

# ROUND TABLE DISCUSSION – EDUCATION AND WORKFORCE DEVELOPMENT

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Renewable Energy Systems and Sustainability Conference  
July 31- August 1, 2017

FESC &  
Florida Polytechnic University  
Lakeland, FL

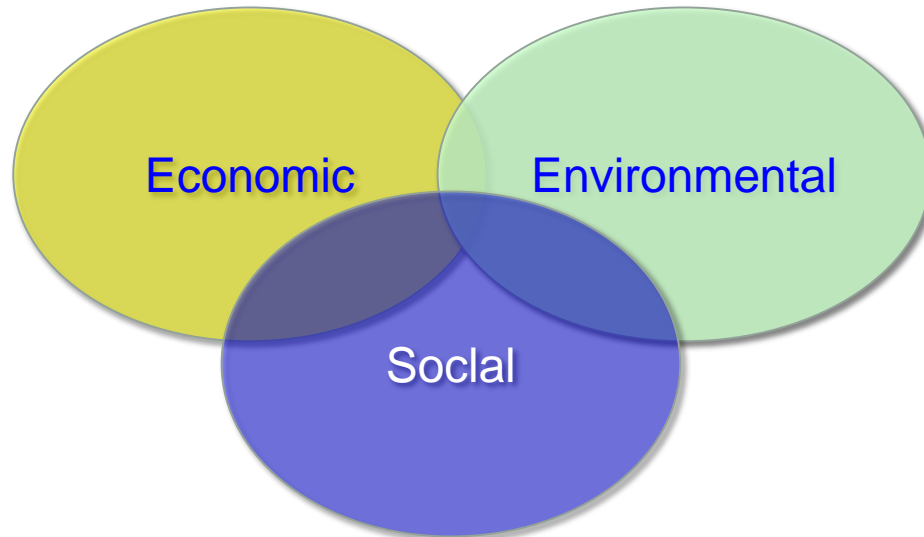
# Participants

- Matthew Lawyer – FL Polytech
- David Bruderly –Bruderly Eng, Jacksonville
- Sesha Srinivasan- FL Polytech
- Muhammad Rashid – FL Polytech
- Ryan Integlia – FL Polytech
- Dan Morris- Palm Beach State College
- Juan Ordonez – Florida State University/Florida A&M University

# Introduction

- Our discussion was preceded by a session with four presentations:
  - FEEDER, A distributed Technology Education/Research Center. → efforts on shared courses across different states
  - Use of Off-grid Zero Emission Building as a connecting block in sustainable energy courses → using concrete, familiar energy systems to motivate topics in sustainable energy courses
  - Teaching a fully online renewable energy course → UWF/ FL Polytech experience on fully online
  - So Climate Chaos is a Hoax? → training and communicating to future elected officials on energy and environmental science supported facts

# Challenges and Opportunities



- **How to incorporate policy issues in sustainable energy education?**
  - Given that at the moment US Government policy is not clear (thus hard to teach) → at least we could ask our students what is their opinion on what the policy should be. This will get them thinking about the role of government and citizens.
- **Renewable energy course should be part of education beyond engineering.**
  - Engineering, political science, economy majors need this training.

# On offering an introductory level course to all majors:

- Every university should have an open course (targeting all majors) on renewable energy
  - Future policy makers maybe coming from outside engineering
- How to design a basic, fundamental class accessible to all majors?
  - Attractive name?
  - Use conservation and destruction of energy quality concepts as starting point?
  - Some concerned with lack of enrollment, others pointed out to experiences that show that this kind of courses are welcome and well attended (e.g. intro to solar).

## Funding for such course?

- For Universities numbers matter → enrollment

# Possible collaborations (starting within Florida)

- How can we deliver courses jointly?
  - This will facilitate specializations/ tracks.
  - Common course curriculum
  - Be aware of difference in funding structure among Florida education institutions (some emphasize on placement others in enrollment)
- Comments on online education
  - Mixed opinions, some feel technology provides the necessary tools to have effective online instruction; others point to the importance of the face-to-face contact.
- Numbers matter.
  - We need to have some less restrictive classes, on introductory topics, that attract students from more majors
- Brevard county - Workforce development:
  - No placement → no funding. This will kill certain programs.
  - Consider internships while course is running.

# Reaction to potential cuts in federal funding:

- Engage local industry
- Companies are looking for improvement in efficiency, this opens opportunities

# Joint education efforts - Collaboration Faculty/Industry

- Explore opportunities to offer joint courses
  - Opens opportunities to create specializations without the burden of having to offer all classes
- Explore fully online courses
  - Comments were made on the pros and cons (lack of direct contact).

Communicate to students, society and industry sponsored webinars on sustainable energy

- YouTube channel?
- Share resources across the internet
- Guest lectures across institutions?