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Global Warming Solutions Acts in the Northeast

New Hampshire Emission Commission

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About RAP

The Regulatory Assistance Project (RAP)[®] is an independent, non-partisan, non-governmental organization dedicated to accelerating the transition to a clean, reliable, and efficient energy future.

Learn more about our work at raponline.org



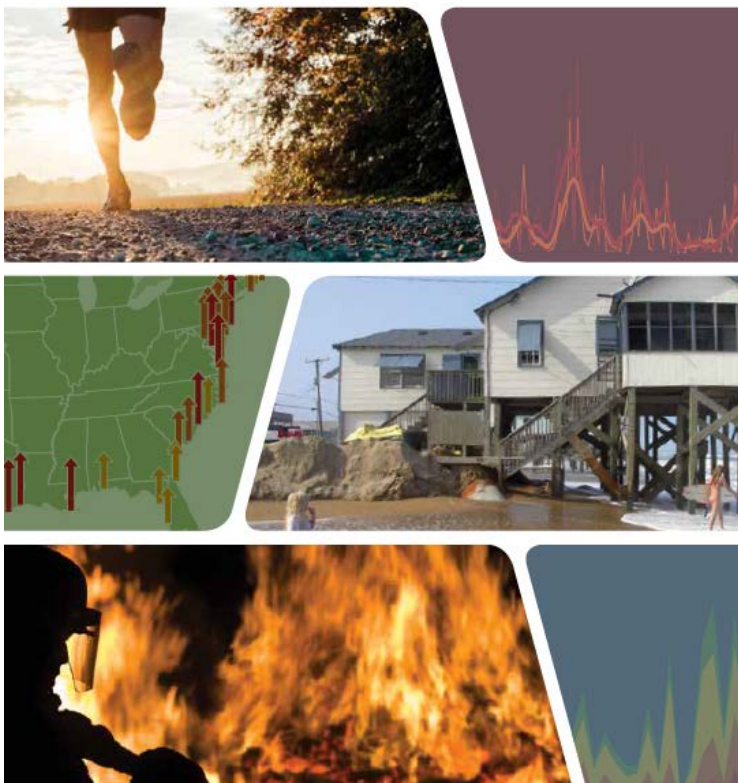
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Outline

- Introduction
- Global Warming Solutions Acts
 - Massachusetts
 - Maine
 - Connecticut
 - New York
 - Vermont

