



Connecting to District Energy in Lincoln

Lincoln is currently served by a nonprofit, local district energy agency, developed by the city of Lincoln and Lancaster County, and currently operating as the District Energy Corporation (DEC). DEC is actually made up of three district energy systems in downtown Lincoln, each with a distinct set of stakeholders and serving a different set of public institutions. The mission of DEC is to provide innovative, efficient, and low-cost heating and cooling utility services to facilities in the Lincoln community. The reliable and efficient infrastructure and resources DEC provides today can help foster economic development of the greater Lincoln area tomorrow by providing efficient low-cost thermal services to even more buildings.

How Does this System Work for Lincoln?

District energy heating and cooling systems are used throughout the world to increase energy system reliability and efficiency. Hot water, steam, or chilled water are produced at a central plant or several satellite plants and piped underground to surrounding buildings. Energy is transferred at the building via a small energy transfer skid (heat exchanger), typically no larger than an office desk, for space heating, space cooling, domestic hot water heating, process heating, and process cooling.

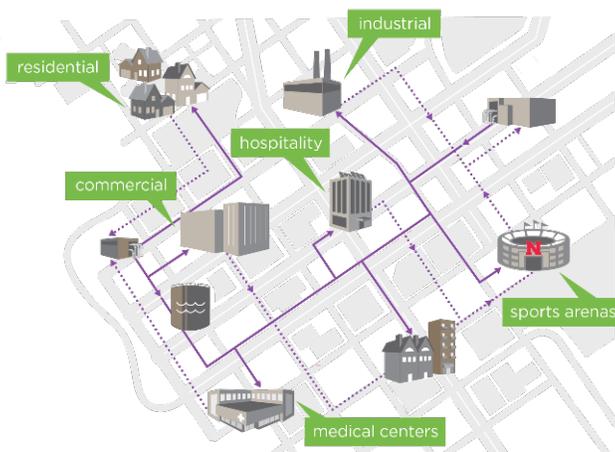
District energy systems have proven to be an efficient and cost-effective way to meet the heating and cooling needs of multiple buildings and often increase the use of renewable energy technologies.

Expanding Lincoln's district energy system will allow the city of Lincoln and District Energy Corporation (DEC) to increase the financial, environmental, and community benefits that district energy systems provide.

CURRENT CUSTOMER BASE

DEC systems currently serve close to 2.8 million square feet. These services are provided to several downtown buildings, including the State Capitol, Pinnacle Bank Arena, Canopy Lofts, the Hall of Justice, the Railyard, Olsson Associates Headquarters and the Hyatt Hotel.

DEC has contracted with Lincoln Electric System to provide administrative, financial, engineering, operations and general corporate functions. DEC has also secured Ever-Green Energy to support system growth.



Benefits of District Energy

- **Reliable**–24/7/365 energy production oversight and equipment redundancy.
- **Efficient**–Save energy and money for your facilities and operations.
- **Cost-effective**–District energy increases the stability and predictability of your energy usage.
- **Space-efficiency**–A small mechanical interface conveniently frees up leasable, usable space.
- **Fuel flexibility**–Provides access to multiple fuels to buffer your operations from fluctuating fuel markets, increases fuel availability, and creates opportunities for renewable integration.
- **Staffing flexibility**–Operations staff will have more flexibility to work on other facility projects when freed up from boiler and chiller maintenance.



DEC Master Plan - What's Next for the System

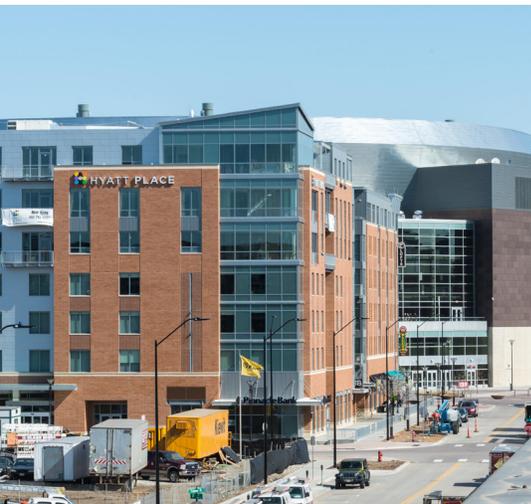
The current operations and management model for the three downtown DEC systems works efficiently and seamlessly. Expanding Lincoln's district energy system will allow the city of Lincoln and DEC to increase the financial, environmental, and community benefits that district energy systems provide.

To further this growth, LES worked with Ever-Green Energy to evaluate the system and design a path forward for growth and system advancement to better serve customers and the community. This process included developing detailed plans for the system's infrastructure development, future energy assets, and a financial plan for the system to provide cost-competitive service at affordable rates.

From this process, the following opportunities were identified and will be part of an ongoing conversation between DEC and facility managers, businesses, and organizations in Lincoln:

- Identifying cost savings opportunities to help save on energy rates on the system and at customer buildings.
- Provide Lincoln businesses access to lower energy costs and a more reliable energy supply.
- Work with the city of Lincoln and developers to offer district energy to new developments, helping them avoid up-front capital costs.
- Coordinate with other major construction projects to make the most of major infrastructure investments in Lincoln.
- Leveraging recent technology advancements to help the system operate more efficiently and reliably, such as distribution piping alternatives or connection stations at customer buildings.

DEC is now reaching out to Lincoln businesses and developers to begin these system advancement discussions.



Learn More

To learn more about the project, connect with Keith Henning at 402.473.3453 or khenning@les.com. Our team members will be reaching out to members of the Lincoln community to discuss your operations and help you evaluate how this system can benefit you.