

COMMUNITY ENERGY TRANSITION

Final Report and Recommendations



A CROSS-AGENCY SPRINT WORK GROUP NOVEMBER 2021









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EXECUTIVE SUMMARY

Since April, an interagency staff team representing members of the Minnesota Business Vitality Council (MBVC) has conducted research and analysis into the issues communities face when large energy plants undergo significant transition, including shutdown. The Community Energy Transition (CET) team has prepared this report for the Minnesota Business Vitality Council, to summarize learning and present initial recommendations for policymaker considerations, as well as an initial "toolkit" of resources for impacted communities. Best practices are provided for communities to consider implementing. And finally, we provide recommendations for the newly established Energy Transition Office to consider as it works on developing a comprehensive community energy transition plan for the state. Additional stakeholder outreach, engagement and research is needed, as the CET team's research and stakeholder outreach was abbreviated due to time constraints.

BACKGROUND AND NEED

While most policymakers in Minnesota already know and understand the general need for strategic thinking on energy transition, the group did a general review of the energy sector trends and documented impacts. Recent data confirms that aging infrastructure, changes in the economics of fossil and clean technologies, federal and state policies, and growing customer awareness of global climate change have all contributed to an accelerating shift away from fossil fuels. While such a shift is inevitable, the potential and actual impacts on Minnesota communities that have hosted large energy power plants are and will be real: jobs, tax base, and even the identity of a city or county may all be at risk. It is also important to recognize that not all communities have benefited from the current power plant infrastructure –past inequities should be taken into account when designing future actions. The three Minnesota coal plants, all estimated for full or partial retirement between 2023 and 2036, directly involve nearly 500 jobs across Becker, Cohasset, and Oak Park Heights and represent between 40 to 77 percent of the relevant city's tax base, with lesser tax base impacts on counties, school districts, and nearby industries. With closings years in the future, we have an opportunity to support power plant communities to plan and implement strategies for a successful transition.

KEY FINDINGS

The team conducted in-state interviews with representatives from impacted communities, utilities, unions, and other groups who seek to benefit from energy transition. Our team met as well with a number of out of state and international stakeholders in regions that have already introduced energy transition efforts. Learnings from those conversations are presented here in the form of key findings.

Tax Base. The impact on tax base may be moderate to severe, depending on the community, and likely enough to justify existing avenues for state or national assistance for the local governments. The existing formula for Local Government Aid (LGA) will likely move more dollars to these areas over time. However, the type of activities needed to plan and prepare community response would likely benefit from more intensive and specific technical assistance and potential tax base reduction relief before a plant shuts down. Some past efforts to alleviate impact (e.g., equalization of school funding) have real but narrow impacts that may not extend to the full community (e.g., city or county services).





Community engagement. The more engagement and communication a community can experience, the more likely it is that solutions can be proactive and effective. State and federal authorities, unions, community partners, academic and scientific researchers, non-profit interest groups, economic development agencies, business groups, and of course the utilities themselves can and should all weave threads in the tapestry of conversation. These types of conversations are difficult to have well in advance, since change can be costly and most individuals and institutions are understandably reluctant to discuss potential loss of jobs or reduction of tax base. But these are nevertheless essential conversations, since the work to be done is substantial.

Workforce. Job assistance programs for workers who experience job loss already exist and can be effective. They require three things to maximize success: worker participants who are ready to move on, employers who cooperate with partners on issues like site access and worker training hours, and sufficient federal and state resources woven together to address potential barriers (child care, transportation, language, etc.) that often arise. As with many other workers in other fields experiencing job loss, most current workers at these fossil fuel plants will not naturally transition into another energy job - it's more tied to their skillset. Strong local economic development initiatives like business attraction, retention, and expansion and seed investment capital are a critical part of past communities' success.



Re-use of Assets. One of the key discussion topics for any community with a plant taking up so much acreage is how to redevelop and/or re-use the site, with the aim to use existing land assets or interconnects to the grid for future resource development. Much depends on the current owners of each site, and each plant can have a different ownership structure. There is some anecdotal evidence that independent third-party owners can act in less cooperative fashion than state-owned utilities, in planning the future of a closing site.

Economic Diversification. Economic diversification is the most critical strategy that communities must deploy in order to realize a successful transition. The closure of power plants may force some communities into necessary conversations that virtually every community has when experiencing the end of a long history with a large single employer: how can we create a future together that will make us less dependent on one industry, and this less likely to happen again? The state can play an important role in providing information on funding opportunities or identifying gaps/needs in capacity.

Additional themes. The findings from this work were as numerous, varied, and informative as the sources themselves; but some themes came up less often in the shortened time frame the CET team had. Emerging themes that could use more exploration included the changing nature of closure timelines, and the general dearth of women's and Tribal Nations, indigenous, people of colors' voices in many community conversations that impacted them. Renewed focus on equity and diversity seems particularly important, given the changing state and national demographics and structural racism.



PRIORITY RECOMMENDATIONS

Many implications stem from the above findings. Of those, the CET team recommends the Energy Transition Office prioritize looking into three specific, actionable items that are likely to generate the highest return on investment both short- and long-term, and would require senior policymaker engagement and action both now and in the future.

Office of Energy Transition as "one-stop" to promote best practices and existing resources. The state agency programs most likely to engage energy sector transitions – from a worker, utility, or elected official perspective – should increase their awareness of each other and their intersections. Upon analyzing the projected plant closure dates in Minnesota, these public servants could initiate and maintain a series of interdisciplinary conversations among themselves and others. The Dislocated Worker program should be familiar with the Public Utility Commission's role and the Utility Valuation Transition Aid program, who should be familiar with the Minnesota Job Skills Partnership, and so on. The state's new Office of Energy Transition could be the ongoing facilitator of this interagency community of resources. As plant closure dates approach, this team would engage communities together or in coordination.

Over time, this Office of Energy Transition should be capable of spear-heading a long-term investment plan for Minnesota's communities facing these economic challenges, which would include strategies for raising funds to match state and federal grants, advocating appropriately for bonding dollars, and engaging Community Development Financial Institutions.

Consider new or repurposed resources to kick-start community engagement. Even if a projected shutdown date is a decade in the future, communities will be more willing to think through the retraining and related economic development needs if the State opens up paths to new or little-used resources. A potential example would be the Minnesota Job Skills Partnership's "six percent" funds (M.S. 116L.05), which represent a modest but flexible opportunity to undertake special projects "concerning areas of projected employment need." That board and staff (and leaders and staff like them) should engage the Office of Energy Transition to schedule a series of specific conversations over the next year or two, to give eligible communities the chance to chart a successful course through the economic challenges ahead.

Over time, experience with these modest, flexible resources should lead to more in-depth learning and data on what Minnesota's communities need, and what works. This learning, documented and organized by the Office of Energy Transition, would form the bedrock for specific executive branch budget proposals to the state legislature, whether using Workforce Development Fund, other Special Revenue streams, or the General Fund.

Ensure a strong focus on inclusion and equity. Workforce development organizations, economic development authorities, unions, and many other stakeholders need assistance and training to recognize the systemic biases inherent in our systems, including in training and in most community conversations about large shutdowns, including power plants, and the overall impact and solutions. The Office of Energy Transition should generate a plan for its agency commissioner, which would be developed in consultation with frontline communities and communities that have





experienced systemic bias and racism, as to how the state Energy Transition plan's strategies lessen current disparities, including but not limited to providing effective and accessible workforce training tailored to specific communities.

Over time, the Office would use specific goals and metrics established in the plan, to determine progress in meeting the community transition needs across all demographics.

COMMUNITY ENGAGEMENT TOOLKIT

In addition to the recommendations for policymakers above, the CET team has taken the liberty of assembling a few key resources for communities' use in the near future. The Office of Energy Transition may find this head-start helpful in assembling the broad and diverse array of resources that any community in Minnesota might need to engage, to ensure successful outcomes.

INTRODUCTION

BACKGROUND AND NEED

Trends in Energy Transition

Over the last decade, the nation has experienced an accelerating shift away from fossil fuels. Driven by the increasing deployment of renewables and battery storage, falling solar and wind prices, aging coal infrastructure, and concerns over the impact of fossil fuel pollution on our health, climate, and environment, the pace of the



energy transition has only quickened in recent years. It will serve Minnesotan's well to be proactive in this transition.

The transition to clean energy can create opportunities for many communities to enter the energy market through attracting renewable energy developments and can open employment opportunities for those previously left out of the energy economy. However, in the communities that are host to existing fossil fuel infrastructure, the transition can bring layers of economic and social distress. This can include significant reductions in tax base, loss of high-paying jobs, legacy environmental impacts, and reshaping a community's identity.

These trends in the energy sector are not unique to the US. In the US and across the globe, community leaders and government officials are implementing policies and programs aimed at addressing the impacts of the energy transition and developing thriving economies. Existing programs and policies focused on economic transition generally fall into four categories: 1) providing financial support to mitigate reduced tax revenue; 2) supporting workers displaced by the transition through retraining programs or, in some cases, financial support to bridge to retirement or reemployment; 3) assisting in reuse planning for the site; and 4) incentivizing the deployment of renewable energy.

Like all built infrastructure, large power plants have a useful life. In Minnesota, legacy power plants are now decades-old, and many of Minnesota's plants are eligible for retirement in the next 10 years. The plants have a significant footprint in their community: property taxes on these power plants can be a significant source of revenue for the school district, city and county; the plants provide many jobs; and the plants can contribute to the fabric of the host communities.

It is also important to acknowledge that not every community sees itself as benefiting from their local power plant. For example, the Prairie Island Indian Community has reported the pain and detriment the local nuclear plant has caused. Systemic racism and structural barriers have shut out people of color disproportionately from jobs, including those in the energy sector. Future policy development must take into account these dynamics.



We recognize that communities that have hosted a large energy facility face challenges as these plants age and retirement dates are set, and there are challenges that are unique to each community. That's why advanced planning is so important, and state agencies can support communities in a number of ways as they do that planning. The goal of this report is to better understand how state agencies, from DNR to DEED, can support communities in transition planning and implementation and support plant workers in a successful job transition, while addressing inequities. It is incumbent upon us as we design



solutions to help these communities and workers who have benefited from the current energy system, to ensure those solutions also provide better equitable access for those that have not. This report will also inform the future workplan of the Energy Transition Office, which was created by the 2021 Minnesota state legislature and will have a big role in coordinating statewide response, supporting communities in economic development planning, addressing tax base, etc.

Overview of MN host communities

In the state of Minnesota there are two nuclear plants and four coal plants with multiple units that have different depreciation dates. Additionally, there is one plant that has already been decommissioned and another one that was transitioned to gas, where the impacts of these transitions are still being felt. Table 1 provides a baseline of information on the eight plants.

TABLE 1: UTILITY PLANT HOST COMMUNITIES

TABLE 1. OTILITY PLANT HOST COMMONTIES					
Plant	Host Community	Estimated Retirement	Other Information**		
Prairie Island Generating Station, unit 1 and 2	Red Wing Prairie Island Indian Community	2033, 2034 (unit respective)	Largest nuclear plant in the state. 600 employees. 39% of workers reside in county. 22% of county, 54% of city and 40% of school district's tax base		
Monticello Nuclear Generating Station	Monticello	2040	460 employees. 32% of workers reside in county. 9% of county, 50% of city and 46% of school district's tax base.		
Boswell Energy Center 3, 4	Cohasset	2035, 2036 (unit respective)	170 employees. 90% of workers reside in county. 13% of county, 69% of city and 19% of school district's tax base.		
Allen S. King Plant	Oak Park Heights	2028	87 employees. 24% of plant workers reside in county. <1% of county's, 40% of city and 5% of school district's tax base.		
Sherburne County Generating Station 1, 2, 3	Becker	2023*, 2026*, 2030 (unit respective)	301 employees. 31% of workers reside in the county. 14% of county, 77% of city and 54% of school district's tax base.		
Hoot Lake Plant***	Fergus Falls	2021 (2 units)	Further conversation with Otter Tail Power is recommended. The Company could not be reached for this effort.		
Laskin Energy Park***	Hoyt Lakes	Converted to gas in 2015	Slated for redevelopment		
Granite Falls***	Granite Falls	Closed, but still feeling impacts from closing	\$112,000 impact to budget from loss of tax base. Learned of this in August 2019 for tax year 2020. Under 3,000 population.		

^{*}Indicates retirement date has been approved by the Public Utilities Commission

^{**}Source: Host-Communities-Study-Report-FINAL_2-24-20_updated (1).pdf (mncee.org)

^{***}Source: Interviews



METHODOLOGY OVERVIEW

The Minnesota Business Vitality Council (MBVC) convened the Community Energy Transition (CET) Sprint workgroup to research and recommend how the State might best assist the counties and cities impacted by plant closures or who are interested in transitioning from coal-based to renewable energy sources. The group's goal was twofold: a) identify existing resources available across state agencies to assist those transitioning communities to plan and prepare in a way that mitigates the negative impacts of transition and to optimize the opportunities and benefits; and, b) devise additional efforts, strategies, and tools that could be made available to more effectively support these communities in the long run.

