

CARBON UTILIZATION PROJECT REVIEW MEETING Virtual Agenda October 21-22, 2020

Wednesday, October 21, 2020

Moderator: Joseph Stoffa, National Energy Technology Laboratory

10:30 AM Welcome and Introduction

Angelos Kokkinos, U.S. Department of Energy

10:45 AM Carbon Utilization Program Overview

Joseph Stoffa, National Energy Technology Laboratory

11:00 AM Novel Algae Technology for CO₂ Utilization (SC0017077)

Ravi Prasad, Helios-NRG, LLC

11:30 AM Electrochemical Conversion of Carbon Dioxide to Alcohols (FE0029868)

Feng Jiao, University of Delaware

12:00 PM Integrated Capture and Conversion of CO₂ to Methanol (ICCCM) Process

Technology (TCF-19-17862)

Robert Dagle and David Heldebrant, Pacific Northwest National Laboratory

12:30 PM Break

Moderator: Naomi O'Neil, National Energy Technology Laboratory

1:00 PM Storing CO₂ in Built Infrastructure: CO₂ Carbonation of Precast

Concrete Products (FE0030684)

Brian Robert Ellis, University of Michigan

1:30 PM Beneficial use of CO₂ from Coal-Fired Power Plants for Production of

Animal Feeds (FE031717)

Tryg Lundquist, MicroBio Engineering

2:00 PM Carbon Dioxide and Renewable Electricity into Chemicals: Chemical Production

from Coal Flue Gas (FE0031706)

Hongzhou Yang, Dioxide Materials, Inc.

2:30 PM Break



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Moderator: Katharina Daniels, National Energy Technology Laboratory

3:00 PM Electrochemical Conversion of CO₂ from Coal into Fuels and Chemicals Using a

Modified PEM Electrolyzer (FE0031712)

Kendra Kuhl, Opus 12, Inc.

3:30 PM Life Cycle Analysis of Carbon Utilization Technologies at NETL

Timothy Skone, U.S. Department of Energy, National Energy Technology Laboratory

4:00 PM Electrochemical CO₂ Conversion

Douglas Kauffman, U.S. Department of Energy, National Energy Technology Laboratory

4:30 PM Adjourn

Thursday, October 22, 2020

9:45 AM Welcome and Introduction

Mark Ackiewicz, U.S. Department of Energy

Panel on Testing Facilities

Moderator: Lynn Brickett, U.S. Department of Energy

10:00 AM Wyoming Infrastructure Authority

Jason Begger, Wyoming Integrated Test Center

10:15 AM National Carbon Capture Center

John Northington, Southern Company

10:30 AM International Test Center Network

Frank Morton, Southern Company

10:45 AM Q&A

Moderator: Dan Hancu, National Energy Technology Laboratory

11:00 AM Evaluation of Concentrated Piperazine for CO₂ Capture from Coal-Fired

Flue Gas and NGCC Conditions

Gary Rochelle, The University of Texas at Austin



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11:30 AM Validation of Transformational CO₂ Capture Solvent Technology with

Revolutionary Stability

Erik Meuleman, ION Engineering LLC

12:00 PM Lunch

Moderator: Joseph Stoffa, National Energy Technology Laboratory

12:30 PM Field Scale Testing of the Thermocatalytic Ethylene Production Process Using

Ethane and Actual Coal Fired Flue Gas CO₂ Amit Goyal, Southern Research Institute

1:00 PM A Scalable Process for Upcycling Carbon Dioxide (CO₂) and Coal Combustion Residues into

Construction Products

Gaurav Sant, University of California, Los Angeles

1:45 PM Membrane-Integrated Sorbent Adsorption Process for Carbon Capture

Gokhan Alptekin, TDA Research

Panel Discussion on DAC and Utilization

Moderator: Amishi Kumar, U.S. Department of Energy

2:15 PM Biofuels and Bioproducts

Ian Rowe, Bioenergy Technologies Office

2:30 PM Strategic Analysis in Advanced Manufacturing

Joe Cresko, Advanced Manufacturing Office

2:45 PM Carbon Conversion Technologies

Phil De Luna, National Research Council of Canada

3:00 PM Renewable Chemical Technologies

Randy Cortwright, National Renewable Energy Laboratory

3:15 PM Advanced Algal Systems

Christy Sterner, Bioenergy Technologies Office

3:30 PM Q&A