



**LEBANON ENERGY ADVISORY COMMITTEE (LEAC)
NOVEMBER 16, 2023 - 4:00 PM
MEETING ROOM #2- CITY HALL BASEMENT, CITY
HALL OR
REMOTE VIA VIRTUAL PLATFORM
LEBANONNH.GOV/LIVE**

-
- 1. Call to Order**
 - 2. Approval of Minutes**
 - A. October 19, 2023
 - 3. Old Business**
 - A. Legislation/PUC Regulations/CPCNH/LCP updates
 - B. Landfill Gas to Energy Updates
 - C. Municipal Solar Updates
 - D. Rental Decarbonization/Utility Burden/Sustainability Fellow Update
 - E. Water Energy Technology (SHARC) Heat Recovery
 - F. City Master Plan-Energy Chapter Update
 - 4. New Business**
 - A. EV Subcommittee Report
-Recruitment of New Member(s) to Subcommittee
 - B. Review of draft ADM-149 Electric Vehicle and Equipment Procurement Policy
 - C. Discussion of Future Role of LEAC
 - D. Discussion of Committee Chair Role
 - E. Recent and Upcoming Conferences or Webinars of Note
 - F. Proposed Letter to NH PUC in Support of Net Metering and NH Saves, docket numbers: DE 23-068 (NH Saves) and DE 22-060 (Net Metering)
 - G. EFM Report
- Relative Costs of Carbon Reduction-From the [Vermont 2021 Energy Plan Report](#)
 - 5. Open to the Public**
 - 6. Future Agenda Items**
 - 7. Adjournment**

Meetings are open for in-person and remote attendance. Members of the public that wish to attend remotely may do so by going to LebanonNH.gov/Live where you will find instructions on how to enter the meeting. Members of the public will be able to participate and ask questions through the City's virtual platform or by phone. Please note:

Should technical difficulties occur during the meeting that disrupts virtual or phone connection(s), the meeting will continue without remote access capabilities.

AGENDA
LEBANON ENERGY ADVISORY COMMITTEE(LEAC)
NOVEMBER 16, 2023

AGENDA ITEM 2
APPROVAL OF MINUTES:

October 19, 2023

DRAFT

**LEBANON ENERGY ADVISORY COMMITTEE
CITY HALL MEETING ROOM OR
REMOTE VIA VIRTUAL PLATFORM
4:00PM, THURSDAY OCTOBER 19, 2023**

MEMBERS PRESENT: Greg Ames (Chair), Jon Chaffee (Vice Chair), Woody Rothe, Clifton Below (City Council Rep.), James Mashal, Sherry Boschert (REMOTE)

MEMBERS ABSENT: Henry Bromberg, Devin Wilkie (Alt. Council Rep), Meghan Butts (alt)

STAFF PRESENT: Tad Montgomery (Energy & Facilities Manager)

1. CALL TO ORDER

Chair Ames called the meeting to order at 4:07pm.

2. APPROVAL OF MINUTES – September 21, 2023

A MOTION was made by Jon Chaffee to approve the September 21, 2023 Meeting Minutes. The Motion was seconded by James Mashal.

Amendments: Page 2 Line 9: change “Chair Ames” to “Mr. Montgomery”

** The Vote on the Motion was approved as amended: (5-0). Sherry Boschert was not present at the meeting for the vote.*

3. OLD BUSINESS

A. Legislation/PUC Regulations/CPCNH Updates

Mr. Below said the Data Platform Governance Council has gotten approval from the PUC to engage a consultant to develop a \$3-6 million GRIP (Grid Resilience and Innovation Partnership) grant proposal. He said this kind of grant helps accelerate applications and targets programs that use data from data platforms and service Justice 40 communities. He said he’s going to ask if the Coalition can be a collaborator on the grant application.

Mr. Below said the Coalition will be onboarding several new staff members, including a Regulatory and Legislative Affairs Director, who will be able to help with the application. He said Andrew Hatch is networking full-time for the Coalition and will also be able to contribute to the effort as well.

He said there was a Commission Ruling that usage data, for Community Power regulation rules, that utilities provide must include negative usage data exports to the grid for net-metered customers.

1 He said the testimony on new net-metering tariffs is due December 1. He said
2 Eversource has declined to respond to requests for utility data responses and a motion
3 may have to be filed to compel Eversource to provide the data. He said he's been in
4 discussions with Clean Energy NH and NH Regulatory Affairs Committee on the
5 proposal that will enable pilot projects for limited producers (generators under 5
6 megawatts). He said the timetable for the Commission to hold the hearing for this case
7 is February/March, and, if the Commission makes a decision by June, new tariffs could
8 go into effect possibly by next September. He said Representative Tom Cormen, state
9 representative from Lebanon, is sponsoring a drafting of a bill to help secure this
10 legislation.

11
12 Sherry Boschert (REMOTE) arrived at the meeting at 4:26pm.

