OPENING WEBINAR
EIME SOFTWARE VERSION 6

Pole of expertise in Life Cycle Analysis and eco-design of LCIE bureau Veritas

FEBRUARY 23, 2023

WEBINAR

Agenda

- EIME, more than 25 years of evolution
- A 6th version to meet the challenges of the LCA of the future
- The main new features
- Useful information

Damien PRUNEL
CODDE manager

Yann FABRE
IT manager - EIME

Béranger HOPPENOT
Senior LCA/Ecodesign consultant

Valérie GILLET
CODDE Sales manager

EIME, MORE THAN 25 YEARS OF EVOLUTION

3 MAIN VERSIONS

1996-2011
version 1 to 4

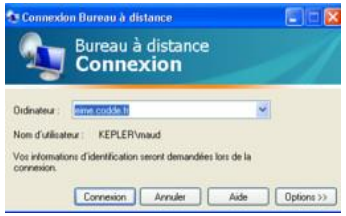
2012-2015
version 5.0

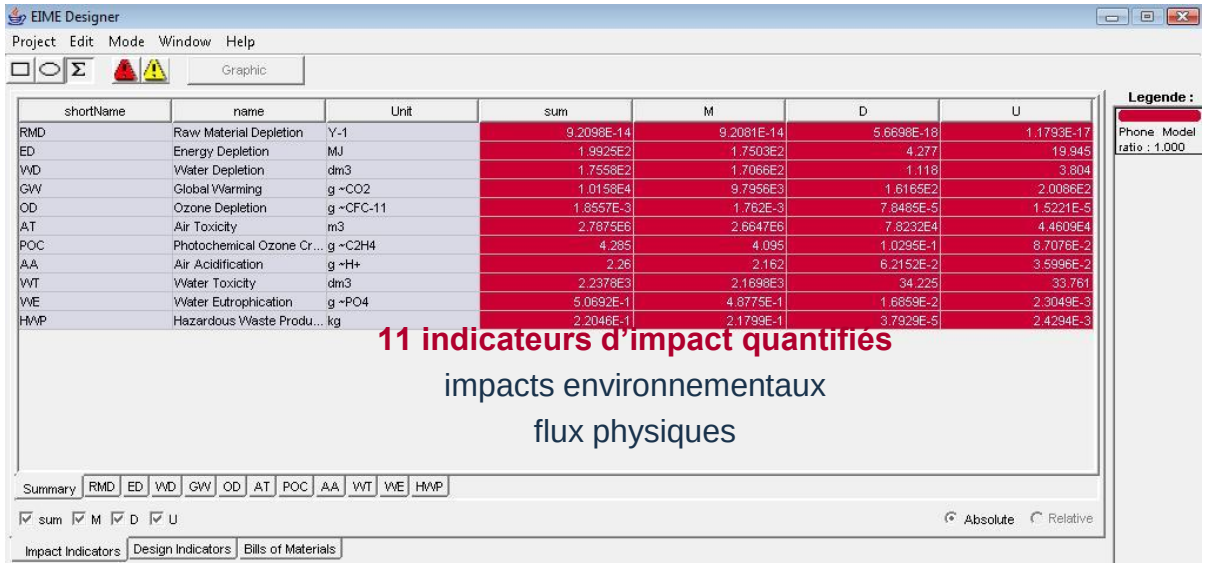
2016-2022
version 5.5

Environmental Information and Management Explorer

1996-2011

version 1 to 4



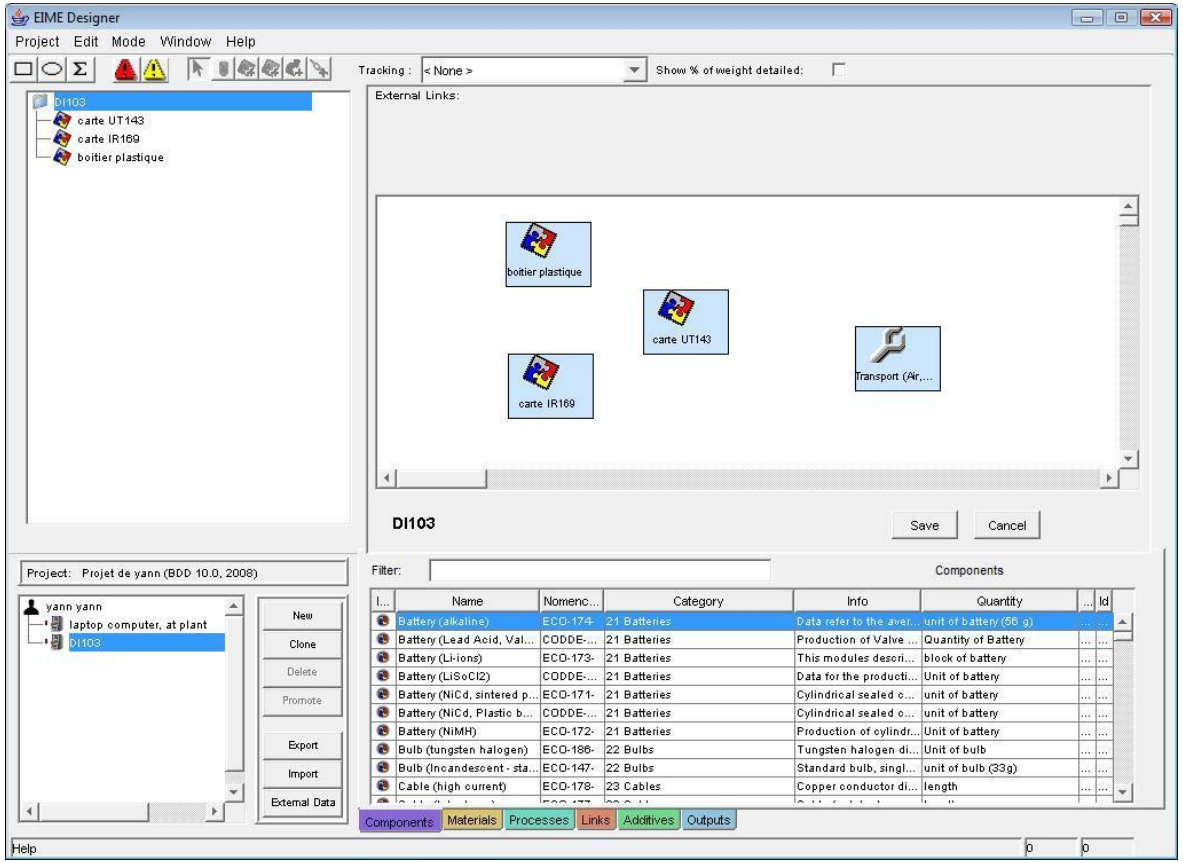


shortName	name	Unit	sum	M	D	U
RMD	Raw Material Depletion	Y-1	9.2098E-14	9.2081E-14	5.6698E-18	1.1793E-17
ED	Energy Depletion	MJ	1.9925E2	1.7503E2	4.277	19.945
WD	Water Depletion	dm3	1.7558E2	1.7066E2	1.118	3.804
GW	Global Warming	g ~CO2	1.0158E4	9.7956E3	1.6165E2	2.0086E2
OD	Ozone Depletion	g ~CFC-11	1.8557E-3	1.762E-3	7.8485E-5	1.5221E-5
AT	Air Toxicity	m3	2.7875E6	2.6647E6	7.8232E4	4.4609E4
POC	Photochemical Ozone Cr...	g ~C2H4	4.285	4.095	1.0295E-1	8.7076E-2
AA	Air Acidification	g ~H+	2.26	2.162	6.2152E-2	3.5996E-2
WT	Water Toxicity	dm3	2.2378E3	2.1698E3	34.225	33.761
WE	Water Eutrophication	g ~PO4	5.0692E-1	4.8775E-1	1.6859E-2	2.3049E-3
HWP	Hazardous Waste Produ...	kg	2.2046E-1	2.1799E-1	3.7929E-5	2.4294E-3

