



ECO-DESIGN

PROGRESS

THALES
Cyber & Digital

Thales Eco-Design
Progress v2023
Principle of Methodology
for Physical Products

Context

Thales has accelerated its strategy for a low carbon future under the leadership of Patrice Caine¹ by setting the objective to have 100% of new developed products adopting ecodesign principles. We, therefore, designed a scoring tool that can inform and help our business lines to measure the maturity of the product and its level of **improvements done since 2018** in terms of environmental impacts and consequently, empower our teams to establish higher ambition to convert progressively their portfolio to more products with positive impacts on the planet. We named our tool **Eco-Design Progress, for Physical products**. The methodological approach was refined with the support of an external consulting firm to ensure a robust tool and to effectively engage Thales teams.

Objectives

The purpose of this summary document is to provide a comprehensive understanding of Eco-Design Progress' methodology and how it is used at Thales to promote environmental action at Product-level.

This document is to describe:

- Scope Boundaries
- Matrix scoring and calculation
- Use case

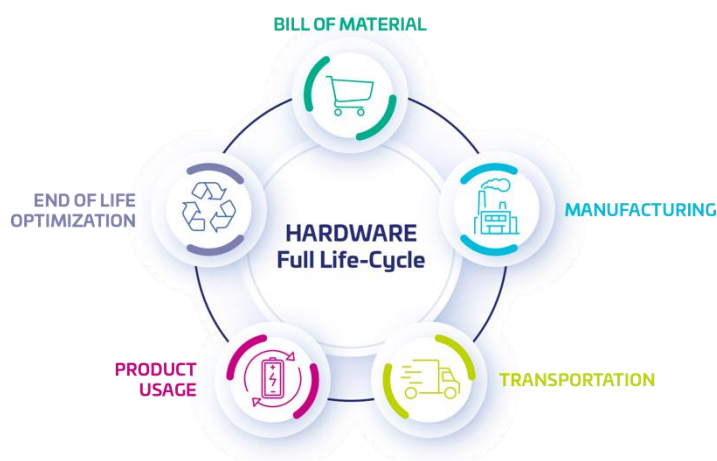
The methodology validation was conducted on a document that provides thorough and robust details.

Thales perimeter

Our measurement applies **only on hardware manufactured products** by Thales Cyber & Digital and their associated services of data personalization, transportation, packaging offers and any other services related to the physical products such as possible collection of obsolete items. We cover all physical products branded under Thales whether they have been manufactured in-house or at sub-contractors' factories.

Scope boundaries

The system boundaries considered in this study cover the full physical life cycle of the product, following a **cradle-to-grave approach**: this includes raw material extraction, manufacturing processes, upstream/internal/downstream logistics, the use phase, and end-of-life treatment, as illustrated in the life cycle representation below



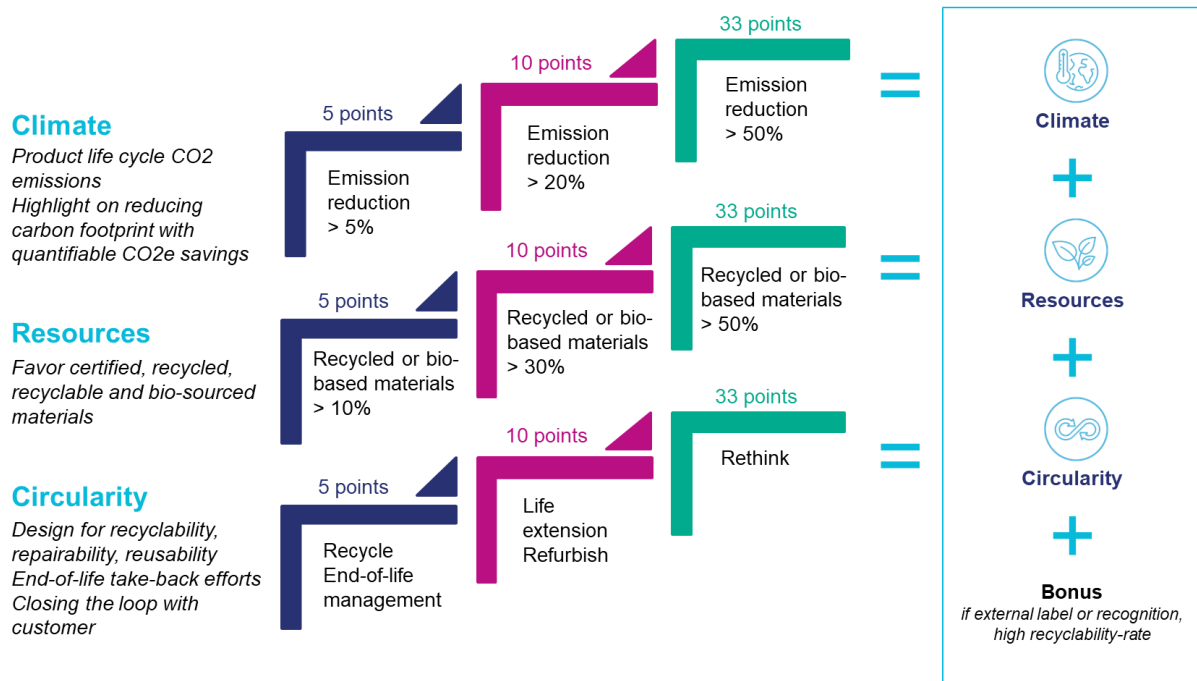
Reference Product

“All evaluations shall take **2018 as the reference year**. If the product/release did not exist in 2018, we might compare the current product to a standard or similar version without improvements.” The indicator is not designed to compare products across business lines as they have different maturity levels. However, it is relevant for comparing several products within their own product family range, serving same use-cases.

