



**LEBANON ENERGY ADVISORY COMMITTEE (LEAC)
MARCH 18, 2021 - 4:00 PM
REMOTE VIA MICROSOFT TEAMS
LEBANONNH.GOV/LIVE**

-
- 1. Call to Order**
 - 2. Approval of Minutes**
 - A. February 18, 2021
 - 3. New Business**
 - A. Discussion with City Manager, Shaun Mulholland, DPW, and Planning Dept. Staff on Near and Long-term City Energy & Climate Goals Role for LEAC in 2021
 - 4. Subcommittee Reports**
 - A. Municipal Aggregation Subcommittee
 - 5. Other Business**
 - 6. Open to the Public**
 - 7. Future Agenda Items**
 - 8. Next Meeting Date**
 - A. April 15, 2021, 4 PM
 - 9. Adjournment**

Due to the current situation with the COVID-19 Pandemic, the City of Lebanon is offering its meetings via Microsoft Teams. Members of the public are encouraged to attend 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 Microsoft Teams software or by phone. Please visit LebanonNH.gov/Live for full details.

THE AGENDA, IN ITS ENTIRETY IS AVAILABLE ON THE CITY'S WEBSITE AT LEBANONNH.GOV

AGENDA
LEBANON ENERGY ADVISORY COMMITTEE
MARCH 18, 2021

AGENDA ITEM 2
APPROVAL OF MINUTES:

February 18, 2021

LEBANON ENERGY ADVISORY COMMITTEE MEETING MINUTES

Due to the Covid 19 Pandemic, the meeting was held virtually via MS Teams

February 18, 2021

4:00 PM

DRAFT

MEMBERS PRESENT: Clifton Below (Chair, Council Representative), Greg Ames (Vice-Chair), Jon Chaffee, Woody Rothe, Joan Monroe (Planning Board Representative), Meghan Butts

MEMBERS ABSENT: Gene Homicki (alternate)

STAFF PRESENT: Everett Hammond

GUESTS PRESENT: Sandy Gmur (Vital Communities), Evan Oxenham

CALL TO ORDER: Meeting called to order by Clifton Below at 4:05 PM.

ACCEPTANCE OF MINUTES: Woody moved to accept the 1/21/2020 minutes with two corrections (add Meghan to Members Present, change Greg's nomination to Vice-Chair, not Chair); Jon seconded. Approved unanimously by roll call vote.

NEW BUSINESS

Update on Community Power Coalition of NH (CPCNH) and Lebanon Community Power (LCP) planning: The City Council unanimously approved the City Manager entering into the CPCNH Joint Powers agreement (Hanover has approved it as well). The City Manager has signed the contract with Samuel Golding as a CPCNH consultant (funded by via the CDFA grant). Henry Herndon's contract as a CPCNH consultant is close to completion (also funded by via the CDFA grant). Clifton shared Samuel and Henry's scope of work documents, detailing what they are doing under their contracts.

Legislative Update: HB 315 City Testimony and Attachments, HB 407, and SB 91: Clifton gave an update on the progress of HB315. Several people who had signed up to testify at the hearing did not get a chance to speak; the hearing has been continued until Monday 2/22 at 1pm. Clifton has had conversations with the bill's main sponsor about possible amendments. Clifton suggested that Committee members consider going to the House site and register their opposition to HB 315. HB 407 has a hearing tomorrow. It creates a market-based alternative to net metering, allowing distributed generation "limited producers" under 5MW to serve as a load reducer, improving economics of distributed generation. Clifton suggested that

Committee members consider going to the House site and register their support of HB 407. SB91 incorporates HB 407 and some of the positive aspects of HB 315

NSF Smart & Connected Communities Grant Proposal for Lebanon Transactive Energy Community (LEBTEC) with Dartmouth, UNH & MIT: Greg gave an update. Amro Farid is applying for a National Science Foundation Smart and Connected Communities Grant for a joint project between Dartmouth and Lebanon, UNH, and MIT as sub-awardees. LEBTEC will serve as a data-gathering pilot to analyze electricity use and learn how to use AI control of demand response without impacting customers use of appliances, water heating, HVAC, building automation, etc. Some of the information learned will likely help with the development of Lebanon Community Power. If approved, the project will start late summer/early fall and run for four years.

Update on LED Street Light Conversion Project: The City Council supported the consensus of LEAC and DPW to convert the lights around Colburn Park and the Mall to 2700K or 3000K LED using the existing poles (with refurbishment of the poles). The new lights will be dark sky friendly. The main street light conversion project has been delayed due to weather, but conversion should begin Monday.

