

# PRICING POLLUTION

**A Progressive Proposal for  
Combating Climate Change**

**WHY**



**Donald J. Trump** ✓

@realDonaldTrump



Following

The concept of global warming was created by and for the Chinese in order to make U.S. manufacturing non-competitive.

RETWEETS

24,831

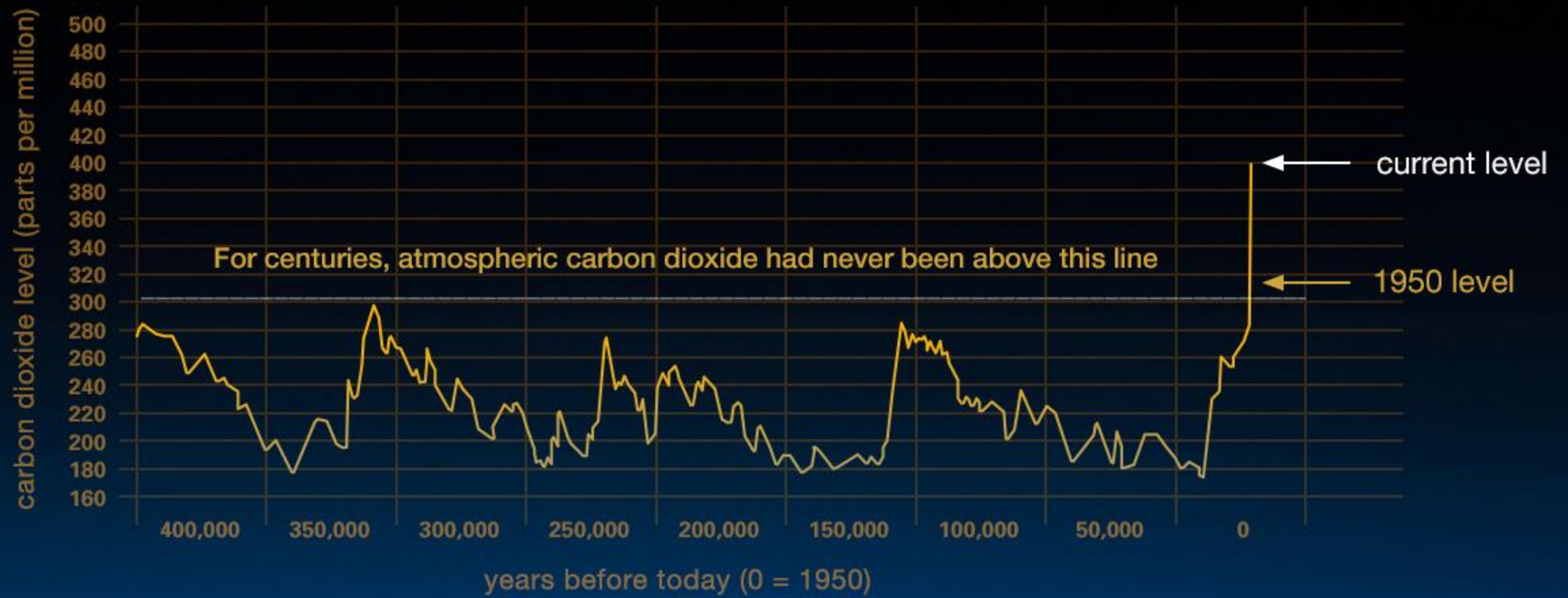
LIKES

14,654

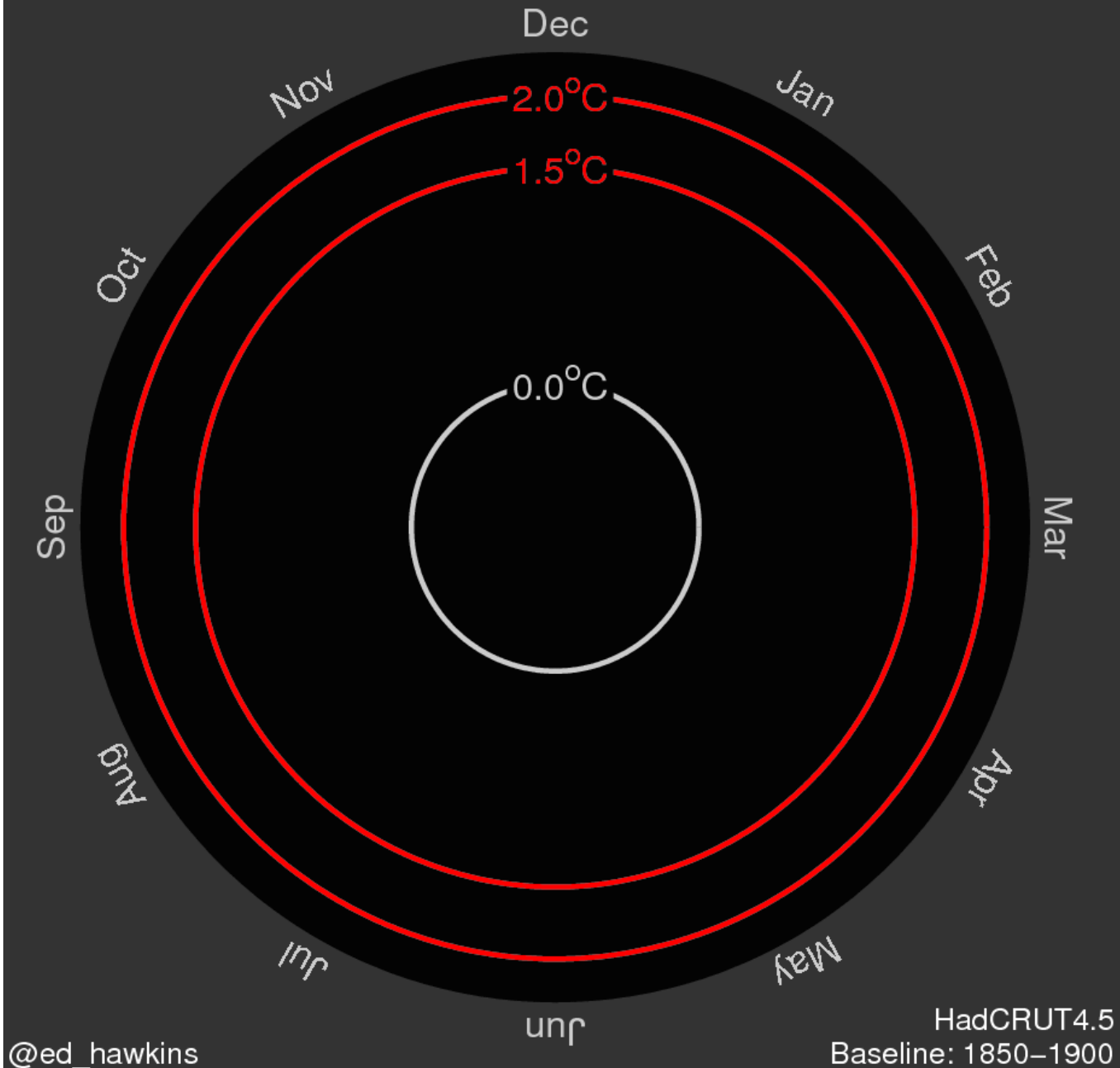


2:15 PM - 6 Nov 2012





# Global temperature change (1850–2016)





*The National Security Strategy, issued in February 2015, is clear that **climate change is an urgent and growing threat to our national security**, contributing to increased natural disasters, refugee flows, and conflicts over basic resources such as food and water.*

# Pope Francis calls climate change a 'sin'



**IMPACTS**



# Flooding of Coast, Caused by Global Warming, Has Already Begun





# A Wrenching Choice for Alaska Towns in the Path of Climate Change



## How Climate Change Helped Cause Massive Floods in Louisiana





# Climate Change Fingerprints Are All over California Wildfires



# ***In Zika Epidemic, a Warning on Climate Change***



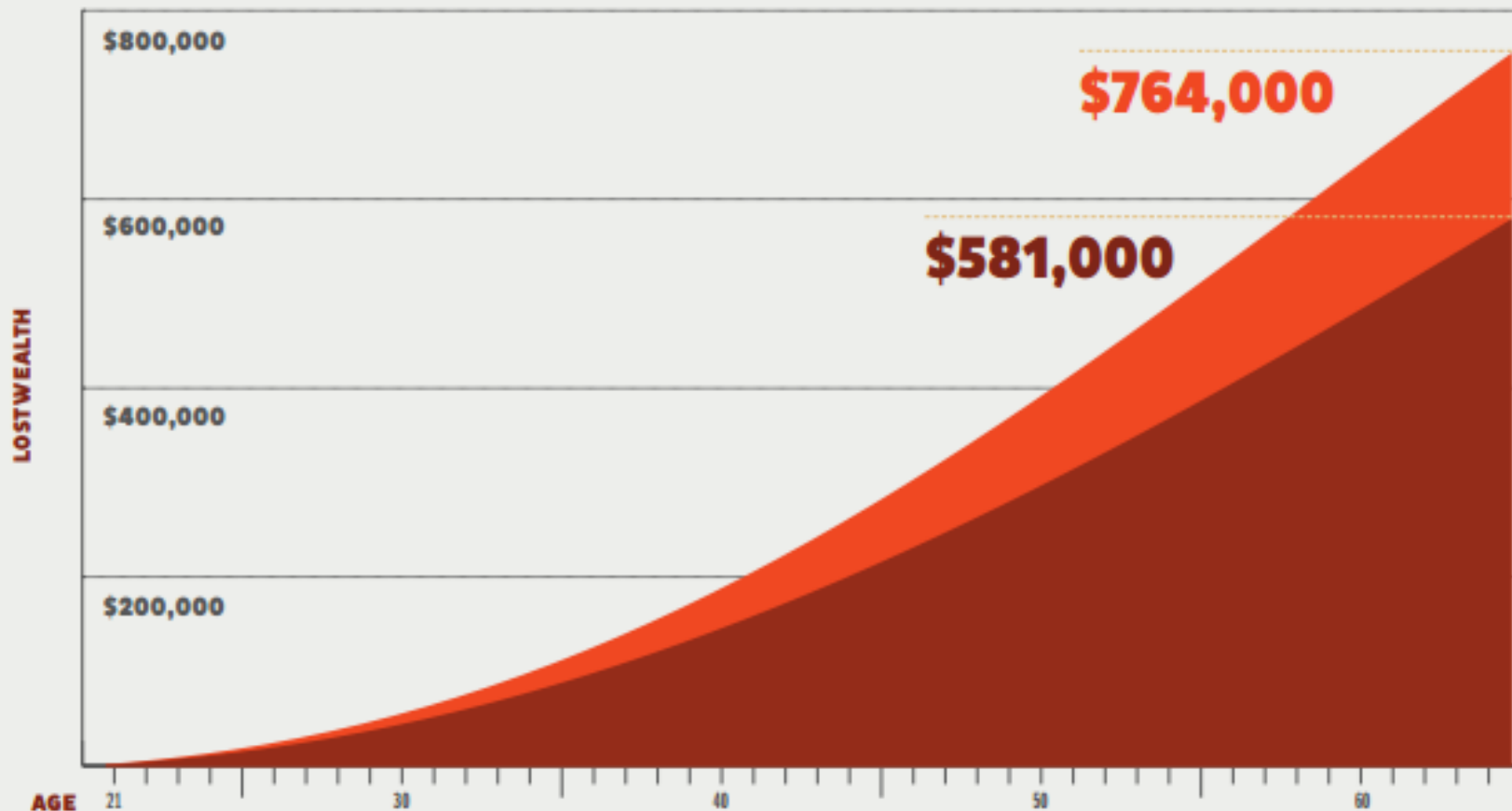
# A major contributor to the Syrian conflict? Climate change



