The Ecobox Project - Creation of an ecodesign methodological platform 2023 Clean Space Industry Days

DEFENCE AND SPACE

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AIRBUS

Quick presentation – Ecodesign team role



The Ecodesign team's expertise and responsibility focus on the **environmental performance** of AD products **throughout** their **whole life cycle**

Technical role

Governance role

Quick presentation – Ecodesign team action perimeter

AIRBUS





Quick presentation – Ecodesign team challenge

SAF*

GreenIT

in operation

New & increasing needs

Diverse environmental focus

Across the whole business

External

environmental impacts evaluation

declaration of product carbon **Holistic product** footprint Military Air Systems **Space Systems** Scope 3 USP* **Future Combat Air** Optimise **Connected Intelligence** System product end of life Design integrating environmental Track Enable trade offs presence of product's specific footprint materials or reduction while substances in

product



LCA

The Ecobox Project - Context

New & increasing needs

Diverse environmental focus Across the whole business



Allow engineering community to be aware of and leverage ecodesign expertise

Create an ecodesign methodological platform



Promote **selected tools/methodologies/datasets** to avoid non-aligned study results and increase reusability



Avoid **inefficient resources use** (h & €) invested in looking for solutions/methods/results



Benefit from the **synergies existing with AC and AH** for the selection and deployment of evaluation tools/methods

AIRBUS

The Ecobox Project – Overview of the project



WP2 - Establish a catalog of recommended methodologies & tools





Mapping the business needs and expectations as well as existing tools & methodologies



→ Product Types (Space, Defence,...)
→ Maturity level (R&T, R&D etc.)
→ Project Lifecycle (various MGs)

→ Department leader

 \rightarrow Team leader \rightarrow Junior engineer Management responsibilities

Activities portfolio



Ro

Role type

- \rightarrow chief/system engineer
- \rightarrow technical expert
- \rightarrow portfolio manager
- → sustainability representative



4 main drivers for tackling environmental issues



29%

Regulations (anticipation)

"I see an exhaustive amount of new regulations coming up. They will require tremendous efforts, that we have to comply with"

/!\ Top Company Objectives

"It was a clear signal from our management that we have to work on the topic "

Customers' requirements



" ESA has introduced LCA as a regular requirement since a few years already, now the European commission goes even further and we expect others to follow"

Team members expectations



"I start having issues to recruit young profiles and to retain some employees in my team"

Main blockers

- Complexity to integrate in corebusiness activity
- Difficulty to find trade-off opportunities

 Difficulty to optimise various constraints

Three main needs expressed by the business



More precise strategy & objective

 High level strategy of the group will have more added value once it is cascaded in a precised and more tailored way

Enablers to work on core-business domains

- Access to environmental evaluations results and/or possibility to perform simplified assessments themselves
- Watch tower to anticipate follow customer requirements / regulations to come
- Guidelines on ways to improve

Awareness & skills development

• Ensuring people have then the right skills to integrate these aspects in their daily job is key







: Ecobox [As-Is]

Tools / Evaluation methods				
E2Ecobuild CO2 emissions assessment tool for military aircraft in service phase	MLI Environmental evaluation too Circularity Evaluation SSR/ Early Stage sustainability indicators	Tool "score de sustainability mission" Mechanical Parts environmental evaluation	WEDA S CoCa S EDSI Commit L	EEDs Scope 3 USP LCA
Gsites		Network		
Sustainability @AD		AD Sustainability network		
AD Sutainability Engineering		Sustainability ambassadors		
Innovation at AD		TEP sustainability network		
Processes		Documents		
Sustainability check in Bid review	Greenplant	Organisation ma	anual	
TRL Sustainability questionnaire Disposal Concept for MiAS		Sustainability in Bids support document		
Databases		Awareness and trainings		
Airbus' common materials database "MARS"		Ecodesign generic E-Leaning	Climate Fr	esk
10		Good IT practice		AIRBUS

: Ecobox [To-Be]

Review of the initial objective:



Promote **selected tools/methodologies** to avoid non-aligned study results and increase reusability

- 1. Consolidate, harmonise, share & continue building on what has already been put in place
- 2. Fill the gaps identified
- 3. Avoid the **traps** of:
 - o becoming an annoying catalog of infos/links
 - o becoming an additional tool in the current landscape creating more complexity

Looking forward to CSID2024 for the next progress update!

Thank you

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