



Decarbonization Roadmap, Climate Leader Communities, & Clean School Bus Rebate

Arlington School Committee

December 5, 2024

Talia Fox, Sustainability Manager, Dept. of Planning & Community Development



Arlington will pursue designation as a “Climate Leader Community”

- New MA Department of Energy Resources (DOER) program, supplements Green Communities
- Aligns resources with state climate goals, focus on decarbonization
- Communities earn state recognition, eligible for substantial grant funds
- Town must meet several criteria by December 31
 1. Local energy committee
 2. Municipal decarbonization commitment (net zero by 2050)
 3. Municipal decarbonization roadmap
 4. Zero emission vehicle first policy
 5. Specialized Stretch Code adoption



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*Must be approved by Select Board & School Committee



Municipal Decarbonization Roadmap

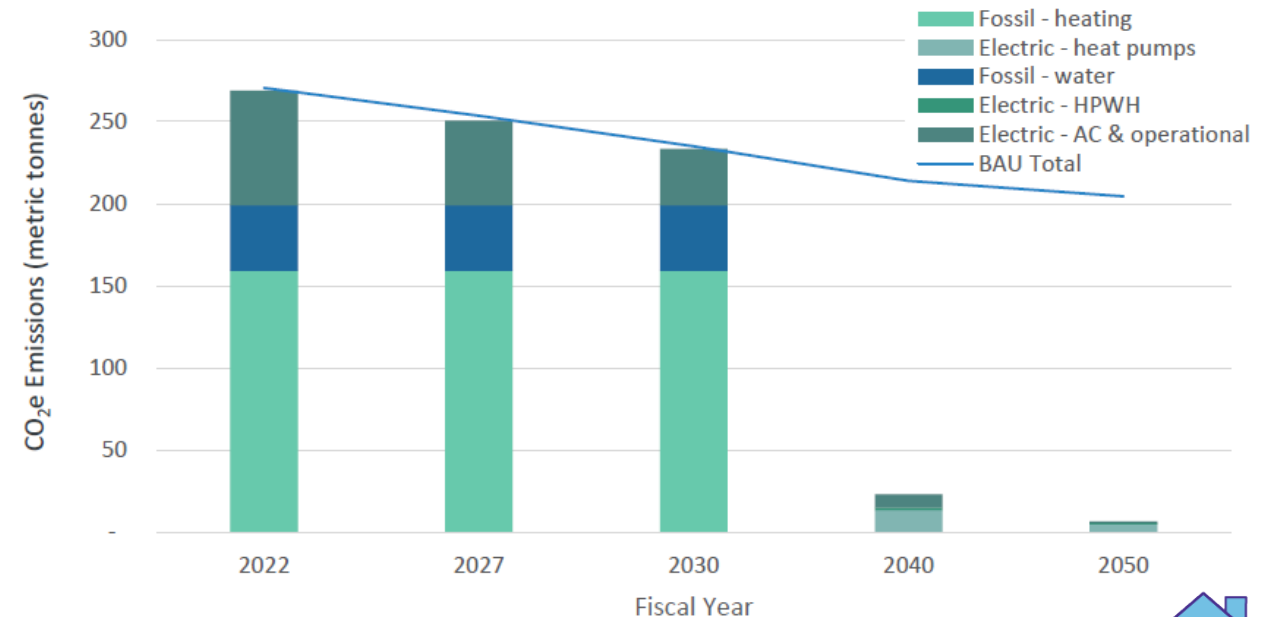
- Town (includes School facilities and vehicles) has already committed to net zero GHG emissions by 2050
- Roadmap details *how* municipal facilities and vehicles will eliminate use of fossil fuels by 2050
- Roadmap to guide project prioritization and capital planning; identifies implementation measures to meet state targets of 20% GHG reduction by 2027, 35% by 2030, 60% by 2040, and 100% by 2050, using a 2022 baseline
- Town awarded technical assistance funds; Roadmap completed by consultant, PowerOptions