**FIGURE 04**

**LIFETIME LOST WEALTH FROM CLIMATE CHANGE,  
WORKERS WHO ARE BORN IN 2015**

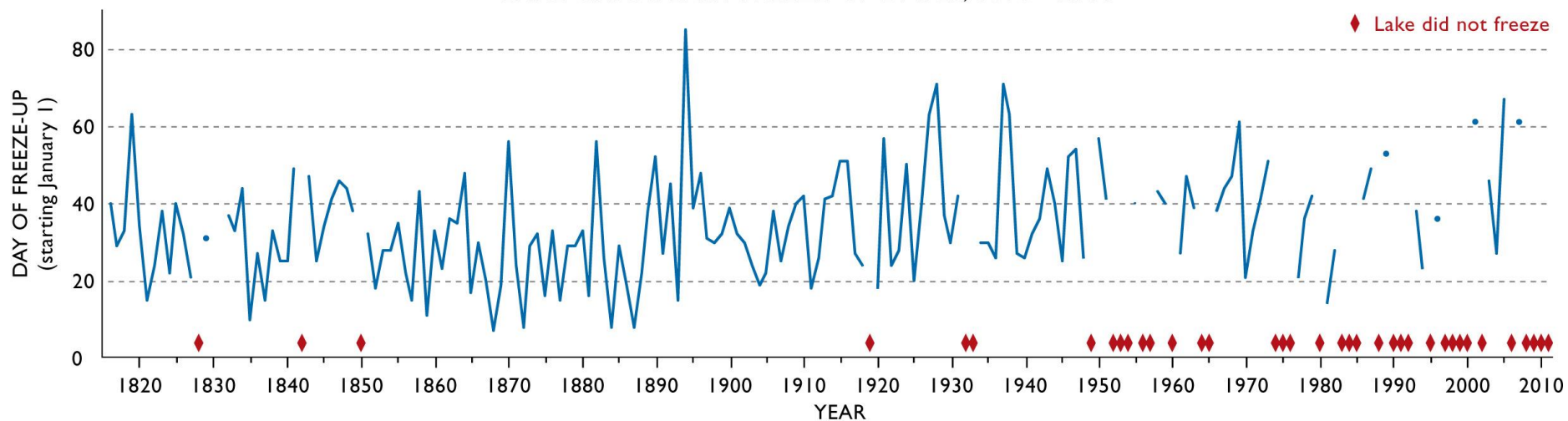
■ MEDIAN EARNER  
■ MEDIAN COLLEGE DEGREE EARNER



# **VERMONT IMPACTS**



## LAKE CHAMPLAIN FREEZE-UP DATES, 1816 - 2011



Notes: Freeze-up occurs when ice covers the main body of the lake. No data available for 1830-1831.

Data Source: National Weather Service

Lake Champlain Basin Program, May 2011

# Weather History for KBTV - December, 2015

December

▼






























































































2015

▼

December Precip Stats: Actual Month Total: 4.44 in | Average Month Total: 2.38 in


[About Calendar](#)


[Print Calendar](#)

Sunday	Monday	Tuesday	Wednesday	Thursday	Friday	Saturday
		<div>1</div> <div>Rain</div> <div></div> <div>Actual: 40°   19°</div> <div> 0.47 in</div> <div>Average: 39°   25°</div> <div> 0.09 in</div>	<div>2</div> <div>Rain</div> <div></div> <div>Actual: 47°   40°</div> <div> 0.83 in</div> <div>Average: 39°   25°</div> <div> 0.09 in</div>	<div>3</div> <div>Rain</div> <div></div> <div>Actual: 42°   37°</div> <div> 0.11 in</div> <div>Average: 38°   25°</div> <div> 0.09 in</div>	<div>4</div> <div>Rain</div> <div></div> <div>Actual: 45°   29°</div> <div> T in</div> <div>Average: 38°   24°</div> <div> 0.09 in</div>	<div>5</div> <div>Partly Cloudy</div> <div></div> <div>Actual: 49°   29°</div> <div> 0.00 in</div> <div>Average: 37°   24°</div> <div> 0.08 in</div>
<div>6</div> <div>Fog</div> <div></div> <div>Actual: 39°   26°</div> <div> 0.00 in</div> <div>Average: 37°   23°</div> <div> 0.09 in</div>	<div>7</div> <div>Partly Cloudy</div> <div></div> <div>Actual: 45°   25°</div> <div> 0.00 in</div> <div>Average: 36°   23°</div> <div> 0.08 in</div>	<div>8</div> <div>Partly Cloudy</div> <div></div> <div>Actual: 40°   25°</div> <div> 0.00 in</div> <div>Average: 36°   22°</div> <div> 0.09 in</div>	<div>9</div> <div>Partly Cloudy</div> <div></div> <div>Actual: 46°   24°</div> <div> 0.00 in</div> <div>Average: 36°   22°</div> <div> 0.08 in</div>	<div>10</div> <div>Partly Cloudy</div> <div></div> <div>Actual: 55°   46°</div> <div> 0.01 in</div> <div>Average: 35°   21°</div> <div> 0.09 in</div>	<div>11</div> <div>Partly Cloudy</div> <div></div> <div>Actual: 56°   48°</div> <div> 0.00 in</div> <div>Average: 35°   21°</div> <div> 0.08 in</div>	<div>12</div> <div>Mostly Cloudy</div> <div></div> <div>Actual: 52°   42°</div> <div> 0.00 in</div> <div>Average: 34°   20°</div> <div> 0.08 in</div>
<div>13</div> <div>Rain</div> <div></div> <div>Actual: 44°   34°</div> <div> T in</div> <div>Average: 34°   20°</div> <div> 0.08 in</div>	<div>14</div> <div>Rain</div> <div></div> <div>Actual: 58°   44°</div> <div> 0.04 in</div> <div>Average: 34°   19°</div> <div> 0.07 in</div>	<div>15</div> <div>Rain</div> <div></div> <div>Actual: 53°   37°</div> <div> 0.25 in</div> <div>Average: 33°   19°</div> <div> 0.08 in</div>	<div>16</div> <div>Overcast</div> <div></div> <div>Actual: 39°   35°</div> <div> T in</div> <div>Average: 33°   18°</div> <div> 0.07 in</div>	<div>17</div> <div>Rain</div> <div></div> <div>Actual: 52°   39°</div> <div> 0.29 in</div> <div>Average: 33°   18°</div> <div> 0.08 in</div>	<div>18</div> <div>Overcast</div> <div></div> <div>Actual: 47°   37°</div> <div> T in</div> <div>Average: 32°   17°</div> <div> 0.07 in</div>	<div>19</div> <div>Snow</div> <div></div> <div>Actual: 37°   27°</div> <div> 1.6 in</div> <div>Average: 32°   17°</div> <div> 0.06 in</div>
<div>20</div> <div>Snow</div> <div></div> <div>Actual: 34°   24°</div> <div> T in</div> <div>Average: 32°   17°</div> <div> 0.07 in</div>	<div>21</div> <div>Mostly Cloudy</div> <div></div> <div>Actual: 46°   34°</div> <div> T in</div> <div>Average: 31°   16°</div> <div> 0.07 in</div>	<div>22</div> <div>Rain</div> <div></div> <div>Actual: 50°   45°</div> <div> 0.72 in</div> <div>Average: 31°   16°</div> <div> 0.07 in</div>	<div>23</div> <div>Rain</div> <div></div> <div>Actual: 57°   39°</div> <div> 0.11 in</div> <div>Average: 31°   15°</div> <div> 0.07 in</div>	<div>24</div> <div>Rain</div> <div></div> <div>Actual: 68°   43°</div> <div> 0.07 in</div> <div>Average: 30°   15°</div> <div> 0.08 in</div>	<div>25</div> <div>Partly Cloudy</div> <div></div> <div>Actual: 51°   35°</div> <div> 0.00 in</div> <div>Average: 30°   15°</div> <div> 0.07 in</div>	<div>26</div> <div>Rain</div> <div></div> <div>Actual: 44°   28°</div> <div> 0.02 in</div> <div>Average: 30°   14°</div> <div> 0.07 in</div>
<div>27</div> <div>Snow</div> <div></div> <div>Actual: 43°   28°</div> <div> 0.3 in</div> <div>Average: 30°   14°</div> <div> 0.07 in</div>	<div>28</div> <div>Snow</div> <div></div> <div>Actual: 29°   16°</div> <div> MM in</div> <div>Average: 29°   13°</div> <div> 0.07 in</div>	<div>29</div> <div>Snow</div> <div></div> <div>Actual: 32°   19°</div> <div> 5.1 in</div> <div>Average: 29°   13°</div> <div> 0.07 in</div>	<div>30</div> <div>Snow</div> <div></div> <div>Actual: 38°   24°</div> <div> 0.1 in</div> <div>Average: 29°   13°</div> <div> 0.06 in</div>	<div>31</div> <div>Fog</div> <div></div> <div>Actual: 39°   34°</div> <div> 0.01 in</div> <div>Average: 29°   13°</div> <div> 0.07 in</div>		

## Vermont skier visits drop 30 percent



# The Warmest August in Vermont History



John Hickey  
@JohnMyNBC5



Following

It's official - August 2016 goes down as the WARMEST on record in Burlington #VT. Records go back to late 1800s.



