

# CONNECTED FOR GOOD

2017 ANNUAL REPORT



**DISTRICT ENERGY**  
ST. PAUL™



At District Energy St. Paul, we strive to deliver the highest value of services to our customers. For 35 years we have taken this commitment very seriously. For us, it comes back to our long-term relationship with our customers and the many leaders and change makers in this city. It is this connectedness with our customers and partners that enables success and positions our public-private partnership to give back. Whether it is through helping a customer with day-to-day operations, delivering innovative solutions in a changing market, or finding ways to serve in our community, our team is connected for good. As we look back at our year, we hope each of these connections and successes can be a building block for what comes next in this dynamic city.

“Whether it is through delivering innovative solutions in a changing market, helping a customer with day-to-day operations, or finding ways to serve in our community, our team is **connected for good.**”

Looking back at 2017, we were excited to see more and more building owners and managers prioritizing energy efficient solutions in their operations. Our customers are looking for more data to inform decisions and investments. The market expectations demand energy cost-effectiveness, as well as more flexibility and tenant accountability. Our team has responded by connecting our customers with customized solutions and strategies to lower costs on the system and in customer buildings.

Alongside impressive energy efficiency projects in our plants, our 2017 system advancement focused on new technology and system growth. With additional system controls and a revised operational strategy, this summer we operated our two thermal storage tanks simultaneously for the first time. This approach shifted more electricity costs to off-peak rates, saving money for our customers. To improve customer access to data and

information, we recently completed a three-year metering upgrade project. The investment in this new metering technology enables us to better manage efficiency of the overall system and to supply real-time data directly to our customer’s building automation systems. Today over 50 customers have taken advantage of the opportunity to integrate data from our metering system into their building automation system to help them manage their energy usage. And we took great lengths to increase cyber security for our information systems, thereby protecting overall reliability. We also increased the fortitude of the system through customer growth. We signed 7 new customers, extended contracts with 13 buildings, and connected new customers including

and resources to efforts that positively impacted energy and the environment in Saint Paul, including our shared recognition through the United Nations Environment Programme, the International Energy Agency, and the US Department of Energy. Thanks for your leadership, hard work, passion for the city, and your partnership with District Energy.

The District Energy team is deeply dedicated to our customers and to Saint Paul. We will continue our long tradition of providing our customers and the Saint Paul community with reliable, efficient, and cost-effective energy while we dynamically respond to evolving customer needs. 🌿

the Treasure Island Center, Higher Ground Saint Paul, Palace Theatre, 333 on the Park, and the Minnesota Children’s Museum. The fiscal strength of our business was validated this year when Standard & Poor’s affirmed the A-/Stable rating we originally received in 2013. The strength of our financial strategy has helped us to keep rate increases below the rate of inflation, while continuing to increase our delivered value through investments in system upgrades and integration of new technologies.

We are grateful to our neighbors that work hard year after year to make Saint Paul a thriving community. Our organization is looking forward to working with Mayor Melvin Carter and his team, and we would like to extend our gratitude to the City’s outgoing administration. Thank you to former Mayor Chris Coleman and the City’s first Environmental Policy Director, Anne Hunt. For twelve years, Mayor Coleman and his team committed time



*Ken Smith*  
Ken Smith  
President and CEO



*Mark Rancone*  
Mark Rancone  
Board Chair

## Renewable Energy: Helping Minnesota’s Communities and Natural Resource Management

Environmental stewardship is a core value to our organization. To promote this value, our teams work closely with customers, partners, and through our existing system infrastructure to conserve energy. We also work with our partners to reduce carbon emissions. For 15 years, District Energy has benefited from the waste heat captured from the biomass-fueled combined heat and power (CHP) plant downtown. Why is biomass, or tree waste, so important to our system? Using this local, renewable energy source decreases our dependence on fossil fuels and increases our resiliency, while providing an important service to metro area communities needing to dispose of their tree waste in an environmentally responsible way. Each year the CHP plant turns approximately 270,000 tons of tree waste into renewable electricity and heat. Using this tree waste as a fuel source also keeps more of our customer’s energy dollars in the local economy. Last year, the use of biomass from tree waste kept approximately \$12 million in the local economy.

For our region, the use of tree waste for bioenergy serves several critical functions. Through our affiliate, Environmental Wood Supply, our team works with

cities, counties, private land owners, and businesses who need help dealing with storm-damaged, diseased, infested, and other compromised trees. This also includes providing a destination for waste stream challenges from tree trimming, residential tree waste, habitat restoration, and other processing that leaves behind a low-grade wood by-product. Since 2008 we have helped to curb the spread of Emerald Ash Borer by working with communities and wood haulers that follow guidelines for species containment. We provide an efficient process for managing these wood waste streams, with the additional benefit of converting it to a renewable energy resource. In areas without this alternative, tree waste is often open-burned, causing local air quality issues, or left in piles to rot. This is a less than ideal outcome and misses the opportunity to convert this local resource to usable energy. The use of biomass plays an important part of maintaining our cost competitiveness, decreasing our dependence on fossil fuels, increasing our resilience to volatile fuel markets, lowering our carbon profile, and preserving our ability to leverage the high-efficiency energy capture of CHP. We are proud to be part of providing a local, renewable energy source to Saint Paul. 🌿

### WHY IS BIOMASS, OR WASTE WOOD, SO IMPORTANT TO OUR SYSTEM? USING THIS RENEWABLE FUEL:

- Reduces Saint Paul’s carbon profile.
- Provides a critical service to local communities.
- Leverages a Minnesota resource, which displaces fossil fuels and keeps energy investments local.





