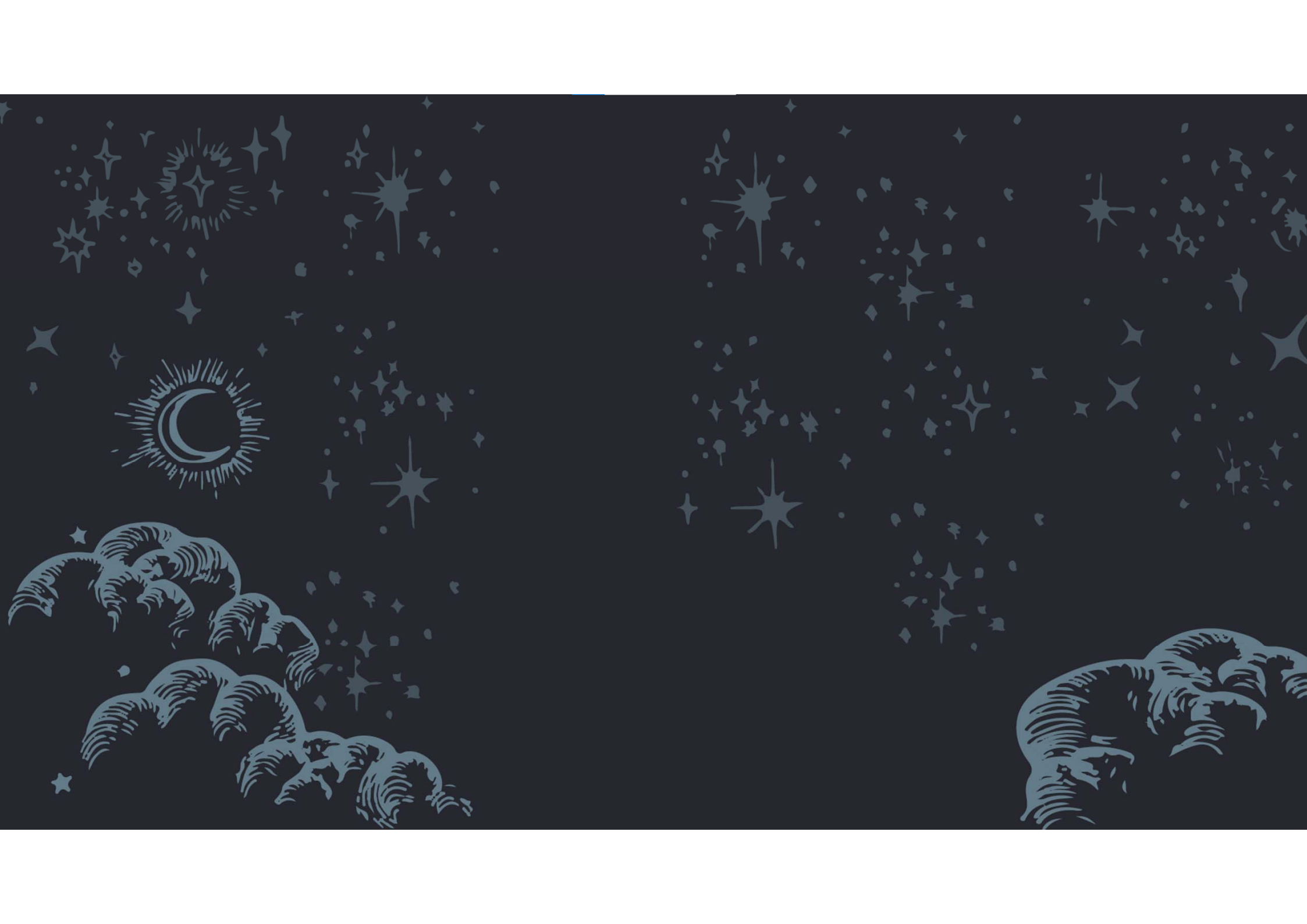




STARRING

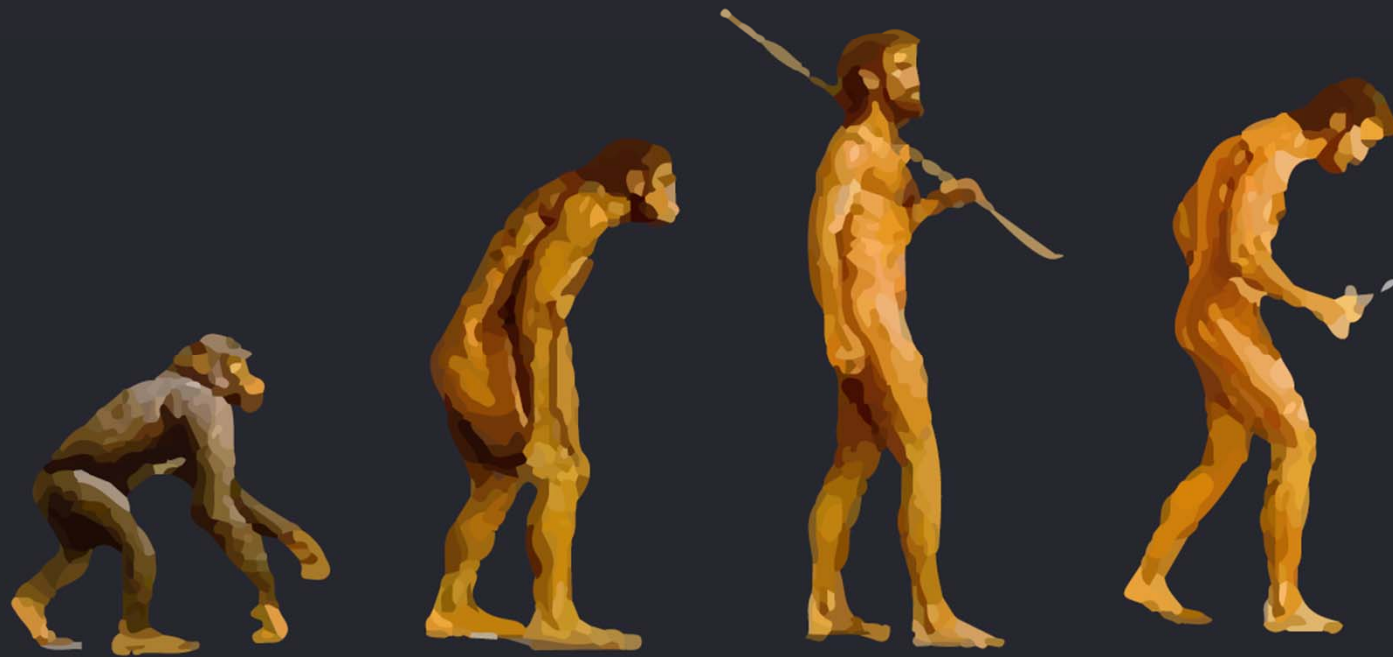


THE SUN



PLANET EARTH

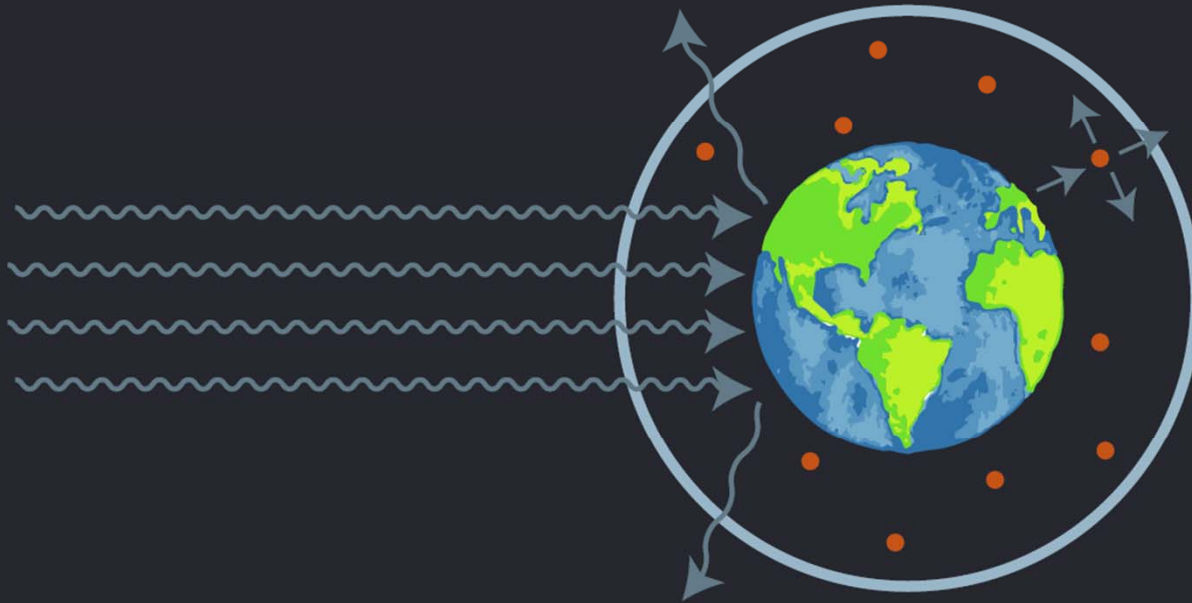
RISE OF THE



SAPIENS

CLIMATE CONTROL

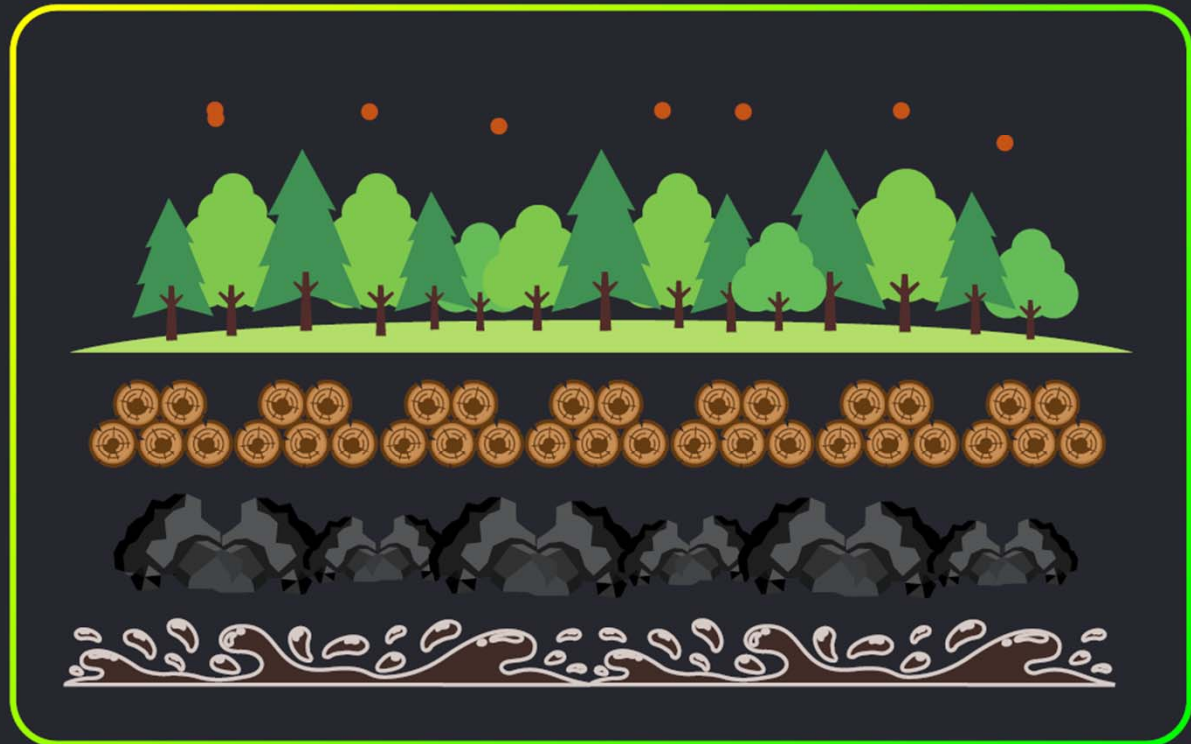
AUTO



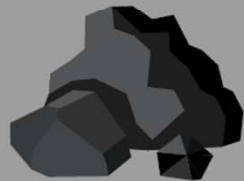
NICE



ENERGY FLOW

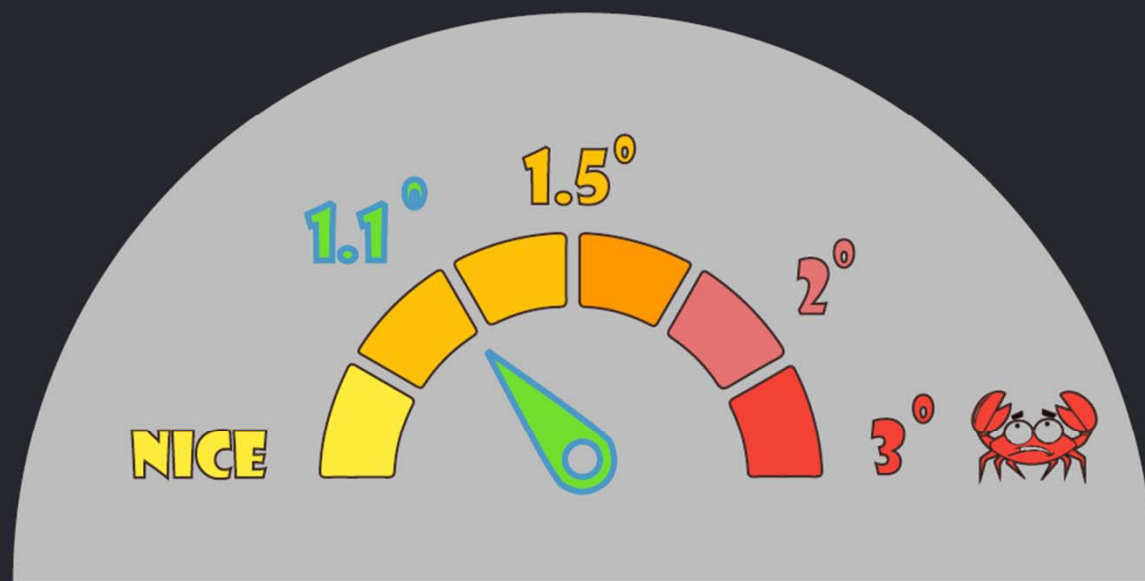


INTRODUCING THE SAPIEN....



PRESENT DAY...

50 B
-8 B



TAKE AWAY ...





World Food
Programme

SAVING
LIVES
CHANGING
LIVES

WFP Aviation

Global Humanitarian Aviation Conference

