



City of Biddeford
Sustainability Commission
December 2, 2024 at 5:30 PM

City Hall Second Floor Conference Room & Zoom

[Join Zoom Meeting Online](#)

Or call in by phone: +1 312 626 6799

Meeting ID: 924 0273 7841

Passcode: 397008

1. Guest Speaker-Peter Dugas-Carbon Pricing
2. Housekeeping/Administrative
 - 2.a Meet twice per month?
 - 2.b Best day of week to meet?
 - 2.c Best time to meet?
 - 2.d Election of Officers (Chair, Vice Chair, Secretary)
3. Continued Discussion-CAP Actions from Nov 18 Discussion
 - 3.a Food Systems
 - 3.b EV Police Cruisers
 - 3.c Cost/Benefit for Trash Truck purchase/lease
 - 3.d Ordinance to Require Cost Benefit Analysis of Purchasing EV vs IC Engine Vehicles
 - 3.e Public Transportation-Reduce Vehicle Miles Traveled in Biddeford
 - 3.f Install Proper Bus Shelters
 - 3.g Encourage Transit-Oriented Development
 - 3.h Shade Ordinance
 - 3.i Snow Shoveling Ordinance
 - 3.j Resilience Hubs
 - 3.k Beach Engineering/Nourishment

- 3.l Biddeford Strategies
- 4. Community Resilience Partnership-Community Actions
 - 4.a Full List of Community Actions
- 5. Creation of Work Plan for 2025-Discussion
 - 5.a Create working sub-committees?
- 6. Other Discussion
- 7. Adjourn

BUILDINGS & ENERGY

How can Biddeford make our city's buildings and energy systems ready for climate change?

B1. Energy efficiency



Increase efficiency of large buildings and rental properties through local ordinances and standards:

- Standards to increase efficiency over time
- Programs to track and disclose energy consumption
- Efficiency standards for rentals

B2. Building weatherization



Create a program to help single family homes increase energy efficiency through weatherization efforts, such as improved insulation, sealing leaks, or improved ventilation.

B3. Renewable energy



Encourage and incentivize small scale renewable energy installation, such as rooftop solar panels.



B4. Risk management



Reduce climate risks to buildings through improved information, education, and action, including:

- Requiring hazard disclosures for property transactions
- Increasing awareness of adaptation options
- Encouraging actions to manage flood risks

B5. Maintain power at critical facilities



Develop and implement a plan for maintaining power at critical facilities during power outages.



B6. Critical facility resilience



Increase the resilience of critical facilities such as our wastewater treatment facility through risk reduction or relocation.

B7. Building electrification



Shift existing buildings & new construction to all-electric heating and appliances.

B8. Municipal energy efficiency



Increase municipal energy efficiency through:

- Energy audits
- Renewable energy installation
- Energy efficiency measures for all city-owned properties and buildings

B9. Maine "Stretch Code" adoption



Adopt the most up-to-date building codes (also known as "stretch codes") to help new buildings to be more efficient.

B10. Improve grid resilience



Work with power companies and state agencies to advocate for efforts to improve the resilience of the electrical grid.

B11. Limit reconstruction & encourage relocation



Limit reconstruction and/or encourage relocation of buildings damaged by hazards that are expected to recur or intensify with climate change.

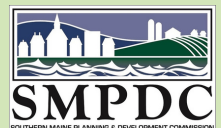


B12. Resilient design standards



Encourage or require new and redeveloped buildings to include sustainable and resilient design measures, especially in flood-prone areas.

Help Guide Biddeford's Climate Action Plan! The Biddeford Climate Task Force has been working hard to create a Climate Action Plan focused on changes that will have the biggest impact. What do you think of the proposed strategies? **Answer the survey linked in the QR code:**



TRANSPORTATION & INFRASTRUCTURE

How can Biddeford make our transportation systems and infrastructure ready for climate change?

T1. Public transit



Expand access to and use of public transit services.



