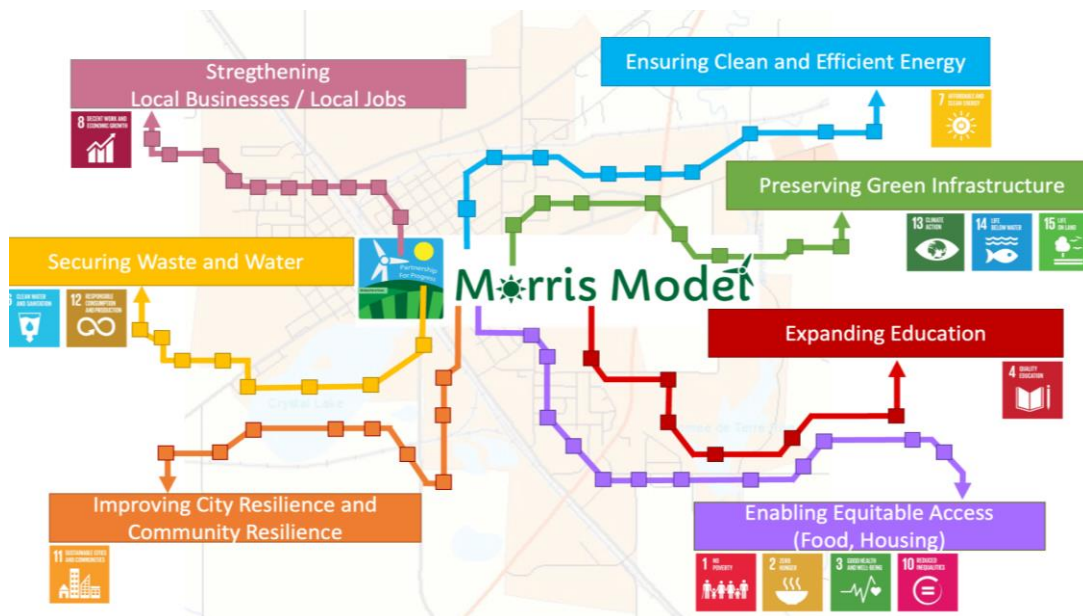




Morris Model

Sustainable Strategic Plan 2.0

“Together we are smarter!”



Morris Minnesota, December 2023



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0. Executive Summary

With the development of the Morris Model Strategic Plan 2.0, the partnership is building on successes from the last 5 years and addressing the community's biggest sustainability challenges head on. This is the next step in continuing to make Morris a rural sustainable model community.

As a first step, a Morris Model Strategic Plan was developed in 2018. This plan comprised 3 Big Goals and around 100 projects. Over the past 5 years, more than half of the projects have been successfully implemented by the project partners (City of Morris, Stevens County, the University of Minnesota, Morris and the West Central Research and Outreach Center, and Morris Area School District). The Morris Model is known far beyond the borders of the state of Minnesota as an example of successful sustainable development in a rural town. It has received numerous awards and recognitions.

This Strategic Plan 2.0 continues the successful work.

The aim is to expand the stakeholders from the community and to supplement and further develop the existing project portfolio in the context of the United Nations Sustainable Development Goals. The United Nations Sustainable Development Goals were created in 2015 to compliment the Paris Climate Accord and provide a framework for sustainable development. The agenda provides a shared blueprint for peace and prosperity for people and the planet, now and into the future. At its heart are the 17 Sustainable Development Goals (SDGs), which are a call for action by all countries - developed and developing - in a global partnership. They recognize that economic growth, social coexistence, and preservation of natural resources must go together with strategies that improve health and education, reduce inequality, and spur economic growth – all while tackling climate change. The goals are applicable to all communities regardless of development. We have used the Sustainable Development Goals as a framework to think about sustainable development across several areas including environmental, social, and economic challenges.

Two community events were held in November 2023. At the first event, assets, vulnerabilities, and challenges were identified, and goals and projects were developed in joint working groups. These were prepared in technical terms and discussed and agreed in greater depth at a second public event. In parallel, several technical discussions were held with the Morris Model partners to update and upgrade the original objectives and projects.

A total of around 65 new projects were identified, four new fields of action (City and County Resilience, Equitable Access, Green Infrastructure, and Strengthening Local Businesses and Jobs) were added to the previous ones (Energy, Transportation, Waste & Recycling, Education) and the circle of stakeholders was significantly expanded by a large number of local players from various fields. The Big Goals of the Morris Model defined in the first step remain valid (generating 80% of energy use locally, 30% reduction in overall energy, end of landfilling).

To implement measures in the short term, several projects have been identified for 2024 to initiate the development of the Morris Model Sustainable Strategic Plan 2.0. The high level of support from the community and the Morris Model team at both events made it very clear that there is a great deal of interest from the community in the joint development of the future in Morris and demonstrated:

Together we are smarter!



I. From Morris Model 1.0 to version 2.0

The Morris Model is a nationally recognized community partnership working to advance sustainability in rural Minnesota. The model partners include UMN Morris, City of Morris, Stevens County, UMN West Central Research and Outreach Center, Morris Area School District, and the Stevens Community Medical Center. Together these partners work to make Morris a model sustainable community in West Central Minnesota.

The Morris Model partnership, which has been active for nearly a decade, has engaged in several forms of planning over the years to aggregate goals and projects. The partnership started initially as a collaboration between UMN Morris and the city of Morris on installing LED streetlights on main street. At the time, the utility did not want to switch to LED's, so the city asked the campus for help. This first project reduced the city's electricity usage by 50,000 kWh and saved \$15,000 each year. Following this project, the city worked with the campus to replace all city owned lighting with LED's.

In 2014, the Morris Model worked with the Jefferson center to host a Rural Climate Dialogue- the first in MN at the time. This dialogue brought together 15 stakeholders from across the community to discuss the extreme weather, climate change, mitigation and adaptation strategies.

In 2015 the city signed a climate protection agreement with our sister city of Saerbeck, Germany. The city was paired with Saerbeck through the climate smart municipalities partnership through the UMN Institute on the Environment. Saerbeck, like Morris, is a rural agricultural community that is committed to using clean and renewable energy. In fact, Saerbeck produces 450% of their energy consumption from renewables including solar, wind, and a biogas plant.

Throughout 2015 and 2016, two UMN Office of Sustainability interns used funding from the Minnesota Pollution Control Agency to draft and create a Morris Model Community Resilience Plan. Pulling information from several community events, including the rural climate dialogue and an extreme weather action meeting, the interns returned a completed report that explains how MN's weather is changing. The report details the impacts of these changes on various community assets, and priority actions for the community to take to increase resilience. These 9 resilience goals included tree canopy health, alternative transportation options, and expanded use of renewable energy.

In 2018, the Morris Model completed the first strategic plan.

The Morris Model Strategic Plan produced 3 big goals; to produce 80% of the energy we consume from renewables, to reduce energy consumption by 30%, and to end landfilling of waste generated in the County. This initial strategic plan also included a list of 100 projects that would help us achieve these big goals. Projects included installing solar PV on a city owned building, purchasing electric school buses and electric transit buses, creating and installing a sustainability educational pathway, launching a County wide composting program, and more.

As of 2023, more than half of these projects had been realized. In addition to this progress, the passage of the Bipartisan Infrastructure Law [BIL] and the Inflation Reduction Act [IRA] in 2022 marks the largest climate investment of any modern nation. More than 350 billion dollars have been earmarked for transitioning the United States away from fossil fuels to renewable energy. Recognizing our own progress and the immense federal investments in climate, Griffin Peck, the Morris Model coordinator applied for a resilient communities grant from the West Central Initiative Foundation to fund an update to the 2018 strategic plan. The grant paid for community events and for Guido Wallraven, a community planner from Saerbeck, to help develop the plan. This updated plan expands upon the goals of the 2018 plan while expanding the scope of the Morris Model to think systematically about sustainability in our community. This report, Morris Model Sustainability Strategic Plan 2.0, summarizes the framing for updated planning, details the events and meetings that gathered information from community stakeholders and leaders, and outlines the outcomes and future projects for the Morris Model and other community organizations.




II. Embedding the Sustainable Development Goals

This update to our strategic plan adopts a framework that maintains the goals and projects from strategic planning 1.0 while also expanding the scope to include more systemic sustainability issues like food and housing security and investing in our green infrastructure. Expanding the scope of this round of strategic planning has a couple of key benefits.

