HENNEPIN COUNTY MINNESOTA

Memo

To: Board of Commissioners

From: David Hough, County Administrator

Lisa Cerney, Assistant County Administrator Public Works

Date: January 23, 2024

Re: County's efforts in renewable energy

This memo provides information about the county's investments in renewable energy sources, like solar, hydro, and geothermal/geo-exchange technologies, to replace the energy produced at HERC. There are statutory limitations on the county's ability to produce energy from renewable sources that is limited to the county producing only for the county's own consumption.

Renewable energy in county operations

As a large organization and a consumer of energy, Hennepin County can have an impact in reducing greenhouse gas emissions through efforts to invest in renewable energy, reduce energy use, and improve energy efficiency in buildings. The county's Climate Action Plan includes a strategy to transition to renewable energy sources in county operations by investing in on-site solar, heat pump technologies, and building electrification.

Solar

The county has a Climate Action Plan goal that 10% of total community electricity use comes from on-site solar by 2030, and Facility Services is ensuring that goal is reflected in county facilities. The county hired a consultant in 2022 to assess county facilities for on-site solar potential. Based on the consultant's findings and other relevant factors, like project schedules, Facility Services will add on-site solar arrays in 2024 at the Adult Corrections Facility, North Regional Library, Ridgedale Regional Center, Rockford Road Library, and St. Louis Park Library. With additional facilities such as Northpoint Health and Wellness Center, Sheriff's Headquarters, Southdale Library, Westonka Library, and others to follow in coming years, Facility Services is on a clear path to reach its on-site solar goal.



Heat pumps/geothermal

The county is accelerating the installation of heat pumps, which includes geothermal systems, to reduce fossil fuels used for heating, cooling, and hot water in county facilities. Currently, four county buildings – the Emergency Communications Facility, Maple Grove Library, Nokomis Library, and Plymouth Library – have geothermal systems. Four additional projects have been identified for the coming years at the Public Safety Services Headquarters, Rockford Road Library, Southdale Library, and Westonka Library. In addition, a Request for Proposals for a geothermal feasibility study for the downtown campus will be released in Q1 2024.

Electrification

Transitioning to electricity for heating, cooling, and hot water needs in county buildings is another key pathway to moving away from fossil fuels and reducing emissions. The county has commissioned two studies to guide future efforts to electrify and decarbonize county buildings – a decarbonization master plan for the Hennepin County Energy Center and a broader study, completed in 2023, with recommendations for future decarbonization of county buildings.

Energy conservation

In addition to increasing the use of renewable energy and moving away from fossil fuels, the county is focused on energy conservation and efficiency through actions like retrofitting buildings, adopting energy efficient technology, and continuously commissioning buildings to meet our greenhouse gas emission goals.

External to county operations

The county can also influence energy planning, policies, and regulations to make carbon-free electricity more widely available and feasible for both county operations and for residents and businesses. Hennepin County's legislative platform includes support of 100% carbon-free electricity by promoting renewable sources like wind, solar, hydroelectric, and geothermal, along with weatherization and energy efficiency in homes.

The county is also working to incentivize renewable energy projects and promote weatherization. The county works with MinnPACE to offer an innovative option for property owners of commercial buildings to invest in renewable energy or energy efficiency upgrades with no upfront costs by financing on a special tax assessment. Furthermore, the county is launching a pilot to initiate weatherization in low-income households, which will reduce emissions while ensuring that families are more resilient to extreme temperatures.

Legal limitations

The county is statutorily limited both in its operation of a district heating system and in production of electricity derived from renewable sources. If the county were to contribute geothermal heating, cooling, and hot water capacity to its existing district heating system, for example, it should continue doing so for the purposes of heating, cooling, and providing hot water to its own buildings, as the current system does. There is no express statutory authority permitting a county to produce heating, cooling, and hot water resources, however derived, for sale to private customers.

What's next

We will continue to implement our Climate Action Plan strategies, and you can expect to see continued progress about these efforts through the Capital Improvement Program and specific projects, upcoming contracts, and grant awards.

Please let us know if you have any questions. Thank you.