Energy Innovation Grant Program Submitted January 22, 2021

Project title: Comprehensive Energy Plan for Vernon County

Applicant: Vernon County Energy District (VCED)



Table of Contents

- Executive Summary: Pages 2-4
- Merit Review Criteria: Pages 5-12
- Appendix A: VCED Articles of Incorporation
- Appendix B: Vernon County 25x25 Resolution
- Appendix C: City of Viroqua Municipal Energy Plan
- Appendix D: 2010 SWDRC 25x25 Report
- Appendix E: LEG Up Finance Program
- **Appendix F**: Letters of support (28)
- Appendix G: Winneshiek Energy District "Geography of Change"
- Appendix H: Winneshiek Energy District "Power of 10"
- Appendix I: Vernon Electric Cooperative On-bill financing cover letter
- Appendix J: Vernon Electric Cooperative Community solar fact sheet
- Appendix K: Drive Electric Week showcase

3.3. Executive Summary

Project Description.

As the board of the Vernon County Energy District (VCED), we respectfully submit this Comprehensive Energy Planning proposal. We propose to organize this energy district in Vernon County, guided by the vision of "100% locally-owned, efficient, renewable energy by 2050." Our first step in realizing this vision is to develop a comprehensive energy plan for Vernon County. Although this project is different from traditional planning projects it will directly impact the strategic objectives set forth in the EIGP.

What is an energy district?

Inspired by the Soil & Water Conservation Districts formed in the 1930s, an Energy District is a non-profit organization that serves a specific county. It fosters the development of locally tailored energy solutions that account for the demographic, geographic, and regulatory factors in that county. An Energy District empowers local energy users to make change, facilitates cooperation between diverse public and private stakeholders, and stimulates the local economy by promoting investment in energy projects and jobs. Through education and community outreach, an Energy District increases adoption of energy efficiency measures and renewable energy production, thereby reducing carbon emissions and other pollution. Finally, an Energy District improves community resiliency through distributed energy generation and storage.

How will VCED address comprehensive energy planning in rural Wisconsin?

Unlike urban areas where one or two utilities dominate the energy sector, rural communities are served by many municipal, investor owned, and cooperative utilities. In Vernon County alone we are served by eight electric utilities; Vernon Electric Coop (Dairyland),Xcel Energy (IOU), Scenic Rivers Coop (Dairyland), Alliant Energy (IOU), Richland Electric Coop (Dairyland), Westby Municipal (WPPI), Viola Municipal (UMMEG), and La Farge Municipal (UMMEG). Each has its



own policies, tariffs, and regulatory framework. A comprehensive energy plan must account for the diversity of policies across utilities, and tailor solutions to benefit rate payers in each utility territory. VCED will coordinate diverse stakeholders to address our shared challenges and ensure that the benefits of a clean energy future are shared across sectors, geographic lines, and socio-economic differences.

How will VCED meet the stated Strategic Objectives?

To support innovative energy technologies that have the potential to serve as a model or better inform decision-makers on emerging trends in the energy sector.

- An energy district is, in itself, an innovative approach to meeting our energy challenges. Inspired by Soil & Water Conservation Districts of the 1930s, the first energy district in the U.S. was formed just 10 years ago in Iowa. Several other Iowa counties have since formed Energy Districts, but Vernon Co. is the first to bring this model to Wisconsin.
- By sharing best practices across multiple utilities, municipalities, businesses, and individuals in our county, decision makers will better understand and appreciate the benefits - including cost savings, local wealth generation, and increased resiliency - of emerging energy trends like electrification and on-site solar generation and storage.

To help provide equitable access to the benefits of clean energy, efficiency, and preparedness by reaching broad applicant types. This includes applicants who may traditionally face barriers to adopting clean energy solutions and the benefits they provide, or whose communities may be disproportionately impacted by the negative effects of traditional fossil fuel and inefficient energy systems.

