

Climate Action & Sustainability Plan



Community Workshop

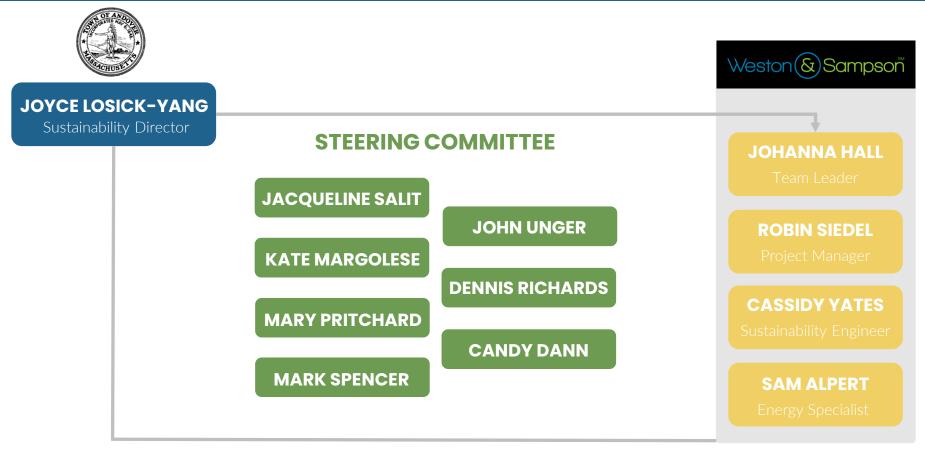
December 12th, 2022







Project Team





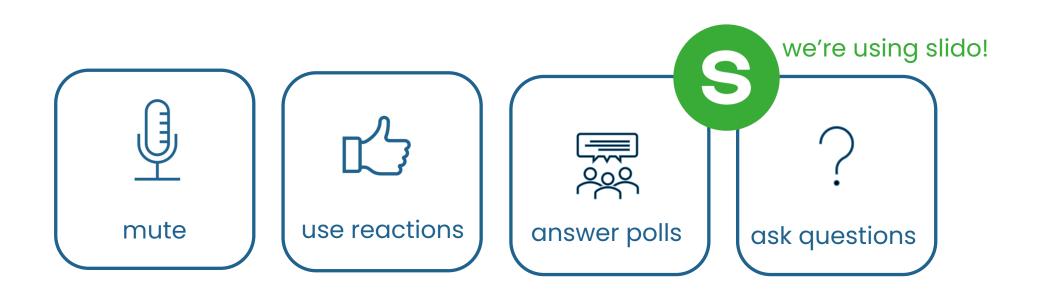
Land Acknowledgment

We open by respectfully acknowledging that we collectively gather on the territory of many Indigenous peoples, who have stewarded this land for hundreds of generations.

With gratitude to the Andover Center for History & Culture for their guidance, we acknowledge the **harmful effect** colonization and violent **systemic and cultural inequities** have had on our understanding of Indigenous identity and terminology.

Andover was home to the **Pennacook people** as early as 6000 BCE, and we honor their past, present, and emerging leaders.

Logistics



Share Your Thoughts

Please use **slido** to provide feedback

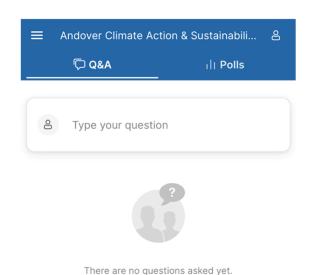




If unfamiliar with QR codes:

- 1. Type in slido.com in a web browser on phone or computer
- Enter code: #AndoverClimateAction





Ask the first one!