RETWEETS

6

LIKES

6



5:20 PM - 31 Aug 2016



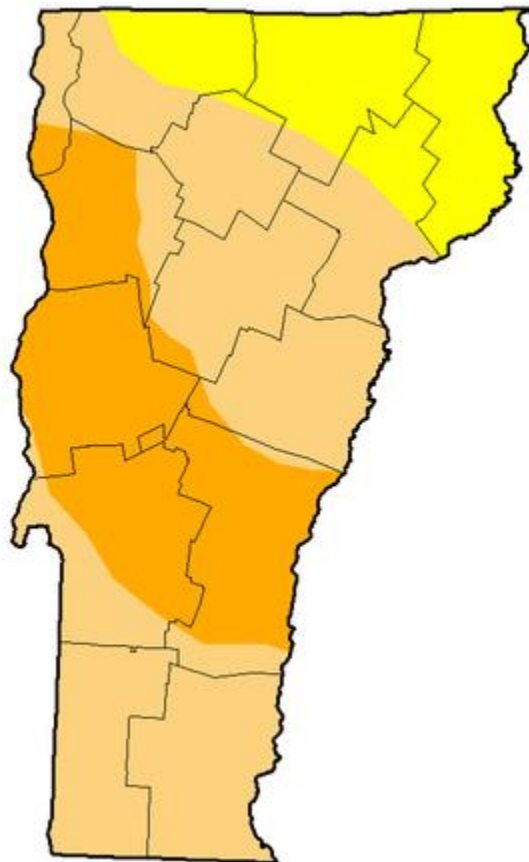
6



6



As of October 25, 2016



Drought Intensities



None: No Drought

D0: Abnormally Dry



D1: Moderate Drought

D2: Severe Drought



D3: Extreme Drought

D4: Exceptional Drought



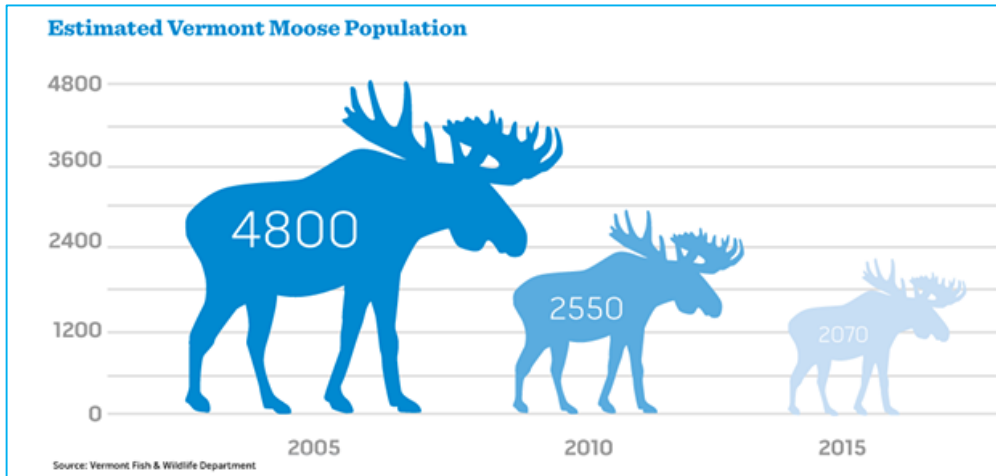
# Crews respond to forest fire in Bolton



# Global Warming May Spread Lyme Disease









# Poisonous Algae Blooms Threaten People, Ecosystems Across U.S.



# Study: Climate Change Could Outpace EPA Lake Champlain Protections







[RutlandWelcomes.org](http://RutlandWelcomes.org)

## Irene's Impact Still Felt Five Years Later

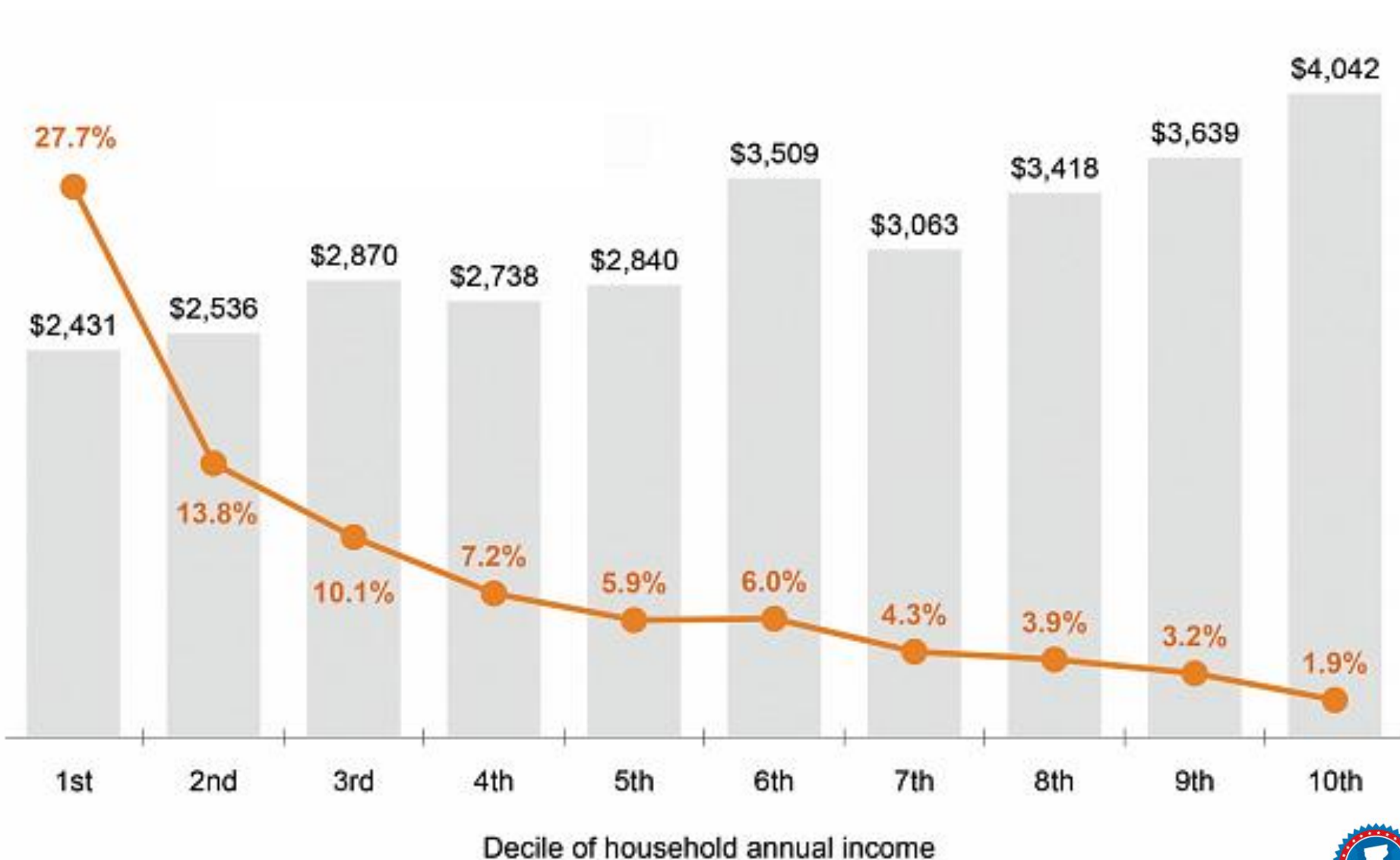


VALLEY NEWS

# \$2,300,000,000/yr.



Figure 2b: Average annual expenditures for all energy used in the household in Vermont, by decile of household income, 2012 (in 2013\$)



