

# Energy Wise Ogden | Strategic Implementation Plan



GOVERNOR'S OFFICE OF  
ENERGY DEVELOPMENT



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**Photos** courtesy of Ogden City, Weber State University, and Utah Clean Energy.

To **download** an electronic copy of this Plan and for information visit: [www.ogdencity.com/sustainability](http://www.ogdencity.com/sustainability).

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June 5, 2020

Dear Resident:

Since February 2019, Ogden City has been participating in the Utah Energy Wise Communities pilot program funded by the U.S. Department of Energy, managed by the Utah Governor's Office of Energy Development, and implemented by Utah Clean Energy. As part of this process, Ogden has developed an Energy Wise Strategic Implementation Plan to improve energy efficiency and resiliency throughout all sectors of the community. This Plan is designed to enhance economic stability, protect our quality of life, and preserve Ogden's rich natural environment.

This Plan relies on close collaboration among Ogden City government, area businesses, residents, local non-profits, institutions, and others and is intended to result in a cost-savings for consumers and businesses. Implementing the strategies and actions outlined in this Plan will require coordinated community effort to bring us closer to meeting these impressive energy-saving goals. We estimate that achieving these goals will save an amount of energy equal to the annual energy used by over 12,000 average Ogden homes! Ogden's program will ultimately serve as a model for other Utah communities to participate in the Utah Energy Wise Communities program.

We are grateful to all those involved in providing the essential guidance needed to develop this Plan, including the many community members who responded to surveys and attended community outreach meetings. Ogden's future is bright!

With optimism,

A handwritten signature in black ink, appearing to be "AChoberka", written over a horizontal line.

Angela Choberka, Chair

# Executive Summary

The Utah Energy Wise Ogden Communities project is an initiative of the Utah Governor's Office of Energy Development, funded by the United States Department of Energy. This innovative initiative was launched to reduce energy consumption, reduce energy costs, and improve resilience across an entire community. It serves as a pilot project with Ogden being the first community to test a process that may be used to inform future projects with other Utah communities.

## **The project had three main objectives:**

- Work with the Ogden community to assess its energy consumption,
- Adopt energy-savings goals, and
- Lay out a plan to achieve the strategic reduction of energy use and improve energy resilience across the Ogden community.

This Energy Wise Ogden Strategic Implementation Plan ("Plan") is one of the primary outcomes of the initiative. The Plan serves as the strategy for Ogden City, residents, businesses, and community and business organizations to follow to reduce energy consumption and improve community resilience. The Plan represents the collective work of more than 30 steering committee members and hundreds of community members who provided feedback during the Plan development. In particular, this Plan would not have been possible without the energy champions at Ogden City—Janene Eller-Smith, Council Members Angela Choberka and Marcia White, Monica Kapp, Jay Lowder, and Weber State University Sustainability staff Jennifer Bodine and Bonnie Christiansen.

The Plan outlines the steps needed for Ogden to save the equivalent of the annual electricity consumption of about 11,670 average Utah homes, and the annual natural gas consumption of 1,026 average Utah homes, by 2025. These reductions will be achieved through energy efficiency improvements, such as facility upgrades, and behavioral changes, such as changing heating and cooling controls. As a result, the Ogden community will achieve substantial cost and carbon-emission savings. It also improves community resilience to natural hazards and other potential disruptions that could impact health, safety, and local economic wellbeing.

In Ogden, the business sector consumes over 70% of electricity and natural gas, despite residents making up 90% of utility customers. A small proportion of businesses consume most of the energy in Ogden, which means that there is a large opportunity for energy savings, because just a few businesses taking action to reduce energy use can have a large impact. Ogden residents can also benefit greatly from energy efficiency—while the energy impact per household is comparatively small, energy cost-savings can reduce many Ogden families' household energy expenditure and energy footprints. Overall, Ogden's community-wide energy consumption is typical of similarly sized cities in the Western United States. However, Ogden has an older building stock that presents an opportunity to increase efficiency and improve the resilience of buildings.

The energy-savings goals adopted through this project will conserve energy and reduce utility costs for municipal facilities, area businesses, and Ogden residents. The structure of the three goals vary but each goal will lead to energy savings and improved resilience of the Ogden community.



- **Municipal goal:** Cost-effectively decrease average energy use intensity of municipal facilities by 5% by 2025, as compared to the 2018 baseline.
- **Business sector goal:** Increase commercial/industrial facilities total annual participation in efficiency programs by 5% by 2025, as compared to 2018 baseline.
- **Residential sector goal:** Increase energy-efficiency upgrades to residential properties by 25% and increase participation in low-income efficiency programs by 50%, over 2018 baseline by 2025.
- **Community-wide goal:** The collective energy savings from the municipal, business, and residential goals is estimated to result in:
  - **Electricity savings:** 17,800,000 kWh in 2025 (106,800,000 kWh savings from 2020 through 2025, equal to the annual consumption of about 11,670 average Utah homes)
  - **Natural gas savings:** 10,250 Dth in 2025 (61,500 Dth savings from 2020 through 2025, equal to the annual consumption of 1,026 average Utah homes)

This Plan presents a list of 10 energy strategies that will guide Ogden City, area businesses, and residents to achieve the energy-savings goals. Each strategy is accompanied by customized actions, timelines, and implementation partners from the Ogden community. The strategies are based on best practices from other American communities and were vetted by community members and fall into three categories: municipal strategies, business strategies, and residential strategies.

## Municipal Strategies

- (Top Strategy) **Strategy 1:** Benchmark municipal facilities
- **Strategy 2:** Assess resilience opportunities in municipal facilities and build on guaranteed energy-saving performance contract project
- **Strategy 3:** Conduct building re-tuning for municipal facilities and water treatment facilities
- **Strategy 4:** Create a position for an Ogden City energy and resilience manager

## Business Sector Strategies

- (Top Strategy) **Strategy 1:** Educate businesses about available energy incentives and financing programs
- **Strategy 2:** Dedicated staff to perform outreach to businesses about energy efficiency and resilience
- **Strategy 3:** Encourage businesses to benchmark energy use

## Residential Sector Strategies

- (Top Strategy) **Strategy 1:** Coordinate energy efficiency campaigns with utilities and service providers for income-qualified services
- **Strategy 2:** Enhance education on energy efficiency financing options
- **Strategy 3:** Participate in a voluntary home energy scoring program

This Plan serves as a guide to Ogden City municipality, businesses, and residents to successfully decrease energy consumption, save on energy costs, reduce emissions, and improve community resilience. As the first Utah Energy Wise Community, Ogden is poised to lead by example to demonstrate robust action to reduce energy consumption and improve community resilience.

# Introduction and Overview

Comprehensive energy efficiency and resilience planning at the community scale can help keep energy costs low, reduce the energy burden on low-income customers, and strengthen the economy by directing dollars to new jobs in the energy efficiency sector. Efficiency and resilience planning can also help increase grid reliability by lowering peak demand and stress on utility infrastructure. High efficiency new construction and retrofits boost the resilience of buildings during power outages and extreme heat waves.

The Energy Wise Ogden Strategic Implementation Plan ("Plan") is a guide for Ogden City residents, businesses, and community and business organizations to follow to improve energy efficiency and resilience across the Ogden community.

The Plan lays out Ogden's past energy consumption, recently adopted energy savings goals, and a plan to achieve the goals organized into three sections:

1. **Where are we Today?** Ogden's Current Energy Consumption
2. **Where do we Want to Go?** Ogden's Energy Savings Goals
3. **How do we get There?** Priority Strategies and Actions for Implementation

## Energy Efficiency Overview

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**Energy efficiency means using less energy to provide the same level of services and plays an integral role in meeting the demands of our thriving economy and growing population.**

Energy efficiency means using less energy to power our homes and businesses at an equivalent level. It plays an integral role in meeting the demands of our thriving economy and growing population. Communities that invest in energy efficiency strengthen their energy systems and improve the local economy, public health, and overall community resilience. Energy efficiency reduces costs with an average return on investment of \$2-\$4 for every dollar invested.<sup>1</sup> For example, it can be more cost-effective for electricity utilities to increase and promote efficiency to customers rather than build new electricity generating capacity. Investments in energy efficiency initiatives benefit local economies through reductions of operational costs and local job creation.<sup>2</sup> Businesses and residents can save money from energy efficiency measures and invest in other areas.<sup>3</sup> The cost-savings and benefits from energy efficiency provide significant impacts to low-income households.

Energy efficiency is a beneficial tool for low-income household programs and provides relief to participants who spend a larger proportion of household income on energy costs. Energy burden refers to the portion of income that is spent on energy costs. One national

<sup>1</sup> Molina, Maggie, Patrick Kiker, and Seth Nowak, "The Greatest Energy Story You Haven't Heard: How Investing in Energy Efficiency Changed the US Power Sector and Gave Us a Tool to Tackle Climate Change." ACEEE. Available at: <https://www.aceee.org/research-report/u1604>.

<sup>2</sup> Utah's Energy Action Plan Through 2020. Utah Governor's Office of Energy Development. Available at: <https://energy.utah.gov/wp-content/uploads/2019/07/Energy-Action-Plan-Website-Final-1.pdf>

<sup>3</sup> Molina, Maggie, Patrick Kiker, and Seth Nowak, "The Greatest Energy Story You Haven't Heard: How Investing in Energy Efficiency Changed the US Power Sector and Gave Us a Tool to Tackle Climate Change." ACEEE. Available at: <https://www.aceee.org/research-report/u1604>.

study states that the median energy burden experienced by low-income households is 7% of total household income, twice as high as the national median of 3.5%.<sup>4</sup> Lower income communities are also the most vulnerable to the adverse economic and health effects of extreme weather events. Energy efficiency and improved home weatherization can increase comfort levels during extreme temperatures, while also providing monthly monetary savings on utility bills.<sup>5</sup>

Numerous energy efficiency programs are available to Ogden city, its businesses, and residents, including ratepayer-funded efficiency incentive programs offered by Rocky Mountain Power and Dominion Energy, statewide Commercial Property Assessed Clean Energy financing, and home weatherization programs for low-income customers. With Utah's population projected to almost double by 2050,<sup>6</sup> energy efficiency programs like these can help communities meet the needs of a fast-growing population. This growth will continue to impact air quality along the Wasatch Front. Current projections suggest that by 2024 "area sources" of emissions, which include pollution from homes and businesses, will become the largest single category of local emissions.<sup>7</sup> Energy efficiency can reduce area source emissions and improve air quality through conserving natural gas used in buildings. Additionally, energy efficiency supports public health by playing a role in reducing the number of instances of lung cancer, asthma, coronary heart disease, and other chronic diseases.<sup>8</sup> Through energy efficiency, communities can sustainably grow while also reducing impacts of air quality and improving health outcomes. The energy system is essential for other community systems and services, and energy efficiency efforts can strengthen overall community resilience.

## Resilience Overview

Energy resilience refers to a community's ability to manage risks to its energy supply by reducing threats and preparing for those that cannot be avoided. Communities face risks unique to their location and region. Risks can include extreme weather events, economic volatility, and weakened or aging infrastructure. Municipalities need to assess risks to prepare for potential hazards. Over time, risk levels can change so jurisdictions should continue evaluating the threats and hazards of their communities to minimize disruptions.

