

Town of Orleans Energy and Climate Action Committee
Minutes September 14, 2023
THE NEXT MEETING WILL BE ON OCTOBER 12, 2023, AT 4:15 PM

Note: A video recording of this meeting can be found at
<https://videoplayer.telvue.com/player/zzV8HNURw1G02-ue3glR7BRTpl-bknlL/series/4129/media/823365?autostart=true&showtabssearch=true>.

Present: John Londa (Chair), Paul Cass, Susan Chandler, Kevin Clements, David Jacobson, Hakim Janah, Roger McDaniel, plus Select Board liaison Andrea Shaw Reed.

Not attending: Bailey Nobili, a student representative of Nauset Schools.

Invited Guests: Carol Combs of the Orleans Climate Action Network.

Call to Order The meeting was called to order at 4:16 pm by the Chair.

Public Comment: None.

Chairman's Report:

Chairperson John Londa reported on his meeting with Town Manager Kimberly Newman on August 28. His notes of that meeting are in Appendix A. Highlights:

1. Tax benefits:
 - a. The Internal Revenue Service is working on proposed regulations for the Elective Pay Program, under which municipalities such as the Town of Orleans can benefit directly from tax credits even though they are not taxpayers, and they can do so without selling the tax credits to a private party.
 - b. Mr. Londa described the solar project being planned for the Town water treatment plant and gave some sample calculations and alternatives, including the tax credit alternatives (Clean Energy Production Credit or Investment Tax Credit).
 - c. Mr. Londa also discussed tax credits available to the Town for qualified commercial vehicles, for which specified hybrid vehicles can qualify and for "alternate fuel vehicle refueling property," which includes EV charging stations.
 - d. Mr. Londa also described an energy efficiency commercial building deduction (not a tax credit) under Section 179D of the Internal Revenue Code and pointed out that it is not available directly to the Town, but it would typically be monetized through a transfer of the deduction to the designer of the project.

2. Mr. Londa also discussed the Committee's webpage, the Town's vehicle fuel efficiency policy, and the Green Community grant program.

Orleans Climate Action Network ("OCAN")

Carole Combs of OCAN reported on the Lifetime Learning sessions on September 27 and October 4, led by Martin Culik and dealing with various techniques for improving a home or a business's energy efficiency, and on the preparation of handouts on the Town's actions dealing with climate change for those sessions and other events.

Town Meeting

The Committee discussed the Town Meeting scheduled for October 16 and the proposals that relate to the Committee's purposes. The specific articles, which are included in Appendix B, are these:

- Article 6: Funding for Economic and Environmental Initiatives, including EV charging stations.
- Article 7: Initial funding for a part-time energy manager.
- Article 8: Funding for initial design of the proposed solar project at the Town's water treatment plant.
- Article 30: Amending the Town's general bylaws to add the Specialized Energy Code, which has been made available by the State, to the Town's building code.

Andea Shaw Reed, the Committee's liaison with Select Board, added explanatory comments relating to those proposals.

The Committee agreed to prepare a handout with the Committee's positions on those four Articles. For that purpose, Roger McDaniel read aloud the introductory paragraph or summary of each proposed Article. Susan Chandler made a motion to approve such a handout supporting the approval of those Articles. Her motion was seconded by Paul Cass. After discussion, the motion was approved unanimously.

Specialized Energy Code

Mr. Londa and Roger McDaniel described the Committee's activities in promoting the proposed Specialized Energy Code, as summarized in Appendix C, as well as the FAQ that Mr. McDaniel and David Jacobson have been preparing.

FY25 Capital Improvement Plan for Vehicles

David Jacobson reported on his review of the FY25 plans for replacing Town vehicles, as presented in Appendix D. Mr. Londa said that the Committee was interested in this issue in coordination with the development of electric vehicle charging necessary if the Town acquires electric vehicles. Mr. Londa also expressed interest in reviewing the Town's existing vehicle policy, and for reference, he provided a copy of the Town of Concord sustainable fleet policy (attached as Appendix E), as a potential guide for the Town of Orleans.

In connection with consideration of the Town's vehicle policy, Mr. Londa referred the Committee to Criterion 4 among those established in the State's Green Communities Act, which "requires all departments within a Green Community to purchase fuel-efficient vehicles for municipal use, whenever such vehicles are commercially available and practicable" and the webinar ("Tackling Municipal Vehicle Fuel Use (3/31/21)"), a link to which is available on the State's website (<https://www.mass.gov/guides/becoming-a-designated-green-community#-criterion-4->).

