

PROJECT

GREENPORT2050

Clean Sky 2 Technologies for Greener Airports by 2050

Funding: European (Horizon 2020)

Duration: Jan 2021 - Dec 2023

Status: Ongoing

Total project cost: €449,710

EU contribution: €449,710



Call for proposal: H2020-CS2-CFP11-2020-01

[CORDIS RCN : 232517](#)

Objectives:

GREENPORT2050 quantifies the environmental impact at airport level of technologies developed in Clean Sky 2 for fixed-wing aircraft. This impact includes noise on the ground and population exposed to noise, emissions and air quality, and individual and societal risk. Quantifications are carried out up to 2050 for existing European airports and a generic airport. Relevant improvements in airport operations from SESAR/SESAR 2020 are taken into account.

Methodology:

GREENPORT2050 conveys target stakeholders' impact through customised innovative communication means, such as a noise simulator enabling people to experience sound and visuals of an aircraft fly-over in a virtual reality environment, and an airport game addressing the link between air traffic volume and environmental impact using Clean Sky 2 aircraft versus reference aircraft.

GREENPORT2050 implements and expands the proven concept of the Clean Sky 2 TE project CLAIRPORT:

1. For communication it determines stakeholders who are impacted by its results; and
2. It sets the quantification process. This process compares, for each airport and timescale, the environmental performance of two scenarios: one is a flight schedule with reference aircraft and the other is the same flight schedule with Clean Sky 2 aircraft replacing their reference to assess the full potential of Clean Sky 2. In each case air traffic is realistically simulated and the simulation results are input to noise, emission, air quality and third-party risk models.

GREENPORT2050 expects to impact Clean Sky 2 TE (by complementing the other assessments), Clean Sky 2 JU and Clean Sky 2 Members (by monitoring Clean Sky 2 achievements), EC and EU Member States (by assessing the level of success towards the ACARE 2050 and Horizon 2020 goals); research community (by indicating opportunities for further research), and local community (by making Clean Sky 2 benefits tangible).

Parent Programmes:

[H2020-EU.3.4. - Horizon 2020: Smart, Green and Integrated Transport](#)

Institute type: Public institution

Institute name: European Commission

Funding type: Public (EU)

Other programmes: JTI-CS2-2020-CfP11-TE2-01-12 Airport level assessments for fixed wing aircraft

Lead Organisation:

Stichting Nationaal Lucht En-Ruimtevaartlaboratorium

Address:

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Organisation Website:

<http://www.nlr.nl>

EU Contribution: €449,710

Technologies:

Aircraft operations and safety
Future-proof airport

Development phase: Validation

Aircraft operations and safety
Air quality measurements

Development phase: Demonstration/prototyping/Pilot Production

Aircraft noise measurements"

Development phase: Demonstration/prototyping/Pilot Production

STRIA Roadmaps: Other specified

Transport mode: Air transport

Transport sectors: Passenger transport, Freight transport
Societal/Economic issues, Environmental/Emissions

Transport policies: aspects

Geo-spatial type: Other