Community resilience can be strengthened by enhancing energy systems and considering energy infrastructure during emergency planning efforts. Increased energy system resilience can help reliability and functionality of other services such as health care, communications, and federal services. One way to improve resilience in energy systems

### Energy Efficiency and Resilience Benefits



Improved public health



Stronger local economy



Strengthened community resilience

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**Resilience refers to a community's reduction of and better preparation for risk.**

<sup>4</sup> Lifting the High Energy Burden in America's Largest Cities: How Energy Efficiency Can Improve Low-Income and Underserved Communities. Drebol, A., Ross, L., 2016. Available at <https://www.aceee.org/sites/default/files/publications/researchreports/u1602.pdf>

<sup>5</sup> Affordable Energy for All: A Plan to Expand Energy Efficiency Benefits for Low-Income Salt Lake City Residents. Utah Clean Energy. 2017. Available at: [https://utahcleanenergy.org/images/Affordable\\_Energy\\_for\\_All\\_A\\_Plan\\_to\\_Expand\\_Energy\\_Efficiency\\_for\\_Low-Income\\_SLC\\_Residents\\_July\\_2017\\_FINAL.pdf](https://utahcleanenergy.org/images/Affordable_Energy_for_All_A_Plan_to_Expand_Energy_Efficiency_for_Low-Income_SLC_Residents_July_2017_FINAL.pdf)

<sup>6</sup> Utah's Energy Action Plan Through 2020. Utah Governor's Office of Energy Development. Available at: <https://energy.utah.gov/wp-content/uploads/2019/07/Energy-Action-Plan-Website-Final-1.pdf>

<sup>7</sup> May, Heather. Homes are a big part of Salt Lake City's air pollution problem. They also are the solution., The Salt Lake Tribune August 26, 2019. Available at: <https://www.sltrib.com/news/environment/2019/08/26/homes-are-big-part-air/#gallery-carousel-5413693>.

<sup>8</sup> Hayes, Sara, and Cassandra Kubus. Saving Energy, Saving Lives: The Health Impacts of Avoiding Power Plant Pollution with Energy Efficiency. American Council for an Energy Efficient Economy. 2018. Available at: <https://www.aceee.org/research-report/h1801>.

is through enhancing the energy efficiency of homes and buildings. Many energy efficiency measures provide resilience benefits including reduced peak demand on utility infrastructure, comfortable and habitable buildings in which to shelter in place, and improved utility cost affordability.<sup>9</sup>

Like other municipalities, Ogden experiences risk factors based on its unique location, housing stock, and economy. Ogden City was established in 1847 and incorporated in 1851. It is Utah's second oldest city and is located along the northern part of the Wasatch Front in Weber County. Currently, the state hazard mitigation plan has identified natural disasters that would most greatly impact Weber County. They include earthquake, flood, drought, landslide, wildfire, dam failure, and severe weather.<sup>10</sup> Ogden lies along the boundary of the Wasatch Fault line, the most active fault in Utah, which possesses

the potential for a magnitude 7.5 earthquake.<sup>11</sup> The City's eastern boundary begins in the foothills of the Wasatch Mountains which may cause some susceptibility to landslides and possible earthquake-induced liquefaction.<sup>12</sup> Weber County also has a higher flood vulnerability rating compared to other Utah counties, which can occur due to rapid snow melt and/or intense rainfall in late spring and early summer. Utah is the second driest state in the country which poses varying annual risks of drought and wildfire conditions to Ogden.<sup>13</sup> Additionally, the abundance of historic buildings and aging infrastructure in Ogden could result in increased community damages during a natural disaster. More than 44% of Ogden's housing stock was built before 1940, compared to 27% of housing stock in Weber County overall. The City's higher proportion of older housing stock indicates that an excessive number of houses may need rehabilitations or retrofits.<sup>14</sup>

### Example of Energy Efficiency Project with Resilience Benefits:

Combined Heat and Power (CHP) systems are one of the most efficient ways to use natural gas by producing electricity and capturing the heat generated to power facilities, including critical infrastructure, which can continue to operate during power outages. In Miami-Dade County, the Miami-Dade Water and Sewer Department (WASD) installed a bio-gas CHP system at its South District Waste Water Treatment Plant to power its entire facility. The CHP system treats wastewater using methane energy generated from the treatment plant's digesters and an adjacent municipal landfill. The Miami-Dade WASD saves approximately \$650,000 per year operating on the CHP system, and is more resilient to disruption. In the event of an emergency or natural disaster such as a hurricane, the South District Treatment Plant would remain operational even if the larger electrical grid went down.<sup>15</sup>

<sup>9</sup> Ribeiro, David, et al., "Enhancing Community Resilience through Energy Efficiency." American Council for an Energy Efficient Economy. October 2015. Available at: <https://www.aceee.org/research-report/u1508>.

<sup>10</sup> "Weber County Pre-Disaster Mitigation Plan", Utah Department of Public Safety Division of Emergency Management. 2015. Available at: <https://hazards.utah.gov/wp-content/uploads/Weber-County-Plan.pdf>

<sup>11</sup> "Utah State Hazard Mitigation Plan 2019." Utah Hazard Mitigation Division. Utah Department of Public Safety. State of Utah, February 2019. Available at:

<https://hazards.utah.gov/wp-content/uploads/Utah-State-Hazard-Mitigation-Plan-2019.pdf>.

<sup>12</sup> Christenson, G.E., and L.M. Shaw. "Hazard Maps: Weber County - General Hazards." Utah Geological Survey, Utah Geological Survey, 2008. Available: <https://geology.utah.gov/hazards/info/maps/#toggle-id-33>.

<sup>13</sup> "Utah State Hazard Mitigation Plan 2019." Utah Hazard Mitigation Division. Utah Department of Public Safety. State of Utah, February 2019. Available at:

<https://hazards.utah.gov/wp-content/uploads/Utah-State-Hazard-Mitigation-Plan-2019.pdf>.

<sup>14</sup> "General Plan." Ogden City Planning. Available at: <https://www.ogdencity.com/DocumentCenter/View/1031/General-Plan-2020-update?bidId=>

<sup>15</sup> Carpentier, Jesse, McKenzie Roberts, and Marina Badoian-Kriticos. ICLEI - Local Governments for Sustainability. CHP & Resilience: Critical infrastructure energy savings and resilience for local governments, 25 Mar. 2020. Webinar. Available at: <https://vimeo.com/400719049>.



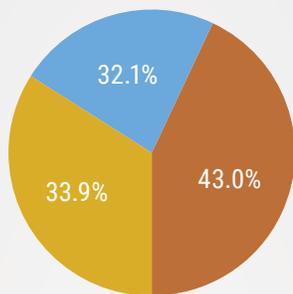
## Energy Efficiency Strategies that Improve Resilience <sup>16</sup>

Energy Efficient Buildings	Utility Energy Efficiency Programs	Green Infrastructure and Water Efficiency
<p><b>Advantage:</b> High performance buildings help maintain indoor temperatures for longer periods of time during extreme weather and power outages. This allows for shelter in place to be a viable option during severe weather events, particularly for vulnerable populations.</p> <p><b>Advantage:</b> Efficiency can improve safety and affordability for low-income and vulnerable households in times of high energy prices and/or extreme temperatures.</p>	<p><b>Advantage:</b> Utility energy-efficiency programs increase system reliability and reduce demand on the utility's electrical grid. Through these system improvements, energy efficiency measures help create a more resilient grid.</p> <p><b>Advantage:</b> Reduction in energy use leads to reduction in energy cost. Energy efficiency strategies result in less utility investment in new energy generation.</p>	<p><b>Advantage:</b> Cities can improve resilience by reducing the flow of stormwater into sewer systems. This reduces the amount of energy needed to treat the stormwater to make it suitable for use. Examples of stormwater mitigation tools are green roofs, rain gardens, permeable sidewalks, and rainwater harvesting systems.</p>

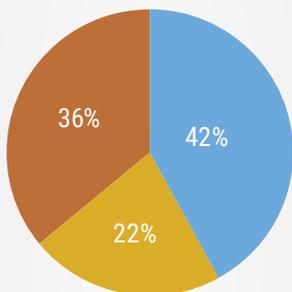
# Where are we Today? Ogden's Current Energy Consumption

## Ogden Electricity Consumption, Cost and Customer Count by Sector (2018)

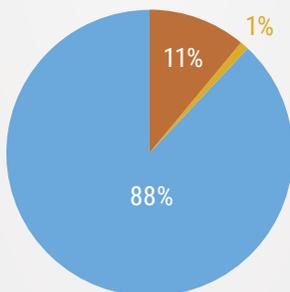
- Residential
- Industrial
- Commercial



**Figure 1.** Electricity consumption by sector



**Figure 2.** Electricity cost by sector  
(Community electricity cost \$51 million)



**Figure 3.** Electricity customer breakdown by sector  
(Number of customers 38,000)



The project team measured energy consumption in Ogden as the first step to create a robust implementation plan. Energy consumption data and energy efficiency trends were collected for the year 2018, which was established as the baseline year. This baseline includes data related to energy consumed in municipal buildings, electricity and natural gas consumption in Ogden's business and residential sectors, as well as participation in both utility-sponsored energy efficiency programs and low-income energy efficiency programs. Local utilities Rocky Mountain Power and Dominion Energy both offer substantial programs for residential and commercial customers that provide incentives and rebates for implementing energy efficiency measures. There are also programs available through the State of Utah, such as Weatherization Assistance Program and HEAT utility bill assistance program, that aid income-qualified households. The baseline numbers for this data can be seen in the table and graphs.

## Community Electricity Consumption

In 2018, the City of Ogden consumed approximately 961 million kilowatt-hours of electricity. Commercial and industrial sectors consumed the greatest amount of electricity at over 75% of the total (See Figure 1). The residential sector only made up approximately 23% of the community electricity consumption but accounted for 42% of the total cost in 2018 (See Figure 2). In 2018, Ogden City had a total of 38,000 electricity customers, and out of that total, 88% of customers were residential electricity customers (See Figure 3). Commercial and industrial customers only accounted for 12% of Ogden's total electricity customers and 58% of the total cost.

## Ogden City Energy Baseline Summary (2018)<sup>17</sup>

### Community Energy Consumption

Electricity consumption	961 million kilowatt-hours (kWh)
Residential Sector	222 million kWh
Business Sector	413 million kWh (commercial) 326 million kWh (industrial)
Natural gas consumption	7.9 million dekatherms (Dth)
Residential Sector	2.2 million Dth
Non-residential Sector	5.7 million Dth
Combined energy consumption	11,225,160 MMBTU
Energy consumption per capita	128.5 MMBTU per person

### Community Annual Energy Savings

Rocky Mountain Power Wattsmart electricity savings	15,718,373 kWh
Residential Sector	653,129 kWh
Business Sector	9,825,067 kWh commercial 5,240,177 kWh industrial
Dominion Energy ThermWise natural gas savings	7,510 Dth
Residential	6,759 Dth
Non-residential	751 Dth

### Community Cost Savings from Utility-sponsored Efficiency Programs

Rocky Mountain Power Wattsmart cost savings	\$684,000
Residential	\$64,000
Business Sector	\$440,000 commercial \$180,000 industrial
Dominion Energy ThermWise cost savings	N/A

### Utility Energy Efficiency Program Participation

Wattsmart Incentive Participation	796 projects
Residential Sector	510 projects
Business Sector	187 commercial projects 34 industrial projects
ThermWise Incentive Participation	1,197 rebates (\$252,000 in incentives)
Residential Incentives	1,107 rebates
Non-residential Incentives	90 rebates

### Low Income Energy Services

State Weatherization Assistance Program	39
HEAT utility bill assistance	2,656 (Weber County)

<sup>17</sup> Data provided by Rocky Mountain Power, Dominion Energy, State of Utah Weatherization Assistance Program, State of Utah HEAT program.