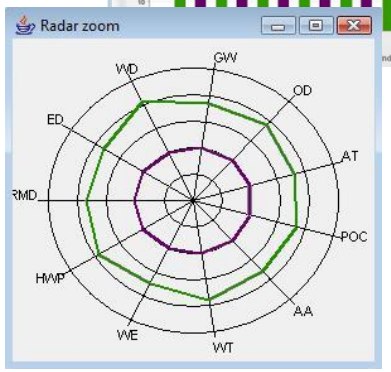
11 indicateurs d'impact quantifiés

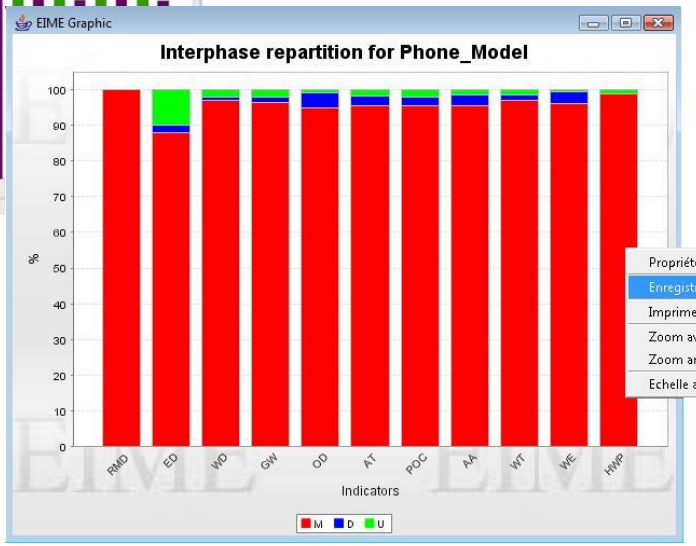
impacts environnementaux

flux physiques



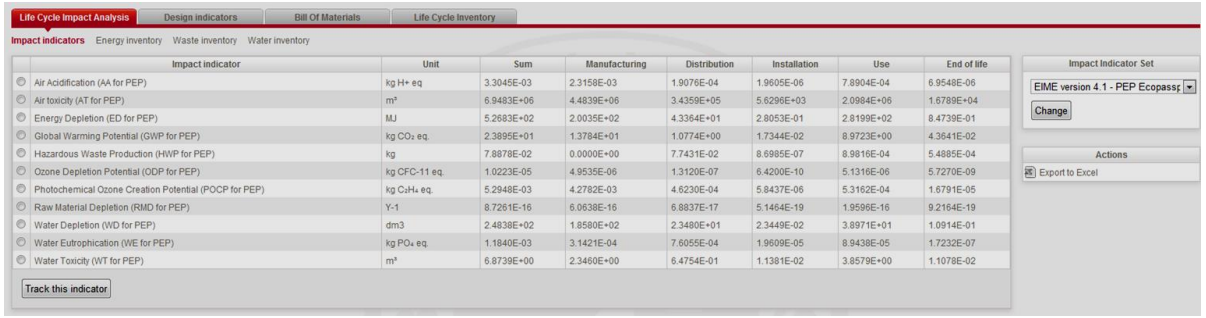
I...	Name	Nomenc...	Category	Info	Quantity	...	Id
	Battery (alkaline)	ECO-174-	21 Batteries	Data refer to the aver...	unit of battery (56 g)	...	...
	Battery (Lead Acid, Val...	CODDE-...	21 Batteries	Production of Valve ...	Quantity of Battery	...	...
	Battery (Li-ions)	ECO-173-	21 Batteries	This modules descri...	block of battery	...	...
	Battery (LiSoCl2)	CODDE-...	21 Batteries	Data for the producti...	Unit of battery	...	...
	Battery (NiCd, sintered p...	ECO-171-	21 Batteries	Cylindrical sealed c...	unit of battery	...	...
	Battery (NiCd, Plastic b...	CODDE-...	21 Batteries	Cylindrical sealed c...	unit of battery	...	...
	Battery (NiMH)	ECO-172-	21 Batteries	Production of cylindr...	Unit of battery	...	...
	Bulb (tungsten halogen)	ECO-186-	22 Bulbs	Tungsten halogen di...	Unit of bulb	...	...
	Bulb (Incandescent - sta...	ECO-147-	22 Bulbs	Standard bulb, singl...	unit of bulb (33g)	...	...
	Cable (high current)	ECO-178-	23 Cables	Copper conductor di...	length	...	...