First, by expanding the scope of our plan we can bring more folks from our community and our partnership to the table. Being a rural community, people often wear multiple hats and fill many key roles throughout the community. When our focus was only on energy and waste reductions, we limited the number of community stakeholders that we could attract. By expanding the scope, we were able to attract more people to the strategic planning process which leads to a more comprehensive plan.

A second benefit is that we were able to bring together folks from different organizations already working on similar projects. During one of the events a comment was made about how County, hospital, and non-profit healthcare workers had never met in person before our sustainable strategic planning meeting. This benefit was an unintended, but valuable outcome of creating a more closely connected and collaborative community. Not only are we able to strengthen our sustainability commitments- but we are also able to build stronger relationships between more members in our community.

Thus, the framing we chose had to stay true to our previous commitment while expanding our lens of sustainability. Used at the National level and around the world, the UN Sustainable development goals provided the framework for Strategic Planning 2.0.

II a. Framing the future: Sustainable Development Goals

The United Nations Sustainable Development Goals [SDG's] were created in 2015, based in part on the Millennium Development Goals. These new SDGs covered 17 areas that have various levels of synergies between them. *The short titles of the 17 SDGs are: No poverty, Zero hunger, Good health and well-being, Quality education, Gender equality, Clean water and sanitation, Affordable and clean energy, Decent work and economic growth, Industry, innovation and infrastructure, Reduced inequalities, Sustainable cities and communities, Responsible consumption and*

production, Climate action, Life below water, Life on land, Peace, justice, and strong institutions, and Partnerships for the goals. The goals were created as a shared blueprint for developed and developing countries to follow and focused on social, economic, and environmental aspects of sustainable development.

The UN SDG's were chosen as a framework for Morris Model strategic planning to align more closely with the West Central Initiative Foundation's Climate Action Plan and state and federal funding that's targeted at intersectional sustainability projects that can address multiple SDG goal areas.

The plain language of the SDG's further helped in our framing of sustainable development in our community. Goals like 'No Poverty' or 'Zero Hunger' are initiatives that most folks in our community can agree on. It also provides different spaces of sustainability for different folks to focus on. For example, if someone is not interested in or even opposed to renewable energy- they still may have important insights for ending poverty and hunger in our community.

The use of the SDG's also helped us capture a wider snapshot of all the different sustainable development work taking place across our community.

II b. Making 7 out of 17: The Morris Approach

The Morris Model Strategic Plan was developed in 2018. This comprised three big goals as well as further sub-goals in the fields of energy, transportation, waste reduction and recycling, and education. A total of around 100 individual projects were identified. In the last 5 years, 34 have been completed and a further 20 projects are currently in progress. Some projects need to be readjusted and updated, while other projects from the old list of measures 1.0 have not yet been implemented (see also Appendix VII f.).

The aim of the Morris Model Sustainable Strategic Plan Version 2.0 is to continue the path based on the measures of the 1.0 version, add new goals and develop further projects. In particular, the aim is to expand the circle of stakeholders in Morris and to broaden the population's awareness of the town's sustainable development. We want to capture a wider snapshot of all the amazing work happening across our community-beyond traditional 'green' sustainability.

It's a process that successfully continues the development of the city and is an ongoing progression - adding a new piece to the Morris Model puzzle that will ultimately become the bigger picture for the city's future.

The Big Goals and updated objectives of the 1.0 version still form the basis of this plan. They will be supplemented by the projects of the 2.0 version in a targeted manner.

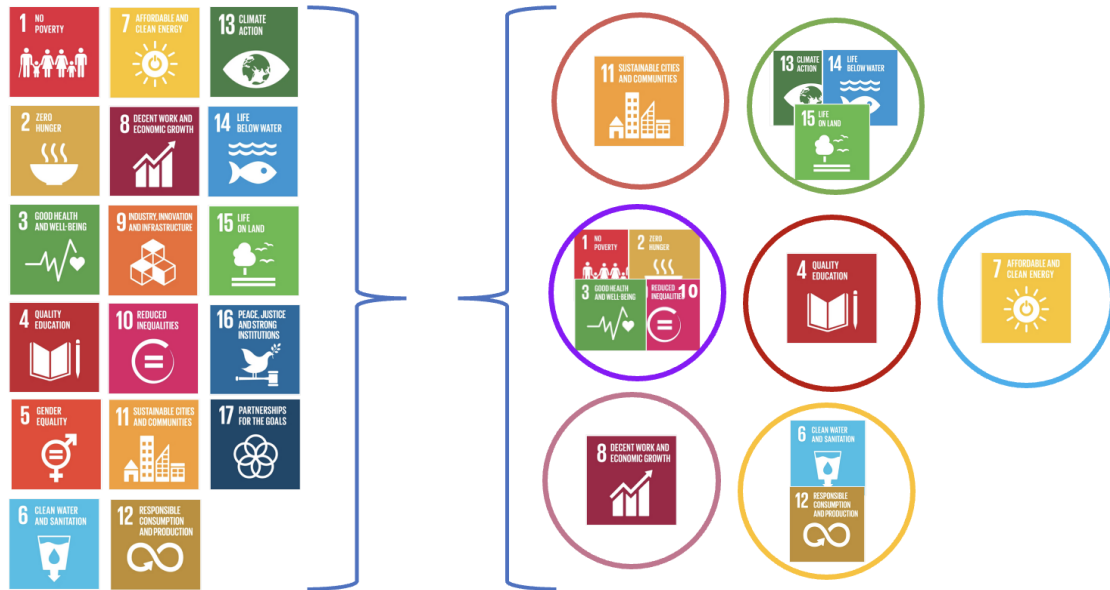
The starting conditions for this are better than ever before: The passage of the Inflation Reduction Act (IRA) and the Bipartisan Infrastructure Law (BIL/IIJA) mark the single largest investment into climate mitigation by any modern nation. This is \$350 billion in incentives, tax credits, rebates, competitive grants, and block grants. We want to seize this opportunity to plan to go after this funding.

The United Nations Sustainable Development Goals form the framework for the development of the goals and projects of the 2.0 version. These were reviewed in advance and adapted to the local conditions in Morris. For these reasons, the SDGs were weighted and sorted according to their local importance, and in some cases several goals were combined into a common field of action. A total of 7 fields of action - all derived from the SDGs - create the framework for the discussion of the community events with the aim of developing further measures and objectives for Morris Model Version 2.0 and integrating them into Version 1.0 (see figure). The following working groups were formed:

- No Poverty, No Hunger, Good Health and Wellness, Equity
- Decent work and Economic Growth, and Industry, Innovation, and Infrastructure
- Sustainable Cities and Communities
- Affordable and Clean energy
- Climate Action, Life below Water, Life on Land
- Quality Education
- Clean Water and Sanitation & Responsible Consumption and Production (Circular economy)

The Big Goals 1.0 continue to frame the overall objectives of the Morris Model:

- 80% of energy from renewables
- 30% reduction in overall energy
- End of landfilling.



The 17 Sustainable Development Goals and the 7 fields of action of the Morris Model Sustainable Strategic Plan 2.0

III. Working together

III a. Together we are smarter: Community Events I + II

The first event we held was focused on 3 key areas. First, we wanted to provide the community and other stakeholders with an update on the progress that partnership organizations have made in the last 5 years. Second, we wanted to collect community insights on the assets, vulnerabilities, and challenges within each of the 7 focus areas. Then, we asked folks to develop goals and projects based on the assets and vulnerabilities they identified. Finally, we wanted to enable cross sector collaboration on the 7 topic areas.

The first event was hosted in Morris at Old No.1 Southside event center on Wednesday November 8th from 3:30 pm - 7:30 pm. As guests arrived, they received a nametag with their table assignments for the evening. They were then asked to sit at their respective topic tables. For the first hour of the event, representatives from the university, city, and research farm presented on the progress their organizations had made on the goals outlined in strategic plan 1.0. Guido Wallraven gave a short presentation on his background, the planning activities that happened in the city of Saerbeck and reviewed the shared vision for strategic plan 2.0.