T2. Increase walkability



Improving the "walkability" of our city's roadways through a safe, comfortable, and convenient network of pedestrian walkways.

T3. Increase bikeability



Improve the "bikeability" of our city's roadways with safe, comfortable, and convenient networks of bikeways and bike-related infrastructure.

T4. Encourage transition to electric vehicles (EVs)



- Streamlined permitting, installation of public EV chargers
- Requirements for EV chargers in new development
- Transitioning city fleets to EV

T5. Transit-oriented development



Concentrate housing, business, and leisure activities within easy walking distance to public transit in new development.

T6. Protect critical infrastructure



Protect critical infrastructure such as wastewater treatment and evacuation routes from climate change hazards.

T7. Vulnerability assessment



Assess the vulnerability of transportation infrastructure to the impacts of heat, groundwater rise, and saltwater intrusion caused by sea level rise.



T8. Reduce single-occupancy vehicle trips



Assess methods to reduce single-occupancy vehicle trips made by municipal staff.



T9. Build infrastructure resilience



Modify roads, culverts, and bridges to increase their resilience to flooding, sea level rise, and other climate hazards, including raising, relocating, and/or upsizing.

T10. Direct development



Decrease the need for private vehicles by reducing sprawl through:

- Directing new development to areas where services are easily accessible
- Reducing minimum parking requirements

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LAND USE & NATURAL ENVIRONMENT

How can Biddeford help our city's natural environment be ready for climate change?



LN1. Sustainable food systems



Promote and expand local and resilient food systems through sustainable practices, such as actions that improve soil health and store carbon.

LN2. Mixed-use zoning



Implement zoning to allow a blend of residential and commercial uses in some areas of the city, in order to reduce sprawl and make neighborhoods more walkable.

LN3. Direct development



Direct development away from areas of the city that are exposed to climate-related risks, including sea level rise, erosion, and inland flooding.

LN4. Sustainable landscaping



Promote and practice climate resilient and sustainable landscaping approaches, including limiting use of fertilizers, herbicides, and pesticides, especially in city parks and green spaces.

LN5. Protect vulnerable areas



Conserve areas of the city that are vulnerable to climate hazards, as well as those that help to minimize climate risks through carbon storage and flood reduction.

LN6. Nature-based solutions



Promote and enable "nature-based solutions", such as the restoration of sand dunes or wetlands, to protect shorelines and coastal property from flooding and erosion.



LN7. Land use ordinance review



Conduct a review of the city's land use ordinances and policies to identify changes needed to include climate resilience and sustainability measures and standards.



LN8. Encourage development in appropriate areas



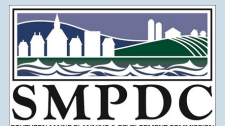
Encourage development in appropriate areas that are already developed, have public services (e.g., water and sewer), and are less vulnerable to natural hazards.

LN9. Restoration of natural habitats



Promote the restoration or enhancement of natural habitats for biodiversity and wildlife protection.

Help Guide Biddeford's Climate Action Plan! The Biddeford Climate Task Force has been working hard to create a Climate Action Plan focused on changes that will have the biggest impact. What do you think of the proposed strategies? **Answer the survey linked in the QR code:**



HEALTH, SAFETY, & WELL BEING

How can Biddeford increase health, safety, & well being in our city?

H1. Affordable housing



Encourage and support the creation of resilient, energy-efficient, and low-carbon affordable housing.

H2. Resilience Hubs



Establish a designated site to serve as a "resilience hub" that can provide critical services to residents during climate-related emergencies or disruptions.



H3. Ensure safe drinking water supply



Ensure the safety and quality of drinking water supplies, including through assessment and management of climate change impacts to septic systems and wells.



H4. Shade structures ordinance



Develop an ordinance to require shade structures (covered bus stops, gazebos, etc.) on city-owned properties.

H5. Tree Ordinance



Develop an ordinance to increase tree canopy both on city-owned and private property.