CLIMATE CHANGE INDICATORS IN THE UNITED STATES 2016

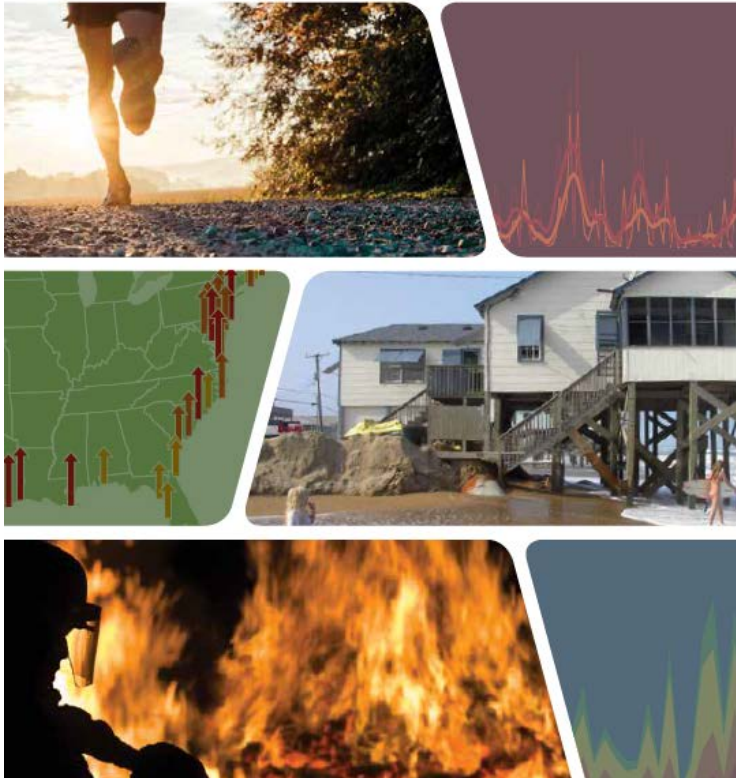
FOURTH EDITION



- U.S. and Global Temperature
- High and Low Temperatures
- U.S. and Global Precipitation
- Heavy Precipitation
- Tropical Cyclone Activity
- River Flooding
- Drought
- Oceans
 - Ocean Heat
 - Sea Surface Temperature
 - Sea Level
 - Land Loss Along the Atlantic Coast
 - Coastal Flooding
 - Ocean Acidity
- Snow and Ice
 - Arctic and Antarctic Sea Ice
 - Glaciers
 - Lake Ice

CLIMATE CHANGE INDICATORS IN THE UNITED STATES 2016

FOURTH EDITION



- Understanding the Connections Between Climate Change and Human Health
 - Heat-Related Deaths
 - Heat-Related Illnesses
 - Heating and Cooling Degree Days
 - Lyme Disease
 - West Nile Virus
 - Length of Growing Season
 - Ragweed Pollen Season

Global Warming Solutions Acts

- Not small undertakings
- Recognizes that entire state economies will be affected by climate change
- Recognizes that certain communities will be more immediately or deeply affected
- Establishes useful framework for information gathering and publicly exploring strategies to address these challenges
- Shows that individual states are determined to make a difference

Global Warming Solutions Acts

- Massachusetts
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Massachusetts – Global Warming Solutions Act

- GWSA (2008) directs Executive Office of Energy and Environmental Affairs (EEA) to set economy-wide greenhouse gas (GHG) emission reduction goals:
 - Between 10% and 25% below statewide 1990 GHG emission levels by 2020
 - At least 80% below statewide 1990 GHG emission levels by 2050

Massachusetts – Global Warming Solutions Act

- EEA to establish advisory groups to analyze strategies and make recommendations
 - *The Climate Protection and Green Economy Advisory Committee* to advise on measures to reduce GHG emissions in accordance with the GWSA
 - *The Climate Change Adaptation Advisory Committee* to study and make recommendations on strategies for adapting to climate change

Massachusetts – Global Warming Solutions Act

GWSA requires the following initial steps:

- Develop Data
 - Establish regs. for GHG reporting by largest sources
 - Establish a baseline assessment of statewide GHG emissions to measure progress toward meeting the emission reduction goals of the Act (1990 baseline year)
- Model Emissions
 - Develop a projection of likely statewide GHG emissions, i.e., estimates of GHG levels from Massachusetts sources if no action is taken
 - Used to analyze extent of emission reductions required to achieve targets established in Act
- Establish target emission reductions
 - 2020 emissions targets establish within 2 years of passage of GWSA

At same time – Other Authorizations

- *Green Communities Act (GCA)* reforms MA energy marketplace to improve the state's ability to meet the GWSA targets
 - Promotes support for EE, RE, and improved building codes
- *Green Communities Program*, provides MA cities and towns with EE and RE

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Maine – An Act to Promote Clean Energy Jobs and to Establish the Maine Climate Council (2019)

The impacts of climate change have created an "emergency within the meaning of the Constitution of Maine."

This law is "immediately necessary for the preservation of the public peace, health and safety."

Reduction Goals

- 2030: 45% below 1990 levels
- 2050: 80% below 1990 levels

Creates the *Maine Climate Council*

- To advise state government on ways to:
 - Mitigate
 - Prepare for, and
 - Adapt to impacts of climate change

Maine Climate Council Establishes

- Scientific and Technical Subcommittee and
- Sector-focused Working Groups to
 - Carry out climate adaptation and mitigation research, and
 - Update Maine's **Climate Action Plan**

Maine's *Climate Action Plan*

- Develops information on climate impacts for Maine's sectors, ecosystems, and communities most at risk, and
- Recommends ongoing strategies and actions for climate adaptation and resilience

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Connecticut – Global Warming Solutions

- Adopted in 2008, legislation requires state to achieve a:
 - 10% reduction below 1990 emissions by 2020
 - 80% reduction below 2001 emissions by 2050

