Velocys is a London Stock Exchange listed international sustainable fuels technology company, traded on AIM. It provides the technology that enables the production of negative carbon intensity Sustainable Aviation Fuel (SAF) safely and effectively on a commercial scale from a variety of waste materials (typically municipal waste and woody biomass).

The technology adds significant IP and optimisation to the long-established Fischer-Tropsch process which converts hydrogen and carbon monoxide into synthetic fuel.

The fuel can be used in both the aviation and heavy goods transportation industries, without the need for any alteration to current jet engines or airport infrastructure.

**Growth Strategy**
- Deepen strategic alliances with technology partners to further enhance Velocys’ integrated solution
- Advance and commercialise the key reference projects in the US and UK
- Investment in scaling-up, including reactor manufacturing capacity, whilst remaining capital light
- Grow new business pipeline, focusing on markets with mature avoided carbon policies
- Target geographical markets where regulatory environment allows for SAF pricing support (e.g. California, USA)
- Expand engineering and technical services to support customers’ needs, from feasibility stage to detailed engineering

**Key Facts and Business Model**
- Capital light, scalable business model
- The company is a technology licensor and equipment manufacturer. It will never seek to own or operate plants
- Upfront Revenue delivered through integrated Fischer-Tropsch Synthesis solution under site licenses and technology services
- Recurring revenue delivered through catalyst sales, engineering support, technology licensing and decarbonisation royalties

**Things You Might Not Know...**
- Aviation is 7% of UK greenhouse gas emissions (and rising). SAF reduces CO₂ by 70% compared to Fossil Fuel Kerosene. With CCUS, the Carbon Intensity (CI) profile of SAF is < -144 g/MJ, ensuring flights are carbon neutral on a 50% fuel load
- There is a recognised shortage of SAF and the UK Gov’t’s new 10 Point Plan recognises the UK needs its own production capability
- Passenger growth and climate change emphasise the need for the aviation industry to focus their efforts on sustainability
- Recent offtake agreements for the fuel produced by the prospective Bayou Fuels plant will avoid 1.3m tonnes of CO₂ a year otherwise emitted, underscoring the role that SAF will play in decarbonising the aviation sector and the journey to a net-zero economy
- This deeply negative CI score is the lowest in the SAF industry
- Hydrogen/Electric planes are not commercially viable, so SAF made from biomass and household/commercial waste is, at present, the only option to reduce the industry’s carbon footprint
- Expected SAF demand is exponential. Based on proposed mandates in Europe, and US incentives, SAF is set to increase to 3.7bn litres pa from 2025, rising to 77.6bn litres pa by 2040 (or 600 plants equivalent)
- The typical life of a SAF plant is c.25 years
Altalto – Immingham, U.K.

Velocys is developing a commercial waste-to-fuel plant in the UK in collaboration with British Airways. Altalto is expected to be Europe’s first commercial scale waste-to-jet-fuel facility. FEED Q2 2023; commence construction Q1 2025, commercial operation Q3 2027

Feedstock: municipal and solid residual waste (otherwise destined for landfill or incineration)

Design capacity: 50kT pa of SAF and 350k T/yr of CO\textsubscript{2} avoided (with CCS)

Bayou Fuels – Natchez, Mississippi, U.S.

Velocys is also developing a reference project in Natchez, Mississippi, U.S. The site would benefit from Federal Inflation Reduction Act SAF producer tax credit 45Z. FEED by Q4 2023; production in 2028

Feedstock: woody biomass for forestry residue meeting stringent sustainability standards

Design capacity: 857kbbls pa of SAF and +1.3m T/yr of CO\textsubscript{2} avoided