



CENTER FOR
**SMART BUILDING &
COMMUNITY DESIGN**

SERVES TO:

- ✓ Provide knowledge and information on achieving energy, water, and waste independence in community planning and development
- ✓ Conduct research on designs that reduce construction and maintenance costs while reducing environmental impact
- ✓ Engage the university community in reducing campus energy use and water consumption and introduce green building practices

RESULTING IN:

Communities that are economically viable and environmentally sustainable while supporting social and cultural diversity



SIGNATURE PROJECTS

ESTABLISHED FIRST POWER PURCHASE AGREEMENT

The *first power purchasing agreement rooftop photovoltaic system* for the University of Hawai'i at the Hawai'i Institute of Marine Biology generates **222 kW** of electricity, approximately **30%** of its energy needs.

SAVINGS EXPECTED TO EXCEED

\$2.3 MILLION

ACHIEVING SMART GROWTH IN KAPOLEI



15,000 new housing units were designed to minimize environmental impact, increase transportation options, and create a more sustainable community.



WHAT IS "SMART BUILDING"?

The process of designing and constructing a structure while considering how it will interact with its inhabitants and its environment.

WHAT IS "COMMUNITY DESIGN"?

A holistic approach to development; it is mindful that neighborhoods, towns, and cities can be more sustainable and inclusive in their design.



SUSTAINABILITY AND RESILIENCE IN THE ALA WAI WATERSHED

A working partnership addresses community resilience in the Ala Wai watershed and focuses on *known natural hazards and risks* as well as environmental issues.



The Ala Wai watershed, which includes Waikīkī, is *the most densely populated watershed* in Hawai'i, accounting for nearly

20%

of O'ahu's population.