Medford Energy & Environment Committee (MEEC) Agenda
May 2, 2022 @ 6:30 PM
Via Zoom Virtual Meeting Connection (connection information below)

Office of Energy and Environment: Alicia Hunt
Committee Members: Luke McKneally, Bob Paine (chair), Gaston Fiore (future co-chair), Paul Taslimi (future co-chair), Barry Ingber, Lauretta James, Kathleen McKenna, Nicole Morell, John Rogers, Dave Hampton, Martha Ondras, Jessica Parks, Chris Hogan, and Benji Hiller.

Attendance: Luke McKneally, Bob Paine (chair), Gaston Fiore (future co-chair), Barry Ingber, Lauretta James, Dave Hampton, Benji Hiller, Kathleen McKenna
Guests: Matthew, phone number, Dan Koretz (Lexington), Susan Brown

1. Administration 6:30-7:00
   ● Greetings, roll call, and introductions of guests
   ● Review of minutes from April 4, 2022 meeting - 2 abstain, 6 in favor
   ● Clarification of quorum - since there are 14 members, committee decided to clarify quorum for this body. 50% or more is considered quorum for this body, i.e., 14 members, 7 is quorum, 15 members, 8 would be quorum; Approved unanimously
   ● Gaston asked about conflict of interest training:
   ● https://www.mass.gov/how-to/complete-the-online-training-program-for-municipal-employees
   ● Administrative updates from Alicia Hunt - we have a few interns starting in May & June. Still trying to hire an Energy Festival intern.
   ● Scheduling the MEEC summer meeting, Alicia is checking with the Mayor about her availability, Bob would like to know members availability the weeks of July 18, July 25, August 1, and August 8
   ● Update on Harvest Your Energy Festival plans
   ● Committee had a long discussion on Open Meeting Law and asking for clarification, Gaston shared this site: https://www.mass.gov/how-to/complete-the-online-training-program-for-municipal-employees

2. Plans for the June 18, 2022 Circle the Square event (3-7 PM; 7:00-7:30)
   see https://www.cachinmedford.org/circle-the-square/). We would like to plan for either handouts or posters on advice for Medford residents on the following topics:
   1) solar energy options for residents (including existing references; see for example, https://www.framinghamma.gov/2754/A-Guide-to-Going-Solar). Could the City point to EnergySage as a non-profit? Or Green Energy Consumers Alliance (GECA) - we prefer to not have every community trying to

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maintain its on webpages on statewide programs and incentives, so it's helpful when there are central pages like Green Energy Consumers Alliance and MassClean Energy Center.

Alicia is often asked questions about heat pumps, solar panels and electric vehicles -
- can you recommend a company?
- can you vet the proposal I've gotten/give me advice on my home.
Perhaps we should refer these to GECA? Alicia can reach out and find out if they have flyers that the committee could give out on these topics.

2) Medford's tree / urban canopy benefits, challenges, and plans for the future - think about having a laptop there for people to look things up? Lauretta can print activity pages from the Arbor Day foundation.
3) Residential building energy management with MassSave audits and consideration of heat pump systems
4) transportation issues in Medford: public transportation options (especially with pending arrival of the Green Line Extension), increased use of electric vehicles, promotion of biking and walking.

Bus Network Redesign's meeting to present the draft network map on Thursday, May 19 from 6:00 – 7:30 PM.https://www.mbta.com/projects/bus-network-redesign

The draft materials will be reviewed at the June 6 committee meeting.

3. Consideration of a potential ordinance regarding use of gas-powered leaf blowers 7:30-8:00
and how / whether MEEC should become involved. Paul Taslimi had hoped to summarize City Council meetings occurring last week on this subject, but a family emergency precluded his attendance. However, a representative from Lexington (Dan Koretz) who was involved in a recently enacted bylaw in that town discussed their process for advancing this proposal.

Some communities limit the # of blowers on a lawn at once, the hours the blowers can operate, etc. Lexington tried to eliminate all blowers. After 3.5 years there could be no more use of backpack leaf blowers. Only 4 stroke engines on lots of an acre or more.

Town meeting passed it by 85%; Landscapers fought it and tried to overturn it, and it was upheld.
Arlington is having a vote this week; Brookline is voting in May or June; Belmont is trying this summer. Some communities like Winchester are trying seasonal bans. A large chunk of the Boston area is trying. Boston is holding hearings on a similar bill.

