

PROCESS IMPROVEMENTS

The Future Focus team implemented various process improvements in Q3 2024 including:

- Finalized a SOW template for Pilot Projects.
- Finalized a SOW template for Emerging Technology Accelerator Projects.
- Continued to develop refreshed content for a new Future Focus landing page.

ACTIVE PROJECT SPOTLIGHT #1

Air-to-water Heat Pump Pilot

This research project will assess AHP retrofits in three (3) residential single family and one (1) multifamily buildings in Wisconsin and residential new construction. The team will oversee procurement, installation, and monitoring of the AHP systems in the identified residences. A final report of the findings and a draft of a workpaper for the technical-reference-manual will be completed by December 2025.

Project launch: October 2023.

Project timeline: 2 years.

Project highlights to date include:

- A multifamily site has been identified and project planning is underway. The AHP system is scheduled to be installed by the end of the year.
- Three single family sites have been identified but have yet to be confirmed. Two of the sites are existing homes with the remaining site a new construction home.
- Recruitment has generally been a challenge due to the complexity of the design of the system and the possibility of expensive upgrades to electrical panels. Builders and Trade Allies have expressed interest though for the high savings potential of these systems, which provide heating and cooling and can provide domestic hot water.

ACTIVE PROJECT SPOTLIGHT #2

Empowering Faith Communities

This pilot aims to deliver energy-efficient products and services to customers in hard-to-serve communities, achieving energy savings, high customer satisfaction, and long-term impacts, including non-energy benefits. The pilot will offer targeted incentives and services tailored to faith-based organizations and their congregations, including energy assessments, enhanced incentives, customized workshops, and connections with Trade Allies.

Project launch: anticipated fall 2024.

Project timeline: ~2 years.

IDEA SUBMISSIONS IN REVIEW

The following ideas continue to be in review:

1. Research Barriers to Net Positive Schools in Wisconsin: this idea seeks to identify existing barriers to the development of net positive schools. Net positive schools seek to minimize the cost of ownership by maximizing efficiency and energy generation. This idea is currently receiving review by a subject matter expert.
2. Zero Fluorescent Bonus: This idea proposes offering a bonus incentive for the replacement of all lamps in a facility with LEDs and would add TLEDs to online marketplace for small businesses for a self-install approach. This idea is currently under subject matter expert review with business implementers.
3. Mobile Home Retrofits: direct install program of air sealing and insulation, air source heat pumps, and high-efficiency furnaces in mobile homes.
4. We Serve: direct install program of energy efficiency products in single family homes of seniors.
5. Energy Efficiency & Accessibility Pilot: direct install program of energy efficiency products and smart products in homes of individuals with accessibility barriers.
6. The following ideas were deferred in Q3:
 - "Light Up The Night" Neighborhood Safety and Security- Proposal.
 - Milwaukee Resiliency Hub
 - Wisconsin Community Energy Ambassadors.
 - Commercial Mission-Based Pilot
 - Focus on Energy Community Connect
 - Focus on Community Coalition.
 - Unlocking Energy Efficiency.
 - Contractor Development in Rural Wisconsin.
 - Diverse Business Enterprise Engagement Specialist
 - Empowering Trade Allies for Energy Efficiency Excellence.
 - Zero Emissions Landscape Equipment Roadshow.
 - Assessing the Landscape of Decarbonization Goals.
 - Broadening the Appeal: Tapping into Sustainable Interest for Energy Benefits.
 - A Carbon TRM and Carbon Valuation Framework.
 - Life-Cycle Energy Emissions and Economic Analysis of Dual Fuel Heat Pump Systems and Air-Source Heat Pump Systems.
 - Interactive Decarbonization Planning Tool and Associated Research.
 - Impacts of Solar Attic Vents on Electricity Demand and GHG Reductions in residential homes.
 - Overcoming Home Energy Efficiency and Electrification Barriers for Low to Moderate Income Households.
 - Heat Pumps Can't Become the Next CFL We Need Them to be LEDs: Comprehensive Synthesis of Research to Inform Wisconsin.
 - Electrification Assessment Pilot.
 - Beneficial Electrification Roadmap for Small and Medium-sized Businesses in Wisconsin.

EMERGING TECHNOLOGY UPDATES

The Emerging Technology Accelerator (ETA) focuses on identifying, evaluating, and promoting new technologies geared toward residential and small/medium business customers. The accelerator complement the legacy program currently known as the Industrial Technology Accelerator, providing similar support to other market segments.

The following ETA activities were coordinated in Q3:

- Onboarded three research teams to the project to support the accelerator and set up the project across systems.
- Hosted a kick-off meeting with the research teams.
- Facilitated idea brainstorming and review.

Technologies currently in consideration include:

- Passive thermal storage with phase-change materials.
- Integrated storage source heat pumps.
- Electrostatic motors.
- Dual-fuel commercial rooftop units (RTUs)
- Alternate form factor heat pumps

REQUESTS FOR CONCEPTS FOR PITCH DAY 2024 AND EERD 2024

The Future Focus team administered the Request for Concepts (RFCs) for Pitch Day and the Environmental & Economic Research And Development Program (EERD). The RFC was released May 22 with concepts due on June 18. Pitch Day took place on August 14.



A total of twenty-eight (28) ideas were received with three (3) selected to move forward to contracting immediately:

1. Empowering Faith Communities for Energy Efficiency (Pitch Day):
 - Timeline:
 - ~2 years.
 - Summary:
 - Provide energy assessments and enhanced rebates to faith-based organizations and supporting community-based organizations.
 - Gauge the impact of leveraging faith-based communities to engage with residential customers via workshops and kit/pack promotion.
 - Targeting 30 audits (20 places of worship, 10 CBOs) and 12 workshops.
2. Diverse Business Enterprise (DBE) Contractor Research and Engagement (Pitch Day):
 - Timeline:
 - ~2 years.
 - Summary:
 - Research and assess the market of diverse business enterprises in Wisconsin.
 - Identify barriers to participation and marketing/outreach/training needs.
 - Develop a roadmap to increase accessibility for DBE Trade Allies and a plan to deploy best practices to engage DBEs.
3. Transitional and Emerging Priorities Research (EERD):
 - Timeline:
 - ~1 year.
 - Summary:
 - Research addressing all request for concept categories (targeted emissions reductions, extending the value of energy efficiency, assessing the landscape of decarbonization goals, proactive market transition).
 - Analysis of carbon and grid impacts of different technologies and policies
 - Development of a tool/matrix to assess different scenarios and interventions, investigating barriers to decarbonization and develop strategies to address barriers.
 - Reviewing of national programs to identify best practices in decarbonization and options for Focus to address identified barriers.
 - Delivery of a transitional roadmap with tactical implementation strategies to address the emerging priorities of the state in the areas of energy efficiency and renewable energy program design and delivery.

Multiple submission concepts continue to be in review and may move forward to procurement. Next steps include making final selections on pilot concepts in review and contracting of selected projects.