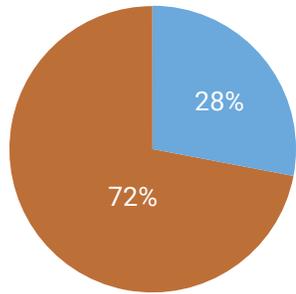
# Community Natural Gas Consumption

The breakdown between natural gas consumption and customer type is similar to electricity consumption. Non-residential consumption accounted for 72% of Ogden City's total consumption (See Figure 4) but only comprised 8% of total customers (See Figure 5). However, residential customers made up over 90% of the total 33,022 natural gas users.

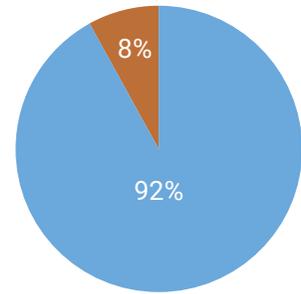
## Ogden Natural Gas Consumption of Residential vs. Non-Residential Customers and Customer Count by Sector (2018)

- Residential
- Non-Residential

**Figure 4.** Natural gas consumption by sector



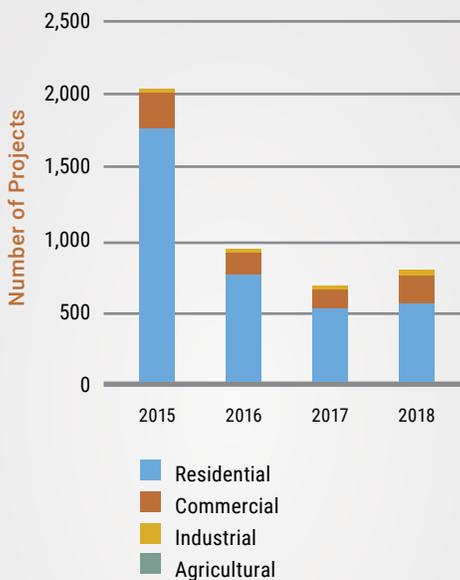
**Figure 5.** Natural gas customer breakdown by sector (Number of customers: 33,000)



# Community Utility Energy Efficiency Program Participation

Participation in electric utility incentive programs varied in Ogden between 2015 and 2018. The number of total projects in 2018 is approximately one-third of the number in 2015 (See Figure 6). The residential sector claimed the majority of incentives, but the largest electricity savings were from commercial and industrial sectors (see Ogden City Energy Baseline Summary table). Electricity program savings steadily increased between 2015 and 2018, despite the variation in the number of projects each year. Customer monetary savings also increased between 2015 and 2018.

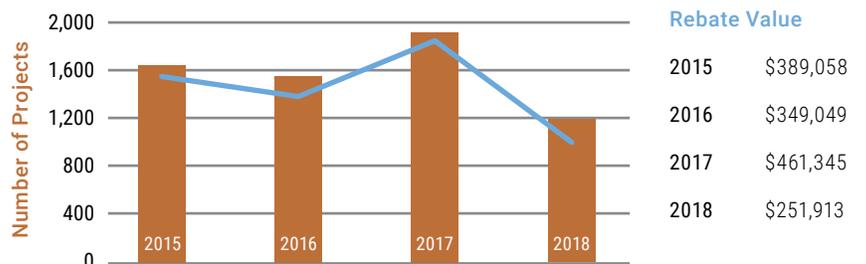
## Ogden Participation in Wattsmart Electricity Efficiency Incentives



**Figure 6.** Rocky Mountain Power's Wattsmart project count by sector.

Dominion Energy's ThermWise Program participation varied from 2015 to 2018 (See Figure 7). Customer monetary and total natural gas savings decreased substantially between 2017 and 2018, likely due to a known administrative change with rebate processing.

## Dominion Energy's ThermWise Incentive Program Count and Value



**Figure 7.** Dominion Energy's ThermWise incentive program count and value.

# Low-Income Program Participation Baseline

The Weatherization Assistance Program is a state-implemented, federally funded program that provides energy efficiency upgrades to income-qualifying households. The program is implemented by local agencies who screen applicants and carry out the repairs for homeowners. These improvements increase the comfort and energy efficiency of participant homes. Locally in Ogden City, Utah Community Action is the entity responsible for administering this program. There are two aspects of this program: ongoing residential weatherization services and crisis weatherization services for emergency situations that require immediate attention. Weatherization Assistance Program projects are standard weatherization upgrades to residential homes, and include activities such as furnace replacement, emergency cooling, and other repairs to improve the immediate comfort and safety of residents. From 2015 to 2018, the number of total weatherization projects in Ogden City remained consistent except for relative increases in 2016 and 2017 (See Figure 8). Weatherization Crisis projects are emergency upgrades to amenities like heating and cooling. Weatherization crisis projects decreased from 2015 to 2018 while weatherization assistance projects increased overall from 2015 to 2018, with a relative decrease from 2017 to 2018.

## Ogden Weatherization Assistance Program Projects

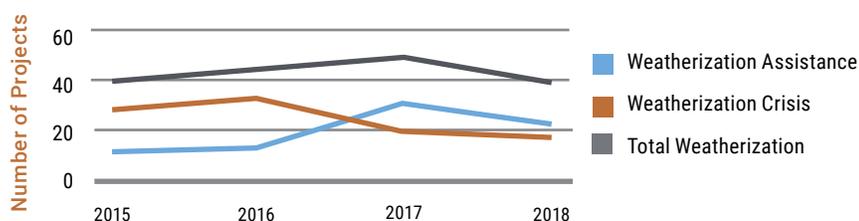


Figure 8. Ogden City Weatherization Assistance Program projects completed.

The project team also compared Ogden’s per capita energy consumption to other similar cities. This helps identify if Ogden’s per capita energy consumption is below, like, or above that of cities that are similarly sized or located in a similar climate. The project team examined cities to see if energy consumption was comparable for different sectors and if other cities utilized strategic energy management plans. The Brendle Group provided data from other similar-sized Colorado cities (Greeley, Centennial, and Westminster) with similar energy efficiency programs. Compared to these cities, Ogden has similar levels of residential per capita energy consumption (Figure 9). However, commercial use per customer is higher in Ogden than in three of the comparable cities (Figure 10).

## Residential Use Per Customer

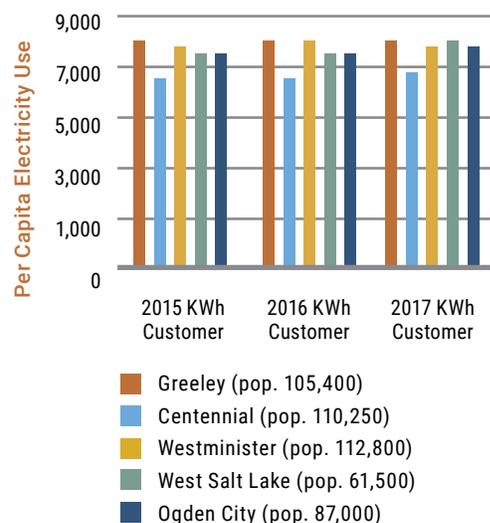


Figure 9. Comparison of residential electricity use per customer

## Commercial Use Per Customer

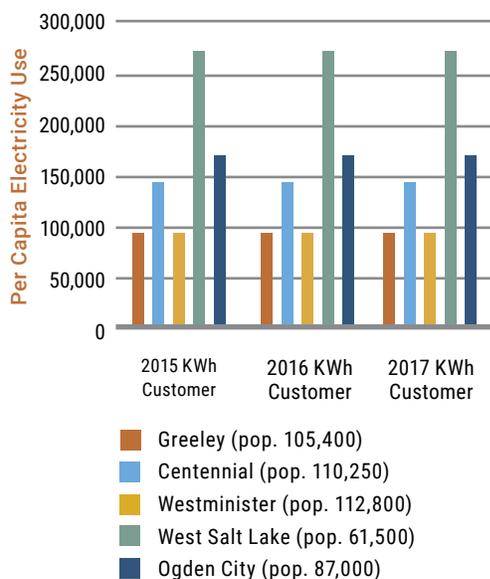


Figure 10. Comparison of commercial electricity use per customer

## Municipal Baseline

The project team evaluated data provided by Ogden City Facilities, Rocky Mountain Power, Dominion Energy, and McKinstry, the contractor implementing Ogden’s guaranteed energy savings performance contract (GESPC). As of May 2020, Ogden City is under contract to complete a GESPC project to make efficiency upgrades to several municipal facilities. McKinstry will complete the preliminary energy assessment, construction, and post-project evaluation. Ogden City has prioritized building efficiency improvements, such as upgraded lighting and HVAC systems, for 13 facilities. The improvements are anticipated to reduce the energy use intensity—energy used per square foot—by more than 13% upon project completion.



