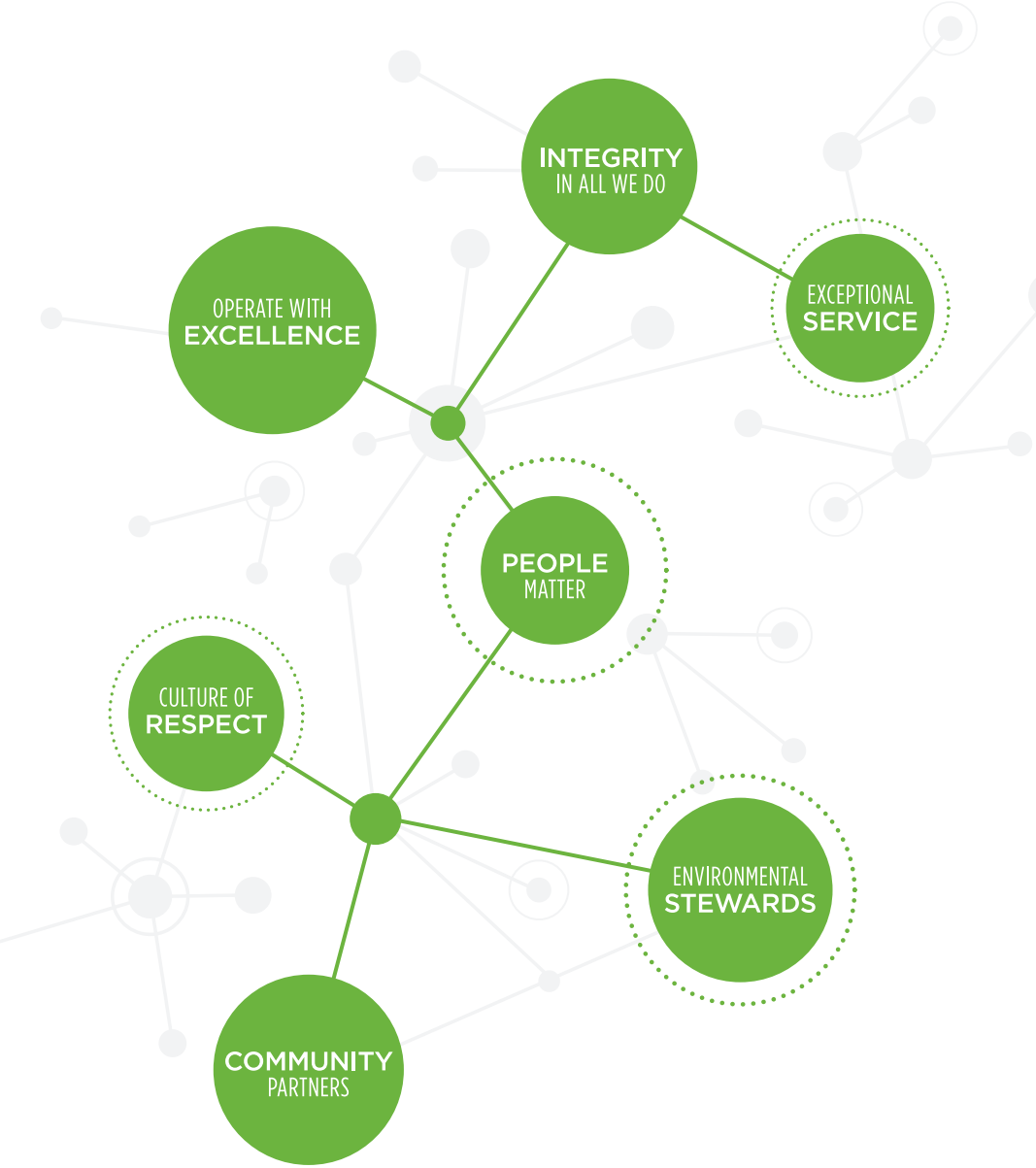
2019

Impact Report

EVER-GREEN ENERGY™



Our Values

Ever-Green Energy was established to fulfill a commitment to the public good. The idea of community energy brings with it a vision for local decision-making, smart resource management, fair and principled employment practices, and environmental stewardship. It requires dedication throughout the organization to elevate our positive impacts and mitigate activities that may negatively affect our stakeholders.