Student Representative

Susan Chandler suggested that the Committee reach out to the student representative to the Committee to explore whether she should continue or a replacement should be identified, and Ms. Chandler agreed to follow up on that idea.

Approval of Minutes

The draft minutes of the Committee's August 10, 2023, meeting, as amended to clarify that the Town's share of the proposed energy manager's time was 7.25 hours per week, were considered. David Jacobson moved to approve the amended minutes. That motion was seconded by Paul Cass and approved unanimously.

Agenda for Next Meeting

Mr. Londa circulated, and the Committee discussed, a draft agenda for the October 12, 2023, Committee meeting. A copy of the draft agenda is attached as Appendix F.

A motion to adjourn was made by Roger McDaniel, seconded by Mr. Cass, and unanimously approved. The meeting was adjourned at 5:50 pm.

Respectfully submitted,
Roger McDaniel
Committee Clerk

Appendix A

ECA Notes for Meeting with Town Manager Aug 28, 11:30 AM

1. Water Department Solar and the IRA Elective Pay Program.
 - a. Water Department Solar Project is trending toward a town funded project.
 - i. Project will likely cost at least \$3700 per KW for a 300KW solar project. Total cost will exceed \$1,110,000. Annual production is estimated at 504,000 kwh.
 - b. IRA Elective Pay Program in proposed regulations June 14, 2023
 - c. Clean Energy Production Credit (Section 13701)
 - i. .0275/kwh with 5 times (.1375 kwh) for prevailing wage and registered apprenticeship requirements. Projects that are placed into service after Dec 31, 24. Phase out 2032 or later based upon greenhouse gas emission. 10 years of credit (\$69,300)
 - ii. 10% increase if project meets certain domestic content.
 - d. Investment Tax Credit for Energy Property (Section 13102)
 - i. 6% with 5 times (30%) for prevailing wage and registered apprentice requirements. (\$339,000) Projects that begin construction before Jan 1, 2025. Credit may scale down in 2033.
 - ii. 10% for domestic content.
 - e. Credit for Qualified Commercial Vehicles (45W) (Section 13403) (\$7500 to \$40,000 depends on vehicle size) Available Jan 1, 2023, to Dec 31, 2032. Vehicles must be propelled by an electric motor which draws electricity from a battery of not less than 15kwh or 7 kwh less than 14,000 lbs. Support hybrids. No domestic content currently.
 - f. Alternate Fuel Vehicle Refueling Property Credit (30C) (Section 13404). Bonus tax credit of 30% for projects meeting prevailing wage and registered apprenticeship requirements.
 - g. IRC 179D Energy Efficiency Commercial Building Deduction is not a direct pay but can be monetized by Transferability of the deduction to the designer.
 - h. Direct Pay Process:
 - i. id project and the credit (Direct ownership, partnership generally disqualifies, elections must be timely and are irrevocable, stacking for grants and forgivable loans ok but capped at 100%)
 - ii. complete prefiling registration with the IRS (Per property per year)
 - iii. File Tax Return typically 990-T and 3800. Filing is based upon accounting period. Payment 45 days after due date.
 - i. Risks: Excess Payments carry 20% penalty, accounting procedures, audit/tax compliance
 - j. Mass Municipal Association Help?
2. Support to Improve the Energy and Climate Action Committee Webpage.

- a. The Energy Climate Action Committee page needs major overhaul. I am looking to see how the town staff can assist in making this a high-quality experience for visitors to the site.
3. Town of Orleans Vehicle Fuel Efficiency Policy. I haven't been able to find the policy. The committee would like to review and revise with an "Electric First" policy. At the September 14th meeting, we will review the 2025 Capital Improvement vehicle replacement plan. Police Cruiser will no longer be exempt on July 1, 2024, which should be driving the town to hybrid cruisers.
4. Green Community Grant Fund.
 - a. Director of Facilities briefed a need for Variable Speed Drives for the Town Hall heat distribution pumps at the August 10th meeting. This is a good initiative, not particularly expensive with very good savings. Recommend Lisa Sullivan, DOER regional rep, be brought into the discussion, if needed, to help the town develop a plan for spending the remaining funds.

