

Answers to Frequently Asked Questions about Strafford's Climate Emergency Resolution

Prepared by the Strafford Climate Action Group
As of February 14, 2020

What exactly will the Resolution accomplish?

Why should Strafford declare that we are in a climate emergency?

What does the Resolution require of us?

What does the Resolution require of the Select Board?

Will the Resolution cost our town money?

Will the Resolution restrict what I can do on my property or what kind of vehicle I can drive?

What constitutes "greenhouse gas emissions"?

How will Strafford's greenhouse gas emissions be determined?

How could Strafford achieve "net zero greenhouse gas emissions" by 2030 and what does this mean?

How would this Resolution affect what is done or not done in Montpelier?

Why should I vote in favor of adopting the Resolution at Town Meeting?

What is meant by "transitions that are just and equitable"?

I don't believe in climate change – why should I support this Resolution?

What has the town of Strafford done already to curb greenhouse gas emissions and address the climate emergency?

What exactly will the Resolution accomplish?

- The Resolution sets a clear goal for Strafford (net zero greenhouse gas emissions) and timeline (by 2030) so that we can make definite plans and hold ourselves accountable.
- The Resolution commits us to considering the impact of all our town decisions on the climate emergency with a sense of urgency that we do all we can.
- The Resolution commits our town to be an advocate to the extent we can influence state legislation to take the same kinds of urgent and just measures.
- The Resolution says that we are working together as a town, that no one in Strafford is alone in this, that we are determined to rise to meet this great challenge.
- The Resolution asks us to increase our awareness: How is our town contributing to climate change? How can we contribute to the solution? What can we do to lower our impact? What about planning for resilience in the future in the face of a rapidly changing environment and society?
- The Resolution should provide encouragement to our children who are looking to adults to take responsibility and protect their future.

Why should Strafford declare that we are in a climate emergency?

- The evidence is overwhelming that very serious climate change is happening to our earth, caused by human activities, especially our greenhouse gas emissions. Severe storms and damaging floods in recent years have affected life in our town and our state, while floods, droughts and fires are affecting many parts of the world and will affect food supplies and cause migrations of people, changing many aspects of our lives, including here in Strafford.
- Recognizing that we, our town, state, country and the world, are in a Climate Emergency is essential to galvanize us into action to address all the aspects of this situation.
- By voting as a town to declare that we are in a Climate Emergency we are saying that we are prepared to work together to do what needs to be done.
- We all want to be a part of a successful thriving community in a viable world - the idea with this resolution is that we give ourselves the best shot at that. No more standing idly and waiting - our children are watching.

What does the Resolution require of us?

- We are committing to considering the impact of all our town decisions on the climate emergency with a sense of urgency.
- We are agreeing to consider not only what is best for the climate, but also what is just and equitable, so that we as a community make sure more vulnerable people of lower and fixed incomes do not bear an unfair burden.
- As citizens we are committing to work with the Select Board to stimulate creative thinking about how our town can lower our impact on carbon emissions.

What does the Resolution require of the Select Board?

- The Resolution requires that our town “commit to working toward the goal of achieving net zero greenhouse gas emissions in Strafford by 2030.”
- The Resolution directs the Select Board to work with the Strafford Energy Committee for information over time regarding our Town’s greenhouse gas emissions and how to achieve net zero greenhouse gas emissions by 2030.
- The Resolution commits our Select Board to integrate the need to act into all future decision-making, which could include vehicle choices, town building maintenance, construction or equipment, or town planning.
- The Resolution commits the Select Board to consider how any action it takes may contribute toward reducing greenhouse gas emissions, and to feel urgency to choose options that both move the town toward zero emissions and do so in a just and equitable way.

Will the Resolution cost our town money?

