

Scope	KPI's	Carbon Impact (tCO2eq)	
		2021	2022
Scope 1 - Carbon emissions	Diesel Consumption (Fuel Buildings)	75	39
	Petrol Consumption (Fuel Vehicles)	60	81
	Greenhouse gas Emitted by Liquid Refrigerants	370	287
Scope 2 - Carbon emissions	Electricity Consumption	6 128	5 813
	Consumption of Renewable Energies	2	11
	TOTAL SCOPE 1 & 2	6 634	6 230
Scope 3 - Carbon emissions	Buildings	696	920
	Waste	45	39
	Electronic and IT equipment	1 585	579
	Use of Fransat Products Sold	99	185
	Employee Commuting (Business Travel)	331	745
	Accomodation and Meals (Business Travel)	0	1
	Water Consumption	2	3
	Telecommunications Packages		180
	Eutelsat Geostationary Satellite Fleet	85 643	81 200
	Capacity Leased on 3rd Party Satellites	11 183	11 183
	TOTAL SCOPE 3	99 584	95 033
	TOTAL CARBON EMISSIONS	106 219	101 263

# Methodology for modeling Co2 emissions from Eutelsat's satellite fleet (Scope 3)

#### **Objective**

The model aims to forecast Co2 emissions from Eutelsat's satellite fleet.

### Modeling technique

Co2 emissions from the whole life cycle of the mission (design, manufacturing, testing, launch campaign, launch and operation) from each satellite are allocated over the design life of the satellite from its OSD. During the Design life of the satellite, allocation may stop if the satellite is sold to another entity.

## Co2 emissions per satellite

In 2016, the European Space Agency conducted an analysis of the life cycle of satellites, which found that emissions from the whole life cycle of the mission are estimated at 56,000 metric tons of Co2 equivalent. This estimate is currently used in the model. This number could be subject to changes if new studies from ESA or other agencies are published on the matter.

### **Perimeter of CO2 emissions**

For Satellites owned by 3rd Parties, where Eutelsat exploits only a portion of the capacity, a pro-rata allocation of the full LCA figure of 56 K tCO2eq, based on the number of exploited transponders, is allocated over the design life of the satellite.

## Assumptions around upcoming satellite part of public nominal deployment plan

It is public information that Hotbird 13F, Hotbird 13G, Konnect VHTS, Eutelsat 10B and Eutelsat 36D will be launched between 2022 and 2024. The latest assumptions regarding launch dates and life duration are taken into account in the model during this period. They can be subject to change on a regular basis.