

12:00-12:45 Presentation:

## European Fuel Standard Project

**COPENHAGEN  
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CONFERENCE**  
25-26 March 2025 • Scandic Copenhagen



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# The European Aviation Fuel Standards Project

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**European Commission**

*Copenhagen Contrails Conference*

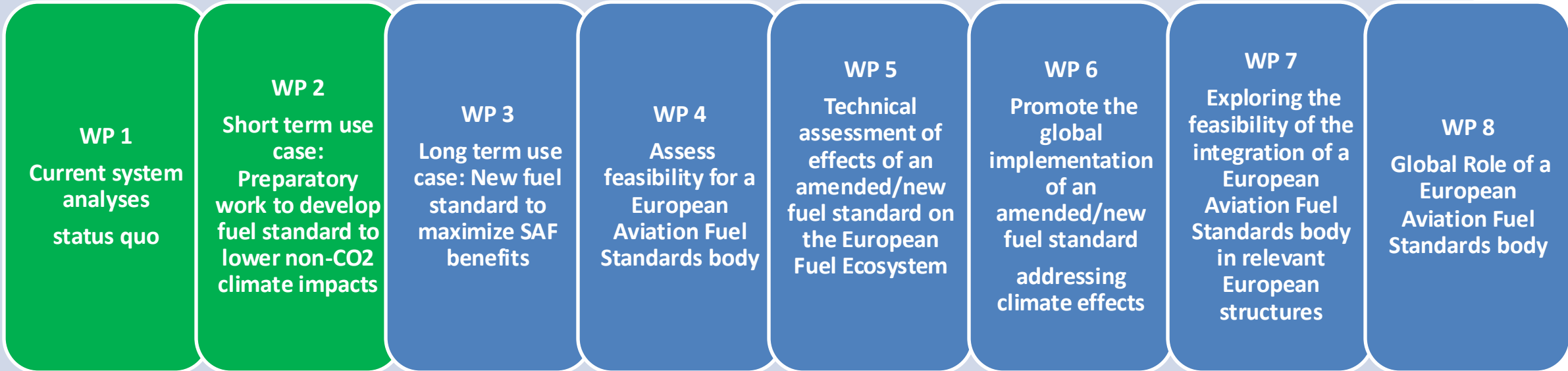
*26 March 2025*

# Project overview

Total estimated budget: EUR 1 990 000

Extension of the EAFSB project by two years until end 2027

Budget: + EUR 990.000



EASA is providing technical assistance to the European Commission to assess the feasibility and requirements for optimizing aviation fuel composition to reduce climate impact while ensuring the highest safety standards.

### Summary of the Action

# Jet Fuel as Enabler for Safe World Wide Air Travel

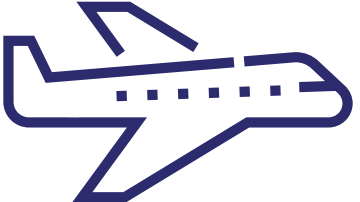
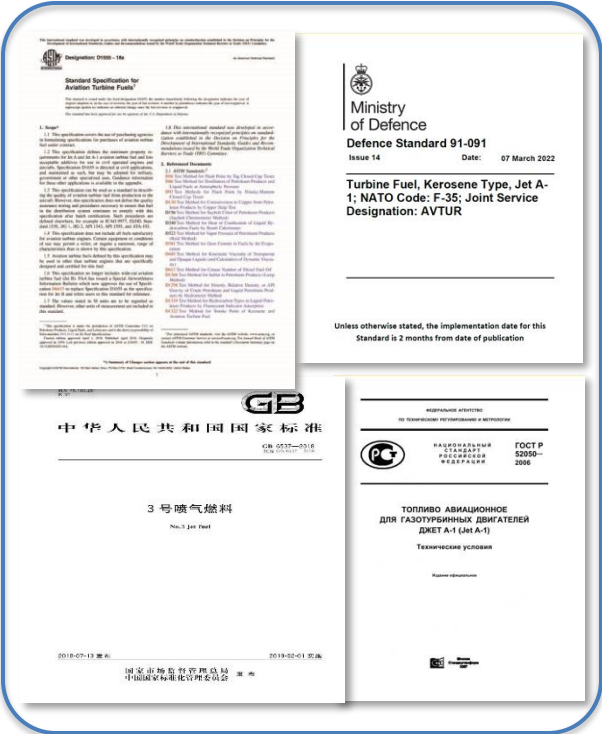
Worldwide air travel