13
14 Mr. Below said the Coalition now has 45 members. He said Grantham is one of the
15 towns joining the Coalition. He said the Coalition CEO was part of the impetus behind
16 the first utility vehicle-to-grid pilot that the Electric COOP did. He said that initiative
17 realized about \$4,000 in additional value payments per vehicle. He said that's a product
18 the Coalition hopes to bring to market.

19 20 **B. Landfill Gas to Energy Updates**

21 Mr. Below said at the last meeting with Liberty, he reminded them that, before the next
22 cost benefit analysis update is completed, they need to determine what additional
23 federal funding opportunities exist that the City could qualify for. He said engineers are
24 working on the plans for the direct charge EV building and islanding, but also to add a
25 DC Fast Charging station for electric fleet vehicles. He said they will need to update the
26 City Council on the addition of the charging station and get additional appropriations
27 for it. He said construction is still slated to begin in the spring.

28 29 **C. Municipal Solar Updates**

30 No update

31 32 **D. Charging and Fueling Infrastructure (CFI) Grant Application**

33 Ms. Boschert said she heard that the announcement of who will be awarded CFI grants
34 will happen by the end of 2023.

35 36 **E. SHARC Energy Wastewater Heat Recovery**

37 Mr. Montgomery said he has sent preliminary schematics for the proposed new fire
38 station and building plans for DPW garage area to SHARC representatives.

39 40 **4. NEW BUSINESS**

41 42 **A. EV Subcommittee Report**

43 **• EV Expo Review**

44 Ms. Boschert said the 2023 Upper Valley EV Expo on September 30 went well
45 and about 400 people attended. She thanked all the volunteers and the tech team,

1 as well as the presenters, for all their hard work. She said the event came in
2 under budget.

3
4 • **EV Street Sweepers Grant**

5 Mr. Montgomery said the application was submitted for the Granite State Clean
6 Fleet grant for a total of approximately \$3 million. He said they should hear if
7 Lebanon is awarded grant funds within a couple of months. He said City
8 Manager Mulholland has been considering contracting out the street sweeping
9 labor/operation, and he said he did not know how that will work if the City owns
10 EV street sweepers. Mr. Below suggested that perhaps the City could own the
11 street sweepers and contract out the labor.

12
13 Ms. Boschert said she will meet with the new Lebanon School Superintendent to
14 discuss electric buses. She said there is a lot of federal money available to pay
15 for the buses, the charging stations, solar panels or battery back-up, etc., and
16 there would not have to be a match for the funding.

17
18 She also said local drivers education instructors contacted her to learn more
19 about EVs because some students are learning to drive using EVs and they don't
20 know that much about how they operate. She said there is a state-wide
21 conference for drivers education teachers on October 21 and she said a few
22 volunteers agreed to bring their EVs to the conference to demonstrate for the
23 teachers.

24
25 **B. Draft letter to the Zoning Board of Adjustments Re: The request for a variance at**
26 **the Element Hotel**

27
28 Ms. Boschert said the developers who own the former Element Hotel have been renting
29 the rooms in the hotel for 30 or 90 days at a time. They are asking the Zoning Board of
30 Adjustments for a variance so it can become residential property and to allow them to
31 rent the rooms for a longer period of time. She said last January, the zoning ordinance
32 was amended, saying that any new residential developments must include EV charging.
33 She said the EV Subcommittee drafted a letter (included in the meeting's agenda
34 packet) and is asking LEAC to send it to the ZBA urging it to include the requirement
35 for EV Charging if it decides to grant the variance.

36
37 ***A MOTION was made by Sherry Boschert that the Lebanon Energy Advisory***
38 ***Committee send the letter to the Lebanon Zoning Board of Adjustments as presented***
39 ***in the meeting agenda packet. The Motion was seconded by Woody Rothe.***

40
41 Ms. Boschert said she is attending remotely out of family health concerns because of
42 COVID.

43
44 **** The Vote on the Motion was approved by roll call vote: Boschert: aye; Mashal: aye;***
45 ***Rothe: aye; Chaffee: aye; Below: aye; Ames: aye (6-0).***

1
2 Mr. Below said Chair Ames should sign the letter and have it sent to the ZBA through
3 the Planning Department. He said the letter would get added to the next ZBA meeting
4 agenda packet.
5

6 **C. Proposed Parkhurst EV charging station**

7 Mr. Montgomery said he was asked to compile data about the cost, expected usage, and
8 potential revenue for the four proposed Level 2 Chargers on Parkhurst Street. He said
9 the average data in the U.S for this kind of location shows average use of .4 uses per
10 day and 6-kilowatt hours per day. He said based on these projections, the City's \$4,236
11 would be paid back in five years if 12 cents are added to the G3 Electric rate as the cost
12 of charging. Ms. Boschert said the data was calculated based on national usage data,
13 and rates can vary greatly from state to state. She said the data calculation will probably
14 be simplified once they get to the RFP stage.
15

16 Ms. Boschert asked if the group could discuss the EV Charger Reliability &
17 Accessibility Accelerator-APD item next.
18

