Anticipating Future Needs: Making Wisconsin Globally Competitive

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Board of Regents Meeting
Example: Energy Power and Controls

- 900 EPC sector companies
- 100,000+ employees
- $38 billion in revenue each year
Historical Context

- Wisconsin is a global leader
- Foundational sector on which state’s economy has been built
Historic Opportunity

➢ Global power and energy market to grow $1.9 trillion over next five years*

*Prediction from 2012 Advanced Energy Economy Institute Study
Historic Opportunity

- Political Economy Research Institute study: Wisconsin could attain $2.8 billion in clean energy investment revenue and create 35,000 new jobs

- Wisconsin ranks 26th among states for venture capital investment into developing clean energy technologies
Challenge

➢ Over next decade, 62% of energy workforce will retire (average age 46.6)*

*Center for Energy Workforce Development
Overcoming the Challenge

- Forming new consortium (9 academic institutions and 60+ corporations in 8 states)

- Developing new model for university-industry engagement
Vision:
Make Wisconsin National Leader in Energy Power and Controls

- Workforce Development
- Technology Innovation
- Market and Industry Expansion
- Public Policy Support
- Strategic Collaboration
New Engagement Model

Joint curricular development and delivery

Internships and sponsored undergraduate student projects

Writing joint research proposals to U.S. government agencies

Faculty part of company’s technology roadmap and company directly funding multiple research projects

Co-location of research facilities, scientists and faculty with joint appointments, joint technology development, philanthropic gifts to university
New Model Benefits

- Creating a talent pipeline of future employees
- Already attracted 16 world-class scientists to Milwaukee
- Intellectual talents of UWM faculty and students used to solve Johnson Controls’ technical challenges
New Model Benefits

- World-class facilities for faculty and students
- Students take unique leading-edge courses, obtain internships, and learn directly from industry mentors
- Faculty have scientific partners who make them more competitive nationally for funding
- Direct Johnson Controls research funding supports faculty and students
A New Engagement Model

New Model Benefits

- State becoming renowned nationally – U.S. DOE energy storage hub and Edison Award

- Over last year, UWM and JCI joint DOE proposals awarded $35 million of federal funds with 92% success rate

- Activities attracting new companies and talent into the region
Model Being Replicated for Other Wisconsin Identified Clusters