



INCREMENTAL STEPS TOWARD DECARBONIZATION

A practical approach

Reaching Net Zero by 2050 presents significant challenges and uncertainties. When will hydrogen aircraft become a reality? Will there be sufficient sustainable aviation fuel (SAF) to meet demand? Are market-based measures truly pushing the industry forward? While we don't have all the answers, one thing is clear: the time to act is now. Improving flight efficiency is a step we can take today.

“Global warming is the issue of our time, and other current issues such as economic and political instability are made worse if climate change accelerates.”



Dirk Singer
Head of Sustainability
SimpliFlying

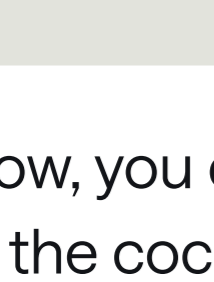
You can make big reductions in fuel burn by making small changes on each flight.



1 Navigating hazardous weather

Hazardous weather is becoming more frequent and more intense. Traditional flight planning systems and processes weren't designed to adapt dynamically, preventing pilots and dispatchers from choosing the most efficient route when weather conditions change rapidly.

“The industry's in a bit of a difficult position, because we built process around the old way of doing things - where we knew hours before the flight exactly what was going to happen.”

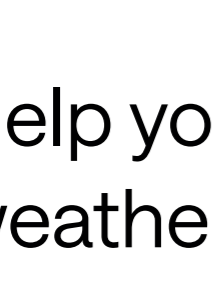


Ian Gray
Senior Product Manager
SITA

Weather-related ATFM delays up by >40% in Europe*

Now, you can make improvements by providing real-time high-resolution weather data in the cockpit and Operations Control Centre (OCC). Pilots and dispatchers can work together using aligned views, enabling them to reroute to avoid hazardous weather.

“[When] you have a single source of truth, everyone has a shared sense of situation awareness, which [leads to] good decision making.”



Shivam Chandra
Business Development Manager
SITA

Help your pilots and dispatchers track evolving hazardous weather, enabling them to plan the most efficient routes around it.



2 Real-time flight trajectory optimization

Once pilots and dispatchers have an informed dynamic view of the weather, they can make further improvements to optimize flight paths using information about real-time air traffic and unique tail-specific aircraft performance.

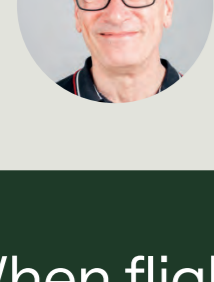
Real-time air traffic data

helps you avoid congested airspace

Tail-specific performance data

helps you use less fuel

“There's a commonly understood problem that the flight plan trajectory that airlines say they're going to fly, versus what they fly, are two different things”



Ian Gray
Senior Product Manager
SITA

When flight plans change en route, pilots and dispatchers can use the latest technologies to share and communicate information.

Tail-specific performance information provides real-time data tailored to each individual aircraft, enabling pilots and dispatchers to make precise adjustments to flight routes. This optimization can cut fuel consumption and reduce delays by leveraging the unique performance characteristics of each plane, resulting in more efficient and timely flights.

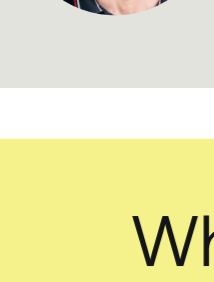
Help your pilots and dispatchers find the most efficient path for each aircraft's unique journey.



3 Synchronizing with Air Traffic Control (ATC)

Collaboration with air traffic controllers (ATC) is essential for optimizing flight efficiency but is often overlooked.

“Our airline customers, especially pilots...get awareness of bad weather, and they have to adjust their trajectory to go around them, and that...causes some friction with ATC.”



Ian Gray
Senior Product Manager
SITA

When all parties—pilots, dispatchers, and controllers—share the same real-time data, airlines can adjust flight paths faster.

“You've got this aligned view [of weather hazards] between airline dispatchers and airline pilots, and now we need to broaden the scope even further so that more stakeholders are involved - and ATC is the most obvious option.”



Ian Gray
Senior Product Manager
SITA

Synchronizing with ATC by sharing the same real-time weather and air traffic view as pilots and dispatchers, and automating evaluation of flight-phase tail-specific fuel-saving recommendations, helps you work together to reduce emissions for each flight.

When pilots, dispatchers, and controllers share real-time data, airlines can adjust flight paths faster, ensuring every stakeholder can help find and fly the most efficient route them to plan the most efficient routes around it.

Focusing on these three steps will help you improve your flight efficiency right now. Together we can help the industry transform today and get closer to its net zero goals.

For more details on how you can navigate the challenges and opportunities of decarbonization, download our ebook 'Fly smarter and cleaner in a carbon-constrained world' or get in touch.

[Download Now](#)

Geographic Offices

Americas
3100 Cumberland Boulevard
Atlanta, GA 30339
United States of America
Tel: +1 770 850 4500

Asia Pacific
11 Loyang Way
Singapore 508723
Republic of Singapore
Tel: +65 6545 3711

Europe
26 Chemin de Joinville
B.P. 31, 1216 Cointrin
Geneva
Switzerland
Tel: +41 22 747 6111

Middle East & Africa
Holcorn Building
Cornich Al Nahr
Beirut - Lebanon
+961 (1) 637 300

Registered Office

SITA SC
2 Avenue des Olympiades
B-1140 Brussels
Belgium
Tel: +32 (0) 2 745 0517