

# Building Economic Resilience through Clean Energy and Equity in Minnesota

Stakeholder recommendations to  
promote immediate re-employment and infrastructure investment  
towards an equitable and decarbonized economy in Minnesota

**MARCH 2021**

Co-convened by the Great Plains Institute and BlueGreen Alliance



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## USAGE OF THIS REPORT

This document provides a summary of recommendations developed by participants in the Building Economic Resilience through Clean Energy and Equity (BERCEE) initiative in Minnesota. It is targeted at Minnesota's elected representatives at the federal and state levels.

Importantly, these are not recommendations of the Great Plains Institute (GPI) and BlueGreen Alliance (BGA). These are recommendations that were developed and informed by the stakeholders who participated in this process, which has been co-convened by GPI and BGA. The recommendations stated in this document represent the collective thinking of the group and should not be attributed to any specific individual or organization.

## ACKNOWLEDGEMENTS

GPI and BGA would like to thank the participants for their significant time commitment and thoughtful engagement throughout this process. We would also like to thank the McKnight Foundation for their generous support of this project.

## ABOUT THE CO-CONVENERS

**Great Plains Institute:** A nonpartisan, nonprofit organization, GPI is transforming the energy system to benefit the economy and environment. Working across the US, we combine a unique consensus-building approach, expert knowledge, research and analysis, and local action to find and implement lasting solutions. Our work strengthens communities and provides greater economic opportunity through creation of higher paying jobs, expansion of the nation's industrial base, and greater domestic energy independence while eliminating carbon emissions. Learn more at [www.betterenergy.org](http://www.betterenergy.org).

**BlueGreen Alliance:** A nonprofit organization, BGA unites America's largest labor unions and its most influential environmental organizations to identify ways today's environmental challenges can create and maintain quality jobs and build a stronger, fairer economy. We are guided by the principle that we can no longer choose between good jobs and a clean environment—that the actions we take to create quality jobs and to protect working people and the environment must go hand-in-hand, and that together, we will build clean, thriving and fair economy. Our work is centered around three key objectives: clean jobs, clean infrastructure, and fair trade.

## QUESTIONS ABOUT THIS REPORT

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# I. Executive Summary

The Building Economic Resilience through Clean Energy and Equity (BERCEE) initiative is a multi-stakeholder effort co-convened by the Great Plains Institute (GPI) and BlueGreen Alliance (BGA) to find opportunity at the confluence of three complex and interrelated challenges facing Minnesota today:

- A global pandemic that has incurred economic devastation;
- Long-standing racial disparities that can no longer be ignored; and
- The growing urgency to significantly reduce greenhouse gas emissions.

In the face of these challenges, BERCEE is an attempt to seize this moment to develop short- and long-term policy recommendations that can inform state and federal policy, direct federal funding, and prioritize state-level investments to achieve the following quadruple objectives:

1. Provide significant near-term economic and jobs benefits (including COVID-19 response and recovery).
2. Drive emissions toward net zero by midcentury, with rapid steps in the near term.
3. Promote equity and a responsible transition.
4. Create clear benefits in energy, transportation, built environment, industrial or agricultural systems.

This report, which follows the first four meetings of the BERCEE group, puts forth a package of 32 broadly supported recommendations that have been developed by a regionally diverse group of stakeholders, including state and local governments, tribal nations, economic development organizations, organized labor, clean energy and environmental advocates, consumer advocates, agriculture and forestry representatives, large and small business representatives, and academic institutions.

Many of these recommendations—which span several topics including energy, transportation, water, agriculture, forestry, and workforce—are targeted at federal-level appropriations, programs, and tax code changes that can support immediate economic recovery in Minnesota, with an eye towards long-term decarbonization and equity—two objectives that the BERCEE stakeholder group acknowledges will require significant additional work.

Moving forward, the group will focus on coordinating outreach around these recommendations, as well as identifying the additional work that Minnesota will need to undertake to successfully transition to an equitable and decarbonized economy.

# II. Background

The Building Economic Resilience through Clean Energy and Equity (BERCEE) initiative is a multi-stakeholder effort co-convened by the Great Plains Institute (GPI) and BlueGreen Alliance (BGA) to find opportunity at the confluence of three complex and interrelated challenges facing Minnesota today:

- A global pandemic that has incurred economic devastation;
- Long-standing racial disparities that can no longer be ignored; and
- The growing urgency to significantly reduce greenhouse gas emissions.

Simultaneously building back Minnesota's economy and decarbonizing it is a transformation that will require a diversity of interests to come together and work collaboratively to view an equitable, low-carbon future as attractive and essential. Moreover, those most disrupted and impacted will need to see options for adaptation and new opportunity.

In the face of these challenges, BERCEE is an attempt to seize this moment to promote massive re-employment, investment in 21st-century infrastructure, and innovation towards a decarbonized economy, all while ensuring equitable outcomes for all Minnesotans.

Given Minnesota's track record of successful bipartisan collaboration, including the 2007 Next Generation Energy Act, the state is well positioned to take bold action at the intersection of economic recovery, inequality, and carbon reduction and lead the nation in the steps needed to do so.

This report, which follows the first four meetings of the BERCEE group, puts forth a package of 32 broadly supported recommendations that have been developed by a regionally diverse group of stakeholders, including state and local governments, tribal nations, economic development organizations, organized labor, clean energy and environmental advocates, consumer advocates, agriculture and forestry representatives, large and small business representatives, and academic institutions.

The recommendations captured in this report are mostly targeted at federal-level appropriations, programs, and tax code changes that can support immediate economic recovery in Minnesota, with an eye towards long-term decarbonization and equity—two objectives that the BERCEE stakeholder group acknowledges will take significant work beyond these initial recommendations.

Importantly, the group recognizes that the economic impacts of the current pandemic, as well as the impacts and environmental harms of climate change, do not affect people equally. These disparities result from systemic racism, income and resource inequality, and oppression, both historic and present-day. Factors such as income, race, ethnicity, citizenship, ability, age, and fluency with the dominant language may limit people's access to the economic and decarbonization solutions that this stakeholder group is exploring. In response, the group feels it has a responsibility and an opportunity to address equity in developing recommendations, while also noting it is not an arbiter of determining when equity has been meaningfully addressed.

### III. Process

#### Process Goals and Phases

The BERCEE initiative seeks to accomplish the following goals:

1. Help Minnesota be a national example of restoring its economy in ways that enable it to achieve net-zero carbon emissions by midcentury or sooner while contributing to equitable economic opportunities.
2. Provide the Walz Administration with broadly-supported economic recovery ideas that meet goal #1 so that its climate strategy can also serve as a sound and equitable economic and industrial strategy for the state.
3. Ensure that the institutions that will be needed for effective disbursement and use of any federal recovery funds help shape economic recovery proposals, including urban and rural interests.
4. Build the foundations of a more robust, well-connected ecosystem of people and institutions devoted to the triple goals of economic recovery and long-term prosperity, decarbonization of the economy, and greater equity.

To accomplish these goals, the process has been planned around two distinct phases:

- Phase 1 took place across four meetings from November 2020 to February 2021, and was focused on developing broadly-supported economic recovery policy ideas that could also position Minnesota to achieve a decarbonized and more equitable economy.
- Phase 2 is planned to take place across three meetings from March to June 2021, and will focus on coordinating state and federal outreach around the Phase 1 recommendations, as well as identifying additional work that Minnesota will need to undertake to successfully transition to an equitable and decarbonized economy.

## Participants

The following individuals participated in the development of the recommendations listed in this report. These recommendations represent the collective thinking of the group and should not be attributed to any specific individual or organization.

