

City of Madison Energy Work Plan

Purpose:

In spring of 2015, the Common Council directed the Sustainable Madison Committee to develop an Energy and Carbon action plan to establish Madison as a leader on energy innovation, racial and social equity, and environmental health.

Process:

An ad-hoc working group of seven Sustainable Madison Committee members participated in four publically noticed meetings that invited nearly 3 dozen community members to identify and advocate for specific policies, practices and partnerships. SMC members recommend the following Work Plan based on concepts vetted throughout the process.

Current Carbon and Energy Goals:

- 80% carbon reduction by 2050
- Obtain 25% of electricity, heating and transportation energy from Clean Energy Sources by 2025
- Reduce overall energy consumption by 50% by 2030 (kWh and therms/sf)

Work Plan Recommendations:

- Advances in science and technology and changes in community sentiment—documented in MGE’s ongoing Community Conversations and during numerous SMC meetings— demand a review of objectives in the Madison Sustainability Plan with respect to Energy and Carbon issues. Residents need a clear understanding of shared, publicly vetted goals. Relevant stakeholders need visible benchmarks and milestones by which to measure progress. **Create an Ad Hoc Committee on Climate Change Leadership made up of Common Councilors, Business and Community Members to establish updated climate change goals.**
- Create a high-level position in city operations to focus on resilience and innovation. In addition to working with responsible Departments to implement the Madison Sustainability Plan, this position supports racial equity and social justice initiatives by providing a detailed analysis of economic and environmental costs to the entire community associated with waste and pollution from city operations and local energy infrastructure. This position also advocates for limits to environmental and financial

costs related to powering homes and businesses in a warmer, wetter and more volatile climate. Responsibilities include:

- Reports to the Mayor with annual updates provided to the Common Council.
 - Implement Madison Sustainability Plan objectives across city departments.
 - Provide written plans annually to elected officials, city administrators and the public to inform budget preparations and deliberations.
 - Annually update Madison Sustainability Plan goals and objectives and measure progress toward achieving goals and objectives. This will necessarily include developing a method of aggregating sustainability performance data from across city operational units and elsewhere.
 - Interact with community stakeholders to identify institutional and community opportunities for financial savings and environmental impact.
 - Direct city of Madison work with counterparts in other government agencies and businesses—including MGE—to advance shared carbon and energy objectives.
 - Collaborate closely with Racial Equity Coordinator to ensure innovation and resilience efforts work in tandem with racial equity and social justice objectives.
- Conduct cost/benefit studies to assess viability of city initiatives to utilize city-owned buildings and facilities to generate clean energy for city's own use, including vehicles. This includes city-owned PV/retrofits (Emil St. expansion).
 - Develop regional initiative to promote transition to clean, preferably local energy – intergovernmental agreement to include Dane County, MMSD (sewerage), MMSD (school) and area technical colleges. Purpose would be to coordinate energy efficiency, renewable energy and GHG reduction efforts, including education and outreach, on region-wide basis.
 - Reduce energy expenses for city operations, business and residents with funding for commercial and residential efficiency improvements including facility-based and behavioral interventions. Examples include interventions implemented through Green Madison to compete for the Georgetown University Energy Prize.
 - Reduce energy costs to businesses and residences by establishing a city-wide, commercial and residential PACE (Property Assessed Clean Energy) program.
 - Fund and implement the city benchmarking resolution adopted in 2015.
 - Explore ways of utilizing City zoning code to promote solar energy development

- Increase economic and job development opportunities in the green sector, including city investment in workforce training to boost green build-out (panel installers, energy auditors), expand the M-power program, build on best practices developed through the city's participation in the Georgetown University Energy Prize competition and broaden outreach efforts in keeping with Race and Equity objectives.
- Solidify cooperative effort with MGE to expand access for city residents to renewable energy and enhance energy efficiency opportunities on the part of MGE customers.
 - Actively participate in MGE community conversations in support of strategies to transition to cheap, clean (carbon-free) and reliable fuels
 - Develop Memorandum of Understanding as framework for short-term joint action, to include the following elements:
 - Develop a utility scale solar pilot project (i.e. >1 MW, per IEA definition), along the lines of MGE's proposal in PSCW Docket No. 3270-TE-101 ; in support of this initiative, the City would partner with MGE to make available suitable property and facilities to serve as host of the project
 - *Develop a storage device pilot project; preferably in conjunction with the above utility-scale solar installation.*
 - Develop a plan to upgrade City street-lighting facilities to incorporate LED or other suitable high efficiency lighting facilities
 - Install additional electric car infrastructure, such as electric vehicle charging stations
 - Cooperate with the city in efforts to promote benchmarking and PACE including but not limited to on-bill, print and online communications
 - Develop a long term, phased plan to modernize MGE's distribution grid, with stepped up investment in Advanced Metering Infrastructure technology; voltage controls and "smart inverters"; advanced information, operating and data analytics technology; and other grid enhancements designed to help MGE improve its operational efficiency and responsiveness as a distribution provider and enable customers to better control their own energy use and maximize the value of their investments in home and appliance energy efficiency.
 - Develop mutually acceptable, progressive and time-varying rate design alternatives intended, to the extent practicable, to (i) minimize cross-subsidization; (ii) minimize rate discrimination against low use or low income customers; and (iii) incentivize energy efficiency and customer installation of renewable distributed generation. To that end, MGE should provide the City prior notice and meaningful opportunity for input prior to the filing of MGE's retail rate cases.