For Ever-Green, corporate social responsibility (CSR) starts with our values, which are elemental to our business: deliver exceptional service, operate with excellence, people matter, integrity in all we do, uphold a culture of respect, serve as environmental stewards, be a part of our community.

The 2019 Impact Report serves as an introduction to how our company lives our values every day and how these values guide our work and our collaborations with partners across the country. The report includes a reflection of CSR activities and operational performance from the past year. We will be sharing additional CSR information on an ongoing basis in an effort to be transparent and collaborative in our work.

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It all starts with Our People

Ever-Green is a mission-driven organization. We place a premium on talent and imagination and reward skills and hard work with a variety of recognition programs. We value diversity and are committed to the communities where we live and work. We attract unique professionals including skilled tradespeople who develop, manage, advise, and deliver exceptional service to our clients and energy system customers.

Diversity, Equity, and Inclusion

Ever-Green recognizes that it is essential to invest in equitable outcomes for our company, the communities we serve, and our industry. As we work toward a culture of diversity and inclusion throughout our business and its areas of influence, we will share updates on what we are learning and applying. Our work to date has been supported by the leadership and insight of others. Here are a few organizations that have helped our company work toward tangible progress in this area.

- The Local Job Network shares our open positions across a network of organizations to increase the diversity in our applicant pool.
- Strategic Diversity Initiatives performed an audit of our employee handbook to ensure no bias in language or procedures.
- In recent years, Ever-Green has been a partner to the Saint Paul Area Chamber of Commerce's work on diversity, equity, and inclusion. Our CEO, Ken Smith, has served on the Chamber diversity, equity, and inclusion committee and our team has been participating in their training and integration of best practices for organizations.

Proud of Our Veterans

Last year, Ever-Green's efforts to recruit and retain veterans were recognized with a HIRE Vets Medallion Award, a federal-level veterans' employment award that recognizes a company's commitment to veteran hiring, retention, and professional development. At Ever-Green, we are fortunate to have nearly 25% of our team comprised of veteran service members. These team members have made selfless contributions to our country, and we are proud that they are part of Ever-Green.


INTEGRITY
IN ALL WE DO
ENVIRONMENTAL
STEWARDS
OPERATE WITH
EXCELLENCE

Our Metrics


Water Meter
Water Meter

Impact through Metrics

For nearly four decades, our team has worked to improve tracking, measurement, and reporting for our utility operations, as well as encouraging our customers to do the same in their facilities.

In 2019, the team adopted a new tracking and performance framework for sustainability to elevate the importance of four high-impact factors in our operations and increase our accountability to the many stakeholders asking us to share our successes in these areas.

In the 2019 Impact Report, we highlight two of those key metrics for the systems we operate and manage. By sharing the greenhouse gas emissions (GHG) profile and fuel mix for each system, we hope to educate our partners and customers on the importance of decarbonizing our energy systems and maintaining fuel flexibility for reliable systems. These are focus areas for the owners of the systems we operate and manage, and their stakeholders are also greatly vested in seeing these systems move toward carbon neutrality.

Internally, we are also tracking system efficiency and water consumption, which are crucial metrics for environmental performance and stewardship. We intend to share more about these metrics in future reports as well as related operational goals to reduce water and increase efficiency.

No single metric will capture all of the positive or negative environmental outcomes, but we believe these metrics will help us promote continuous improvement and awareness of environmental performance indicators.

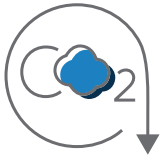
Greenhouse Gas Emissions

System Efficiency

Water Consumption

Fuel Mix and Renewable Energy

4
metrics



Greenhouse Gas Emissions Profile

As climate awareness and impacts build, it is more critical than ever that we work across all of our operations and projects to reduce GHG. This is accomplished through integrating renewable fuels and technologies and increasing system efficiency. The heating and cooling operations represented in this report are dependent on electrical energy provided by regional utility providers. The GHG profile of these operations also varies widely and is noted alongside each metric. Looking forward, Ever-Green is planning for greater renewable power purchases for its partner operations, which will also be tracked and reported in future reports. We will also evaluate the GHG impact of water usage, as well as office, travel, and fleet operations.

System Efficiency

A core tenet of utility performance is making the system as efficient and effective as possible. To achieve this, our team is tracking, measuring, ans improving energy usage at every stage of the cycle including plant production, distribution, and customer consumption. Programs are in place to improve each of these categories on a continuous basis.

