Introduction to Vermont's Energy Goals

In fulfillment of 3 V.S.A. §138
addressing how licensed professionals further energy goals

Why does this matter?

Professionals like you are essential to Vermonters' daily lives.

Why is this required?

You influence lasting decisions on how residents meet their needs and save money.

What is the takeaway?

Clean energy choices can lower total lifetime costs. Incentives make many actions easier.

Energy Policy Strives to Balance Multiple Goals

Meet Energy Needs Reliably, Securely, Sustainably, Affordably

- Meet energy needs in ways that are adequate, reliable, secure, sustainable
- Ensure affordability
- Encourage economic vitality, efficient use, cost-effective demand management, be environmentally sound

Lower Costs by Managing Both Supply and Demand

- Use least-cost planning, including efficiency, conservation, load management
- Use renewable resources and environmentally sound energy supply

Fulfill the Global Warming Solutions Act

- Meet legal requirements for greenhouse gas (GHG) emissions reductions by 2025, 2030, and 2050
- Be consistent with Vermont's Climate Action Plan
- Track progress in reducing GHG emissions

For the full text, see 30 V.S.A. § 202a

Policy in Practice

Affordable – Vermonters need to be able to heat their homes, turn on the lights, and get where they need to go at reasonable costs

Least-cost planning looks at long-term costs

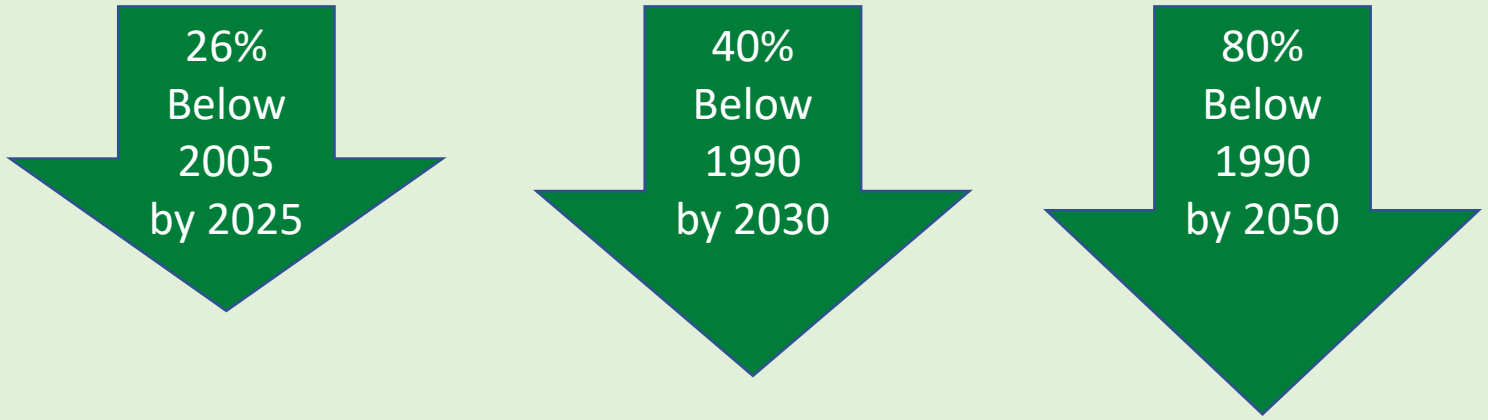
Reliable – Heat needs to work on the coldest days, lights need to turn on around the clock, and Vermonters should have dependable transportation options

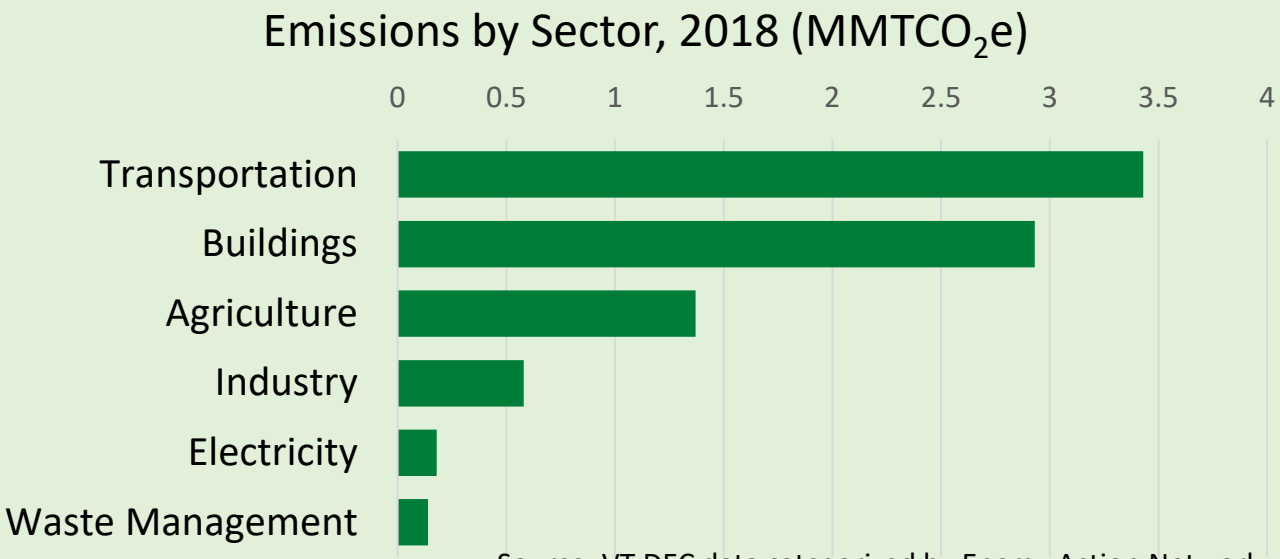
Sustainable – Energy decisions consider environmental impact and minimize impact where possible