2021 Goals and Work Plan: Clifton shared the Planning Board section of the 2021 proposed budget. The Committee discussed the Planning Department's interest in encouraging more sustainable and energy efficient development within the City. Jon mentioned that he has invited the City Manager to attend LEAC's March meeting to get his feedback and plans on this topic. Joan discussed some of the proposed changes to sight plan regulations, including outdoor lighting.

OTHER BUSINESS – Meghan discussed the Governor's new proposed Department of Energy that would impact OSI and recommend that LEAC monitor the situation.

OPEN TO THE PUBLIC – Sandy Gmur from Vital Communities discussed the Valley Quest and specifically Lebanon Energy Quest. This year's "Super Quest" is around climate, and she is interested in including some of Lebanon's energy updates in Super Quest. The Lebanon Energy Quest was last updated in 2012. Could include updates around LED's, Solar, etc. The Committee discussed some of the impacts of Hurricane Irene. Sandy will forward the Lebanon Energy Quest information to the Committee for review.

COMMITTEE REPORTS – Meghan gave a summary of last week's EV Subcommittee meeting – The Subcommittee discussed NH DES DERA grant funding for upgrading diesel vehicles – possible upgrades of school buses? Discussion of planning regulations around EV charging, possibility of EV police cars and patrol eBikes, and the expansion of CMAQ to possibly cover EV charging. Joan mentioned that the Planning Board regulations are being updated to include some discussion/requirement of EV charging.

FUTURE AGENDA ITEMS: Jon and Woody suggested that we invited the City Manager to the March meeting to discuss long-term planning. Possible updates on City solar, anaerobic digester, and landfill gas-to-energy.

NEXT MEETING:

Scheduled for Thursday, March 18th at 4pm.

ADJOURNMENT:

A motion was made by Greg to adjourn the meeting at 5:51 PM. The motion was seconded by Meghan. The motion was unanimously approved by roll call vote.

Respectfully submitted,
Gregory Ames

DRAFT

AGENDA
LEBANON ENERGY ADVISORY COMMITTEE
MARCH 18, 2021

AGENDA ITEM 3
NEW BUSINESS:

2021 LEAC Priorities

Energy and Climate Action Items

1. Transition City buildings off fossil fuel, CIP plan
2. Create City (LGO) Climate Action Plan, inc. transportation sector
3. Manage, track and report on City Climate Actions
4. City Wide GHG baseline and Action Plan
5. Outreach and engagement of citizens in GHG reduction
5. Adopt updated building code
6. Update Energy Chapter of Master Plan
7. Implement Lebanon Community Power
8. City procurement policy
9. Coordination with regional, state + national initiatives

Multi-Year Energy Transition Goals

	2021	2022	2023	2024
Tad	1. Building CIP Plan 2. Assist LGO plan 3. Assist LEAC	1. Train City depts. in GHG plan 2. Generation at water pumps 3. Assist CW GHG planning 4. Seek Grants	1. Begin CW GHG organizing in City, outreach. 2. Outreach for LCP 3. LGO + CW transportation GHG reduction planning	
LEAC	1. Woody and Jon assist Tad on energy use database	Implement LCP pilot Launch LCP CW	Plan LCP thermal program Help with CW engagement	
Planning Office	1. LGO GHG plan 2. Energy Code	City Wide (CW) GHG baseline and begin plan	Finish CW Plan with wide participation	
SL	1. Get 501c3	Seek grants to partly fund EFM	Work on CW engagement in broader sustainability goals with Tad Fund 50% of Tad	

AGENDA
LEBANON ENERGY ADVISORY COMMITTEE
MARCH 18, 2021

AGENDA ITEM 3
NEW BUSINESS:

Leac Relevant Portions of City 2020-2021 Work Plan

- Evaluate additional zoning protection initiatives, e.g. Aquifer and/or Source Water Protection overlay, as appropriate.
- Evaluate creation of a Conservation zoning district for properties that are preserved by City or conservation organizations, or by request of individual landowners.
- Work with NHDOT and developers to protect wildlife corridors and sensitive natural resources as projects or opportunities arise.
- Enhance presence of Conservation Commission and conservation parcels on the City website to provide more and better information to the public.
- Work with DPW to utilize the RPC culvert evaluation study to identify potential vulnerabilities and to plan for rehabilitation efforts using Asset Management tools.