Select all that apply:

0 3 5

I live in Andover

83 %

I work in Andover

26 %

I'm an Andover business owner

3 %

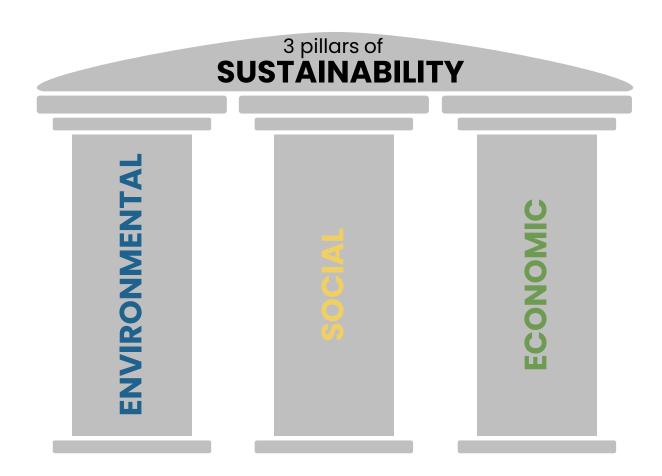
I live elsewhere but work in Andover

3 %

Other

9 %

Climate 101



Climate 101



Adaptation

Adapting to life in a changing climate – involves adjusting to actual or expected future climate



Mitigation

Reducing climate change – involves reducing the flow of heat-trapping greenhouse gases into the atmosphere



Vulnerability

The degree to which a system is susceptible to adverse effects of climate change, including climate variability and extremes. Vulnerability is a function of exposure, sensitivity, and adaptive capacity



Resilience

The ability of a system and its component parts to anticipate, absorb, accommodate, or recover from the effects of a hazardous event in a timely and efficient manner

Greenhouse Gas Emissions

Greenhouse Gases:

Carbon dioxide
Methane
Nitrous oxide
Fluorinated gase

Sources: Residential, commercial, & industrial



Andover's Emissions

In 2017, our town was responsible for emitting:

453,779
METRIC TONS OF CO2e

Types of emissions:



Stationary emissions



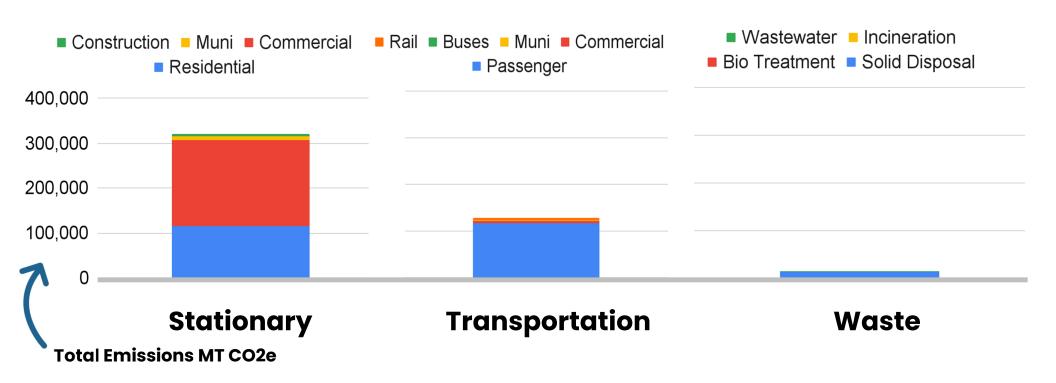
Waste emissions



Transportation emissions

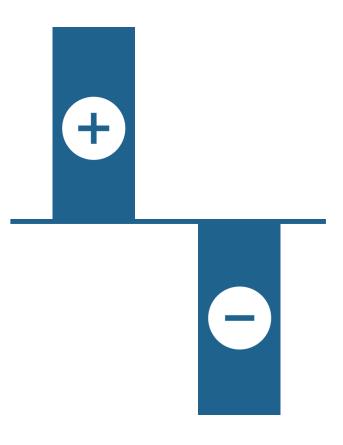
We Learned...

