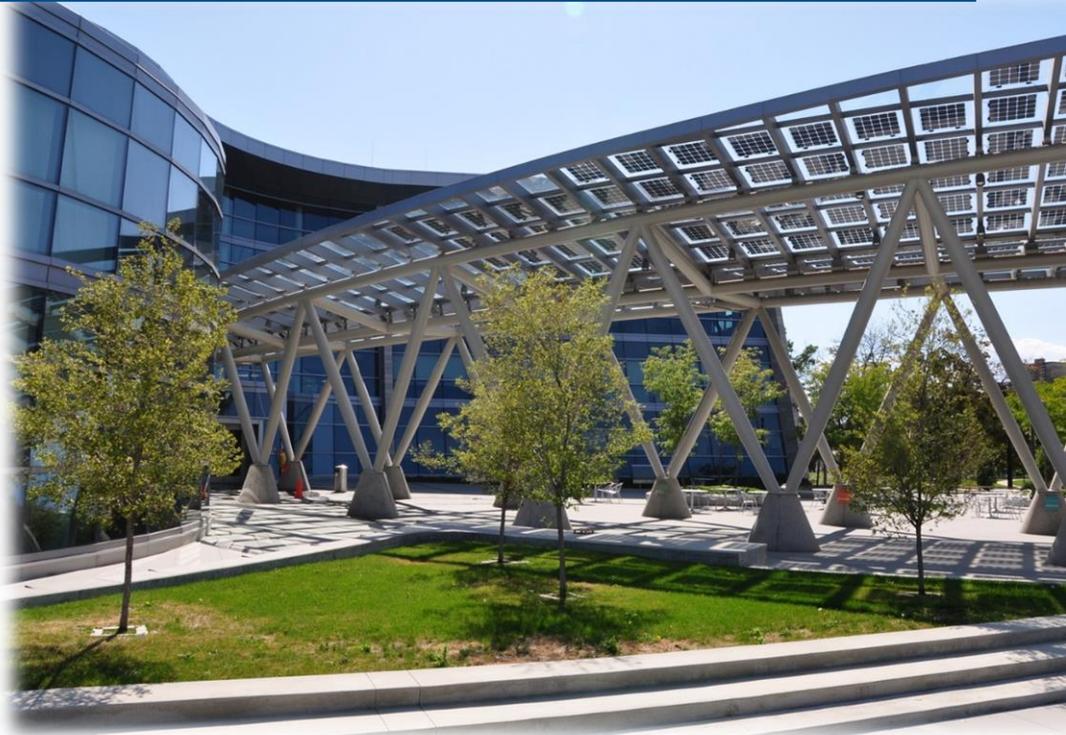




Clean Energy Implementation Plan



**Salt Lake City Corporation
Department of Sustainability**

Rocky Mountain Power

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Cooperating for Clean Energy

Salt Lake City and Rocky Mountain Power are committed to cooperatively seeking and implementing energy solutions that reduce emissions and align with community values of local residents and businesses. Mayor Jackie Biskupski and Rocky Mountain Power CEO Cindy Crane signed a [Clean Energy Cooperation Statement](#) in August 2016 detailing goals, timing and scope for this vision.

This high-level Clean Energy Implementation Plan was drafted to support goals detailed in the Cooperation Statement and document the programs, projects and tasks that must be prioritized in order to ensure success.

Policies, programs and projects across focus areas combine to create a clean energy pathway for the City and Rocky Mountain Power. These areas are key to reducing community carbon emissions by at least 80% by 2040, a target set via a Joint Resolution by Mayor Biskupski and the Salt Lake City Council in 2016.



This plan was drafted to be brief and accessible, while still highlighting key concepts and a timeline for implementation. Follow-up progress reports will be jointly published annually.





Energy efficiency and conservation offer the most affordable and lowest polluting opportunities for households and businesses to contribute to community energy goals. Rocky Mountain Power and Salt Lake City have consistently collaborated on these initiatives in the past and intend to sustain and accelerate this partnership through new, innovative opportunities. New technologies and engagement strategies offer transformative solutions that save customers money, reduce carbon emissions and enhance community connectivity.