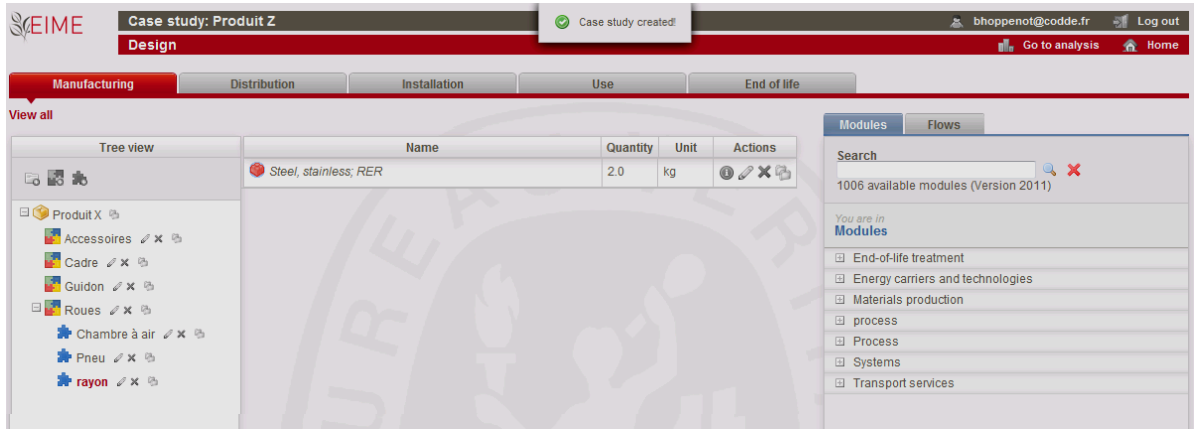


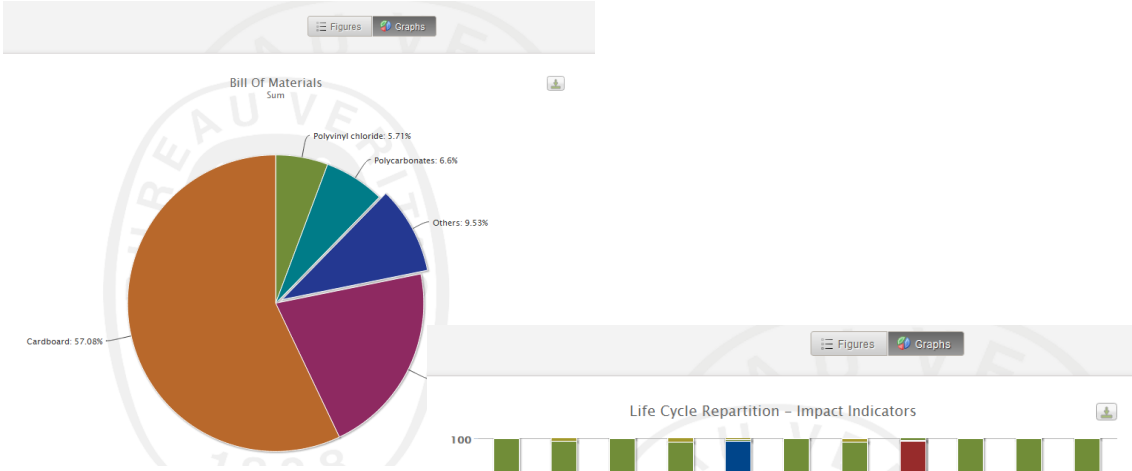


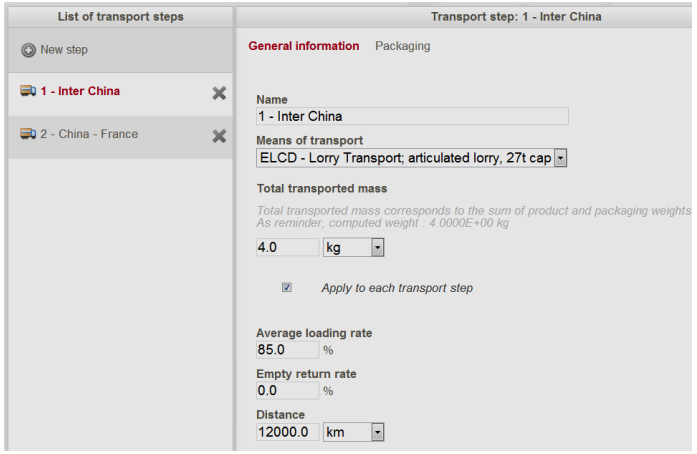
EIME

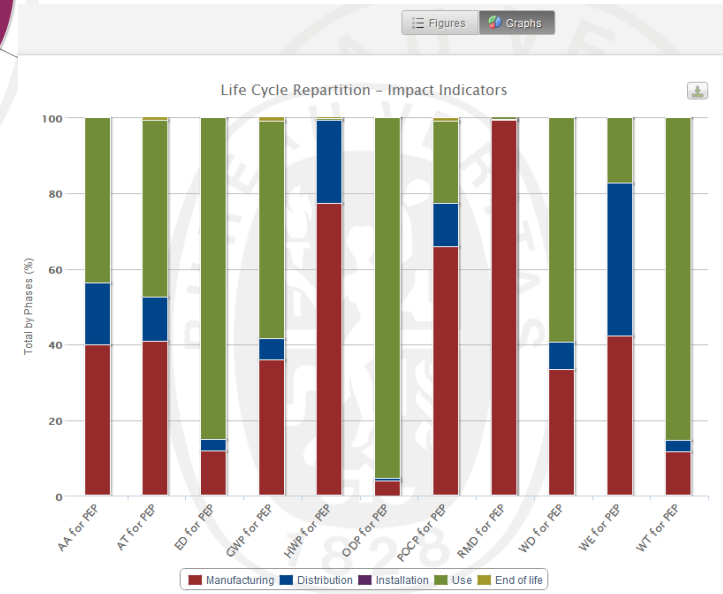
2012-2015
version 5.0







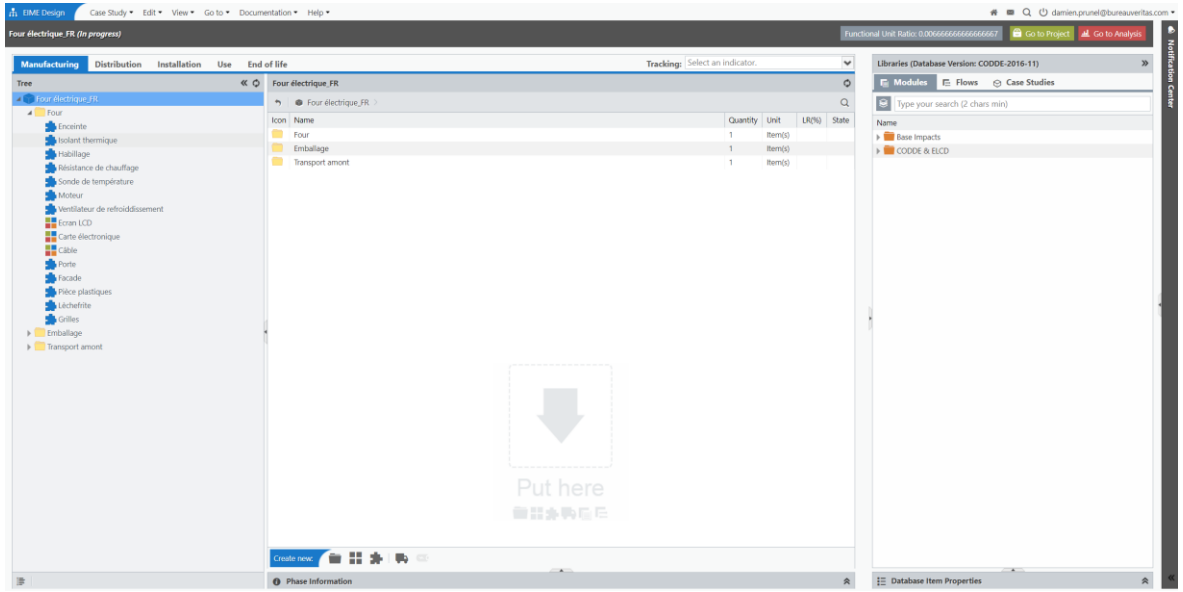


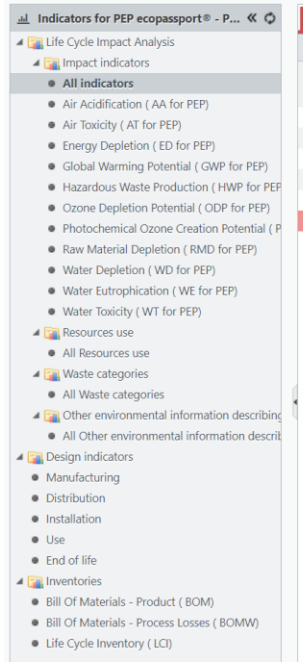


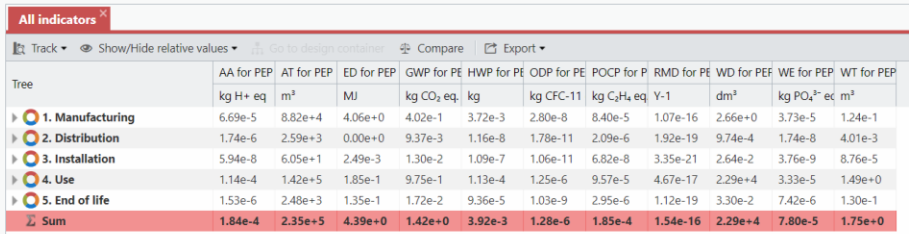
eime

2016-2022

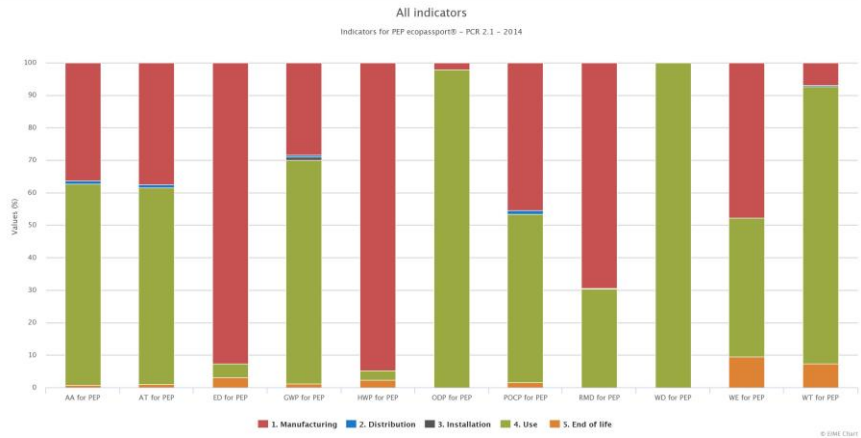
version 5.5

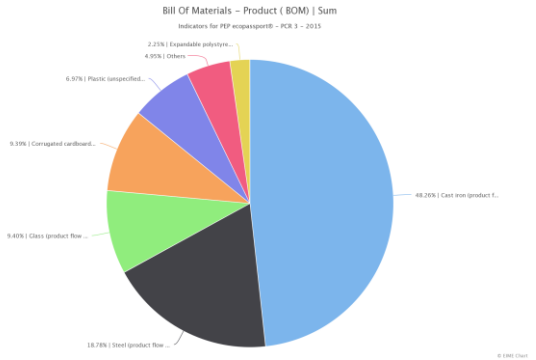






Tree	AA for PEP	AT for PEP	ED for PEP	GWP for PE	HWP for PE	ODP for PE	POCP for P	RMD for PE	WD for PEF	WE for PEP	WT for PEP
	kg H+ eq	m^3	MJ	kg CO_2 eq.	kg	kg CFC-11	kg C_2H_4 eq	Y-1	dm^3	kg PO_4^{3-} eq	m^3
1. Manufacturing	6.69e-5	8.82e+4	4.06e+0	4.02e-1	3.72e-3	2.80e-8	8.40e-5	1.07e-16	2.66e+0	3.73e-5	1.24e-1
2. Distribution	1.74e-6	2.59e+3	0.00e+0	9.37e-3	1.16e-8	1.78e-11	2.09e-6	1.92e-19	9.74e-4	1.74e-8	4.01e-3
3. Installation	5.94e-8	6.05e+1	2.49e-3	1.30e-2	1.09e-7	1.06e-11	6.82e-8	3.35e-21	2.64e-2	3.76e-9	8.76e-5
4. Use	1.14e-4	1.42e+5	1.85e-1	9.75e-1	1.13e-4	1.25e-6	9.57e-5	4.67e-17	2.29e+4	3.33e-5	1.49e+0
5. End of life	1.53e-6	2.48e+3	1.35e-1	1.72e-2	9.36e-5	1.03e-9	2.95e-6	1.12e-19	3.30e-2	7.42e-6	1.30e-1
Sum	1.84e-4	2.35e+5	4.39e+0	1.42e+0	3.92e-3	1.28e-6	1.85e-4	1.54e-16	2.29e+4	7.80e-5	1.75e+0





A 6th VERSION TO MEET THE CHALLENGES OF THE LCA OF THE FUTURE

Our vision

Since 1996, the CODDE department of LCIE Bureau Veritas evolved to meet normative and industrials requirements.

Future of LCA will have to reinforce **current solutions** by meeting the **challenges of tomorrow: cybersecurity, big data, traceability.** In order to respond to the low carbon strategies 2030-2050.

In order to meet the low carbon strategies of 2030-2050.

