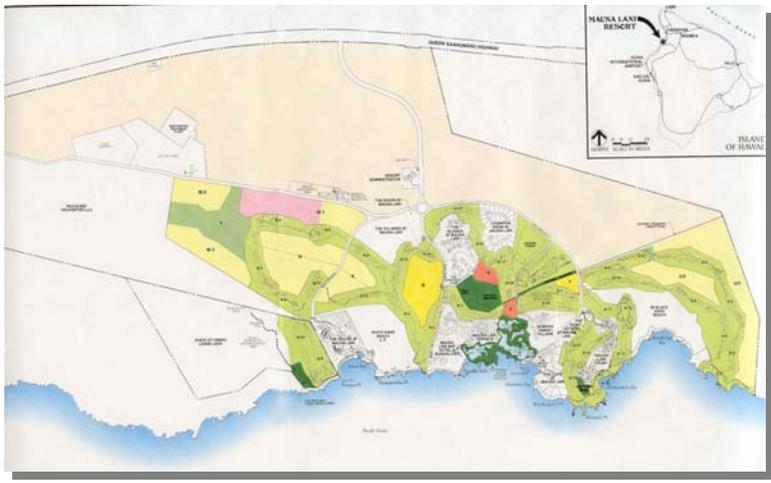


WELCOME TO
MAUNA LANI RESORT
MAUNA LANI BAY HOTEL & BUNGALOWS
FRANCIS H. ITI BROWN GOLF COURSES
MAUNA LANI SPA

Presentation for
**Environmental Purchasing
Conference**
July 18, 2002
Green Fleets & Fleet Maintenance



- Area = 3200 Acres
- 2 Hotels (Total of 892 hotel rooms)
- 2 18-hole golf courses
- Free-standing Spa facility
- 5 luxury home developments
- 266 completed condominium units
- Retail/Commercial Complex (2002)
- PUC-regulated wastewater treatment facility

MAUNA LANI RESORT

Summary of Environmental Practices

Harnessing the Sun...

- **Mauna Lani Bay Hotel & Bungalows**
100 kW PowerGuard™
solar electric roof system
- **Francis H. I'i Brown Golf Maintenance Facility**
130 kW PowerGuard™
solar electric roof system
- **Mauna Lani Resort Brackish Water Delivery System**
250 kW PowerTracker™
solar tracking system
- **Francis H. I'i Brown Golf Course**
Suncaddy™ Solar Powered Golf Fleet

Mauna Lani Bay Hotel & Bungalows

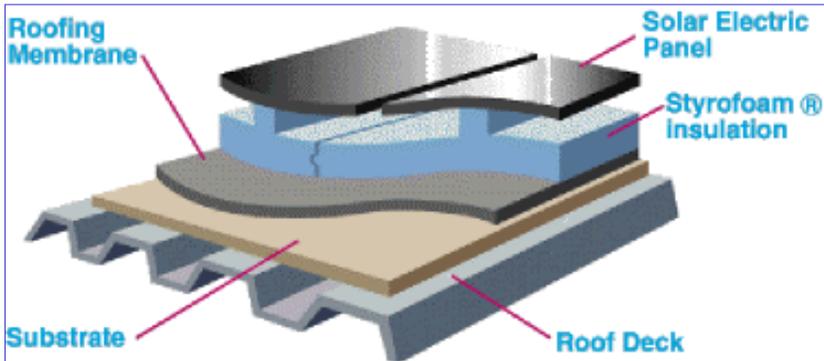


PowerGuard™ 100 kW Solar Roof System

Francis H. 'I Brown Golf Maintenance Facility



PowerGuard™ 130 kW Solar Roof System



**PowerGuard™
System**

PowerGuard™ System Features...

- **Utility Bill Savings** - *Feeds clean AC power into the building, displacing high daytime utility rates.*
- **Modular Design** - *Allows easy expansion and provides up to **10 net watts/sq. ft.**, meeting the peak load of most large buildings.*
- **Lightweight** - *Weighs only 5 lbs./sq.ft*
- **No Roof Penetrations**

PowerGuard™ System Features... (Continued)

- **Longer Roof Life** - *Protects the roof membrane from harsh UV rays and thermal degradation for 30 years.*
- **Thermal Energy Savings** - *Reduces air conditioning and heating costs with R-19 insulation and roof shading.*
- **No Condensation** - *Prevents interior condensation by keeping the dew point above the roofing membrane.*

Mauna Lani Resort

Using the sun to water the golf courses?



***PowerTracker™ 250 kW
Solar Tracker System***

PowerTracker™ System Features...

