The global aerospace industry is committed to reducing the environmental impact of aviation. The reduction of aircraft emissions, particularly NOx 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 (NOₓ)

Nitrogen Oxide (NOₓ) 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**

<table>
<thead>
<tr>
<th>Fuel consumption</th>
<th>Emission of CO</th>
<th>Emission of CO₂</th>
<th>Emission of UHC</th>
<th>Emission of NOₓ</th>
</tr>
</thead>
<tbody>
<tr>
<td>204.08 kg</td>
<td>6.43 kg</td>
<td>642.80 kg</td>
<td>0.43 kg</td>
<td>0.89 kg</td>
</tr>
<tr>
<td>167.80 kg</td>
<td>4.68 kg</td>
<td>528.88 kg</td>
<td>0.34 kg</td>
<td>0.80 kg</td>
</tr>
<tr>
<td>79.38 kg</td>
<td>1.71 kg</td>
<td>243.43 kg</td>
<td>0.16 kg</td>
<td>0.43 kg</td>
</tr>
</tbody>
</table>

Figures = Totals (kg)  
- Red = Dual Engine Taxiing  
- Green = Electric Taxiing by Safran  
- Black = Single Engine Taxiing

Example for 17-minute taxi-out.
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 NOx reductions.

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

- up to -51% NOₓ
- up to -62% UHC
- up to -61% CO₂
- up to -73% CO

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 NOx reductions.

Example for 2,000 cycles per year.