- Because energy costs absorb a proportionately larger share of the household budget of lower-income families, cost savings from energy efficiency improvements developed in our plan will provide greater benefit to such households.
- Working with partners like <u>Couleecap</u>, VCED will incorporate the energy challenges faced by low-income households into our comprehensive energy plan and ensure that the implementation of the plan generates benefits for those households.
- Community solar, innovative financing options, and cost savings from energy efficiency improvements will help electric users who traditionally face barriers to adopting clean energy solutions to participate in meaningful ways in a clean energy future.
- Many Vernon County communities have been disproportionately impacted by flooding which is more intense and increasingly frequent due to climate change - over the last 10 years. VCED's comprehensive energy planning efforts will ensure that members of those communities benefit from the transition to a locally owned, clean energy future.

Key Partners and Stakeholders

Project Partners

- Winneshiek and Clayton County (IA) Energy Districts Provide support and share learnings from 10 years of energy planning, community outreach, and efficiency assessments.
- **Couleecap** Communicate the energy needs and priorities of low income households and recruit members to participate in energy planning.
- Vernon Electric Cooperative Provide anonymized energy usage data, facilitate survey of energy use by co-op members, educate stakeholder groups about incentives available for energy efficiency and renewable energy projects.
- City of Viroqua Demonstrate 25x25 planning process for municipal governments.
- City of Hillsboro, Village of La Farge, and Vernon County governments Develop and refine energy plans.
- Ethos Green Power Provide technical support in evaluation of solar energy generation and storage potential.
- Westby Coop Credit Union and Local Energy Generation Educate stakeholders about low-interest financing for energy efficiency and renewable energy projects.

Stakeholder Groups

Utilities, Community Organizations, Businesses, Municipal governments, School Districts, Homeowners and renters.

Together the stakeholder groups will participate in the various elements necessary to develop a comprehensive energy plan: evaluation of energy use and sources; determining local potential for energy generation; creation of goals for energy savings and generation; and education about renewable energy technologies, efficiency improvements, and financing opportunities.

• Project Objectives and Metrics.

- Calculate and analyze countywide energy demand from all sources, potential savings that could be realized through efficiency improvements, and the amount of renewable energy generation necessary to meet demand.
 - **Metrics**: Successful when the countywide analysis is complete.
- Measure and evaluate current energy use and sources for representatives of each stakeholder group to assess accuracy of baseline estimates.
 - **Metrics**:Successful when the following number of representatives from each stakeholder group completes an energy evaluation.
 - 4 Municipalities or school districts
 - 2 Utilities
 - 20 Businesses or community organizations
 - 300 Homeowners or renters, including 30 low-income households.
- Create goals for efficiency related energy savings and local, renewable energy generation with a graduated goal schedule (ex. 25% by 2025, 40% by 2030, etc)
 - **Metrics**: Successful when the following number of representatives from each stakeholder group has created efficiency or renewable generation goals.
 - 2 Municipalities or school districts
 - 1 Utility
 - 10 Businesses or community organizations
 - 50 Homeowners or renters, including 5 low-income households.
- Evaluate potential for locally owned renewable generation, in terms of desirability, affordability, and practicality of onsite and community solar.
 - Metrics: Successful when 2 of the 3 components below have been completed.
 - 300 stakeholders participate in a survey measuring their interest in energy efficiency and renewable energy projects.
 - 100 stakeholders investigate on-bill financing, LEG-up loans, or other financing options.
 - 20 stakeholders request a site assessment or project quote from a renewable energy contractor.
- Establish an Energy Club that meets monthly to educate participants, demonstrate local initiatives already in progress, and build a network of local advocates.
 - **Metrics**: Successful when the Energy club has met six times or achieved attendance by 40 unique participants.

• Reference Materials List. Provide a list of any reference materials included.