# Where do we Want to Go? Ogden's Energy Savings Goals

## The four energy-savings goals set by Ogden City are:

- 1. Municipal Goal:** Cost-effectively decrease average energy intensity of municipal facilities by 5% by 2025, as compared to the 2018 baseline.
- 2. Business Sector Goal:** Increase commercial/industrial facilities total annual participation in efficiency programs by 5% by 2025, as compared to 2018 baseline.
- 3. Residential Sector Goal:** Increase energy efficiency upgrades to residential properties by 25% and increase participation in low-income efficiency programs by 50%, over 2018 baseline by 2025.
- 4. Community-wide Goal:** The collective energy savings from the municipal, business, and residential goals is estimated to result in:

- **Electricity savings:** 17,800,000 kWh in 2025 (106,800,000 kWh savings from 2020 through 2025, equal to the annual consumption of about 11,670 average Utah homes)<sup>18</sup>
- **Natural gas savings:** 10,250 Dth in 2025 (61,500 Dth savings from 2020 through 2025, equal to the annual consumption of 1,026 average Utah homes)
- 436,801 MMBTU of combined electricity and natural gas savings from 2020 through 2025

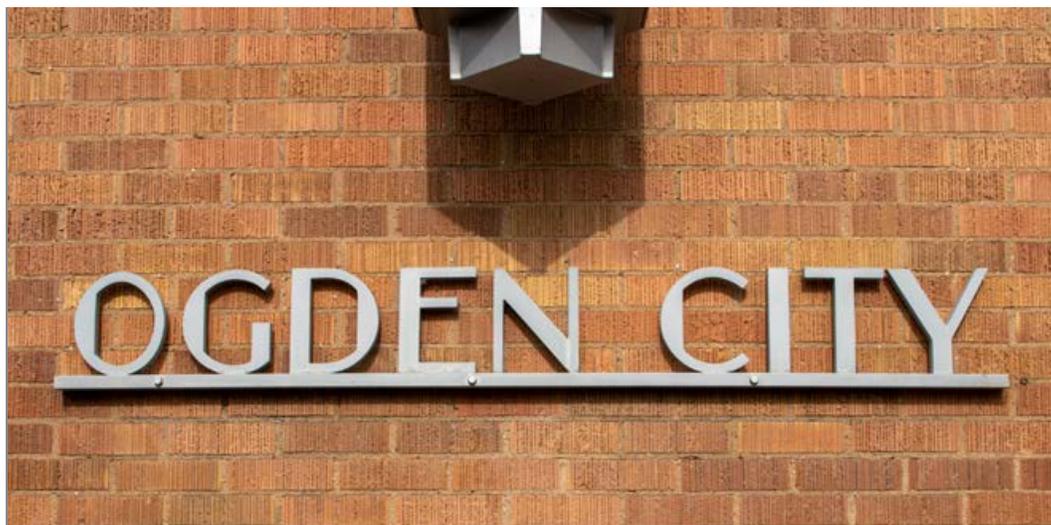
## Goal Selection and Community Feedback

The development of Ogden City's energy savings goals involved several steps, including proposal, revisions, and feedback from the community. The first round of goals was proposed by the steering committee at the August 2019 steering committee meeting and included:

- **Decrease average energy use across municipal facilities by 5%**
- **Increase commercial participation in conservation programs by 5%**
- **Improve aging building stock**
- **Reduce energy cost for low-income residents by 10%**

The project team used the goals selected at the August meeting to create a survey to collect community feedback. Over 120 survey responses from community members and businesses were received. Most respondents supported the overall goals, but some provided additional comments that stated the goals were not ambitious enough, were too vague, and some expressed concern about the impact on economic development. The steering committee adopted the finalized energy goals after additional discussion at the November 2019 steering committee meeting, a review of the results of the community survey, and feedback received during the community feedback sessions.

<sup>18</sup> The equivalencies utilized to provide context to the electricity and natural gas savings for each of these goals rely on a prepared report developed by the Southwest Energy Efficiency Project that examines Utah residential energy consumption. This fact sheet from October 2018 pegs an average Utah household as consuming 9,151 kilowatt hours of electricity and 70.57 dekatherms of natural gas



**Energy Use Intensity (EUI):**

Energy use intensity is the amount of energy in KBTU (thousand British Thermal Units) per square foot. It is one way to compare energy use between buildings.

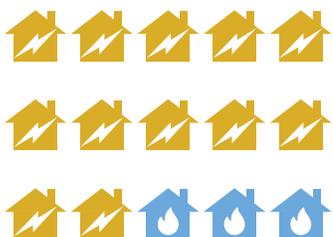
**Municipal Goal:** Cost-effectively decrease the average energy use intensity of its municipal facilities by 5% by 2025 as compared to the 2018 baseline.

**In 2025, the municipal goal is estimated to save:**

- 1,100,000 kWh of electricity,
- 2,200 Dth of natural gas, or
- 5,953 MMBTU of electricity and natural gas combined.<sup>19</sup>

This amount of energy savings is equivalent to the annual electricity consumption of about 120 average Utah homes and the annual natural gas consumption of 31 average Utah homes.<sup>20</sup> This equates to approximately 914 metric tons of carbon emissions saved.

**Municipal Savings Equivalent**



- = 10 Homes' Annual Electricity Use
- = 10 Homes' Annual Natural Gas Use

This goal builds on a current GESPC project that is underway for Ogden City facilities. The current GESPC project is expected to reduce energy use intensity (EUI) of 13 Ogden City municipal facilities by 14% after project completion. Energy efficiency improvements will be made through the replacement of heating and lighting equipment and installation of improved automated controls. The goal sets an additional 5% reduction in average EUI for all municipal facilities on top of the estimated reductions to be achieved through the current GESPC. With this target in mind, the 2025 target average EUI for all Ogden City municipal facilities is 93.4 KBTU/square foot, as compared to an estimated EUI of 98.2 KBTU/square foot in 2018. It is important to note that EUI varies considerably between each facility, but the targeted EUI is an average of all facilities.

<sup>19</sup> These energy savings estimates are derived from the estimated 5% reduction in average EUI across Ogden's municipal facilities and corresponding reductions of natural gas and electricity that would be achieved from this reduction.

<sup>20</sup> The average annual electricity and natural gas consumption for a Utah home is taken from a 2018 Southwest Energy Efficiency Project (SWEET) report, found here: [http://www.swenergy.org/Data/Sites/1/media/documents/publications/factsheets/2018-fact-sheets/sweep-ut-factsheet-2018\\_final.pdf](http://www.swenergy.org/Data/Sites/1/media/documents/publications/factsheets/2018-fact-sheets/sweep-ut-factsheet-2018_final.pdf) and emissions calculations rely on data from the U.S. federal Environmental Protection Agency EGRID reported numbers for the state of Utah, found here: [https://www.eia.gov/environment/emissions/co2\\_vol\\_mass.php](https://www.eia.gov/environment/emissions/co2_vol_mass.php)

**Business Sector Goal:** Increase commercial/industrial facilities total annual participation in efficiency programs by 5% by 2025, as compared to 2018 baseline.

**By 2025, the business sector goal is estimated to save:<sup>21</sup>**

- 103,000,000 kWh of electricity
- 6,100 Dth of natural gas, or
- 357,536 MMBTU of electricity and natural gas combined

These savings are equivalent to the electricity consumption of about 11,255 average Utah homes and the natural gas consumption of 86 average Utah homes. This equates to nearly 75,000 metric tons of carbon emissions saved due to 2,531 projects completed between 2020 and 2025.



The business sector is broad and includes the following: small businesses, industrial facilities, academic institutions (such as Weber State University and Ogden City School District), community centers not managed by Ogden City (such as the Weber County Library), and religious institutions.

This goal tracks the number of energy efficiency projects in this sector, such as rebates redeemed through utility programs, through utility programs, GESPC projects, and projects, and other efficiency projects.

One suggested method for tracking this goal is by examining increases in the number of utility-sponsored efficiency incentives redeemed by Ogden businesses. This can be compared to the Rocky Mountain Power Wattsmart program data and the Dominion Energy ThermWise program data provided for the baseline level of efficiency incentive program participation in 2018. Rocky Mountain Power reported 187 commercial electricity efficiency projects and 34 industrial electricity efficiency projects implemented in 2018, totaling 221 projects. Increasing this number of projects by 5% annually by 2025 would equate to an additional 75 projects in total, or an average additional 13 projects per year.

In 2018, there were an estimated 90 non-residential natural gas rebates redeemed through the Dominion Energy ThermWise program. A 5% annual increase would be an additional 30 projects by the year 2025, an average increase of 5 rebates redeemed per year.

Figure 11 illustrates how many additional energy efficiency projects the Ogden business sector needs to implement each year to meet the goal. It also shows the total number of projects by year (new efficiency projects plus the estimated number of projects that are likely to occur, based on data from previous years.).



**Figure 11.** Projected energy efficiency projects in the business sector.

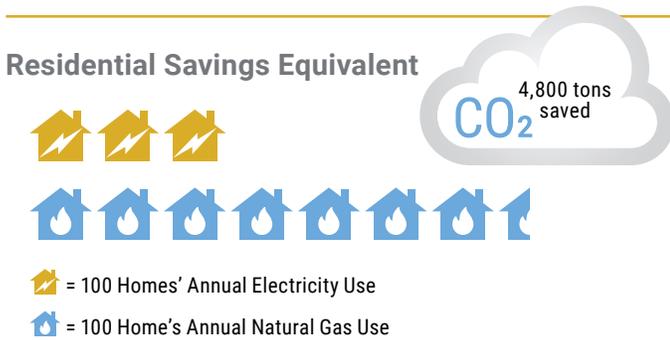
<sup>21</sup> This was calculated using the number of rebates redeemed and associated energy savings from a 5% annual increase in the number of non-residential natural gas, commercial electricity and industrial electricity rebates from Dominion Energy and Rocky Mountain Power.

**Residential Sector Goal:** Increase residential energy efficiency upgrades by 25% and increase participation in low-income efficiency programs by 50%, over the 2018 baseline, by 2025.

**In 2025, the residential sector goal is estimated to save:<sup>22</sup>**

- 2,700,000 kWh of electricity,
- 53,200 Dth of natural gas, or
- 62,412 MMBTU of combined electricity and natural gas.

The energy savings associated with the residential goal is equivalent to the annual electricity consumption of about 295 average Utah homes and the annual natural gas consumption of about 750 average Utah homes. This equates to nearly 4,800 metric tons of carbon emissions saved.



**The residential goal includes two parts:**

1. Targets for general residential properties, and
2. Targets for those that qualify for low-income efficiency programs.

The definition of “energy efficiency upgrades” encompasses a wide variety of projects, from LED replacements to air sealing and furnace replacements. To calculate the potential impact of an increased number of projects, the project team relied on estimated increases

in the number of rebates redeemed through energy efficiency programs. However other projects can contribute to this goal, such as net-zero new home construction.

The first part of the residential goal is to increase the number of residential energy efficiency projects implemented in Ogden between 2020 and 2025 by 25%, as compared to the 2018 baseline. A total of 1,617 residential energy efficiency projects were implemented through Rocky Mountain Power’s and Dominion Energy’s energy efficiency incentive programs in 2018 (510 electric energy efficiency projects and 1,107 natural gas energy efficiency). If the same proportion of electricity and natural gas efficiency projects are implemented between 2020 and 2025 as the baseline, this is an additional 128 electricity efficiency projects, or 21 additional projects per year on average (see Figure 12). This equates to an additional 277 natural gas projects or 46 projects per year on average.



**Figure 12.** Projected energy efficiency projects in the residential sector.

The total number of residential energy efficiency projects projected in 2025 is more important than the breakdown between electricity and natural gas projects. If 2,022 projects are completed, with any distribution between

<sup>22</sup> This was calculated using the number of rebates redeemed and associated deemed savings from a cumulative 25% increase in the number of residential natural gas and residential electricity rebates from Dominion Energy and Rocky Mountain Power, respectively, by 2025. The estimate energy savings and equivalencies does not include additional energy savings that would result from addition low-income efficiency program participation.



