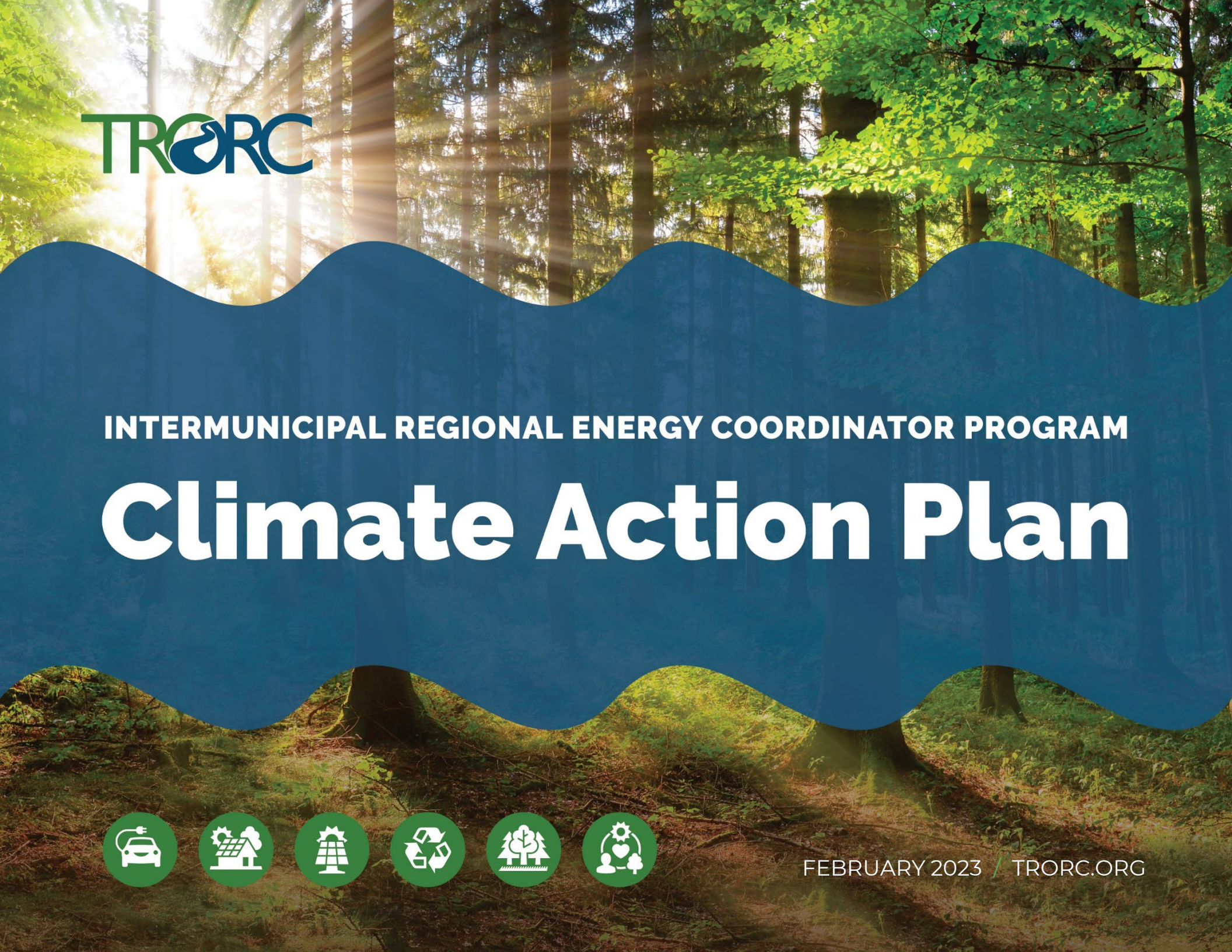

TRORC

INTERMUNICIPAL REGIONAL ENERGY COORDINATOR PROGRAM

Climate Action Plan

FEBRUARY 2023 / TRORC.ORG

Overview

COLLABORATION

The Intermunicipal Regional Energy Coordinator (IREC) program, hosted by TRORC, is a collaboration among the Vermont Towns of Bradford, Norwich, Sharon, Strafford, Thetford, Woodstock and Barnard to provide recommendations that can be used to reduce energy use, increase the use of renewable energy, and lower greenhouse gas emissions within their jurisdictions. This IREC Climate Action Plan (CAP) is designed to define specific actions that can be taken to move these six towns towards their goals at the community level, and, to the extent possible, to encourage partnerships among the IREC towns. It is intended primarily to serve as an action plan for each town's respective Energy Committee, but can also be a useful tool for government officials.