- The Resolution does not specifically require the town to increase spending.
- The Resolution does not override the normal budget process, which we all vote on at Town Meetings.
- Climate change is already costing us (flood damage, road damage, loss of income to businesses affected by a worsening or changing environment from sugar-makers to snow-plowers, increased insurance rates and increased taxes to pay for climate impacts) and these costs are expected to increase exponentially if we do not take immediate action.
 - Vermont's legislative economist Tom Kavet in his January 2020 economic review for the Legislative Joint Fiscal Office:
"The economic costs of climate change may come slowly enough for many to ignore and irregularly enough for some to prevaricate. But these costs are undeniably growing with each year of record heat and each 'one in a thousand year' natural calamity. Costs such as those being experienced in Australia are a rising economic threat everywhere. Policy

delays to address this issue look increasingly indefensible —especially to the next generation."

- Our town can do the easier and less expensive things first, and take full advantage of state programs that support our actions.
- Following the Resolution may lead our town to decide to increase some spending up front in order to save much more money for taxpayers over time, but in other cases following the resolution may have no cost or may save money from the start. For instance, investments in electric vehicles, insulation, solar, etc. not only are becoming less expensive, but could pay for themselves over time with decreased energy and operating expenses, while also helping us to meet goals for decreasing greenhouse gas emissions.
- The commitment to be just and equitable and the collaboration between the Strafford Energy Committee and our Select Board are two ways built into the resolution to stimulate creative, low-cost solutions.

Will the Resolution restrict what I can do on my property or what kind of vehicle I can drive?

- The Resolution itself does not place any restrictions on individuals or direct the Select Board to do so.
- The Resolution does encourage all of us to increase our awareness of our choices and actions with regard to climate change.

What constitutes “greenhouse gas emissions”?

- The primary greenhouse gases in Earth's atmosphere are water vapor (H₂O), carbon dioxide (CO₂), methane (CH₄), nitrous oxide (N₂O), and ozone (O₃). These are gases that absorb and emit radiant energy within the thermal infrared range and cause the greenhouse effect (warming) on planets. (Wikipedia) All of these naturally occur in the atmosphere, but only some are being seriously increased by human activities and thus affecting world climate.
- When carbon-based fuels (including coal, gasoline, oil, propane, methane, “natural gas”, wood, etc.) are burned, carbon is released into the atmosphere mostly in the form of CO₂, a greenhouse gas emission (Wikipedia)
- According to the EPA, the largest source of greenhouse gas emissions from human activities in the United States is from burning fossil fuels for electricity, heat, and transportation.
- Additional contributions of greenhouse gases come from deforestation, changes in land use, soil erosion and agriculture (including livestock). The leading source of human-caused methane emissions is animal agriculture (especially concentrated feedlot operations), followed by fugitive emissions from gas, oil, coal and other industry, solid waste, wastewater and rice production. (Wikipedia)

How will Strafford’s greenhouse gas emissions be determined?

- The Strafford Energy Committee is working with the Two Rivers Ottauquechee Regional Commission (TRORC) and using Vermont State algorithms to assess and estimate Strafford’s overall carbon emissions. It is expected that these methods will be improved and made more precise over the coming years.
- At the same time, each of us can become more aware of our own household’s greenhouse gas emissions (our “carbon footprint”) and take whatever actions we can to reduce them; we do not have to wait for a formal assessment of our Town’s emissions.

How could Strafford achieve “net zero greenhouse gas emissions” by 2030 and what does this mean?

- The Energy Committee has already done much work to promote and provide information and help about the many known ways to reduce greenhouse gas emissions, even if we don’t yet have a

precise way to calculate Strafford's emissions. These projects include: Improve insulation in all our houses, help change heating systems to more efficient and electric-based systems, help people get electric vehicles, etc. A list of these projects is included at the end of this document.

- As our Town works with the Energy Committee, and citizens come up with new ideas, and more information and innovations become available, we expect to have more and more information on what our Town can do to decrease greenhouse gas emissions and meet the goal.
- In addition to the Town's work, we will all need to be involved, doing all we can, to decrease greenhouse gas emissions.

How would this Resolution affect what is done or not done in Montpelier?