Conformity

Acknowledgement

Traceability

Fiability

Performance

CARBON NEUTRALITY

Automatisation

Data privacy

Big data

Cybersecurity

BUREAU VERITAS

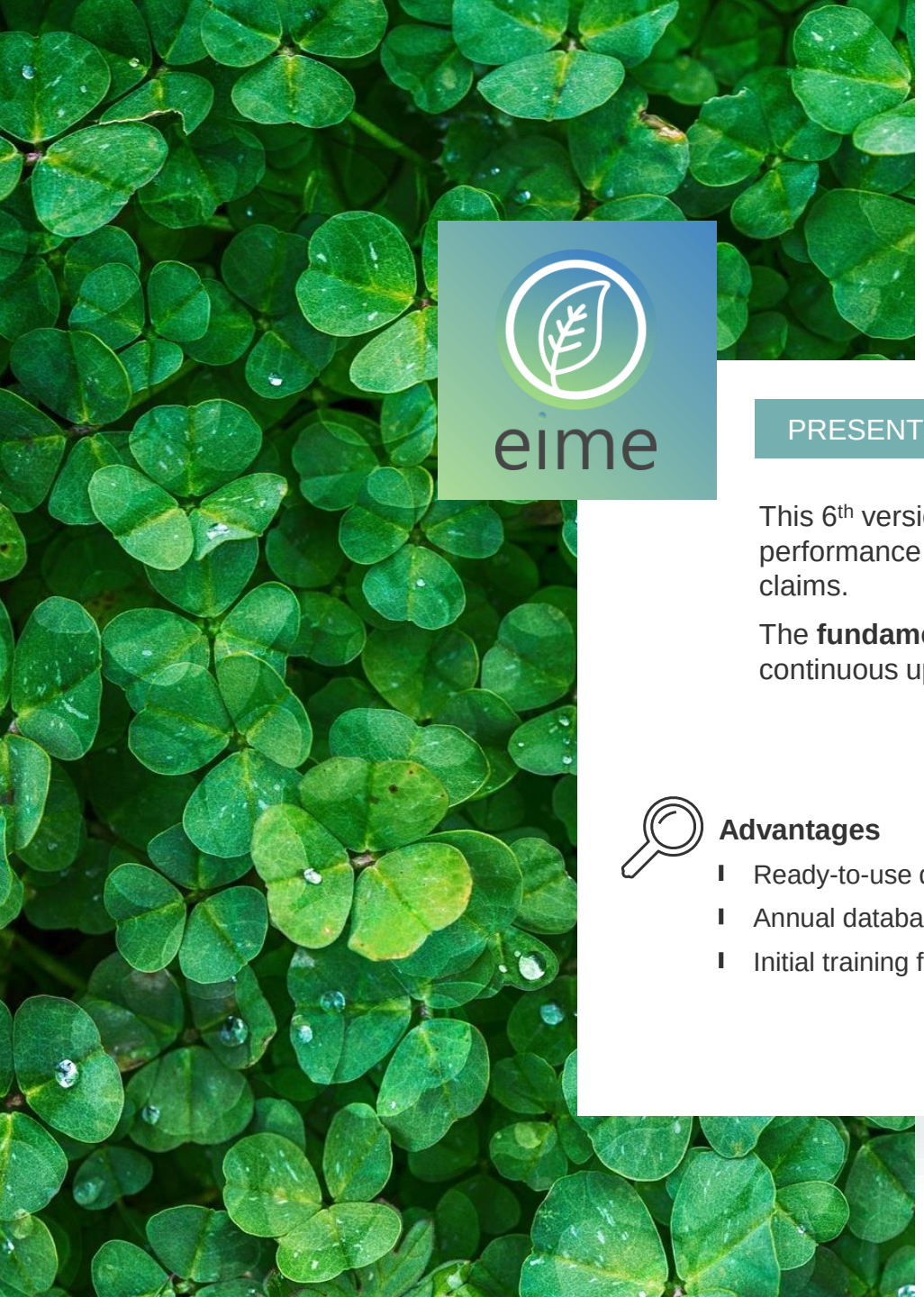
TWO VERSIONS

eime

February 27, 2023

eime API

Release in 2024



eime

PRESENTATION

This 6th version is based on a **total overhaul** of the source code in order to strengthen calculation performance and meet the challenges of European and international compliance with environmental claims.

The **fundamentals of EIME** remain preserved: create an intuitive and ergonomic interface, with continuous updates.

Advantages

- Ready-to-use database and set of indicators
- Annual database update
- Initial training from 2 days

Objectives

- Product carbon footprint (ISO 14067)
- LCA and ecodesign studies (ISO 14040/44)
- Product environmental declaration (ISO 14025)

BUREAU VERITAS

KEY FIGURES

x5

Number of elementary flow

130 000 FLOW

x8

Database size

>25 000 DATA

x3

Number of indicators

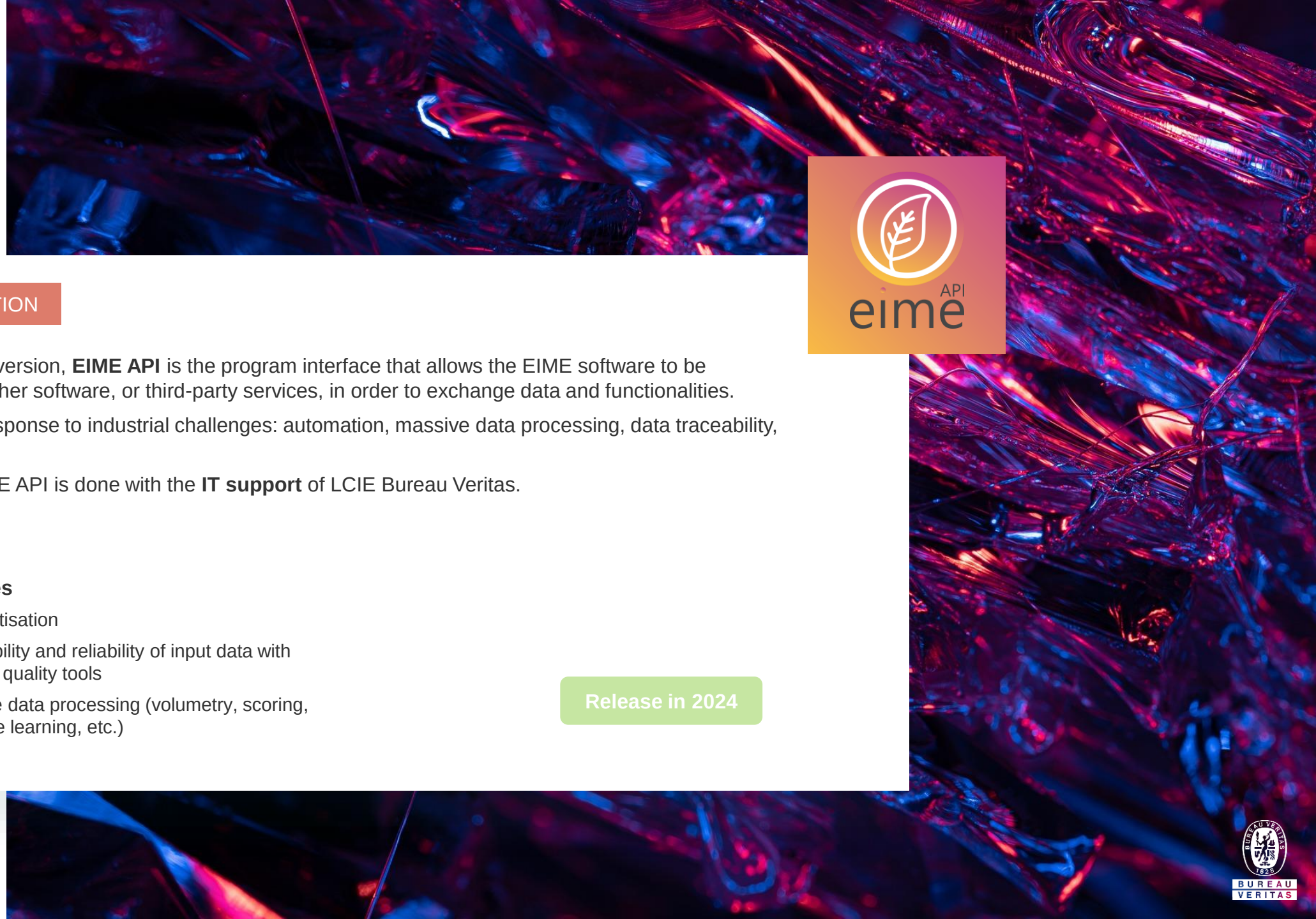
> 100 INDICATORS

x15

Complexity of indicators

UP TO 75 000 FLOW

* Comparison between EIME v5 and v6 when released



PRESENTATION

New in the 6th version, **EIME API** is the program interface that allows the EIME software to be connected to other software, or third-party services, in order to exchange data and functionalities.

It provides a response to industrial challenges: automation, massive data processing, data traceability, etc.

The use of EIME API is done with the **IT support** of LCIE Bureau Veritas.

Objectives

- Automatisation
- Traceability and reliability of input data with existing quality tools
- Massive data processing (volumetry, scoring, machine learning, etc.)

Release in 2024

CYBERSECURITY

MISSION

To guarantee all our users a secure workspace, whatever the size of their company.

EVOLUTIONS

In our time, companies are increasingly subject to malicious attacks and must increase their security requirements.

As a SaaS software, EIME is among your concerns.

LCIE Bureau Veritas is working with Yogosha, a company specializing in security testing, to strengthen EIME.

Added values

- SSO authentification
- Encryption of database
- « grey box » penetration testing
- Annual update of security tests

KEY ADVANTAGE

YogOsha

BIG DATA

MISSION

Process, create and analyze a growing volume of data to bring out the solutions of tomorrow.

EVOLUTIONS

With the growing interest in LCA and the strengthening of associated standards, the volume of data has increased significantly over the past 10 years. We believe this will still be the case in the future.

LCIE Bureau Veritas has therefore revised the EIME calculation system to meet this data volume requirement.

Added values

- Redesign of instances
- Creation of technical nodes (Node ILCD EF3.0)
- Increased maximum case study size x5 (~5,000 rows)
- Optimization of queries for the calculation of indicators
- Decorrelation of calculations and display

TRACABILITY

MISSION

Make environmental claims more reliable by using dynamic, traceable and verifiable production data.

EVOLUTIONS

It is no longer enough for companies to communicate the environmental impact of their products and services.

Our way of producing and consuming resources must be part of a transparency scheme while guaranteeing the achievement of carbon neutrality.

The LCIE Bureau Veritas is now preparing new functionalities.