TRACKING PROGRESS

Energy Committees can work with their towns to decide which goals in this plan will be tracked on an annual basis, and reported in the Town Reports. Energy Committees and the IREC will work together to modify the plan each year as new information becomes available and new priorities are established, to identify opportunities for collaboration, and to learn from the experiences of others.

If Energy Committees decide to conduct a GHG emission inventory in their town, the IREC and Energy Committee members will work together to define a standardized procedure using best current practices and methods. GHG emissions from municipal operations can be tracked directly from known fossil fuel and electrical consumption data. Community or county GHG emission data is either imperfect or difficult to obtain. Ultimately, the actions in this CAP are designed to move towns closer to their goals, using the best available methods and data.

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Definitions

PATHWAY

A sectoral pathway is a high level means of achieving GHG emissions reductions.

STRATEGY

Statements of measurable activity, a benchmark, to be reached in pursuit of the pathway. Strategies should be measurable and are a more specific subset of pathways.

ACTIONS

The “operational” tasks that the town will undertake to meet the pathways and strategies. Actions may be written around existing, or propose new, policies, programs, projects, initiatives, plans, etc.

Transportation

PATHWAY

Electrification

STRATEGY

Increase the share of all-electric vehicles to 25% of all vehicles by 2030 (from approximately 235 vehicles in 2020 to 3,257 vehicles in 2030 community-wide).

ACTIONS

- Implement an "Electric Vehicle (EV) Ready" building ordinance that requires new developments to have panel capacity and conduit in place to charge electric vehicles and establish minimum parking requirements for exclusive EV use.
- Require parking garages to have at least 20% of spaces served by charging outlets at construction and an additional 20% every 5 years thereafter.
- Apply for funding and/or work with outside organizations (e.g., local businesses) to apply for funding for EV charging stations.
- Create an EV ambassador program with designated residents that can be contacted to answer questions about EVs and provide real world experience.
- Survey residents on their transportation habits and needs to inform a regional effort to lower vehicle miles traveled (VMT), increase EV adoption, and target gas "superusers". Applies to "Reduce VMT" Pathway.
- Work with driver's education programs to use electric vehicles and encourage driving behaviors that reduce fuel use (e.g., driving the speed limit, not idling).
- Do not permit new gas stations, fuel depots or pipelines.
- Work with schools to plan for/acquire electric school buses and charging infrastructure.

Transportation

PATHWAY

Low-Emissions Vehicles

STRATEGY

Establish viable low-emission vehicle fuel sources to serve the community by 2025. Achieve 25% diesel consumption replacement with low-emission fuels by 2030.

ACTIONS

- Conduct a diesel vehicle fuel alternative feasibility study to identify viable low-emission fuel alternatives and sources.
- Pilot using biodiesel in one municipal medium- to heavy-duty vehicle as a demonstration for municipal vehicles and commercial fleets.

PATHWAY

Reduce Vehicle Miles Traveled

STRATEGY

Encourage development inside of town/village centers and along existing transit routes and interstates.

ACTIONS

- Discourage vehicle use in downtowns/village centers by eliminating or reducing minimum parking requirements for multi-family housing and commercial developments. Require shared parking with compatible uses.
- Identify dead-end Class 3 town roads that serve few structures and consider reclassification to Class 4.
- Examine options for community water and septic systems.

Transportation

PATHWAY

Reduce Vehicle Miles Traveled

STRATEGY

Increase walking and biking to work rates from the Vermont 2020 five year average of 5.2% and 0.8% respectively, to at least 10% and 3%.

Source: 2020 five year statistics from data.bikeleague.org

ACTIONS

- Institutionalize pedestrian and bicycle accommodations (including transit connectivity) in all planning, engineering, and construction related activities (i.e., implement "Complete Streets"). Develop a free-standing Bicycle and Pedestrian Plan.
- Continue/join the ebike lending library program, and encourage their use for local travel (e.g., errands, commuting, etc.).
- Work with TRORC to develop a project that could be funded through VTrans' Annual Bike/Ped Program. If the project is ready, apply for funding.
- Amend zoning regulations to allow or (even require) higher density development. These amendments could include increasing building heights, reducing setbacks, eliminating restrictions by unit (for example units/acre) in areas with sewer and water, and allowing mixed land use. Density in areas with sewer and water should be at least 4 units/acre but really has no practical upper limit beyond what builders will build. Maximum densities can also be coupled with minimum densities – you can't build less than 4 units/acre.
- Bonus units can be given to development that meets affordable housing goals.

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Transportation

PATHWAY

Reduce Vehicle Miles Traveled

STRATEGY *(continued)*

Increase walking and biking to work rates to at least 10% and 3% respectively.