The following representatives from eight state agencies made part of this effort:

- Anthony Alongi, Section Manager, Policy and Planning, Minnesota Department of Natural Resources (DNR)
- Tim Barrett, Trade and Industry Specialist, Minnesota Department of Education (MDE)
- Katherine Blauvelt, Assistant Commissioner of the Division of Energy Resources, Minnesota Department of Commerce (COMM)
- Chris Ismil, Community Development Representative, Iron Range Resources and Rehabilitation Board (IRRRB)
- Bob Patton, Supervisor, Minnesota Department of Agriculture (MDA)
- Aditya Ranade, Deputy Commissioner, Energy Resources Division, COMM
- Whitney Ridlon, Community Development Representative, IRRRB
- Steven Roos, Environmental Planner, MDA
- Natalie Siderius, Southeast Business Development Manager and Executive Director of Minnesota Business First Stop and Minnesota Business Vitality Council, Minnesota Department of Employment and Economic Development (DEED)
- Catalina Valencia, Executive Director of Business Development, DEED
- Jon Van Nurden, State Assessed Property Supervisor, Minnesota Department of Revenue (REV)

Additionally, the team received important support from:

- Emily Rhodes, Technical Assistance and Planning Manager, Just Transition Fund (JTF)
- Cindy Winland, Senior Fellow, JTF
- Jason Wadell, Program Manager/ Coordinator, Employment and Training, DEED
- Neal Young, Economic Analysis Director, DEED
- Dru Frykberg, Senior Librarian, DEED

The group's first meeting was on April 16, 2021. The group made a six month project plan and agreed to meet every other week. The work plan comprised of four phases:

- 1. Kickoff, alignment, data gathering and analysis
- 2. Stakeholder outreach
- 3. Strategizing
- 4. Final Report





Bi-weekly two-hour meetings were held remotely and involved the sharing of information and resources identified and reviewed by members. Subject matter experts spoke to the group during regular meetings as outlined below:

- Neal Young, Economic Analysis Director, DEED, Workforce Research
- Aditya Ranade, COMM, 2020 Quadrennial Energy Report Highlights
- Katherine Blauvelt, COMM, Research on Plant Communities
- Jon Van Nurden, MN Dept of Revenue, Community Tax Base and Revenue
- Katrina Hapka and Denise Wilson, EQB Environmental Review Program, Coordinator and Director of Environmental Review Board/Program, Environmental Review and AUAR Potential
- Nick Greene, Property Tax Research Director, MN Dept of Revenue, LGA and Energy Transition Connections
- Shane Zahrt, Flaherty and Hood, and Coalition of Utility Cities, Host Communities Concerns and Desires
- Jason Wadell, Rapid Response Coordinator, MN Apprenticeship Initiative Program Manager and Marla Beatty, Rapid Response and Trade Adjustment Assistance liaison, DEED, Dislocated Workers Program
- Jodie Greising, DEED's MN Job Skills Partnership Director

To accomplish the breadth of work, all members were delegated tasks aligned with their subject matter expertise, which allowed for all members to contribute.

The group contracted, via interagency agreement with Minnesota Management and Budget (MMB), a professional facilitator, Lea Bittner-Eddy at Alliant Consulting, to assist with:

- Meeting design, format, and agenda setting;
- Facilitation of meeting discussions to assure full participation and active decision-making;
- Documentation of meeting discussions, next steps, and outcomes;
- Team communications;
- Tracking of tasks;
- Assuring compliance with project timeline and goals;
- Assistance with mid and final report-writing; and,
- Preparing presentation slides and materials.

The group delivered a mid-term report and presentation in June to the Minnesota Business Vitality Council members. Questions and feedback were received and considered by the CET group for the remainder of their work and this final report. The workgroup made a decision to move to weekly two-hour meetings to accommodate the fast-approaching deadline. The process of clear delegation of work tasks for members to complete in-between meetings continued to allow for the work to be shared by and benefit from the contribution of all members.

During Phase One the group took advantage of the diversity and breadth of knowledge of group members and developed and agreed to a work plan and timeline, reviewed and shared articles, identified relevant resources, and invited subject matter experts as guest speakers to meetings.

The stakeholder outreach phase involved identifying and interviewing the broadest groups of in and out of state stakeholders (including international) to learn from the experiences of those either facing energy transitions or those having lived through energy transitions. The complete list of interviews can be found in the Appendix under Other Resources. The group developed a standard set of questions to ask each stakeholder group and summaries of each





interview were also standardized for the purposes of identifying lessons learned and useful recommendations to pass on to those facing energy transition.

The strategizing phase involved compilation and assessment of the total data, lessons learned and key findings, with a goal to begin developing a tool kit of resources and recommendations to share with communities facing energy transition. The group identified categories for the key findings, best practices and recommendations to be organized.

These categories were:

- Tax Base/Financial Assistance
- Community Engagement
- Workforce
- Re-use of Assets
- Economic Diversification
- And Other

Members collected content under these categories and further differentiated:

- Key findings = things this group learned from their process
- Best practices = actions communities can and should take as part of their transition planning
- Recommendations = those actions the State of Minnesota is recommended to take as a result of this group's work

Given the very fast nature of this Sprint workgroup, this group is providing an initial collection of resources in the hopes that the newly created Office of Energy Transition and its associated Advisory Committee, will be able to continue to refine this work, adding definition and clear instructions for use.



KEY FINDINGS, BEST PRACTICES, AND RECOMMENDATIONS FOR STATE ACTION

Recommendations are presented here under the categories:

- **Host Communities** learnings from stakeholder interviews with communities experiencing energy transition in Minnesota, across the US and internationally;
- All Minnesota considerations for communities across the state;
- Office of Energy Transition for this newly created Office to be able to continue the work of this group; and,
- Other

The learnings of CET's work are further synthesized under each category into key findings, best practices and recommendations. The key findings are what was learned from the group's interviews. Best practices are suggestions aimed at communities for actions that can be taken in situations of energy transition. Recommendations are written specifically for state action consideration.

The CET workgroup organized learnings from the host community stakeholder interviews and information gathering under the topic headings of:

- Tax base/Financial Assistance
- Community Engagement
- Re-use of Assets
- Workforce
- Economic Diversification
- Other

HOST COMMUNITIES

Tax Base/Financial Assistance

KEY FINDINGS

- The closure of an existing power plant can have significant impacts on the tax base in a taxing jurisdiction depending on the size and makeup of the total tax base. These impacts may include tax shifting and changes in the stability of the tax base.
- There were concerns reported in many in-state interviews about raising local taxes for residents to cover the reduction in tax base when power plants close. This was seen as a disincentive for people to remain in the area and therefore could mean a larger community exodus than that due to loss of jobs related to the plant closure.
- Key considerations included the identification of both state and federal financial resources to assist energy transition.
 The factor of timing was identified as sometimes unknown, and critical to successfully utilizing the resources available.
- Communities reported wanting grants for research, data to identify exact current conditions and to help make the case for the need for grants and funding, and grants to help access federal monies.



- Some examples of successful energy transitions outside of Minnesota included equalization of school district funding, however, this equalization did not extend to library, fire and other districts that may suffer from inequitable funding support.
- Experiences from other states tell us that it cannot be assumed that plant replacement in transitioning communities will equally supplant current tax base reductions and that replacement energy also cannot be assumed to be the solution. Solutions need to be matched to an area's workforce and their specific situation.
- Common recommendations from successful international energy transition efforts were to offer tax incentives to attract new businesses into the area, as well as to lower the cost of living to keep and to attract people to the area.
- Communities in transition may need something unique to attract new businesses and people to the area.
- Many tax base funding grants decrease over time and therefore need offsetting financial support planning.
 Recommendations included that funding should be distributed to those hardest hit in regions where power plants are closing or transitioning.
- Energy is a fast changing field, so communities should remain flexible and work with stakeholders that have resources and are able to contribute to the region and its needs.
- Several out-of-state communities requested cooperation in the creation of federal assistance programs to assist states in efforts to successfully close and transition fossil fuel plants.

BEST PRACTICES

Identified best practices for host communities include:

- Proactive tax diversification
- Proactive budget review and planning
- Identification of opportunities based on regional strengths
- Economic development and diversification

Adequate timing for taking proactive steps requires open disclosure of decommissioning plans by electric utility companies. Regulated utilities in Minnesota are required to provide planned retirement dates in public filings, so host communities may be able to obtain current information without additional disclosure by utility companies. Regardless of whether the exact date of plant closure is known, host communities should anticipate and plan for eventual closure.

Communities would likely find the following to be helpful:

- Working with fiscal experts to identify specific funding options, including repurposing existing revenue streams and tax
 expenditures, developing other sources of funding, and other fiscal strategies for lawmakers to consider
- Working with economic development experts in long-term planning
- Working with economists and subject matter experts in state government to develop estimates of program costs and revenue impacts to individual taxing districts in transition communities to identify funding needs and appropriate next steps

Many communities expressed challenges related to taking the above steps and identified that financial support is helpful. Financial support may take various forms, such as grants and aid. Host communities should take advantage of relevant programs. Existing programs are included in Appendices Toolkit Resources section, page 30.

RECOMMENDATIONS

Following, there is a prioritized list of recommendations, split into those that require legislative action and those that do not, which can be implemented at the agency level.



Legislative recommendation

Other states have provided transition aid to host communities through property tax revenue loss-based formulas. One suggestion from another state that has implemented this kind of program was to design the tax base aid such that those communities with greater loss of tax base get more aid than those with less tax base loss. The levy-based property tax system of Minnesota does not align with a direct revenue loss-based transition aid. However, Minnesota could provide transition aid to host communities through new or amended grant or local government aid programs. A grant program would be more useful for a targeted transition goal and a local government aid would be more useful for a general transition goal.



Recommendations for state agencies to implement

Some communities expressed interest in the state providing additional support in obtaining grants and competing for federal opportunities. The Energy Transition Office should compile and coordinate agency resources to provide this type of assistance.

There was also interest in establishing a statewide independent investment intermediary focused on leading and structuring investments in transition communities coupled with establishing a statewide investment fund with two components: (1) a "First Risk Capital Fund" to make short-term local commitments to lower the risk for investors; and (2) a "Permanent Investment Capital Fund" to provide long-term capital. The Energy Transition Office could investigate the feasibility of forming such an intermediary, other public/private/philanthropic partnerships, and other creative financing mechanisms for mission-based investing.

Community Engagement

Community engagement is important to help the community drive the transition efforts and encourage open communication with a variety of stakeholders including different levels of government, power plants, workers, residents, business community, and unions. While it was apparent that some communication with stakeholders had been minimal and basic, communities and other interviewees such as unions, non-profits, and other organizations



unanimously said they wanted to hear messages and be engaged in the transition process as far in advance as possible. Community engagement should carefully consider the community outreach, planning, and advocacy efforts as well as build the technical, financial, and political community capacity needed to implement the ideas and plans that result from the engagement. Based on significant research and stakeholder interviews, the following are community engagement key findings, best practices, and recommendations for communities facing power plant closures and energy transition:

KEY FINDINGS

- It is helpful to have community input to learn what communities need to thrive after energy facilities close.
- It may take several years before community engagement efforts are productive. Communication efforts in the local communities take time.
- It is important to follow-up after community conversations.



- It is important to manage community expectations around planning for the redevelopment and economic revitalization plans in a community. This includes the funding and other resources available.
- It is important to form a community committee early and plan for the future. It is critical to have all stakeholders, including legislative leaders, engaged early to be productive.
- Public engagement is critical to assess concerns, impacts, identify opportunities and ideas.
- Communities must lead the way and drive their roadmaps.
- Having the power company at the table and involved is important.
- It is important to bring the unions/worker representation into conversations/planning efforts early.
- In carrying out public engagement, efforts should be cautious, specific and tailored. There are concerns that widespread engagement will cause panic among public and will be counterproductive.
- Uncertain or shrinking plant closure times makes community planning difficult.
- Plant closure dates that change and move nearer are seen with high anxiety for community residents, who want to be communicated with and involved in the process as far in advance as possible. The challenges moving closure dates represent to local communities is great in their transition planning.
- Huge tax base reductions makes financing the planning efforts difficult.
- There is not always the community staff capacity to clearly understand and tackle these large scale community projects.
- Both state and, to a greater extent, federal financial assistance programs are difficult to access because they require much up-front planning and investment to put forth a competitive application/project.
- There can be a lack of engagement and communication with power companies. Often the communities feel they are not being kept abreast of developments that could impact their plans, tax base, and future.
- There is a real concern by communities for the welfare of their citizens who are displaced by plant closure and what it
 means for the larger community, businesses, and schools when entire families must move away for work.
- In some instances power plants collaborated across state lines to share resources and work together on transition efforts.
- It was noted that the larger the partnership, the less ownership partners take in the overall project, perhaps assuming other partners will drive efforts.
- Partners that assisted and supported communities with closing or transitioning power plants include state and federal
 legislators, utilities, environmental groups, the Just Transition Fund, unions (especially for re-training), the Department
 of Labor (to identify local skills sets and possible employment avenues), and universities (for both conducting helpful
 research and to offer programs in IT and engineering fields in the region).
- Social and cultural implications are integral to successful transition efforts.
- State of Minnesota economic development agencies that were reported as helpful to the transition process included the Department of Employment and Economic Development and the Iron Range Resources and Rehabilitation Board.
- The Coalition of Utility Cities was also reported as a key partnership to help advance the interests of impacted communities.
- Educational facilities were also mentioned as providing research assistance in some instances.

BEST PRACTICES

Outreach/Planning/Advocacy

- Creating a community task force like in Oak Park Heights or utility-led Community Advisory Panels (CAP's) such as in Cohasset, Hoyt Lakes, and Taconite Harbor. This creates a formalized and constant communication line between the energy company and community.
- Other potential partners named in many interviews to work in unison potentially as a joint commission include labor, local politicians, industry representatives, climate activists, scientists, think tanks, and environmentalists.



MINNESOTA

- Holding informal or formalized community conversations where all voices are heard and collectively plan for the future. An example is community conversations/survey work in Granite Falls or a formalized regional summit that is planned for October 2021 for Itasca County/Cohasset.
- Energy transition should be considered part of city and county comprehensive planning efforts. Coordination of land use planning between abutting jurisdictions is critical.
- Utility company led site master planning that uses a full-service firm from start to redevelopment of the site.
- Cities and the State need to be at the table sooner with the power companies to plan for redevelopment on sites pending plant closures. Example: Oak Park Heights is very limited on land for development. The King Plant site owned by Xcel needs a viable tax-base and high wage job business development alternative once the plant closes in 2028. This redevelopment requires additional expertise.
- Participation at the capitol early to influence and stimulate action by the legislature.
- Seek help from the regional development commissions, the Initiative Foundations, and other major economic development partners in development and implementation of local community transition plans.
- The use of data was recommended as critical to successful efforts. Economic development agencies were named as being useful to such data-gathering efforts.
- In some instances, consulting companies were paired with communities to support planning and implementation.
- Studies have been done by partnering educational institutions on plant re-use and environmental reviews.

