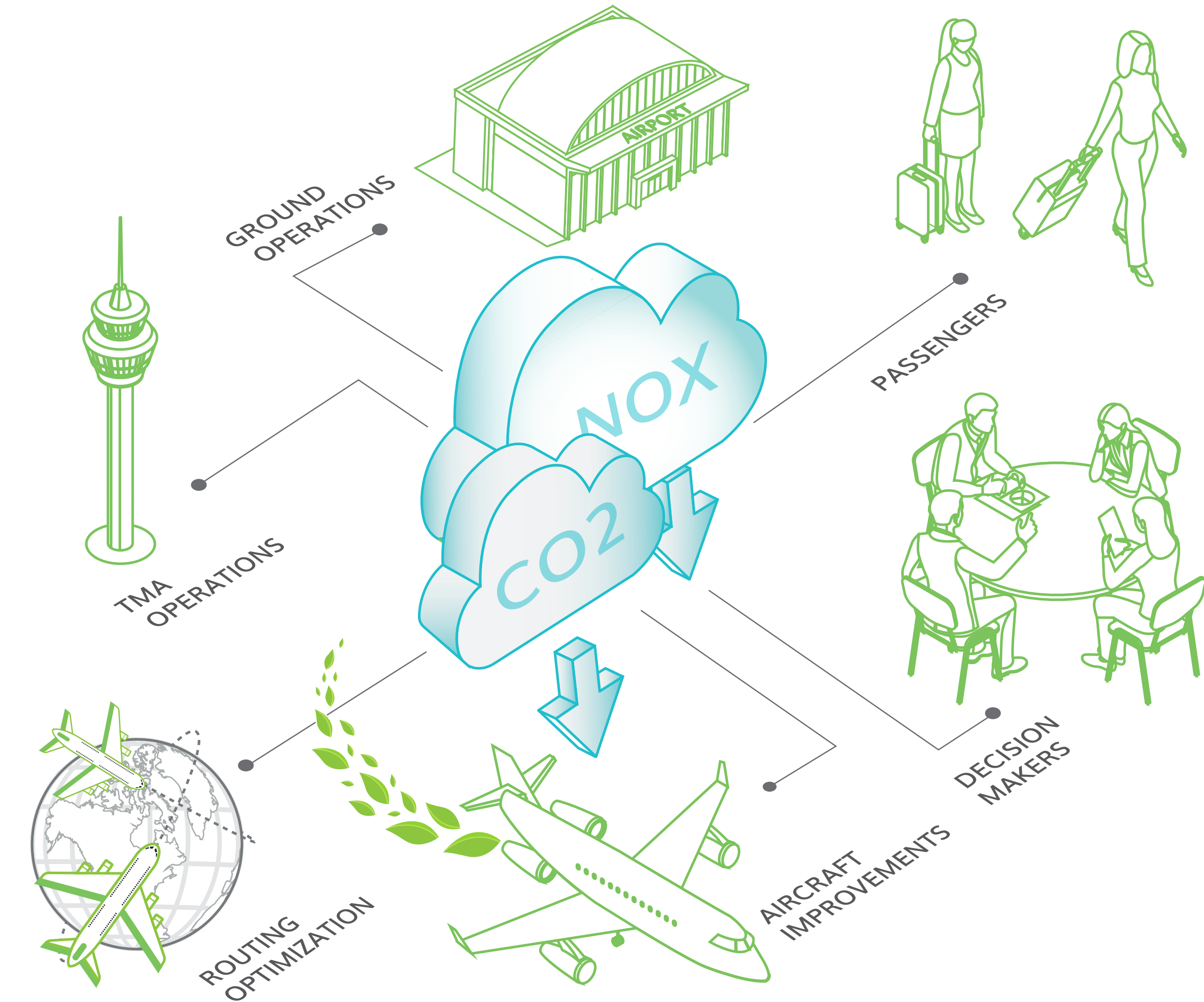


# Climate assessment of innovative mitigation strategies towards operational improvements in aviation



## Highlights

- 01** Selection of **aviation operational** improvements to moderate the **climate impact** of aviation
- 02** Utilization of **Climate Models** to test operational improvements effectiveness
- 03** **Validation** of the **outcomes** through stakeholder’s consultation
- 04** Identification of **mitigation strategies** and policy recommendation to reduce the **aviation sectors emissions**

## Summary

Since the end of the 20th century, the urgency of **climate changes** has attracted attention all over the world. Frequently, general opinion has linked the **aviation sector to climate impact** and **environmental issues**, even if its contribution to anthropogenic emissions is about **5%**. The aviation industry, considering the sector growth expected, worked on improvements that could fit at different levels. However, more **efficient operational im-**

**provements remained** undervalued. ClimOP project aims to contribute to the **reduction of the climate impact** of aviation, identifying a set of harmonized mitigation strategies. Those will be developed from a preliminary list of most-promising **operational improvements** (Tab 1) assessed through climate models. After a **validation process** with **all aviation stakeholders**, the mitigation strategies will be proposed as recommendations to policymakers, fostering their implementation.

## Operational Improvements

Category	Examples	Stakeholders involved	Implementation timeframe
Ground Operations	Electric taxiing	Airlines	Short to medium term
	Intelligent runway lights	Airports	Short term
TMA operations	Continuous Climb Departure or optimized Profile Descendent	Airports ANSPs Airlines	Short to medium term
Individual flight planning/ routing	Flexible, direct routing	Airlines ANSPs	Short term
	Flying lower, flying slower	Airlines ANSPs	Short term
Airline network operations	Intermediate Stop Operations	Airlines ANSPs	Medium term
	Civil formation flights	Airlines ANSPs Aircraft manufacturers	Long term

Tab 1

## Methodology