Water Consumption

Despite limited market mechanisms to encourage water conservation, our team realizes that saving water is critical to environmental stewardship. Energy production can have immense water impacts, and we are committed to continuous improvement and savings in our systems.

Fuel Mix and Renewable Energy Profile

Promoting a decarbonized fuel profile is key to a sustainable future for our systems and the communities they serve. Fuel inputs to the system reflect a balance of priorities, including reliability, fuel flexibility, commodity pricing, fuel availability, and environmental stewardship. We are committed to identifying new opportunities for carbon-free and renewable sources in our system planning, as well as advocating for better renewable thermal policies to support their integration into our systems. For 2019, we will be reporting on the fuel mix for heating only, given that cooling is dependent on the electric grid mix.

Measuring Our Carbon Factor

Ever-Green is presenting its GHG profile as a carbon factor for operations. This metric represents the carbon intensity of the energy within each system (heating and cooling). We are using this measure because it makes it easier for our customers to consider their own carbon profile, as a product of our carbon intensity and their building's energy consumption. As we reduce fossil fuel usage and increase energy efficiency in each operation, our carbon factor will decrease. Our new tracking and reporting protocols will make it easy to track this progress year-over-year.

Operating with Excellence

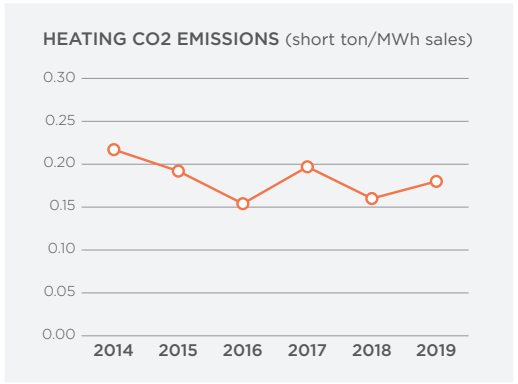
Saint Paul
commits to carbon neutrality

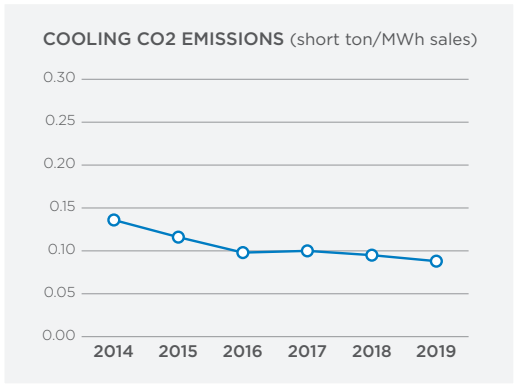
District Energy St. Paul is the flagship operation that inspired the growth of the Ever-Green enterprise, which was built from the idea that Saint Paul's successes could be reimagined in other communities. This legacy system was reimagined as a hot water system in 1983 and integrated biomass-combined heat and power (CHP) in 2003. The biomass-CHP advancement provides customers with nearly 45% renewable heat. This is well above the average in the country, as most historic systems are still highly dependent on fossil fuels. In 2019, the system retired the use of coal, after a decade-long reduction effort, resulting in nearly 70% reduction in carbon compared to 2000 heating operations.

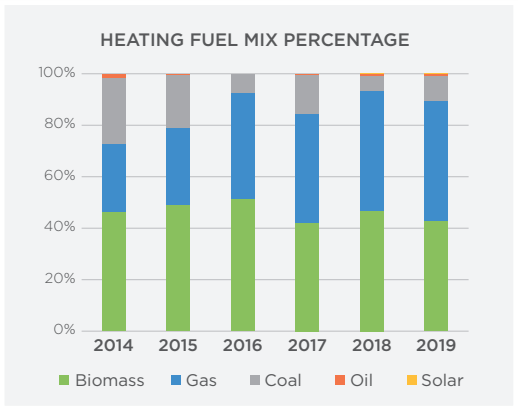
Between 2000 and 2019 **carbon was reduced 70%**

