

# **Minnesota House State Government Finance and Elections**

February 25, 2021

Marcus Grubbs Office of Enterprise Sustainability

# Office of Enterprise Sustainability Background

- Team of three established in 2017 and reaffirmed by Executive Order (19-27) in 2019
- The Order directs State Government to conserve energy and water, and reduce waste to save money
- The Order establishes Sustainability Steering Team to guide work
- The Order directs State agencies to participate in Enterprise Sustainability effort and outlines agency responsibilities

## STATE OF MINNESOTA Executive Department



Governor Tim Walz

Executive Order 19-27: Rescinding Executive Orders 18-01 and 17-12

Directing State Government to Conserve Energy and Water, and Reduce  
Waste to Save Money

I, Tim Walz, Governor of the State of Minnesota, by the authority vested in me by the Constitution and applicable statutes, issue the following Executive Order:

As with any large organization, operating Minnesota's government generates pollution, consumes energy and natural resources, and contributes to climate change. Sustainable practices by our government can positively impact the environment, human health, and the economy by preventing pollution, reducing energy and natural resource consumption, and minimizing climate impacts. Minnesota has made progress to make its government operations more sustainable. We must continue to lead by example, ensuring that we maintain our efforts so that our sustainability goals are met.

To meet the State's goals, we must make efficient use of water and energy, reduce greenhouse gas emissions, and ensure that goods and services procured by the government are sustainable. We will make quicker progress toward our goals by encouraging collaboration across our government.

Continuing the effort to run our government in more sustainable ways helps Minnesotans by improving the environment, controlling unnecessary waste of natural resources and public funds, and spurring innovation. These measures save taxpayer dollars through avoided costs, increased efficiencies, more resilient facilities, and a stronger economy.

For these reasons, I order that we undertake the following actions to protect and enhance Minnesota's environment, economy, and health for current and future generations:

1. **Sustainability Goals.** Cabinet Agencies will improve their operational practices to achieve the following Sustainability Goals:
  - a. **Reduced Fleet Fossil Fuel Consumption:** 30% reduction of state fleet consumption of fossil fuels by 2027 relative to a 2017 adjusted baseline

# Sustainability Goals

## Fleet



Fleet: 30% reduction of fossil fuel use by vehicles and equipment by 2027.

## Solid Waste



Solid Waste: 75% of solid waste is recycled or composted by 2030.

## Energy



Energy: 30% Reduction in consumption of energy per square foot by 2027.

## Procurement



Procurement: 25% of total spending on priority contract is sustainably purchased by 2025.

## Water



Water: 15% reduction in water use by 2025.

## Greenhouse Gas



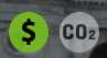
Greenhouse Gas: 30% reduction of greenhouse gas emissions by 2025.

Measuring the sustainability of Minnesota state government operations

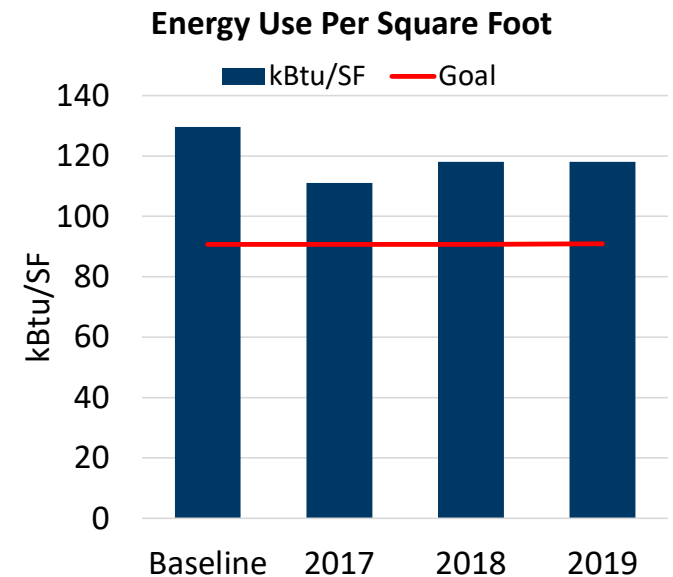
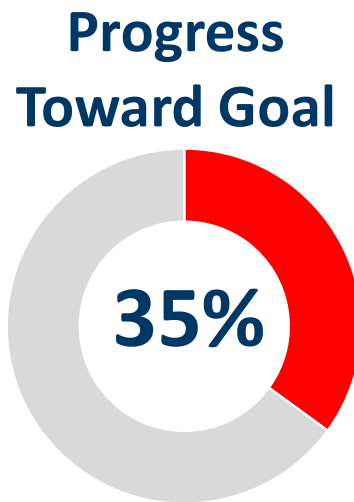
- Fleet
- Energy
- Water
- Solid Waste
- Procurement
- Greenhouse Gas

Avoided Costs Due To Conservation Measures (2005 - Present)