19 **D. EV Charger Reliability & Accessibility Accelerator-APD**

20 Ms. Boschert said she had heard the charger at APD was broken, but she said it's not
21 actually broken. She said APD shut it down because they are afraid it's too close to the
22 building and they are concerned about stationary EV fires. Mr. Montgomery said he has
23 heard this concern a couple of times about fires and EVs recently.
24

25 **E. Review Fleet Electrification Plan and EV Subcommittee comments**

26 Mr. Montgomery said the City Managers have asked that the LEAC come up with
27 policy recommendations for the Fleet Electrification Plan. He said City Manager
28 Mulholland wants this plan to be part of the new City procurement policy, which will
29 include a green purchasing aspect.
30

31 The group discussed the plan document, which was included in the meeting's agenda
32 materials. Mr. Montgomery said City policies can be edited or adapted as needed. Ms.
33 Boschert asked Mr. Montgomery to write a draft policy that the LEAC could then
34 review and edit.
35

36 Chair Ames suggested that EV manufacturers might have policies already drawn up that
37 are used by municipalities. Ms. Boschert said there are examples that the EV
38 Subcommittee suggested that could be used as templates for Lebanon.
39

40 Mr. Montgomery said the City's fleet superintendent, Jesse Dumayne, would prefer if
41 the entire City fleet were one make, Ford, so fewer tools and mechanic training are
42 needed to service them. Mr. Montgomery said EVs take a lot less maintenance than gas-
43 powered vehicles of any make/model. He said Mr. Dumayne has been involved in the
44 Granite State Clean Fleet grant application and is onboard with the idea of EVs for the
45 City's fleet.
46

1 The group discussed the following DRAFT policy language:

2
3 *In accordance with the City's policy of reducing its carbon footprint, the City will seek*
4 *to transition to EVs wherever it is cost effective, and where the new vehicle meets the*
5 *needs of the user.*

6
7 *Overall policy statement: If a new vehicle is to be purchased for the City, it must be an*
8 *electric vehicle unless there is a justified reason otherwise.*

9
10 *If an EV cannot be purchased now because of financial considerations, a plan will be*
11 *made to purchase it in the future.*

12
13 *Even if an EV costs more upfront, if there's a lower life cycle cost, purchase the vehicle*
14 *that has lower life cycle cost.*

15
16 [Separate item – not included in Fleet Electrification policy: Staff use of EV Chargers –
17 add as an employee benefit]

18
19 Mr. Below said Liberty Utilities is proposing to modify their existing EV charging rates
20 for fast charging and medium use. They are proposing options to get rid of the demand
21 charge by time of use.

22 23 24 **F. Clean Energy NH Local Energy Solutions Conference**

25 Mr. Chaffee asked if other LEAC members would attend this conference. He, Mr.
26 Below, and Mr. Montgomery expressed interest in attending.

27 28 **G. Recent and Upcoming Conferences or Webinars of Note**

- 29
- 30 • NH DOE about their Solar Lottery Nov 20 at 9:00am to disperse the subsidies
31 for residential solar. Mr. Below said the funding is for new applications and
32 there is a limited amount of funding available.
 - 33
 - 34 • Dartmouth College Energy and Climate Week by the Energy Justice Clinic - Mr.
35 Montgomery said he gave a talk at the event. He said someone came up to him
36 after the talk and said he is working to try to pass legislation to put a price on
37 carbon. He said Europe is doing this and American will someday be at a
38 disadvantage if we are not doing it.
 - 39
 - 40 • NH Public Works Association on October 26 - Mr. Montgomery said he's been
41 asked to give a talk at the about municipal development of EV fleets and
42 charging infrastructure.
 - 43
 - 44 • Amory Lovins of the Rocky Mountain Institute is coming to Dartmouth College
45 on Oct 28 at 4:15pm at Cook Auditorium.

H. EFM Report

Mr. Montgomery said the streetlight project is almost completed. He said the recent phases of the project involve the conversion of 15 floodlights and seven roadway luminaries, and the addition of several new streetlights at crosswalks.

Mr. Montgomery said Lebanon Airport Manager Carl Gross suggested a National Electric Vehicle Infrastructure grant to help get EV chargers up at the airport.

Mr. Montgomery said there's internet connection to Valley Cemetery and the Civic Memorial Fieldhouse so real-time monitoring can be set up and the Phase II Solar project can be finished.

Mr. Montgomery congratulated Mr. Rothe on his reappointment to LEAC.

Mr. Montgomery said Dr. Jackson Caspari asked about how the City budgets for electricity purchasing. He said he will meet with him this week. Mr. Below suggested Andrew Hatch be included in that meeting.

5. OPEN TO THE PUBLIC

Chair Ames said this is his last meeting with LEAC. He said he is not seeking reappointment so he can finish his degree. He thanked everyone for their hard work.

6. FUTURE AGENDA ITEMS**7. ADJOURNMENT**

A MOTION was made by James Mashal to adjourn the meeting at 5:52pm. The Motion was seconded by Sherry Boschert.

