



Horizon 2020 Green Deal Call

Topic 5.1 on Green Airports and Ports

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Green airports and ports as multimodal hubs for sustainable and smart mobility



Policy context

The European Green Deal Communication (Dec-2019)

- "Transport should become drastically less polluting"
- "Accelerating the shift to sustainable and smart mobility"
- "Ramp-up the production and deployment of sustainable alternative transport fuels"
- Aviation: "air quality should be improved near airports by tackling the emissions of pollutants by aeroplanes and airport operations"
- Shipping: "[the Commission] will take action in relation to maritime transport, including to regulate access of the most polluting ships to EU ports and to oblige docked ships to use shore-side electricity."

Sectoral / policy perspective

- Decarbonisation progress in Road / Rail (e.g. electrification)
- Aviation: 14% of EU transport GHG emissions (rising), rising traffic by 2050
- Shipping: 13% of EU transport GHG emissions (rising), 90% of global trade
- Further policy action foreseen in aviation and waterborne transport
- Significant and immediate impact required by 2025-2030

H2020 Green Deal Call 2020

- Green airports and ports as multimodal hubs for sustainable and smart mobility

Note: The prevailing text for Green Deal Call Topic LC-GD-5-1-2020 is contained in the Horizon 2020 Work Programme 2018-2020, as adopted by European Commission Decision in September 2020.

Green airports and ports as multimodal hubs for sustainable and smart mobility



Proposed activities

- Large-scale, real-life high TRL (6 or above) demonstrations of green airports, maritime and inland ports, of different sizes, across Europe
- Pilot/demo plants of zero-emission energy production and supply at airports and ports (electricity, green hydrogen, sustainable alternative fuels)
- Supply systems, storage, distribution and power/re-charging/alternative re-fuelling infrastructure for aircrafts, ships and other vehicles / purposes
- Integration with green and smart operations and logistics, innovative construction, dredging, infrastructures, effective and green land/sea/river use
- Smart tools for optimisation of passenger/freight traffic flows into/out of airports and ports, from/to city and for inter-modal connections/modal shifts
- Non-technological framework conditions, new multi-actor governance and investment analyses

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Green airports and ports as multimodal hubs for sustainable and smart mobility



Targeted impacts

- Accelerated deployment of sustainable alternative fuels (e.g. biofuels, green hydrogen) and electromobility for aviation, shipping and other transport modes
- Clean energy / fuel production, distribution and supply (e.g. green hydrogen, electricity, biofuels), with re-fuelling and re-charging capabilities for multiple vehicles/purposes
- Zero-emission ports and airport operations and improved air quality by 2030
- Reduced emissions in aviation, shipping, multimodal mobility for passengers/freight
- Energy-efficient and smart operations and buildings, logistics, inter-modal connections and modal shifts
- Reduced emissions for cities, urban mobility, better city integration for ports/airports

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Key features for Green Airports and Ports

Sustainable

- Green energy production, distribution, supply
- Use of clean energy for transport and other purposes
- Green hydrogen, electricity, biofuels, sustainable alt. fuels

Smart

- Connected and automated vehicles, cranes, etc.
- Dynamic traffic optimisation into/out of airport/port, from/to city or nodes
- Smart operations, logistics, inter-modal connections/modal shifts

Multimodal

- Aviation, Maritime, Inland Waterway Transport
- Road, Rail, multimodal connections/modal shifts
- System-wide door-to-door multimodal mobility for passengers/freight

Other

- Green logistics, infrastructures, energy-efficient buildings
- Links with cities, urban environment, urban mobility
- Biodiversity, circular economy, effective land/sea/river use

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Call topic modalities

Action type

Innovation Action (IA)

Project duration

4-5 years

Consortia

Including 1 leading "Lighthouse" and max. 3 "Fellow" airports/ports

Evaluation

Potential funding for at least 2 proposals per area A) Green Airports, B) Green Ports

Budget

EUR 100 million overall – EUR 15-25 million per proposal

Call model

Single-stage

Call deadline

26 January 2021

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Thank you for your attention

