

## **Project #1: Advancing the Vermont Farm Labor Housing Initiative**

*Partner: Peter Schneider '97, Senior Energy Consultant, Vermont Energy Investment Corporation*

### Introduction

Vermont's Mobile Home Replacement Program is one of many important income-based assistance programs offered through Efficiency Vermont. This program replaces old trailers with new zero-net energy modular homes both in mobile home parks and on private land.<sup>1</sup> Among the myriad benefits of this program are reduced energy burden for low-income households, improved comfort, environmental health gains, and reduced use of fossil fuels.

Led by Middlebury alumnus Peter Schneider '97 and launched in response to the devastation many mobile home parks faced in the wake of 2011 Tropical Storm Irene flooding, the program now boasts over 90 homes throughout the state as has helped home owners avoid more than \$800,000 in energy costs.<sup>2</sup> The program is now in the process of expanding in response to two pressing needs—using COVID recovery and stimulus funding to meet pandemic related housing needs and improving often dire housing conditions for Vermont's migrant farm workers. It is with the latter program—dubbed the Farm Labor Housing Initiative—with which this project team will engage.

10% of the agricultural workforce in Vermont is made up of immigrants with 1,500 migrant workers sustaining the state's iconic working landscape. These workers are the backbone of Vermont's agricultural economy, but they have been historically mistreated. 40% of workers receive less than the Vermont minimum wage, often never have a day off, and work and live under incredibly challenging conditions.<sup>4</sup>

### Project Need

To date, the Farm Labor Housing Initiative (FLHI) has successfully partnered with Migrant Justice, the Vermont Community Foundation, and the Vermont Low-Income Trust for Energy to begin replacing worker housing on farms that supply milk to Ben and Jerry's—the first corporation to participate in Migrant Justice's Milk with Dignity campaign, a “movement of farmworkers and allies calling on dairy companies to ensure respect for human rights in their supply chains.”

While foundation funding and the partnership with the non-profit Migrant Justice is a successful model for a subset of Vermont's dairy farms, there are several challenges facing the more widespread deployment of this program. These include:

- 1) Dairy farms not being classified as non-profits and therefore not being eligible for traditional sources of funding such as that provided through the Vermont Housing and Conservation Board and the Vermont Housing Finance Agency;

---

<sup>1</sup> <https://www.encyvermont.com/services/income-based-assistance/mobile-home-replacement>

<sup>2</sup> <https://www.vtenergydashboard.org/stories/encyvermont-zero-energy-modular-initiative>

<sup>3</sup> <https://migrantjustice.net/milk-with-dignity-campaign>

<sup>4</sup> <https://www.americanimmigrationcouncil.org/research/immigrants-in-vermont;>  
<https://migrantjustice.net/about>

- 2) The available financing options—e.g. through the USDA and Federal Farm Credit Banks—pose onerous mortgage loan processes and are often not attainable due to the heavy debt situation many Vermont dairy farms are operating under and/or don't support the housing of multiple unrelated residents; and
- 3) An incomplete picture of existing labor housing, number of migrant workers, and the demographics of these workers has resulted in an incomplete assessment of immediate housing and welfare needs.

This project team will lend your creativity and research acumen to address this suite of challenges. Work will include:

- Baseline site assessments and evaluations for dairy farms in Addison County to identify need
  - There are an estimated 12 dairy farms in Addison County that are not affiliated with Milk with Dignity. Needed assessment elements include age, status, and specifications of current housing (including potential monitoring data re. indoor air quality), number of rooms offered in current housing, number of year-round laborers per housing unit, their relation to each other, and demographic details (e.g. gender, age, etc.)
- Case studies of replacement homes on Milk with Dignity farms to demonstrate success of program
- Researching and developing proposals for creative financing solutions – e.g. partnerships with land trusts, revolving loan funds, non-profits serving as developers and property managers, etc.
- Build upon existing guidance documents that Peter has developed—e.g. process documents for successful installations elsewhere—by adding your findings from the above bullets to develop a blueprint for expanding the FLHI.

