

Southeast Wind Energy Resource Center

Stakeholders Meeting
August 20, 2014

Hosted by FPL

UF UNIVERSITY of
FLORIDA



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SOUTH FLORIDA



SE Wind Energy Regional Resource Center (RRC)

FESC is one of the partners of the SE RRC.

**SE RRC funded by US DOE Grant: \$750,000
(including cost share) for 3 years**

Outline

- US DOE Funded RRC's
- SE RRC and Partners
- FL Wind Energy Resources
- Deliverables



Wind Energy Regional Resource Centers

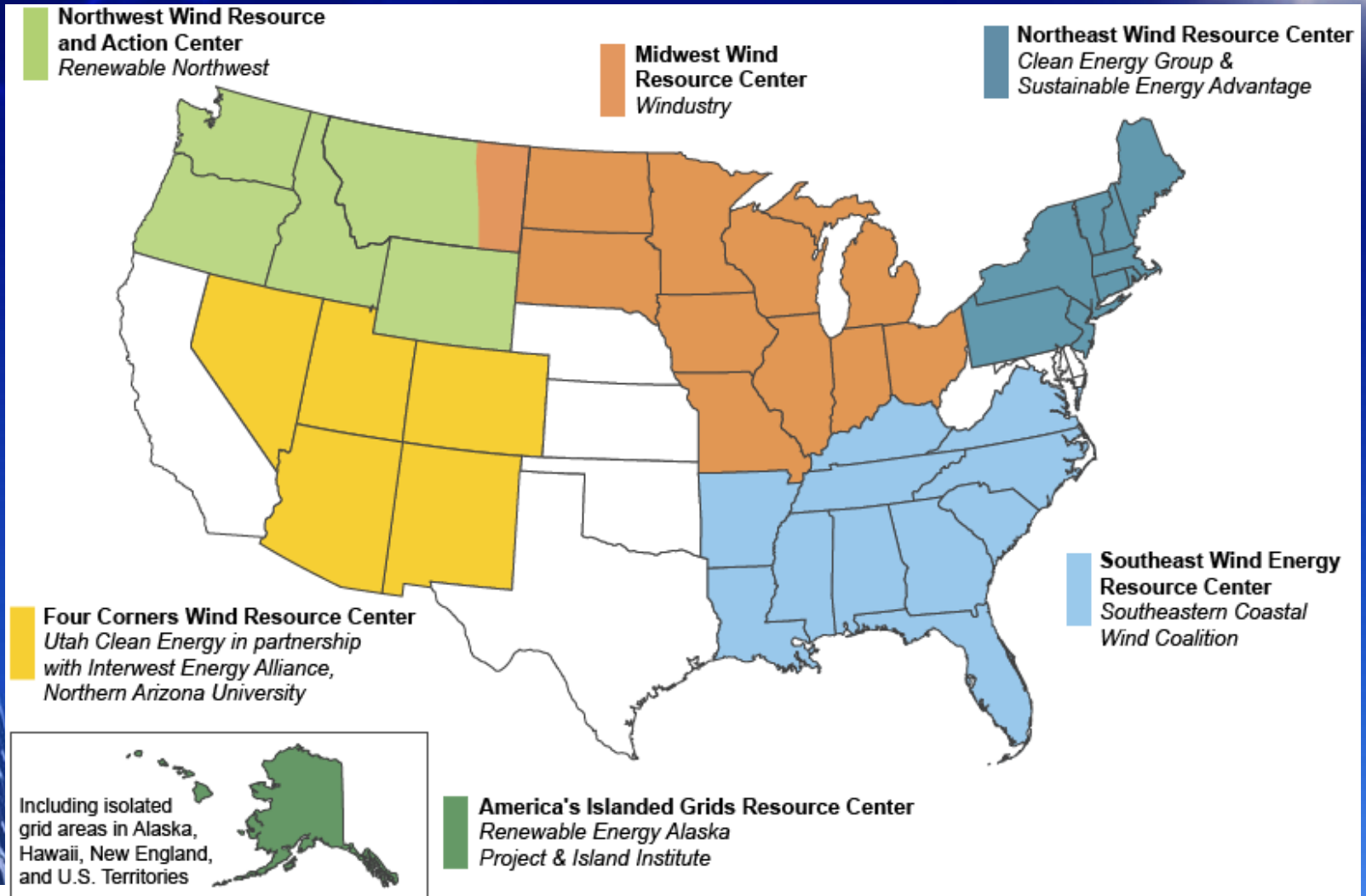
US DOE Established Six Wind Energy Regional Resource Centers Across The U.S.

