

district energy

st. paul



DISTRICT ENERGY
ST. PAUL™



Stable
rates and reliable
service
delivered to a diverse
customer base.

heating



cooling



District Energy St. Paul provides 80% of the heating and 60% of the cooling to downtown (based on available square footage).

Integration of local
and renewable fuel sources is a
commitment
to a better environment.

Leadership

District Energy St. Paul is recognized throughout North America as a leader in community energy, by providing unmatched benefits to our customers, our community, and the environment. Excellence in customer service, reliability, efficiency, and affordability has earned our non-profit utility the privilege

of supplying the majority of the heating and cooling to downtown Saint Paul. Our team is committed to keeping District Energy St. Paul at the forefront of creative integration and providing the highest value in service for our customers.



Energy dollars
are invested in the
local
community.

Local company
invested in the
success
of the community.



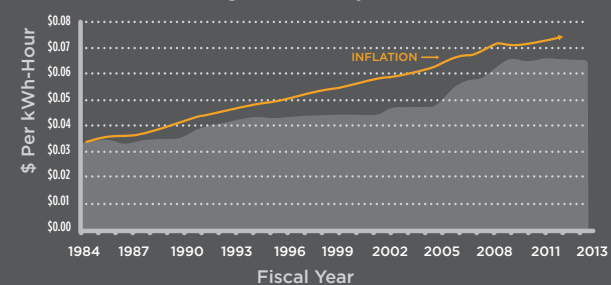
Energy Choice, Business Advantage

District Energy St. Paul offers customers a choice in their energy supply. Customers choosing this unique alternative enjoy reliable hot and chilled water service, excellent customer service, and competitive and stable energy rates. District Energy rates for heating and cooling have remained below the rate of inflation for decades. Our customers also save on capital costs and maintenance. These savings can be invested into a customer's building or the growth of the customer's business.

District Energy rates for heating and cooling have remained below the rate of inflation.

District Energy St. Paul

Combined Heating Rate Summary—1984-2013



District Cooling St. Paul

Combined Cooling Rate Summary—1993-2013

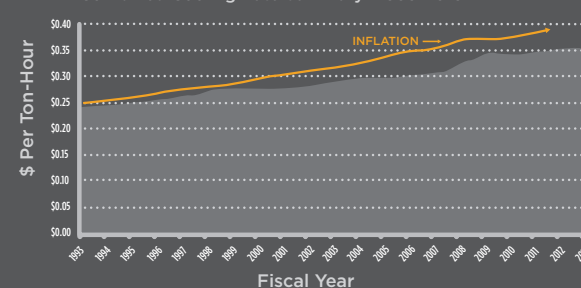
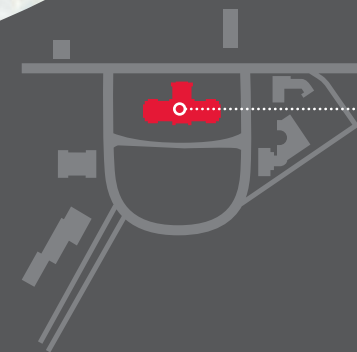
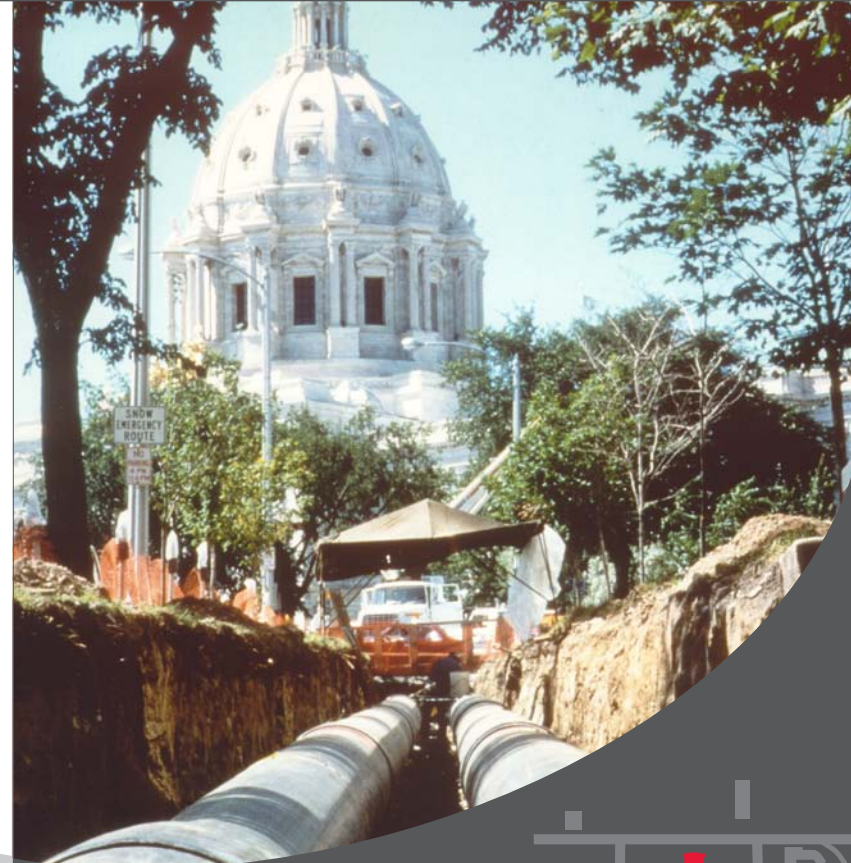


