



# **wattsmart** Summit County

## *Summit Community Energy Plan*

September 2018

**wattsmart**® Communities



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# Acknowledgements

A special thanks to the following organizations and individuals who helped develop this Community Energy Plan for the Summit County community.

## Summit Community's Planning Team

The team was formed from a diverse group of county staff, municipal staff, local organizations, local businesses, and community members.

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- Kevin Emerson, Summit Community Power Works

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### Contributing Organizations

- Dominion Energy
- Habitat for Humanity – Utah
- Kamas City
- McKinstry
- Mountain Regional Water District
- North Summit School District
- Oakley City
- Park City Mountain
- Promontory
- Recycle Utah
- Utah Clean Energy
- Utah Department of Agriculture & Food
- Utah State University Extension – Agriculture
- Summit Community Power Works
- Summit County Health Department
- Summit Land Conservancy
- Wild Harvest Farms

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- DJ Hubler, McKinstry
- Phillip James, Wild Harvest Farms
- Robin Milne, Promontory
- Dusty Morgan, Utah State University Extension
- Amber Nelson, Summit Land Conservancy
- Andy Pappas, Utah Department of Agriculture & Food
- Craig Ritzman, North Summit High School

- Tom Smart, Oakley City
- Shelby Stults, Summit Community Power Works
- Bryan Taylor, Dominion Energy
- Garry Walker, Kamas City
- Carolyn Wawra, Recycle Utah
- Stephanie Woolstenhulme, Community member

# Executive Summary

Summit County government (the County) came to the community energy planning process with a well-defined vision and energy goals established as part of its Climate Action Plan (2015) and an adopted resolution (October 4, 2017) to establish renewable energy and greenhouse gas emissions reduction goals. The County also is and will continue to be a leader in encouraging renewable energy and removing barriers to installing rooftop solar in the community, including creating an online permitting checklist and administering community solar bulk purchase programs (2013, 2016).

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***Vision:*** *Summit County communities working together to power the future by strategically addressing efficiency use of energy resources and increasing access to renewable energy options while promoting energy-related economic development and overall quality of life county-wide.*

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Summit County set ambitious new goals in 2017, including the following:

- Renewable Energy made available and widely adopted county-wide by 2032. 100% renewable energy for county operations by 2032.
  - County residents
  - Businesses
  - Operations
- 80% Reduction in Greenhouse Gas Emissions
  - County operations by 2040
  - County-wide by 2050

This Community Energy Plan is intended to promote a 2-year sprint of activities to move the Summit County community closer to its renewable energy and carbon reduction goals. The sprint will combine resources among a variety of local partners, including Rocky Mountain Power, Summit Community Power Works (SCPW), Dominion Energy, and others identified in the plan, and building capacity around education, outreach, action, and recognition.

The plan document and resulting strategies are the culmination of 3 community-focused workshops that occurred in the spring and summer of 2018. These workshops were designed to bring community and utility stakeholders together to review Summit County's energy use and supply, historical county participation in existing utility programs (including renewable energy programs), and initiatives or activities already underway in the county. With this foundation, the stakeholders prioritized focus areas for action and developed the strategies in this plan for execution.



*Figure 1. Summit County Focus Areas for Action*

By following through with the strategies outline here, the county is estimated to experience energy savings of approximately 2.25 Gigawatt-hours (GWh) (2,250,000 million kilowatt-hours [kWh]) and 1.7 GWh in renewable electricity delivery. This equates to an incremental Greenhouse Gas (GHG) emissions reduction of approximately 5,000 metric tons of carbon dioxide equivalent (MTCO<sub>2</sub>e), or the equivalent of removing over 1,070 cars from the road on an annual basis. This contribution is linked to the specific activities identified in this plan and does not account for additional project implementation that will likely follow with continued efforts.

Successful implementation of this plan depends on the involvement and support of the Summit County Sustainability Department and the various partners identified in the strategies detailed in the “Course of Action” section. Rocky Mountain Power also will play a key role through its incentive programs and staff commitment to the county.

The County will have access to county-wide aggregated periodic data from Rocky Mountain Power to track progress toward the established targets for participation in energy efficiency and renewable energy programs. Furthermore, each strategy includes methods for measuring specific progress and the plan, as a whole, has built-in requirements for review and adjustment over time to encourage persistence and capacity building.

# 1 Decide to Thrive

As part of the energy-planning process, community stakeholders were identified and invited to participate on a Planning Team for three planning workshops held on April 19<sup>th</sup>, June 7<sup>th</sup>, and August 2<sup>nd</sup>, 2018, where their input on community priorities, targets, and strategies were gathered and form the basis for this plan. The Planning Team members represent a variety of community organizations, views, and perspectives for an informed and supported plan. Also, they will be essential in leading the strategies identified and engaging the broader community for greatest impact.

This Community Energy Plan is a first step in broader sustainability activities underway at the County and will serve as a template and catalyst for other community-wide efforts.

## wattsmart Communities

**wattsmart** Communities is Rocky Mountain Power's newest program within the **wattsmart** portfolio. This program broadens Rocky Mountain Power's energy efficiency and renewable energy programs delivered to entire communities, such as Summit County's, with the commitment to support the unique needs of the community, achieving their energy-savings goals.

The content of this plan is derived from a series of planning workshops with the Community Energy Leader and Planning Team committed to representing local energy priorities. Rocky Mountain Power will work with Summit County to help answer three essential questions (Figure 2): Where are we now? Where do we want to go? And how will we get there? Everyone in the county has a potential role to play, with key roles and responsibilities outlined in Figure 3.



Figure 2. **wattsmart** Communities Planning Process



## COMMUNITY ACTION PLAN

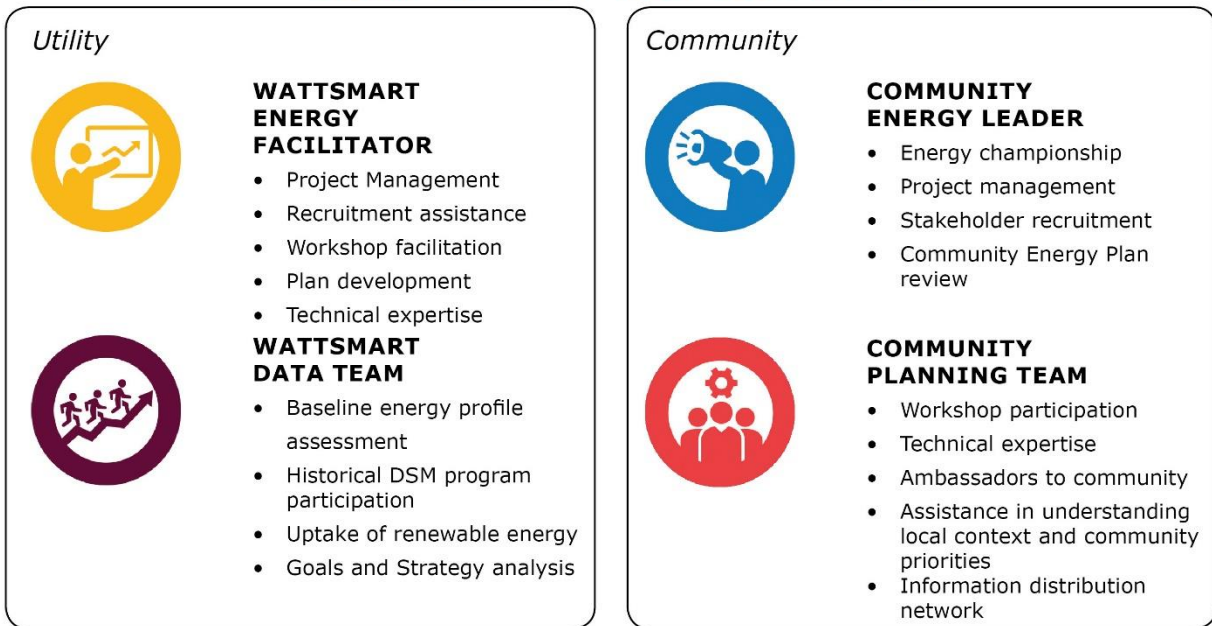


Figure 3. **wattsmart** Communities Roles and Terminology



## 2

## Where Are We Now?

Summit County is committed to reducing carbon emissions (or greenhouse gas emissions), pollution and addressing climate change. As detailed in Summit County's renewable energy and emissions reduction goals, the County has established itself in a leadership role to address these important issues. Summit County's ambitious climate goals include making 100% renewable energy obtainable and adopted broadly by residents and businesses by 2032 and an 80% reduction in GHG emissions for county operations by 2040 and county-wide by 2050. These goals were passed in a resolution in October 2017 with strong community support, and Summit County was the first county in Utah to adopt such aggressive goals. Building on this momentum the Community Energy Plan for Summit County is a catalyst for action, involving the community in measurable and impactful initiatives, and tracking progress toward longer-term goals of energy and emissions reductions.

