Reaching 100% Renewable Energy in Traverse City, MI

Final Report
December 1, 2018
Executive Summary

Introduction
When identifying our project, our Dow Fellows group was interested in the growing divide between rural and urban American communities and the social sustainability issues that the economic transformation of rural areas presents. Rural communities are asked to address environmental concerns while simultaneously struggling to retain population and build a strong, diverse economic engine that sustains the economic and social needs of the population.

Our project centered around the nexus of these sustainability challenges. In collaboration with the Groundwork Center for Resilient Communities in Traverse City, we contributed our skills to make a case for local politicians and rural communities in the region to incorporate renewable energy as an economic and social sustainability initiative.

Background
In 2016, Traverse City committed to sourcing 100% of the energy used for city operations from renewable sources by 2020. In 2018, the municipal utility Traverse City Light & Power made a similar commitment to 100% renewable sources by 2040. The Dow Sustainability Fellows team worked with a local environmentally-focused nonprofit, Groundwork Center, to identify a business plan and models for community engagement for reaching Traverse City’s 100% renewables goal. Our team was committed to ensuring that the energy project is community-driven and the benefits are inclusive to low and middle-income residents.

Methods
Our team used the following methods, which include primary and secondary research, to identify next steps for Traverse City stakeholders to achieve 100% renewable energy.

- Identified and evaluated case studies of community benefit models from other renewable energy projects, and make recommendations for which models could work in the greater Traverse City area
- Reviewed literature on community engagement strategies and made recommendations on effective ways to involve the community in this project.
- Conducted primary research and interviews to understand community priorities, as well as stakeholder perspectives
- Convened cross-sector stakeholders in a round-table setting to discuss next steps for developing renewable energy projects in the Traverse City area

Results
Our primary and secondary research resulted in three major categories of takeaways to be considered in Traverse City: the importance of a community engagement strategy, the range of community benefits models available, and the interests and incentives for different stakeholder groups. We synthesized a spectrum of community engagement strategies, revealing that a process that seeks to obtain the buy-in of community members but is not overly burdensome or
costly is ideal. The optimal project would maximize both community benefits in financial terms, as well as local support in political terms.

Interviews with 15 individuals across four stakeholder groups—community organizations, energy project developers, utilities, and local government—revealed that while different groups have various incentives to support renewable energy, there is ample space for common ground. Corroborating our secondary research, these interviews showed that all groups are seeking an option that is both environmentally progressive and financially smart. Finally, we held a workshop as a resource for local stakeholders in the Traverse City area.

Recommendations
As next steps for Traverse City to meet its 100% renewable energy goals, the Dow team recommends the following:

- **Define and refine the energy project scope:** Although the community of Traverse City is politically primed to have local renewables development, the stakeholder group needs to make a series decisions to bring the project to life. These include: Where will the project be located? Who or what organization will fund the capital expenditures, and what is the amount of the up-front investment? Will there be a PPA with the utility or the city?

- **Identify stakeholder needs in a potential benefits model:** The variety of models and experiences also show that, from a community benefit perspective, there is not a recognized “best” project model within the industry. Therefore, the Traverse City stakeholder group should assess which parties will be on board to develop an energy project and identify their model according to these needs and incentives.

- **Work with a project developer:** Once the previous two recommendations have been met, the coalition will need to work with an energy developer that is on board with the community benefits model. Suggestions for types of developers to look for and ways to guide the conversation will be included in the playbook.

Anticipated Impact
Through our project scoping and research, we discovered that Traverse City’s desire for a business model required more work on a cohesive strategy among stakeholders. Our team has outlined the model for Traverse City to develop a small renewable energy project that incorporates the three pillars of sustainability, which includes an intentional engagement of the community from the very beginning. Our project will provide Groundwork Center and Traverse City with a ‘playbook’ for taking the next steps toward a renewable energy project. At the conclusion of the project, our results will be shared with Traverse City officials and stakeholders. We also hope that our results may serve as a model for other communities in Michigan looking to invest in renewable energy by incorporating community decision-making and benefits into the development process.
Final Report: Reaching 100% Renewable Energy in Traverse City

