

Dennis Robison (<u>robisode@gmail.com</u>) & Rob Taylor (<u>retaylor3d@gmail.com</u>) editors

Contents Community Power Status Report Who Knew? EV Future - Enough Chargers? E-bikes Coming to Hanover Help Wanted! Recycling



# Status Report on Hanover Community Power and the Community Power Coalition of NH By Julia Griffin, Hanover Town Manager

Last July, attendees at Hanover's Town Meeting voted to adopt the proposed Electric Aggregation Plan (EAP) to establish Hanover Community Power, a town-wide municipal electricity aggregation. Adoption of the EAP enabled Hanover to begin working with the Community Power Coalition of NH for the procurement of 100% green power for Hanover "retail" (residential and small business) electricity customers.

CPCNH formally incorporated on October 1, 2021 with 13 member cities and towns, including Hanover and Lebanon. As of April 15, 2022, 20 communities are members of CPCNH, including the cities of Nashua, Dover and Portsmouth. Each member community has appointed one representative and one alternate to serve on the CPCNH Board. Currently, Hanover Sustainability Director April Salas represents the Town of Hanover and Public Works Director Peter Kulbacki serves as an alternate member. In addition, April Salas served as Chair of the CPCNH Board during the first 6 months of operation, from October 1, 2021 through April 21, 2022. The CPCNH Board has worked diligently over the past 6 months to set up this new organization, retaining professional

consulting assistance, organizing the work via five key operating committees made up of Board members, preparing to hire CPCNH's first Executive Director, fundraising, and planning for the initial purchase of green power on behalf of all the retail customers residing in each of the 20 member communities. Several additional communities around the state are also contemplating membership in CPCNH and Board members are actively providing outreach to other communities as they inquire about participation in the Coalition.

CPCNH is now waiting for the NH Public Utilities Commission to adopt operating rules for municipal electricity aggregations in NH. Sadly, draft rules were submitted for adoption in early 2021 but have been stalled before the PUC. The lack of at least two Commissioners, combined with the disassembly of the former PUC staff structure with the creation of the new NH Department of Energy in the fall of 2021, led to a period of complete disfunction at the PUC for almost 6 months including an inability to take-up the electric aggregation rules. CPCNH cannot move forward until the rules are formally adopted, which will then enable member communities to submit their adopted Electric Aggregation Plans for formal approval by the Commission. It is hoped that all of this will occur during the summer of 2022.

Once the municipal aggregation rules are approved and individual community EAPs are adopted by the PUC, CPCNH plans to go out for bid to purchase green power on behalf of member communities in the spring of 2023. Spring is the optimal time to seek bids for wholesale electricity which is why the Coalition plans to wait for the 2023 launch. Several weeks prior to the Coalition's purchase of green power next spring, all Hanover retail electricity customers will begin to receive updates and, ultimately, pricing for the green power product so that if any customers prefer to opt out of Hanover Community Power and continue purchasing either Liberty default power or power from an alternative competitive energy supplier, they will be able to do so.



### Who Knew?

#### By Barbara Callaway, Community Climate Connections

These are words that Community Climate Connections or C3, a committee of Sustainable Hanover, has been working with a lot in the past few months. We hope that you have seen our **"Who Knews?"** in the Hanover listserve every Tuesday, on the Sustainable Hanover website where it can be found under "News," or on the Sustainable Hanover Facebook page.

We try to find interesting and helpful ideas for residents of Hanover to use to make our community more sustainable. That is, we want to assure that the Town of Hanover thrives for present and future generations. We focus on ideas from many different areas of our lives that are do-able, that people are talking or asking about, and that can make a difference for our community. For example, at our last committee meeting, we were discussing whether plastic bottle caps are recyclable or not and we came up with 3 different opinions. (Check the end of this article for **the correct answer.**)

We have been pleased to receive emails from people who have read a Tuesday morning "Who Knew?" saying they appreciated that piece of info or suggesting other pieces of information. We welcome new ideas and even guest authors! We can always add writers to our "staff." Email us at sustainablehanovernh@gmail.com, if you are interested.