The meeting was adjourned at 5:52pm.

Respectfully Submitted,
Paula Roux
Recording Secretary

AGENDA
LEBANON ENERGY ADVISORY COMMITTEE(LEAC)
NOVEMBER 16, 2023

AGENDA ITEM 4
NEW BUSINESS:

B. ADM-149 FLEET ELECTRIFICATION POLICY



City of Lebanon
New Hampshire

ADMINISTRATIVE POLICIES & PROCEDURES

Electric Vehicle and Equipment Procurement Policy

Policy Number	Effective Date	Last Revision	Page No.
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Approved by:			

Section 1.0: Purpose

This policy provides guidance on the purchase of vehicles and equipment relative to the City's preference for conversion of all vehicles to electric or other non-polluting vehicles and equipment over time, as well as the development of electric charging infrastructure that will be necessary for those vehicles. The objective is to reduce the City's greenhouse gas emissions and other pollutants in accordance with the City Council Resolution in Support of the International Paris Climate Accord and the New Hampshire Climate Action Plan.

Section 2.0: Scope

This policy applies to the purchase of all vehicles and equipment by all departments.

Section 3.0: Definitions and Acronyms

Battery Electric Vehicle (BEV) – A type of electric vehicle (EV) that exclusively uses chemical energy stored in rechargeable battery packs, with no secondary source of propulsion.

Capital Improvement Project (CIP) – A six-year plan adopted annually as it applies to vehicles and equipment valued at \$100,000 or more. This also applies to the new construction or renovation of old buildings and related infrastructure.

Demand Charges – Demand charges are based on the maximum amount of power drawn on an electric account over a single demand period or interval in a given month. Demand intervals are usually 15 minutes. Electricity demand charges represent the high costs that electric companies pay for generating and transmission equipment that sits idle most of the time. Demand charges are generally only levied on accounts that fall into the higher commercial and industrial usage categories (over 20 kilowatts in Liberty territory).

Direct Current Fast Charger (DCFC) – aka 'Level 3 charger,' is an EV charging system that provides 20+ kilowatts of DC power directly to an EV's battery, thereby greatly increasing the potential charging speed.

Electric Vehicle or Equipment (EV) – A vehicle or piece of equipment that can be powered by an electric motor that draws electricity from a battery and is capable of being charged from an external source.



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Electric Vehicle Service Equipment (EVSE) – The equipment associated with transferring electric energy to a battery or other energy storage device in an electric vehicle.

Hybrid Electric Vehicle (HEV) – A vehicle powered by an internal combustion engine in combination with one or more electric motors that use energy stored in batteries.

Internal Combustion Engine Vehicle (ICE) – A vehicle or piece of equipment that is powered by an engine that generates motive power by the burning of gasoline, oil, or other fuel with air inside the engine, the hot gases produced being used to drive a piston or do other work as they expand.

Life Cycle Analysis (LCA) – The systematic analysis of the potential economic and/or environmental impacts of products or services during their entire life.

Time-of-Use Electric Rates (TOU) – Time-of-use rates fall within a broader category of innovative utility rate structures that adjust the rate a customer pays for electricity over the course of the day. These types of rate structures are commonly referred to as time-varying rates.

Total Cost of Ownership (TCO) – The purchase price of an asset plus the costs of operation. Assessing the total cost of ownership means taking a bigger picture look at what the product is and what its value is over time.

Section 4.0: Policy Detail

City Staff will purchase electric vehicles whenever they are able to do so and when an electric vehicle adequately meets the function and performance of the internal combustion engine vehicle or piece of equipment it is replacing. Staff shall document the reasons for any inability to meet this policy. This policy outlines the guidelines and procedures for the procurement and management of electric vehicles and equipment by the City, with a focus on financial feasibility and performance.

This Fleet Electrification Plan will be used to further other City environmental goals wherever possible. Examples include:

- Renewable energy (solar, landfill gas-to-energy) to power the City EVSE.
- Energy storage incorporated into EVSE to reduce electric demand charges and polluting peaker electricity plants.
- Time-Of-Use rates for EV charging to reduce costs and pollution.
- Vehicle-to-grid energy transfer when feasible and effective to generate revenue and reduce pollution.
- Noise pollution reduction (e.g. leaf blowers).



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New Hampshire

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If a Battery Electric Vehicle or equipment is not available that meets the City's needs, consideration will be given to hybrid vehicles or other types of vehicles or equipment that reduce priority pollutants.

Objectives

The objectives of this policy are as follows:

- Reduce the City's greenhouse gas emissions and dependence on fossil fuels by promoting the use of electric vehicles and equipment.
- Prioritize the procurement of electric vehicles and equipment when they are financially feasible and meet or exceed the function and performance requirements of the internal combustion engine vehicles they are replacing, or when Staff otherwise determine that the EV's function is adequate to meet the City's needs.
- Support the development of EV charging infrastructure within the City.

