



Aviation & Climate Change State Action Plan



ENSURING SUSTAINABLE AIR TRANSPORT

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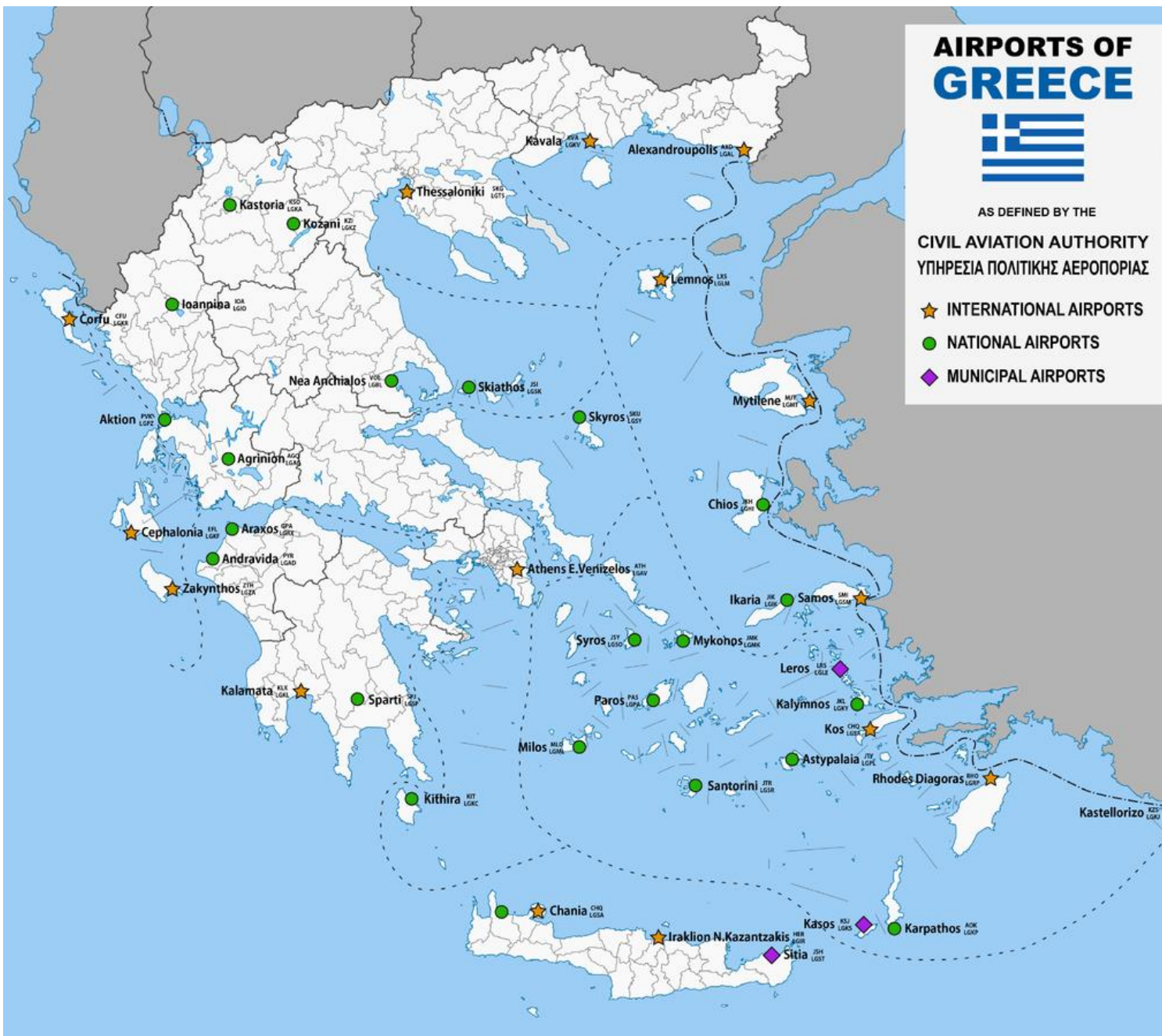


Hellenic Civil Aviation Authority (HCAA)