- Chris Duffrin, Center for Energy and Environment
- Brian Edstrom, Citizens Utility Board of Minnesota (CUB)
- Benjamin Stafford, Clean Energy Economy Minnesota
- Lissa Pawlisch, Clean Energy Resource Teams (CERTs)
- Peder Mewis, Clean Grid Alliance
- Shane Zahrt, Coalition of Utility Cities
- Marco Hernandez, Comunidades Organizando el Poder y la Acción Latina (COPAL)
- Michael Noble, Fresh Energy
- Kevin Pranis, Laborers' International Union of North America (LIUNA) Minnesota & North Dakota
- Craig Johnson, League of Minnesota Cities
- Brandy Toft, Leech Lake Band of Ojibwe
- Cameran Bailey, Metropolitan Council
- Jake Glavin, Midwest Tribal Energy Resources Association
- Tim Sexton, Minnesota Department of Transportation
- Stu Lourey & Michelle Medina, Minnesota Farmers Union
- Rick Horton, Minnesota Forest Industries

- Chair Katie Sieben & Commissioner Joseph Sullivan, Minnesota Public Utilities Commission
- Cheryal Lee Hills, Region Five Development Commission
- Jigme Ugen & Mackenzie Flynn, SEIU Healthcare
- Pommella Wegmann, Southeast Minnesota Area Labor Council, AFL-CIO
- Jay Trusty, Southwestern Minnesota Regional Development Commission
- Jessica Hellmann, University of Minnesota Institute on the Environment
- Emily Reno, West Central Initiative Foundation

## Meetings

As noted above, GPI and BGA have so far convened stakeholders for four virtual meetings, each a half to two thirds of a day in duration, from November 2020 to February 2021, focused on developing broadly-supported economic recovery policy ideas that could also position Minnesota to achieve a decarbonized and more equitable economy. A brief list of the topics covered during the Phase 1 meetings is provided below. Notes and presentation slides from the meetings are also included as an attachment to this summary.

### MEETING 1 (November 10, 2020)

- Built a shared understanding of why this process is being convened and what participants would like to see come out of it.
- Reviewed and refined the group's purpose statement, objectives, and criteria for developing recommendations.
- Built a shared understanding around the current state of economic stimulus efforts at both the federal and state level.
- Began identifying participants' perceived opportunities and challenges around recommendations that could meet the group's objectives and criteria.

### MEETING 2 (December 15, 2020)

- Built a shared understanding of what the final product coming out of this process should look like.
- Reviewed and refined an initial list of possible economic recovery recommendations, based on a participant survey sent before the meeting.
- Assessed gaps amongst the refined list of recommendations.

### MEETING 3 (February 9, 2021)

- Reviewed and refined the list of economic recovery recommendations that are described in this report.

### MEETING 4 (March 9, 2021)

- Reviewed and finalized this report.

## IV. Outcomes

### Purpose Statement and Four Objectives

During the first and second meetings, stakeholders collaborated to develop a purpose statement for the BERCEE initiative, as well as criteria that the group aspires to meet in developing economic recovery recommendations.

**Purpose Statement:** The BERCEE initiative seeks to enable sharing expertise and perspectives to develop short- and long-term policy recommendations that can inform state and federal policy, direct federal funding, and prioritize state-level investments to achieve the following quadruple objectives:

1. Provide significant near-term economic and jobs benefits (including COVID-19 response and recovery).
2. Drive emissions toward net zero by midcentury, with rapid steps in the near term.
3. Promote equity and a responsible transition.
4. Create clear benefits in energy, transportation, built environment, industrial or agricultural systems.

Importantly, BERCEE participants said that their recommendations, as a package, should aspire to meet all four objectives, such that every recommendation might not by itself meet every objective, but the package as a whole addresses all four. However, they also said that objective 3—promoting equity and a responsible transition—is special in that no recommendation should be advanced if it might worsen current inequities. The group also acknowledged that it does not adequately portray all perspectives necessary for a robust representation of equity and looks forward to working with affected communities to ensure the following:

- That the recommendations are implemented in a way that reduces current inequities and does not create new inequities, in terms of costs and benefits.
- That the benefits of recommendations—including economic, public health, and environmental benefits—are experienced among all Minnesotans, especially under-resourced communities, workers, and communities in Greater Minnesota.
- That the recommendations accommodate workers, including but not limited to power plant operators, site maintenance people, and those in construction crafts, whose jobs and employment standards will be impacted by the transition to a decarbonized economy.
- That the recommendations build a stronger, fairer, and cleaner economy that creates and sustains the good, high-paying jobs of the future and makes our communities and workers more resilient to crises.

In addition to the four objectives listed above, the group also sought to adhere to the following criteria in developing the near-term recommendations outlined in this report:

- Relies on existing legislative authorities, wherever possible

- Avoids or minimizes the need for further rulemaking or guidance procedures
- Has the potential to garner broad political support
- Utilizes and builds upon existing infrastructure to deploy the strategy (infrastructure broadly—human, financial, institutional)

## **Economic Recovery Recommendations**

To develop a set of economic recovery recommendations in a short period of time, the group reviewed a list of over 70 recommendations<sup>1</sup> that had already been developed by various organizations and provided feedback to tailor those recommendations to the group's objectives, remove ones that didn't meet the objectives, and offer new ones to fill gaps.

Importantly, in December 2020, between the second and third meetings of the BERCEE group, Congress passed and President Trump signed into law the 2021 Consolidated Appropriations Act, which addressed many of the recommendations being considered by this group. In response, we have highlighted below only those recommendations that have not already been enacted by the federal omnibus bill. The recommendations that were considered and enacted by the federal omnibus bill are included as an attachment to this report.

Ultimately, participants broadly supported the remaining list of economic recovery recommendations described below. The recommendations are split into the following categories:

- Energy
- Transportation
- Water & Sewer
- Agriculture, Forestry, and Land
- General

In addition, many recommendations include multiple sub-recommendations that have been grouped for organizational purposes. We have also identified where recommendations apply specifically to the federal or state level. The recommendations are numbered for reference purposes only; the numbers do not indicate a ranking or priority.

When considering and implementing these recommendations, it is important to recognize the special relationship that tribal nations have with the federal government, and to ensure that the benefits of investments and programs are made accessible to tribes.

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<sup>1</sup> The original list of recommendations that the group reviewed is in the appendix of this report, including the source of each recommendation.

## Energy

The group reviewed and discussed a list of nearly 30 different energy-related economic recovery recommendations, including multiple different proposals to advance energy efficiency, renewable energy, carbon capture, and grid modernization. Overall, there was broad support for many of these recommendations—an acknowledgement of their general ability to meet the four criteria that the group established. As previously stated, equity must be considered for all recommendations; however, for energy infrastructure in particular, the group urges policy makers to avoid repeating inequities of the past and not create new inequities in the way infrastructure is deployed. In addition, many of the recommendations discussed were enacted, in full or in part, by the 2021 Consolidated Appropriations Act; these have been listed in the appendix of this report.

### #1: ENERGY EFFICIENCY

*Level of Government: State and Federal*

NOTE: Participants discussed how the 2009 ARRA funding for energy efficiency and weatherization led to the startup of new energy efficiency businesses, some of which were owned by people of color, but many of those businesses went away after the stimulus funding dried up. The group would therefore like to see more sustainable funding for energy efficiency and weatherization programs.

**Recommendation:** Support and invest in energy efficiency for all sectors, including the following:

- Expand and sustain funding for the US Department of Energy (DOE) Weatherization Assistance Program. Increase the efficiency of the program by updating the qualifying household income limits to reflect impacts of COVID-19 as well as directing DOE to expedite the grant process.
  - NOTE 1: In response to the issues with 2009 ARRA funding noted above, the group proposes to establish long-term funding and specific targets for the number of homes to be weatherized. In addition, the program should fund pre-weatherization mitigation, asbestos and vermiculite removal, knob and tube wiring, and moisture and radon remediation, all of which must currently be addressed before weatherization can be implemented. Pre-weatherization work should be performed by responsible contractors that employ skilled, safety-trained workers—practices that can be supported by prevailing wage requirements and partnerships with registered apprenticeship programs.
  - NOTE 2: While the Weatherization Assistance Program was funded by the 2021 Consolidated Appropriations Act, the group has retained this recommendation to ensure funding is sustained and the program is expanded.
- Reinstate and fund the Energy Efficiency and Conservation Block Grant Program and prioritize grants that create incentives to increase the market saturation of proven energy efficiency technologies and support renewable energy installations.