Procurement Principles

Financial Feasibility: The financial analysis shall consider factors such as inflation rates, federal and state tax incentives, and maintenance and repair costs after the warranty has expired to determine the TCO of each EV vs. ICE option.

Performance: EVs shall be selected based on their ability to meet the needs of the City and Staff's ability to adapt to them. A comparison to equivalent ICE vehicle or equipment performance shall be performed for all potential EV purchases.

Environmental Impact: The environmental impact of EVs, including their potential for reducing CO2 emissions compared to ICE vehicles or equipment, shall be estimated and considered in the procurement decision. Emissions shall be calculated, and emission reductions publicized.

Collaboration: Staff working to transition the City's fleet to EVs should build strong relationships with utility representatives, peer local governments, regional associations, state-level agencies, elected state and federal officials, and other stakeholders to accelerate the transition.

Staff should make use of the State's collective vehicle procurement offers as well as those of the Climate Mayors' Purchasing Collaborative (see Resources) whenever advantageous for EV purchases.



City of Lebanon
New Hampshire

ADMINISTRATIVE POLICIES & PROCEDURES

Electric Vehicle and Equipment Procurement Policy

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Section 5.0: Procedures

Procurement Process

Analysis: The procurement team, comprised of the Energy and Facility Manager, Fleet Superintendent, Department Head or their Designee, and others with technical knowledge of the asset as needed, shall conduct a comprehensive analysis using an EV Procurement Analysis Tool. This tool shall evaluate the financial feasibility, performance, environmental impact, and ownership structure of potential EV options. See Section 6.0: References, Dashboard for Rapid Vehicle Electrification: (DRVE Tool) to access one EV procurement analysis tool.

Financial Assessment: The purchase of electric vehicles or equipment shall be considered when they are financially feasible, factoring in such elements as:

- Expected years of use/ownership.
- Annual vehicle mileage, idling time, and fuel use.
- Inflation rate (including fuel and electricity) (%/year).
- Value of federal or state tax and other incentives (\$/vehicle).
- Maintenance and repair cost (\$/mile) after the warranty expires, EV vs. ICE.
- Life Cycle Assessment and Total Cost of Ownership as opposed to up-front capital cost alone.
- Electricity Costs, including Demand Charges.
- Ancillary benefits, such as Time Of Use charging rates, Vehicle-to-Grid remuneration, and the increased functionality of EVs.

Federal, state, and other incentives and rebates will be sought to cover the cost of fleet electrification wherever feasible.

Performance Evaluation: EV models shall be evaluated for their performance, including interviews with current users in similar climates/conditions. A performance comparison to equivalent ICE vehicles shall be made.

Environmental Impact Assessment: The environmental impact of EVs, including their potential to reduce CO2 emissions and the emissions of the electricity used to charge the EVs, shall be determined.

Ownership Structure Analysis: The procurement team shall evaluate different ownership structures to determine the best approach for the City, including Purchase (cash), Purchase (Loan), Lease, and Tax-Exempt Lease Purchase.



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New Hampshire

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Electric Vehicle and Equipment Procurement Policy

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Recommendations and Approvals: The procurement team shall provide a recommendation based on the analysis of potential EV options, considering financial feasibility, performance, environmental impact, and ownership structure. The recommendation shall be reviewed and approved by the Department Head for submission per Administrative Policy #08-02-A Purchase Agreements Policy, Administrative Policy 2018-01-25 Purchasing and Payment Processing of Vendor Invoices, and Administrative Policy 98-01-A Budget Submission Dates.

Implementation: Once approved, the procurement of electric vehicles shall be carried out in accordance with the selected ownership structure. The City shall continually monitor the performance and costs associated with the EVs to ensure they meet the expected benefits and cost savings.

Charging Infrastructure

The City will develop and maintain an EV charging infrastructure plan to support its electric vehicle fleet. This plan will anticipate future needs for City EV charging, especially if an EV purchase is anticipated. Costs for this EVSE will be incorporated into operating budgets and/or the CIP process, with financial incentives obtained wherever practical. The plan will also consider the placement of charging stations at City facilities and in public areas to encourage EV adoption by employees and residents.

Staff will undertake long-term planning for EV charging equipment whenever a facility is undergoing substantial renovation, especially if the renovation involves a parking area. This includes at the very least the installation of electrical conduit to locations where future EV charging stations could be located. EVSE development can have a long lead time, up to two to three years for DC fast chargers, and staff should plan accordingly.

Facility renovations shall incorporate infrastructure for future EVSE wherever possible, even if no EV purchases are planned for the immediate future. This will substantially reduce future costs and work. EVSE installed by the City should meet not only current needs but anticipate future needs as well.

EVSE should be sited to avoid accidents and hazards, maximize convenience, allow for future expansion in number of stations and charging speed, and minimize the cost of installation. It should be undertaken with pre-knowledge of electrical capacity at the site, an awareness of how it will affect traffic patterns, and any other major site constraints. Liberty Utilities should be consulted early in the EVSE



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New Hampshire

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development process as they often require a long lead time to do EVSE feasibility assessments and cost estimates.