- ✓ **HCAA** has been established by National Law 4757/2020 as **Independent Civil Aviation Authority** and started its operation on January of 2022 with headquarters in Athens International Airport.
- ✓ Supported by the Ministry of Infrastructure and Transport, enjoys operational independence and financial autonomy. Subject to parliamentary control, submits annual report of its activities to the **Minister of Infrastructure and Transport and Hellenic Parliament**.
- ✓ Responsible for **national aviation strategy**, exercising **supervision** over the operation of civil aviation, the **implementation of national and EU law** and international conventions. Performs the duties of the Regulatory Authority of economic activity in the field of air transport, air traffic services and airports.
- ✓ It supervises the operation of the **HASP - Hellenic Aviation Service Provider**.

Hellenic Civil Aviation Authority (HCAA)

- Greece like all ECAC States share the view that the environmental impacts of the aviation sector must be mitigated. Recognize the value of each State preparing and submitting to ICAO an **updated State Action Plan for CO2 emissions reductions** as an important step towards the achievement of **ICAO Long-term Aspirational Goal (LTAG)** for international aviation of **net-zero carbon emissions by 2050**
- Fully supports ICAO's on-going efforts to address the full range of those impacts, including the key strategic challenge posed by **climate change**, for the sustainable development of international air transport.
- As committed by the 2016 Bratislava Declaration, Greece supports **CORSIA** implementation and voluntarily participate in CORSIA scheme, since 2019 from the start of its implementation.



In Greece, there are **40** aerodromes, designated as International, National and Municipal Airports.

They are categorized according to their ownership status, services provided, organisational structure etc.

Main Airport Hubs are:

- Athens International Airport (IATA: ATH, ICAO: LGAV) serves Athens and Attica region
- Thessaloniki Intl Airport (SKG/LGTS)
- Heraklion Intl Airport (HER/LGIR)
- Chania Intl Airport (SKG/LGTS)
- Rhodes Intl Airport (SKG/LGTS)
- Corfu Intl Airport (SKG/LGTS)
- Kos Intl Airport (KGS/LGKO)

