



# Florida Wind Power





# What is Wind Power?

- **\$17B and 85,000 jobs in the US in 2008**
- **Clean, Carbon-Free energy**
- **More built in '08 than Natural Gas, Coal, or ANY other power source**
- **Most economically viable Renewable Energy solution**



**Myth**



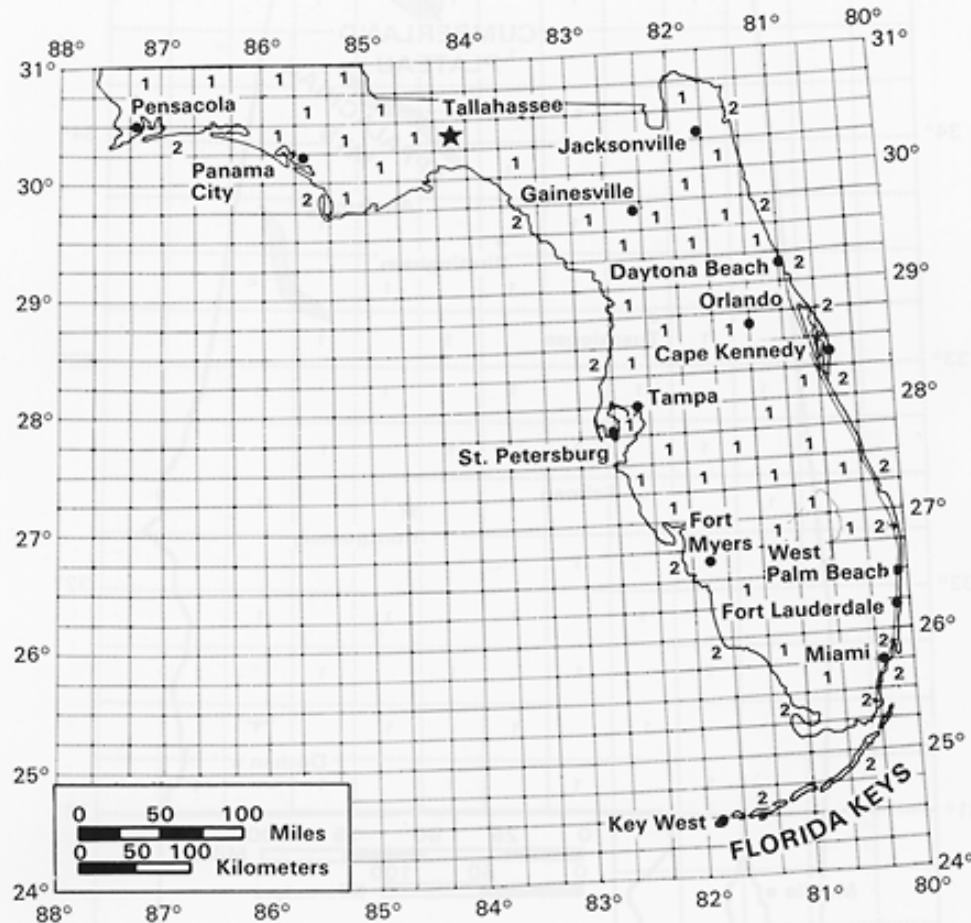


# **Myth: There is no wind in FL**

- **FPL study: “Hutchinson Island wind speeds strong enough to produce substantial electricity”**
- **Airport and NOAA data show almost all coastal communities have at least the same level of resource as Hutchinson Island**



# Myth: There is no wind in FL



- NREL wind map

- “2” = Class 2, or > 12.5 mph average annual wind speed

- A statewide detailed study has not been done



# Challenges





# What are challenges in FL?

- **NIMBY—Not In My Back Yard**
- **Hurricanes**
- **Nuclear and Oil Interests**
- **Lower Wind Speeds than Midwestern US**
- **Lack of Local Wind Power Experience**
- **Lack of Infrastructure to Transport and Erect Huge Components**



# How can we succeed in FL?

- **Florida Centric Technology**

- **Innovative, Smaller Sized Turbines**
- **Lower Environmental Impact**
- **Florida Designed and Built**

- **Facility Class Wind**

- **Net Metering**
- **Distributed Generation**
- **'Behind the Meter' Applications**



[image]

**EcoVert 250**

- **Vertical-Axis**
- **Quiet**
- **Low Head Mass**
- **Slim Profile**
- **Smaller Components**





# Where can EcoVert be used?

- Schools/Universities
- Public Parks
- Public Works Facilities
- Retail and Grocery Stores
- Industrial Facilities
- Office/Municipal Complexes



# What kind of investment?

- \$3 per Watt capacity
- 6-year capital payback in class 2 wind regime
- 1 million kWh annual production
- 25+ year machine life
- Numerous finance models/options
- Federal and State incentives



# Benefits



# What will success mean?

- Florida Jobs: estimated 5 man-years per turbine
- Emissions Reduction: 500+ Tons CO<sub>2</sub> annually per turbine
- Fuel Import Reduction: \$80k annually per turbine



# Sustainability

# How do we achieve Sustainability?



- Distributed Wind
- Solar
- Waste to Energy
- Offshore Energy
- Energy Storage
- EV's or Synthetic Fuel Technologies

A background image of a wind turbine, showing the blades and the central hub, set against a dark teal sky. The image is semi-transparent.

**Myth**

# References



- American Wind Energy Association 2008 Report
- Navigant Consulting Florida Renewable Energy Potential Assessment
- Florida Power & Light Wind Results from the St. Lucie Project Site
- National Oceanographic and Atmospheric Administration
- DOE