After these presentations, we moved into a two-hour block for table discussions. Each table had a Morris Model moderator and a UMN Morris student recorder. The table moderator and student recorder each received an instruction sheet. There was also

information at each table regarding the focus area and related SDGs. Each table had 4 questions they needed to answer. They are:

1. Characterize how these focus areas show up in our community, in your line of work, or in your own life?
2. What are our community's strengths in this area? What are our vulnerabilities?
3. What are 2-3 goals for the community? For governmental, NGO, and Community Leaders? For businesses?
4. What are 4-8 projects that we could pursue to push us to these goals?

During the discussions, table moderators were asked to ensure every person at the table was able to answer before continued discussion. Halfway through these discussions, dinner was served. This helped break up the time, so folks weren't sitting for too long at a time.

After the discussions had ended, we took a 20-minute break to allow workshop participants to mingle, use the restroom and regroup. Then we took time to hear from each of the tables to learn about what was discussed. During this time folks from different tables were able to provide initial feedback and ask questions about the content of other table's discussions. We knew we wanted to provide this time to collaborate as there were many folks who had expertise across several of the goal areas. This allowed them to express their concerns and insights on topics they weren't able to be a part of.

The first event wrapped up with Griffin Peck expressing their gratitude for spending the evening with the Morris Model and encouraged folks to attend the second event 9 days later.

The second event had two main priorities. First, to share the results of Event 1 and the Morris model partner expert talks. The second priority was to provide more people with the opportunity to discuss and provide insight on the goals and projects identified throughout the planning process.

The second event was also hosted at Old No.1 Southside event center, occurring on Friday, November 17th from 5-7:30 pm. This time as guests arrived, they filled out an interest form with their name, contact information, and 1 or 2 focus areas that they were interested in. Then they made a name tag for themselves and were asked to sit wherever. Once most of the attendees had arrived, Griffin gave a short welcome. Then, dinner was served. During the dinner portion of the event, we wanted to feature speakers from the community that we don't always hear from. Anna

Wasescha, President of West Central Initiative, gave a short talk on how the West Central region is using sustainable development goals to inform their current region wide planning efforts. Dan Dripps, CEO of Heartland Motor Company talked about the past and the future of electric vehicles in the US and in Morris and announced that they would install 10 level 2 charging stations throughout the community as they launch new electric vehicle models. Britney House, the Earth and Physical Science teacher from Morris Area High School, presented on the various sustainability educational experiences that have been offered to students at Morris Area Schools. Finally, we heard from Syd Bauer, the Stevens County Organics Recycling Coordinator and founder of the West Central MN Climate Network (WCMNCN). Syd discussed the successful launch of the County wide composting program over the last 2 years. They also explored how the WCMNCN could play a role in increasing sustainability education and communication to the residents of Morris. Griffin and Syd jointly identified how the climate network could act as a megaphone for the projects and initiatives of Morris Model partners, while also providing insights back to Morris Model leadership from the community itself.

Next Griffin Peck and Guido Wallraven presented the results of the previous week's workshop and conversations held with Morris Model partners [see outcomes section].

After the results had been presented the group broke out into 7 discussion tables for each of the 7 focus areas. Again, each table had a Morris Model moderator who, at this event, also took notes on the discussion. At each table there was a copy of the list of project ideas gathered from the previous workshop and a sheet with the following questions:

1. What projects are you most excited about?
2. Are there projects we should prioritize?
3. Are there other project ideas?
4. What should we do first?

Initially we planned for two 20-minute discussions so folks could switch to a second focus area if they wanted to, but most people stayed with the same group for the full 40 minutes. Again, table moderators were asked to share what their group discussed. Griffin ended the event by sharing appreciation for all the community members that took the time to engage with the Morris Model. The coordinator also thanked the core Morris Model team, West Central Initiative for their support for the events, and Guido Wallraven for lending Morris his expertise to think big about what can be achieved on the MN prairie.

III b. The four pillars: Morris Model partners collaboration

The expert talks with Morris Model partners served a couple of purposes. First, it gave each organization time and a private space to discuss their internal goals and projects with Griffin and Guido. It also created a space where Morris model partners could brainstorm ways of implementing or supporting projects that were identified in the community workshop. The second purpose these individual meetings served was an opportunity to ask how we all can be better partners within the Morris Model partnership. How can we increase communication and collaboration between the institutions that play such a large role in the community? We focused on how we can be more inclusive in our event planning and discussed strategies for increasing collaboration on complex multi-stakeholder projects.

These ‘expert talks’ were scheduled to take place after the November 8th workshop and before the November 17th event. In each meeting we discussed some framing questions:

1. How did you feel about what you heard, saw, and discussed during the workshop?
2. Did you hear any projects or ideas that interested you?
3. What role do you think [your organization] could play in advancing these projects?
4. Looking at the next 5 years, where do we want to go? What do we want to achieve?

First, we met one on one with UMN Morris faculty, staff, and leadership. To no one’s surprise, the university is evaluating projects that will help them reach full carbon neutrality for thermal and electrical loads, creating a campus-wide microgrid, and exploring new technologies to electrify thermal demands. The university is also working on improving access to food and encouraging students to take a more active role in growing and procuring local foods. The campus is also looking to convert their fleet to EV’s and PHEV’s to decarbonize fleet emissions. Finally, the campus is continuing to explore active transportation and alternative transportation options for students, staff, and faculty.

Next, Griffin and Guido met with leadership and sustainability staff at the city of Morris. The city manager, mayor, director of public works, and water plant staff were in attendance. The conversation revealed 4 clear areas for goals and projects for the city. These areas include reducing stormwater runoff, reducing energy use, increasing use of renewable energy, increasing safe access to active and alternative transportation, and increasing community resilience to extreme weather.

Then, the coordinator and Guido met with County commissioners, the director of environmental services, and the County administrator. Some of the major themes that emerged from this meeting included the need for increased collaboration between the County and city governments. It also became clear that hiring a sustainability coordinator for the County would add critical capacity to pursue state and federal funding for sustainability projects at the County level. Some possible project ideas included a community solar garden on the closed landfill, a year-round community garden/greenhouse, low income and net zero affordable housing, and increased daycare pods with renewable energy installed.

Next, the coordinator and Guido met with the West Central Research and Outreach Center and its leadership team. The WCROC already has their own internally developed goals that interface with the larger goals of the Morris Model. Looking to the future, WCROC will continue to work towards their model sustainable farm concept with organic dairy cows, reduced emissions from farm operations, increased use of renewable energy, and Green Ammonia development.

The final one-on-one meeting was with the West Central Minnesota Climate Network, a new partner for the Morris Model. The Climate Network is a local citizen-based group that gathers to “promote individual and group action toward a resilient, equitable and sustainable community through modeling behavioral change, conversation and education.” Many of the members of this group possess extensive sustainability knowledge and are excited to effect positive changes to our community. One of the biggest findings from this discussion was the opportunity for the climate network to coordinate a quarterly sustainability newsletter. The newsletter would highlight the sustainability work and projects across the community in a widely available format that can be shared virtually and in person. Members of the climate network also have a lot of expertise related to green infrastructure or our natural assets. Again, the network could provide essential support to the city and County government as they explore options to increase canopy resilience, reduce runoff, and conserve our green spaces.

IV. Goals and projects 2.0

The two community events in November 2023 were a first step in the expansion of the Morris Model to version 2.0. More than 100 people from the community and

members of the Morris Model team took part in these two events. This created new fields of action for the further development of the Morris Model with new measures. Objectives, project portfolios, and stakeholders involved have been multiplied and expanded. The Morris Model stands on more and new legs, and the community becomes an important new partner.