https://en.wikipedia.org/wiki/List_of_airports_in_Greece

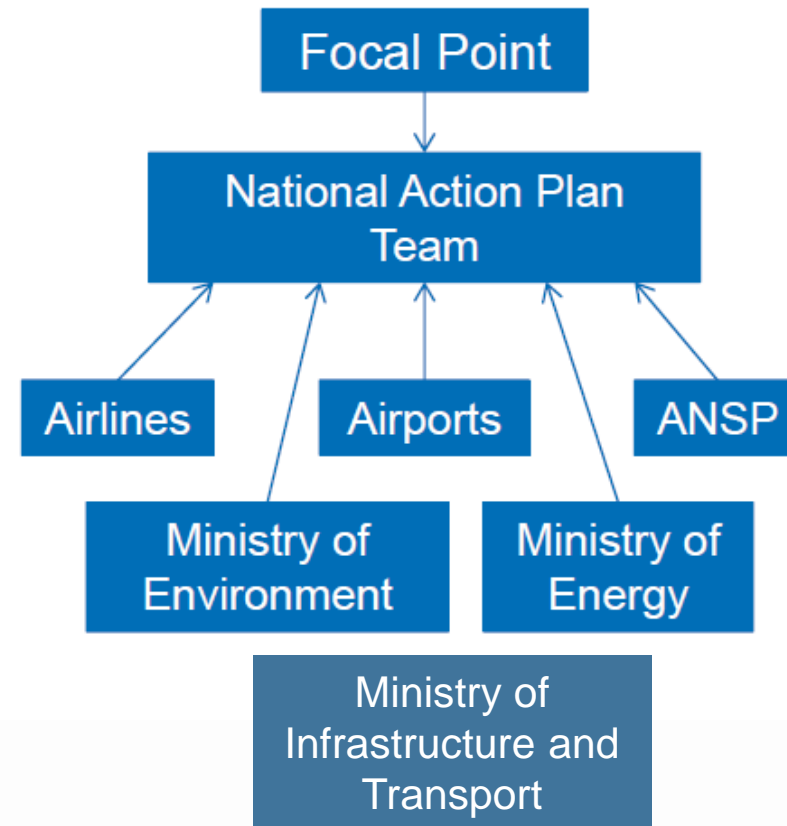
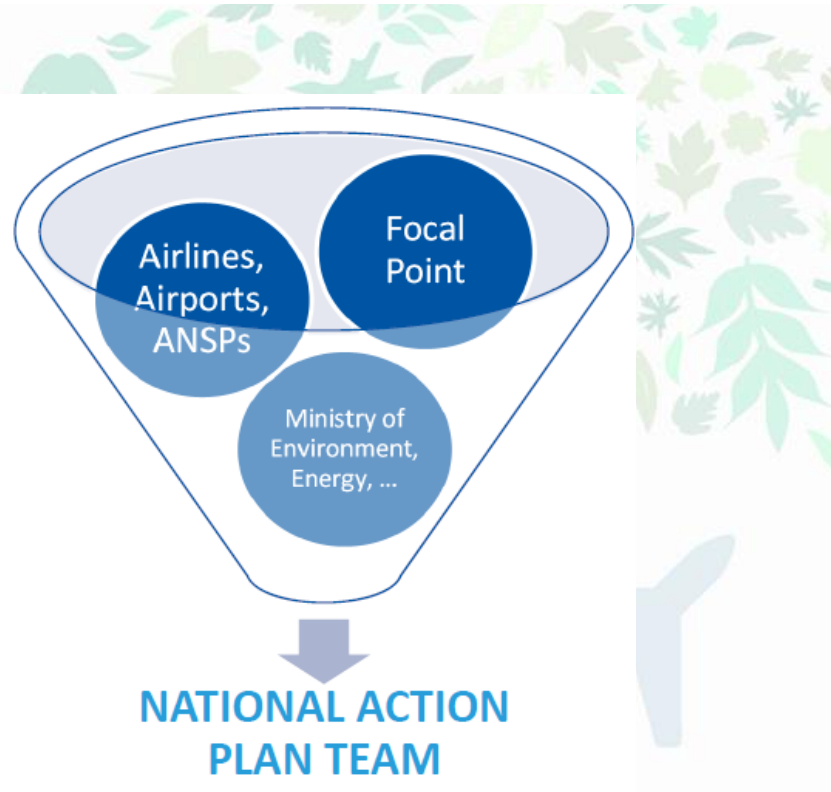
Greek State Action Plans submitted to ICAO

State Action Plans are a voluntary planning and reporting tool for States to communicate information on their activities to address CO₂ emissions from international civil aviation



Greek State Action Plans submitted to ICAO

Greece designated a State Action Plan Focal Point and communicated their contact information to ICAO. The **Focal Point** coordinated with ICAO, established a Nation Action Plan Team, developed the State Action Plan and submitted the document to ICAO.



Greek Action Plan main structure

- In Europe, many of the State actions are being undertaken **collectively**, most of them led by the European Union legislation. These actions are reported in the European Section, where the involvement of Greece is described collectively.
- The **European section (SECTION 1 – Measures taken collectively in Europe)** presents a summary of the actions taken throughout the 44 States of the European Civil Aviation Conference (ECAC) to reduce CO2 emissions and provides an assessment of their benefit against an ECAC baseline. It also provides a description of future measures aimed to provide additional CO2 savings.
- **The National Section (SECTION 2 – National Actions in Greece)** presents the actions undertaken in Greece, by the State and by stakeholders, in order to reduce CO2 emissions from the aviation system, as well as future measures aimed at further CO2 reduction.

