Coordinator: **Resilio**

Partners: **EVEA Conseil, Hubblo, WeLoop,**

Partners not receiving funding: **LCIE, TIDE Environnement**
Subcontractors: **TND**

Project acronym: InnoData Silicum

Brief description of the project (maximum 8 words): Innovation through data for responsible digital technology.

Duration: **19 months**

Start month: **September 2025**

Total project cost (M€): **1.85 mio €**

Project funding (M€): **1.42 mio €**

Location department: **Multiple. Dissemination of common goods online.**

Context (maximum 150 words):

The eco-design approach is based on objectifying the environmental performance of products and services. This involves assessing their footprint and then identifying the most effective levers for reducing it. The most widely used method, promoted by the European Union and ADEME, is Life Cycle Assessment (LCA).

In the digital sector, most of the impact of equipment and services is concentrated on silicon wafers and their encapsulations (processors, GPUs, SSDs, etc.), optical sensors, and motherboards. Today, all LCAs conducted on these components suffer from a lack of reliability, opacity, and low granularity of the fundamental data available.

This makes eco-design for digital technology complex, unreliable, and subject to very significant margins of error. The lack of granularity limits the identification of eco-design levers. Subsequent decision-making, from products to public policy, suffers greatly from the lack of transparency.

Objectives (150 words maximum):

The objective of the project is to promote and enable eco-design and responsible innovation throughout the digital value chain: from semiconductors to services.

To achieve this, the project will create a rich, open, and freely accessible expert knowledge base on open innovation, enabling market players to access key information that they currently lack. The knowledge base will be accompanied by environmental footprint data, providing an immediately usable working basis, accelerating innovation and eco-design initiatives and enabling the community to take ownership of the deliverables.

This project aims to resolve an information access issue that is paralyzing the entire sector, providing all market players with the means to innovate in the field of semiconductors and responsible digital technology, thereby reducing their environmental footprint.

Process (150 words maximum):

The project, conducted as an open innovation initiative, will be carried out along two lines, each resulting in one deliverable. The first line will focus on the expert knowledge base, and the second on data production.

When the focus shifts, the knowledge base will be opened up and made accessible to the community. The base will be able to start its own life as a common resource. In addition, the choice of data to be characterized will be finalized to correspond as closely as possible to the expectations of the stakeholders and provide a relevant deliverable.

Our consortium will be led by Resilio, which will coordinate the project and carry out part of the research. Each of the seven consortium members will contribute to the project according to their area of expertise: modeling for Evea, Tide, WeLoop, and Hubblo; laboratory analysis by TND; and sharing of characterization data by LCIE Bureau Veritas.

Expected results

- Innovation **(50 words maximum):** Currently, there is no other project of this type in the world that offers such a high level of coverage, accuracy, and openness. Our Open Innovation approach will enable stakeholders to truly take ownership of the project, supporting their own responsible innovation initiatives in the digital value chain.
- Economic and social **(50 words maximum):** The project, which is for the common good, should accelerate the economic development of the market, creating activity and employment. By offering open and shared knowledge, it develops a common good and responds to the challenge of democratizing environmental issues. The economy and society will benefit from the advances.
- Environment **(50 words maximum):** We are leveraging the democratization of eco-design across the entire market, and an accelerated growth in responsible innovation. Both are currently constrained by major shortcomings, which we wish to address. Leverage offers a unique opportunity to improve the sector's sustainability.

Application and promotion (150 words maximum):

We believe that Open Innovation will be a powerful lever to stimulate the growing eco-design market in the digital value chain by increasing confidence in the market and enabling the creation of new tools and services.

We can already identify many uses for the commons produced during the project:

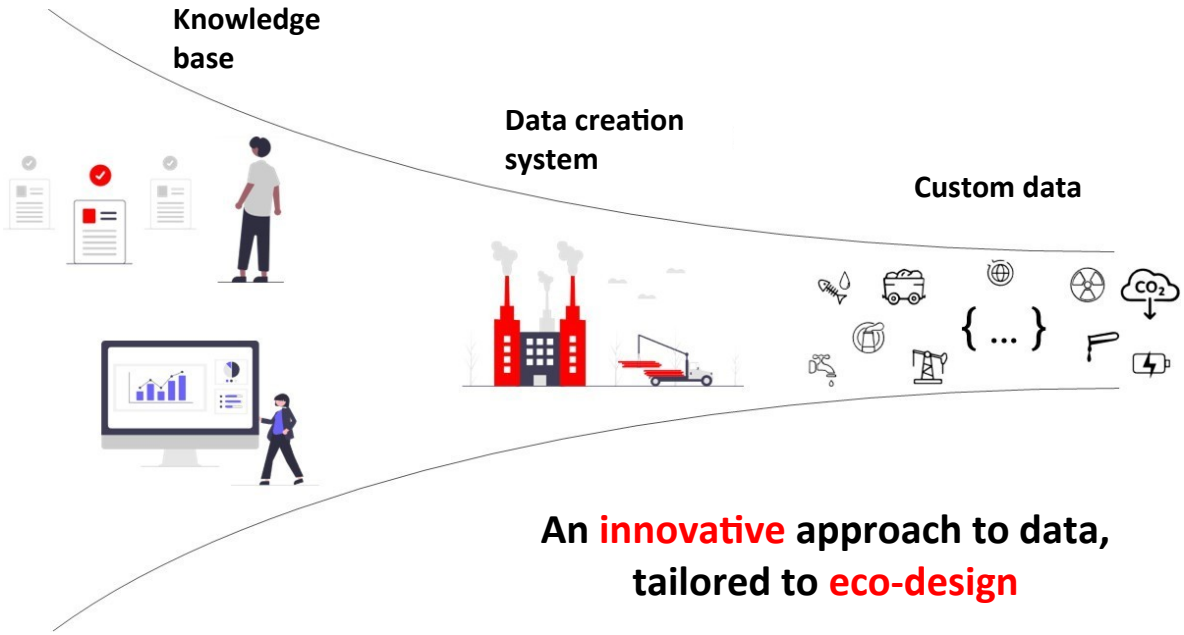
- Industrial eco-design tools
- Databases & tools for carbon footprint and LCA assessment
- Datagir tools or ADEME footprint database
- LCA of digital products and services, or for digital production companies
- Support for public policies and transition plans (SRADDET, PCAET, SNBC, etc.)
- Regulations on digital environmental labeling and certifications
- Applied research

There are just as many stakeholders involved in France and Europe: design offices, manufacturers, academics, software developers, databases (including public ones), and beyond that, service providers, consultants, etc.

We want to work together to support the transition!

Partner logo (.jpg)

Illustration of the project in HD format (.jpg) (specify caption and credits for the illustration)



Credit: Resilio, InnoData Silicum Consortium, Amael Parreaux-Ey

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