IV a. The Vision: Big Picture 2.0

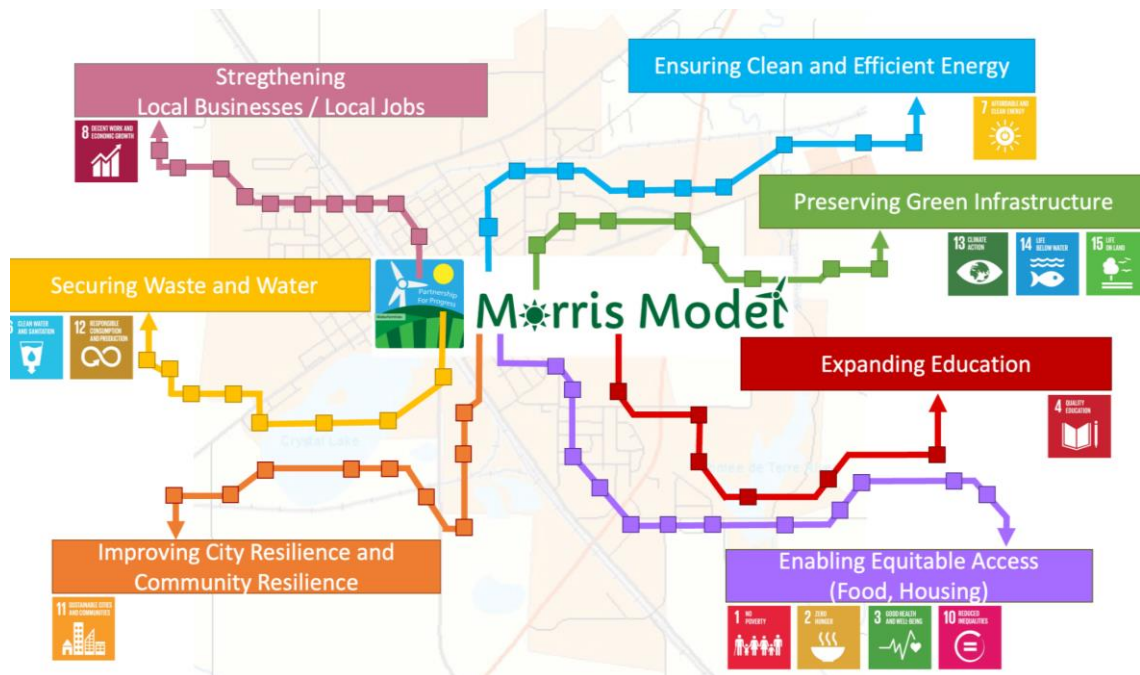
The Morris Model Strategic Plan 2.0 continues the work of 1.0 as a new piece in the puzzle of Morris' future development. The existing fields of action from 1.0 have been aligned with the goals of the SDGs and new fields of action have been added. The circle of stakeholders has been significantly expanded - all of which is a great success. This was made possible by the large number of participants and never-ending discussions and conversations.

As a result of the two community events, the bilateral consultations with the Morris Model partners and numerous internal consultations, a big picture of version 2.0 has been developed. The big picture - i.e. the overall vision for the continuation of the Morris Model's successful work - clearly sets out the long-term vision for future collaboration and the objectives and the steps to be taken to achieve these objectives:

- The core objective remains the three Big Goals from 1.0, which will continue to be implemented individually by the Morris Model partners (as will the remaining projects of the 1.0 version).
- Existing fields of action will be transferred to version 2.0 (Energy, Waste and Recycling, Education).
- The Morris Model has one more partner - the community.
- New fields of action from the community complement the big picture in a target-oriented way (City and County Resilience, Equitable Access, Green Infrastructure and Green Businesses and Jobs).
- All fields of action are interlinked - the stakeholders work together.
- A renewed focus on communication and education will share information locally and broadly and will increase engagement between the Morris Model and the Community.

Big Picture Morris Model 2.0

IV b.



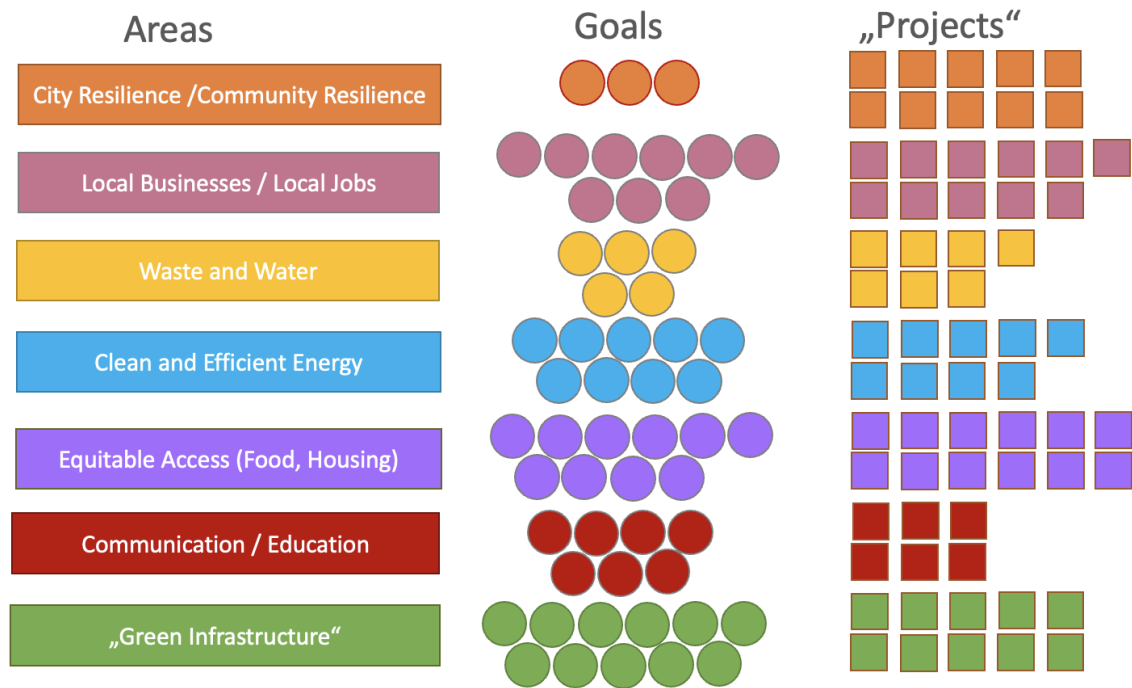
The pathway: goals and projects

The results of the discussions of the first event were summarized and organized (see Appendix VI e. Assets-Vulnerabilities-Goals and Projects). Goals and projects for Morris Model Strategic Plan 2.0 were derived from this and are essentially based on the project proposals of the event participants. A total of around 65 new projects were defined, which were discussed in detail and confirmed in Event II. This provides the basis for a second implementation phase / expansion of the existing Morris Model. The objectives and measures reflect the status of the current discussion and form the framework for short- to medium-term implementation. Project implementation is an ongoing process: adjustments, changes, updates and additions are an integral part of this process.

For further implementation, the projects should be worked out in more detail and specified ("Who does what by when?"). A distinction can be made between different types of projects:

- Low Hanging Fruit - Projects, that can be implemented with little effort and at short term, e.g.:
 - MM podcast and MM newsletter
 - Yearly Community Events

- Information on websites about MM activities (Morris Model, City, County, UMM, WROC)
- Cooking classes/ cookbook for low-income families
- Walk the Talk - Projects, that show that something is already happening, e.g.:
 - Talk to farmers about green energy
 - Talk to local business people about green energy
 - Hold citywide walk/bike/roll to school and work days
- Midsize Projects, that require more work and coordination to concretize them, e.g.:
 - Finding a site for a community solar garden
 - Battery storage at the community center
 - More charging stations in Stevens County
 - Increase number of crosswalks and related active transportation infrastructure along dedicated walking routes to and from Downtown Morris to MAS, St Mary's and UMN
 - Tree specific and stormwater specific BMP guides for residents
 - Residential rainwater collection program
- Big Projects, which involve intensive work, where several players usually work together and which require a longer planning lead time due to their complex requirements, e.g.:
 - Green industrial park (center for innovation)
 - City owned microgrid
 - Food Emergency Plan
- Cross-section Projects, which affect all individual projects equally and are cross-sectional, e.g.:
 - Community education program
 - Health Committee
 - Ongoing project information and project communication (technologies, subsidies, good examples)



Areas - Goals - Projects - 2.0

The establishment of a coordination office (Sustainable Coordinator) has proven its worth for all partners in the past and has become indispensable. To organize project implementation, an overhead function is still needed to structure, organize and manage implementation and bring people (stakeholders), money (funding) and projects together. For the 2.0 project implementation, project management in the sense of the previous work must also continue. This includes the core task of elaborating and further developing the existing projects 1.0. Further project tasks will be added from the 2.0 version. The first step is to draw up a work program with detailed plans and prioritization.

It is important to set the foundations and framework conditions for successful implementation. The tasks of coordination and steering can possibly be extended to coordination tasks and support for Stevens County and other project partners. This is associated with a broader multiplier effect and the City and County institutions can be supported in terms of personnel to implement corresponding projects as important partners. At the same time, this promotes cooperation and relieves the existing players, who must continue to ensure that their everyday tasks are carried out in full (more work = more resources). Extensive funding opportunities are available for financing. This allows staff and projects to be funded and the financial burden on the project partners to be minimized. Funding management is also an important coordination task, including interface management of the stakeholders involved.

