

U.S. DEPARTMENT OF  
**ENERGY**

Office of  
ENERGY EFFICIENCY &  
RENEWABLE ENERGY

# Feedstock Conversion Interface Consortium

Peer Review Introduction

March 15 2021



# Greetings From Snowy Colorado!

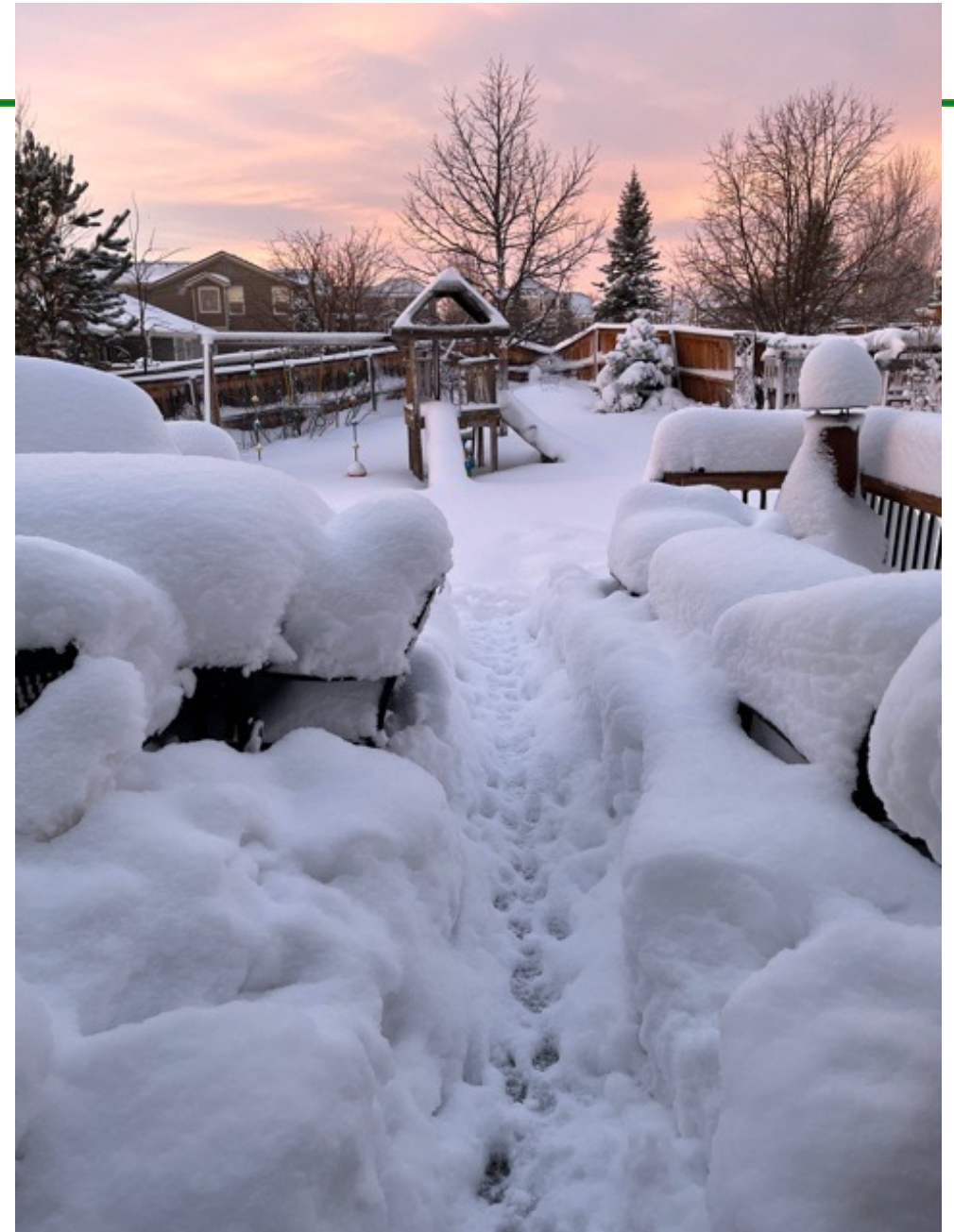
 **Denver Int'l Airport**   
@DENAirport 

 Blizzard conditions continue at the airport. Airlines have ceased operations at DEN for the rest of the day. Peña Blvd is currently impassable with multiple disabled vehicles along the roadways, if you absolutely must come to the airport, please use the [@RideRTD](#) A-Line instead



4:59 PM · Mar 14, 2021 

 210  81  Share this Tweet



# Agenda

## Day 6 - MONDAY, MARCH 15, 2021

Start Time EST	End Time EST	FEEDSTOCK CONVERSION INTERFACE CONSORTIUM		
		Presentation	Organization	Presenter
11:00 AM	11:30 AM	GATHER, TECH CHECK, NETWORKING QUESTIONS		★
11:30 AM	3:55 PM	Feedstock Conversion Interface Consortium	BETO	Liz Moore
11:30 AM	11:40 AM	Introductions/Expectations	BETO	Peer Review Lead
11:40 AM	12:10 PM	FCIC Overview	NREL	Ed Wolfrum
12:10 PM	12:35 PM	Task X - PI/PM	NREL	Amie Sluiter
12:35 PM	1:05 PM	BREAK		★
1:05 PM	1:40 PM	Task 2 - Feedstock Variability	INL	Allison Ray
1:40 PM	2:15 PM	Task 5 - Preprocessing	INL	Vicki Thompson
2:15 PM	2:45 PM	BREAK		★
2:45 PM	3:20 PM	Task 3 - Material Handling	INL	Yidong Xia
3:20 PM	3:55 PM	Task 6 - High Temperature Conversion	NREL	Daniel Carpenter
3:55 PM	4:25 PM	Reviewer Wrap Up and Debrief	Reviewers	★

