

24 July 2023

International Airlines Group announces investment into Nova Pangaea Technologies to drive UK-sourced Sustainable Aviation Fuel

- **Investment into Nova Pangaea Technologies (NPT) announced by International Airlines Group is in addition to its \$865 million commitment to SAF;**
- **NPT are a cleantech company developing advanced biofuels used to produce Sustainable Aviation Fuel from non-food agricultural waste and wood residues;**
- **Investment will support delivery the first commercial plant of its kind in the UK;**
- **IAG was the first European airline group to commit to the use of 10% SAF by 2030.**

International Airlines Group (IAG), the parent company of Aer Lingus, British Airways, Iberia, Vueling and LEVEL —has today announced an investment into Nova Pangaea Technologies (NPT), an innovative Teesside-based cleantech company whose technology is a crucial pathway to the production of Sustainable Aviation Fuel (SAF).

NPT's innovative technology converts agricultural waste and wood residue feedstocks into second-generation bioethanol, which can then be processed into SAF.

IAG's investment will progress the development of 'NOVAONE', NPT's first waste-to-fuel commercial-scale production facility, and the UK's first of its kind. Construction is expected to begin later this year, with the facility producing biofuels by 2025, creating major employment opportunities in the North-East.

NPT is one of several companies in the UK preparing to contribute towards the country's domestic SAF production, which would help the industry decarbonise. The UK's SAF mandate requires at least 10% jet fuel to be made from sustainable feedstocks by 2030. This represents 1.2 million tonnes of fuel (1.5 billion litres). Total global production of SAF in 2022 was estimated by IATA to be 450 million litres at a maximum (300-450 million litre range). This means that total global supply would have to more than triple just to meet the UK's mandate. Facilities like the one Nova Pangaea Technologies is constructing in Teesside will be vital in meeting this demand.

IAG also plans to harness NPT's technology to support the decarbonisation of the other airlines in its group. The project is part of IAG's investment programme in SAF, which at the end of 2022 amounted to \$865 million in future SAF purchases and investments (based on assumed energy prices), with agreements in place for 250,000 tonnes of SAF, 25% towards its target of one million tonnes by 2030. This comes as IAG seeks to secure further UK SAF supply ahead of the introduction of the UK Government's SAF mandate, which is expected to be introduced from 2025.

IAG was the first European airline group to commit to the use of 10% SAF by 2030, and its intention to be net zero by 2050.

Luis Gallego, IAG's CEO, said:

"Sustainable Aviation Fuel is the only realistic option for long haul airlines to decarbonise, which is why investment in this area is so critical."

“At IAG, we have set a goal to use 10% SAF by 2030. And we are not just buying SAF, we are willing to invest in developing the industry, but we need governments in the UK and Europe to act now to encourage further investment.”

Sarah Ellerby, Chief Executive of Nova Pangaea Technologies, said:

“This is a transformational milestone, and a real endorsement of the crucial work Nova Pangaea Technologies is doing. We are delighted to be adding IAG – one of the foremost names in the aviation industry - to our shareholder register.

“Our facility will be the UK’s first commercial plant of its kind, and it will play a crucial role in decarbonising the aviation sector, as well as providing local employment opportunities. We are confident of beginning construction later this year and producing second-generation biofuels by 2025.”

-Ends-

Notes to Editors:

Second generation biofuels: Unlike other methods of ethanol production, NPT’s REFNOVA process creates second generation biofuels which is produced from residual and waste products, as opposed to first-generation biofuels which are produced from crops.

NPT’s technology is feedstock agnostic, which de-risks their supply chain and future proofs the production of second-generation ethanol. Residues from sawmills and forestry operations will come from UK sawmills and include sawdust and other wood trimmings. Agricultural waste, including wheat straw and corn stover, are mostly left on the fields after harvests and used for fodder or landfill material.

About IAG

International Airlines Group (IAG) is one of the world’s largest airline groups with 558 aircraft, directly connecting the UK to 334 destinations in 81 countries. Its leading airlines in Spain, the UK and Ireland include Aer Lingus, British Airways, Iberia, Vueling and LEVEL.

In the UK and Europe IAG supports 618,000 jobs directly or indirectly and through the spending of the travellers carried. This activity contributes a total of €72.5bn to the UK and EU economy combined. (source: IAG PwC report 2023).

About Nova Pangaea Technologies

Nova Pangaea Technologies (NPT) is a cleantech company that has created a revolutionary process, converting wood residues and agricultural waste into advanced biofuels and other bio products, some of which are then used to produce Sustainable Aviation Fuel (SAF), a crucial tool in the effort to decarbonise flight.

Based in Teesside, NPT has gained significant momentum in recent years, securing millions of pounds worth of private investment and public funding. NPT’s innovative REFNOVA process also produces the co-product biochar, a natural carbon sink which can be used as soil enhancement.

Construction at NOVAONE, NPT's commercial-scale production site, is expected to begin by the end of 2023, and the facility is due to be producing fuels by 2025. The development is set to create major employment opportunities, supporting the decarbonisation of the aviation industry, and helping the UK meet its wider net zero targets.

British Airways: Project Speedbird

In 2021, Nova Pangaea Technologies (NPT) announced the launch of 'Project Speedbird' - a partnership with British Airways and LanzaJet, in which NPT would be providing bioethanol feedstocks to be processed into SAF for British Airways by a dedicated SAF plant using LanzaJet's patented technology. The initiative was launched to develop cost-effective second-generation SAF (waste and residue-based) for commercial use in the UK.

Project Speedbird would produce 82,000 tonnes of SAF per year, with British Airways intending to purchase all SAF produced at the facility to help power some of its flights. The SAF produced at the facility would reduce CO2 emissions, on a net lifecycle basis, by 230,000 tonnes per year. This is the equivalent of approximately 26,000 British Airways domestic flights*. (*Based on the calculated average UK domestic route from 2019 data).