The progress of the project should be evaluated and reported to the City Council, County Board, and Morris Model Team on an ongoing basis. A broad-based project implementation requires a larger and, if possible, regular exchange of information to inform the urban community, attract other interested parties and win over more stakeholders from the heart of the urban community for the implementation. Information and discussion with the community can take place regularly, at least once a year, at public events.

V. Next Steps

The following projects outline short term measures and initiatives to be implemented in the near future. This is the result of the two community events and the bilateral discussions with the Morris Model Partners. It is of central importance that the interfaces between Morris Model partners and the community are further secured via the Sustainable Coordinator position. The following immediate projects are planned for short-term implementation (6-12 months):

- **Create Interest groups for sharing progress and future planning efforts**



As a result of the two community events, cooperation for the implementation of further concrete measures of the SSMM 2.0 is to be intensified through the establishment of various interest groups. The aim is to increase communication, consolidate the discussion process, and implement specific projects from the 2.0 plan. Coordination and steering will continue to take place via the sustainability coordinator. These

groups will be consulted with throughout the project implementation, from planning to implementation. The results of the work can, for example, be communicated to the wider public as part of the planned annual community events to report on the status of implementation to the interested public and gain further supporters.

- Provide more local communication and education on Morris Model projects to share the spirit



To attract many people to the Morris Model project and encourage more people to participate, the activities should be made accessible to a broad public (in the city and County) via information and communication formats. This concerns information about the goals and projects of the Morris Model and extends to concrete information about the possibilities for using solar systems on roofs or the efficient use of energy/cost savings in one's own

home/business. Successfully implemented projects of the project partners as well as individual citizens and local companies can also be made available to a wide range of interested parties as examples of best practice. In order to bundle the activities, a work and action program can be developed in a first step for the year 2024 (e.g. by the communication and education workgroup). Initial project ideas include a Morris Model podcast, a regular sustainability newsletter (in cooperation with West Central Climate Network), the provision of more information via the Morris Model website and the city and County website's and the use of social media channels. Care must be taken to ensure that the different target groups (young people, farmers, business people, private individuals, older people) should be addressed individually, as each group uses different information channels. Further project proposals for expanding communication and information include, e.g.:

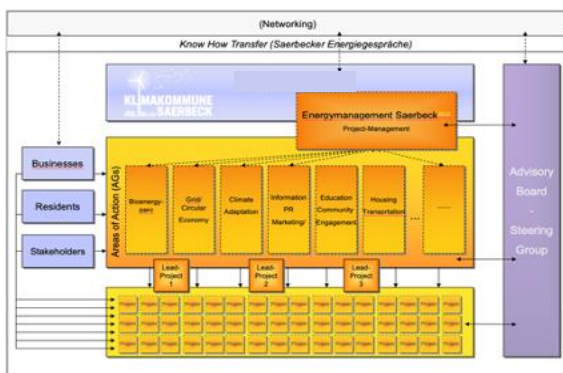
- Work on a community education program
- Providing more information for the public about state and federal funds
- "Green Energy Handbook" for businesses
- Flyers with essential information for business owners
- Community education campaign on smart water use and importance of reducing water use
- Regenerative agriculture video series for area farmers

- Host 1-2 Morris Model Community Events a year to get more people excited



As a result of the intensive and fruitful discussions at the two community events, the participants expressed a desire to continue and intensify the joint discussions. This new culture of discussion should therefore be maintained and intensified. To this end, 1 to 2 community events per year are possible. The goal is to inform more people from Morris and Stevens County about the ongoing progress of the Morris Model 2.0, to inform about the various activities in Morris, to provide an opportunity for discussion for everyone, to provide further information (e.g. about technical input on current issues), and to strengthen the discussion culture of the community. It is also about getting more people involved in the project and answering critical questions and comments. The Sustainable Coordinator can take over the organization.

- Complete 10 projects a year to show that things are happening



In order to turn words into action and show that Model 2.0 also works, a program of action and measures should be developed for each project year with approx. 10 individual projects from the lists of measures from the various fields of action (see point Vi a.). The SC can take over the organization and management, draw up an annual implementation program, coordinate this with the MM partners and other community stakeholders (e.g. as part of the annual community events), and manage and organize the implementation. This will ensure that interesting project ideas are followed by concrete projects. Possible initial lists of measures for 2024 include (see also project list, appendix VI a.):

- Finding a site for a community solar garden
- More charging stations in Stevens County

- Create a green industrial park/center for innovation
- Sustainable Coordinator looking and talking with individual business owners to get them on board
- Working with Chamber, send out sustainability fast facts and other information via socials
- Create plan to increase resilient facilities and infrastructure
- Cooking classes/cookbook for low income families (High School has a competition team for “doing food recipes”)
- Hold citywide walk/bike/roll to school and work days
- Create tree specific and stormwater specific BMP guides for residents. Include information on management
- Community education campaign on smart water use and importance of reducing water use.

The SC clarifies all key factors such as costs, financing, funding, stakeholders, project PR and marketing. An important prerequisite is the strategic cooperation of the individual project participants and their deployment as required - this applies to the City of Morris and Stevens County.

- **Provide human and financial resources to ensure project implementation on the timeline**



The implementation of the MMSS 2.0 projects and measures requires additional work. This concerns the entire organization and control of the implementation, professional project management, and accompanying public relations and information work. This work goes more than the day-to-day work of all those involved in the project. In the past, the SC office has successfully managed and implemented

these tasks at the interface between the City of Morris and the other partners in the model team (UMM, Count, WROC). This work should be continued in any case.

Due to the growing workload, it is also conceivable that an additional position could be created for the implementation of the extensive project list (approx. 65 new projects in addition to those still to be implemented in version 1.0). As a result of the stakeholder discussions, it became clear that cooperation between the County and the City of Morris is expedient and should be strengthened, not

least due to the existing interfaces (health, education, social affairs, waste management, energy supply). This can avoid frictional losses and release additional synergies. In this respect, an additional coordinator position with a focus on supporting the County and the interface work between County, City, and Morris Model partners would be a possible solution. Funding can be secured more than project funds from funding pots.

VI. Appendix 1

VI a. Morris Model Sustainable Strategy Plan 2.0 Project List

CLEAN AND EFFICIENT ENERGY		
No.	Project	Responsible Parties ¹
EE 1	Identify site, conduct outreach, and conduct techno-economic analysis for a Community Solar Garden	City, County, Public Utility, Community
EE 2	Install 15 public charging stations in Stevens County by 2030.	County, Public Utility, Community
EE 3	Explore energy storage options for senior community center and city hall.	County, Public Utility, Community
EE 4	Create a farm-scale microgrid at the WCROC.	UMN, WROC
EE 5	Establish local energy expert network for residents and businesses.	City [SC], WROC, UMN
EE 6	Develop community education focused on reducing energy use and renewables adoption.	City, UMN, MAS
EE 7	Distribute Inflation Reduction Act tax credit and rebate guide for residents.	City [SC]
EE 8	Host 1 community event per year with a Clean Energy element.	City [SC]
EE 9	

¹ UMN: University of Minnesota, Morris / WROC: West Central Research and Outreach Center, Morris / SC: Sustainable Coordinator / MAS: Morris Area School, SCEIC: Stevens County Economic Improvement Commission / HPH: Horizon Public Health, Morris/ Conexiones, Morris

LOCAL JOBS / LOCAL BUSINESSES		
No.	Project	Responsible Parties
JB 1	Establish plans for a green energy business park in Stevens County. Attract green manufacturers and investors.	City [SC], County
JB 2	Distribute 'Green Energy Handbook' for local businesses.	City [SC], UMN
JB 3	Host a business specific sustainability event to enable networking and collaboration among local business.	City [SC], County (SCEIC)
JB 4	Meet with local business owners to discuss green economy opportunities.	City [SC]
JB 5	Meet with area farmers to discuss renewable energy for farm operations.	City [SC], WROC
JB 6	Organize Community and Local Business trip to Saerbeck.	County [SCEIC], UMN, WCROC, City
JB 7	Explore green concrete opportunities with Hancock Concrete	City [SC], County [Chamber of commerce]
JB 8	Work with Chamber of Commerce to distribute sustainability fast facts and flyers with essential information	City [SC], County [Chamber of commerce]
JB 9	Develop report on land rent cost and farming vs wind vs solar vs combined approach.	WROC, UMN
JB 10	