Heating system is **nearly 45% renewable energy**

DISTRICT ENERGY ST. PAUL METRICS

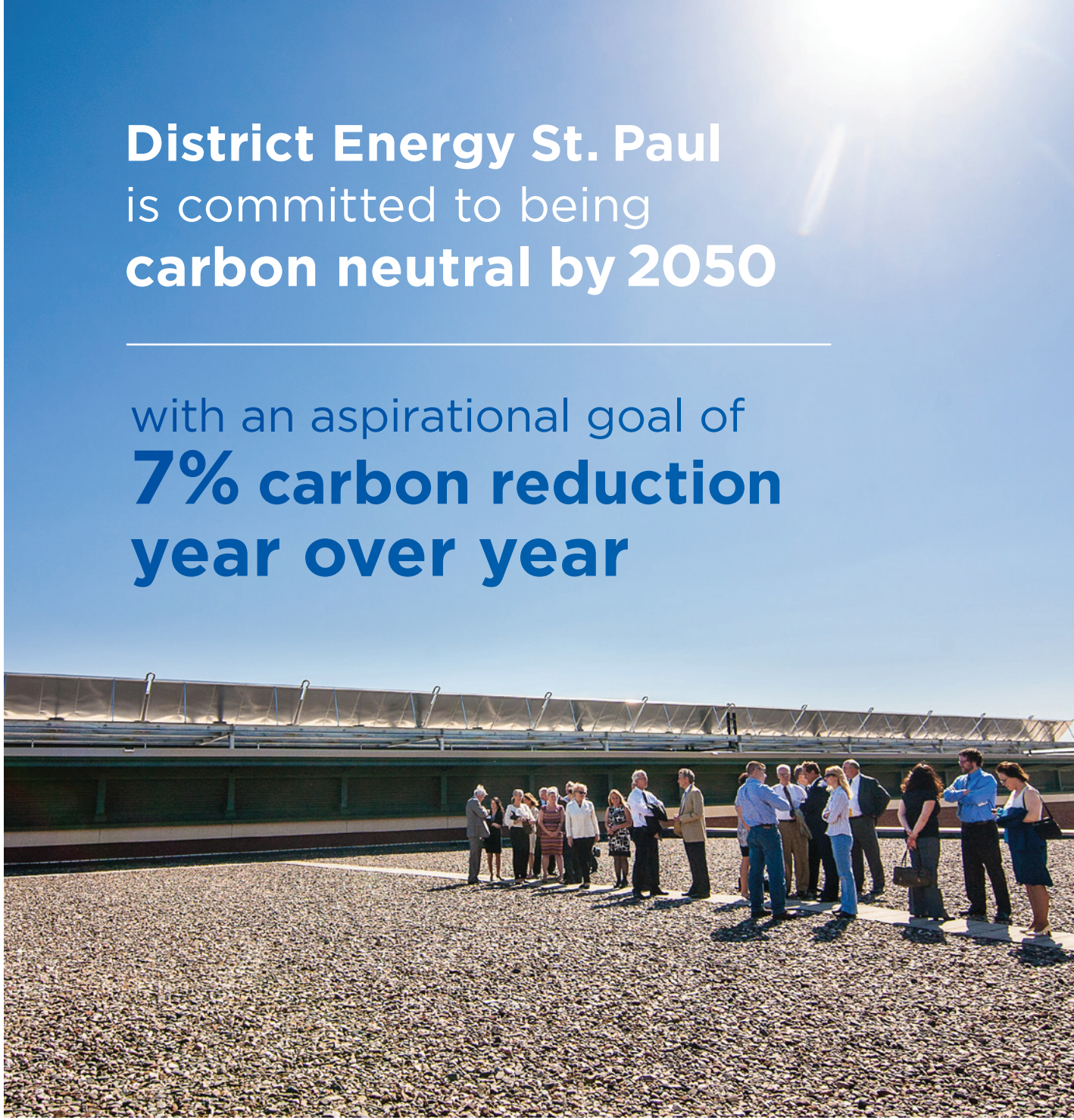






Another 2019 milestone for this system was the completion of a carbon-neutrality planning process, resulting in a vision for a carbon-free system by 2050. Significant technology and renewable fuel advancements will lead to substantial carbon improvements; however, it is still important that the operations target year-to-year progress. To achieve regular reductions, the team also has an aspirational goal of 7% reductions each year, based on a commitment to efficiency improvements in production, distribution, and customer buildings. Although we know it will be a significant challenge to achieve this number every year, we want to emphasize the recommendations from the United Nations Environment Programme to reduce greenhouse gas emissions by 7.6 % each year between 2020 and 2030. We hope to use this objective to educate customers and other stakeholders on the importance of these reductions to meeting the Paris Climate Accord.

