A collaboration between British Airways and Velocys

We are developing plans to build the first commercial scale waste-to-transport-fuels plant in the UK, subject to planning and final investment decisions.

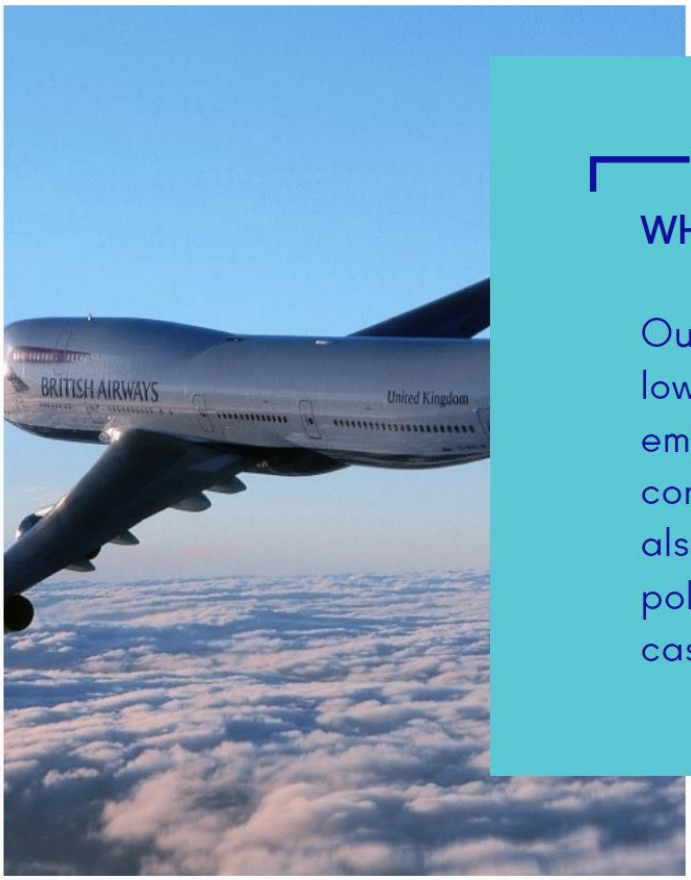
We combine technologies in a new way to deliver a cost-effective and sustainable supply of renewable fuels. These products are needed in order to reduce the climate change impact of travel; particularly long-haul air travel, which is likely to rely on liquid fuels for years to come.

WHAT WE PLAN TO DO

We plan to build the UK's first commercial plant to make jet fuel from household and office waste.

The basic concept of converting solids into liquid fuels using this route has been in industrial use for decades. We have modified the process to make it suitable for the production of jet fuel and other transport fuel from waste. Our proposed plant will take hundreds of thousands of tonnes per year of household and office waste (including hard-to-recycle plastics), left over after recycling, and convert them into cleaner burning, sustainable fuels for aviation and road use. Otherwise this waste would end up in landfill, or be incinerated.

The plant's main product will be Synthetic Paraffinic Kerosene (SPK), which is approved worldwide for commercial aviation at up to 50% in a blend with conventional jet fuel. The other product is naphtha, a constituent of petrol, which will help to reduce the net CO_2 emissions of road users.



WHY DO IT?

Our fuel will have 70% lower greenhouse gas emissions than conventional jet fuel. It also reduces exhaust pollutants – in some cases by 90%.

Aviation accounts for around 2% of the world's total greenhouse gas emissions, and passenger numbers are growing rapidly. Aviation is now part of a new global climate regulation, the first of its kind for any global industry, and this means the market for sustainable aviation fuels will grow in the future.

Altalto's sustainable jet fuel will help society to continue to get the benefits of air travel whilst reducing our impact on the environment, reducing harmful emissions, and dealing with wastes that cannot be recycled effectively.

But it's not only in aviation where Altalto can make a difference – some of our production will also be blended into petrol, helping to lower the carbon footprint of car travel.