Building Community Capacity (Technical, Financial, and Legislatively)

- Establish a peer-to-peer mentoring and networking program among coal and nuclear transition communities and with other communities (in the state and around the country) that have experienced or are undergoing similar transitions connect with other communities that have or are currently going through transition to share ideas and experiences
- Allocate funding for impacted communities to build the local staffing and expertise they
 need to develop their local transition strategies. This would include support for them
 to work on other economic and community development issues (housing, childcare,
 broadband, tourism, business retention and expansion (BR&E), community planning,
 grant writing, etc.). Examples: East Range Joint Powers Board and Itasca Economic
 Development Corp. receiving grant funding via federal and state agencies to support local
 economic development staffing.
- Allocate funding for impacted communities to implement their local transition strategies. State government needs
 to be proactive in developing targeted economic assistance programs that help communities implement transition
 strategies including but not limited to: jobs transitioning (retraining programs), industry recruitment to create
 replacement jobs (DEED), shovel ready site work and marketing to recruit businesses with the goal of helping offset
 reductions in tax base and lessen the impact to a community when this happens. Becker was instrumental in lobbying
 for the Community Energy Transition Grant program. This program should expanded outside of Xcel areas and to allow
 for recommendations in this report.
- Targeted financial assistance via infrastructure grants to these communities: Physical infrastructure investments are
 not inexpensive for a community, but greatly contribute to that community's ability to recruit replacement industry
 and businesses.
- Marketing support for business recruitment is essential in establishing the benefits of the community as part of BR&E and business recruitment strategies.
- Communities facing power plant closures and transitions need access to resources to assist with grant writing efforts in order to be successful.



RECOMMENDATIONS

Recommendations for state agencies to implement

- 1. The State of Minnesota Office of Energy Transition should provide and support the development of community led engagement efforts to help communities plan for a successful transition. Guidance on developing and implementing beneficial community conversations, task forces, community advisory panels, surveys, local and regional planning efforts, etc.
- 2. Multi agency state action teams made up of technical experts in relevant fields should be available to provide assistance and guidance to coordinate and align existing grant programs and funding which helps coordinate and execute support strategies at the local, state, and federal levels.
- The State of Minnesota Office of Energy Transition should further support the development of peer to peer networks and coalitions to bring forward the collective voice of small communities to the state and federal government.

Workforce

Power plants are unique in that, for regulated utilities, the closure date is within the purview and jurisdiction of the Public Utilities Commission. In addition, unions often represent worker classes within the power plants, and will be active on their members' behalf in the retirement decision and via their bargaining agreement. Utilities may employ a number of tactics with regard to their workforce, such as voluntary retirements, transfer to another job, etc. Recognizing this context, as we approach the first of several anticipated closures in Minnesota's energy sector, a proactive and strategic workforce plan needs to be swiftly executed to assist both the employer, its employees, as well as the city/county and other invested stakeholders where the business is located.



Although Rapid Response typically works reactively to business layoffs and closures, the Office of Energy Transition should serve as the "first line" and be the catalyst for engaging the Rapid Response Program to begin this proactive and strategic work. The US Department of Labor (DOL) defines Rapid Response as a pro-active, business-focused, and flexible strategy designed to respond to layoffs and plant closings by quickly coordinating services and providing immediate aid to companies and their affected workers.

Regardless of the number of workers affected by a permanent closure, Rapid Response and the activities they are required to perform are mandatory per section § 682.320 of the Workforce Innovations and Opportunity Act (WIOA). One such activity required of Rapid Response is Layoff Aversion, which is to help those workers avoid having to use Unemployment Insurance.

KEY FINDINGS

• As part of the energy omnibus bill that was passed into law in 2021, utilities required to provide a resource plan to the Public Utilities Commission that has scheduled the retirement of a plant facility must include in their resource filing: a narrative describing the utility's efforts, in conjunction with the utility's workers and the workers' designated representatives, to develop a plan to minimize the dislocations employees may suffer as a result of the facility's retirement. The narrative must address, at a minimum, plans to: (1) minimize financial losses to workers; (2) provide a transition timeline to ensure certainty for workers; (3) protect pension benefits; (4) extend or replace health insurance, life insurance, and other employment benefits; (5) provide training and skill development for workers who



must or choose to leave the utility; (6) create targeted transition plans for workers at all locations impacted by the facility retirement; and (7) quantify any additional costs the utility would incur and specifying what costs, if any, the utility would request be recovered in the utility's rates as a result of efforts made under this subdivision to minimize impacts to workers.

- The need for marketing and a strategy to attract and retain businesses and bring investment into these communities
 was commonly reported by Minnesota communities facing power plant closures.
- Many of those who consider themselves workers affected by plant closures, disliked use of the term "dislocated workers." The term "workforce adjustment" was suggested as a better descriptor and term to use when searching or information.
- Not all workforce adjustment programs were successful and that not all would-be participants have the means to participate in such a program due to limitations such as needing child care and requiring pension funding.
- In order to be effective, re-training efforts need to be carefully planned.
- One challenge reported of re-employment programs was the challenge in retaining employees to stay on until the closing date as they were more likely to leave for new jobs prior to the closure date.
- Another challenge reported was that wind and solar replacement jobs were challenging because of fewer unions and smaller workforces in these industries.
- It was suggested that a federal program is needed to back efforts for dislocated workers, and that goals of such efforts should focus on:
 - > Planning staff and capacity building for communities
 - Money to attract and retain businesses
 - > Seed investment capital to reduce risk
- Transition incentives were suggested to be tied to labor standards such as prevailing wage requirements. Unions were said to typically prefer wage differential benefits.
- Equity was a missing component in many transition efforts which were suggested as needing more women and BIPOC individuals involved.
- As the current Administration considers policies and assistance to plant communities, it is also important to be consulting with Tribal nations and communities of color that have experienced disproportionate barriers to employment due to systemic racism. For example, as recommendations on work force transition are developed, there is an opportunity to create programs or policies that enhance equity rather than reinforce it. A parallel track approach, of consulting with both plant communities and those that were not at the table when the current energy system was developed, will maximize opportunity for all. Thanks to the new Energy Transition Office, plant communities will continue to be supported via financial resources and technical assistance. Communities that have not gotten as many benefits, such as those that have experienced systematic bias, require as much concerted attention.

BEST PRACTICES AND RECOMMENDATIONS

Below are the recommended strategies and best practices for proactive engagement and Layoff Aversion in development for the state of Minnesota. We recognize that plant closures are unique and the purview of the Public Utilities Commission, therefore the below processes will need to be adjusted to fit this unique sector:

- 1. State Rapid Response
 - a. Early notification of employer downsizing/closing.
 - b. Develop an Early Warning Network and Indicators.
 - c. Asset Mapping: Continue to build on the existing work of identifying key resources in the community that have the potential to provide assistance to the targeted employer/employees.



- d. Develop and implement strategy notification of employer downsizing.
- e. Feasibility evaluation and consultation by Rapid Response team.
- f. Provide customized aversion strategies or rapid response (RR) services as needed.
- 2. Engage the Minnesota Job Skills Partnership Board (MJSB) to look at programmatic development using the boards 6% funds in partnership with local educational institutions and businesses to upskill affected workforce and place them into new jobs.
- 3. Work with MBVC-member state agencies to identify appropriate funding sources, including state and federal, for a fund specific to energy workers being affected by plant closures from 2023 to 2040 this could be an Open Appropriation. The funds would be used specifically to address workforce development needs such as upskilling, and assistance with job transition to clean energy/electricity positions.
- 4. Support of activities to enhance workforce diversity and inclusion efforts which would include encouraging and funding cultural competency training for trade unions and workforce development organizations. Workforce retraining or training programs should be designed to, enhance equity rather than reinforce disparities. Consult with frontline communities and communities that have experienced systemic racism and barriers when developing programs. Prospective employers should be encouraged to consider:
 - a. Establishing data tracking on employee demographics and pay;
 - b. Encouraging employee recruitment from outside typical networks;
 - c. Monitoring promotion patterns and eliminating biased language in job descriptions; and,
 - d. Evaluations and striving to eliminate harassment in the workplace.
- 5. Back previous MBVC CTE in High School Recommendations:
 - a. Build executive leadership in the state through development of statewide quality criteria, use of incentivized grant programs, and professional development opportunities.
 - b. Inform industry leadership through statewide career & technical education advisory committees.
 - c. Increase legislative leadership through the creation of statewide career & technical education legislative councils.
- 6. We recommend the Minnesota Business Vitality Council (MBVC) consider forming a Sprint workgroup that is focused on consulting with frontline communities and creating recommendations that are equity-focused as it relates to energy, workforce, and economic development.

Reuse of Assets

Infrastructure was mentioned in nearly every community interview as essential to a community's sustainable future. When a community faces the loss of a power plant, the ability to transition existing assets into other uses faces several challenges. Assets are unique from community to community, and the ability to control those assets varies. Existing assets can be broadly considered; however, this section will focus on two categories of assets:

- Land assets most often the power plant site but could include ancillary lands and facilities that are no longer necessary to support energy production.
- Infrastructure assets these assets include infrastructure that directly supports energy production, such as transmission interconnects and power lines; and, traditional infrastructure such as sewer, water, and streets.

Land Assets

Many communities face challenges to their ability to expand due to natural features or existing land uses that constrain expansion. Because of this, the opportunity for reuse means land assets are often the most valuable assets a community has and offer significant opportunities:

The land is either already within the jurisdiction of the community, or it is adjacent and can be annexed relatively easily.



- Sewer and water services to the site already exist and can be improved cost effectively, if required.
- Street infrastructure and connections to the community exist and can also be improved.
- Connections to regional and national transportation networks, such as major highways and rail service may already be in place.

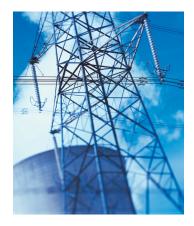
However, the site may pose challenges as well:

- Isolation from other commercial/industrial land uses in the community.
- Isolation from major transportation networks limiting potential redevelopment opportunities.
- Inadequate existing city infrastructure including roads, water treatment, etc.
- Inadequate utilities sufficient to make the site attractive for other uses (business and housing).
- Inadequate broadband.
- Uncertainty about future ownership that limits redevelopment planning.
- Uncertainty about continued use by the utility for nuclear waste storage.
- Waste storage was another commonly reported concern impacting land re-use options.

Infrastructure Assets

Infrastructure that directly supports energy production may offer some unique opportunities. For example, interconnects and transmission lines can be reutilized by future energy production and storage projects. Associated substations can offer high-capacity access to energy intensive industrial redevelopment.

Existing traditional city infrastructure serving a power plant site may or may not be adequate for future uses on the site. In particular, the adequacy of sewer and water infrastructure will be dependent on the scale and type of new uses planned for the site. Similarly, street infrastructure improvements may be required depending on requirements for new facility design, freight hauling capacity, and size of workforce. However, upgrading infrastructure is often more cost-effective for a community then building new infrastructure to a new, more remote site.



The communities involved in this study have offered several observations on what they have discovered going through the process of transitioning away from being the site of a major energy production facility. These observations have been framed as findings, best practices, and recommendations:

KEY FINDINGS

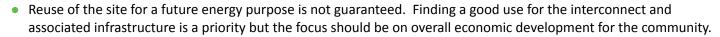
- There are industrial developers focused on acquiring and repurposing heavy-industrial sites, including coal-based
 power plants. It was reported that when they acquire a site, they work closely with key stakeholders, communities,
 and regulators in building a plan that is compatible with site conditions and the communities' goals. Forsite
 Development Inc., whom our team met with, is one of such groups.
- Land uses replacing coal or nuclear plants can pose their own unique challenges to orderly development of the rest of the community.
- Risk transfer for environmental cleanup on a site can be a challenge for a community to assume.
- Seeking ways to repurpose infrastructure, and the permits that that are associated, can offer high value to a community.
- Full redevelopment of a site is not likely to fully replace the loss of tax revenue so infrastructure investments need careful consideration.

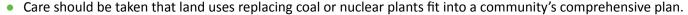


- Community expectations about the nature and character of site redevelopment must be carefully managed.
- Transportation was seen as a very lengthy planning process that was particularly difficult to impact.
- Site redevelopment for the purpose of tourism was noted as one possible re-use option for certain regions.
- Future-use studies conducted by consulting organizations were cited as helpful to re-use planning.

BEST PRACTICES

- Front-end planning ahead of decommissioning of the plant will allow for the existing assets of value to remain and be put back to work while those assets that have hit the end of their useful life can be demolished/removed.
- Commission site evaluation studies to determine best future uses before decommissioning/demolition so that any potential site alterations can be accomplished during the process.
- The risk transfer model for redevelopment of power plant sites would require underwriting and taking title to the property, and then striving to recoup costs through development of the site. Utilities find use of the model attractive.







- The state can develop programs that can make host communities more competitive in seeking redevelopment projects.
- The state can provide clarity on the regulatory process by developing informational materials on regulatory proceedings related to resource acquisition and asset retirement (including clean up and timing, if possible).
- The state could provide connection between the utilities and the communities to encourage engagement on clean up, timing, and other aspects related to retiring a power plant.

Economic Diversification

KEY FINDINGS

Communities should not get stuck in the frame of mind that energy-based closures exclusively need energy-based replacements.
 Diversification was cited as helpful in many interviews with out-of-state communities. Encouragement was given to explore industries other than energy when planning for closures and transition, and to focus on appropriate matches for the regional skills rather than defining the industry first. The goal of all being thriving, not just surviving, communities.



- Stakeholders in many community interviews reported economic diversification as directly linked to that community's
 successful and sustainable future. Economic diversification is a strong alternative for communities that need to find
 new avenues for growth that help minimize the impacts of power plant closures, build resilience, and offer renewed
 opportunities for sustainable socioeconomic wellbeing.
- Communities facing power plant closures want to focus on new, innovative business investments for the future, and are challenged as to how best do this and which partners could assist this process. Diversifying requires a





comprehensive approach that involves all necessary actors at the local, regional, state, and federal level, and equips communities with the resources and support mechanisms to adequately address all facets of the process, from planning to execution.

