

Review of Strategic Directive BP-SD-09, Energy Efficiency

NPPD Board of Directors Meeting Strategic Session May 2023

David Rich, Sustainable Energy Manager



EnergyWiseSM Introduction

EnergyWiseSM is the Program "umbrella" for:

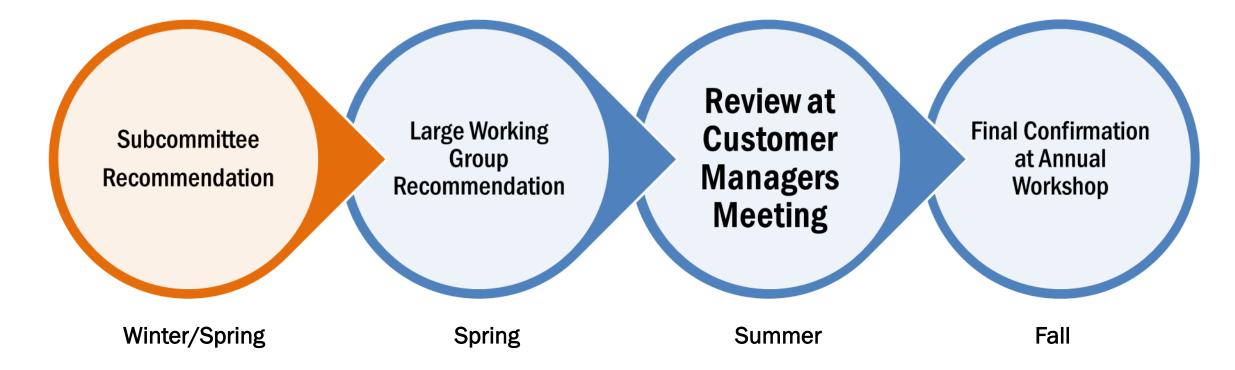
Energy Efficiency

- Save energy and reduce costs for end-use customers
- Reduce the cost to serve load during peak usage
- Examples: Ground Source Heat Pump, Variable Frequency Drive

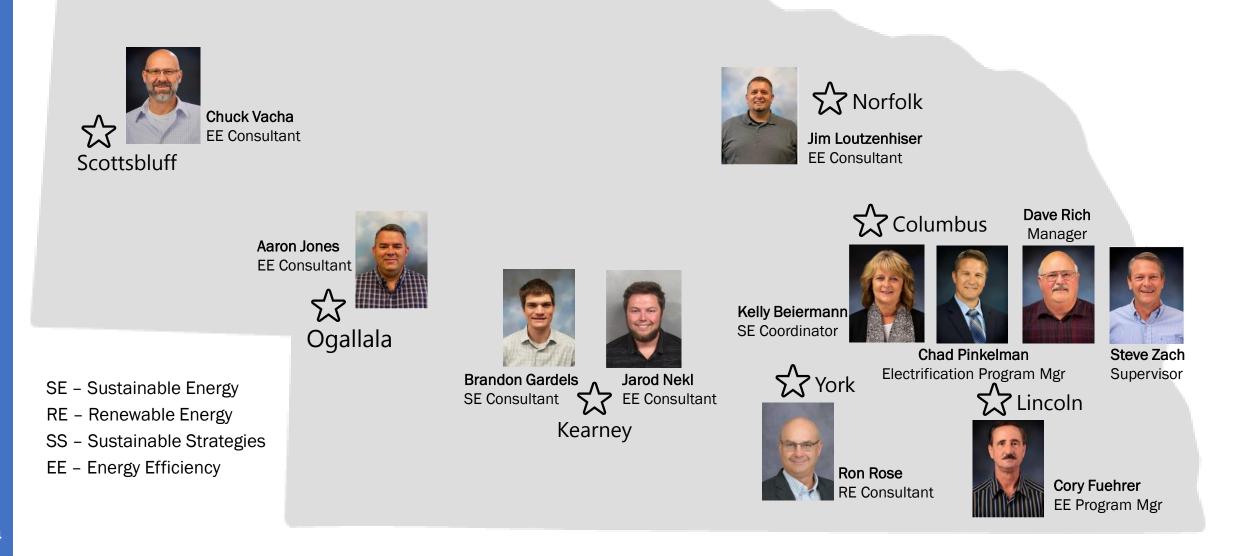
Electrification

- Add load by converting fossil fuel sources
- Strategically add load that utilizes existing grid
- Reduction of CO2
- Save the customer money overall in energy purchases
- Examples: Electric Vehicles, Fossil Fuel Furnace / Water Heater to Electric Conversions, Battery Powered Mowers