*Additional stakeholders to be in touch with:*

- *John Ryan – VHCB consultant studying VT farm labor housing burden*
- *Lise Anderson of Addison Allies – an organization supporting migrant workers in Addison County*
- *Dan Baker at UVM*
- *Tom Fritz – Executive Director of Milk with Dignity program*

## **Project #2: Replace Your Ride in Vermont**

*Partners: Cara Robeck, Network Manager, Energy Action Network and the Co-Chairs of the Replace Your Ride Action Team: Linda McGinnis, EAN Senior Fellow and Peggy O'Neil-Vivanco, VT Clean Cities Coordinator*

### Introduction

The goal of Replace Your Ride is to help low-income Vermonters switch to clean transportation options affordably, while also accelerating the reduction of greenhouse gas emissions from transportation in Vermont. It would offer up to \$3000 cash incentive to lower-income Vermonters to *scrap an older high-polluting vehicle* and switch to one of the following clean transportation options:

- A new or used Electric Vehicle (or Plug-in Hybrid),
- Electric Bicycles or Motorcycles,
- Vouchers for public transit, shared-mobility options, or private ride hailing. (Options could include **public transit passes**, membership in **CarShare VT** or bike-share programs, vouchers for **ride hailing** options like Lyft/Uber and **Capstone's new mobility rides.**)

For more detailed information, please refer to the accompanying [project description and FAQs](#).

### Project Need

Your team will assist the Energy Action Network on the proposed "Replace Your Ride" project by providing critical research, mapping and program outreach materials. The scope of work in support of the project will include 1) conducting supporting research and developing critical background materials for project implementation in Vermont and 2) developing survey/interview materials to support (and possibly perform) outreach activities aimed at strengthening the impact of, and building support for, the Replace Your Ride (RYR) project from stakeholders across Vermont.

### *Supporting Research*

Vermont Mapping Data: Identify and map transportation options and infrastructure across the 14 counties in Vermont to assist in identifying gaps and targeting outreach. Ideally, the product would be a series of comparable maps in most of these core areas by county:

- Model Year of current vehicles (DMV data)
- EV/PHEV distribution (new and used) from Drive Electric Vermont
- New and Used car dealerships
- Income distribution (Energy Burden Report)
- Charging infrastructure - Level-2 and Direct Current Fast Charging (DCFC)
- Fixed transit routes
- Bike infrastructure

### *Outreach Protocol Development*

In order to identify how Replace Your Ride might benefit low-income Vermonters, and whether they might be willing and able to participate, it is important to understand both needs and

challenges facing low-income Vermonters in transportation, as well as their desire to switch to cleaner options.

Using both existing survey and transportation/income information, and undertaking interviews with those who work closely with low-income populations, this team will develop questions and suggest the best means to generate that information (survey/interviews/focus groups). This could include:

- Research existing survey data (The Nature Conservancy Northeast Rural Transportation Survey, the Union of Concerned Scientists Rural Transportation Report, etc.)
- Research existing transportation/income data in Vermont (Energy Burden Report, EAN transportation equity research, etc.)
- Research quantitative results of similar programs across California under the Clean Cars 4 All program, e.g. the relative success of each type of option in the programs (e.g., new PEVs, used PEVs, Electric Bikes/motorcycles, vouchers for public transit, vouchers for private ride-share options)
- Interview key partner groups: Efficiency Vermont (Energy Burden Report Authors); Community Action Organizations; California Community Partner agencies, Used Car Dealers
- Collect quotes on how this type of program could improve the lives of potential beneficiaries from existing programs like those in CA

Once the above research is completed, this team will develop specific outreach/survey questions for prospective participants. In addition to the questions you develop based on your research, baseline questions of interest to your partners include:

- Living situation (own, rent a house, apartment), rural, urban
- Transportation barriers
- Estimated costs of current transportation option (fuel/maintenance; ride share/taxi costs)
- Level of convenience of current transportation option
- Ideal transportation options (and what they could/would include or offer)
- Awareness & availability of transportation options
  - Transit
  - RideShare
  - Vanpool
  - CarShare
  - Biking/e-biking
  - Other
- Awareness about EVs and EV charging
- Awareness of state and utility incentive programs
- Cost threshold for purchase of a new or used vehicle

Your partners also welcome your recommendations for the best way(s) to obtain this information, i.e. via a survey instrument or by establishing interview and focus group protocols based on the transportation outreach questions developed.