- The more towns that adopt Resolutions like this, and communicate with our government in Montpelier, the more influence we can have on what happens there.
- The Select Board could write one or more letters to the Governor and others in the State Government explaining what we want (serious legislation to curb carbon emissions effectively, through regulations, funding, etc.).
- This resolution can help us as citizens become more aware of the issues, and we can each communicate what we want to our state government and elected officials.

Why should I vote in favor of adopting the Resolution at Town Meeting?

- There is a danger that the strains of a climate crisis world will create a survivalist mentality where individuals live in fear of or in competition with their neighbors. It does not have to be that way. In fact, we are each far better off if we work together and look out for one another, especially for those who are most vulnerable and least well off. Voting for this resolution is a first step in being a united Strafford, saying that no one is in this alone and that we are going to face whatever comes together.
- Adopting this Resolution sets our town on a path to increased awareness of the problem and toward being part of the solutions.
- The climate crisis has many of us asking what more we can do. Adopting this Resolution is a significant and meaningful step to help lessen the effects of climate change beyond what any of us can do individually.

What is meant by “transitions that are just and equitable”?

- Actions (here and in Montpelier) should not unfairly impact some groups of people more than others.
- The various responsibilities created by climate action should be fairly and justly distributed and should not unfairly burden those less able to pay.
- The Green New Deal resolution says this: “to promote justice and equity by stopping current, preventing future, and repairing historic oppression of indigenous peoples, communities of color, migrant communities, deindustrialized communities, depopulated rural communities, the poor, low-income workers, women, the elderly, the unhoused, people with disabilities, and youth.” Not all those apply to Strafford, but the list gives an idea of the kinds of considerations “just and equitable” would include. In other words, an acceptable response to climate change must be pro-jobs, pro-community and supportive of people with limited resources.
- The Green New Deal also includes the stipulation that everyone should be provided with high-quality health care; affordable, safe, and adequate housing; economic security; and clean water, clean air, healthy and affordable food, and access to nature. “Transitions that are just and equitable” would keep in mind these basic necessities for all citizens of Strafford so that all steps taken do not detract from but enhance their availability.

I don't believe in climate change – why should I support this Resolution?

- Please seriously consider what the vast majority of scientists have concluded about climate change and its causes.
 - From the United Nations: <https://www.un.org/en/sections/issues-depth/climate-change/>
“...after more than a century and a half of industrialization, deforestation, and large scale agriculture, quantities of greenhouse gases in the atmosphere have risen to record levels not seen in three million years. As populations, economies and standards of living grow, so does the cumulative level of greenhouse gas (GHGs) emissions.”
 - From the Intergovernmental Panel on Climate Change: <https://www.ipcc.ch/sr15/> “*An IPCC special report on the impacts of global warming of 1.5 °C above pre-industrial levels and related global greenhouse gas emission pathways, in the context of strengthening the global response to the threat of climate change, sustainable development, and efforts to eradicate poverty.” “Limiting global warming to 1.5°C [will] require rapid, far-reaching and unprecedented changes in all aspects of society;”*
- Even if you don't think that greenhouse gas emissions from the use of fossil fuels are causing climate change, you might be concerned about human health. Are you aware that fossil fuels – their extraction, refining, transport and combustion -- all result in many toxins and (unreported) radioactive waste being widely spread in our environment? All of these toxins are harmful to human health, so this is a good reason for us to work on reducing our dependence on and use of fossil fuels. For examples, see :
 - From the Global Alliance on Health and Pollution <https://gahp.net/pollution-and-health-metrics/> “*Pollution remains the world’s largest environmental threat to human health, responsible in 2017 for 15% of all deaths globally, and 275 million Disability-Adjusted Life Years. The 2019 report, which uses the most recent Global Burden of Disease data from the Institute of Health Metrics Evaluation, underscores the extent and severity of harm caused by air, water, and occupational pollution.”*
 - From the National Institute of Environmental Health Sciences <https://www.ncbi.nlm.nih.gov/pmc/articles/PMC3915249/> : “*Studies such as this provide a light at the end of the wellbore. Yet the current patchy understanding of radioactive fracking waste’s fate in the environment precludes making good decisions about its management. And even if fracking the Marcellus ceased overnight, the questions and potential problems about radioactivity would linger. ‘Once you have a release of fracking fluid into the environment, you end up with a radioactive legacy,’ says Vengosh’.*
 - For current information on how the disposal of brine (some of it very radioactive) is impacting people and communities, see: <https://rollingstone.com/politics/politics-features/oil-gas-fracking-radioactive-investigation-937389/?fbclid=IwAR2OxJWYSFYeFcyxGgHhk90-CPADa1jOKt4vh2MHjVYpNie3uTPQ5MWDXbk> .
- According to the EPA, the largest source of greenhouse gas emissions from human activities in the United States is from burning fossil fuels for electricity, heat, and transportation.