Added values

- Association of dataset
- Configurable dataset
- Annual update of electricity mixes

KEY ADVANTAGE

- Traceability and reliability of input data with company quality tools

eime API

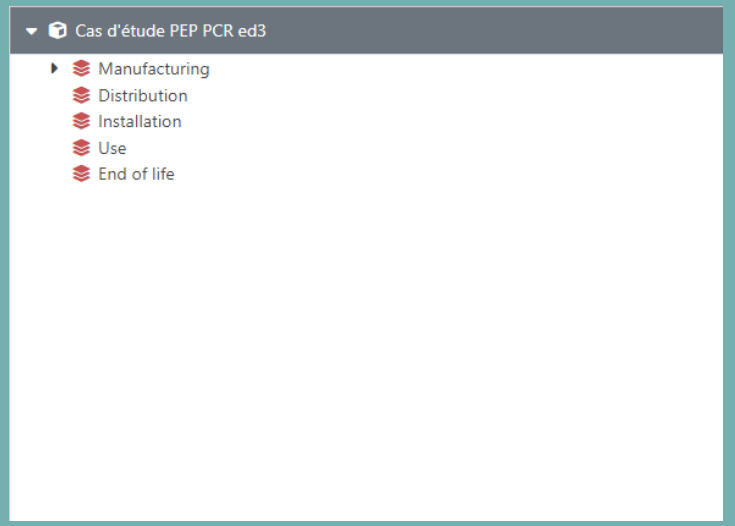
DEMONSTRATION

THE MAIN NEW FEATURES

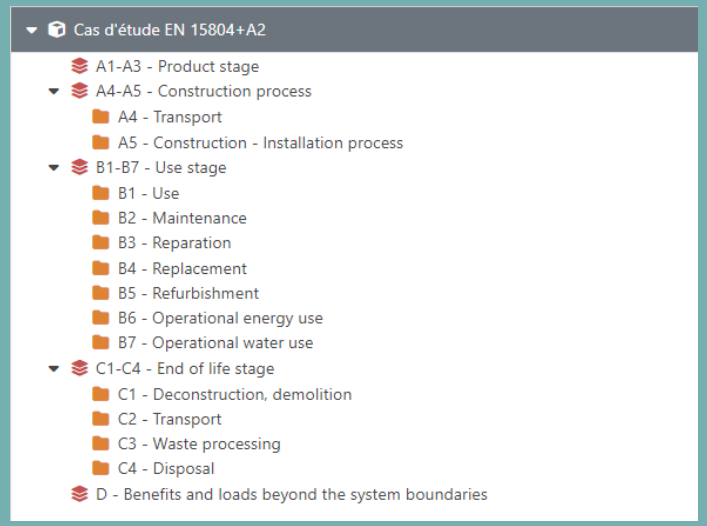
LIFE CYCLE PHASES

MAIN INNOVATION

In EIME v6, it is possible to create as many lifecycle phases as desired. The objective is to be able to respond to the multiplicity of requests.



NEW



Add phase

Function available for all users

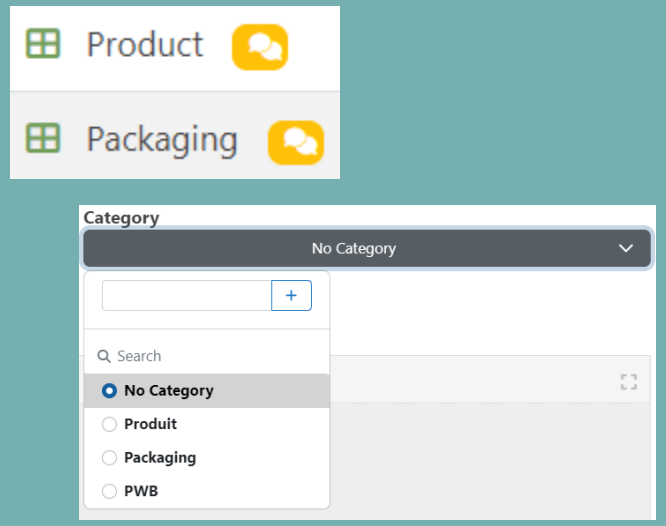
KEY ADVANTAGE

- For all users, 4 templates available
- The analysis interface adapts to the phases

CATEGORIZED BILL OF MATERIALS

MAIN INNOVATION

In EIME v6, it is possible to create categorized bill of materials



KEY ADVANTAGE

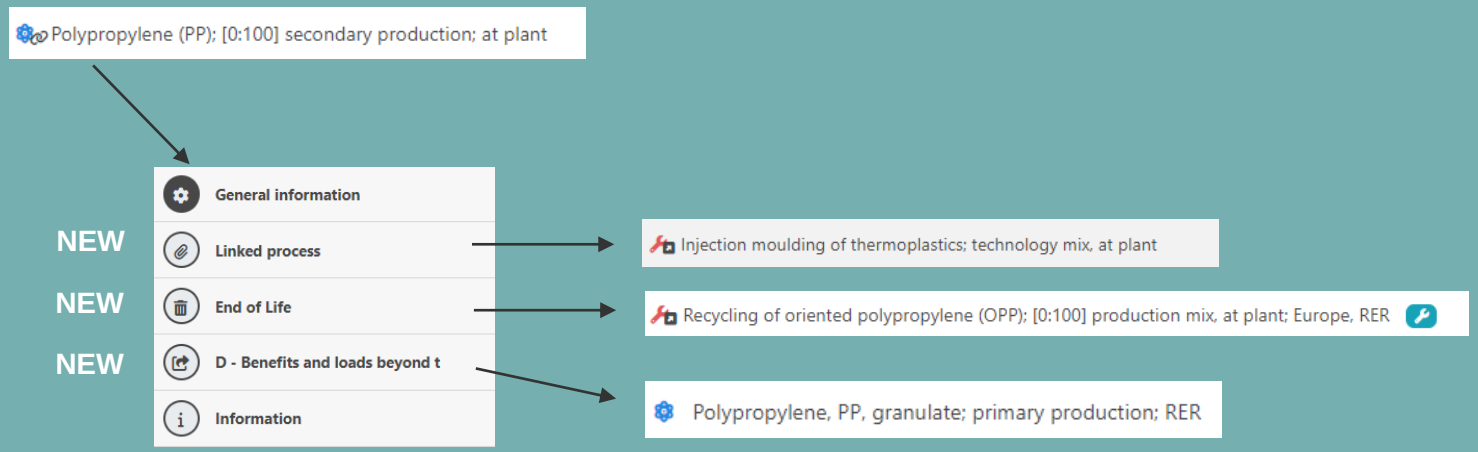
- Save time to model the end of life phase

ASSOCIATION OF DATASET

MAIN INNOVATION

In order to facilitate the modeling of upstream transport, shaping processes for waste treatment and module D, we have created in EIME v6 a new functionality:
« Association of dataset ».

From a **modeling entry point**, it is possible to **manage several datasets** present in different stages of the life cycle.



New icons

Icons representing the association of datasets

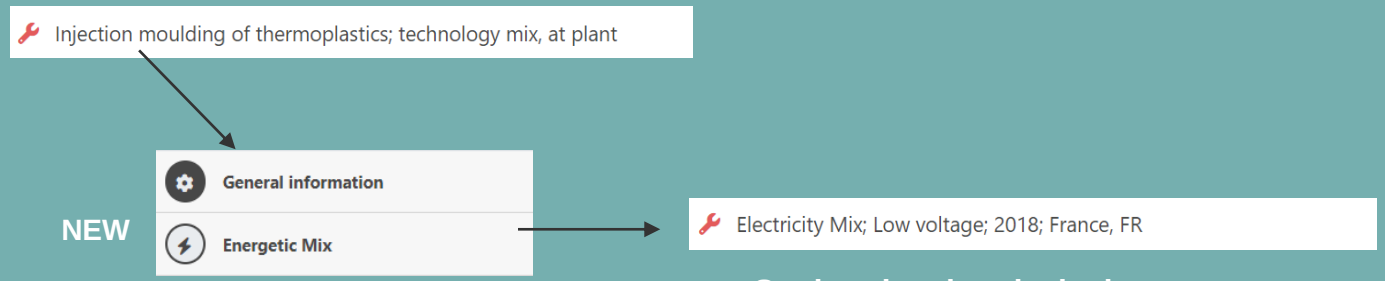
KEY ADVANTAGE

- You can combine as many modules as you want
- The new Database manager interface will make it possible to create **scenarios** (S2 2023).

DATASET CONFIGURABLE

MAIN INNOVATION

Parameterizable dataset is a dataset with at least 2 parameters. *Example: a component where you can enter a quantity (item), while modifying a surface density (kg/m²).*
In EIME v6, we are creating a new type of dataset: « configurable dataset ». These are datasets whose use is directly associated with another dataset.



Setting the electrical mix

- Choice of geographical area
- Modification of the default energy consumption (if proof available)

To be discovered in the CODDE® 2023-02 database

80 process configurable dataset

KEY ADVANTAGE

- 1 process configurable dataset = multiple results

EVOLUTION OF EIME V6

UPDATE

The fundamentals of EIME remain preserved: create an intuitive and ergonomic interface, with continuous updates.

COMING SOON

2nd semester 2023 :

- Design interface: module comparison tool
- Analysis interface: normalization / weighting results
- Update of export formats according to future recommendations (INIES, PEP ecopassport®)
- Database manager interface
  For reasons of database stability, the creation of data is inaccessible under EIME v6. The Database manager interface will be available in summer 2023.