City Staff will anticipate the need for back-up EV charging when planning EV purchases and EVSE development, and address how the vehicles will be charged if the electric grid goes down.

Charging stations shall be installed in accordance with applicable regulations and standards.

Benefit-Cost Analysis

The City will conduct a comprehensive benefit-cost analysis to compare the total cost of ownership for electric vehicles/equipment and traditional vehicles/equipment, considering purchase price, operating costs, fuel costs, maintenance, and available incentives or grants.

EV Fleet Management

City Departments will establish a system for monitoring and managing the electricity-specific aspects of its electric vehicle fleet, including vehicle maintenance, charging schedules, usage, and cost tracking.

Training and Awareness

All City employees responsible for operating electric vehicles will receive training on EV operation. All City employees responsible for maintaining electric vehicles will receive adequate training on EV maintenance.

The City will raise awareness about the benefits of electric vehicles among employees and residents through outreach and educational programs.

Reporting

The City will provide regular reports on the progress of its electric vehicle adoption program, including cost savings, emissions reductions, staff maintenance reductions, and other relevant data.

This policy will be periodically reviewed and updated to reflect advancements in EV technology and changes in the City's goals and needs.



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New Hampshire

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Electric Vehicle and Equipment Procurement Policy

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Compliance

All City departments and employees are expected to comply with this policy to the best of their ability.

This policy requires staff to document the reasons for any vehicle purchase that does not meet the criteria outlined in the policy. This is in order to ensure transparency and accountability in the procurement process.

Section 6.0: References

- [National Electric Vehicle Infrastructure \(NEVI\) Program](#)
- [Local Government Playbook](#) – Electrification Coalition.
- Dashboard for Rapid Vehicle Electrification: ([DRVE Tool](#)).
- Climate Mayors' [EV Purchasing Collaborative](#).
- [Transportation Electrification Roadmaps](#) – Electrification Coalition.
- [Charging and Fueling Infrastructure grant program](#).
- [U.S. Department of Transportation - federal funding programs](#).
- Federal Joint Office of Energy and Transportation: <https://driveelectric.gov/>
- [FACT SHEET](#) | The White House | New Standards and Major Progress for a Made-in-America National Network of Electric Vehicle Chargers.
- [Connecticut Department of Transportation EV Plan](#), published 9/12/2022.
- [Net Zero Montpelier](#), Vermont.
- Electrification Coalition: State Plug-In Adoption Resource Kit ([SPARK](#)).
- Rocky Mountain Institute [Federal Funding Opportunities for Local Decarbonization](#) (FFOLD) tool helps local governments identify the most relevant funding sources for their fleet electrification process (and other decarbonization efforts) and provides key guidance on eligibility and effective grant application components.
- [Electric Vehicle Infrastructure Projection Tool](#) (EVI-Pro). This tool provides a simple way to estimate how much electric vehicle charging you might need and how it affects your charging load profile.



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- [How Cities and Counties can Electrify Their Fleets](#), Rocky Mountain Institute, January 2023.

Two specific fleet electrification incentives:

- Qualified Commercial Clean Vehicles Tax Credit (Section 45W): As of 2023 this new 'tax credit' is available to municipalities and provides up to \$7,500 for vehicles with a gross weight up to 14,000 pounds, and up to \$40,000 for heavier vehicles. Final assembly of eligible vehicles must take place in North America, unlike the modified personal vehicle tax credit (Section 30D), and the commercial version does not impose battery and critical mineral manufacturing and sourcing requirements. The 45W tax credit value is calculated as the lesser of (a) 30% of the vehicle's cost basis or (b) the incremental cost difference of the EV compared with a conventional alternative.
- Alternative Fuel Vehicle Refueling Property Tax Credit (Section 30C): This tax credit provides an incentive for developing EV chargers. It modifies and extends a previous tax credit that expired in 2021. Specifically, for EV chargers deployed in either low-income communities or outside of urban areas, a credit of 6% of project costs is available, with the potential to increase this credit to 30% for projects using prevailing wages and meeting certain apprenticeship requirements. The maximum credit value is \$100,000 per charger.

Section 7.0: Policy & Procedure Revision History

	Section	Revisions	Date
Original Adoption			
Amendment			
Amendment			
Amendment			

AGENDA
LEBANON ENERGY ADVISORY COMMITTEE(LEAC)
NOVEMBER 16, 2023

AGENDA ITEM 4
NEW BUSINESS:

**F. PROPOSED CITY
COUNCIL RESOLUTION &
DRAFT LEAC LETTER TO
PUC**

DRAFT LEAC LETTER TO NH PUC

To: New Hampshire Public Utilities Commission (PUC)
puc@puc.nh.gov

November 16, 2023

cc: New Hampshire Governor Sununu
governorsununu@nh.gov

Re: Dockets DE 23-068 (NH Saves) and DE 22-060 (Net Metering)

Dear PUC members,

We, the members of the Lebanon, N.H. Energy Advisory Committee, urge you to approve the proposed Triennial NH Saves Energy Efficiency Plan (Docket DE 23-068) before November 31, 2023 and urge you to support the current net metering tariffs (Docket DE 22-060).

