

the future is green

OUR ENVIRONMENTAL CULTURE
VOL 2. MAY 2021



viva
aerobus

CONTENTS

Our environmental culture	2
Mexico's greenest airline	5
CO ₂ emissions target	6
Engine and fleet efficiency	7
CO ₂ offset scheme	10
Fuel efficiency	11
Inflight recycling	12
For a 100% green future	13
Summary	14



1) OUR ENVIRONMENTAL CULTURE

At Viva Aerobus we continue to be the greenest airline in Mexico. In these changing and uncertain times, we have achieved remarkable results that consolidates our position in the Mexican market, carrying over 8 million passengers in 2020. We are the first airline in the Americas to resume 100% of our operating capacity since November 2020.

We are Mexico's ultra-low-cost airline; and, thanks to our business model, we have carried millions of passengers at the best prices, with a 145 routes' network (31 international and 114 domestic) and 56 destinations (16 international and 40 domestic), as of the end of 2020.

Today, more than ever, we have reinforced our commitment to contribute and promote the democratization of the airline industry, allowing many Mexicans to travel by air for the first time, while following all the sanitation and health measures and protocols outlined by regulators, to ensure the safety of our passengers.

Our more than 2,000 employees are fully committed to Mexico and our passengers, providing a quality service with the best value proposal, to continue reactivating our industry at all destinations. Our low-cost culture, coupled with a superb operational efficiency, allows us to protect the environment across all our operations.

We have the youngest fleet in Mexico and the second youngest in North America, that together with an efficient and environmentally responsible operation, strengthen our environmental commitment. Our 5 operating hubs, located in Monterrey, Mexico City, Guadalajara, Cancun, and Tijuana allow us to connect over 50 domestic and international destinations.

“ WE HAVE THE YOUNGEST FLEET IN MEXICO AND THE SECOND YOUNGEST IN NORTH AMERICA. ”

“Viva Aerobus has the youngest fleet in Mexico and the second youngest in North America, with an average age of 4 years. Thanks to the state-of-the-art engine technology of our fleet. We offer our passengers a reliable and safe service, which is also environmentally friendly due to its greater fuel efficiency and reduced noise pollution.”

Juan Carlos Zuazua,
Viva Aerobus CEO

In 2020, in line with our environmental culture, we published the first document summarizing our key green initiatives. Now, we are pleased to release the second volume, outlining both the actions that make us the greenest airline in Mexico and our future goals set in this matter.

In this sense, pursuant to the Ley General de Cambio Climático, in November 2018, we carried out the first verification of our Greenhouse Gas Emissions Report, in accordance with Registro Nacional de Emisiones “RENE”. The renewal of the validation of this report will take place over 2021.

The Agencia Federal de Aviación Civil “AFAC”, together with the Secretaría de Medio Ambiente y Recursos Naturales “Semarnat”, oversees compliance with environmental regulations applicable to air transportation services. Accordingly, each year, we file a regulatory operating report (Cédula de Operación Anual, COA), which is a federal report that requires companies to disclose their records and inventories of: emissions, greenhouse gases, transfers of pollutants to air, water, soil, and hazardous waste. This report provides Semarnat with helpful information to pursue greater efficiencies and lessen any environmental damage,

thus contributing to foster international competitiveness.

We continued integrating different standards and management models into our sustainability practices to achieve a more efficient environmental performance, such as:

- ISO 14001:2015 - Internationally standard that provides organizations with a framework for protecting the environment and addressing changing environmental conditions in harmony with socio-economic needs.
- ISO 9001:2015 - International standard that promotes the adoption of processes when developing, deploying, and improving the effectiveness of a quality management system oriented to enhance customer satisfaction.
- Carbon Offsetting and Reduction Scheme for International Aviation (CORSA) - Global scheme developed to lower CO₂ emissions for international flights.

The priorities of our sustainability strategy are: 1) operational efficiency and responsible use of resources, 2) care for the environment, and 3) the professional growth of our people.

In this regard, it is important to highlight the composition of our fleet that is made up of the modern family of aircraft manufactured by Airbus, whose latest-generation technology reduces fuel consumption by 15% and, hence, lowers greenhouse gas emissions. Similarly, thanks to the configuration of our aircraft, with seating capacity for 186 passengers (A320neo) and 240 passengers (A321neo), and our ultra-low-cost model, which allow us to offer competitive fares (translated into high load factors) we have lower more environmental emissions than other carriers: the more passengers per flight, the lower the fuel consumption per passenger.