Greece supports European Aircraft related technology improvements and initiatives that include:

- **Clean Sky EU Joint Technology Initiative (JTI)** that aims to develop and mature breakthrough “clean technologies” in European Aviation.
- **Single European Sky ATM Research (SESAR)**, improvement and optimization of Air Traffic Management and infrastructure use within Europe, in particular through and beyond European borders through participation in international cooperation.
- **Improved Air Traffic Management** The European Union’s **Single European Sky (SES)** policy aims to transform Air Traffic Management in Europe, tripling capacity, halving ATM costs with 10 times the safety and 10% less environmental impact.
- **Economic/Market Based Measures (MBMs)** always has been strong supporters of a market-based measure scheme for international aviation to incentivize and reward good investment and operational choices (ETS, CORSIA implementation)

Greece participates in the EU Emissions Trading System (including UK-ETS & CH-ETS) & ICAO CORSIA system

EU ETS

- EU ETS Directive 2003/87/EC



UK ETS

- Greenhouse Gas Emissions Trading Scheme Order 2020.

CH ETS

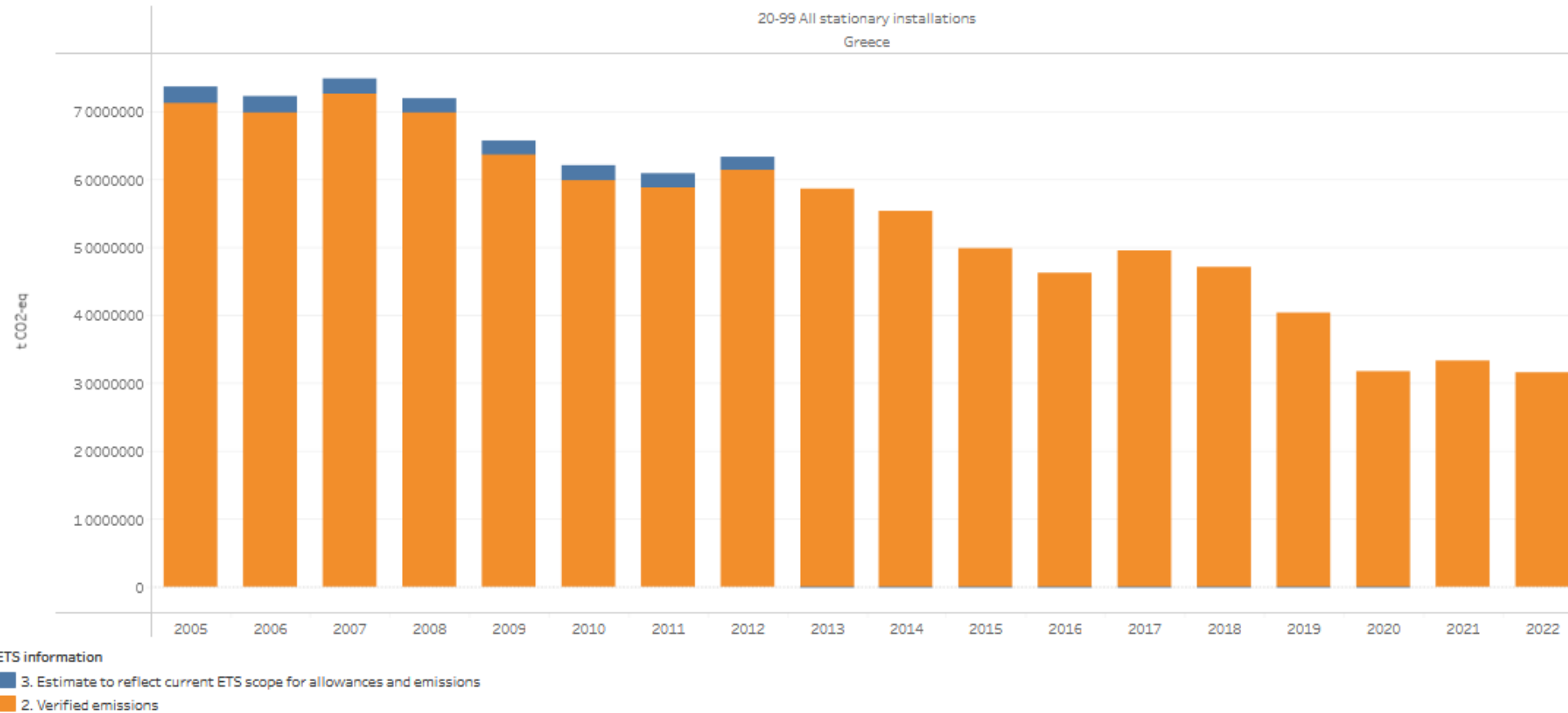
- Art. 46.d CO2 Swiss Ordinance & Annex 13.1.



