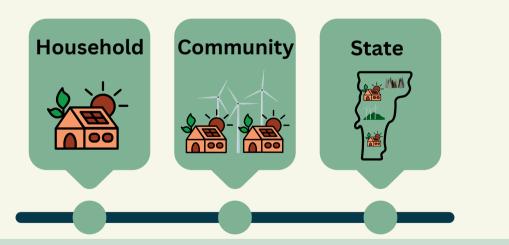
# CLIMATE ACTION IN VERMONT Resilience and Adaptation

Vermont is already feeling the impacts of climate change - shorter winters, droughts, and more intense rain events. The 2021 Climate Action Plan identifies state actions to cut climate pollution and make communities more resilient. The Climate Action Office wants to hear what actions and programs are most important to Vermonters as we work to implement the Plan and develop future iterations of it.

#### **RESILIENCE IN VERMONT**

In Vermont, building resilience to climate change means taking steps to change our behavior, systems, and in some cases our way of life to prepare for the impacts of climate change. This might mean moving our homes out of the way of rivers that are likely to flood, checking on elderly neighbors when there is a heat wave, or protecting wild places so that plants and animals under stress from changing temperatures have places to live.

#### **LEVELS OF RESILIENCE**



#### **BENEFITS**

Even if we do everything possible to slow down climate change, the impacts will still be felt by people, particularly those already marginalized and vulnerable. Adapting to climate change now will **save lives; save money; reduce risk from future disasters; and improve quality of life for people, plants, and animals.** 

**Resilience and Adaptation** 

## HOUSEHOLD PROGRAMS

#### VEM Flood Resilient Communities Fund

reduces flood hazards while increasing water quality and public safety through at-risk property buyouts.

### NOFA-VT Farmer Resilience Grants

distributes money directly to farmers to fund projects that will improve long-term resilience.

#### NOAA Climate Resilience Activity

**Book** is an activity book accessible to all ages to help facilitate conversation about and explain climate resilience in a community.

# **COMMUNITY PROGRAMS**

VT Urban & Community Forestry Program has funding for municipalities to create more resilient urban tree networks.

VDH Health Equity and Community Design Technical Assistance Pilot gives capacity and resources to communities to develop healthy community designs

### VDH Hot Weather Preparedness

centered on equity.

Follow these steps and guidance from the Dept of Health to make your family and community more resilient to hot weather.

# OTHER PROGRAMS AND RESOURCES

#### **Current Use Program**

provides incentives to keep agricultural or forest land undeveloped through valuation and taxation.

### **US Climate Resilience**

**Toolkit** outlines steps to identify and address pressing climaterelated vulnerabilities and risk.



**PROGRAM LINKS** 

VERMONT CLIMATE ACTION OFFICE: www.climatechange.vermont.gov anr.cao@vermont.gov

### Transportation

Vermont is already feeling the impacts of climate change - shorter winters, droughts, and more intense rain events. The 2021 Climate Action Plan identifies state actions to cut climate pollution and make communities more resilient. The Climate Action Office wants to hear what actions and programs are most important to Vermonters as we work to implement the Plan and develop future iterations of it.

#### **TRANSPORTATION IN VERMONT**

As a rural state, public transportation is restricted to urban areas. Vermonters travel in their own cars that use fossil fuels like gasoline. Burning fossil fuels releases harmful air pollution and greenhouse gases into the atmosphere. To do our part to address climate change, we must lower emissions from transportation, which is our largest contributor to climate pollution in VT. Transitioning to electric vehicles, considering micros public transit for rural areas, and living in villages can help lower emissions in from transportation in Vermont.

# TRANSPORTATION EMISSION REDUCTION PLAN



- An **individual** can decrease their own transportation emissions by relying less on fossil-fuel vehicles.
- A **community** can decrease its emissions by increasing access to public transportation and implementing new land use planning.

### **BENEFITS**

Fewer Emissions - When cars run on electricity instead of gasoline, they produce significantly less climate pollution.

Improved Public Health - Burning fewer fossil fuels decreases air pollutants and improves overall public health.

Money Saved - A rural driver can save at least \$1500 each year by switching to an electric car. Increased Equity - Increasing access to micro-public transit makes it easier for rural Vermonters to drive less.

# Transportation

# GET HELP PURCHASING AN ELECTRIC VEHICLE



#### VERMONT STATE INCENTIVES

Up to \$8000 on eligible new EV purchase at point of sale



FEDERAL INCENTIVES Up to \$7500 tax credit

**ELECTRIC UTILITY** 

**INCENTIVES** 

Rebates and bill credits (varies by Utility)

# OTHER WAYS TO BE MOBILE AND CLIMATE-FRIENDLY

Carpool - share your car or get a ride to save money and reduce pollution Carshare - for when you need a car, why own when you can share? Work from home save money and time





Reduce the cost and environmental impact of your commute! Vermont's seven regional bus companies help you get around in your community and across the state.



**PROGRAM LINKS:** 

# **VERMONT CLIMATE ACTION OFFICE:**

www.climatechange.vermont.gov anr.cao@vermont.gov

# **Renewable Energy**

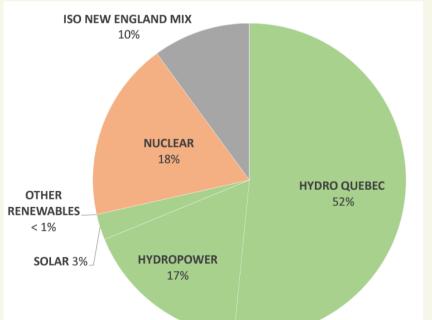
Vermont is already feeling the impacts of climate change - shorter winters, droughts, and more intense rain events. The 2021 Climate Action Plan identifies state actions to cut climate pollution and make communities more resilient. The Climate Action Office wants to hear what actions and programs are most important to Vermonters as we work to implement the Plan and develop future iterations of it.

