

FAA CENTER OF EXCELLENCE FOR ALTERNATIVE JET FUELS & ENVIRONMENT

Alternative Jet Fuel Supply Chain Analysis

ASCENT 1

ASCENT-1 Overview

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Opinions, findings, conclusions and recommendations expressed in this material are those of the author(s)
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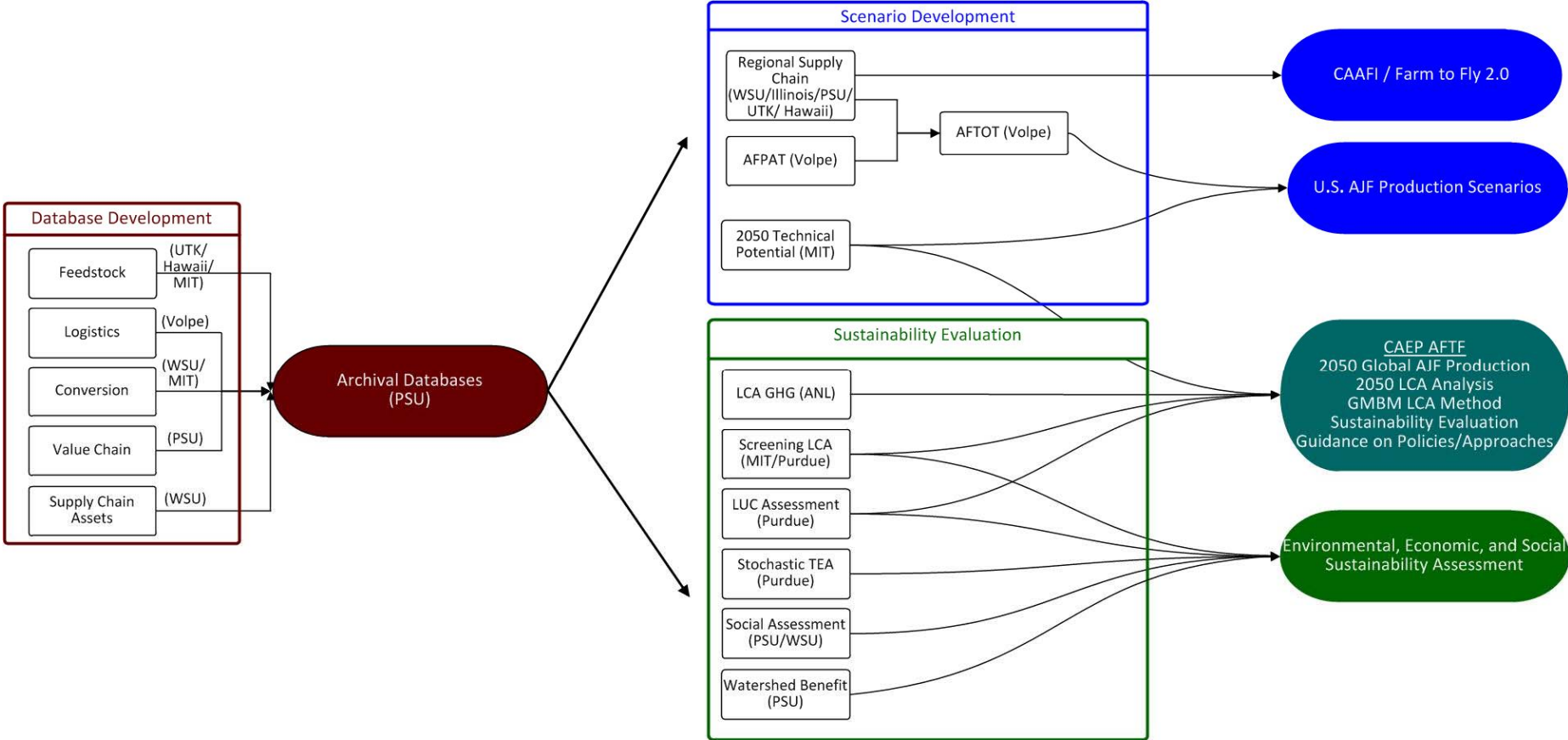
Presentation Agenda

- Overview of Vision for ASCENT-1 Organization
- Review Primary Project Components
- Review Individual Project Task Groupings
- Review of Schedule for ASCENT Bi-Annual Meeting

