



# ***Getting to Net Zero Emissions Warrant Article 19***

Lexington Town Meeting  
April 3, 2017

# Getting to Net Zero Emissions

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Our 25 year goal is to reduce greenhouse gas emissions from Lexington's residential, commercial, and municipal buildings and to achieve a transition to renewable energy sources.



# *Amazing Group of Stakeholders*

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- Diversity is Key - All Major Stakeholders will be included
- Joe Pato, Board of Selectmen
- Jeanne Krieger, Former Chair, Board of Selectmen
- Paul Lukez, Architect – Sustainable Communities
- Wendall Kalsow, Architect – Historical Renovations
- Mike DiMinico, King Street Properties
- Melanie Waldron, Boston Properties
- Joseph Fulliero, Shire
- Janet Terzano, Real Estate Agent and Resident
- Alessandro Alessandrini – School Committee
- Melisa Tintocalis – Economic Development
- Mark Sandeen – Sustainable Lexington Committee
- Lisa Fitzgibbons – Mothers Out Front



# Consultant Status

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- Peregrine Energy Group
  - Delivered Lexington's Energy / Emissions Assessment
- Integral Group / SPI – Team Hired
  - Recommend strategies for reducing emissions and assess options.
  - Facilitate task force meetings to build consensus on the plan's recommendations.
  - Community Engagement Strategy
  - Phase I – Task Force meetings thru June
  - Phase II – Develop a final action plan including recommendations, timeline and key milestones.
    - Low Carbon Best Practices
    - Planning Approaches for Low Carbon Development
    - Policy Options for Low Carbon Development
    - Final Action Plan



# ***Report, Reduce, Produce, Purchase***

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Four Steps to achieve net zero emissions

**Report** – Assessment of building's performance

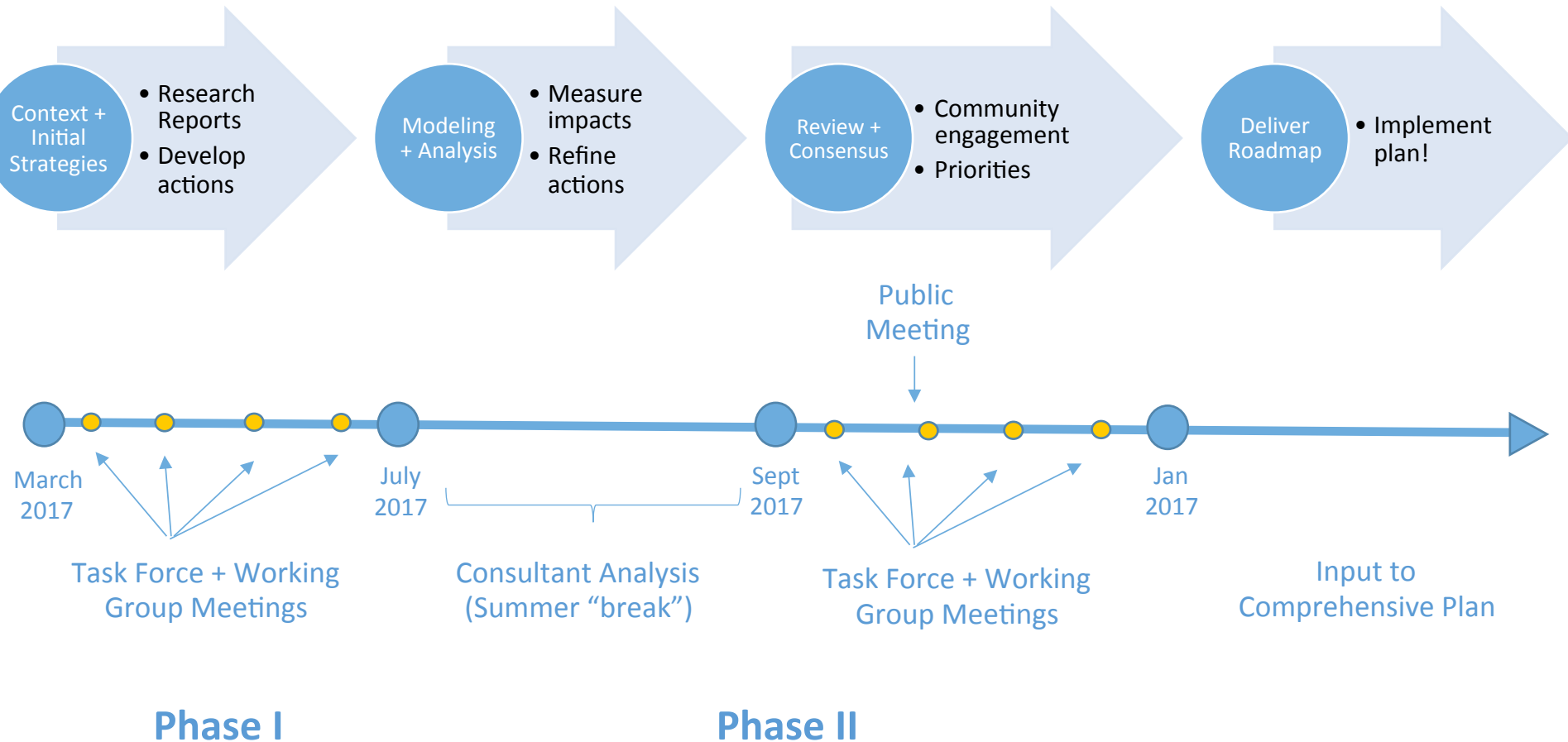
**Reduce** – Energy efficiency improvements

