



 **RYANAIR**
Tourism Transition Pathway

Long term Goal – Net Zero by 2050

32%

of carbon emission reduction targets to come from technological and operational improvements

34%

of carbon emission reduction targets delivered with increased use of SAF

10%

reduction in emissions with the introduction of the Single European Sky initiative

24%

of emission reduction target to occur with offsetting and other economic measures

CURRENT AIR TRAFFIC MANAGEMENT

+10% CO₂



\$22bn
INVESTMENT
IN NEW
AIRCRAFT

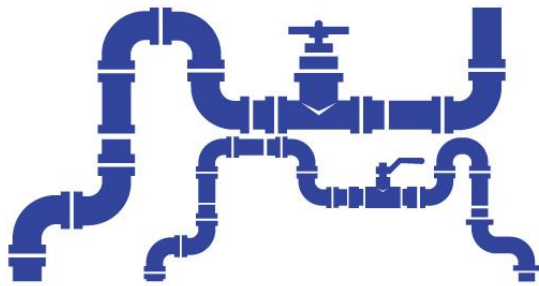


Pledge 1 = 12.5% SAF by 2030



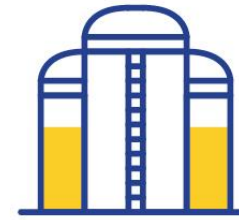
1

Feedstock, like household waste or waste oils, is collected.



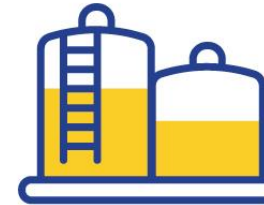
4

Fuel is delivered to airports and into aircraft wing where facilities exist.



2

Feedstock is converted to sustainable aviation fuel.



3

Traditional jet fuel is blended with sustainable aviation fuel to make it suitable for use in aircraft.



Achieving Ryanair's SAF pledge

➤ Alternative to fossil-based jet fuel

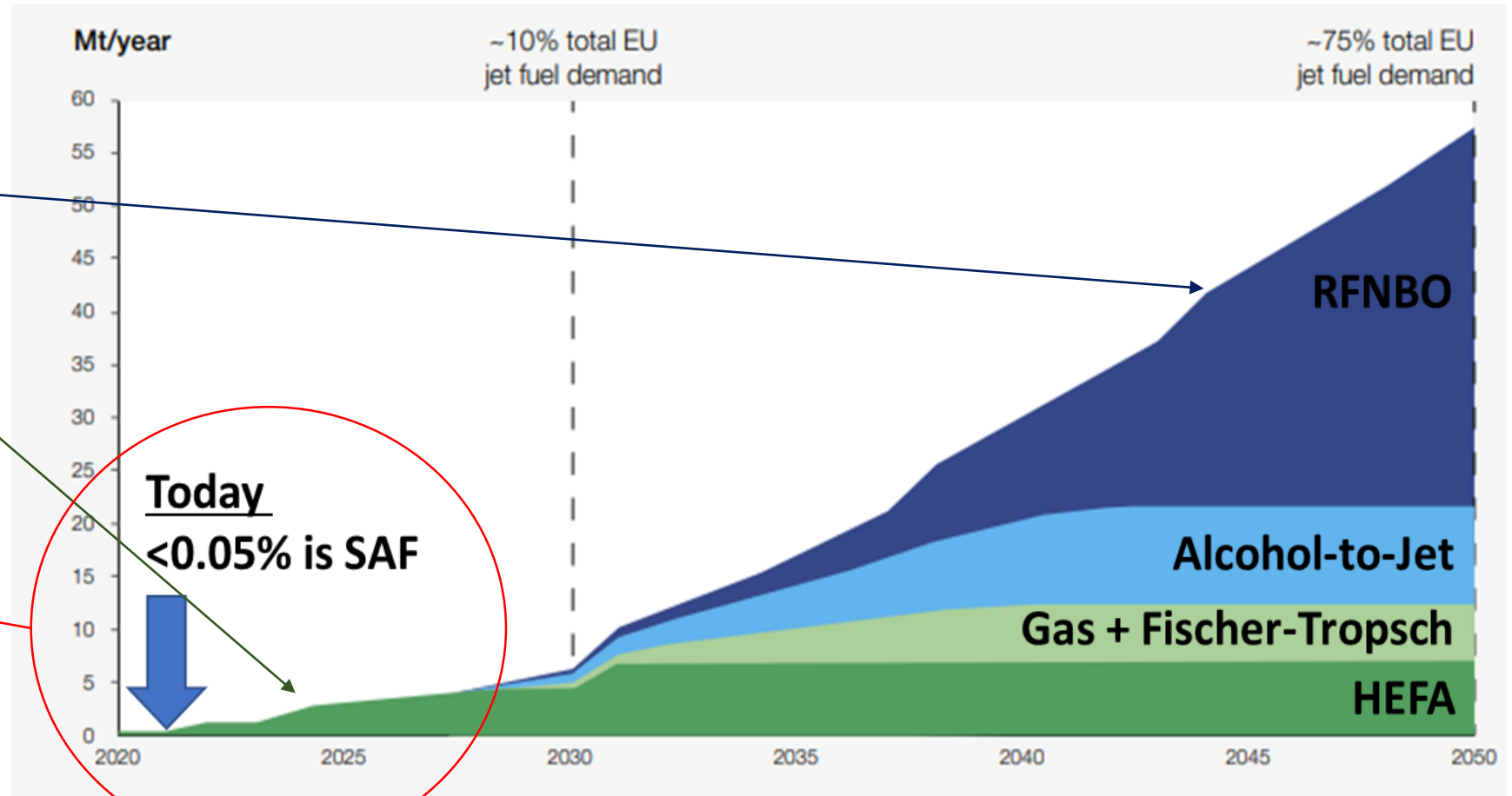
➤ Drop in fuel

✓ Synthetic

✓ Biofuel (HEFA)

Challenges:

- Capacity
- Cost



Achieving Ryanair's SAF pledge

➔ Partnership with Trinity College Dublin



➔ Partnership with Neste 40% SAF (AMS)



➔ Ryanair / OMV MoU 160,000 tonnes of SAF



➔ Ryanair / Shell MoU 360,000 tonnes of SAF

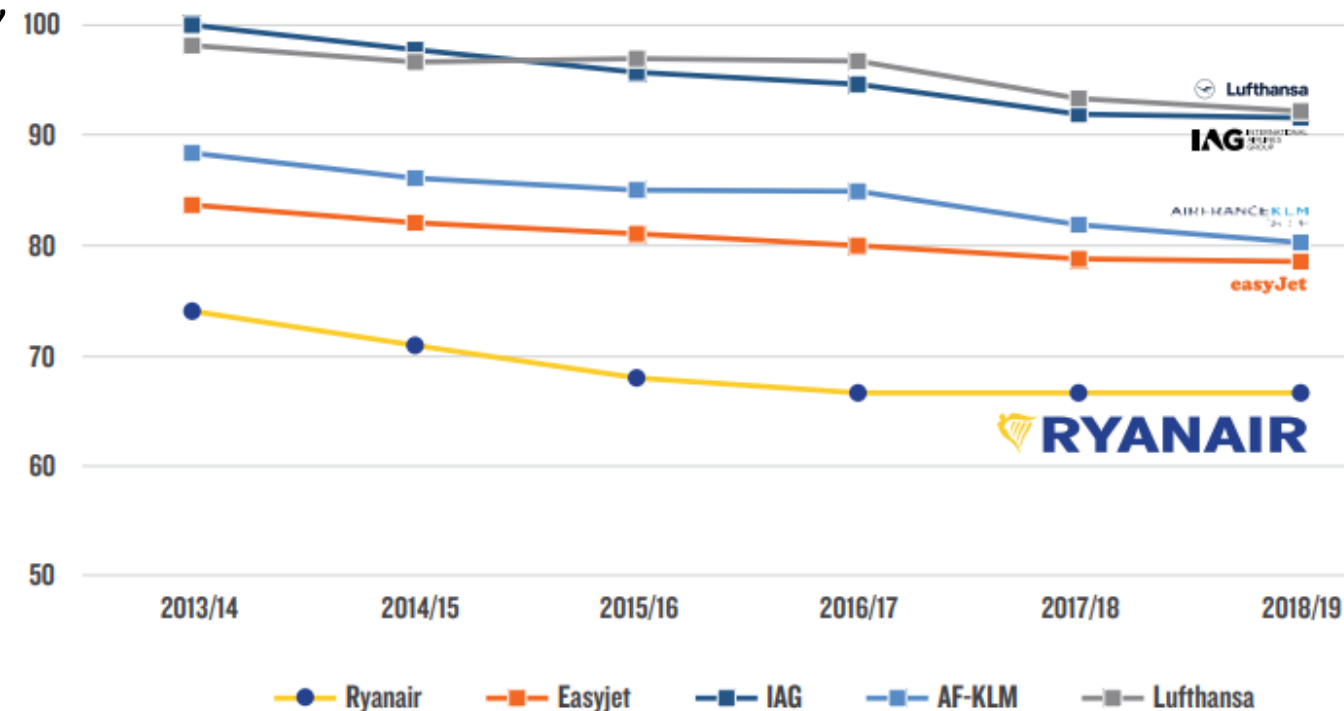


Pledge 2 = Target of 60g CO₂ pax/km by 2030

The metric is important!

- CO₂ per pax/km represents real emissions intensity, any other metric is not representative of societal benefit
- More pax per flight → lower emissions intensity
- How do we want to go there?
 - ✓ Newer fleet
 - ✓ Improved operations
- Regulatory help: Single European Sky -10% CO₂

Carbon efficiency performance



The winning formula



96%
**FILLED SEATS &
CABIN DESIGN**



**YOUNGEST
FLEET**
(avg. 8 years)



**EFFICIENT
OPERATIONS**
(P2P, Continuous Descent, Paperless)



LOWEST

**66g
CO₂**
PER PAX/KM

EMISSIONS

(Cut to <60g by 2030)