- Provide new federal and state funding for utility, state, and tribal programs that help small businesses and farms improve energy efficiency.
- Provide federal funding for energy efficiency grants for affordable rental units to be administered by the state Housing Finance Agencies, to fill a gap left by the US DOE weatherization program.
- Provide funding through the Smart Cities program to city and multi-city efforts that can demonstrate they are in a position to quickly move beyond planning into project implementation.
- Support efforts to evaluate, improve, and enhance Minnesota's existing energy efficiency programs so that they better serve renter, low-income, and Black, Indigenous, and people of color (BIPOC) households.
- Fund grants to public housing authorities and spread the funds over five years via appropriations to the Public Housing Capital Fund. Authorize public housing authorities to use the funds to improve energy efficiency, including through energy performance contracting arrangements.
- Support the implementation or expansion of conservation incentives for Minnesotans who heat homes with propane, similar to those available to people who heat with electricity or natural gas.
- Advance and adopt building codes to support decarbonization.

## #2: DIRECT CASH PAYMENTS FOR CLEAN ENERGY TAX CREDITS

*Level of Government: Federal*

**Recommendation:** Allow clean energy and carbon capture tax credit recipients to receive a direct cash payment from the US Treasury Department without the need to rely on tax equity markets constrained by the current COVID-19-induced economic and market crisis (sections 45Q, 45, 48, and 48C).

## #3: CLEAN ENERGY INFRASTRUCTURE

*Level of Government: State and Federal*

**Recommendation:** Create new programs and/or invest in existing programs aimed at clean energy infrastructure development. This should include, but not be limited to:

- Clean energy and energy efficiency retrofits for buildings, including but not limited to municipal, university, school, and hospital buildings;
- Workforce training programs;
- Investments in transmission, microgrid projects, storage, and grid resilience;
- Infrastructure needed to support electrified transportation; and
- Enabling technologies, like communications technology needed to support clean energy advancements.

#### #4: DECARBONIZATION OF BUILDINGS AND INDUSTRY

*Level of Government: State and Federal*

**Recommendation:** Support the deployment of low-carbon technologies and programs in the buildings and industrial sectors as a strategy to reduce carbon emissions.

#### #5: CLEAN ENERGY IN MANUFACTURING AND INDUSTRY

*Level of Government: State and Federal*

**Recommendation:** Support energy efficiency, clean energy, and carbon emissions reduction technologies in the manufacturing and industrial sectors, including the following:

- Enhance technical assistance through DOE's Better Buildings, Better Plants Initiative via the following actions:
  - Identify sector-specific goals that define leadership by industry and drive energy efficiency improvements;
  - Develop metrics with industry partners and other stakeholders for tracking and goal setting that go beyond energy efficiency; and
  - Track participation of the 500 largest manufacturing plants and include increased linkages with smart manufacturing profiles.
- Incentivize clean energy manufacturing in the US through tax credits or domestic content incentives that promote the creation and expansion of US manufacturing facilities for clean energy and its supply chain.
- Grow clean energy and domestic manufacturing, while reinvesting and retooling industry to build more of the products, materials, and technologies of the future here—all while providing more pathways into good family-supporting jobs and ensuring strong, secure clean technology supply chains.

#### #6: TRANSMISSION AND DISTRIBUTION GRID MODERNIZATION

*Level of Government: State and Federal*

**Recommendation:** Support transmission and distribution grid modernization efforts that can help to meet clean energy and climate goals, including the following:

- Expand eligibility for DOE's Loan Program Office funds to include power system infrastructure, such as transmission and distribution systems, smart grid, and projects that enhance energy infrastructure resilience. Furthermore, make funds available through an open solicitation, limit and defer administrative costs, and expand credit subsidies to better leverage private capital.
- Fund DOE grid-scale energy storage grants, including increasing funding to add smart grid functions to transmission and distribution systems, and to provide technical and financial assistance for transmission planning analysis.
- Increase funding for transmission infrastructure innovation programs to support electrification and integration of renewables.

## #7: RURAL CLEAN ENERGY PROGRAMS

*Level of Government: Federal*

- Provide funding for technical assistance with applying for the Rural Energy Savings Program to encourage energy upgrades in rural areas including efficient lighting and building, expanded energy storage, and on- and off-grid renewable energy systems.
  - NOTE: The BERCEE group identified that the barrier to accessing Rural Energy Savings Program dollars is not the amount of funding available, but the availability of technical assistance to complete the application process.
- Increase funding for the Rural Energy for America Program, and provide funding for technical assistance with applying for program funds.
- Incentivize investment in cleaner technology for on-farm use, especially for farms that have succession plans.

## Transportation

The group discussed a range of transportation recommendations, many of which are focused on electrified transportation. Importantly, stakeholders felt that while many recommendations speak to personal vehicles, multi-modal transportation is vital and should be developed along with personal vehicles incentives.

## #8: ELECTRIFIED TRANSPORTATION

*Level of Government: State and Federal*

**Recommendation:** Broadly support the deployment of electric vehicles (EVs) and electrified transit infrastructure, including the following:

- Provide public-private funding through a competitive grant program for EV charging corridors. In particular, the BERCEE group would like the state to play a bigger role in EV infrastructure, both for public fleets and public use.
- Provide funds to states and tribal nations through Congestion Mitigation and Air Quality Programs, with priorities for EV charging investments.
- Provide EV research, development and demonstration funds through the DOE Offices of Vehicle Technologies and Hydrogen and Fuel Cell Technologies.
- Support light-duty EV sales by extending the 30D EV Tax Credit.
  - NOTE: There was a concern raised that this strategy alone may create inequities, as tax credits can limit who has access to the intended benefit.
- Implement a program to incentivize EVs for lower-income households.
- Support EV manufacturing through the Advanced Technology Vehicles Manufacturing Loan Program.
- Support the purchase of electric buses by transit operators and electric school buses.

- Increase public EV charging infrastructure where it's most needed, including for diverse communities and rural areas.
- Ensure that electrified transportation efforts consider multi-modal transportation options, not just personal EVs.
- Ensure that electrified transportation efforts consider where electrification of public transportation could have the most positive impact on reducing particulate and other air pollutants—particularly in areas where high air pollution levels correlate with high percentages of people living in poverty and/or high percentages of BIPOC households or others who experience systemic inequities.

## #9: GENERAL TRANSPORTATION INVESTMENT AND OPTIMIZATION

*Level of Government: State*

**Recommendation:** Invest in and optimize transportation systems and infrastructure, including the following:

- Invest in the optimization and maintenance of existing transportation systems and infrastructure, including roads and bridges.
- Increase funding for public transit and regional transit networks.
- Fully fund the transit maintenance backlog and provide funds for new transit construction.
- Perform freeway “road diets” by revitalizing regional passenger rail service within the existing right-of-way. Ideally, these are chemical and/or hydrogen fuel cell driven electric transit and rail vehicles.

## Water

The BERCEE group generally supported measures to increase funding for water infrastructure, including drinking water, wastewater, and storm water. Some stakeholders noted that flood mitigation may also be useful to keep in mind for resilience.

Notably, many of these recommendations align to the Minnesota Environmental Quality Board’s 2020 State Water Plan.<sup>2</sup>

## #10: WATER INFRASTRUCTURE RESILIENCY AND SUSTAINABILITY

*Level of Government: Federal*

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<sup>2</sup> Minnesota Environmental Quality Board, *2020 State Water Plan: Water and Climate* (September 15, 2020), 24, [https://www.eqb.state.mn.us/sites/default/files/documents/2020\\_water-plan%20FINAL.pdf](https://www.eqb.state.mn.us/sites/default/files/documents/2020_water-plan%20FINAL.pdf). The content beginning on page 24 includes goals and strategies that could provide additional context.

**Recommendation:** Authorize the Clean Infrastructure Resiliency and Sustainability program at \$5 million in annual grants through FY2024 for public clean water utilities of all sizes. This program specifically looks at water infrastructure that might be at risk due to climate change.

#### #11: WATER ASSISTANCE FOR DISADVANTAGED COMMUNITIES

*Level of Government: State and Federal*

**Recommendation:** Support swift analysis by the US Environmental Protection Agency (EPA) of historical distribution of funds to low-income communities, rural communities, minorities, and indigenous peoples under the Safe Drinking Water Act and Clean Water Act programs. In addition, provide assistance to communities that are working to define and adopt rate structures that address affordability and equity.