NH Saves

By helping to make buildings more energy-efficient, the proposed 2024-2026 NH Saves Program will reduce the state's greenhouse gas emissions by more than 2 million tons and reduce costs for New Hampshire communities and residents by more than \$675 million. [ANY LOCAL EXAMPLES TO BOLSTER SUPPORT FOR NH SAVES?]

Net Metering

New Hampshire utilities report that customer participation in net metering has nearly tripled in the last year. Net metering tariffs effectively support opportunities for New Hampshire customers to install distributed generation resources, which reduce customer costs and add renewable energy to the state's energy generation mix.

[ANY LOCAL EXAMPLES TO BOLSTER SUPPORT FOR NET METERING? EXAMPLE: Lebanon's significant solar installations participate in net metering, which provide considerable taxpayer savings. Net metering is a key strategy for increasing Lebanon's use of renewable energy resources.]

For these reasons we ask the PUC to approve the NH Saves Energy Efficiency Plan and the current net metering tariffs for the good of Lebanon citizens and all New Hampshire residents.

Sincerely,

[NAME], Chair
Lebanon Energy Advisory Committee
[ADDRESS??]

**PROPOSED RESOLUTION BY THE
LEBANON (N.H.) CITY COUNCIL**

WHEREAS, Lebanon as a community has committed to reducing its greenhouse gas emissions by a minimum of 25% by 2025 and by 80% by 2050; and

WHEREAS, the vast majority of Lebanon's greenhouse gas emissions come from the built environment and transportation sectors; and

WHEREAS, Lebanon's Master Plan emphasizes our goals of increasing energy savings for residents, businesses, and municipal functions, to ensure a robust and stable energy economy and to reduce the impacts of greenhouse gas emissions that result from a fossil fuel-dependent economy; and

WHEREAS, current net metering tariffs reduce taxpayer and customer costs and contribute sources of renewable energy in Lebanon; and

WHEREAS, the proposed 2024-2026 NH Saves Energy Efficiency Program would provide increased benefits to Lebanon residents and further our emissions-reduction goals;

NOW, THEREFORE, BE IT RESOLVED, that the Lebanon City Council, the governing and legislative body of the City of Lebanon, New Hampshire, does hereby request that City Manager Shaun Mulholland submit a letter of support for the current net metering tariffs and the proposed triennial energy efficiency plan to the NH Public Utilities Commission.

PASSED AND ADOPTED this ____ day of **November, 2023** by a majority vote of the Lebanon City Council.

Timothy J. McNamara, Mayor
Lebanon City Council

AGENDA ITEM 4
NEW BUSINESS:

**G. RELATIVE COSTS OF
CARBON REDUCTION-
VT 2021 ENERGY
REPORT & STRAFFORD
RPC GUIDE TO
MUNICIPAL EVSE**

Relative Costs of Carbon Reduction

There are many state programs that support Vermont's efforts to reduce GHG emissions across the different sectors, including renewable power supply requirements, energy efficiency, weatherization, advanced wood heating, and incentives for electric vehicles and cold climate heat pumps. These programs use a mix of public and private investment to lower emissions and incur both public and private costs and savings. The Department created a tool to better understand how particular actions ("measures") reduce carbon emissions relative to the costs and benefits of each action.

This simplified spreadsheet model compares efficiency, transportation, and renewable energy measures by estimating the amount of carbon savings relative to the economic cost to Vermont as a whole over the measure's life. Measures with negative "net costs" are effectively "net benefits." Other important emissions reduction policies, such as improving bicycle and pedestrian infrastructure and increasing public transit use, are not included given the difficulty of estimating emissions reductions on a per-measure basis.