Goal: To expand wind energy in these regions

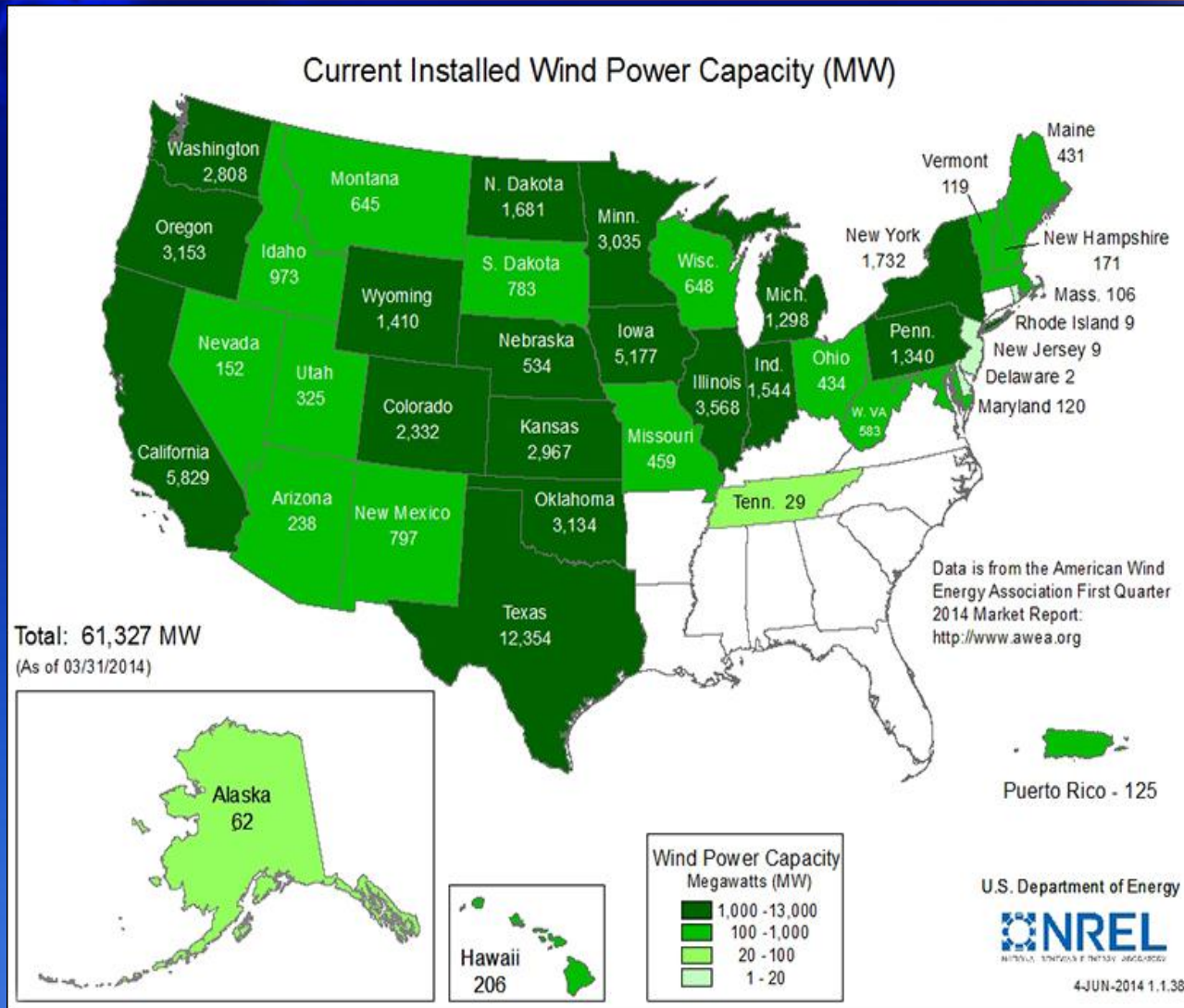
These centers will aim to:

- Provide fact-based, unbiased, relevant information about challenges facing wind energy deployment
- Work with decision-makers to ensure they have the tools to make informed decisions about wind energy projects and related policies in their jurisdictions

US DOE Regional Resource Centers



USA Current Installed Wind Power Capacity (MW)

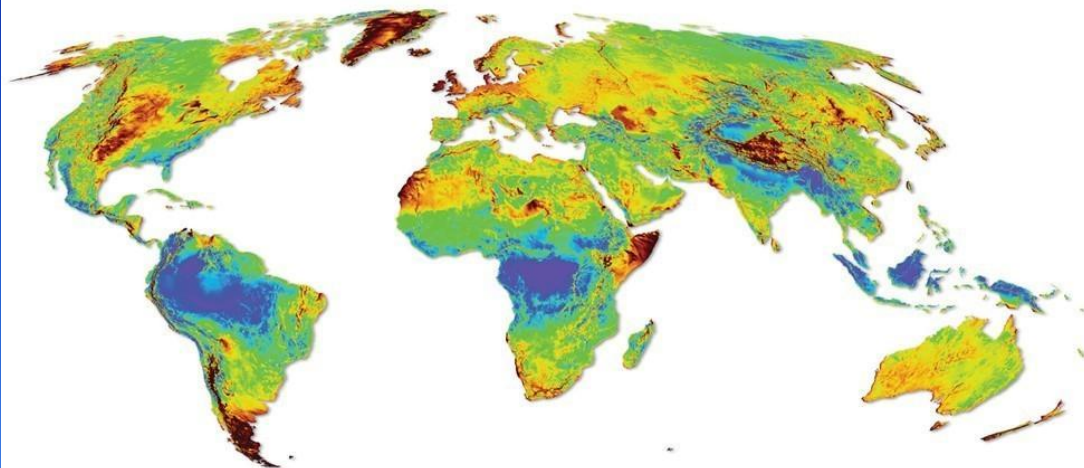


TN Wind Farm: 29 MW, built by Vestas. Has 18 turbines.

Installed Wind Power in the World

Year:	Installed MW	Increase %	Cumulative MW	Increase %
2008	28,190		122,158	
2009	38,103	35%	160,084	31%
2010	39,404	3%	199,520	25%
2011	41,712	6%	241,029	21%
2012	44,951	8%	285,761	19%
2013	36,134	-20%	321,559	13%
Average growth - 5 years		5.1%		21.4%

(Source: Navigant Research)



