

Q2 2024

Progress Highlights

We are over halfway through our first year of active market deployment for our Efficient Technology Accelerator (ETA) program as we work to accelerate adoption of residential air source heat pumps (ASHPs), High-Performance Windows, commercial Luminaire Level Lighting Controls (LLLCs) and Next Gen Rooftop Units. So far, we've focused on:

- Building our team of market transformation experts (8 new staff this year)
- Increasing our engagement with market actors across all initiatives (active engagement with over 225 market actors)
- Facilitating 4 technology pilots to increase experience and knowledge of technologies, while we continue to recruit for more
- Continuously improving our market education and support efforts by delivering 14 trainings to roughly 480 trade professionals
- Launching new websites, resources, and market research

We're honored to be doing this work and continue to work hard every day to save energy on behalf of the state and our utility partners.



Spotlight: Next Gen Rooftop Units

Our team is excited that our newest initiative passed into full-scale market development in April of this year, our Next Gen Rooftop Unit program. Rooftop units (RTUs) are the workhorse in commercial HVAC, where 80% of the commercial buildings in MN have RTUs, yet there has been little to no innovation in this technology for decades. This presents a tremendous opportunity to increase energy efficiency and reduce carbon emissions by converting to Next Gen RTUs, not to mention a golden opportunity for market transformation.

The Next Gen Rooftop Unit program is focused on the following technology, which can reduce HVAC energy use by 50%:

- **Dual Fuel Heat Pump RTUs:** Includes a heat pump rather than a one-way air conditioner as part of the packaged unit. This can include a gas burner or electric resistance for the auxiliary heating component. The heat pump can be anywhere from 200% to 400% efficient, delivering huge energy and carbon savings.
- **Energy Recovery Ventilators (ERVs):** ERVs use waste heat to pre-condition the intake air and increase the overall efficiency of the system by up to 30%. These can be packaged with a heat pump RTU or a traditional RTU, and can also be added to existing systems, broadening the scope of possible energy savings.

We are thrilled to welcome Leah Guenter to our team who is taking the helm as the initiative manager for this program. She brings her extensive commercial construction background to our team and is excited to begin working on the following strategies in the years to come:

- Conducting research and pilots to understand how to best optimize energy performance
- Partnering with manufacturers to increase product availability
- Delivering market education and training
- Increasing awareness and pull from purchasers
- Building value proposition by highlighting incentives and beneficial rates that can lower operating costs
- Collaborating nationally to raise the profile of the technology and create national pull
- Working to advance codes that will ultimately transform the commercial heating and cooling market toward the next generation of RTU equipment

To learn more about Next Gen RTU's contact Leah at Nextgentu@etamn.org.

Looking Ahead

For the rest of 2024, our teams will be working hard to complete our goals set for our first year in market deployment. We also are working to advance a new initiative for market deployment related to MN codes and standards advancement, which will raise the bar for efficiency across all our portfolio and sectors. We also continue to evaluate technologies to support the Gas Heat Pump Initiative. We look forward to our continued partnership and vision of bringing lower energy bills and environmental benefits to all Minnesotans.



Leah Guenter, Initiative Manager, Next Gen Rooftop Units



U.S. Department of Energy (DOE) and National Renewable Energy Laboratory (NREL) met with ETA staff at Minneapolis nonprofit PRG Inc



CEE research staff installing RTU monitoring equipment