Source: © ESA, DLR, SES: Proba-V satellite detecting aircraft

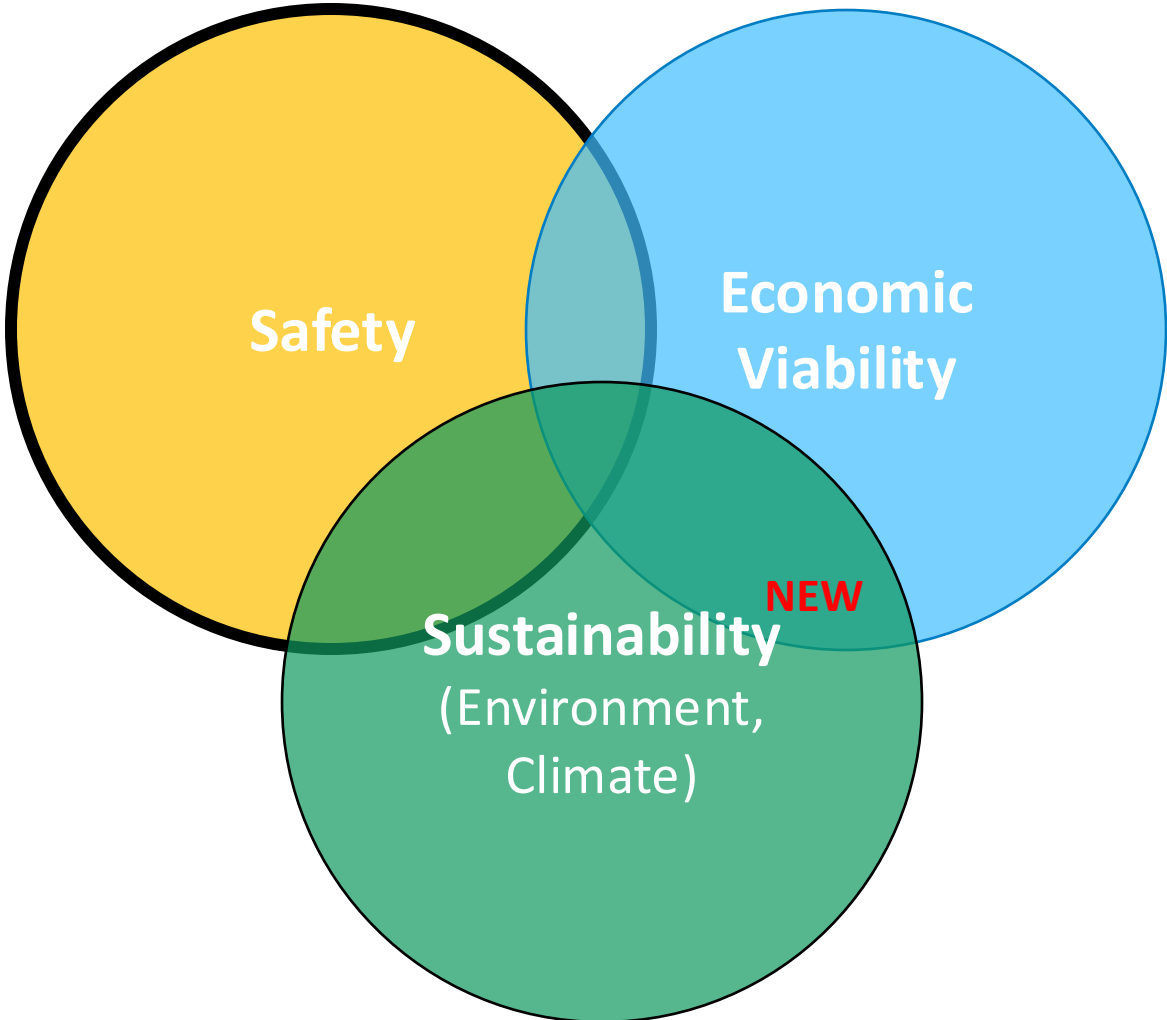
is enabled by internationally harmonized\* fuel specifications

and aircraft certified to operate on specified fuels



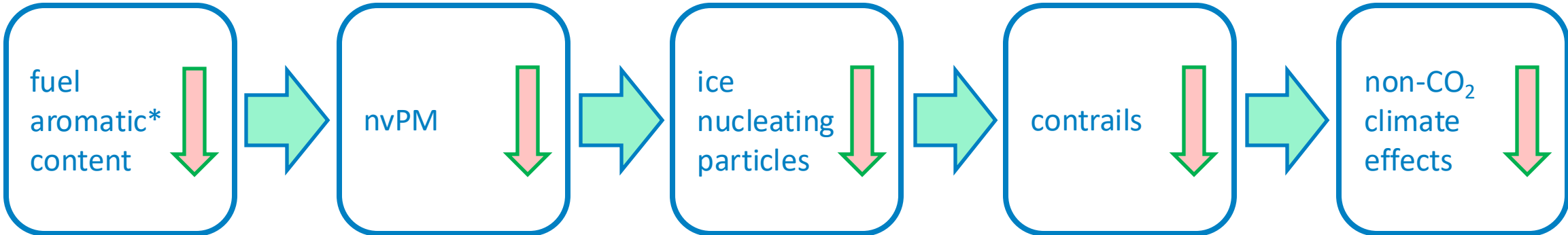
\*Jet fuel is meeting the same minimum requirements worldwide.

# Fuel Standardization

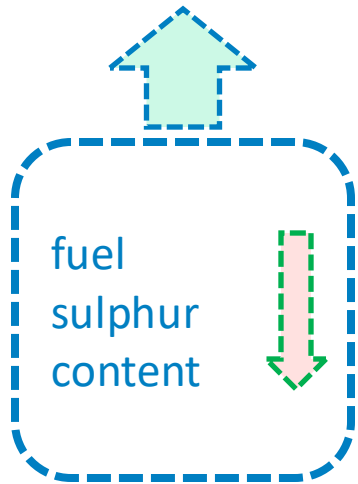


# Cause-Effect Relationships

## Hydrogen Content / Soot / Contrail / Climate Impact



\* fuel hydrogen content has proven to be a better indicator



# Next: Studies to address Gaps and Uncertainties

- Quantification of climate impacts
  - additional CO<sub>2</sub> emission versus contrail reductions that would result from:
    - discrete increases in hydrogen content (reductions in aromatic content) in European fuel
    - reductions in sulphur content in European fuel
- Better understanding of the economic and operational impacts of adapting refineries to produce higher hydrogen content, ultra-low sulphur fuels
- Possibility of modifying specification requirements to allow below 8% aromatic fuels
  - conventional, 100% SAF, and SAF blends
- Understanding the impact that new limits would have on SAF blending
  - conventional Jet A-1 as blend stock, need for SAK (synthetic aromatic kerosene)

# Summary

- Findings underline benefits of increasing hydrogen content and lowering aromatic, naphthalene, and sulphur levels
- Market levels of aromatics, naphthalene, and sulphur are substantially lower than upper limits
  - ReFuelEU reporting will confirm the European situation
- Three pathways to increase hydrogen content and lower sulphur levels:
  1. Fossil fuel upgrading (hydroprocessing)
  2. Co-processing with biomass
  3. SAF Blending & Aromatic-free fuels (100% Non-Drop-In SAF)
- Fossil fuel upgrading challenges:
  - Potentially major investments required for European refineries
  - Uncertain additional CO<sub>2</sub> emissions and associated climate impact
  - SAF market impact: Lowering aromatics too much may limit SAF introduction



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