Photo: Teresa Boardman



partners

“The incredible community partnership with District Energy St. Paul has made it possible for the City of Saint Paul to become a leader in sustainability, driving the national conversation on conservation as we strive to improve building efficiency, energy production, and our environment.” Mayor Chris Coleman



Public-private partnerships are the foundation of District Energy’s success. From the initial launch to our ongoing collaboration, our world-class system is the product of a shared vision between the City of Saint Paul, Ramsey County, the State of Minnesota, the Saint Paul Building Owner and Manager’s Association, the Saint Paul Chamber of Commerce, the Saint Paul Foundation, the Department of Energy, and many other public and private partners. Today, our heating and cooling services support the daily needs and crucial functions of Saint Paul’s hospitals, state laboratories, courthouses, secondary schools, higher learning, and historic institutions, increasing the system benefits for customers and the public good.

“District Energy St. Paul is one of our community’s greatest assets, having succeeded in reducing air pollution, increasing energy efficiency, and introducing new renewable energy technologies all while holding the cost of energy stable in Saint Paul.”

Congresswoman Betty McCollum

Customers

District Energy St. Paul understands that our customers need economical solutions for today and stability for the future. Among our proven solutions, District Energy utilizes multiple fuels to provide customers with stable energy rates, saving customers millions of dollars in the past decade.

Community

Local energy is an important value in Saint Paul and for our company. The majority of the heat for the district system comes from local wood residuals, contributing millions to the local economy each year. Local jobs, local resources, and local commitment build strong ties between District Energy and the people we serve.

Environment

District Energy St. Paul is committed to environmental stewardship, use of renewable resources, and energy-efficient systems, such as chilled water storage, renewable CHP, and integration of solar thermal. Furthermore, our teams working in the plant and distribution system strive to achieve optimal system efficiencies to reduce fuel inputs needed to serve our customers.



National Park Service volunteers clear brush, storm-damaged trees, and invasive species such as Buckthorn along the Mississippi River Valley. Urban wood residuals such as these are processed into fuel for use in the combined heat and power plant, which provides the majority of the heat for the district system.

Photo: Courtesy of National Park Service



of all touring attendees were
energy professionals

30% students +
professors

customers → **15%**
15% —government



MORE THAN 2,500
VISITORS IN LAST 5 YEARS

Outreach & Education

District Energy St. Paul's team is active in the community, including the Building Owners and Managers Association, Rotary Club of Saint Paul, and both the Saint Paul and Minnesota Chambers of Commerce. Additionally, District Energy is committed to educating the public about energy through community programs, speaking engagements, and tours. Our staff volunteers for the annual Living Green Expo and the Sustainability Stage at the State Fair. Both events emphasize public education and showcase solutions for a better environment and a better Minnesota.

District Energy St. Paul's expertise results in on-going

requests to share our best practices and insights with planners, researchers, students, and industry partners.

District Energy St. Paul conducts dozens of tours each year with heightened interest since the integration of solar thermal into our district system. The hundreds of visitors to our plant and solar installation include customers, college students, operators of other systems, local, state and national elected officials, international energy experts, and economic development leaders eager to learn about the technologies and how to develop and sustain a community energy system.

the science & sustainability district



Downtown Saint Paul is the only place in the country to find an integrated showcase of efficient and renewable energy technologies, including combined heat and power, solar hot water, biomass, district cooling, district heating, and thermal storage. Behind these technologies are District Energy's public and private partners, leading the country with innovative conservation programs and unique educational opportunities.

