

# SCV1

**Silicon Valley - Santa Clara**  
**CyrusOne Data Centers**  
**2600 De La Cruz Blvd.**  
**Santa Clara, CA 95050**

Strategically located in Santa Clara, California, CyrusOne's **SCV1** data center is purpose-built, offering industry leading efficiencies, the latest cooling technology, uniquely low PUE's and multilayer security.



## Overview

- Acreage for the site: 14.9 Acres
- Gross Building Area: 703,450 total sq. ft.
- Number of stories: 4
- Total MW: 67.5 MW IT
- Number of Data Halls: 11
- Total Data Hall Area (including Mech Galleries): 375,800 sq. ft.
- Total Data Hall Area (without Mech Galleries): 288,900 sq. ft.
- Total Office Area: 67,600 sq. ft.
- Building Height: 85 ft.



# SCV1: Building for a sustainable future

At CyrusOne, as we expand into new markets, we are focused on purchased renewables, leveraging green power and integrating sustainable design components for all facilities. We pledge to become carbon neutral by 2040 through the reduction of carbon emissions focusing on renewable energy to power data centers, designing energy-efficient new buildings and upgrading new facilities.

Upon its completion, our Santa Clara data center will be the most efficient CyrusOne design in our portfolio.

### Features include:

- Santa Clara Water-free Cooling:** California's green building code (Title 24 or CalGreen) has some of the most stringent energy efficiency requirements in the world. Many data centers meet these energy efficiency requirements by evaporating water, which is "invisible" to the energy calculations. In Santa Clara, California, we knew we needed a different approach. We combined return air coolers with economizing air-cooled chillers as well as variable speed pumps and drives to achieve a highly efficient design PUE of 1.23 and WUE of under 0.1 (based on projections of facility maintenance, landscaping, and domestic water). With this design, we reduce stress on the local water resources, leaving more water for use by the surrounding communities as well as the local environment.
- CyrusOne Zero Water Consumption Cooling:** No water towers or evaporative cooling is used at this facility. Santa Clara uses highly efficient chillers, variable frequency drives and energy efficient fan wall CRAH units to achieve high efficiency air cooled chilling with only minimal amounts of water for humidification and facility maintenance. Based on a US Dept. of Energy estimated average, CyrusOne saves over 11 million gallons of water per month over traditional cooling methods.
- Regional Water Stress:** The Santa Clara area currently has sufficient water supply, but that is projected to change drastically in the next decade. By 2030, the region is projected to experience extremely high water stress. With CyrusOne zero water consumption cooling, CyrusOne's Santa Clara campus will be insulated from this regional water risk, both current and future.

- Low Air Emissions:** The emergency diesel generators at the Santa Clara facility will achieve the lowest level of air pollution emissions available for units of their size. These generators will meet EPA's Tier 4 emission standards, resulting in a 90% reduction in emissions of nitrogen oxides (NOx) and particulate matter (PM). These standards satisfy California's strict Best Available Control Technology (BACT) requirement.

Water Risk and Use	Now	2030 Projection	2040 Projection
Regional Water Stress	Low	Extremely High	Extremely High
CyrusOne Water Use	Zero Consumption	Zero Consumption	Zero Consumption

(Risk assessment and projections based on [WRI Aqueduct Tool](#))

### Regional Grid Greenhouse Gases:

The carbon-intensity of the grid has improved about 2.9% points per year over the last 14 years of published data. Reported by the [US EPA eGRID](#) for the WECC California subregion (CAMX).

Greenhouse Gases	2004	2007	2012	2016	2018
MTCO2/MWh	0.399	0.309	0.295	0.239	0.225

- Regional Grid Renewables:** The percentage of this facility's local electrical grid from renewable sources (wind, solar, biomass, hydro and geothermal) has been increasing almost 1% per year over the last 14 years of published data. Based on [US EPA eGRID](#) for the WECC California subregion (CAMX).

Grid Renewables	2004	2007	2012	2016	2018
Percent from renewable sources	24.9%	21.6%	25.9%	36.7%	40.2%

## Sustainable Data Center Infrastructure

