeting adjourned.