Wholesale Customer Process Flow



2023 Sustainable Energy Team



Review of Strategic Directive

BP-SD-09, Energy Efficiency

David Rich Sustainable Energy Manager

BOARD POLICY STRATEGIC DIRECTIVE Policy No. <u>BP-SD-09</u> Effective Date <u>06-09-22</u> Page <u>1</u> of <u>1</u>

ENERGY EFFICIENCY

Nebraska Public Power District (NPPD) is committed to working in partnership with customers to maximize the value of their energy purchases in a cost-effective manner in order to:

- a. Help customers reduce costs, and improve business' bottom lines.
- b. Provide a service that engages customers in a positive way.
- c. Reduce the cost to serve load during peak usage.

NPPD will be a leader in promoting energy efficiency by:

- Partnering with our wholesale customers to develop and market cost effective energy efficiency programs, incentives, and services.
- b. Being a resource for efficiency information and technology for our wholesale customers.
- Building relationships with business partners (manufacturers, builders, dealers, etc.) and community colleges.
- Partnering with the Nebraska Department of Environment and Energy and other utilities in Nebraska to promote the efficient use of energy.
- e. Taking advantage of state and federal incentives, grants, and other opportunities as available.
- f. Educating customers and colleagues about energy efficiency principles and benefits.
- Offering energy use audits, calculators, information, and recommendations for improving energy usage.

Nebraska Public Power District (NPPD) is committed to:

- Using all available tools to keep affordable for wholesale and end-use customers
- Reduce the cost to serve load during peak usage periods
- Partnering with our wholesale customers to develop programs and services
- Being a resource for technical information for our wholesale customers
- Help end-use customers reduce costs and improve business' bottom lines
- Provide a service that engages customers in a positive way

BP-SD-09, Energy Efficiency (Cont'd)

NPPD is committed to:

- Building relationships with business partners and community colleges
- Partnering with the Nebraska Department of Environment and Energy and other Nebraska utilities
- Taking advantage of state and federal incentives, grants, and other opportunities
- Continually sharing helpful information with customers and teammates
- Offering energy use audits, calculators, information, and recommendations

EnergyWisesm Programs: Energy Efficiency

Residential

• Heat Pumps

- Loan or Incentive
- Attic Insulation
- Cooling System Tune-Up
- Smart Thermostat
- Heat Pump Water Heaters



Commercial / Industrial

- LED Lighting
- Variable Frequency Drives (VFD)
- Industrial Process
- HVAC Equipment
- HVAC System Optimization

Agricultural

- LED Lighting
- Corner Pivot VFD
- Prescriptive Irrigation
- Custom Ag
- Agricultural Efficiency