Below are 2 examples of recent **"Who Knews?"** to give you an idea of the types of things that we write about as well as an answer to that question about plastic bottle caps.

We had been hearing about "No Mow May" from various sources so we posted this **"Who Knew?"** the last week of April.



**WHO KNEW** Simple Changes in Lawn Care Produce Fascinating Results?

In the US, roughly 80% of us live in urban areas and our lawns take up a lot of space. Typical lawn care can contribute to greenhouse gasses and pollute runoff from rain or snow. We also know that because of pesticide and herbicide use on lawns native bees are in decline in urban areas, and few flowering plants are found. However, a few simple changes in the way we care for lawns can bring back pollinators and contribute to biodiversity in our own lawns......The results of a recent study suggest that a 'lazy lawnmower' approach to lawns results in greatly improved bee numbers and increased flowers. For some, mowing less often is more economical, practical and timesaving than lawn replacement.....



Finally, a recent **Who Knew?** told about a helpful app from the Lebanon Landfill that none of us knew about:

**Who Knew** There Is a Free App to Help You Identify Recyclables and Compostables?

While many of us in Hanover have No Sort recycling provided by Casella, Recyclables can also be dropped off free of charge at the Lebanon Landfill in clearly marked bins.

The Landfill maintains an amazing list of what can be recycled or disposed of. See <u>lebanonnh.gov/</u> <u>solidwaste</u> The website also gives you the information to download a free App which will clarify what can be recycled and what is trash. No longer will you be left wondering:

- Search for Betterbin in the <u>Apple App Store</u> or <u>Google Play</u>.
- 2. Download the app to your mobile device.
- 3. Create an account and log in.
- 4. Choose Lebanon as your community.
- 5. Use the app to scan the UPC barcode of any items you wish to recycle or alternatively use the text search option.
- Receive Lebanon Recycling Center programspecific disposal instructions.
- 7. Earn points and receive rewards!

If you have trouble accessing or using the app, please email <u>marc.morgan@lebanonnh.gov.</u>

After perusing the Lebanon Landfill website, I found their answer about plastic bottle caps: Plastic bottle caps are **NOT** Recyclable at the landfill.

"These items are all plastic but we cannot recycle them at our facility. If you cannot find an outside recycling vendor for these items, you will need to dispose of them in the landfill." Since Beauchene takes their recyclables to the Lebanon Landfill, plastic caps are not recyclable through them.

However, many Hanover residents have No Sort recycling service through Casella. If you use this service, you **can** recycle the plastic bottle caps, **if they are left on the bottle**. For more detailed recycling information from Casella, see <u>https://www.casella.com/services/recycling/recycle-better?</u> tab=Download Free Posters#tabs.

## Who Knew???

Community Climate Connections (C3): Sarah Young, Rebecca Paquette, Judith Pettingel, Robin Kaiser, Barbara McIlroy, Susan Edwards, Barb Callaway



# Our Electric Vehicle Future: Will There be Enough Chargers?

By Ben Steele, Transportation Committee

The number of Electric Vehicles (EV's) on the road is increasing quickly, spurred on by government subsidies, concern for the climate, and Hanover's own goal of 100% renewable transportation by 2050. Over 300,000 EV's were sold in the US in 2019. Most car manufacturers are phasing out gas engines. In Hanover alone, there are 96 fully Electric cars registered, up 57% from 2020.

But these cars need to be charged. Most people with EV's do most of their charging at home, but for people who live in apartments, and for trips longer than the range of the car, there need to be public chargers. That has become the focus of the efforts to move towards electric transportation. The feberal bipartisan infrastructure bill and the VW settlement funds will increase the number of chargers statewide and nationally. Locally, Hanover, in collaboration with Lebanon and Hartford, is developing a plan for public chargers. So, charging will soon be a less of a concern for hesitant EV buyers.