Introduction
When identifying our project, our Dow Fellows group was interested in the growing divide between rural and urban American communities: non-metro poverty rates (17%) exceed metro areas (14%), and technological advances led to a loss of 14% of agriculture jobs between 2001 and 2013. From the viewpoint of rural communities, their economic outlook has declined while others have prospered. Moreover, the transformation of the rural landscape is not only an environmental sustainability issue, but also a social one, as rural communities in the United States are at a critical juncture. While being asked to address rural and semi-rural environmental concerns of land management, water, air, and soil quality, they are simultaneously struggling to retain population and build a strong, diverse economic engine that sustains the economic and social needs of the population. This true triple-bottom-line, intersectional challenge of poverty, rural development, and sustainability is among the top sustainability challenges of our generation.

Our project touched on the nexus of these sustainability challenges. In collaboration with the Groundwork Center for Resilient Communities in Traverse City, we contributed our skills to make a case for local politicians and rural communities in the region to incorporate renewable energy as an economic and social sustainability initiative. By conducting secondary research on community benefits models for renewable energy development, as well as primary research to understand the perspectives of the relevant stakeholders, we sought to develop a model that is specific to the economic, social, and environmental conditions of the region. The project culminated in a cross-sector round-table with representatives from utilities, community organizations, city government, and advocate groups; this event served as a first step for the Groundwork Center’s initiatives to convene stakeholders and build a coalition toward renewable energy development in and around Traverse City. Finally, through the Dow Distinguished Grant, the team plans to create a “playbook” for Traverse City and communities like it to assist them in navigating the energy development process.

Background
Traverse City, as well as Traverse City Light and Power, recently committed to sourcing 100% of the energy used for city operations from renewable sources by 2020. To help reach this goal, the Groundwork Center is participating in the U.S. Department of Energy’s Solar in Your Community Challenge to create a model for harnessing the revenue from large, local, utility-scale solar projects. Through this project, the Traverse City Rural Independence through Solar Energy project (or TC-RISE), the Groundwork Center and its partners hope to create a series of solar and efficiency success stories that taken together will help rural and urban communities improve their homes, create jobs, and save residents money.
The Groundwork Center has identified several ongoing projects in the Traverse City area that would be good candidates for developing and using a community-benefit model. 5MW of renewable energy are needed to meet Traverse City’s goal of running all city operations using renewable energy. Currently, 1MW of solar has been installed in Elmwood; however, the other 4MW are on hold due to community concerns about their ability to benefit from this project. To move this project forward, there needs to be a clear business case and plan for how the revenue will go back to benefit the community.

**Methods**
The Dow Sustainability Fellows team sought to help the Groundwork Center identify a business plan and models for community engagement for reaching Traverse City’s 100% renewables goal. The team was committed to ensuring that the energy project is community-driven and the benefits are inclusive to low and middle-income residents, and we hope this research can be applied in other communities in Michigan and beyond.

*Objectives and Methods:*
- Developed an understanding of the regulatory, utility, developer, and other relevant stakeholder landscape as it relates to renewables development in Michigan.
- Identified and evaluated case studies of community benefit models from other renewable energy projects, and make recommendations for which models could work in the greater Traverse City area
- Reviewed literature on community engagement strategies and made recommendations on effective ways to involve the community in this project.
- Conducted primary research and interviews to understand community priorities, as well as stakeholder perspectives
- Convened cross-sector stakeholders in a round-table setting to discuss next steps for developing renewable energy projects in the Traverse City area.

**Results**
Our primary and secondary research resulted in three major categories of takeaways to be considered in Traverse City: the importance of a community engagement strategy, the range of community benefits models available, and the interests and incentives for different stakeholder groups.