H6. Improve disaster planning



Improve disaster planning and response to be better prepared for climate change risks, including early warning systems and community evacuation plans.

H7. Climate hazard training



Provide emergency responders and medical providers with training about the types of illnesses that might occur as a result of climate hazards.

H8. Public health outreach



Conduct outreach about public health advisories for climate-related health impacts and weather events.

H9. Monitor vector-borne diseases and invasive species



Explore options for monitoring and managing pests, like ticks and mosquitoes, that are associated with increases in diseases (e.g. Lyme disease) using natural and ecologically sound methods.

Help Guide Biddeford's Climate Action Plan! The Biddeford Climate Task Force has been working hard to create a Climate Action Plan focused on changes that will have the biggest impact. What do you think of the proposed strategies? **Answer the survey linked in the QR code:**



LEADERSHIP & SUPPORT

How can the City of Biddeford foster leadership and support to implement our Climate Action Plan?

LS1. Establish local funding

Establish local funding mechanisms, such as fees on new construction, to support implementation of the Climate Action Plan.

LS2. Include climate in municipal investments

Incorporate climate resilience and carbon emissions measures into planned investments for city-owned infrastructure and equipment.



LS3. School curricula

Support local schools to include climate change and sustainability in school curricula.



LS4. Create Climate Commission

Create a municipal Climate Commission made of up city residents to assist with the implementation of the Climate Action Plan.

LS5. Create Office of Sustainability

Create a municipal Office of Sustainability and position of Sustainability Coordinator, whose mandate will be to implement the Climate Action Plan.



LS6. Include climate in decision-making

Incorporate future climatic conditions in land use planning and municipal policies.



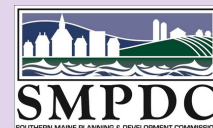
LS7. Build municipal capacity

Ensure municipal departments have the resources, guidance, and support to implement the Climate Action Plan.

LS8. Climate change training

Provide climate change training for municipal boards, commissions, and committees.

Help Guide Biddeford's Climate Action Plan! The Biddeford Climate Task Force has been working hard to create a Climate Action Plan focused on changes that will have the biggest impact. What do you think of the proposed strategies? **Answer the survey linked in the QR code:**



Community Resilience Partnership

List of Community Actions

Revised September 2024

The List of Community Actions are suggested activities for communities that align with the goals and strategies of Maine Won't Wait. Communities will use the List first as a self-assessment tool during the enrollment process to aid in determining where progress has already been made, then as a guide for identifying future priorities and funding opportunities.

Instructions: In the three left-most columns (columns A, B, C), mark your community level of progress with each of the Strategy Area Actions by putting an X in the box. Only one of the three columns should be marked for each action. If you wish to add additional comments or notes about why you marked a specific action as you have, use the right-most column (column F) labeled Additional Notes/Comments.

"Complete" actions have been fully carried out before the Enrollment Form was submitted.

"In Progress" actions, show that the community has taken concrete steps toward the completion of the action. This can look like many different things:

- Received funding that supports the completion of the action.
- Held meetings with outside agencies or public meetings to further plan completion of action.
- Have a clear idea of the next steps, for example, have a future meeting planned beyond the initial meeting.

"No Progress" actions have not been implemented in any way; interested, future priority, planned, or goal actions would go in this category.

Program Contact: Ashley Krulik

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[Community Resilience Partnership | Office of Policy Innovation & Future \(maine.gov\)](#)

Community Resilience Partnership

List of Community Actions

Revised September 2024

See Instructions on Introduction tab and Example sheet.