- 1. VCED Articles of Incorporation
- 2. Vernon County 25x25 Resolution
- 3. City of Viroqua Municipal Energy Plan
- 4. 2010 SWDRC 25x25
- 5. LEG Up Finance program
- 6. Letters of support (28)
- 7. Winneshiek Energy District "Geography of Change"
- 8. Winneshiek Energy District "Power of 10"
- 9. Vernon Electric On-bill financing
- 10. Vernon Electric Cooperative Community solar fact sheet
- 11. Drive Electric Week showcase example from 2019

3.4. Merit Review Criteria

3.4.1. Eligibility and ability to achieve the objectives

VCED is a 501(c)(3) nonprofit and is eligible under the application criteria. As the proposed project consists of planning efforts and does not involve modifications to public buildings or historical resources, the ARRA does not apply.

VCED is an innovative, inclusive effort designed to move everyone in our county toward efficient and sustainable energy use and generation. Our goal is 100% locally-owned, efficient, renewable energy. This requires participation from producers and consumers, public and private entities, organizations and individuals. Organic Valley, GoMacro, and the Viroqua Food Co-op represent some of the many area businesses that have invested significantly in renewable energy production. Vernon County, the City of Viroqua, and the Villages of La Farge and Viola participated in the 2010 Wisconsin Energy Independent Community Partnership and have taken various steps to create and implement energy plans. Countless county residents have invested in solar panels, wind turbines, and electric vehicles. From the creation of the <u>Soil and Water</u> <u>Conservation Districts</u> (1933) to the founding of <u>Organic Valley Cooperative</u> (1988), the people of our county continue to demonstrate the cooperative spirit, prioritization of conservation, and pioneering grass roots thinking that will ensure our success.

The Board of Directors and staff of VCED bring decades of experience in engineering, renewable energy, community organizing, and energy planning to this project.

<u>Alan Buss - President</u>: Al has a decade of experience in municipal (Town of Kickapoo) government. His professional background includes over 20 years of web-based software development for clients ranging from dairy industry manufacturers, local businesses, and municipal governments. For five years he managed training and education for a department of over 700 employees at a large printing company. He is currently working on a load management system to maximize the use of solar energy as it is generated. This system controls his EV charger(amperage, on/off), freezer, refrigerator, and water trough heater. The impact of intelligently controlling these few loads is already proving quite significant.

<u>Samantha Laskwoski - Vice President</u>: Sam owns and operates a small business powered almost entirely by renewable energy. She is a founding member of Local Energy Generation (LEG), which, in partnership with Westby Co-op Credit Union, has distributed over \$1 million in low interest loans for renewable energy and energy efficiency projects since its inception. Sam is a member of the La Farge Community Solar Committee as well as a community group focusing on rural community resiliency in the face of climate change. She has also provided technical and communications support for solar installation projects in the Town of Stark and the Village of La Farge.

<u>Rob Danielson - Secretary</u>: Rob is an energy planner for the Town of Stark in Vernon County, Wisconsin and representative to the Inter-Municipal Energy Planning Committee comprised of 10 Wisconsin municipalities. IMEPC was asked to be one of eleven parties participating in the PSC's Grid Modernization study in 2019. He is also a member of the La Farge Community Solar Committee. As Secretary of S.O.U.L. of Wisconsin (Save Our Unique Lands) since 2012, Rob has aided a large array of ratepayer and community initiatives working closely with nationally recognized specialists in the development of Non-Transmission Alternatives based on accelerated end user applications of energy efficiency, load management, solar and solar plus storage. As SOUL's intervention agent in several cases before the PSC, Rob has become familiar with MISO policies, PSC review process, state energy laws, and energy planning on state and regional levels.

<u>Alicia Leinberger - Treasurer</u>: Alicia has two decades of experience in various aspects of renewable energy technology and electricity markets. As founder and owner of a rural solar installation company, she brings the perspective of working with a diversity of private and public entities on energy planning and implementation of onsite production. In addition, she serves on the board of RENEW WI and brings to this project an understanding of state policy, as well as familiarity with the various utility policies and tariffs. In addition, her 20 years of experience operating a renewable installation business affords our groups insight into workforce development and training opportunities.

