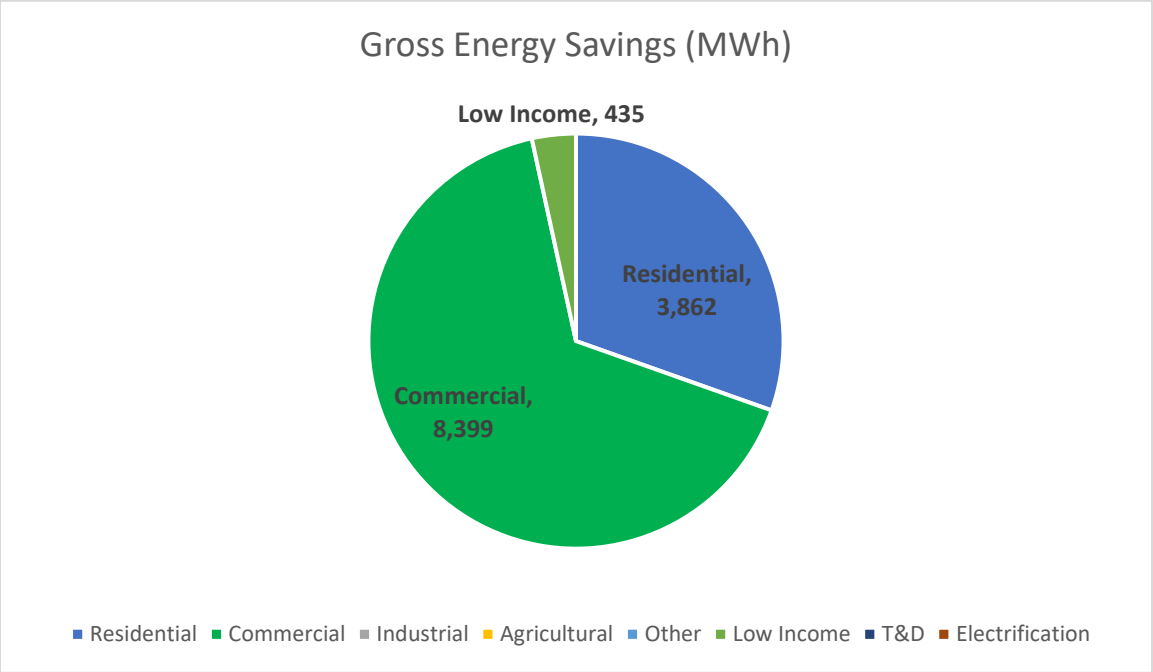
RIVERSIDE

Riverside at a Glance

- Climate Zone(s): 10
- Customers: 113,082
- Total annual retail sales (MWh): 2,064,551
- Annual Retail Revenue: $352,501,989
- Annual energy efficiency expenditures for reporting year: $7,144,896
- Gross annual savings from reporting year portfolio (MWh): 12,696



Riverside Overview

Riverside Public Utilities (RPU) has been providing efficient, reliable water and electric services throughout the city since 1895. RPU is committed to providing the highest quality services at the lowest possible rates to benefit customers and the community.

RPU continues to help customers manage their energy use through a comprehensive range of education, rebates and incentives. In Fiscal Year (FY) 2024 RPU reached 57% of the kilowatt-hour (kWh) savings goal of 1% of retail sales as adopted by the Board of Public Utilities in 2021.

Major Program and Portfolio Changes

RPU continues to enhance and expand its energy efficiency program portfolio for the benefit of its customers and the community. Staff regularly review the program portfolio and make changes to the rebates and incentives as needed. Since 2020, RPU has developed new and enhanced programs for both commercial and residential customers. This has led to an increase in program participation and resulted in increased energy savings being realized.

Throughout FY 2024, RPU enhanced the program offer via the Tree Power Program, Commercial Outdoor Lighting program, and the Small Business Direct install programs. Beginning FY 2024, RPU implemented some enhancements to the existing Energy Savings Assistance Program (ESAP) with Southern California Gas Co., expanding the program to include refrigerator replacement and whole house fans at no cost to qualifying customers.

Program and Portfolio Highlights

RPU has focused considerable attention on further developing commercial programs. Commercial customers represent almost 12% of the customer base, but account for approximately 65% of the City's load. In FY 2024 RPU entered a second year of the Medium and Large Business Outdoor Lighting Program, Small Business Direct Installation Program and Small Business Refrigerator Load Program.

Commercial, Industrial & Agricultural Programs

- Air Conditioning Incentives – Rebates for replacement of energy inefficient AC units.
- Business Outdoor Lighting Program – Program provides direct installation for medium and large business with outdoor lighting conversion to efficient LED.
- Key Account Energy Efficiency Program (KEEP) – Program targeting RPU's largest Time of Use Customers and includes the top 300 RPU customers in terms of consumption. KEEP is intended to provide Key Account customers with a comprehensive energy efficiency plan including a priority list of recommended energy efficiency measures along with an estimated return on investment and applicable utility incentives.
- LEED New Construction – Rebate for LEED certification for new buildings and major renovations.