When Washington, DC passed this 3 years ago, it had a 3-year phase out, and it is now in effect. That did start a trickle effect in surrounding towns.

Question - why only leaf blowers and not things like lawnmowers? There have been places that have passed broader rules - California passed a law that would ban all gas-powered landscaping equipment. The primary reason is that the commercial grade leaf blowers are very noisy. One gas-powered leaf blower can produce 100 decibels in the immediate vicinity. Dan has measured 93 decibels at the property line. There are very few pieces of equipment (other than these tools) that use 2 stroke engines, the power to weight ratio is very high, but they are very high emitting engines. Using one for an hour produces the same emissions as driving a Camry 1100 miles. It puts out very toxic emissions. However, the cities may not have the authority to regulate things on a health basis. The Board of Health put out a statement that the emissions and noise have a clear health risk for workers.

There was a misunderstanding about an early version of the motion and people thought it would ban lawn mowers, and there was huge pushback.

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Commercial vendors opposed for several reasons: they pointed out that lithium mining is very environmentally disruptive (but so is petroleum extraction). It is a serious disruption to their business because the electric blowers are less powerful, but the work is different. It’s a change for how they do their work, it can be an increase of cost with a large property. Landscapers claimed it would triple costs, which was not true. When you use gas leaf blowers you spread cost over time - the maintenance and fuel is expensive, but the equipment is not. With the electric leaf blowers the costs to the companies is upfront, especially with needs for additional batteries. Their costs over time is not high.

American Green Zone Alliance (AGZA) helps organizations convert from gas to electric equipment. They have a lot of data from California where the leaf loads are much lighter. He was able to provide some costs for landscapers. Most keep leaf blowers 2-3 years, which is why the 3-year transition makes sense, to allow them to be replaced at end of life during a transition period. There is a bill before the State House to allow towns to set up programs to provide support for this, and they’re looking at bulk purchasing for this equipment. Could likely get substantial bulk discounts if a few towns work together.

Strong pitch by commercial landscapers to cast this as property rights, but the response was “what about the property rights next door?” Dan is also happy to send over materials, and Arlington is getting the same arguments.

Question - is the ban a gas ban or a 2-stroke engine ban; many jurisdictions have tried controlling the type of engine, but that hasn’t worked. Newton, Cambridge have imposed a 65 decibel sound limit, but then you have to have someone measure it. Lexington’s Chief of Police asked that the rule had to be simple, so it was easy for the police to enforce. Banning gas powered leaf blowers entirely was the one thing that was enforceable. There are a few people who want all blowers banned. Any leaf blowers damage overwintering pollinators. They knew that wasn’t politically feasible. They had an acoustical technician from MIT make charts for them. one gas leaf blower generated twice the noise of 4 electric leaf blowers. There was also an analysis of the low frequency noise.

Enforcement? In Lexington its police because of their size. They don’t have other enforcement bodies that would do it.

Cost of electric leaf blowers versus monthly revenue of crews? Dan can send us that information. Is the cost of the equipment consequential to the cost of business? Actually, the big costs are disposing of the leaves and the labor. There was a big landscaper that was in Lexington that used to share this information. The issue is that you need a lot of batteries to get through the day. One company sends 3 blowers with 24 batteries for the day.

Some landscapers put in their contracts that they can charge batteries at their house for the next day. The trouble is if the weather doesn’t cooperate, or there aren’t outdoor outlets.

The punishment in Lexington can be applied to either the contractor or the property owner. This is because sometimes the landscapers are hard to find, so you can fine the homeowner who will stop hiring them. Their highest fine is $200.

The rationale behind seasonal restrictions is the inappropriate use of them. They didn’t have people argue against seasonal restrictions at all. That’s politically easy to pass. Newton banned them Memorial Day to Labor Day - much easier - that stops the “inappropriate use” of them. However, the main problem is in the fall because of the seemingly endless cleaning up of leaves.

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Dan would be happy to speak to the City Council as well.

Gaston’s points - with the limited size of yards in Medford, can’t we just ban all blowers that are not human powered? Data will be very important; Feels it would be important to do this through a referendum rather than an ordinance. Feels we need to invest a lot of time in education.

Barry: motion that the Committee endorse a ban or phase out gas powered leaf blowers and ask the Mayor for her support of such an ordinance.; Benjie seconded.