IMPLEMENT LAND USE POLICIES THAT RESULT IN MORE ENERGY-EFFICIENT BUILDINGS AND SUSTAINABLE DEVELOPMENT (PLANNING & ZONING)

STRATEGIES

- Encourage the use of energy conservation measures through site plan review, such as orienting buildings to take advantage of natural light and heat, and providing vegetation for summer shading and wind buffers. (5.1.S14)
- Explore cottage or bungalow development strategies to promote, smaller, more energy-efficient, more affordable dwellings with limited size and footprint. (7.1.S15)
- Revise existing subdivision and site plan regulations to encourage or require more energy-efficient development. (13.1.A3)
- Encourage developers to site and design buildings to meet LEED certification or other energy sustainability guidelines. (7.2.S11)
- Maximize energy efficiency in municipal buildings and encourage efficiency in commercial and residential buildings. (13.1.SA; 13.1.SB)
- Adopt Energy Efficient Building Code policy (13.1.A2; 13.4.A1; 13.5.A1)

2020 OUTCOME MEASURES

- Progress on GHG emissions tracked and reported annually building on 2019 baseline for local government operations (LGO) developed by UNH Fellow.
- Proposal developed and application submitted to UNH Sustainability Institute to engage UNH Fellow for community-wide GHG emissions inventory as recommended in 2019 LGO GHG report.
- Evaluate costs, benefits, and necessary tasks for preparing a Municipal Climate Action Plan or Sustainability Plan.
- Energy efficiency recommendations and/or requirements incorporated into development regulations.
- Continue to work with and support Energy & Facilities Manager on development of programs and policies for energy reduction and efficiency, such as solar installations, electric fleet, development of EV charging stations, etc.

LOOKING AHEAD (2021-2022)

- Assist UNH Fellow with completion of community-wide GHG emissions inventory, if application proposal is successful.
- Undertake development of a Municipal Climate Action Plan or Sustainability Plan to develop a strategy and list of specific actions and steps for moving toward compliance with adopted climate

action goals, such as the Global Covenant of Mayors for Climate and Energy as recommended in the 2019 LGO GHG report.

- Evaluate the potential for City to adopt enhanced energy code requirements (IECC) on accelerated schedule from State Building Code and/or encourage commitment to above-code performance through compliance with voluntary standards.
- Evaluate opportunities for increased flexibility in the size and design of residential construction.



PLAN FOR MULTI-MODAL TRANSPORTATION (PLANNING & ZONING)

STRATEGIES

- Encourage a diversity of transportation uses within the CBDs by improving roadway design, increasing incentives for mass transit use, and providing pedestrian and bicycle linkages. (3.1.S12; 3.1.A8; 9.4.S4)
- Encourage and support transportation alternatives to single-occupancy vehicles, including mass transit, pedestrian and bicycle paths and facilities, ride-sharing, etc. (5.1.S16; 9.2.S3)
- Develop facilities to allow for independent child mobility, such as separated bike paths. (9.4.A3; 9.4.S7)
- Identify bicycle routes off main streets in an effort to make transportation more accessible for riders, for example, a bike route from the Lebanon Mall Entrance through the major parking lot to Spencer Street to Elm Street. (3.1.S19; 9.4.S7)
- Create and improve bikeway linkages, such as extending the Northern Rail Trail/ Mascoma River Greenway to West Lebanon. (3.1.S18; 3.1.A12; 9.3.S1; 9.4.S7)
- Develop a citywide system of safe pedestrian paths, crosswalks, curb extensions, buffered sidewalks, bikeways, and bike lanes, which connect neighborhoods, recreational areas, and the CBDs. (3.1.S13; 3.1.S23; 3.1.A20; 4.1.S4; 4.1.S28; 4.1.A16; 4.1.A10; 9.4.S4; 9.4.S5)
- Encourage sidewalks, bike paths, parks, playgrounds, bus stops, walking paths and other pedestrian-oriented and traffic calming amenities as part of neighborhood planning, especially in underserved areas. (7.2.S2; 9.2.S10; 9.2.S6; 9.2.A5; 9.4.S4)
- Formalize standards for City and state road and bridge projects and the City's development regulations to control automobile traffic to allow safer pedestrian activity, addressing such issues as road widths, corner radii, signage and other specific design criteria, while ensuring adequate access by emergency vehicles. (7.2.A3; 9.1.A1; 9.4.A1; 10.1.S14)
- Coordinate with the Planning Board, Conservation Commission, Pedestrian and Bicycle Advisory Committee, and the Recreation Department to develop a trails and ped/bike master plan. (9.3.A1; 9.4.S2; 9.4.S4; 9.4.S7)
- Continue support of Advance Transit and promote new routes and expanded service, where appropriate. (13.6.A3)
- Continue to work with the UVTMA to market commuting options and engage employees in a behavior change campaign. (13.6.A14)
- Complete the Americans with Disabilities Act Transition Plan to ensure that public facilities meet ADA guidelines. (9.4.A2)

2020 OUTCOME MEASURES

- Complete Streets Policy addressed in projects including CSO 13, and State and City road and bridge resurfacing projects.
- Pedestrian/bicyclist mobility map prepared with Ped/Bike Advisory Committee depicting existing, proposed, and gap opportunities for public and private routes.

