

Sustainability workshop offers view of future

sustainability
workshop at
Turner Hall
Thursday drew a
variety of individuals
including local
business and industrial
leaders, educators and
interns from as far
away as Germany.

"The workshop was created to create a community-driven sustainability council to help New Ulm advance in the Minnesota GreenStep

Cities program," said New Ulm Public Utilities (NUPU) Energy Services Representative Derek Nelson.

A free, voluntary challenge, assistance and recognition program managed by public-private partnerships, GreenStep Cities helps cities achieve sustainability and quality-of-life goals.

Twenty-nine best practices can be implemented, as

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decided by city elected officials, staff and community members, by completing one or more actions at a 1, 2, or 3-star level. The voluntary actions are tailored to all Minnesota cities, focus on cost savings and energy use reduction and encourage civic innovation.

The City of New Ulm joined the GreenStep Cities program in

April 2021 and has reached the second of five recognition steps.

Nelson said the (New Ulm) EDA (Economic Development Authority) has received federal and state money to install solar (panels) at seven locations, the largest one, at the Broadway Haus, 300 N. Broadway.

"A few months back, University of Minnesota graduate students looked at the New Ulm City Hall building and analyzed it for solar installation," Nelson added.

He said the City of New Ulm is looking at solar power sites including about 80 acres of land near the airport.

"Not all 80 acres would be used for a pilot project," said Nelson.

WORKSHOP continued to page 2...



...WORKSHOP from page 1

A Minnesota Mining and Manufacturing (3M) engineer said the company is buying 100% renewable electricity from NUPU, and is landfill-free, recycling waste or sending it to a Mankato waste-to-energy facility.

New Ulm Kraft Heinz Manager Darrin Buegler said the plant has greatly reduced energy use a number of ways.

New Ulm City Council President and Turner Hall Executive Director Andrea Boettger said the City of New Ulm is considering sits for an aerobic digester (where microorganisms break down biodegradable material in the absence of oxygen to manage waste or produce fuel).

"New Ulm has the perfect mix of industries to do this, with 3M, Kraft, Schell's and Firminich," she said.

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I'm really excited to lead the community in exploring this. Who doesn't want to be more energy efficient? We aren't telling people what to do. We're just sharing information. We can go down the path of change or changes will happen to us."

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doesn't want to be more energy efficient? We aren't telling people what to do. We're just sharing information. We can go down the path of change or changes will happen to us," Boettger added.

Chris Steffl, a 3M manufacturing engineer, said he put solar panels on his home, bought energy efficient appliances and an electric vehicle.

"I hardly use any natural gas to heat my home in the winter. I save lots of water with an energy efficient washer," said Steffl.

Prof. Christof Wetter of Muenster University of Applied Sciences said his research includes robot use in agriculture and converting diesel engines to burning ammonia.

Wetter talked about a Saerbeck, Germany energy park in that has been visited by more than 130,000 people since it opened in 2006. The park includes a large natural area and education center for students.

"Our goal is to be climate neutral by 2030. It's about people and education. German kindergarten students study it. More than 3,000 students visit the park each year," he added.

Muenster University graduate student Jan Fecke presented research on converting gas and diesel engines to burning 80% ammonia and 20% hydrogen. He said a converted engine would not emit carbon dioxide and fuel could be produced for about 90 cents a gallon in the United States. Challenges include NOx (nitrogen oxide) emissions.



Tree Pruning, Remova and Planting Permit

Do you have a tree or shrub located on the boulevard, rights of way, or easment areas adjacent to your property that requires pruning or removal? Need to plant a tree?

Complete an easy online Tree Permit application at **newulmmn.gov/303/Tree-Advisory Commission.**

Adjacent property owners and tree service professionals licensed by the City of New Ulm can apply for a permit at no cost.



Region 9 Development Commission tours NUPU





Region 9 Development Commission embarked on their annual bus tour visiting and learning about a variety of industries and organizations in the area.

The annual bus tour is an opportunity to highlight innovative projects to spark conversations and inspire local leaders. New Ulm's District Heating and New Ulm Public Utilities offered a great example. The city's district heating is unique

to the region, but it is common in Scandinavian countries due to its lower cost, increased reliability, and reduced emissions.

Glen Hillesheim, Power Plant Supervisor and Chief Engineer, led the group on a tour of the facility and Utilities Director Kris Manderfeld, gave a presentation about the history of New Ulm Public Utilities.

"At the beginning of the 20th century, there was a lot of dissatisfaction with the New Ulm Electric Light Company and the rates they were charging," explained Manderfeld. "The city council decided to investigate the feasibility of installing their own municipal light plant. On April 2, 1901, the community voted 10-to-1 in favor of building their own light plant. The plant began operating in August of 1903."



