

## Seawater Air Conditioning for Downtown Honolulu

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**MSB 114**

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**3:00-3:30 pm Coffee Hour**

**3:30-4:30 pm Seminar**

### **Abstract**

As a tropical island state, Hawaii has a year-round demand for air conditioning. Conventional air conditioning systems are energy intensive and represent close to 50 percent of energy use in typical office and hotel buildings in Hawaii. Hawaii relies on imported fossil fuels to generate more than 90 percent of its electricity and also has some of the highest electricity rates and air conditioning costs in the country. Honolulu Seawater Air Conditioning, LLC, is currently developing a 25,000-ton seawater air conditioning (SWAC) district cooling system for downtown Honolulu that can reduce electricity usage by 75 percent compared to conventional air conditioning systems. This renewable energy system is designed to cool buildings in the downtown core utilizing deep cold seawater. The proposed project would have positive effects on the local economy, reduce O'ahu's dependence on imported oil for electrical generation, reduce potable water consumption, reduce sewage generation, and reduce use of ozone depleting substances and chemicals used in maintaining existing air conditioning systems. The downtown Honolulu SWAC system is a cost-effective and practical way to use renewable energy for air conditioning and a key part of the solution to a sustainable future for O'ahu.

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**Please join us for the coffee hour at the seminar venue a half hour before the seminar, 3:00 – 3:30 pm**