

# Tech That Transforms:

## Emerging Technologies Update

Utah Expo Event – April 30, 2025



WATTSMART®

 **ROCKY MOUNTAIN  
POWER**  
POWERING YOUR GREATNESS

# Lauren Eagan – Sr. Solutions Manager



- Emerging technologies
- Underserved markets
- Customer-centric program design
  
- Projects
  - Heat pumps
  - Integrating HVAC + lighting controls
  - Controlled environment agriculture
  - Natural and low-global warming potential (GWP) refrigerants
  - Luminaire Level Lighting Controls (LLLC)
  - Windows and window attachments
  - Pro Network program design

# Chris Fleming – Sr. Program Manager



- Program operations
- Manages Wattsmart residential program
- Customer-centric program design
  
- Projects
  - Pro Network program design
  - Program incentive management
  - New measure product development
  - Home assessment design
  - Strategic program planning (residential)

AVAILABLE NOW

# Heat Pump Water Heaters

## BENEFITS

- Up to 62% more efficient than standard water heaters
- \$325 savings per year on energy costs
- 10- to 15-year life
- Reduced carbon emissions



## NEW FEATURES

- Many manufacturers
- Split systems
- Varying shapes and sizes
- Load flexible controls
- Low GWP and natural refrigerants
- 120V or 220V

**UTAH  
INCENTIVES:**  
trade ally \$150  
customer \$350

# Rooftop Heat Tape Timer

UTAH  
INCENTIVES:  
customer \$150



## BENEFITS

- Energy efficient
  - Turns off heat tape when not in use
  - Saves up to \$135 annually
- Prolonged equipment lifespan
- Convenience
- Safety

# Unitary Heat Pumps/ Heat Pump Rooftop Units (RTUs)

## OPPORTUNITY

- RTUs are most common form of commercial HVAC nationwide
- Premium efficiency heat pump products launching – all electric and dual fuel
- Significant reductions in energy use, energy costs and carbon emissions
- U.S. Department of Energy Commercial Building Heat Pump Accelerator is driving innovation in heat pump RTUs, challenging manufacturers to create products ready for sale by 2027



# Unitary Heat Pumps/ Heat Pump Rooftop Units (RTUs)

## DUAL FUEL RTUs

- Save both electric and gas
  - 20% energy savings, up to 40% when paired with energy recovery ventilator (ERV)
- Can often be replaced without infrastructure upgrades
- Allows for energy and price flexibility
- Provides comfort in cold temperatures