- Impacted communities face major barriers that limit their capacity to diversify their economies. These barriers are not any different than those that smaller, more rural communities experience, with high infrastructure costs, lack of resources for housing development, child care shortages, and weak fiber/broadband infrastructure, being the most common ones brought up by the communities and stakeholders interviewed. In addition to housing, child care, and fiber/broadband infrastructure, communities need investments in utilities and transportation/logistics infrastructure to diversify their economies. Rural communities nonetheless, were said to present greater challenges because of fewer diversification options and greater dependence on the power plant.
- Business attraction, retention, and expansion efforts allow communities to market themselves and proactively
 connect with multipliers (e.g., site selectors) and decision makers (e.g., companies), positioning themselves as suitable
 locations for business investment.
- Target industry cluster analysis, along with skills crosswalk mapping, have been important vehicles for communities to identify opportunities for economic diversification. As an example, back in 2017, American Electric Power (AEP) and four economic development organizations (EDOs)¹, located in the neighboring states of Kentucky, Ohio, and West Virginia, launched AppalachianSky, a strategic alliance aimed at leveraging the tri-region's strength in metal fabrication workforce and strategic location within an aerospace corridor, to attract and expand aerospace and aviation industry and jobs. As a critical step at the beginning of this effort, the partnership completed a comprehensive regional workforce analysis. The research showed that coal miners have the skills that aerospace and advanced manufacturing companies need. The study concluded that the region had eight times the national average of skilled metal workers. This study constituted the basis for the business recruitment efforts that AppalachianSky conducts as an economic diversification response to transitioning out of coal mining.
- Site readiness is an important component for economic diversification, as it allows communities to increase the inventory of project-ready sites. Site readiness involves at a minimum, developing critical technical site due diligence items (e.g., wetlands delineation, ALTA survey, geotechnical survey, archeological and cultural resources survey, endangered species survey) that are required to characterize and understand the risks and development needs on a site. In a time when project timelines are shorter, site readiness is becoming much more critical. In some instances, completing the technical site due diligence is not enough to allow a community to compete for project opportunities. More often than not, site readiness these days requires the development of site concept plans, site market studies, construction of site-related upgrades (e.g., utilities extensions, roads, pad ready), among others.
- Power plant sites offer very robust infrastructure. From utilities power, natural gas, direct water/waste water intake/discharge to logistics infrastructure rail, barge/deep water port access power plant sites are generally very attractive for economic development projects that are heavily dependent on these assets. For these types of projects, finding greenfield, and even brownfield sites, where all these factors coexist, is very challenging. If these sites exist,

 $^{^{1}}$ One East Kentucky, Ashland Alliance, Huntington Area Development Council (HADCO), and Southern Ohio Port Authority





the time, money, and other resources that are required to plan, run the technical site due diligence, develop, and permit them, make them highly capital-intensive. If decommissioned power plants can be repurposed and reused for other industries that require these assets, it is important to have them readily available to expedite project timelines and minimize the impact of long-term components, such as permitting, on project schedules.

- Permitting is an essential process in economic development. Permitting impacts infrastructure development and business expansions, which in turn affect a community's capacity to diversify their economies. Speeding up the permitting process, and continuous and transparent communication with businesses and entities going through them, is paramount. Communities interviewed feel that not all permitting agencies are on the same page in this area.
- Financial incentives are building blocks of business attraction, retention, and expansion efforts. It is traditionally said that "incentives do not make a bad community look good, but good communities look better." Whereas a community needs to first and foremost ensure that it offers the most important conditions for businesses to succeed in the long term (e.g., workforce, infrastructure, sites, business environment, quality of life), incentives help communities close deals and drive projects home.
- Economic diversification needs to be looked at primarily through the lens of the quality of jobs that diverse economic activities can help create. As an example, several communities and stakeholders interviewed feel apprehensive about solar and wind projects that are built, because the state of Minnesota is only getting the installation jobs but not the manufacturing of these renewable energy options, which would be a valuable industry to attract to this state.
 It is paramount, for achieving sustainable economic outcomes, to ensure that economic diversification strategies implemented by impacted communities produce quality jobs for that community.

BEST PRACTICES

- Economic diversification requires close coordination and interaction with many different stakeholders at the local, regional, state, and federal levels. The time needed to build relationships with all the different partners, including government agencies that communities need permits/grants/support from is extensive. Identifying who those critical stakeholders are and building those partnerships well in advance is essential for achieving successful outcomes.
- Leveraging existing partnerships is an effective way to fast track the process. For example, Monticello participates in the transportation-focused Central Mississippi River Regional Planning Partnership. This may be a good vehicle/forum for cooperating on economic diversification.
- All out-of-state communities and stakeholders interviewed, alluded to the fact that it is necessary to plan for transition well in advance of closure. More often than not, closures end up occurring sooner than initially announced. As pointed out previously, economic diversification requires a highly comprehensive approach that demands time and effort. As a best practice, communities are advised to start planning for this process sooner rather than later. This will prepare them more effectively to be able to anticipate and contain the negative impacts from the closure.
- Economic diversification planning should not be taken lightly. Economic diversification will build the path for a
 community's growth prospects. Doing it right from the beginning will increase a community's chance to succeed.
 Careful analysis to identify suitable sectors and markets that communities can shift their focus to, is critical. Market
 analysis via industry cluster is a very good option for identifying diverse industry sectors that are a good fit for a
 community based on its workforce specialization/concentration, strengths, and assets.
- Aligning target industries identified through market analysis with regional business recruitment efforts is a best
 practice to efficiently focus resources on and gain community buy in as market analysis helps build the business case
 for a community's economic diversification plan.
- Investing in site readiness, is a smart way of making sites poised for business attraction, retention, and expansion, shovel-ready, minimizing risks, costs, and expediting the timelines in which projects can be developed and become fully operational.
- Communities are also encouraged to look beyond their geographical delimitations and evaluate challenges and opportunities from a regional perspective, seeking common and unifying denominators. AppalachianSky also offers



a great example of regionalization. In order to maximize resources available for business attraction, retention, and expansion and develop a wide-ranging, more impactful value proposition, communities can look beyond their geographical boundaries, and join forces with adjacent communities they share commonalities with to market the region to leverage each other's strengths and assets.

RECOMMENDATIONS

Following, there is a prioritized list of recommendations, split into those that require legislative action and those that do not, which can be implemented at the agency level.

Legislative recommendations

It is recommended that the State builds a long-term investment plan for communities facing economic challenges that are seeking opportunities to transition via economic diversification. Specifically:

1. We recommend that the state reinstates and expands DEED's Community Energy Transition Grant Program to support communities beyond Xcel Energy areas currently eligible/designated. This grant would provide funding for communities to cover a wide variety of needs, from developing impact and planning studies, to infrastructure development and site readiness. Specific areas where communities could choose to allocate moneys to from this grant include:



- Economic impact study Developing impact studies for communities that have not yet done so is a recommended step to understand the specific funding needs of impacted communities.
- > Planning Many impacted communities do not have the capacity to plan for their transition. Funding is needed to support capacity building to tackle planning efforts.
- Infrastructure development Long-term investments in infrastructure are needed for economic development and specifically for economic diversification efforts in impacted communities. DEED's existing infrastructure funding is helpful but additional funding may be needed to address infrastructure challenges of these communities more effectively.
- > Repurposing & site readiness For impacted communities, readying their sites is a costly effort. State-level support is needed to help match local funding and help communities repurpose power plant sites (when this option is available) and/or develop shovel-ready sites that make economic diversification feasible. For repurposing power plants, DEED's Cleanup and Redevelopment Grant and Loan programs may be an option, but additional financial support may be needed to complement funding needs of communities for repurposing plant sites and/or for readying other properties slated for uses identified as part of the communities' economic diversification efforts.
- Matching funds for grants Funding to allow communities to secure the local match needed to apply for state and federal grants
- 2. It is also recommended for the state to consider allocating additional funding towards business incentives that can support impacted communities with business retention, expansion, and attraction efforts to allow:
 - > Waiving local matching-fund requirements for incentive programs for companies locating in impacted communities (e.g., one deal waiver per county) to attract new primary employers and help diversify the economy with a sunset and subject to review for extension consideration.
 - Committing a specified amount of financial incentives within a defined timeframe to attract businesses to impacted communities; more money to create deals for retention and attraction of businesses; not to supplant but to augment.



3. Other recommendations –

- > Allow bonding money to be used to support host communities. Infrastructure is an easy way for the State to support economic development based on identified developing industries
- > Programs through Community Development Financial Institutions (CDFIs) and others to leverage capital as seed investment to reduce risk.

Recommendations for state agencies to implement

- 1. In coordination with the local communities/regions, conduct industry cluster analysis, along with a skills crosswalk map for each impacted community to identify what other industries the current workforce skills can be easily transferred to.
- 2. An immediate action item is to help impacted communities understand the value of completing in advance the Alternative Urban Areawide Review (AUAR) Process for geographic areas slated for development (giving special priority to those better positioned for business attraction and expansion projects) and guiding communities through the planning, application, and execution of the process. Completing AUARs would complement site readiness efforts and help impacted communities be better positioned to compete for economic diversification projects, including business attraction and expansions. The shovel ready funding presented previously should also include the possibility of funding the completion of AUARs where required.
- 3. Many impacted communities do not have the resources to implement their own business attraction, retention, and expansion efforts and have to rely on regional and state-level economic development organizations to do this on their behalf. It is recommended for the State, specifically for DEED, IRRRB, and MDA, to prioritize and work with impacted communities in devising and executing a plan for business development.
- 4. To drive early successes in local business attraction, retention and expansion, it is recommended that the State establishes a State Action Team using the newly approved Office of Energy Transition as a lead organization that assists impacted communities in navigating and maximizing benefits from the very wide array of programs and tools. This recommendation builds upon the Colorado Just Transition Action Plan. Immediate action items for this State Action Team, include hosting local educational and resource forums to encourage participation in existing programs, and developing and expanding remote work opportunities in transition communities.
- 5. To support impacted communities that can drive economic diversification by leveraging existing industry in the mining and other heavy manufacturing sectors, it is recommended that State review the results of the "Buy Clean study" that the Department of Administration is currently implementing, with the goal of identifying opportunities to differentiate industries that comply with clean production practices to position them for market favorability that can drive greater support and increased value.
- 6. Impacted communities should be made aware that Minnesota Business First Stop (MBFS) works with businesses to deliver high-level customer service for complex business expansions, relocations, and major startups to help streamline the development process across state agencies.

ALL MINNESOTA COMMUNITIES

KEY FINDINGS

- Many Minnesota communities, outside of those communities impacted by coal fired plant closures, are thinking
 about and working toward sustainability, resiliency, the shift from coal and gas, and energy use reduction, they need
 resources that help them then navigate the energy transition. Fortunately, Minnesota has existing programs that
 could be expanded to support energy transition work more robustly and include more communities.
- <u>Minnesota GreenStep</u> is an existing, challenge, assistance, and recognition program for cities, tribal nations, and schools/school districts working on sustainability planning, action, and metrics. The program, a public/private



partnership with state agency, university, professional associations, and non-profit partners, currently provides support to over 140 participating communities across the state.

• The <u>GreenStep Cities and Tribal Nations program</u> includes over <u>180 Best Practice Actions</u> under five main categories: buildings & lighting, land use, transportation, environmental management, and resilient economic & community development. Actions include guidance, implementation tools, and peer action reports that address both community-wide education and outreach and also city or tribal internal operations. A number of Best Practice Actions (see, for example, <u>BP1</u>, <u>BP6</u>, <u>BP26</u>) can support communities during their own energy transition and as they work on climate change planning and action (see additional search filters including: city/tribal operations, climate mitigation, efficiency, solar, etc.). The GreenStep program has a proven framework for supporting Minnesota communities and there is a growing interest and need in expanding the program, along with partner organizations, to support additional jurisdictions such as counties, regional development organizations, and businesses, etc.

Contact:

GreenStep Cities and Tribal Nations Co-Director Minnesota Pollution Control Agency 520 Lafayette Road St. Paul, MN, 55155 O: 651-757-2793

• U of MN Institute on the Environment is an existing program that is modeling Integrated Energy Communities for the 21st Century in Minnesota and Germany and is pairing Minnesota municipalities with award-winning climate-smart communities in Germany to accelerate progress toward a cleaner and more efficient energy footprint. Selected muncipalities send representatives to Germany to learn about innovative programs and practices, then share their progress and insights in Minnesota. They also have the benefit of working with their twin community while a delegation of municipalities and leaders visits Minnesota each fall. In April 2016, five communities — Duluth, Elk River, Morris, Rochester and Warren — were chosen to participate in the program. Further information is available here: Climate Smart Municipalities

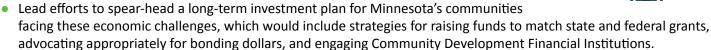
RECOMMENDATIONS FOR STATE AGENCIES TO IMPLEMENT

Support and expand Minnesota GreenStep Cities program and similar programs. Additional funding may be necessary.

ENERGY TRANSITION OFFICE

During all in-state interviews conducted, the Energy Transition Office, approved by the Minnesota 2021 legislature, was recommended to serve as the first line for catalyzing the work of the State to support impacted communities and workers as they transition out of fossil-fuel-based power generation.

In addition to the goals and duties delineated on the statute that created the Energy Transition Office, Stakeholders interviewed envisioned the Office as the one called to:



- Be familiar with the regulatory process, the role of the Public Utilities Commission and work with the MN Department of Commerce, as needed
- Play an important role of staying up-to-date on the federal and state funding opportunities available to energy communities and provide technical assistance support to energy communities in applying for federal and state funds.
- Serve as the conduit for engaging the Rapid Response Program to begin proactive and strategic work in support of impacted workers.





- Be the facilitator for the interagency community of resources. As plant closure dates approach, this team would engage communities together and present a united, cost-effective front.
- Serve as facilitator to help communities kickstart community engagement to give eligible communities the chance
 to chart a successful course through the economic challenges ahead. Provide and support the development of
 community led engagement efforts. Guidance on developing and implementing beneficial community conversations,
 task forces, community advisory panels, surveys, local and regional planning efforts, etc.
- Further support the development of peer to peer networks and support local community participation to bring forward the collective voice of small communities to the state and federal government.
- Document and organize in-depth learning and data on what Minnesota's communities need, and what works that would form the bedrock for specific executive branch budget proposals to the state legislature, whether using Workforce Development Fund, other Special Revenue streams, or the General Fund.
- Work together with the Energy Transition Advisory Committee in devising a plan for effective DEI training tailored
 to specific communities and aimed at eliminating current disparities. The recommendation is to develop this plan in
 consultation with frontline communities and communities that have experienced systemic bias and racism.
- Establish and use specific goals and metrics established in the plan, to determine progress in meeting the community transition needs across all demographics.
- Assemble the broad and diverse array of resources that any community in Minnesota might need to engage, to ensure successful outcomes.
- Lead a State Action Team to drive early successes in local business attraction, retention and expansion, assisting impacted communities in navigating and maximizing benefits from the very wide array of programs and tools.
- Coordinate statewide response, supporting communities in economic development planning, addressing tax base, etc.
- Continue to refine this work of the Minnesota Business Vitality Council (MBVC) Community Energy Transition (CET) Sprint, adding definition and clear instructions for use.
- Investigate the feasibility of a statewide independent investment intermediary focused on leading and structuring investments in transition communities, other public/private/philanthropic partnerships, and other creative financing mechanisms for mission-based investing.
- Coordinate with other states that are exploring state-level transition strategies to advocate for a national strategy
 for supporting impacted fossil-fuel workers and communities. The MBVC spoke with representatives in the states of
 Colorado and New York and both expressed interest in engaging in cross-state coordination on lifting up the need for
 Federal Government support on transition issues.