### **ELECTRICITY IN VERMONT**

Electricity is a critical source of energy that fuels many of our daily activities, and increasingly helps heat our homes, businesses, and powers our transportation. Every year more of that electricity comes from renewable sources like solar, wind, hydroelectric power, or biomass. Vermont's Renewable Energy Standard (RES) requires electric utilities to purchase an increasing amount of renewable electricity over time and develop renewable electricity in Vermont.

Approximately one-third of Vermont's electricity use is met by in-state generation. The remainder is imported from other New England states, New York, and Quebec and includes additional types beyond what we generate in state, including natural gas (which emits greenhouse gases) and nuclear power (which doesn't). Renewable energy certificates (RECs) are used to establish "renewability". This allows

be 73% renewable and 90% non-GHG emitting.



Vermont's final electricity mix to The above graphic illustrates Vermont's electricity portfolio which includes in-state generation, hydro Quebec, and additional electricity purchased from the "ISO New England Mix" which is the bundle of electricity generated in New England. In 2022 it was 52% natural gas, 26% nuclear, 12% renewables, 7% hydropower, and 2% oil.

#### **VERMONT'S ELECTRICITY MIX**

# **Renewable Energy**

## CONSUMER FOCUSED ELECTRICITY PROGRAMS

- Net-metering get credit for electricity you generate
- Affordable Community Renewable Energy (ACRE) access to low-cost renewable electricity to disadvantaged communities
- Energy Efficiency reduce your electricity and heating costs
- Energy Transformation (RES Tier III)



# **ELECTRIC VEHICLE PROGRAMS**

#### **Replace Your Ride Program**

\$3000 for each scrapped internal combustion engine when buying a new or used electric vehicle MileageSmart Program

#### MileageSmart Program

Up to \$5000 towards a used high efficiency vehicle for low and moderate income buyers

#### **State Incentive Programs**

State money available based on income for purchase of all-electric or hybrid plug-in vehicles

#### **Federal Tax Credit**

Many new and used electric vehicle purchases are eligible for federal tax credits through the Inflation Reduction Act.

# VERMONT CLIMATE ACTION OFFICE:

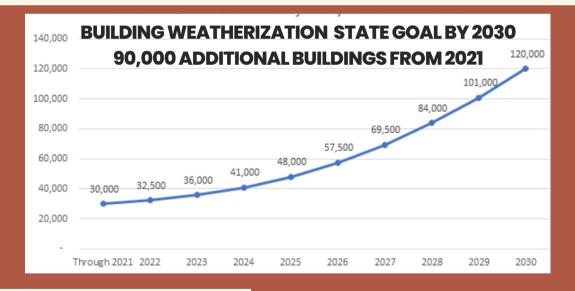
www.climatechange.vermont.gov anr.cao@vermont.gov

# Buildings

Vermont is already feeling the impacts of climate change – shorter winters, droughts, and more intense rain events. The 2021 Climate Action Plan identifies state actions to cut climate pollution and make communities more resilient. The Climate Action Office wants to hear what actions and programs are most important to Vermonters as we work to implement the Plan and develop future iterations of it.

#### **BUILDINGS IN VERMONT**

Vermont has some of the oldest homes in the country resulting in poor insulation, heat loss, and older types of heating systems. Building efficiency refers to the ways energy and resources are used by a structure. Supporting building efficiency through weatherizing our homes and fuelswitching, Vermont can reduce climate pollution while making our homes more comfortable, healthier, and less costly to heat and cool.



#### WHAT IS ...?

Weatherization - Simple measures like weather stripping and caulking to whole home air sealing and insulation

**Fuel Switching** - Changing the fuel used for heat; for example from an oil or gas furnace to an electric heat pump

#### BENEFITS

**Saves Money** - Well insulated homes cost less to heat and cool. Heat pumps cost less to operate than gas or oil heat

Increases home comfort - No more cold drafts!

Healthier homes - Effective insulation and proper ventilation improves indoor air quality

# CLIMATE ACTION IN VERMONT Buildings

# винате

#### WEATHERIZATION ASSISTANCE PROGRAM

Provides no-cost home energy audit and weatherization services to eligible households through 5 regional community action organizations:

Bennington Regional Opportunity Center

**Capstone Community Action** 

Champlain Valley Office of Economic Opportunity

Northeast Employment and Training Organization

Southeastern Vermont Community Action



#### **ENERGY EFFICIENCY PROGRAMS**

The **Energy Efficient Utility Program** provides energy efficiency options, including fuel switching and weatherization, services to homeowners and businesses throughout Vermont.

- Efficiency Vermont (statewide) (888) 921-5990
- Burlington Electric Department (for BED customers) (802) 865-7362
- Vermont Gas Systems, Inc. (for VGS customers) (802) 863-4511



**PROGRAM LINKS** 

# **VERMONT CLIMATE ACTION OFFICE:**

www.climatechange.vermont.gov anr.cao@vermont.gov