



WORKFORCE DEVELOPMENT COLLABORATION



PARTNERS IN ENERGY
An Xcel Energy Community Collaboration

XCEL ENERGY PARTNERS IN ENERGY AND THE ROLE OF TOOLKITS

Xcel Energy Partners in Energy provides communities in Minnesota, Wisconsin, and Colorado services to develop and implement an energy or electric vehicle action plan. Every community has its own unique energy needs and priorities, and Partners in Energy tailors its services to complement each community's vision. As part of this offering, we have developed several toolkits to help communities reach their energy goals.

You can explore all available toolkits on the [Partners in Energy Portal](#). To customize any of the resources with your community's unique brand identity, contact your Partners in Energy facilitator.

Using this Toolkit

This toolkit is one of two workforce development toolkits developed through Partners in Energy. Both toolkits are intended to help you strengthen your local energy or electric vehicle workforce to support greater opportunities for local businesses and residents to save energy and reduce greenhouse gas emissions. While the initial [Workforce Development Initiative](#) toolkit focuses on ways to build your own workforce development program, this [Workforce Development Collaboration](#) toolkit focuses on ways to bolster and expand existing efforts.

Xcel Energy assumes no liability during project implementation. Both toolkits are only intended to provide information and are not a substitute for on-the-job training and proper safety procedures.

Who Should Use This Toolkit?

This toolkit is designed to support local government staff, businesses, nonprofit organizations and volunteers in identifying workforce development opportunities and strategies for their community to drive actions that support their energy vision.

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WORKFORCE DEVELOPMENT CONTEXT

Workforce Development Context

A strong workforce is essential to achieve the ambitious energy saving, decarbonization, renewable energy and electric vehicle goals set by Partners in Energy Network communities. From energy assessments to electrification and deep energy retrofits, these building and infrastructure improvements require skilled contractors trained in the latest technologies.

WHAT IS WORKFORCE DEVELOPMENT?

Workforce development encompasses programs and other initiatives that aim to meet employment needs for both the employer and potential employee. Examples of workforce development programs include mentorship and skills training for students, job seekers and workers so they can successfully enter and navigate career pathways, as well working with employers to understand their needs and connect them to talent networks.

This toolkit focuses on the clean energy workforce, including jobs related to energy efficiency, renewable energy, energy storage, building electrification and transportation electrification.

WHY WORKFORCE DEVELOPMENT?

The demand for clean energy skills is outpacing the workforce. The energy efficiency sector continues to grow, with a 2.7% nationwide increase of nearly 60,000 jobs from 2020 to 2021 (U.S. Department of Energy, 2022). Additionally, the U.S. Department Energy estimates that the jobs needed for solar, wind and battery storage could more than double between 2020 and 2030.



Solar (PV)

293,874

U.S. Job Estimates
in 2020

30–80% increase
estimated by **2025**

70–160% increase
estimated by **2030**



Wind (land-based)

116,817

U.S. Job Estimates
in 2020

10–40% increase
estimated by **2025**

20–90% increase
estimated by **2030**



Battery Storage (grid-connected)

66,751

U.S. Job Estimates
in 2020

90-70% increase
estimated by **2025**

200-470% increase
estimated by **2030**

The demand across these sectors is driven by multiple factors:

- **Unprecedented federal funding** was unlocked with the passage of the Infrastructure Investment and Jobs Act in 2021 and the Inflation Reduction Act in 2022. Both initiatives include direct funding over the next several years for implementing energy efficiency, renewable energy and electrification measures that will need to be installed by a trained workforce.
- **Ambitious state and community goals** to reduce energy use and greenhouse gas emissions are being set across the nation, including many Partners in Energy communities. The strategies to achieve these goals require participation from the clean energy workforce.
- **New technologies** for building and transportation electrification are emerging and will require training for the new and existing workforce. This presents opportunities for entrepreneurial activity and economic potential for communities to leverage.
- **A focus on equity** is being prioritized by the federal government and many state and local governments. This means that workforce development efforts need to reach those that may have been left behind in the past, as well as other underserved communities.

