IMPERIAL

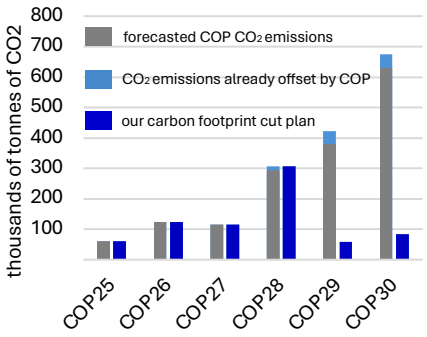
FAO: UNFCCC Executive Secretary & the organising committee of the

Conference of the Parties (COP)

A key task for the COP is to review the international emission inventories and set the guidelines for the years to come in term of sustainability. However, faced with the rise of its own rising CO_2 emissions induced by the transport of its participants, the summit has brought attention and is called upon to set an example. Many NGOs point at the mode of transport as the main source of CO_2 from COP summit. The fact that nearly twice as many people travel to a specific point on the globe each year by plane raises questions about the viability of an event claiming to be "green". To promptly limit this increase we propose:

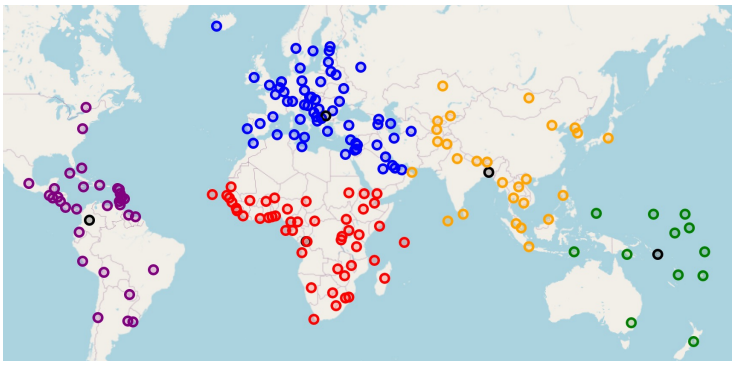
- **regional COP summits,**
- **limit overflow guests,**
- **rely on better aircraft,**
- **and sustainable fuels**

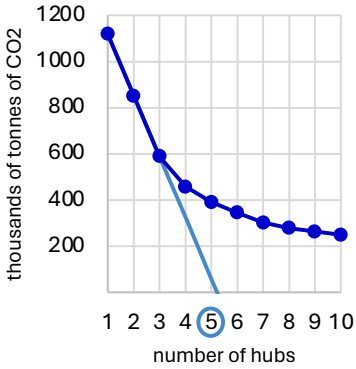
Each measures could cut COP's CO_2 emissions by **+40%.**



Solution 1: regional hubs *(short term)*

Instead of holding the event in one place, we propose the COP becomes a decentralised event held in five different regions of the world. This set-up cuts the total distance travelled by all stakeholders by **+60%**, thus resulting in a **time gain** and **reduction in carbon footprint**. Moreover, this fragmentation allows global leaders to make decisions more aligned with their region needs while ensuring the local consensus will be reached more easily.



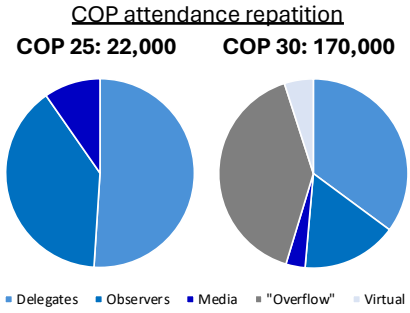


The savings in total distance travelled decays with the number of new hubs. While two hubs are politically and technically irrelevant, dividing into more than five hubs will bring no more benefits. This configuration is also beneficial to smaller countries which could decide their future. Meanwhile, northern countries would not have to wait them before acting.

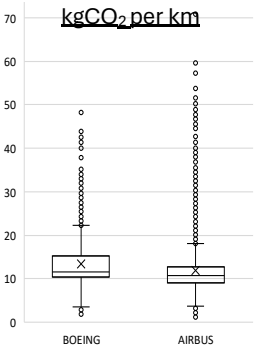
Solution 2: limit Overflow *(medium term)*

The COP represents a great economic opportunity for the hosting countries. We forecast the **total attendance to soar at a +50% CAGR** over the next 5 years. But this surge is mainly due to "Overflow" guests [1] whose presence and relevance might be questioned. This unexpected guests, who will represent about half of the attendance in the years to come, could spare the trip by following another rising trend we noticed over the past two COPs: **virtual meetings**.

With **tighter controls** and a **limit of 100,000** participants, the hosting country would still be able to welcome **x5 more people** than the COP25. Coupled with the first solution, the CO_2 would be cut by almost **80%.**



Solution 3: right choice of aircraft *(medium term)*

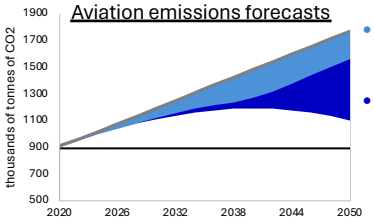


The sempiternal duel between Boeing and Airbus for the domination of the sky resurfaced after the recent failures from the American giant. Global travel data gathered over four month are clear: the **American consumes 12.5% more fuel per km** (thus emitting as much more CO_2) than its European competitor.

Although the fuel savings will amortise such cost, we invite anyone to size the cost of replacing 30% of a fleet.

Solution 4: Sustainable fuels (SAF) *(long term)*

SAF are a long-term solution that still lack of momentum. It would send a strong message if COP could put it in the spotlight.

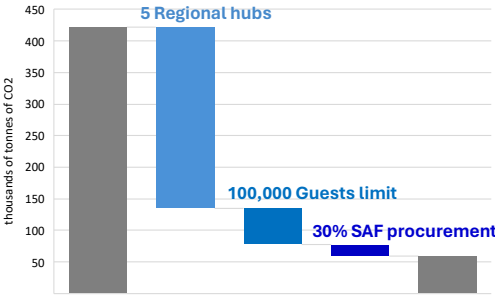


- Imminent aircraft technologies can cut 15% of CO_2
- SAF effect only visible in high production capacity case [2] but is a great candidate to reach the carbon neutral targets

SUMMARY

The COP has the potential to serve as a sustainable, ethic, and technological showcase. Our set of policies Suggest a gradual, phased intervention over time that would eventually **slash CO emissions by +90%**.

Just as seeds that has shaped forests, this set of measures must be acted upon promptly to come to fruition when our children will need it.



[1] R. McSweeney (2023): Analysis: Which countries have sent the most delegates to COP28?, Carbon Brief, [online] https://www.carbonbrief.org/analysis-which-countries-have-sent-the-most-delegates-to-cop28/

[2] I. Abrantes, A.F. Ferreira, A. Silva, M. Costa, Sustainable aviation fuels and imminent technologies - CO2 emissions evolution towards 2050, Journal of Cleaner Production, Volume 313, 2021, 127937, ISSN 0959-6526, https://doi.org/10.1016/j.jclepro.2021.127937.