Summit County is a longtime supporter of renewable energy (Figure 4) and has been working in partnership with Rocky Mountain Power and SCPW for quite some time toward that end. The County has a co-beneficial partnership, including its participation in Blue Sky, Subscriber Solar, and community rooftop solar initiatives.



*Figure 4. Summit County Justice Center Solar PV Installation  
(photo provided by Summit County)*



*Figure 5. Summit County Library Electric Vehicle Charging Stations  
(photo provided by Summit County)*

With this as a backdrop, the County recognizes the need to continue to lead in promoting energy efficiency and renewable energy community-wide and regionally. To this end, the County believes in not only setting goals to reduce energy use and increase support for and use of renewable fuels, but also to take immediate and impactful action today to make progress on its aspirational and achievable goals for County and community operations. By the end of 2018, Summit County will have solar PV installations on 6 of its buildings, providing approximately 15% of the total electricity energy consumed by the county annually.

Furthermore, the County is committed to operating in a manner that lowers its environmental impacts while strengthening economic and societal leadership. Examples include upgrading to LED lighting and utilizing EVs to reduce utility and fleet fuel costs. The County continues to look for ways to collaborate with nonprofits, businesses and state and local organizations that promote a sustainable economy, social equity, and environmental sustainability.

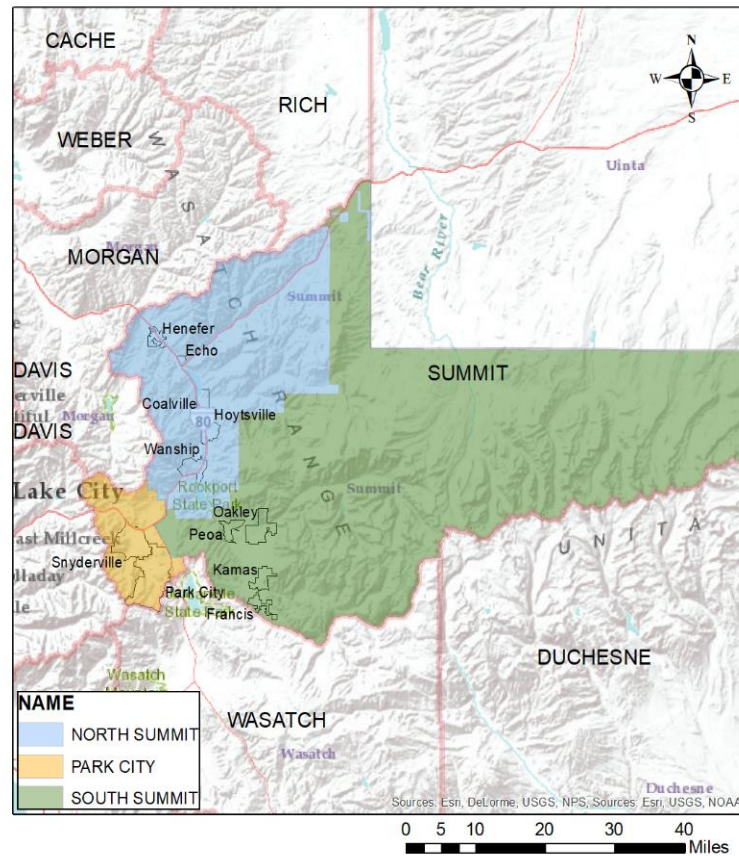
## Community Energy Profile

A first step in the **wattsmart** Communities planning process is to explore a community's energy profile, which provides a picture of the community's current energy landscape. **wattsmart** Communities facilitators analyzed and presented electric energy consumption and renewable energy net-metering data provided by Rocky Mountain Power by user type (i.e., residential and non-residential) to illustrate the community's electricity baseline as a framework for developing the targets and actions in this plan. Summit County's community energy profile illustrates historic electricity use and incentive program participation, helps identify potential opportunities, and supports model scenarios that informed decision-making during the planning process. Three years of data, 2015-2017, were used for analysis, with 2017 established as the baseline.

The analysis includes the entire county and is sub-divided into the three school districts for reference (Figure 6):

1. North Summit School District
2. South Summit School District
3. Park City School District

## Summit County Energy Breakout



*Figure 6. Summit County Breakout by School District  
(U.S. Census Bureau, Utah SGID)*

The following cities, towns, or locales are included within the school district areas:

- North Summit School District
  - Coalville
  - Echo
  - Henefer
  - Hoytsville
  - Upton
  - Wanship
- South Summit School District
  - Kamas
  - Oakley
  - Peoa
  - Francis
- Park City School District
  - Park City
  - Snyderville Basin

## Electricity Consumption

There are approximately 28,725 total electricity customers<sup>1</sup> in Summit County as of 2017. While customers in the county are primarily residential (87%), they consumed only half (49%) of the county-wide electricity in 2017 – about 289 gigawatt hours (GWh). Contrastingly, while there are far fewer non-residential customers, those consumed 51% of county-wide electricity used in 2017 – about 325 GWh. Figure 7 shows county-wide customer counts in comparison with electricity use in 2017. Non-residential customers include commercial, industrial, and irrigation sector customers.

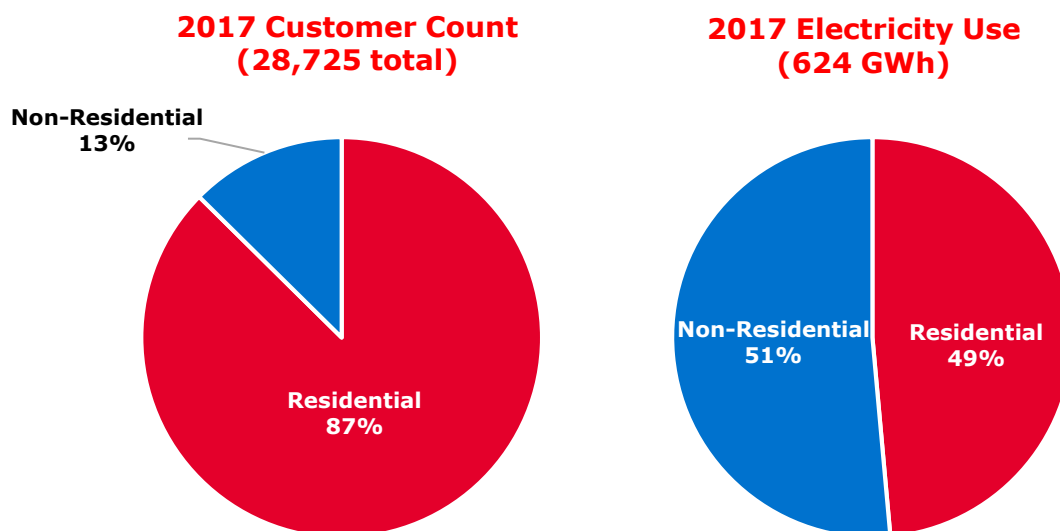


Figure 7. Electricity Use by Customer Type in 2017

County-wide electricity consumption was also broken down by school district (Figure 8). Park City School District is the region with highest energy consumption (74%), while South Summit and North Summit School District areas each account for less than 10%, and 12% is attributed to unincorporated areas overlapping two or all three school districts (unknown).