In line with the European legislation and policy, Greece implements the EU Emissions Trading System (EU ETS) since 2005. Aviation emissions included since 2012

Emission Trading Data for the years 2006-2022 in Greece

Historical Emissions



Source: <https://www.eea.europa.eu/data-and-maps/dashboards/emissions-trading-viewer-1>

The National Energy and Climate Plan (NECP)

Reducing GHG emissions and environmental objectives

Total GHG emissions to be reduced by at least 40% compared to 1990 (reduction rate >42%)

- to attain emission reduction objectives in the individual sectors within and outside the emissions trading system which are equivalent to the respective core EU objectives
- to attain quantitative targets for reducing national emissions of specific air pollutants
- to shut down lignite power plants by 2028

Increasing the RES share in energy consumption

The RES share in gross final energy consumption to reach at least 35%

- RES share in gross final electricity consumption to reach at least 60%
- RES share in covering heating and cooling needs to exceed 40%
- RES share in the transport sector to exceed 14% (19% attained), using the relevant EU calculation methodology

Enhancing energy efficiency

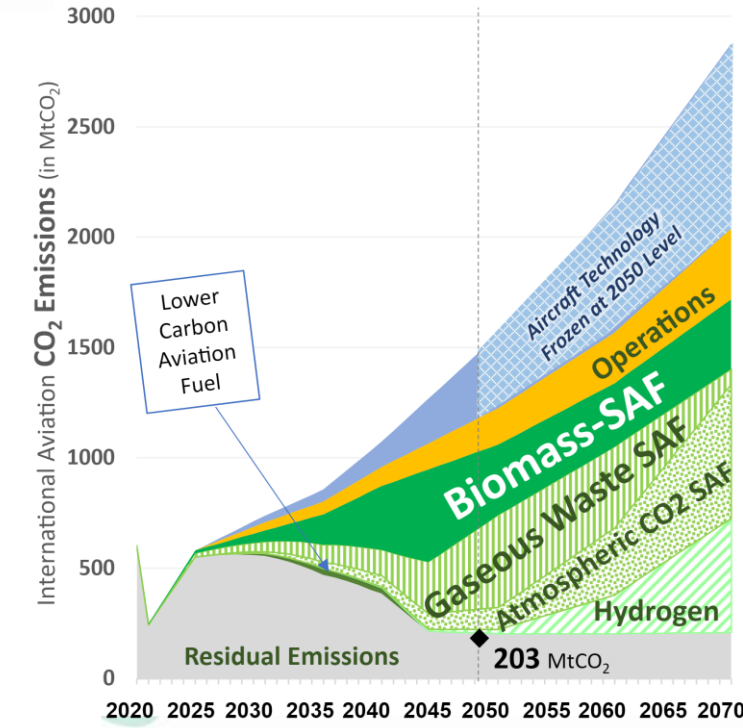