Complete	In Progress	No Progress	Strategy Areas & Actions (mark Columns A, B, C as complete, in progress, or no progress)		Additional Notes/Comments
Strategy Area A: Embrace the Future of Transportation					
Accelerate the Transition to Electric Vehicles (EVs)					
			Note: A maximum of \$7,500 of a Community Action Grant may be applied to the purchase of an electric vehicle for municipal or tribal fleets (Action A1). Eligible vehicles for Action A1 include light-duty, medium-duty, and heavy-duty on-road electric vehicles as well as electric riding mowers and electric outboard engines that are part of a municipal fleet, all subject to the maximum award amount. Where applicable, Efficiency Maine’s electric vehicle rebate (Action A1) or EV charging rebate (Action A2) must be included in the applicant’s project budget.		
			A1	Purchase or lease electric vehicles for municipal or tribal government-owned vehicle fleets.	
			A2	Install EV chargers in public parking areas.	
			A3	Adopt ordinances to encourage EV charging infrastructure, including at multifamily dwellings, businesses, and public parking areas.	
			A4	Adopt an anti-idling ordinance.	
Improve Mobility and Reduce Vehicle Miles Traveled (VMT)					
			A5	Implement strategies that increase public transit ridership and alternative transportation modes, including bike and walking infrastructure.	
			A6	Implement strategies that encourage municipal/tribal employees to commute via carpools, public transit, bike/walk, or other alternatives to single-occupancy vehicles.	
			A7	Adopt a telework policy for municipal/tribal government staff positions that can work remotely some days per week.	
			A8	Adopt land use and development policies in plans and codes that reduce the need for driving (e.g. locating schools, workplaces, and shopping near where people live; encouraging density of development near housing and transportation).	
			A9	Adopt a Complete Streets policy which addresses safety, bike/pedestrian uses, and transit.	
			A10	Adopt a broadband plan that reduces the need to drive by increasing access to high speed internet for underserved residents to support telecommuting, access to remote education and telehealth.	

Strategy Area B: Modernize Maine's Buildings

Transition to Cleaner Heating and Cooling, and Efficient Appliances in Municipal/Tribal Buildings

			Note: Energy efficiency projects (Actions B1-B5) such as heat pumps, VRF systems, LED lighting upgrades, water heaters, etc. must be eligible for Efficiency Maine’s incentives. The energy efficiency project must be located in a municipally, tribally, or publicly-owned building. The applicant’s project budget must include applicable Efficiency Maine rebates or incentives.		
			B1	Adopt and execute a plan for energy efficiency and building envelope weatherization improvements for municipal/tribal buildings. Collaborate with local school district for school building improvements.	
			B2	Upgrade to energy efficient interior lighting in municipal/tribal buildings.	
			B3	Upgrade to energy efficient appliances in municipal/tribal buildings.	
			B4	Install a heat pump system or VRF system for heating/cooling and heat pump water heating in municipal/tribal buildings.	
			B5	Upgrade streetlights and exterior lighting for municipally/tribally-owned facilities with energy efficient LED lighting (and minimize light pollution with downlighting where possible).	
			B6	Adjust procurement policies to prioritize climate-friendly Maine forest products (e.g. mass timber, wood-fiber insulation) in construction projects.	

Advance the Design and Construction of New Buildings

			B7	Adopt the energy efficiency stretch building code (currently IECC 2021).	
			B8	Require EV charging readiness and solar energy readiness for all new construction.	
			B9	Support regular professional development for code enforcement officers, especially Efficiency Maine's code trainings.	
			B10	Adopt C-PACE ordinance for commercial property owners to install renewable energy systems, energy efficiency measures, and EV charging infrastructure.	

Strategy Area C: Reduce Emissions through Clean Energy Innovation

Reduce Greenhouse Gas (GHG) Emissions

			C1	Conduct a baseline for energy useage by municipal/tribal government including electricity, heating and transportation fuels, and other energy sources.	
			C2	Identify and track a simplified set of emissions indicators for community emissions reduction (e.g. number of EVs registered in the community, number of homes with solar panels, number of heat pump rebates from Efficiency Maine).	
			C3	Adopt a resolution setting targets and a plan for reducing emissions and advancing clean energy from municipal/tribal operations that align with the state's targets.	