- Lighting Incentive – Rebates for kWh savings on installation of more energy efficient lighting and controls.
- Performance Based Incentive – Rebates for customers who can demonstrate a kWh savings based on custom energy-efficiency measures.
- Refrigerator Load Program - Program offers the direct installation of energy efficiency measures such as air curtains, cooler gaskets, automatic door closures, LED case lighting retrofits and high-efficiency motor upgrades.
- Small Business Direct Install Program (SBDI) - Program provides small and medium-sized businesses with energy audits, and direct installation of energy efficiency measures such as lighting upgrades and controls, HVAC tune-ups, exit and open/closed signs, advanced power strips and weatherization.
- Weatherization – Rebates for installation of insulation, window film and cool roofs.

Residential Programs

- Air Conditioning Incentives – Rebates for replacing Central Air Conditioners with a SEER rating of 15 above and HVAC tune-up.
- Appliance Recycling – Free recycling service for old inefficient refrigerators and freezers.
- Energy Savings Assistance Program (ESAP) – Direct installation program targeting low-income customers, offered in partnership and cooperation with SCGC. Measures include lighting efficiency upgrades, HVAC tune-ups, smart power strips, and refrigerator recycling (low-income assistance, Res Lighting, Res Cooling, Res Refrigeration).
- Energy Star Appliances – Rebates for purchase of Energy Star-rated refrigerators, dishwashers, clothes washers, room air conditioners, ceiling fans, and televisions.
- Heat Pumps – New rebate to residential electric customers when they purchase and install new energy-efficient heat pumps.
- Pool Saver – Rebates for purchase and installation of high efficiency, variable speed, or multi-flow pool pump motors.
- Tree Power – Rebates for purchasing and planting of up to five qualifying shade trees per year and one free qualifying shade tree coupon printed on the March back of the bill.

- Weatherization – Rebates for installing attic insulation or wall insulation, standard rebates for duct replacement, duct testing/sealing, window film, solar and standard attic fans, whole house fans, and cool roofs.

Complementary Programs

- SHARE – This low-income assistance program credits $250 toward the electric deposit or as an emergency payment on delinquent balances and/ or assists with a $16 monthly bill payment and beginning January 1st, 2024, the monthly credit was increased to $20 to offset the rate increase for qualified low-income applicants annually

- Energy Savings Assistance Program (ESAP) - In partnership with SoCal Gas, ESAP is designed to help lower monthly bills to income-qualified renters and homeowners, making homes more energy efficient through professional no-cost energy-saving home improvements by RPU's authorized contractor Synergy. Participation of ESAP for FY 2024 was 367 with 4,874 different EE measures installed.

- Pool Pump Timer Credit Load Shift Program – This program offers a bill credit of $5 per month for customers who agree to install and program their residential pool pump timer so that the pump operates only during off-peak hours.

Evaluation, Measurement & Verification Studies

- RPU is committed to providing cost-effective, ongoing evaluation, measurement, and verification (EM&V) efforts for its energy efficiency programs. EM&V costs are covered in the individual program budgets.

- In addition to periodic program audits, RPU consistently performs the following in support of EM&V activities.

- An onsite inspection rate of a selection of randomly selected residential program participants, performed by RPU staff and contractors.

- A pre-and post-inspection of 100% of large commercial rebate participants, including a review of historical energy usage, energy-saving calculations, and post-measure bill analysis.

- Audits and installations performed by third-party contractors for RPU direct installation programs have high inspection rates that are performed by both the contractor and RPU staff.

- Refrigerator recycling program administered by A&G Recycling Angels assures full inspection when the contractor picks up old appliances.

Major Differences or Diversions from CA POU TRM for Energy Savings

None Noted.