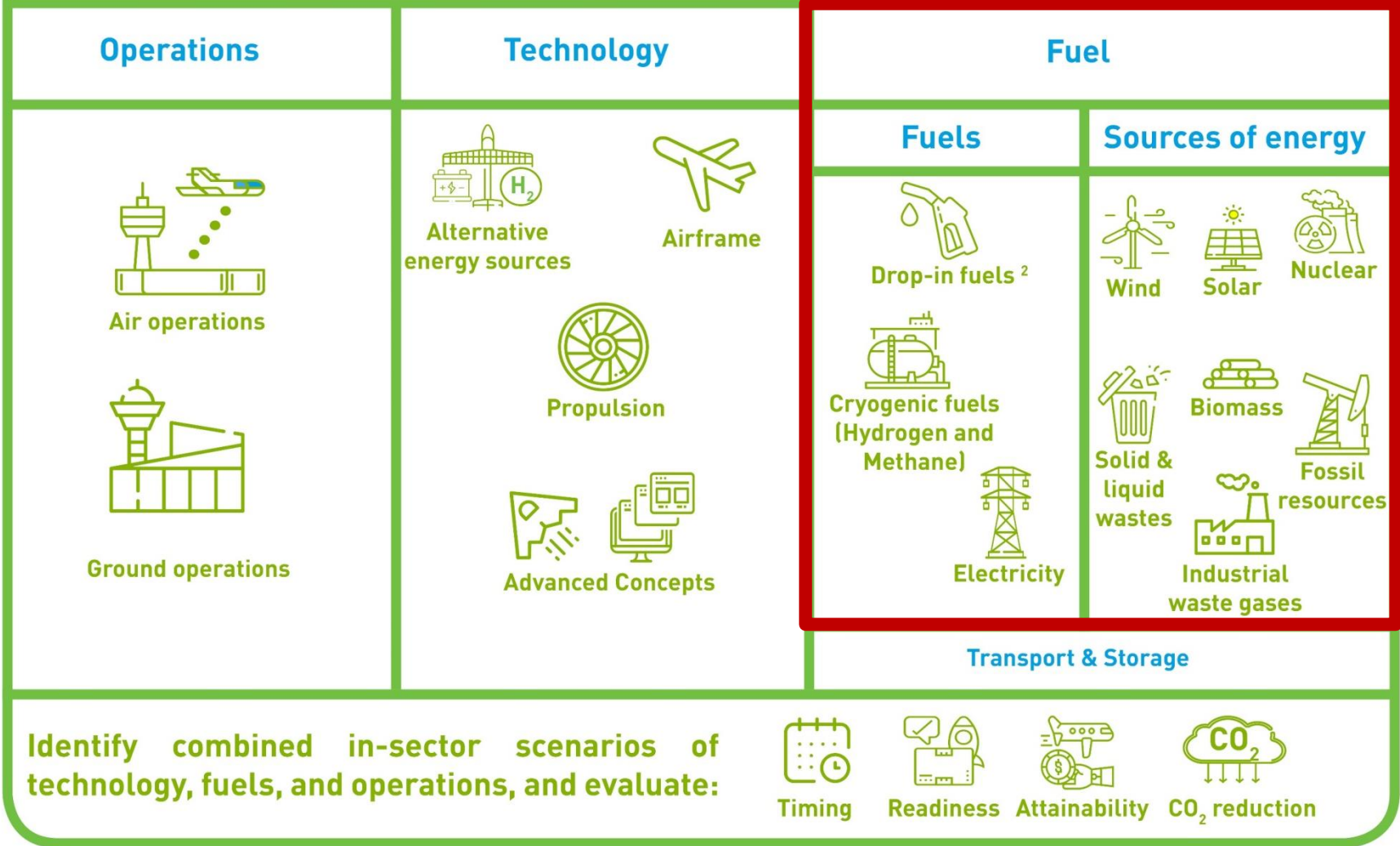
To achieve an improvement in energy efficiency by 38%, using the EU methodology

- final energy consumption not to exceed 16.5 Mtoe in 2030
- primary energy consumption not to exceed 21 Mtoe in 2030
- to attain cumulative energy savings of 7.3 Mtoe in the period 2021-2030**
- energy renovation to cover, on an annual basis, 3% of the total surface area of the heated parts of central government buildings by 2030

- NECP is the Greek government's strategic plan for climate and energy issues, setting out a detailed roadmap regarding the attainment of European Union's energy and climate objectives by 2030.
- National energy and environmental objectives for the period 2021-2030 priorities and policy measures in respect of a wide range of development and economic activities intended to benefit Greek society, and therefore it is a reference text for the forthcoming decade.
- NECP is also directly linked to other national policies, such as waste management, circular economy and adapting to climate change.

Greece supports ICAO work and Initiatives for LTAG

ICAO WORK ON LONG-TERM ASPIRATIONAL GOAL¹





Here you will find more information on ACT-SAF Participants* and Initiatives.