What has the town of Strafford done already to curb greenhouse gas emissions and address the climate emergency?

- Strafford’s farms and forests help reduce our greenhouse gas emissions directly by keeping carbon in the ground.
- Local businesses contribute significantly by reducing the distance we need to drive for goods and services, or the distance contractors need to drive to reach us.

- Having our school in town for as many grades as we can cuts down on greenhouse gas emissions from driving and busing.
- Many actions have already been taken, and are being taken, led by individual citizens, businesses and the Strafford Energy Committee. Here is a partial list:
 - Energy efficient lighting, insulation, and weatherization of the United Church of Strafford
 - Energy efficient lighting and equipment at Newton School, including a small solar electric rooftop array
 - Removal of five unnecessary street lights on the outskirts of the villages and the replacement of the remaining lights with energy efficient LED fixtures
 - Municipal Building weatherization, energy efficient heating system, and insulation of the roof and vault
 - LED lighting for the Town Garage
 - Air sealing and added insulation to Barrett Hall
 - Programmable thermostats added to Barrett Hall, Newton Library
 - Weatherization of at least 40 residential homes in Strafford through the Vermont Home Energy Challenge
 - The partial weatherization and insulation of the Mason's building
 - The addition of over 36 kW of residential photovoltaics through the Solarize initiative (Solarize Strafford), bringing the total in town, including community solar initiatives, to approximately 300 kW (over 80 households), producing about 8% of the electricity consumed by the town.
 - The addition of a 110 kW (dc) community solar array providing net metering credits for the town and school electric meters, Barrett Hall, the library, the United Church of Strafford and their parsonage, and the landowner (in lieu of rent), allowing the non-profit entities to be powered up to 90% renewably. Together with those installations mentioned above, approximately 408 kW of renewable power provides about 410,000 kWh/year, or about 11% of the 2010 electric usage (4,096 MWh/year)
 - A 5 MW AC (7MW DC) photovoltaic array on the Elizabeth Mine capped tailings pile, was completed in 2017. Strafford and Thetford split the installation for tax purposes and one half the array output is approx. 4,500 MWh per year
 - 2014: the Strafford Edible Pocket Park began, showing all how to grow fruit and more without importing it from California
 - 2017&2018: the SECC has participated in the 4th of July parade with an information booth on the Common to bring awareness to electric vehicles, bikes and other appliances aiming to reduce fossil fuel use throughout the transportation and heating sectors
 - 2018 - Efficiency VT Button-Up Hero weatherization program - 32 homes visited for energy upgrades to hopefully be performed in the not-to-distant future. 3 low-income recipients received weatherization upgrades at no cost from the Capstone Community Action network
 - 2019 - WindowDressers interior storm windows program - working with WindowDressers of Maine to bring winter energy savings and increased comfort to residents of Strafford (partnering with Thetford Energy Committee and their community). Through donations and grants, the program will focus on low-income families. A volunteer community workshop to assemble the frames occurred Jan 4th to 12th in the N. Thetford Church. 100 inserts were made available to Strafford residents this year and plans are to continue and increase the program into following years.