Integrated Energy Model

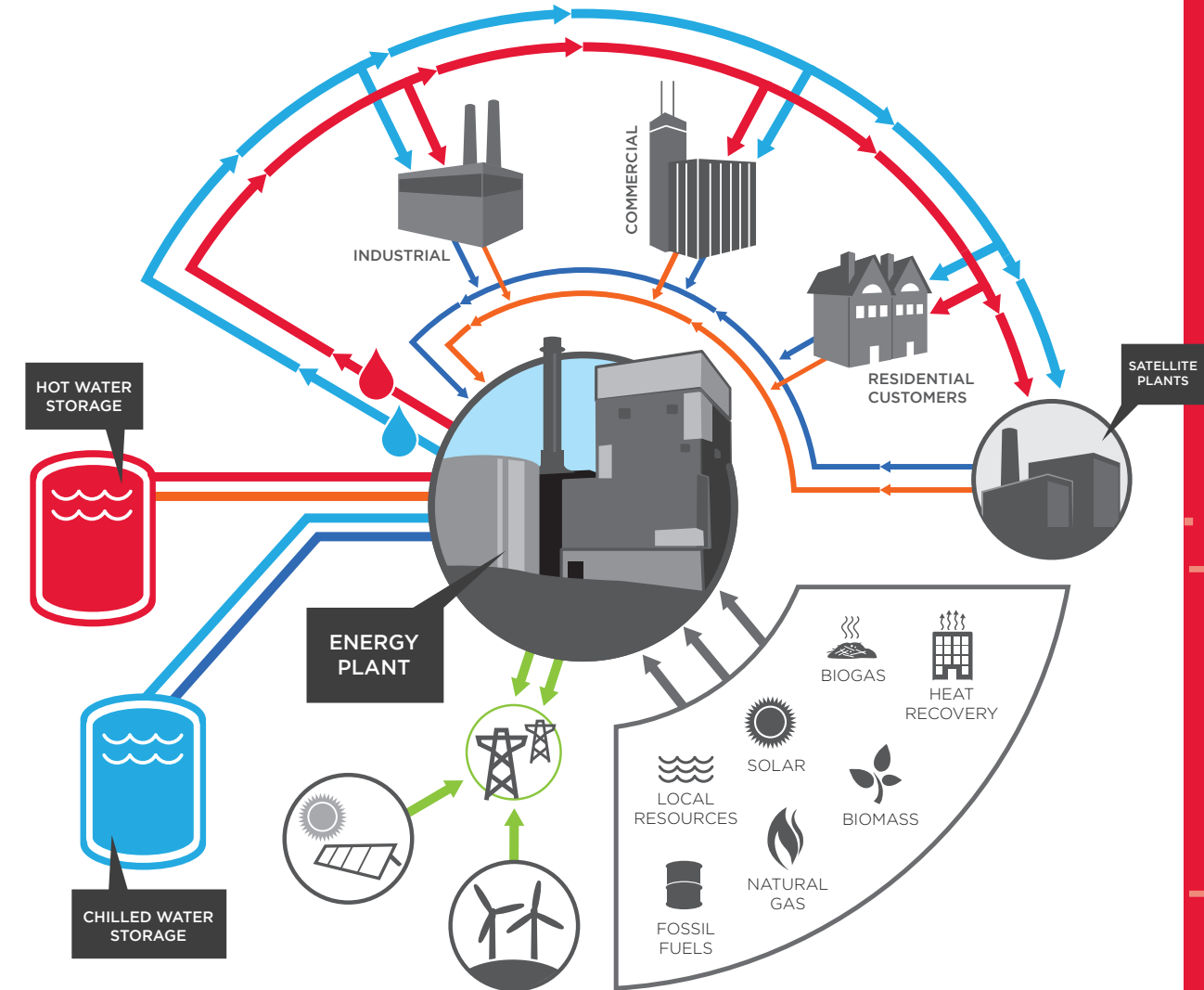
Integration is the hallmark of District Energy St. Paul's system. Many district energy systems around the world focus on one service offering and one fuel source. From its inception, District Energy St. Paul has envisioned a future that used district heating and cooling infrastructure to integrate a variety of local, renewable energy sources, and technologies. That vision continues today. Our customers benefit from an

integrated system that offers fuel flexibility, advantages for green certifications, load shifting to reduce costs, and helps the community realize the full potential of renewable energy and energy conservation technologies.

District Energy St. Paul continually moves toward this vision for our systems. Although District Energy St. Paul's system integrates cooling, thermal storage, and solar thermal, the system is most famous for integration of waste heat from

the biomass-fueled combined heat and power plant. Biomass and waste heat integration enables the heating system to be primarily renewable and gain two energy products from the same fuel. This showcases the integration potential of locally available resources that can also drive rate stability.

Not content with the status quo, we continue to evaluate options for advanced heat recovery, solar cooling, and integrating excess heat from other sources for our system.



timeline