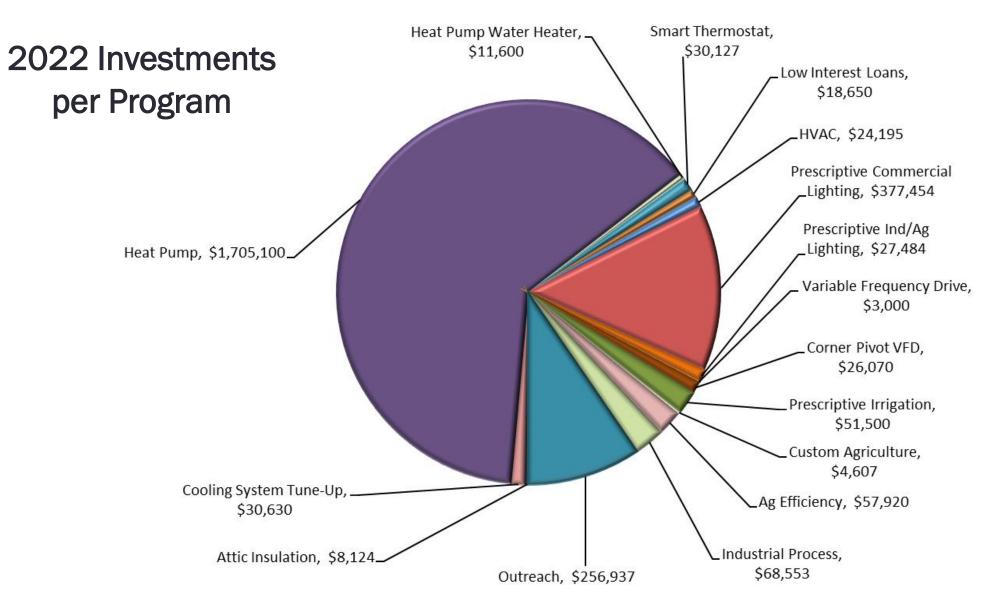




www.EnergyWiseNebraska.com

2022 EnergyWiseSM Energy Efficiency Results

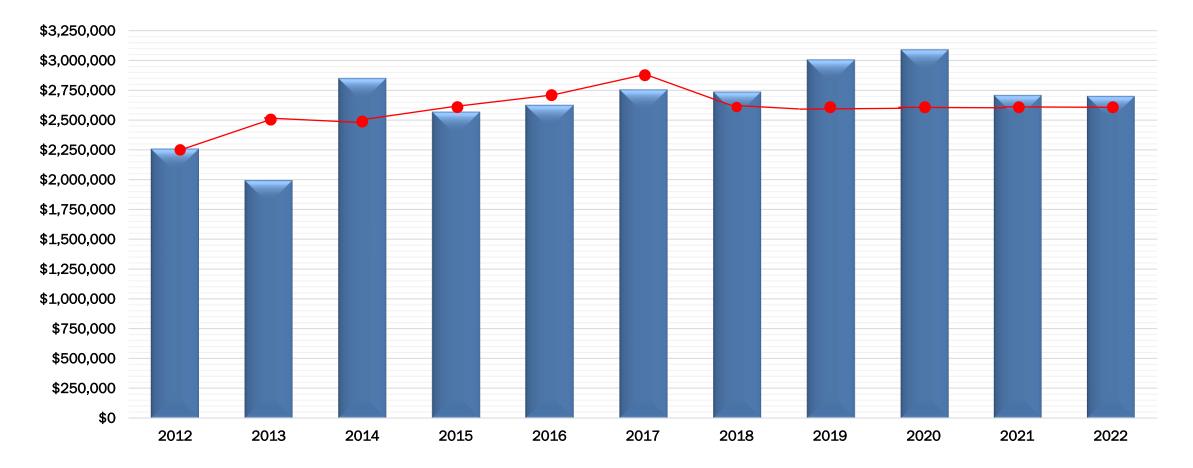
- \$2.6 M budgeted
- \$2.70 M invested*
 - ✓ \$1.71 M High Efficiency Heat Pumps (Residential)
 - 1,592 incentives
 - ✓ \$0.40 M Lighting (Commercial/Industrial/Ag)
 - 701 incentives
 - ✓ \$0.59 M Remainder of Programs
 - 2,565 incentives
- *EnergyWiseSM Annual Report for 2022, provides more details.
- Overall cost effectiveness of energy efficiency programs: \$0.01/kWh over LOM (Life of Measure)