OTHER

The Colorado Just Transition Action Plan intentionally put host/plant communities into tiers, depending on the dimension of the challenges that they each will face in comparison with the others. The plan determines that most of the efforts and attention of the Office of Just Transition (OJT) is and will be on the tier 1 communities, while keeping an eye on those categorized as tier 2. This type of approach should be considered by Minnesota's Energy Transition Office.

Several interviewees from plant communities noted the overall need for capacity at the local level within the city itself. They simply don't have the staff to do this long-term economic diversification planning. Staffing at the local level is just as important as adequate staff at the state level.





APPENDICES

TOOLKIT

State Agency Resources

DEED

- Community Energy Transition Grant Program
- https://mn.gov/deed/government/financial-assistance/community-funding/community-energy.jsp
- Competitive grant program awarded to communities with the highest tax loss and net job loss. Grant awards up to \$500,000 to eligible communities.
- Office of Energy Transition
- Workforce Strategy Consultants
- Rapid Response Team
- Business Development Managers in each Economic Region of the State

Minnesota Department of Agriculture

The Agricultural Growth, Research, and Innovation (AGRI) Program, established at the Minnesota Department of Agriculture (MDA) by MINN. STAT. 41A.12, advances Minnesota's agricultural and renewable energy industries. In Fiscal Year 2020 (FY20), the eighth year of the program, the MDA awarded \$15.5 million to farmers, agricultural businesses, and schools.

Component programs within AGRI are:

- **Bioincentive Program** The Bioincentive Program provides incentives for the production of advanced biofuels, renewable chemicals, and biomass thermal heat that meets the requirements specified in MINN STAT 41A.15 through 41A.18. Incentives are paid quarterly in the form of reimbursements for production that occurred during the previous quarter.
- **County Fair Grants** These grants help Minnesota county fairs preserve and promote Minnesota agriculture, and provide access to the arts and the state's agricultural, historical, and cultural heritage.
- **Crop Research Grants** AGRI Crop Research Grants are intended to generate applied crop research that will improve agricultural product quality, quantity, or value.
- Farm Business Management Scholarships The Beginning Farmer Farm Business Management Scholarship program provides scholarships to eligible farmers in Minnesota to learn business management strategies that will lead to profitable and satisfying farming operations.
- Good Agricultural Practices/Good Handling Practices Certification Cost-Share Good Agricultural Practices (GAP) and Good Handling Practices (GHP) audits and certifications help growers and handlers implement food safety plans that enhance the integrity of our food supply
- Livestock Investment Grants The AGRI Livestock Investment Grant encourages long-term industry development for Minnesota livestock farmers and ranchers by helping them improve, update, and modernize their livestock operation infrastructure and equipment.
- New Markets Development Our Minnesota Pavilions program offers financial, promotional, and logistical support to small-to-medium sized Minnesota food and beverage companies who want to exhibit with us at select business-to-business (B2B) wholesale tradeshows. Our AGRI New Markets Cost-Share Program can help your Minnesota farm or



branded food or beverage company take advantage of market opportunities through E-commerce, contracted store merchandising and point-of-sale work, store promotions (end cap displays and store flyers), tradeshows (virtual and in-person), and store demos.

- Sustainable Agriculture Demonstration Grants The AGRI Sustainable Agriculture Demonstration Grant supports
 innovative on-farm research and demonstrations. It funds projects that explore sustainable agriculture practices and
 systems that could make farming more profitable, resource efficient, and personally satisfying.
- **Urban Agriculture Grants** The AGRI Urban Agriculture Grant Program encourages urban youth agricultural education and urban agriculture community development within city limits of urban or peri-urban areas.
- Value-Added Grants The AGRI Value-Added Grant helps Minnesota processors add value to Minnesota agricultural
 products by investing in the purchase of equipment, production capacity, market diversification, and market access for
 value-added products.

Minnesota Department of Commerce

(Clean Energy Resource Teams) CERTs seeks to provide <u>Seed Grants</u> to support for clean energy projects that spur community development in Minnesota. Clean energy projects include those related to energy conservation and efficiency, renewable energy, electric vehicles, and energy storage. Priority will be given to proposals that provide forums for community education about the technologies and their economic, ecological, and community benefits. <u>cleanenergyresourceteams.org/seedgrants</u>

Minnesota Department of Iron Range Resources (IRR)

The Department of Iron Range Resources Is a unique State of Minnesota economic development agency that invests in resources to foster vibrant growth and economic prosperity in northeastern Minnesota by enhancing livable communities, maximizing collaborations and partnerships and strengthen businesses and worker education. Iron Range Resources & Rehabilitation provides vital funding, including low or no interest loans and grants for businesses relocating or expanding in the region. Additionally, a variety of grants are available to local units of government, education institutions, and nonprofits that promote workforce development and sustainable communities. Resources that may be beneficial include:

Business Assistance: The agency provides flexible, custom low-interest loans to businesses relocating to the region and to existing businesses that are expanding. The loans may be used for:

- Land and building acquisition.
- Building renovation.
- New building construction (only permanent term financing).
- > Land improvements.
- > Machinery and equipment purchases.
- Inventory purchase.
- > Equity capital.

Development & Community Infrastructure Grant Program: Infrastructure grants that assist communities with projects that support community & economic development. https://mn.gov/irrrb/grant-resources/community-programs/development-infrastructure.jsp

Commercial Redevelopment Grant Program: Commercial Redevelopment grants assist communities in demolishing dilapidated commercial or industrial buildings and cleaning up brownfields. https://mn.gov/irrrb/grant-resources/community-programs/commercial-redevelopment.jsp

Business Energy Retrofit Grant Program: This funding will provide a grant 1/3rd project cost up to \$20,000 for energy efficiency upgrades such as windows, doors, HVAC, lighting, solar, renewable energy, etc. https://www.aeoa.org/business-energy-retrofit



Workforce Development Grant Program: Workforce Development grants support education and training initiatives that emerge from industry sectors, schools or collaborations that build capacity, increase responsiveness, or demonstrate innovation to address workforce needs. https://mn.gov/irrrb/grant-resources/other-opportunities/workforce-development.jsp

Application Fund Grant Program: This grant program reimburses the costs of preparing and applying for a non-agency grant that will advance economic growth. https://mn.gov/irrrb/grant-resources/other-opportunities/application-fund.jsp

Development Partnership: Development Partnership grants provide funds for research, education and development-based initiatives that support the long-term economic growth of northeastern Minnesota. The agency has been supporting pre-development site work due diligence (shovel ready work) on sites in NE MN in partnership with communities and the power companies to support business recruitment efforts in the region. The program also supports community planning efforts and other partnerships with industry. https://mn.gov/irrrb/grant-resources/other-opportunities/development-partnership.jsp

Minnesota Department of Education

Perkins V Career and Technical Education (CTE) Funding

CTE is supported by the Strengthening Career and Technical Education for the 21st Century Act of 2018 (Perkins V). This federal grant is distributed to state-approved career and technical education programs with appropriate teacher licensure. Funds are granted to districts and consortia of districts on a formula basis. They can be used for professional development or career counseling and guidance; and to promote student attainment of academic and technical skills, upgrade equipment, or provide school- and work-based experiences. https://education.mn.gov/MDE/dse/cte/pol/

Minnesota Career and Technical Education Levy

The Career and Technical Education (CTE) Levy is a permissive levy for school districts to provide extra support based in part on the district's CTE expenditures. Minnesota Statutes, section 124D.4531, as modified by the 2014 Legislature, allows a district with a career and technical program approved under this section to be eligible for career and technical revenue equal to 35 percent of approved expenditures in the fiscal year in which the levy is certified. Districts submit anticipated CTE expenditures each year in the spring for the coming school year, and detailed information about actual CTE expenditures each fall for the previous school year. (The dual reporting is required due to the legislative timing of the levy.)

https://education.mn.gov/MDE/dse/cte/pol/levy/

ACTE-SPED Aid

Access to Career and Technical Education for Students with a Disability (ACTE-SPED) aid is designed for students who require curriculum modifications and special equipment to participate in state-approved Career and Technical Education (CTE) work-based learning (WBL) programs. ACTE-SPED is funded similar to all other special education programs. A student selected for this program must meet the state definition of a child with a disability.

https://education.mn.gov/MDE/dse/cte/pol/acc/

Title IV Part A Grant Program

Title IV, Part A, also known as the Student Support and Academic Enrichment (SSAE) grant program, is a relatively new federal Title grant program under the Every Student Succeeds Act (ESSA). The purpose of this annual program is to improve access to a holistic education. Minnesota received approximately \$12 million dollars FY20. Title IV, Part A funds are distributed to Local Educational Agencies (LEAs) as a formula grants to LEAs that spent Title I, Part A awards during the prior fiscal year.

https://education.mn.gov/MDE/dse/ESEA/iv/



Youth Skills Training Grants (through Minnesota's Department of Labor and Industry)

The Youth Skills Training (YST) Program encourages, promotes, and supports the development of local partnerships between schools, employers, and community organizations.

https://www.dli.mn.gov/yst

MN Department of Natural Resources

This agency houses the state's climatologist and information about climate change, which is a key driver of the environmental and economic trends driving some of the industry trends at work. Learn more at:

https://www.dnr.state.mn.us/climate/climate_change_info/index.html

MPCA

Minnesota GreenStep Cities

Minnesota Environment Quality Board

MN Rules on Environmental Review - https://www.revisor.mn.gov/rules/4410/

A Guide to Environmental Review Rules

https://www.eqb.state.mn.us/sites/default/files/documents/Guide%20to%20MN%20ER%20Rules-May%202010.pdf

Master Contract

Service and Eligible Consultants List

https://www.eqb.state.mn.us/ERMasterContract

Cooperative Purchasing Membership - FREE

- http://www.mmd.admin.state.mn.us/coop.htm
- http://www.mmd.admin.state.mn.us/pdf/CPVSubscribe2.pdf

Minnesota Clean Energy Resource Teams (CERTs)

Seed Grants from the Clean Energy Resource Teams (CERTs) for community-based projects related to energy efficiency, renewable energy, electric vehicles & energy storage. Every two years, CERTs seek seed grant applications for clean energy projects. Over \$1.3M has been awarded since 2006 to 393 projects. The Minnesota Clean Energy Resource Teams (CERTs) have recently released the Seed Grant RFP. Applications are due by 4 pm on Friday, October 8, 2021 and all the information is available at the following link: https://www.cleanenergyresourceteams.org/seedgrants



Minnesota Department of Revenue

<u>Understanding Property Tax | Minnesota Department of Revenue (state.mn.us)</u>

Aids, Credits, Levies and Budgeting | Minnesota Department of Revenue (state.mn.us)

Property Tax Administrator's Manual | Minnesota Department of Revenue (state.mn.us)

Auditor/Treasurer Manual | Minnesota Department of Revenue (state.mn.us)

Local Sales Tax Information | Minnesota Department of Revenue (state.mn.us)

index / mn.gov // Minnesota's State Portal

Federal Resources

In January 2021, the Biden administration committed to providing federal leadership to support coal and power plant communities in addressing the economic and workforce challenges associated with the nation's transition away from coal. The establishment of the Interagency Working Group on Coal and Power Plant Communities and Economic Revitalization brought together 12 federal agencies to identify existing federal programs that could provide immediate investments in energy communities. In addition to the \$38 billion in existing federal programs, in June 2021, the Economic Development Administration announced a historic investment of \$300 million targeted to coal communities, part of a total \$3 billion of economic recovery dollars made available through the American Rescue Plan Act (ARPA). The newly formed Energy Transition Office in Minnesota could play the important role of staying up to date on the federal funding opportunities available to energy communities. Below is a list of agencies that often provide funding and technical support for transition-related activities and key programs in each agency that energy communities could consider:

- US Department of Energy (DOE): https://www.energy.gov/osdbu/funding-opportunity-announcements-and-grants
 - ➤ Local Energy Action Program
 - > Energy Storage for Social Equity Technical Assistance Program
- US Department of Labor (DOL): https://www.dol.gov/general/grants/howto
 - Workforce Opportunity for Rural Communities (WORC)
 - ➤ <u>Trade Adjustment Assistance Programs</u>
- US Economic Development Administration (EDA): https://www.eda.gov/funding-opportunities/
 - Economic Adjustment Assistance (Assistance to Coal Communities)
 - Build Back Better Regional Challenge
 - Nuclear Closure Community funding: EDA Seeks Applications to Support Nuclear Closure Communities | U.S. Economic Development Administration
- US Environmental Protection Agency (EPA): https://www.epa.gov/grants
 - > Brownfields Assessment, Cleanup, and Revolving Loan Fund Grant programs
- National Endowment for the Arts (NEA): https://www.arts.gov/grants/apply-grant/grants-organizations#our%20town
 - > Our Town
- National Telecommunications and Information Administration (NTIA): https://www.ntia.doc.gov/category/grants
 - > Broadband Infrastructure Program
 - > Tribal Broadband Connectivity Program
- Small Business Administration (SBA): https://www.sba.gov/funding-programs
 - > Small Business Innovation Research (SBIR)



- US Department of Agriculture, Rural Development (USDA): https://www.rd.usda.gov/
 - Rural Innovation Stronger Economy (RISE)
 - > Rural Economic Development Initiative (REDI) fund

Funding a just energy transition in Minnesota will take both public and private investment. Federal funding support can be a key component to the funding package, to advance large scale infrastructure projects. However, obtaining and managing federal grants requires significant capacity, which can be a major barrier in many energy communities. Providing technical assistance support to energy communities in applying for federal funds should be considered by the newly formed Minnesota Energy Transition Office.