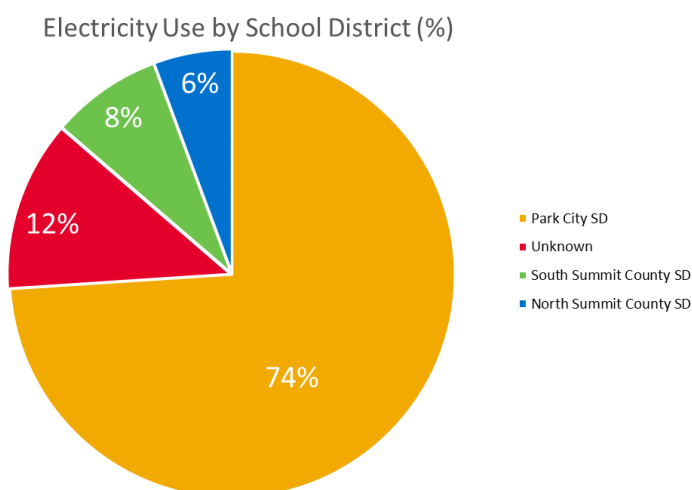
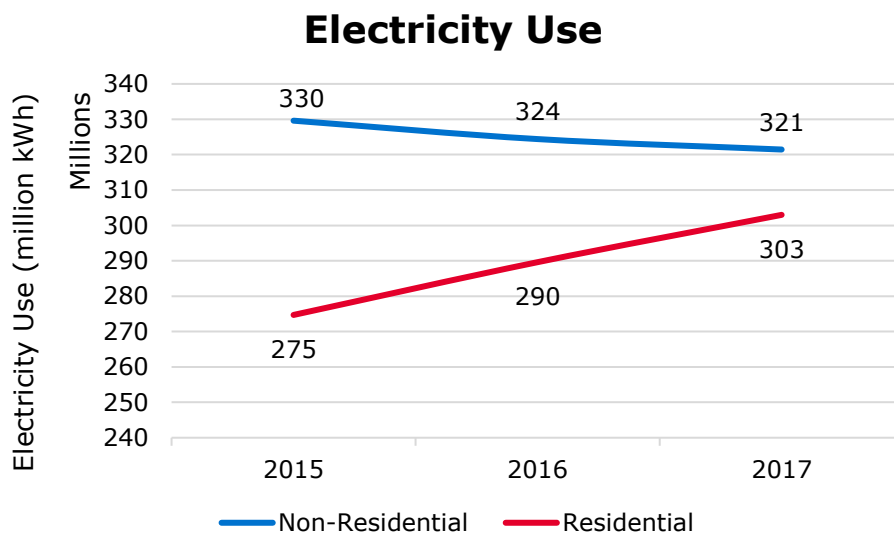


Figure 8. Electricity Use by School District in 2017

<sup>1</sup> A customer is defined as a unique identifier for a location of electric service.

Year-to-year electricity consumption from 2015 through 2017 shows modest growth in the residential sector of 5.1%, while the residential customer base grew over the same period by 1.6%. The non-residential sector exhibited a modest decrease in electricity use (1.2%) from 2015 through 2017 despite an increase of 2.0% in customer base (2.0%). Therefore, electricity use is not linearly correlated with customer base growth per sector. Figure 9 shows year-to-year sector consumption from 2015 to 2017.



*Figure 9. Year-to-Year Consumption by Sector (2015-2017)*

## Electricity Costs

Combined, electricity customers county-wide spent an estimated \$46 million on electricity in 2017 (66% residential, 34% non-residential). Per residential customer, this amounts to an average of \$1,221 annually, or about \$102 monthly. An average non-residential customer spent \$4,175 annually, or about \$348 monthly. Note that electricity costs vary by sector and time of year. For more information about energy rates and charges by sector, visit [www.rockymountainpower.net](http://www.rockymountainpower.net).

## Program Participation

Baseline data provided by Rocky Mountain Power include historic demand-side management (DSM) **wattsmart** incentive programs that reduce electrical energy usage. Additional details about the programs may be found at the following Rocky Mountain Power links:

**wattsmart** homes: [www.rockymountainpower.net/res/sem/utah.html](http://www.rockymountainpower.net/res/sem/utah.html)

**wattsmart** business: [www.rockymountainpower.net/bus/se/utah.html](http://www.rockymountainpower.net/bus/se/utah.html)

These program participation counts include related electricity savings, as well as renewable energy program customer participation counts and energy delivery. These data provide a snapshot of what types of programs customers in Summit County are using and to what degree. They also show opportunities for greater participation in the available program offerings and where to potentially invest for increased education and awareness.

From the years 2015 through 2017, on average, 373 out of 24,594 eligible residential customers in Summit County (1.5%) participated in a demand side management (DSM) program. Of the participating customers, an average of 462 projects were completed per year, as shown in Table 5, with average annual electricity savings of 491 kWh per project. This is equivalent to a participating homeowner saving \$49 per completed project in electricity costs per year. Over the 3-year period, residential project counts have decreased considerably (35%). Contributing factors to the decreasing

trend may include reduced engagement from SCPW in 2017 compared to the two previous years, as well as reduced marketing interaction from Rocky Mountain Power as compared with previous years.

The top three average cost-saving projects for residential customers over the years of record were the following:

1. Home Energy Savings-Water Heater
2. Low Income Weatherization
3. New Homes

A portion of residential customers received the free service of a Home Energy Report, which provides detailed information about a homeowner's energy use in comparison to his/her neighbors. The Home Energy Reports are not considered in the project counts below since they are simply comparison reports to other customers in the area and not all customers receive them. Details about the Home Energy Savings (HES) programs (voluntary incentive programs) are available on the Rocky Mountain Power website: [www.rockymountainpower.net/res/sem/utah.html](http://www.rockymountainpower.net/res/sem/utah.html).

The HES programs are focused on energy efficiency and energy savings, as shown in Table 1.

*Table 1. wattsmart Residential Project Counts (2015-2017)*

wattsmart Residential Project Counts						
Program	Units	2015	2016	2017	Average	Trend
Low Income Weatherization	Counts	2	0	0	2	-50.0%
New Homes	Counts	0	65	15	40	-
HES - Appliances	Counts	89	113	16	73	-41.0%
HES - Building Shell	Counts	18	56	11	28	-19.4%
HES - Electronics	Counts	0	1	0	1	-
HES - Energy Kits	Counts	224	74	37	112	-41.7%
HES - HVAC	Counts	54	56	143	84	82.4%
HES - Lighting	Counts	388	22	0	205	-50.0%
HES - Water Heater	Counts	0	0	3	3	-
Total (w/o Home Energy Report and Cool Keeper)	Counts	775	387	225	462	-35%

In the years 2015 through 2017, on average 110 out of 3,651 eligible **non-residential customers** in Summit County (3.0%) participated in a DSM program. Of the participating customers, an average of 161 projects were completed per year, as shown in Table 2, with average annual electricity savings of 42,516 kWh per project. This is equivalent to a participating non-residential customer saving \$2,053 annually in electricity costs. Non-residential project counts have increased over the 3-year period (31%), likely as a result of interest in the Lighting and Midstream Lighting programs.

*Table 2. **wattsmart** Non-Residential Project Counts (2015-2017)*

wattsmart Business Project Counts						
Program	Units	2015	2016	2017	Average	Trend
Energy Project Manager	Counts	0	0	0	0	-
Midstream Lighting	Counts	10	49	43	34	165.0%
Small Business Direct Install	Counts	0	67	0	67	-
Cool Keeper	Counts	0	0	0	0	-
WSB - Additional Measures	Counts	0	0	2	2	-
WSB - Building Shell	Counts	11	4	0	8	-50.0%
WSB - Compressed Air	Counts	0	0	2	2	-
WSB - Container	Counts	0	0	0	0	-
WSB - Custom	Counts	7	10	7	8	0.0%
WSB - Electronics	Counts	0	0	0	0	-
WSB - Farm & Dairy	Counts	0	0	0	0	-
WSB - Food Service Equipment	Counts	2	4	0	3	-50.0%
WSB - HVAC	Counts	3	1	4	3	16.7%
WSB - Irrigation	Counts	3	2	1	2	-33.3%
WSB - Lighting	Counts	60	94	94	83	28.3%
WSB - Motors	Counts	0	1	2	2	-
WSB - Oil & Gas	Counts	0	0	0	0	-
WSB - Refrigeration	Counts	0	0	0	0	-
WSB - Water Heating	Counts	0	0	0	0	-
<b>Total</b>	Counts	<b>96</b>	<b>232</b>	<b>155</b>	<b>161</b>	<b>31%</b>

The top three cost-saving projects for non-residential customers included the following:

1. **wattsmart** Business-Compressed Air
2. **wattsmart** Business-Custom
3. **wattsmart** Business-HVAC

Details about the **wattsmart** Business programs are available on the Rocky Mountain Power website:  
[www.rockymountainpower.net/bus/se/utah.html](http://www.rockymountainpower.net/bus/se/utah.html).



