

Sustainable aviation – how?

09th of November 2023

CHRISTIAN DOTTORINI – KEY ACCOUNT MANAGER DENMARK



Air France and KLM proudly partner with



Air France-KLM Group in short

A leader in international air transport departing from Europe

- **Three airlines:**
 - Air France
 - KLM Royal Dutch Airlines
 - Transavia
- **Key areas of expertise:**
 - Passenger transport
 - Cargo transport (1053 k tonnes)
 - Aircraft maintenance
- In 2022, we transported **83 million passengers** worldwide



300
Destinations

117
Countries worldwide

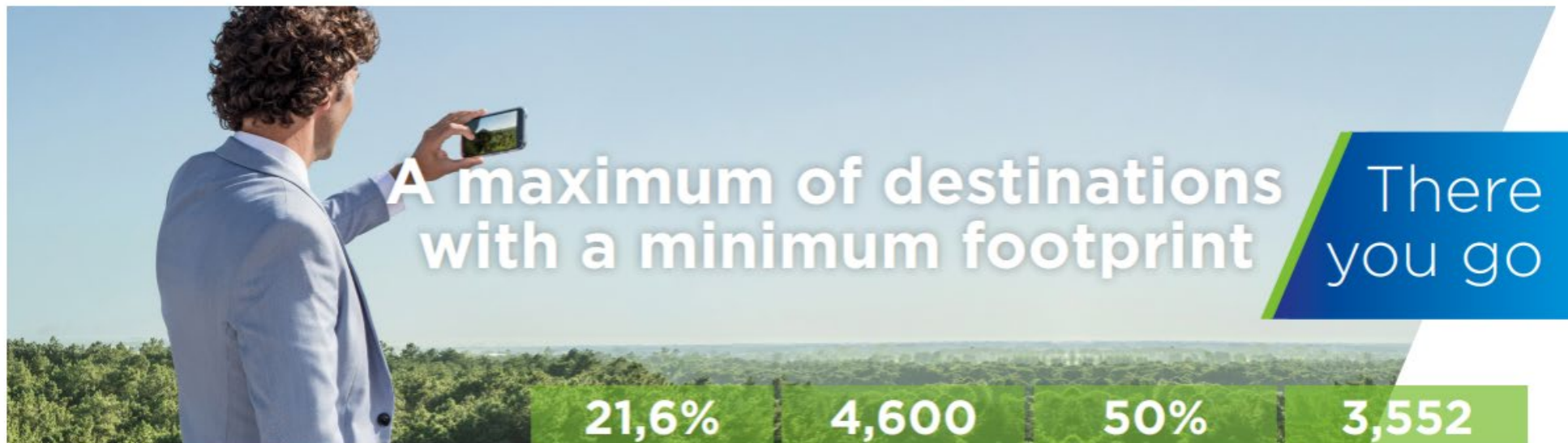
537
Aircrafts

71,000
Employees

Hvad er Dow Jones World Index?

Dow Jones Sustainability Index (DJSI) er et globalt indeks og anses som et af de mest fornemme.

DJSI World Index udgiver en stabilitetsrapport over førende selskaber verden over baseret på miljø, socialt og økonomisk resultat inklusive en fremtidig udviklingsindikator



RANKED #1 IN DOW JONES SUSTAINABILITY INDEX IN 2019

Travel should always be future focused. Business travelers fly all over the world. And every day, they realize how beautiful and vulnerable our planet is.

As airlines, we sense an even greater responsibility towards social and environmental topics. Air France and KLM are proud to be leading airlines on these matters for years: **we've been in the top of the Dow Jones Sustainability Index for 15 consecutive years, of which 13 times ranked as number one.**

We're committed to reducing our CO₂ emissions per passenger per km by 50% by 2030 compared to 2005. And, we are always looking for more sustainable solutions. For everyone involved, but most importantly - for all future travelers.

This overview contains examples of our sustainable efforts and achievements. Get the full overview and detailed sustainability information on the [Air France](#) and [KLM](#) websites and [report](#).