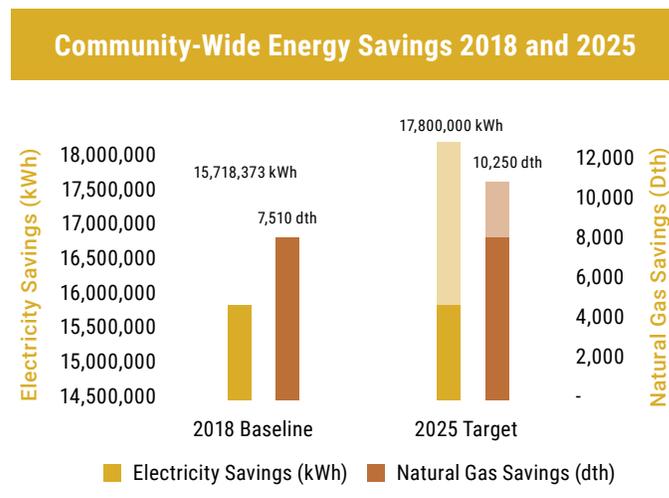
**Community-wide goal:** From a community perspective, the combined energy savings from the municipal, business, and residential goals is estimated to result in:<sup>23</sup>

- Electricity savings: 17,800,000 kWh in 2025 (106,800,000 kWh savings from 2020 through 2025, equal to the annual consumption of about 11,670 average Utah homes)<sup>24</sup>
- Natural gas savings: 10,250 Dth in 2025 (61,500 Dth savings from 2020 through 2025, equal to the homes annual consumption of 1,026 average Utah homes)
- 436,801 MMBTU of combined electricity and natural gas savings from 2020 through 2025

Figure 13 represents the baseline energy savings achieved in 2018 and the projected cumulative savings anticipated in 2025 as a result of the municipal, business, and residential sector energy savings goals.

project type, the goal will be achieved. The chart below demonstrates the suggested target number of residential efficiency projects that should be implemented each year to achieve part 1 of the residential goal.

The second part of the residential goal focuses on increased energy efficiency and resilience among income-qualifying residents in Ogden. This goal is based on the number of homes that received weatherization services through the State of Utah’s Weatherization Assistance Program (WAP). The WAP is a federally funded program administered by the State of Utah that provides home weatherization services to residents who meet income eligibility requirements. The weatherization services include insulation, air sealing, furnace and air conditioning replacement, and installation of efficient lighting. The goal aims to increase participation in the WAP by 50%, compared to the baseline year, an increase from 39 annual participants in 2018 to 59 annual participants in 2025. This is 3 additional projects per year on average.



**Figure 13.** Community-Wide Energy Savings.

<sup>23</sup> The community-wide goals for energy savings are summations of each sector goal savings for both natural gas and electricity.

<sup>24</sup> The equivalencies utilized to provide context to the electricity and natural gas savings for each of these goals rely on a prepared report developed by the Southwest Energy Efficiency Project that examines Utah residential energy consumption. This fact sheet from October 2018 pegs an average Utah household as consuming 9,151 kilowatt hours of electricity and 70.57 dekatherms of natural gas.

# How do we get There?

## Priority Strategies and Actions for Implementation

The following list of strategies, actions, and timelines serves as a guide for Ogden City, area businesses, and residents to reach the adopted energy reduction goals. Each strategy should be viewed as one of several that are necessary to achieve each sector goal. The prioritized strategies listed below should be implemented first, prior to considering the additional strategies included on page 32 and 33.

**NOTE:** This Plan was finalized during the early phase of the COVID-19 global pandemic. While the timelines for implementation have been updated to reflect the impact on municipal budgets and the economy as a whole, additional modifications may be necessary as more becomes known about how the economic recovery will impact Ogden's municipal budget, as well as local businesses' and residents' ability to participate in implementation of this Plan

### Best Practice Strategies Selection and Community Feedback

The project team presented a list of best practice strategies to community members and solicited feedback about which strategies would best fit Ogden through two community events. Attendees included Ogden residents, city council members, Weber State University professors, local non-profit employees, and small business owners. Attendees were asked to evaluate each strategy for the residential and commercial/ industrial sectors according to several criteria:

- **Ease of implementation:** considerations about funding, existing programs, and leadership support
- **Community interest:** considerations about neighborhood support and organic resident momentum
- **Highest impact:** considerations about the greatest potential energy-use reduction among other benefits.

The project team presented the list of Best Practice Strategies with community feedback at the fifth steering committee meeting and solicited feedback from committee members. Attendees evaluated the project team's list of Best Practice Strategies according to potential impacts, technical feasibility, political feasibility, and timeline for implementation. Members of each sector chose their top strategies, and then the entire group voted to select the "top priority" strategy that should be implemented first for each sector goal. The selected best strategies are discussed in further detail below.

## Monitoring Progress Over Time

The project team recommends that the entity with primary responsibility for carrying out this project review the implementation plan annually to make amendments based on the progress. This annual review should be overseen by the Ogden City Council with assistance from the Ogden Natural Resources and Sustainability Stewardship Committee, and Ogden City Facilities. Additional plan iterations could include the identification of additional partners, resources, incentives or funding sources, and/or the adjustment of strategies to meet the goals in advance of the 2025 timeline.

# Municipal Strategies



Four municipal strategies were selected to achieve the municipal goal of cost-effectively decreasing the average energy use intensity of Ogden’s municipal facilities by 5% by 2025, compared to the 2018 baseline. This 5% goal is additive to the current energy savings performance contract underway at Ogden City.

## Municipal Strategies

(Top Strategy) **Strategy 1:** Benchmark municipal facilities

**Strategy 2:** Assess resilience opportunities in municipal facilities and build on guaranteed energy-saving performance contract project

**Strategy 3:** Conduct building re-tuning for municipal facilities and water treatment facilities

**Strategy 4:** Create a position for an Ogden City energy and resilience manager

## Energy Efficiency and Resilience Program and Resource Catalog

The Energy Efficiency and Resilience Program and Resource Catalog, available on the Ogden City website [www.ogdencity.com/sustainability](http://www.ogdencity.com/sustainability), identifies funding mechanisms, incentive programs, information, and tools offered by federal, utility, state, city, and third-party programs to help accelerate efficiency and resilience. This catalog will support implementation of the Energy Wise Ogden Strategic Implementation Plan. It should be treated as a living document and updated periodically as new programs and resources become available and change.

## Top Priority **Strategy 1:** Benchmark municipal facilities

**Lead Implementer:** Ogden City

**Supporting Implementer:** Rocky Mountain Power, Dominion Energy

**Programs to Leverage:** ENERGY STAR Portfolio Manager ([energystar.gov/buildings/facility-owners-and-managers/existing-buildings/use-portfolio-manager](https://energystar.gov/buildings/facility-owners-and-managers/existing-buildings/use-portfolio-manager)), Rocky Mountain Power Energy Benchmarking program ([rockymountainpower.net/savings-energy-choices/business/benchmarking.html](https://rockymountainpower.net/savings-energy-choices/business/benchmarking.html)), Dominion Energy Business Benchmarking program ([thermwise.com/business-benchmarking/](https://thermwise.com/business-benchmarking/))

### Action steps and timeline:

**Step 1:** Enroll Ogden City facilities in Rocky Mountain Power Energy Benchmarking program (June 2020)

**Step 2:** Identify lead municipal staff person/contractor to complete benchmarking training and manage the process of benchmarking municipal facility (October 2020)

**Step 3:** Complete benchmarking of all municipal facilities, identify low performing buildings, and investigate additional energy efficiency projects (November 2020)

### Resilience Benefit:

Benchmarking energy use of municipal buildings helps identify buildings in need of energy improvements and can help to reduce overall energy consumption and peak demand, which reduces strain on utility infrastructure. Efficient buildings also provide more comfortable indoor temperatures and can be used as emergency centers

for “shelter in place” scenarios that keep occupants comfortable and safe.

### Strategy Details:

Benchmarking the energy consumption of municipal facilities is a cost-effective and widely accepted first step prior to undertaking other high-impact, energy-efficiency strategies. Energy benchmarking is a process to measure a building’s energy consumption and cost and then compare the results to buildings with similar occupancies, climates, and sizes. Buildings that benchmark energy use on a regular basis reduce their energy consumption by 2.4% annually on average.<sup>25</sup>

City facility managers can implement this strategy through use of the free online ENERGY STAR Portfolio Manager tool.<sup>26</sup> Portfolio Manager can be used to track energy use and costs, water consumption and costs, as well as greenhouse gas emissions of a single building or a portfolio of buildings. More than 100 metrics can be tracked with this tool by entering energy consumption data, cost information, and building size and operational details. Then this information can be used to compare building performance to the 2018 energy baseline, national medians, and other Ogden City facilities.

This was selected as the top priority strategy since benchmarking can be implemented quickly and at little to no cost. To start, Ogden City will need to identify a staff person or contractor to enter energy consumption data into Portfolio Manager.<sup>27</sup> Electricity consumption data can be automatically entered through Rocky Mountain Power’s Energy Benchmarking tool, which transfers electricity consumption data into Portfolio Manager. Automated benchmarking can greatly reduce the time, effort, and errors associated with manual data entry. Except for the municipal facilities operating on the Transportation Service rate schedule, all of Ogden City’s facilities are eligible to participate in the ThermWise Business Benchmarking program.<sup>28</sup> Data entry needs to

<sup>25</sup> United States Environmental Protection Agency ENERGY STAR program, Data Trends: Benchmarking and Energy Savings, accessed March 2, 2020: <https://www.energystar.gov/buildings/tools-and-resources/datatrends-benchmarking-and-energy-savings>

<sup>26</sup> United States Environmental Protection Agency ENERGY STAR program, Use Portfolio Manager webpage: accessed March 2, 2020: <https://www.energystar.gov/buildings/facility-owners-and-managers/existing-buildings/use-portfolio-manager>

<sup>27</sup> Rocky Mountain Power Energy Benchmarking, accessed March 2, 2020: <https://www.rockymountainpower.net/savings-energy-choices/business/benchmarking.html>

<sup>28</sup> The ThermWise Business Benchmarking program (<https://www.thermwise.com/business-benchmarking/>) is available to entities on the Dominion Energy General Service rate schedule. Ogden City municipal facilities are on the Transportation Service rate schedule and so are ineligible to participate.

follow a routine schedule to ensure that it is accurately carried out. Without regular data entry, it is difficult to monitor the changes in energy consumption that can be addressed with behavioral changes, energy management controls, or investment in efficiency technology.



**Utah example:** *Locally, Salt Lake City uses Portfolio Manager to track energy consumption. Since 2015, Salt Lake City has required all city-owned buildings larger than 3,000 square feet to track and report annual energy use using the Portfolio Manager tool. In this same policy, buildings greater than 22,000 square feet are required to identify energy-saving opportunities and implement energy-saving projects. Salt Lake City requires facilities to be evaluated for retro-commissioning at least once every 10 years to improve energy performance.*

## Strategy 2: Assess resilience opportunities in municipal facilities and build on guaranteed energy-saving performance contract project

**Lead Implementer:** Ogden City Facilities

**Supporting Implementers:** Utah Governor's Office of Energy Development, Ogden Fire Department Emergency Management group, Utah Department of Public Safety, U.S. Department of Energy Combined Heat and Power Technical Assistance Partnership

**Programs to Leverage:** Emergency Management Performance Grant ([dem.utah.gov/grants/non-disaster-grants/empg/](https://dem.utah.gov/grants/non-disaster-grants/empg/)), No-cost Resilience Screening offered by Southcentral Combined Heat and Power Technical Assistance Partnership ([betterbuildingsolutioncenter.energy.gov/accelerators/combined-heat-and-power-resiliency](https://betterbuildingsolutioncenter.energy.gov/accelerators/combined-heat-and-power-resiliency))

### Action steps and timeline:

- Step 1:** Examine opportunities to incorporate resilience planning into municipal energy efficiency planning and emergency planning activities (June 2020)
- Step 2:** Construction on retrofits for GESPC completed (August 2020)
- Step 3:** Examine opportunities to engage city employees in behavioral activities to conserve energy in municipal facilities (October 2020)
- Step 4:** Investigate opportunities for future GESPC initiatives for municipal facilities and streetlights (January 2021)

### Resilience Benefit:

An assessment of the current state of building resilience can identify facilities with a good potential for installing resilient energy systems, such as combined heat and power, micro grids, distributed energy generation, and battery storage. Incorporating resilient energy systems can improve reliability in emergency scenarios and reduce utility system stress by reducing or eliminating energy demand in emergency situations.