WORKFORCE CHALLENGES

The demand for a clean energy workforce is intensified by significant existing challenges within the workforce:

- The clean energy workforce includes a **wide range of careers**, including energy auditors, HVAC technicians, weatherization workers, electricians, salespeople and financing agents. Because these jobs cross so many sectors, it can be difficult to gather the right partners to support a comprehensive workforce development initiative. Additionally, many of these careers are supported by small employers, who may lack the organizational capacity to promote their industry at local, regional and state levels.
- Many workforce development organizations, including local, state and regional agencies, might **lack awareness** about the clean energy industry and what types of careers are involved. Existing economic and workforce development organizations may not identify clean energy jobs as a priority, so are not putting resources to promoting and preparing those jobs. This means that entrepreneurs, students and other jobs seekers may not know that these job opportunities exist.
- The **“silver tsunami”** refers to the next wave of retiring workers in the trades that make up much of the clean energy workforce. A Minnesota report found that 85% of energy efficiency employers that were interviewed reported difficulty in hiring, while it is estimated that 29% of the existing workforce will retire by 2026 (Center for Energy and Environment, 2019). Without encouraging individuals to pursue trades in these industries, the shortage will become more severe.

- **Racial/ethnic inequality is evident in the workforce**, with Black and Latino workers being overrepresented among the lowest-paying occupations in transportation and clean energy sectors (Markle, 2023). Overall, the energy sector has a below-average representation of Black and Latino workers (Lehman, Hunt, Frongillo, & Jordan, 2021).
- Job seekers may have **challenges accessing training** because of language proficiency and fluency or transportation limitations. Many trainings for new technologies are in the metro areas and may be difficult for rural workers to access. To implement an equitable workforce development initiative, options to address these barriers must be incorporated.

These challenges increase the complexity of implementing successful workforce development initiatives and emphasize the need for collaboration.





ADDRESSING WORKFORCE GAPS THROUGH COLLABORATION

Addressing Workforce Gaps through Collaboration

LOCAL GOVERNMENT'S ROLE IN WORKFORCE DEVELOPMENT

Local government organizations—from a town to a county—have an important role in promoting and retaining a qualified workforce. Government entities often have existing complementary initiatives with workforce development, from economic development to relationship building, that can build and strengthen communities. For local governments with sustainability staff, there is additional overlap with workforce development programs—as communities work toward achieving their energy savings and greenhouse goals, there is a need for a local clean energy workforce to complete projects.

Ways Local Government Interacts with Workforce Development

 <p>Economic Development</p>	<p>Economic development initiatives grow the local economy through new work opportunities, business retention and expansion, and community investment. Government-led economic development initiatives naturally tie to broader workforce development programs—as local businesses grow and develop, there is an increased demand for workers to fill those jobs.</p>
 <p>Community Development</p>	<p>Through community development, government staff gain an important understanding of their community's social issues, including population demographics and housing needs. Local governments can leverage their understanding of local needs to better inform workforce programs, ensuring programs offer accessible training and meeting the needs of the community.</p>
 <p>Community Connectors</p>	<p>Governments often serve as community connectors, building relationships and connections to broader community efforts. From nonprofit and faith-based organizations to business associations, local government is engaged in various community initiatives. As a community connector, local government can facilitate connections between workforce programs to other community organizations and initiatives, creating a more localized training program.</p>
 <p>Workforce Programs</p>	<p>Leveraging public funding and existing programs, governments can help initiate and expand workforce programs. These programs can be within the government enterprise itself, such as internships in different departments, or by working with local businesses to create a workforce development program targeting the community to recruit participants.</p>

This toolkit focuses on helping communities, nonprofits and other partners collaborate on existing workforce development initiatives. If you are looking to create your own workforce program, check out the [Partners in Energy Workforce Development Initiative Toolkit](#).

WORKFORCE DEVELOPMENT PARTNERS

A successful workforce development program includes many partners collaborating to develop and implement the program. For a clean energy workforce development program, we've identified several important stakeholders and their potential role in a clean energy workforce program.