John Londa, 978-956-3194

Appendix B

Articles 6, 7, 8 and 30 of Special Town Meeting Warrant

ARTICLE 6. FUND ECONOMIC AND ENVIRONMENTAL INITIATIVES

To see if the Town will vote to transfer from available funds the sum of Two Hundred Thousand and 00/100 Dollars (\$200,000.00), or any other sum, for the purpose of funding electric vehicle charging stations, hydration stations, solar waste receptacles, and related initiatives to be placed on Town-owned property, at various locations, as determined by the Select Board, including all costs incidental and related thereto, and further authorize the Select Board and /or Town Manager to apply for and accept any Federal, State, and County grants or other funds that may be available for this purpose, and to enter into Intermunicipal Agreements for acceptance of any such grants or funds, or to take any other action relative thereto. (Select Board)

(Simple Majority Vote Required)

PROPOSED MOTION

I move that this article be accepted and adopted as printed in the warrant and that the sum of Two Hundred Thousand and 00/100 Dollars (\$200,000.00) be transferred from Free Cash for this purpose.

SUMMARY

The environment plays a vital role in the economy of our community. Funding opportunities for these types of projects, such as grants or cost offsets from utility companies have funding cycles and commitment deadlines that do not always align with our fiscal year or town meeting schedule. This article provides a funding source for projects or funding to use as a match to pursue grants or other funding opportunities as they arise. For example, the Town is currently considering the installation of four dual- port charging stations at an estimated cost of \$120,000. These costs will likely be offset by a utility company, but the exact amount of the offset versus cost to the town is unknown until the project completes the approval process.

Relates to FY24 Select Board Goal #2

SB:	5 – YES	0 – NO	0 – ABSTAIN
FC:	5 – YES	2 – NO	0 – ABSTAIN

ARTICLE 7. FUNDING FOR SUSTAINABILITY & ENERGY MANAGER

To see if the Town will vote to transfer from available funds a sum of Twenty-Five Thousand and 00/100 Dollars (\$25,000.00), or any other sum, for the purpose of hiring and/or contracting

for services for a Sustainability & Energy Manager, including all expenses incidental and related thereto, or to take any other action relative thereto. (Select Board)
(Simple Majority Vote Required)

PROPOSED MOTION

I move that this article be accepted and adopted as printed in the warrant and that the sum of Twenty-Five Thousand and 00/100 Dollars (\$25,000.00) be transferred from Free Cash for this purpose.

SUMMARY

This article would fund the creation of a part-time Energy Manager for Orleans. The Energy Manager in conjunction with the Buildings & Facilities Manager will develop energy efficiency projects, submit Green Community grant applications, track implementation of energy reduction projects, complete grant reports and the annual Green Community report to the Department of Energy Resources, and support Inflation Reduction Act Energy Direct Pay clean energy, clean vehicle, and electric vehicle charging projects.

Relates to FY24 Select Board Goal #2

SB:	5 – YES	0 – NO	0 – ABSTAIN
FC:	5 – YES	2 – NO	0 – ABSTAIN

ARTICLE 8. FUND DESIGN OF SOLAR PROJECT AT THE WATER TREATMENT PLANT

To see if the Town will vote to transfer from available funds the sum of Twenty-Five Thousand and 00/100 Dollars (\$25,000.00), or any other sum, for the purpose of funding conceptual design services for a solar project at the Water Treatment Plant including all costs incidental and related thereto, and further to authorize and direct the Select Board, to the extent required under Article 97 of the Amendments to the Massachusetts Constitution, to petition the Great and General Court of the Commonwealth of Massachusetts for special legislation to allow for the installation of a solar array within the Town Watershed property to provide electric power for Water Department purposes only, and further to authorize the Select Board, the Board of Water & Sewer Commissioners and /or Town Manager to apply for and accept any Federal, State, and County grants or other funds that may be available for this purpose, and to enter into Intermunicipal Agreements for acceptance of any such grants or funds, or to take any other action relative thereto. (Board of Water & Sewer Commissioners)

(Simple Majority Vote Required)

PROPOSED MOTION

I move that this article be accepted and adopted as printed in the warrant and that the sum of Twenty-Five Thousand and 00/100 Dollars (\$25,000.00) be transferred from Water Surplus Funds for these purposes.

SUMMARY

This is an article for concept design services related to the installation of solar arrays at the Water Treatment Plant to offset electrical costs for the Water Department and to authorize the Select Board to petition the Great and General Court of the Commonwealth of Massachusetts for special legislation, as needed.