“I have enjoyed more than 12 years of working with our customers and welcoming new customers to our heating and cooling system. Our service has proven reliable and dependable and I am proud to be part of the team. When I started we were collecting data through a 1200 baud modem. Today we are using a fiber network and collecting minute data that has greatly improved our ability to help customers understand their building’s performance and opportunities for energy efficiency and related savings. Working closely with building engineers and building owners to reduce their costs is a value I like bringing to the table.

— Jeff Volovsek, Senior Account Manager, District Energy St. Paul



Timberland Partners transformed a historic building into beautiful apartments at **333 on the Park** at the corner of Mears Park. Residents enjoy luxury amenities and amazing views.

# Connected for Good

“The bills don’t lie. The residents are happy to see their utility bills much lower than the other properties that they have lived in previously.

All of our questions and concerns are always answered immediately. Customer service is always quick to walk us through an issue or come on site to show us how.”

— Calsey Smith, Community Manager, 333 on the Park



The **Minnesota Children’s Museum** completed an extensive renovation that reimagines the exhibits and the building. The museum’s 10 all-new exhibits were designed with the philosophy that open-ended, child-directed activities give children the space and freedom to explore and develop the skills they need to thrive.

“The Lowertown Lofts Artists’ Cooperative was one of the first buildings to join with District Energy in 1984.

We have always loved the idea that this is a cooperative venture.

Interestingly, I have been the Lowertown Lofts on-site manager for thirty years and I am an artist. I designed and created the Snoopy Doghouse, ‘Red Hot, Cool Green,’ on display at District Energy’s complex on Kellogg Blvd.

Thanks DE.”

— Marla Gamble, Lowertown Lofts Artists’ Cooperative

“When I joined District Energy in 2017, I knew this team was different. My co-workers recognize the trust the community has put into our system and our team. They work every day to honor that trust by keeping services reliable and cost-effective.”

— Chris Peterson, Director of Production, District Energy St. Paul

“Today, our venues are operating 28% more efficient than average buildings like us in the United States. Much of that energy efficiency has to do with our solid partnership with District Energy and the sustainable programs they offer. We are truly grateful for the steadfast support and guidance of our friends at District Energy.”

— Kate Setley, Saint Paul RiverCentre

“Innovation is key. We work across departments to improve processes and technology to save our customers money without sacrificing reliability.”

— Ron Anderson, Plant Superintendent, District Energy St. Paul



The City of Saint Paul, with partners First Avenue and JAM Productions, opened the **Palace Theatre** as a contemporary music venue in the heart of downtown. Described by the Star Tribune as, “... the Twin Cities’ own rock ‘n’ roll clubhouse.”

“Perseverance paid off when we were successful in accomplishing coincident operation of our two chilled water storage tanks – one at the Nyman Energy Center and one at the 10th Street Plant. This provides added flexibility in our efforts to reduce peak electric usage and to shift our production to lower-cost off-peak energy. In our first summer cooling season with this capability, we were able to reduce our average cost per ton-hour delivered to customers by almost 10 percent.”

— Mike Burns, Senior Vice President, Operations, District Energy St. Paul

“The support from the District Energy team has been phenomenal. I am not used to an energy company reaching out to me and offering help, let alone actually answering my questions and providing solutions on how to save money. This is unheard of at my previous facility in Los Angeles!”

— Dave Pierson, Church of Scientology



The Saint Paul Port Authority and Hempel Companies redeveloped **Treasure Island Center** for offices, health care, retail, and restaurants. TRIA Rink will serve as the Minnesota Wild’s practice facility, Hamline University’s home ice, and an available rink for youth, college, and adult leagues.



“Volunteering for lunch service has been a humbling experience that reminds me to be grateful for all my blessings. Interacting with guests and volunteers has been rewarding, and I plan to continue volunteering for Catholic Charities after I retire.”