12-14 October 2022 | Istanbul, Türkiye



Contents

- UN General assembly information & SDGs
- Net Zero 2050 – Goals and Realities
- WFP Aviation Service Environmental snapshot
- Humanitarian Aviation stakeholders: Challenges & Opportunities

UN General Assembly information & SDGs

Since 2007, under the UN Climate Neutral Strategy, all UN agencies, funds and programs (UN AFP) have committed to measure, reduce and then offset any greenhouse gas emissions that cannot be avoided. More specifically, the Strategy is aimed at achieving the following three goals:

- 1. estimate annual greenhouse gas emissions with accepted international standards;**
- 2. undertake efforts to reduce greenhouse gas emissions;**
- 3. analyse cost implications and explore modalities of purchasing carbon offsets.**



WFP Aviation Service Environmental impact 2021 figures



700,000
km travelled



1,500,000
kg cargo transported



1,500,000
passengers transported



10
aircraft

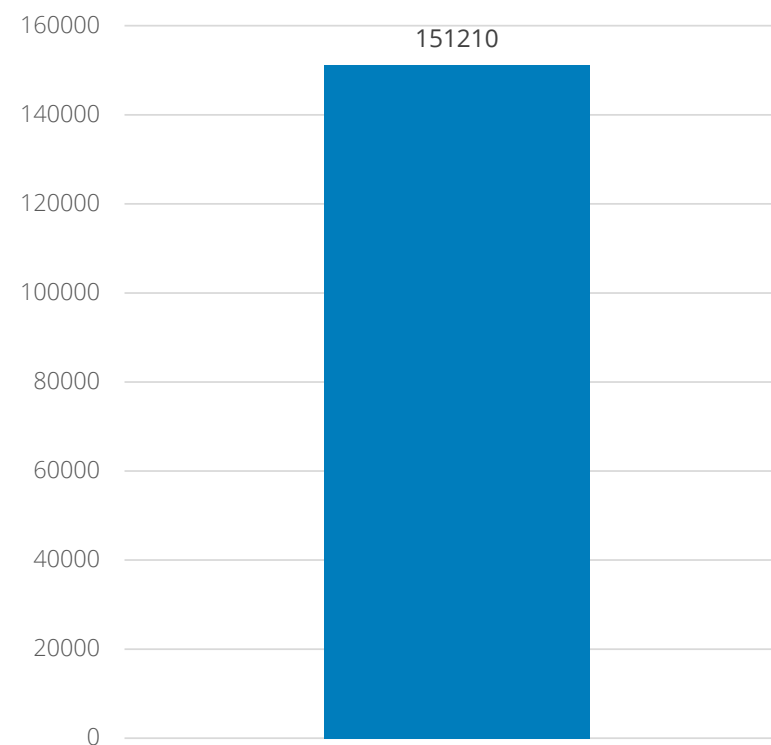


15,121
Carbon dioxide (CO₂)



UNHAS
Humanitarian Air Service

Total CO₂ Emissions (mt)



Emissions comparable to a mid-size air carrier

Net Zero 2050 Long-Term Aspirational Goals

- Fuel-producing companies bringing large scale, cost-competitive sustainable aviation fuels (**SAF**) to the market;
- Governments and air navigation service providers (ANSPs) eliminating inefficiencies in **air traffic management & infrastructures**;
- **Increasing operational efficiency** & Optimizing flight procedures (CO2 & noise reduction);
- **Aircraft and engine** manufacturers producing radically more efficient airframe and propulsion **technologies**;
- **Offsetting**.



...Reality Check

How to bridge the gap?

Sustainable Aviation Fuel

- SAF production **MUST NOT** take away from food resources;
- Spark donor and fuel broker engagement;
- Participating in SAF advocating campaigns and stakeholder roundtables.



...Reality Check

How to bridge the gap?

Improving air traffic management
& infrastructures

- Advocacy toward:
 - Local civil aviation authorities;
 - Airport authorities.
- Encourage ATM trainings;
- Share best practices;
- More direct flight paths lead to shorter flying times, which reduce fuel burn and resulting emissions.



B1900 fuel consumption = **400 litres/hr**



MI8 fuel consumption = **700 litres/hr**



Emissions due to go-arounds/low passages in 2021 = **100mt**

equal to **25** cars used for one year

...Reality Check

How to bridge the gap?

Increasing operational efficiency

Case studies conducted to assess operational opportunities to minimize aircraft fuel usage and emissions :

- **2% decrease of fuel consumed** when ICAO Doc 10013 technical measures were implemented by selected operators on four WFP aircraft for three months;
- **Potential 1 million USD per year net savings** of fuel purchased;
- **Second Case study** covering 50% of long-term chartered fleet: results have confirmed the saving margin.



...Reality Check

How to bridge the gap?

New technologies

- Expand our network of manufacturers and game-changer companies to keep abreast of upcoming technologies;
- Donor advocacy;
- Participation in technical roundtables;
- Electric and hydrogen-powered flight remains the ultimate goal.



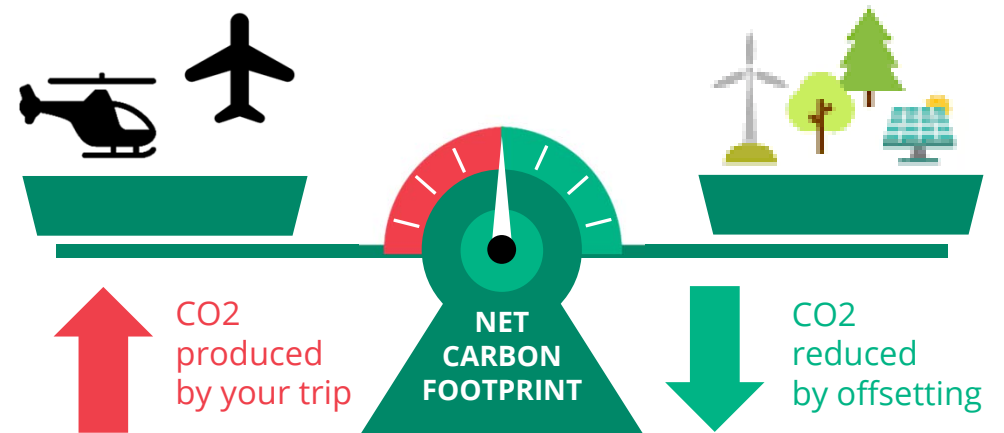
...Reality Check

How to bridge the gap?

Offsetting

- **AVOID GREENWASHING:** instead of using offsetting as a magic bullet, make investments to significantly reduce carbon footprint;
- Ensure offsetting projects are respectful of the local populations and ecosystems;
- The WFP Aviation Service is still identifying the most appropriate offsetting methodologies in order to compensate emissions at passenger and corporate levels.

CARBON OFFSETS ALLOW YOU TO BALANCE OUT YOUR EMISSIONS



WFP Aviation Service Environmental and Sustainability Program

Launched in 2021 to operationalize WFP's commitment to **environmental improvement and reduction of carbon footprint**.

Key achievements :

- **Aircraft CO2 emission calculation methodology** with environmental KPIs established
- Enforce **EMS as a minimum contracting requirement**
- **Environmental component** integrated into contracting and procurement processes, donor proposals and reports
- **Case studies conducted** to assess operational opportunities to minimize aircraft fuel usage
- Provide basic environmental **training** to our staff
- Launch and promote pax **awareness-raising campaigns**.
- Use **ground electricity as a primary option** instead of Ground Power Unit (GPU).
- **Extended series of operational opportunities to reduce fuel burn and emissions** has been drafted, further discussion will be held with the contracted Air Operators

Humanitarian Aviation Stakeholders

Challenges & Opportunities

- Pooling of environmental best practices;
- Common advocacy towards donors to find balance between operational needs and financial constraints;
- Share our CO2 reduction actions.



THANK YOU