- **Enhanced Community Energy Efficiency:** Rocky Mountain Power assists customers in reducing electricity use through its [wattsmart energy efficiency programs](#). Residential and business customers within Salt Lake City have benefited from millions of dollars in wattsmart incentives in recent years by implementing energy-saving measures. The City has also received hundreds of thousands of dollars in wattsmart incentives to improve energy efficiency in government operations—thereby saving taxpayers money year after year. The City desires to enhance community outreach efforts and drive greater use of energy efficiency offerings, particularly by low income households.
- **Elevate Buildings & Project Skyline:** Salt Lake City engages large commercial building owners and operators through the [Elevate Buildings](#) and [Project Skyline](#) programs. These initiatives include a partnership with Rocky Mountain Power through enhanced data access and ongoing informational workshops.
- **Financing Options:** Salt Lake City offers Commercial PACE ([C-PACE](#)) financing to complement an array of other energy financing options and is enrolled in the C-PACE administrative program offered by the Utah Office of Energy Development.



Renewable Energy

- City Operations
- Community | Distributed, Net Metered
- Community | Large-Scale

Achieving 100% renewable electricity for the community by 2032 is foundational to the collaboration between Salt Lake City and Rocky Mountain Power. Evolving customer preferences have combined with local market forces to drive substantial renewable energy growth at all scales in Utah. Renewable electricity is also key to the City's more holistic goal of reducing community carbon pollution **80% by 2040**. Ongoing development of clean energy opportunities and enhanced customer choice will be key in the transition to a renewable-powered economy.

- **City Operations:** Salt Lake City has renewable energy installations at 12 separate local government sites, totaling nearly three megawatts of onsite generation. Nine additional City government projects are planned for 2017. The City also **enrolled** in Rocky Mountain Power's Subscriber Solar program and is developing a strategy to achieve at least 50% renewable electricity for City operations by 2020.
- **Community | Distributed, Net Metered:** Over 1,500 individual renewable energy projects have been completed by households and organizations within City limits since 2003. Investments in clean energy resources, such as rooftop solar, contribute towards the 100% community renewable electricity goal, create local jobs and enhance energy resiliency when combined with battery storage.
- **Community | Large-Scale:** Rocky Mountain Power launched the **Utah Subscriber Solar** program in 2016 and the project was fully enrolled by the time a new 20 megawatt solar resource became operational in 2017. Enhancing customer choice through utility development of renewable energy resources is a key aspect of ongoing collaboration. The City is also developing a roadmap to 100% community renewable electricity and will work with Rocky Mountain Power on implementation.



Electric Vehicles

- EV Ready Construction
- Charging Infrastructure
- WestSmart EV Partnership

Electrified transportation promises a range of benefits including enhanced domestic energy choice, cleaner air and lower cost mobility options. Supportive policymakers, local research institutions and an innovative electric utility have positioned Utah to become a leader in the electrified transportation sector and Salt Lake City hopes to accelerate this trend through partnership with Rocky Mountain Power. Widespread adoption of electric transportation powered by local and in-state renewable energy is imperative to the City's sustainability vision.

- **Charging Infrastructure:** Rocky Mountain Power is currently seeking approval for a new electric vehicle (EV) charging incentive program that would provide up to \$2 million in annual funding for five years to Utah customers. Salt Lake City has also installed 30 publicly accessible Level 2 EV charging ports at 13 separate locations, in addition to two Level 3 fast-charge stations near downtown. Ongoing investment in charging infrastructure is key to encourage sustained adoption of EVs.
- **WestSmartEV Partnership:** Rocky Mountain Power was selected for a \$4 million grant award from the U.S. Department of Energy to drive electric vehicle adoption in its service territory. Salt Lake City is a formal partner on this *WestSmartEV* grant and will assist with numerous deliverables over three years, including deployment of EVs in local government fleets, charging infrastructure support and community engagement on smart electrified mobility.
- **EV Ready Construction:** "EV Ready" construction means that properties have the electrical transformer capacity and conduit in place to facilitate lower-cost future installation of charging stations. Salt Lake City encourages this type of development to enhance transportation choice and facilitate a cost-effective transition to electric vehicles.



Investing in a progressive grid will ensure the responsible use of customer funds and optimal balancing of new technologies such as renewable energy resources, electric vehicles, energy storage and effective demand response. A progressive grid will also catalyze system efficiencies and maximize the ability of Rocky Mountain Power to reduce pollution and assist communities like Salt Lake City in meeting its carbon reduction goals. A resilient and reliable electric grid is also inherently an evolving grid and it is indispensable to a clean, renewable energy future.