<u>Toby Grotz - Director</u>: Toby is an electrical engineer with a background in power systems design. He has designed electrical systems for coal, natural gas and nuclear power plants. He has been effectively managing projects in the energy and utility industry and researching alternative energy systems for 40 years. His work experience includes design and support for capital improvements for power plants rated up to 1800MW. Toby has also conducted research on the relationship of resource depletion to energy use both internationally and in the U.S.

<u>Wayde Lawler - Project Coordinator</u>: Wayde has over a decade of experience in sustainable food projects, education, and community organizing. He has also served on the boards of various non-profit organizations. Wayde helped design and build his own home, incorporating energy efficiency techniques and an innovative DC solar PV water heating system.

3.4.2. Budget Justification and Cost Share ("Match")

Personnel - Total: \$80,400. Grant-funded: \$40,200. Match: \$40,200.

- Project Coordinator: 30 hours/week at \$40/hour for 52 weeks. Total: \$62,400. Match: \$31,200, donations or in-kind.
- Energy Assessment Specialist: 15 hours/week at \$30/hour for 40 weeks. Total: \$18,000. Match: \$9,000, donations or in-kind.

Fringe - NA

Equipment - Total: \$6000. Grant-funded: \$6000. Match \$0

- Blower door for air leakage tests: \$5500
- Infrared cameras and software for energy assessments: \$500

Supplies - Total: \$13,850. Grant-funded: \$13,850. Match: \$0.

- Kill A Watt Energy (or similar Monitors: 25 at \$30/ea. Total: \$750
- SENSE (or similar) Energy Monitors: 40 at \$300/ea. Total: \$12,000
- Office supplies: \$500
- Laptop computer, refurbished with MS Office software: \$400
- All in One Printer: \$200

Travel - Total: \$4368. Grant-funded: \$4368. Match: \$0.

- 150 miles per week at \$0.56/mile for 52 weeks: \$4368

Contractual - Total: \$15,800. Grant-funded: \$13,050. Match: \$2750

- Programmatic presentation by representative of Winneshiek Energy District: \$300
- Design services for website and educational materials: Total: \$5500. Match: \$2750, donations or in-kind.
- Training for home energy audits: \$2000
- 40 home energy audits including blower door test, installation of SENSE meter, and detailed report at \$200/ea: \$8000

Other - Total: \$8100. Grant-funded: \$600. Match: \$7500

- Event and office space rental \$600 (events), \$500/mo for 12 months (office). Total: \$6,600. Match: Ethos Green Power donation of office space valued at \$6,000
- Incentive for participants in energy use and priority survey \$500/ea for three service providers. Total: \$1500. Match: \$1500, donations or in-kind.

Indirect - NA

<u>Cost Share</u> - \$50,450. This represents 39.25% of the total project cost of \$128,518. Ethos Green Power will contribute up to \$20,000 in direct and in-kind contributions. VCED will raise \$30,450 in donations and in-kind contributions from community partners.

3.4.3. Savings and Payback.

VCED's comprehensive energy plan alone will not produce any direct cost savings. Instead, this plan will create awareness of the potential savings, and the return on investment available through energy efficiency improvements and renewable energy generation. Implementation recommendations will highlight opportunities for stakeholders across the county to lower their energy bills and retain wealth in our communities.

Additionally, research has shown that simply paying closer attention to our energy bills results in an average savings of 13%.¹ VCED plans to engage 300 households in an evaluation of their energy use. Given that the average residential electricity customer in WI spends approximately \$84/month on the usage component of their electricity bill (700kWh at .12/ea), this simple energy evaluation could result in over \$3200 in monthly savings for participants.

3.4.4. Energy Savings and Environmental Impact.

As in 3.4.3, the impact of this project will be in demonstrating the potential for savings and educating stakeholders about these possibilities. Applying the 13% average savings across the 300 households (700kWh approximate use) that complete an energy use evaluation would result in a total savings of 27,300 kWh and 19.3 metric tons of Carbon Dioxide Equivalent emissions per month, from reductions in electricity consumption alone.

