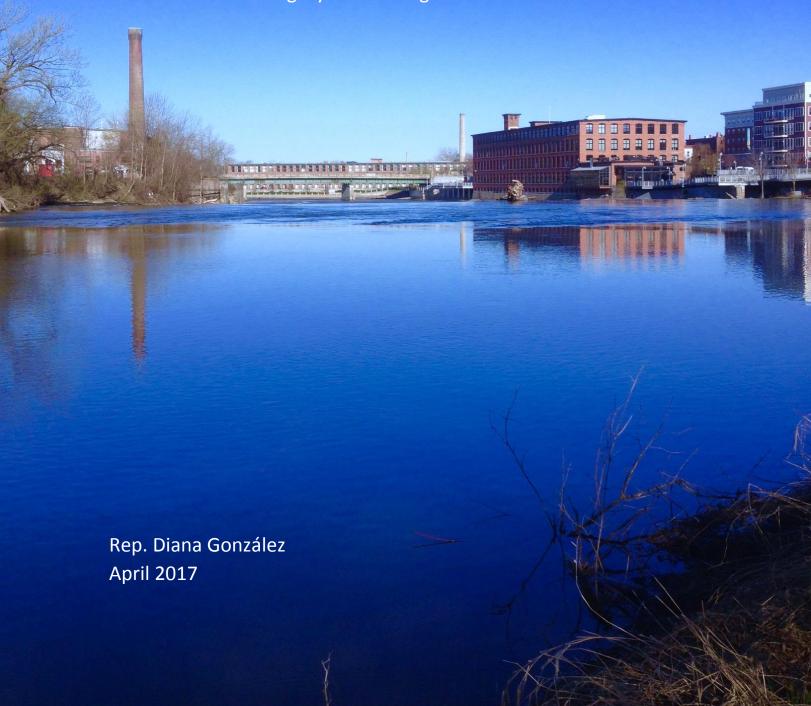


How a new climate strategy can create jobs, strengthen our economy, and leave a better legacy for future generations of Vermonters



#### **ABOUT THE AUTHOR**



**DIANA GONZÁLEZ** is a Vermont State Representative from Winooski committed to a platform of economic justice and equity for all Vermonters. A Progressive/Democrat, she is the ranking member of the House Committee on General, Housing and Military Affairs.

#### **ACKNOWLEDGEMENTS**

Inspiration for *The Vermont Case for Carbon Dividends* comes from:

**CITIZEN CLIMATE LOBBY** - This non-profit, non-partisan, grassroots advocacy organization is focused on national policies to address climate change. Their consistently respectful, non-partisan approach to climate education is designed to create a broad, sustainable foundation for climate action across all geographic regions and political inclinations. By building upon shared values rather than partisan divides, and empowering its supporters to work in keeping with the concerns of their local communities, CCL works towards the adoption of fair, effective and sustainable climate change solutions.

THE CLIMATE LEADERSHIP COUNCIL - An international research and advocacy organization whose mission is to mobilize global opinion leaders around the most effective, popular and equitable climate solutions. As a central part of this mission, the Council develops and promotes new policy frameworks based on carbon dividends for each of the largest greenhouse gas emitting regions. The CLC's Conservative Case for Carbon Dividends is co-authored by conservative luminaries, including James Baker, Henry Paulson, and George Shultz – all cabinet secretaries in the Reagan and Bush administrations.

THE CLIMATE SOLUTIONS CAUCUS OF THE U.S. HOUSE OF REPRESENTATIVES – This strictly bi-partisan caucus serves as an organization to educate Members of Congress on economically-viable options to reduce climate risk and protect our nation's economy, security, infrastructure, agriculture, water supply and public safety. Its membership is split equally between Republicans and Democrats and includes Rep. Peter Welch (D-VT) and Republican Rep. Elise Stefanik from the New York congressional district that borders western Vermont.

**SEN. BERNIE SANDERS** – Vermont's Independent senator has inspired millions of Americans to action. His calls for economic and social justice have shaped the political debate in Vermont and across the nation. Whether he is taking on Wall Street, fighting to raise the minimum wage or insisting that health care is a human right, Senator Sanders is always protecting Vermont's most vulnerable. *The Vermont Case for Carbon Dividends* draws upon the spirit of Sen. Sanders' fights against climate change and for real tax reform by proposing a solution similar to his Climate Protection Act of 2013.

## THE NEED FOR CLIMATE ACTION

There is broad scientific consensus that climate change is occurring, that it is happening at an accelerating rate, and that burning fossil fuels is a primary cause.