5km Wind Map at 80m
Wind speed
3 6 9 m/s

SE Regional Resource Center

SE RRC Led by: Southeastern Coastal Wind Coalition

Located in Raleigh NC

SE RRC includes 11 States

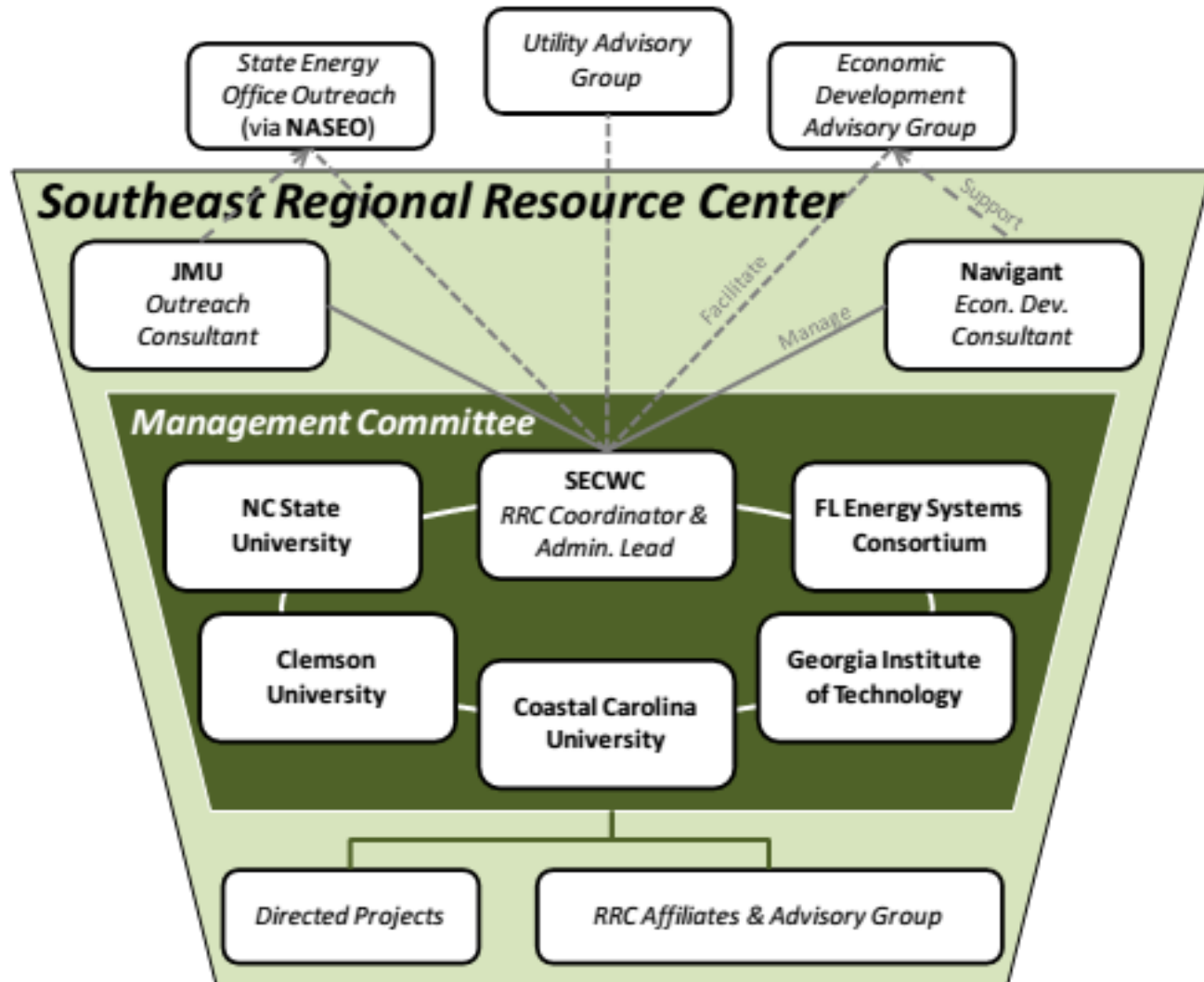


