Airline presentation template

Ryanair scenario

ESTUAIRE

isae
Institut Supérieur de l'Aéronautique et de l'Espace
SUPAERO

Hypothesis - General informations

Period considered : 2023 - 2030

2023 CO2 emissions : 14.2 mtCO2eq.

Fleet hypothesis :
B737_NG : 213 planes
B737_max : 85 planes
15 planes replaced per year
15 additional planes per year
emission reduction rate by new planes : 20%

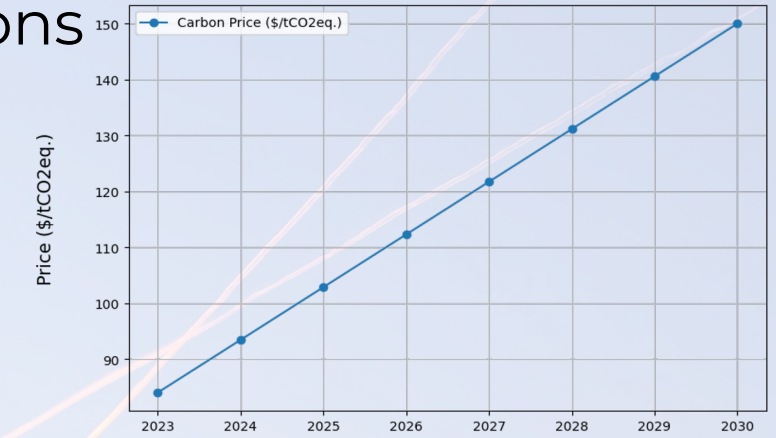
EU market share : 90%

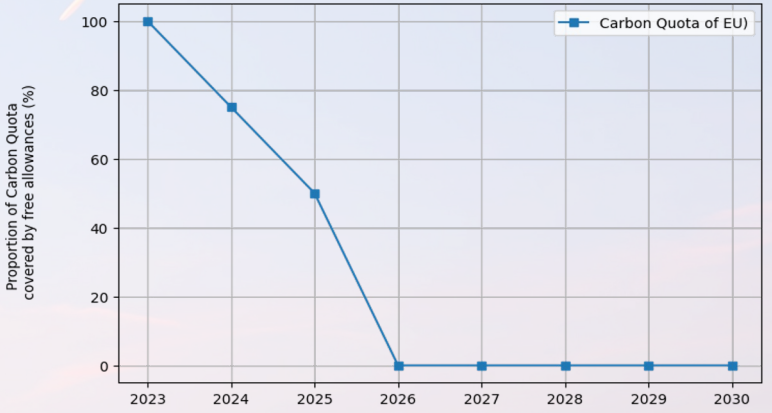
2023 Free Allowances : 90%*14.2 mtCO2eq.