### **Project #3: Strategic Blueprint for Climate Justice Jobs: How to Create a Diverse Workforce in Service of the Climate Economy**

*Partners: Johanna Miller, Energy and Climate Program Director, Vermont Natural Resources Council; Lauren Hierl, Executive Director, Vermont Conservation Voters; and Catherine Crawley, Chair, Stowe Energy Committee*

#### **Introduction**

The state of Vermont has a series of emissions reductions and renewable energy generation targets detailed in the state's Comprehensive Energy Plan.<sup>5</sup> After the successful passage of the Global Warming Solutions Act in Fall 2020, these goals are now legal requirements. Required emissions reductions are linked to three time periods:

- 2025: not less than 26% below 2005 emissions (Paris Agreement goal)
- 2030: not less than 40% below 1990 emissions
- 2050: not less than 80% below 1990 emissions<sup>6</sup>

Meeting these climate pollution reduction targets will take an “all hands on deck” approach and is intimately intertwined with increased renewable energy generation and the reduction of energy usage through efficiency. As just one example of how sweeping the changes need to be, the Energy Action Network projects that meeting the 2025 target for the thermal energy sector alone will require 90,000 more heat pumps installed, 25,000 more advanced wood heat systems installed, and 90,000 additional building retrofits.<sup>7</sup> For heat pumps alone, needed installs climb to 160,000 to meet the 2050 reductions. Another example comes from our Addison County Senator Chris Bray, chair of the Senate Committee on Natural Resources. He introduced this current legislative session an ambitious proposal to weatherization 120,000 homes over the next 10 years.<sup>8</sup>

While these requirements are critical, many are now asking whether we have the workforce to actually complete the needed installations, weatherization projects, and retrofits demanded. Further, much-needed attention has been directed towards ensuring that the needed transitions are as just and equitable as possible. This is being looked at from two standpoints—the first being ensuring that Vermonters with the highest energy burdens<sup>9</sup> (i.e. the percent of one's income spent on energy) receive priority for weatherization and the installation fossil-fuel free heating systems. The second links back to the workforce / jobs question. Clean energy employers are already reporting hiring difficulties, especially outside of the Burlington area. Yet salaries for these jobs earn wages well above the state median hourly wage and represent an opportunity to develop training and apprenticeship programs for un- or under-employed Vermonters. Through deliberate planning, there is also an opportunity to actively recruit and train BIPOC, New American, lower-income, and other Vermonters from historically marginalized communities to be part of this workforce.<sup>10</sup>

---

<sup>5</sup> [https://publicservice.vermont.gov/publications-resources/publications/energy\\_plan](https://publicservice.vermont.gov/publications-resources/publications/energy_plan)

<sup>6</sup> <https://legislature.vermont.gov/bill/status/2020/H.688>

<sup>7</sup> <https://www.eanvt.org/longform/2019-apr-key-findings/>

<sup>8</sup> <https://vtdigger.org/2021/01/25/ambitious-proposal-seeks-to-weatherize-120000-vermont-homes-over-10-years/>

<sup>9</sup> <https://www.efficiencyvermont.com/news-blog/whitepapers/vermont-energy-burden>

<sup>10</sup> <https://www.eanvt.org/longform/2019-apr-key-findings/>

## Project Need

There are a diverse array of Vermont stakeholders that have begun to discuss and conceptualize what such training and apprenticeship programs might look like—some are tied to the needed weatherization and renewable energy installation programs and others, like a proposed Vermont Jobs Recovery Corps, are more holistic in nature bringing in dimensions related to food systems, health, resilience, equity, and security.

This team will draw on insights from key stakeholders working on these concepts (Appendix A), consider the capacity of established organizations in Vermont (Appendix B), and research model programs from other states and those being proposed at the federal level (Appendix C) to develop a blueprint for a “Climate Justice” Jobs Corps to ensure that Vermont can meet both its justice and equity goals as well as its emissions reductions requirements. This Climate Justice Jobs Corps might be a standalone entity or one component of a broader “jobs/recovery corps”.