- **Customer-Side Technologies:** Demand-response programs, such as [Cool Keeper](#), offer the ability to curtail peak electricity demand when the grid is most heavily utilized. Promising cost-curves for battery storage are following a similar, steeply declining trajectory to what was experienced with solar technologies. Also, vehicle-to-grid advances with EVs could be harnessed with the appropriate technologies and coordination between utilities and customers. Overall, customer-side investments play an important role in a progressive grid and are in scope for partnership between the City and Rocky Mountain Power.
- **Utility-Side Technologies:** Salt Lake City became the fifth city in the world to enjoy a central-station electric grid. Much has evolved since those days in the late 1800s, and Rocky Mountain Power continues to invest in cost-effective technologies to protect and enhance transmission and distribution systems. Sustaining utility-side investments is key to integrating clean technologies and recent Sustainable Transportation and Energy Plan ([STEP](#)) legislation will catalyze pilot and research opportunities with utility-scale energy storage.
- **Resilient Operations:** Fault-finding equipment and other responsive technologies ensure a reliable and resilient grid that is essential to the Clean Energy Implementation Plan and all utility customers statewide.

April 2018 Annual Updates

Salt Lake City and Rocky Mountain Power publish annual updates on programs, policies and projects related to the Clean Energy Implementation Plan. Below is a brief update on key advances and accomplishments over the past 12 months, [including hyperlinks](#) to more details.

Energy Efficiency

- ✓ **wattsmart Communities:** Salt Lake City is participating in the new [wattsmart Communities](#) program offered by Rocky Mountain Power. Through this effort the organizations are co-hosting workshops with local stakeholders to gather input and inform a new action plan to enhance engagement on energy efficiency opportunities. The associated plan for Salt Lake City will be complete in mid-2018.
- ✓ **Neighborhood Engagement:** Salt Lake City is developing a new program to engage households and businesses in targeted neighborhoods on energy conservation and efficiency. This effort is informed by the wattsmart Communities process and a pilot program will be launched in late 2018.
- ✓ **Elevate Buildings:** The City Council of Salt Lake City passed a new ordinance in August 2017 that requires [energy benchmarking and reporting](#) for large buildings starting in 2019. The program implementation plan is still under development and City staff are hosting recurring informational workshops for building owners, tenants and managers.
- ✓ **Commercial PACE Financing:** Salt Lake City is currently evaluating a newly offered, centrally administered program for [C-PACE financing](#) created by the Utah Governor's Office of Energy Development. This program would create new opportunities for commercial properties to finance energy and water improvements.

Renewable Energy

- ✓ **Solar Energy Innovation Network:** Rocky Mountain Power and Salt Lake City are part of a team led by Utah Clean Energy that is participating in the U.S. Department of Energy's new [Solar Energy Innovation Network](#). The team is in the process of refining and prioritizing shared objectives that will be researched and advanced through 2019.
- ✓ **Government Solar Sites:** Salt Lake City [completed solar installations](#) on seven separate government facilities, including five existing fire stations, in September 2017. A total of 756 solar panels were installed that will offset onsite electricity use between 17% and 92%, depending on the facility. The City is also in the process of finalizing construction of two new net-zero energy fire stations, the second and third of their kind in the country.
- ✓ **50% Renewable Government Operations:** Salt Lake City is collaborating with Rocky Mountain Power to power at least 50% of its government operational needs with renewable electricity by 2020. The Rocky Mountain Power [Subscriber Solar](#) project

completed its first full year of operation in 2017 with three megawatts of the project directly contributing to the City's goal and additional projects are being envisioned.

- ✓ **Rooftop Solar Settlement:** Salt Lake City and Rocky Mountain Power joined many other parties in signing a settlement related to net metering for solar customers in Utah. The settlement detailed a grandfathering agreement for existing solar customers, plus how solar exported to the electric grid will be compensated for transition customers while parties develop a new solar tariff in coming years.

Electric Vehicles

- ✓ **WestSmart EV Partnership:** Rocky Mountain Power continues to lead partners driving electric vehicle adoption in Utah with support of a \$4 million grant award from the U.S. Department of Energy. In addition to enhancing the impact of EV charging incentives offered by Rocky Mountain Power and creating innovative models for transportation electrification, this effort also created the [Live Electric](#) public engagement platform.
- ✓ **Electrified Transportation Roadmap:** Salt Lake City co-authored a new [Electrified Transportation Roadmap](#) with guidance and best practices for other cities, towns and counties in Utah interested in advancing electrified transportation. The roadmap includes recommendations on charging infrastructure, electrified fleets, smart mobility solutions, education & incentives, plus equitable access to electrified transportation choices.
- ✓ **Salt Lake City Public EV Charging Network:** Salt Lake City [completed the installation](#) of 28 level 2 EV charging ports in spring 2017. City Council then [approved a proposal](#) in February 2018 to waive fees associated with public use of these stations. The 28 charging ports were used for over 8,600 charging sessions in the first 14 months of operation and additional public stations are being planned for completion in summer 2018.
- ✓ **Electrified Government Fleet:** Salt Lake City is sustaining its commitment to a cleaner vehicle fleet and added five new all-electric vehicles in early 2018, plus e-bikes for certain government operations. Electrified fleets are supported by Rocky Mountain Power through utility incentives and WestSmart EV programming.