### Strategy Details:

This strategy is a priority since it builds upon the city's current Guaranteed Energy-Savings Performance Contract (GESPC). The city's current GESPC, which was initiated in 2020, is estimated to reduce the energy use intensity (EUI) of 13 municipal facilities by about 14%. This will be accomplished through the replacement of water heating, HVAC systems, lighting, and improving other energy management controls. The strategy encourages additional efficiency and resilience opportunities that were not included in the current GESPC to be assessed and implemented soon. For example, the city should conduct a resilience screening to assess opportunities to install resilient energy systems (such as combined heat

and power, micro-grids, and distributed energy resources) on Ogden’s municipal facilities that provide core public safety functions. This initial screening will help the city determine which facilities might benefit from an industrial grade assessment for possible installation of resilient energy systems.

**Utah example:** *In March 2016 the city of Orem, Utah entered a GESPC for a \$6.7 million contract for 19 energy efficiency projects that will substantially save electricity and natural gas. The funding of these projects is estimated to save \$893,000 per year through improved efficiency technology and reduced maintenance costs. This was made possible through enabling legislation that allows for energy-savings performance contracting for state agencies, local units of government, and K-12 schools.*

### Strategy 3: Conduct building re-tuning for municipal facilities and water treatment facilities

**Lead Implementer:** Ogden City Facilities

**Supporting Implementer:** Rocky Mountain Power, Dominion Energy

**Programs to Leverage:** Rocky Mountain Power Energy Management Program ([rockymountainpower.net/savings-energy-choices/business/energy-management.html](http://rockymountainpower.net/savings-energy-choices/business/energy-management.html))

#### Action steps and timeline:

- Step 1:** Create a 5-year building recommissioning plan for all Ogden facilities (October 2020)
- Step 2:** Examine building controls and schedules of all municipal facilities (October 2020)
- Step 3:** Evaluate possibilities for recommissioning not included in current GESPC (November 2020)

#### Resilience Benefit:

Re-tuning can very cost-effectively lower energy consumption patterns in buildings, thereby reducing demand for heating and cooling and lowering associated stress on utility energy systems. Cost savings achieved from building re-tuning can be reinvested in other energy efficiency or resilience projects.

#### Strategy Details:

Building recommissioning or re-tuning is a process that examines a building's energy performance and resets it to the original design or intent to conserve energy and meet the needs of its occupants. Re-tuning is a cost-effective way of reducing energy consumptions and costs, with median payback times between 1.1 and 4.2 years.<sup>29</sup> Projects with a comprehensive approach achieve much higher levels of savings than a constrained or targeted approach to energy management.<sup>30</sup> This strategy can be employed in conjunction with both benchmarking municipal facilities and as a long-term follow-up to current GESPC efforts. For example, benchmarked buildings that show a below average ENERGY STAR Score are likely to benefit from building re-tuning.

**Utah example:** *Salt Lake City incorporated building re-tuning into an internal energy management policy for facilities owned and operated by the Salt Lake City Corporation. Salt Lake City has created an Energy Management Steering Committee, which has participation from several city departments and requires these departments to develop an Energy Management Plan. These plans require near- and long-term energy management strategies with the following activities:*

- **Benchmarking**
- **Identification and documentation of energy savings opportunities**
- **Development of efficient operations**
- **Building operator training**
- **Employee engagement**
- **Renewable energy opportunities**

<sup>29</sup> Mills, Evan. Lawrence Berkley National Laboratory, Building Commissioning: A Golden Opportunity for Reducing Energy Costs and Greenhouse Gas Emissions, July 21, 2009: <http://cx.lbl.gov/documents/2009-assessment/lbnl-cx-cost-benefit-pres.pdf>  
<sup>30</sup> See Footnote 29.

*Within the documentation of this required process, Salt Lake City defines re-tuning as “...a systematic process to identify operational problems by leveraging data collected from the building automation system and correcting those problems at no-cost or low-cost.”*

## **Strategy 4:** Create a position for an Ogden City energy and resilience manager

**Lead Implementer:** Ogden City Facilities

**Supporting Implementers:** Weber State University Sustainability, Rocky Mountain Power

**Programs to Leverage:** Energy project manager co-funding from Rocky Mountain Power ([rockymountainpower.net/savings-energy-choices/business/energy-project-manager-cofunding.html](https://www.rockymountainpower.net/savings-energy-choices/business/energy-project-manager-cofunding.html))

### **Action steps and timeline:**

**Step 1:** Include funding for an energy and resilience manager or contractor into the city budget (May 2021)

**Step 2:** Work with Rocky Mountain Power to determine if a “cost-share” arrangement is a possibility for this position (May 2021)

**Step 3:** Hire or contract with an energy and resilience manager (December 2021)

### **Resilience Benefit:**

An energy and resilience manager can identify opportunities for energy savings and resilience improvements in Ogden municipal facilities and coordinate energy management efforts with emergency planning and response initiatives. The cost savings from future energy efficiency improvements can be reinvested into other climate mitigation, resilience, and emergency management adaptations.

### **Strategy Details:**

The steering committee recommends the creation of a position for an energy and resilience manager within Ogden City. This will help ensure that energy-savings strategies and actions continue to be pursued by the city. A person in this specialized role would be responsible for managing tasks related to data accounting for energy benchmarking, ensuring targets are met for reductions, and exploring options for new efficiency projects. This strategy may be more difficult to implement than the others since it requires a funding appropriation. However, this position could be funded through cost savings achieved through energy efficiency projects managed by this employee. Additionally, there may be opportunities for collaboration to co-fund a position for an energy and resilience manager. For example, Rocky Mountain Power’s Energy Project Manager Co-Funding program pays for a portion of the cost for energy management positions housed in municipalities, institutions, and other large electricity users that meet minimum requirements for annual energy savings.<sup>31</sup> In addition, during steering committee meetings Weber State University representatives suggested that an energy and resilience manager position could be supported by the University.

**Utah example:** *Weber State University provides a concrete example of this strategy in action. When strategically examining how to best meet the energy reduction goals established in the Weber State Climate Action Plan, WSU Sustainability explored GESPC before creating and hiring a position for an energy manager. The first WSU energy manager was hired in 2009 to assist with reductions in energy consumption. In the first year of this position, the energy manager saved WSU over \$430,000 in reduced electricity and natural gas costs. The reductions in consumption were identified through the in-house execution of projects that were identified through an energy audit.*

<sup>31</sup> Rocky Mountain Power Energy project manager co-funding webpage, accessed March 2, 2020: <https://www.rockymountainpower.net/savings-energy-choices/business/energy-project-manager-cofunding.html>

## Business Sector Strategies



The following 3 strategies were selected as the top ways that the Ogden business sector could increase total annual participation in efficiency programs by 5% by 2025, as compared to 2018 baseline.

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### Business Sector Strategies

(Top Strategy) **Strategy 1:** Educate businesses about available energy incentives and financing programs

**Strategy 2:** Dedicated staff to perform outreach to businesses about energy efficiency and resilience

**Strategy 3:** Encourage businesses to benchmark energy use

**Local example:** *Weber State University provides a concrete example of this strategy in action. When strategically examining how to best meet the energy reduction goals established in the Weber State Climate Action Plan, WSU Sustainability explored GESPC before creating and hiring a position for an energy manager. The first WSU energy manager was hired in 2009 to assist with reductions in energy consumption. In the first year of this position, the energy manager saved WSU over \$430,000 in reduced electricity and natural gas costs. The reductions in consumption were identified through the in-house execution of projects that were identified through an energy audit.*

## Top Priority **Strategy 1:** Educate businesses about available energy incentives and financing programs

**Lead Implementers:** Ogden City Business Development Division, Ogden Natural Resource and Sustainability Stewardship Committee

**Supporting Implementers:** Rocky Mountain Power, Dominion Energy, Ogden Weber Chamber of Commerce

**Programs to Leverage:** Rocky Mountain Power Small Business Direct ([rockymountainpower.net/savings-energy-choices/business/wattsmart-efficiency-incentives-utah/ut-small-medium-business/ut-small-business-lighting.html](https://rockymountainpower.net/savings-energy-choices/business/wattsmart-efficiency-incentives-utah/ut-small-medium-business/ut-small-business-lighting.html)), Rocky Mountain Power HVAC Check Up ([rockymountainpower.net/savings-energy-choices/business/wattsmart-efficiency-incentives-utah/ut-incentive-lists/ut-hvac.html](https://rockymountainpower.net/savings-energy-choices/business/wattsmart-efficiency-incentives-utah/ut-incentive-lists/ut-hvac.html)), Dominion Energy ThermWise for Business ([thermwise.com/business-rebates/](https://thermwise.com/business-rebates/))

### Action steps and timeline:

**Step 1:** Organize an information round table with Ogden City Business Development employees and utility efficiency program representatives to educate business stakeholders about existing efficiency program options (July 2020)

**Step 2:** Upload information about energy benchmarking and the Energy Efficiency and Resilience Program and Resource Catalog on Ogden City websites (August 2020)

**Step 3:** Create outreach plan and identify collaborations or pathways for Ogden City or local organizations to share information on existing incentives and financing for sharing information about energy efficiency information (September 2020)



### Resilience Benefit:

Increasing awareness of various energy efficiency incentive and financing programs can drive energy efficiency improvements for commercial and industrial businesses. The cost savings from energy efficiency projects allow for owners to invest money back into their businesses and the local economy. Awareness campaigns promoting energy efficiency can also promote priority resilience strategies for businesses to consider implementing.

Communities with a stronger local economy are more resilient and less vulnerable to disruption. The cost savings that can result from increased business participation in energy efficiency incentive and financing programs can strengthen the local economy in two ways. First, reducing business operating costs can provide the opportunity to reinvest savings back into the business. Second, if the energy efficiency financing and incentives are from a local financing program or lender, this keeps invested dollars circulating in the local economy.

### Strategy Details:

Widespread education to area businesses about efficiency and resilience programs and how to enroll in the programs is an essential step toward maximizing community efficiency and resilience. This low-cost strategy is focused on various groups collaborating more closely to promote existing energy efficiency and resilience incentive and financing programs that are currently available to local businesses and institutions. The Energy Efficiency and Resilience Program and Resource Catalog developed for this project will be an asset in carrying out this strategy (see note about the Program and Resource Catalog on page 19).