# WHAT DO WE DO?!

The most efficient way to cut carbon pollution will spur economic innovation

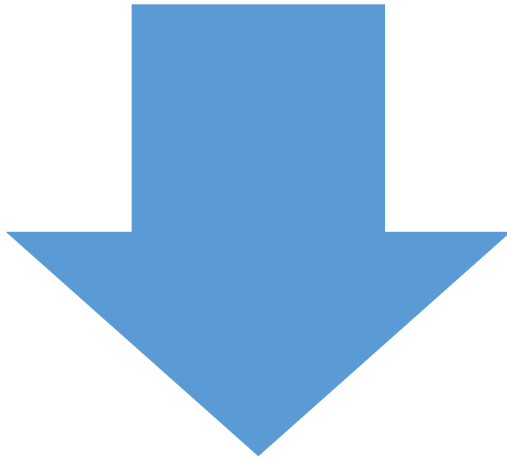


# PRICE POLLUTION





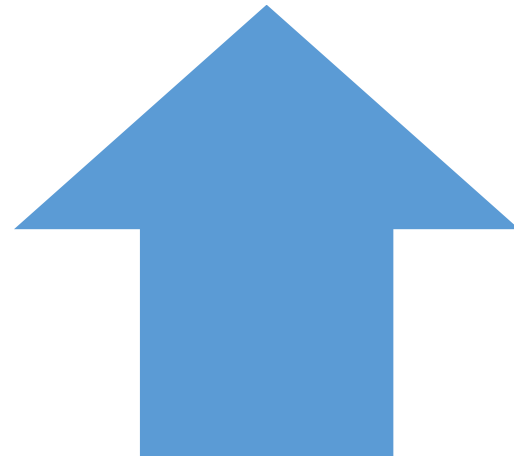
# TAX REFORM

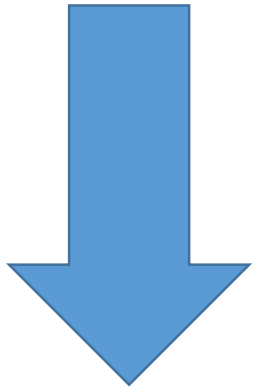


Reduce Taxes

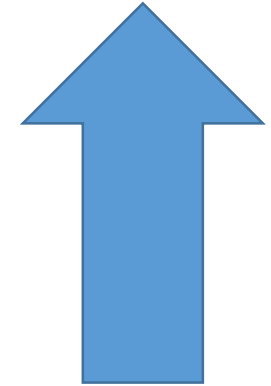


Price Carbon  
Pollution



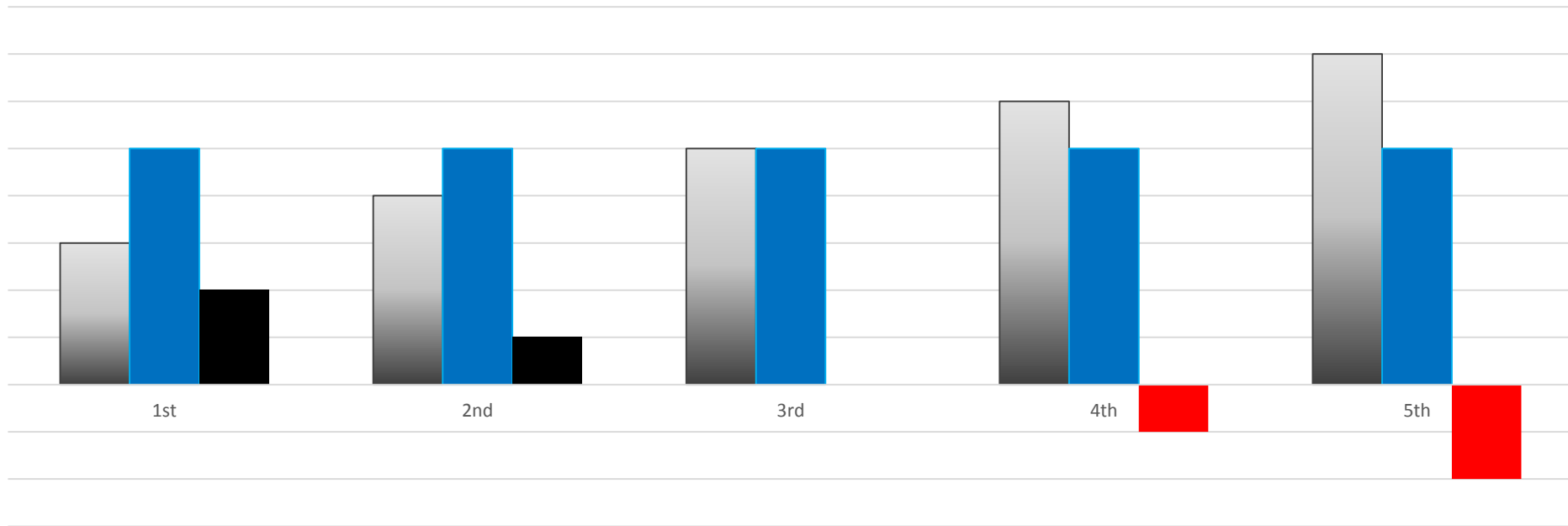


**Taxes**



**Incentive to  
Cut Fossil  
Fuels**

# PROGRESSIVE BY DESIGN

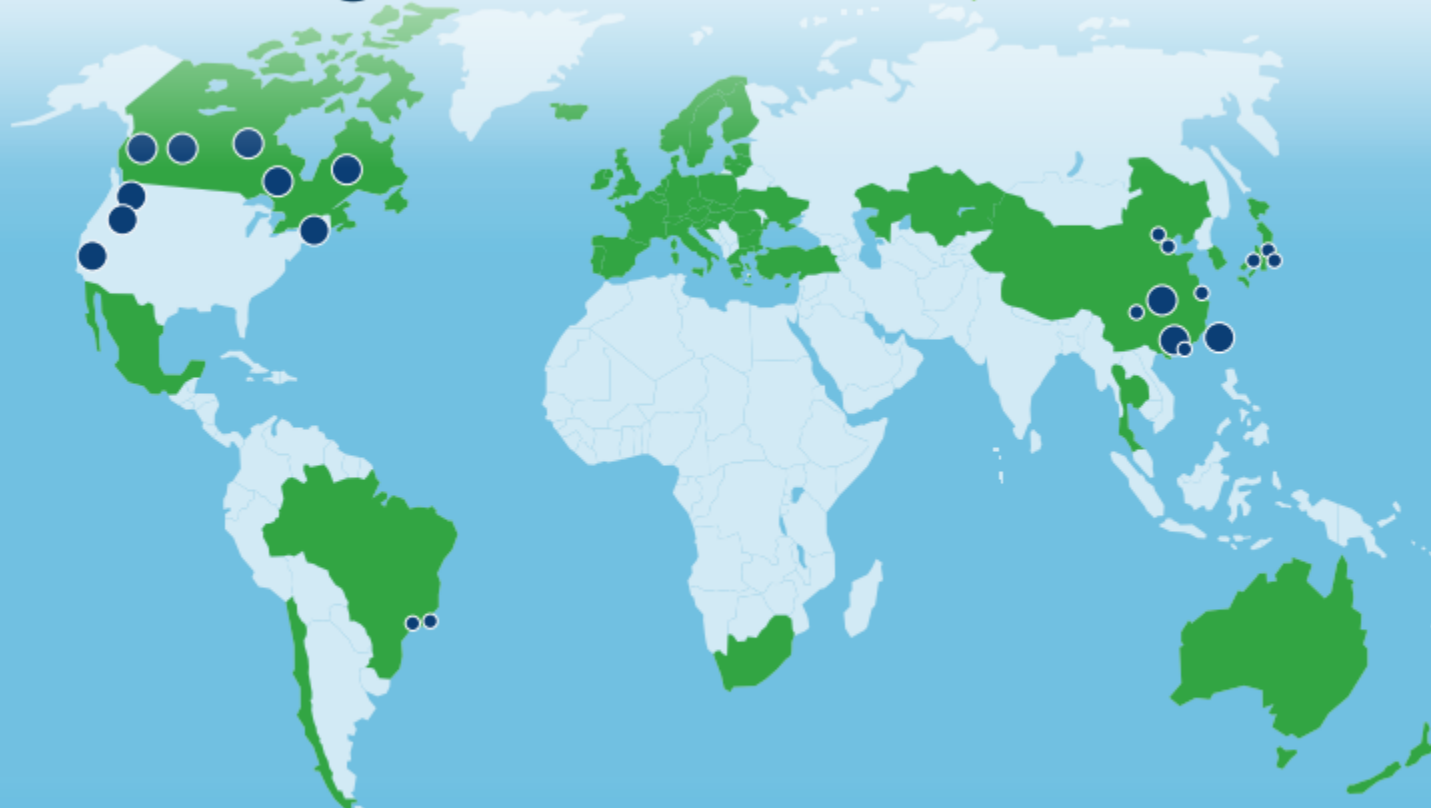


■ Pollution Price ■ Green Energy Rebate/Tax Reductions ■ Net Benefit/(Expense)



WORLD BANK GROUP  
Climate Change

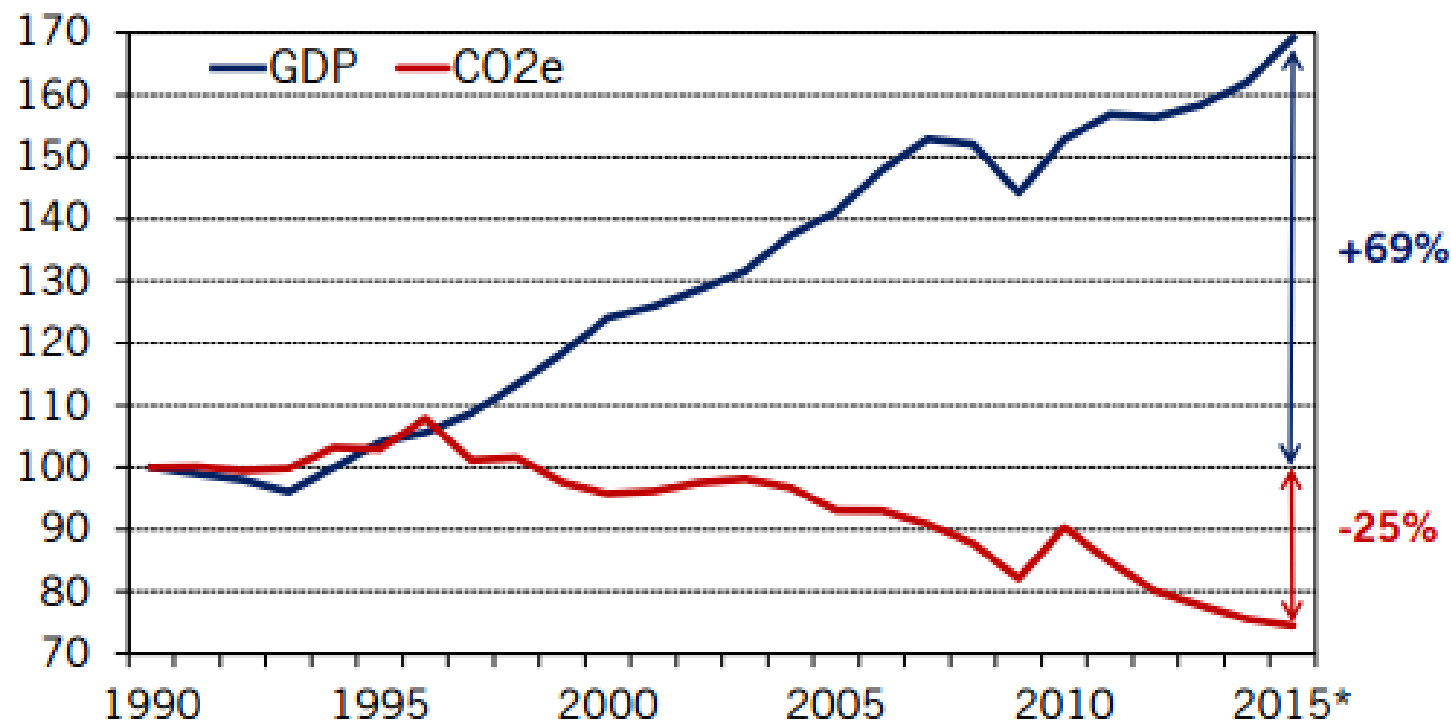
ECOFYS



CARBON PRICING WATCH 2016

# Real GDP and domestic CO<sub>2</sub>e emissions<sup>1</sup> in Sweden, 1990–2015

Index (1990=100)



<sup>1</sup> In accordance with Sweden's National Inventory Report, submitted under the UNFCCC and the Kyoto Protocol. CO<sub>2</sub> = approx. 80 % of total CO<sub>2</sub>e emissions. Preliminary data for 2015.

