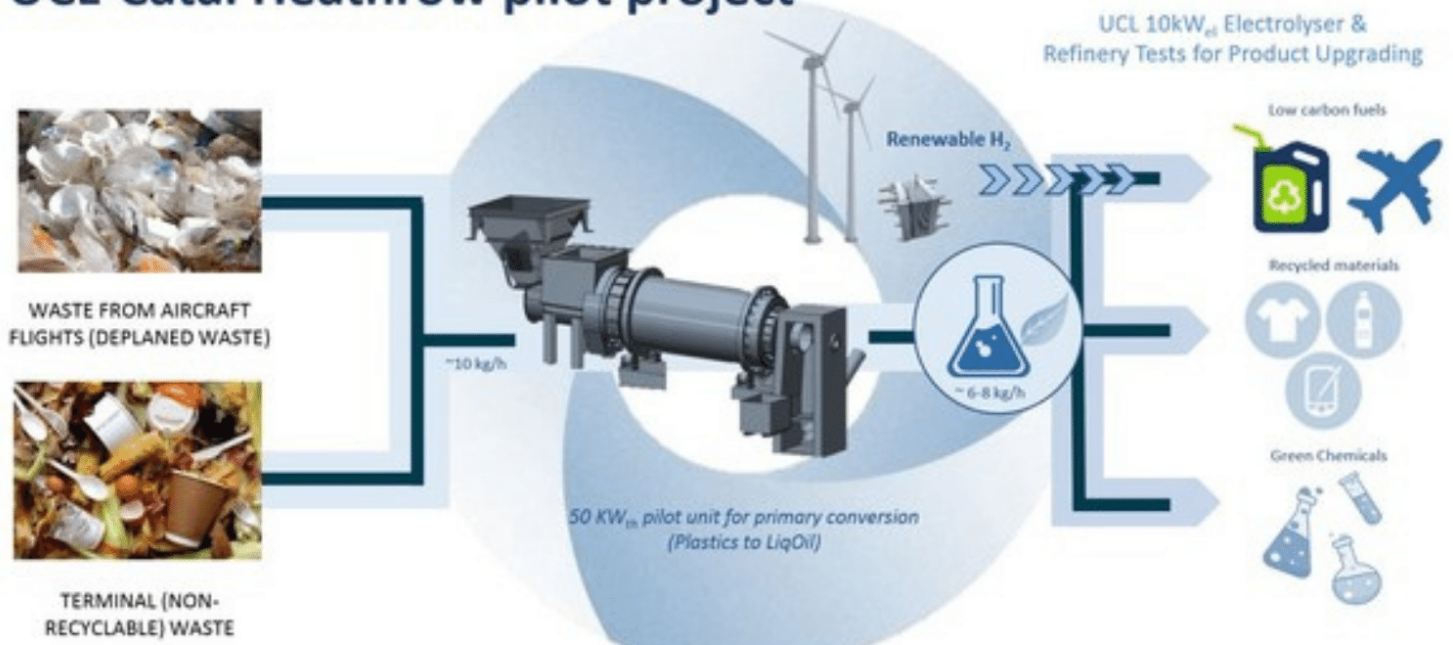


UCL-Catal Heathrow pilot project



An on-site, dedicated Research and Development unit is piloting new methods of recycling plastic | Photo source [Heathrow/UCL](#)

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HEATHROW EXPERIMENTS WITH TURNING PLASTIC WASTE INTO NEW PRODUCTS

 TRAVEL & TOURISM

A pilot recycling unit is being tested with the goal of transforming waste into items like new uniforms, furniture and jet fuel

Spotted: One of the world’s busiest airports, Heathrow, currently recycles around half of its waste. When international travel restarts after worldwide lockdowns, the global volume of rubbish will increase as well. A project that began in 2019 is working to increase the airport’s rate of recycling to nearly 100 per cent. An on-site, dedicated Research and Development unit is piloting new methods of recycling plastic. Many types of waste that were previously incinerated, such as food packaging and plastic film, could instead become a series of new products, including staff uniforms, terminal furniture and jet fuel.

The recycling unit was created by a partnership between Sheffield’s catalytic processes experts Catal, and researchers from University College London. The new process could prevent up to 5,000 tonnes of waste from ending up in landfill every year. Rubbish is returned to its original state as oil before the liquid is refined. When combined with renewable hydrogen, the resulting material can be turned into new, low-carbon products.

Scientists estimate the initial rate of return on the recycling will be five to eight kilograms of oil for every 10 kilograms of waste. The R&D team is focusing its developmental work on producing commercially available units for use at other facilities by 2025.

From [hydrogen-powered planes](#) to [terminal furniture](#) made entirely from recycled materials, many airports and airlines are seeking ways to operate more sustainably. A significant challenge lies in

scaling up the innovations fast enough to keep emissions at a level that meets climate change deadlines.

Written by: Keely Khoury

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Email: massimiliano.materazzi.09@ucl.ac.uk

Website: ucl.ac.uk

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Takeaway:

With the world's top 10 busiest airports all serving more than 75 million passengers a year, the volume of rubbish produced is staggering. Even recycling half of that waste still leaves a vast amount of what ultimately becomes pollution. It is encouraging to see larger scale innovations beginning to be piloted at airports around the world. Like cities, airports can use holistic approaches to resource management to reap surprising rewards, as interconnected benefits (and challenges) reveal new ideas and potential for further improvements.