Relates to FY24 Select Board Goal #2

SB: 5 – YES 0 – NO 0 – ABSTAIN
FC: 1 – YES 6 – NO 0 – ABSTAIN

ARTICLE 30. AMEND GENERAL BYLAWS TO ADOPT SPECIALIZED ENERGY CODE

To see if the Town will vote to replace Chapter 131 of the Town of Orleans General Bylaws entitled “Stretch Energy Code” with “Specialized Energy Code” (language below) for the purpose of regulating the design and construction of buildings for the effective use of energy and reduction of greenhouse emissions, pursuant to 225 CMR 22 and 23 including Appendices RC and CC, including future editions, amendments or modifications thereto, with an effective date of July 1, 2024, a copy of which is on file with the Town Clerk:

CHAPTER 131 SPECIALIZED ENERGY CODE

131-1 TITLE

This bylaw shall be cited and may be referred to as the specialized energy code.

131-2 PURPOSE

The purpose of 225 CMR 22.00 and 23.00 including Appendices RC and CC, also referred to as the Specialized Energy Code is to provide a more energy-efficient and low greenhouse gas emissions alternative to the Stretch Energy Code or the baseline Massachusetts Energy Code, applicable to the relevant sections of the building code for both new construction and existing buildings.

131-3 APPLICABILITY

This energy code applies to residential and commercial buildings.

131-4 DEFINITIONS

International Energy Conservation Code (IECC) – The International Energy Conservation Code (IECC) is a building energy code created by the International Code Council. It is a model code adopted by many state and municipal governments in the United States for the establishment of minimum design and construction requirements for energy efficiency and is updated on a three-year cycle. The baseline energy conservation requirements of the MA State Building Code are the IECC with Massachusetts amendments, as approved by the Board of Building Regulations and Standards and published in state regulations as part of 780 CMR.

Specialized Energy Code – Codified by the entirety of 225 CMR 22 and 23 including Appendices RC and CC, the Specialized Energy Code adds residential and commercial appendices to the Massachusetts Stretch Energy Code, based upon amendments to the respective net-zero appendices of the International Energy Conservation Code (IECC) to incorporate the energy efficiency of the Stretch energy code and further reduce the climate impacts of buildings built to this code, with the goal of achieving net-zero greenhouse gas emissions from the building sector no later than 2050.

Stretch Energy Code- Codified by the combination of 225 CMR 22 and 231, not including Appendices RC and CC, the Stretch Energy Code is a comprehensive set of amendments to the International Energy Conservation Code (IECC) seeking to achieve all lifecycle cost-effective energy efficiency in accordance with the Green Communities Act of 2008, as well as to reduce the climate impacts of buildings built to this code.

131-5 ENFORCEABILITY

The Specialized energy Code is enforceable by the Building Commissioner or local Building Inspector. (Select Board)

Or take any other action relative thereto.

(Simple Majority Vote Required)

PROPOSED MOTION

I move that this article be accepted and adopted as printed in the warrant.

SUMMARY

This article advances the efforts of the Town of Orleans and the State of Massachusetts to combat climate change and global warming. This article, which applies only to new construction of residential, commercial and municipal construction, adopts the newly available “Specialized Energy Code,” which increases insulation and air sealing requirements in new mixed-fuel residential construction greater than 4,000 square feet and multi-family housing greater than 12,000 square feet, requires on-site renewable energy for certain construction, and facilitates the use of electric vehicles, among other things.

SB:	5 – YES	0 – NO	0 – ABSTAIN
FC:	6 – YES	1 – NO	0 – ABSTAIN

Appendix C

DRAFT 9/13/23

Specialized Energy Code Tasks and Presentations

Tasks

1. FAQ: Roger and David are putting this together. This has been helpful in preparing presentations and will be posted on Town website and be otherwise available.
2. Brief video for posting on the Town website along with information about other Articles in the Town Meeting warrant. Roger is working on this.
3. One-pager. Roger will draft this.

Presentations and meetings

Completed:

1. July 18: Public presentation via OCAN at Snow Library.
2. July 20: Meeting with Tom Evers, Building Commissioner (John and Roger)
3. July 20: Meeting with Finance Committee (Roger, Hakim and Susan), as described by Susan and Hakim in their July 21 emails . There will be substantial follow-up, probably including one or more in-person presentations.
4. July 25: Meeting with Planning Board (Roger and John).
5. Aug. 1: Affordable Housing Committee and Affordable Housing Trust Fund Board (Roger, Hakim and Susan).
6. Aug. 22: Second public presentation via OCAN at Snow Library (Roger, Martin, David, Susan, Paul and John, followed by Martin discussing Cape Light Compact).
7. Wednesday, Sept. 6: Follow-up meeting with Tom Evers, Building Commissioner, for FAQ material (Roger and David).

