

### POWER UP!

## Preparing Florida's Students for Tomorrow's Economy

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Florida Energy Workforce Consortium





#### Florida Energy Workforce Consortium

- Formed in 2006 to develop solutions to meet the current and future workforce needs of Florida's energy industry
- Comprised of energy industry, construction, preK –
   12 and post-secondary education, and workforce representatives
- Compete for a talent puddle or work together to build a talent pool?





#### The New Economic Development Reality

- A skilled workforce is the TOP business competitiveness issue.
- As layers of middle management have been eliminated, these workplace skills are increasingly required of all employees:
  - Critical thinking
  - Problem-solving
  - Communication skills
  - Teamwork and Self-direction
  - Global, civic, financial, economic & entrepreneurial literacy





# Creating the Next Generation Standards for Career & Technical Education Programs is Important to Florida's



- Economic Development
  - #1 issue identified by business/industry seeking to relocate or expand their business in Florida:
     Is the skilled workforce or "talent" available
  - Ensuring that Florida's career and technical education program standards are aligned with the needs of business and industry is a major component
- Citizens
  - Seeking educational opportunities that will prepare them for high-skill, high-wage, high-demand occupations



Source: "Creating the Next Generation Standards for Career & Technical Education" Florida Department of Education, Department of Workforce Education

## In order to ensure that Florida has the skilled workforce to "grow" the economy:



School Districts

Community Colleges

& other providers → Skilled Workforce

Identify occupations important to Florida's economic development

Create the educational programs that prepare individuals for employment in the occupation

Deliver the educational program



Florida Energy Workforce

Set into

Next Generation Standards



#### So What Is Our Need?

- A qualified, diverse workforce for us and our contractors
- Various career entry points with various educational attainments
- Pipeline of students
- Core values





#### **Top Occupations of Concern**

- Line Installers and Repairers
- Plumbers, Pipefitters & Steamfitters
- Welders
- Maintenance and Repair Workers
- Electricians
- Engineering Technicians
- Engineers (electrical, mechanical, chemical, civil...)
- Instrumentation & Control Technicians
- Power Plant Operators





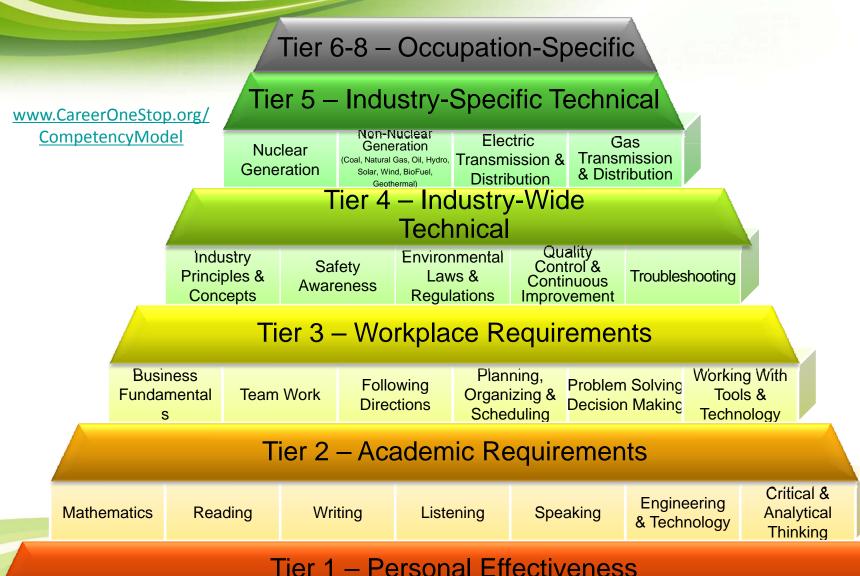
#### So How Do We Get There?

- PARTNER and COLLABORATE!
- Work locally, regionally, at state, and at national levels to brand our industry careers and create talent pipeline programs
- Focus on key areas:
  - State & National Outreach Career Awareness

  - Policy & Education
     Untapped Labor Sources
  - Funding & Resources



#### **Energy Competency Model**



Interpersonal Skills Professionalism Motivation Dependabilit Self- Flexibility & Ability To Learn



#### **Policy and Education**

- Partnered with Florida Department of Education to gain approval for the addition of an Energy Industry Cluster - FIRST IN NATION!
- Partnered with FDOE to develop energy curriculum framework for five (5) courses:
  - Energy Foundations
  - Introduction to Alternative Energy
  - Power Generation Technician
  - Power Distribution Technician
  - Solar Energy Technician









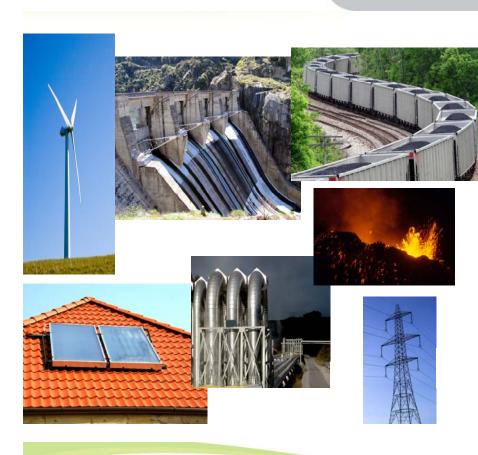












#### **Working Groups**

Agriculture, Food, and Natural Resources

Architecture and Construction

Arts, Audio\Video Technology, Communication

Business, Management, and Administration

**Education & Training** 

**ENERGY** - NEW

Financial Services

Government and Public Administration

Health Science

Hospitality and Tourism

**Human Services** 

Information Technology

Law, Public Safety, and Security

Manufacturing

Marketing, Sales, and Services

Transportation, Distribution and Logistics



## Career Cluster Working Group\* Representation

- Business/Industry
- Professional/Trade Association(s) representing business and industry
- Labor
- Banner Centers
- Local/Regional Economic Development Organization
- Regulatory Agency(s)
- Secondary Sector
- Postsecondary School District Sector
- Community College Sector
- DWE Cluster State Supervisor (staff)



\* Each working group is chaired by a business/industry representative.



#### Role of the Energy Working Group

- Overall Goal
  - To ensure that the occupations included in the specific career cluster are aligned with the needs of Florida's business and industry
- Specific Tasks include
  - Identify the energy occupations that are critical to Florida's economic development
  - Develop a 3-year program of work to ensure career & technical education occupational standards are relevant
  - Determine/approve
    - Strategies for standards development/revision
    - Timeline
    - Participants



Manage the process



#### **Energy Career Academies**

- Have 22 in Florida, including our Gulf Power Academy at West Florida High School in Pensacola (2001)
- Many utilize NCCER Electrical curriculum, resulting in industry-recognized and valued credentials
- Most offer articulation, energy industry preemployment testing, and local energy company engagement
- Will pilot the new energy courses at Gulf Power Academy and Lakeland Electric Power Academy (first course January 2011) at a minimum





#### **Next Steps for Policy & Education**

- Develop curriculum materials for Energy Courses
- Create of Florida Energy Teachers Network will add teacher "toolkit" to Get Into Energy Florida web site
  - Complete and publish compilation of readily available resources for K-12 teachers to use to integrate energy concepts into the math, science and reading curriculums
  - Develop incentive program for educators to use the new curriculum frameworks and materials
  - Develop a FEWC teacher externship program for CTE, Science and Math teachers
- Replicate energy career academies





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