Converting MSW Into Low-Cost, Low-Carbon Jet Fuel

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Alternative Fuel Symposium
Singapore
November 16, 2018
Fulcrum: Solving Two Global Challenges

Waste Disposal
Decarbonization of Air Transportation
Fulcrum’s Business Model

Long-Term Feedstock Supply – Input Costs Locked In
Long-Term Feedstock Agreements
Guaranteed Technology Process
Strong Strategic Investor Group
First Project Financed and Under Construction
Standardized Projects – Design, Contracts, Financing
MSW – A Strategic Feedstock

Changing the way Garbage is Handled and Disposed

- Large Volumes, Ideal Locations
- Established Infrastructure
- Carbon-Rich Feedstock Ideal for Biofuel Production
- Predictable Cost
- No Competing Uses
- Resolves Waste Disposal Problems
Proprietary, Proven & Scalable Fuels Process

Material Processing Facility Prepares MSW for Fuels Process

Steam Reforming Gasification System Converts MSW to Synthesis Gas

Fischer-Tropsch Process Converts Synthesis Gas to Syncrude, Jet Fuel & Diesel
Fulcrum’s Strategic Partner Model

Feedstock Supply → Waste to Syncrude → Fuel Refining → Fuel Logistics → Customers

Partners:
- Waste Management
- World Fuel Services
- ABENGOA
- Waste Connections, Inc.
- bp
- Cathay Pacific
- Marubeni
- JAPAN AIRLINES
- UNITED
• Feedstock Processing Facility In Operations; Construction Completed on Schedule and on Budget

• Converts 350,000 Tons of Raw Waste into 175,000 Tons of Processed Feedstock per Year

• Waste Processing Capacity up to 120 Tons per Hour
Sierra BioFuels Plant Biorefinery

- Biorefinery Under Construction
- 175,000 Tons of Processed MSW Feedstock Converted to 11 Million Gallons of Low-Carbon Transportation Fuel Each Year
- Plant Operations Begin in Early 2020