8. Wednesday, Sept. 6 Snow Library Board (Roger and David).

TO COME:

9. *[Thursday, Sept. 14, 4:15 pm: Report to Energy and Climate Action Committee at its monthly meeting.]*

10. Thursday, Sept. 21, 6:15 pm: Finance Committee (second presentation) (Roger and _____).

11. September 28, ___ pm: Orleans Citizens Forum (Roger and _____).

12. Wednesday, Oct. 11: Select Board (Roger and John).

In addition, there are Lifetime Learning sessions presented by Martin on behalf of Cape Light Compact on the following dates; I think the Specialized Energy Code is part of the Oct. 4 session, but it may be flexible:

1. Wednesday, Sept. 27, 10:30 am-12:00 pm (may not include Specialized Energy Code).

2. Wednesday, Oct. 4, 10:30 am-12:00 pm (not just Specialized Energy Code).

Roger

Appendix D

FY 2025 planned vehicle replacements and requirements

Department	Vehicle		Standard
Highway	14 Int'l 4WD Dump Truck (511)	170000	Exempt - Heavy Duty vehicle over 8500 lb gross vehicle weight
Harbor Master	16 Chevy K2500 4WD Pickup Truck	60,000	must get at least 18 MPG
Police	15 Ford Taurus Unmarked Car (Deputy)(M2) 62,000	62000	must get at least 30 MPG
Police	20 Ford Explorer AWD (M8) 62,000	62000	must get at least 21 MPG
Town Hall	11 Ford Focus Sedan	10000	must get at least 30 MPG
Council on Aging	17 Ford E350 14 Passenger Van	79000	must get at least 20 MPG
Beach Operations	19 Chevy K1500 4WD Pickup Truck (68)	60000	must get at least 18 MPG
Water Dept	13 Ford F250 4WD Utility Truck (1673)	48000	must get at least 18 MPG

Appendix E

Date Adopted: December 14, 2020

Town of Concord
APP #65
Sustainable Fleet Policy

Effective Date: January 1, 2021
Revisions: December 2020
Approval Date: December 14, 2020

BACKGROUND

The Town of Concord Select Board have approved the following policy to govern the replacement and purchase of all non-exempt municipal vehicles with the most sustainable vehicle option, as defined below.

This policy replaces APP #63, "Fuel Efficient Vehicle Policy" adopted in October of 2013.

POLICY STATEMENT

Whereby unanimous declaration of the Select Board the Town has pledged to reduce its municipal energy use by realistic and measurable means of 20% using a 2011 baseline as required by Concord's participation in the Green Communities Program as established by the Green Communities Act M.G.L. Chapter 25A Section 10.

Whereby as part of the Town's overall goal to conserve natural resources, reduce our dependence on foreign oil, reduce greenhouse gas emissions, and promote the use of clean technologies, as directed by the 2011 adoption of Sustainability Principles.

Whereby the Town committed to a goal of 80% reduction in community-wide greenhouse gas (GHG) emissions by 2050 in 2017.

Whereby the Town's 2020 Climate Action and Resilience Plan calls for the Town to lead by example and implement a plan to electrify town vehicle fleets.

It is recognized that all Town departments will take action to minimize greenhouse gas emissions from Town operations by adopting a Sustainable Fleet Policy including:

- The purchase or lease of exclusively battery electric vehicles for all light-duty passenger fleet replacements by FY22;
- Pilot, evaluate, and, where feasible, acquire electric vehicles for medium- and heavy-duty vehicle and equipment categories;
- Minimize vehicle miles travelled and minimize idling.

Therefore the Select Board hereby adopts this Policy to inform and guide all Town employees regarding the purchase and efficient use of town vehicles. Town departments shall make efficient use of municipal vehicles in order to minimize the cost of town operations to taxpayers, to protect and preserve the natural environment and quality of life in Concord, and reduce GHG emissions.

Further, this Policy is adopted in order to:

- Reduce GHG emissions as directed by Article 5.1 at the 2017 Annual Town Meeting
- Comply with the DOER Green Communities Program requirements
- Demonstrate leadership in electrifying transportation as called for in the 2020 Climate Action and Resilience Plan
- Reduce life-cycle cost of vehicle ownership
- Enforce environmentally-responsible fleet maintenance
- Minimize the Town's consumption of natural resources
- Improve local air quality and public health

We the Concord Select Board do hereby approve the following Sustainable Fleet Policy dated this 14 day of December 2020.