First, there are two major opportunities to support a community’s needs when considering a new renewable energy project: community engagement and community benefit mechanisms. Community engagement strategies focus on the strategies used to build public knowledge and buy-in for renewable energy projects, while community benefit mechanisms are structures built into renewable energy projects that are used to fund local priorities and communities. Among the renewable energy and other infrastructure projects surveyed in the United States and abroad, three major strategies for community engagement and three community benefit mechanisms were identified. See Appendix II and Appendix III for detailed explanations of these strategies and models.
The team also conducted interviews with 15 individuals across four stakeholder groups: community organizations, energy project developers, utilities, and local government. See Appendix IV for the results of these interviews, which support the recommendations below.

Finally, we held a workshop as a resource for local stakeholders in the Traverse City area. The workshop was the first event of its kind in the area, bringing diverse industries together for a conversation that revealed the many common interests between stakeholders. The 14 attendees included representatives from utilities (include Consumers Energy and the Traverse City Light & Power), city and county government, and community groups (including Rotary Charities and Habitat for Humanity). During the meeting, we shared our research results on community benefits and community engagement methods. Our project advisor, who conducts research on community acceptance of renewable energy projects, also shared her research with the group. In the last hour, we held a feedback and brainstorming session to get feedback on what deliverables could be most helpful for moving the needle on moving the City of Traverse City to the next steps in 100% renewable energy. The last session resulted in a series of prescriptions for the next phase of our project, funded by the Dow Distinguished Grant.

**Recommendations**

These results highlight the multiple opportunities to create community benefit within renewable energy project models, both during engagement and service phases of a project. However, at the same time, the variety of models and experiences also show that, from a community benefit perspective, there is not a recognized “best” project model within the industry. Through research on existing models, we found that much of a project’s success depends on selecting a community benefit model that is specific to the community itself. Model selection must depend on stakeholder-specific needs and interests, which vary by geography, past experience, local needs, regulatory environment, and perception of the opportunity. Different projects also impact different stakeholders themselves, which impacts project model selection.

Before the coalition in Traverse City can create a renewable energy development with community benefits, it will have to answer a range of questions on the logistics and financing of the project. Some of these questions include where the capital will come from, where the development will be located, what entity will agree to purchase the power, and what organization would manage the benefits on an ongoing basis. In order to guide decision-making on these questions, the team is using the Dow Distinguished Grant to create a ‘playbook’. The playbook will outline why developing renewable energy locally is more beneficial for the community, what different stakeholders look for to support a local renewable energy development, and examples from other cities that have achieved 100% renewable energy. This playbook, in conjunction with the research results highlighted above, can be used as a guide for project model selection, business case development, and sharing Traverse City’s results with other communities across the state.

**Anticipated Impact**
“In Traverse City, we have lined up the partners for this project – project mappers, installers, and financiers, community groups working with low and middle income clients, and renewable energy customers. This group is primed and ready to collaborate on building a smart, local project that gets the City to its 100% renewable power goal. **What we lack is the blueprint and business model for how to do this.**” - Dan Worth, Groundwork Center

Through our project scoping and research, we discovered that Traverse City’s desire for a business model required more work on a cohesive strategy among stakeholders. Our team has outlined the model for Traverse City to develop a small renewable energy project that incorporates the three pillars of sustainability. This means that in addition to ensuring financial sustainability for the project that will power city operations, the model will build in social sustainability by including community decision-making and benefits into the equation. Intentionally including the community from the very beginning will ensure that it feels a part of the individual energy development as well as the wider turn toward a new energy economy in Michigan. Our project will provide Groundwork Center and Traverse City with a ‘playbook’ for taking the next steps toward a renewable energy project. This will take the form of a reference resource on incorporating communities into the process by summarizing community benefit and decision-making models. The resource will include Traverse City as a case study, including language for sharing Traverse City’s story with potential partners for their project as well as other communities across the state, an analysis of the advantages and disadvantages of each model, recommendations for what to include in a local government renewable energy project RFP, and prescriptions from state and national developers for making the region attractive to renewable energy business.

