



Converting MSW Into Low-Cost, Renewable Jet Fuel

US Department of Energy Bioeconomy 2017

Arlington, VA
July 12, 2017



Fulcrum – MSW to Renewable Fuels



Low-Cost Producer

80% Reduction in GHG Emissions

Proven Technology

Long-Term MSW Feedstock Agreements

Long-Term Fuel Offtake Agreements

Large Development Program With First Project Under Construction

Fulcrum's Valuable Fuel Products

- Renewable Drop-in Fuel
- Passed Numerous Market Fuel Certifications
 - Ultra Low Sulfur Diesel
 - Commercial Jet
 - Military Jet
 - Navy Distillate
- Lowers Carbon Emissions by More Than 80%
- Qualifies for Numerous Renewable and Sustainability Standards
 - U.S. Renewable Fuel Standard
 - CA Low Carbon Fuel Standard
 - Roundtable for Sustainable Biomaterials

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 & Efficient Fuels Process



Feedstock 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 and Diesel



Sierra BioFuels Plant

Feedstock Processing Facility



- In Operations
- Construction Completed on Schedule and on Budget

Biorefinery



- EPC Activities Underway
- Prepared to Begin Construction Upon Financial Close
- Will Produce More Than 11 Million Gallons of Renewable Fuel in 2019

Fulcrum's Strategic Partner Model



