## building a community based wind program

#### FORMATION OF NORTH STRAND ENERGY

Assembling a platform for research and development in alternative energy, the **North Strand Coastal Wind Team** seeks to attract innovators and entrepreneurs in the field to participate in a new Economic Cluster. North Myrtle Beach has committed itself to becoming a **Demonstration City** in the area of alternative energy.

#### ON SHORE DEVELOPMENT

North Myrtle Beach has ideal conditions for electrical generation from the wind and the sun. Small Wind refers to roof top turbines in the 3.5-20 kW range.

#### AGGREGATION OF ENERGY

The energy produced will be aggregated along with other roof top producers to provide single marketable units of electrical power. These units of power can be sold via energy credits or net metering to Santee Cooper.

- It is a basis for earning marketable carbon credits.
- •The aggregate tap system enables rapid innovation to reach the grid immediately.
- It brings a competitive advantage for South Carolina on the world stage of alternative energy product development.
- It provides jobs.

#### WIND ENERGY IN NORTH MYRTLE BEACH:

Community Involvement & Ownership

The question is not will the residents of North Myrtle Beach accept the idea of windmills on its buildings and, in the future, on the horizon?











# building a community-based wind program

Economic Development Council North Myrtle Beach Chamber of Commerce

Mr. Monroe Glass Baldwin, III

Mr. Doug Chastain Wind Team

North Myrtle Beach Chamber of Commerce

Mr. Marc Jordan

Coastal Carolina University Center for Marine and Wetland Studies

Paul T. Gayes, Ph.D. Director

Mr. Scott Wolfry Wind Team

Director

Clemson University Renewable Energy Nicholas C. Rigas, Ph.D.

Savannah River National Laboratory
Mr. Ralph Nichols
Fellow Engineer

Orangeburg-Calhoun Technical College Jim Payne, Ph.D. Project Manager

Santee Cooper Renewable Energy

Ms. Elizabeth A. Kress Principal Engineer

Mr. Eric Boessneck Associate Engineer

**SC Energy Office** 

Mrs. Erika Myers Renewable Energy Coordinator

SC Sea Grant Consortium

Mr. M. Richard DeVoe Executive Director

Caudle Reef Foundation

Ron McManus Chairman

City of North Myrtle Beach South Carolina

Hon. Gregory D. Duckworth Councilman

Mr. John Smithson City Manager

Mr. Aaron Rucker Planning Department

Myrtle Beach Regional Economic Development Authority

Mr. Bill Britton Director

### 01 proof of concept

- Avista Testing Project
- Apache Pier Project



02 cost analysis

- Payback Period
- Lease Financing
- Tax Incentives





 Custom Aeronautical Design for Each Location

- Local Manufacturing
- Local Ownership



## 04 hurricane readiness & testing

- Portability and Ease of Removal
- Permitting
- Inspections



#### **Mission Statement**

The North Strand Coastal Wind Team will seek to develop wind energy resources for the City of North Myrtle Beach, to facilitate this initiative, and to partner with other organizations.

This will be accomplished by:

- Introducing the initiative to the community through educational programs and research;
- Developing the economy to initiate a conducive environment for wind industry;
- Establishing a program to introduce rooftop Vertical Axis Wind Turbines (VAWT) to the oceanfront business community;
- Instituting a municipal hurricane preparation program;
- Acting as a liaison to attract wind energy businesses;
- Representing North Myrtle Beach on the subject of offshore wind farms;
- And, working to ensure maximum economic impact from wind energy development for the North Strand region.