



BUILDING DESCRIPTION

The Clark Center is home to Bio-X at Stanford University; an interdisciplinary program that supports, organizes, and facilitates research connected to biology and medicine. The facility houses wet labs, dry labs, offices, and two server rooms. It is one of the top five energy consuming buildings on campus, with annual utility costs of about \$2.4 million.



Building Number	07-340
Gross Square Feet	193,476
Building Type	Laboratory
Year Constructed	2004

PROJECT OVERVIEW

Stanford decommissioned the 940 sqft. South Server Room and consolidated the hardware in the Research Computing Facility (RCF). The South Server Room held about 350 servers, the majority of which (~290) were part of a supercomputing cluster. The cluster had 475 users, and other lab-based systems served approximately 50 users. The project will save annual energy costs of about \$60,000 by consolidating from the server room with a Power Usage Effectiveness (PUE) of 2.0 to the RCF with a PUE of 1.3. This project allowed a flexible and smooth migration of computers, scalability to accommodate new systems, and demonstrated a great partnership between the Clark IT, Bio-X researchers, and SEM groups.

KEY PROJECT METRICS

Project Cost	\$87,226
Simple Payback	1.4 years
CO2 Savings	198 tons/yr
Energy Savings*	
Electricity	600,936 kWh/yr
Avoided Costs (2013 Rates)	\$62,738/yr



Decommissioning Clark Center's South Server Room will save \$60,000 each year

MORE INFORMATION

FACILITIES ENERGY MANAGEMENT

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