Progressive Grid

- ✓ **Demand Response:** Rocky Mountain Power continues to offer and manage its [Cool Keeper](#) demand management program in Salt Lake City, plus other areas of its service territory. This initiative complements a variety of grid management measures taken by the utility to ensure resilient operations and affordable electricity rates.
- ✓ **Utility-Scale Energy Storage Pilot:** Rocky Mountain Power is completing feasibility steps and moving towards implementation of a pilot battery storage program to demonstrate the viability of utility-scale energy storage for grid management purposes and enhanced integration of renewable energy.

Salt Lake City-Rocky Mountain Power
Clean Energy Implementation Map
March 28, 2017

Target / Goal	Pilot Program	Targeted Capital Construction
Study / Report	Full Program	Targeted Implementation

	2017	2018	2019	2020	2021	2022	2023	2024	2025	2026	2027	2028	2029	2030	2031	2032	
Action Area: Municipal Clean Energy																50% Renewable	100% Renewable
Net Metered Projects for City Operations	9-12 solar NEM projects	NEM Projects Installed			Future Planning and Implementation												
Subscriber Solar for City Operations	3 MW for SLC Operations Year 1 Report	New Project Options		Implemented if Successful and New Projects Approved					Future Planning and Implementation								
Major Renewable Project for City Operations	New RFP	Inter-connection	Construction		Closing the gap to 100%				Future Planning and Implementation								
Ongoing Internal Energy Efficiency: Comprehensive Energy Mgmt Executive Order	Ongoing Implementation and Annual Internal Reporting in Compliance with Executive Order										Future Planning and Implementation						
Ongoing LEED and Net Zero Standards for New Municipal Construction	Ongoing Implementation, Based on Project Types and Construction Timing										Future Planning and Implementation						
Action Area: Community Renewable Energy																100% Renewable	
Solar Permitting: Costs & Process Improvements	Fee Schedule	New Opportunities		Implement		Future Planning and Implementation											
Distributed Generation: Interconnection	Interconnection Process Optimization		Implement			Future Planning and Implementation											
Large-Scale Clean Energy Choice	Feasibility Published	Collaborative Policy Work			Implement		Program Implementation			Evaluate		Final Implementation Window				100% Renewable	
Action Area: Community Energy Efficiency																	
Residential & Commercial: Enhanced Marketing of Utility DSM Programs	Evaluation	Small Scale Implementation		Full Program Implementation					Future Planning and Implementation								
Residential: Targeted Investments in DSM Programs and Uptake	Evaluation	Priority Pilots New Project Review		Review		Full Program Implementation					Future Planning and Implementation						
Commercial: Elevate Buildings Initiatives Benchmarking and Efficiency Enhancements	Engagement and Pilot Implementation		Full Implementation Window					Sustain and Consistent Evaluation of Program Opportunities									
Commercial: C-PACE Financing	OED-SLC Partnership	Full Program Implementation					Future Planning and Implementation										
Action Area: Electric Vehicles																	
SLC "EV Ready" New Construction	Ordinance Adoption and Implementation				Evaluate and Report			Future Planning and Implementation									
SLC Public EV Stations	Level 2	Comprehensive Plan		New Implementation	Construction				Future Planning and Implementation								
Regional Partnership DOE Grant	WestSmartEV: Western Smart Plug-in Electric Vehicle Community Partnership																
EV Infrastructure Incentive Program	Finalize and Incentives Available to All Utah Ratepayers										Future Planning and Implementation						
Action Area: Smarter, Resilient Grid																	
Customer-Side Investments	Evaluate Options Annual Report			Possible Pilot Implementation				Broader Implementation, if Feasible					Future Planning and Implementation				
Utility-Side Investments	Evaluate Options Annual Report			Possible Pilot Implementation				Broader Implementation, if Feasible					Future Planning and Implementation				
Action Area: City-Utility Collaboration																	
SLC-RMP Clean Energy Cooperation Statement	Annual Progress Reporting			Revisit Cooperation Statement Franchise			Future Planning and Implementation										