City of Claremont

City of Claremont Goes 100% Renewable While Reducing Community Costs by Over \$1.4 Million TRAN

Customer Story

Known widely as "the City of Trees and PhDs," the City of Claremont is rich with public parks and architectural gems coveted by residents—many of whom are graduates of the seven Claremont Colleges. With more than 56 percent of Claremont residents holding advanced academic degrees¹, it comes as no surprise that community members expect forward-thinking, innovative and fiscally responsible city management from local leaders.

Challenge

When aging infrastructure started to break down, resulting in costly repairs and uncomfortable buildings, Claremont leaders knew they needed an affordable and effective solution.

Aging buildings were deteriorated as roofing leaked and central cooling systems became overwhelmed by summer heatwaves. Community centers where kids practiced martial arts and senior citizens socialized had become unreliable. The police station and other administrative buildings where city staff served the residents of Claremont each day became uncomfortable hindering productivity and morale.

With infrastructure modernization a top priority, the city sought to address three important objectives:

• Modernize 9 aging community spaces without relying on tax dollars. Repairs and long-deferred maintenance costs were growing. City leaders needed to improve these critical public spaces while being good stewards of community budgets.

• Improve Claremont's resiliency through existing infrastructure Like many Californian communities, extreme weather, heatwaves, wildfires and droughts threatened residents and the environment alike. Since public buildings are often converted into shelters during emergencies, ensuring they operate reliably, comfortably, and safely at all times is always critical.

• **Position Claremont as an innovative and sustainable community.** Being good environmental stewards is central to Claremont's civic values. Residents have formed a Sustainability Task Force to achieve audacious sustainability goals, including reducing carbon emissions through thoughtful city management, nurturing the local urban forest, and transitioning Claremont to rely on <u>100 percent clean power by 2045</u>. As partners of neighboring communities, Claremont's leaders want to share their formula for decarbonizing while saving money—two goals prioritized by many American community leaders.

Modernizing public spaces with reliable comfort management systems, impactful energy conservation measures, energy-efficient and Title 24 compliant <u>lighting</u> and electrical infrastructure, and affordable renewable energy set the city up to meet its ambitious goals.



City of Claremont

Project Highlights

(7)



Reduced the city's reliance on grid-based power by 55%

Reduced city's energy demand by 1.08 million kWh/year

Offset CO₂ emissions by 767 metric tons annually, equivalent to planting over 12,600 clean air producing trees each year

Solutions used:

- Energy performance contracting
- Tracer SC+ Building Automation System (BAS)
- Tracer Ensemble Building Management System (BMS)
- Rooftop units
- Air handling units
- High efficiency transformers
- Interior & Exterior lighting retrofit
- Heat pumps
- Energy storage

Solution

City officials wanted to collaborate with proven expertise in executing facility modernization and energy efficiency projects. As a reputable energy services company (ESCO) with extensive experience helping governments leverage existing infrastructure to recover capital for community reinvestment, Trane was selected as Claremont's partner of choice.

Investing in Community Spaces

Starting with an extensive review of parks, buildings, parking ramps, and more, the team diagnosed daily occupancy and energy requirements for each facility. This assessment armed Trane's team with insights to create a comprehensive energy conservation and facilities modernization plan.

After detailed planning discussions, the final project plan included upgrading facilities with high-efficiency HVAC systems, transformers, building automation and <u>management systems</u>, and electrical storage (to store and enable the city's solar photovoltaic renewable power generation) at key city facilities. This plan was strategically designed to address the city's immediate needs and to support future decarbonization and electrification infrastructure projects.

Leveraging Savings to Fund Future Investments

As repair and maintenance costs mounted, the project teams knew they had to get started – and fast. To fund the project without relying on additional tax dollars, Jeremy Swan, Director of Community Services opted to solicit a project through an energy savings performance contract (<u>ESPC</u>). Trane ESPCs offered a budget-neutral solution to fund projects using guaranteed future energy savings to pay for the modernization investments. Through this approach, the city leveraged existing buildings to modernize and create significant operational and energy savings that could be reinvested into the community.

Relying on Trane's expertise, Claremont leaders improved the reliability and comfort of the buildings that residents rely on most—all while being good stewards of community budgets and the environment.

In total, the project is saving \$1.4 million for community reinvestment, reducing the city's reliance on grid-based power by 55 percent, and offsetting Claremont's carbon emissions by 767 metric tons annually - equivalent to planting over 12,600 clean air producing trees or removing 165 fossil gasoline-powered vehicles each year.

Through this project and additional procurement through the Clean Power Alliance, Claremont's public buildings are now powered by 100% clean, renewable energy.

"We had aging infrastructure that was neglected. Not only was it increasingly costly to maintain, but the truth is, our infrastructure simply wasn't set up to withstand a major devastating event. This infrastructure upgrade project was critical to ensuring the safety and comfort of our community."

- Jeremy Swan, Claremont's Director of Community Service

"Claremont residents are very deliberate about what we leave behind for our children. We are incredibly thoughtful about how we ensure Claremont is going to be a sustainable, thriving community for generations to come. Completing this project that made massive updates to our city's infrastructure, as well as adds new renewable energy generation, delivers on our promise to protect our kids' future and set them up for continued success."

- **Jed Leano,** Mayor of Claremont



Trane – by Trane Technologies (NYSE: TT), a global climate innovator – creates comfortable, energy efficient indoor environments through a broad portfolio of heating, ventilating and air conditioning systems and controls, services, parts and supply. For more information, please visit trane.com or tranetechnologies.com.