



# MINNESOTA **SUSTAINABLE GROWTH** COALITION

*A COLLABORATION TO DEMONSTRATE AND ADVANCE A THRIVING CIRCULAR ECONOMY  
CONVENED BY ENVIRONMENTAL INITIATIVE*

# Our Vision

Minnesota is an inspiring  
example of collaboration  
advancing **a thriving  
circular economy**  
that promotes a healthy  
environment and  
sustainable growth.



# Circular Economy Principles

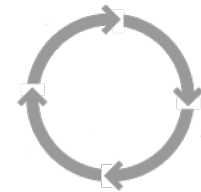
## **Powered by Renewable Energy**

Maximizes efficiency and is powered by 100% clean, efficient and renewable energy



## **Materials Cycled Infinitely**

Material inputs are cycled infinitely to ensure the elimination of waste



## **Rebuilding Natural Capital**

Supports and builds ecosystems while adding to our natural capital



## **Healthy People & Communities**

Supports healthy living environments and works to promote an equitable society and culture



# Coalition Members





# Clean Energy *Vision*

## Vision:

- Surpassing the State of Minnesota's current economy-wide greenhouse gas emissions targets of 30 percent reduction by 2025 and 80 percent reduction by 2050
- Increasing access to affordable, reliable, clean energy to improve racial, economic, social and public health outcomes
- Fueling economic growth for all Minnesotans

# Coalition Members





# Minnesota Sustainable Growth Coalition

*Amy Fredregill, Managing Director*  
[afredregill@en-in.org](mailto:afredregill@en-in.org)  
612-965-1489

INTERNAL

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AVEDA



AVEDA  
THE ART AND SCIENCE OF PURE  
FLOWER AND PLANT ESSENCES

cherry  
almond

softening  
shampoo  
sweet floral aroma

shampooing  
adoucissant  
arôme floral doux

AVEDA  
THE ART AND SCIENCE OF PURE  
FLOWER AND PLANT ESSENCES

cherry  
almond

softening  
conditioner  
sweet floral aroma

après-shampooing  
adoucissant  
arôme floral doux



Minnesota House  
Energy and Climate Finance and Policy Committee  
February 6, 2020



UNIVERSITY OF MINNESOTA

**Driven to Discover<sup>SM</sup>**



# Conservation, Renewable Energy, and Climate Innovation at the University





## University Impact



- 16,238 Degrees Awarded
- \$982 Million in R&D
- 900+ Active Patents, 1800+ licenses, 150 startups launched
- Thousands of people supported through extension
- Modeling through operations



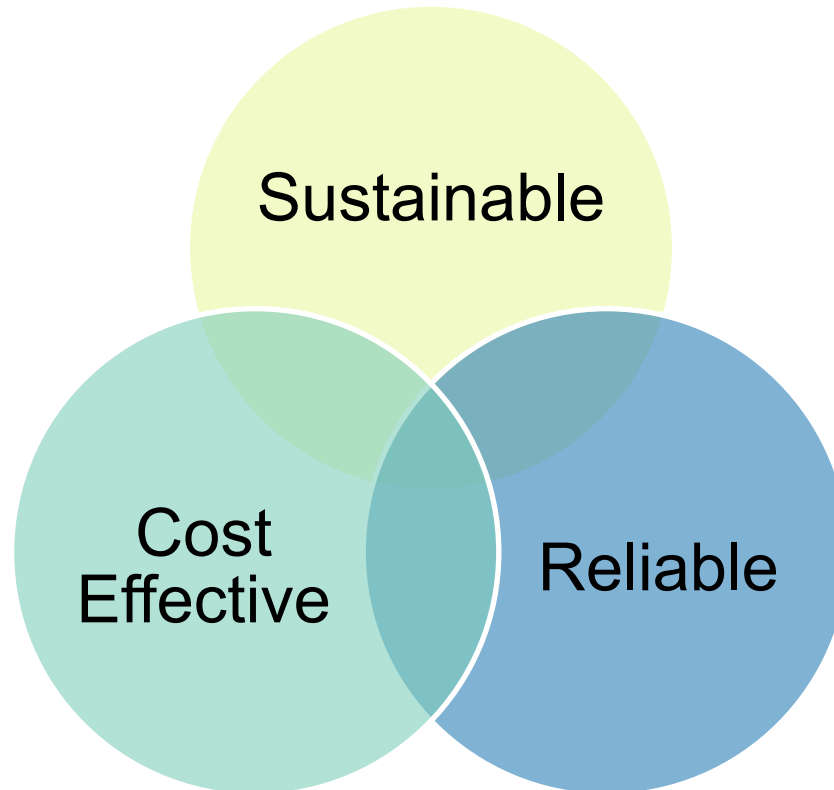
# Drivers for Operations Innovation



- Scientific Data
- Place Based
- Institutional Longevity
- Large Energy Consumer
- Student and Employee Attraction and Retention