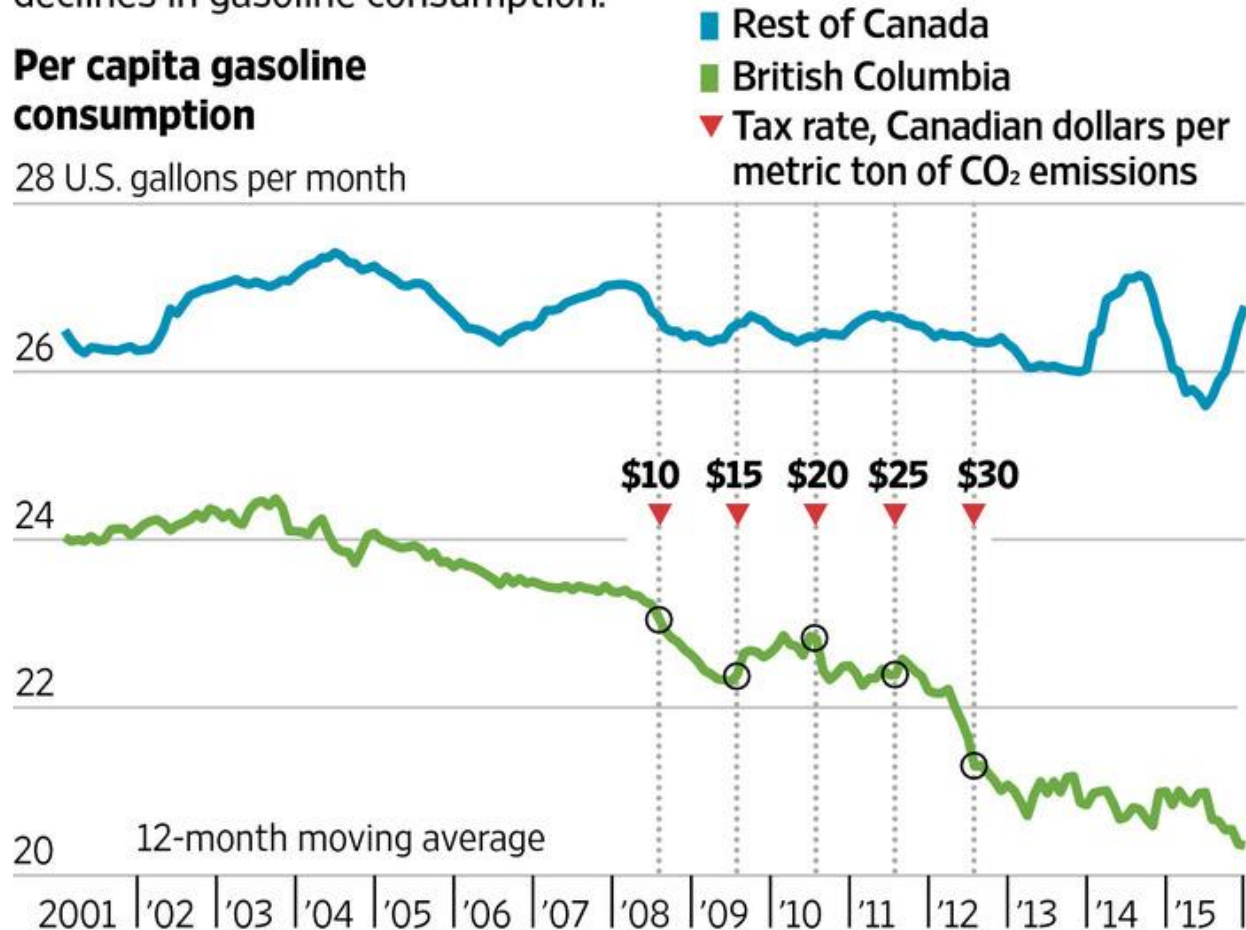
**Sources:** Swedish Environmental Protection Agency, Statistics Sweden

# A Climate Policy Leaves Its Mark

A proposed revenue-neutral carbon tax in Washington state is modeled on British Columbia's, which has led to relatively faster declines in gasoline consumption.

## Per capita gasoline consumption

28 U.S. gallons per month

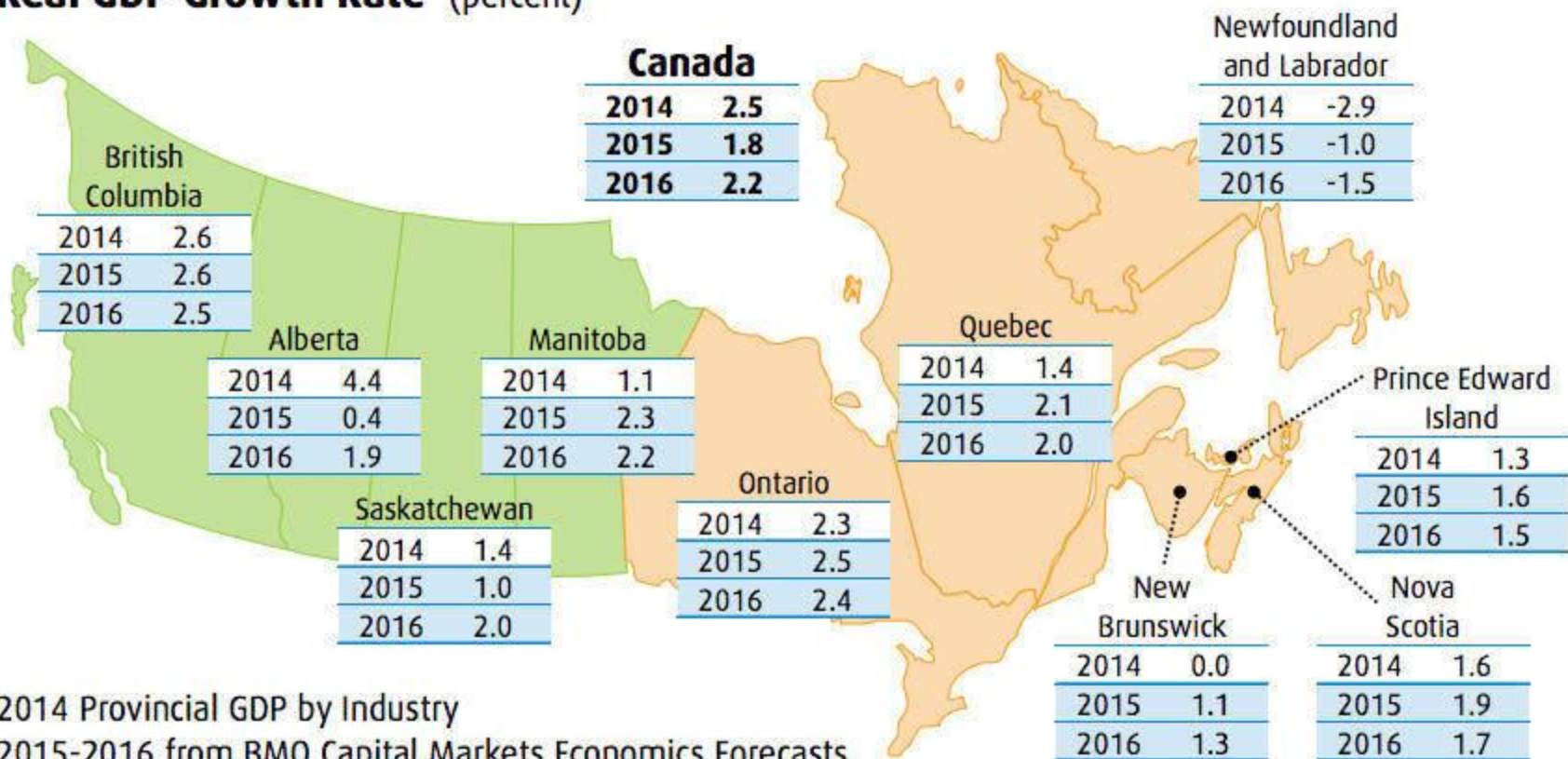


Source: Werner Antweiler and Sumeet Gulati, University of British Columbia

THE WALL STREET JOURNAL.