CITY RESILIENCE / COMMUNITY RESILIENCE		
No.	Project	Responsible Parties
CCR 1	Create a city owned microgrid with city hall and resilient community hub by 2030.	City [SC]
CCR 2	Identify and pursue opportunities for clean mobile power stations for emergency operations.	All
CCR 3	Establish a network of facilities hardened against power loss.	City, County
CCR 4	Create a plan to increase resilient facilities and infrastructure.	City [SC]
CCR 5	Working with Morris Model partners- identify and make known locations hardened against power loss.	City, County, UMN, Community
CCR 6	Reopen Morris community center with dedicated community space that's always open.	City [SC]
CCR 7	Hold citywide walk/bike/roll to school and workdays	City, MAS, UMN
CCR 8	Increase the number of crosswalks and related active transportation infrastructure along dedicated walking routes to and from Downtown Morris to MAS, St Mary's and UMN.	City, MAS, UMN
CCR 9	

EQUITABLE ACCESS (Food, Housing, Health)		
No.	Project	Responsible Parties
EA 1	Identify funding and complete a Food Emergency Plan for Stevens County.	County (Food shelf, SCEIC, HPH), UMM
EA 2	Build 6-10 more childcare pods. Explore adding renewables and heat pumps to reduce operating cost.	County
EA 3	Create plans and identify funding for a food shelf expansion with resilient facilities.	County (Food shelf)
EA 4	Create food shelf cookbook with commonly available ingredients.	County, City
EA 5	Work with local farmers to explore strategies for increasing local food production and consumption.	County (Food shelf, SCEIC, HPH)
EA 6	Establish a location with 24-hour food access.	County [Food shelf], City [SC], UMN
EA 7	Coordinating with MN State, identify CNA, Nursing, and Daycare certification programs that can be brought to Morris. (i.e. CNA, Nursing, Daycare, etc.)	County [SCEIC, Chamber of Commerce], Hospital
EA 8	Establish a Health Equity Committee. Identify gaps to equitable access to health services. Create more opportunities for community health.	County [Human Services, HPH], Hospital, St. Francis Health
EA 9	Bolster university programs addressing translation services and ELL. [Communication and Education]	UMN
EA 10	Increase options for access to mental health professionals.	County, Hospital, UMN

EA 11	
COMMUNICATION / EDUCATION		
No.	Project	Responsible Parties
CE 1	Identify funding for and create a Morris Model Apprenticeship Program	UMN [Morris Challenge], MAS, City [SC]
CE 2	Plan and Host sustainability summer camp at UMN Morris campus.	UMN [Morris Challenge], MAS, City [SC]
CE 3	Develop a Morris Model newsletter via West Central MN Climate Network	City [SC], Climate Network
CE 4	Create a Morris Model/sustainability and energy podcast	City [SC], UMN
CE 5	Bolster ELL and Translator programs at UMN and MAS. [Equitable Access]	UMN, MAS, Conexiones
CE 6	Create Morris Model training for new hires at Morris Model partners.	City [SC]
CE 7	Create UMN OOS Alumni Spotlight to highlight widespread sustainability impacts.	UMN
CE 8	Offer Community focused green tours to educate residents.	UMN, City [SC], WCROC
CE 9	

GREEN INFRASTRUCTURE “Our natural assets”		
No.	Project	Responsible Parties
GI 1	Create tree specific and stormwater specific best management practice guides for residents. Include information on management.	City [SC, Tree Board, City Forester]
GI 2	ReTrain and ReSkill city forestry staff in updated BMPs	City [SC, City Forester]
GI 3	Plant 500 trees each year for the next 5 years	City [SC, Green Corps]
GI 4	Conduct volunteer invasive species removals and tree plantings during Earth Month.	City [SC, Greencorps, Tree Board]
GI 5	Restore city owned remnant prairies to ‘very good’ condition.	City [SC, Parks Board], Morris Wetland District
GI 6	Increase the survival rate of young trees by 50%.	City [Tree Board, Tree Stewards]
GI 7	Create new lawns ordinance / a community partnership that allows for diverse and low input management options.	City [SC, Tree Board, Parks Board, Planning Commission]
GI 8	Add compost and/or recycling bins to restaurants and along major walking corridors.	City [SC], County, local businesses
GI 9	Identify high value ash trees for EAB treatments.	City [SC, Forester, Tree Board]

WASTE AND WATER		
No.	Project	Responsible Parties
WW 1	Identify funding and establish residential rainwater collection to reduce runoff.	City [SC], County, Climate Network
WW 2	Create a community education campaign on smart water use and importance of reducing water use.	City [SC and Mayor?], Climate Network
WW 3	Build dedicated pages on city and County websites addressing water and waste.	City, County
WW 4	Start Adult Community Education to learn essential knowledge [IE basic plumbing and electrical, intro to canning, basic sewing and mending, etc.]	MAS [Community Ed.], City [SC], County
WW 5	Create lending library for power tools, small machines, and specialty equipment. Collaborate with local businesses.	City [SC and Library], UMN
WW 6	Generate video series on sustainable and regenerative ag practices for farmers.	UMN, WCROC
WW 7	Start composting programs in Hancock and Chokio	County
WW 8	

VI b. Summary of Project Progress and Goal Progress on 2018 Strategic Plan

(by Griffin Peck, Sustainable Coordinator, July 2023)

As of the writing of this summary, approximately 29 projects from the original 100 Projects have been completed according to the knowledge of the Sustainability Coordinator. The projects that are completed are as follow:

1. Install Solar PV on public buildings (3)
 - a. *110 kW of solar on 4 different building types. Reduced city of Morris's grid electricity use in all of its buildings (including those without solar) by 33%.*
2. Install small solar array at High School (14)
 - a. *Reduces grid energy use and electrical emissions and provides revenue stream for a MAS robotics club. Unique financing model for a club for a k12 school.*
3. Establish a Bio-gas plant with local ownership (17/18)
 - a. *AmpAmerica's RNG plant removes methane from 3 industrial dairy operations, Captures, cleans, and injects for use into the NG line running through Stevens County.*
 - b. *New biogas facility in the works. Presented to County commissioners in July 23. Located on 28 East of town. Will collect manure from dairy's in MN and ND/SD. Manure will go through heating process to extract methane and methane will be injected to be used locally.*
4. Ramp up NH3 storage, usage, projects (25)
 - a. *Project has expanded to include several national partners. Funding through DOE ARPA-E will expand the facility to produce 1-ton per day and will be the first site in the world to do so. **Scaling up from pilot scale to community scale.***
5. Feasibility study of converting UMM hot water to steam (32)
 - a. *Plans in OOS folder contains distilled pricing estimates of upgrading to hot water, chilled beams and/or more efficient HVAC systems –can we trial a heat pump in any of these cases?*
6. Predesign for district heating with city/hospital/campus (34)
 - a. *Evergreen energy performed feasibility study that would include the MAS campus and the hospital campus. Study found that a district heating system would reduce energy costs, reduce carbon emissions, reduce capital operating costs at SCMC, and free up space in both buildings. 1.3 million dollars in energy savings over 30-year LCCA. Reduce carbon emissions by 28% for heating needs.*
7. E-bike pilot program (36)
 - a. *2 E bikes purchased in 2020 using Tech Fee funding. Program had rough start with Covid, but thanks to further work by OOS interns has been successful- bikes were taken to community events and students events to advertise. E bike adoption within the community is also increasing among university associated folks and non-U associated folks. 2024 will have E bike tax credit available to expand adoption within Morris.*