21,6%

CO₂ emissions reduction already achieved since 2011

IN THE AIR

Improving fuel efficiency and reducing noise with our climate action plan:

- fleet renewal;
- operational efficiency (lighter weight equipment, optimizing airspace usage and eco-flying);
- investing in sustainable aviation fuel plant and other innovations (Flying-V, electric plane, Solar Impulse Foundation partnership);
- carbon compensation (offsetting all domestic flights in France).

4,600

tons CO₂ saved by press digitalization

ON BOARD

Using high quality products and services reflecting our sustainability strategy:

- introducing paperless cockpits and cabins including reducing paper newspapers on board;
- responsible catering and waste separation;
- circular economy (reducing single use plastic, recycling and reusing headphones and old uniforms);
- offering customers the opportunity to offset CO₂ emissions.

50%

electric ground support equipment

ON THE GROUND

Focusing on efficient resource and energy usage and recycling:

- using efficient aircraft washing techniques;
- reducing residual waste and increase percentages recycled;
- reducing CO₂ emissions in ground operations by upgrading equipment, using sustainable energy (solar panels and reuse of data centre energy) and using electrical ground vehicles.

3,552

flight tickets donated by Flying Blue members to NGO's in 2018

IN THE WORLD

Adding economic and social value in areas we operate in:

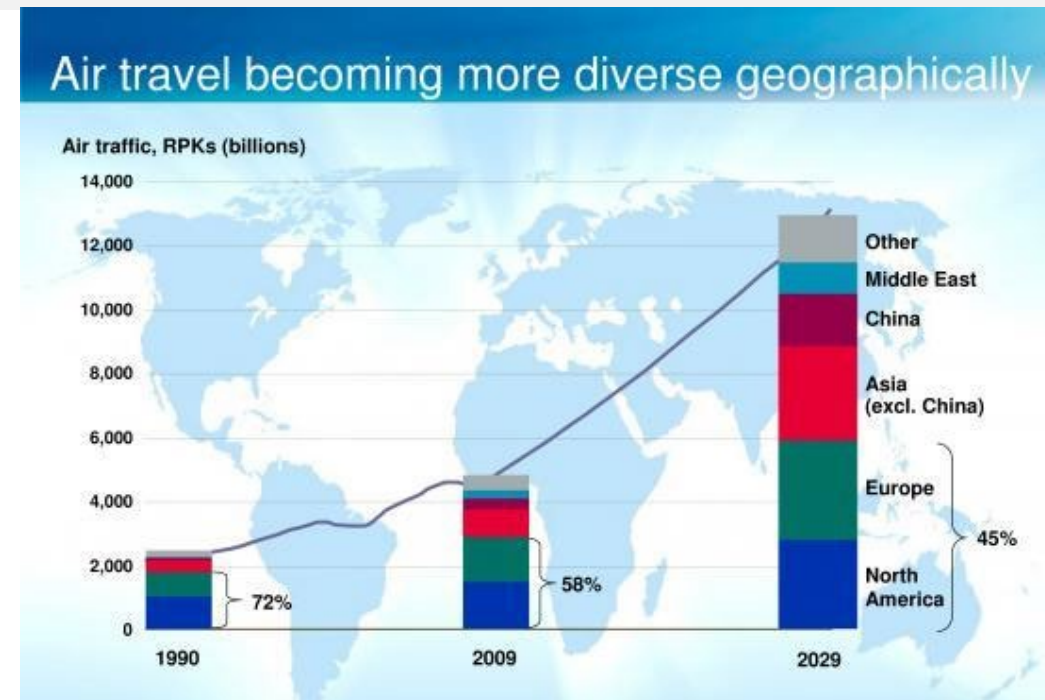
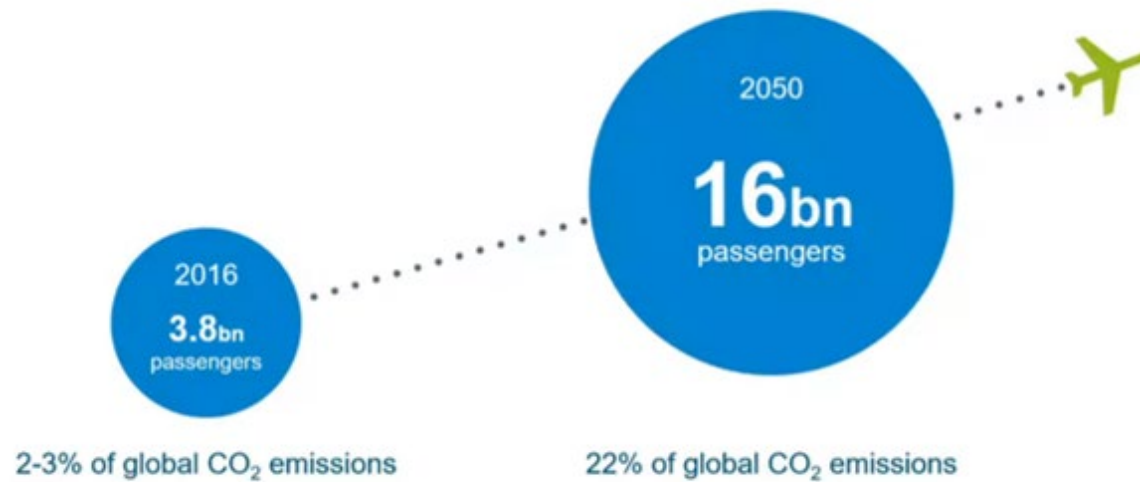
- contributing to climate awareness (Fly Responsibly campaign, air and rail combinations when possible);
- donating tickets to NGO's and start-ups;
- financial support to community projects;
- environmental projects such as reforestation;
- creating an optimal working climate for our employees.