CONCORD SELECT BOARD

Linda L. Escobedo

NAME, Chair

Jane Hotchkiss

NAME

Susan Bates

NAME

Terri Ackerman

NAME

Matthew Johnson

NAME

Date Signed:

December 24, 2020

Sustainable Fleet Policy

I. POLICY OBJECTIVES

It is the intent of this policy to create guidelines for the purchase and operation of town fleet vehicles in order to reduce municipal GHG emissions and demonstrate leadership in achieving the town's community-wide sustainability goals.

It is not the intent of this policy to require a department to take any action which conflicts with local, state, or federal requirements. Nor is it the intent of this policy to mandate the procurement of products that do not perform adequately for their intended use, to exclude adequate purchasing competition, or to require a purchase when a vehicle is not available at a reasonable price.

The objectives of this policy are to:

- Increase the use of all-electric vehicles in the town fleet
- Increase the average fuel economy of each vehicle
- Optimize the fleet size and minimize vehicle size, weight, and other factors affecting fuel use when appropriate
- Minimize vehicle miles traveled (VMT)
- Reduce total cost of ownership over the lifetime of the vehicle
- Reduce GHG emissions from the town's fleet vehicles
- Maximize the use of grant funding and incentives to convert and purchase electric and emissions-reduction technology for the town fleet

II. APPLICABILITY

This policy applies to all departments of the Town of Concord and is adopted in conjunction with a similarly-worded policy adopted by the Concord School Committee.

III. DEFINITIONS

- a) Electric Vehicle: a vehicle that gets all or part of its energy from electricity instead of gasoline
- b) BEV: Battery Electric Vehicles, also known as All-electric or Full-electric, have a rechargeable battery and rely on electricity as their sole source of fuel
- c) PHEV: Plug-in Hybrid Electric Vehicles have a rechargeable battery as well as a gasoline tank, which can be used if the battery is depleted.
- d) Combined city and highway MPG (EPA Combined fuel economy) – The fuel economy from driving a standard combination of 43% city and 57% highway miles, calculated as follows:
$$= \left(1 / \left\{ (0.43 / \text{City MPG}) + (0.57 / \text{Highway MPG}) \right\} \right)$$
- e) Drive System – The manner in which mechanical power is directly transmitted from the drive shaft to the wheels. The following codes are used in the vehicle inventory drive field:
 - a. AWD = All Wheel Drive: four-wheel drive automatically controlled by the vehicle powertrain system
 - b. 4WD = 4-Wheel Drive: driver selectable four-wheel drive with 2-wheel drive option
 - c. 2WD = 2-Wheel Drive

- f) GVWR – Gross Vehicle Weight Rating refers to the vehicle’s weight and class.
- g) Heavy-duty vehicle – A vehicle with a manufacturer’s gross vehicle weight rating (GVWR) of more than 8,500 pounds. Note: If a vehicle can be found on www.fueleconomy.gov, then it has a GVWR of less than 8,500 pounds and is therefore NOT a heavy-duty vehicle and is NOT exempt from Green Communities fuel efficiency standards. (Reference: EPA Emissions Classification)
- h) Light duty – A vehicle with a GVWR of less than 8,500 pounds. (Reference: EPA Emissions Classification)
- i) Medium duty – A vehicle with a GVWR between 8,500 and 10,000 pounds. (Reference: EPA Emissions Classification)

IV. VEHICLE INVENTORY

a. Maintain inventory of all Town vehicles

As required by the DOER Green Communities Program, the Town will maintain an inventory of all Town- and School-owned vehicles.

This inventory will include the following information: model, make, model year, month and year purchased, VIN, drive system, weight class, miles per gallon, annual miles driven, total fuel consumption, department, vehicle function.

b. Early retirement program for the least efficient vehicles

Departments shall develop a plan to replace all non-exempt vehicles with fuel-efficient vehicles. Said plan shall prioritize vehicle replacement according to the life cycle cost, outline the process by which the Town will replace vehicles, and set goals for when the existing fleet will be replaced. The early retirement plan shall be reviewed and revised, if necessary, on an annual basis.