DATABASE

CODDE®

Generalist and sectoral database

Electric & Electronic

4,200 DATASETS

NEGAOCTET

Database dedicated to digital service

Digital

1,500 DATASETS

ECOINVENT

16,000 DATASETS

PEF/OEF

3,000 DATASETS

BASE IMPACT®

1,650 DATASETS

CODDE® 2023-02

CODDE® 2023-02: Exclusivity of EIME v6

- **720** datasets with new impacts (creation or update)
- **1,300** datasets with information updates

Data quality

- Evaluation of the quality of data from the CODDE® database: available in the EIME documentation section.
- Overwall score of the CODDE® 2023-02:
  - **2.9****
  - **0.3 point** improvement compared to the CODDE® 2022-01 database

**Rating scale from 5.0 to 1.0 (1.0 being the best rating). Calculated for the CODDE® 2023-01 base..

New set of indicators

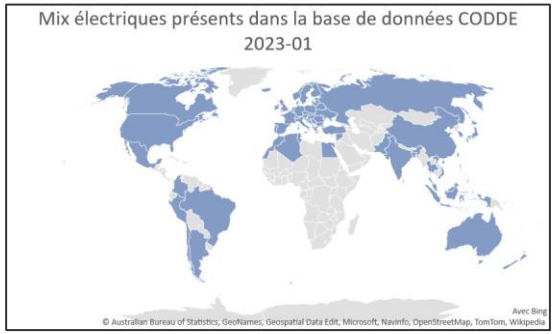
- Nouvelle version du set d'indicateurs PEF/EN15804+A2 compatible avec la base de données CODDE® 2023-02 :

  « Indicators for PEF EF 3.0 (Compliance: PEP ed.4, EN15804+A2) v2.0 »

CODDE® 2023-02

New electricity mix datasets

- Added 11 low voltage electrical mix datasets
- Added 68 high voltage electrical mix datasets



New end of life datasets

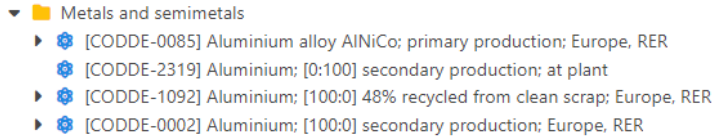
- In order to facilitate the use of ECOSYSTEM end-of-life datasets in module D, in particular to model the benefits generated by end-of-life treatment, "benefits only" datasets have been created.

New material datasets

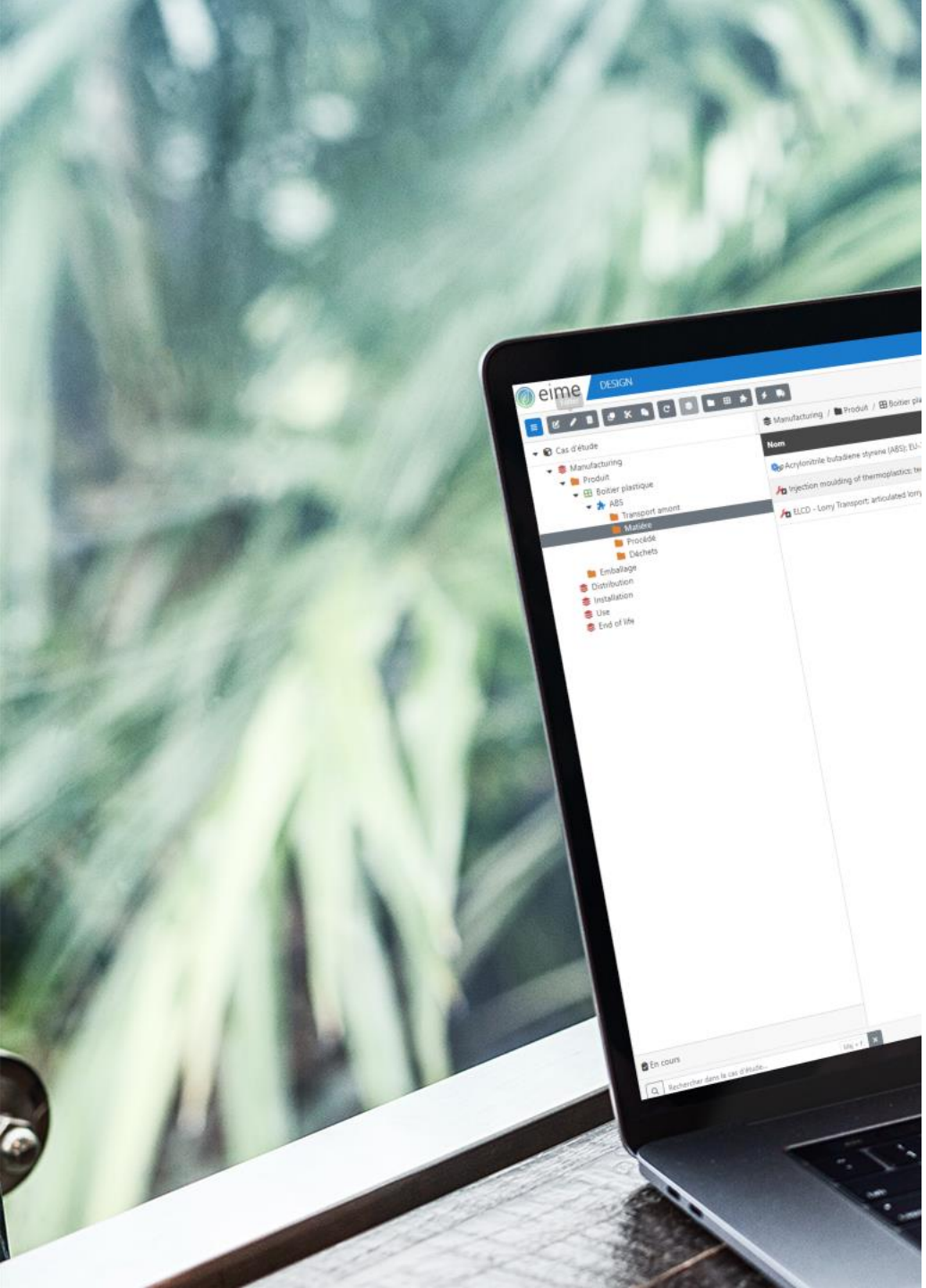
- Biobased materials (biogenic GWP indicator)
- Plastics
- Enamel
- Lead recycling
- Refrigerant: R290, R32 et R23

Creation of [100:0] [0:100] tags

- The tag [100:0] has been added to all dataset names only usable for the inventory method
- The tag [0:100] has been added to all dataset names only usable for the substitution point method
- Datasets conforming to both methodologies do not contain any tags



USEFUL INFORMATION



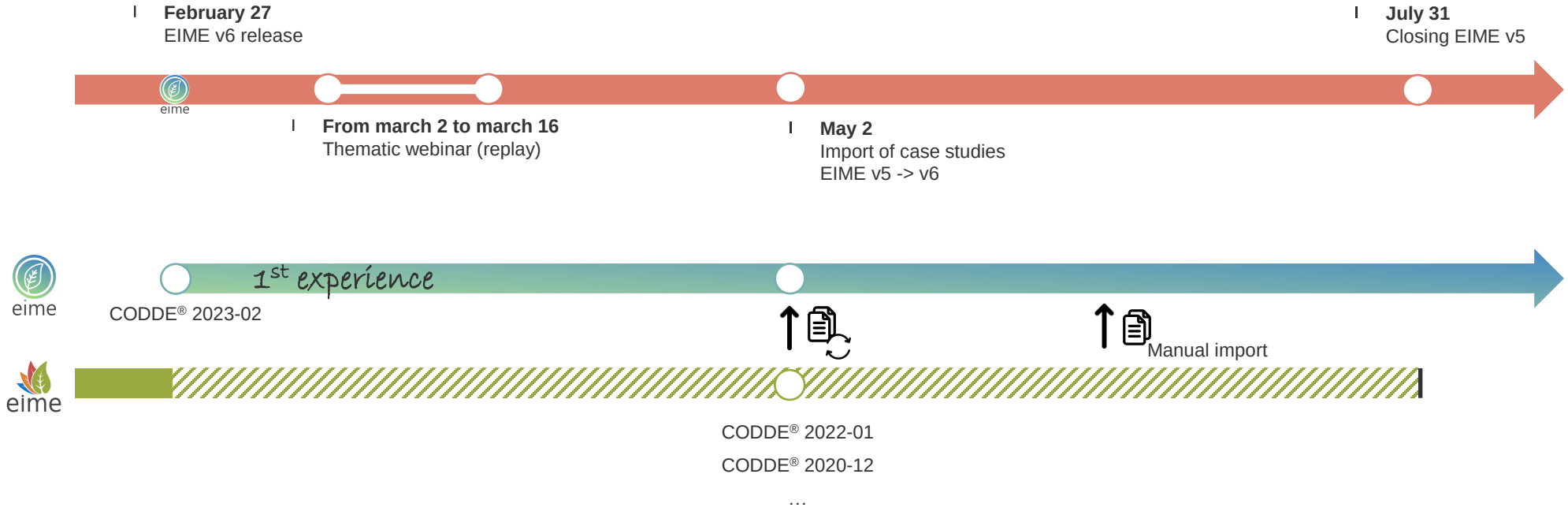
RELEASE DATE

EIME v6 licenses release on:

- **February 27, 2023**, with a differentiated opening
  - EIME users with a Team Manager in their organization
  - EIME users without Team Manager
- **EIME v5 - v6 transition period** for everyone
- **Import of EIME v5 case studies** to EIME v6 for everyone

AGENDA

EIME USERS WITHOUT TEAM MANAGER



DETAILLED INFORMATION

EIME USERS WITHOUT TEAM MANAGER

Release date

- On February 27, 2023, you will receive an email activating your EIME v6 license.