Roll call - 8 in favor, 6 absent.

Lots of residents have landscaping services in Medford. Could we do something for lawn care volunteers? Gaston would like to try to educate homeowners.

Luke: motion to have the letter include that the Mayor should phase out gas powered leaf blowers on municipal properties whether or not the ordinance passes. Roll call - 8 in favor, 6 absent.

Bob will ask Paul and Nicole for information on the current ordinance to inform the letter.

Lauretta spoke about the reforestation bill, and for her to contact the other mayors in the Metro Mayors region and to contact the state committee that will be reviewing the bill. She said that she would support the bill, but that she wanted to check with Alicia and MAPC about it. If it passes it includes equipment, support for volunteer groups, etc. Lauretta will send this to Alicia to review.

4. Other committee business: any subcommittee reports; review by Bob Paine of state implementation of the Massachusetts Climate Law if time allows (time did not allow, but a presentation was sent to the committee before the meeting).

Transportation Subcommittee - Gaston - has been trying to engage with the City Engineer and Transportation Director to get Medford to be a Vision Zero Community. Boston, Cambridge and Somerville already are; the goal is to get human powered transportation to work together better. He would like to get a member of the E&E Committee onto the Complete Streets Committee. Martha is also very involved in this work.

6. Adjourn
Community Development is inviting you to a scheduled Zoom meeting.

Topic: Energy and Environment Commission Meeting

Time: May 2, 2022 06:30 PM Eastern Time (US and Canada)

Join Zoom Meeting

https://zoom.us/j/96291215902

Meeting ID: 962 9121 5902

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Find your local number: https://zoom.us/u/aVXjXTo94

Anyone wishing to send comments or questions to the meeting can send email to enviro@medford-ma.gov

The meeting recording will be available on the committee website within a few days:
https://medfordenergy.org/gogreen/medford-energy-committee/

On February 12, 2022, Governor Baker signed into law a supplement of COVID-19 fiscal appropriations and an extension through July 15, 2022 of certain authorizations related to public meetings.

This new law extends the remote meeting provisions of the Governor’s March 12, 2020, Executive Order Suspending Certain Provisions of the Open Meeting Law. In accordance with the 2020 Executive Order, this meeting of the City of Medford Energy & Environment Committee is being conducted totally via remote participation using Zoom, including committee members and the public. The use of Zoom complies with the law’s requirement to provide live “adequate, alternative means” of public access to the deliberations of the public body, instead of holding meetings in a public place that is open and physically accessible to the public. Persons who would like to listen to or view this meeting while in progress may do so by using the link that was included on the meeting agenda posted on the City of Medford website. If, despite our best efforts, we are not able to provide for real-time access, we will post a record of this meeting on the city’s website in the near future at the link provided in the meeting agenda.

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Medford Energy and Environment Committee Members

**Luke McKneally**: registered architect with in-depth experience in energy-efficient, environmentally responsive design and the use of renewable energy in buildings. He is an Energy Engineer at ICF, implementing MassSave Passive House incentives for multifamily development in Massachusetts to encourage best practices and the highest performance possible with minimal project cost implications.

**Bob Paine (chair)**: Certified Consulting Meteorologist and Qualified Environmental Professional. Experience in meteorology and air pollution studies and consulting. Associate Vice President at AECOM, a company that focuses on areas of air quality consulting, engineering, and compliance, climate adaptation, and PFAS mitigation. Bob has been a member of this committee and legacy municipal committees (e.g., wind turbine committee) since 2004.

**Barry Ingber**: has spent most of the past four decades with non-profit organizations that serve low-income communities and work for a more sustainable and affordable energy future. Most recently, he managed energy programs for Tri-City Community Action Program. Previously, as Executive Director of MassEnergy, he founded the state's first and largest green power program, and the nation's first non-profit renewable energy coop.

**Lauretta James**: is a real estate agent and Realtor®. She works within the Committee to design and promote energy, sustainability, and environmental programs and events to educate and benefit residents and businesses. Her background includes working in the elevator industry, event organizing, and art and design. She was previously President of the Massachusetts Elevator Safety Association.