## Strategy 2: Dedicated staff to perform outreach to businesses about energy efficiency and resilience

**Lead Implementer:** Ogden City Business Development

**Supporting Implementers:** Weber State University, Rocky Mountain Power, Dominion Energy

**Programs to Leverage:** AmeriCorps Internship

### Action steps and timeline:

**Step 1:** Identify whether this role would be assumed by existing staff or new staff hire (November 2020)

**Step 2:** Create strategic business outreach plan for educating and providing guidance to Ogden businesses about energy efficiency actions. (January 2021)

**Step 3:** Work with business account managers with Rocky Mountain Power and Dominion Energy to identify businesses not currently participating in efficiency programs (January 2021)

**Step 4:** Begin business outreach on energy efficiency and resilience (June 2021)

### Resilience Benefit:

A staff person can be an asset to small- and medium-sized businesses by providing valuable assistance about how business owners can use resilience plans to remain operational during disruptions. Many of these smaller-sized business staff may not have the staff or time to access or research this information themselves.



### Strategy Details:

A dedicated staff person can educate businesses about the benefits of energy efficiency and resilience planning, as well as about available efficiency incentives, financing tools, and other programs available to local businesses. Other community institutions, such as Weber State University could also partner with Ogden City to assist with this position. A partnership between multiple institutions utilizes assets and expertise from other community coalitions, committees, and organizations to move this plan forward. There may be opportunities to leverage marketing resources from Rocky Mountain Power, Dominion Energy, and multiple sources to assist with this outreach to Ogden businesses. Both utilities have representatives whose primary objective is to engage commercial entities in energy efficiency programs. Additionally, Rocky Mountain Power has a program that co-funds a dedicated energy manager for businesses that have large potential for electricity savings.

Hiring a dedicated staff member would alleviate some common barriers to business participation in energy efficiency actions. Some of these include a lack of awareness of the benefits of energy efficiency and a perceived disruption of making improvements. Many of these hurdles would be overcome through the dedicated time and expertise of a business outreach employee, increasing the potential for energy savings.<sup>32</sup>

<sup>32</sup> Nowak, Seth. "Big Opportunities for Small Business: Successful Practices of Utility Small Commercial Energy Efficiency Programs." American Council for an Energy-Efficient Economy. November 2016. Available at: <https://www.aceee.org/research-report/u1607>.

### Strategy 3: Encourage businesses to benchmark energy use

**Lead Implementers:** Ogden City Business Development, Ogden Natural Resource and Sustainability Stewardship Committee

**Supporting Implementers:** Weber State University, Ogden Weber Chamber of Commerce, Ogden City Business Development Division

**Programs to Leverage:** ENERGY STAR Portfolio Manager ([energystar.gov/buildings/facility-owners-and-managers/existing-buildings/use-portfolio-manager](https://energystar.gov/buildings/facility-owners-and-managers/existing-buildings/use-portfolio-manager)), Rocky Mountain Power Energy Benchmarking program ([rockymountainpower.net/savings-energy-choices/business/benchmarking.html](https://rockymountainpower.net/savings-energy-choices/business/benchmarking.html)), Dominion Energy ThermWise Business Benchmarking program ([thermwise.com/business-benchmarking/](https://thermwise.com/business-benchmarking/))

#### Action steps and timeline:

**Step 1:** Assist Ogden City Business Development to establish internal training with utility representatives to learn about benchmarking and utility efficiency programs (July 2020)

**Step 2:** Incorporate information about energy benchmarking on the Ogden City Business Development website and into in-person outreach (August 2020)

**Step 3:** Present information about energy benchmarking and utility efficiency programs at the quarterly town hall with the Ogden Downtown Business Alliance (October 2020)

#### Resilience Benefit:

Benchmarking energy use in businesses can identify buildings in need of energy efficiency improvements. Updating infrastructure, tuning-up heating and cooling

systems, installing heating and cooling system controls, or lighting controls can lead to energy savings that can be reinvested into operational funds that can bolster resilience in times of disruption.

#### Strategy Details:

The third strategy focuses on informing business and property owners about the energy use in their facilities which is the first step prior to investing in energy efficiency improvements. Facilities that benchmark consumption and earn the ENERGY STAR certification use 35% less energy than the average comparable commercial, industrial, or institutional facility.<sup>33</sup> This can have profound financial impacts to businesses bottom lines, such as in commercial real estate where decreasing energy costs by 30% is equivalent to increasing net operating income by 4%.<sup>34</sup> Ogden businesses have the option to participate in programs offered by Rocky Mountain Power and Dominion Energy that will automatically import their energy consumption data into ENERGY STAR Portfolio Manager. Automating benchmarking reduces the time required for building owners and facility managers to locate and eliminates the need to manually enter energy data, a strong incentive to encourage business benchmarking.<sup>35</sup>

To implement this strategy, areas businesses first need to be educated about the value of building energy benchmarking using a tool such as ENERGY STAR Portfolio Manager, and the availability of the utility-sponsored automated benchmarking programs. A program to encourage benchmarking could be implemented in the mid- to near-term and would need an entity to be designated as the lead for developing and implementing a program. Funding may also be needed to pay for outreach and training activities. Potential partners to assist with this strategy could include Rocky Mountain Power, Dominion Energy, Weber State University, Ogden Downtown Alliance, Ogden City Community & Economic Development and/or Ogden City Business Development.

<sup>33</sup> See additional information on the ENERGY STAR website for businesses at: [https://www.energystar.gov/sites/default/files/buildings/tools/Benchmarking\\_to\\_Save\\_Energy.pdf](https://www.energystar.gov/sites/default/files/buildings/tools/Benchmarking_to_Save_Energy.pdf)

<sup>34</sup> See previous footnote.

<sup>35</sup> <https://www.swenergy.org/automated-energy-benchmarking-a-new-solution-for-businesses-in-utah>

# Residential Sector Strategies

## Programs that provide services to income-qualified residents in Ogden:

- Home Energy Assistance Target (HEAT)
- Weatherization Assistance Program (WAP)
- Joyce Hansen Hall Food Bank (Catholic Community Services of Northern Utah)
- Outreach from Weber State University Sustainability
- Family Counseling Service of Northern Utah, Inc.
- Ogden Salvation Army
- Midtown Community Health Care, Inc.
- Utah Department of Workforce Services
- Ogden City Community Development's Emergency Home Repair Program
- Weber-Morgan Health Department's WIC Program
- St. Anne's Center/The Lantern House
- Your Community Connection's Housing Assistance Program
- Ogden Rescue Mission
- LDS Welcome Center for Immigrants - Ogden



The strategies outlined below aim to increase energy efficiency upgrades to residential properties by 25% and to increase participation in low-income efficiency programs by 50%, over the 2018 baseline.

## Residential Sector Strategies

(Top Strategy) **Strategy 1:** Coordinate energy efficiency campaigns with utilities and service providers for income-qualified services

**Strategy 2:** Enhance education on energy efficiency financing options

**Strategy 3:** Participate in voluntary home energy scoring program

## Top Priority **Strategy 1:** Coordinate energy efficiency campaigns with utilities and service providers for income-qualified services

**Lead Implementers:** Futures Through Training (HEAT implementer), Ogden Civic Action Network

**Supporting Implementer:** Ogden City Housing Authority

**Programs to Leverage:** Ogden Connection the official Ogden City magazine, HEAT program, Weatherization Assistance Program

### Action steps and timeline:

**Step 1:** Brief staff from programs that serve income-qualified residents in Ogden about the Plan and this strategy (August 2020) (See sidebar for list of programs)

**Step 2:** Ensure that all similar and relevant city programs have information on-site for beneficiaries (posters, fliers, contact information in offices) and that program staff are trained on available efficiency programs (October 2020)

**Step 3:** Compile list of program clients that could receive targeted mail, emails, or bill inserts that have information about qualifying benefits (December 2020)

### Resilience Benefit:

Energy efficiency campaigns between utilities and income-qualified service providers help to reduce high energy burdens in low-income communities. Through energy efficiency improvements, households can reduce the cost of utility bills and increase household comfort during normal and extreme events. Low-income households are more vulnerable to extreme events and natural disasters and energy efficiency measures can help to reduce vulnerability, which in turn improves community resilience.<sup>36</sup>

### Strategy Details:

Improved coordination between utility energy efficiency programs and income-qualified service providers is the top priority due to the large social benefit it would provide Ogden City residents while leveraging existing programs. Recipients of income-qualifying programs need to be made aware of qualifying energy efficiency incentives and rebates. This can help increase participation in these programs by more economically vulnerable community members. One example of improved campaign coordination includes bill inserts targeting specific households or neighborhoods with information about qualifying for the Home Energy Assistance Target (HEAT) program for utility bill support. One important aspect of the HEAT program is to encourage recipients to embrace energy efficiency in combination with their assistance to reduce energy bills. Energy efficiency actions can be better encouraged by including information on energy efficiency incentives available from local utilities.

The timeline to implement this coordination could be immediate. This would require better communication and coordination between local service providers at Futures Through Training (local HEAT implementer), city officials, and utility representatives.

One example of how campaigns could be coordinated with utilities and services providers is HEAT program implementer, Utah Community Action, which has ensured that all beneficiaries of this program are signed up for other utility programs. When a client attends an appointment to enroll in the benefits through the HEAT program, the Utah Community Action worker informs them about eligible discounts through the Rocky Mountain Power residential efficiency programs. HEAT recipients through Utah Community Action also receive 5 free LED lightbulbs during their appointments. This is made possible through a partnership with Utah Clean Energy, which supplies donated LED lightbulbs to community partners for distribution. This would be a simple model to also adopt in Ogden as a partnership with Futures Through Training.

## Strategy 2: Enhance education on energy efficiency financing options

**Lead Implementers:** Ogden Civic Action Network, Ogden Natural Resources and Sustainability Stewardship Committee

**Supporting Implementers:** Weber State University, Rocky Mountain Power, Dominion Energy

**Programs to Leverage:** Residential incentives from Rocky Mountain Power ([wattsmarthomes.com/state/UT](http://wattsmarthomes.com/state/UT)), Residential incentives from Dominion Energy's ThermWise program ([thermwise.com/rebates/](http://thermwise.com/rebates/))

### Action steps and timeline:

**Step 1:** Identify outreach priorities and opportunities (July 2020)

**Step 2:** Design outreach plan to improve education on efficiency programs and financing (October 2020)

**Step 3:** Begin outreach to distribute information on energy efficiency financing and education (November 2020)

### Resilience Benefit:

Energy efficiency financing options make larger residential energy upgrades more accessible for Ogden residents. This strategy provides a way to further invest in the local economy by partnering with local financial institutions and creating greater demand for local contractors to install energy efficiency upgrades. Through this strategy, Ogden homeowners can invest in energy efficiency retrofits, which collectively improves the city's housing stock, and increases community resilience. Basic seismic improvements could also be considered during comprehensive energy retrofits, leveraging one construction time period to complete two important types of home resilience improvements.