SAF price : 1,92 USD/L
Kerosene price : 0,7 USD/L

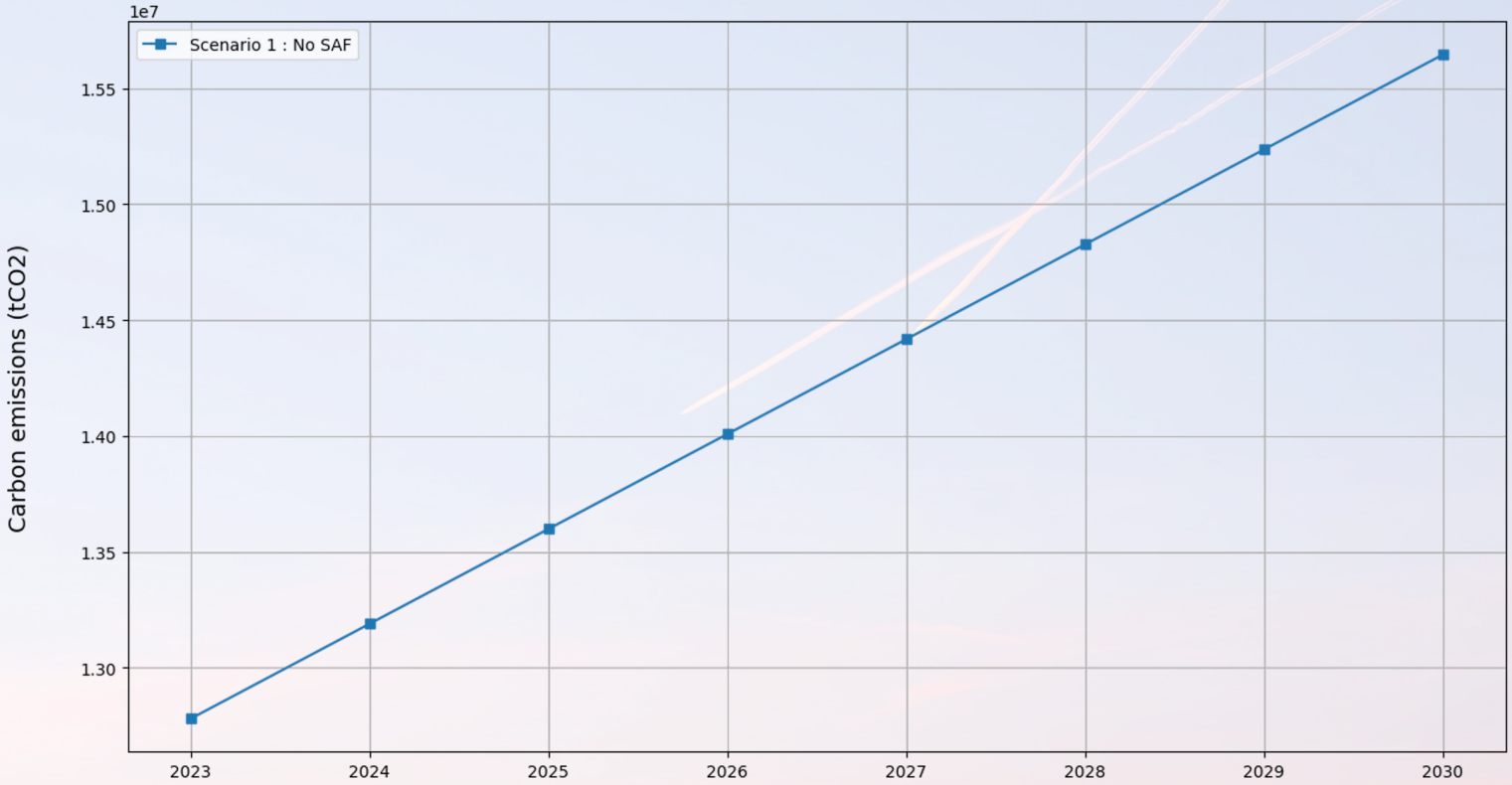
Core LCA SAF : 0 gCO2eq./MJ
Core LCA kerosene : 88,8 gCO2eq./MJ