These chargers need to be in convenient places and the right kind and to be useful. There are three basic types of chargers. All EV's come with a cord for a regular 110 volt outlet. This is called level 1 charging and most people already have the ability to charge with level 1 at home. This is slow, however, about 5 miles of charge per hour of charging, so it works for charging overnight and only if you drive less than 40 miles a day. Employers can supply level 1 charging for low cost, and an 8 hour workday will give many employees enough charge for their commute home.



Example of Level 2 EV charger

But most EV owners install a level 2, or 220 volt, charger so they can go on longer and more frequent trips. These chargers are useful in public places, as long as the car will be there for an hour or more. They will give you 15-25 miles per hour of charging, depending on the car, the amperage of the charger, and the temperature. (Cold temperatures reduce the miles an EV will go on a charge.) So public level 2 chargers can be used to draw customers to shopping areas, restaurants, hotels, ski areas, or anywhere that it is convenient to park for a few hours. My son charges his Nissan Leaf at public level 2 chargers that are a short walk from his home in Golden, Colorado.

Some level 2 chargers are free to use. Others, you pay with a credit card or a card from a network like ChargePoint<sup>®</sup>. Businesses that install level 2 chargers might want to give the electricity away in order to attract customers, because the cost of the electricity is minor compared to the cost of a networked, or "smart" charger that charges for the electricity used.

Four hours of charging might use \$2 to \$4 of electricity, and a networked charger costs \$7,000 to \$10,000, (or a monthly fee) so it is a long time before the cost of the charger is recovered. On the other hand, a basic charger costs about \$500 plus installation.

For long distance travel, however, an EV driver needs a DC fast charger, sometimes called level 3. These can charge a car to 80% of its capacity (the last 20% charges much more slowly) in 20-60 minutes, long enough to stretch your legs, get a cup of coffee, or walk the dog. These are very expensive to install, upwards of \$50,000, depending on whether there is three-phase power available nearby. So, it is DC fast chargers that are targeted by federal and state funds. The federal infrastructure bill envisions a network of chargers across the country on all major roads, enabling EV drivers to go anywhere without "range anxiety".

DC fast chargers are already common along Interstate highways. Tesla has a network of over 1200 stations, although these are dedicated to Teslas only. Tesla has promised to make them available to other users, but it has not happened yet. <u>Plug Share</u> and many other EV web site show a map of all EV charger locations. Currently, there are about 132 public EV charging stations in NH and 25 of these are DC fast chargers. You may have noticed the Tesla chargers beside Price Chopper in West Lebanon, and the newly installed Electrify America fast chargers outside Walmart.

Public Level 2 charging is also available locally. Hanover has four level 2 chargers in the parking garage, and plans for more in the future. The hospital (DHMC) has chargers in the parking garage. Dartmouth College has charging stations at two surface lots and in the new Thayer Engineering & Computer Science Center underground parking garage and has ambitious plans to provide charging in all its parking lots.

So, charging away from home is available, but takes a bit of planning. Many people have driven on long trips in their EV, but route finding can be more complicated than in a gas car. Planning is aided by apps that map out a route with chargers. <u>ABRP</u> has a trip planner that describes where to stop for charging and for how long. It takes into account what EV you have and identifies chargers that are not working. Most Tesla's have that capability built into the navigation system.

There is a risk that with increasing numbers of EV's on the road, chargers may be in use when you get there. The chargers at ski areas - Killington, Sugarbush, and Loon for example - are often all in use after 10:00 in the morning, especially on weekends. And sometimes a charger you are counting on is out of service. The <u>PlugShare map</u> includes user reviews that will identify plugs that are broken or frequently in use.

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Clearly, if EV growth meets predictions, (most manufacturers will only be selling electric vehicles within a few decades) and if Hanover is to meet its goal of 100% renewable transportation by 2050, we need more public chargers. And they are on their way. Three million dollars of New Hampshire's share of the VW settlement money is allocated to chargers along the major highways. The request for proposals that the State sent out in the fall netted 30 applications, so this will soon add to existing chargers. Plus, the State is due to receive \$17 million from the infrastructure bill for fast chargers. Employers, businesses, and recreation areas are installing more and more chargers to attract clients and employees. We can look forward to a future when stopping for gas is a thing of the past, a time when we can leave home with a full battery and fill up on the road without going out of our way and without adding to global greenhouse gasses.