* MEETING MINUTES

NUPU Commission

July

- ✓ Presentation by New Ulm Public Utilities Intern Katharian Reiswich.
- ✓ Receive and order filed the purchase of consulting services for a study of HVAC system of NUPU Administration building.
- ✓ Accepted quote for Phase 1 installation of Verkada security camera system on NUPU facilities.

June

- ✓ Received annual financial report for the fiscal year ended December 31, 2023 for New Ulm Public Utilities Commission.
- ✓ Received and order filed the purchase from Thermal Process Systems for odor control media replacement for ATAD (Autoheated Thermophilic Aerobic Digestion).
- ✓ Authorized City Manager to accept letter of recommendation from Bolton and Menk selecting In-Control of Fridley, MN to be the Control System Integrator for the New Ulm Wastewater Department.
- ✓ Authorize the City Manager to sign the proposal for Wastewater Department Arc Flash Analysis from Power System Engineering, Inc. (PSE).
- ✓ Accepted quote from Hach Company for Turbidimeter and accessories replacement.
- ✓ Received and order filed the purchase of a Ford F-150 4X\$ crew cab pickup from Chuck Spaeth Ford.
- ✓ Authorized the proposal from Power System Engineering, Inc. (PSE) to develop plans and specs, acquire and oversee the replacement of the Remote Terminal Unit (RTU) at the South Side Substation.
- ✓ Authorized the proposal from Power System Engineering, Inc. (PSE) to develop plans and specs, acquire and oversee the replacement of the Remote Terminal Unit (RTU) at the Xcel West New Ulm Substation.
- ✓ Authorized the proposal from Power System Engineering, Inc. (PSE) to develop plans and specs, acquire and oversee the replacement of the Remote Terminal Unit (RTU) for the Heartland connection.
- ✓ Authorized the City Manager to accept the proposal from Power System Engineering, Inc. (PSE) to model and access the transmission coordination.

Dehumidifier

Facts & Stats

- *A dehumidifier that has earned the ENERGY STAR label removes the same amount of moisture as a conventional until, but uses almost 15% less energy.
- ★ A standard dehumidifer uses ab out the same amount of energy as a refrigerator and clothes washer combined, so it pays to find an ENERGY STAR certified option.
- Reducing sources of moisture can reduce your need for a dehumidifier, or allow you to use it less often. Here's how:
 - Improved the drainage around the foundation of you home by extending downspouts from your gutters and keep gutters and downspouts clear from debris.
 - Ensure that clothes dryers and properly vented outside.
 - Use vent fans in bathroom and kitchens to remove humidity at the source.

Get more great tips at engergystar.gov.

REMEMBER! NUPU offers rebates on ENERGY STAR certified dehumidifiers. Find more details and apply for rebates at newulmmn.gov.



Do you have symptoms of excess moisture in your home?

Symptoms include:

- Condensation on windows during the winter.
- Excessive mildew in the bathroom.
- Mold growing on interior surfaces (corner of a closet, kitchen or bathroom).
- Peeling, cracking or blistering paint on exterior or interior finishes.
- Dust allergies (caused by dust mites).
- Indoor activities such as bathing, cooking, dishwashing and just breathing all produce moisture.

Other moisture sources in the home include:

- Plants.
- · Humidifiers,
- · Stored firewood.
- Plumbing leaks.
- Unvented appliances.
- Outside air during humid weather.
- Damp soil under basements and crawlspaces.
- Relative humidity
- Relative humidity is the amount of moisture in air at a given temperature. Keeping relative humidity lower helps to reduce moisture problems in homes.

When the relative humidity is more than 50%, moisture problems may occur. Generally, in cold winter conditions the relative humidity levels need to be low to prevent condensation and potential damage to the structure of the house and to discourage mold growth, which can cause allergies and respiratory problems.

Keeping the relative humidity at 25% (winter) to 50% (summer) is generally considered healthy and comfortable for people and better for the house.



Identify the source of moisture problems

To control a moisture problem, you must first identify and remove the source. If that isn't possible, then use a dehumidifier or ventilate the house by opening windows or adding a ventilation system.

How to reduce or eliminate high moisture levels in your home:

- Reduce sources of water evaporation (bathing, cooking, humidifiers, etc.).
- Install or inspect and repair exhaust fans in your bathrooms.
- Install an exhaust fan in the kitchen to remove moisture caused by cooking.
- Bring dry outdoor air into the home to replace stale, moist air that is being exhausted.
- Check that exhaust ventilation systems are working properly.
- Consider adding a whole house ventilation system.
- In winter, temporarily open windows just a little to allow warm moist air to leave the home and allow cold, dry air to come in.
- In summer, use a properly sized airconditioner or stand-alone dehumidifier to reduce indoor humidity.
- Seal openings that might allow warm, moist air to enter walls, ceilings and the attic where it may become a cause of structural damage to the home.