Upon completion of the project, the Groundwork Center will share our deliverables with Traverse City officials, both on the City Council and at Traverse City Light & Power municipal utility. Groundwork will also share our materials with their other community and policy partners to advocate on behalf of incorporating the model into Traverse City’s approach. Parts of our deliverables may even be used in a presentation or report to the wider community to relay the city’s vision for the development. The deliverables will provide a vision for how to plan for the impacts of the 100% renewable vision with a lens that is wider than just its environmental impact, to include everyone that the development may impact. In addition, Groundwork Center hopes to use this model to market the 100% renewable energy for municipal operations program across the state and support other municipalities and regions to pursue a similar model. Such activities will be conducted with the goal of facilitating the development of a new energy economy in Michigan.
Appendices

Appendix I: People

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Appendix II: Community Engagement Models

1- Social License to Operate

In cultivating community support for a project, developers may seek a “Social License to Operate,” which refers to “the approval or broad social acceptance of a project by the local community and other stakeholders.”¹ This strategy encompasses a wide variety of approaches; developers achieve a “Social License to Operate” through either a formal structure, such as a community trust or consultation committee, or a broad strategic campaign to build support. Simply put, this approach recognizes that a positive community opinion of a project is critical to the project’s success.

For example, Cedar Falls Utilities, a municipally owned utilities in Cedar Falls, Iowa, partnered with a private developer to connect a 1.5 MW solar array to its grid. The utility engaged customers early in the process, launching a pre-enrollment media campaign. This campaign introduced customers to solar farm designs, allowed customers to reserve their unit in advance, and ran a show on local-access TV. As the project progressed to the enrollment phase, the utility focused on marketing the project through television, online, in-person, and direct mail channels. These outreach activities were designed to excite customers and answer questions about the “Simple Solar” program. All community outreach efforts were focused on education.

¹ “Strategic options for delivering ownership and benefit sharing models for wind farms in NSW.” Ernst and Young, September 2014. 7.
and engagement; there was no effort to engage the community in decision-making prior to or during project launch.²

2- Community Consultation and Community Benefits Agreements
A more formal structure for achieving a social license to operate is a Community Consultation Committee (CCC), “a forum for discussion between developer representatives, community, council and others.”³ Developers are legally mandated to form a CCC in some European countries, though they are less commonly used in the United States. The outcome of a CCC is typically a Community Benefits Agreement.

CCCs have not always found success in the United States. For instance, Atlantic Yards is a 22-acre, $49 billion mixed-use development in Brooklyn, NY. Developer Bruce Ratner engaged ACORN, Brooklyn United for Innovative Local Development, and the Downtown Brooklyn Oversight and Advisory Committee, and other community organizations from the outset of the project as a CCC- in this case, referred to as a Community Benefits Coalition- and potential signatories to a community benefits agreement, aiming to court organizations and individuals to gain political support. Ultimately, a Community Benefits Agreement was signed in 2005 to contribute to jobs development, small business development and contracting, housing, community facilities, and public housing. However, despite this seemingly strong process, today the CBA has low public support because the process was seen as untransparent and the outcome as lacking alignment with community needs.⁴

In a more successful example, Cherokee Denver, a real estate developer, proposed redeveloping a retired industrial site in downtown Denver. They negotiated a Community Benefits Agreement with a coalition of community groups including Colorado ACORN, Front Range Economic Strategy Center, Denver Area Labor Federation, United Food and Commercial Workers, Service Employees International Union, and Colorado Jobs with Justice. Negotiations between community groups and developer took place many months before construction was set to begin. The final agreement include provisions for affordable housing (200 units of affordable rental units for Denver families at 50% and 30% AMI); living wages for construction jobs; first-source hiring (prioritizes immediately adjacent low-income neighborhoods); prohibition on big-box stores entering area; cooperation with neighborhood coalition Voluntary Cleanup Advisory Board that is monitoring the environmental cleanup and communicating cleanup issues to affected neighbors.

3- Community Trusts
An additional mechanism for community engagement is inviting a community trust or similar fund to invest in the development. This type of community engagement shows commitment to

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³ EY
the community by allowing the community to essentially invest in the success of the project; in this way, it can also be seen as a community benefit mechanism.