The U.S. Department of Defense classifies climate change as a national security threat. Pope Francis calls it a sin. Fortune 500 businesses are preparing for a world of rising temperatures and sea levels. The Vermont Department of Health warns that, "Climate change increases health risks for Vermonters."

According to the U.S. Environmental Protection Agency, "By 2100, the average U.S. temperature is projected to increase by about 3°F to 12°F."

Our climate – like the human body – is a fragile, complex system undergoing constant change. In the Earth's history there have been warmer and colder periods, but there has never been such a dramatic rise in temperatures in *human history*. While life on Earth will likely survive this change, it's unknown what impacts global warming will have on human civilization – and the downside risks are colossal.

To avoid catastrophe, we must act now.

Consider a temperature rise of 3°F to 12°F on the human body. It's the difference between an uncomfortable fever of 101.6°F and a life threatening, brain damaging emergency of 110.6°F. Such a temperature rise may well have similarly dramatic, systemic implications for our climate.

But climate change is not a distant or future threat. It affects Vermont's weather, water and economy and impacts Vermonters' health, wealth and quality of life today.

In order to stave off the worst consequences of climate change, we must reduce greenhouse gas emissions dramatically and fast.

Thankfully, the solutions to the climate crisis – conservation, efficiency and low-carbon energy – already exist. Even better, Vermont is a leader in these fields. Better still, the transition to clean energy will create more jobs, raise wages and strengthen Vermont's economy.

What is missing are public policies that will drive rapid adoption of these forgotten habits and new technologies.

Economists of all political persuasions agree that pricing carbon pollution is the simplest, least costly and most efficient way to achieve significant carbon reductions. Additionally, a well-designed fee-and-dividend system is both equitable and easy to administer.

Carbon dividends paired with a revenue-neutral carbon pollution fee – similar to a national plan proposed by Republican cabinet secretaries James A. Baker, George Shultz and Henry Paulson from the Reagan and Bush administrations ("The Conservative Case for Carbon Dividends") – would provide Vermonters both the incentive to transition off of fossil fuels and the means to do so.

# THE THREE LEGS OF VERMONT'S CARBON DIVIDENDS PLAN

#### 1. A GRADUALLY INCREASING FEE ON CARBON POLLUTION

The first leg of a carbon dividends plan is a gradually rising fee on the carbon content of fossil fuels paid by the one hundred or so companies that distribute these fuels in Vermont. A sensible fee might begin at \$10 a ton and increase over time until reaching the Social Cost of Carbon (an estimate of the monetized damages caused by greenhouse gas emissions) as calculated by the U.S. Environmental Protection Agency.

The Department of Public Service should be tasked with determining the percentages of revenues that come from fossil fuels destined to the residential sector (primarily home heating fuels and gasoline and diesel for personal transportation) and the percentage of revenues from fossil fuels destined to Vermont's commercial and industrial sectors.

### 2. CARBON DIVIDENDS FOR ALL VERMONTERS

All of the carbon revenues from the residential sector should be returned to individuals. The long-standing and popular Alaska Permanent Fund, which distributes a share of fossil fuel revenues to Alaskans, could serve as a model. In Vermont, carbon pollution fee proceeds from the residential sector should be returned to Vermonters in quarterly payments via dividend checks or direct deposits.

The General Assembly should determine if dividends be distributed equally on a per-Vermonter basis or allocated based on a distributional analysis such as Efficient Vermont's 2016 *Mapping Total Energy Burden in Vermont* study. An equal dividend would be administratively efficient. A dividend based on consumption estimates would provide greater relief to the Vermont communities currently burdened by higher fossil fuel costs and address concerns that a carbon pollution policy would unfairly impact rural Vermonters.

#### 3. CARBON DIVIDENDS FOR ALL VERMONT BUSINESSES

To maintain competitiveness with other jurisdictions that don't yet price carbon pollution, all of the carbon pollution fee revenues from the commercial and industrial sectors should be returned to Vermont businesses.

Dividends to Vermont businesses could be based on the number of full-time employees or FTE-equivalents working in Vermont. A small business with five full time employees would receive nearly \$300 in dividend payments in the first year of such a program. Once the carbon pollution fee reached the Social Cost of Carbon a company with 200 full-time employees would receive approximately \$50,000 in annual dividends.

#### **CREATING JOBS**

Vermont has no known petroleum reserves. We don't mine for coal, drill for oil or frack for gas. There are no coal jobs here. There are, however, over 17,000 Vermonters working in clean energy – and the industry is growing at a rate ten times faster than the workforce as a whole. It makes economic sense to build on that success.

A carbon pollution policy will steer Vermonters to lower-carbon options for heating and transportation, increasing demand for weatherization, renewable energy systems and travel efficiencies, while simultaneously spurring business innovation in these sectors.