- **Energy utilities** have energy savings goals, and benefit from a robust clean energy workforce to help customers leverage rebates and programs.
- **Trade unions** create apprenticeship and training opportunities for their members and can be a partner in offering job placement opportunities.
- **Professional organizations and associations** provide a network of trained and qualified workers who could serve as community connectors and mentors.
- **Universities, technical colleges and trade schools** offer education opportunities and create a pipeline of potential workforce program participants.
- **K-12 schools** offer career and technical education, helping connect young students to future careers, including those in clean energy.
- **Large and small industry and employers** are looking for qualified workers to fill job openings and are valuable partners for job placement opportunities.
- **Social service organizations** can offer wrap-around and support services to workforce programs, such as transportation, housing and healthcare access.
- **Other units of government** like state agencies often have existing workforce development programs to support overall economic health.



OPPORTUNITIES FOR COLLABORATION WITH STAKEHOLDERS

Local governments are key collaborators and connectors in workforce development programs. This section outlines different strategies for local governments to collaborate with partners and stakeholders to further develop and enhance workforce development programs.

Promote Existing Training Opportunities and Incentive Programs

Many trade unions, regional organizations, utilities and other workforce development partners already offer training resources to help grow the workforce and sharpen skills for new technologies. This strategy involves reaching out to those partners and asking how you can best support their success. This may be as simple as promoting the training through your outreach networks. You may consider providing space for trainings, sponsoring local participants to attend by covering their training fee or travel costs, or coordinating translation services to increase the accessibility of the training for those who otherwise might not attend. By supporting existing work, you can be efficient with your resources, while expanding impact.

First Steps:

- ✓ Inventory entities that provide training opportunities and determine if your organization already works with them in some capacity.
- ✓ Identify initial ideas for how you might offer support to the organization. This will allow you to reach out in a way that makes the most of everyone's time.
- ✓ Explore this toolkit's [Resources for Collaboration](#) for a list of state entities that might help you identify local partners.



Community Spotlights: Existing Training Opportunities

- St. Louis Park, MN offers [cost share funds for Building Operator Certification \(BOC\)](#) training in an effort to develop the local workforce and reduce greenhouse gas emissions. The training is for commercial, industrial and multifamily building employees who focus on efficient building operations. The nationally accredited BOC training is offered by the Midwest Energy Efficiency Alliance.
- In 2022, [EnergySmart Colorado](#) reimbursed training and certification costs for 16 newly certified Building Performance Institute (BPI) building analysts who agreed to work locally. They also provided stipends for 14 analysts and contractors to attend heat pump workshops and travel to weatherization conferences.

Identify Local Needs and Gaps through Business and Resident Surveys

Every community has unique workforce needs and opportunities. To help potential partners understand and support your local workforce, this strategy involves collecting feedback from residents and businesses in your community. Key questions for this outreach might include asking individuals their interest in changing careers and what type of support they would need. Questions for businesses could include asking them about the workforce issues they are currently facing and what type of support would be most helpful for upskilling their employees. For an effective research-based survey, consider hiring a research or survey firm to facilitate. After you collect feedback, share your findings with your workforce development partners so that they can refine their programs and inform new programs to enhance offerings in your community.

First Steps:

- ✓ Determine how you will collect feedback by considering who you are trying to reach and what their preferred methods of communication are. You might conduct focus groups with existing contractor businesses or develop an online survey to share with all residents.
- ✓ To reach those who you may not traditionally hear from, consider working through community organizations or doing intercept interviews at community centers that serve the target population.



Community Spotlight: City of Minnetonka Citywide Survey

In 2021, the City of Minnetonka conducted a [citywide business climate survey](#) to better understand the state of the local economy. The City learned from the survey that taxes, worker supply, COVID and infrastructure reliability were primary concerns. From this survey, Minnetonka was able to identify program, assistance and outreach changes necessary to connect with businesses.



Facilitate Connections and Relationships Among Partners

In every community, there are many creative and impactful initiatives happening in parallel. Local workforces are complex and require wrap-around services to be truly successful and impactful. This strategy focuses on supporting these dynamics by connecting organizations and initiatives with common goals. Often, it's as simple as setting up a meeting between two community leaders and allowing them to imagine the possibilities of partnership and identify resources they can share and leverage.

First Steps:

- ✓ Inventory the local workforce development partners in your community and their mission or goals. Don't forget to include those providing social services, which are as critical as technical training.
- ✓ Review your list to match up those with shared goals or complementary services.



