

MINUTES

Banner Center for Energy Advisory Council Meeting

Palm Beach State College, Palm Beach Gardens, Florida

Friday, February 26, 2010

10:00 AM - 1:00 PM

I. Welcome and Introductions

Dr. Jay Matteson, Director of Institute for Energy & Environmental Sustainability, welcomed all those in attendance to the Banner Center for Energy's Advisory Council Meeting at Palm Beach State College (PBSC). Dr. Matteson gave an overview of the meeting with a strong focus on curriculum and workforce development. In order to have sustainable energy we need education aligned to get the win. He led into individual introductions.

Dr. Jean Wihbey, Provost, Palm Beach State College, Eissey Campus welcomed all in attendance to PBSC. Industry and educational partners all have the same commitment to environmental responsiveness. The initiative fueled by the President and legislative action has worked its way down. There is, at this time, an increased number of student enrollment and an increased interest shown in energy programs. There is also a strong focus on energy and environmental sustainability that needs to continue and filter throughout society.

John Wasukanis, Director of College Facilities, talked about energy efficiency initiatives at PBSC. The College is taking a number of steps in the direction of energy efficiency throughout its campuses. Examples include recycling efforts and integrated pest control management that does not harm the environment. In February of 2007 there was a change in design standards for campus buildings to meet LEED standards for new construction. There was a fear of the cost associated with this goal but the College had a focus on sustainability. This focus remains today.

PBSC has 31 electric cars on their campuses and offer priority parking for low emission vehicles. One major contribution to the sustainability effort has been student groups that have gotten involved in energy efficiency and sustainability efforts. Student involvement in sustainability should and will be a part of future initiatives at PBSC.

General Update

Jose Farinos, Director Banner Center for Energy, Dean of Advanced Technology, Indian River State College. Dean Farinos gave an overview of the goals and purpose of the Banner Center for Energy. The Banner Center holds advisory meetings and focus group meetings in order to keep education aligned with industry needs in the energy field.

Indian River State College is advancing the energy programs and offerings of the Banner Center for Energy. The new Energy Center is another aspect of IRSC's commitment to the advancement of energy related education initiatives.

It seems natural for us involved in energy education and in the energy industry to invest in renewables as we follow the lead of our current administration at the national level. A culture change is imperative for us to remember today as we continue to aim for further involvement in and commitment to sustainability.

It is encouraging to see that Palm Beach State College and Indian River State College have the same vision for sustainability. It is also a shared goal to make sure that energy related education initiatives understand the needs of the energy industry. This remains the goal of the Banner Center and we thank our education and industrial partners for their continued involvement and aid in reaching this goal.

Banner Center Plan Overview

Kevin Cooper, Coordinator Banner Center for Energy, Indian River State College. Mr. Cooper gave a Banner Center update including a review and approval of the Advisory Council of the Marketing Plan, Sustainability Plan, and Curriculum Development Plan.

Banner Center and its goal:

- The goal of The Banner Center for Energy is to develop and coordinate customized educational and training resources for students.
- The Banner Center has partnered with three major universities in the state of Florida as well as other academic partners that are both in state as well as out of state.
- There are three levels of training provided by the Banner Center and partners Lake-Sumter and Miami Dade are influential in energy training as well.
- The focus is on programs that create jobs in the State of Florida.
- Discussed the usage of the Smart Grid.
 - It is a true merging of fields that requires cross training to function properly and get the most out of the system.
 - This training can be undertaken by the Banner Center and its partners.
- IRSC is developing a new Energy building.
 - There will be the development of a Fermentation Chamber in partnership with Florida Power & Light.

Marketing Plan

- Be an industry-driven, statewide resource for workforce education and training in the energy industry.
- Increase awareness of what the Banner Center for Energy does and its value.
- Increase participation in Banner Center initiatives.
- How this will be accomplished:
 - Website, logo, branding

- One-on-one meetings
- Writing grants
- Marketing through electric car project
- Reach high school students through Great Explorations presentations
- Getting involved in social media/blogs
- Advertising in local and industry related magazines

Sustainability Plan

- The Banner Center will be sustainably by 2013.
- Core Competence: Training in energy fields.
- Customers: Energy companies (students).
- Energy usage in the state of Florida will increase 2% per year.
- 2% of energy careers per year will transition to lean/green/sustainable energy careers.
- Attrition and retirement in the energy industry will follow DOE suggested roadmaps.
- Tuition, supplies, & salaries will scale with federal reserve based inflationary models.

Curriculum Development Plan

- 3 Types of Smart Grid Training
 - Microsoft Excel for Smart Grid
 - 4 hour online class.
 - Teaches the general functions of Excel with graph capabilities and statistical analysis.
 - Ideal for customer service representative, field meter readers, and the general public.
 - Teach networking to power plant technicians and line workers. Each will get certificate at end for networking.
 - One 15 hour course focused on the basics of networking for a better educated workforce and a functioning smart grid.
 - IT training
 - 3 courses, designed to get IT personnel, networking personnel up to speed on the fundamentals of a power plant.

Nanotechnology in Energy

- Discussed what Nanotechnology is, and what Indian River State College will be doing in the future with it.
 - Nanotechnology is anything under 100 nanometers.
 - IRSC is partnering with Penn State in nanotechnology applications.
 - Goal is to get businesses to use labs in new Energy Center.

Lunch & Learn

Leo A Daly firm gave a presentation on the FAU engineering building under construction.

- The new building has achieved a LEED Platinum level for energy efficiency – only one other building in the Southeast has achieved this.
- Building specifically designed to maximize on shading and sunlight to result in efficient usage for cooling and lighting within the building; 90% daylight used.
- Electrical system in building – Photovoltaic.
- This new building uses a solar water heating system as well as a solar plumbing system.
- Also has a geothermal heating and cooling system. For some of the system they used Chilled Beams: a coil that is around 68 – 72 degrees in temperature.
- Carl Stevens, Dean of Engineering at FAU spoke about the building and the University's commitment to energy efficiency.