THE FUTURE OF EXISTING BUILDINGS: OPERATIONS & MAINTENANCE

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Welcome to Pacific Guardian Center

A High Performance, Energy Efficient Landmark
Makai and Mauka Towers – 733 and 737 Bishop Street

**Construction:** 1977-1982 *formerly Grosvenor Center*

**Mixed-use space:** 644,542 ft²

**Parking:** 336,444 ft²

**Average occupancy:** 2,200
Sustainable Sites

• 100% covered parking reduces heat-island effect
• Pacific Guardian Center is centrally located and is part of a “connected community”
Water Efficiency

- Pacific Guardian Center’s 42+ public restrooms are equipped with low flow faucets, toilets, and urinals
• Water efficient landscaping
• Cooling Tower condenser water is saved using high-tech controls and innovative chemical management
Energy and Atmosphere

- Energy use breakdown

Baseline End Use Breakdown - Consumption
Pacific Guardian Center

Target End Use Breakdown - Consumption
Pacific Guardian Center
Pacific Guardian Center’s Energy and CO2 Emissions Performance

- KBTU/ft²: 70, 126
- MtCO2e (Metric tons Carbon Dioxide equivalent): 9854, 13679
• A perfect Energy Star score of 100 earns maximum LEED certification points
Energy Efficient Lighting

- Restroom occupancy sensors
- Stairwell occupancy sensors
Energy Efficient Lighting

- Daylight harvesting at perimeter of parking garage
- High performance LED lighting
Building Automation

• Machinery communicates via the Energy Management System where engineering staff monitors, measures, and adjusts parameters to maximize efficiency and comfort
Materials and Resources

- Purchasing policy stating minimum level of recycled content in paper products
• Paper, Cardboard, HI-5, E-Waste and Green waste Recycling
• Purchase of florescent lighting with minimum mercury content (< 90 picograms/lumen hour)
Indoor Environmental Quality

- Smart ventilation system controls enhance energy efficiency while providing ample fresh air
• High-efficiency particulate filters (MERV 13) installed in all air handling units
• UVC lighting arrays in central air handling units sterilize cooling coils and enhance sanitation
Pacific Guardian Center was designed to take advantage of day lighting and views for a more productive work environment.
Green Cleaning

- HBM’s Green Cleaning practices ensure a pleasant and healthy building

- Sustainable cleaning products are used
Tenant awareness program enlightens our community and empowers everyone to do their part to save energy.

- Reduce
- Reuse
- Recycle
Why Pacific Guardian Center?
“We were looking for a building owner for whom sustainability was important. PGC’s LEED O+M Silver certification was highly attractive to us and in the end it played a big role in our decision to move into that building.”  
Bettina Mehnert, Chief Operating Officer, Architects Hawaii Ltd.
LEED O+M Silver

- Energy Star Score 100 out of 100
- Green Cleaning Policy - 80% Products / 76% Equip
- Expected to reduce 1 mil Gallons - H2O
- Waste Diversion - 100% E-waste/ 26% Recycle Rate
- Alt. Transportation - Reduce 30% of commuting trips
- Indoor Environmental Quality
- Controllability of Systems - Lighting

Architects Hawaii Office

In process - LEED CI - Silver

- PGC’s EBOM Certification helped by:
  - SS 1 - Site Selection - 5 pts instantly w/ certification or earn thru 12 paths
  - If Recycling Area is sufficient in building, tenant space only need to provide collection bins
  - Bike Racks most likely present w/ existing building
Daylighting and Views/Sensors
What do you feel is the biggest opportunity for existing buildings to make an impact for the future?
Are there any opportunities to overcome roadblocks that prevent Existing Building Owners from embracing Sustainability?
Q & A
THANK YOU