Decarbonization Roadmap: Buildings

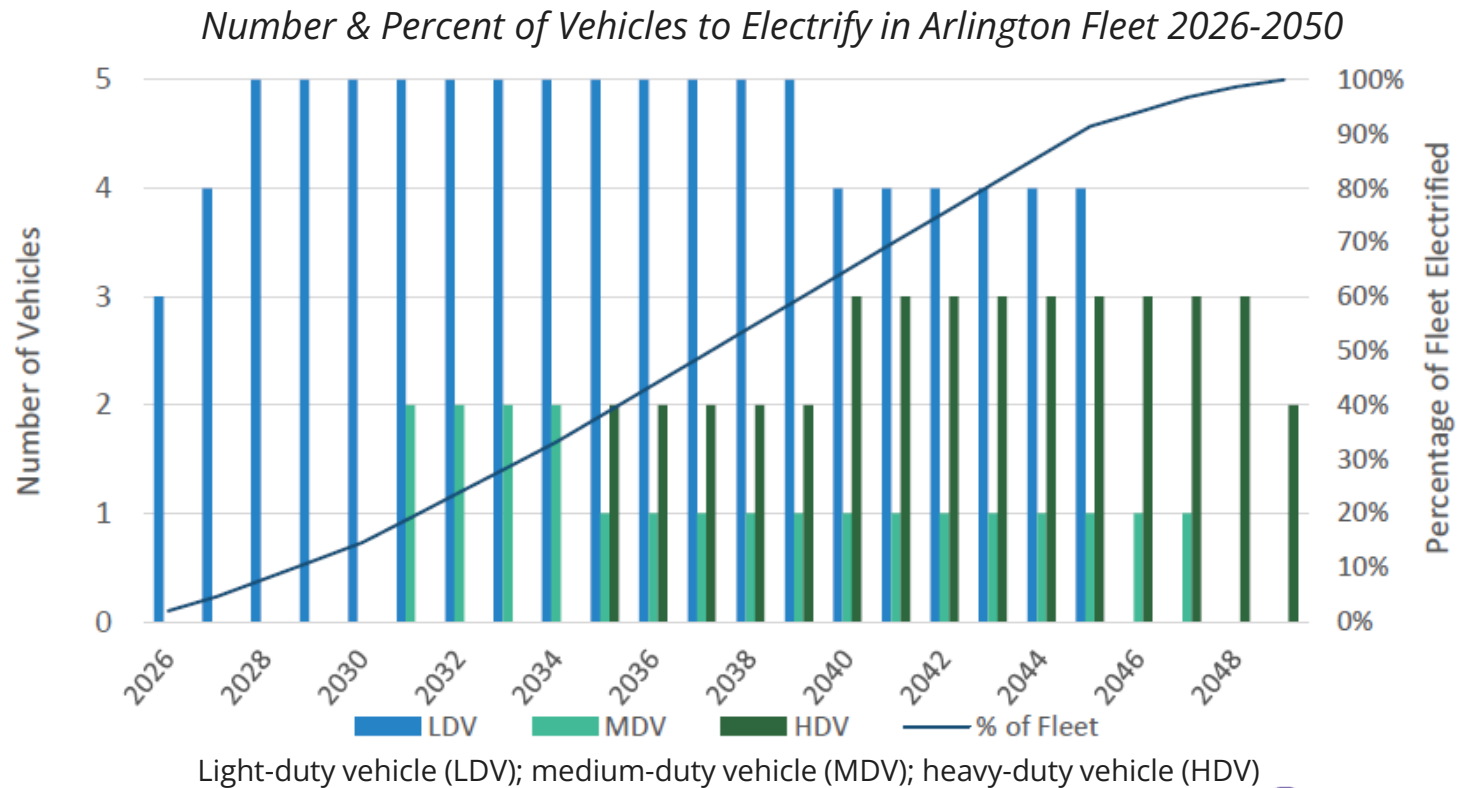
- Takes a “Zero Over Time” approach, leveraging “trigger events” (i.e., equipment end of life) to identify electrification timeframes
- Directs Town to focus efforts on high-impact buildings (highest GHG emitters)