#### #12: SEWER OVERFLOW/STORMWATER REUSE GRANTS

*Level of Government: Federal*

**Recommendation:** Reauthorize the sewer overflow and stormwater reuse municipal grants program at the increased levels of \$250 million annually for FY2021 and FY2022.

#### #13: CLEAN AND DRINKING WATER STATE REVOLVING FUNDS

*Level of Government: Federal*

**Recommendation:** Increase available capital for loans and grants under the Clean Water State Revolving Fund (CWSRF) and Drinking Water State Revolving Fund (DWSRF). In addition, when allocating funds under the CWSRF and DWSRF, include green infrastructure projects to produce both mitigation and adaptation benefits, while also contributing to air and water quality to improve the health of communities.

- NOTE: Some stakeholders raised the concern that prioritizing green infrastructure would inhibit projects that are seeking infrastructure replacement that have nothing to do with "green infrastructure" (defined by EPA as a specific subset of improvements—waste energy, heat, capture of gases, etc.). This risk should be addressed as part of advancing this recommendation.

#### #14: RURAL WATER SYSTEMS

*Level of Government: State and Federal*

**Recommendation:** Provide funding to address failing wells, septic systems, and rural water systems. The group noted that this is needed to ensure water systems are dealt with equitably across Minnesota to safeguard public health and environmental quality.

### Agriculture, Forestry, and Land

These recommendations are focused on agriculture, forestry, and land management practices and product markets that can help to reduce carbon emission while supporting economic development.

## #15: AG, FORESTRY, AND LAND PROJECTS AND PROGRAMS

*Level of Government: State and Federal*

**Recommendation:** Increase funding for ag, forestry and land projects and programs that can help to meet the group's four objectives including the following:

- Increase federal funding for landowner implementation of soil health best practices to increase soil carbon sequestration, through increased funding to the U.S. Department of Agriculture's Environmental Quality Incentives Program, Conservation Reserve Program, and Conservation Innovation Grants.
  - NOTE: Some stakeholders suggested that this program could pay for ecosystem services and development of carbon and water markets.
- Increase funding for Job Corps Civilian Centers, with a focus on at-risk youth.
- Fully fund the State of Minnesota's Agricultural Growth, Research, and Innovation (AGRI) Bioincentives Program, which would provide production incentives for innovative investment in Minnesota. There is room for growth in the forest products industry in Minnesota in a way that can help sequester and store carbon while creating good-paying jobs in rural communities that often have the highest poverty rates in the state.

## #16: DISEASED WOOD AND FOREST BYPRODUCT MARKETS

*Level of Government: State and Federal*

**Recommendation:** Many forest byproducts simply rot and release their carbon due to a lack of markets that can utilize tops, bark, sawdust, and underutilized species. Home to a significant forest products industry, Minnesota should seek to create markets—which won't exist unless we create them—for these byproducts to reduce carbon emissions and support economic development as part of a circular economy, including the following:

- Forest byproducts like treetops, bark, sawdust, and underutilized species can be put to a wide array of uses and strategies for tackling decarbonization, including liquid biofuels, pellets, or torrefied carbon that can replace coal in power plants. Creating an environment for investment in these technologies would reduce carbon emissions while creating good-paying jobs in rural Minnesota.
- Minnesota forests die from insects and diseases like emerald ash borer, eastern larch beetle, and spruce budworm. The emerald ash borer in particular has the potential to turn one million acres of carbon-absorbing forest into dead, carbon-emitting trees and swampland. At this moment in time, there is an urgent need and substantial opportunity to address the biomass being generated by the emerald ash borer. Creating and maintaining markets for diseased wood will make forests healthier and lock the carbon into products.

## #17: HABITAT & WILDLIFE RESTORATION

*Level of Government: State and Federal*

**Recommendation:** Strategically restore habitat and wildlife to improve stormwater management, water quality, erosion, soil quality, and reduce land use and agriculture emissions. Tie agricultural production and natural resource extraction to meet the needs of a bioregional economy. For example, incentivize widespread use of perennial crops and other techniques that can support soil quality.

#### #18: FOREST MANAGEMENT TO SEQUESTER CARBON

*Level of Government: State and Federal*

**Recommendation:** Forests have the capability to sequester far more carbon than they currently do, and rapidly-growing young forests sequester carbon at a far greater rate than older ones. The biggest violators are our national forests, which are suffering from decay and are prone to wildfires. To address this, the USDA Forest Service should be incentivized to step up forest management and meet the 2004 Forest Plan outputs.

#### #19: CROP INSURANCE REFORM

*Level of Government: Federal*

**Recommendation:** The next farm bill should implement crop insurance reform to account for soil health and carbon management practices.

#### #20: FOOD WASTE REDUCTION

*Level of Government: State and Federal*

**Recommendation:** Develop a program or initiative to reduce food waste, both on- and off-farm.

### General

The following recommendations did not fit well under any of the categories above, but the BERCEE group felt they were important for meeting the four objectives established by the group. These speak to labor and quality-of-life issues that are necessary for a thriving, equitable, and decarbonized economy in Minnesota.

#### #21: MAKE EQUITY A PRIORITY

*Level of Government: State and Federal*

**Recommendation:** Proactively prioritize equity in carrying out the recommendations in this report, including the following:

- Prioritize grant and program applications that are led by underrepresented communities, nonprofits, and businesses.
- Provide targeted technical assistance to support community organizations applying for federal and state funds and programs, to ensure that funding reaches underserved communities.

#### #22: HIGH-SPEED INTERNET ACCESS

*Level of Government: State and Federal*

**Recommendation:** Increase funds to extend high-speed internet access to all Minnesotans, including areas that are not covered by the USDA’s Rural Development Broadband ReConnect Program, such small cities that are too close to large urban areas to qualify, as well as low-income urban areas.

### #23: STATEWIDE COMPREHENSIVE INFRASTRUCTURE PLANNING

*Level of Government: State*

**Recommendation:** Create a statewide infrastructure plan to address near-term supply chain needs and long-term economic stimulus. This plan should include traditional infrastructure, energy, water, broadband, and cybersecurity infrastructure. Currently, only failing infrastructure is prioritized for investment. Minnesota needs a way to be more proactive with infrastructure maintenance and improvement.

### #24: STATE STABILIZATION FUNDS

*Level of Government: Federal*

**Recommendation:** Appropriate additional funding for direct aid to states and territories to replace lost revenue. Ensure flexibility to allow for lost revenue in Treasury Department funds necessary for state governments to function.

### #25: PREVAILING WAGE AND LABOR STANDARDS

*Level of Government: State and Federal*

**Recommendation:** Ensure existing federal, state, and regional prevailing wages, reporting requirements, and labor standards are applied to all public investments, and that public dollars do not support wage theft, tax fraud, or worker exploitation.

- NOTE 1: Some BERCEE participants cannot support any energy and environmental policies that do not include prevailing wage requirements for the workers who actually build the infrastructure. Any state or federal dollars used for construction projects in the energy and environmental space should observe prevailing wage and labor standards.
- NOTE 2: The group supports Minnesota state agencies following federal practices to ensure data collection is as accurate as possible.
- NOTE 3: Some stakeholders raised a concern that prevailing wage requirements are impossible to enforce in market programs where homeowners are incentivized (i.e., rebated) to choose energy-efficient products. Setting a project size threshold for which prevailing wage laws would apply would help small customer incentive programs still operate.

### #26: NATIONAL CLIMATE BANK

*Level of Government: Federal*

**Recommendation:** Create a national climate bank to provide capital for green bank activities in the states.

## #27: SUSTAINABILITY SERVICE AND TRAINING PROGRAMS

*Level of Government: State and Federal*

**Recommendation:** Support sustainability service and training programs, such as the Minnesota GreenCorps program, to both retain or bring workers to Minnesota and implement concrete actions to support a decarbonized and equitable economy. In addition, the time is ripe to create work opportunities for youth and address student loan debt and financial concerns. Such service and training programs should be designed and funded appropriately, to ensure (to the extent reasonably possible) they are accessible to all, regardless of financial means.

## #28: COMMUNITY DEVELOPMENT BLOCK GRANTS

*Level of Government: State and Federal*

**Recommendation:** Authorize increased funding for Community Development Block Grants and direct the Department of Housing and Urban Development to expedite the grant process and promote energy-efficient homes for low- to moderate-income people.