Advance Clean Energy Adoption

			C4	Adopt a renewable energy ordinance(s) that allows, enables, or encourages community-appropriate renewable energy and energy storage installations.	
			C5	Adopt a streamlined permitting process for small-scale renewable energy installations.	

Transition to Clean Energy

			C6	Enter into a long-term service contract or power purchase agreement (PPA) or adopt a clean power purchase policy to ensure increasing local government energy supplies come from renewable energy.	
			C7	Install a renewable energy project (solar, wind, geothermal, anaerobic digestion, etc.) on municipal/tribal property (e.g. school rooftop, wellhead protection area, landfill, brownfield site, etc.).	

Strategy Area D: Grow Jobs and Protect Natural Resource Industries

Support Maine's Natural Resource Economy

			D1	Adopt policies that enable, support, or incentivize local food production and consumption, including community gardens.	
			D2	Adjust procurement policies to prioritize climate-friendly Maine forest products (e.g. mass timber, wood-fiber insulation) in construction projects.	

Support Clean Energy Jobs and Businesses

			D3	Assess the suitability of privately-owned brownfield and disturbed/contaminated sites for clean energy projects and encourage project development.	
			D4	Establish incentives for clean energy industry or businesses to locate in community.	
			D5	Encourage and support clean energy industries in economic development plans.	

Strategy Area E: Protect the Environment & Promote Natural Climate Solutions

Protect Natural and Working Lands and Waters

			E1	Set targets for increasing green space and tree planting to increase shade and water access in public spaces and carbon sequestration.	
			E2	Incorporate a goal into conservation plans of conserving 30% of land in the community by 2030 (including undeveloped town property), with a priority on addressing conservation gaps related to high biodiversity areas, undeveloped blocks, and land and water connectivity.	
			E3	Create or update a watershed plan to identify flooding and water quality priorities and adaptation options.	
			E4	Develop a natural resource and habitat inventory that includes climate stressors and impacts.	
			E5	Conserve, revegetate and reconnect floodplains and buffers in riparian areas.	
			E6	Preserve climate-threatened natural areas such as wetlands, riparian areas, and headwater streams through zoning or other regulations.	
			E7	Implement a source water protection program.	
			E8	Adopt policies that prioritize natural, nature-based or ecologically enhanced shoreline protection for coastlines, rivers, and lakes.	
			E9	Identify and protect sites for living shorelines and saltmarsh migration areas.	
			E10	Identify and protect open space in the floodplain to increase flood buffers and community resilience.	

Strategy Area F: Build Healthy & Resilient Communities

Plan for Community Resilience

			F1	Conduct a community vulnerability assessment that identifies climate risks and vulnerable populations and includes a review of existing plans and policies. Adopt a climate resilience plan that describes high priority strategies for reducing risk and vulnerabilities (may be a standalone plan or included in a comprehensive plan).	
			F2	Update the local or county EMA hazard mitigation plan to address changing/future conditions and identify specific strategies to reduce vulnerability and increase resilience to climate change impacts.	
			F3	Develop or enhance early warning systems and community evacuation plans.	
			F4	Develop a storm debris management plan.	

Reduce Flood Risk					
			F5	Complete the Maine Flood Resilience Checklist.	
			F6	Participate in the National Flood Insurance Program (NFIP).	
			F7	Enroll in the NFIP's Community Rating System (CRS) at Class 9 or better, reducing flood insurance premiums for community residents.	
			F8	Achieve CRS Class 6 or better, maximizing flood insurance savings for community residents.	
			F9	Map sea level rise projections in the local or county EMA hazard mitigation plan.	
			F10	Require consideration of sea level rise projections and impacts in planning and permitting coastal development.	
			F11	Adopt freeboard requirements in the special flood hazard area and higher freeboard critical infrastructure and long-lifespan assets.	
			F12	Adopt a low-impact design (LID) standard for stormwater management.	
Strengthen Public Health					
			F13	Identify and plan to reduce public health threats in the community that are exacerbated by climate change.	
			F14	Develop and implement an extreme temperatures emergency plan, including strategies that increase use of cooling centers by residents.	
			F15	Establish a peer-to-peer program for checking in on vulnerable community members during extreme heat or cold events.	
			F16	Increase community-level resilience to mosquito-borne diseases by implementing vector controls to decrease mosquito habitat.	
			F17	Implement school-based programs to educate students about prevention of mosquito- and tick-borne diseases.	