Community Spotlights: Partner Relationships

- During its participation in Partners in Energy, [Northern Colorado Clean Cities \(NCCC\)](#) became a “Power Partner” for [She’s in Power](#), a program that advances women in clean energy in Northern Colorado. As a Power Partner, NCCC provided projects for She’s in Power students to gain experience in the electric vehicle industry.
- The City of Winona, MN identified a gap in its local workforce, noting that there were no BPI-certified insulation contractors, a requirement for residents to receive an insulation rebate from Xcel Energy. Using a grant from Clean Energy Resource Teams, the City partnered with a local technical college, a community-based contractor and energy auditor, and Xcel Energy’s Partners in Energy to offer a local training opportunity for HVAC and insulation contractors to become BPI certified.

Integrate Workforce Development Objectives into Existing Plans and Policies

Workforce development overlaps with several existing community plans and policies, including economic development, climate action, housing stability, academic performance and overall community wellbeing. However, this overlap is often not measured, especially as it relates to the clean energy workforce. For example, your community's economic development strategy may not acknowledge the need for energy efficiency jobs, making it more difficult to reach your climate action goals because there is insufficient attention on skills development for electrification, renewable energy or electric vehicles. By integrating workforce development objectives more directly into existing plans and policies, you can help accelerate progress toward multiple community goals.

First Steps:

- ✓ Identify any existing workforce development goals in your local, regional and state plans.
- ✓ Use these goals to inform the addition of workforce development objectives during the creation or update process for other local plans and policies.



Community Spotlight: City of Westminster Electric Vehicle Training

As part of the implementation of its Electric Vehicle Action Plan through Partners in Energy, the City of Westminster, CO recorded a training to help new staff become familiar with electric vehicles as part of the City fleet and how they contribute to the community's goals.

Provide Local Context and Input to Program Design by Other Partners

As a community leader, you often have access to demographics, business data, energy data and other information that can help inform the design of a workforce development program. By acting as a resource for workforce development partners that are leading a new initiative, you can save them time and resources and ensure that the program reflects your community.

First Steps:

- ✓ Understand the type of data you have available, including community and economic data, and what format the data is available in.
- ✓ Share your aggregated data with workforce partners to enhance their programs' design.



Community Spotlight: Xcel Energy's Workforce Development Program

Xcel Energy's [Workforce Development program](#) aims to recruit, train, place and retain participants who are historically and currently underrepresented in the energy efficiency sector in Minnesota, specifically individuals from Black, Indigenous, and People of Color (BIPOC) communities and women. To help reach ideal candidates, the program partners with social service nonprofits.

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Provide Job Opportunities for New Workforce

In addition to promoting training and support services for individuals, you can also provide jobs for them to apply their new skills. This can be as simple as providing internships at your organization (e.g., in facilities management) or working with partners to develop a preferred vendor list for your own facilities or programs to support qualified contractors. By building this pipeline of work, you can also expand your network of workforce contacts and promote future training opportunities to continue the cycle of workforce development.

First Steps:

- ✓ Reach out to workforce development partners (e.g., colleges, employers, business organizations) to see if there is an existing internship program that you can sign your organization up for, or if there is an existing vendor list that you can promote.



Community Spotlight: Saint Paul Public Schools Career and Technical Education

Saint Paul Public Schools (SPPS) offers [career and technical education](#) (CTE) in many industries to its students. In its Energy Action Plan, SPPS created a strategy to connect its CTE programs to energy efficiency workforce opportunities, including working with Facilities and Buildings staff at the district.



RESOURCES FOR COLLABORATION

Resources for Collaboration

- [Partners in Energy Workforce Development Initiative Toolkit](#): This toolkit outlines the steps to develop a new workforce development program from the ground up.
- [U.S. Department of Energy State and Community Energy Programs](#): The federal government offers grant funding and technical assistance to support states and local governments in furthering local clean energy, weatherization and economic development work.
- [U.S. Department of Energy Better Buildings Workforce Accelerator](#): This website includes information for building energy professionals to increase their knowledge of building science and energy efficiency.