An Act Concerning Climate Change Planning and Resiliency

- Adopted in 2018, requires state to achieve an additional emissions reduction goal:
 - 45% below 2001 levels by 2030
- Creates *Governor's Council on Climate Change (Climate Council)*

Connecticut – Climate Council’s Role

- Monitor and report on state’s implementation of GHG reduction strategies set forth in the Council’s December 2018 report *Building a Low Carbon Future for Connecticut: Achieving a 45% GHG Reduction by 2030*
- Develop and implement adaptation strategies to assess and prepare for the impacts of climate change in areas such as:
 - infrastructure
 - agriculture
 - natural resources
 - public health

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New York – State Climate Leadership & Community Protection Act (2019)

- Reduction Goals
 - 2030: 40% below 1990 levels
 - 2050: 85% below 1990 levels
- Creates *New York State Climate Action Council*

New York State Climate Action Council

- Climate Action Council (CAC) and
- 6 advisory panels to support CAC on specific topics
- Within 3 years, CAC to submit a
 - Scoping plan with
 - Recommendations for regulatory measures to meet reduction goals
- Scoping plan update (5 years)

New York CAC to produce an Emissions Report every 2 years

- Report to include
 - Fossil fuel use by sector;
 - Information regarding fugitive and vented emissions;
 - Emissions associated with generation of imported electricity; and
 - Emissions associated with extraction, and transmission of imported fossil fuels

New York Department of Environmental Conservation (DEC)

- To work on a mandatory emissions registry
- To develop rules and regulations to ensure compliance with the mandate
- In coordination with CAC and climate justice working group, DEC to develop implementation report to include:
 - whether rules and regulations are equitable and cost effective; their social benefits; the compliance costs; the impacts regarding co-pollutants; and any recommendations for future action

New York CAC's *Just Transition Working Group*

- Working group to advise CAC on opportunities for workforce development with a specific focus on job training and workforce opportunities for disadvantaged communities and underrepresented populations
- Working Group to identify sector specific
 - Impacts on the state's workforce and
 - Avenues to maximize worker expertise in the new energy economy

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Vermont - Global Warming Solutions Act

- Emission Reduction Goals
 - Within geographical boundaries of the State and
 - Outside boundaries of the State that are caused by using energy in Vermont,
 - 26% from 2005 levels by January 1, 2025 (pursuant to *United States Climate Alliance membership* and commitment to meet standards in *2016 Paris Agreement*)
 - 40% from 1990 levels by January 1, 2030, and
 - 80% from 1990 levels by January 1, 2050 (both pursuant to *VT 2016 Comprehensive Energy Plan*)

Vermont - Global Warming Solutions Act

- Lead by Example: Implementation of State programs to reduce GHG emissions
- To facilitate the State's compliance with these goals
 - All State agencies shall consider, whenever practicable, GHG emissions in their decision-making related to
 - purchase/use of equipment;
 - siting,
 - construction, and maintenance of buildings;
 - assignment of personnel; and
 - planning, design, and operation of programs, services, and infrastructure

Vermont — The Act creates the Vermont Climate Council (Council)

- Council to analyze and evaluate strategies and programs to reduce GHG emissions, and
- Build resilience to prepare the State's communities, infrastructure, and economy to adapt to current and anticipated effects of climate change, including:
 - Emissions inventory
 - Analysis of technical feasibility and cost-effectiveness of reduction strategies
 - ID and evaluate financing strategies to reduce carbon emissions and promote ability of communities, infrastructure, and economy to adapt to current and anticipated effects of climate change

Adopt VT Climate Action Plan (Plan)

- By December 1, 2021, adopt Plan
 - Update every 4 years including:
 - Specific initiatives, programs, and
 - GHG reduction strategies, and
 - Build resilience to prepare the State's communities, infrastructure, and economy to adapt to current and anticipated effects of climate change

Some Conclusions about Global Warming Solutions Statutes

- States are taking this challenge seriously:
 - Emissions goals/strategies
 - Effects on economy and specific communities
 - Transition and adaptation strategies
- Assigning responsibility to a specific entity
- Requiring planning/updating (numerous specifications) and development of strategies for achieving specified goals
- Establishing a framework for complementary statutes/programs