-Martha Modrynski, Accountant, District Energy St. Paul

# Partners in Service

The people of Saint Paul are known for their service of others. Along with the municipal, state, and county government, the city is home to hundreds of non-profits, businesses, and residents who value giving back to the community. The development of the Dorothy Day Place project by Catholic Charities of Minneapolis and Saint Paul has stood out as an amazing example of what happens when all of these entities come together to improve the lives of some of our most vulnerable. In January 2017, this broad and dedicated community came together to open the doors to the first phase of the Dorothy Day Place project – Higher Ground Saint Paul –which offers nearly 500 people experiencing homelessness

permanent homes, dignified shelter, and pathways out of poverty. This past summer, during the construction of the new Saint Paul Opportunity Center – the second phase of the project – services were still provided to those in need through Catholic Charities Mary Hall, including medical and mental health care, hot meals, showers, computer lab access, laundry, and employment counseling. District Energy is proud to be a partner to these important facilities in Saint Paul, as their heating and cooling provider. Our employees have also stepped up to assist with lunch services. 🍴

Catholic Charities started work on the new Saint Paul Opportunity Center and opened **Higher Ground Saint Paul**, which provides permanent homes, dignified shelter, and a pathway out of poverty.



Photo: Courtesy of Catholic Charities

## New Meters, Better Information

As building systems have advanced, building owners and managers are leveraging their access to information and tools to take more control over their decisions. Many of our customers are using their building data to drive better building system performance. In response to our customer’s desire for more information, over the past three years our controls team has been working to upgrade customer meters. Now almost all of our meters can provide customers with real-time data. Customers are able to monitor this information by integrating meter data points into their building’s energy management system. The customer integration provides building operators the opportunity to customize alerts or controls to improve performance, increase efficiency, and save money. For our team, the instantaneous data helps us to quickly identify issues and the added volume helps us to analyze trends. This technology investment is helping our customers to get the most value out of their District Energy connection. 📶

New meters can help building operators improve performance, increase efficiency, and save money.

## REVENUES AND EXPENSES

Year-End September 30	FY2017	FY2016	FY2015
<b>HEATING SERVICES</b>			
<b>OPERATING REVENUES</b>			
Net demand revenues	\$ 11,405,148	\$ 10,784,394	\$ 10,897,611
Energy revenues	\$ 6,650,927	\$ 6,193,191	\$ 8,051,397
Other revenues	\$ 963,345	\$ 941,529	\$ 1,098,193
Total operating revenues	\$ 19,019,420	\$ 17,919,114	\$ 20,047,201
<b>OPERATING EXPENSES</b>			
Fuel and energy	\$ 6,650,927	\$ 6,193,191	\$ 8,051,397
Non-fuel operating expenses	\$ 7,547,939	\$ 7,101,545	\$ 7,249,070
Total operating expenses	\$ 14,198,866	\$ 13,294,736	\$ 15,300,467
<b>Operating income before depreciation</b>	<b>\$ 4,820,554</b>	<b>\$ 4,624,378</b>	<b>\$ 4,746,734</b>

<b>COOLING SERVICES</b>			
<b>OPERATING REVENUES</b>			
Net demand revenues	\$ 8,962,803	\$ 8,504,130	\$ 8,556,951
Energy revenues	\$ 3,446,231	\$ 3,763,576	\$ 3,569,823
Other revenues	\$ 11,255	(\$ 1,713)	(\$ 1,935)
Total operating revenues	\$ 12,420,289	\$ 12,265,993	\$ 12,124,839
<b>OPERATING EXPENSES</b>			
Fuel and energy	\$ 3,446,231	\$ 3,763,576	\$ 3,569,823
Non-fuel operating expenses	\$ 5,249,871	\$ 4,997,124	\$ 4,252,684
Total operating expenses	\$ 8,696,102	\$ 8,760,700	\$ 7,822,507
<b>Operating income before depreciation</b>	<b>\$ 3,724,187</b>	<b>\$ 3,505,293</b>	<b>\$ 4,302,332</b>

## RATES AND UNIT SALES

Year-End September 30	FY2017	FY2016	FY2015
<b>HEATING SERVICES</b>			
Demand rate (\$/kW/mo)	\$ 5.37	\$ 5.27	\$ 5.27
Energy rate (\$/MWh)	\$ 24.15	\$ 25.59	\$ 25.59
Fuel adjustment charge (\$/MWh)	(\$ 1.25)	(\$ 4.36)	\$ 0.64
Overall rate (\$/MMBtu, 1700 Util hrs)	\$ 17.82	\$ 17.12	\$ 18.58
Demand (kW) - average	176,510	170,241	171,870
Energy sales (MWh) - actual	294,185	283,259	318,958
Heating season degree days	6,310	6,252	7,449
Energy sales (MWh) - normalized	346,000	336,000	322,000
<b>COOLING SERVICES</b>			
Demand rate (\$/ton/mo)	\$ 27.41	\$ 26.69	\$ 26.69
Energy rate (\$/ton-hour)	\$ 0.098	\$ 0.087	\$ 0.087
Fuel adjustment charge (\$/ton-hour)	(\$ 0.008)	(\$ 0.003)	\$ 0.008
Overall rate (\$/ton-hour, 1200 Util hrs)	\$ 0.365	\$ 0.352	\$ 0.362
Demand (tons) - average	27,211	26,518	26,672
Energy sales (tons-hours) - actual	37,785,631	41,974,384	39,588,241
Cooling season degree days	831	969	802





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