## #29: LOW-INCOME HOUSING TAX CREDIT REFORM

*Level of Government: Federal*

**Recommendation:** Explore reforming the Low-Income Housing Tax Credit mortgage interest write-offs and Section 8 dollars to make the impacts of these tax credits more sustainable.

## #30: COMPREHENSIVE WORKFORCE DEVELOPMENT PLANNING

*Level of Government: State*

**Recommendation:** The state should strengthen its comprehensive workforce development plan, with an emphasis on clean energy, decarbonization, equity, just transitions for legacy energy workers, and leveraging the state's highly-successful registered apprenticeship programs in order to recruit and train the workforce necessary to carry out the recommendations in this report. The group notes that there are several existing resources that could support this, including the following:

- The Construction Career Pathways Alliance, which works to educate young people, parents, and educators about construction careers and apprenticeship pathways.  
<https://constructioncareers.org/about/>
- The Energy Utility Diversity Stakeholder Group Report submitted on January 15, 2020 (the "EUDG Report") recommends steps that could be taken to increase equitable access to employment opportunities in Minnesota's utility and energy industries.  
<https://www.leg.mn.gov/docs/2020/mandated/200077.pdf>
- CEE Minnesota Energy Efficiency Workforce Gap Analysis:  
<https://www.mncee.org/resources/resource-center/technical-reports/minnesota-energy-efficiency-workforce-gap-analysis/>
- In late 2018, the National Association of State Energy Officials, the Energy Futures Initiative, and BW Research Partnership partnered with the City of Minneapolis Offices of Sustainability and Community Planning and Economic Development:

<https://naseo.org/data/sites/1/documents/publications/Minneapolis%20Workforce%20Development%20Assessment.pdf>

- Minnesota’s Strategic Workforce Plan, 2016-2020: [https://mn.gov/deed/assets/wioa-state-strategic-plan\\_tcm1045-264923.pdf](https://mn.gov/deed/assets/wioa-state-strategic-plan_tcm1045-264923.pdf)

To ensure equitable access and outcomes, this should include developing a training and leadership pipeline program geared towards first generation, low-income, BIPOC- and LGBTQIA-identifying<sup>3</sup> individuals.

### #31: RESPONSIBLE TRANSITION FOR LEGACY WORKERS

*Level of Government: State and Federal*

**Recommendation:** Establish a clear route to retrain legacy energy workers—including power plant operators, site maintenance people, construction craftspeople, and others who currently work in carbon-generating facilities that will be at risk of workforce reduction or closure due to decarbonization transition—and ensure retraining programs adhere to existing federal and state joint labor-management or other registered apprenticeship standards.

### #32 RESEARCH, DEVELOPMENT, AND DEPLOYMENT

*Level of Government: State and Federal*

Research, development, and deployment (RD&D) is critical to enabling a prosperous energy transition and creating local and regional economic opportunities. RD&D is necessary to fill critical knowledge and technology gaps to meet decarbonization goals, and it leads to business creation, workforce development, and products that can be built locally and exported around the world. Strategic resources are necessary to finance that innovation, including product commercialization and critical management services.

**Recommendation:** Support and attract RD&D activities to advance a decarbonized and equitable economy. In particular, the group suggests creatively and strategically applying the renewable development account to RD&D. We also must attract federal resources to Minnesota businesses and universities, such as DOE Energy Efficiency and Renewable Energy funding.

## V. Conclusion

In response to the economic devastation incurred by the COVID-19 pandemic, long-standing racial disparities, and the urgency to significantly reduce greenhouse gas emissions, the Building Economic Resilience through Clean Energy and Equity (BERCEE) initiative seeks to build a vision for rebounding Minnesota’s economy while ensuring that it becomes more equitable and increasingly decarbonized.

This report, which follows the first four meetings of the BERCEE group, puts forth a diverse list of recommendations targeted at federal-level appropriations, programs, and tax code changes that can support immediate economic recovery in Minnesota. Collectively, this package of

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<sup>3</sup> LGBTQIA includes individuals identifying as lesbian, gay, bisexual, transgender, queer, intersex and asexual.

recommendations is intended to build on the 2021 Consolidated Appropriations Act and achieve the following four objectives:

1. Provide significant near-term economic and jobs benefits (including COVID-19 response and recovery).
2. Drive emissions toward net zero by midcentury, with rapid steps in the near term.
3. Promote equity and a responsible transition.
4. Create clear benefits in energy, transportation, built environment, industrial or agricultural systems.

Moving forward, the group will focus on coordinating outreach around these recommendations, as well as identifying additional work that Minnesota will need to undertake to successfully transition to an equitable and decarbonized economy.

*The Great Plains Institute and BlueGreen Alliance would like to thank all participants for their ongoing engagement in and commitment to this important process, as well as the McKnight Foundation for its financial support of this effort.*

## VI. Appendix

### Initial Recommendations Reviewed

At the second meeting, GPI provided a list of federal recommendations, compiled from various organizations, as a starting point for the BERCEE group to consider. Table 1 contains the original recommendations and the source for each.

**Table 1. Initial recommendations reviewed by BERCEE group**

Policy Recommendation	Source
<i>Energy</i>	
<b>Provide support to biofuel producers that were forced to idle or cut production due to COVID</b>	
<b>Ensure sufficient federal and state Class VI permitting capacity to expedite saline storage and associated capture projects</b> Fully fund the EPA UIC program, both for staffing at EPA, and State and Tribal Grants.	Carbon Capture Coalition 4/30
<b>Direct Pay for 45Q Tax Credit</b> Allow 45Q tax credit recipients to receive a direct cash payment from the Treasury without the need to rely on tax equity markets constrained by the current COVID-19-induced economic and market crisis.	Carbon Capture Coalition 4/30
<b>Extend commence construction window for 45Q</b> Enact a multi-year extension of 45Q to ensure that projects, both announced and under development, continue to move forward despite near-term economic and market headwinds.	Carbon Capture Coalition 4/30
<b>Appropriate funds to advance CarbonSAFE saline geologic storage projects</b> Fully fund CarbonSAFE to allow all current Phase II and Phase III projects to advance through Phases III and IV, as well as an additional four Phase I projects to complete the program (total of 10 projects).	Carbon Capture Coalition 4/30
<b>Fix 48A tax credit to enable carbon capture retrofits of power plants</b> Modify heat-rate requirements within 48A to allow carbon capture retrofits of power plants to qualify.	Carbon Capture Coalition 4/30
<b>Access to tax-exempt private activity bonds</b> Adopt the Carbon Capture Improvement Act to make industrial and power plant carbon capture projects eligible for private activity bonds, together with an amendment to also provide for eligibility of direct air capture technologies.	Carbon Capture Coalition 4/30
<b>US DOE cost-share programs, FEED studies &amp; saline storage</b> Appropriate funds to support and temporarily expand DOE cost-share programs for commercial carbon capture technology demonstration and for the development of large-scale commercial saline geologic storage facilities and associated transport infrastructure.	Carbon Capture Coalition 4/30