“ THANKS TO THE CUTTING-EDGE TECHNOLOGY OF OUR FLEET, WE REDUCED FUEL CONSUMPTION BY 15%. ”

“The cutting-edge technology of our Airbus aircraft allows us to be more efficient, reducing fuel consumption by up to 15%. In this way, we are able to maintain the lowest cost structure in Latin America; directly benefiting our passengers with the best fares, while operating in harmony with our environment.”

Juan Carlos Zuazua,
Viva Aerobus CEO

Pursuant to our environmental culture and through a variety of initiatives and continuous process optimization, we are committed to:

- Continue complying with Mexican and international environmental regulations, standards, and codes that apply to our operations.
- Reduce noise emissions. For example, our new Airbus A321neo aircraft not only reduces noise, but also reduces fuel consumption by 15% and NOx (nitrogen oxide) emissions by 50%.
- Reduce our CO₂ emissions to meet our target of 49g per passenger kilometer.
- In 2021, offer our passengers the option to voluntarily offset the carbon footprint of their flights on our website.
- Remain strengthening our social responsibility partnerships.

ACCOUNTABILITY AND REPORTING:

Viva Aerobus management is responsible to outline the company-wide goals, including all those actions that lead us to meet our commitments and improve our environmental impact.

This document will be updated annually and available to download at our website.



Juan Carlos Zuazua,
Viva Aerobus CEO

2) MEXICO'S GREENEST AIRLINE

Our actions and business model make us the greenest airline in Mexico:

- Our high load factors, together with the highest seat density allowed by the manufacturer (186 seats for A320neo and 240 for A321neo), make us the airline with lowest CO₂ emissions per passenger in Mexico.
- Most of our routes are point-to-point, avoiding unnecessary fuel consumption by flying nonstop between destinations.
- Highly efficient operations: the optimization of routes allow us to minimize fuel consumption.
- Investments to modernize our fleet, which is the most modern in Mexico (average age of 4.2 years), with the most advanced engine and fuel consumption technologies.
- Reducing our noise emissions and fuel consumption through Airbus neo engines, which offer reduced noise pollution and greater fuel efficiency.



OUR 2021 ENVIRONMENTAL CULTURE

To reaffirm our pledge to lessen our environmental impact, Viva Aerobus is committed to the following actions:

- Annually update our environmental protection initiatives.
- Maintain the lowest level of CO₂ emissions per passenger.
- Be the leanest airline in terms of airport infrastructure use.
- Promote inflight recycling.
- Strengthen our partnerships with green institutions and provide our passengers with an opportunity to make donations for fighting climate change and improving local environments.
- Comply with CORSIA standards to offset the carbon cost of our flights.
- Track our fuel consumption on international flights, following the most accepted monitoring methods, and offset our carbon footprint.
- In October 2020, the first verification of the 2019 CORSIA Emissions Report was performed and submitted to the AFAC with no major findings. Additionally, in May 2021, the 2020 CORSIA Emissions Report was verified without any findings, thus attesting Viva Aerobus' transparency and Green commitment.
- Gradually join market-based carbon offset programs aligned to the General Law on Climate Change.



3) CO₂ EMISSIONS TARGETS

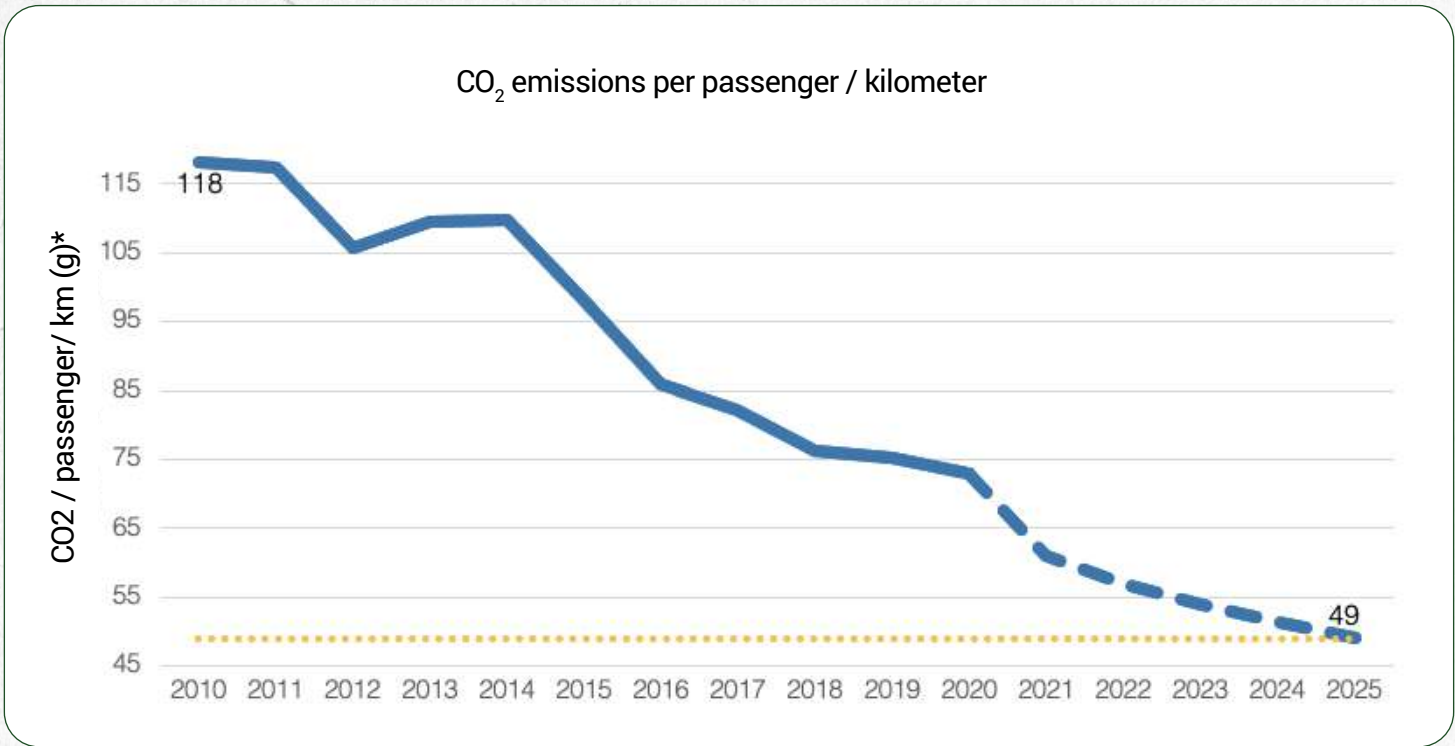
As part of our environmental commitments, Viva Aerobus has set the following CO₂ emissions target.

CO₂ EMISSIONS PER PASSENGER / KILOMETER PER YEAR

- Historical emissions
- - - Projected emissions



Target
49 g
CO₂ per passenger / kilometer



*Based on a projected load factor of 85%.

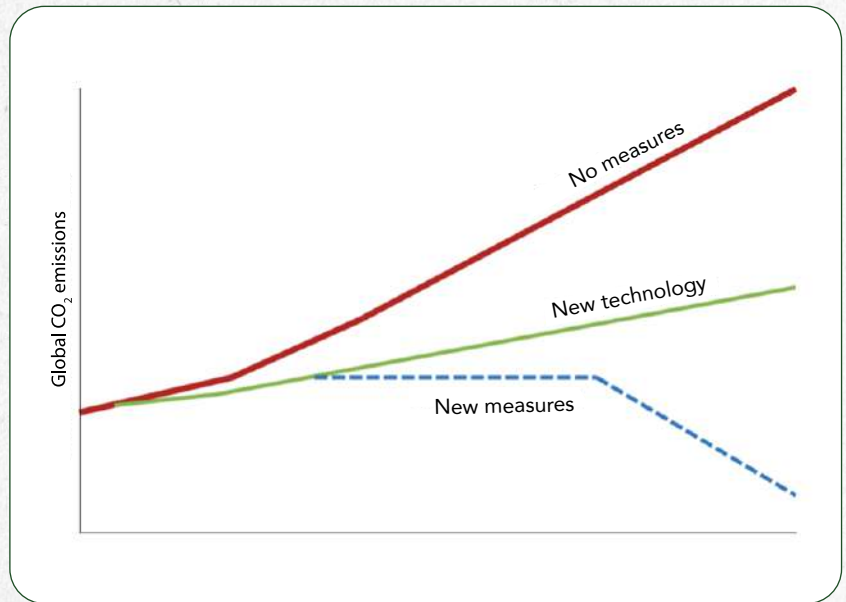


Through projects such as CORSIA and fuel saving initiatives, we join the efforts to reduce global and local CO₂ emissions.

CO₂ EMISSIONS PER YEAR

This graph shows global CO₂ emissions under three different scenarios proposed by the International Air Transport Association (IATA).

- █ Normal growth of flight operations according to trend; no actions to reduce emissions or new technology.
- █ Emission reductions from new technologies incorporated into latest-generation aircraft, as well as from standard procedures aimed at optimizing asset utilization.
- █ █ █ Along with new technologies, schemes such as CORSIA and more intensive use of low-carbon fuels are introduced. With a special focus on fuel consumption efficiency.



*Source: IATA's Technology Roadmap 2013

4) ENGINE AND FLEET EFFICIENCY

We have the youngest fleet in Mexico, averaging 4.2 years old.

Our 45-aircraft fleet includes the Airbus A320neo family, fitted with technology upgrades that reduces fuel consumption and lowers noise emissions. In this regard, between 2020 and 2025, Viva Aerobus will incorporate up to 67 Airbus neo aircraft to its fleet, corresponding to order books placed in 2013 and 2018. It is worth noting that during 2020, Viva Aerobus received its first A321neo aircraft, thus reinforcing its environmental commitment:

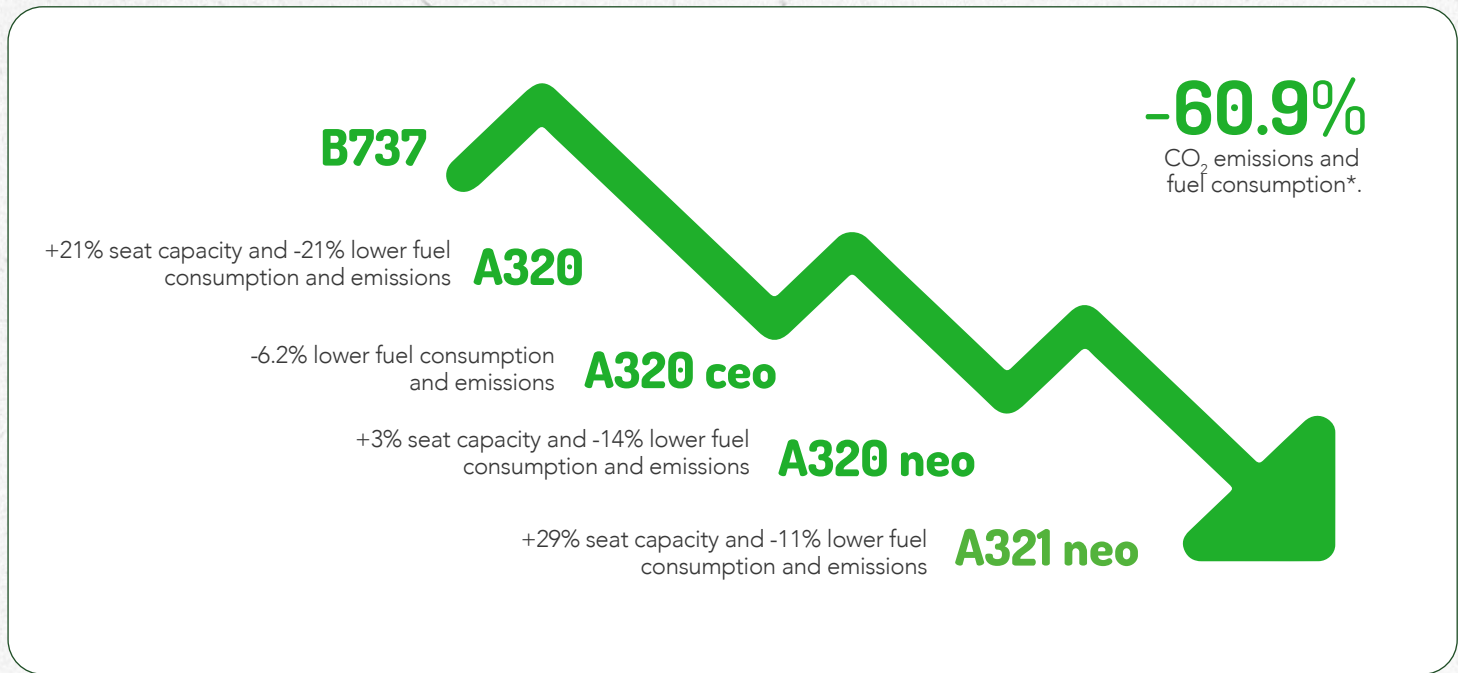
- More efficient and potent engines.
- More space-efficient cabin layout (240 seats), contributing to further reduce CO₂ emissions per passenger.
- 15% lower fuel consumption*.
- 50% reduction in NOx* emissions (nitrogen oxide, a pollutant gas).
- Reduced noise pollution*.

Aircraft	2016	2017	2018	2019	2020	2021
Airbus 320 ceo	19	22	21	21	20	20
Airbus 320 neo	2	2	10	18	20	20
Airbus A321 neo					3	4
Airbus A321 ceo						1
Total	21	24	31	39	43	45

(*Compared to previous A320 models.)



FLEET OPTIMIZATION

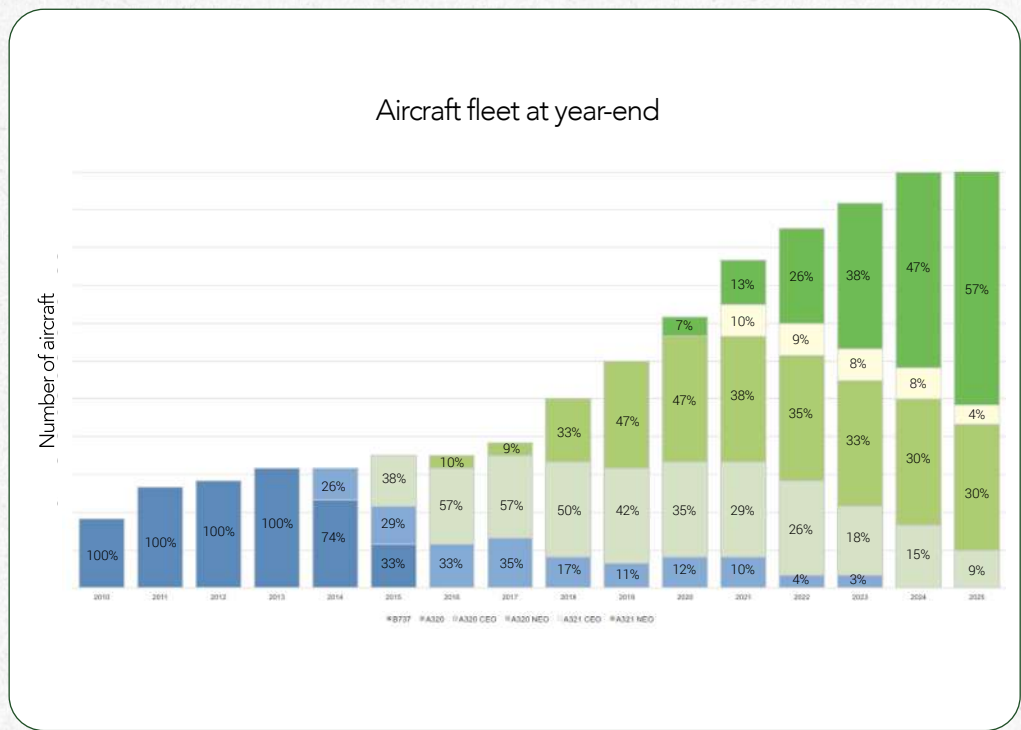


*Per seat from the first Boeing 737 aircraft.

Aircraft model	Seat Capacity
Boeing 737	148
A320 Classic Wingtip	180
A320 ceo Sharklets	186
A320 neo	186
A321 neo	240
A321 ceo Sharklets	220

Fleet	Age (years)*
2021	4.9
2022	4.7
2023	4.9
2024	4.9
2025	4.9

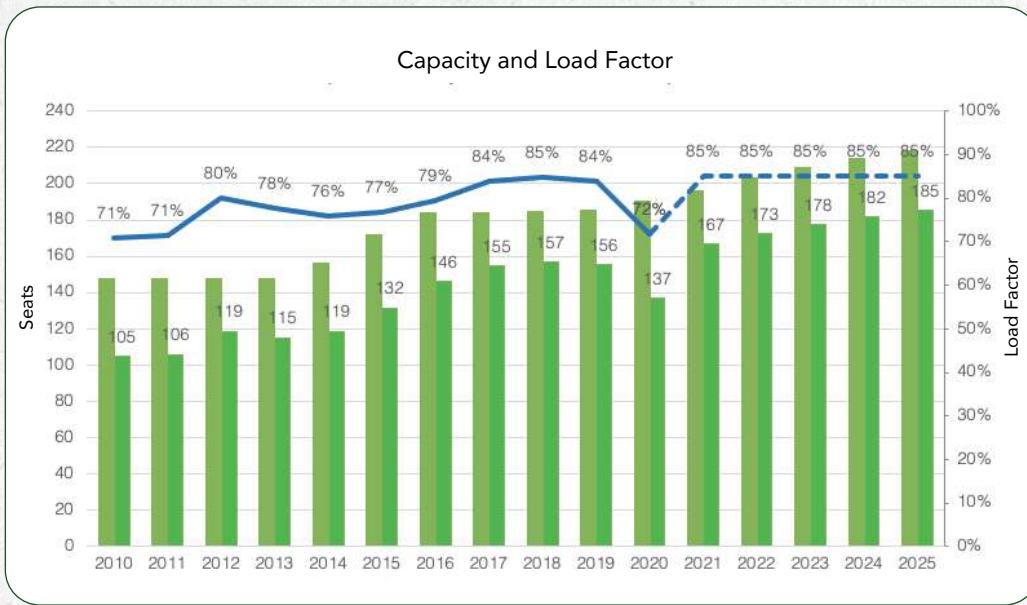
*At the end of each year



Thanks to our modern fuel-efficient aircraft fleet, in addition to our high load factors, we are well positioned to remain as the airline with the lowest CO₂ emissions per passenger.



CAPACITY AND LOAD FACTOR



- █ Average seats available per aircraft.
- █ Average seats flown per aircraft.
- Actual load factor.
- - - Projected load factor.

*Pre-COVID projections

The seats of Viva Aerobus' new aircraft fleet feature the most advanced design technology, bringing significant savings in fuel consumption and, therefore, reduced CO₂ emissions, in line with global aviation industry's objective of achieving carbon neutrality.

These aircraft are equipped with seats 27% lighter than the industry's average, resulting in a total reduction of 85 tons of fuel consumption per aircraft by 2021, which translates into 269 tons of CO₂ that will no longer be released into the atmosphere.

To better illustrate this impact, each aircraft will stop generating the equivalent of the CO₂ emissions associated with the annual energy consumption of 49 homes, offsetting carbon footprint to the same extent that 4,448 tree seedlings grown for 10 years do.

(Source: United States Environmental Protection Agency Calculator. <https://www.epa.gov/energy/greenhouse-gas-equivalencies-calculator>)

“ 27% LIGHTER SEATS WHICH TRANSLATES INTO 269 TONS OF CO₂ THAT WILL NO LONGER BE RELEASED INTO THE ATMOSPHERE. ”

“The cabin configuration of our new Airbus A321 aircraft is designed for sustainable operation. As a result, their seats are up to 27% lighter; this leads to a reduction of 269 tons of CO₂ that we are no longer emitting. Additionally, they are the first aircraft of this family with a 240-passenger capacity, which contributes to maintaining a low carbon footprint per passenger.”

Juan Carlos Zuazua,
Viva Aerobus CEO



5) CO₂ OFFSET SCHEME

CORSIA's environmental efforts follows 14 out of the 17 United Nations Sustainable Development Goals. To offset CO₂ and comply with CORSIA's national and international standards, we are in the process of implementing the following actions:

- Participating in market-oriented mechanisms to reduce greenhouse gas emissions, as part of CORSIA's objectives to offset or minimize CO₂ emissions growth.
- Measuring and reporting our emissions to environmental verifiers and offset those emissions through the carbon market.

- Protection of several species of birds, orchids and other flowers, wild boars, white-tailed deer, and pumas, all dangerously threatened by deforestation.
- Creation of jobs for local people.
- Support local communities to learn new skills.
- Sustainable forest management with minimal impact on the ecosystem but a broad contribution to social and economic development.

**“ THE ONLY MEXICAN AIRLINE THAT
ALLOWS PASSENGERS TO OFFSET WHAT
IS TRULY EQUIVALENT TO THEIR TRIP,
WITHOUT APPROXIMATE OR
GENERIC AMOUNTS. ”**

VOLUNTARY CARBON OFFSET SCHEME:

Starting this May, we are launching our voluntary carbon offset program in partnership with AnaCO₂nda Carbon, a company with extensive experience in a wide variety of renewable energy technologies, energy efficiency and sustainability initiatives.

Unlike other Mexican airlines, our offset program is calculated on a route-by-route basis, meaning that passengers offset the actual amount of their trip, not approximate or generic sums. This process can be performed by our passenger on our website when booking their flights. This initiative reinforces our commitment to the environment and our passengers.

With this scheme, we will support an environmental indigenous project in Oaxaca, which aims to mitigate the environmental impact caused by logging, as well as restore areas with severe erosion or those affected by fires and pests, while also helping to protect and prevent damage from fires, grazing and illegal use of forest resources.

Other benefits of this project:

“Viva Aerobus is the only Mexican airline that, hand in hand with AnaCO₂nda Carbon, allows passengers to actively engage in environmental care and join the fight against climate change. With us, travelers can opt to offset their carbon footprint every time they purchase a ticket and thus allocate resources to a project that helps reduce greenhouse gas emissions or generate green energy.”

*Juan Carlos Zuazua,
Viva Aerobus CEO*



ANACO₂ NDA CARBON

www.anacondacarbon.com

6) FUEL EFFICIENCY

The initiatives deployed to improve our fuel efficiency reflect our high operational performance, as well as our company-wide commitment to the environment.

Among these actions, we highlight the following:

- Aircraft use according to their performance, considering short, medium, and long routes.
- Air route optimization to reduce flight distances.
- Elimination of physical manuals on board, by migrating them into a digital library. This also minimizes the use of paper, thus reducing the generation of solid waste.
- Use of ground power plants (GPUs) to reduce the use of aircraft auxiliary power unit (APUs). APUs are on-board aircraft generators that run on fuel. When aircraft are on the ramp, it is preferred to use GPUs whenever available, which are external power plants that provide the required power.
- Regular aircraft rigging to keep airframe components perfectly aligned. With this procedure, we avoid irregularities in the air flow during flights, thus avoiding unnecessary fuel consumption.
- Lighter materials optimization, as approved by the industry.
- Reducing weight on board.
- Opticlimb: We implemented OptiClimb, as part of our standard operating procedures, starting in 2021, making use of historical flight data and artificial intelligence, allows us to predict fuel consumption in different scenarios, to recommend optimal climb speeds for each flight. This resource also allows to save over 70kg of fuel per flight (equal to 14,000 tons of CO₂ per year)..

“ THROUGH THE IMPLEMENTATION OF OPTICLIMB, WE WILL BE ABLE TO SAVE UP TO 70KG OF FUEL PER FLIGHT OR 14,000 TONS OF CO₂ PER YEAR.”

“Through the implementation of opticlimb, we will be able to save up to 70kg of fuel per flight - equal to 14,000 tons of CO₂ per year - for viva aerobus, sustainability is a cornerstone of its operation and guides us to continue investing in high-tech and innovation, to make the difference for our planet.”

*Juan Carlos Zuazua,
Viva Aerobus CEO*

Standard Operating Procedures / Flight Dispatch and Control:

- Adjustment in the configuration of the flight plan system in accordance with Viva Aerobus' operational procedures.
- Optimal selection of alternate airports in flight planning.
- Definition of criteria for discretionary fuel.
- Use of shorter air routes.

Standard Operating Procedures / Flight Crew:

- Compliance with standard operating procedures (SOPs).
- Takeoff with Flex Temperature. Consists of setting a higher ambient temperature than the actual, thus limiting the engine's power output.
- Thrust Reduction Altitude. This procedure defines the optimum altitude (based on airport-specific conditions) at which the aircraft's takeoff power is reduced. Fuel is saved by reducing it early as possible during each flight.
- A/C Packs Off at Takeoff. Procedure by which the aircraft's air conditioning packs are turned off at takeoff. This allows us to optimize engines' air intake to generate sufficient thrust for takeoff.

- Single Engine Taxi In. In this procedure, once the aircraft lands and until it reaches the disembarking position, power is provided through only one engine instead of both.

Viva Aerobus has set a "Fuel Efficiency" committee, whose objective is to implement a strict Fuel Conservation Program that allow us to review and measure all actions aimed at reducing fuel consumption and CO₂ emissions.

- Multidisciplinary team capable of engaging through different levels and areas of the company.
- Monthly meetings to develop initiatives and follow up on those already deployed.
- Definition of objectives and key performance indicators (KPIs), which are measured and reviewed on a daily basis.
- Use of data directly fed from the aircraft. This information is processed by the "Flight Data Monitoring System" to create data dashboards for decision making.

Another initiative deployed to achieve greater efficiencies is **FLYdocs**, for the digitization of our entire operation's maintenance files. This effort, towards a paperless operation, strengthens not only our commitment to the environment, but also our determination to continue embracing technology and innovation..

7) INFLIGHT RECYCLING

As part of our social responsibility initiatives to reduce our environmental impact and manage urban solid waste, we are the only airline in Mexico that separates its waste on board and then recycles it.

We launched this program at our Monterrey operational hub during the third quarter 2020 and for 2021 and 2022 we will extend it to other hubs.

Our crew has been trained to ask our passengers to separate and recycle waste on all our flights. Likewise, our onboard menu includes a recycling handbook that, together with Eco Trolley (cart to separate trash), guide the passenger through this important initiative.

Thanks to this activity, in 2020, we recycled:

- Emissions of over 200 kg of CO₂.
- Sufficient water for one person consumption for more than 2 years.
- Enough fuel to travel over 200 km by car.



8) FOR A 100% GREEN FUTURE

Wright Electric Electric is the leader in the future of sustainable, low-emission aviation. The Albany, NY, USA-based company is on a mission to make all air travel low-emission in 20 years. For this purpose, they are developing electric aircraft, to eliminate carbon emissions, fuel costs, noise pollution, and takeoff time on the runway.

It was founded in 2016 by Jef Engler and a team of aerospace engineers, powertrain experts, and battery chemists.

How do we work with Wright Electric?

Since 2017, Viva Aerobus joined this great initiative that will shape the future of aviation, by providing advice with first-hand commercial, operational, and maintenance information, which will help to ensure that the electric aircraft under development is completely functional and safe.

Wright 1, the company's flagship design under development, has the following features:

- 186-passenger electric aircraft
- Range: 800 miles (~1,280 km)
- Timeline:

2020 - Start of program (engine development).

2021 – Ground testing of electric engine.

2023 – Flight tests.

2030 – Entry into service.

Main advantages:

- Reduced emissions: Requires less fuel to operate.
- Improved air quality: By requiring less fuel, pollutants such as NOx (nitrogen oxide) and soot released into areas near airports are reduced.
- Less noise pollution: Electric engines are quieter than current options.

How does an electric aircraft work?

Electric aircraft fly following the same physical principles as other aircraft: a propulsion system drives the aircraft forward, allowing air to pass over the wings, creating lift. When the amount of lift created is greater than gravitational force, the aircraft takes flight. The key difference is that the propulsion system of an electric aircraft is built around battery-powered electric engines, while a conventional aircraft propulsion system is built around fuel-powered jet engines.



For more information, please visit:
Website: www.weflywright.com
Email: contact@weflywright.com

9) SUMMARY





THIS IS
JUST THE BEGINNING

viva
 aerobus