

# **Iowa Power Fund Successes and Lessons Learned**

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# Iowa Power Fund

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- Established in 2007
- \$100 million initiative
- \$75 million actual investment
- Purpose
  - Promote research and development
  - Early stage commercialization
  - Energy education (10% of the annual allocation)



# Goals

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- Reduce pollution
- Reduce dependence on foreign oil
- Create jobs



# Governing Structure

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- 11 voting Board Members
- 8 non-voting members
- Due Diligence Committee of 8

Members included representatives from the private sector, state agencies, higher-level educational institutions.

# Projects by Industry

Table 1: Iowa Power Fund Projects by Industry

<b>Industry</b>	<b>Number of Projects</b>
Second-Generation Biofuels	3
Wind	4
Biomass	4
Energy Efficiency	6
First-Generation Biofuels	4
Solar	2
Transportation	2
Education	6

# Project Highlights-POET Project Liberty

- \$14.75 million
- \$100 million leverage (US DOE)
- First in the nation to utilize corn waste and second commercial-scale cellulosic ethanol biorefinery to come online.
- Went into production last week-25 million gallons of cellulosic ethanol each year.
- Utilizes corn husk, leaves, and corn stalk harvested by local farmers.
- Plant also utilizes anaerobic digestion process and solid fuel boiler to power the entire facility and the co-located existing POET corn ethanol plant.
- Significant success payments associated with it with each replication of the technology to other ethanol plants.



# Project Highlights-Acciona Wind Power North America, LLC

- \$3.05 million
- \$16.85 million leveraged (Company funds and Section 1603 program, US Treasury)
- Commercialize the AW-3000 Wind Turbine, a 3 MW wind turbine.
- Built one turbine on a concrete tower and another one on a steel tower.
- Project was successfully completed recently.
- Potential to recover full state investment amount through success payments.
- So far, received \$152,366.61, still a long way to go.



# Project Highlights-TPI Composites

- \$2.1 million
- \$2.1 million leveraged (Company funds and Sandia National Lab)
- Improve the blade's production process.
- Partnered with Iowa State University.
- Wind blade manufacturing cycle time reduced from 38 to 24 hours.
- 37% improvement in the manufacturing process.
- Company employed former employees of the Maytag Corporation that was shut down previously.





# Not All Projects Go As Planned!

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- \$1.5 million award to Cellencor
- \$0.5 million leveraged (Cellencor)
- Set up a full scale industrial microwave drying system to dry corn distillers grains located at or near an existing ethanol plant.
- Partner company, Ferrite that designed the microwave systems went bankrupt.
- Iowa has been able to recover a little over \$121,000 as a result of bankruptcy settlement payments.

# Important Items to Consider

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- Develop a well planned operational strategy that safeguards against known and unknown risks.
- Involve legal teams early on in exploring contract terms and conditions.
  - Leverage ratios
  - Success payments
  - Protection from bankruptcy, changes in company ownerships etc.
- Develop plans on how contracts will be executed, how would the recipients report on the projects, and how reimbursements will be made.

**Ensure there is prior discussion on who will manage the program.**

# Recipe for Success

Target specific industries that advance your state goals.

Set program goals of the program early on and communicate with the stakeholders.

Require that cost share is available from multiple sources and is confirmed at the time of the application.

Ensure projects have wide economic and community impacts

Ensure there is a well-established market for the products being developed.

Allow long-ranging timelines for R&D and Early Commercialization projects.

Keep the program focus and intent intact



Thank you  
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