### Renewable Energy Programs Participation

In this section we discuss program participation in Rocky Mountain Power's Blue Sky and Subscriber Solar programs. The Blue Sky program is a subscription program that allows customers to buy renewable energy in 100-kWh increments (or blocks) for a premium, which supports the development of small scale community renewable energy project in local communities. Subscriber Solar provides a mechanism for customers to meet all or part of their electric needs with solar power generated from Utah solar facilities without installing physical solar panels on their own homes. The county-wide participation data for Summit County is displayed and analyzed below.

#### Blue Sky

In 2017, the average annual energy generation from county-wide participation in the Blue Sky renewable energy program represented 2.1% of the community's total electricity use (see Figure 10). While Most Blue Sky customers are residential customers, the non-residential sector (only 4% of participating customers) contributed a large percentage (40%) of Blue Sky energy delivery.

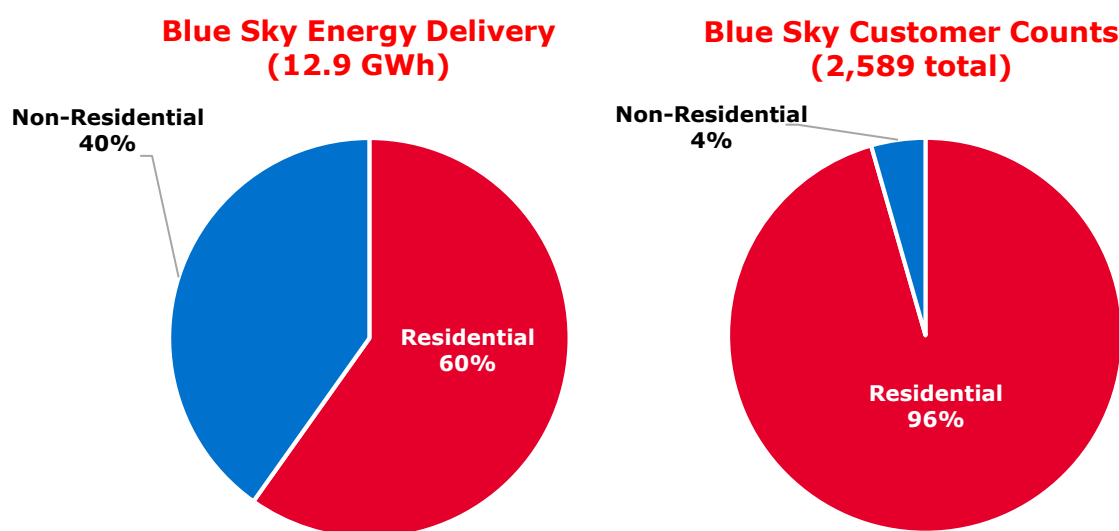


Figure 10. Blue Sky Program (2017)

Table 3 summarizes Blue Sky's average energy delivery (generation), percent of annual electricity use, customer count, and average energy delivery per customer by sector from 2015 to 2017.

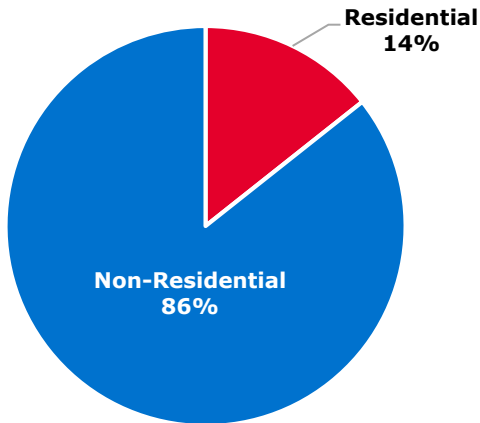
Table 3. Blue Sky Program Summary (2015-2017)

Sector	Average Energy Delivery (kWh)	Average Percent of Annual Electricity Use	Customer Count	Average Annual Energy Delivery per Customer (kWh/Customer)
Residential	7,904,833	2.7%	2,463	3,209
Non-Residential	5,198,433	1.6%	115	45,204

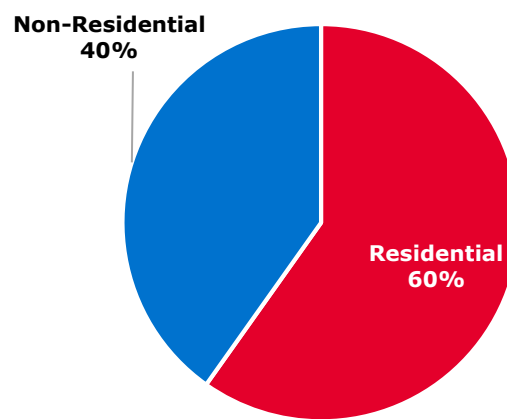
### Subscriber Solar

Subscriber Solar is an alternative renewable energy program offered by Rocky Mountain Power that allows customers to get some or all of their energy from solar power. Customers subscribe in blocks of 200 kWh and can keep their subscription for up to 20 years. In 2017, 215 customers participated in this program subscribing to 7.6 GWh of renewable energy (summarized in Figure 11). This program was not available to Summit County customers prior to 2017 and is fully subscribed but will be available in the future.

**Subscriber Solar Energy Delivery  
(7.6 GWh)**



**Subscriber Solar Customer Counts  
(215 total)**



*Figure 11. Subscriber Solar Program (2017)*

Table 4 summarizes Subscriber Solar's average energy delivery and percent of annual electricity by sector in 2017. There is currently a waitlist for the next block of Subscriber Solar, but customers are encouraged to sign up for the wait list at the following site: <http://utsubscribersolar.net/>.

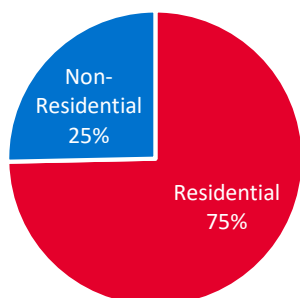
*Table 4. Subscriber Solar Program Summary (2017)*

Sector	Average Energy Delivery (kWh)	Average Percent of Annual Electricity Use
Residential	1,084,400	0.4%
Non-Residential	6,480,000	2.0%

### Net-Metering

Net-metering is defined by the Solar Energy Industries Association as “a billing mechanism that credits solar energy system owners for the electricity they add to the grid.”<sup>2</sup> The definition applies to non-residential buildings and customers as well as homes or residential customers that have roof-top solar systems. Most net-metering customers were residential customers (93%) and residential customers also generated the bulk of the net-metered electricity (75%), as shown in Figure 12. Non-residential customers represented 7% of net-metered customer accounts and accounted for 25% of the net-metered electricity generation.

#### Net-Metering kWh Generation



#### Net-Metering Customer Counts

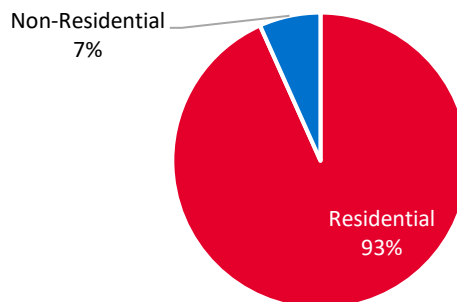


Figure 12. Net-Metering Program (2017)

County-wide electricity generated via net-metered solar installations steadily increased from 2015 through 2017 (Figure 13) for both residential and non-residential customers. Total net-metered electricity generation peaked in 2017 at 7.5 GWh.

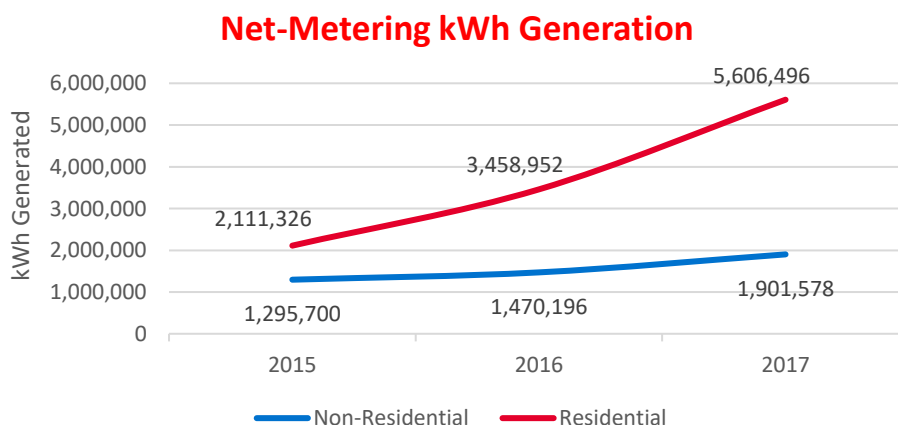
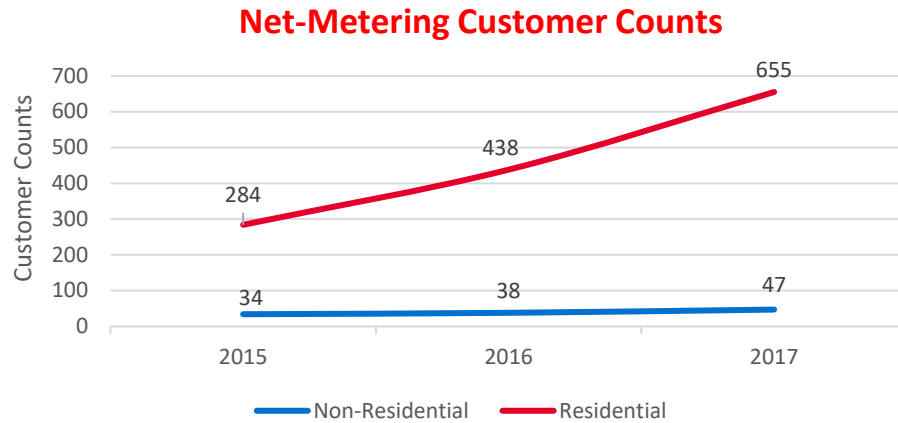


Figure 13. Net-Metering kWh Generation (2015-2017)

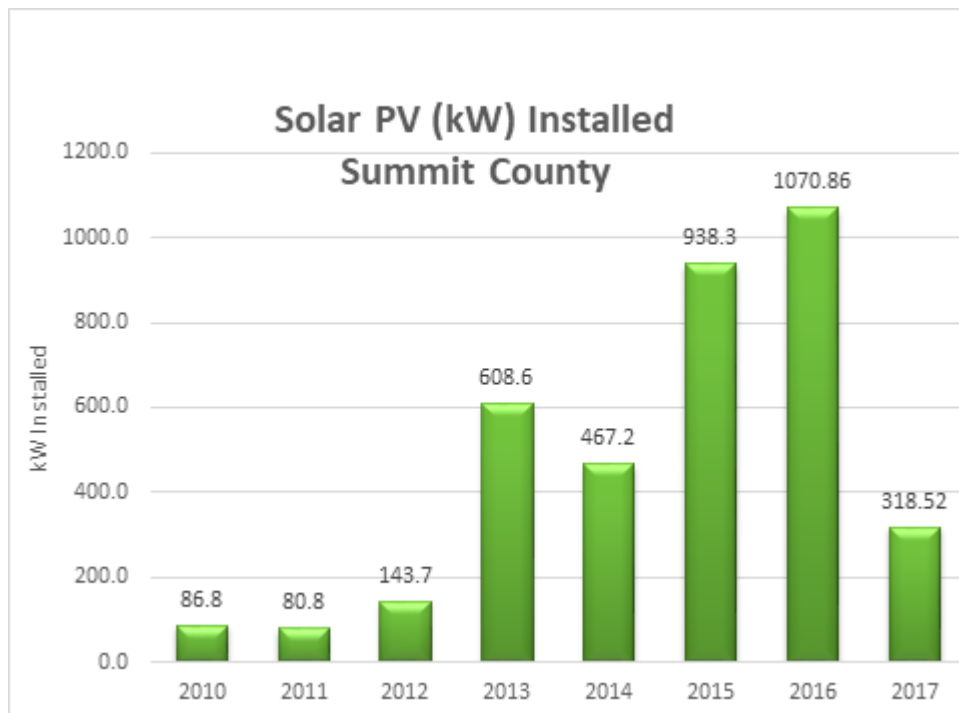
As shown in Figure 14, net-metered customer counts increased steadily each year from 2015 through 2017 for residential customers (from 284 customer counts in 2015 to 655 customer counts in 2017). Non-residential customer counts increased slightly from 2015 to 2017.

<sup>2</sup> <https://www.seia.org/initiatives/net-metering>



*Figure 14. Net-Metering kWh Generated Estimates (2015-2017)*

Summit County additionally provided data regarding the amount of Solar PV capacity in terms of kW that was installed from 2010 through 2017. County-sponsored Community Solar programs offered in 2013 and 2016 contributed to the rapid increase in solar installations. See Figure 15 details.



*Figure 15. Solar PV (kW) Installed – Summit County (2010-2017)*

The drop in 2017 installed capacity was the likely the result of change in state net-metering policy that is less favorable to customers. More information about the net-metering program and the transitions resulting from the change in state policy can be found on the Rocky Mountain Power website:

[www.rockymountainpower.net/env/nmcg/utah/utah-program-faq.html](http://www.rockymountainpower.net/env/nmcg/utah/utah-program-faq.html).

## Community Energy Efforts

Summit County government has a long history of leading by example and partnering with local and regional partners on energy and other initiatives. These partnerships (Table 5) will be instrumental in executing the strategies in this plan.

*Table 5. Community Energy Partners*

Summit County's Current Partnerships	
<b>Summit County</b>	
	<ul style="list-style-type: none"><li>• Utah Clean Energy/SCPW<ul style="list-style-type: none"><li>◦ Mountain Town Community Solar Program</li><li>◦ Residential and commercial support</li></ul></li><li>• Utah Department of Agriculture and Food<ul style="list-style-type: none"><li>◦ Coordinated Management Plans for irrigation</li></ul></li><li>• Recycle Utah Green Business Program<ul style="list-style-type: none"><li>◦ Currently working group to make program more robust (Recycle Utah, Summit County, and Park City)</li></ul></li><li>• Utah Climate Action Network<ul style="list-style-type: none"><li>◦ Best Practices, resources</li></ul></li><li>• Kamas Valley Conservation District<ul style="list-style-type: none"><li>◦ Agricultural outreach</li></ul></li><li>• Utah Ski Resorts Sustainability Cohort</li></ul>



## Where Do We Want to Go?

Understanding energy context in Summit County and existing community goals set the stage for moving forward on increasing electricity savings and renewable energy participation.

### Energy Vision

An energy vision is an aspirational description that aligns with core community ideals and values to inspire work toward achieving its energy goals. Summit Community's Planning Team confirmed during the second workshop on June 7<sup>th</sup> that the following energy vision will be a guide for the Summit Communities' energy future:

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*Summit County communities working together to power the future by strategically addressing efficiency use of energy resources and increasing access to renewable energy options while promoting energy-related economic development and overall quality of life county-wide.*

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### Focus Areas

To make progress toward the ideals and values in the community energy vision statement, the Planning Team selected three focus areas that were determined to have the greatest potential impact over the next 2 years, with renewable energy and electric vehicle (EV) charging as cross-cutting themes.

#### Focus Area 1: Large Commercial Energy Users

There are over 3,600 commercial electricity customers in the Summit County community, according to data provided by Rocky Mountain Power. Large energy users (those exceeding 1 Megawatt in electrical demand at any given meter) may include local governments, local school districts, transportation companies, and wastewater treatment facilities, to name just a few. Being able to raise awareness and increase conservation and renewable energy participation in this sector has the potential for significant energy impacts and influence.

#### Focus Area 2: Small/Medium Business

Many commercial energy customers in Summit County are small to medium businesses that range from retail to service to agricultural operations. Given their numbers, this sector has the potential to increase energy efficiency and to participate in renewable energy offerings in meaningful ways. They also have the local influence to encourage policy changes for greater efficiency and attention to growth and resource management.