NC STATE UNIVERSITY

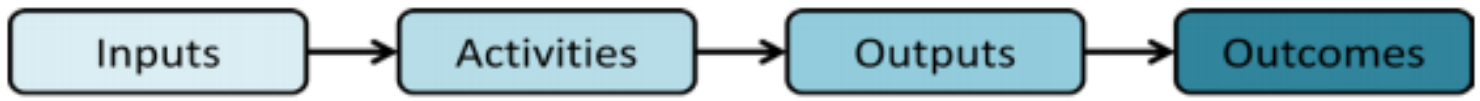


SE RRC Partners / Organization

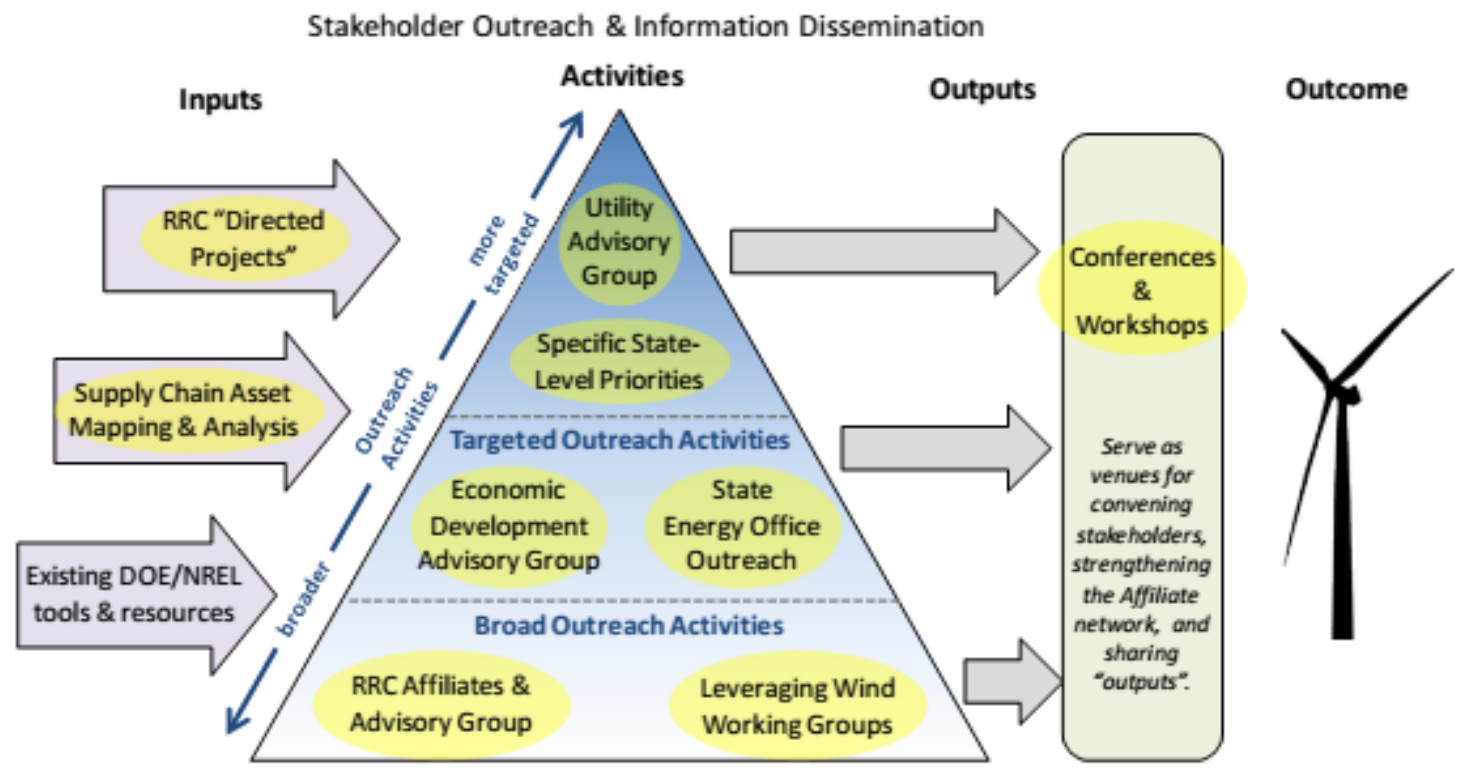
Lead: SE Coastal Wind Coalition (SECWC)