Source: University of Minnesota Extension



The municipal Advantage

id you know that heat pumps can be utilized by water heaters? If you prefer an electric water heater, heat pump water heaters are the way to go! Heat pump water heaters use electricity to move heat from one place to another instead of generating heat directly. Therefore, they can be two to three times more energy efficient than conventional electric resistance water heaters. To move the heat, heat pumps work like a refrigerator in reverse.

While a refrigerator pulls heat from inside a box and sends it into the surrounding room, a stand-alone air-source heat pump water heater pulls heat from the surrounding air and transfers it — at a higher temperature — to heat water in a storage tank. You can purchase a stand-alone heat pump water heating system as an integrated unit with a built-in water storage tank and back-up resistance heating elements. You can also retrofit a heat pump to work with an existing conventional storage water heater.

Heat pump water heaters require installation in locations that remain in the 40°-90°F (4.4°-32.2°C) range year-round and provide at least 1,000 cubic feet (28.3 cubic meters) of air space around the water heater. Air passing over the evaporator can be exhausted to the room or outdoors.

Heat Pump Water Heaters More Energy Efficient



Heat pump water heaters will not operate efficiently in a cold space since they tend to cool the space they are in. Installing them in a space with excess heat, such as a furnace room, will increase their efficiency.

You can also install an air-source heat pump system that combines heating, cooling, and water heating. These combination systems pull their heat indoors from the outside air in the winter and from the inside air in the summer. Because they remove

heat from the air, any type of airsource heat pump system works more efficiently in a warm climate.

Homeowners primarily install geothermal heat pumps — which draw heat from the ground during the winter and from the indoor air during the summer — for heating and cooling their homes. For water heating, you can add a desuperheater to a geothermal heat pump system. A desuperheater is a small, auxiliary heat exchanger that uses superheated gases from the heat pump's compressor to heat water. This hot water then circulates through a pipe to the storage water heater tank in the house.

Desuperheaters are also available for tankless or demand type water heaters. During summer, the desuperheater uses the excess heat that would otherwise be expelled to the ground. With frequent operation during the summer, the geothermal heat pump may provide most of a person's hot water needs.

During the fall, winter, and spring -when the desuperheater isn't
producing as much excess heat -you'll need to rely more on your
storage or demand water heater.
Some manufacturers also offer triplefunction geothermal heat pump
systems, which provide heating,
cooling, and hot water. They use a
separate heat exchanger to meet all
household hot water needs.



• Storage Water Heater <u>\$100</u>

Instantaneous Water Heater \$175

ONLINE FILLABLE FORMS:

forms.ci.new-ulm.mn.us/Forms/WaterHeaterRebate OR PICK UP PAPER FORMS:

NEW ULM PUBLIC UTILITIES 310 1ST N. ST., NEW ULM, MN

Questions call: 507-233-2110

AT YOUR SERVICE Employees of the Month Honored

Scott is honored for this **SCOTT** recognition for all the **KNISLEY** extra things he does on Journeyman the job. Scott will step Lineman up and take over the **Electric Dist** Dept. crew chief responsibilities when the crew chief is absent. He is very good at teaching and instructing the less experienced linemen. Scott has a positive attitude, and when it comes to quality of work, he always exceeds the standards that have been set by the department. Scott is a valuable part of the team.

As

C DEPT.

2025 REBATE & CONSERVATION CALENDER THEME

NewUlm COOKS!

New Ulm Public Utilities 2025 Rebate & Conservation Calendar will feature customers' family meal memories, cooking tips, short recipes, and photos of food creations, families and friends gathered for picnics, holidays and meals, etc.

Only high resolution digital photos will be accepted. If you have prints only , feel free to take cell phone photos of them. Please provide a caption with photos describing food, event, or activity. You may choose to identify the people in the photo at your discretion. Photos from past or present events accepted. You must be a PUC customer to enter but people in the photos do not need to be New Ulm residents.

All entries must include your name. Food tips, memories and recipes must be short. Photos do not necessarily need to accompany tips, memories, recipes.

We reserved the right to edit or reject as space allows.

● Email tips, short recipes, memories, and high resolution digital photos to: DerekN@newulmmn.gov.

Submissions accepted until September 30, 2024.







NEW ULM PUBLIC UTILITIES

QUICKFACT

✓ HVAC

Rebate amount dependent upon what ASHP (air source heat pump) is replacing.

