

## The “New Economy” Can Strengthen Vermont’s Working Landscape

The July 10, 2011 issue of Time Magazine ran an article titled “Want to Make More than a Banker? Become a Farmer!” It is about the resurgence in the value of Midwest grain farms as food and energy (with the impact of ethanol) prices rise globally.

VT farms and forest must find new sources of income for our celebrated working landscape is to survive and thrive. While Vermont farmland, with our dominant dairy industry and fast-growing diversified vegetable and value-added farms, is not seeing a doubling in value in the past 6 year like the Midwest, our farmers and foresters are likely to see better income opportunities in coming decades.

It’s my view that in the coming years of slower, “peak petroleum” economic growth, Vermont’s farms and forests can play a key role in enhancing economic prosperity and resilience. I have focused on the food side of this equation for almost 30 years through Gardener’s Supply and the Intervale Center plus through board membership with VNRC, VT Land Trust, VT Sustainable Ag Council, and helping VT Businesses for Social Responsibility to launch Farm to Plate. VT Sustainable Jobs Fund just completed the Farm to Plate statewide plan for our food system. It concluded that the direct economic impact of increasing farming and food production in Vermont by just 5% (by Vermonters buying more local food and/or selling more to New England) would generate \$135 million in annual output for the VT economy.

The best way to bolster the economic viability of working landscapes is to generate a higher return on investment per acre of working lands, both financial ROI and return to nature’s capital.\* The Farm to Plate plan offers many smart strategies for this outcome, and the good news is that State leadership in Montpelier understands this opportunity and is committing to work with the private sector to get there.

As the Time magazine article notes, in addition to food, the renaissance in farm value and employment is being triggered by another major force in today’s economy that can help VT landowners increase their financial return beyond food: Clean Energy!

“Peak oil” has arrived and we are approaching “peak coal” and “peak natural gas.” We have extracted half the known reserves of these fossil fuels and there’s no question that extracting the other half will cost more and more. Energy costs will increase. With VT Yankee nuclear plant closing in 2012, we will experience new energy supply and cost challenges. But VT has been innovating in the area of land-based renewable energy for decades with the McNeil wood-fired electrical generating plant, BERG showing the way to optimize our biomass resources for heating, dairy farmers generating electricity from manure bio-digesters, and biodiesel replacing on-farm fossil fuel use.

This transition to a locally owned, more resilient and more affordable (as fossil fuels costs rise) energy system can accelerate with the right policies and incentives. Our working landscape can play a central role and benefit from this shift. Innovative Group Net Metering programs, State tax credits and financing support for clean energy projects, and the VT Standard Offer (the SPEED program sets the nation’s first statewide price for

renewable energy projects) are birthing hundreds of new of clean energy projects – owned by Vermonters – all across the State.

VT energy experts suggest VT's working landscapes offers the potential for wind, solar, biomass and methane projects to generate over 50% of our electrical energy by 2030 (they generate 5% now). This clean, safe, local energy would more than replace the 30% of our electricity we get from VT Yankee. Solar and wind projects will be the key to this happening.

To learn more about this “new economy” opportunity I developed a 150 thousand kWh solar array last year to provide all electrical power for Farm at South Village, a CSA farm I started in 2009. Excess power from this array is provided through Green Mountain Power and their Group Net Metering program to the City of South Burlington (for traffic and street lights) and to South Village Community. Plus, the CSA has locked in energy prices for the next 25-30 years...now there's a long term competitive advantage vs Calif tomatoes and lettuce!

Now, I'm working with Encore Redevelopment, a leading clean energy project developer, to develop an exciting wind project in Derby Line under the VT SPEED program. This project is comprised of two 2.2 MW turbines located on adjacent farms, the Chase Farm and the Grandview Farm, in the Northern Plateau among the corn rows. It is projected to generate 8 million kWh of carbon-free electricity each year. Besides helping the two dairies control their energy costs and generate extra income, these wind turbines would keep 4,000 metric tons of CO<sub>2</sub> out of the atmosphere...comparable in CO<sub>2</sub> terms to keeping 700 cars off Vermont roads each year.

The nearly \$100 million we currently pay to get almost 1/3 of our electricity from a risky and aging power nuclear plant also sends a substantial flow of profits to corporate owners outside Vermont while we bare the risk. Instead, we can start using that money to fund Vermont's transition to clean energy, and we'll also keep our dollars circulating in Vermont, helping to build a more resilient economy.

\* Partnering with Vermont's farmland and forests to produce more needed products sustainably will generate financial ROI as well as the value that comes from healthy forests converting CO<sub>2</sub> to oxygen, restored soils sequestering atmospheric carbon and protected wetlands purifying water. We are some years away from a new economic analysis framework that has the ROI on nature's capital on the same ledger as the ROI on our financial capital, but we will get there. The Gund Institute for Ecological Economics at UVM is a national leader in developing new economic analysis that values nature's services.