LACROIX

Tegis Lite

Ecodesign Report

July 2025

Tegis Lite,

a modular and connected ecosystem, tailored to the specific needs of local authorities

Tegis Lite is the new LACROIX solution for connected control of lighting switch-on and switch-off.

Tegis Lite is part of the intelligent streetlighting management ecosystem TEGIS. This new solution meets the needs of electrification syndicates and local authorities for connected control of streetlighting installations.

Tegis Lite is a communicating control unit dedicated to the connected control of streetlighting cabinets. Installed in the cabinet, the Tegis Lite control unit allows remote parameter settings and offers the possibility to control two astronomical clocks independently. Tegis Lite is remotely operated via the Tegis Web platform.

Objective

This report presents the **ecodesign measures** implemented during the development of the **Tegis Lite** control unit, with the aim of reducing its footprint across its entire life cycle.

The final **environmental footprint** of the product was measured precisely through a **Life-Cycle Assessment** (LCA), whose results are converted into a single score, in accordance with the **PEF 3.1 method** (see opposite), and compared with the previous generation of control unit.

Product Environmental Footprint Method (PEF 3.1)

European method aimed at quantifying **the environmental footprint** of a product:

- Based on Life-Cycle Assessment (LCA) and ISO standards, it considers 16 categories of environmental impacts.
- It enables the calculation of a **single score** representing the product's **environmental footprint** in millipoints (mPt). *(1000 millipoints = the average annual footprint of a European citizen)*

How?

- **Conducting** a Life-Cycle Assessment **(LCA).**
- **Normalization** aimed at relating the results obtained in the 16 impact categories to the **annual footprint of an average human** for that category.
- **Weighting** aimed at reflecting **the relative importance** of each of the 16 impact categories (determined by a 2018 JRC* study, based on contributions from environmental experts and stakeholders).
- The **weighted results** of each impact category are then **added** together to obtain a **unique score** in millipoints (mPt).

** Joint Research Center*

Main ecodesign issues identified

According to the LCA of the previous generation, **the sub-assemblies contributing** the most to the product's environmental footprint are as follows:

Energy consumption

Certain electronic components, particularly integrated circuits

Printed Circuit Board (PCB) surface area

Amount of paper in the user manual

An investigation into alternatives was therefore carried out to reduce the impact of these sub-assemblies in the new Tegis Lite control unit.

Results – Tegis Lite

The overall impact of the Tegis Lite solution is reduced by nearly one third compared with the previous generation. Only one indicator shows an equivalent impact to the previous version, related to human carcinogenic toxicity, due to an equivalent amount of chemicals used in the paper manufacturing process for the manual.

Across all other indicators assessed, a significant reduction in impacts is observed.

- *Reduction in energy consumption (-30%)*
- *Reduction in PCB surface area*
- *Optimisation of components*

Climate change: 0,46 mPt **-34%***

-43%* **Resources, mineral and metal: 3,1 mPt**

- *Optimisation of relays, integrated circuits, and surface-mounted components*

Unique Score
Tegis Lite : 11,4 mPt
(1,63 smartphone**)

-31%*

Other Indicators : 0,65 mPt **-36%***

-19%* **Ionising radiation: 4,19 mPt**

- *Reduction in energy consumption (-30%)*

- *Equivalent impact due to the chemicals used in paper manufacturing for the manual*

Human toxicity, cancer: 0,61 mPt **+1,1%***

-32%* **Resources, fossil: 2,46 mPt**

- *Reduction in energy consumption (-30%)*

** compared with the previous generation*

*** the unique score of a smartphone is 7 mPt (Source : NegaOctet)*

Going further...

Environmental benefits of the product

Beyond its environmental footprint, which we have sought to reduce as much as possible through our ecodesign approach, **Tegis Lite** provides significant environmental benefits to our customers.

Reduction in energy consumption

thanks to lighting adaptation to solar time and customised switch-off periods

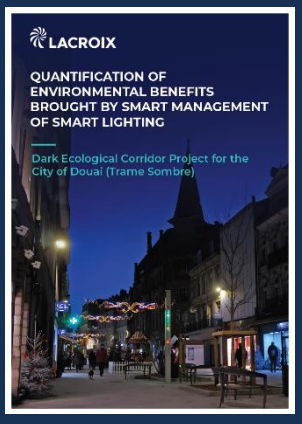
Support/preservation

of biodiversity thanks to time-slot settings adapted to local fauna and flora

Optimisation of on-site interventions

to reprogram or override cabinets, thereby reducing travel and CO^2 emissions

For more information, please refer to our Study on the quantification of the environmental benefits provided by Smart Streetlighting Management:



Short summary

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