



METROPOLITAN
UTILITIES DISTRICT



Sustainability Master Plan

December 2018

PRESENTED BY





Executive Summary

Metropolitan Utilities District recognizes the relationship between sustainability and responsible resource management and has a strong desire to improve operations to save money, prepare for the future, and be a leader in the Omaha area. Starting in 2016, M.U.D. underwent a process to examine current usage of resources and ideas around sustainability within the organization, and examine a pathway and set goals to become more sustainable. Employees at M.U.D. are highly engaged in the pursuit of a more sustainable future and look to District leaders to set the organizational tone. This master plan can come at no better time for the District with so many passionate, engaged and motivated employees ready to create change.

Letter from the President

The core of what we do at the Metropolitan Utilities District, from infrastructure improvement to answering the phones, revolves around being stewards of our land's natural resources. That is what keeps our lights on, draws employees from across the country, and makes M.U.D. a leader in the Omaha area.

Our community relies on us to keep the heat on and keep the water running, two life-essential services. As a result, we as M.U.D. employees have a responsibility not only to our current customer-owners, but also to the children and grandchildren of our customer owners.

As a major steward of Nebraska's resources, M.U.D. has a responsibility in this new era of climate change not only to set a good example for our community today, but to ensure we are resilient and ready for the challenges of tomorrow. That is the motivation for creating sustainability goals outlined in the plan, and a path for achieving them.

What will the world look like 10 or 20 years from now? M.U.D. is in a unique and exciting position to ensure that our community is prepared for whatever comes our way. With hard work and preparation outlined in the Sustainability Master Plan, we will be able to do more with less resources while continuing to place quality, service and reliability above all else.

Mark Doyle

President

A handwritten signature in blue ink that reads "Mark Doyle". The signature is fluid and cursive, with a long horizontal stroke at the end.

Summary of Methodology

Baselines at M.U.D. were established through collection and analysis of water, energy and waste data. A survey was distributed to M.U.D. employees to baseline engagement at the organization, as well as percentage of employees actively commuting. Interviews were conducted with all District vice-presidents and key staff to determine organizational ideals about sustainability and potential strategies. Verdis Group toured all M.U.D. buildings to identify potential strategies.

Two strategy planning sessions were held with subject matter experts from six sustainability focus areas with staff from across the District. Strategies were identified, vetted and prioritized into short, medium and long term. Finally, a vision and goals workshop was held with staff from across the District, who used baseline information and strategies to identify goals for each of the five key areas. In the fall of 2018, Verdis Group prepared the final Sustainability Master Plan.

Strengths & Successes

Many sustainability efforts have occurred over the last several years at M.U.D. that have helped reduce environmental impact, save money and improve efficiency. A comprehensive list can be found in the 2016 M.U.D. Sustainability Annual Report. Some particular strengths and successes of importance are the following:

Compressed Natural Gas

In 2011, M.U.D. began converting fleet vehicles to those run on Compressed Natural Gas (CNG). CNG reduces carbon dioxide and other greenhouse gases and is now used to power over 170 vehicles in the District. Additionally, Omaha Metro buses are now beginning to run on CNG. Catalyzing a community shift to a cleaner burning fuel has been greater incentivized by M.U.D. by the addition of three public CNG fueling stations in the metro area.

Infrastructure Replacement Program

In 2008 the District began to replace aging cast iron pipes used to transport natural gas. New pipes reduce the amount of fugitive emissions lost during transfer by eliminating cracks and leaks in the system. When the project is completed in 2027, 450 miles of cast iron will be replaced and fugitive emissions will decrease 87% compared to emissions in 2010. The District also made a commitment to the Environmental Protection Agency to reduce methane emissions from this process by 7.5% by 2021 from a 2017 baseline.

Fleet Efficiencies

M.U.D. has invested in a variety of measures to reduce greenhouse gases produced by fleet inefficiencies. A GPS-enabled system allowed for reduced travel time, empowering staff to respond to calls closest to them, reducing customer wait time in the process. Additionally, M.U.D. now uses a Home-Based Vehicle Fleet, which allows technicians to begin their work from home, reducing miles traveled.

Paper Reduction

Paperless billing was an important step for M.U.D., reducing the amount of paper printed in the hundreds of thousands annually. The program, which started in 2014, now has 23% of customers receiving bills electronically. Additionally, M.U.D. has also implemented secure printing, reducing paper by ensuring that double sided printing is automated and that employees must release a job before it is printed.

Goals

The following five goals lay out the scope of M.U.D.'s desired progress on sustainability initiatives. They have been divided into two time frames: a 5 year goal to be completed by 2023, and a longer term visionary goal to be completed by 2030. In each case, a goal was chosen as a result of input from subject matter experts, 2018 workshop attendees, and leadership. Each goal is designed to be challenging yet achievable. A baseline is indicated in every case so that progress can be measured accordingly.



Greenhouse Gas Emissions

2017 Baseline: 150,800 metric tons of CO₂e

2023 Goal: 35% reduction

2030 Vision: 45% reduction
in greenhouse gas emissions



Water Consumption

2017 Baseline: 24,597 CCF/year

2023 Goal: 40% reduction

2030 Vision: 65% reduction
in water consumption



Engagement

2016 Baseline: 56

**2023 Goal: Sustainability
Engagement Score of 73**

2030 Vision: Sustainability
Engagement Score of 89



Waste Management and Purchasing

2017 Baseline: 77% of materials
are diverted

**2023 Goal: Zero Waste
(90% diversion rate)**

2030 Vision: 95% diversion rate
of materials from the landfill



Active Transportation

2016 Baseline: 12% use active
transportation methods

**2023 Goal: 20% use
active transportation**

2030 Vision: 35% of employee commuters
use active transportation modes

Top Strategies

The following are the highest-impact strategies that M.U.D. will implement first to progress toward its sustainability goals.

Greenhouse Gas Emissions

1. For building energy emissions, implement select strategies related to setpoints and controls, including:
 - a. Institute organization-wide temperature setpoint guidelines.
 - b. Implement evening and weekend setbacks in buildings where they aren't already in place.
 - c. Review and fine tune other control settings to ensure they are still appropriate.
 - d. Provide guidance to those using garages on what appropriate temperatures are, and decrease the temperature at which garages are kept.
2. Implement technology-based strategies to limit fleet fuel consumption

Waste and Recycling

3. Implement cardboard recycling at all locations.
4. Ensure all M.U.D. locations are on the same page with respect to which hauler to use and which materials are recyclable.
5. Conduct a waste audit. Waste will be surveyed for recycling opportunities, and recycling will be surveyed to ensure contamination rates are low.

Active Transportation

6. Offer a telecommuting program for employees, either as a matter of policy or as standard practice. Incorporate more flexible scheduling (e.g. four 10-hour days, four days in office with one day remote, flexibility to avoid peak rush hour) and work from home options for job types that don't present operational issues.
7. Provide software that allows for internal and external video conferencing meetings that prevents staff from having to travel from one M.U.D. location to another.

Engagement

8. Create a sustainability committee, council or team and institutionalize supervisor support for employees to participate on the committee.
9. Develop and implement an engagement and communication strategy.

Water

10. Implement strategies specific to reducing irrigation, including:
 - a. Install a WaterSense timer or sensor for irrigation and adjust settings based on season.
 - b. Reduce the amount of lawn that is watered.