TABLE 1. EnergyEfficiency Program Results by End Use

Summary by End Use	Resource Savings Summary								Cost Test Results		
End Use	**Gross Peak Savings (kW)**	**Gross Annual Energy Savings (kWh)**	**Gross Lifecycle Energy Savings (kWh)**	**Net Peak Savings (kW)**	**Net Annual Energy Savings (kWh)**	**Net Lifecycle Energy Savings (kWh)**	**Net Lifecycle GHG Reductions (Tons)**	**Total Utility Cost**	**PAC**	**TRC**	**Utility ($/kWh)**
Any	0	2,070,068	20,700,684	0	2,070,068	20,700,684	6,916	$335,406	7.03	9.56	0.020
Appliance & Plug Loads	241	874,538	5,224,956	229	829,256	4,948,015	1,818	$248,920	2.44	8.24	0.057
Building Envelope	175	192,465	3,557,903	159	175,207	3,231,945	1,229	$148,957	4.58	8.81	0.066
Commercial Refrigeration	0	116,984	1,359,252	0	116,984	1,359,252	485	$159,873	0.94	9.56	0.148
HVAC - Cooling	2,311	4,306,156	95,791,775	1,942	3,330,556	71,801,263	26,292	$2,198,098	5.91	8.42	0.047
Lighting - Indoor	2	415,233	4,177,098	2	415,233	4,177,098	1,395	$89,599	5.30	9.56	0.026
Lighting - Outdoor	0	1,372,825	13,728,250	0	1,372,825	13,728,250	6,432	$1,029,220	1.51	9.56	0.091
Miscellaneous	2	2,354,229	22,439,137	2	2,354,007	22,438,249	7,634	$2,319,499	1.09	9.55	0.125
Service & Domestic Hot Water	0	5,956	60,628	0	5,658	57,597	20	$2,067	2.85	8.56	0.044
Whole Building	0	552,494	8,287,410	0	552,494	8,287,410	2,936	$163,096	5.68	9.56	0.026
Energy Efficiency	2,732	12,260,949	175,327,094	2,334	11,222,289	150,729,763	55,156	$6,694,735	3.32	8.80	0.060
Appliance & Plug Loads		12,288	122,880		12,288	122,880	44	$24,591	0.67	9.56	0.242
Building Envelope	0	62,355	1,247,100	0	62,355	1,247,100	472	$146,321	1.96	9.56	0.173
HVAC - Cooling	0	186,806	2,493,777	0	186,806	2,493,777	949	$209,927	2.14	9.56	0.110
Lighting - Indoor	0	173,153	2,597,295	0	173,153	2,597,295	981	$69,322	4.22	9.56	0.036
Low-Income	0	434,602	6,461,052	0	434,602	6,461,052	2,446	$450,161	2.32	9.56	0.094
EE, Low Income and Electrification	2,732	12,695,551	181,788,146	2,334	11,656,891	157,190,815	57,602	$7,144,896	3.26	8.83	0.062
C&S and T&D								$0			
Utility Total	2,732	12,695,551	181,788,146	2,334	11,656,891	157,190,815	57,602	$7,144,896	3.26	8.83	0.062

TABLE 2. EnergyEfficiency Program Results by Sector

Summary by Sector	Resource Savings Summary								Cost Test Results		
Sector	**Gross Peak Savings (kW)**	**Gross Annual Energy Savings (kWh)**	**Gross Lifecycle Energy Savings (kWh)**	**Net Peak Savings (kW)**	**Net Annual Energy Savings (kWh)**	**Net Lifecycle Energy Savings (kWh)**	**Net Lifecycle GHG Reductions (Tons)**	**Total Utility Cost**	**PAC**	**TRC**	**Utility ($/kWh)**
Commercial	1,393	8,398,770	93,711,419	1,246	8,200,225	90,603,173	32,042	$4,086,481	2.49	9.29	0.056
Residential	1,338	3,862,179	81,615,675	1,088	3,022,064	60,126,589	23,114	$2,608,254	4.63	8.43	0.068
Energy Efficiency	2,732	12,260,949	175,327,094	2,334	11,222,289	150,729,763	55,156	$6,694,735	3.32	8.80	0.060
Residential	0	434,602	6,461,052	0	434,602	6,461,052	2,446	$450,161	2.32	9.56	0.094
Low-Income	0	434,602	6,461,052	0	434,602	6,461,052	2,446	$450,161	2.32	9.56	0.094
EE, Low Income and Electrification	2,732	12,695,551	181,788,146	2,334	11,656,891	157,190,815	57,602	$7,144,896	3.26	8.83	0.062
C&S and T&D								$0			
Utility Total	2,732	12,695,551	181,788,146	2,334	11,656,891	157,190,815	57,602	$7,144,896	3.26	8.83	0.062

TABLE 3. EnergyEfficiency Program Results by Building Type

Summary by Building Type	Resource Savings Summary								Cost Test Results		
Building Type	**Gross Peak Savings (kW)**	**Gross Annual Energy Savings (kWh)**	**Gross Lifecycle Energy Savings (kWh)**	**Net Peak Savings (kW)**	**Net Annual Energy Savings (kWh)**	**Net Lifecycle Energy Savings (kWh)**	**Net Lifecycle GHG Reductions (Tons)**	**Total Utility Cost**	**PAC**	**TRC**	**Utility ($/kWh)**
Any	1,393	6,573,878	76,705,467	1,246	6,375,333	73,597,222	26,262	$2,655,990	3.11	9.23	0.045
Other Commercial	0	1,883,609	17,769,261	0	1,883,609	17,769,261	6,058	$1,802,219	1.11	9.56	0.122
Residential	1,338	3,803,463	80,852,366	1,088	2,963,348	59,363,280	22,837	$2,236,525	5.36	8.42	0.060
Energy Efficiency	2,732	12,260,949	175,327,094	2,334	11,222,289	150,729,763	55,156	$6,694,735	3.32	8.80	0.060
Residential	0	434,602	6,461,052	0	434,602	6,461,052	2,446	$450,161	2.32	9.56	0.094
Low-Income	0	434,602	6,461,052	0	434,602	6,461,052	2,446	$450,161	2.32	9.56	0.094
EE, Low Income and Electrification	2,732	12,695,551	181,788,146	2,334	11,656,891	157,190,815	57,602	$7,144,896	3.26	8.83	0.062
C&S and T&D								$0			
Utility Total	2,732	12,695,551	181,788,146	2,334	11,656,891	157,190,815	57,602	$7,144,896	3.26	8.83	0.062