

The City of Madison is working to reduce carbon emissions from our municipal operations, setting a goal to achieve 100% renewable energy usage for City operations by 2030.

In 2023, 82% of the electricity used by the City came from renewable sources.

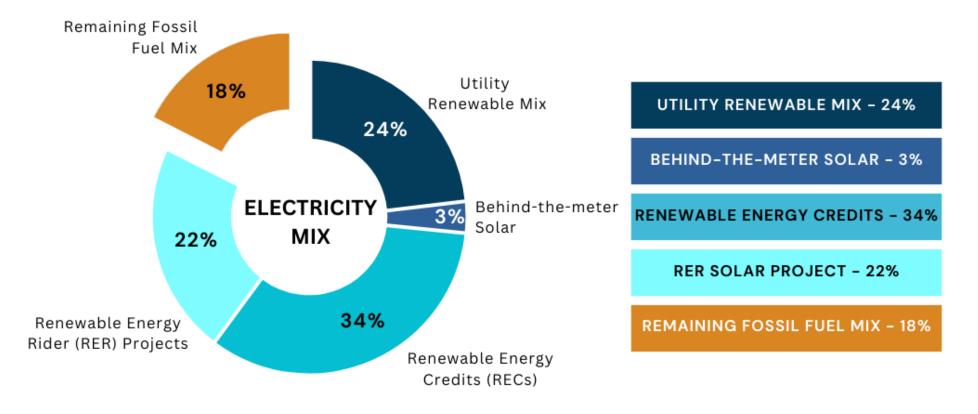
That's a 7% increase since 2020, when 75% of electricity used for City operations came from renewable sources.

Overall Energy Usage:

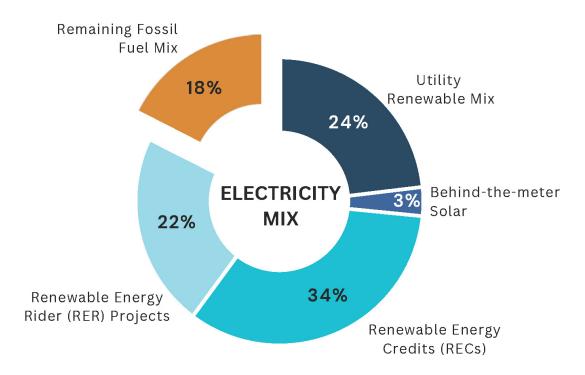
- In 2023, the City of Madison used 44.3 MWh of electricity to power its buildings, provide essential services, and charge its electric vehicle fleet.
- The largest consumers were the Water Utility (41%), the Parks Department (7%), and Metro Transit (6%).



CITY OF MADISON 100% RENEWABLE ENERGY GOAL

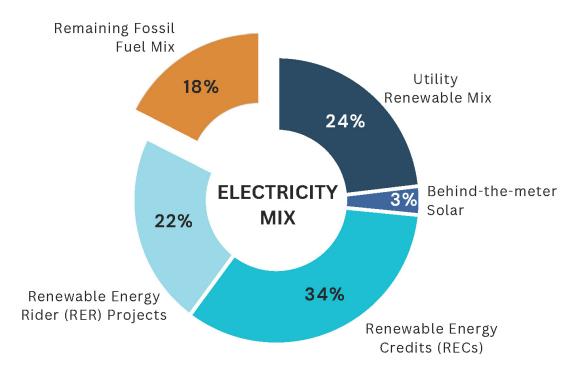






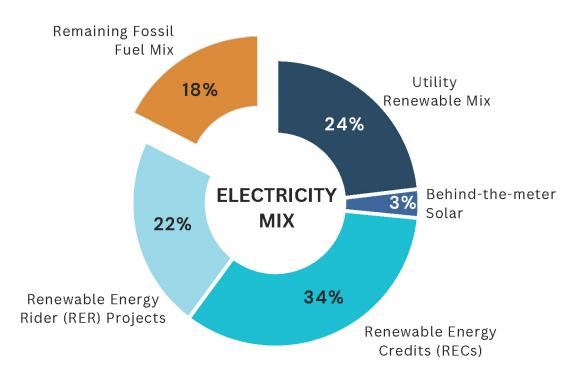
Utility Renewable Mix (24%)