REBATE AMOUNTS:

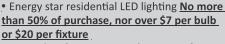
- Electric Heat **\$900-\$2,200**
- Air Source Heat Pump \$125-\$500
- Through Wall Heat Pump \$200-\$700
- Natural Gas or Other \$100-\$200 Rebate will not exceed 50% of equipment cost

✓ ENERGY STAR APPLIANCES ✓ LED LIGHTING

Appliances, ceiling fans and bulbs must be Energy Star certified to qualify for a rebate.

REBATE AMOUNTS:

- Clothes washer \$50
- Electric clothes dryer \$50
- Dehumidifier \$15
- Dishwasher **<u>\$25</u>**
- Refrigerator \$40
- Freezer \$40



ENERGY STAR

• LED ceiling fans No more than 50% of purchase, nor over \$15 per fixture

✓ DISTRICT ENERGY STEAM HEAT

Eligible customers include existing district heating customers and potential customers within immediate reach of the district heating system

REBATE AMOUNT:

50% up to \$7,500 for repairs and modernization efforts to building and heating systems including steam traps and trap parts, valves, steam pipe insulation, zone controls, steam coils, and duct work.

✓ HOLIDAY LED LIGHTS

Rebates will ONLY be given for each string of LED lights whose purchase price was \$5.00 or more per string with minimum of 25 lights per string.

REBATE AMOUNT:

<u>\$5</u> (Chamber Dollars) per string with five strings per customer

✓ CENTRAL AIR CONDITIONING CLEAN & CHECK

Must be performed at locations connected with electric service supplied by New Ulm Public Utilities and be performed by an HVAC professional.

REBATE AMOUNT:

\$40 credit to your utility account.

✓ FURNACE/BOILER CHECK & CLEAN

Check & clean must be performed at locations connected with natural gas service supplied by New Ulm Public Utilities and be performed by a professional HVAC or boiler service technician.

REBATE AMOUNT:

\$25 credit to your utility account

✓ COMMERCIAL LIGHTING

All products must be installed in existing facilities in NUPU's service territory The lighting retrofit must provide a net reduction in kWh usage from that of the existing lighting system.

REBATE AMOUNT:

\$0.30 for each watt saved

NEW ULM PUBLIC UTILITIES

✓ WATER HEATER REBATE AMOUNTS:

• Storage Water Heater: \$100• Instantaneous Water Heater: \$175

✓ FURNACE REBATE AMOUNTS:

- Furnace new construction: 95% AFUE \$12597% AFUE \$150
- Furnace retrofit:92% AFUE **\$100**95% AFUE **\$275**

✓ THERMOSTAT REBATE AMOUNTS:

- Smart Thermostat Non Energy Star WiFi enabled: \$30
- Smart Thermostat Energy Star WiFi enabled: \$75

✓ CENTRAL AIR REBATE AMOUNTS:

• Central AC and mini split ac systems:

Cooling Capacity 14.5 15.0 16.0 17.0 18.0 19.0 20.0 21.0 22.0 and over 20,000 btu/h or less \$100 \$120 \$ 140 \$160 \$180 \$200 \$220 \$240 Formula-see below Over 20,000 btu/h \$200 \$200 \$220 \$240 \$260 \$280 \$300 \$320

20,000 btu/h or less formula: \$100 + [(Actual SEER - 14.5) x \$20]; Over 20,000 btu/h: \$200 + [(Actual SEER - 14.5) x \$20]

■ REMINDER!

Rebate amounts dependent on minimum qualifications. Rebates are only given when funds are available and during the calendar year in which items were purchased, installed, or when an action occurred, to NUPU customers only. NUPU's Conservation Improvement Program, expenses, and energy savings associated with activities need to fall within the same year, and reported for the year in which they occur. If funds run out within that year, no rebates will be available. Rebate submissions are accepted until January 31 of the following year for the prior year purchases.

New Ulm Public Utilities 310 1st North Street New Ulm, Minnesota 56073 PRSRT STD US POSTAGE PAID MANKATO, MN PERMIT 609



Advantage

NEW ULM PUBLIC UTILITIES JULY-AUGUST 2024 NEWSLETTER

INSIDE









NEW ULM PUBLIC UTILITIES 310 1st North Street

MAIN NUMBER	233-2110
Billings & Connections	359-8259
Administration	359-8264
Electric Distribution Dept	359-8295
Gas Dept	359-8289
Material Distribution Center	233-2134
Power Plant Chief Engineer	233-2128
Power Plant Operator	233-2129
Utilities Director	359-8264
Wastewater Treatment Plant	359-8360
Water/Steam Dept	359-8279
AFTER HOURS ALL CALLS	359-8204