Meeting the Global Warming Solutions Act

Chase Whiting, Conservation Law Foundation



Conservation Law Foundation

Founded in 1966, CLF is a nonprofit, member-supported organization working to create solutions that preserve our natural resources, protect public health, and promote thriving communities for the benefit of all people living in New England.

We have worked to implement enforceable greenhouse gas reduction requirements across New England. There are now such requirements in Maine, Vermont, Massachusetts, Rhode Island, and Connecticut.





Climate change is detrimental to Vermont

The Intergovernmental Panel on Climate Change has concluded that global warming of 1.5°C and 2°C (the highest levels permitted by the Paris Climate Agreement) will soon occur

- More variable maple sugaring seasons
- Shorter winters squeezing Vermont's ski and snowboard industry
- Warmer waters with more cyanobacteria blooms in Lake Champlain
- More severe floods and storms risking life, health, and property
- More tick born illnesses
- More droughts
- Increased risk of wildfires
- Worsened air and water quality



We Need to Achieve the Global Warming Solutions Act Targets. We cannot delay.



Achieving the GWSA

Sec. 3. 10 V.S.A. § 578 is amended to read:

§ 578. GREENHOUSE GAS REDUCTION GOALS REQUIREMENTS

- (a) General goal of greenhouse Greenhouse gas reduction requirements. It is the goal of the State to Vermont shall reduce emissions of greenhouse gases from within the geographical boundaries of the State and those emissions outside the boundaries of the State that are caused by the use of energy in Vermont in order to make an appropriate contribution to achieving the regional goals of reducing emissions of greenhouse gases from the 1990 baseline, as measured and inventoried pursuant to section 582 of this title, by:
- (1) 25 not less than 26 percent from 2005 greenhouse gas emissions by

 January 1, 2012 2025 pursuant to the State's membership in the United States

 Climate Alliance and commitment to implement policies to achieve the objectives of the 2016 Paris Agreement;
- (2) 50 not less than 40 percent from 1990 greenhouse gas emissions by

 January 1, 2028 2030 pursuant to the State's 2016 Comprehensive Energy

 Plan; and
- (3) if practicable using reasonable efforts, 75 not less than 80 percent from 1990 greenhouse gas emissions by January 1, 2050 pursuant to the State's 2016 Comprehensive Energy Plan.

"Vermont shall reduce emissions of greenhouse gases from within the geographic boundaries of the State and those emissions outside the boundaries of the State that are caused by the use of energy in Vermont"

26% by 2025

40% by 2030

80% by 2050



Achieving the GWSA

Sec. 3. 10 V.S.A. § 578 is amended to read:

§ 578. GREENHOUSE GAS REDUCTION GOALS REQUIREMENTS

- (a) General goal of greenhouse Greenhouse gas reduction requirements. It is the goal of the State to Vermont shall reduce emissions of greenhouse gases from within the geographical boundaries of the State and those emissions outside the boundaries of the State that are caused by the use of energy in Vermont in order to make an appropriate contribution to achieving the regional goals of reducing emissions of greenhouse gases from the 1990 baseline, as measured and inventoried pursuant to section 582 of this title, by:
- (1) 25 not less than 26 percent from 2005 greenhouse gas emissions by

 January 1, 2012 2025 pursuant to the State's membership in the United States

 Climate Alliance and commitment to implement policies to achieve the objectives of the 2016 Paris Agreement;
- (2) 50 not less than 40 percent from 1990 greenhouse gas emissions by

 January 1, 2028 2030 pursuant to the State's 2016 Comprehensive Energy

 Plan; and
- (3) if practicable using reasonable efforts, 75 not less than 80 percent from 1990 greenhouse gas emissions by January 1, 2050 pursuant to the State's 2016 Comprehensive Energy Plan.

"Vermont shall reduce emissions of greenhouse gases from within the geographic boundaries of the State and those emissions outside the boundaries of the State that are caused by the use of energy in Vermont"

26% by 2025

→ 40% by 2030

───<mark>80% by 2050</mark>



Today's decisions will help determine tomorrow's emissions

A heating system installed today will likely last for 20 or more years, meaning that it will almost certainly remain in use beyond 2030

(2) 50 not less than 40 percent from 1990 greenhouse gas emissions by

January 1, 2028 2030 pursuant to the State's 2016 Comprehensive Energy

Plan; and

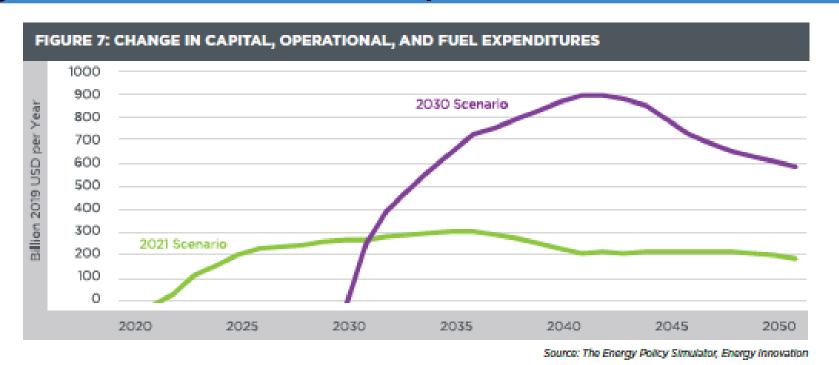
(3) if practicable using reasonable efforts, 75 not less than 80 percent

from 1990 greenhouse gas emissions by January 1, 2050 pursuant to the

State's 2016 Comprehensive Energy Plan.



Today's decisions will help determine tomorrow's costs



"If we continue to buy and build polluting power plants, factories, and equipment for the next decade, and then decide we must make the clean energy transition fast to avoid climate damages, we will need to retire much more polluting equipment before the end of its functional life. And that isn't cheap."

conservation law foundation

Source: Hal Harvey, et al, The Costs of Delay, Energy Innovation Policy & Technology (2021)

Today's decisions will help determine tomorrow's equity

The Vermont Legislature has found that "a failure to substantially reduce emissions over the next ten years will . . . increase the costs of decarbonization" and "risks significant economic damage to Vermont."

The "climate crisis disproportionately impacts rural and marginalized, disenfranchised, and disinvested communities" in Vermont, which is why Vermont "must prioritize the allocation of investment of public resources to these communities."

Source: Vermont Laws, Act No. 153, Sec's. 2(3), 2(2), 2(5)



Clean electricity is critical to reducing emissions

"All [decarbonization] scenarios share common features — such as relying upon deep decarbonization of the electricity sector, coupled with extensive electrification of the thermal and transportation sectors in order to achieve Vermont's 2030 and 2050 GHG emissions reduction targets."

Source: DPS, Vermont Comprehensive Energy Plan (2022)

We must incentivize clean thermal electrification and make it accessible to all Vermonters, especially Vermonters with low- and moderate-incomes

- Clean grid electricity used as 'fuel' for heat
- Air and ground source heat pumps
- Network geothermal
- Rooftop & community-scale solar coupled with heat pumps
- Efficient electric appliances (dryers, water heaters, stoves, etc.)



A Well-Designed Affordable Heat Act Should:

- Provide Vermonters with low- and moderate incomes access to installation measures, like cold climate heat pumps and weatherization
- Limit the harms caused by combustion measures
- Incentivize weatherization & clean electric options
- Ensure carbon pollution is accurately counted and meaningfully reduced
- Ensure that environmental standards are followed

