

## Vermont's Climate Economy Business Environment

**What is the Climate Economy?** – The Vermont Council on Rural Development and the Sustainable Jobs Fund have worked together the past two years to explore the impacts of climate change on Vermont economic opportunities. One product of that work is [Accel-VT](#), a climate economy business accelerator, which provides business development, mentoring and capital access services to entrepreneurs looking to grow their businesses in ways that, for instance, integrate distributed generation with the electric grid, develop new, innovative green building technologies or innovative approaches to capture and recycle phosphorus (at the intersection of clean water, soil, and food production).

While it is easiest to think of ways that the “climate economy” includes clean energy businesses, it also includes transportation, working lands, land use, green building and many other sectors – because all these sectors connect in some way to our climate.

### The Clean Energy Sector of the Climate Economy –

The Department of Public Service and Clean Energy Development Fund have investigated the clean energy industry in a series of reports that show the magnitude of the business sector from a jobs perspective. Highlights of those reports show:

19,000 jobs - 12,000 full time jobs in the Clean Energy Sector in 2017

- 10,600 jobs in efficiency (3% of all jobs in the state)
- 3,000 jobs in solar installations and related businesses
- 1,350 jobs in renewable energy through wood heat

29% growth in jobs between 2013 and 2017 (8% between 2016 and 2017)

- State job growth in the same period – less than 3% 2013-2017 and 0.5% 2016-2017

3,700 businesses in the Clean Energy sector

- Almost 1300 firms do installation work
- Almost 1000 firms provide professional services
- More than 750 firms do sales and trade
- Almost 500 firms are in clean energy manufacturing

### But wait... there's more

In addition to the clean energy sector, climate change has impacts on other sectors of the economy including building resilience to the damaging impacts of increasingly frequent and strong storms, changing snow patterns and increased severity of drought. Finally, the topic of climate change is a subject of investigation for both our understanding of climate and weather and our understanding of the impacts of those changes on all of our economic activities.

### The Resilience Sector of the Climate Economy

Vermont is investing millions of dollars to reduce future damages to properties subject to flooding. In addition, ski areas are investing in improved snow making and diversified recreational opportunities to prepare for less certain natural snow in the future. Other examples are in the health care, agricultural, finance and insurance sectors.

### The Research Sector of the Climate Economy

One important subset of climate research is included in the work of Vermont's clean energy businesses and that is described in the Clean Energy Sector discussion, above. In addition, there is research on changes in weather patterns and changes to agriculture and forestry resulting from changing storm strength, and temperature and precipitation regimes.

One thing the VSJF intends to do over the coming year is to quantify and better describe the climate economy. Meaning that we intend to gather relevant NAICS codes to count up how many jobs and establishments are in this sector and to better describe their attributes. VSJF has successfully done this for the food system and will apply a similar methodology, in addition to building off the work that was done by the [Brookings Institute](#) and the [Bureau of Labor Statistics](#) did for the Obama Administration.