\$45,152,940



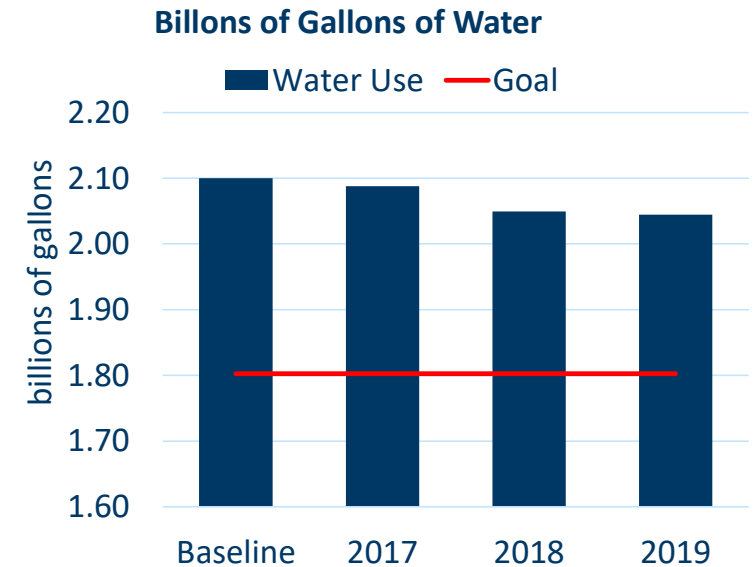
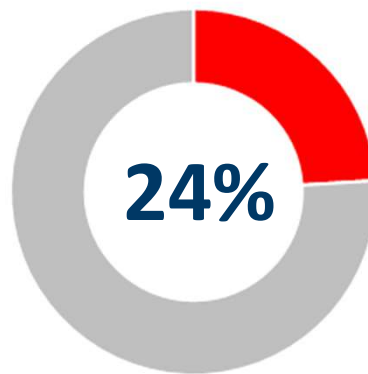
Goal: Reduce energy use per square foot 30% by 2027.



## Energy

Goal: Reduce water use by 15% by 2025.

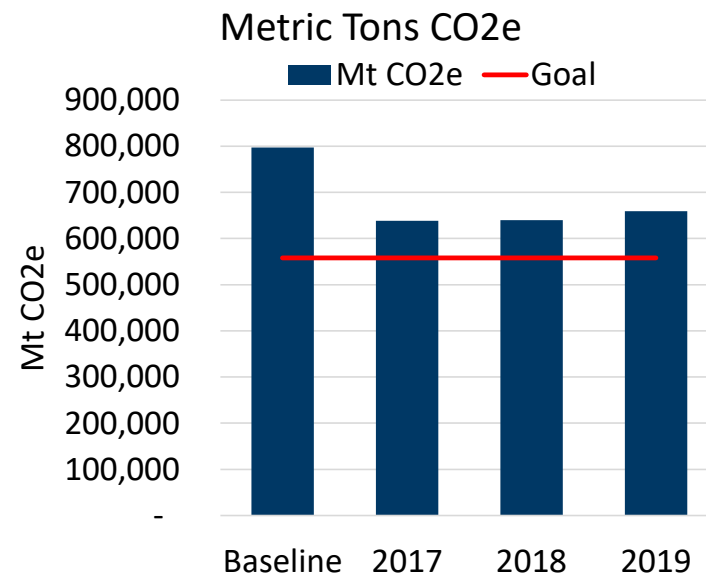
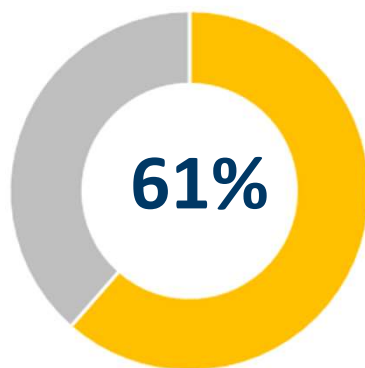
Progress Toward Goal



## Water

Goal: Reduce  
GHG  
emissions by  
30% by  
2025.

Progress  
Toward Goal



## Greenhouse Gas Emissions

# SF543 - State Building Energy Conservation Improvement Revolving Loan Fund



- Establishes a revolving loan fund for building improvements that will reduce energy and water consumption in state-owned buildings.
- Funds sustainable operational improvements that lead to avoided costs often neglected due to limited operating funds.
- All cabinet-level agencies would be eligible
- Requests reviewed by the Office of Enterprise Sustainability, and recommended for approval to the Commissioners of Administration, Management and Budget, and Commerce.
- Loans at or below market interest rates, including zero interest loans, for a term that does not exceed seven years.
- Modeled after similar efforts in 31 other states.



# Loan Applications

- Total estimated project costs and loan amount sought
- Description of existing equipment, structural elements, operating characteristics and other conditions affecting energy use
- Proposed project and detailed budget
- Proposed project's expected energy and monetary savings
- Information about agency's ability to repay loan
- Any additional information



# Revolving Loan Eligible Projects



- Exterior and interior LED lighting
- Digital controls for heating and cooling
- Variable-frequency speed fans and motors
- Ground and air source heat pumps
- Low flow fixtures and toilets
- Faucet aerators and washing equipment sprayer heads
- Water irrigation sensors, controls
- Retro-commissioning

# Capital Complex 2020 LED Light Bulb Replacements

<b>Building</b>	<b>Upfront Cost</b>	<b>Avoided Energy Use kWh/year</b>	<b>Avoided Costs</b>	<b>Simple Payback</b>
State Office Building	\$59,000	340,000	\$31,000	1.9 years
Retirement	\$23,872	109,000	\$10,000	1.9 years
Admin	\$5,455	65,000	\$6,000	0.9 years
Veterans	\$9,271	65,000	\$6,000	1.5 years
691 Robert St	\$4,900	43,000	\$4,000	1.2 years
<b>Total</b>	<b>\$102,498</b>	<b>622,000</b>	<b>\$57,000</b>	<b>1.8 years</b>

## Need Around the State

- Opportunities for avoided energy costs exist across the state.
- Shown are zip codes with state owned facilities where there is potential for avoided energy costs.



# Thank you!

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