## Day 7 - TUESDAY MARCH 16, 2021

11:00 AM	11:30 AM	GATHER, TECH CHECK, NETWORKING QUESTIONS		★
11:00 AM	5:10 PM	Feedstock Conversion Interface Consortium	BETO	Liz Moore
11:30 AM	11:40 AM	Introductions/Expectations	BETO	Peer Review Lead
11:40 AM	12:15 PM	Task 7 - Low Temperature Conversion	ANL	Phil Laible
12:15 PM	12:50 PM	Task 1 - Materials of Construction	ORNL	Jun Qu
12:50 PM	1:20 PM	BREAK		★
1:20 PM	1:55 PM	Task 8 - TEA/LCA	PNNL	Steven Phillips
1:55 PM	2:20 PM	Task 4 - Data Management	PNNL	Jim Collett
2:20 PM	2:55 PM	DFO - Jenike & Johanson	LANL	Troy Semelsberger
2:55 PM	3:25 PM	BREAK		★
3:25 PM	4:00 PM	DFO - Fulcrum	Fulcrum	Jaya Shankar Tumuluru
4:00 PM	4:35 PM	DFO - The Wonderful Company	NREL	Daniel Carpenter
4:35 PM	5:10 PM	DFO - Forest Concepts	ORNL	Jun Qu
5:10 PM	6:10 PM	Reviewer Wrap Up and Debrief	Reviewers	★

“Core” AOPs  
(Annual Operating Plan)

“DFOs”  
(Direct Funding Opportunity)

# FCIC Overview

---

- **“FCIC 1.0”**
  - All activities 2018 & prior
  - Focused on reliability
- **Reboot ~October 2018**
- **“FCIC 2.0”**
  - Overview presented at 2019 Peer Review
  - Focus on First Principles understanding (QbD approach)

# Feedstock-Conversion Interface Consortium

The Feedstock-Conversion Interface Consortium (FCIC) is led by DOE as a collaborative effort among 9 National Labs

## Founding principles

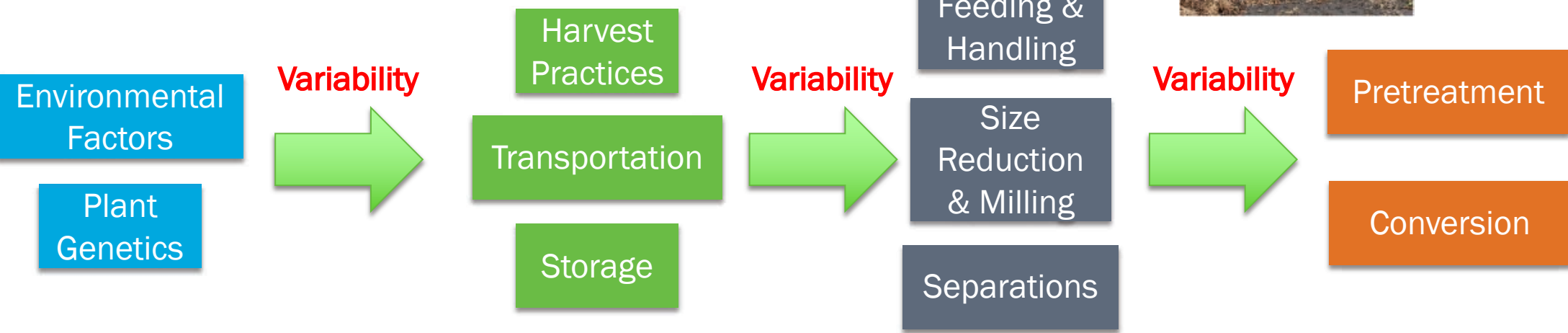
- Biomass feedstock properties are **variable and different** from other commodities
- **Empirical** approaches to address these issues have been **unsuccessful**
- The biomass supply chain introduces **additional variability**: growth factors, during harvest/storage, during comminution, ...



The FCIC seeks to systematically understand and mitigate this feedstock and process variability to reduce the risk for biorefineries



Fuels  
or  
Products



# FCIC Team



**Beau Hoffman**



**Mark Elless**



**Liz Moore**

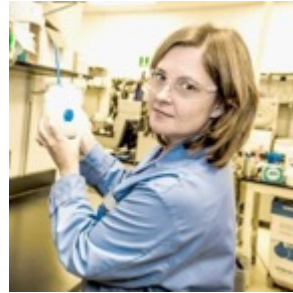
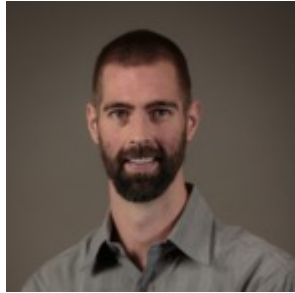


**Alexander Jansen**



**Art Wiselogel**

# FCIC Review Panel



**Mark Peshorn, Peshorn Analysis (Lead Reviewer)**

**Kim Nelson, GranBio**

**Paul Paxson, E3 Consulting**

**Mike Tupy, Cargill**

**Phil Weathers, Weathers Associates Consulting**

★ Thank you!! ★

---

# Questions? Help?

[Liz.Moore@ee.doe.gov](mailto:Liz.Moore@ee.doe.gov)

720-840-5880