

# Tri-City Medical Center

Oceanside, CA



## Tri-City Medical Center

4002 Vista Way  
Oceanside, CA 92056

Residents of North Coastal San Diego County mandated the founding of Tri City Medical Center (TCMC) in 1957. TCMC is a modern, full-service hospital whose goal is to improve our patients' quality of life through health education, disease prevention, and comprehensive diagnostic and treatment services. Every eight to 10 years, we add a new wing to the existing structure. Today, TCMC consists of 12 modern surgery suites.

Our engineering department sets our annual energy conservation goals, establishes energy standards for construction projects, and creates hospital-wide energy conservation plans. The department also constantly evaluates our operational energy methods and uses new technology, where appropriate, to ensure effective energy performance throughout our hospital. Energy performance projects have been conducted in the following areas:

- Replaced 11,000 T12 fluorescent lamps with T8 lamps and installed new energy-efficient fixtures and ballasts. The project lasted 18 months and cost \$210,000. We also received a \$46,000 rebate from California's Public Utilities Commission.
- Improved the efficiency of our Thermal Storage System, which consists of 39 ice tanks and two ice-producing chillers that aid in the air-conditioning of our buildings.
- Installed Siemen's energy management system, which sets our HVAC equipment to meet our heating and cooling loads. The system constantly calculates our loads based on the outside air temperature and humidity and the average building temperature. The system also uses different winter and summer set points.

In addition to these upgrades, we have an excellent preventive maintenance program that ensures that our equipment is always running as efficiently as possible. We are also considering the installation of variable frequency drives (VFDs) on our fans to increase their efficiency, and are conducting a feasibility assessment of co-generation and early

retirement programs for non-premium energy efficiency machines. We use ENERGY STAR's Portfolio Manager to monitor our facility's energy consumption and compare our hospital's energy use to others of similar size and scope. Portfolio Manager has helped us plan energy efficiency savings programs and learn energy efficiency techniques and technology. By reducing our energy costs, we are able to allocate more resources to meet the changing needs of our patients.

**Communications:**

We educate our employees of our energy efficiency efforts through our monthly "Life in the City" news and by announcements at employee forums. We also plan to notify the media of our energy efficiency successes via our Marketing and Community Services Department.

**Testimonial:**

"The ENERGY STAR label recognizes Tri City Medical Center's energy performance efforts, which allow us to reduce our energy costs and allocate more resources toward providing our patients with health education, disease prevention, and comprehensive diagnostic and treatment services."

-- Fred Just, Director of Engineering, Tri-City Medical Center

**Building Owner:**

Tri-City Medical Center

**Year Labeled:**

2004

**Space Type:**

Hospital (Acute Care or Children's)

**Total Floor Space:**

510,000 sf

**Year Constructed:**

1960

**Energy Intensity:**

237.4 kBtu/sf/yr

**Contract Type:**

None

**Technologies Used:**

### **Stage 1-Commissioning**

- New EMS
- New Maintenance Practice

### **Stage 2-Lighting**

- Electronic Ballasts
- T8 Lamps

### **Stage 5-Heating and Cooling Plant**

- High Efficiency Chillers

### **Other Technologies/Strategies**

- Ice Storage

### **For More Info:**

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