New energy efficiency programs launching in 2020 and a major electrification study will be critical initiatives to make progress toward these commitments.



MRMCT
leads during COVID-19

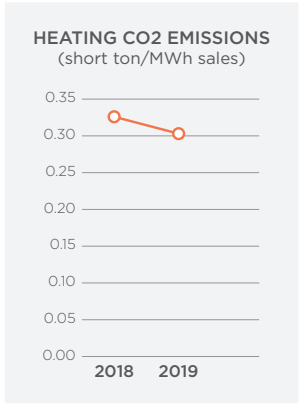
The Milwaukee Regional Medical Center (MRMC) is a nonprofit consortium of health care institutions whose faculty and staff provide a full range of health and wellness services to the residents of Wisconsin. Over the past five years, the Ever-Green team has worked closely with the MRMC leadership to renew the heating and cooling systems to improve reliability and resilience, while lowering costs and resetting the useful life of infrastructure for the system.

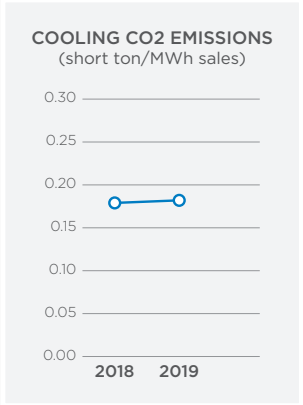
We are immensely proud of the work our operations team has done to make sure energy operations run smoothly, so health care providers can care for the patients and families that depend on them. The Milwaukee region has depended on MRMC to provide critical, Level 1 trauma care to COVID-19 patients starting in March 2020. Simultaneously, the hospital continued to provide health care services to hundreds of patients requiring care for other emerging and chronic ailments. This partnership has been forged in trust and deep commitment to the greater good. When it mattered, they were all there to provide essential services.

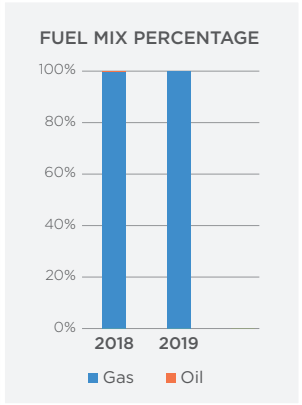
99.99% reliable
heating and cooling from 2018 to 2019

Our team makes sure energy operations run smoothly, so health care providers can care for the patients and families that depend on them.

MILWAUKEE REGIONAL MEDICAL CENTER THERMAL METRICS







MRMCT adopted the Ever-Green metric tracking methodology in 2018.

70% reduction in greenhouse gas emissions from 2013-2019

36% reduction in water consumption from 2016-2019

Duluth
advances a legacy system

Since 2012,
coal usage has reduced nearly
80%

GHG emissions
reduced nearly
20%

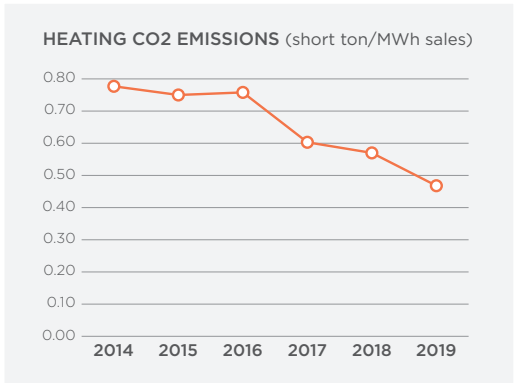
Duluth Energy Systems is the city-owned energy system that provides heating and cooling service to the downtown and Canal Park. Ever-Green has managed the system for eight years and works closely with the City of Duluth to provide exceptional service and advance the system to better serve the community.