#### **E-Bikes Coming to Hanover in June**

By Yolanda Baumgartner, Co-Chair Sustainable Hanover

The Upper Valley E-Bike Lending Library will be in Hanover from June 8 to 28. Volunteers from Sustainable Hanover and Hanover Bike Walk will offer a mix of two-day rentals and one-hour test rides for community members to experience why electric-assist bicycles (e-bikes) are an increasingly popular choice for local travel. See the schedule and make a reservation (required) <u>online</u>. As in prior years, the event is free.

What's new this time? A foldable mini e-bike has been added to the Library fleet. During Dartmouth graduation weekend, the June 11 Demo Day and June 12-13 pickup/drop off will be held at Gile Hill, a convenient location for test rides on the Medical Center bike path. All other Demo Days and two-day rentals will be held at the Hanover Parking Garage. ]Also new this year, the E-Bike Library is operating under the sponsorship of <u>Vital</u> <u>Communities</u>.



Cargo E-bike

E-bikes make it possible for more people to get around locally without using a car. They have battery-powered motors to supplement the rider's own pedaling to help them ride further. Some describe e-bikes as "riding with the wind at your back", especially on Upper Valley roads with hilly terrain. Studies have shown e-biking improves the rider's health and fitness. The cost for recharging an e-bike battery amounts to pennies instead of gasoline dollars. When more people choose to drive less, air pollution and carbon emissions go down, there is less traffic and less wear-and-tear on the roads, and the pressure for more and more parking is reduced.

The four e-bikes in the Library's fleet represent an assortment of styles and price range, from a "cargo e-bike" that can haul groceries or kids to lighter-weight "commuter e-bikes" to a foldable mini e-bike.

So far, more than a third of the people who have borrowed Library bikes have said they plan to buy one of their own.

Hanover will host three Saturday "Demo Days" offering one-hour appointments to test-ride one or more e-bike models, and 28 two-day overnight loans for a more in-depth experience. Last year Sustainable Hanover and Hanover Bike Walk also

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held special Demo events for the Hanover Public Department and Town staff. They plan to host a special Demo for Hanover teachers this year.

Besides Hanover, the Library will travel to eleven other Upper Valley towns and one workplace (Hypertherm) in 2022. It was started in 2020 by a consortium of volunteers representing several town energy and sustainability committees facilitated by Vital Communities. Previously logistical support was provided by Burlington-based nonprofit <u>Local</u> <u>Motion</u>. This year, the project is fully supported by Vital Communities.

Questions? Email sustainablehanovernh@gmail.com.

# Upper Valley E-bike Library 2022 Community Schedule

Newbury	4/19 <u>-</u> 4/26
Sharon	4/26-5/10
Norwich	5/11-5/24
Hartland	5/25 <u>~</u> 6/7
Hanover	6/8-6/28
Thetford	6/29-7/19
New London	7/20-8/9
Lebanon	8/10-8/16
Cornish	8/17-8/30
Woodstock	8/31 <u>-</u> 9/6
Windsor	9/7 <u>-</u> 9/20
Andover NH	9/21 <u>~</u> 9/27
Hypertherm	0 (00 40 /05
PILOT	9/28_10/25



# Bring Your Ideas and Energy to the Recycling Committee

Hanover's Recycling Committee is looking for additional members. Our mission is to encourage residents to "reduce, reuse, recycle", and a major project each year is the Community Yard Sale at Dewey Field on the Saturday of Labor Day weekend.

Libby Barry joined the Recycling Committee last winter, and her fresh ideas and energy are most welcome. We still need additional members if we are to continue our efforts at past levels.

If you are interested or would like to have more information, please contact a committee member or leave a message - <u>sustainablehanovernh@gmail.com</u>.

Libby Barry,Mary Donin,Susan Edwards (chair),Carolyn Frye (representing Norwich). Joyce Noll, Teresa Oden.