V. VEHICLE PROCUREMENT

a. Electric-first procurement

Vehicle procurement should be prioritized as follows:

1. Battery-electric vehicle (BEV)
2. Plug-in hybrid vehicle (PHEV)
3. Hybrid-electric vehicle or other alternative fuel vehicle
4. Standard vehicle

The fleet policy is electric-first, meaning that electric vehicles shall be prioritized when the Town purchases or leases motor vehicles for its municipal operations. Beginning in FY22, all light-duty passenger vehicles purchased or leased are required to be BEVs.

Departments may request an exemption from the BEV replacement. All exemptions shall require approval by the Town Manager after a recommendation is made by the Director of Sustainability.

b. Fuel-efficient requirements for standard vehicles

If it is determined that an electric vehicle (BEV or PHEV) does not meet the Town’s needs, the purchased or leased vehicles must be the most fuel-efficient class, drive train, and model available that will fulfill the intended municipal function;

When determining the most fuel-efficient vehicle for a given class, the Town will utilize the fuel efficiency limits contained in the most recent guidance for Criteria 4 published by the MA Department of Energy Resources' Green Communities Division (<https://www.mass.gov/guides/becoming-a-designated-green-community>). These limits are based on the most recently published U.S. Environmental Protection Agency combined city and highway MPG ratings (see www.fueleconomy.gov). The EPA maintains a database on vehicle fuel efficiency that is updated throughout the year as new models are released. As increasing numbers of fuel efficient vehicle models are released, the minimum combined MPG requirements of the Green Communities Program may be revised.

Using this EPA data, at the time of approval of this policy, vehicles are to have a combined city and highway MPG no less than the following:

- 2 wheel drive car: 30 MPG
- 4 wheel drive car: 29 MPG
- 2 wheel drive van: 22 MPG
- 4 wheel drive van: 20 MPG
- 2 wheel drive pick-up truck: 21 MPG
- 4 wheel drive pick-up truck: 18 MPG
- 2 wheel drive sports utility vehicle: 24 MPG
- 4 wheel drive sports utility vehicle: 21 MPG

This policy may be updated from time to time to reflect these changes. The Green Communities' Criteria 4 Guidance must be checked for updates prior to ordering replacement vehicles.

In addition, many vehicles that meet the above criteria can be found on statewide contract VEH98: "Purchase of Light Duty Vehicles – Passenger Cars, SUVs, Trucks, Vans, SSVs and PPVs located on www.commbuys.com.

These fuel efficiency rules are set to ensure that at least five or more automatic transmission models of mass production (excluding luxury models) are available for sale in Massachusetts.

Nothing contained herein shall be construed to derogate from the authority and discretion of the procurement officers of the Town or Schools acting pursuant to the Uniform Procurement Law, Chapter 30B of the General Laws.

c. Transfers between departments

Vehicles may not be recycled from one municipal department to another unless the recycled replacement meets the fuel efficiency ratings outlined in this Policy and is more efficient than the vehicle it is replacing. All vehicle transfers must be approved by the Town Manager after a recommendation is made by the Director of Sustainability.

d. Exempt vehicles

Vehicles exempt from the fuel efficiency requirements above include:

- Any vehicle with emergency response capabilities (i.e. vehicles with radios, computers, emergency lights, and sirens)
Note: Police cruisers are exempt, only if fuel efficient cruisers are not commercially available
- Heavy-duty trucks, such as fire trucks, ambulances, and public works trucks
- Off-road vehicles

All other vehicles, including pickup trucks, vans, and police/fire administrative vehicles are not exempt and therefore must comply with the fuel efficiency requirements of this policy.

While exempt vehicles are not required to meet the specific MPG requirements listed above (Section V item b), exempt vehicles should prioritize vehicle procurement as outlined in this policy (Section V item a).

If purchasing a standard vehicle, exempt vehicle purchases should prioritize the most fuel-efficient model available and consider fuel-reduction and emissions-reduction technology, such as diesel particle filters, selective catalytic reduction systems, exhaust gas recirculation, NOx adsorbers, oxidation catalysts, anti-idling devices, etc.

Where opportunities exist, particularly if grants and new technologies are or become available, the Town should pilot electric options for heavy-duty and exempt vehicles.

Where the Town contracts vehicle services, the Town will allow for consideration of contracts and seek out companies for competitive bidding that offer the use of electric and/or fuel-efficient vehicles.

e. Evaluation of fleet and vehicle size

The Town will procure vehicles and equipment of minimum size according to assessed needs. Specifically, the Town will ensure that purchase plans require vehicle class and model of the smallest size and weight appropriate for each vehicle's tasks. All positions requiring vehicle use shall be evaluated as to the required vehicle class size necessary to conduct the job.

