**Team ID: G09**

**Avian Consulting Group**

**Team Member Name Year Major**

Apoorva Jain 2024 MS in Marketing Analytics

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**Advisor(s):** Prof. John Crocker

**Topic:** United Airlines Flying Clean: Advocacy for Sustainable Aviation Fuel Adoption

**Audience:**  Board of Directors of United Airlines

**Sustainable Development Goal**

SDG 07: Ensure access to affordable, reliable, sustainable and modern energy for all

SDG 12: Ensure sustainable consumption and production patterns

SDG 13: Take urgent action to combat climate change and its impacts

**Executive Summary**

The urgency to confront climate change has never been greater, particularly for the aviation sector, which is responsible for around 2.5% of global carbon emissions and is poised to double by 2050. According to Atmosfair, a single long-haul flight can create more carbon emissions in a few hours than the average person in 56 different countries will generate in an entire year. The International Air Transport Association (IATA) has set a net-zero carbon emissions target by 2050, recognizing Sustainable Aviation Fuel (SAF) as a beacon of hope for achieving this goal. SAF, a biofuel alternative, offers up to an 80% reduction compared to traditional fuels and is key to the industry's greener future. United Airlines or hereafter referred to as United, in its mission to lead the charge towards a sustainable future, has not only been an early adopter of SAF but is also committed to a 100% green operation by 2050.

Avian Consulting Group recognizes the challenges United Airlines would face as it ventures on its path towards a sustainable future. Maintaining a competitive edge and growing profits while managing the high costs of SAF, supply chain challenges and adhering to regulatory compliance pose significant hurdles. We aim to address these challenges by first analyzing the current fuel usage, infrastructure, operational processes and regulatory frameworks and incentives regarding SAF adoption. Subsequently, proposing a strategic roadmap to guide United towards a smoother fuel transition. This will involve economic modeling to navigate high costs, advocating for governmental policies fostering research and lowering SAF costs, and assisting in establishing partnerships to secure a sustainable feedstock supply chain. We will also assist United through the legal complexities of SAF adoption, ensuring compliance with emerging regulations and advocating for policy changes that incentivize SAF's scaled adoption. For operational efficiency, we suggest greater emphasis on route optimization and weight reduction strategies. A key factor in successful adoption of SAF would be strategic engagement with the government, industry partners, competitors, and environmental organizations to align efforts and share best practices. Further, we will encourage United Airlines to invest in research focused on development of greener fuels and emission reduction. This approach will assist United Airlines in meeting environmental commitments and positioning itself as a leader in reducing aviation's climate impact. Avian is committed to supporting United Airlines in navigating this transformation, ensuring financial viability and regulatory compliance.