Other

State of Minnesota Dislocated Worker Program

Dislocated Worker Program services are designed to help workers get back to work as quickly as possible and overcome such difficult barriers to employment as:

- Difficulty transferring specialized skills to other occupations or industries.
- A decline in the market demand for certain skills.
- Age or length of work experience.
- Need for formal training or education.
- Lack of jobs with earnings at a level comparable to their previous positions.
 - > Dislocated Worker Program Video: https://mn.gov/deed/programs-services/dislocated-worker/overview/
 - Dislocated Worker Program Handbook: https://mn.gov/deed/job-seekers/recently-unemployed/layoff/dwp-overview.jsp

Workers Adjustment and Retraining Notification (WARN) Act Compliance Assistance

The Worker Adjustment and Retraining Notification (WARN) Act helps ensure advance notice in cases of qualified plant closings and mass layoffs. The U.S. Department of Labor has compliance assistance materials to help workers and employers understand their rights and responsibilities under the provisions of WARN.

https://www.dol.gov/agencies/eta/layoffs/warn

US Department of Labor (DOL) - Subpart C—Rapid Response Activities

• https://www.govinfo.gov/content/pkg/CFR-2018-title20-vol4/pdf/CFR-2018-title20-vol4-part682-subpartC.pdf

Rapid Response Details and Layoff Aversion Strategies

Layoff aversion consists of ten (10) strategies and activities, including those provided in §§ 682.330 and 682.340 of WIOA's Final Rule, to prevent or minimize the duration of unemployment resulting from layoffs.

Per WIOA §682.320(b) layoff aversion activities may include:

- Providing assistance to employers in managing reductions in force, which may include early identification of firms at
 risk of layoffs, assessment of the needs of and options for at-risk firms, and the delivery of services to address these
 needs, as provided by WIOA sec. 134(d)(1)(A)(ix)(II)(cc).
- Ongoing engagement, partnership, and relationship-building activities with businesses in the community, in order to
 create an environment for successful layoff aversion efforts and to enable the provision of assistance to dislocated
 workers in obtaining reemployment as soon as possible.



- Funding feasibility studies to determine if a company's operations may be sustained through a buyout or other means to avoid or minimize layoffs.
- Developing, funding, and managing incumbent worker training programs or other worker upskilling approaches as part of a layoff aversion strategy or activity.
- Connecting companies to:
 - a. Short-time compensation or other programs designed to prevent layoffs or to reemploy dislocated workers quickly, available under Unemployment Insurance programs,
 - b. Employer loan programs for employee skill upgrading; and
 - c. Other federal, state, and local resources as necessary to address other business needs that cannot be funded with resources provided under this title.
- Establishing linkages with economic development activities at the federal, state, and local levels, including Federal Department of Commerce programs and available state and local business retention and expansion activities.
- Partnering or contracting with business-focused organizations to assess risks to companies, propose strategies to address those risks, implement services, and measure impacts of services delivered.
- Conducting analyses of the suppliers of an affected company to assess their risks and vulnerabilities from a potential closing or shift in production of their major customer.
- Engaging in proactive measures to identify opportunities for potential economic transition and training needs in growing industry sectors or expanding businesses.
- Connecting businesses and workers to short-term, on-the-job, or customized training programs and registered apprenticeships before or after layoff to help facilitate rapid reemployment.

Below are the detailed recommended strategies and best practices for proactive engagement and layoff aversion developed for the state of Minnesota:

STATE RAPID RESPONSE TEAM (SRRT)

Early notification of employer downsizing/closing.

- a. Pre-engagement
 - i. Employer
 - ii. Employee,
 - iii. CareerForce Staff
 - iv. Media
 - v. Regional Partner
 - vi. Workforce Strategy Consultant (WSC)
 - vii. Other
 - 1. Upon notification of layoff for closure, immediately contact RR prior to communication with employer.
 - 2. Provide RR with employer contact information if available.



- b. Early Warning Network
 - i. Notification of employer downsizing
 - ii. Location close/downsizing date
 - iii. Number of employee layoffs
 - iv. Positions
 - v. Skillsets
 - vi. Location
 - vii. Confidentiality status
- c. Worker Adjustment Retraining Notification (WARN) Notice
- d. Rapid Response will identify Local Workforce Development Area (LWDA) Rapid Response Liaison and identified partner(s) involved in process.
 - i. Depending on Mass Layoff Grant Project Process, partners may be included in full RR Process.
- e. RR & WSCs Discuss workforce transition plan
 - i. Human Capital Sharing pilot
 - ii. Human Capital Sharing/Upskilling pilot training for new position
 - iii. Other strategies (from MAWB, etc.) TBD
- f. WSCs outreach to employer(s) with similar needs
 - i. Specific employer
 - ii. Group of employers

SRRT Layoff Aversion Strategy:

- 1. Develop an Early Warning Network and Indicators
 - a. Early Warning Monitoring: Using industry and labor market systems and networks to monitor and predict plant closures to implement response and prevention strategies.
 - b. Early warning systems include early warning networks and community partners such as:
 - i. Local Chamber of Commerce
 - ii. City/County Economic Development
 - iii. Other state agencies (Divisions within DEED)
 - iv. Regional Partner (Workforce Development Area WDA)
 - v. CareerForce staff
 - vi. Workforce Strategy Consultant (WSC)



- vii. Media
- viii. Other

2. Asset Mapping

Identify key resources in the community who have the potential to provide assistance to the targeted employer/employees.

- a. Chambers of Commerce
- b. Local, regional, or state economic development entities
- c. Local banks, and utility companies
- d. Local elected officials
- e. Two and Four-Year Colleges and Universities
- f. Labor and Management Associations
- g. City/County Economic Development
- h. Telecommunications/Media Companies
- i. Accounting and Law Firms
- j. CareerForce/LWDA
- k. Community-Based Organizations
- I. Others
- 3. Develop and Implement Strategy Notification of Employer Downsizing
 - a. Develop commitment to ongoing meetings and communication for the Early Warning Network.
 - b. Engage WSC's in proactive measures to identify indicators of potential economic transitions and training needs both in growing industries and those in decline.
 - c. Partner with business representatives that work with the companies (Helping them with continuous improvement in processes and quality and constantly looking for opportunities for new products, customers, markets, and business models).
- 4. Feasibility Evaluation and Consultation by RR
 - a. Organizational structure: Present salary structure, possible willingness of all stakeholders to restructure operations, work system, and compensation as a last alternative.
 - b. Market: Trends in the industry, the company's market share, etc.
 - c. Operations/manufacturing: Condition of equipment, equipment as compared to state-of-the-art, potential need for capital investment.
 - d. Financial: A preliminary evaluation of a purchase price, the company's present profitability and expenses, the ability of a potential buyer to finance the purchase.
 - e. Legal: Prospects for a smooth ownership change and other restructuring issues.
 - f. Conclusions and methodology: Recommendation to proceed or not, and how.



- 5. Provide Customized Aversion Strategies or RR services as needed
 - a. Assess what the underlying cause of the possible layoff or closure decision is to help determine the best strategy.
 - b. Other potential Layoff Aversion strategies:
 - i. New Human Capital Sharing program
 - ii. Shared Work
 - iii. Incumbent Worker Training
 - iv. Talent Transfer
 - v. Unemployment Insurance Partnership
 - vi. RETAIN- Retaining Employment and Talent After Injury Illness Network
 - vii. ESOP- Employee Stock Ownership Plan
 - viii. Others

Xcel Energy—Minnesota Utility Economic Impact Study, available online at: https://www.remi.com/wp-content/uploads/2020/12/991-Xcel-Energy-Minnesota-Utility-Economic-Impact-Study.pdf.

Minnesota Power Economic Impact Study, available online at: https://www.edockets.state.mn.us/EFiling/edockets/searchDocuments.do?method=showPoup&documentId=%7b10B75F77-0000-C932-920B-5ECAAE3ED46F%7d&documentTitle=20212-170607-02



Identification of Alternatives for Minnesota Fossil Fuel Power Plant Workers

MEMORANDUM

TO: Catalina Valencia, Business Development Director

Natalie Siderius, Business Development Representative

FROM: Neal Young, Economic Analysis Director

DATE: May 20, 2021

RE: Identification of Alternatives for Minnesota Fossil Fuel Power Plant Workers

Introduction

Currently, the Minnesota Business Vitality Council is considering Community Energy Transition (CET), a planning process for the potential and planned closure of coal-fired electric generation plants. The goal of this analysis is to identify possible alternative industries and occupations that workers whose jobs may be eliminated by CET could consider moving forward. First, the analysis identifies the most common occupations in the fossil fuel electric power generation industry. Second, using a tool called a staffing pattern, it identifies other industries in which those occupations work. The idea is that workers could relatively easily transition from electricity generation to these alternative industries. Finally, using a MN DEED tool called JOBSTAT that identifies occupations that have similar skill requirements, this analysis identified the top alternative occupations into which workers in fossil fuel electric power generation could move.

NOTE: This analysis was done as a starting point. If requested, additional data on wage comparisons, job vacancies, etc. could be used to augment this short analysis.

TABLE 1: OCCUPATIONS OF FOSSIL FUEL ELECTRIC POWER GENERATION (NAICS 221112)

These are the top occupations in which workers in fossil fuel electric power generation are employed.

soc	Description	Employed in Industry (2020)	% of Total Jobs in Industry (2020)
51-8013	Power Plant Operators	370	21.8%
49-9051	Electrical Power-Line Installers and Repairers	88	5.2%
17-2071	Electrical Engineers	78	4.6%
43-4051	Customer Service Representatives	63	3.7%
51-1011	First-Line Supervisors of Production and Operating Workers	62	3.7%
49-9041	Industrial Machinery Mechanics	56	3.3%
49-2095	Electrical and Electronics Repairers, Powerhouse, Substation, and Relay	54	3.2%
49-1011	First-Line Supervisors of Mechanics, Installers, and Repairers	43	2.5%

Source: EMSI.



TABLE 2: ALTERNATIVE INDUSTRIES FOR OCCUPATIONS ABOVE

For each of the occupations identified in Table 1, a staffing pattern was used to identify other industries that also employ that occupation. Workers could consider applying for vacancies in the same occupation in these top alternative industries.

SOC	Description	Alternative 1	Alternative 2	Alternative 3	Alternative 4
51-8013	Power Plant Operators	Hydroelectric Power Generation	Electric Power Distribution	Local Government	Biomass Electric Power Generation
49-9051	Electrical Power-Line Installers and Repairers	Electric Power Distribution	Power Line Construction	Local Government	Electrical Contractors
17-2071	Electrical Engineers	Engineering Services	Electromedical Apparatus Mfg	Electric Power Distribution	Corporate Offices
43-4051	Customer Service Representatives	Commercial Banking	Corporate Offices	Direct Health and Medical Insurance Carriers	Insurance Agencies and Brokerages
51-1011	First-Line Supervisors of Production and Operating Workers	Commercial Printing	Machine Shops	All Other Plastics Product Mfg	Local Government
49-9041	Industrial Machinery Mechanics	Commercial and Industrial Machinery Repair and Maintenance	Industrial Machinery and Equipment Wholesalers	All other Plastics Produce Mfg	Construction and Mining Machinery and Equipment Wholesalers
49-2095	Electrical and Electronics Repairers, Powerhouse, Substation, and Relay	Electric Power Distribution	Local Government	Federal Government, Military	Nuclear Electric Power Generation
49-1011	First-Line Supervisors of Mechanics, Installers, and Repairers	Local Government	General Automotive Repair	New Car Dealers	Plumbing, Heating and AC Contractors

Source: EMSI



TABLE 3: ALTERNATIVE OCCUPATIONS FOR OCCUPATIONS ABOVE

For each of the occupations identified in Table 1, MN DEED's JOBSTAT tool uses the worker's current occupation to identify alternative occupations that are a relatively close fit based on the comparison of skills required for the occupations. Workers could consider applying for vacancies in these top alternative occupations.

soc	Description	Alternative 1	Alternative 2	Alternative 3	Alternative 4
51-8013	Power Plant Operators	Petroleum Pump System Operators	Stationary Engineers and Boiler Operators	Mixing and Blending Machine Operators	Chemical Plant and System Operators
49-9051	Electrical Power-Line Installers and Repairers	Rotary Drill Operators, Oil and Gas	Commercial Drivers	Maintenance and Repair Workers, General	Ship Engineers
17-2071	Electrical Engineers	Computer Hardware Engineers	Mechanical Drafters	Materials Scientists	Nuclear Engineers
43-4051	Customer Service Representatives	Interviewers	Bill and Account Collectors	Insurance Claims and Policy Processing Clerks	Billing and Posting Clerks
51-1011	First-Line Supervisors of Production and Operating Workers	First-Line Supervisors of Farming, Fishing and Forestry Workers	Industrial Production Managers	First-Line Supervisors of Mechanics, Installers and Repairers	First-Line Supervisors of Construction Trades and Extraction Workers
49-9041	Industrial Machinery Mechanics	Maintenance Workers, Machinery	Millwrights	Electric Motor, Power Tool and Related Repairers	Computer Numerically Controlled Tool Operators
49-2095	Electrical and Electronics Repairers, Powerhouse, Substation, and Relay	Wind Turbine Service Technicians	Hydroelectric Plant Technicians	Control and Valve Installers and Repairers	Electrical and Electronics Installers and Repairers, Transportation Equipment
49-1011	First-Line Supervisors of Mechanics, Installers, and Repairers	Solar Energy Installation Managers	Wind Energy Operations Managers	Biomass Power Plant Managers	Hydroelectric Production Managers

Source: JOBSTAT, MN DEED.



