

The Four MRV Group Projects:

Group A:

Compost Power

CompostPower.org, Vermont Compost and Highfields Center for Composting have been collaborating to develop best practices on methods of using specially designed compost-mounds (made of shredded wood biomass such as bark mulch, etc) along with embedded heat-exchangers and water-circulation systems to provide steady streams of 120+ degree water for extended periods of time (6-12+ months). Initial experiments and research based on the “Jean Pain Method” have shown much promise in terms of providing low-cost emission-free heat from local renewable resources to be used for space heating, domestic hot water and greenhouse heating.

Students will:

1. Research the “Jean Pain Method” of composting and see how agricultural operations around the country are utilizing this composting method to generate heat.
2. Develop educational materials for agricultural enterprises in the MRV about the potential of this concept both in terms of the heat-energy and in terms of the value of the finished compost that can be applied to agricultural purposes.
3. Survey and compile responses from farms and greenhouse operators in the Mad River Valley to develop a database of potential interest in using compost to heat water for space-heating, greenhouse heating and process-heat-loads.
4. Finally students will provide a written report and presentation on the education materials they developed and survey responses collected from the community.

Local Website: CompostPower.org

Group B:

Waitsfield PACE

The Town of Waitsfield was awarded an Energy Efficiency and Conservation Block Grant (EECBG) from the Department of Energy (DOE) for the development of a program by which Waitsfield homeowners could receive funding for domestic energy-efficiency measures in the form of a low-cost loan to be repaid over time as an annual supplement to their property tax bill. This program has been known more recently as a Property Assessed Clean Energy (PACE) program and is a strategy being pursued in towns and cities nationwide.

Students will:

1. First research the other PACE programs nationwide.
2. Develop a survey of Waitsfield residents to gauge awareness about the program and evaluate resident interest in making energy efficiency improvements or adding renewable energy systems on their home with the support of PACE financing.
3. Identify any lingering barriers or knowledge gaps with the program and provide recommendations for addressing these issues..

4. Finally students will provide a written report and presentation on the results of their research, survey results, and recommendations. These will not only serve to inform the best practices for the Town of Waitsfield to take the next steps in rolling out a PACE program, but also to support the broader statewide initiative of Efficiency Vermont.

Group C:

The Mad River Valley Health Center

The MRVHC tenants presently include four mental health professionals, a physical therapist, a Chinese medicine/acupuncture practice, and massage therapist. As they enter their 30th year as stewards for our community-owned, not-for-profit health care facility, the Board of Directors would like to develop a current assessment of local health care resources and compile updated data on the needs and health status of members of our community.

Students will develop a snapshot of our Valley from a health perspective, by completing the following:

1. MAP local practitioners and area health resources.
2. Develop a strategy and survey instrument to administer a community health needs assessment.
3. Collect data and summarize local health needs.
4. Finally using data from both the mapping and community assessment projects, students will provide a written report and presentation on the results of their survey and formulate recommendations for improving the health status of valley residents.

Group D:

Solar Farm

MRVE.net is a newly organized co-operatively owned/managed project in which property owners will be able to “go solar” by owning part of a solar-farm to be installed on land that is being donated by Sugarbush.

Students will:

1. Research other co-operatively owned/managed solar projects nationwide.
2. Survey and compile responses from MRV businesses, farms and residents regarding potential interest in a pending “cooperatively owned solar farm” that is being organized as Vermont’s first community-scale “group net metering” project.
3. Develop materials to help educate local property owners about solar power (photovoltaics) and about net-metering in general.
4. Finally students will provide a written report and presentation on the education materials they developed and survey responses collected from the community.

Local Website: MRVE.net