- Approximately 24% of electricity provided by MGE came from renewable sources in 2023
- This means 10.4 MWh of the City's 44.3 MWh are already renewable
- MGE is committed to reducing carbon emissions by 80% by 2030 and achieving net-zero carbon electricity by 2050
- The City and the broader community will benefit significantly from the eventual elimination of these fossil fuels



Behind-the-Meter Solar (3%)

- Solar panels have been installed at 39 sites throughout the city since 2008
- In 2023, these panels provided 1.4 MWh of the City's total electricity usage
- This share is expected to grow significantly, as the City surpassed 2 MW of installed capacity in 2024 and plans to reach 10 MW of behind-themeter solar capacity by 2030



Renewable Energy Credits (RECs) – 34%

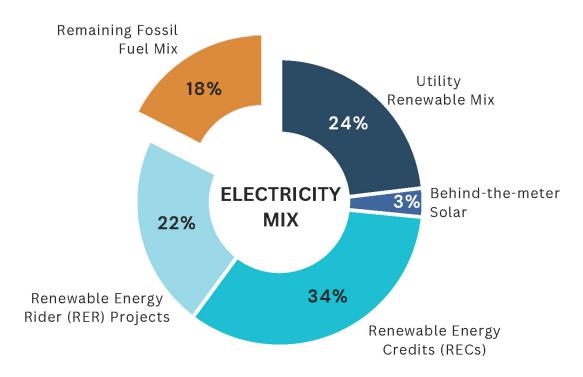
- In 2017, the City of Madison partnered with sustainability-focused organizations to help develop the <u>Butter Solar Project</u>
- The project included 32 MW of solar capacity across 10 locations feeding into 13 municipal utilities in three states
- In exchange for a \$1.4 million investment, Madison receives approximately 14 MWh of <u>renewable energy credits (RECs)</u> annually
- All five projects supported by the City provide solar energy within Wisconsin





Butter Solar

- Argyle Lafayette County (1.1 MW)
- Elroy Juneau County (2.1 MW)
- Fennimore Grant County (4.1 MW)
- Cumberland Barron County (3.4 MW)
- New Lisbon Juneau County (3.5 MW)



Renewable Energy Rider (RER) - (22%)

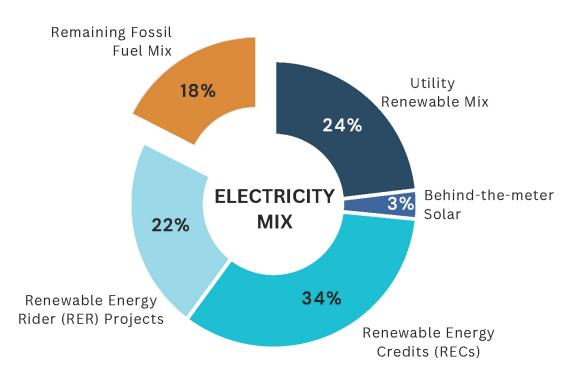
- In 2022, the City of Madison and Madison Metropolitan School District (MMSD) began receiving power from the 8 MW Hermsdorf Solar Fields
- This solar array, built and operated by MGE, supplies 5 MW to the City and 3 MW to MMSD. It provides 9.6 MWh





Hermsdorf Solar – 8 MW

MGE's Renewable Energy Rider (RER) program enables Madison to enter into an agreement for dedicated renewable energy projects



Remaining Fossil Fuel Mix (18%)

- The City of Madison remains committed to eliminating the remaining 8 MWh of its energy usage that comes from fossil fuels
- To tackle this, the City is actively improving energy efficiency and reducing electricity consumption across all departments through initiatives like building retrofits, advanced energy management systems, and ensuring future buildings meet LEED silver standards or higher
- Further collaborations with MGE and other local institutions will enhance our renewable energy portfolio