Focus Areas: Commercial & residential buildings Residential transportation

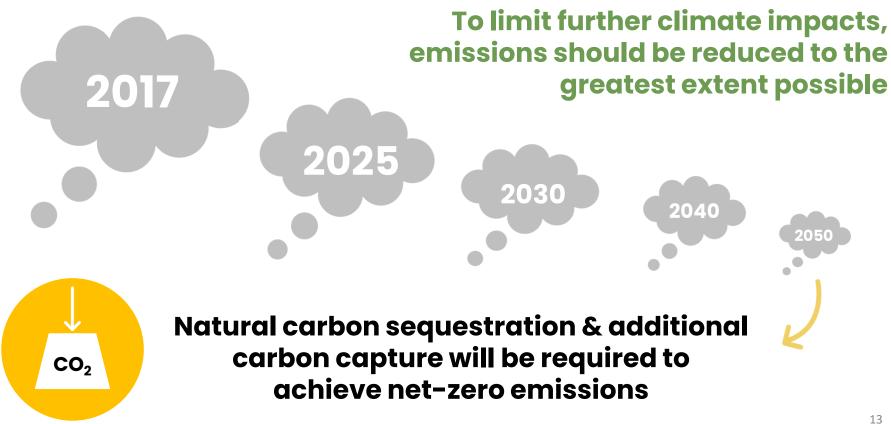


What is Net Zero?

Remaining emissions produced equal emissions removed resulting in net-zero emissions



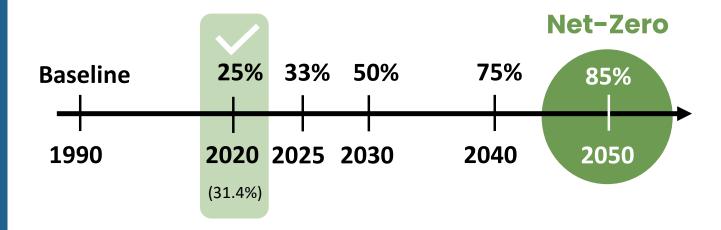
What is Net Zero?





Statewide Action

Emissions Reduction Goals



Legislation

An Act Creating A Next-Generation Roadmap for Massachusetts Climate Policy requiring interim emissions limit and sector-specific sublimits every 5 years

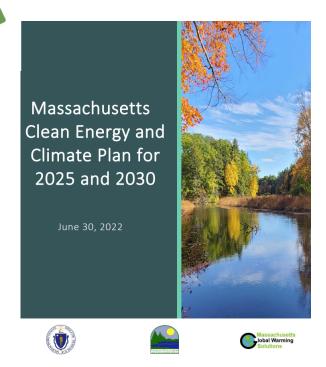


Clean Energy & Climate Plan

Statewide Action

Identifies strategies and policies to achieve sector-specific GHG emissions sublimits for:

- Transportation
- Buildings
- Electricity generation
- Industrial emissions
- etc.



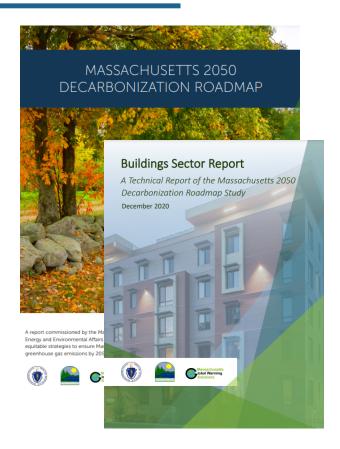


Decarbonization Roadmap

Statewide Action

Outlines pathways to the Commonwealth's net zero goals with a focus on buildings & energy systems





Where Andover Differs

Andover need's its own pathway

Different challenges and opportunities, compared to state as a whole & other towns



Examples:

Land area for protection

Industrial sector

Community groups

Which of the State's Clean Energy and Climate Goals should Andover adopt (choose 1)?



All interim and final goals (50% by 2030, 75% by 2040 and net-zero by 2050)

97 %

Only adopt the 75% by 2040 and net-zero by 2050 goal

3 %

Only adopt the final net-zero by 2050 goal

0 %

Andover's Progress



Andover's Progress



What are Andover's unique strengths when it comes to climate action?



dedicated sustainability and energy team

Lots of green space

Green space

percentage

Resident volunteers_{area} space

tech/ energy companies

OVCE avis conservation land

commitment to education

open

protected Land Wealth Privilege Large School resources

Engaged Schools

Students

Noblesse oblige!

Financial resources

Wealthy town

Youth climate action

WeCan

People care

Talented committed students

What are Andover's weaknesses when it comes to climate action?



don't recognize our privilege

conservative

lack of public transportation Follower Trophy lawns

Nimbys nimby attitude

Resistant to change

large community

lots of cars Cost large yards largely car-dependent

Too cautious wealth

Old buildings

need more action from the industrial sector

Andover's Progress



Climate Action & Sustainability Plan

What word comes to mind when you think of sustainability in Andover?



