

Bioenergy Technologies Office

**2017 Program Management
Review**

Biochemical Conversion Response

Kevin Craig

Program Manager

Arlington, Virginia

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BIOCHEMICAL CONVERSION REVIEW PANEL

NAME	AFFILIATION
Suzanne Lantz*	DuPont
Yoram Barak	BASF
Joseph Bozell	University of Tennessee
Jamie Ryding	Corvia Biotechnology Group
Steve Van Dien	Genomatica

- Successes highlighted by the Review Panel:
- “A strength of the Biochemical Conversion program is the development of clear price and performance targets.”
- “A variety of organisms, fuel molecules, chemical coproducts were covered by the various projects, as well as different options for carbon sources (cellulosic sugars, lignin, syngas). Thus, BETO is not placing all of their bets on one process at this stage.”

- Successes highlighted by the Review Panel:
- “The projects that ranked highest were generally Core and Consortia projects that have broad impact across BETO, and indeed, the industry at large. The impact of the Core projects, i.e. facilities/resources including process integration, bench and pilot scale fermentation, analytical and computational support, is program wide. These projects develop and implement new standard procedures making relevant benchmarking and comparison possible.”
- “The renewed focus on making chemical products in parallel to fuel is critical, and will play a major role in developing a strong biorefining industry. The panel recognized the progress made in lignin conversion research, which is addressing BETO’s focus on co-products as an economic necessity.”

Biochemical # of Projects	39
Biochemical Total Funding Reviewed	\$140,331,161
% of BETO Total	20%

- Introduction to Program Manager and Session Lead
 - Program Manager Kevin Craig
 - Session Lead Jay Fitzgerald

Increase Project Management Rigor

More consistent use of TEA

- NREL is working on a “quick turn-around TEA tool” to give standardized results across projects

Monitor overcommitted project leadership

- Will discuss when forming FY18 AOPs

Alternative evaluation procedures for core operations teams at national labs (i.e. analytics, pilot plant, modeling, etc.)

- Will discuss when forming FY18 AOPs; more joint milestones

Explain Multiple FOAs Represented in Peer Review

- Will provide detailed fact sheets on all FOAs and goals to Peer Reviewers

Continue to support consortia organization in specific technology areas.

Separations, Renewable Carbon Fibers, Agile BioFoundry are a good models for streamlining and coordinating R&D in certain areas

- The Conversion Platform has increased focus on current consortia for FY18

New consortia in areas such as fungal strain development and lignin depolymerization

- Lignin research is being re-focused in a consortia-like concept for FY18; biochemical upgrading efforts are also being streamlined to be more integrated across labs

Encourage use of industrial advisory boards and partnerships

Consortia industrial advisory boards (IABs) have a noticeable impact on consortia projects and should be more broadly encouraged

- IABs are being emphasized in all current and future consortia
- Larger project areas will work to develop plans to better engage industry in some capacity in FY18
- Competitive projects cannot be forced to have IAB input but industrially-relevant reviewers will be emphasized in the review process