

Brussels Airport, 25 November 2021

Brussels Airport's Stargate project for greener aviation officially launched

Brussels Airport's Stargate project, which has received a grant within the European Green deal, has been officially launched. In the next five years, Brussels Airport will be working with a consortium of 21 partners on some 30 concrete projects to make aviation and airports greener and more sustainable. Stargate includes building a biofuel blending installation at the airport, electric ground handling material and testing a new innovation that will make engine test runs much quieter.

At the end of 2020, following a call of the European Commission, Brussels Airport took the initiative to submit an ambitious programme ("Stargate") together with 21 partners, including three European airports, airlines, mobility and knowledge institutes and local authorities, to develop innovations and initiatives for an accelerated transition to greener aviation. Brussels Airport's Stargate project was selected and has received a 24.8 million euros grant within the European Green Deal to implement these projects in the coming years.

"With Stargate we want to show, together with our partners, that a more sustainable aviation is possible, and that we want to take the lead in this. Through partnership and innovation, we want to address the climate challenges we are facing. Within the Stargate project, we will develop biofuels for aircraft on the airport's grounds, make the ground operations more sustainable, and turn airports into intermodal hubs, where alternatives for the car are even more accessible. By exchanging knowledge and experience with our partners, we can learn from each other, and our fellow airports will be the first to roll out the specific actions that proved successful at Brussels Airport. And within Stargate we are also looking at opportunities to cooperate with the local residents, for example regarding renewable energy. In addition, the initiatives around the modal split will of course have a positive impact for them as well.", says Arnaud Feist, CEO of Brussels Airport.

Innovative solutions for a more sustainable aviation

Stargate includes about thirty small and large projects, focused on three main areas:

- a **further decarbonisation** of the airport operations,
- improving the local environmental quality and
- improving the modal split.

In the area of decarbonisation, an increasing focus will be on electric taxing, electric ground handling material and ground handling material fuelled by hydrogen. DHL, one of our partners in the consortium, has purchased the first electric ground handling equipment in order to test it in practice.



Next to that, a blending installation for biofuel will be built at Brussels Airport. Brussels Airport will thus become the first airport in the world where kerosene is blended with biofuel on site. This will allow a systematic increase in the proportion of biofuel. The airlines within Stargate (Brussels Airlines, TUI and DHL) will be the first to fly on this fuel. A companion to this project is the development of an electric fuel truck and the collection of waste fats and oils that can be used for that biofuel.

For the production of energy, we will look into how we can increase the supply of renewable energy and we will investigate the possibilities to cooperate with neighbouring municipalities. This could involve, for example, an additional solar panel park, and there will also be a feasibility study for the construction of a bio-digester at the airport, where organic waste from the airport companies and, if possible, the neighbouring municipalities can be converted into energy.

Regarding the local environmental quality, the focus will be on refining existing techniques and on innovation. This includes improving the flight efficiency and green landings, a landing technique that ensures lower fuel consumption, lower emissions and less noise. In addition, work is taking place on a new innovation that could reduce the ground noise and emissions during engine test runs.

Finally, Stargate also aims at improving mobility at and around airports and stimulating alternatives to the car, by, for example, testing solutions for the luggage of passengers arriving by train and optimising the accessibility of the train station together with SNCB. There will also be a focus on digitisation and ways of making mobility information more centralised and fully accessible for the passengers.

Diverse European consortium with three fellow airports

For Stargate, Brussels Airport is working with 21 partners from all over Europe, including three other airports: Athens International Airport, Budapest Airport and Toulouse Blagnac Airport. These airports are already CO2-neutral for their own operations, as is Brussels Airport, and each has their own accents in the area of sustainability. The airports will be able to exchange their knowledge and experience within Stargate, and what proves successful at Brussels Airport will also be rolled out and deployed at these fellow airports.

Athens International Airport's CEO, Dr. Yiannis N. Paraschis, stated: "The need to respond to the climate emergency has never been more evident and the industry is responding to the challenge. Through Stargate we aim to accelerate the adoption of sustainable aviation fuel, zero emission vehicles, green hydrogen, and other solutions, while contributing from our own expertise gained from over a decade of carbon reduction, in particular the implementation of large-scale solar projects within the airport fence. It will also provide an opportunity to harness the power of digitization to improve environmental performance, not only in emissions but also issues such as circular economy and noise. Athens International Airport is both delighted



and inspired to join its Stargate partners to take on these challenges and deliver a more sustainable future for air travel."

"In line with its sustainability objectives, Budapest Airport joined the Stargate project, as part of which the airport operator's task is to develop and put in place a cloud-based, paper-free air cargo handling system, together with other sustainable projects, concerning mainly the terminal, energy efficiency, sustainable aviation fuel and traffic developments. Budapest Airport has taken numerous real steps in order to continuously reduce the airport's carbon footprint and we plan to reduce harmful greenhouse gas emissions to zero by 2035, a goal to which the Stargate project and the involved sharing or experiences and knowledge will contribute greatly." says Chris Dinsdale, CEO of Budapest Airport.

"We are very proud to be a member of the Stargate consortium under the leadership of Brussels airport. With three major European airports, we will collaborate on very concrete initiatives to accelerate the energy transition and, more broadly, to ensure the sustainable development of our business. Stargate will also support our efforts to seamlessly integrate our airport into its territory and local environment. The current context confirms the relevance of our action in favour of the decarbonization of air transport. The strength of the Stargate collective, diversified and complementary, will leverage the resources dedicated to reaching this ambition, which is also our Purpose." says Philippe Crébassa, CEO of Aèroport de Toulouse-Blagnac.

The other partners in the consortium are Brussels Airlines, TUI, DHL Aviation, Engie Laborelec, Air Cargo Belgium, Skytanking, skeyes, To70, Lux Mobility, University of Hasselt, expertisecentre Erasmus UPT, IES R&D, Sopra Steria, Province of Flemish Brabant, Quatra, the Flemish Institute for Technological Research (VITO), NMBS and the Flanders Institute for Logistics.



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