*Figure 16. Kamas Chevron and Famous Donut Shop;  
Photo permission from David Wade, Owner*

### Focus Area 3: Neighborhoods and Home Owners' Associations

Summit County has a diverse housing stock with an estimated 27,500 total housing units ranging from single-family detached units to multi-family housing and HOAs. There are over 24,500 residential electricity customers in the County, according to data provided by Rocky Mountain Power. In the existing housing stock, there is a high owner vacancy rate (51%) and a low owner-occupied rate (37%), illustrating the high propensity of second home owners and vacation rental properties.<sup>3</sup>

Encouraging conservation through home owners' associations (HOAs) and neighborhoods, including second homes, is a top-priority for the Summit County Planning Team. Challenges in this sector include population growth coupled with high seasonal visitation, lack of affordable housing, and economic diversity. By comprehensively engaging the residential sector, Summit County residents are poised to save energy and money and increase their investment in renewable energy.



*Figure 17. Residential Setting courtesy of Lisa Yoder, Summit County.*

### Shared Theme: Renewable Energy and Electric Vehicles

As the county and state populations continue to grow, Summit County government and the Summit Community Planning Team are interested in increasing the use of renewable energy through participation in Blue Sky and Subscriber Solar, encouraging installations of solar PV, and powering an EV charging network throughout the community with renewable energy. Renewable energy is a cross-cutting priority that will be infused in strategies for both commercial and residential impact. In addition, Summit County and the Summit Community Planning team aim to increase the number of businesses that install EV charging infrastructure, provide EV charging at new or redeveloped housing projects for future EV charging station capacity, and to engage existing businesses and homeowners to install charging stations and apply for funding through Rocky Mountain Power to further expand the EV charging station network. Summit County Sustainability will partner with Utah Clean Cities and Leaders for Clean Air to encourage utilization of RMP's WestSmart EV program, STEP funding, and Volkswagen Settlement funds by large commercial and small/medium energy users.



*Figure 198. Solar PV Example at Summit County Health Department.*



*Figure 189. Photo of EV Charging Station at Summit County Library courtesy of Summit County.*

<sup>3</sup> U.S. Census Data, [https://factfinder.census.gov/faces/nav/jsf/pages/community\\_facts.xhtml](https://factfinder.census.gov/faces/nav/jsf/pages/community_facts.xhtml)





## Course of Action

Identifying focus areas is a first step, but having an impact on these focus areas requires actionable and measurable strategies. The strategies laid out in this section were identified by the Planning Team as realistic, achievable, and targeted for success. They include a description or objective, targets to show progress, a scope of work with steps for getting things done, and teams and leaders with accountability for execution. Furthermore, each strategy includes estimated timelines, necessary resources, and metrics for success.

Given the level of coordinated effort necessary to effectively implement these strategies, specific and accountable leadership is critical. The Planning Team determined that the Summit County Sustainability Department will establish a Green Ribbon Commission to guide implementation of this plan. The Commission will be comprised of the Summit County Sustainability Program Manager and champions to lead each strategy. Summit County Sustainability Department will solicit appropriate champions and the Summit County Manager will approve their selection and service to the community. Once convened, the Commission will set a regular meeting schedule to coordinate on plan progress. Each strategy champion will build his/her own implementation team from the resources identified in this plan and beyond to undertake the work of the strategy. The Summit County Sustainability Department will lead the commission, selected strategy champions will build and lead their teams to execute their plans, and all will regularly share their outcomes with the County Council and the broader community.

## Strategies

### Focus Area 1 – Large Commercial Energy Users

Large commercial energy users (exceeding 1 Megawatt in electrical demand at any given meter) may include local government facilities, school districts, and major employers. These entities have great potential for saving energy and helping to achieve overarching energy goals, but perhaps more importantly they have considerable influence in the community and can lead by example.

Strategy 1: Showcase Energy Efficiency to Encourage Action	
<b>Description</b>	
Increase energy efficiency and renewable energy planning and participation for government, institutional, transit, and large industrial sectors by showcasing energy efficiency successes, sharing what works, and recognizing successful activities in the community.	
<b>Targets</b>	
<ul style="list-style-type: none"><li>• Increase commercial participation in available utility efficiency programs by 25 projects over baseline participation</li><li>• Increase installations of EV charging stations by 10 stations for staff and customers</li><li>• Increase commercial participation in the Blue Sky program by 10% over baseline</li><li>• Increase commercial participation in the Subscriber Solar program by 10% over baseline, as availability allows</li></ul>	
<b>Scope and Action Items</b>	
<ul style="list-style-type: none"><li>• Convene strategy team</li><li>• Develop outreach materials and press releases to help educate businesses on benefits of energy efficiency and renewable energy by increasing awareness and showcasing success stories/case studies of large energy users already saving energy through Rocky Mountain Power programs<ul style="list-style-type: none"><li>◦ Summit County Sustainability Department will help develop the content for case studies (data, stories, photos, etc.), and Rocky Mountain Power will provide design services to accommodate the content</li></ul></li></ul>	

<ul style="list-style-type: none"> <li>• County to lead by example in its own facilities and share stories of benefits of building to standards higher than code and incorporating solar PV with community</li> <li>• Consider EV charging opportunities and showcase where this infrastructure is already available</li> <li>• Rocky Mountain Power to meet with individual large energy users to develop an energy efficiency plan for participating businesses</li> <li>• Rocky Mountain Power to help businesses identify how many projects are feasible and how much energy they think they can save based on their baseline energy consumption</li> <li>• Host an annual event to present case studies, bring everyone together to share information, and create an award or recognition of organizations that have been successful in increasing energy savings and participating in renewable energy or have installed charging stations for EVs</li> </ul>
<b>Responsible Parties</b>
<p>Lead: Green Ribbon Commission member, TBD</p> <p>Participants:</p> <ul style="list-style-type: none"> <li>• Rocky Mountain Power</li> <li>• Summit County Sustainability Department</li> <li>• Dominion Energy</li> <li>• Park City Mountain (initial business showcase/education campaign)</li> <li>• Mountain Regional Water (initial business showcase/education campaign)</li> </ul>
<b>Timeline</b>
<p>Q3 2018</p> <ul style="list-style-type: none"> <li>• Convene Green Ribbon Commission and identify strategy champion</li> <li>• Establish regular check-ins</li> <li>• Identify roles and top priority actions</li> </ul> <p>Q4 2018</p> <ul style="list-style-type: none"> <li>• Confirm showcase organizations/facilities and gather relevant information</li> <li>• Set schedule and timeline for Rocky Mountain Power energy management plans (order of participants and if desired by participants)</li> <li>• </li> </ul> <p>Q1-Q2 2019</p> <ul style="list-style-type: none"> <li>• Develop materials for outreach, including showcase pieces</li> <li>• Map out recognition opportunities and framework</li> <li>• Begin outreach and education</li> </ul> <p>Q3-Q4 2019</p> <ul style="list-style-type: none"> <li>• Continue outreach and education</li> <li>• Identify candidates for awards</li> <li>• Map communication channels and schedule for recognizing high performers</li> </ul>
<b>Resources</b>
<ul style="list-style-type: none"> <li>• Rocky Mountain Power program staff</li> <li>• Limited Rocky Mountain Power design staff</li> <li>• Summit County Sustainability Department</li> <li>• Dominion Energy program staff</li> <li>• Recycle Utah</li> <li>• Kamas Valley Business Association</li> </ul>
<b>Channels</b>
<ul style="list-style-type: none"> <li>• Summit County website</li> <li>• Local government websites</li> <li>• School district newsletters and websites</li> </ul>

<ul style="list-style-type: none"> <li>Local newspapers</li> </ul>
<b>Metrics</b>
<ul style="list-style-type: none"> <li>Number of case studies for showcasing</li> <li>Number of utility program projects</li> <li>Number of installed EV charging stations</li> </ul>

## Focus Area 2 – Small/Medium Businesses

Small to medium businesses drive much of the activity in Summit County and have considerable economic and social influence that could be leveraged to raise awareness about the benefits of energy efficiency, renewable energy, and strategic resource conservation for both existing buildings and new construction. Summit County, like other areas in the state, is experiencing both the benefits and pressures of considerable growth as it relates to infrastructure and available resources and has the opportunity to elevate best practices and encourage high-performing buildings through increased awareness and education. Education and awareness should happen at the business and building owner level as well as the policy lever through local building departments, code trainings, and vendor/contractor trainings.