87

States

Name of State

Γαβόν

Georgia

Ghana

Greece

Guatemala

Haiti

States

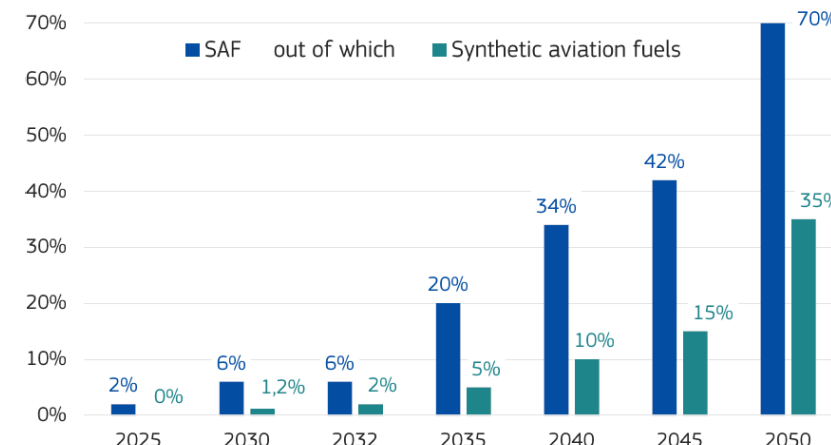
Acceptance to ... Pending Yes



Refuel Aviation Regulation



- The ReFuel EU Aviation Regulation includes mandatory shares of sustainable aviation fuels (SAFs) to be available at airports, starting at **2%** of overall fuel supplied by **2025** and reaching the **70% by 2050**.
- It also includes mandatory **RFNBOs sub-quotas** of 1.2% in 2030 all the way to 35% in 2050.



Aviation fuel suppliers

All aviation fuel suppliers supplying to Union airports



Union airports

≥ 800 000 passengers
 ≥ 100 000 tonnes freight
 Opt-in for airports below threshold, and those in outermost regions



Aircraft operators

> 500 passengers flights
 > 52 all-cargo flights
 Opt-in for other commercial flights and for non-commercial flights

Greek Air Operators Environmental Initiatives



Reduction of CO ₂ emissions per month					
350 Tons CO ₂ Fuel savings	800 Tons CO ₂ New software	50 Tons CO ₂ New lighter trolleys	40 Tons CO ₂ Required water quantity	450 Tons CO ₂ New aircraft seats	15 Tons CO ₂ Electronic documents

- + Launched a Sustainable Aviation Fuel (SAF) program to power its fleet with sustainable aviation fuel
- + Committed to the long-term sustainability goals of the aviation industry and is taking an active role to support various initiatives towards achieving net zero by 2050.
- + As part of its sustainability strategy, AEGEAN managed to significantly reduce its CO₂ emissions by investing in a large Airbus A320/321 neo fleet renewal program.

The positive environmental footprint of A320neo family aircraft, in relation to the previous generation of Airbus A320ceo family aircraft

Up to 23%
less CO₂ emissions per seat

50%
lower NO_x emissions levels

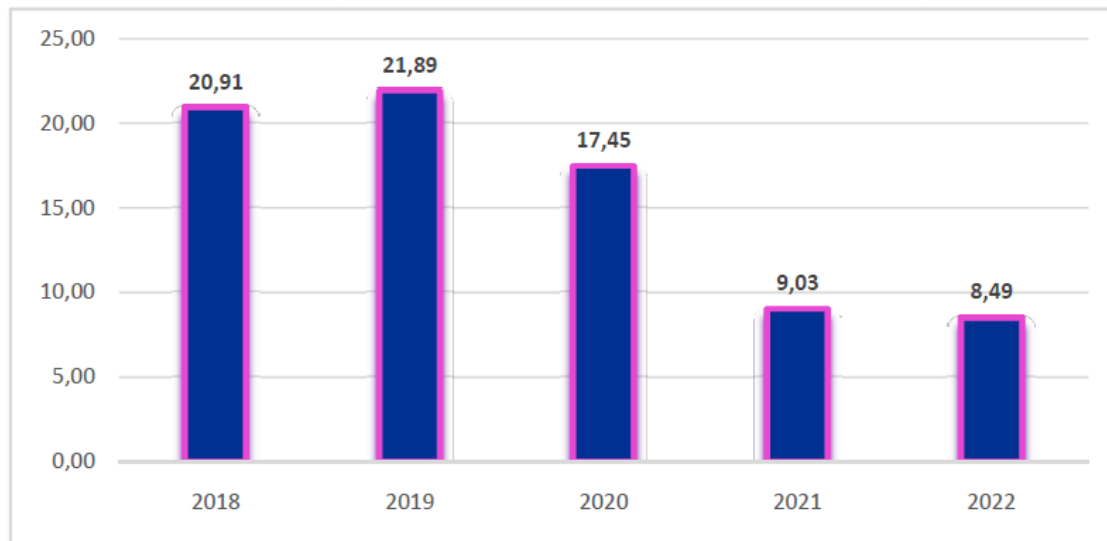
16%
16% less fuel consumption
+ up to 1 additional hour of flight, up to 4,600 km