Workspace

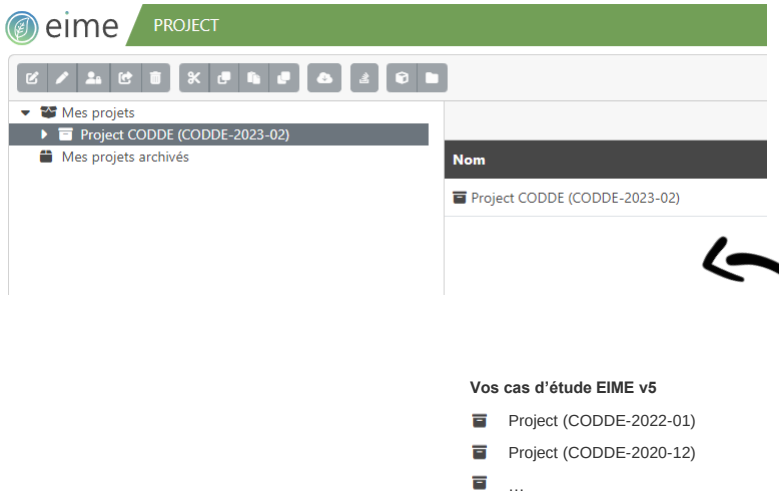
- Create your EIME v6 case studies with the « Project CODDE® -2023-02 » available at the opening of your license, having the latest version of the database.

Transition period

- Discover EIME v6 while continuing your EIME v5 projects: your EIME v5 license remains accessible until July 31, 2023.

Transfer of EIME v5 case studies

- On May 2, 2023, LCIE Bureau Veritas will create a copy of your EIME v5 projects and case studies to EIME v6. Case studies created between May 2 and July 31 under EIME v5 must be imported individually by the user.

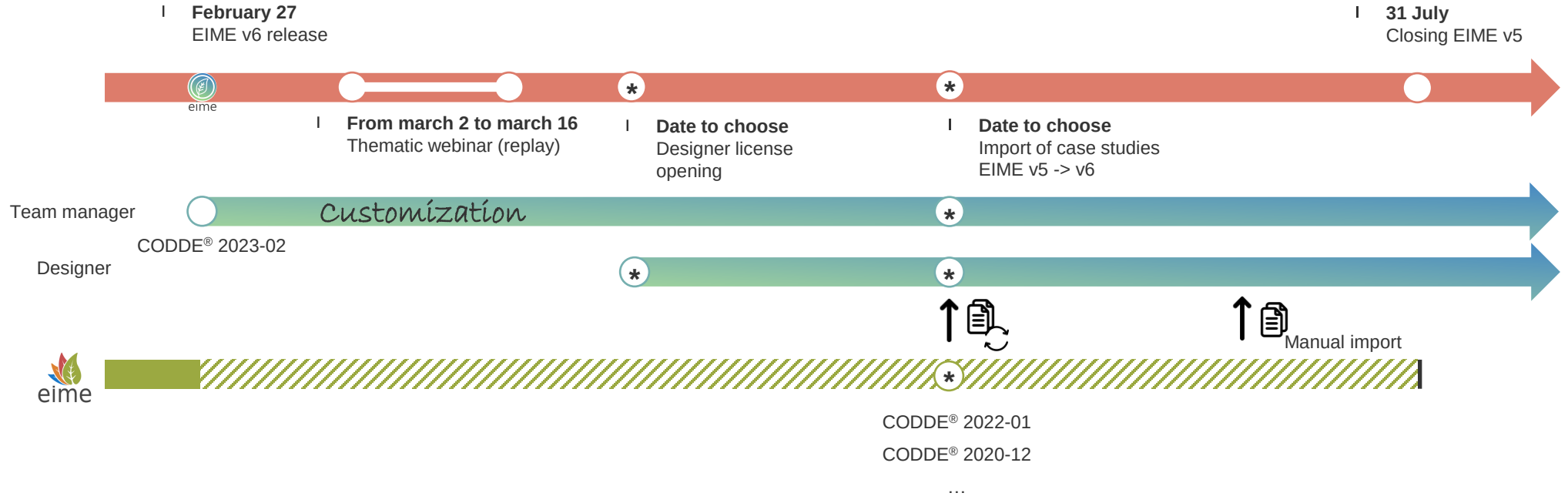


February 27, 2023

May 2, 2023

AGENDA

EIME USERS WITH A TEAM MANAGER



DETAILLED INFORMATION
EIME USERS WITH A TEAM MANAGER

Release date

- On February 27, 2023, you will receive an email activating your EIME v6 license.

Workspace

- Create your EIME v6 case studies with the « Project CODDE® -2023-02 » available at the opening of your license, having the latest version of the database.
- Use Team Manager features to customize your license (project, set of indicators, template). This step is important to improve the user experience.

Activation of other EIME licenses

- The Team Manager contacts LCIE (codde@bureauveritas.com) to define a date on which users will receive an EIME Designer EIME v6 license activation email. Date defined between the Team Manager and LCIE.

Transition period

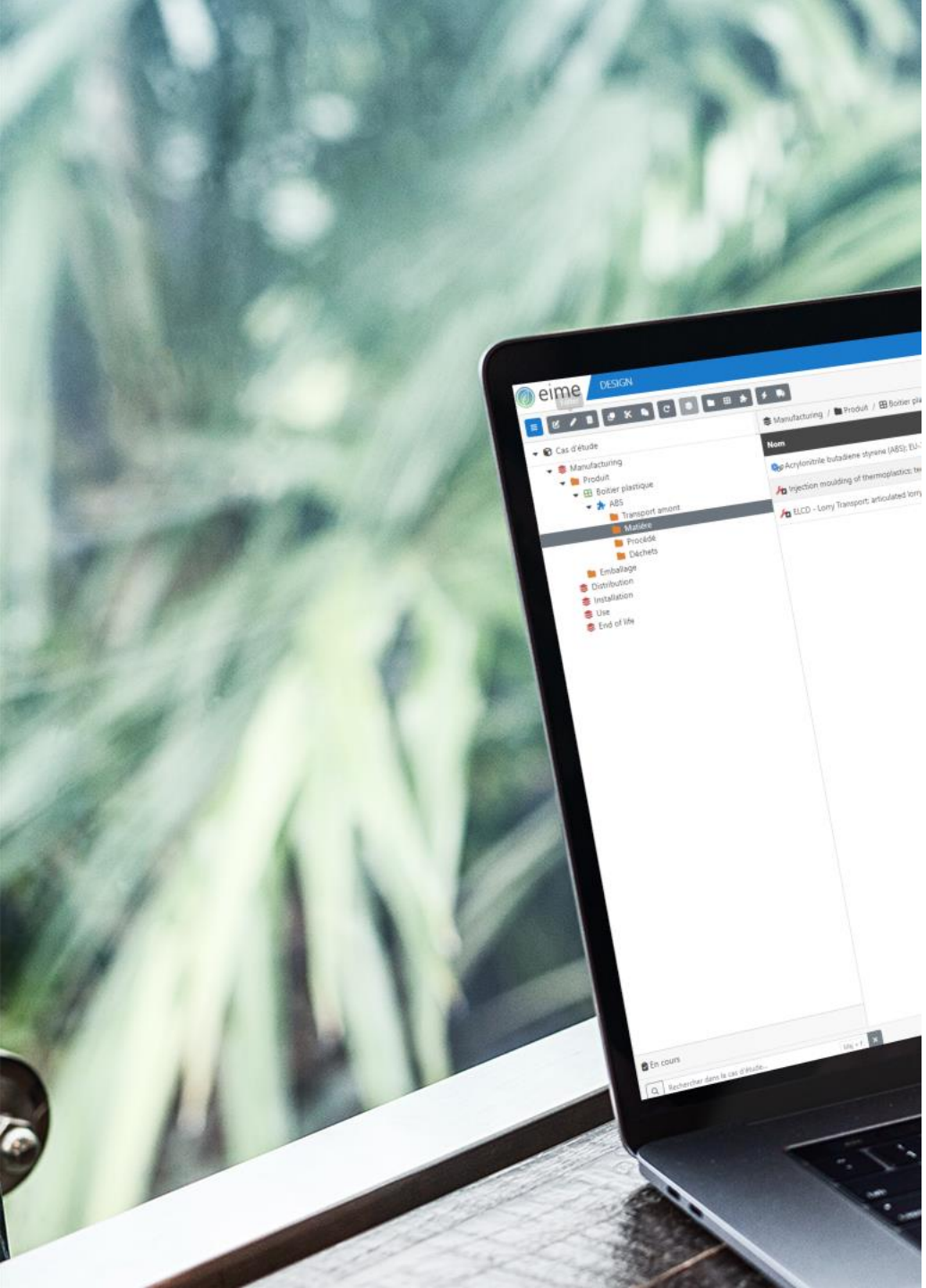
- Discover EIME v6 while continuing your EIME v5 projects: your EIME v5 license remains accessible until July 31, 2023.