Free allowances from EU : 70% of additional costs

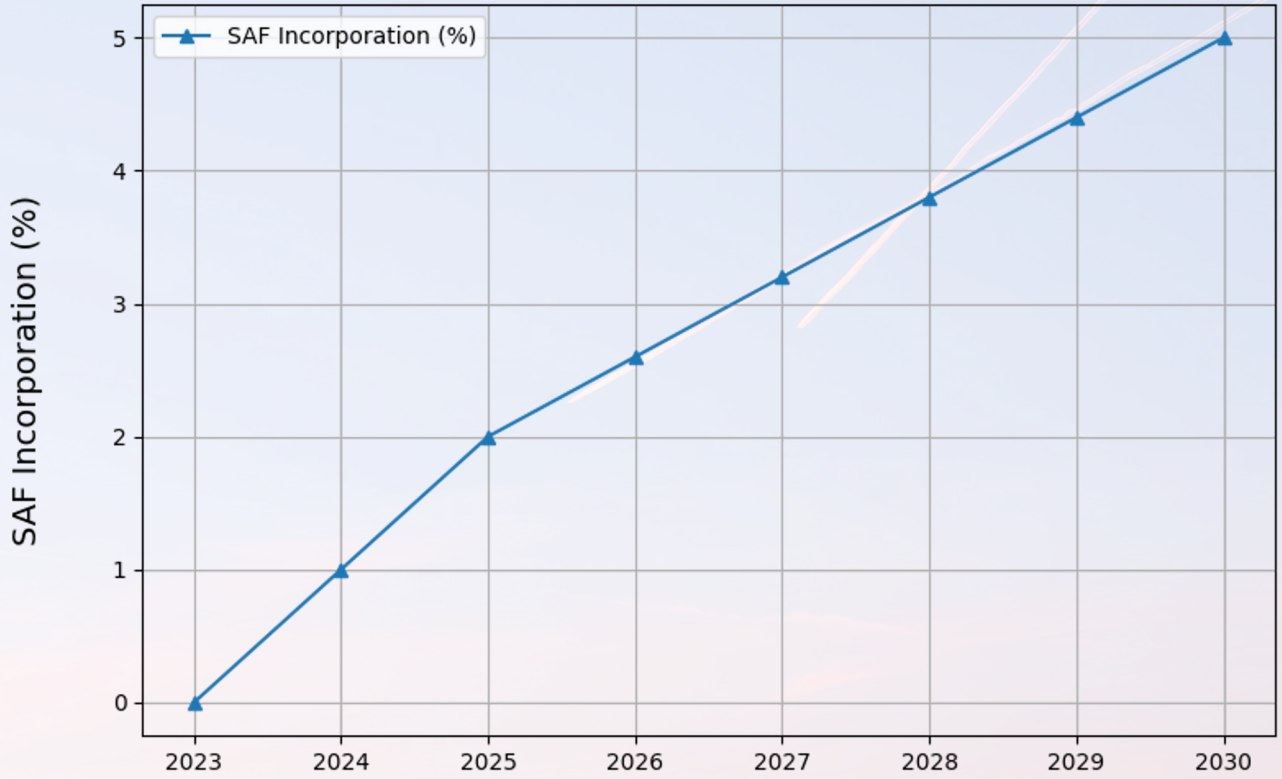




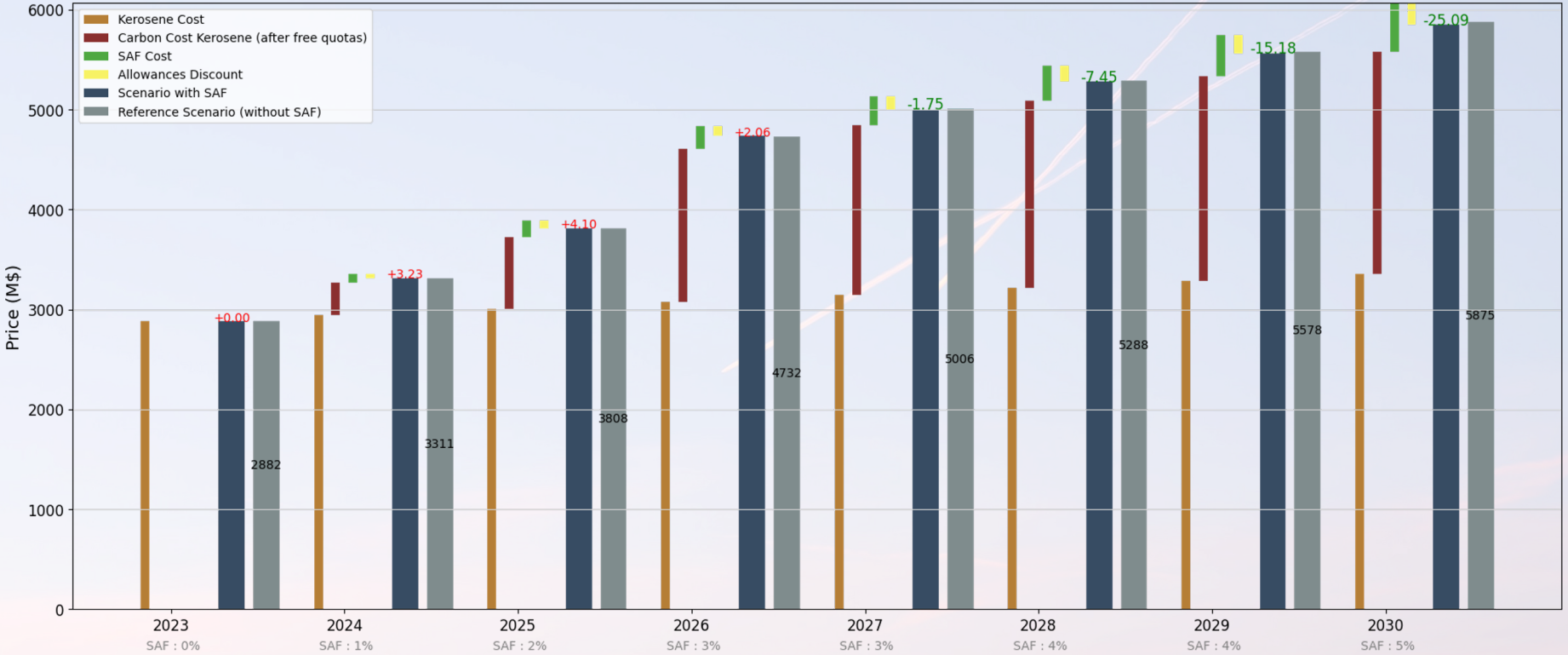
Hypothesis - Carbon emissions



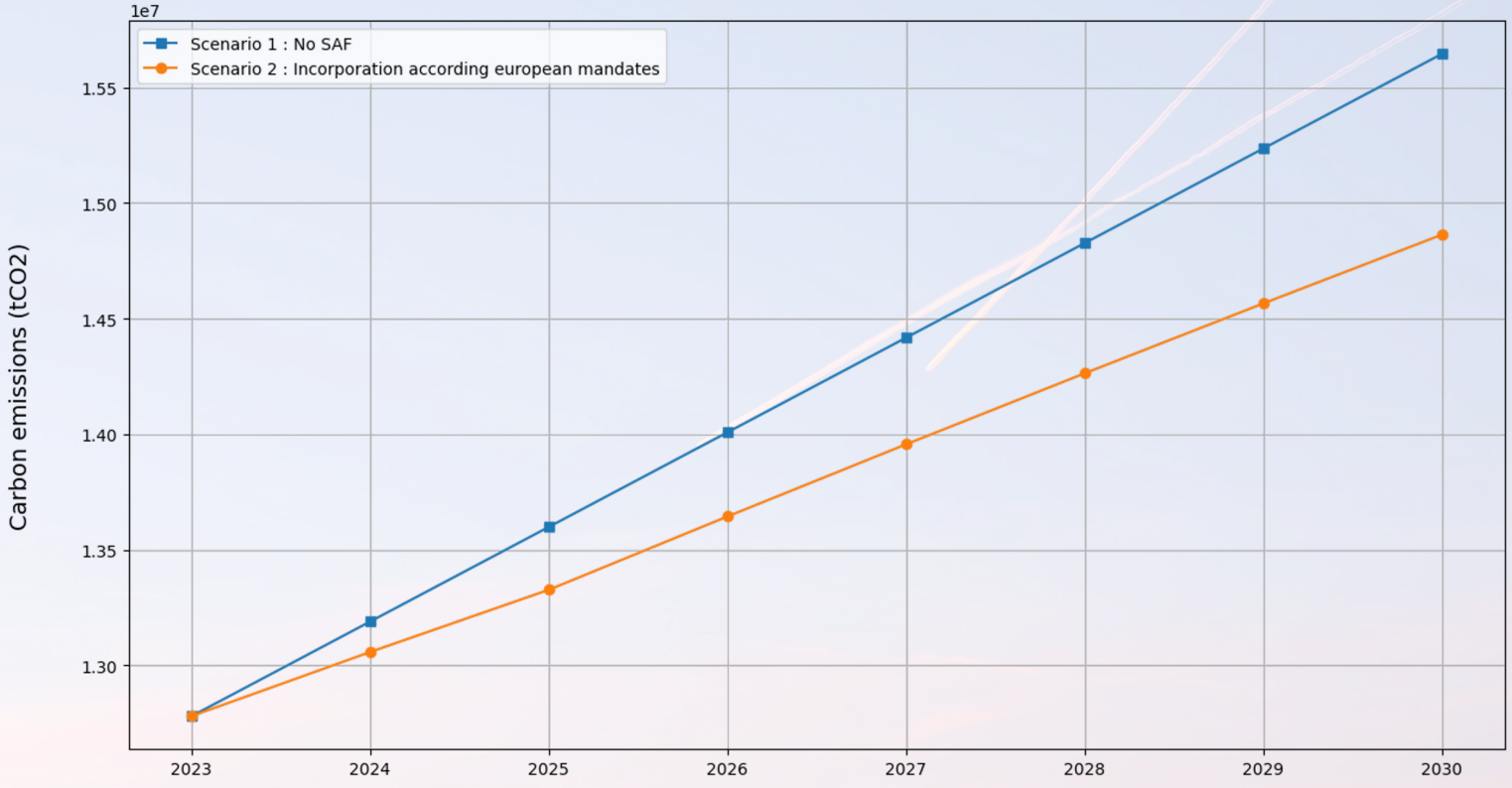
Hypothesis - Incorporation rate



Results - costs previsions



Results - CO2 emissions



Results - Optimal carbon price for SAF encouragement

CO2 must reach a certain price to encourage airline to use SAF. This price limit only depends on the gap between SAF price and kerosene price.