Allt Daerg and the Srondoire Community Wind Farm provide a strong illustration of this type of community engagement. Planning permission was initially denied to a large-scale wind developer near Allt Daerg, Scotland on the grounds of community opposition. In order to engage the community in development after the initial denial, the developer invited the Ardishaig Community Trust to buy into the ownership structure to invest and provide commercial management. The Trust’s trading subsidiary secured a non-recourse loan to obtain 1/12th the projected build price— a significant discount from the market value. According to the Trust, “the enthusiasm and resolve within the community was essential to the project’s success… Having a passionate and committed volunteer resource allowed the group to become an active partner in the project rather than a passive beneficiary of community benefit payments.” The Trust continues to receive a portion of the profits from the project.5

In addition to engaging communities and community needs during renewable energy planning processes, there are also opportunities to structure the renewable energy project to provide direct benefits to the community while remaining profitable.

Appendix III: Community Benefits Models for Solar and Wind Development

1- Payments to Communities
The first type of community benefit model uses direct payments to the community. These payments are typically made in three ways: 1) through a community enhancement fund, 2) through discounted electricity, or 3) through local employment and procurement.

Community enhancement funds (CEF) are a common community benefit mechanism, involving a payment by a developer to fund community initiatives. A CEF can be implemented in a number of ways depending on the partnership agreement between the developer and community and is generally administered by a community trust organization, local government agency, or funds awarded on an ad hoc basis through a grants process. CEFs are fairly easily administered and can be a way to fund much-needed community programs— for example, public transport. Preconditions for success include a well-informed working group to represent the needs of the community, a plan for achieving long-term outcomes, and clarity and transparency on the size of the financial benefit. Conversely, CEFs are unlikely to have an impact on community acceptance of energy development absent other forms of community consultation, as they can be seen as tokenistic and disingenuous.6

For example, the Gullen Range wind farm in Australia contributes $1,666 per annum for each turbine in its development to a community enhancement fund, amounting to $120,000 in 2014.

5 EY 33.
6 EY 15.
The fund supports projects that benefit the community within a 10km radius and is governed by the local council. Similarly, the Gamlingay Community Wind Turbine in the UK, which was initiated and funded by a group of local residents and businesses, generates 10% of local energy needs and dedicates 10% of its revenue to a local Community Fund that reinvests back into local energy projects. In the first year, this turbine generated 6,000 pounds in benefits for the Community Fund and it will continue to generate more funds each year. The turbine is owned by residents and businesses in the community and is operated by a private company. The initial investment was 30,000 pounds, and the two investment options were fixed interest loan at 6% and an equity investment with projected rates of return at 7-12%. Charities, organizations and individuals can apply to receive funding through the community fund on the main website.

Another direct payment opportunity is through discounted electricity and energy efficiency initiatives. For instance, in 2016, Cedar Falls Utilities, a municipally-owned utility in Cedar Falls, Iowa, connected a 1.5 MW solar farm to its grid. The solar farm had been financed and built by the RER Energy Group, a private developer. Because the developer is private, they are able to capture the 30% federal Investment Tax Credit (ITC) that would be otherwise unavailable to the municipally-owned utility. In this “Simple Solar” program, customers can buy a 20-year lease on a 170 watt unit (~60% of a solar panel) for $270 paid up-front or in 12 monthly installments. Subscribers receive a $1.30 solar bill credit per unit of electricity generated; the customer payback period is estimated to be 15 years. The “Simple Solar” program is fully subscribed with 8,882 units available to individual customers and the remainder leased to retail and wholesale subscribers.

While discounted electricity may come through a lease or partial ownership, it can also be used to serve a community’s low income customers with discounted energy access. In 2017, the Poudre Valley Rural Electric Association, in joint efforts with non-profit GRID Alternatives and the Colorado Energy Office, developed a community-scale solar farm that dedicates about 35 percent of its output to low-income customers - deemed as those who must spend 4% or more of their income on utility bills - and the remaining 65 percent is offered to other customers.

Finally, direct payments can be made in the form of local employment and procurement throughout the project building and maintenance phases. With this type of payment, developers

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7 EY 15.
can show support for the local community and share benefits by contributing to the local economy.

