

Smart & Sustainable: Chula Vista Bayfront

The City of Chula Vista and the Port of San Diego are launching the Chula Vista Bayfront project, which may showcase proactive approaches to sustainable development and innovative Smart City applications. In 2002, the Port and City signed a joint planning agreement to master plan the Chula Vista Bayfront (see *Illustrative Master Plan* below). Since then, the Port and City have worked together to build a plan that is based on community input, financial sustainability, and respect for the environment and surrounding sensitive habitat areas.

Throughout this effort, the Port and City engaged the community with over 100 public meetings and two phases of a 28 person Citizen Advisory Committee. The Port and the City addressed issues raised by stakeholders and spent many months agreeing to measures that are now embodied in the Chula Vista Bayfront Settlement Agreement.

Some of the categories addressed by the settlement agreement include:

- **Wildlife and Habitat**
- **Public Participation**
- **Job Quality**
- **Energy Efficiency**
- **Parks and Recreation**

The project is situated on approximately 530 acres of land and water at the edge of the San Diego Bay, and includes a conference center, resort, hotel, residential units, retail, mixed use commercial, and several acres of community parks and pedestrian and bicycle paths. Guided by a master plan developed jointly through the City and Port, the Bayfront project is currently the largest waterfront development project on the west coast.

www.cvbayfront.com



Sustainable

Smart

Energy efficiency is anticipated to play an important role in the Bayfront development. The settlement agreement established a minimum 50 percent reduction in energy use, and building design requirements that are at least 15% more energy efficient than Title 24 requirements. Energy generation may also be incorporated to reach the goals of the settlement agreement. Energy efficiency measures were identified as having some of the greatest return on investment (see *Graph 1* below). Initial studies have also indicated that the utilization of passive design is also encouraged to meet energy efficiency goals, whereby 75% of a building is cooled solely with natural ventilation.

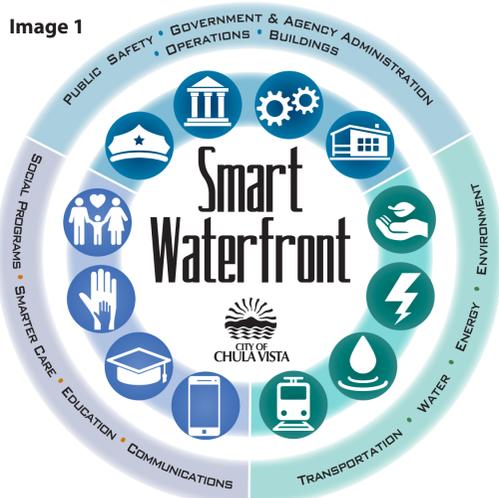
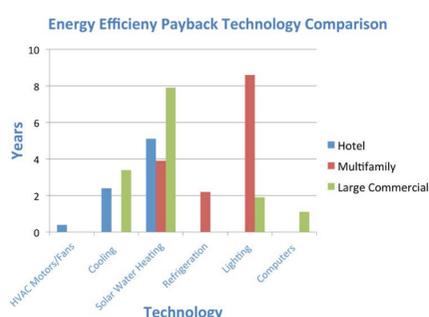
The City and Port also have conducted a smart waterfront analysis (see *Image 1* below) to identify infrastructure needs which will support the Bayfront's innovative Smart City applications. These applications may help the Port and City use resources more efficiently, optimize delivery of City services, and increase community engagement. With the help of an Innovation Council coordinated by Cleantech San Diego and consisting of Qualcomm, Cisco, and OSISOFT, the City and Port may evaluate the applicability of the following technologies:

- **Smart and adaptive LED outside lighting;**
- **Parking that alerts drivers to open spaces;**
- **Infrastructure for public and private electric vehicles;**
- **A network of sensors in and outside of buildings that help building managers better track how their buildings are using resources; and**
- **Interactive kiosks that can provide energy efficiency messaging.**



Return on Investment:

Graph 1



Illustrative Master Plan:

