



# Air Transport: Attractiveness and Environment

Vision of the Energy and Environment commission of the  
Air and Space Academy

By Xavier Bouis, head of the commission

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# Hope for young people: pilots, engineers, technicians...! The most “environmentally friendly” transport of the future? Aviation!

One way or another, zero emission aviation will exist in 2050 for flights from Europe.

Fuel efficiency/pkt: 3.4 l/pkt (now) 2.5 l/pkt (new) 1.8 l/pkt (2050)

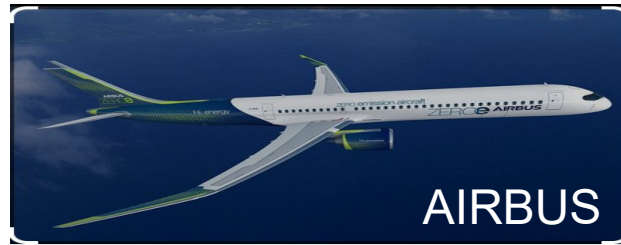
ReFuelEU: SAF bio & e-bio (20%?) e-fuels (50%) (if enough “green” energy)

Negative emissions: capture & sequestration of CO<sub>2</sub> (remaining fossil fuel)

Some sobriety + traffic growth balanced by efficiency = stable fuel demand



RISE  
(CFM)



AIRBUS



BOEING



# Stop the lies and untruths supporting “aviation bashing”!

1% of humanity responsible for 50% of CO2 generated by air transport: **FALSE!** (1)

Contrails double or triple the effect of CO2: **FALSE** (2)

Only the rich fly: **FALSE** (3)

5g CO2/pkt by train, 200+ by plane: **FALSE** (4)

**The public expects strong climate measures: flashy communication hinders our cause... Much better to explain, educate**

(1) 7% of seats (F+C) = 18.5% of emissions, insufficient data to go further! (TBM Aero N°10/2022)

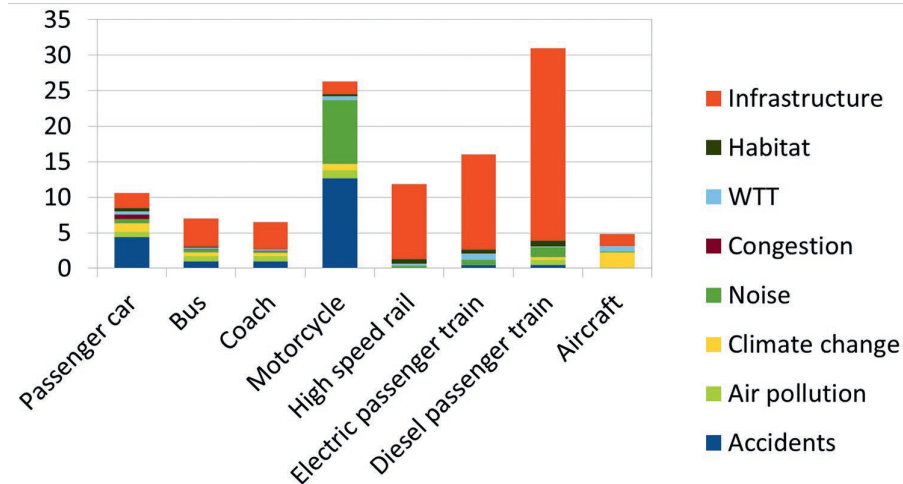
(2) outdated info, erroneous calculation: much smaller effect, if any at all! (AAE Dossier 55)

(3) same customers as high speed trains... (Chiambaretto, Montpellier Univ.)

(4) marginal and fantasy calculation... In Life Cycle Analysis, rail close to flight (infrastructure !)

# Surprise? Air Transport = the lightest for Society !

In addition to decarbonising mid & long-distance flights, aviation should also impose itself in niches where road and rail are less efficient.



CE Delft for EU DG Move : 4.K83 - Sustainable Transport Infrastructure Charging and Internalisation of Transport Externalities: Main Findings may 2019



Velis Pipistrel (**certified**)  
Volocopter (flies)  
ATR-EVO. Dash hybrid



## Conclusion

Carbon-neutral air transport has a bright future,  
but to go beyond its current scope, we  
need:

**"Uninhibited, strong and explanatory  
communication for an attractive aviation"**

More on : <https://academieairespace.com/publications/dossier-55-decarbonising-air-transport-by-2050-a-question-of-energy/?lang=en>