50%
lower noise footprint

Greek Air Operators Environmental Initiatives



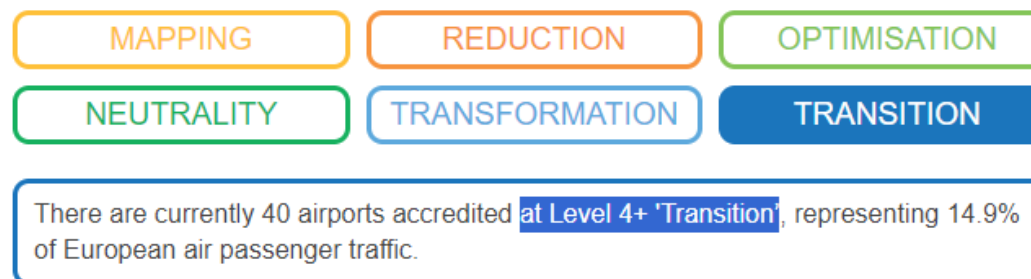
Figure 15. Average age of Sky Express fleet



- **SKY express** incorporated the highest environmental standards regarding air emissions, noise pollution and ground operations in its developmental strategy.
- Moreover, the company follows European and international climate trends in the sector to improve its performance, participates in relevant national and European consultations for the sustainable future of aviation.
- Started implementing the strategic target of **fleet renewal** in 2020, which is ongoing in 2022.
- On air emissions, the company introduced a wide range of continuous actions, such as: **new route optimization plans**, **aircraft weight reduction measures** and implementation of revised policies for **optimizing fuel consumption** resulting in reduced CO2 emissions.

Athens International Airport AIA

AIA played an instrumental role in helping shape the concept for **Airport Carbon Accreditation**. AIA was initially accredited at the Mapping level having mapped its carbon emissions from the following sources: Electricity consumption (from purchased electricity), Natural gas consumption (for heating purpose), Petrol, diesel and LPG consumption by AIA's vehicle fleet, Heating oil consumed by AIA's boilers, Diesel consumed by AIA's generators



Further to AIA's involvement in Airport Carbon Accreditation AIA also requires that **all Third Parties (airlines, ground handlers, caterers, retail, etc.) submit a carbon footprint to AIA** on an annual basis. Currently, more than 60 companies submit an annual carbon footprint.

AIA has attained the highest level of Airport Carbon Accreditation (Level 4+), as certified by the Airport Council International's (ACI) Airport Carbon Accreditation management programme.

CONCLUSION

- The Action Plan provides an **overview of past and future actions** decided both at European and national level in order to **mitigate climate change** and to develop a **resource efficient, competitive and sustainable aviation system**. The national actions presented in Section 2 of this Action Plan cover measures taken at state level by State authorities and by stakeholders of aviation industry.
- The Greek Government and Hellenic Civil Aviation Authority are fully committed to address the climate change impacts of commercial aviation and achieve CO2 emissions reductions through an **integrated strategy of technology, operations and policy framework**.
- Greece has already **achieved significant reductions in Green House Gas** emissions and energy efficiency improvements in the aviation sector over the past years, through public and private efforts, and is on a trajectory to continue that progress in coming years.