## Guiding Principles



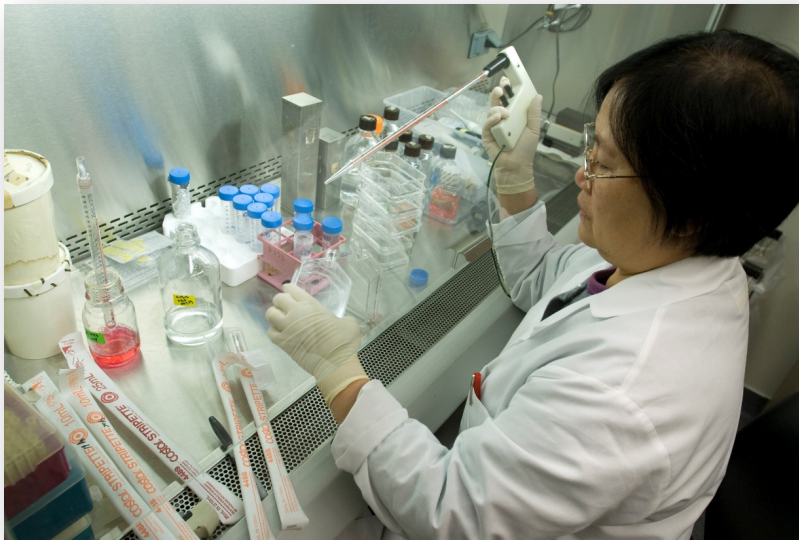


# Stormwater Reuse



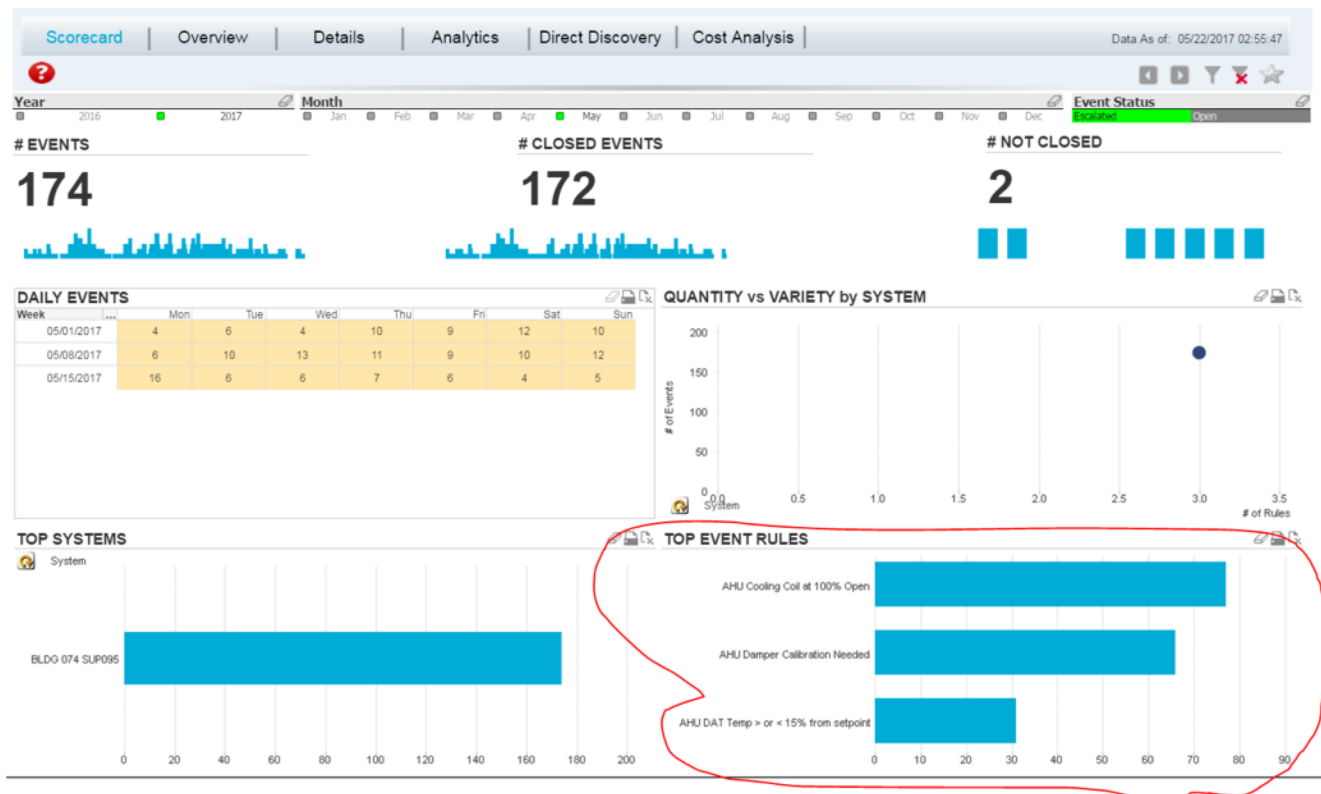


# Smart Labs





# Fault Detection Diagnostics (FDD)





## Results

### Twin Cities Campus Greenhouse Gas Emissions