¹[Accelerating our strategy for a low carbon future](#)

Matrix scoring and calculation

Driven by the lessons learned from several Life Cycle Assessments performed, we identified the main pillars with the highest environmental impact and crafted our own maturity index built around **three key pillars**.



This selection is a pragmatic choice that allows monitoring across all Business Lines. However, it should not prevent us from considering potential impact transfers to other environmental topics such as water stress, toxicity, and biodiversity. A comprehensive assessment of these aspects requires a full Life Cycle Assessment (a method that evaluates a product's environmental impacts throughout its entire life cycle) in line with the ISO 14040/44² standards.

Bonus points

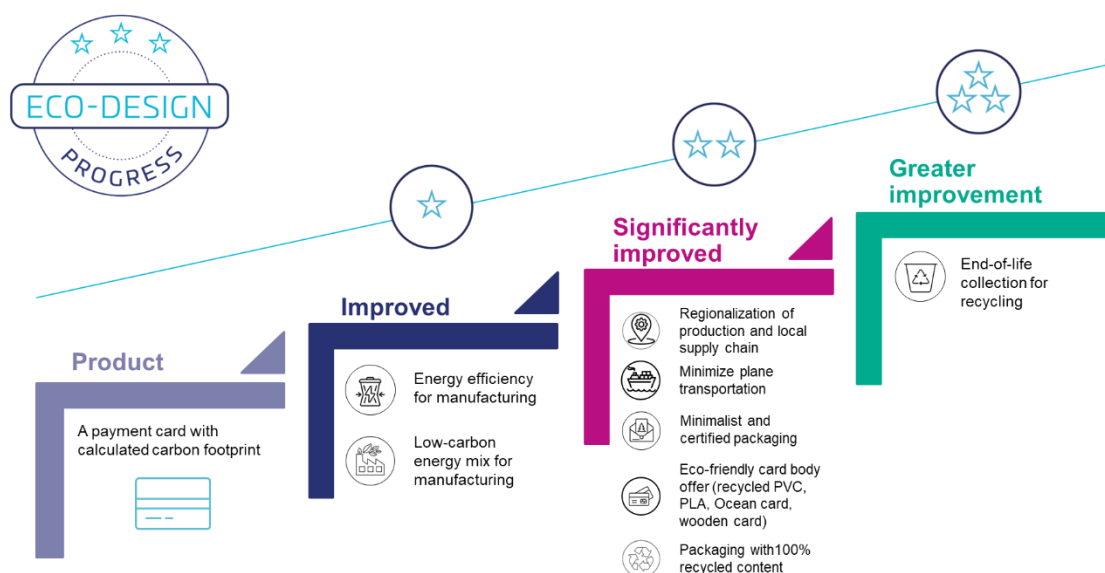
Bonus points may be awarded to products that have obtained specific eco-labels or certifications, as these demonstrate an additional effort beyond standard practice (except when such labels have become the industry state of the art). Bonus points can also be granted for achieving a recyclability rate above 50%, as assessed with the Reecyc'Lab tool or a similar methodology. Furthermore, additional bonuses may apply when innovative business models are implemented.

Product score assessment	
Climate + Resources + Circularity + Bonus	
> 50 points	Greater improvement
21-51 points	Significantly improved
5 to 20 points	Improved

² ISO 14040 and ISO 14044 are international standards that define the principles, framework, and requirements for conducting Life Cycle Assessments (LCA). They provide guidance on goal definition, scope, inventory analysis, impact assessment, and interpretation. Together, they ensure transparency, consistency, and scientific robustness in environmental evaluations.

Use case : Payment card

The aim of conducting an assessment based on three pillars is to provide project teams with multiple approaches to the eco-design of their products. The following table illustrates the different possible solutions for a 'payment card' use-case that can be implemented to move from 'improved' to 'greater improvement'. Road maps can then be drawn up to present the measures implemented and future developments for a product.



Potential for future development

The Eco-Design Progress is intended to serve as a stable reference indicator over time; however, it may evolve to incorporate future methodological improvements. In the event of major changes in the methodology of impacts calculation, we would decide to:

- adjust the reference year with Thales Group new commitments
- change the border of each criteria to apply higher constraints;
- change the number of points to apply higher rates for highest categories.
- integrate a quantity of water used throughout the product's life cycle and impact on water quality or other relevant impact categories
- apply weighted points between the 3 pillars

External Verification

EcoAct³, a wholly owned subsidiary of Schneider Electric, supported us in validating the methodology of our "Thales Eco-Design Progress" by carrying out an independent critical review as an external stakeholder.

This review helped improve the overall quality of the work and ensured the methodology's relevance, traceability, consistency, and transparency.

The critical review was carried out by two members of EcoAct's Life Cycle Assessment team:

Guillaume Mignot, Manager expert LCA

- LCA expertise 8+ years: ISO 14040/44, Ecoscore Methodology (Laposte), SaaS Solution (EcoDesignCloud), FDES verifiers.

Etienne Bellevergue, Consultant senior LCA

- LCA expertise 6+ years: ISO 14040/44, Ecodesign, Digital tools, SaaS Solution.

³ [EcoAct | Votre expert climat et environnement.](#)

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