<p><b>Implement administrative improvements to the Title 17 DOE loan guarantee program to enable access to existing federal funding</b>  Implement improvements to appropriate funding to cover the credit subsidy, reduce applicable fees, eliminate the requirement for carbon, capture, utilization, and storage projects to employ new or significantly improved technologies, and clarify industrial applications beyond carbon capture and efficiencies are included.</p>	<p>Industrial Innovation Initiative</p>
<p><b>Low-interest federal loans and grants for CO<sub>2</sub> transport infrastructure</b>  Low and zero-interest federal loans to supplement private capital in financing CO<sub>2</sub> transport projects and federal grants to cover the incremental cost of sizing pipelines to realize economies of scale and provide extra capacity upfront to enable future carbon capture and geologic storage project development.</p>	<p>Carbon Capture Coalition</p>
<p><b>Regional demonstration of large-volume, long-distance CO<sub>2</sub> transport infrastructure projects</b>  Create regional demonstration projects that feature large-volume, long-distance interstate trunk lines linking multiple industrial facilities and power plants to move captured CO<sub>2</sub> to utilization and geologic storage sites.</p>	<p>Carbon Capture Coalition</p>
<p><b>Designate CO<sub>2</sub> pipelines as “pollution control equipment”</b>  Designating the CO<sub>2</sub> transport infrastructure as “pollution control equipment” to allow abatement of property taxes.</p>	<p>Carbon Capture Coalition</p>
<p><b>Allow and fund demonstration projects for CE</b>  Authorize and fund demonstrations for low-carbon technologies with an emphasis for those that will be globally competitive and boost domestic supply chains.</p>	<p>C2ES</p>
<p><b>Expand CE tax credits to: geothermal, combined heat and power, storage, nuclear, offshore wind</b>  Extend existing tax credits to 2024 and reinstate the 1603 program to allow for cash payments instead of tax credits. Expand the technologies eligible for the full credit to include geothermal, CHP, storage, offshore wind, and nuclear. Additionally, formally establish the CHP Technical Assistance Partnership Program and clarify that waste heat-to-power is a qualifying technology.</p>	<p>C2ES</p>
<p><b>Expand CE Tax credits to: storage, offshore wind, Home EE, Drive America</b>  Include the following tax credits in the next stimulus package: "The Energy Storage Tax Incentive and Deployment Act of 2019," "The Renewable Energy Extension Act," "The Offshore Wind Power Act," "The Incentivizing Offshore Wind Power Act," "The Driving America Forward Act," "Home Energy Savings Act," "New Home Energy Efficiency Act," "The Renewable Energy Transferability Act" and extend the PTC for wind.</p>	<p>Multiple env. groups 3/19</p>
<p><b>Incentivize CE manufacturing in US</b>  Support programs such as tax credits or domestic content incentives, that promote the creation and expansion of US manufacturing facilities for solar and it's supply chain.</p>	<p>SEIA 6/20</p>
<p><b>Expand weatherization program</b></p>	<p>C2ES</p>

Provide additional funding to the DOE's Weatherization Assistance Program. Increase the efficiency of the program by updating the qualifying household income limits to reflect impacts of COVID-19 as well as directing DOE to expedite the grant process.	
<b>Federal grants for affordable rental units</b> Provide federal funding for grants of \$3,000 per unit that would be administered by the state Housing Finance Agencies.	ACEEE
<b>Fund grants to public housing authorities (PHA)</b> Spread the funds over five years via appropriations to the Public Housing Capital Fund. Authorize PHAs to use the funds for energy performance contracting arrangements.	ACEEE
<b>Extend Building Efficiency Tax Incentives</b>	ACEEE
<b>Home Online Performance-Based Energy Efficiency (HOPE) contractor training and Home Owner Managing Savings (HOMES) Rebate program</b>	ACEEE
<b>Enable loans for small, medium-sized businesses for EE work</b> Provide new federal funding for utility and state programs that help small businesses improve energy efficiency.	ACEEE
<b>Expand Energy Savings Performance Contract (ESPCs) Program</b> Expand eligibility for ESPCs to allow third parties which can provide distributed energy services.	C2ES
<b>Expedite Small Business Administrative loans for items identified in IAC audits</b>	ACEEE
<b>Funds for Smart Cities Program for implementation of plans</b> Provide funding through the Smart Cities program to city and multi-city efforts that can demonstrate they are in a position to quickly move beyond planning into project implementation.	C2ES
<b>Reinstate and fund EE and Conservation Block Grant (EECBG) Program</b> Prioritize grants which create incentives to increase the market saturation of energy efficiency appliances and support renewable energy installation.	C2ES
<b>Retrofits for public buildings</b> Appropriate \$22 billion over five years to retrofit public buildings.	Multiple groups 6/2
<b>Increase Community Development Block Grant (CBDG) funding</b> Authorize increased funding for CBDGs and direct the Department of Housing and Urban Development (HUD) to prioritize projects aimed at increasing resiliency as well as improvements to vulnerable infrastructure. Furthermore, direct HUD to expedite the grant process.	C2ES
<b>Eliminate 45Q Credit eligibility thresholds for industrial facilities and carbon utilization projects</b> Eliminate the minimum annual eligibility thresholds for qualifying industrial facilities and carbon utilization projects that deter technology innovation and emissions reductions.	Industrial Innovation Initiative
<b>Allow a direct pay option for clean energy and industrial tax credits that help to reduce industrial carbon emissions</b> Allow project developers the option to receive a direct cash payment from US Treasury in lieu of monetizing clean energy and industrial tax	Industrial Innovation Initiative

credits that help foster industrial emissions reductions (s.45Q, s.45, s.48, including 48C).	
<p><b>Enhance technical assistance through Better Buildings, Better Plants Initiative</b></p> <p>Identify sector-specific goals that define leadership by industry and drive energy efficiency improvements; develop metrics with industry partners and other stakeholders for tracking and goal-setting that go beyond energy efficiency; and track participation of the 500 largest manufacturing plants and include increased linkages with smart manufacturing profiles.</p>	Industrial Innovation Initiative
<p><b>Augment investment in RD&amp;D of innovative technologies for reducing industrial carbon emissions</b></p> <p>Provide RD&amp;D funding across a range of industrial technologies with significant potential to achieve reductions in carbon emissions well below incumbent technologies and to provide viable pathways to longer-term decarbonization.</p>	Industrial Innovation Initiative
<p><b>Remove barriers to the Title 17 DOE loan guarantee program and revise eligibility criteria to include key industrial technologies</b></p> <p>For the next two years, provide increased Title 17 administrative funds and cover credit subsidies. Allow federal grants to count toward developers' equity contributions for projects, make certain state financing entities eligible to use the program, and remove the requirement in the 2009 Omnibus Appropriations Act restricting project developers from receiving a DOE loan and a federal grant. Eliminate the requirement for CCUS projects to employ new or significantly improved technologies. Lastly, clarify industrial applications beyond carbon capture and efficiencies are included.</p>	Industrial Innovation Initiative
<p><b>Expand block grant funding for states</b></p> <p>Provide state grants to expand industrial efficiency support to manufacturers to cover upfront costs of energy-efficient retrofits. Additional funding can be applied for by states contingent on the commitment to establish programs to help build market demand for low-carbon products.</p>	Industrial Innovation Initiative
<p><b>Renew, expand, and increase eligibility for Section 48C manufacturing tax credit</b></p> <p>Revive the now expired 48C Advanced Manufacturing Tax Credit program and expand eligibility to include facilities that manufacture industrial goods for innovative production processes that produce greenhouse gases well below current best practices. Also expand eligible transportation fuels to also include fuels from carbon capture and utilization and waste-based sources.</p>	Industrial Innovation Initiative
<p><b>US DOE cost-share programs, FEED studies &amp; saline storage</b></p> <p>Authorize funds for a temporarily expanded US DOE cost-share program for commercial-scale technology demonstrations, front-end engineering and design (FEED) studies, and saline geologic storage sites.</p>	Industrial Innovation Initiative
<p><b>Additional funds for water and transit infrastructure</b></p> <p>Provide cash infusions for water infrastructure programs and invest in transportation through increased funding of existing programs and funds.</p>	BlueGreen Alliance