Beyond passive savings, actual implementation of energy plan recommendations could result in substantially more energy savings. For example, over the last 10 years, Winneshiek District has saved roughly 118,000 metric tons of carbon reduced through locally owned energy efficiency and renewable energy over practice lifetimes.²

¹http://soulwisconsin.org/Documents/13X13_EfficiencyHandout.pdf 1/20/2021 ²https://energydistrict.org/wp-content/uploads/2020/11/WED-10-years-impact-share.pdf pg. 4, 1/20/2021

3.4.5. Equity and Energy Justice.

Working directly with partners like Couleecap (an organization dedicated to fighting poverty), VCED will incorporate the energy challenges faced by low-income households into our comprehensive energy plan and ensure that the implementation of the plan generates benefits for those households. Because energy costs absorb a proportionately larger share of the household budget of lower-income families, cost savings from energy efficiency improvements developed in our plan will provide greater benefit to such households.

Education about community solar, innovative financing options like on-bill financing and the LEG Up Loan Program, and savings from energy efficiency improvements will help electric users who traditionally face cost barriers to adopting clean energy solutions to participate in meaningful ways in a clean energy future.

Many Vernon County communities have been disproportionately impacted by flooding - which is more intense and increasingly frequent due to climate change - over the last 10 years. Municipal governments, utilities, businesses, and individuals from these communities are important stakeholders in our comprehensive energy planning efforts and VCED will work to ensure that members of those communities benefit from the transition to a locally owned, clean energy future.



Community Solar Farm - Vernon Electric Cooperative

3.4.6. Financial Leverage and Economic Impact.

In our initial round of fundraising, VCED has raised \$4,000 of seed money. This funding has allowed us to hold initial meetings with stakeholders, host a presentation by staff from the Clayton County (IA) Energy District, develop a website and social media presence, and hire a short-term project coordinator. An EIGP award will dramatically accelerate our efforts to achieve a 100% locally owned, efficient, renewable energy future for Vernon County. This funding will enable our organization to extend employment of our project coordinator through the completion of the comprehensive energy planning process. The project coordinator will hold primary responsibility for our education and community outreach efforts, organizing and facilitating meetings with stakeholders and partners in the project, and executing the strategic directives of the Board of Directors. VCED also intends to hire an Energy Assessment Specialist who will coordinate and carry out energy audits, training, and technical consultations. Furthermore, this funding will help cover the cost of designing, developing, and distributing educational and outreach tools and materials. Finally, an EIGP award will facilitate the purchase of a blower door and energy use monitors - critical tools for home energy use and efficiency assessments - and training in their use. VCED will complement EIGP funding with continued community

fundraising, donations of supplies, and additional grant funding to ensure the development of a comprehensive, clean, inclusive energy future for Vernon County.

Based on results produced by the lowa energy districts from which we draw our inspiration, implementation of the strategies developed in VCED's comprehensive energy plan has the potential for significant positive impact on the local economy. For example, in 2019 the Clayton County Energy District generated \$16,238 in total household energy bill savings for participants in their First Step Home Efficiency Program.¹ Since it's inception in 2010, the Winneshiek Energy District has created, retained, or supported over 250 jobs through its investments in the local energy economy.² Building on these models, VCED anticipates equally impressive results in Vernon County. With the implementation of energy efficiency improvements and renewable energy projects, home values will increase and our communities will become more attractive to prospective residents and businesses, creating significant additional potential economic impact.

¹https://claytoncounty.energydistrict.org/about-us/impact/ 1/20/2021. ²https://energydistrict.org/wp-content/uploads/2020/11/WED-10-years-impact-share.pdf pg. 5, 1/20/2021.