Project Organization

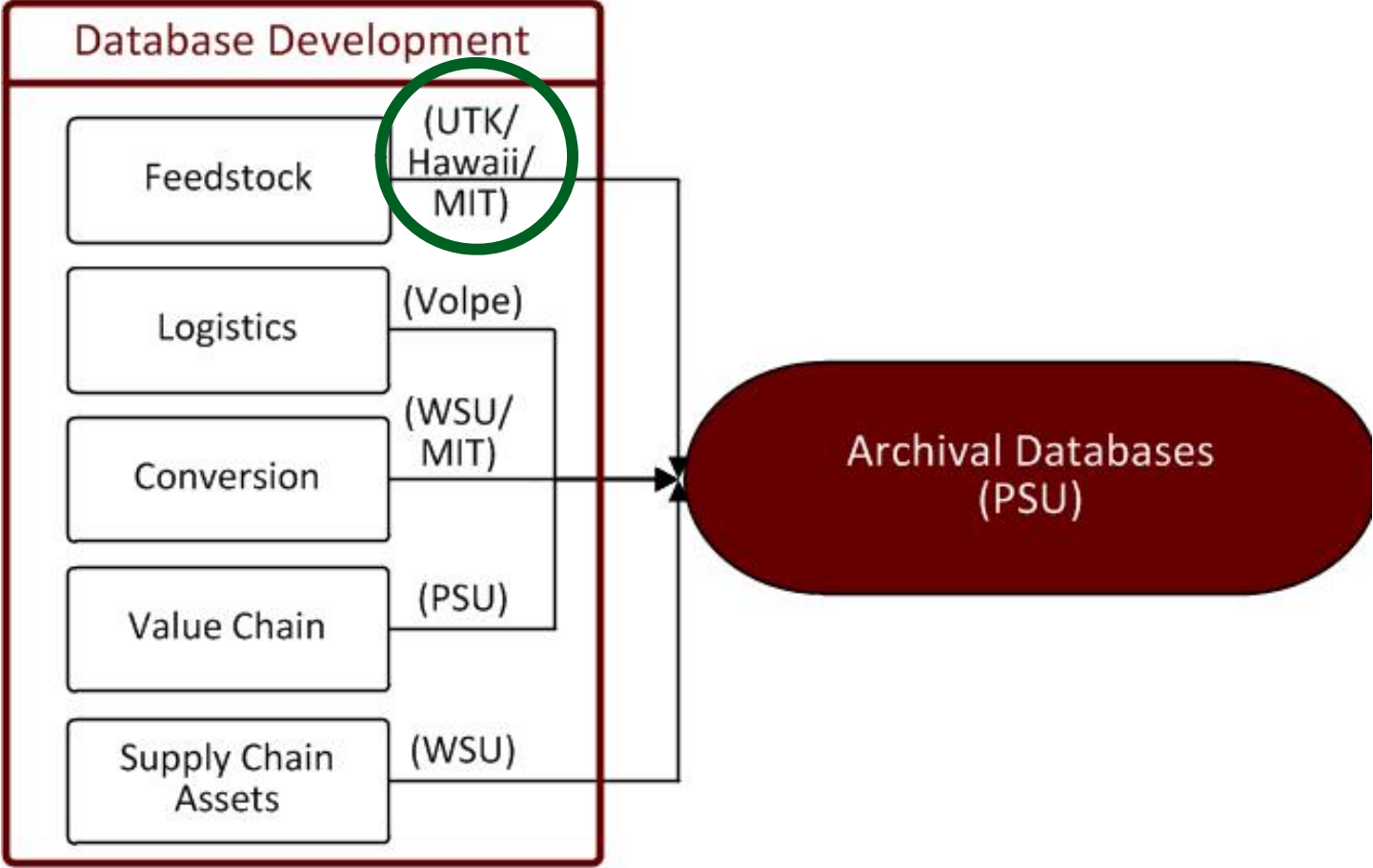
Database Development and Archive

Scenario and Sustainability Analysis

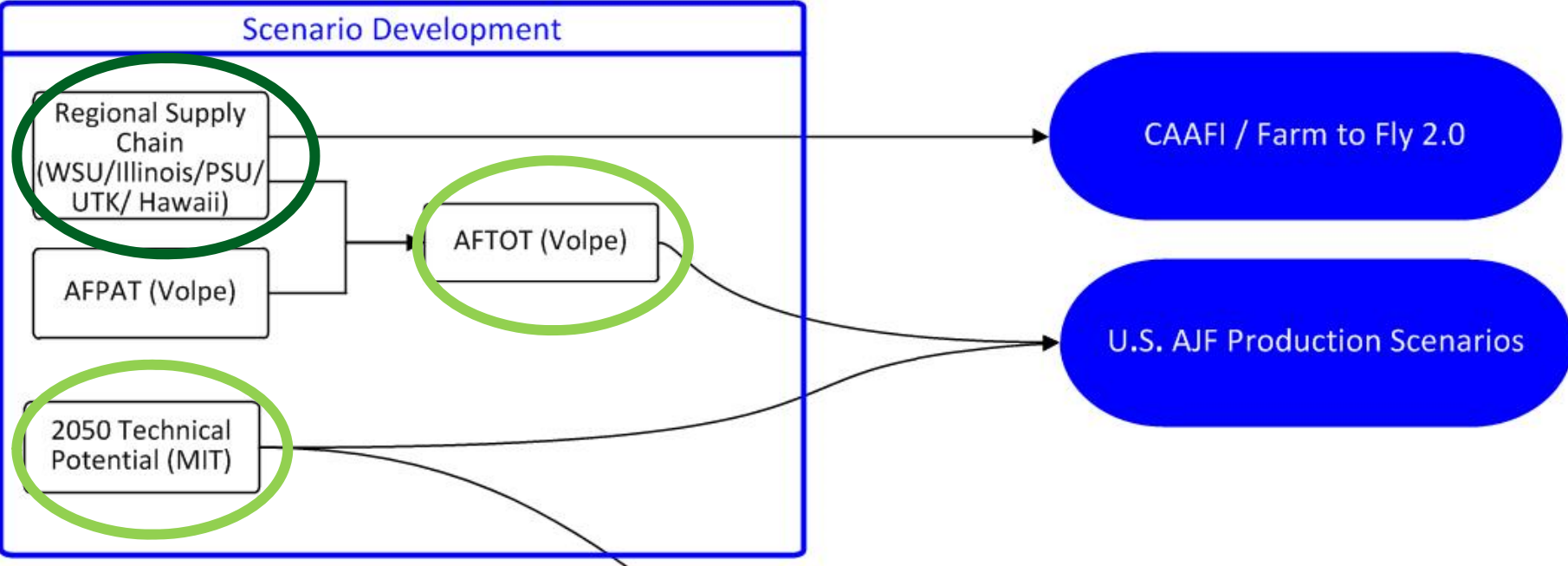


Project Outputs are in Color

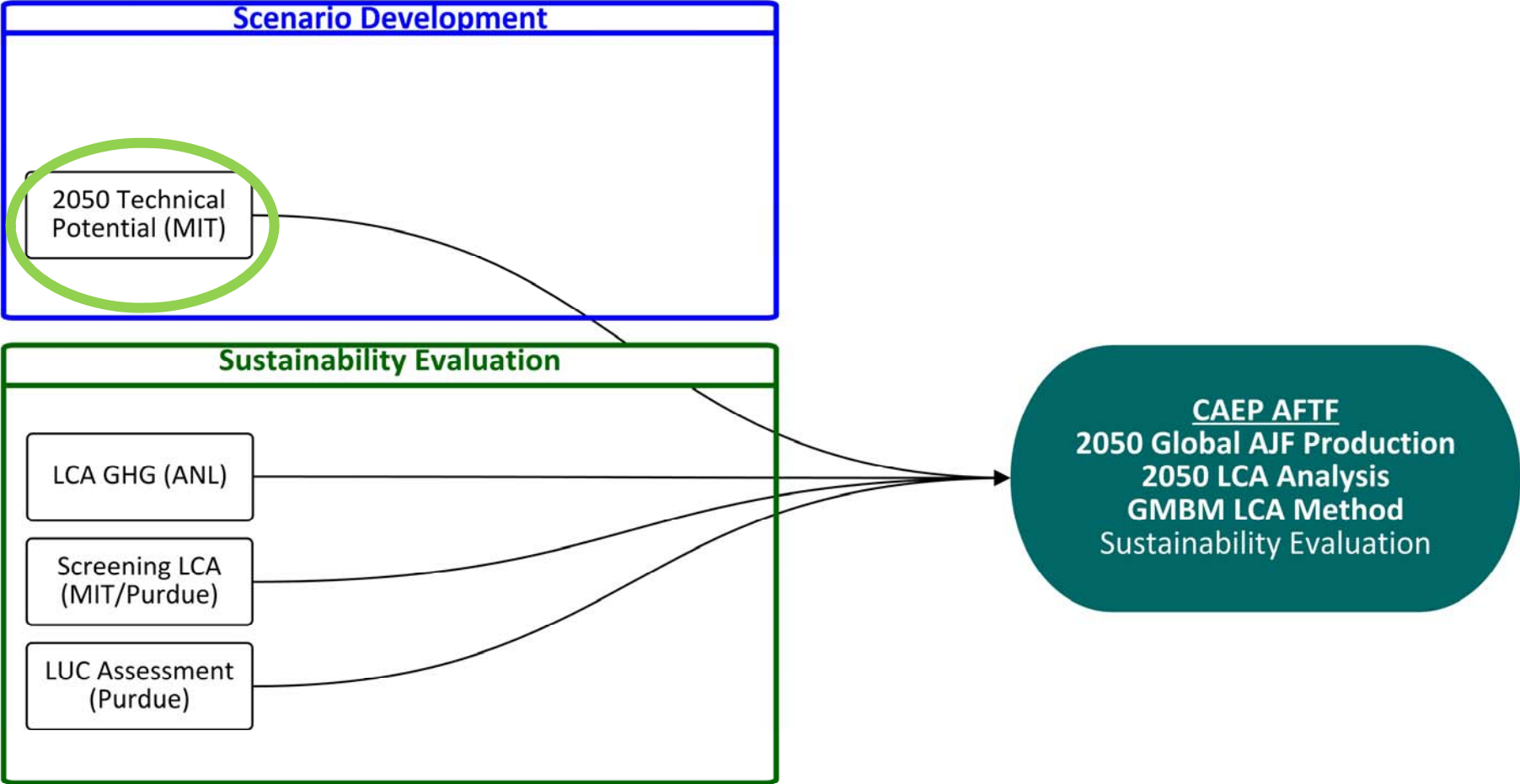
Part 1: Database Development



Part 2: Scenario Development



Part 3: CAEP Alternative Fuels Task Force Analyses

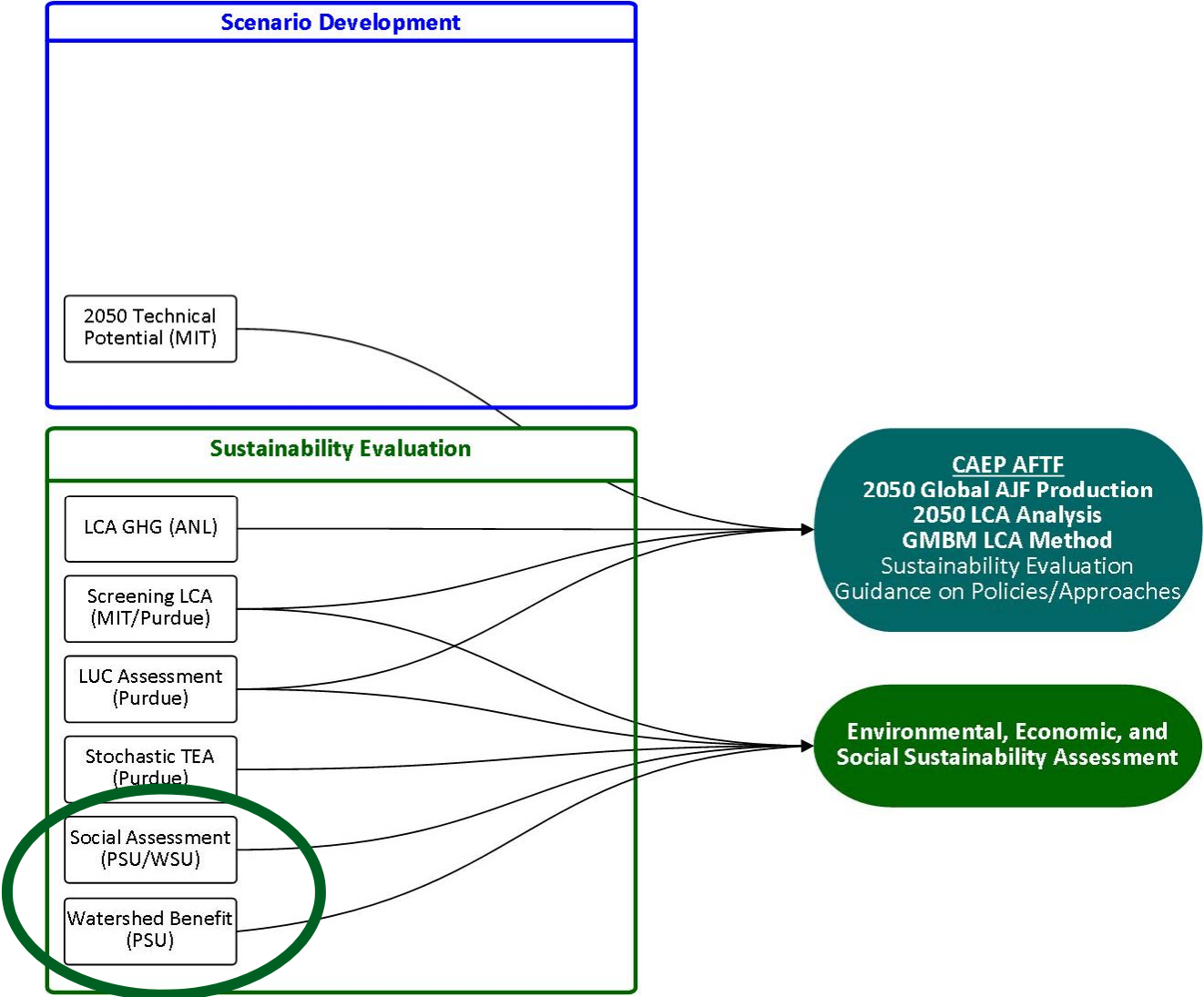


Alternative Fuels Task Force



- 2014-2016
 - Developed methodology for global SAJF production and life cycle GHG mitigation potential for 2020 and 2050