## Provincial GDP

### Real GDP Growth Rate (percent)



2014 Provincial GDP by Industry  
 2015-2016 from BMO Capital Markets Economics Forecasts

Image: BMO Blue Report



# Canada set to introduce carbon tax





Left

Barack  
Obama

Bernie  
Sanders

Right

Henry  
Paulson

George  
Shultz

# Proof That a Price on Carbon Works



# With more people hitting the road, it's time for a carbon tax





# Why Climate Skeptics Should Support a Carbon Tax



**WHAT'S THE  
HOLD UP?**

# Priebus confirms that climate denial will be the official policy of Trump's administration



**Oil companies are coming around to a carbon tax.  
Their politicians aren't.**





# U.S. Supreme Court Blocks Obama's Clean Power Plan

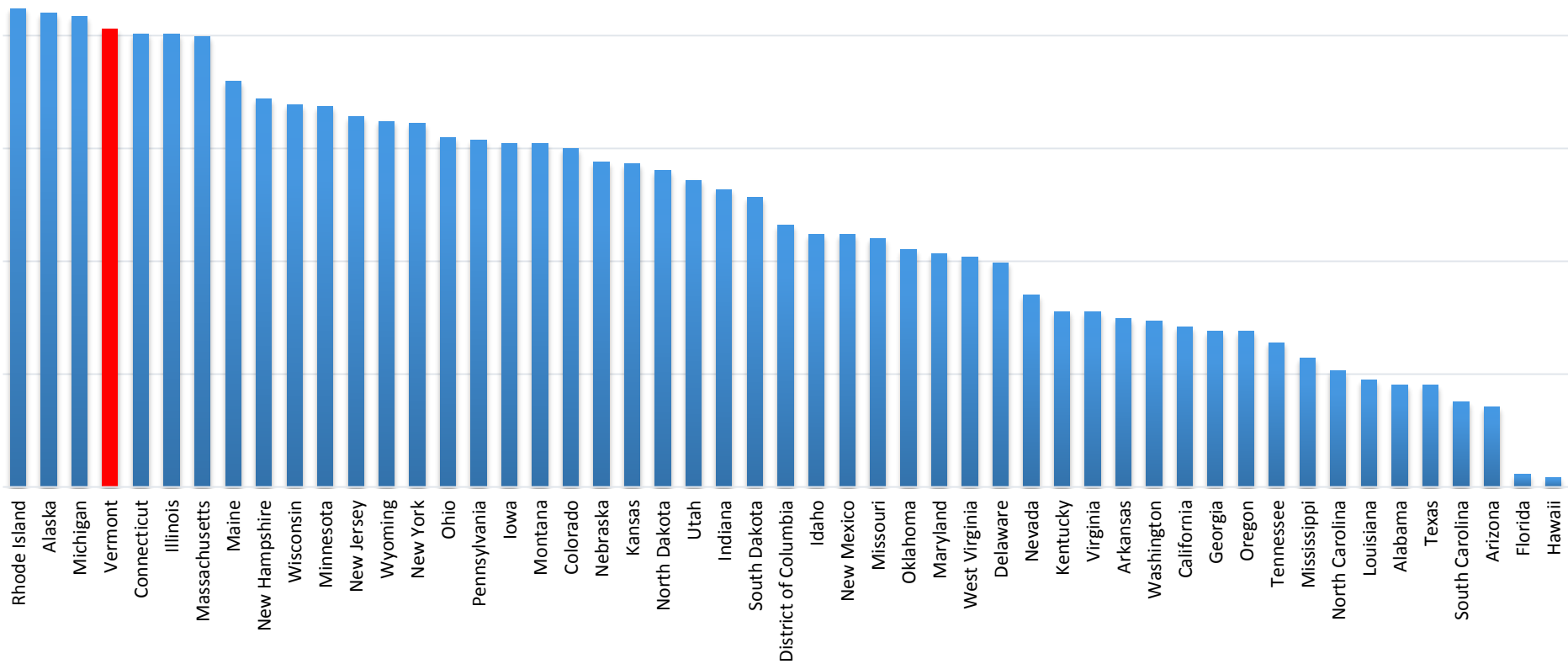


**WHY VERMONT**

***"If the spirit of liberty should vanish in other parts of the Union, and support of our institutions should languish, it could all be replenished from the generous store held by the people of this brave little state of Vermont."***

**-Calvin Coolidge**

# Residential-related emissions per capita by state, 2013

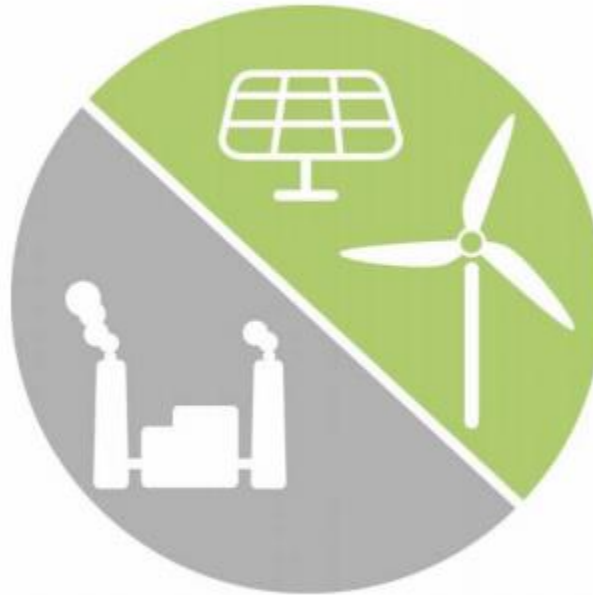




# RGGI's Success Continues: Region Outpacing the Rest of the Country on Emissions and Economics

## Regional Greenhouse Gas Initiative Status Report

### Part I: Measuring Success



July 2016

**ECONOMICS**



*"A tax on carbon emissions will unleash a wave of innovation to develop technologies, lower the costs of clean energy and create jobs as we and other nations develop new energy products and infrastructure."*  
— Henry Paulson



**Total Energy Study:  
Final Report on a Total Energy Approach to  
Meeting the State's Greenhouse Gas and  
Renewable Energy Goals**

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*Vermont Public Service Department*

*December 8, 2014*



*The Economic, Fiscal, Emissions, and  
Demographic Implications from a  
Carbon Price Policy in Vermont*

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**Prepared by**  
Regional Economic Models, Inc. (REMI)  
Washington, DC

**Prepared for**  
Vermont Public Interest Research and Education Fund (VPIREF)  
Montpelier, VT

**Scott Nystrom, M.A.**  
Senior Economic Associate, REMI

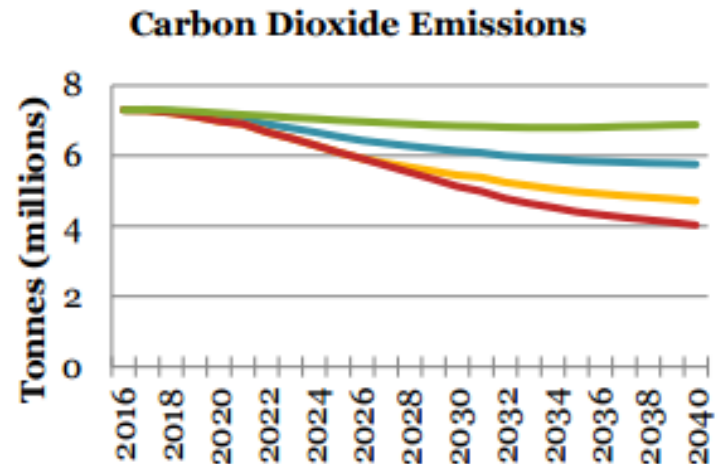
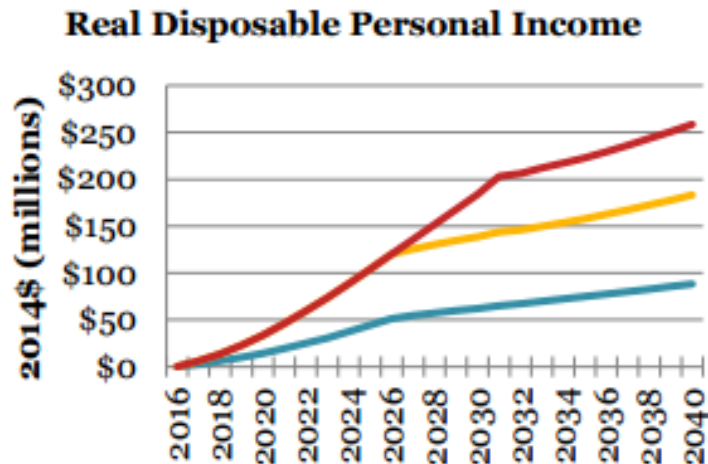
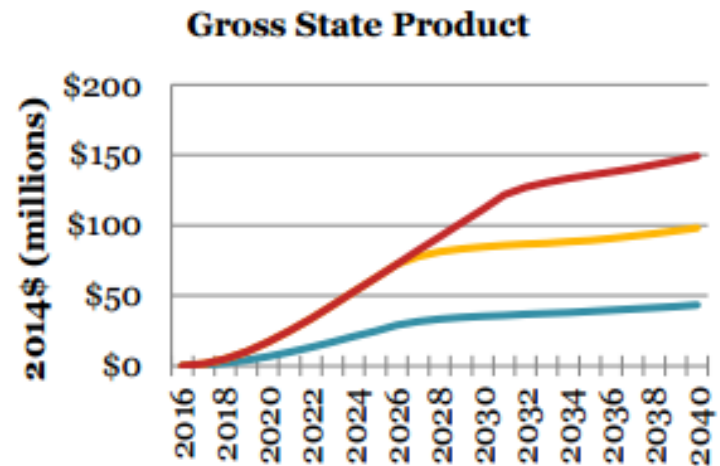
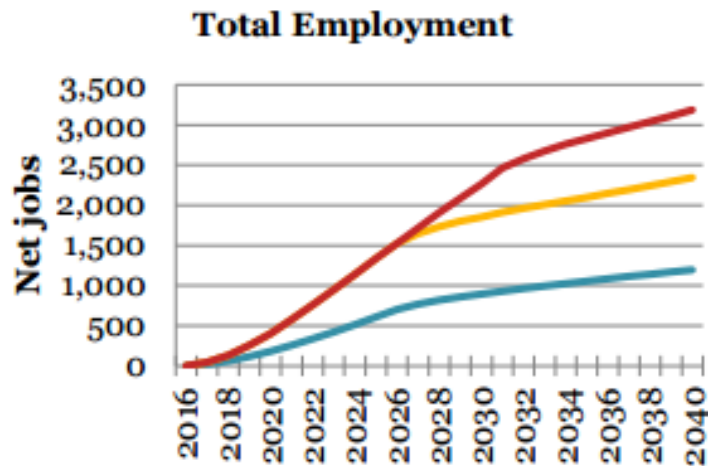
1717 K Street NW Suite 900  
Washington, DC 20006  
(202) 716-1397  
<[scott.nystrom@remi.com](mailto:scott.nystrom@remi.com)>