The Town will evaluate ways to reduce its fleet size. Departments will also investigate whether vehicles can be shared between departments. When retiring a vehicle from the fleet, the Town will evaluate whether replacement is necessary.

f. Evaluation of leasing

If it is determined that an electric vehicle (BEV or PHEV) is not currently available to meet the Town's needs, the Town should consider leasing a standard vehicle to allow for flexibility to transition to an electric option if it becomes available during the life-cycle of that vehicle.

VI. POLICY IMPLEMENTATION AND ENFORCEMENT

a. Electric Vehicle transition plan

The Town will conduct a fleet baseline and develop an electric vehicle transition plan by 2022. This fleet study will include a plan to transition the vehicle fleet to electric vehicles, identify necessary charging infrastructure, and opportunities for piloting and deploying vehicle-to-grid technology.

b. Electric vehicle charging

Where possible, efforts will be made to install charging equipment at locations convenient for vehicle users to minimize operational inefficiencies. However, flexibility may be required of vehicle operators and town staff to adjust procedures to accommodate charging locations.

Electric vehicles should be scheduled to charge only during off-peak hours (as defined by Concord Municipal Light Plant) unless it would negatively impact town operations. Off-peak hours are listed here: <https://concordma.gov/DocumentCenter/View/1201/Residential-Time-of-Use-Rate-PDF>

c. Funding

The purchase of policy-compliant vehicles and equipment may be more expensive in the initial years. Departments should estimate upfront investment required for vehicle purchases and budget accordingly in capital budget requests.

The Town shall evaluate existing capital requests for vehicles and evaluate opportunities to fund additional upfront costs.

The Town shall take advantage of grant funding to offset the upfront costs of electric vehicles and charging apparatus.

VII. VEHICLE OPERATION AND MAINTENANCE

Where applicable, the Town will use available resources to build awareness and educate its employees regarding responsible vehicle operation as detailed below.

a. Anti-Idling

Vehicle idling produces both excessive waste of fuel and air pollution. As a part of this policy the Town hereby recognizes the importance of enforcing the existing Anti-Idling Law, as allowed by M.G.L. Chapter 90 Section 16A. Additionally, Town staff should reduce idling as much as possible in vehicle operations. The Town will also incorporate anti-idling education into other public health and sustainability forums.

b. Reinforce operator awareness

The Town and its employees will encourage energy-saving driving habits (i.e. awareness of sudden acceleration or sudden stopping), and paying attention to the need for regular preventative maintenance of vehicles.

c. Reduce Vehicle Miles Travelled (VMTs)

The Town will reinforce employee awareness of vehicle miles travelled during work hours as well as for commuting, and will encourage alternate travel practices such as carpools, vanpools, bicycling, and walking.

d. Vehicle maintenance

A well-maintained vehicle will optimize fuel use and reduce air pollution. Preventative maintenance that ensures optimal vehicle operation shall be performed regularly for each vehicle.

Vehicles will be inspected regularly and prior to extended use to ensure correct tire pressure, oil and coolant levels, and to identify possible signs of other fluid leaks.

The Town will dispose of hazardous materials such as waste oil, lubricants, antifreeze, and batteries safely through environmentally-responsible practices and in accordance with all applicable state and federal regulations.

Appendix F

Town of Orleans
OFFICIAL NOTICE OF A PUBLIC MEETING
Energy and Climate Action Committee Meeting

On Thursday, October 12th, 2023 at 4:15 PM in Nauset Room, Town Hall, 19 School Road,
Orleans, MA

or

Join Zoom webinar via computer or mobile device: <https://us02web.zoom.us/j/88298889461>
Dial in via phone (646) 558-8656 Webinar ID 882 9888 9461

- 4:15 PM
1. Call to order
 2. Public Comment
 3. Chairman's report
 4. Update on Orleans Climate Action Network
 5. Review of Green Community Initial Grant plan (Ron Collins)
 6. Discussion on improving the Energy Climate Action Web page (volunteer to lead)
 7. Energy Manager coordination with Cape Light Compact
 8. Discussion on how ECA can assist with Town Owned vs 3d Party owned solar analysis (volunteer to lead)
 9. Discussion on next steps to update Town of Orleans Vehicle Policy (volunteer to lead)
 10. Vote to approve minutes for September 14, 23 meeting.
 11. Next Meeting/Agenda Items.
 12. Adjourn