Electric buses Phillips Academy Potential 3rd train station

Solar programs

What does wecan do?

Land management

Suddenly more important

Conservation commission Heat pumps

Opportunity

Fusion

conservation AVIS AGAB

Strong commercial

native plant requirements

Trains progress

energy efficiency Greening

green Space

Protected land

culture Cars WECAN

Slow progress

Town Composting

Building code

Water treatment plant nascent Trees loyce

Expertise

Education

Two train stations

Andover Community Trust

Future generations

Sustainability Emergency Declaration Proposal Resident energy

Growing awareness



Climate Action & Sustainability Plan Contents

40+ HIGH-IMPACT ACTIONS TO:

Reduce carbon emissions Improve climate resiliency Enhance inclusion and equity

IMPLEMENTATION PLANS IDENTIFYING:

Action leaders
Co-benefits
Equity considerations
Timelines

Where should the Plan put more emphasis on (choose 1)?



More actions, less implementation (breadth)

28 %

Less actions, more implementation (depth)

72 %



Timeline

TASK 1

Baselining, goal setting, & planning engagement

TASK 2 & 3

Action ldentification & prioritization

TASK 4

Implementation plan development

TASK 5

Final plan development

NOV - DEC

JAN - MAR

APRIL

MAY - JUNE

COMMUNITY ENGAGEMENT

Plan Development

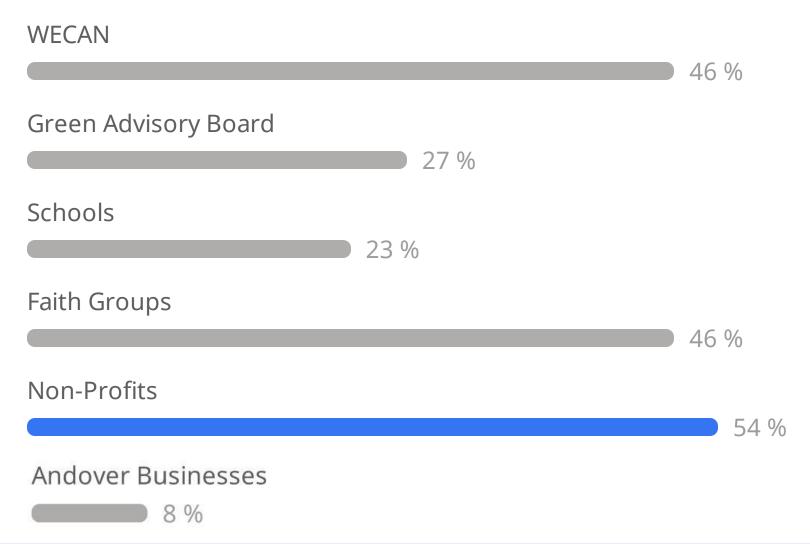


Community Partners



Are you involved with any of the following groups? Select all that apply:







Are there any additional groups or individuals that you recommend we engage during this project? (1/3)



- Act
- Medical professionals
- Cormier
- Phillips Academy
- Playing field tenants
- Psychological and behavioral health professionals
- Renters and public housing residence
- Downtown Business Association
- Chamber of Commerce
- History cwnter
- PTOs

- Mbta
- industry = most important
- local food access orgs
- Select board
- DPW
- Schneider Electric
- Bus drivers
- Andover Townsman
- Major industries...Victor, etc
- Owners of businesses and industries with a presence here but owned elsewhere
- Youts



Are there any additional groups or individuals that you recommend we engage during this project? (2/3)



- seniors
- variety of ethnic groups
- Landscapers
- Artists
- YMCA
- Schneider electric
- Conservation commission
- Architects
- orgs that represent underserved community members
- Indigenous knowledge representatives
- AHS ESIC student interns

- Andover Trails
- Contractors
- Raytheon
- Andover Trails / Shawsheen
 Greenway
- students
- Vets
- Memorial Circle residents
- Greater Andover indivisible
- Builders/developers
- Pfizer,
- AVIS
- Service clubs including rotary, Kiwanis. YMCA

Are there any additional groups or individuals that you recommend we engage during this project? (3/3)



- ABC
- Senior center?
- Avis
- Middle school students
- Heat Smart Alliance
- DEI commission
- AVIS
- Labor unions
- Harry Vorhees
- Chamber of Commerce
- Merrimack Valley Chamber of Commerce
- AVIS

- Realtors
- Rotary
- Students
- Walk Bike Andover



This is Your Plan



Engagement Target: Reach 1000 people!

