

# Food Processing Industry Resource Efficiency

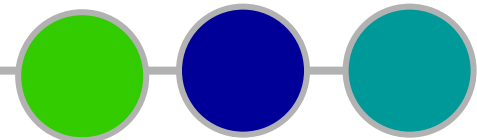
***STAC funded  
multi-state collaborative***

NASEO Annual 2007 Meeting  
Jake Fey, WSU Energy Program  
September 11, 2007

# Food Processing Industry in WA, OR, ID, CA

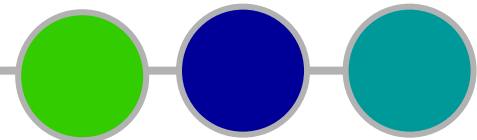


- **Approximately \$60 billion in product shipments each year**
- **Over 15 percent of the gross national product for industry**
- **Employs over 224,000, with payrolls exceeding \$7.7 billion**
- **Energy use cut in half by food processors over past 30 years, but energy costs have risen nearly tenfold**
- **Current energy usage ranges from 3 to 45 percent of production costs – a significant factor**



# Opportunity Knocks

- In November 2002, NASEO, ASERTTI, and U.S.DOE came together to form STAC – *State Technologies Advancement Collaborative*
- STAC provided funding for projects focused on:
  - Efficient Transportation Technology Use
  - Building Technologies
  - Industrial Technologies
  - Distributed Energy Resources
- Representatives from CA, ID, OR, WA recognized their collective expertise could provide a value-added resource for food processing industry in the region and across the country

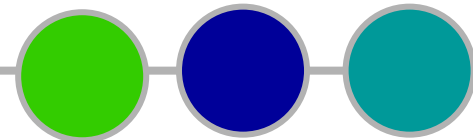


# FoodProcessing Industry Resource Efficiency -- FIRE --



## Public-Private collaboration

- *California Energy Commission*
- *California League of Food Processors*
- *Del Monte Foods*
- *Idaho Energy Division*
- *Lawrence Berkeley National Laboratory*
- *Northwest Energy Efficiency Alliance*
- *Northwest Food Processors Association*
- *Oregon Department of Energy (Contract Lead)*
- *Washington State University Energy Program (Project Lead)*

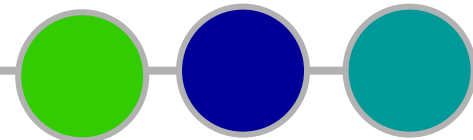




# FIRE Project Goals

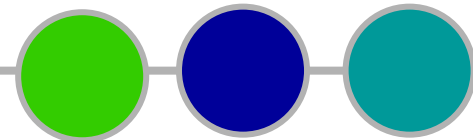
**Overall aim of project – create an effective network to improve the energy and water use efficiency of the food processing industry in California, Idaho, Oregon, and Washington.**

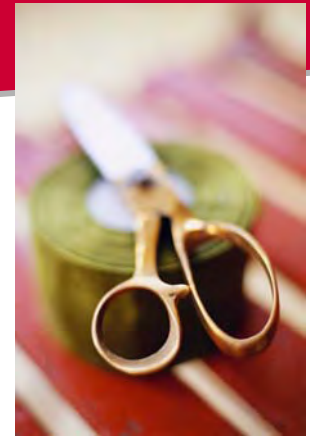
- 1. Planning: Identify specific needs of industry, and develop network for information sharing**
- 2. Best practices portfolio: Identify best processing practices for energy and water savings**
- 3. Emerging technologies: Identify new technologies showing promise for efficiency**
- 4. Prepare and deliver content: Implement a communication strategy**
  - Workshops**
  - Case Studies**
  - Satellite teleconference**
  - Website**
- 5. Project demonstration: Utility Enterprise Management**



# A Summary of Results

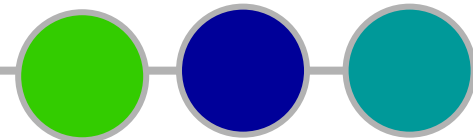
- **Developed Stakeholder Network**
- **Best Practices Portfolio**
- **Emerging/Established Technologies Portfolio**
- **Voltage Sag Protection**
- **Demonstration Project Case Studies**
- **Energy Portal**
- **Satellite Teleconference**
- **Industrial Best Practices Conference**
- **Industrial Energy Efficiency Training**
- **Utility Enterprise Management Demonstration Project**

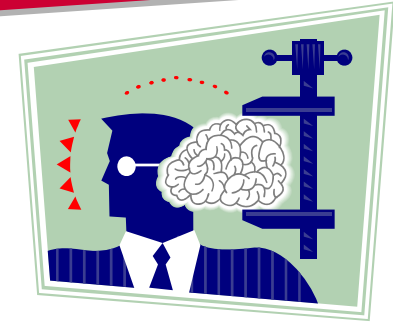




## Wrapping Up

- **Clear understanding of industry technology and best practices needs, and filling them with cost-effective solutions**
- **Information delivered in coordinated, cost-effective way**
- **Industry feedback overwhelmingly positive**
- **FIRE team members continue to collaborate on variety of efforts**
- **Project legwork helped establish readiness of food processing industry for market transformation efforts through NEEA's Industrial Efficiency Alliance**





## Lessons Learned

- **Well targeted and delivered information created specifically for an industry (food processing or other) will likely be well received**
- **Much work is required in the collection and packaging of information for specific industries (e.g. Energy Portal, best practices portfolio, emerging technologies report, etc.)**
- **The FIRE project successes are due in large part to the involvement of the NWFPA and CLFP trade associations. If you find a good trade organization willing to work with you, and your efforts are unified and organized, the impacts will persist over time**
- **The stronger the trade organization and member buy-in, the more likely you are to get results**