**Kathleen McKenna**: environmental engineer at Commercial Construction Consulting, Inc. (C3), which deals with LEED and sustainability consulting, energy audits, and implementation. She is secretary of the New England Chapter of The Association of Energy Engineers. Kathleen served in the role of community solar coach for the very successful 2013 Solarize Mass Program, when she coordinated the community outreach process, answered questions from residents and businesses, and was the main point of contact for community members.

**Nicole Morell**: currently a member of the Medford City Council. She is the communications specialist in the MIT Office of Sustainability where she is tasked with educating and engaging the community in campus sustainability efforts focused on emissions, climate resiliency, materials management, and more. Nicole has volunteered for many campaigns for progressive candidates and issues and joined the committee to help advance Medford’s green future and protect its many green spaces.

**John Rogers**: extensive background in energy conversion (motors, batteries, chargers, power grid, electric vehicles). With Solectria, he worked on the electrical system for the “Solectria Sunrise” EV and on their Grid Tied Solar Inverters. With Azure Dynamics, he worked on a Ford E250 Electric Van Prototype and on the onboard charging system for Ford’s Transit Connect Electric. He now works for Instrumentation Laboratory - Bedford, MA.

**Dave Hampton**: Climate Resilience Associate at The Cadmus Group, practicing at the intersection of climate adaptation, international development, and resiliency planning with experiences in the Middle East and Africa.

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20+ years’ experience in architecture, planning, and construction. His experience includes post-disaster recovery, sustainable development, humanitarian design, living systems integration, high-performance energy-efficient buildings, and materials reuse. His work brings people, nature, and the built environment together to adapt to a changing climate.

**Martha Ondras:** with a Master’s degree in environmental health at Tufts, she is a research associate at the Health Effects Institute (HEI) in Boston, working on air quality research. HEI provides high quality, trusted science for cleaner air and better health. Prior to pursuing a second career in environmental health, she retired from the post of Director of Design at Harvard Business School.

**Jessica Parks:** with a background in sustainable design and urban planning, she has experience in developing greenhouse gas reduction plans, driving energy efficiency projects, and establishing energy reporting protocols. She is currently a Senior Project Manager at MIT for projects under the campus-wide Greenhouse Gas (GHG) program. Jessica hopes to utilize her experience and expertise to help create opportunities for community engagement and education in support of a more sustainable and resilient Medford.

**Chris Hogan:** Construction Program Manager at Tufts University. Working in support of Tufts’ goal of Carbon Neutrality by the year 2050, Chris’ projects are tasked with the study and implementation of energy reducing strategies within buildings of varying usage types. (i.e. research labs, wood frame housing, dining facilities, etc.). A 20-year Medford resident, Chris is excited to serve on the committee to help promote the shared goals of Tufts and the City of Medford in their pursuit of a cleaner energy future.

**Gaston Fiore (future co-chair):** Gaston believes that an environmental education campaign leveraging our youth, encouraging active forms of transportation (pedestrian and bicycle), and making green technologies reachable to low-income households are key to achieving world-class environmental sustainability for Medford. Gaston has a background in AI and machine learning and has experience in self-driving cars and demand modeling to medicine. He has BS and MS degrees in Aerospace Engineering from MIT, and an MS in Computer Science from Harvard.

**Benjamin ("Benjie") Hiller:** is a now retired lawyer. He has a Masters degree in biology/ecology. He spent most of his career engaged in toxic tort litigation, specializing in representing children harmed by lead poisoning. Back in the 1970s and 1980s, he was part of the Clamshell Alliance which fought to prevent the construction of the Seabrook Nuclear Power Plant and which brought the dangers of nuclear power to the attention of the world.

**Paul Taslimi (future co-chair):** Senior scientist at Merck Research Laboratories Boston. Paul has been an active scientist for 40 years. Paul has a BSc and MSc degrees in Chemistry and Biochemistry respectively from Canada. Paul has a deep interest in mitigating the climate crisis through science education and raising awareness at the local level and hopes that his years of experience in science can be beneficial to the Medford community in addressing the climate crisis.

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Alicia Hunt: Director of Energy & the Environment as well as the Environmental Agent for the City of Medford. Alicia started working with the city in 2010 as the Energy Efficiency Coordinator and has done a lot of energy efficiency work on the City’s buildings. She facilitated the City's Green Communities designation and works to bring in energy and environment related grants and programs to the City of Medford. Alicia is a Medford resident who brings her green knowledge to other Medford organizations in her spare time.

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