- Miracle Mile bus stops relocated, and new sidewalk segments and signalized pedestrian crossing installed in coordinated with DPW, Liberty Utilities, Advance Transit, and abutting property owners.
- Sidewalk segments installed to address gaps in connectivity along Route 12-A in coordination with DPW and abutting property owners and utilizing funds from private development.
- Connections to Mascoma River Greenway developed in coordination with Recreation and Parks Department and adjacent landowners.
- Preliminary and Final Design completed for multi-use pathway along Lahaye Drive as part of TAP grant project and worked with NHDOT to accelerate bid and construction phases of project in State's 10-Year Plan.
- Pedestrian/bicyclist pathway funding and design needs addressed with NHDOT for signalized crossing at Centerra Parkway.
- Citywide crosswalk inventory and needs map developed to inform streetlight upgrades and Police Department's 2019 evaluation of Safe Routes to School.
- ADA Transition Plan advanced.
- Advance Transit and UVTMA supported, including advocacy for van-share program and transit extensions up Route 120 into Lebanon.
- UVTMA Mobility Checklist explicitly referenced and incorporated into development regulations.
- Complete Streets Design Standards and Streetscape Standards, as well as bike rack requirements, integrated into Site Plan Review and Subdivision Regulations.
- Bike Friendly Community Bronze Rating from May 2017 reviewed for opportunities to sustain or improve rating in 2021.

LOOKING AHEAD (2021-2022)

- Advocate for construction funding from NHDOT for TAP grant-funded multi-use path along Lahaye Drive, if necessary.
- Partner with Advance Transit, when possible, to implement facilities and improvements as recommended in 2010 Bus Stop Study.
- Advocate for and assist with preferred alternative of MRG extension and connections.
- Continue review of on- and off-street parking standards, including commuter parking/park and ride provisions.
- Review possibilities for encouraging or requiring bicycle parking and related amenities or improvements in new developments and in public areas.
- Monitor state law proposals on electric bikes and scooters and work with Police Department and City Administration to update local regulations, as needed.



IMPLEMENT LAND USE POLICIES THAT PRESERVE OUTLYING RURAL AREAS AND DIRECT DEVELOPMENT TO BUILT-UP AREAS (PLANNING & ZONING)

STRATEGIES

- Implement and/or update Future Land Use Map and Master Plan Land Use Chapter (#2) through zoning map amendments.
- Promote balanced land use that preserves the City's outlying rural character and directs development toward its urban and densely settled residential cores. (2.1.S1; 2.2.S1; 2.2.S2)
- Establish an Urban Services Boundary, clearly keyed to the Zoning Map and the Land Use Map that includes high-density residential, commercial, and industrial zones, as well as potential identified growth areas, while excluding the rural zones. (2.2.A1; 6.1.A8; 7.2.A5; 8.1.S19; 8.1.S20; 8.1.A26)

CITY OF LEBANON
2020-2022 OUTCOMES & WORK PLAN



**TRANSPARENT AND FISCALLY RESPONSIBLE
ANNUAL BUDGET**
(CITY MANAGER)

STRATEGIES

- Expand Team-based Work Methods
- Training Program for Succession Planning
- Complete a City-wide Workflow Analysis
- Seek New Revenue Streams
- Review Potential for Expanding Operational Reserve Planning for Energy Related Matters
- Review Procurement Policies (Best Value v. Low Bid; Life Cycle Costs)

2020 OUTCOME MEASURES

- Implement new Water Development Fees to increase revenues
- Analysis of Sewer Development Charge
- Streamline purchasing policies and include design build provisions
- Advocate for local adoption fees in the State Legislature

LOOKING AHEAD (2021-2022)

- Departments Outfitted with Active Succession Plans
- Workflow Analysis Complete
- Project Driven Teams Created
- Additional revenue generated through implementation of new or updated fees/policies
- Implementation of strategy for the City's Transparency Initiative