Strategy Area G: Invest in Climate-Ready Infrastructure

Assess climate vulnerability of infrastructure

			G1	Conduct a vulnerability assessment for critical community infrastructure that includes: 1) the climate hazards to which infrastructure assets are exposed and how the intensity and likelihood will change over time; 2) the susceptibility to damage or failure given location, design, age, condition, and state of repair; and 3) the consequences that impairment or failure of the infrastructure will have on the community.	
			G2	Develop a Capital Investment Plan that a) identifies vulnerable municipal/tribal facilities and assets, and b) prioritizes resilience in improvements and/or new construction.	

Utilize climate-ready standards, designs, and practices to improve infrastructure

			G3	Improve and protect drinking water, wastewater treatment, and stormwater facilities to reduce physical damage and sustain function during extreme weather events.	
			G4	Adopt a policy that prioritizes green infrastructure to manage stormwater in developed areas.	
			G5	Adopt DEP's Stream Smart Crossing Guidelines as standard practice for culvert and bridge improvements. Identify vulnerable crossings and apply for DEP improvement funds.	
			G6	Assess wastewater treatment facilities for clean energy potential (solar, anaerobic digester, etc.).	

Strategy Area H: Engage Maine People				
			H1	Establish or recognize an official committee of community stakeholders.
Increase public awareness of climate change impacts and opportunities to take action				
			H2	Create a climate change education, outreach, and engagement program, focusing on mitigation and adaptation for residents and businesses.
			H3	Amplify public health advisories for climate-related health and weather events, such as air quality advisories, extreme heat or cold events, extreme storms, power outages, waterborne disease outbreaks, harmful algal blooms, vectorborne disease trends, etc.
			H4	Engage youth in resilience, clean energy, and energy use reduction.
			H5	Engage populations that are vulnerable to climate impacts in resilience, clean energy, and GHG emissions reduction.
Engage the business community and recognize climate leadership				
			H6	Create and support an energy reduction campaign or challenge among businesses.
			H7	Initiate a community bulk purchasing program with a vendor, or vendors, to provide low cost equipment such as heat pumps and solar for interested residents and businesses.
			Note: Bulk purchasing (Action H7): Grant funds may not be used to purchase or subsidize equipment or services for residential or commercial properties, but may be used for program design and capacity building .	

Community Resilience Partnership

List of Community Actions
Revised September 2024

See Instructions on Introduction tab below.

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Accelerate the Transition to Electric Vehicles (EVs)					
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X			A1	Purchase or lease electric vehicles for municipal or tribal government-owned	Town purchased two electric municipal vehicles in 2019.
	X		A2	Install EV chargers in public parking areas.	Recently Received funding [from outside grant] will support the installation of EV chargers in our town
	X		A3	Adopt ordinances to encourage EV charging infrastructure, including at multifamily dwellings, businesses, and public parking areas.	Town held a meeting with [outside agency]/held public meeting to discuss how to best carry out this action.
		X	A4	Adopt an anti-idling ordinance.	Priority Interest.
Improve Mobility and Reduce Vehicle Miles Traveled (VMT)					
		X	A5	Implement strategies that increase public transit ridership and alternative	Planning to think about this next quarter.
		X	A6	Implement strategies that encourage municipal/tribal employees to commute	Bought up at a previous board meeting.
X			A7	Adopt a telework policy for municipal/tribal government staff positions that can work remotely some days per week.	Registering online and COVID protocols have increased the telework of town staff
		X	A8	Adopt land use and development policies in plans and codes that reduce the	Progress due to complying with ____ Maine State law.