### Strategy Details:

Enhanced education about energy efficiency financing options for Ogden residents should be designed to increase the number of residential efficiency upgrades implemented. Funding options to promote could include conventional financing and loan programs, CRA lending programs, and income-qualifying services for residential energy improvements. This educational effort could be a partnership implemented by local financial institutions (especially those that administer CRA lending such as Rocky Mountain Community Reinvestment Corporation), Ogden City, utilities, residential energy contractors, and community organizations. Implementation of this strategy could include an RFP from Ogden City for a community-wide "preferred lender" for residential efficiency improvements, or an expansive marketing campaign with community events and classes to educate residents about available programs for financing energy efficiency improvements to their homes.

This strategy is synergistic with the following residential strategy #3, as home energy scoring programs are increasingly recognized by federal home lending programs such as FHA and Fannie Mae.<sup>37</sup>

### Strategy 3: Participate in voluntary home energy scoring program

**Lead Implementer:** To be determined

**Supporting Implementers:** Ogden City Housing Authority, Ogden Community and Economic Development, Ogden Civic Action Network, Ogden Natural Resources and Sustainability Stewardship Committee

**Programs to Leverage:** State of Utah voluntary home energy information pilot program steering committee,<sup>38</sup> United States Department of Energy Home Energy Score ([energy.gov/eere/buildings/downloads/home-energy-score](https://www.energy.gov/eere/buildings/downloads/home-energy-score))

#### Action steps and timeline:

**Step 1:** Identify a lead person from Ogden City or a partner organization to participate in the creation of model rules for a statewide home energy scoring pilot program (July 2020)

**Step 2:** Once the model rules are finalized, assist with launching a statewide pilot program in which the Ogden community could participate (March 2021)

**Step 3:** Develop a coalition of partners that can assist in promoting the home energy scoring pilot program and encourage Ogden residents to participate in program (January 2022)

#### Resilience Benefit:

Implementing a home energy scoring program can help drive demand for home retrofits, therefore improving the affordability, comfort and safety of residential buildings across the community. A pilot home energy scoring program would include an easy-to-understand list of recommended energy retrofits customized for each home and could also include resilience improvements such as seismic/structural upgrades and basic home emergency

preparedness, such as anchoring water heaters to protect against flooding and natural gas leaks that can result from earthquakes.

#### Strategy Details:

To encourage increased home energy retrofits in Ogden, residents need a consumer-friendly report that explains how efficient or inefficient their home is and provides a customized list of priority home energy improvements. A home energy scoring program implemented in Ogden is essential to drive demand for home energy retrofits.

Numerous communities around the United States have launched home energy scoring programs and many of them utilize the United States Department of Energy's Home Energy Score program structure and resources.<sup>39</sup> This national program provides a means of directly comparing energy scores between homes and identifies energy solutions to cost-effectively improve efficiency. The program also provides free home energy assessment software, free training for qualified assessors, and a list of qualified assessors approved to provide Home Energy Score assessments, among other resources.

In March 2020, the Utah Legislature adopted House Bill 235, which will result in the creation of model rules for a pilot home energy scoring program in Utah. This strategy could be implemented in Ogden in coordination with the development of the pilot program developed through HB 235, which would enable Ogden to offer a home energy scoring program to its residents without having to create its own program.

A primary obstacle to implementing home energy retrofits is paying for the upfront costs. For this strategy to be most successful, a widespread educational campaign about available residential efficiency financing programs is needed (see residential strategy #2).

A home energy scoring program would support Ogden's contractor community by increasing demand for local insulation, air sealing, and HVAC contractors to help implement home energy improvements.

# Additional Strategies for Future Consideration

Building continuous momentum to advance energy reductions beyond 2025 in Ogden requires a plan that layers strategies in the near-, mid-, and long-term. Additional mid- and long-term best-practice strategies for municipal, business, and residential sectors that should be considered after implementing the best practice strategies above are outlined below:



## Municipal Sector:

**Additional Strategy 1:** Develop and deliver employee education campaigns on energy efficiency and resilience

An education campaign can positively shape the actions and behavior of Ogden City employees to obtain additional energy savings beyond implementation of efficient technology. It also can impact behaviors and habits in the residential sector, as employees replicate these actions at home. There are numerous free resources about behavioral efficiency changes that can impact energy use in the workplace, such as information available from Energy Star. A more robust program that incentivizes specific behaviors requires a higher investment but could see increased participation among employees.

**Additional Strategy 2:** Incorporate energy and resilience management into water utility operations

Better energy management through efficiency actions can reduce cost and increase savings. This could be achieved through a combination of implementing efficiency technology, such as automated controls, and behavioral action on behalf of staff.

## Business Sector:

### **Additional Strategy:** Developing an energy efficient business recognition program

A recognition program can highlight businesses that have met established energy efficiency standards in order to raise awareness of and investment in energy efficiency. This can be accomplished with a moderate cost investment to develop an ongoing program and annual event to recognize business leaders. Other local communities have developed successful programs that recognize businesses that are taking energy efficiency action, such as Salt Lake City's Elevate Buildings program.<sup>40</sup>



## Residential Sector:

### **Additional Strategy 1:** Leverage utility programs for multifamily properties

An informative campaign that encourages multifamily property owners in Ogden to participate in available programs may increase the number of multifamily energy efficiency projects are completed, providing a key benefit to renter households in Ogden which comprise about 45% of the occupied housing stock. This would require time to coordinate how to best disseminate this information to property managers, and for owners to invest in efficiency improvements.

### **Additional Strategy 2:** Encourage above-code new home construction and retrofits

This is a strategy that the city and other Ogden area organizations can encourage to improve residential energy efficiency. Several institutions in Ogden already pursue above-code standards in residential projects, such as a net-zero home project collaboration with Habitat for Humanity and Weber State University.<sup>41</sup> Joint partnerships that pursue above-code standards set examples for the rest of the community to demonstrate the financial feasibility and benefits of energy-efficient construction. Providing more examples of above-code new construction can normalize the adoption of this as a voluntary standard in Ogden City.

<sup>40</sup> Elevate Buildings." Salt Lake City Sustainability. Available at: [www.slcc.gov/sustainability/elevate-buildings/](http://www.slcc.gov/sustainability/elevate-buildings/)

<sup>41</sup> WSU Collaborates on Net-Zero House for Parade of Homes." Weber State University, 7 July 2019, Available at: [https://www.weber.edu/WSUToday/070119\\_NetZeroHouse.html](https://www.weber.edu/WSUToday/070119_NetZeroHouse.html)

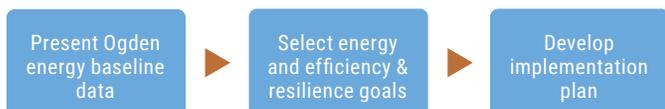
# Appendix

## Background on Project Origin

The Utah Energy Wise Communities project was funded through a grant from the U.S. Department of Energy awarded to the Utah Governor's Office of Energy, to create new community-level partnerships and address energy planning. Ogden was selected as the pilot city for a model that will be developed for replication in other urban and rural communities. The project involved three main steps:

1. Development of an energy consumption baseline for the community,
2. Adoption of energy savings goals, and
3. The development of an implementation plan to achieve the adopted goals.

## Key Project Deliverables



The goal of the Utah Energy Wise Communities project is to advance energy efficiency and resilience across an entire community and create a tested Community Energy Efficiency and Resiliency Planning Model adaptable for other local governments in Utah. A model summary and project executive summary will be provided to U.S. Department of Energy to help shape future projects implemented with other communities.

## Project Team

There were multiple collaborators involved in this project, from several different organizations and institutions. First, our project officer from the U.S. Department of Energy is Julie Howe. Collaborators from the Utah Governor's Office of Energy Development included: Shawna Cuan, Brooke Tucker, Alair Emory, Guille Loyola Pelaez, and Annie Schneider. Staff from Utah Clean Energy (Kevin Emerson, Shelby Stults, Haylee Neel, and Aimee Urbina) led project implementation. Technical assistance was

provided through the Rocky Mountain Power Wattsmart Communities project, implemented by The Brendle Group (Susan Bartlett, Judy Dorsey, Becca Stock and Zach Taylor).

## Steering Committee Members

The project team worked with City Council members and City Council staff to identify individuals to invite to participate in the project steering committee. The individuals who participated on the steering committee include city council members, staff from the city council, staff from the city's public services and facilities divisions, staff from the mayor's office, as well as individuals representing Rocky Mountain Power, Dominion Energy, low-income programs, Habitat for Humanity, and Weber State University.

## Steering Committee Participants:

- **Natalie Alejandra**, Futures Through Training
- **Erick Allen**, McKinstry
- **Bryan Andersen**, Rocky Mountain Power
- **Jennifer Bodine**, Weber State University and Ogden Civic Action Network
- **Lisa Brinkeroff**, Ogden City Public Services
- **Greg Buxton**, Ogden City Management Services Director
- **Angela Choberka**, Ogden City Council Member
- **Janene Eller-Smith**, Executive Director for Ogden City Council
- **Jeannie Gamble**, Habitat for Humanity
- **Mark Johnson**, Ogden City Chief Administrative Officer
- **Monica Kapp**, Ogden City Fleet & Facility Manager
- **Luis Lopez**, Ogden City Council Member
- **Jay Lowder**, Ogden City Public Services Director, Ogden Natural Resources and Sustainability Stewardship Committee
- **Amy Maybe**, Ogden City Council Policy Analyst
- **Clay Monroe**, Rocky Mountain Power
- **Mike Orton**, Dominion Energy
- **Steve Rush**, Rocky Mountain Power
- **Ian Spangenberg**, Utah Community Action
- **Glenn Symes**, Ogden City Council Staff
- **Bryan Taylor**, Dominion Energy

- Bryan Ward, Dominion Energy
- Marcia White, Ogden City Council Member

### **Project Team Members:**

- Susan Bartlett, Brendle Group, Rocky Mountain Power Wattsmart Communities
- Shawna Cuan, Governor's Office of Energy Development
- Judy Dorsey, Brendle Group, Rocky Mountain Power Wattsmart Communities
- Kevin Emerson, Utah Clean Energy
- Alair Emory, Utah Governor's Office of Energy Development
- Miriam Handler, Utah Clean Energy
- Haylee Neel, Utah Clean Energy
- Guille Pelaez, Utah Governor's Office of Energy Development
- Annie Schneider, Utah Governor's Office of Energy Development
- Rob Simmons, Utah Governor's Office of Energy Development
- Becca Stock, Brendle Group, Rocky Mountain Power Wattsmart Communities
- Shelby Stults, Utah Clean Energy
- Glenn Symes, Ogden City Council Deputy Director
- Brooke Tucker, Utah Governor's Office of Energy Development
- Aimee Urbina, Utah Clean Energy

### **About the Utah Governor's Office of Energy Development**

The Utah Governor's Office of Energy Development receives state funding that supports energy development programs including energy efficiency and resilience.

The office is tasked with positioning Utah as a leader in energy and mineral development through:

- Efficiently implementing the State Energy Policy (63M-4)
- Realizing Governor Gary R. Herbert's vision of providing affordable, reliable, and cleaner energy sources, and
- Achieving the 10 specific goals of Utah's Energy Action Plan.





GOVERNOR'S OFFICE OF  
ENERGY DEVELOPMENT