<p><b>Clean Infrastructure Resiliency and Sustainability Program support</b>          Authorize the Clean Infrastructure Resiliency and Sustainability program at \$5 million in annual grants through FY 2024 for public clean water utilities of all sizes.</p>	NACWA 5/1
<p><b>General infrastructure money</b>          Create an infrastructure plan to address near-term supply chain needs and long-term economic stimulus. This plan should include traditional infrastructure, energy, water, broadband, and cybersecurity infrastructure.</p>	NGA letter 4/21
<p><b>New clean energy infrastructure</b>          Create new programs aimed at new infrastructure development such as clean energy and energy efficiency retrofits for buildings, workforce training programs and investments in transmission and microgrid projects.</p>	SEIA 6/20
<p><b>Direct pay extended to storage</b>          Allow for direct pay to enable the financing mechanisms needed to monetize current tax credits and extend the option to energy storage projects.</p>	Multiple env. groups 3/19
<p><b>Extend PTC, ITC and include storage</b>          Extend the ITC and PTC for solar and wind projects and include energy storage projects.</p>	SEIA/AWEA
<p><b>Extend “start construction date” for RE</b>          Extend the “start construction” deadline by one-year to qualify for renewable energy tax credits at 2020 credit values.</p>	Multiple env. groups 3/19
<p><b>Extension of safe harbor provisions</b>          Extend the safe harbor placed-in-service deadlines two additional years (currently four years, asking for six years).</p>	Multiple env. groups 3/19
<p><b>Expand loan capital for Rural Energy Savings Program</b>          Expand available loan capital for the Rural Energy Savings Program and expedite the application process to encourage energy upgrades in rural areas including efficient lighting and building, expanded energy storage, and on- and off-grid renewable energy systems.</p>	C2ES
<p><b>Increase funding for Rural Energy For America Program (REAP)</b>          Expand funding for REAP grants and loans to farmers and rural small businesses to purchase or install renewable energy systems or make energy efficiency improvements.</p>	C2ES
<p><b>Increased funds for Broadband</b>          Increase funding for the USDA's Rural Development Broadband ReConnect Program to expand high-speed broadband in underserved rural areas. Also increase funding for the FCC's Lifeline program to expand broadband access for low-income households.</p>	C2ES
<p><b>Allow for remote solar permitting</b>          Reform the permitting process and provide additional support for the DOE's Energy's Solar Automated Permit Processing (SolarAPP) program to increase local jurisdictions electronic permitting and solar inspections.</p>	SEIA 6/20
<p><b>Extend Solar ITC</b>          Delay annual deadlines for the Section 48 and Section 25D solar ITC and postpone the corresponding placed-in-service deadlines.</p>	SEIA 6/20

<p><b>Remove/extend project deadline</b> Delay the phasedown and remove or delay the 2023 placed-in-service deadline.</p>	SEIA 6/20
<p><b>Solar ITC Direct Pay</b> Establish a direct pay option for projects placed in service through 2022 to enable financing mechanisms needed to keep projects on track.</p>	SEIA 6/20
<p><b>Expand eligibility for DOE smart grid, transmission, distribution, resilience</b> Expand eligibility for DOE's Loan Program Office funds to include power system infrastructure, such as transmission and distribution systems, smart grid, and projects that enhance energy infrastructure resilience. Furthermore, make funds available through an open solicitation, limit and defer administrative costs, and expand credit subsidies to better leverage private capital.</p>	C2ES
<p><b>Fund DOE Grid-scale energy storage grants</b> Provide funding to DOE for grid-scale energy storage and microgrid demonstration projects.</p>	C2ES
<p><b>Increase funding for DOE Smart Grid grants</b> Increasing funding to add smart grid functions to transmission and distribution systems, and provide technical and financial assistance for transmission planning analysis.</p>	C2ES
<p><b>Increase funding for Transmission Infrastructure Innovation Programs</b> Increase funding and update eligibility criteria to support electrification and integration of renewables (e.g., burying high-voltage transmission lines under existing rights-of-way).</p>	C2ES
<p><b>Reinstate DOE Smart grid Investment (two-way flow) Act</b> Reinstate the Smart Grid Investment grant and provide cost-share for private sector projects that support two-way power flow, address aging infrastructure, incorporate greater information communication technologies, protect against cyber and physical security threats and protect against the impacts of extreme weather.</p>	C2ES
<i>Transportation</i>	
<p><b>Increase funding for public transit</b> Increase funding and allow agencies to use federal funds for operating costs. Fully fund the transit maintenance backlog and providing funds for new transit construction. Furthermore, prioritizing the Low- and No-Emissions Bus Program to help transit agencies produce electric or other zero-emissions buses and their corresponding infrastructure.</p>	Third Way
<p><b>Prioritize air traffic control efficiency</b> Prioritize development of more efficient air traffic control system to alleviate congestion, reduce delays, and reduce jet fuel consumption.</p>	C2ES
<p><b>Extending the 30D Electric Vehicles Tax Credit</b> Support light-duty EV sales by extending the 30D EV Tax Credit.</p>	MTEC
<p><b>Support purchase of Medium and Heavy Duty EVs by providing additional funding to states through the DERA program</b></p>	MTEC

<b>Support purchase of EV transit buses by transit operators through the Low No grant program</b>	MTEC
<b>Support the purchase of EV school buses</b>	MTEC
<b>Support EV manufacturing through the Advanced Technology Vehicles Manufacturing Loan Program</b>	MTEC
<b>Provide more funds to re-tool closed or at-risk manufacturing plants to produce EVs by reviving the 48C tax credit</b>	MTEC
<b>Provide funding for EISA Section 132 Domestic Manufacturing Conversion Grant programs to support EV manufacturing</b>	MTEC
<b>Support EV charging infrastructure by reforming and extending the 30C tax credit for EV charging</b>	MTEC
<b>Provide funds to states through Congestion Mitigation and Air Quality Programs, priorities for EV charging investments</b>	MTEC
<b>Provide public-private funding through a competitive grant program for EV charging corridors</b>	MTEC
<b>Provide EV research, development and demonstration funds through the DOE Offices of Vehicle Technologies and Hydrogen and Fuel Cell Technologies</b>	MTEC
<i>Water &amp; Sewer</i>	
<b>Alternative Water Source pilots</b> Reauthorization of Alternative Water Source Pilot Programs at \$25 million annually from FY 2022 to FY 2024.	NACWA 5/1
<b>Clean Water Advanced Technology pilots</b> Establish a water data sharing pilot program under EPA to provide grants to states to create platforms for interstate information sharing regarding water quality, water infrastructure, and water technologies. In order to receive federal dollars, eligible participants must have a coastal watershed with significant pollution levels, a water system with significant pollution levels, or significant individual water infrastructure deficits.	NACWA 5/1
<b>Congressional Authorization for Supplemental Environmental Projects (SEPs) in CWA settlements</b> Authorize SEPs to invest in local projects that improve the environment in lieu of paying a fine to the US Treasury in CWA consent decrees and settlements.	NACWA 5/1
<b>EPA Analysis of Water in Disadvantaged Communities</b> Support swift analysis by EPA of historical distribution of funds to low-income communities, rural, minority and indigenous peoples under Safe Drinking Water Act and CWA programs.	NACWA 5/1
<b>Funding for Sewer Overflow/ Stormwater Reuse Grant</b> Reauthorize the sewer overflow and stormwater reuse municipal grants program at the increased levels of \$250 million annually for FY 2021 and FY 2022.	NACWA 5/1

<p><b>Funds for technical assistance to small/ medium public systems</b> Under AWIA, authorize \$40 million for FY 2021 to FY 2024 to provide on-site technical assistance to owners and operators of small and medium publicly owned treatment works through a credit rider program. Additionally, increase funding under the CWA for technical assistance.</p>	<p>NACWA 5/1</p>
<p><b>Funding for Water Infrastructure Financial Innovation Act (WIFIA)</b> Reauthorize WIFIA through 2024 at the core annual funding level of \$50 million and reduce the number of final rating options letters required for each WIFIA applicant from two to one in order to ease administrative burdens.</p>	<p>NACWA 5/1</p>
<p><b>Grants for Connection to Public Water</b> Establish a new EPA program to provide grants to publicly owned treatment works or other organizations to help households connect to a public wastewater system. This program should be funded at \$20 million in FY 2021 and FY 2022.</p>	<p>NACWA 5/1</p>
<p><b>Increased funding for capital under Clean and Drinking Water State Revolving Funds (CWSRF, DWSRF)</b> Increase available capital for loans and grants through the CWSRF and DWSRF.</p>	<p>C2ES</p>
<p><b>Prioritize green infrastructure projects In CWSRF and DWSRF</b> When allocating funds under the CWSRF and DWSRF, prioritize green infrastructure projects in the allocation of funding to produce both mitigation and adaptation benefits, while also contributing to air and water quality to improve the health of communities.</p>	<p>C2ES</p>
<p><b>Reauthorization of Water Infrastructure and Workforce Investment Act</b> Reauthorize the Water Infrastructure and Workforce Investment grant program under AWIA 2020 and fund it at \$2 million annually though FY 2024. Clarify that public water and clean water utilities are directly eligible for these grants.</p>	<p>NACWA 5/1</p>
<p><i>Agriculture, Forestry, Land</i></p>	
<p><b>Coastal Blue Carbon Projects</b> Increase federal funding for field projects that promote carbon dioxide removal in coastal areas. Expand on current demonstration projects at NOAA and Army Corps of Engineers.</p>	<p>NGO CDR letter to Senate</p>
<p><b>Soil Health for Carbon Sequestration</b> Increase federal funding for landowner implementation of soil health best practices to increase soil carbon sequestration, through increased funding to USDA programs in EQIP, CRP, and CIG.</p>	<p>NGO CDR letter to Senate</p>
<p><b>Restoring Trees on Non-federal Land</b> Increase funding through USDA EQIP, CRP, Agriculture Conservation Easement Program's Wetland Reserve Program to support increased tree planting to sequester carbon.</p>	<p>NGO CDR letter to Senate</p>