Global Warming Solutions Act

In 2020, the Legislature adopted legally-binding mandates to reduce greenhouse gas emissions.

Most emissions come from burning fossil fuels for transportation and heating buildings.





Source: VT DEC data categorized by Energy Action Network

The Climate Action Plan outlines pathways to reduce emissions and adapt Vermont's infrastructure for extreme weather. Find it at climatechange.vermont.gov.

Comprehensive Energy Plan Goals

All Energy Use

- Meet 25% of energy needs with renewable sources by 2025, 45% by 2035, and 90% by 2050

Thermal

- Meet 30% of energy needs with renewable sources by 2025 and 70% by 2042
- Weatherize 120,000 households by 2030
- Require net-zero ready buildings for all new construction by 2030
  - Residential and commercial building energy codes are mandatory and updated every 3 years

Transportation

- Meet 10% of energy needs from renewable energy by 2025, and 45% by 2040
- Increase electric vehicles, with EVs being 100% of new cars and light trucks by 2035

Electricity

- Use 100% carbon-free electricity by 2032, sourcing at least 75% of electricity from renewable sources

Meeting Vermont Energy Requirements & Goals

Use Low Carbon Technologies to Lower Lifetime Costs

- Vermonters spend 80% of their energy purchases on transportation and thermal fuels
  - For example, gasoline and fuel oil
- Modern technologies such as electric vehicles and heat pumps can cost more upfront but save money over their lives.
- Utilities, state government, and the federal government offer incentives to reduce the upfront costs of efficient and renewable technologies
  - Incentive levels vary depending on income, location, and other factors
  - Vermont's Energy Efficiency Utilities are Efficiency Vermont, Burlington Electric Department, and Vermont Gas Systems (VGS)
  - Vermont's Electric Utilities are Green Mountain Power, Vermont Electric Co-op, Washington Electric Co-op, and 14 municipal electric utilities

Thermal Sector, Including Space Heating

- Efficiency and conservation examples: Air sealing and insulation, smart thermostats, efficient equipment
- Efficient technologies: Heat pumps, advanced wood heating
- Programs and incentives:
  - Electric utilities and efficiency utilities (including Efficiency Vermont, Burlington Elec. Dept., VGS)
    - Incentives for building improvements and new equipment
    - Technical assistance and expertise
    - 0% Home Energy Loan for low- and moderate-income households
  - Weatherization Assistance Program for income-eligible customers
  - Federal tax credits for high-efficiency equipment, including heat pumps and heat pump water heaters

Transportation Sector

- Efficiency and conservation examples: Compact cities and villages, public transit, walking and bicycling, carpooling
- Efficient technologies: All-electric vehicles, plug-in hybrid EVs, e-bikes
- Programs and incentives:
  - Electric utility incentives for EVs and EV charging stations
  - Electric utility EV rates for lower-cost at-home charging
  - State incentives for new and used EVs
  - Federal tax credits for new (max $7,500) and used EVs (max $4,000)
  - Vermont's Complete Streets requirements for safer walking/biking on roads
  - Carpooling and transit services

Electricity Sector

- Efficiency and conservation examples: Efficient appliances and equipment, LEDs, lighting controls
- Efficient technologies: Energy storage, smart EV chargers, solar
- Programs and incentives:
  - Electric utilities and efficiency utilities
    - Incentives for building improvements and equipment
    - Technical assistance and expertise
  - Federal tax credits for high-efficiency equipment, EV chargers, and solar
  - State net-metering incentives for solar and small-scale wind

Key Resources & Incentives

Thermal	Transportation	Electricity
EnergySaver.Vermont.gov	DriveElectricVT.com	EfficiencyVermont.com
EfficiencyVermont.com	ConnectingCommuters.org	BurlingtonElectric.com
VermontGas.com		