RESOURCE DOCUMENTS

Current information arranged by:

- Alternative uses for coal plants
- Organizations for information & support
- Economic analysis
- Guidance
- U.S. case studies
- State legislation & programs
- Canada
- Germany
- Iceland
- Norway
- Global
- News

Alternative uses for coal plants

- Battery storage
- Biomass, natural gas, hydrogen plants
- Carbon capture, sequestration operations
- Data centers
- Industrial parks
- Nuclear energy
- Solar energy
- Office parks

Organizations for information & support

- Business Council for Sustainable Energy
- Center for Energy and Environment, https://www.mncee.org/
- Clean Energy Economy MN (CEEM)
- Delta Institute, https://delta-institute.org/
- EDA, https://www.eda.gov/
- Environmental and Energy Study Institute, https://www.eesi.org/
- EPA (Coal Plant Reuse & Redevelopment), https://bit.ly/3a1hdUK
- EPA (Community Revitalization Assistance), https://www.epa.gov/community-revitalization
- EPA (Smart Growth), https://www.epa.gov/smartgrowth
- Headwaters Economics, https://headwaterseconomics.org/
- Interagency Working Group on Coal & Power Plant Communities & Economic Revitalization, https://energycommunities.netl.doe.gov/
- Just Transition Fund, https://www.justtransitionfund.org/
- Minnesota Pollution Control, https://www.pca.state.mn.us/



- Minnesota Public Utilities Commission, https://mn.gov/puc/
- Resources for the Future, https://www.rff.org/
- RMI, https://rmi.org/
- Sierra Club's Beyond Coal Campaign, https://coal.sierraclub.org/
- USDA Programs & Announcements, https://www.usda.gov/energy/matrix/html/programsannouncements.html
- USDA Rural Development, https://www.rd.usda.gov/
- USDA Rural Development Innovation Center, https://www.usda.gov/topics/rural/rural-development-innovation-center

Economic analysis

Coal-fired power plant retirements in the U.S. June 2021

National Bureau of Economic Research

"... Our model predicts that three-quarters of coal generation capacity will retire in the next twenty years, with most of that retirement concentrated in the next five years. Policy has limited ability to affect retirement times ..."

https://bit.ly/2UNpKpu or request from library

Xcel Energy – Minnesota utility economic impact study April 2020 University of Colorado Boulder

"... presents the results of an analysis prepared by the Leeds School of Business to quantify the net economic impacts of five scenarios presented by Xcel Energy in its July 1, 2019 resource plan filing. The study areas include the state of Minnesota and four counties within the state: Goodhue, Sherburne, Washington, and Wright. The study period extends from 2020 through 2045 for the state of Minnesota ..."

https://bit.ly/3fLjdUL

Minnesota Power economic impact study March 2020 University of Colorado Boulder

"... examines the economic impact of two alternative scenarios—one that retires Boswell unit 3 in 2030 and unit 4 in 2036 ("Scenario 1"), and another that retires unit 3 in 2035 and unit 4 in 2036 ("Scenario 2") ... The study areas include the state of Minnesota and Itasca County. The study period spans two decades, from 2030 through 2050 ..."

https://bit.ly/3t0VWlg

Minnesota's power plant communities: An uncertain future February 2020
Center for Energy and the Environment

"Study exploring the social and economic implications of Minnesota's energy transition for communities that host power plants ..."

https://bit.ly/3rTQkrN



Coal plant communities seek a just economic transition Aug. 7, 2020 Institute for Local Self-Reliance

"... Each community will face unique challenges, but planning ahead for the future of the workers, the tax base, and the community makes the transition easier ..."

https://bit.ly/3dEfW75

Green versus brown: Comparing the employment impacts of energy efficiency, renewable energy, and fossil fuels using an input-output model February 2017
Economic Modelling

"... We find that on average, 2.65 full-time-equivalent (FTE) jobs are created from \$1 million spending in fossil fuels, while that same amount of spending would create 7.49 or 7.72 FTE jobs in renewables or energy efficiency. Thus each \$1 million shifted from brown to green energy will create a net increase of 5 jobs ..."

Abstract at https://bit.ly/3mDPRJv; request article from library

Guidance

Blueprint for Just Transition
Just Transition Fund
https://bit.ly/3ontPNF

Transmission planning and development primer for Midwestern policy makers April 2021

Great Plains Institute for the Midwestern Governors Association https://bit.ly/3onl9Ho (brief at https://bit.ly/3F33wlX)

How one mayor forged his city's future by rethinking its past Pete Buttigieg TEDxUND

"... Buttigieg explains how innovation is about seeing the value in the old as well as the new ..."

https://bit.ly/3i9CKij

Initial report to the president on empowering workers through revitalizing energy communities National Energy Technology Laboratory

"... A set of communities across the country hard-hit by coal mine and coal power plant closures, which should be prioritized for focused federal investment ..."

https://bit.ly/37aXccc

How to get started: A guide to help local governments engage in coal transition Just Transition

https://bit.ly/3fdduoz



Preparing Midwestern Communities for Power Plant Closures 2021 Midwestern Governors Association

https://bit.ly/2PEf5eD

Energy policy and conservation quadrennial report, 2020 March 1, 2021 Minnesota Department of Commerce

"... documents status and major emerging trends and issues in Minnesota's energy supply, consumption, conservation, and costs to the fullest extent possible ..."

https://bit.ly/3vdVLUH

State energy factsheet: Minnesota April 15, 2021 BloombergNEF

"... provides a fact-based overview of Minnesota's energy sector. It presents key metrics, highlights recent trends, and discusses opportunities for clean energy ..."

https://bit.ly/3xblsWp

State lawmakers consider 'coordinated effort' to help communities when power plants shutter March 10, 2021
Minnesota House of Representatives

"... Now is the time to act, says Rep. Shelly Christensen (DFL-Stillwater), if we want to prevent Minnesota cities with nearby coal and nuclear power plants from suffering a similar fate when those plants close in 10-20 years. She sponsors HF1750, which would create and fund an Energy Transition Legacy Office within the Department of Employment and Economic Development to help these cities deal with the economic disruption resulting from the expected shutdowns ..."

https://bit.ly/31TMswg

Could refinancing be an option for retired power plants? Feb. 2, 2021 Minnesota House of Representatives

"... Rep. Jamie Long (DFL-Mpls) is floating an idea that's been successful in other states: Securitization. He's currently <u>crafting a bill</u> ..."

https://bit.ly/3dcki6h



National economic transition platform Just Transition Fund

"Crafted by local, tribal and labor leaders to build sustainable, resilient and equitable economies for the people and places hit hardest by the changing coal economy ..."

https://nationaleconomictransition.org/

Coal communities and the U.S. energy transition: A policy corridors assessment April 2021 Energy Policy

"... We find that the absence of a national energy transition policy exacerbates uncertainty for coal communities, and as a consequence, two distinct and diverging policy corridors emerge at the state level ..."

Abstract at https://bit.ly/3cUYPOX; request article from library

'Learn to code' won't cut it: How planners can ensure energy transitions won't leave coal country behind March 3, 2021
Urban Institute

"... planners and policymakers should recognize that coal losses are more than economic—they're community-wide—and prioritize social and cultural infrastructure investments that value communities beyond their economic utility ..."

https://urbn.is/3mxDUF7

How renewable energy jobs can uplift fossil fuel communities and remake climate politics Feb. 23, 2021
Brookings

"... Our analysis of a geographic database of renewable energy generation potential finds that many current fossil fuel hubs are ideal sites for renewable energy production ..."

https://brook.gs/3dOc9E5

Cultivate a second life for decommissioned power plants Q1 2021 Area Development

"... Industrial developers can take advantage of these well-maintained, high-value assets and breathe new life into their purpose ..."

https://bit.ly/3d3iegF



Issue brief: How coal country can adapt to the energy transition

Nov. 10, 2020

Environmental and Energy Study Institute

"... the transition should serve as an opportunity for economic diversification, which mitigates the shock created by the decline of one industry. Finally, since coal industry jobs tend to pay relatively high wages, workforce transition solutions should aim to help workers maintain their current quality of life ..."

https://bit.ly/39QkshM

Redevelopment of former coal plant sites Q2 2020 Area Development

"... the range of potential end-users of these sites is very broad. 'One of the incredible attributes of power plant reclamation is that the real estate typically has built-in infrastructure components that can be easily reused for new industries' ..." Reports on how state governments in Illinois, Massachusetts and Pennsylvania are leading redevelopment efforts.

https://bit.ly/2Qfpxcb

Solutions for transitioning coal-dependent communities September 2018 Headwaters Economics

"... Headwaters Economics hosted a Coal Transition Solutions Forum in 2018 to develop fiscal policy solutions that could begin to unwind dependence on coal for revenue and build wealth and capacity in vulnerable communities ..."

https://bit.ly/3mAfef4

Coal plant redevelopment roadmap: A guide for communities in transition May 2018

Delta Institute

"... This roadmap is intended to inform the municipal government's planning and response to closure ..."

https://bit.ly/3t5E88Y

Planning for the local impacts of coal facility closure: Emerging strategies in the U.S. West 2018

Resources Policy

"... The findings highlight the absence of effective strategies to address lost local revenues, lack of connections between environmental quality and long-term economic resilience, and a range of levels of acceptance of the coal transition. Together, the plans demonstrate the negative consequences of an uncoordinated, contradictory policy environment for transition planning at the local level and the need for policy interventions to address issues of equity and efficiency in this process ..."

https://bit.ly/3g2EB7Z



Lessons from the coal industry transition Winter 2017 Economic Development Journal

"... Economic developers and community leaders in Appalachia and in other coal-impacted regions are developing innovative new approaches that are relevant for any region in the midst of economic transformations. This experience also offers insights on how to improve the US's overall capacities to help workers retrain and retool, and to aid communities in responding to major economic shocks ..."

https://bit.ly/39VCsaw

U.S. case studies

Case studies
Just Transition Fund
Case studies include Mingo County, West Virginia; Becker, Minn. and Tonawanda, N.Y.

https://bit.ly/2Q5lkYu

Federal economic development support for coal communities: A case study of the Athens, Ohio region February 2021
Resources for the Future

https://bit.ly/3wA2IRp

Coal communities in transition: A case study of Colstrip, Montana January 2021 Resources for the Future

https://bit.ly/39TmzRH

Colorado wants to help after coal leaves town. It's going to take time. And a lot of money Jan. 6, 2021 Colorado Sun

"... The Office of Just Transition ... submitted its framework to the state ... outlining the beginnings of what will likely be more than a decade's worth of work to help coal-dependent communities avoid a devastating economic bust ..." More about Colorado's Office of Just Transition at https://cdle.colorado.gov/the-office-of-just-transition and its action plan is at https://bit.ly/2Q6Jqm0.

https://bit.ly/3wAn1Os

Powerful redevelopment – transforming retired coal-fired power plants Winter 2021 Economic Development Journal

"... examines how a partnership between a Midwest utility and a college led to maximizing the potential of a former coalfired power plant into a sustainable redevelopment project. This collaboration led to Alliant Energy receiving IEDC's Gold Award for Partnerships with Educational Institutions for the Beloit College Powerhouse facility project ..."

https://bit.ly/3rlwRQB or request from library



As U.S. coal plants shutter, one town tests an off-ramp March 4, 2020 Stateline

"... A one-of-a-kind deal struck by [Washington] lawmakers, environmentalists, local leaders and the power plant owner — Canada-based TransAlta — in 2011 gave Centralia more than a decade to prepare for the plant closure. It requires TransAlta to provide \$55 million for economic development, support for displaced workers, energy technology and energy efficiency. The money is given out via grants overseen by a board comprised of company and local leaders ..."

https://bit.ly/3dHayjy

Shenango reimagined site visioning report Feb. 28, 2020 Delta Institute

"... Delta facilitated a coalition of community groups outside Pittsburgh to create Guiding Principles for sustainable redevelopment of the closed Shenango Coke Plant ... Intended for use by future developers of the 50-acre site, these Guiding Principles were created by the Shenango Reimagined Advisory Council, composed of citizens, environmental groups, economic development agencies, and municipalities. The revisioning process also identified 20 site reuse ideas ..."

https://bit.ly/3rZA480

Pennsylvania promotes playbook for redeveloping former coal plant sites Aug. 7, 2019 Energy News Network

"... The state economic development department recently used a grant from the federal <u>POWER initiative</u> to develop a series of plans to help speed the decommissioning and redevelopment of coal-fired power plants ..."

https://bit.ly/3uD17IO

In transition: Stories from coal plant communities August 2017

Delta Institute

Highlights transitional and redeveloped sites throughout the U.S.

https://bit.ly/3wEl1oD

AppalachianSky

An effort that originated from the need to transition skillsets from the coal industry into a growing industry.

https://bit.ly/3tEKaMY



State legislation & programs

Colorado Just Transition Action Plan 2020

https://bit.ly/2Q6Jqm0

Colorado Just Transition Support for Coal-Related Jobs (House Bill 19-1314) 2019

https://bit.ly/3nA3U2U

New Mexico Creation of Sustainable Economy Task Force (Senate Bill 112) 2021

https://bit.ly/33aFALz

New Mexico Energy Transition Act (Senate Bill 489) 2019

https://bit.ly/2RcgXM7

New York State Consolidated Funding Application https://apps.cio.ny.gov/apps/cfa/

New York State Electric Generation Facility Cessation Mitigation Program https://on.ny.gov/3gYdsUp

New York State Just Transition Technical Assistance & Planning Services RFP https://on.ny.gov/3aSH7dG

Ohio Coal Communities Project

https://energizeohio.osu.edu/fossil-energy-resources/ohio-coal-communities

Canada

Support for Albertans affected by coal phase out Government of Alberta's guide to financial, employment and retraining support information for employees in the coal-fired electricity generation industry.

https://bit.ly/3h9YZUK

Supporting workers and communities: Recommendations to the Government of Alberta Advisory Panel on Coal Communities

https://bit.ly/379VNCZ



Task Force: Just Transition for Canadian Coal Power Workers and Communities Government of Canada

https://bit.ly/3BJryRx

Tracking the energy transition 2021: The new reality June 2021
Clean Energy Canada

"The future of Canadian energy looks bright, with clean energy job growth projected to outpace losses in fossil fuels amid a shifting global landscape ..."

https://bit.ly/3BCErMO

Alberta, Canada: Supporting both workers and communities to ensure a just transition 2021

Just Transition (World Resources Institute)

https://bit.ly/2V5blVJ

Don't let history repeat: Canada's energy sector transition and the potential impact on workers April 6, 2021

TD

"... We recommend that Canada's just transition policy framework have three main elements ..."

https://go.td.com/2UyU9Z3

Employment transitions and the phase-out of fossil fuels January 2021 The Centre for Future Work

"... reviews the scale, trend, and regional distribution of employment in fossil fuel industries in Canada, in order to better understand the labor market challenges associated with the coming phase-out of fossil fuel use ... lists ten key policy principles to guide a fair and effective transition away from fossil fuel employment ..."

https://bit.ly/2V9sKg9

Developing a multiple-criteria decision analysis for green economy transition: A Canadian case study December 2019 Economic Systems Research

"... The proposed analysis tool will provide decision-makers with the ability to explore the design and effects of policy reforms, regulatory changes, and targeted public expenditure strategies, thereby overcoming barriers towards a green economy ..."

https://bit.ly/3y64Gtb



Germany

Climate Smart: Cities Working Together (Germany & Minnesota partnerships) https://bit.ly/3xeXVoc (TPT video) and https://bit.ly/3xeXVoc (TPT video) and https://bit.ly/3xeXVoc (TPT video) and https://bit.ly/3wkEx81 (UMN program)