- **Solar Tracking Technology** - *Tracks the sun from east to west on a tilted axis, generating the maximum energy possible.*
- **More Energy** - *Provides as much as 30% more power than fixed PV structures.*
- **Uniform Output** - *Produces consistent power from early morning to late afternoon, an advantage for uniform load applications.*



**MAUNA LANI
RESORT**



Francis H. I'i Brown Golf Course SunCaddy™ Solar Cart Fleet





**Imagine a
golf car that
recharges
itself during
play...**

**...reducing
your utility
costs while
extending the
useful life of
the car's
batteries.**



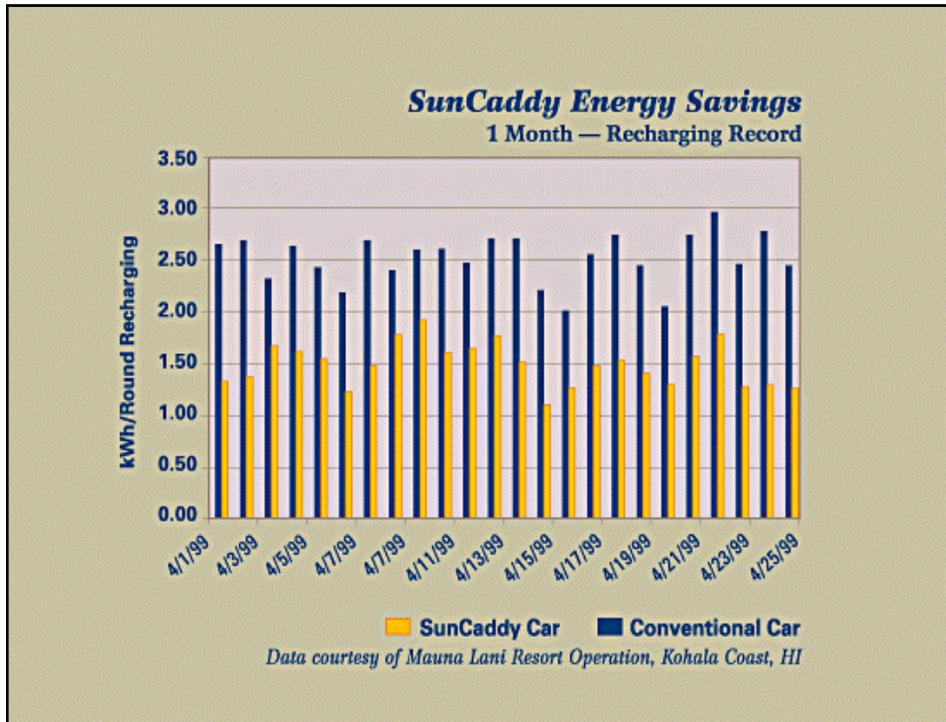


What are the **BENEFITS** of SunCaddy?

SunCaddy Benefits

Reduced Recharging Expenses...

- SunCaddy **operates and provides a constant charge even on cool and cloudy days.**
- SunCaddy **produces the most savings during sunny weather—when course usage is greatest.**
- SunCaddy **cars recharge a third faster and use a third less energy than conventional cars.**



SunCaddy Benefits

Extended battery life...

- Batteries last longer—to an estimated 6-year life
- Longer lasting batteries = lower fleet operating costs and higher trade-in values
- Staff is available to service the customers, instead of the cars.

SunCaddy Benefits

Grants and Tax Credits...

- Generous Federal Tax Credits are available for environmentally-preferred solar power
- Some States offer additional grants and tax incentives for solar power systems

SunCaddy Benefits

Low-Maintenance and Guaranteed Power...

- SunCaddy is designed for 20 years of maintenance-free operation
- Each SunCaddy comes complete with a 10 year limited warranty for guaranteed power, and a 5 year limited warranty against material and manufacturing defects.
- SunCaddy tops can be easily transferred to your new car

SunCaddy Benefits

Promoting your ECO-COURSE...

Each converted SunCaddy car saves the energy recharging equivalent of:

12 barrels of oil

or 2,200 lbs. of coal

over a conventional car's life, providing substantial air quality benefits.



SunCaddy Frequently Asked Questions

Are SunCaddy Carts still plugged in at night?

Yes. SunCaddy Carts are plugged in when they return to the barn to top off the batteries, but they recharge in about 1/3 less time than a regular cart.

SunCaddy Frequently Asked Questions

How long will SunCaddy tops last?

SunCaddy is designed for 20+ years of maintenance-free operation.

SunCaddy Frequently Asked Questions

Does SunCaddy work in cloudy weather?

Yes. SunCaddy produces the greatest savings on sunny days, but still generates savings during inclement weather. As most courses experience greater use during good weather, there is a natural correlation with SunCaddy's operational savings.

SunCaddy Frequently Asked Questions

How much does SunCaddy cost?

\$15 to \$25/month is a typical range of lease costs.

SunCaddy Frequently Asked Questions

What are SunCaddy's maintenance costs and requirements?

Virtually none! SunCaddy has no moving parts or fluids.