 - Developed methodology for GHG LCA for SAJF for use in Global Market Based Measure for international aviation
- 2016-2019
 - Develop SAJF GHG LCA values for use in Global Market Based Measure for international aviation
 - Evaluate sustainability considerations regarding AJF
 - Assemble information on Potential Policies and Coordinated Approaches for the Deployment of SAJF
- See Robert Malina's poster on 2050 production potential for more details

Part 4: Sustainability Evaluation



Recent P1 Team Efforts

- Goal: When/How Can U.S. Reach 1 Billion Gallons of AJF?
- Common Scenario Definitions
 - Conversion process definition, yields, product slate
 - Conversion process financial assumptions (pioneer vs. nth plant)
 - Feedstock cost
 - Transport, storage, and blending
 - Supply chain characteristics
- Near term analysis focuses on waste feedstocks to determine how far these can get us.
- Special Discussions:
 - Sierk de Jong (Univ. of Utrecht) - perspective on general scenario assumptions
 - Laura Vimmerstadt (NREL) – Biomass Sector Model

ASCENT P1 Agenda



P1 Team Posters

- Technoeconomic Analysis (Purdue)
- Municipal Solid Waste (MIT)
- CAEP Fuel Production Assessment (MIT)
- Aviation Fuel Supply Chain Stakeholder Perceptions in the PNW (WSU)
- Airport Management Perceptions of Aviation Biofuels in the Pacific Northwest (WSU)
- Alternative Fuel Transportation Optimization Tool (AFTOT) (Volpe Center)

ASCENT P1 Agenda



Wednesday, April 27, 2016

- 12:50 – 01:10 PM ---- Regional Focus: Midwest Supply Chains
- 01:10 – 01:45 PM ---- Regional Focus: Northwest Supply Chains
- 01:45 – 02:00 PM ---- Regional Focus: Hawai'i
- 02:00 – 02:15 PM ---- Environmental Services
- 02:15 – 02:30 PM ---- Discussion