Colorado provides another strong example discounted electricity combined with local labor. Grand Valley Power, a utility in Colorado’s Grand Valley, partnered with a local non-profit, Grid Impact, to build a 17kW solar farm to serve low-income families. Local residents who meet the income threshold can apply to become co-op members. If selected, they agree to provide 15 hours in sweat equity to the co-op and to authorize the co-op to keep a small portion of revenue for administration expenses. In exchange, they receive a share in the cooperative, or about 16 solar panels generating 3.5 kW and saving the family ~$600 in electricity for the year. There are 7 families participating in the co-op at a time, which families eligible to participate for 4 years maximum. The program also received grant funding from the state of Colorado.\textsuperscript{11}

\textbf{2- Payments to Landowners}

Community benefits can also be conferred through landowner lease payments negotiated between developers and individual landowners. While necessary in many situations, closed-door agreements can result in disapproval among neighbors and the broader community.\textsuperscript{12} In Michigan, this model and controversy is commonly seen among land lease agreements for wind turbine development in Michigan’s Thumb (Huron, St Clair, Lapeer, and Sanilac counties).\textsuperscript{13}

As an alternative to individual landowner lease payments, some developers have employed proximity rent models to pay rent to landowners within a certain distance from a wind turbine. This model has low administrative costs and the model scales well, but it requires complex GIS modeling and does not contribute to a community fund or to a specific set of issues.\textsuperscript{14}

\textbf{3- Community Ownership}

Lastly, community benefits can be realized through three types of community ownership: 1) individual co-ownership, 2) community organization co-ownership, or 3) fully owned by the community.

Individual co-ownership is common in the UK. These type of co-investment models are typically operated by large commercial wind developers who allow individuals to buy shares in the project. These shareholders are paid an annual dividend, and the investment opportunity may be opened to landowners within proximity to the development or the broader community.\textsuperscript{15}

\textsuperscript{11} “Colorado: Grand Valley Power Cooperative.” Environmental and Energy Study Institute. \texttt{http://www.eesi.org/obf/solar/casestudies}
\textsuperscript{12} EY 21.
\textsuperscript{14} EY 24.
\textsuperscript{15} EY 27.
For instance, in the UK, Falck Renewables Designs partnered with NGO Energy4All to assist communities at each of its wind farm developments. It is the only developer in the UK to adopt this approach systematically across its portfolio, prompting co-operatives in Scotland give local people the opportunity to own a stake in wind turbines for as little as 250 pounds. In some cases, the cooperative owns a stake in the net income rather than equity in the wind farm itself. Projected ROI over the life of the project is 10% with a minimum of 6.5% guaranteed by Falck.  

This approach has also been used for US renewable energy projects. In Minnesota, the Lake Region Electric Cooperative developed a 60 panel 25 kW solar array entirely developed, owned, and operated by the co-op. As a pre-existing co-op, they were able to develop and build the project using internal resources, rather than relying on a developer. To invest, co-op members pay a 1-time, 20-year lease payment of $1,400 for a full panel or $700 for a half panel. Full panel leases are also available in installments of $40/month for 35 months; these payments are made on monthly utility bills. Leasees receive $5.75 monthly bill credit for a full panel (20 year payback period). Many co-op members who purchased a panel are retirees with a second home in the area; for these members, winter solar credits can be carried forward into the spring or summer months of residency.

Community organization co-ownership is similar to the individual co-investment model. This structure allows an organization to buy shares in the project. Some cases allow the organization to invest in the broader project or a particular wind turbine on behalf of the community. However, this model requires significant administrative resources.

Lastly, to overcome the difficulties of community organization co-ownership, some localities have developed wholly-owned energy projects. Community solar is on the rise in the United States, but finding a financial institution willing to provide debt finance to a local organization can be difficult. Moreover, some communities have pursued a co-operative structure for sole ownership, similar to the co-ownership model.

