ICAO UNITING AVIATION

Eco-Design through LCA

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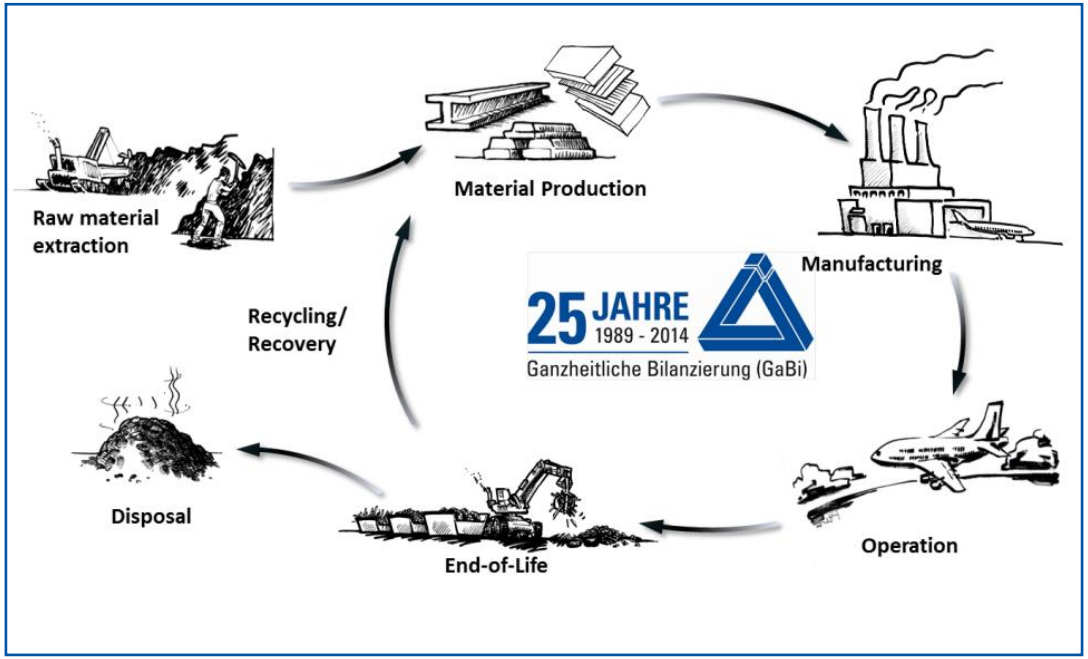
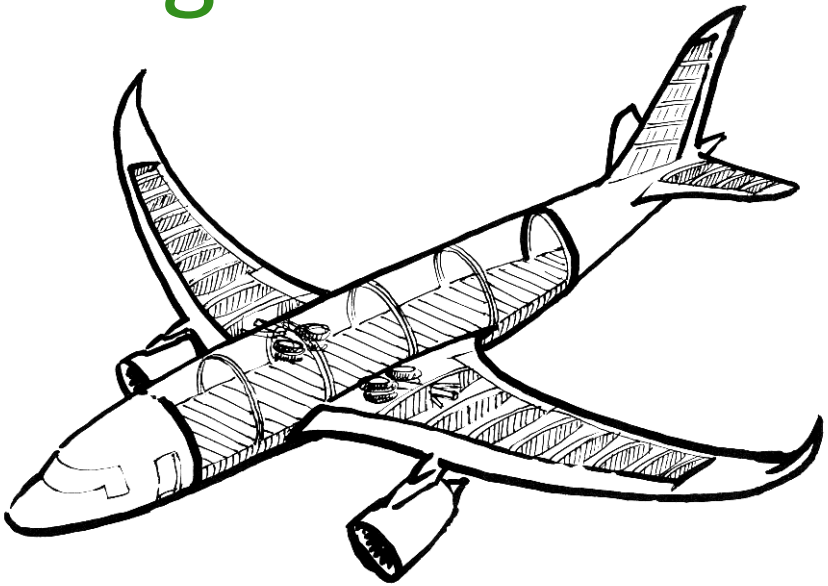
Fraunhofer IBP