8. Install DC Fast charger in Morris (38)
 - a. *OTPCO is installing their regional network in Western MN throughout 2023 and 2024. Morris will have 2 180 kW DC fast chargers and 4 lvl 2 chargers. 97% of otp customers within 30 miles of charging, 100% within 60 miles.*
9. Purchase City PHEV (39)
 - a. *Chevy Volt PHEV. With 50 miles of electric range, city employee travel is emissions free within the city and County. And when employees need to travel outside of the County, the vehicle acts as a hybrid with 45 MPG.*
10. School district electric bus application and purchase (49)
 - a. *School district worked with City of Morris and UMN Morris student to write an application for two electric busses. Busses are used to fill the need to two routes for the schools. Reduced GHG emission. Improves air quality in residential areas with kids.*
11. Dialogue with dealers on EV and E85- this needs to be continued too (50)
 - a. *Dealers are continuing to work with the EV transition. Heartland Chevy is installing 2 DC fast chargers to support equinox ev, blazer ev, and Silverado ev. 2023 Chevy bolt is most affordable car in America starting at \$16k after tax incentives. Ford dealer continues to offer test drives with a lightning and sell Chrysler PHEV and others. Continuing partnership by working with OTP to advertise cost of ownership with OTP overnight rates.*
12. Morris Model friendly stickers on Cars and Gas pumps (51)
 - a. *I believe this happened. If not, could be a cool way top highlight e85 as a biofuel.*
13. Evaluate current waste streams that can be recycled of composting *part of syd/trygg work* (56)
 - a. *Composting team (above) worked with local businesses to establish organics diversion. Present at restaurants and grocery store. Individual homeowners are also a part of the program- over 500 kits distributed to folks around Morris. Now 4 different drop sites- 3 on eastside and 1 at city shop. Add 1 more on NW side.*
14. Develop composting at County level (58)
 - a. *See above.*
15. Introduce standardizes signage for waste/recycling/composting across County (61)
 - a. *Worked with Pope Douglas to adapt signage with Stevens County/ Morris logo. Creates recognition of composting with similar signage across the entire community.*
16. Composting at public school and st mary's (64)
 - a. *Syd worked with both entities to start composting. Elementary students have it down tight. Middle and HS are less good about separating food from recycling and landfill. Both schools have composting during meals, but not bins?*
17. Install community drop sites for composting and route/pickups for local businesses and restaurants (60 and 65)
 - a. *See above.*
18. Manage waste at community events SYD (63)
 - a. *See above*
19. Streamline composting at UMM Dining hall (67)

- a. *Food grinder presses water out of organic waste before its dropped directly into composting bin below grinder.*
20. Hire a Morris Model coordinator (72)
 - a. *Currently position is filled with Sustainability coordinator- provides capacity to coordinate Morris model partnerships and engage in relationship building to foster new partnerships. Coordinates grant applications for Morris model organizations to work together on.*
21. Community project on storm proofing opportunities- Community Resiliency Building (71)
 - a. *Community resilience building- funded through WCI 2020-2023- CRB discussion series, CRB resilience workshop, CRB Community building events.*
22. Newspaper and social media for Morris Model message (74)
 - a. *Sustainability spotlight articles in newspaper- 17 and counting so far. Articles are also posted via the Morris Model website. Morris Model facebook page is open and available- not much interaction/engagement.*
23. Develop footprint for intensive agriculture vs conservation agriculture—Eric? (83)
 - a. *Ongoing wroc work- believe I saw some of this in my Industrial ecology class.*
24. Establish best practices for Ag commodities, kWh for Dairy and Pork—Eric? (84)
 - a. *See above- ongoing work.*
25. Develop method to track and report on sustainability- Morris Model Blog and Sustainability Spotlight (88)
 - a. *See 22*
26. Host community event about solar (89)
 - a. *Morris Solar celebration- Fall 2022. Educated community about solar installed on Morris buildings and incentives coming soon. Learned about needs from Morris community and created a solar pv citizen installation guide available on city website.*
27. Progress on GSC advance to step 3 and 4 and 5 (94)
 - a. *Progress on solar installations on city buildings and by homeowners in Morris helped to push forward steps. Other projects on this list also contributed to it IE composting, ev adoption, bike access.*
28. Display in library to demonstrate function of geothermal (96)
 - a. *will be on pathway and installed display of solar production*
29. Communication Partnership between Morris and Munster students- do we count student exchanges, or do we want to create a clearer partnership with OOS and Munster? (97)
 - a. *OOS students work with German Interns during their time in Morris. Morris students visit fh munster yearly with a delegation of students from across the university system.*
30. Energy Experience Pathway (68)
 - a. *Installed in July 23, the pathway focuses on energy education and literacy by using city buildings and their solar arrays as an example. Additionally, the pathway explores the importance of local ownership, urban canopy importance, and County wide composting efforts. Installed adjacent to Otp chargers and library bike program.*
31. Develop City Carbon footprint baseline and tracking (31)

- a. *ML 22 LCCMR Activity one- quantified city of Morris LGO GHG emissions and Nitrogen emissions. Looked at 3 years- 2020, 2021, and 2022. Performed analysis using Degree days and precipitation totals. Made recommendations for GHG reductions through solar energy installation. Explored equivalencies of Morris's footprint with different examples.*
32. *BONUS- Solar Guide for Morris and Stevens County Residents (n/a)*
 - a. *Created based on community wants and needs- how can we make solar easier for folks in Morris and Stevens County? Solar guide educates on different types of solar systems, racking systems, and explains interconnection and permitting needs for any residential installation.*
33. *Improved clean energy signage around town (pathway) (92)*
 - a. *See 30(68) City building signs have information regarding annual KWH use in buildings, and how much energy the solar arrays on each building offset that annual use through clean energy production.*
34. *Develop and expand community resiliency work (75)*
 - a. *Worked with WCI community resilience funding to put on Morris Model resilience discussion series which brought field experts into Morris community to educate on how climate will change in MN, and it's impacts for WC MN life as we all have known it. Then worked with Second Nature and the Nature Conservancy to do a community resilience building workshop with community leaders and members. This workshop produced a community resilience report which guides leaders on community wants and needs when it comes to increasing resilience against extreme weather, power outages, flooding, drought, and more.*
35. *Small solar install at UMN Morris taking advantage of POP Solar (15)*
 - a. *240 kW agrivoltaic array used POP solar funding.*

As of the writing of this summary, the following 16 projects are currently 'In-Progress:'

1. *1 MW of solar at UMN Morris (5)*
 - i. *Currently ~270 kW of solar PV installed at UMN Morris. Another 180-240 kW of agrivoltaics is already in the pipeline- brings total planned to around 500 kW. City of Morris WTP project will add another 500-700 kW of solar. This would bring total along US 59 to 1 MW of solar. Another demonstration of space needed to power UMN campus.*
2. *UMN Morris Solar and Storage project (21)*
 - i. *UMN Morris is currently working on two energy storage projects. The first is a 40 kW LiFePo battery that will be powered by the GP solar array and virtually provide power back to the campus grid to power GP when renewables aren't producing. The second energy storage project is exploring using a flow battery to power the entire campus for several hours. The battery which would store energy in two electrolyte solutions, would be much safer than traditional lead acid, lithium, and LiFePo4 batteries that require fire suppression systems and other safety measures. The flow battery uses a mixture of iron, water, and salt to store energy between two electrolyte solution. Because of the design, battery storage (kWh) and max output (kW) can be scaled to customer needs.*

3. Enhancing energy metering on UMN Morris campus (27)
 - a. *Bryan Herrmann is pursuing funding to replace and upgrade metering.*
4. Install more level 2 charges (37)
5. Buy and operate electric school bus and transit bus (41)
 - i. *Electric school busses have been purchased and operational for 1+ years. Electric cutaway bus has been ordered. Fast charger and facility remediation procurement ongoing.*
6. Expand and Improve SRTS program, designated bike lanes, MNDOT Funding etc (54)
7. Host public meetings to discuss strategic report (69)
8. Develop K-12 curriculum. Renewable fuels, climate smart (82)
 - i. *See below 9 (91)*
9. Renewable energy visits to High School (91)
 - i. *Morris challenge is connecting area high schoolers with sustainability work happening at UMN Morris and UMN WCROC. Targeting high schools within 2 hours of Morris and those that are in rural areas. Building connections with young folks to attract them to Morris and to the renewable energy technician field.*
10. GIS copy of pathway once installed (93)
 - i. *GIS/ Storymap is work in progress.*
11. Identify CSM/ Morris Model volunteer network and build capacity (95)
 - i. *Morris Model mailing list is one network to work though. UMN Spouse and Retired faculty lists. UMN Faculty and Staff list. Other community orgs to tap?*
12. City Bike racks and Bike sharing program (35)
 - i. *Through nice ride program ending in twin cities, UMN Morris received 15+ bikes and distributed them throughout the university and the city of Morris. Bikes can be found in the Briggs library, in the welcome center, and in the RFC. Bikes are also located at WCROC and Morris Library. All bikes will be brought to UMN TC in fall for servicing.*
13. Facilitate and encourage more bicycle use in community (42)
 - i. *Through bike program above and e bike program at UMN RFC, biking is increasing in Morris. In 2024 new e bike tax credit will make e bike purchases easier for many in the community. Will work with area orgs to advertise tax credit and increase Biking. Morris Mayor (K Wohlers) wants to expand existing biking networks and create a connection to Alexandria and Starbuck/Glenwood.*