Aviation –
how many % of global green
house gas emissions?

But without timely actions...

...the emissions will grow significantly



Aviation decarbonization is part of Paris Agreement

Climate goals world and key initiatives aviation industry

*What the **world** wants to achieve*

191 nations signed the UN Paris Climate Agreement in 2015.
These nations agreed to **limit world's temperature increase** well below 2°C and pursue efforts to limit increase to 1.5°C.

*What the **aviation sector** wants to achieve*

Aviation industry (IATA) wants to contribute towards global climate ambition and has set a **net zero target by 2050**

Key initiatives to reach these goals

- **CORSIA**: IATA uses **CORSIA** as a bridge mechanism to address emissions from aviation globally
- **EU-ETS**: Under **EU Fit for 55**, **EU-ETS** remains in place as part of EU cap and trade system, covering emissions on intra-EU flights
- **SBTi** created guidance for aviation industry to set **science-based targets** aligned to 1.5-2°C Paris goals

Air France-KLM Group

AMBITION | Destination Sustainability

TARGETS Air France KLM Group By 2030

30%

Less emissions per
passenger / km in 2030
compared to 2019

10% SAF

On board of our aircraft in 2030

64%

New generation aircraft
in our fleet by 2028

2% - 3%

Average saving on Fuel consumption
enabled by eco-piloting

50%

Less non recycled waste
in 2030 than in 2011



How to reduce the emissions
from aviation?

2 KEY things – it's “all” about the fuel

1 - Less fuel



+

2 - Better fuels



2 KEY things – it's “all” about the fuel

1 - Less fuel



How to reduce the amount of fuel

We scan every corner of our business to reduce Co2 emissions

Fly less



< 100 %

New fuel-efficient aircrafts



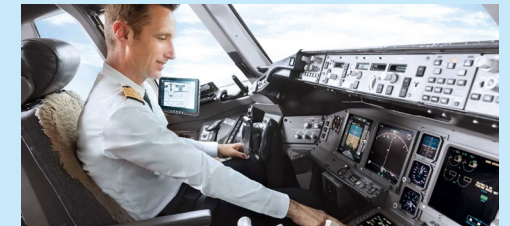
~ 15 %

Reduce the weight on-board



~1-3 %

Eco-Piloting



~ 2-3 %

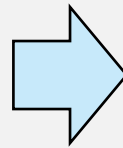
Our fleet investments

Modernizing the fleet the most efficient lever to reduce fuel usage = Co2 emissions

New fuel-efficient aircrafts



~ 15 %



KLM

- **100** x A320 neo – 15% emissions
- With an option for **60** more



Air France

- **60** x A220-300 - 20% emissions
- **28** x A350-900 - 25% emissions



2 KEY things – it's “all” about the fuel

2 - Better fuels





Better fuels - what is it?

Sustainable Aviation Fuel - SAF

Can reduce the emissions as much as 75 – 80 % !

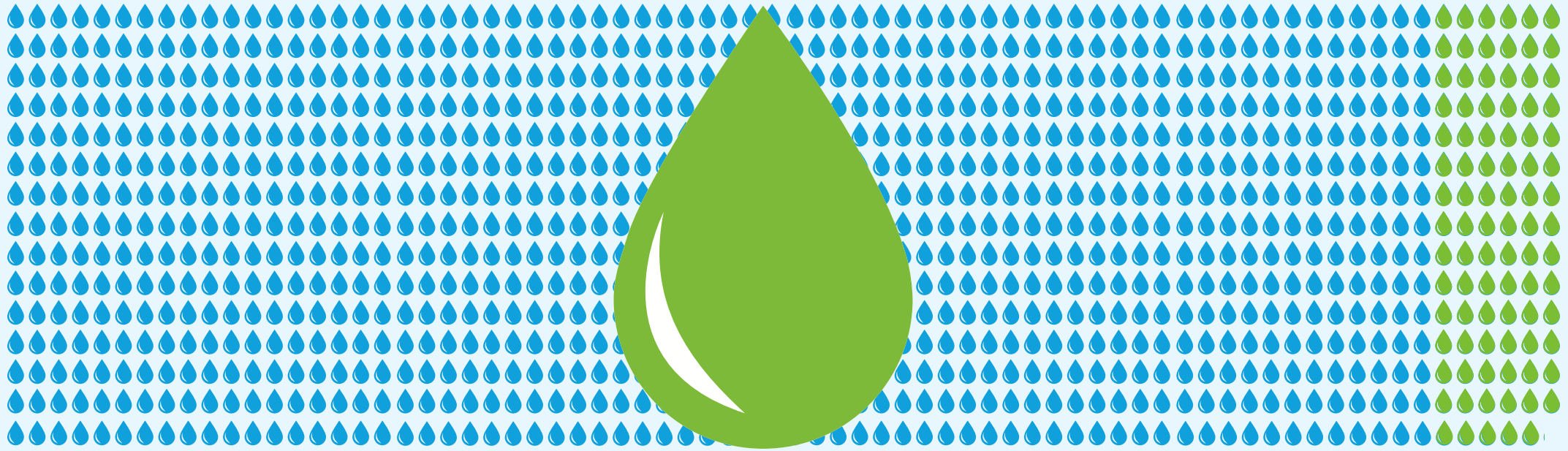




So what is the problem?

Current SAF usage

Airline industry worldwide

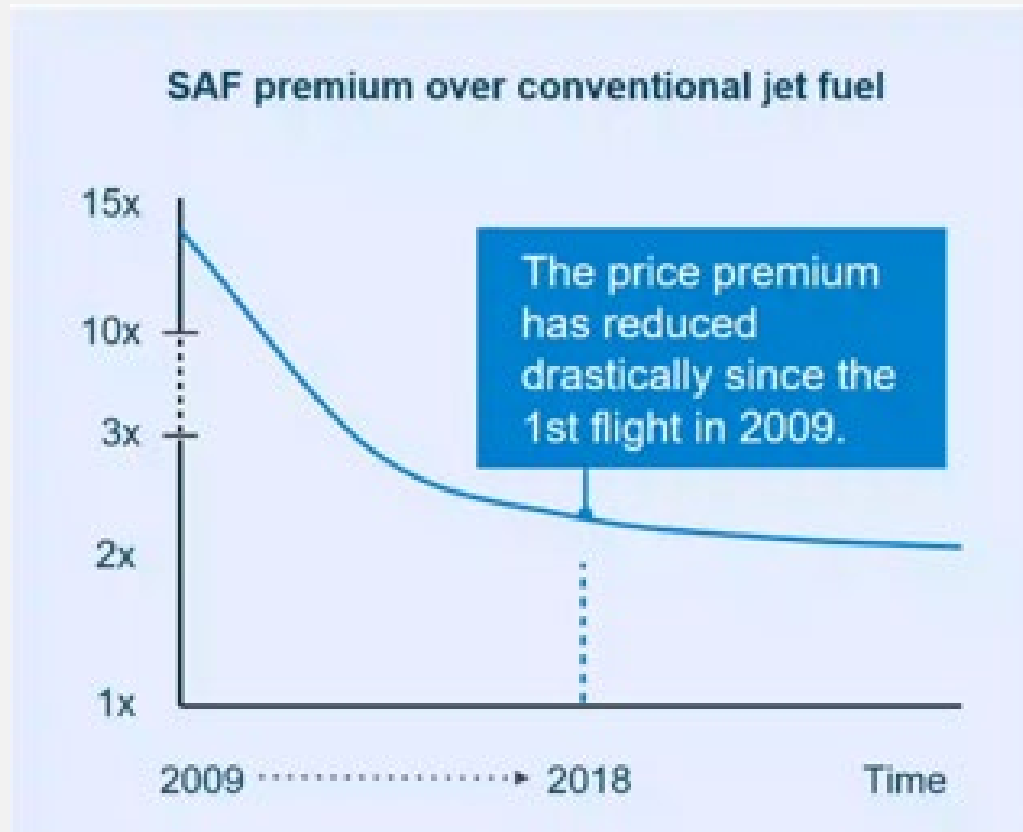


Today, less than 0.1% of the roughly 300 million tons of jet fuel used by commercial airlines is SAF. We need to accelerate its usage and production on short term to make flying more sustainable.



Why?

High price and low availability



Currently sustainable aviation fuel is 3 – 4 times as expensive as conventional jet fuel

We need to make SAF available around the globe

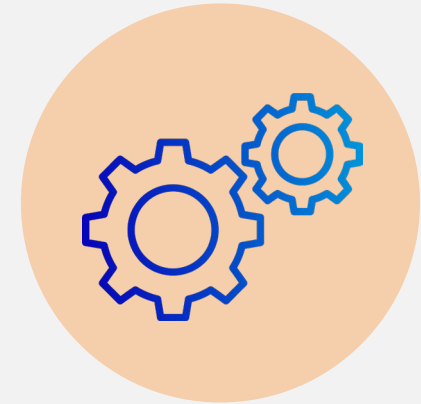
Only with joint forces we can get there fast enough



✓ Stimulate SAF demand and usage



✓ Raise awareness for the SAF market



✓ Optimize SAF production



Our pathway in short

Approved by the Science Based Target Initiative

LESS FUEL

Modernized 64 % of our fleet 2028

- 15 %



+

BETTER FUELS

Use of sustainable aviation fuel 2030

10 %



=

LESS EMISSIONS


Reducing Co2 per pax/km 2030 vs 2019

- 30 %



Our sustainability roadmap is approved by the Science Based Target Initiative (SBTi)

2021 Air France and KLM committed to the Science Based Target Initiative and during 2022 our roadmap was approved. This means our targets are in line with the Paris agreement making sure to keep global warming well below 2 degrees.



Together we can reach
sustainable aviation
– faster!

Air France and KLM Corporate SAF program

Benefits of the program

Partners in development of SAF



Become a pioneer in sustainable aviation and support the transition from fossil fuel to SAF

Lower CO₂ emissions



Reduce the footprint from business travel by at least 80% and support your sustainability goals

Reduce your corporate travel CO₂ emission (scope 3)

Report, certification

We support your organization in making your own scope 3 claim.

- With a custom-made annual report
- Verified by independent third-party auditor.

The report includes:

- Your company's CO₂ emissions of business travel and the impact of your contribution on reducing CO₂ emissions
- Proof documents required by SBTi to make a scope 3 emission calculation (e.g. sustainability certificates, proof of consumption and proof of custody).

Marketing exposure

Exposure, media coverage and (press) event possibilities for a wider audience: both external stakeholders as well as your employees