How would you like to be engaged (select all that applies)? (1/2)



Public meetings (50+ people)

65 %

Smaller targeted groups (committees, boards, clubs, neighborhood or faith groups, etc)

79 %

Serving on working groups for the Climate Action and Sustainability Plan

53 %

1:1 interviews (either as interviewer or interviewee)

32 %

Opinion surveys

50 %

How would you like to be engaged (select all that applies)?

0 3 4

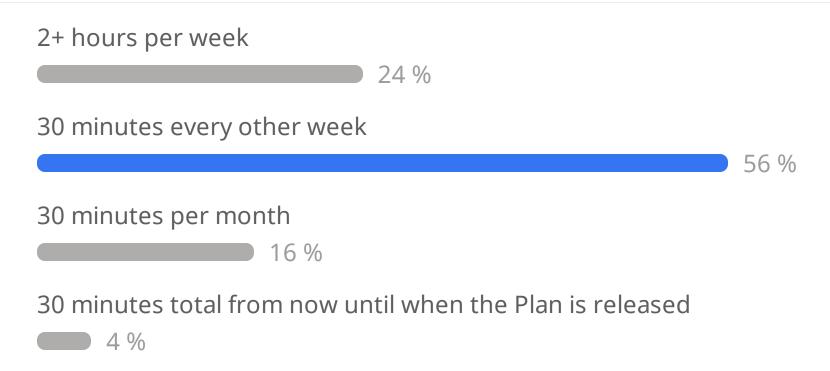
(2/2)

Review final drafts of documents

65 %

0 2 5

If you chose working groups or interviews above, how long might you be willing to give of your personal time to this effort?



This is Your Plan



- 1. Attend public meetings
- 2. Talk with friends & neighbors
- 3. Take the survey
- 4. Youth logo contest



The Town would like to offer a web-based Sustainability Dashboard to report on progress being made. Which of the following would you most like to see (choose 7)? (1/2)

Total kW or MW capacity of solar installed

82 %

Number of Plug-in Hybrid or fully Battery Electric Vehicles registered to 01810

70 %

Number of heat pumps installed

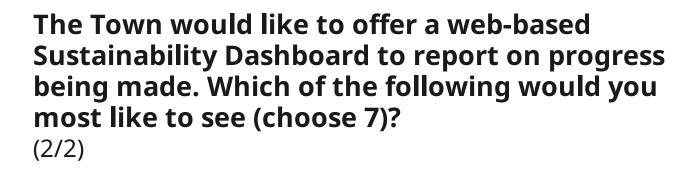
67 %

Number of acres of protected land and estimated carbon sequestered

73 %

Total municipal energy consumption

73 %





Total residential energy consumption 82 % Total commercial and industrial energy consumption 76 % Number of LEED certified buildings 36 % Number of public green infrastructure projects 70 % Miles of sidewalks and bike share roads



Questions or Comments?



Thank you for attending & participating!



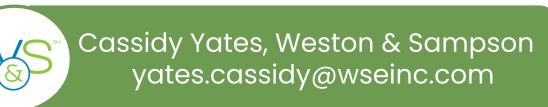






Additional questions & comments can be emailed to:







Resources for State Goals:

The following link is the homepage for the Massachusetts Clean Energy and Climate Plan for 2025 and 2030, and includes:

- Clean Energy and Climate Plan for 2025 and 2030
- 2025 and 2030 Emissions Limits and Sublimits
- Statement of Compliance with 2020 Greenhouse Gas Emissions Limit
- Additional resources

https://www.mass.gov/info-details/massachusetts-clean-energy-and-climate-plan-for-2025-and-2030