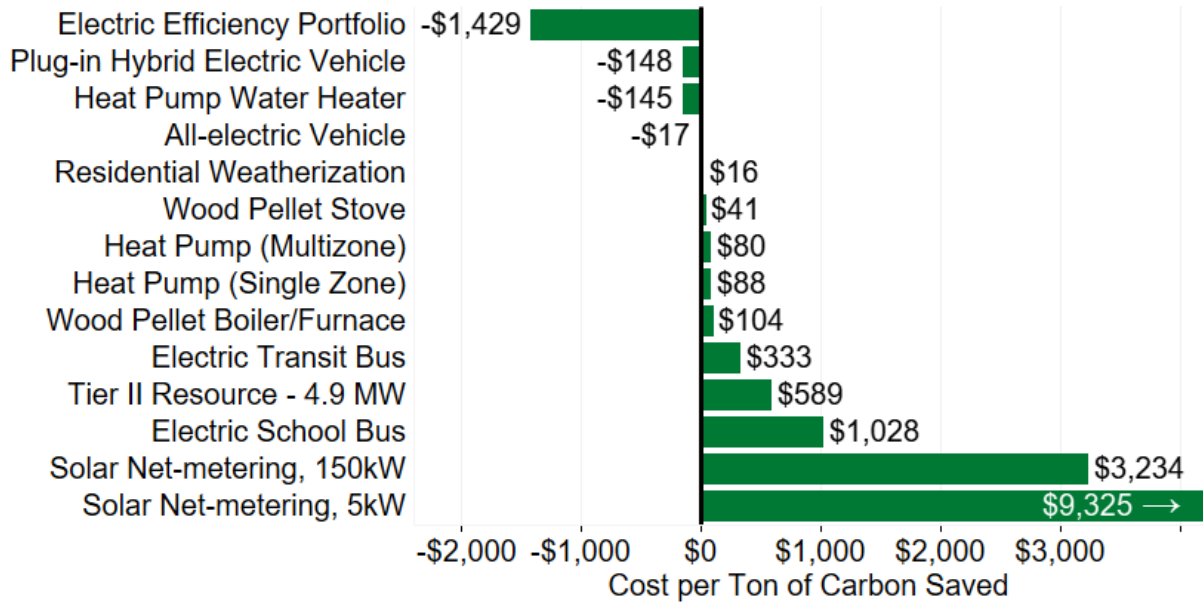
The measures analyzed often provide additional benefits besides carbon reduction, including economic development, health benefits, and improved comfort in weatherized homes. The model does not attempt to capture these additional benefits because they are not already quantified for each and every measure. The model is not an argument to expand or eliminate certain programs, but instead intended to compare the carbon impacts of existing clean energy measures. The Department supports continuing a diverse approach to mitigating carbon emissions; such a portfolio approach provides customers with choices and ensures lower cost strategies are accessible as technologies improve and prices fall.

The tool uses readily available data and estimates, meaning that only select measures are included. Data and assumptions were developed in 2019 and updated in fall 2020. The model accounts for electricity-related emissions based on the Vermont utilities' power supply mix after attribute trading and adjusted to reflect the changes to the power supply mix over a measure's lifetime.

The chart below depicts the measures analyzed, ranked occurring to the cost per ton of carbon avoided. A negative cost means that benefits outweigh costs; in other words, the measures save money over their lifetime. A positive cost means that the financial costs of the carbon-reducing measure outweigh the financial benefits. The summary does not differentiate who bears the cost and includes incremental expenditures and savings whether these are borne by individuals (e.g., buying equipment) or Vermonters at large (e.g., lower electricity costs).

Additional information about the methodology is available in Appendix B.

Figure 1 - Relative Cost of Carbon Reduction Policies



Generally, efficiency measures such as electric efficiency and weatherization programs are more cost-effective than measures that require significant upfront expenditures. Some of the measures analyzed have high initial costs and are not widely deployed. For such measures, it is important to remember that it is useful to trial new technologies, particularly in the areas of transportation and heating where electrifications efforts are relatively nascent, new approaches to decarbonization are needed, and technology costs will likely continue to decline.

III. Strategies for Reaching 90 by 2050

Reducing demand

Over the past decade, electric efficiency and conservation have more than offset the increase in energy demand associated with increases in population, the growth in building-space square footage, and the growth in industrial output. Efficiency, defined as doing the same amount of work with less energy input, remains Vermont's first option to meet energy requirements – in both the building (electric and thermal) and transportation sectors. Traditional efficiency programs have served Vermont well over the last several decades. Over the last several years, fuel switching technologies such as electric heat pumps and plug-in or all-electric vehicles allow the same level of energy services with much less site energy requirements, while also allowing for sourcing of the energy renewably. Together, both traditional efficiency and cost-effective fuel-switching are critically important to meet both Vermont's energy and GHG reduction goals and requirements.

Traditional electric efficiency programs remain cost-effective, but achievable efficiency potential is declining. Vermont needs to continue to acquire all reasonably available electric potential, while maintaining stability in programs and rates charged to support investment. In addition, innovation remains paramount – as we invest in efficiency, we can identify opportunities to further pursue

Municipal Guide to Electric Vehicle Charging Stations

Electric vehicles (EVs) are now more affordable and easier to find, driving EV purchases up in New Hampshire and the Northeast in general. Municipalities have a vital role in planning for, permitting and installing EV Charging Stations to meet the growing demand for these consumers. The *Municipal Guide to EV Charging Stations* was created by Strafford Regional Planning Commission, with assistance from Clean Energy NH and NH Department of Environmental Services, to help increase deployment of EV charging stations in your community. We hope it serves as a helpful guide to remove the barriers to increasing installation and maintenance of EV charging stations in your community.



9 Sections Available

The guide covers everything from charging levels, to financing, where to install the chargers, various fee structures, and station maintenance.



Based on National, State, & Regional EV Resources

The resources in the guide are based on research from communities and agencies around the region, state and country.



Regularly updated with local and state best practices

Updates will be conducted monthly, or as needed, to include new financial resources, best practices, and other advancements in EV Charging technology.



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