ACTIONS

- Allow accessory dwelling units ("ADU") beyond the statutory minimum. This could include provisions for more than one ADU, exemption from permitting for ADUs (that met standards) to create additional legal ADUs compatible with residential neighborhoods.
- Require uses to interconnect sidewalks for pedestrian access, or to construct such access when adjacent uses develop.
- Use the official map provision in 24 VSA 4421 to lay out alleys, paths and new roads to minimize vehicle trips.
- Achieve Platinum Level status in the Vermont Safe Routes to School Program.

STRATEGY

Increase percentage of residents that own 1 car or less from 21.5% (statewide) to 30% by 2030.

ACTIONS

- Survey residents on their transportation habits and needs to inform a regional effort to lower VMT, increase EV adoption, and target gas "superusers".

Transportation

PATHWAY

Reduce Vehicle Miles Traveled

STRATEGY

Increase the availability and use of shared transit.

ACTIONS

- Explore expanding hours and/or service routes with transit providers, including combining school and transit service (see the Energy Action Network's "The Future of Rural Transit").
- Establish a car-share program, with pickup trucks included.
- Require new public buildings over an occupancy of a certain size on Federal-aid secondary highway system (FAS) roads to have a dedicated transit stop either built, or required to be built later based on the situation (such as when transit is established), if distant from an existing stop.
- Consider establishing a Town Driver, employed by multiple towns to provide rides to medical appointments, shopping trips, etc.

STRATEGY

Increase opportunities for telework/remote work.

ACTIONS

- Work with employers to adopt telecommuting policy.

Stationary Combustion

PATHWAY

Increase Building Efficiency

STRATEGY

Improve total community-wide residential and commercial building energy efficiency by 10% (electricity and thermal) by 2030.

ACTIONS

- Develop a weatherization program for income-qualified households using ARPA funds.
- Develop and adopt a rental housing energy efficiency policy by 2025 requiring single family and multi-family rental housing properties to meet minimum energy efficiency level to qualify for rental licensing and/or requiring landlords to weatherize their buildings (see Burlington example). Program to include an energy efficiency rating system (ENERGY STAR or HERS) or a Town "Green Landlords" certification program based on the energy efficiency of their rental units.
- Establish new incentives and expand and promote existing incentives for energy efficiency, weatherization, renewable energy, and energy storage, (e.g. expedited permitting, rebates, property tax incentives, utility programs, etc.) for all buildings.
- Work with Listers to track which properties in town are rentals, in order to target those properties for energy programs.
- Establish a policy or ordinance requiring landlords to provide an energy disclosure, a statement of previous occupants' energy usage and expenses, when advertising and leasing properties.

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Stationary Combustion

PATHWAY

Increase Building Efficiency

STRATEGY *(continued)*

Improve total community-wide residential and commercial building energy efficiency by 10% (electricity and thermal) by 2030.

ACTIONS

- Assess instating impact fees with rebates for projects that meet CAP objectives for increased building efficiency.
- Investigate the legality of Implementing a policy or sales license requiring fuel dealers to report sales within IREC towns annually. If legal, adopt the policy.
- Enact maximum floor space limits for residential construction to minimize energy use.
- Work with Vital Communities on their Energy Saving Outreach Campaign.

STRATEGY

100% of new construction meeting the State's Building Energy Standards (RBES/CBES) by 2025.

ACTIONS

- Update zoning regulations to require a Certificate of Occupancy, if not already required.
- Ensure that all permit applicants receive a copy of the RBES Handbook, and that all completed projects file an RBES Certificate (tied to CO where one exists).
- Advocate at the state level for increasing compliance with the RBES.

Stationary Combustion

PATHWAY

Eliminate Fossil Fuel Use in Homes and Businesses

STRATEGY

Achieve 30% residential, commercial and industrial building thermal "fuel switching" (to renewable source) to reduce onsite fossil fuel use by 2030.

ACTIONS

- Assess fees for infrastructure using fossil fuel, with goal to stop permitting new fossil fuel systems (e.g., heating systems, water heaters).
- Work with Efficiency Vermont and others to promote building retro commissioning program to identify energy efficiency upgrades and operation and maintenance practices that improve affordability, comfort, indoor air quality and energy efficiency in all commercial and multifamily buildings. Target 10% of eligible buildings in year 1.
- Work with schools to adopt a Green Procurement Policy.
- Require 200-amp service for new residential construction or when replacing the service panel.
- Regulate internal thermal systems in new construction so that primary heat systems may not be run on fossil fuels, but rather have to use a renewable heat source as is required in Burlington, Vermont.