**CAREFUL, WELL BALANCED, COST-CONSCIOUS,
CAPITAL IMPROVEMENT PLANNING**
(CITY MANAGER)

STRATEGIES

- Prioritize CIP Projects being mindful of the desire to balance between differing departments
- Optimize departmental collaboration to create a broad overview of infrastructure
- Assess where projects may overlap with future private ventures; combine efforts where possible
- Review potential for Capital Reserve Planning
- Assess value-added opportunities when planning capital projects

2020 OUTCOME MEASURES

- Compliance with schedule for completion of CSO in relation to Consent Decree



REDUCE ENERGY CONSUMPTION IN ALL PUBLIC FACILITIES

(DPW - EFM)

STRATEGIES

- Require the use of renewable energy in heating and cooling systems in new construction of public buildings. (5.1.S12)
- Conduct periodic energy audits of all City buildings, infrastructure (including streetlights) and operations to identify areas of energy waste and recommend cost-effective energy conservation measures. (5.1.A18)
- Ensure that new public facilities (and where possible, existing facilities) incorporate the following principles, when appropriate: Central location (locally and regionally); good access and traffic flow; adequate parking; energy efficiency; handicapped access; multi-purpose buildings when possible. (8.1.S2)
- Practice and promote cost-effective energy efficiency. (8.1.S11)
- Assess all City-owned buildings periodically to determine needed repairs, upgrades, energy-efficiency improvements, and replacements, as well as the suitability of operational standards. (8.1.A2)
- Review energy use in all City government operations on an annual basis. (8.1.A12)
- Develop an energy conservation plan for City buildings and facilities. (8.1.A13)
- Purchase hybrid vehicles using biodiesel and/or other alternative fuels for all appropriate City vehicles. (9.2.A10)
- The City shall maximize energy efficiency in municipal buildings and encourage efficiency in commercial and residential buildings. (13.1.SA)
- Assess the feasibility of renewable energy technologies in new and existing municipal buildings. (13.2.A3)
- Continue to take advantage of geothermal resources in new construction, similar to Kilton. (13.2.A12)
- Study the feasibility of ground-source-heat pumps in new and upgraded municipal buildings. (13.2.A12 & 13.7.A13)
- Advocate for projects that reduce the City's energy consumption and/or introduce renewable energy resources in the Capital Improvement Program. (13.3.A4)
- Investigate opportunities for interdepartmental coordination and funding of energy efficiency maintenance projects in existing municipal buildings. (13.3.A5)

2020 OUTCOME MEASURES

- Conduct energy audits or retro-commissioning on the GAR building, DPW Admin., DPW Garage, airport buildings.
- Monitor energy consumption and review trends and opportunities for improved efficiency.
- Continue effective management of engine idling policy.
- Implement energy efficiency measures of the Lebanon Library, city hall, police station, water treatment facility and wastewater treatment facility as recommended in their audits.
- Implement Phase 1 of the Streetlight Conversion Project to LED fixtures for the majority of City-owned streetlights. Include the potential for smart meter networks in conjunction with the streetlight project and in collaboration with Liberty Utilities.
- Assess feasibility of Streetlight Conversion Project Phases 2-4: Colburn Park +, West Lebanon, Storrs Hill. Implement them as funds allow. Assess and if deemed feasible begin to implement collaboration of smart streetlight network with the Lebanon Community Power metering.

- Assess feasibility of City-owned electric vehicles. Wherever feasible, build out EV charging infrastructure for City fleet and residents', and visitors' vehicles.
- Work with Cemetery Sexton to design new building for main cemetery, apply for CIP funds.

LOOKING AHEAD (2021-2022)

- Develop and implement energy improvements to include renewable energy sources and energy conservation measures for the City and for residents, organizations and businesses through Lebanon Community Power.
- Complete Facility Assessment Plan/Facility Condition Assessment.
- Long Range Capital Maintenance & Energy Use Plan Completed (8.1.A12; 8.1.A13) including 30-year plans for converting all City buildings to non-greenhouse gas producing renewable heating sources.



“FRIENDS OF LEBANON RECREATION & PARKS” ARE ENHANCING OUR PARKS (RECREATION & PARKS)

STRATEGIES

- There are many opportunities for improved coordination with other partners in providing community facilities and services. (8.B.2)
- Evaluate the need for facilities and continue to form partnerships with user groups to develop these facilities. (10.1.A1)

2020 OUTCOME MEASURES

- Recruit more supporters of a broad age range for ideas, fundraising efforts, etc.
- Solicit fresh ideas for new projects to support and fundraise.

LOOKING AHEAD (2021-2022)

- Collaborate for fundraising for an indoor community center.
- Solicit fresh ideas for new projects to support and fundraise.