

*Bioenergy Technologies Office*

**2017 Program Management  
Review**

*Feedstock Conversion Interface Consortium*

**Gerson Santos Leon**

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## FEEDSTOCK-CONVERSION INTERFACE CONSORTIUM

NAME	AFFILIATION
Gerson Santos Leon*	Abengoa
Brandon Emme	ICM, Inc.
Emily Heaton	Iowa State University
Philip Marrone	Leidos
F. Michael McCurdy	Leidos
Luca Zullo	VerdeNero, LLC.

\* Lead Reviewer

- Perform individual project reviews
- Interact with presenters to clarify questions
- Convene panel to build consensus
- Issue panel report

Average scores ranged from 6.30 – 8.85, with a median of 7.45

## Top 5 performing projects:

- Biomass Feedstock Library
- Multi-Scale Physical and Structural Particle Mechanics
- Pretreatment and Process Hydrolysis – Pretreatment
- Feedstock - Process Interface and Biochem Blended Feedstock Development
- Advanced Feedstock Preprocessing

- The FCIC activities will guide equipment suppliers, process designers, and plant operators to lower the risk associated with biomass handling, transport and conversion risk of heterogeneous biomass feedstock.
- The Biomass Feedstock PDU at Idaho National Laboratory (INL) provides a platform for the development of design principles for the handling, transport and pre-processing of biomass feedstock.
- The PDU will help define the concepts and strategies for the FCIC considering the requirements of the feedstock and conversion processes .

- The depot and blending concepts should help lower the cost and improve the quality of the feedstock for a mature Biorefinery industry.
- Intelligent feedback control systems for biomass handling and processing will increase the operability and availability of the production plants.
- Development of heterogeneous biomass transport models for the design community. The current models based on biomass combustion and pelletization, pulp and paper, and sugar industries are insufficient to adequately meet the design requirements of the biorefinery industry.

- The knowledge and capabilities at the national laboratories, commercial industrial partners, and biomass industries should be the foundation to help define and support the development of an integrated FCIC plan.

- The recommendations of the Biorefinery Optimization Workshop should be the basis for the goals and objectives of the FCIC.
- The program should focus its activities on the development and implementation of an integrated cohesive plan based on Workshop recommendations.
- Balance the portfolio of projects to meet the objectives of the plan.



# Overall Impressions: Commercialization

The present FCIC portfolio of projects is too broad and must be aligned with the recommendations of the Biorefinery Optimization Workshop to facilitate the commercialization objectives of BETO.

1. Identify a diverse industrial guiding committee to build on the recommendations of the Biorefinery Optimization Workshop to continue capturing real world technical and operational issues.
2. Develop an integrated FCIC plan based on the recommendations of the Biorefinery Optimization Workshop and the guiding committee considering the different requirements of the various thermochemical and biochemical conversion processes.
3. Balance the portfolio of projects to include near-, mid- and long-term FCIC projects. Wind-down or terminate projects that do not fit in the portfolio.
4. Perform a trade-off evaluation of the depot and blending concepts to validate the solutions and guide FCIC activities.