### Strategy 2: Small/Medium Commercial Business

#### Description

Increase energy efficiency and renewable energy engagement for small to medium commercial businesses by communicating the benefits of and resources available for efficiency improvements and renewable energy options. Simultaneously, support local building departments to streamline permitting for renewable energy and EV charging station projects and encourage higher performing buildings from the start through code trainings, contractor/trade trainings, and improved code enforcement practices for bottom-line financial savings and better building stock.

#### Targets (2 years)

- Increase commercial participation in available utility efficiency programs by 40 projects over baseline
- Increase installations of EV charging stations by 10 stations for staff and customers
- Increase commercial participation in the Blue Sky program by 10% over baseline
- Increase commercial participation in the Subscriber Solar program by 10% over baseline, as availability allows

#### Scope and Action Items

- Convene Green Ribbon Commission and select strategy champion
- Coordinate with Recycle Utah's Green Business Program to educate local businesses and encourage efficiency and renewable energy projects
- Develop energy efficiency checklists for businesses and building departments and encourage development that includes renewable energy options
- Engage local building and planning departments as trusted channels to communicate opportunities for higher performing buildings with long-term benefits
- Leverage existing business networks, property management companies, watershed groups, etc., to share information about efficiency and renewable energy resources and economic benefits
- Identify existing businesses (potentially through the Green Business Program) that demonstrate the benefits of efficiency and renewable energy and are credible case studies
- Confirm positive economics of efficiency (triple-bottom-line economics)
- Leverage Recycle Utah Green Business awards events to recognize businesses that make progress in efficiency, renewable energy, waste reduction, transportation, etc.
  - Vet potential for multiple business awards (small, large, energy champion, etc.)
  - Vet potential to collaborate with SCPW Challenge recognition events to greater exposure and benefits

<b>Responsible Parties</b>
<p>Team Leadership: Green Ribbon Commission member, TBD</p> <p>Participants:</p> <ul style="list-style-type: none"> <li>• Recycle Utah</li> <li>• Summit County Sustainability Department</li> <li>• Summit County Health Department</li> <li>• Utah Department of Agriculture &amp; Food (UDAF)</li> <li>• Rocky Mountain Power</li> <li>• Dominion Energy</li> <li>• Kamas Valley Business Association</li> <li>• Local building and planning department staff</li> <li>• Trade associations</li> </ul>
<b>Resources</b>
<ul style="list-style-type: none"> <li>• Summit County Planning and Zoning Department staff</li> <li>• Rocky Mountain Power incentive programs</li> <li>• Summit County Environmental Health programs</li> <li>• Dominion Energy incentive programs</li> <li>• Summit County Council</li> <li>• Community Council(s)</li> <li>• Local business champions to show the way</li> </ul>
<b>Communication Channels</b>
<ul style="list-style-type: none"> <li>• Recycle Utah</li> <li>• Summit County Sustainability Department</li> <li>• Summit County Health Department</li> <li>• SCPW</li> <li>• Utah Department of Agriculture &amp; Food (UDAF)</li> <li>• Kamas Valley Business Association</li> <li>• Websites and Facebook pages</li> </ul>
<b>Timeline</b>
<p>Q3 2018</p> <ul style="list-style-type: none"> <li>• Identify strategy champion and convene team</li> <li>• Establish regular check-ins</li> <li>• Identify roles and top priority actions</li> </ul> <p>Q4 2018</p> <ul style="list-style-type: none"> <li>• Coordinate timing and process for joining Recycle Utah’s Green Business program</li> <li>• Identify most important resources available to business community (conservation and renewable energy)</li> <li>• Coordinate with Rocky Mountain Power on timing for Small Business Direct Install offering and outreach</li> <li>• Identify high-performing businesses that can share their stories</li> <li>• Establish objectives for messaging to local building and planning departments</li> <li>• Develop heat tape example to demonstrate potential for better design, greater efficiency, and long-term financial benefits</li> </ul> <p>Q1-Q2 2019</p> <ul style="list-style-type: none"> <li>• Leverage communication channels to encourage participation in Green Business Program</li> <li>• Provide education information for local building and planning departments to share with constituents</li> <li>• Identify training opportunities and resources for trades/contractors</li> <li>• Enroll businesses in Green Business Program and encourage energy projects</li> </ul> <p>Q3-Q4 2019</p>

- Track progress, share results with Green Ribbon Commission and County Council
- Refine strategy based on lessons learned

**Metrics**

- Number of utility efficiency projects
- Number of businesses joining Green Business Program
- Measurable policy initiatives from local jurisdictions
- Number of EV charging stations installed

## Focus Area 2 – Neighborhoods and Home Owners’ Associations

There are more residential energy customers in Summit County than commercial energy customers, and while each individually has a small impact, combined they can make a meaningful difference in community energy use. The challenge is finding effective channels of communication and education for a diverse group, such as targeted neighborhoods and HOAs that can influence their members and encourage actions.

### Strategy 3: HOAs and Neighborhoods

#### Description

Increase energy efficiency and renewable energy participation in residential neighborhoods and Homeowners Associations (HOAs) and target second homeowners via outreach efforts and the SCPW Challenge website at <https://scpwchallenge.org/>.

#### Targets

- Increase the project counts across the available residential utility and SCPW programs to increase energy savings and renewable energy participation over the next 2 years for at least 250 residential customers
- Increase installations of EV charging stations by 5 stations
  - Accompanied by possible change in Development Code to require new construction to provide a certain number of EV chargers, or at least wiring/prep for future chargers, at multifamily and single family residences
- Increase residential participation in the Blue Sky program by 15%
- Increase residential participation in the Subscriber Solar program by 25% if availability allows

#### Scope and Action Items

- Convene strategy team and identify roles/responsibilities
- Map outreach efforts to promote SCPW Challenge launch and benefits
- Develop opportunity for HOAs, neighborhood teams, schools, etc. to receive public recognition for achieving energy savings goals or participating in renewable energy activities (could be “wattsmart Community” or “SCPW” branded recognition)
  - Define benchmarks, criteria, and quantitative measurements for recognition
  - Define benefits (rewards) of public recognition, timelines for participating, and channels for recognition (i.e., award presented by Park City Mayor and Summit County Council)
  - Identify and define four to five self-selectable goals that are progressive yet feasible to work toward eligibility for public recognition (could include conservation actions as well as EV and renewable energy actions)
  - Determine what organization administers recognition (SCPW?) and promotes neighborhoods, HOAs, school teams, etc. that achieve goals
  - Develop training for property managers (best practices, outreach, etc.)
  - Help HOAs develop new design guidelines for greater efficiencies and renewable energy (higher standards could be part of certification as well as recognition for installing EV charging stations)
  - Brainstorm annual recognition event possibilities
  - Start with basic public recognition level and then add more advanced levels over time
  - Add category for new home construction over time
- Determine how to engage neighborhoods in SCPW neighborhood challenge
  - How to build or join a team
  - How to use portal
  - What actions earn challenge points (conservation and EV/renewable energy actions)
    - Snowmelt controls
    - LED lighting upgrades
    - Lighting timers/occupancy sensors
    - Irrigation controls
    - Holiday LED lighting and timers