3.4.7. Existing Energy Planning Efforts.

As stated, Vernon County, the City of Viroqua, and the Villages of La Farge and Viola participated in the 2010 Wisconsin Energy Independent Community Partnership and have taken various steps to create and implement 25x25 energy plans.¹ Viroqua, county seat of Vernon county, has recently updated their plan in order to meet their goals. VCED Treasurer Alicia Leinberger was instrumental in developing the City of Viroqua's 25x25 plan. Furthermore, the Villages of La Farge, Viola, and Readstown are each developing economic recovery plans. Flood damage has had significant impacts in these villages in recent years: homes were condemned (loss of tax base), families moved away (loss of school enrollment), and damaged homes and spoiled food (economic loss). Incorporating energy planning into their recovery plans will provide economic and environmental benefits to these communities. These existing planning efforts will support and inform the Vernon County Energy District as we expand the vision of the 25x25 project countywide on our way to 100% renewable energy usage by 2050.

¹https://psc.wi.gov/Documents/OEI/EIC%20-%20Energy%20Independent%20Communities/201025x25PlanSWDRC.pdf 1/20/2021.

3.4.8. Energy Resiliency.

Vernon County faces many challenges to energy resiliency. The planning and analysis accomplished through our project will address those challenges and strengthen the resiliency of our communities in a variety of ways.

<u>Weather</u>

Challenge - Flooding in particular has been a problem in our area due to the steep hillsides and rapid runoff that occurs during heavy rainfalls. According to the National Weather Service, between 1844 and 2014, Vernon County had the most (95) flood events of all WI counties.¹ Severe floods occurred every year from 2016 to 2019, only adding to that total. Increasingly frequent and severe flood events have forced utilities and municipal governments to request FEMA recovery funds repeatedly in recent years. Damage to electricity transmission and generation equipment due to flooding and high wind events (also increasingly common) has left communities without power for extended periods of time. For example, in the record setting flood of 2018, the Village of

La Farge was without power for 51 hours.² These outages endanger vulnerable community members who count on reliable power to manage life threatening health issues. Many community members suffer serious financial hardship when power outages occur, for example losses due to spoiled or unsafe food. Repeated power outages also increase risk to utility workers making repairs.

• **Approach** - Energy District planning will address local renewable energy islands in schools, homes, and community owned facilities that can operate without grid connection during flooding and other extreme weather events. Battery storage will help meet critical energy needs until grid service is restored. For example, community members can have a place to charge cell phones, medical equipment, and other critical devices; places to gather and share their experiences (mental health implications); and coordinate support and mutual aid.

Housing stock

- Challenge Many of our rural communities are made up of housing stock more than 50 years old, which means these homes are often not very energy efficient. Higher energy demands for these homes can make on site solar energy generation cost prohibitive. Moreover, power outages during periods of extreme heat or cold can leave residents of these homes particularly vulnerable.
- **Approach** Energy District planning will incorporate energy efficiency improvements for older, less efficient homes enabling residents to shelter in place for a longer period of time during an emergency, especially in extreme heat or cold. Cost savings and decreased energy demand from efficiency measures will make on site solar energy generation and storage more feasible. Where homeowners are not able to install solar and/or storage on their own, they can participate in community solar + storage programs. Finally, our planning project will help ensure that new construction incorporates best practices for energy efficiency and on site energy production and storage.

Transportation

- Challenge Residents of rural areas must often travel significant distances to access employment, healthcare, and important services. Farmers require reliable sources of fuel for operations and to transport goods to market. Rural homes and businesses often rely on liquid propane for heating. These factors combine to make Vernon County and other rural areas vulnerable to dramatic swings in the price of fossil fuels and disruption in the delivery of those fuels.
- **Approach** Energy District planning will help accelerate electrification of rural areas and the transition to electric vehicles. This will buffer our communities from swings in the cost of fuel and ensure that essential services will continue even if liquid fuel distribution is disrupted by extreme weather events or other circumstances.