**Produce** – Maximize onsite renewable energy

**Purchase** – Buy renewable electricity



# Task Force Schedule



# Deliverables

## Cambridge Net Zero Action Plan - April 29, 2015



Net Zero + Net Positive Targets		2015	2016	2017	2018	2019	2020	2021	2022	2023	2024	2025	2026	2027	2028	2029	2030	2031	2032	2033	2034	2035	
Action 1 - Energy Efficiency in Existing Buildings																							
1.1.1 Custom Retrofit Program	Residential	Feasibility	Multi-Family Pilot	Review	Potential Multi-Family Program					Review	Potential Multi-Family Program												
	All				Feasibility	Custom Retrofit Pilot	Review	Custom Retrofit Program					Review	Custom Retrofit Program									
1.1.2 Additional BEUDO Requirements	Comms. + MF		Design	New Building Energy Use Disclosure Ordinance Req's					Review	Version 2 Potential T.O.S/R. Requirements					Review	Version 3 Potential T.O.S/R. Requirements							
1.1.3 Upgrades at Time of Renovation or Sale	All		Feasibility	Potential T.O.S/R. Requirements					Review	Potential T.O.S/R. Requirements					Review	Potential T.O.S/R. Requirements							
1.1.4 O+M Plan Requirement	Comms. + MF (New Const.)		Design	Required O+M Plans					Review	Required O+M Plans					Review	Required O+M Plans							
Action 2 - Net Zero New Construction																							
2.2.1 Market Based Incentive Program	Residential	Feasibility	Pilot Residential	Review	Pot. Net0 Incentive Program		Review	Potential Net+ Incentive Program		Review	Potential Net+ Incentive Program		Review	Potential Net+ Incentive Program		Review	Potential Net+ Incentive Program						
	Comms. + MF		Feasibility	Pilot Commercial			Review	Potential Net0 Incentive Program		Review	Potential Net+ Incentive Program		Review	Potential Net+ Incentive Program		Review	Potential Net+ Incentive Program						
	Labs		Feasibility	Pilot Labs		Review	Potential Net0 Incentive Program		Review	Potential Net0 Incentive Program		Review	Potential Net+ Incentive Program		Review	Potential Net+ Incentive Program							
2.2.2 Height + FAR Bonus		Feasibility*	Potential H/FAR Incentive Program					Review	Potential H/FAR Incentive Program		Review	Potential H/FAR Incentive Program		Review	Potential H/FAR Incentive Program								
2.3 Increase Green Building Requirements in Cambridge Zoning Ordinance		Design	Stage 1 - New LEED Requirements		Review	Stage 2 - New LEED Requirements			Review	Stage 3 - New LEED Requirements			Review	Stage 4 - Potential New Green Building Requirements									
2.4.1 Net Zero Requirement for New Construction of Municipal Buildings		Design	Net Zero Ready		Review	Net Zero Required			Review	Net Positive Required			Review	Net Positive Required									
2.4.2 Renewal of Municipal Buildings		Design Action Plan		Pilots		Stage 1 - Building Renewal Strategy					Stage 2 - Building Renewal Strategy												
2.5 Removal of Barriers to Increased Insulation		Design	New Policy		Review	New Policy																	
Action 3 - Energy Supply																							
3.1 Low Carbon Energy Supply Strategy		E.S.S. Study**		Implement Energy Supply Strategy																			
3.2 Rooftop Solar Ready Requirement		Design	Solar Ready Requirement	Study	Potential Solar Requirement Version 1					Potential Solar Requirement Version 2													
3.3 Develop a Memorandum of Understanding with Local Utilities		Develop MOU		Utility Collaboration					Review	Potential 2nd Utility Collaboration													
Action 4 - Local Carbon Fund																							
4 Investigate Local Carbon Fund		Feasibility		Establish Potential Co2 Fund																			
Action 5 - Engagement and Capacity Building																							
5.1 Communication Strategy		Design		Implement Communication Strategy																			
5.3 Net Zero Lab Standards		Feasibility***	Dev. Standard	Pilot Standard 1		Implement Potential Standard			Review	Pilot Standard 2		Implement Potential Standard											



# ***Motion***

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That the Town appropriate \$40,000 for Phase II of a study to determine whether the Town can develop guidelines for achieving building which results in no greenhouse gases, to be spent under the direction of the Town Manager; and that to meet this appropriation \$40,000 be appropriated from the General Fund unreserved fund balance.