Thursday, November 13, 2014



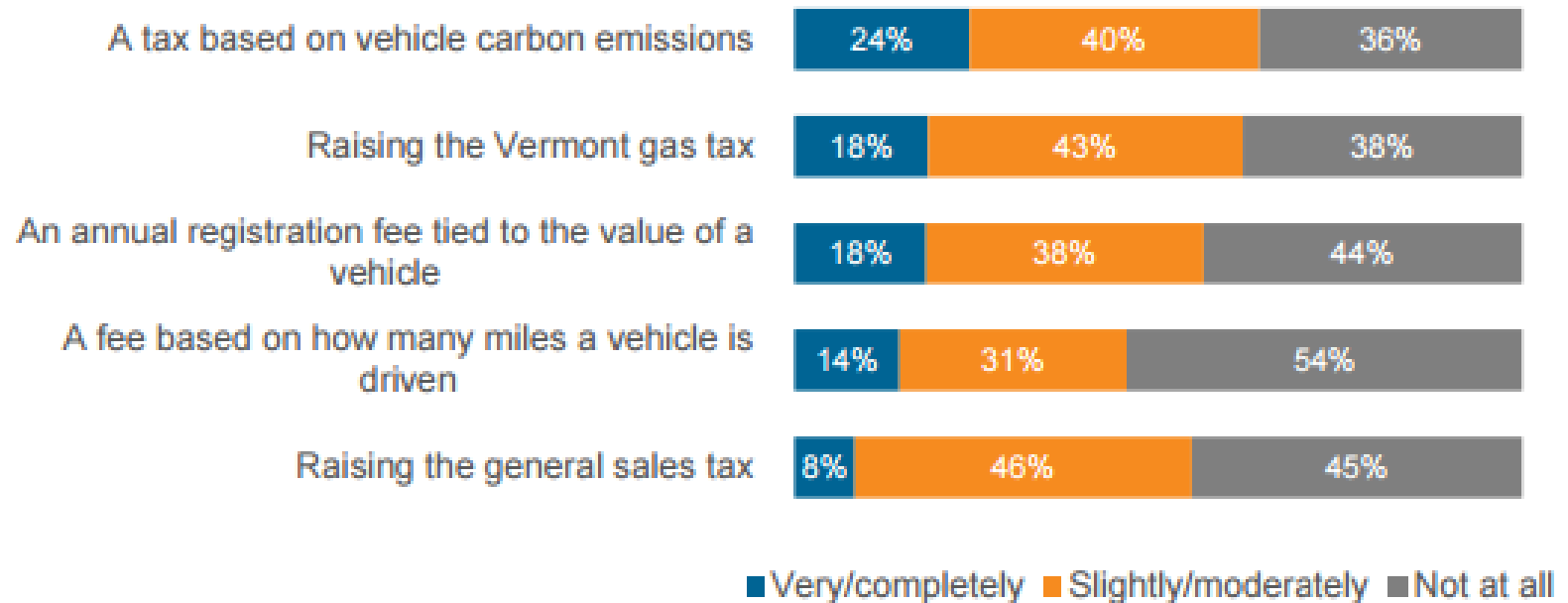
# JOBS & ECONOMY



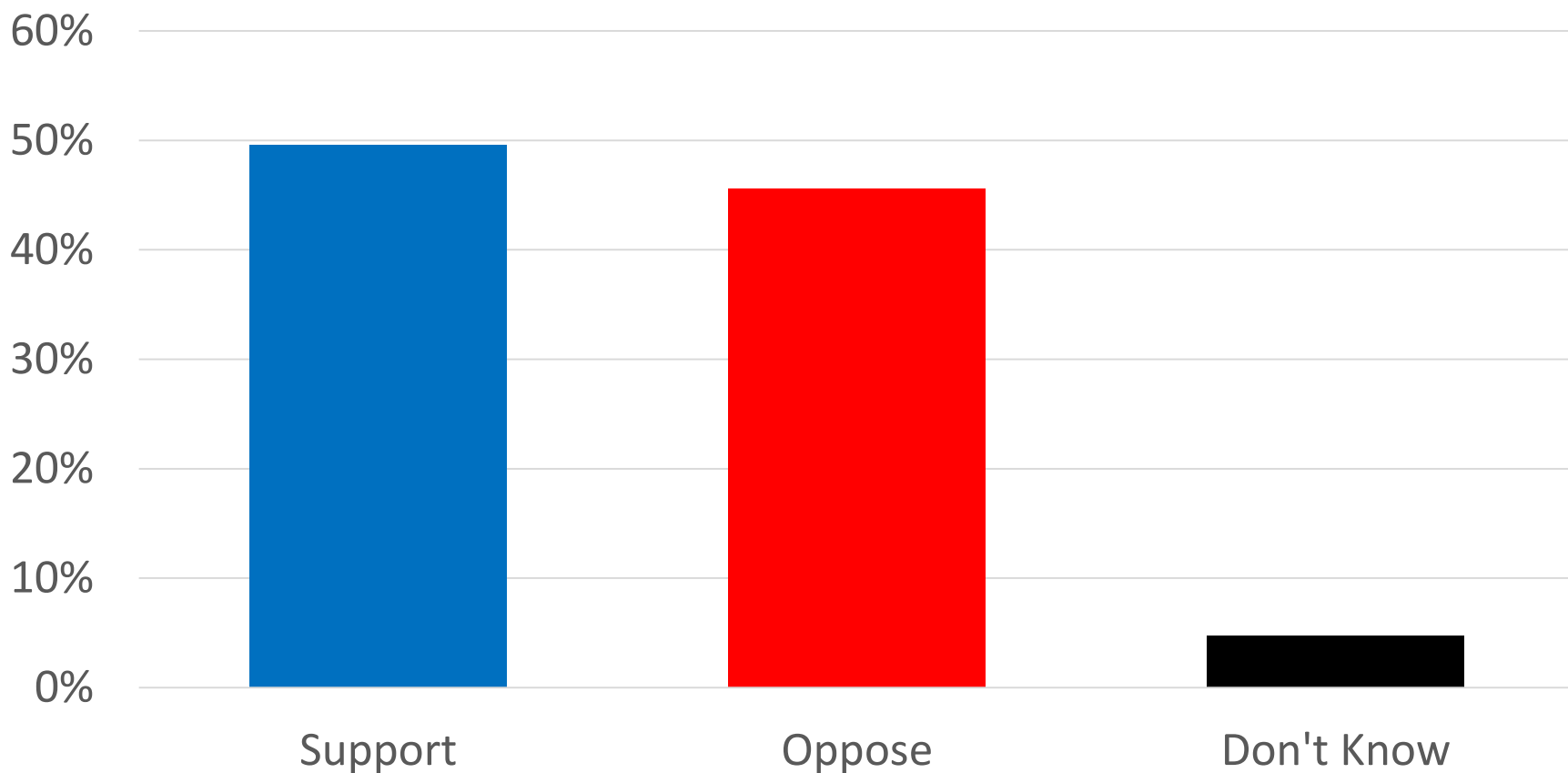
— LOW — MEDIUM — HIGH — BASELINE

**PUBLIC SUPPORT**

**FIGURE 4-20: ACCEPTABILITY OF TRANSPORTATION FUNDING MECHANISMS**

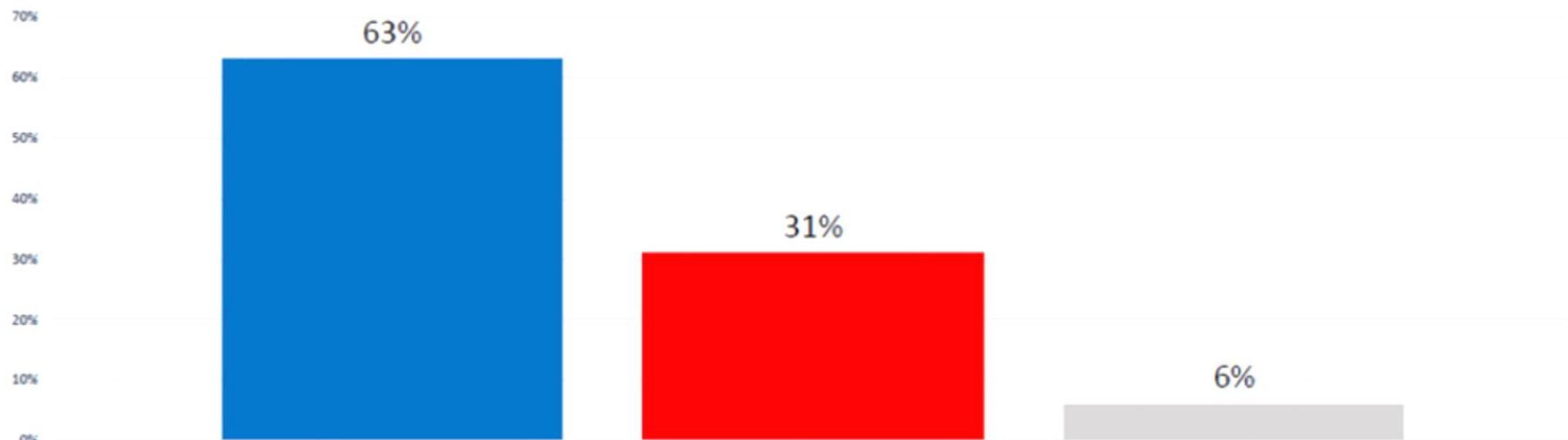


**Do you strongly support, moderately support, moderately oppose or strongly oppose a Vermont carbon tax aimed at reducing global warming?**



## By a 2-to-1 Margin, Vermonters Support a Carbon Pollution Tax Coupled with Investments in Clean Energy and Tax Cuts for all Vermonters and Vermont Businesses

■ Strongly & Somewhat Support   ■ Somewhat & Strongly Oppose   ■ DK/NA



All Registered Voters

This Energy Independence proposal would do the following: Establish a statewide Energy Independence Fund to help Vermonters reduce their home heating and transportation costs and weatherize public buildings, like schools; Finance the Energy Independence Fund with a carbon pollution tax paid by the companies that import oil, gas, or other fossil fuels into Vermont. It would not apply to electricity; Cut state taxes for all Vermonters and Vermont businesses, with additional rebates for low-income Vermonters, so that we are protected from fossil fuel companies passing on their costs. Does this sound like something you would support or oppose?