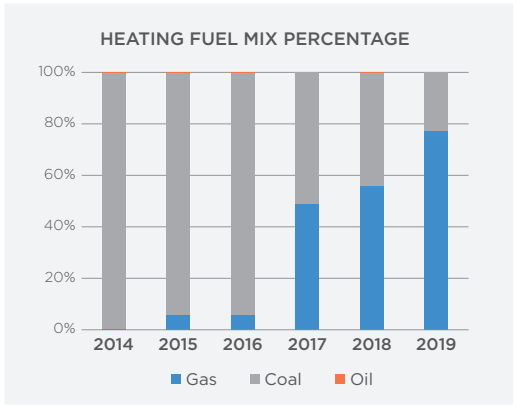
Three years ago, Ever-Green and the City began the transformation of a major portion of the energy system, replacing 16 blocks of the aged downtown system steam pipe with new hot water infrastructure to improve the efficiency, water conservation, and performance of this system. This was also a critical upgrade to enable future renewable energy alternatives. The steam to hot water conversion for this major segment will be complete in 2020. In addition to the natural gas pilot, this project will help make major strides for reducing greenhouse gas emissions in Duluth. Since taking over operations in 2012, Ever-Green has reduced coal use by nearly 80%. The coal reduction and efficiency efforts have reduced greenhouse gas emissions by 20% in that timeframe.

"The modernization of Duluth Energy Systems saves energy and emissions. It shows how the City of Duluth puts our climate goals into action."

— Mayor Larson, City of Duluth

DULUTH ENERGY SYSTEM METRICS





Cooling not applicable.

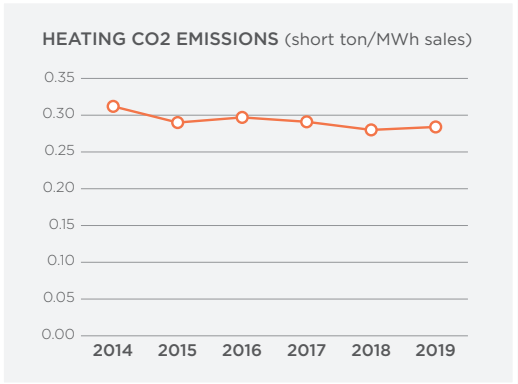
Energy Park

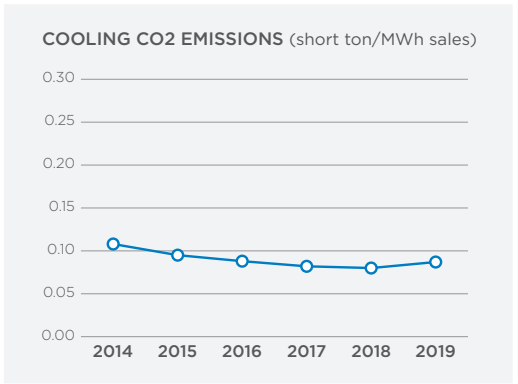
leads with efficiency

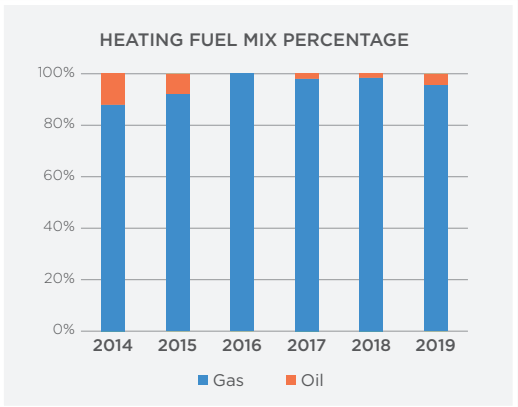
Energy Park Utility Company was an early example of what could be accomplished by redeveloping a brownfield into an urban corridor. The Saint Paul Port Authority (SPPA) led this effort in 1983 and has continued to help this corner of the Saint Paul community evolve to meet changing market and sustainability expectations. The heating and cooling utility is owned by SPPA and provides heating and cooling services to the mixed-use business center offering office space, schools, light industrial manufacturing facilities, health clinics, a hotel, and more than 780 affordable and market-rate housing units. Ever-Green and SPPA continue to work together to increase the efficiency and resilience of this system, upgrading the distribution infrastructure in 2014 from a two-pipe to a four-pipe system. In the last five years, the carbon intensity for heating has been reduced nearly 10% and cooling nearly 20%.

Carbon intensity has been **reduced nearly 10%** for heating and **nearly 20%** for cooling over past 5 years.