Estimated future building emissions based on proposed efficiency and electrification plans at Stratton Elementary School



Decarbonization Roadmap: Vehicles

- Replacement schedule includes recommended EV replacement models, estimated total cost of ownership
- Accounts for vehicles' remaining useful life, EV market availability



Decarbonization Roadmap: Vehicles (cont'd)

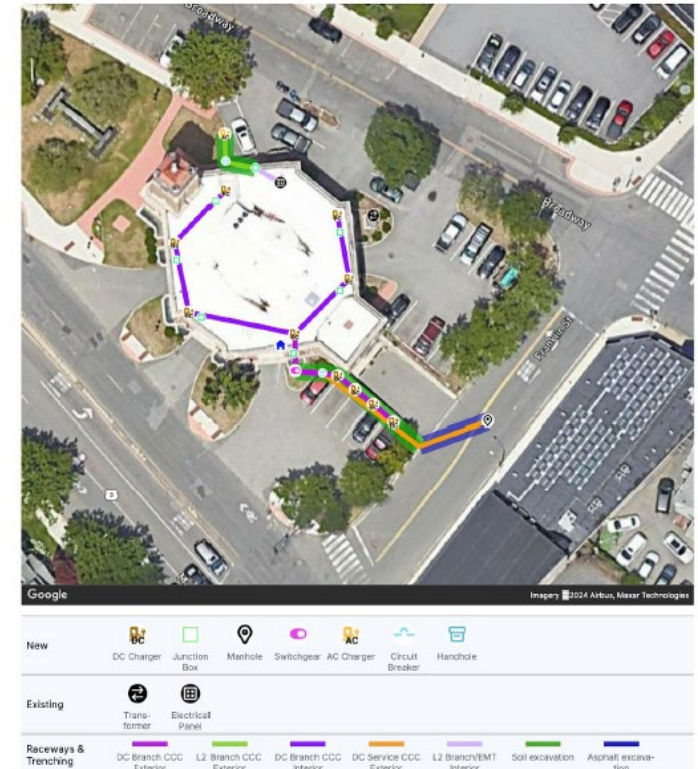
- Town's Zero Emission Vehicle First Policy (adopted June 2024) supports implementation of the Roadmap
- Consultant has also provided recommendations for fleet charging infrastructure, cost estimates, and anticipated electrical upgrades required at key sites
- Does not include estimates for bus charging; pursuing separate path for this assessment

Summary of Proposed Installation

Arlington - AFD Admin | 411 Massachusetts Avenue, Arlington, MA 02474-6702, USA

11
EVSE Stations

12
Charging Ports



Cost Considerations

- Leveraging equipment replacement cycles helps minimize additional cost of electrifying
- Lifecycle costs of electric systems comparable to or better than fossil fuel alternatives (accounting for added cooling costs, operating costs, incentives)
- May need to accommodate building electrification costs outside capital plan
- Town to pursue financing strategies, funding through DOER, MA Clean Energy Center, utilities



Next Steps

- School Committee discusses Roadmap today (12/5); requests changes/follow-up, potential vote to approve Roadmap at 12/19 meeting
- Pending approval of Roadmap, Sustainability Manager applies to Climate Leader Community program on behalf of Town by 12/31
- Climate Leader Communities program requires revising the Roadmap every three years



Clean School Bus Rebate

- Federal initiative run by US Environmental Protection Agency (EPA), funded through Bipartisan Infrastructure Law of 2021
- Arlington already awarded \$200,000 for third electric bus to replace diesel bus
- Goal to apply for \$170,000 for a fourth electric bus (maximum award amount for Arlington) by January 9, 2025
- Application requires “School Board Awareness Certification” to verify the School Committee’s awareness of the rebate application
- Request is for the Superintendent to sign the Certification

