Is Fulcrum a “clean energy” company?

Yes. We were founded to help address two environmental challenges — greenhouse gas emissions and landfill waste. Fulcrum’s process converts household garbage into sustainable aviation fuel (“SAF”) that reduces greenhouse gas emissions by over 80% compared to traditional jet fuel. We will also divert approximately 700,000 tons of waste per year from regional landfills. Our fuel represents the best opportunity for airlines to reduce their emissions to help address climate change. The environmental benefits are well recognized, studied and understood.

Does Fulcrum use household garbage?

Yes. Across the United States, 145 million tons a year of household garbage are buried in landfills. Landfills are the largest human source of methane (a greenhouse gas 30 times more potent than carbon dioxide) and create several other environmental problems. Waste avoidance, recycling and composting are a critical part of the solution. However, they alone cannot solve the problem. Furthermore, aviation contributes to climate change and has a responsibility to help solve it. SAF produced from garbage is an alternative to fossil fuels and is one of the most effective ways to reduce emissions from flying.

Is Fulcrum’s technology proven?

Yes. Fulcrum uses commercially proven and reliable technology that has been in operation around the world since the early 20th century. We have integrated this technology into a proprietary and proven process that has undergone an immense amount of third-party technical due diligence. Fulcrum’s strategic partners, such as United Airlines, BP, Cathay Pacific and others, conducted their own technical due diligence using their own expertise and independent engineers. Similarly, the United States Department of Defense performed such an analysis for our first commercial biorefinery in Reno, Nevada which started operations in May 2022.

About Fulcrum

Fulcrum BioEnergy is the world’s first producer of sustainable aviation fuel (“SAF”) from household garbage. In 2014, Fulcrum constructed and operated its pilot plant for 120 days successfully producing fuel. Fulcrum’s SAF has been independently tested and meets ASTM standards as well as military fuel specifications. Fulcrum’s first commercial biorefinery, Fulcrum Sierra BioFuels, in Reno, Nevada, completed construction in 2021 and started operations in May 2022. Fulcrum’s second commercial biorefinery, Fulcrum Centerpoint, in Gary, Indiana is currently in development.

Economic Investment in Centerpoint Biorefinery

$600+ million

Direct Employment at Centerpoint Biorefinery

130 full-time operational jobs and 1,000 construction jobs

Indirect Employment

Numerous jobs supporting the facility including technical trades, logistics and supply chain

Biorefinery Average Wage

Approximately $30 per hour, plus benefits

Timeline

Expected commercial operations in 2025/2026

Waste Removed

Approximately 700,000 tons per year of waste diverted from regional landfills

Fuel Produced

Approximately 31 million gallons of SAF per year

To find out more, please visit:
fulcrumcenterpoint.com

Fulcrum Centerpoint

Facts, Figures and FAQs

Will Fulcrum Centerpoint bring garbage into Gary and burn it?

No. We will not be bringing any garbage into Gary. Garbage will first be processed at feedstock processing facilities ("FPF") outside of Gary. There will be two FPFs supporting the biorefinery. The feedstock will be transported in enclosed trucks to the biorefinery in Buffington Harbor. Fulcrum's process does not burn garbage and is vastly different than incineration. Incineration needs a high oxygen environment and its emissions are released into the atmosphere. Fulcrum uses a gasification process to convert feedstock into a synthesis gas (syngas) in an enclosed, low oxygen environment. The syngas is then converted into fuel.

Will air emissions from Fulcrum Centerpoint be controlled?

Yes. The Centerpoint biorefinery is designed with several controls which will minimize emissions. In fact, the projected emissions from the biorefinery will be below "major source" thresholds, which in Lake County, Indiana are far more stringent than typical EPA standards. The regulatory body for air emissions is the Indiana Department of Environmental Management ("IDEM") through which Centerpoint applied for its minor source air permit.

Will Fulcrum Centerpoint have trucks full of garbage driving through Gary?

No. Trucks coming to and from the biorefinery will be delivering feedstock and will be fully enclosed. All truck traffic will be limited to I-65, I-80/94, Cline Avenue, and Buffington Harbor Drive. These are all designated heavy vehicle routes. The majority of the truck traffic will be limited to Monday through Friday as feedstock is not delivered over the weekend. Centerpoint will receive approximately 100 to 120 trucks per day delivering feedstock.

Will Fulcrum Centerpoint discharge anything into Lake Michigan?

No. There will be no discharge or direct connection to Lake Michigan. Centerpoint's biorefinery is separated from Lake Michigan by other industrial properties and a Class 1 railroad. All wastewater from the facility will be treated in an on-site wastewater pretreatment plant and then sent to the Gary Sanitary District's ("GSD") wastewater treatment plant for further treatment. Centerpoint will receive recycled water from GSD for its process.

Is it true Fulcrum wants to burn plastics?

No. The Fulcrum process does not burn its feedstock, it uses gasification. Roughly 30% of the feedstock is plastic in nature. The feedstock contains plastic because it is in household garbage. Fulcrum supports measures that reduce plastic waste including consumer recycling and the banning of single use plastics.

Is Fulcrum building on a toxic cement plant site?

No. Fulcrum is redeveloping a brownfield industrial property that was the former home of a cement plant and has been vacant for over 20 years. Several environmental investigations have been conducted on the site by both Fulcrum and the City of Gary. These investigations have concluded that the site is not toxic and is appropriate for redevelopment.

Will Gary be Fulcrum's only functioning biorefinery?

No. Fulcrum's first project (Fulcrum Sierra BioFuels near Reno, Nevada) has started operations. Fulcrum has a development pipeline of projects across the United States and globally. We are currently developing a project on the Gulf Coast with plans to develop at least 10 projects across the United States.

Will jobs with Fulcrum Centerpoint be permanent?

Yes. We expect to create approximately 130 permanent, well paid full-time jobs and will require a wide variety of skill sets. We have made commitments to prioritize hiring of Gary residents and are working with Ivy Tech Community College to facilitate training and skills development for Gary residents and high school graduates. In addition, the construction of the biorefinery is expected to create approximately 1,000 temporary construction jobs over the two-year construction period.

Is Fulcrum committed to the Gary community?

Absolutely! We are bringing a large, clean energy investment to Gary. We hope to spur economic growth by attracting other like-minded innovative and clean energy businesses. We aim to embrace the City and its residents in creating a sustainable community while enhancing its economic development. We believe providing clean energy jobs, education and training opportunities will help transform the local economy. Fulcrum is supporting the City's efforts with demolition, clean-up of abandoned buildings and working with community partners to improve parks and greenspaces.

The information herein is current as of June 2022