ENERGY PARK UTILITY METRICS







Groundbreaking Projects

Mission Rock
breaks ground

43,000 gallons
of potable water saved
per day

64,000 gallons
of black water recycled
per day for purposes such as irrigation and toilet flushing

Mission Rock is a key gateway development and one of the most prominent undeveloped sites in the Mission Bay neighborhood of San Francisco. From the beginning, the vision for this project has been to create a sustainable development with great consideration for renewable energy and reducing potable water usage. Ever-Green has led the utility development for this system and is guiding the development of innovative infrastructure that will save 1,600 tons of CO2 per year through bay water energy recovery. Additionally, the proposed black water recycling system will recycle 64,000 gallons of black water per day. Recycled water will be utilized for non-potable purposes such as irrigation and toilet flushing.

Predicted GHG savings

1,600 tons of CO2
savings per year

Over 50,000 tons
could be saved
over 30 years

(note: CO2 savings increase as grid decarbonizes)

in the nation
district energy system
to use **aquifer thermal energy storage as a geoexchange solution**

Plans include over
10 million sq ft
of development

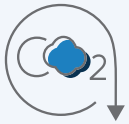
Towerside
demonstrates innovation and partnership

Towerside Innovation District is a community-driven project that envisions a neighborhood where sustainability and high-tech solutions come together to create a better place to live, work, and play. Ever-Green is contributing to that vision through the development of a first-in-the-nation scale district energy system using aquifer thermal energy storage as a geoexchange solution. The result is a predicted 40% GHG savings per building connected to the system. The project reached the financing and test well stage in 2020 and is on track to start construction in 2021. Towerside Innovation District's lower CO2 impact and potential for future net zero make it a demonstration of what's possible when dedicated partners, smart planning, and big ideas come together.

Predicted GHG savings

40% CO2 savings
per building

Full build out could exceed
500,000 tons of avoided CO2



Oberlin leads the way

Oberlin is on track to meet its carbon neutrality goal by 2025 with a planned transition to hot water distribution and energy efficiency improvements.

Oberlin College is widely known as a leader in sustainability. Moving toward its 2025 milestone commitment for carbon neutrality, their program is one of the most ambitious in the nation. The campus has already reduced GHG by 68% since 2007. In 2020, Oberlin and Ever-Green began planning for the transition of the campus steam system to hot water distribution. When paired with the next phase of energy efficiency improvements and renewable source development, the campus is on track to meet its goals.

1 million
gallons of water
saved per year

Predicted GHG savings

300,000 tons
of CO2 savings
over 30 years

92% reduction
of CO2 emissions
from 2010 baseline

Higher Education Partnerships

Higher education partnerships lead the way to Carbon Neutrality

In 2019, Ever-Green launched a new program to help higher education institutions achieve carbon neutrality goals for their campuses. Our **Roadmap to Carbon Neutrality** program provides pro bono planning services to the schools, with a focus on moving beyond planning to implementation by tackling common issues with decarbonizing thermal systems, financing infrastructure, and operational improvements. The 2019 cohort included the University of Minnesota Morris, University of St. Thomas, and the College of St. Benedict.

The 2020 cohort was announced in September 2020 and includes Macalester College and Slippery Rock University. This program is focused on helping these campuses move toward carbon neutrality. The long-term vision is to establish dynamic learning partnerships. Together with these higher education leaders, Ever-Green believes the implementation of proven and emerging technologies will create a showcase for what is possible with smart planning, financing, and partnership.

UNIVERSITY OF MINNESOTA
MORRIS

"This program helped us accelerate our carbon reduction efforts, so our campus can model how our rural community can meet climate and renewable energy goals and provide a learning opportunity for our students," says UMN Morris Vice Chancellor for Finance and Facilities Bryan Herrmann.

UMN Morris anticipates **reducing carbon dioxide by 10,000 tons annually**

a 98% reduction for their heating and cooling from the 2018 baseline

"For Ever-Green Energy, corporate social responsibility starts with our company mission and values. It is our promise to those who depend on us. It shows our customers and community partners what matters to us — integrity and excellence in our operations, respecting and caring for people, and being dedicated stewards to the environment.

As we set ambitious goals, we are emboldened by those who support us in the journey. Our first corporate social responsibility report is an invitation to our current and future partners to join us in this work and share our commitment to sustainability and community. Together we can help others shape their own vision for system advancement, take meaningful steps to address climate change, and create a more just and equitable energy industry.

There are many challenges before us, but together, we can accomplish great things."

Ken Smith, CEO and President, Ever-Green Energy

EVER-GREEN ENERGY™

Learn more about our corporate social responsibility efforts:
www.ever-greenenergy.com/CSR