<p><b>Increase funding for forest restoration programs and forest health and hazardous fuels treatments on public lands</b>  Increase funding for forest restoration programs and forest health and hazardous fuels treatments on public lands within the National Forest system, funded through the Collaborative Forest Landscape Restoration Program.</p>	<p>NGO CDR letter to Senate</p>
<p><b>Lift Reforestation Trust Fund Cap</b>  Lift the Cap on the Reforestation Trust Fund to \$60 million, to provide funding to reforest America's forests impacted by wildfire, pests, disease, or timber harvests.</p>	<p>NGO CDR letter to Senate</p>
<p><b>State Aid to Expedite Forest Health</b>  Prioritize and augment funding for states to expedite implementation of elements of State Forest Action Plans (required under 2008 Farm Bill) that stimulate job creation, increase forest resilience, and increase carbon sequestration.</p>	<p>NGO CDR letter to Senate</p>
<p><b>Support for Rural Manufacturing and Wood Product Markets</b>  Increase funding for the Wood Innovation Grant Program. This program helps to create new opportunities for innovative wood products, such as cross-laminated timber and other engineered wood products, that contribute to rural economic development and increase sequestration of carbon in wood products.</p>	<p>NGO CDR letter to Senate</p>
<p><b>Expand Conservation Reserve Program (CRP)</b>  Increase funding for voluntary conservation practices on private land. CRP supports enrollment of private agricultural land in conservation practices like permanent cover.</p>	<p>C2ES</p>
<p><b>Increased funds for Great American Outdoors Act, RECLAIM Act, Abandoned Mine Land Program</b>  Supports deferred maintenance on federal lands.</p>	<p>BlueGreen Alliance</p>
<p><b>Increased funds for Job Corps Civilian Centers, with focus on at-risk youth</b>  Could support employment restoring public lands.</p>	<p>C2ES</p>
<p><i>General</i></p>	
<p><b>Additional funds for the State Energy Program</b>  Provide additional funding to state energy offices through the SEP.</p>	<p>C2ES</p>
<p><b>Paycheck Protection Program</b>  Prioritize funding for the Paycheck Protection Program and the Economic Injury Disaster Loan program. Allow broad eligibility for these programs and extend the timelines for businesses to meet the assistance requirements.</p>	<p>NGA letter 4/21</p>
<p><b>State Stabilization Funds</b>  Appropriate an additional \$500 billion for direct aid to states and territories to replace lost revenue. Ensure flexibility to allow for lost revenue in Treasury Department funds necessary for state governments to function.</p>	<p>NGA letter 4/22</p>
<p><b>Short-term tax credit for capital expenditures related to 5G investment</b></p>	<p>C2ES</p>

Provide a short-term tax credit and/or accelerated depreciation for capital expenditures related to licensed 5G and fiber investments.	
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## Recommendations Enacted by Federal Omnibus Bill

Between the second and third meetings of the BERCEE group, Congress passed and President Trump signed into law the 2021 Consolidated Appropriations Act, which addressed many recommendations being considered by the group. The recommendations that were considered and enacted by the federal omnibus bill are listed in Table 2.

**Table 2. Considered recommendations that were enacted in December 2020**

Recommendation	How it is included in the Federal Omnibus Bill
<i>Energy</i>	
Extend the project deadlines for clean energy and industrial tax credits (45Q, ITC, PTC).	<ul style="list-style-type: none"> <li>• 45Q has been extended through 2025</li> <li>• Extension of ITC through 2022 and PTC through 2021</li> </ul>
Extend clean energy tax credits to include geothermal, combined heat and power, storage, nuclear, home energy efficiency, and Drive America.	<ul style="list-style-type: none"> <li>• Extension of Residential Energy-Efficient Property Credit and Inclusion of Biomass Fuel Property Expenditures (<i>extends 25D to December 31, 2023</i>)</li> <li>• Energy Efficient Commercial Buildings Deduction (<i>Section 179D was made permanent</i>)</li> <li>• ITC was extended to waste heat-to-power</li> </ul>
Provide funding to DOE for grid-scale energy storage and microgrid demonstration projects.	<ul style="list-style-type: none"> <li>• Section 3202 establishes an energy storage and microgrid grant and technical assistance program at DOE for rural electric cooperatives and public utilities to assist with designing and demonstrating energy storage and microgrid projects that use energy from renewable energy sources</li> </ul>

	<ul style="list-style-type: none"> <li>• Section 8001 reauthorizes the smart grid demonstration program in the Energy Independence and Security Act of 2007, and adds the commercial application of distribution automation technologies to the goals of the program</li> <li>• The Title 17 Loan Guarantee Program revisions also provide more accessible funding options</li> </ul>
<p>Authorize and fund demonstrations for low-carbon technologies with an emphasis for those that will be globally competitive and boost domestic supply chains.</p>	<p>There are several components of the omnibus that get at this indirectly—Title VI focuses on industrial competitiveness and decarbonization, but generally the Energy Act of 2020 has an R&amp;D focus</p>
<p>Provide RD&amp;D funding across a range of industrial technologies with significant potential to achieve reductions in carbon emissions well below incumbent technologies and to provide viable pathways to longer-term decarbonization.</p>	<p>Section 6004 establishes and authorizes funding for the Industrial Emissions Reduction Technology Development Program to further the development and commercialization of industrial decarbonization technologies</p>
<p>Appropriate funds to support retrofits for public buildings.</p>	<ul style="list-style-type: none"> <li>• Section 1001 streamlines available federal energy efficiency programs and financing to help improve efficiency and lower energy costs for schools</li> <li>• Section 1004 looks at implementing energy efficiency technologies in federal buildings</li> </ul>
<p>Provide support to biofuel producers that were forced to idle or cut production due to COVID-19.</p>	<ul style="list-style-type: none"> <li>• The Renewable Fuels Association said the bill</li> </ul>

	<p>“clearly specifies that renewable fuel producers are eligible to receive COVID-19 emergency relief aid from USDA” and</p> <ul style="list-style-type: none"> <li>• “Extends key tax provisions that support innovation and expansion in the renewable fuels industry, including the Second Generation Biofuel Producer Tax Credit, Alternative Fuel Refueling Property Credit, and the Section 45Q tax credit for carbon sequestration.”</li> <li>• Allows for payments to producers of advanced biofuel, biomass-based diesel, cellulosic biofuel, conventional biofuel, or renewable fuel</li> <li>• Includes a one-year extension of the Section 40 Second Generation Biofuel Producer Tax Credit, a \$1.01 credit per gallon of second-generation biofuel produced</li> </ul>
<i>Transportation</i>	
<p>Support purchase of medium- and heavy-duty EVs by providing additional funding to states through the DERA program.</p>	<p>Amends Section 797(a) of the Energy Policy Act of 2005 to reauthorize the diesel emissions reduction program (DERA) until FY2024</p>
<i>Water &amp; Sewer</i>	
<p>Reauthorization of Alternative Water Source Pilot Programs at \$25 million annually from FY2022 to FY2024.</p>	<p>Section 1014 authorizes a new Smart Energy and Water Efficiency Pilot Program. This pilot program provides grants to water authorities that provide water, wastewater, or</p>

	<p>water reuse services for demonstrating advanced and innovative technology-based solutions.</p>
<p><i>General</i></p>	
<p>Prioritize funding for the Paycheck Protection Program and the Economic Injury Disaster Loan program. Allow broad eligibility for these programs and extend the timelines for businesses to meet the assistance requirements.</p>	<p>The Federal Omnibus Bill includes amendments to the Payment Protection Program</p>