ClimOP

CLIMATE ASSESSMENT OF INNOVATIVE MITIGATION STRATEGIES TOWARDS OPERATIONAL IMPROVEMENTS IN AVIATION

Funding: European (Horizon 2020)
Duration: Jan 2020 - Jun 2023
Status: Ongoing
Total project cost: €3,064,273
EU contribution: €3,064,273

Call for proposal: H2020-MG-2019-SingleStage-INEA
CORDIS RCN: 226571

Objectives:

Air Transport has for a long time been linked to environmental issues like pollution, noise and climate change. Aviation emissions, such as carbon dioxide (CO2), water vapour (H2O), nitrogen oxides (NOx), soot and sulphate aerosols, alter the concentration of atmospheric Greenhouse gases and trigger the formation of contrails and cirrus clouds. The share of aviation amongst all anthropogenic CO2 emissions is about 2% (ATAG).

However, studies estimate the climate impact from aviation for the year 2005 including non-CO2 emissions to roughly 5% of the total anthropogenic radiative forcing (Lee et al., 2010). Considering the projected growth of air traffic for the next decades of 5% (RPK) per year, aviation’s share of the total anthropogenic climate impact is expected to increase further. Consequently, intergovernmental organizations, aircraft manufacturers and operators and the research community are increasingly focusing on different technological, operational and regulatory climate impact mitigation options.

In this framework, ClimOP aims to identify, evaluate and support the implementation of mitigation strategies to initiate and foster operational improvements which reduce the climate impact of the aviation sector. Operational improvements correspond to any operational measure or action taken through time in order to improve the current provision of aviation operations. The overall objective of ClimOP is to define actions and advice for policymakers by proposing a set of most promising and harmonized mitigation strategies.

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)

Lead Organisation:

Deep Blue Srl
Address: Via Ennio Quirino Visconti 8
193 Roma
Italy
EU Contribution: €423,625

Partner Organisations:
Stichting Nationaal Lucht En-Ruimtevaartlaboratorium

Address:
Anthony Fokkerweg 2
1059CM AMSTERDAM
Netherlands

Organisation Website:
http://www.nlr.nl

EU Contribution: €569,860

Istanbul Okan Universitesi

Address:
TEPEOREN MEVKII ISTANBUL PARK
34959 ISTANBUL
Turkey

Organisation Website:
http://www.okan.edu.tr

EU Contribution: €236,250

Societa Per Azioni Esercizi Aeroportuali Sea Spa

Address:
Presso Aeroporto Linate
20090 Segrate - Milano
Italy

Organisation Website:
http://www.sea-aeroportimilano.it

EU Contribution: €206,100

Deutsches Zentrum Fuer Luft - Und Raumfahrt Ev

Address:
Linder Hoehe
51147 KOELN
Germany

Organisation Website:
http://www.dlr.de

EU Contribution: €697,120

Iata Espana Sl Sociedad Unipersonal

Address:
PASEO DE LA CASTELLANA 95, 5
28046 MADRID
Spain

Organisation Website:
http://www.iata.org

EU Contribution: €156,875

Amigo Srl

Address:
VIA FLAMINIA 48
Technische Universiteit Delft

Address:
STEVINWEG 1
2628 CN DELFT
Netherlands

Organisation Website:
http://www.tudelft.nl

EU Contribution: €517,568

Technologies:
Aircraft operations and safety
Optimization of air traffic operations for reduced environmental impacts

Development phase: Research/Invention

STRIA Roadmaps: Low-emission alternative energy for transport
Transport mode: Air transport
Transport sectors: Passenger transport, Freight transport
Transport policies: Environmental/Emissions aspects
Geo-spatial type: Other