

ELECTRIC TAXIING BY SAFRAN

ENVIRONMENTAL BENEFITS FACTS AND FIGURES

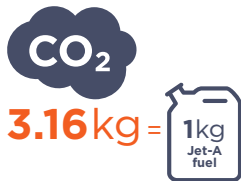
The global aerospace industry is committed to reducing the environmental impact of aviation. The reduction of aircraft emissions, particularly NO_x and CO₂, within the airport environment would have a positive impact on both local air quality and global climate change concerns.

The information below and on the back of this leaflet demonstrates that **Electric Taxiing by Safran** can form a useful and important component to reduce ground taxi airport emissions by introducing cleaner electric taxi operations.



CRITERIA POLLUTANTS

Carbon Dioxide (CO₂)



Approximately **3.16 kg** of Carbon Dioxide (CO₂) generated per kg of Jet-A fuel burned. CO₂ is a greenhouse gas that affects global climate.

Other Pollutants



The other criteria pollutants for aviation are Carbon Monoxide (CO) and Unburned Hydrocarbons (UHC). UHC emissions may become more regulated. These pollutants are required to be below a threshold level.

Nitrogen Oxide (NO_x)



Nitrogen Oxide (NO_x) emissions from aircraft cause ground level smog.

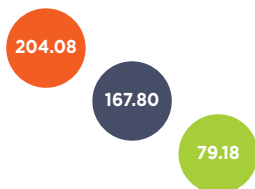
Emissions Compliance



Airports in many regions of the world are required to perform detailed modeling and maintain inventories of emissions to comply with regional or national regulations and take steps to reduce emissions.

EMISSIONS – THE FIGURES

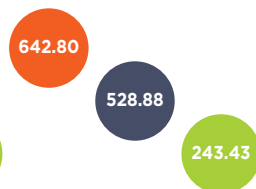
Fuel consumption



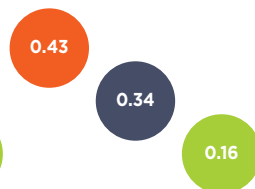
Emission of CO



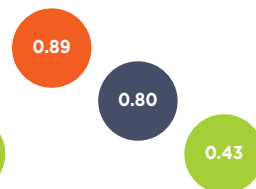
Emission of CO₂



Emission of UHC



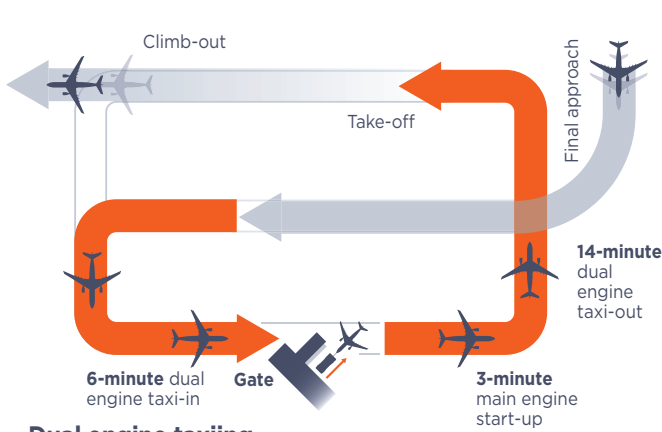
Emission of NO_x



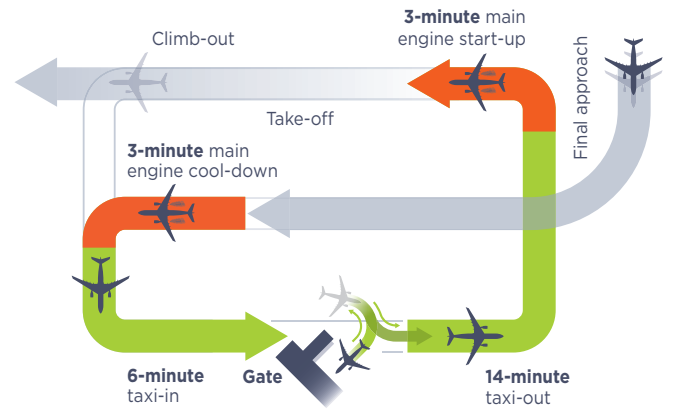
Figures = **Totals (kg)** ● Dual Engine Taxiing ● Single Engine Taxiing ● Electric Taxiing by Safran

Example for 17-minute taxi-out.

DUAL ENGINE TAXI AND ELECTRIC TAXIING BY SAFRAN



Dual engine taxiing



Electric Taxiing by Safran

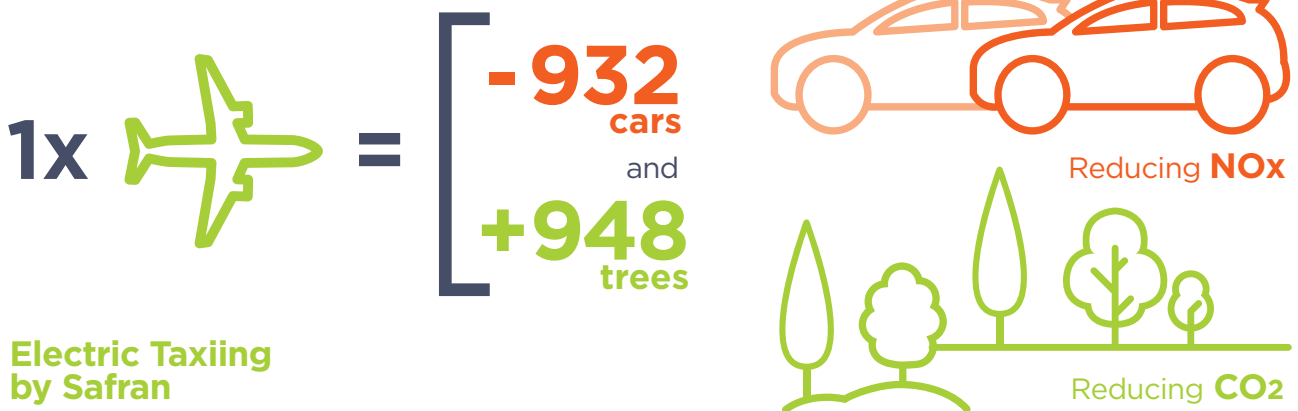
ENVIRONMENTAL BENEFITS - EMISSIONS REDUCTIONS WITH ELECTRIC TAXIING BY SAFRAN

When compared with Dual Engine Taxi Operations, **Electric Taxiing by Safran** provides the opportunity to reduce by...



WHAT THIS MEANS FOR THE ENVIRONMENT

Typical use of **Electric Taxiing by Safran** annually with an Airbus A320 aircraft at American airports is predicted to be the equivalent of planting up to 948 trees for CO₂ saving and eliminating 932 automobiles for NO_x reductions.



Example for 2,000 cycles per year.