The transition to a clean energy economy will be a generational effort, and there is at least a generation's worth of work to be done. The Public Service Department's *Total Energy Study* of 2014 estimated that a fee on carbon pollution would create 2000 – 6000 new jobs in the state.

### STRENGTHENING VERMONT'S ECONOMY

Since the turn of the 21<sup>st</sup> century Vermont's economy has begun to "decouple" from fossil fuels. In other words, the state has reduced its carbon pollution emissions by almost 13%, while Vermont's real GDP has grown by almost 23% – the fastest rate in New England.<sup>ii</sup>

It's easy to see why decoupling is good for Vermont's economy – all fossil fuels used in Vermont are imported. According to the *Comprehensive Energy Plan 2016*, "In 2013, the state spent nearly \$2.3 billion annually — about 8% of Vermont's GDP — on petroleum products that are extracted and refined elsewhere." This is a significant drain on the Vermont economy, particularly when there are abundant, low-carbon and comparably-priced sources of energy available locally.

Consider this economic phenomenon in terms most Vermonters understand implicitly: maple syrup. It makes little sense for Vermont to import maple syrup when we produce the best product and all the quantity we need. Buying local creates jobs and boosts our local economy.

The same applies to energy. Our economy is stronger when we use locally generated energy instead of imports from distant states and (sometimes hostile) countries.

#### A PROUD LEGACY

Unchecked, climate change represents a significant financial burden on young Vermonters. A child born this decade will lose over three-quarters of a million dollars in wealth paying for the impacts of climate change. We should not pass these costs on to Vermont's young people.

There are those who oppose action to reduce pollution and protect the climate because they can't imagine a different way to heat our homes or fuel our vehicles. But the way Vermont powered its economy was different a century ago, and it will be different a hundred years from now. In the next century, Vermont can chose to go along for the ride – or we can maximize our opportunities and lead the transition.

For the sake of the Vermonters alive a hundred years from now, it's imperative that today's policymakers set Vermont on a cleaner, healthier, economically stronger path. Carbon dividends that drive down pollution and drive up the economy will shape the legacy we want to leave to our children.

#### **NON-PARTISAN LEADERSHIP**

Climate change is non-partisan, and so are most Vermonters opinions of it. A Yale Program on Climate Change Communications study estimates that nearly three-quarters of all Vermonters believe climate change is happening and more than 60% are worried.

Unlike other states, Vermont has a tradition of non-partisan climate leadership that reflects the opinion of Vermonters rather than the wishes of the fossil fuel industry. Republican Governor Jim Douglas implemented Vermont's first price on carbon pollution in its electric sector through the Regional Greenhouse Gas Initiative (RGGI) – and it is working. Carbon emissions in the RGGI states are down and the economies of the RGGI states are growing faster than states outside the compact. On the opposite end of the political spectrum, Independent Senator Bernie Sanders has long called for a national price on carbon pollution.

As a testament to the non-partisan nature of the problem and the opportunity for a non-partisan solution, this *Vermont Case for Carbon Dividends* – introduced by a Progressive/Democrat – builds on a proposal forwarded by Republican cabinet secretaries from the Reagan and Bush administrations.

#### A JUST TRANSITION TO THE CLEAN ENERGY FUTURE

In a world of rising income inequality, Vermonters are wise to consider every proposal from the perspective of the most vulnerable. The place to start is to recognize that Vermont's current reliance on fossil fuels is regressive. Low-income Vermonters pay a higher percentage of their income on heating and transportation fuels than their wealthier neighbors.

While no one policy can solve every societal ill, a well-designed carbon dividends program provides the opportunity for a just transition off of fossil fuels. Wealthier Vermonters, who typically use more fossil fuels, will pay more than their dividend. Low-income Vermonters, who typically use less fossil fuels, will pay less than their dividend. The General Assembly can design a carbon dividends system to account for income discrepancies as well as rural Vermonters' current reliance on fossil fuels.

#### **POLICY FINE PRINT**

A gradually rising carbon pollution fee should be steady, transparent and predictable. All dividends should be exempt from Vermont income tax. Vermont's community action agencies can be engaged in dividend delivery to those without bank accounts or permanent addresses. The General Assembly should commission a regular, independent 5-year review of the climatic and economic results of this program.

i https://www.epa.gov/climate-change-science/future-climate-change

https://www.brookings.edu/research/growth-carbon-and-trump-state-progress-and-drift-on-economic-growth-and-emissions-decoupling/#interactive-data

iii http://www.demos.org/publication/price-tag-being-young-climate-change-and-millennials-economic-future