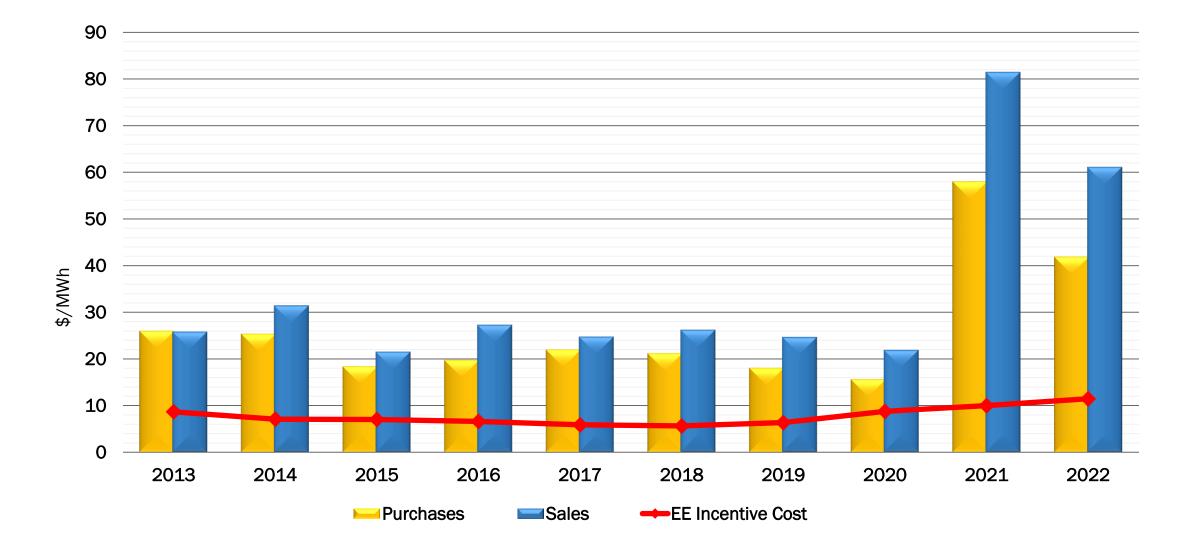
Energy Efficiency Incentives by Year

Budgeted amount

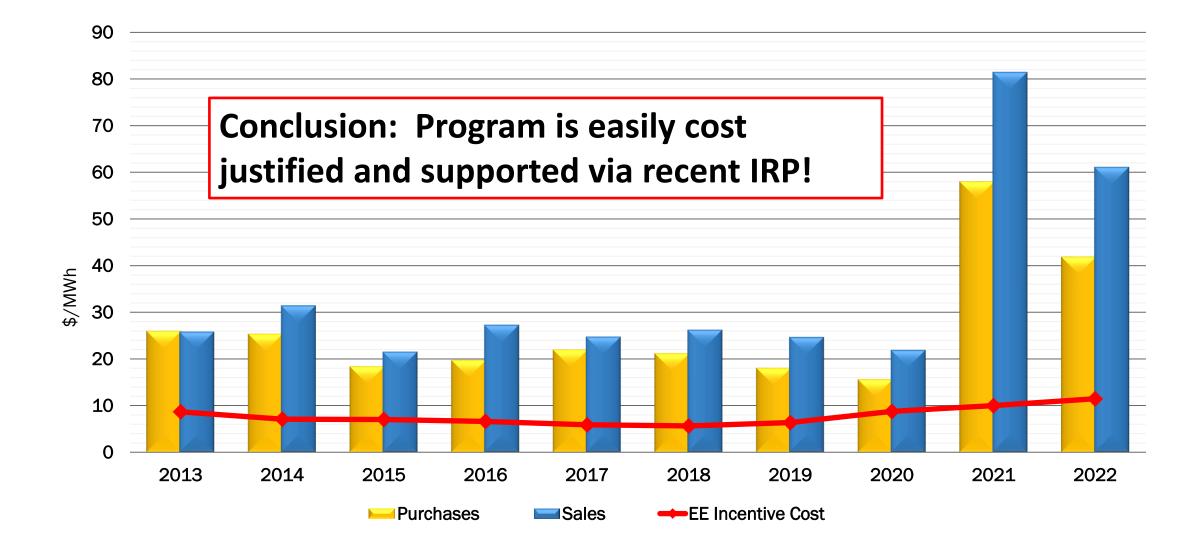


2023 EnergyWiseSM Budget = \$2.6 M

Energy Efficiency Incentive Cost vs Price of Non-Firm Purchases and Sales



Energy Efficiency Incentive Cost vs Price of Non-Firm Purchases and Sales







Questions

Stay connected with us.