<ul style="list-style-type: none"> <li>- Hot water heater upgrades</li> <li>- Building envelop upgrades</li> <li>- Energy use during non-peak times</li> <li>- EV charging station installation</li> <li>- Solar PV</li> <li>o Flag actions with the greatest potential (more points for these?)</li> <li>• Engage children at school(s) to influence behaviors at home</li> <li>• Engage low-income sector with easy access to energy-saving actions, and education about the benefits of conservation</li> </ul>
<b>Responsible Parties</b>
<p>Lead: SCPW</p> <p>Participants:</p> <ul style="list-style-type: none"> <li>• HOAs (start with Promontory)</li> <li>• Habitat for Humanity</li> <li>• Utah Recycles and schools</li> <li>• Rocky Mountain Power</li> <li>• Dominion Energy</li> <li>• Summit County</li> <li>• Park City</li> </ul>
<b>Resources</b>
<ul style="list-style-type: none"> <li>• SCPW Challenge website, including Actions and Resources (<a href="https://scpwchallenge.org/">https://scpwchallenge.org/</a>)</li> <li>• Rocky Mountain Power and Dominion Energy efficiency incentive programs</li> <li>• National benchmarks for high-performing buildings</li> <li>• Utah Weatherization Assistance Program (for income-qualified households)</li> </ul>
<b>Channels</b>
<ul style="list-style-type: none"> <li>• SCPW Challenge website (<a href="https://scpwchallenge.org/">https://scpwchallenge.org/</a>)</li> <li>• Utah HOA Network</li> <li>• Property management companies (for second home owners)</li> <li>• HOAs</li> <li>• Congregational groups</li> <li>• Nextdoor</li> <li>• Local government and NGO Facebook pages</li> <li>• North and South Summit School Districts</li> </ul>
<b>Timeline</b>
<p>Q3 2018</p> <ul style="list-style-type: none"> <li>• Convene strategy team</li> <li>• Establish regular check-ins</li> <li>• Identify roles and top priority actions</li> </ul> <p>Q4 2018</p> <ul style="list-style-type: none"> <li>• Promote SCPW Challenge launch</li> <li>• Work with leading HOAs to develop framework for public recognition for actions <ul style="list-style-type: none"> <li>o Criteria</li> <li>o Level of recognition</li> <li>o Certifications?</li> <li>o Cycle of participation</li> </ul> </li> </ul> <p>Q1-Q2 2019</p> <ul style="list-style-type: none"> <li>• Develop approach for engaging HOAs and neighborhoods</li> <li>• Develop outreach materials and begin outreach</li> </ul> <p>Q3-Q4 2019</p>

- Operate Challenge and recognition programs
- Share outcomes

**Metrics**

- Number of participants in neighborhood challenges (HOAs, individual residents, school teams, etc.) through SCPW challenge website
- Number of actions taken through SCPW challenge website
- Number of EV charging stations installed
- Number of attendees at trainings
- Numbers of resulting utility program projects

## Implementation Approach and Tracking

This plan is the first step in a series of activities that will be executed over the next 2 years and beyond. Without the execution, there is no real progress. To that end, each strategy identified and framed in this plan by the Planning Team includes a required leader with team members who will build out the details and follow through with increased engagement and activity. These leaders and teams will necessarily adjust tactics as they proceed to accommodate new information and resources, unforeseen challenges, and lessons learned along the way. They also will coordinate with similar activities underway in Park City for a more robust regional impact. SCPW and Recycle Utah will be key in maintaining strong coordination among similar activities with Park City.

## Roles and Responsibilities

To encourage the success of the Community Energy Plan, Summit County will support implementation and on-going progress. The County Sustainability Program Manager will serve as the central coordinator of the Green Ribbon Commission and will lead the tracking of metrics. The Sustainability Program Manager also will coordinate among and across County departments, convene meetings, and oversee the plan's monitoring and reporting activities.

Members of the strategy teams will support the Sustainability Program Manager in implementing the Community Energy Plan. The teams will meet on a regular basis to review progress on strategies and align on implementation efforts. To capture and communicate the spectrum of efforts and achievements, the team will prepare an annual status report or snapshot to summarize the status of each focus area. It is further recommended that following the status report each year, the strategy action items be updated to remove outdated items and to refine details related to timing and responsibilities. The County has myriad avenues to communicate both internally and externally about its community energy efforts, and the status report will be shared with the broader community in these ways.

With Summit County Council approval and resource support, the County Sustainability Program Manager is responsible for monitoring performance toward targets and metrics during implementation. The County Sustainability Program Manager will work directly with Rocky Mountain Power to coordinate information and track the metrics and targets across strategies. Rocky Mountain Power will provide county-wide annual electricity consumption by sector (i.e., residential and non-residential) in addition to DSM and renewable energy program participation by sector, or as otherwise requested by the County Sustainability Program Manager.

To support Summit County's energy vision and goals, the County Sustainability Program Manager is tasked with the following as they relate to the monitoring and progress of this Community Energy Plan:

- Community-wide GHG Emissions every 5 years
- County-building/facility GHG emissions annually
- Implementation and promotion of the strategies of the **wattsmart** Community Energy Plan that contribute to the County's GHG emissions reduction goals by reducing energy consumption and increasing the use of renewable energy

**Rocky Mountain Power** will serve as a resource and partner and will bring all available energy efficiency and renewable program offerings to Summit County, in coordination with the County's Sustainability Program Manager. Rocky Mountain Power will also serve as a resource to provide data to track program participation targets.

Rocky Mountain Power is committed to transitioning to a sustainable future and a partnership with Summit County can help both parties achieve their goals. This partnership will include energy efficiency expertise and funding through **wattsmart** programs, enablement of more use of renewable programs through Blue Sky and Subscriber Solar, and willingness to evaluate feasibility of building new solar resources based upon customer willingness to participate.

## Implementation and Performance Monitoring

As the Community Energy Plan is implemented, it is imperative to measure and monitor progress across strategies toward the targets and aspirational community energy goals, particularly as compared to baseline. This step will involve monitoring and tracking achievements made as a result of the strategy activities, while quantifying their impacts to measure success over time and to inform future actions. This iterative implementation process is illustrated in Figure 20. The implementation cycle necessarily includes regular and step-wise activities for accommodating lessons learned and continuing to make progress beyond initial activities.



*Figure 20. Iterative Implementation Cycle*



*Figure 21. Step-Wise Process*

## Plan Amendments and Updates

The Community Energy Plan provides a framework for community energy reduction through 2020. It is likely that amendments and updates to the plan will be necessary. Similarly, the plan will need to be updated as strategies are successfully implemented, and new technologies, opportunities, partnership, and community priorities shift. As a part of Summit County's sustainability programs, the Community Energy Plan should align with the County's comprehensive sustainability efforts and organizational processes.

## Appendix 1. Glossary of Terms

**Community Energy Plan:** A written document that outlines the collective energy vision, goals, and strategies for achieving those goals.

**Community Energy Profile:** Paints a picture of your community's recent energy use, participation in DSM programs, and reliance on renewables.

**Community Planning Team:** Community stakeholder group comprised of residents, businesses, organizations, and local governments.

**Customer:** A unique identifier for the location of electricity service.

**Demand Side Management (DSM):** Modification of consumer demand for energy through various methods, including education and financial incentives. DSM aims to encourage consumers to decrease energy consumption, especially during peak hours or to shift time of energy use to off-peak periods, such as nighttime and weekend.

**Energy Baseline:** Historical data (usually a full calendar year) of a community's energy use, including electricity, renewable energy, and other sources of power.

**Energy Vision:** An energy vision is an expression of the community's shared energy intention.

**Focus Area:** A category your community selects to target for action (e.g., residential energy efficiency, economic development)

**Goals:** The results toward which efforts and actions are directed. There can be a number of objectives and goals outlined in order to successfully implement a plan.

**Greenhouse gas (GHG):** Gas in the atmosphere that absorbs and emits radiant energy within the thermal infrared range (primary GHGs include water vapor, carbon dioxide, methane, nitrous oxide, and ozone); GHGs are associated with affecting climate change.

**GWh:** Gigawatt-hour; a unit of electric consumption.

**HES:** Home Energy Savings.

**HOA:** Home owners' association.

**HVAC:** Heating, ventilation, and air conditioning.

**LED:** light-emitting diode.

**kW:** kilowatt (1,000 watts); a unit of electric power.

**kWh (kilowatt-hour):** A unit of electric consumption.

**MTCO2e:** Metric tons of carbon dioxide equivalent (MTCO2 Eq.); measure used to compare the emissions from different greenhouse gases based on their global warming potential (GWP). The carbon dioxide equivalent for a gas is derived by multiplying the tons of the gas by its associated GWP.

**MW:** Megawatt (1 million watts); a unit of electric power.

**Solar Garden:** Shared solar array with grid-connected subscribers who receive bill credits for their subscriptions.

**Solar PV:** Solar cells/panels that convert sunlight into electricity (convert light, or photons, into electricity, or voltage).

**Subscription:** An agreement to purchase a certain amount of something in regular intervals.










**WSB:** *watt*smart business



## Appendix 2. Implementation Tracking Tool

Tools like this one will be used to keep strategies on track and maintain accountability.

#	Action Step	Today's Status	Due Date	Responsibility	Additional Notes
1					
2					
3					
...					

	In progress and moving forward
	In progress and no change
	In progress and declining
	Caution
	Of concern, but improving
	Of concern and no change
	Of concern and declining
	Not started or temporarily on hold
	Completed