Broad framing questions to consider include: 1) Where are the needs 2) who would be doing the work, 3) who is being helped (via job training or as beneficiary of work being completed), 4) how does it help VT reach its climate goals, 5) how does it help achieve equity (which needs to be defined), 6) how much will it cost and how will it be funded, 7) what type of program would offer the “biggest bang for the buck”, 8) who are the needed partners, and 9) is it a good idea (feasible, advisable)?

Desired blueprint components include:

- “Backcasting” from state’s 2025, 2030, and 2050 emissions and renewables targets. What vision, strategies, and recommendations are needed to achieve these targets from a workforce perspective?
- How many workers will be needed in the various sectors of a climate economy and what skills are needed? For relevant businesses, how do they reach potential workers?
- Blueprint should be sure to address who is being recruited and trained – i.e. how to attract, recruit, and retain a diverse workforce
  - Attention to this through conversations to identify wants & wishes, current gaps hindering connections to existing opportunities, desired training opportunities, etc.
- How would the program prioritize an equitable approach that supports communities most at risk and most in need?
- Strategies and recommendations for better connecting to labor union leaders should be included, as well as for (re)training Vermonters working in more traditional fossil fuel delivery companies to support the potential expansion of the services this sector provides to include other energy services (e.g. weatherization, heat pump installation etc.)
- Blueprint should address funding challenges, i.e. identify creative public/private partnerships that avoids pitfalls of short-term stimulus funding and connect with federal congressional delegation liaisons to learn how VT can best position itself to receive and utilize other funds.

The above broad framing questions and blueprint components should be discussed with key stakeholders to identify other possible priority areas of focus. Presentation of this teams’ work could be in the form of a stakeholder summit, a presentation to the Climate Council, or through the annual conference of the VT Energy and Climate Action Network.

## Appendix A – Stakeholders to Engage With

Senator Kesha Ram (work with and through Sen. Ram for ideas on how to refine this focus/process and outreach to BIPOC and marginalized communities), Center on Rural Innovation, Montpelier City government, Commissioner of Forest Parks and Recreation, VT Audubon, green building experts, affordable housing coalitions, town energy committees (e.g. Stowe and Charlotte), EAN fellows, VT Council on Rural Development, Vermont Gas Systems, Agency of Commerce and Community Development, Climate Council, Climate Caucus, key staff leads in Vermont’s Congressional delegation (Sens. Leahy, Sanders, Congressman Welch) etc.

- The significant transformation required demands a variety of skills, strategies and partners. Your conversations with stakeholders will help you more clearly articulate the specific role a climate corps could play within this broader landscape.

## Appendix B – Starting List of Existing Organizations in VT to learn from (these orgs support similar work and may offer opportunity for alignment)

AmeriCorps  
SerVermont  
Vermont Works for Women  
Vermont Youth Conservation Corp  
Regeneration Corps  
ReSource  
Alchemist Foundation

## Appendix C – Starting List of Model State and Federal Programs:

[California Climate Action Corps](#)  
[Green City Force](#)  
[Hawaii Kupu Aina Corps and Aloha Connects Innovation](#)

### January 27, 2021 Biden Administration Executive Order on Tackling the Climate Crisis at Home and Abroad

*Sec. 215. Civilian Climate Corps. In furtherance of the policy set forth in section 214 of this order, the Secretary of the Interior, in collaboration with the Secretary of Agriculture and the heads of other relevant agencies, shall submit a strategy to the Task Force within 90 days of the date of this order for creating a Civilian Climate Corps Initiative, within existing appropriations, to mobilize the next generation of conservation and resilience workers and maximize the creation of accessible training opportunities and good jobs. The initiative shall aim to conserve and restore public lands and waters, bolster community resilience, increase reforestation, increase carbon sequestration in the agricultural sector, protect biodiversity, improve access to recreation, and address the changing climate.<sup>11</sup>*

---

<sup>11</sup> <https://www.whitehouse.gov/briefing-room/presidential-actions/2021/01/27/executive-order-on-tackling-the-climate-crisis-at-home-and-abroad/>