Fintry, a small rural community in Scotland, pursued a community wholly-owned model to address lack of employment opportunities, high costs of living, and fuel poverty. Falck Renewables Designs provided the Fintry Development Trust with a mortgage-like loan arrangement with a 15-year repayment period, and using this capital investment, FDT purchased a share of the revenue stream, representing 1/15th of the development. Income minus the loan payment goes directly to the trust, and the community gained an income stream that has run specific projects such as free insulation, free energy consultation, subsidizing

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16 EY 35.
18 EY 27.
19 EY 28.
energy efficient heating systems, and a local EV car-share fleet (the community has no access to public transport).

As an additional example, the Hepburn Wind Farm in Central Victoria is Australia’s first community-owned wind farm with nearly 2000 cooperative members, raising almost $10M in capital. It is wholly owned by the community for the benefit of the community through dividends and a fund, made up of profits from two turbines.

Appendix IV: Stakeholder Interviews

1- Energy Project Developers
To understand the perspective of a critical partner in any renewable energy project, the team interviewed developers from Cypress Creek Renewables, Geronimo, Apex, and Microsoft. The first three develop projects for residential and commercial customers, while the Microsoft individual led the company’s renewables portfolio to offset its energy use.

Notably, the commercial and residential developers expressed that community engagement is already a core part of their business strategy. Because of the varying degrees of acceptance of renewable energy technologies in both rural and urban areas, educating the public and conveying the economic and environmental benefits of renewables is an important part of the job of a developer. Developers often act as community organizers to engage groups and build bridges across communities. In fact, most energy development companies are already informally deploying community benefits programs in the form of community donations, school support, and power generation-based contributions. Although they may lack the structure and vocabulary to identify them as a particular type of benefit model, the essence certainly exists in their current activities. Lastly, the Microsoft individual noted the importance of securing a low cost of capital in renewables development to make it economically feasible and profitable. In terms of challenges, developers noted the lack of statewide policy on selling energy and inconsistent land use policies, as utilities struggle to open up their business models while also serving their shareholders.

2- Utilities
Because most energy today is delivered to users via a power utility, the team interviewed the three area power providers: Cherryland Electric Cooperative, Traverse City Light and Power, and Consumers Energy.

All the utilities expressed that their power purchasing decisions are primarily driven by a desire to lower operating costs and rates, which means that local development does not always make sense from a cost perspective when compared with RECs or other alternatives. However, as pressure builds from community and local businesses and state laws progress, utilities are

20 EY 32.
21 EY 28.
purchasing more energy from renewable sources and seeking to improve energy efficiency as an important way to meet renewable targets. Some of the preeminent challenges for utilities include finding land and land owners for local development—especially for utility-scale wind-advocacy groups that lobby against renewables, and limited energy storage technology solutions.

3- Government
Local, state and federal government partners are critical to the success of renewable energy development projects. These stakeholders drive policy that can support or discourage such investments in local communities, and also wield community resources that can serve as negotiating tools for finalizing a project. We interviewed stakeholders from the City of Traverse City, Traverse County Chamber of Commerce, and the USDA Rural Development agency.

These stakeholders all expressed an interest in maintaining and promoting Traverse City’s brand as a beautiful and environmentally-friendly city. To that end, they viewed promoting renewable energy as consistent with the region’s goals. These stakeholders’ concerns were about the long-term impacts of any investment in the local economy. For example, they expressed reservations about the large upfront costs for renewable energy infrastructure and the risk of the future community shouldering end-of-life costs for project infrastructure in the next decades.

4- Community Groups
Because our team is committed to renewable energy developments benefitting the most vulnerable segments of the community, we also interviewed stakeholders that are knowledgeable about the needs and desires of low and moderate income families. The team interviewed the Father Fred Foundation, Grand Traverse Land Conservancy, and the Grand Traverse Community Foundation.

While renewable energy investments is not typically in the wheelhouse of a community group’s strategic priorities, these stakeholders expressed optimism for its potential to help them meet their organizations’ goals and community needs. For example, development can serve as a way to engage the greater region in a conversation on the organizations’ inclusive economic goals, and can also help reduce organizations’ operating costs. However, stakeholders expressed concern about alienating their constituency based on potentially negative perceptions of renewables and whether the energy transition would raise energy prices for their most vulnerable residents.