Stationary Combustion

PATHWAY

Eliminate Fossil Fuel Use in Homes and Businesses

STRATEGY

Increase net zero buildings within the community to 5% of building stock by 2030.

ACTIONS

- Promote Efficiency Vermont's Residential New Construction program.

STRATEGY

Incentivize landlords to fuel switch.

ACTIONS

- Develop policy to incentivize both landlords and tenants to use energy efficiently.

Electricity

PATHWAY

Use No-Emissions Generation Source

STRATEGY

Increase number of on-site distributed renewable energy systems from 6% of residence to maximum on-site potential by 2030.

ACTIONS

- Adopt solar-ready ordinance.
- Exempt all on-site distributed renewable energy facilities from municipal taxes.
- Require buildings to take reasonable steps to orient roofs (when sloped) for solar gain, and for all roofs over a certain size to take solar loads.

STRATEGY

Develop community solar projects to meet 25% of town 2050 renewable energy target by 2030.

ACTIONS

- Identify site(s) (municipally, school district, or private) to host community solar.
  Identify community leader to facilitate development of community solar array.
  Provide community leader with resources for developing community arrays.
  Achieve 3% of town 2050 renewable energy target each year.

Waste

PATHWAY

Reduce the Amount of Waste Entering Landfills

STRATEGY

Achieve 100% organics landfill waste diversion by 2030.

ACTIONS

- To be determined.

STRATEGY

Increase recycling from 5% to 20% of total municipal solid waste (MSW) handled by 2030 in an energy efficient, low emission manner.

ACTIONS

- Develop ordinances requiring businesses to recycle material streams like cardboard, paper, beverage containers, etc.

Waste

PATHWAY

Reduce the Amount of Waste Entering Landfills

STRATEGY

Decrease total per capita municipal solid waste handled by 5% by 2030.

ACTIONS

- Establish a policy to make zero and reduced waste events standard for large community events.

PATHWAY

Reduce the Use of Water and Wastewater

STRATEGY

Promote increased water conservation community-wide with a targeted reduction of 6% (water and wastewater) by 2030.

ACTIONS

- Encourage the installation of low-flow water fixtures in homes and businesses.
- Require water-efficient fixtures and appliances in all new construction and renovation.
- Have a standard that requires installation of rainwater collection systems for landscaping or aquifer recharge.

Forestry / Agriculture / Land Use

PATHWAY

Protect and Promote Working Lands and Natural Spaces

STRATEGY

Care for forests to enhance their resilience to climate change and capacities for carbon sequestration and storage.

ACTIONS

- Establish and disseminate guidelines for landowners to manage forests for carbon sequestration and storage.

STRATEGY

Increase production of and access to local food, particularly for low income and food insecure individuals.

ACTIONS

- Promote eating local, and encourage the distribution of local foods at food shelves.

Forestry / Agriculture / Land Use

PATHWAY

Protect and Promote Working Lands and Natural Spaces

STRATEGY

Increase tree cover and diversity.

ACTIONS

- Review management practices in Town Forests and adopt policy to manage for carbon sequestration and storage.
- Consider a town policy to purchase land in priority areas (forest blocks, property on dead-end roads, etc.) to be managed for carbon storage/sequestration.

STRATEGY

Increase the use of native species and pollinator-friendly species.

ACTIONS

- Establish communications and outreach campaign to residents and businesses, particularly lawn care companies, about the advantages of utilizing native/pollinator-friendly species and the dangers of applying chemicals.

Forestry / Agriculture / Land Use

PATHWAY

Protect and Promote Working Lands and Natural Spaces

STRATEGY

Maintain and promote tree cover in new developments.

ACTIONS

- Require no net decrease in carbon sequestration between pre - and post- construction (this would involve on or off-site mitigation at times).
- Require deciduous shade trees and proper placement to shield buildings from summer heat.
- Require east-west parking aisles with tree breaks for shade and stormwater retention.
- Require trees in mobile home parks and other development.
- Limit tree cutting to envelopes in subdivision and development review.
- Regulate the cutting of mature trees in more dense areas.

Cross-Sectoral

PATHWAY

Community Outreach

STRATEGY

Disseminate information about energy efficiency/renewable energy to the community and establish commitments.

ACTIONS

- Establish a Climate Action Guidelines & Pledge program for residents and businesses, designed to help people and businesses make climate-friendly choices.
- Organize showcases, where people that have adopted clean technologies (e.g., EVs, heat pumps, solar) or practices (e.g., garden, lawn, or land management) can educate the public about these topics.
- Weatherize/Solarize campaigns.

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