

Report Out I: Infrastructure

Co-Chairs:

Neil Rossmeissl, U.S. Department of Energy, Office of the Biomass Program
Bob Reynolds, Downstream Alternatives, Industry Expert

Facilitator:

Ken Boras, BCS

Scribe:

Sara Baker, BCS

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A Scenario for Supplying 30% of 2004
Motor Gasoline with Biofuels by 2030

Biomass

Infrastructure Pathway

- Feedstock Source
- Pre-processing
- Truck to plant
- Plant to terminals
- Terminals to retail

Infrastructure: Cost Targets

- What is the delivered cost target or cost range has to be met in order for biofuels to be competitive with gasoline? Why was the cost target or range chosen?
 - » From biomass source to conversion facility
 - ♦ \$30 - \$40/dry ton by 2012
 - Depends on feedstock

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Infrastructure: Cost Targets (con't)

- » From conversion facility to consumer
 - ♦ 30% lower than gasoline by 2030 (E85)

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Infrastructure: Barriers

- Net back to farmer (2007); price to producers (2012)
- Developing of harvesting equipment (2012)
- Harvesting, drying, pre-processing (2012)
- Water resources, environment sustainability (2012)
- Continuous feedstock stream – purity and quality (2012)
- Railroad infrastructure issues (2012)

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Infrastructure: Barriers (con't)

- Pipeline utilization needs (2015)
- Retail facility infrastructure (2012)

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Infrastructure: Research and Development Needs

- Processing standards – drying, concentrating and storage
- Increasing yields, conversion ready plants and plants with low water needs
- Design harvest and processing equipment and storage
- Life cycle analysis for all pathways and feedstocks

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Infrastructure: Research and Development Needs (con't)

- Enzymes – low cost, flexibility of input and output
- Conversion process using less water
- Investigate alternative uses of biofuels coproducts to maximize return on investment
- Utilize railroads more efficiently
- Ability to use existing pipelines with biofuels

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Infrastructure: Policy

- Feedstock price floor
- Agriculture and university collaboration
- Design and production equipment
- Life cycle analysis for all regulated pollutants and CO₂
- Pipelines – ACRS, right of way issues
- Inland waterways restoration

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Infrastructure: Policy

- Delete retail Stage 2 recovery requirement
- Incentivize retail biofuels conversion
- Biofuel neutrality
- Increase federal funding for research

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Infrastructure

**ALL ISSUES RESOLVED BY 2012 TO
REACH 30 X30**

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