COLORADO

- [Colorado Career Development Association](#): The Colorado Career Development Association is a state affiliate of the National Career Development Association and serves those who have an interest in career and workforce development issues in Colorado.
- [Colorado Community College System Workforce Development](#): The Colorado Community College System organizes workforce development collaboration through committees and groups, and also supports a myriad of workforce initiatives.
- [Colorado Department of Labor and Employment](#): Part of the role of this State Department is to connect job seekers with jobs and provide an up-to-date and accurate picture of the economy to inform decision making.
- [Colorado Workforce Center Map](#): The Colorado Department of Labor and Employment hosts a map of workforce centers that provide free services to assist employers and job seekers.
- [Colorado Workforce Development Council](#): The State of Colorado offers strategies and programs to support employers and workforce members to enhance a skills-based talent development network.
- [Latino Leadership Institute](#): This nonprofit organization led by Latino leaders provides programs related to leadership development, entrepreneurship support and activation of a Latino professional network.
- [Regenerative Recovery Coalition – Workforce Development Working Group](#): The Workforce Development Working Group is developing the backbone infrastructure for certificates, apprenticeships and more to get people back to work in clean energy and regenerative agriculture. Additionally, they are creating a statewide communications campaign to uplift skilled trades.

MINNESOTA

- [Center for Workforce Solutions](#): The Center for Workforce Solutions is a business-led initiative to ensure employers and employees possess the necessary tools for jobs of the future. Included in this effort is the Business Education Network, which seeks to narrow the skills gap by helping students understand career opportunities in their community.
- [Greater Twin Cities United Way Career Academies](#): Partnering with school districts across Minnesota, Career Academies provides specialized funding and technical assistance and coaching, and a platform for peer-to-peer support focused on building sustainable career pathways alongside local businesses.
- [Home Energy Career Training](#): Xcel Energy's CIP Workforce Development program aims to recruit, train, place and retain participants who are from historically and currently underrepresented communities.
- [Latino Economic Development Center](#): As an organization created by Latinos, the Latino Economic Development Center provides classes, workshops, one-on-one assistance, agricultural assistance, a kitchen incubator and loans as a Community Development Financial Institutions (CDFI).
- [Local Workforce Development Boards](#): Local workforce development boards play a critical role in developing and implementing workforce initiatives in Minnesota. Minnesota is organized into 16 Workforce Development Areas.
- [Minnesota Department of Employment and Economic Development](#): The State of Minnesota provides grants and resources for businesses and job seekers in an effort to improve the quality of the state's workforce.
- [Minnesota State Colleges and Universities Workforce and Economic Development](#): This division works in partnership with industry, government and education partners to develop a diverse, multi-talented workforce.
- [Ramsey County Means Business](#): A workforce development resource page containing a wide-breadth of information including Labor Market Information, tools for job seekers to find community-based training programs, and inclusive workplace cohorts.
- [Real-Time Talent](#): An employer-led public-private collaborative focused on aligning Minnesota's workforce. This website landing page provides cutting-edge Minnesota labor market research and reports on Career & Technical Education (CTE) pathways, sector analysis of the Metro area, and data by sector on Minnesota's labor shortages.

WISCONSIN

- [Governor’s Council on Workforce Investment \(CWI\)](#): CWI makes budget recommendations and created a 2022–2026 Strategic Plan that outlines key priorities and recommendations for outcome-based strategies.
- [Job Center of Wisconsin](#): The Wisconsin Department of Workforce Development created this portal to connect talent with opportunities throughout the state.
- [Library Resources to Assist Wisconsin’s Workforce](#): The Department of Public Instruction developed multiple resources to assist in building partnerships with workforce development teams, and to enhance knowledge of workforce systems and programs.
- [Wisconsin Department of Workforce Development](#): The State of Wisconsin has programs for employers and workers, including a portal that connects job seekers with employers who are hiring skilled workers.
- [WisConomy](#): A tool from the State of Wisconsin with economic and labor market information.
- [Workforce Development Boards](#): Workforce Development Boards deliver services, support customized training, build community partnerships, and establish relationships with local employers, leaders and job seekers. There are 11 workforce regions in Wisconsin.

A high-angle photograph of a person's hand pointing at a pie chart on a document. The document is on a clipboard and features a bar chart and a pie chart. The pie chart has a blue slice labeled 'Sell'. The document is on a wooden desk with a calculator, glasses, a tablet, and a smartphone. The word 'REFERENCES' is overlaid in large white letters.

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