SE RRC Technical Approach and Work Plan

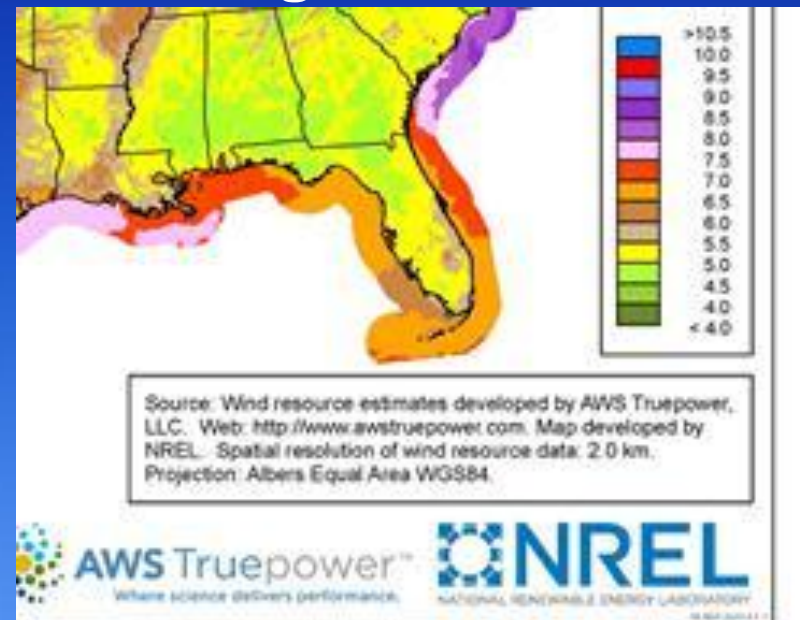
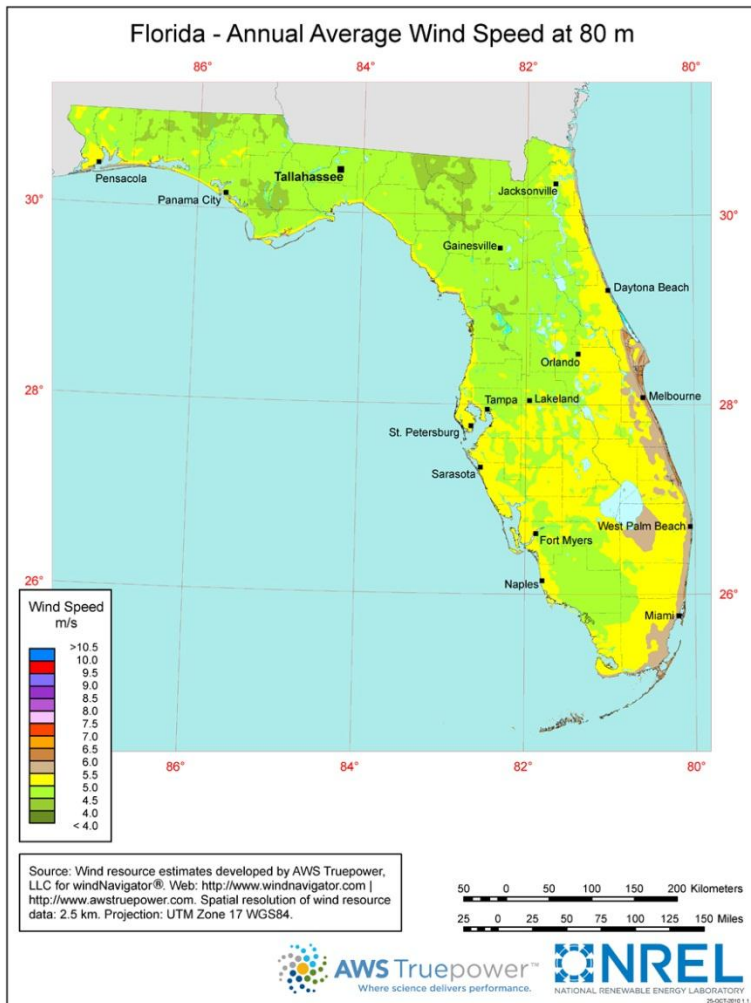


Overview of Southeast RRC Technical Approach & Work Plan



FL 80 & 100 meter Wind Map and Wind Resource Potential

- Desired wind speed is 6.5 m/s or greater at 80m height
- Utility-scale, land-based wind turbines are typically installed between 80 and 100 m high.





FL Wind Energy Industry



- **Siemens:** Top 10 off-shore wind turbine supplier (58.4% market share). Siemens opened **Wind Service Training Center** in Sep 2013 (Orlando, FL) to provide advanced technical and safety training for wind energy projects located throughout the Americas region.
- **GE** has a wind turbine assembly facility in Pensacola
- **NextEra Energy Resources LLC:** Largest owner of wind power capacity in the United States



FESC Deliverables

FL Lead for SE RRC: FESC office and Dr. David Prevatt, Professor of Civil and Coastal Eng., UF

The team will focus its efforts on:

- **Provide fact-based FL wind information to local and state decision makers**
- **Engage with stakeholders and military bases to provide fact-based information on wind energy**
- **Collaborate with RRC network members and connect our key stakeholders to the network**