Germany: The Ruhr Region's pivot from coal mining to a hub of green industry and expertise Just Transition (World Resources Institute) https://bit.ly/3ru00L9

What should coal communities do when power plants shut down? Ask Germany March 31, 2021 Vox

"... Germany established itself as a model when it passed two laws committing to completely phasing out coal power and providing \$47.3 billion in funding to help coal regions like Lusatia diversify their economies ..."

https://bit.ly/3sX2OjO

Iceland

What U.S. policymakers can glean from Iceland's clean energy evolution June 3, 2021
The Hill

"... Today, Iceland is the world's largest green energy producer per capita, but it was not always that way ..."

https://bit.ly/2VaHhb9

Norway

How together, Norway and California are modeling the world's sustainable future https://bit.ly/3ze0NST; Innovation Norway and GO-Biz MOU

Green energy creates commerce and jobs – look to Norway and Texas for how June 25, 2021 Forbes

"Norway is a small country, about 5 million people, that has transformed their transport sector to renewable energies. They lead the world in uptake of electric vehicles ..."

https://bit.ly/36TesTb



Global

Fostering effective energy transition April 2021 World Economic Forum

"... benchmarking of countries on their energy transition progress ..."

https://bit.ly/3ri8HIk

Employment in the energy sector 2020
European Commission

"... an overview of recent employment trends at the global and EU-28 level related to the greening and decarbonization of the economy, with a focus on the energy sector ..."

https://bit.ly/3Bng5GK

Measuring the socioeconomics of transition: Focus on jobs 2020

International Renewable Energy Agency

"... monitors the evolution of renewable energy jobs, forecasts employment in renewables and evaluates the wider impact of transition roadmaps on overall and sectorial jobs ..."

https://bit.ly/3Bmxpfl

Real people, real change: Strategies for just energy transitions December 2018 International Institute for Sustainable Development

"... brings together political and communications strategies for a just transition, building on research and case studies of energy transitions that have happened or that are happening in Canada, Egypt, Indonesia, India, Poland and Ukraine ..."

https://bit.ly/3kNDv2z



News

Renewables fast replace coal, except in rural areas Aug. 9, 2021 – Wall Street Journal

"U.S. utilities are moving to replace coal plants with renewable-energy sources, but the shift is happening more slowly at the cooperatives that serve much of rural America ..."

https://on.wsj.com/3iEcnkN or https://bit.ly/3jHSxoe (eLibraryMN) or request from library

Building solar farms may not build the middle class July 16, 2021 New York Times

"Some of the wealthiest companies in the world are investing in the green economy. But they're not investing in paying union wages ..."

https://nyti.ms/3irOeN9

Great River to sell coal plant, but still buy power from it June 30, 2021 Star Tribune

"[Maple Grove-based] Great River Energy's massive North Dakota coal power plant – once slated for closure – will be sold to a North Dakota operator that will in turn sell coal-fired electricity back to Great River ..."

http://strib.mn/3AgkVFn

Xcel drops plan for big new gas power plant in Becker June 25, 2021 Star Tribune

"... it now plans to build two smaller natural gas plants — one each in southwestern Minnesota and North Dakota — at less than half the cost of the planned Becker plant ..." MPR also reports on this at https://bit.ly/3y6kDz5.

http://strib.mn/3x7sHzm

Why coal plant workers aren't going green June 22, 2021 E&E News'

"... electric utilities are transitioning almost none of their tens of thousands of coal workers into clean energy jobs. But they also aren't laying them off. Instead, most power companies are playing a sort of musical chairs where no one quite loses a chair. The strategy: When a coal plant closes, offer the machinists and operators the same job at one of the dwindling numbers of coal plants that are still running ..."

https://bit.ly/3xYjrhb



Minnesota is on a path to dramatic energy transformation April 19, 2021

MinnPost

An op-ed by Gregg Mast, executive director of <u>Clean Energy Economy MN (CEEM)</u>, and Lisa Jacobson, president of the <u>Business Council for Sustainable Energy</u>. "... When our organizations ... talk about a clean energy future, we're talking about an entire ecosystem utilizing a diverse suite of clean, affordable, and innovative technologies like energy efficiency, renewable energy, smart grids, and other low and zero-carbon sources ..."

https://bit.ly/3gsNs3d

Zero-carbon electricity now provides more power in Minnesota April 17, 2021 Star Tribune

"... There is encouraging work going on; from battery storage of renewable power to farms where manure is converted to fuel, to growing sales of thousands of electric vehicles annually, to capturing methane gas at the huge Pine Bend landfill and elsewhere for processing into renewable gas that fuels trucks ..."

http://strib.mn/3v6FQr4

Xcel wants to build \$575 million solar energy plant in Becker April 13, 2021 Star Tribune

"The project will be adjacent to the utility's Sherco coal power complex ..."

http://strib.mn/3dcyk7N or request from library

Lawmakers eye funding for clean energy program; carbon capture draws scrutiny April 5, 2021
Bismark Tribune

"North Dakota lawmakers are trying to pinpoint how much money to funnel into a proposed program that would help fund technology designed to reduce emissions, including carbon capture systems at coal-fired power plants ..."

https://bit.ly/3wSIGCL or request from library

Could potential new owner be Coal Creek's savior? Talks to rescue ND's biggest coal-fired plant ongoing March 27, 2021
Grand Forks Herald

"North Dakota's largest coalfired power station, which is due to close next year, appears to be on the brink of landing a new owner in a bid that would rescue the plant from shutting down ..." The Star Tribune also reports on this at http://strib.mn/20FuJWs.

https://bit.ly/3tegNSi or request from library



Minnesota Power to eliminate coal, carbon Jan. 13, 2021 Duluth News Tribune

"... Boswell Energy Center employs 170 workers and makes up 70% of the city's tax base while also making sizable portions of the Itasca County and Grand Rapids school district tax bases ... To make up for the loss of coal-fired energy, Minnesota Power plans to build 400 megawatts of solar and wind -- 200 megawatts of each -- by 2035. The solar will likely go on existing Minnesota Power property, with Boswell as 'the premier candidate' ..."

https://bit.ly/3dJRkKd or request from library

Minnesota Power shutting, converting final two coal plants by 2035 Jan. 12, 2021 Star Tribune

"... Minnesota Power is one of the largest employers in Itasca County – Boswell employs 165 – and a major taxpayer ..."

http://strib.mn/3qjNMD3 or https://bit.ly/2PFAjZt or request from library

Xcel Energy plans large solar project near retiring Becker coal plant Jan. 4, 2021 Minneapolis/St. Paul Business Journal

"Xcel Energy said it wants to add around 500 megawatts of new large-scale solar generation near its existing Sherco Power Plant in Becker ..."

http://bit.ly/39fLrSP or request from library

Helping Becker as well as Google Oct. 22, 2020 Star Tribune

"... Becker, with just under 5,000 people as of the last census estimate, can't fairly be described as a struggling small town. It's about a 60-mile drive to Minneapolis-St. Paul International Airport, so it's within commuting range of the Twin Cities. Its median household income of \$87,000 is about 25% higher than the state's. The value of Sherco to Becker goes beyond payroll, though. It pays taxes that fund the city and public schools. Xcel Energy represents nearly 55% of the city of Becker's adjusted net property tax capacity and Southern Minnesota Municipal Power Agency, part owner of Sherco Unit 3, represents an additional 23% of the tax capacity, as of the latest annual statement filed for Becker's bond issues. The remaining eight taxpayers of Becker's Top 10 together account for roughly 3% ..."

https://bit.ly/31R9a8n or request from library

What looks like a giveaway to Google is actually a bet against decline in Becker Oct. 21, 2020
Star Tribune

"... A new sewer line and other infrastructure will hopefully attract Google to build a massive data center next to Xcel Energy's coal-fired electric power station in Becker ..."

http://strib.mn/35nPWZp or request from library



Phasing out: Utilities, cities prepare for the end of coal-fired energy in Minnesota July 27, 2020 MinnPost

"... Audrey Partridge, the regulatory policy manager at the Center for Energy and Environment, ... has been studying the economic impact of coal-plant closures. One probable change: higher taxes in communities where coal-fired electricity plants have been producing significant revenue for cities and school districts ..."

https://bit.ly/2Q5F9Pm and https://bit.ly/3kc2tG6

Xcel coal plant closure later this decade poses big question for Oak Park Heights Aug. 3, 2020 Star Tribune

"... The plant is the city's largest taxpayer by far, with annual collections making up about 39% of the tax base ..."

http://strib.mn/30mL6u0 or request from library

Minnesota's Great River Energy closing coal plant, switching to two-thirds wind power May 7, 2020 Star Tribune

"The state's second-largest electricity provider is closing its Coal Creek Station in North Dakota, one of the largest coal electricity plants in the Upper Midwest ..."

http://strib.mn/2LfDoJL or request from library

Wind energy, tax breaks sought to bring Google to Becker Feb. 25, 2019
MPR

"... Google's plan to build a \$600 million data center in the central Minnesota city of Becker is drawing support from both renewable energy advocates and local government officials fretting the impending closure of a large, coal-fired power plant ..."

http://bit.ly/2U2vx5c

Coal no more? Becker bets on natural gas, recycling and, maybe, Google Jan. 28, 2019
MPR

"... city leaders are trying to imagine a future for Becker without the fossil fuel that put it on the map. They want to diversify the local economy and bring in new businesses so the community won't flounder when the Sherco coal units are retired ..."

http://bit.lv/2RpI4gT



STAKEHOLDER INTERVIEWS

Out-of-State Community Interviews

Category	Contact	Company/Organization	State	Title
Reuse of Assets	Katherine Burkholder	CMS Energy; Consumer's Energy	Michigan	Manager of stakeholder relations, CMS Energy
Community Engagement	Amanda Pankau	Prairie Rivers Network	Illinois	State-wide community engagement through their Listen Lead Share campaign and crafting CEJA legislation
Workforce	Lee Anderson	Utility Workers Union of America	Nationwide	Director of Government Affairs. Work quantifying dollars needed for supporting workforce
Reuse of Assets	Tom McKittrick	Forsite Development Inc.	Nationwide	CEO of real estate company that purchases former industrial sites
Workforce	Brad Hall	Appalachian Power - Appalachian Sky Program; AEP	КУ	VP of External Affairs and lead on the AppalachianSky program
Overall state effort	Wade Buchanan	Colorado Office of Just Transition	со	Executive Director of the CO Office of Just Transition.
Policy	Vincent Ravaschiere or Kevin Hansen	Empire State Development	NY	Vincent & Kevin: Empire State Development runs the state's tax base replacement program Jamie: NYS Energy Research Development Authority talked about a toolkit they are developing for local plant site redevelopment.
International Experience	Nora Lohle	Heinrich Boll Stiftung North America	German experience. Located in DC	Program Director, Energy and Environment
International Experience	Various members	Alberta's Coal Workforce Transition Program (CWTP)	Alberta, Canada	Rob Lunman, Director, Regional Employer Supports, <u>www.work.alberta.ca</u>



In-State Community Interviews

In-state region	Interviewee Contact Details
Oak Park Heights	Eric Johnson, City Administrator, Oak Park Heights Mary McComber, Oak Parks Heights Mayor Chris Engh, Washington County Economic Development Director Deb Ryun, Executive Director, Wild Rivers Conservancy Shane Zahrt, Flaherty & Hood, representing the Coalition of Utility Cities
Becker, Sherco Coal Plant	Marie Pflipsen, Becker Community Development Director; Patti Garland, Greater Sherburne Development Corp; Dan Weber, Asst. County Admin for Sherburne; Leslie Dingmann,GSDC Don Hickman, Pres Initiative Foundation; Greg Pruszinske, Becker City Administrator; Brian Kolbinger, Becker Town Board; Kevin Janasechi, School Finance Diretor; Jeremy Schmidt, Schools Supt. Shane Zahrt, Flaherty & Hood, representing the Coalition of Utility Cities
Red Wing Nuclear Plant	Dan Rogness, Red Wing Community Development Director Marshall Hallock, Red Wing Administrative Business Director Evan Brown, Red Wing Council President Pro Tem Becky Norton, Red Wing Council President Shane Zahrt, Coalition of Utility Cities
Monticello Nuclear Plant	Rachel Leonard, City Administrator, City of Monticello Angela Schumann, Community Development Director, City of Monticello Jim Thares, Economic Development Manager, City of Monticello Marcy Anderson, Executive Director, Monticello Chamber of Commerce & Industry
Fergus Falls	Andrew Bremseth, Fergus Falls City Administrator Clara Beck, Fergus Falls Community Development Jeff Drake, School Superintendent Nick Leonard, Deputy Admin., Otter Tail County NiTea Bauman, Greater Fergus Falls Director
Granite Falls	Dave Smiglewski, Mayor Crystal Johnson, City Manager
Hoyt Lakes	Chris Vreeland, Mayor - City of Hoyt Lakes Becky Lammi, City Administrator – City of Hoyt Lakes Karl Schuettler, East Range Joint Powers Board Arik Forsman, MN Power Lance Johnson, East Range Chamber of Commerce



In-state region	Interviewee Contact Details
Cohasset Coal Plant	Max Peters, Director of Finance, City of Cohasset Tom Pagel, City Administrator, City of Grand Rapids Roy Smith, Grand Rapids Area Chamber of Commerce Tamara Lowney, Itasca Economic Development Corporation Shane Zahrt, Flaherty & Hood, representing the Coalition of Utility Cities
Unions/Workers Representatives	Multiple IBEW Locals: Duane Peters - IBEW 23; Rick Bartz; Cheri Steward; Jordan Marquardt, Local 31, Boswell; Will Keyes; Jordan Marquardt; M Kaufman, Local 949; kwz@ibew160.org , Local 160; joelonemn@gmail.com Ilallemont@ibewlocal949.org; emhoppe2@frontiernet.net-krenskers@ibew31.com ; Rick Bartz, Local, Red Wing; Kurt Zimmerman, Local 160, Joel Johnson, lobbyist Jason George, Operating Engineers, IUOE Local 49 Interview Luke Voight, Boilermakers Union #647 Kevin Pranis, Laborer International Union of North America (LIUNA) Robert Blake, Executive Director, Native Sun Chris Markussen, Blue Green Alliance Marc Majors, DEED, Clean Jobs Action Training/Clean Energy Career Training
MPCA GreenStep Cities	Kristin Mroz, GreenStep Cities and Tribal Nations Co-Director

