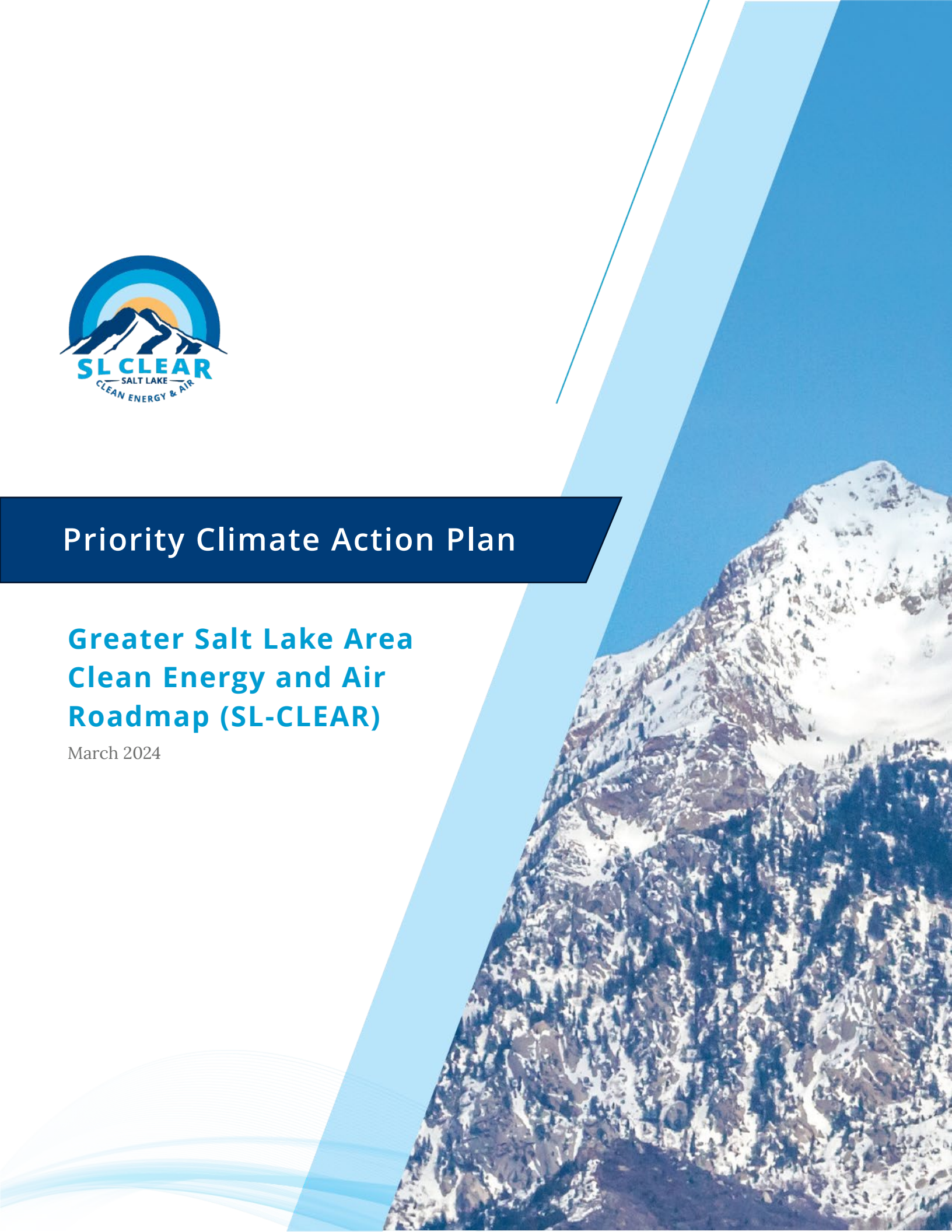




Priority Climate Action Plan

Greater Salt Lake Area Clean Energy and Air Roadmap (SL-CLEAR)

March 2024



15. Biodigester for Combined Heat and Power

Applicable Sector	Buildings; Electricity; Wastewater Treatment
Measure Summary	Salt Lake City Department of Public Utilities (SLCDPU) is capturing biogas from a digester at an existing water reclamation facility and using it to generate combined heat and power (CHP) for the treatment process and space heating. Substantial upgrades or complete replacement of this system is needed to ensure sustained operations.
Cumulative GHGs Reduced Through 2030	35 MT CO ₂ -equivalent
Cumulative GHGs Reduced Through 2050	173 MT CO ₂ -equivalent
GHG Modelling Assumptions	A GHG reduction estimate was provided by SLCDPU based on internal calculations and technical evaluation of new or upgraded facility potential.
Measure Subtitles and Descriptions	a. Salt Lake City Public Utilities Clean Energy Project: Upgrades or replacement of the biodigester system will allow for efficient capture of biogas and generation of heat plus power for the water reclamation facility. This project will reduce energy use at the facility and mitigate GHG emissions associated with operations.
Implementing Agencies	Salt Lake City Department of Public Utilities (SLCDPU)
Implementation Schedule and Milestones	2025 – 2028 (Estimated implementation through grant funding time horizon) 1. Planning/Design phase: Complete design for CHP Engine Generator Replacement including electrical improvements

	<p>required to connect into new 13.8kV plant power system and equipment procurement documents - 1 year</p> <p>2. Procurement Phase: Conduct equipment solicitation and procure new CHP Engine generators and new Hot Water Boilers - 1 year</p> <p>3. Implementation Phase: Construction of CHP Replacement project including installation of new Engine Generators, new Hot Water Boilers and Electrical Improvements to connect to 13.8 kV plant power system</p>
Authority to Implement	SLCDPU has the authority to invest in capital projects and facilities for its operations
Progress Tracking Metrics	<ul style="list-style-type: none"> - Quantity of biogas captured annually - kWh of electricity generated annually - Space heating capacity generated annually - Estimated annual GHGs reduced
Geographic Location	<p>SLCDPU Facility Site</p> <p>1365 West 2300 North, Salt Lake City, UT 84116</p>
Funding Sources	Funding sources are TBD
LIDAC Benefits Analysis	See details in separate LIDAC section of PCAP