Building resilient communities is not possible with a continued reliance on fossil fuels. As noted by Secretary-General António Guterres of the United Nations:

"We are telling countries that if they bet on the grey economy, they will have a grey future. Without carbon neutrality, countries will be facing more and more natural disasters, threats to public health, and a dramatic loss in biodiversity." 20 September 2019, New York

The funds received from this grant application will be used to prepare for a bright future by helping the residents, municipalities, utilities, and businesses in Vernon County prepare for a sustainable, resilient future.

¹<u>https://www.weather.gov/images/mkx/images/Flood.jpg</u> 1/20/2021

²"Kickapoo Valley faces long, winding road to flood recovery." La Crosse Tribune, 8/26/2019

3.4.9. Education and Awareness.

Education of stakeholder groups will be essential to the success of this project and will be achieved in multiple ways. These include the formation of an Energy Club; informational resources made available through our website, social media platforms, and presentations; and hands on training.

- Energy Club The Energy Club will serve as one of the primary pathways for VCED to recruit our target of 300 households to participate in energy use evaluations. Energy Club participants will also be recruited to install home energy monitors and create goals for energy efficiency and renewable generation. In addition, participants will engage in monthly exploration of topics in energy efficiency, renewable energy, etc. Topic experts will share presentations and participants will also have opportunities to share practices they have implemented. This peer to peer networking is likely to result in increased implementation of efficiency and renewable practices.
- Informational Resources VCED will develop and share informational resources with stakeholders. With eight utilities serving our county, VCED will strive to compile, understand, and communicate the policies and programs of each utility. Additional resources will cover existing energy incentives, project financing options, energy efficiency improvements, electric vehicles, renewable energy generation, community solar, and more.
- Training VCED will train five interns to conduct home energy audits, perform blower door tests, and install home energy monitors. Once trained, these interns will work with the Energy Assessment Specialist to develop customized recommendations for stakeholders.

3.4.10. Innovation.

A county wide energy district is an entirely new approach in Wisconsin. Overall energy policy and regulatory framework is determined by the state. Energy needs and challenges, however, vary widely across regions, utility territories, etc. Furthermore, coordination of stakeholders across the entire state presents significant logistical and communication difficulties. A typical energy plan - developed for a specific entity like a business or municipality - better addresses specific local factors and makes stakeholder coordination easier to manage. Operating only at this scale, however, makes it difficult to achieve the efficiencies and momentum required to achieve widespread, sustainable change in a larger geographical setting with more stakeholders.

Building our comprehensive energy planning efforts through an energy district will substantially advance the transition to a locally owned, clean energy future. A county unit is focused enough to enable effective coordination with partners and develop approaches that successfully respond to specific local circumstances. At the same time, a county is large enough to engage diverse stakeholders, leverage resources and opportunities, and provide a model of change that can be replicated broadly. In fact, since the formation of the first energy district in 2010, nine other lowa counties have incorporated energy districts, demonstrating the potential for widespread, county-driven momentum of the sort achieved by the Soil and Water Conservation

Districts. As a grassroots organization, an Energy District empowers the residents of the county to articulate their priorities, invest in achieving them, and build resiliency in the process.

VCED will build an energy plan that is truly comprehensive; in its engagement of diverse stakeholders including utilities, municipalities, businesses and individuals; in its work to include communities and individuals that have traditionally faced barriers to the benefits of clean energy; and in its "green meets green" approach, where the green of environmental stewardship and education is paired with the green of investment in local clean energy jobs and energy cost savings.

With this common sense approach and broad base of participation, a locally owned and operated clean energy future is well within reach.

3.5. Reference Materials

- VCED Articles of Incorporation
- Vernon County 25x25 Resolution
- City of Viroqua Municipal Energy Plan
- 2010 SWDRC 25x25
- LEG Up Finance program
- Letters of support (28)
- Winneshiek Energy District "Geography of Change"
- Winneshiek Energy District "Power of 10"
- Vernon Electric On-bill financing cover sheet
- Vernon Electric Cooperative Community solar fact sheet
- Drive Electric Week showcase