Eco-Design of Aircrafts



The Challenge

- Complexity
- Efficiency
- Accuracy
- Secrecy



The Challenge

- Complexity
- Efficiency
- Accuracy
- Secrecy

→ Smart concepts
→ Collaboration
→ Automation

Collaboration within CLEAN SKY

- 6 technology demonstrators
- 500+ partners

LCA Activities in CLEAN SKY

T
E
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D
A

Environmental Impact on fleet level

FLEET Level

Information on aircraft global fleet

Airliner | Business Jet | Rotorcraft

Environmental Impact on aircraft level

PART/AIRCRAFT Level

Information on current and future aircraft parts, modules and sub-modules

Airliner | Business Jet | Rotorcraft

Environmental Impact on aviation processes

PROCESS Level

Information on materials, processes and technologies

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→ Efficient analysis tool

→ Aviation-specific database

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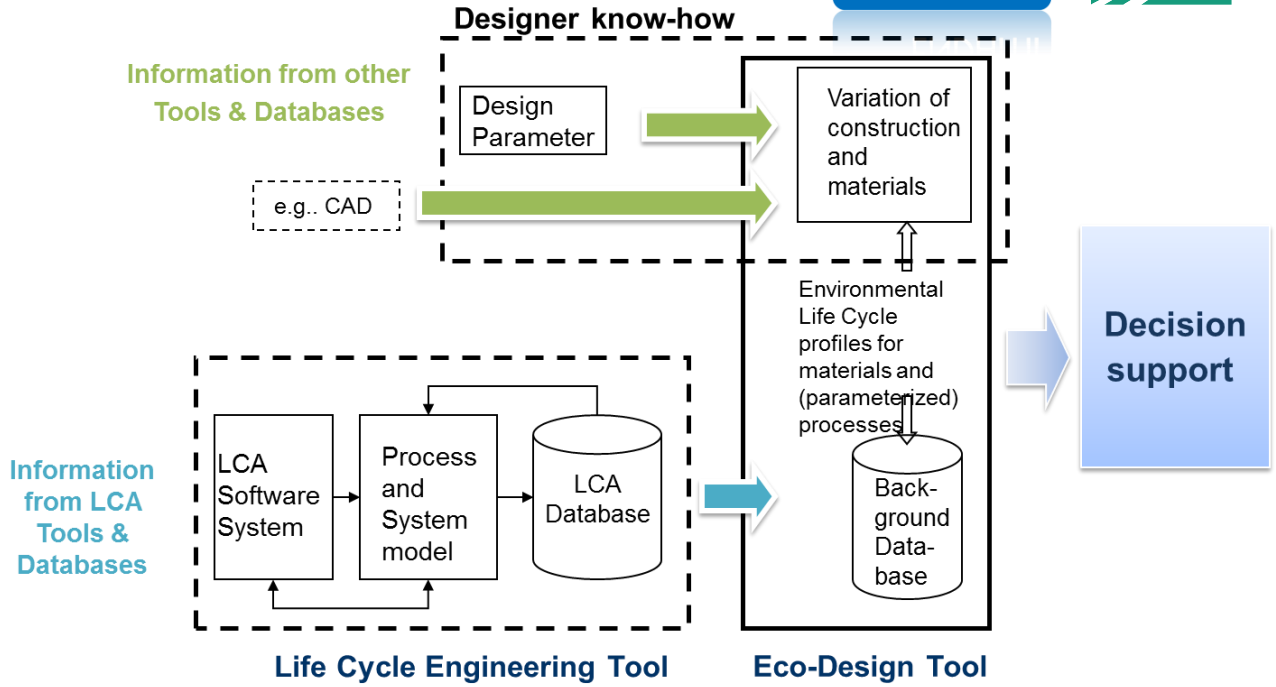
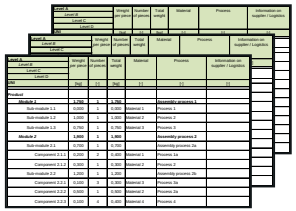
Design Know-How

LCA Expertise



Cloud Infrastructure



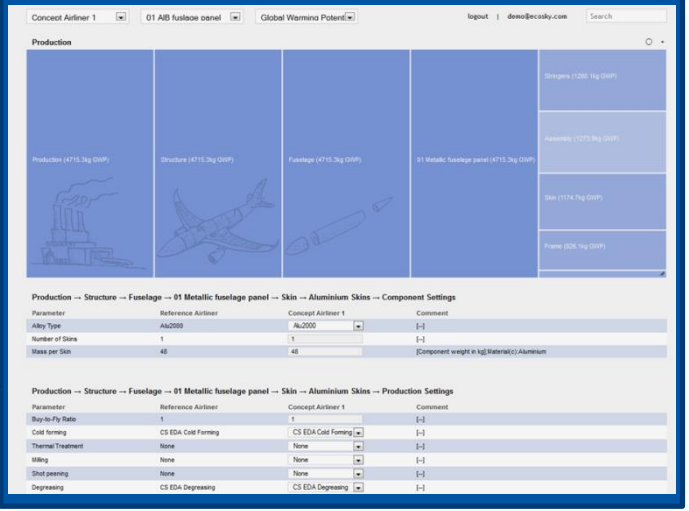
Fraunhofer neutral BoM Format

BoM - Import

Aviation-specific datasets in Parameterised LCI models

Web Service API

Eco-design: User-interface



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- Easy-to-use interface
- High degree of automation
- Complex LCI model background
- Aviation specific background data
- Integration in company structures
- Multiple scenario options
- Collaboration across distributed teams or even with suppliers

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A SUSTANIA 100 Solultion

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