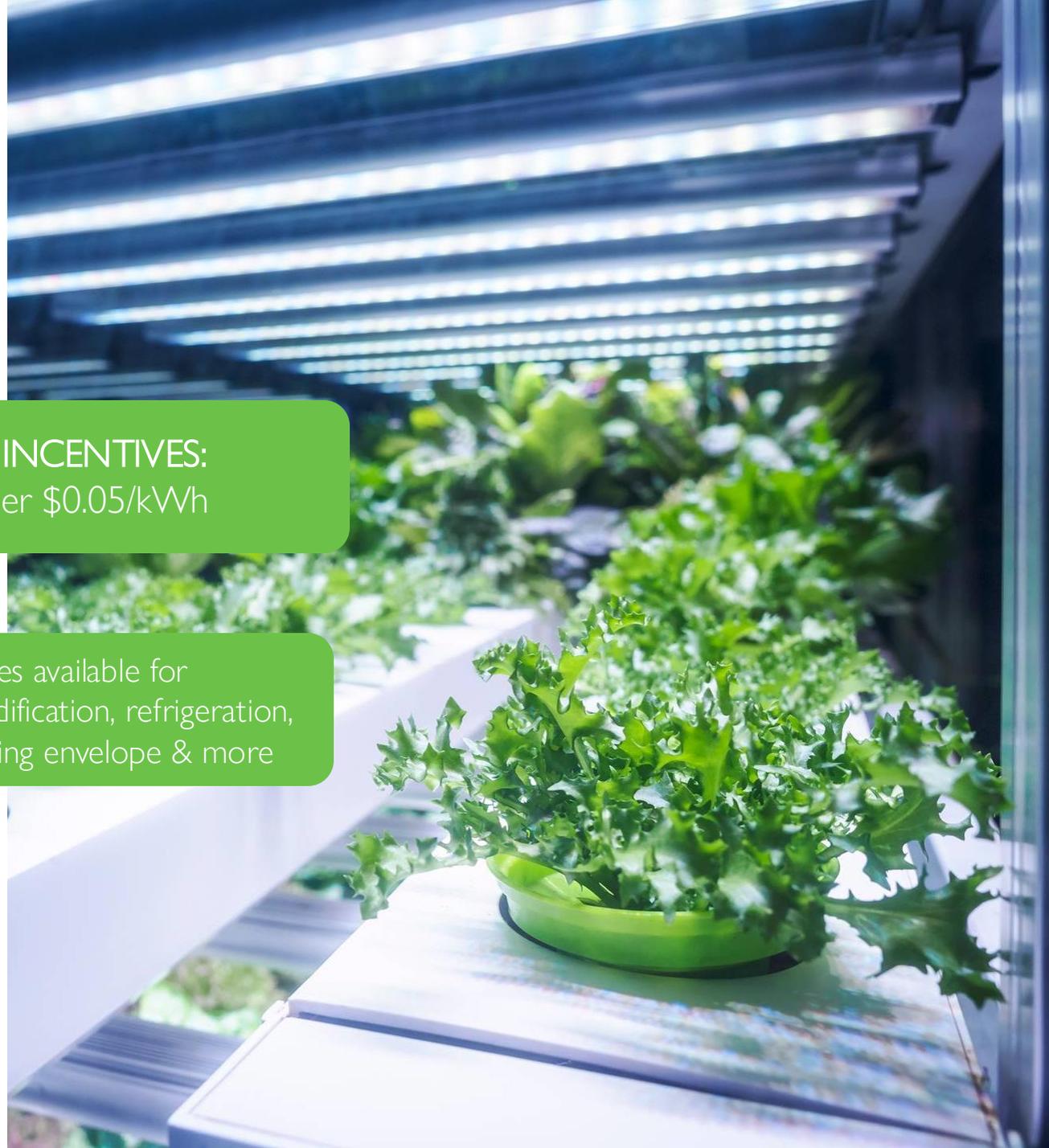
# LED Grow Lights

## BENEFITS

- 60% lighting savings
- Run cooler = HVAC savings
- Superior spectrum control
- Dimmability
- Longer lifespan
- Lower maintenance
- Improved plant quality
- Reduced water consumption

UTAH INCENTIVES:  
customer \$0.05/kWh

Incentives available for  
HVAC, dehumidification, refrigeration,  
controls, building envelope & more



UNDER RESEARCH  
& DEVELOPMENT

# Window Heat Pumps

## BENEFITS

Efficiency & Performance	Occupant Satisfaction	Form Factor	Easier Installation
<ul style="list-style-type: none"><li>• Cooling mode is more efficient than traditional window A/C</li><li>• Heating mode can be more efficient than existing heating</li><li>• Cold-climate performance below 0°F without need for backup electric resistance heating</li></ul>	<ul style="list-style-type: none"><li>• Increased comfort</li><li>• Increased control via mobile app</li><li>• Year-round solution</li><li>• Material and labor cost savings</li><li>• Quiet</li></ul>	<ul style="list-style-type: none"><li>• Provides heating and cooling in one unit</li><li>• Saddle design improves visibility and operation of the window</li><li>• Reduced window air leakage</li></ul>	<ul style="list-style-type: none"><li>• No external drainage or plumbing required</li><li>• No electrical upgrade required, 120V plug-in design</li><li>• Reduced risk and severity of refrigerant leaks due to packaged design</li><li>• Can be installed by non-specialized labor (two people)</li></ul>



Coming soon...  
2025 incentive!

# All-in-One Washer Dryer

## BENEFITS

- Energy efficiency
- Space saving
- Convenience
- Overall washing performance
- 120V can plug-in
- No venting required
- Quiet

## CONSIDERATIONS

- Expense
- Drying performance
- Maintenance time and costs
- Cycle time
- Capacity
- Mobile app interface

WATT**SMART**®



Coming soon...  
2025 incentive!

# Air-to-Water Heat Pumps

Incentive research & development underway

## BENEFITS



Highly efficient, even in cold temperatures



Heating + cooling + domestic hot water



No Ductwork



Zoning



Retrofit opportunity for existing hydronic systems



Reduced carbon emissions