

Executive Summary - Assessing Vermont's climate responsibility: A comparative analysis of per capita emissions

Lena Stier and Jared Duval September 2023

A jurisdiction's relative role in causing the climate crisis – and its responsibility to act in response to it – often comes up in policy debates at both the local and national level. Opponents of climate action in small states, including Vermont, often argue that their states' emissions are "too small to make a difference." At the federal level, opponents justify inaction by arguing that the United States is not the problem relative to countries that now produce higher annual totals of emissions, like China and India. However, comparing *total* greenhouse gas (GHG) emissions from a small state, like Vermont, to those of a much larger jurisdiction, misses the point that there is a collective responsibility to act and that each jurisdiction should do its part to reduce the pollution it creates.

This paper explores Vermont's climate responsibility in the context of comparing GHG emissions data on a per capita basis, as well as on a cumulative basis. The purpose of this research is to analyze how Vermont's emissions stack up against those of other jurisdictions, in order to better understand the state's relative responsibility. In this paper, we also draw on concepts from moral philosophy and economics to understand climate responsibility as a collective action problem and a public goods dilemma.

Key Findings:

- Vermont's Global Warming Solutions Act (GWSA) establishes that the state will do
 its part in helping the United States meet the goals of the Paris Agreement.
 However, Vermont has made the least progress toward the 2025 target of the
 Paris Agreement of any state in the Northeast.
- When it comes to a state's responsibility to act, comparing emissions on a per capita basis is more appropriate than comparing total statewide emissions because it accounts for differences in population size. In terms of statewide emissions, Vermont produces the smallest total amount of climate pollution in the Northeast. However, when expressed on a per capita basis, Vermont's emissions

are among the highest in the region (second highest in New England and third highest in the Northeast).

- Looking globally, Vermont's per capita emissions are more than two times higher than the global average.
- Cumulative GHG emissions offer a way to account for a jurisdiction's historical climate responsibility. Vermont's cumulative emissions are higher than those of over 70 countries, many of which have much larger populations. Additionally, Vermont's cumulative per capita emissions are among the highest in the world.
- Climate responsibility should be viewed through the lens of justice and equity.
 It is not just about the amount that a jurisdiction has contributed to climate change, but also the relative ability that a jurisdiction has to advance climate action, which is often determined by access to technological and financial resources.
- It is helpful to understand the climate crisis as a collective action problem, where some jurisdictions may try to act as "free-riders." Effective mitigation of GHG emissions can only be achieved by a collective effort. When one jurisdiction doesn't do its part, it can create a domino effect and stall effective action elsewhere.

The paper argues that Vermont has just as much (if not more) of a responsibility to act to address climate change as its neighbors in the United States and across the globe. Not only has Vermont been responsible for more climate pollution on a per capita basis than many other states and countries, it also benefits from having the technology, resources, and expertise to reduce emissions in ways that can save consumers money over time and strengthen the state economy.

Vermont has a responsibility to do its part in reducing emissions within the state *and* to serve as an example for other states and jurisdictions, rather than free-riding and letting the burden fall onto others. That means implementing strong policies and programs designed to rapidly scale back Vermont's emissions in line with science-based targets and to facilitate a just and equitable transition to a clean energy economy.