Likely Voters 18+. June 2016.

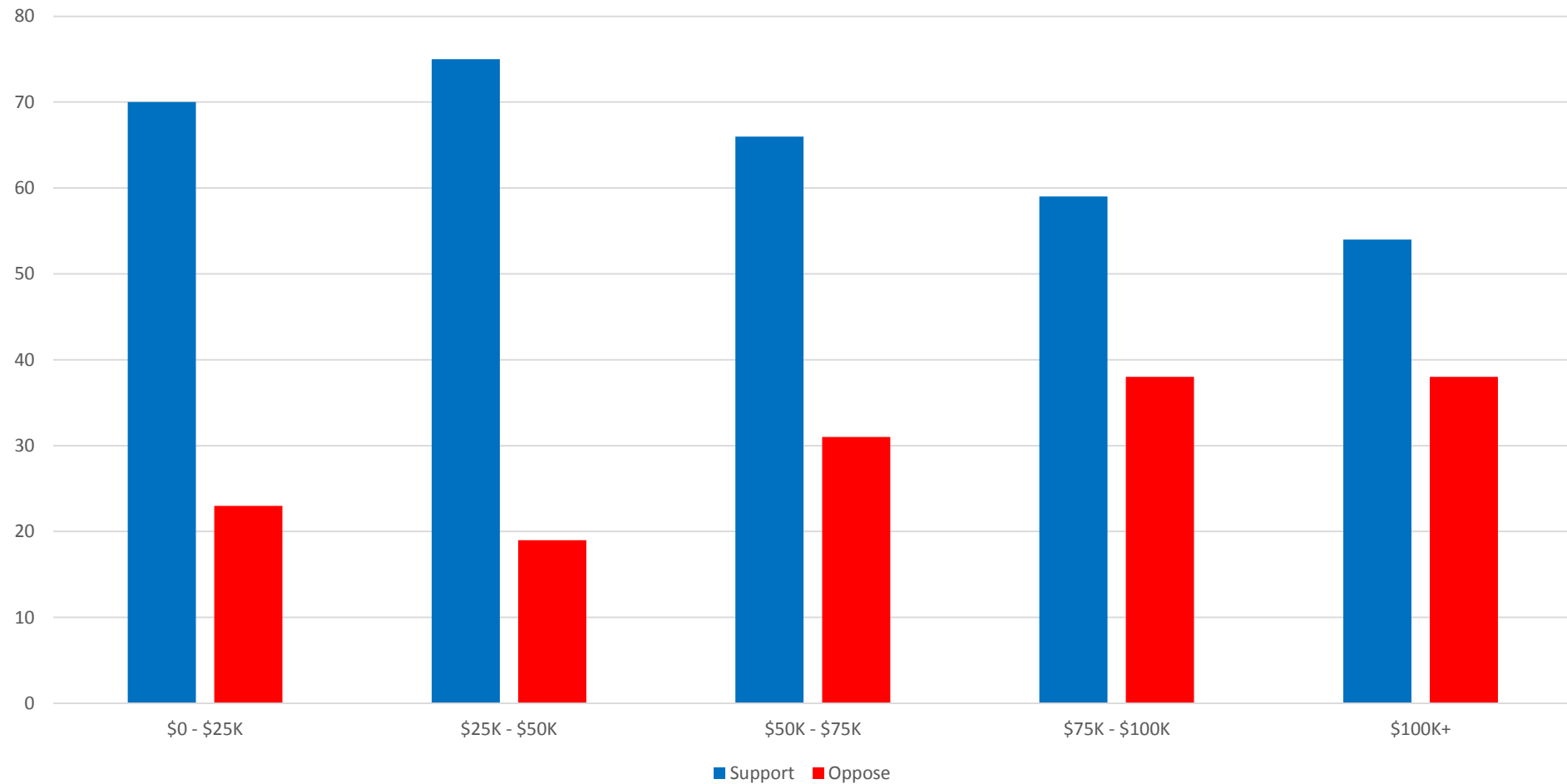
Fairbank,  
Maslin,  
Mauhin,  
Metz &  
Associates

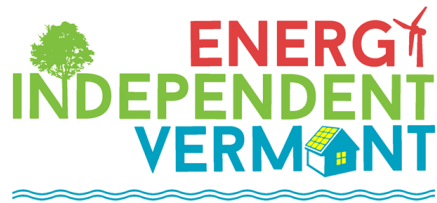
FM3





## Low- and Middle-Income Vermonters Support the Energy Independent Vermont Proposal





Vermont Interfaith  
Power and Light



# 500+ BUSINESSES

## Some of our signers:

A Candle in the Night	Cushman Design Group	Logic Branch Productions	Splash Naturals
A Little Something	CK Associates LLC	Long Ago & Far Away	Springfield Food Coop
A Schoolhouse Garden	Cynthia's Spa LLC	Lucid Path Wellness	Spruce Mountain Design
A Stitch In Time	Dalkin Comfort	Maday Architects	stachopkinsdick- Scavenger gallery
Artistic Inc Tattoo	Dan Freeman's Leatherworks	Mad River Glass Gallery	Standards Technology Group
Able Advertising	Dana's Barber Shop	Magliano's Café	Stanford & Strouss Architects
Acorn Renewable Energy Co-op	Dancing Trees Farm	Main St Sport Cards	Star Wind Turbines
ACS Design & Building	Danforth Pewter	Main Street Landing	State Line Farm Biofuels
Adamant Sugarhouse	Dave Couch Signs	Main Street Stationery	Stella Mae
Adirondack Guide Boat	David Ekenbogen Inc.	Majestic Auto Inc.	Stewart Construction
Aegis Renewable Energy	David Hurwitz Originals	Malloun	Stonemutter Spirits
Aeolus Labs	Deer Ridge Farm	Mama's Special Family	Stoner Andrews
Age of Enlightenment	Deerfield Designs	Manhattan Pizza	Stowe Craft & Design
A's Pizza	Depot Street Malt Shop	Massage Professionals of Randolph	Stowe Fabric & Yarn
All Things Bright and Beautiful	Design Matters	Massage Vermont	Stowe Street Emporium
AlEarth Renewables	Dewey+Associates Architects & Planners	Matt's Wash and Wax	Strolling of the Heifers
AlEarth Services	Digger's Mirth Collective	McWayne Jewelers	Studio Hill LLC
Allen Simon Antiques	Dirt Chic	Men's Cutting Edge	Sudie's
Almost Home Market	Diversified Designs	Meritt & Meritt & Moulton	Sugartree Maple Farm

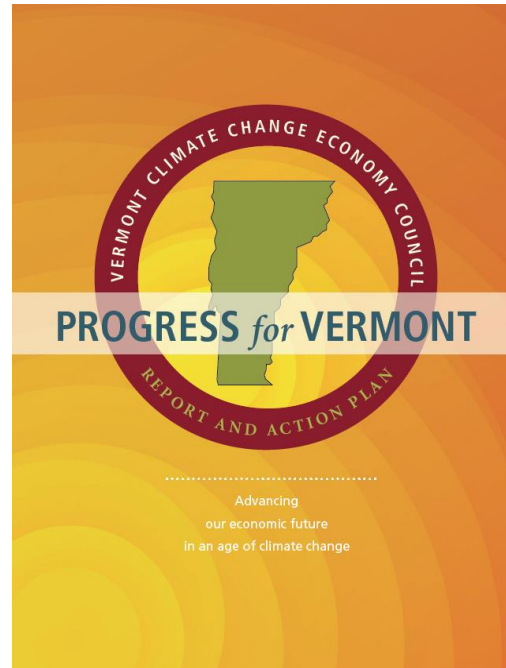


"COMMUNITY IS IMPORTANT TO US.  
THE PLANET IS IMPORTANT TO US.  
AND WE'RE LOOKING AT THE LONG RANGE"

**-MARK CURRAN-**  
OWNER, BLACK RIVER PRODUCE

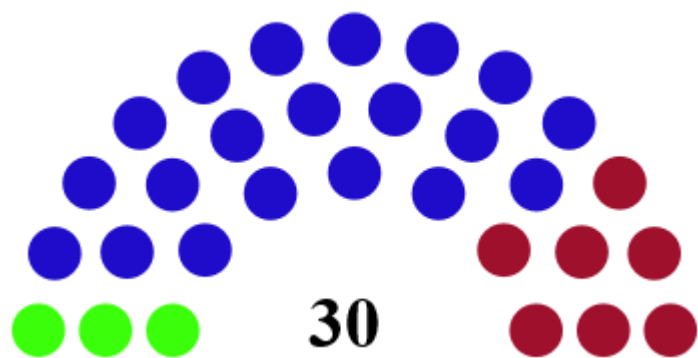
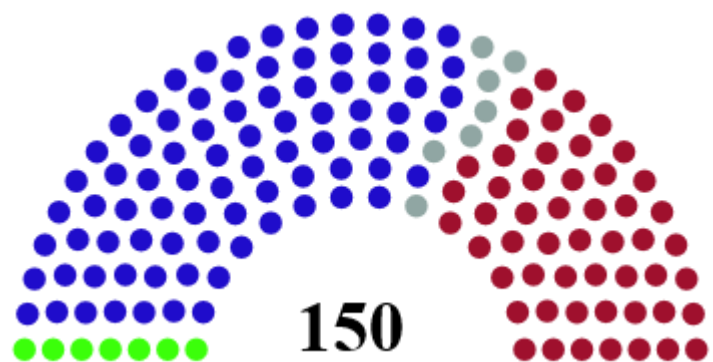
ENERGY INDEPENDENT VERMONT

# POLLUTION PRICING ALLIES



**HOW**







**BE THE CHANGE**  
EARTH ALLIANCE

# WHAT'S YOUR STORY?