As of the writing of this summary, the following projects are ones the Sustainability Coordinator hopes to work on in coming years:

1. 1 MW solar community garden/solar on landfill (4/13)
2. Occupancy sensors in public buildings
3. Align community energy goals with OTCO and Agralite (24) *Could we put pressure on these entities to install renewable energy generation at grid scale in our County to go after producing renewable energy in the County?*

4. Purchase a thermal imaging camera or work with UMN Morris/ WCROC to conduct thermal studies of residential and commercial buildings- UMN Heat Seekers work with Coordinator to offer services during winter 2024-2025 (28)
 - a. *Purchase thermal imaging ~~drone~~-CAMERA- using a drone was only feasible in warren due to a variety of factors including but not limited to- existing drone program at area college, and warren owning their own utility, specific scan conditions.*
5. EV Transportation option for UMN Morris Students to rent for regional travel (47)
 - a. *Can students already rent the bolt for personal regional travel? Either way- incentivize students to use PHEV and EV for regional trips. Further electrify Morris fleet for student and staff travel (non-on-site equipment)*
6. Start a community garden capable of providing produce year-round (59)
 - a. *Paisley Sierra is working on starting three sisters garden on campus and other summer season growing- possibility to use a greenhouse on campus to grow other produce year-round?*
 - b. *Explore year-round greenhouse with Pommes De Terre foods and food shelf.*
7. Add recycling bins to gas stations by pumps with additional signage ie landfill vs recycling (62)
8. Distill community Energy Report from utilities to create baseline of energy use in Morris (70)
9. Create an integrated website to show instantaneous and historical energy production in Morris across orgs (78)
10. Complete a GESP or LEEP project in County (79)
11. Smart microgrid- *Griffin met with OTCPO and they don't have experience in doing this within their MN service region- would have to partner with them to figure out policies and implementation- would be a pilot project of sorts (6)*

As of the writing of this summary, the following projects need to be revisited to assess feasibility in 2023:

1. District heating project- *I think this could still be a good idea for MAHS, University, and Hospital- what would it take though? (12)*
2. Require flex fuel usage (in organizational vehicles- yes, but for all public??) (40)
3. Convert police fleet to EV/PHEV- *No more police—could work with County to make sheriffs fleet into EV/PHEV/HEV) (55)*
4. Youth competition with video competition with energy scouts/ YES Team at MAHS *(Staff capacity does not currently exist to support either of these to my knowledge, would require Morris Model coordinator to facilitate—discuss further (80/81)*
5. Develop Sister City program with Fukushima, Japan – *wants to know more about this- do other still think this is something to pursue? (99)*

Big Three Goals.

1. Produce 80% of the energy consumed in the County by 2030

- a. *City of Morris and UMN Morris and WCROC all have installed and are looking to continue to install renewable energy and carbon free energy solutions.*
- b. *Not close to 80% of energy produced in the County though.*
- c. *What are some mechanisms we should consider to reach this goal? Is it a matter of building a local energy coop or working with OTTERTAIL and AGRALITE to install utility scale renewables in Stevens County? Is this something even allowed within policies?*

2. Reduce energy consumption 30% by 2030

- a. *Difficult to track if organizations are not benchmarking their energy use—Morris has reliable data starting in 2019- can get better data for older years but would need to dedicate a lot of time to data entry.*
- b. *UMN Morris has reliable records for some buildings, but overall data completeness is low and little to no data is available for heating etc- requires installing better meters—aggregate bills may show reductions though not currently possible to track at a building level.*
- c. *Unaware of WCROC goals*
- d. *MAS has data current to 2021 in B3*
- e. *County operations are current to 2009- does not reflect renovations in 2012 and energy use sense then*
- f. *Maybe a Greencorps worker could work on behalf of City of Morris and Morris model to work on updating data in b3 for city, high school/elementary school, County etc. OOS interns work with troy and bryan to build up data for UMN Morris. Can also work with ottertail to possibly get more sysynct data rather than relying on bills which can be very time consuming*

3. No landfilling of waste generated within the County by 2025

- a. *Currently MSW is landfilled in Gwinner and Incinerated in Alexandria- City of Morris waste is incinerated, and wider County waste is landfilled.*
- b. *Work with Pope/Douglas to send a higher percentage of water to incinerator.*
- c. *Continue to reduce organics in waste streams via organics composting.*
- d. *Increase diversion to recycling.*
- e. *Engage the public more when it comes to waste and thinking about reducing waste*
- f. *Do we have any idea how much waste is currently being diverted- work with Engebretson on this.*

Community Goals

I think that these community goals can act as sub goals for the Big Three goals. They can help guide future efforts and provide some additional mechanisms for reaching goals.

As a community, including the city, County, public schools, UMM, and industry our goals are as follows:

Energy:

- 1. Reduce Energy consumption 5% annually with a minimum reduction of 30% by 2030.**
- 2. Expand solar generation to 50% of public buildings and 25% of privately-owned homes.**
 - a. Public building is adding more solar, need to work on adding solar to homes in Morris- New citizen guide to solar installation could help.*
- 3. Using renewable energy, produce 80% of the community's energy needs by 2030 with strong community investment and participation.**
 - a. As a goal I think this closely reflects what was done and is being done in Saerbeck. Is it possible to still honor the partnership while also making this goal reflect the realities of Morris being a small town in the US vs Saerbeck being a small town in Germany. There are simply different needs when it comes to climate and policies in the countries are so vastly different. Are there any communities in the US that produce this much of their own energy?*

Transportation:

- 1. Reduce fossil fuel consumption by 30% by 2025 with strategies for public and private fleets.**
 - a. Within the city of Morris, fuel consumption has trended downward over the last 3 years- possible that this is due to lingering effects of less consumption during the pandemic. We can further clarify this by adding strategies for electrification of fleets and fuel switching.*
- 2. Establish baseline fossil fuel consumption and then include on-going monitoring.**
 - a. City has done so with GHG inventory that is currently on going.*

Waste Reduction and Recycling:

- 1. Eliminate organics in waste streams.**
 - a. Our community is working towards this reality with composting program- could be in peril when funding for the program runs out later this year. How can we increase adoption and sell it to our community? Could homes that participate in organics recycling and recycling materials get a discount on their garbage bill? How can we incentivize diverting waste from landfills?*

2. Achieve 60% diversion from landfills to recycling and compost

a. See above

Education:**1. Raise awareness through a K-12 curriculum.**

a. This is something that I haven't had a ton of experience with yet. I specifically want to work more on this by trying to do presentations with the city of Morris. It seems like there is not a ton of staff capacity to add things to curriculum—would have to be supported by UMN and City.

2. Develop semi-annual scorecard and communicate results.

a. I have been writing in the Stevens County times about current sustainability efforts, but we should work to develop a scorecard that looks at the goals areas in the strategic plan and find a way to measure success.

3. Develop strategies for effective communication and volunteer programs.

a. Have and use the Morris Model email list to communicate, are there other ways to communicate via social media, if so, which social media platform should we use to reach different audiences. If we developed a volunteer program, what would it focus on? Clean ups in Parks? Door knocking to spread the word about composting and recycling?

VII Acknowledgements

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The West Central Initiative

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All of the November 8th workshop attendees

see list of participants (appendix 2)

The Morris Model Core Team

Troy Goodnough, Bryan Herrmann, Mike Reese, Eric Buchanan, Doug Reed, Syd Bauer

All Morris Model Partners

University of Minnesota-Morris, City of Morris, West Central Research and Outreach Center, Stevens County, Morris Area School District

Dr. Sabine Engel

University of Minnesota and the Climate Smart Municipalities Partnership

Guido Wallraven

for flying around the world to spend two weeks in Morris,
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