Sustainable Bioeconomy IWG
FY18 Work Plan Status
Biomass R&D Board TAC Meeting
August 22, 2018
Key Activities/Deliverables Planned in FY18

Q1: Contribute to finalizing the Sustainability R&D section of the *Bioeconomy Initiative: Implementation Framework*.

Q2: Improve awareness across the SBIWG by identifying and sharing information on agency-led efforts underway on the environmental, economic, and social effects of the bioeconomy.

Q3: Begin development of a catalogue of key metrics and indicators relevant to measuring the economic, environmental, and social effects of biomass and bioenergy technologies.

Q4: Propose draft elements of a Bioeconomy Sustainability Framework that considers multi-dimensional costs and benefits from the use of biomass.

Ongoing:
- Hold monthly calls to exchange information and coordinate activities
- Maintain communication with other IWGs
Resources Gathered: Federal Reports on Metrics & Indicators

The intent is to streamline and improve diverse stakeholders’ access to a variety of resources pertinent to evaluating and monitoring the sustainability of biomass, bioenergy, and the bioeconomy.
Progress Toward FY18 Deliverables

Resources Gathered: Journal Articles on Metrics & Indicators

1. **Indicators to support environmental sustainability of bioenergy systems**
   - Allen C. McBride et al.
   - Geophysical Research Letters, 2013
   - DOI: 10.1002/grl.50143

2. **Environmental indicators for sustainable production of algal biofuels**
   - Rebecca A. Efroymson and Virginia H. Dale
   - *Ecological Indicators*, 2014
   - DOI: 10.1016/j.ecolind.2014.05.006

3. **Indicators for assessing socioeconomic sustainability of bioenergy systems**
   - Virginia H. Dale, Rebecca A. Efroymson, Keith L. Kline, Matthew H. Langholtz, Paul N. Leiby, Gabriel A. Oladusio, Mark E. Downing, and Michael R. Hillard
   - *Ecological Indicators*, 2015
   - DOI: 10.1016/j.ecolind.2014.11.014

These articles provide valuable insights into the sustainability and environmental impact of bioenergy systems, which are crucial for the development of sustainable biofuel technologies.
FY18-19 Path Forward

• By end of Q4:
  – Propose draft elements of a Bioeconomy Sustainability Framework that considers multi-dimensional costs and benefits from the use of biomass

• Plans for FY19:
  – Create webpage on the Bioenergy KDF that houses and links to resources on sustainability metrics & indicators relevant to the bioeconomy
  – Develop preliminary sustainability framework for the Bioeconomy Initiative. The intent of the framework is to help federal efforts to prioritize the most promising bioeconomy pathways in a way that minimizes negative impacts while enhancing positive effects.