AIRBUS

FISHING FOR EXPERIENCE

Sustainability Impact driven by Standardization of Cabin Seats Assembly Parts

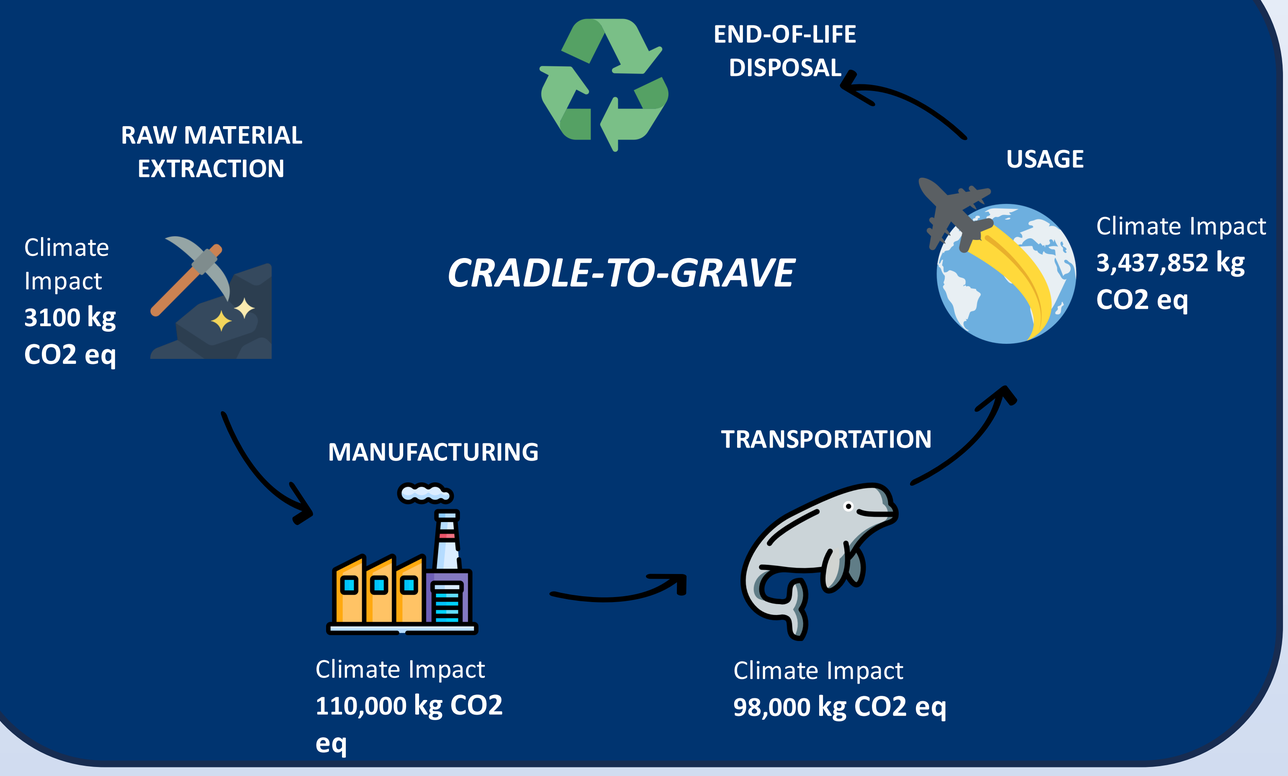
PROJECT SCOPE

- Assess ***ENVIRONMENTAL IMPACTS*** of commercial aircraft passenger seat (economy or business) over its lifecycle with a ***LIFE-CYCLE ASSESSMENT***.
- Explore the scope of ***CIRCULARITY*** and ***RE-USABILITY*** in the end-of-life management of an aircraft seat within non-aviation segments.
- Identify potential areas for component ***STANDARDIZATION*** to enhance the scale of end-of-life management towards circularity.

METHODOLOGY

- Initial Phase : Comprehensive interaction with company executive and understanding the goals.
- Collaboration Phase: Intensive discussion and design thinking session.
- Research Phase: Thorough research for the possible solutions.
- Implementation Phase: Assumption based calculations for the feasibility.

LIFE CYCLE ASSESSMENT



CIRCULARITY

THE AIRBUS EXPERIENCE

Changing one train compartment with **refurbished airplane economy class** seats.

Reduces the train weight by **14,000 Kg**

With **300 *kWh*** *of energy savings* On your next Hamburg-Kiel trip.

50
seats can be reused per train.

THE AIRBUS DINE-IN

Aircraft themed Restaurant

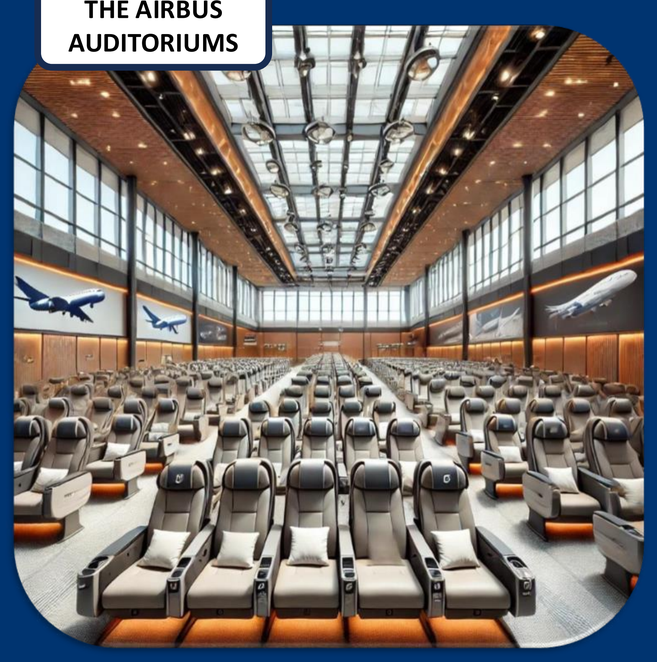
2000
seats can be reused
50 seats per location
25 locations

THE AIRBUS WAITING ROOMS

Waiting rooms
with repurposed airplane seats

9000
seats can be reused
50 seats per location
180 locations

THE AIRBUS AUDITORIUMS



Auditoriums/Cinemas
With refurbished Airplane seats

1500
seats can be reused
150 seats per location
10 locations

Conclusion

- Life Cycle Assessment of Aircraft seats conducted with Cradle-to-Grave approach, Usage phase cause the more than 90 % Environmental impact.
- Reusability of Aircraft Seats in non-aviation industry explored with intent to generate value.
- Reusability of Aircraft component (Armrest) explored in Trains, Buses, Ferrys and Medical fields.

Future Scopes

- Deep analysis of the feasibility of reusing Aircraft seats in Trains, Restaurants, Waiting rooms, Auditoriums and more, their economic value (direct and indirect).
- Scope of reusing other Aircraft seat components in non-aviation industries.

Udo Brunswig
Company Executive

TEAM :1

Abhay Handa
Product Owner

Fulvio Romano
Scrum Master

Asif Nizam Malik
Product Developer

Alexandra Sagel
Product Developer

Surakshit Chouta
Product Developer

Tharunya Mirle Vasudeva
Product Developer