Transfer of EIME v5 case studies

- The Team Manager contacts the LCIE (codde@bureauveritas.com) to define a date on which the EIME v5 projects and case studies will be copied to EIME v6 (by July 31, 2023 at the latest). Date defined between the Team Manager and LCIE.
- The case studies created between this date and July 31, 2023 under EIME v5 must be imported individually by the user.

Database manager interface

- For database stability reasons, data creation is inaccessible under EIME v6. The Database manager interface will be available in summer 2023.



DOCUMENTATION

To be consulted from EIME v6:

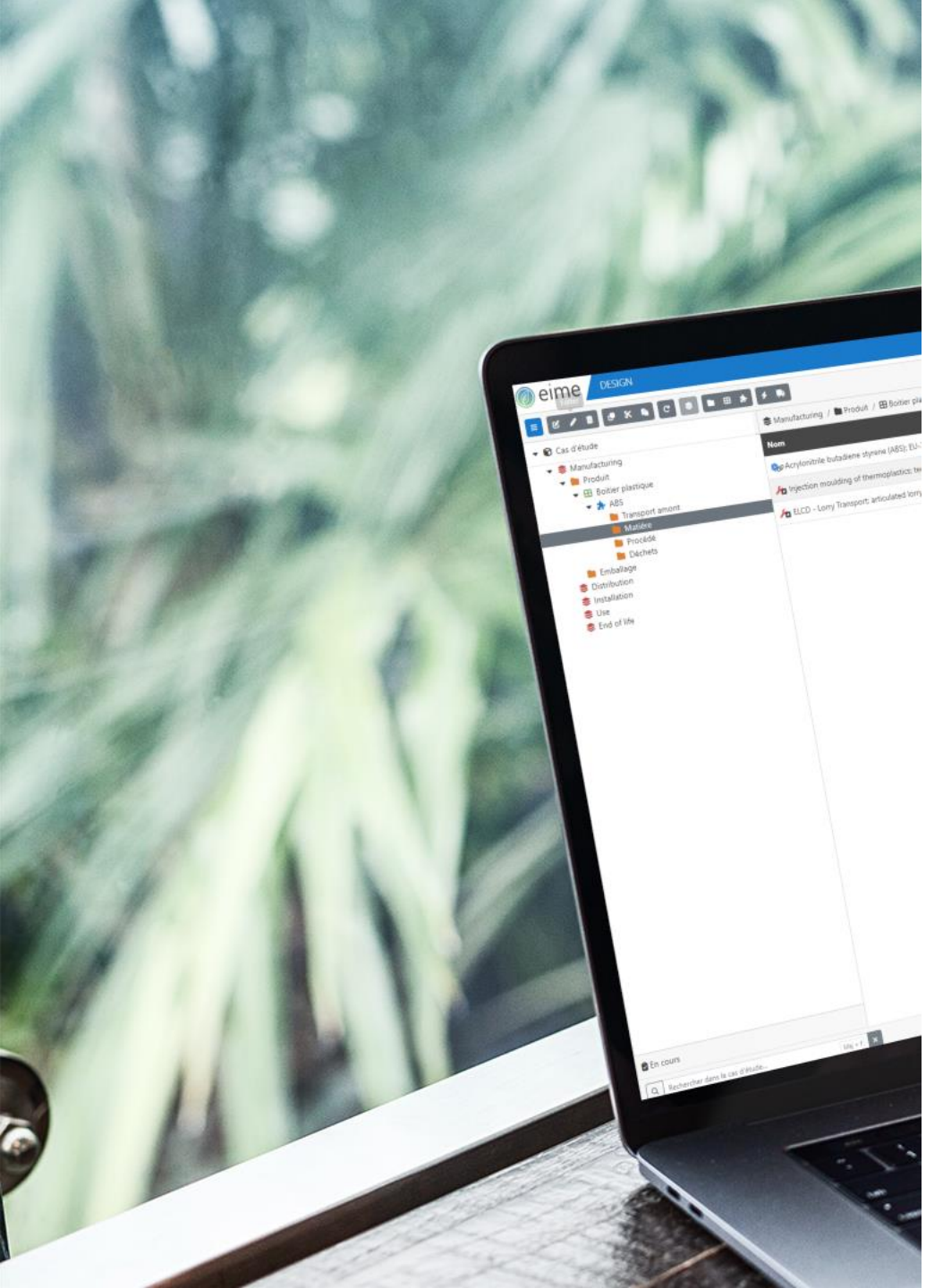
- **Handbook**
  - 1st step ← Recommended for all !
  - Detailled handbook
  - Team manager
- 10 **good practice** sheets
- 1 CODDE® 2023-02 **database guide**, including appendices (correspondence table, data quality assessment)

DOCUMENTATION

25 documents

available in EIME v6

Regular update of documents, stay informed!



WEBINAR

« Analyse interface »	March 2
« Design interface »	March 7
« Database »	March 12
« Team manager »	March 16

Registration reserved for users with an EIME license. The **replays** will be available to everyone on the codde.fr website.

Upcoming English session.

21

HABITS

- 21 days is the minimum time to get used to the change
- For some it may take longer

We recommend learning about EIME v6 features as you go, starting with the basics.

TRAINING

From March 2023, our training will be done on the EIME v6 software

- EIME Designer training
- PEP ecopassport® PCR ed4 training

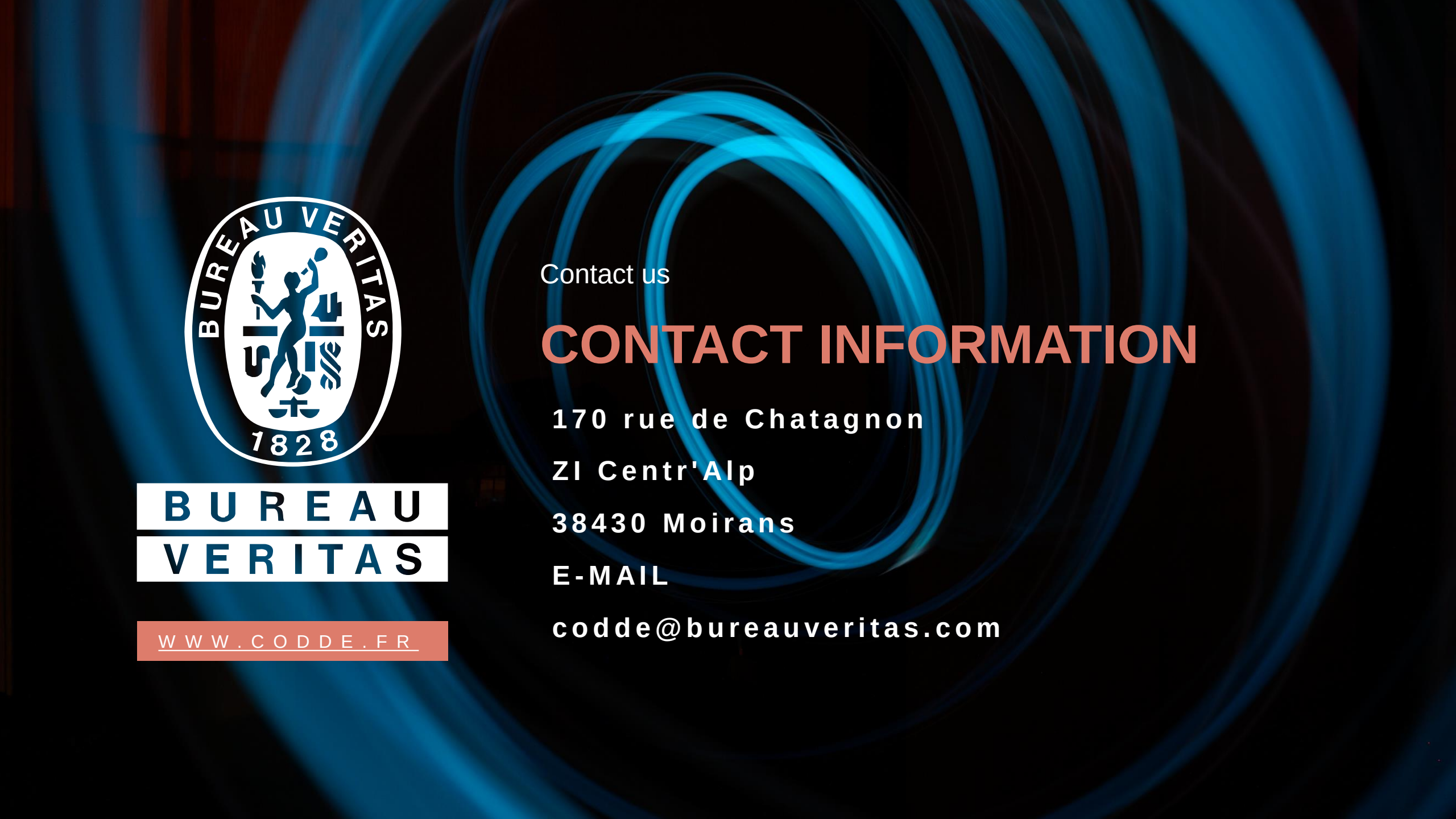
Information & registration: codde.fr

BUREAU VERITAS

NEWS

codde.fr/en

SOME QUESTIONS?



WWW.CODDE.FR

Contact us

CONTACT INFORMATION

170 rue de Chatagnon

ZI Centr'Alp

38430 Moirans

E-MAIL

codde@bureauveritas.com