



# Release notes July 2022

Version 1.1 - 25.7.2022



# Release highlights

## GENERAL IMPROVEMENTS

- ✓ Continued quality improvements

## BUILDING & INFRA LCA

- ✓ New templates for Carbon Designer 3D to cover all structural frame options and regions

## PRODUCT LCA & EPD SOFTWARE

- ✓ Updates announced in June are now available, incl. the Product Carbon Footprint report **new**

## GLOBAL DATA & COMPLIANCE

- ✓ Lots of new datapoints and generic datasets
- ✓ France: range of updates to RE2020 tool

**new** = Completely new tool or major feature



# General improvements

# Continued quality improvements

We are now releasing product updates on a monthly basis, instead of quarterly as before. The objective is to make the releases smaller and easier to handle so you can receive improvements faster and with better quality.

One Click LCA Tekla Structures plugin is compatible with Tekla Structures 2022.

We also made many security improvements and smaller fixes requested by customers.





# Building & infrastructure LCA

# Carbon Designer 3D updates

## Structural frames

Templates are now available for all structural frame options and regions. New templates include:

- ✓ Seismicity-related structural frame scenarios
- ✓ New US/CA regions using local average EPDs instead of One Click LCA generic data
- ✓ Italian & Southern Europe region

## Increased GFA limits for new designs

- ✓ 150 000 m<sup>2</sup>
- ✓ 1 600 000 sq ft



# Global data & compliance

# 20 new generic materials

HVAC and energy production:

- ✓ Liquid chiller 4507 kg/unit, 400 kW
- ✓ Liquid chiller 6465 kg/unit, 700 kW
- ✓ Photovoltaic monocrystalline panel, per m<sup>2</sup> 14.5 kg/m<sup>2</sup>, 224 Wp
- ✓ Photovoltaic polycrystalline panel, per m<sup>2</sup> 14.5 kg/m<sup>2</sup>, 210 Wp
- ✓ Variable refrigerant flow (VRF) system 75.15 kg/unit, 5 kW

15 new ready-mix concretes for Norway (Lavkarbonbetong NB37 2019):

- ✓ Bransjereferans: B20, B25, B30, B35, B45, B55, B65
- ✓ Lavkarbon B: B55, B65
- ✓ Lavkarbon A: B55, B65
- ✓ Lavkarbon Pluss: B55, B65
- ✓ Lavkarbon Ekstrem: B55, B65

*Note: New One Click LCA generic datasets are generally available in all tools automatically. That said, tools follow different certification schemes and data restrictions may apply in some cases.*



# 32 new MEP constructions

32 new MEP constructions (mechanical, electrical and piping) have variations for buildings of different sizes and cover the following systems:

- ✓ Water supply system
- ✓ Combined waste and vent system
- ✓ Basic and commercial lighting and power system
- ✓ Dedicated outdoor air system with energy recovery ventilator and variable refrigerant flow and with energy recovery ventilator and packaged rooftop heat pump
- ✓ Water source heat pump heating/cooling system
- ✓ Variable air volume handling unit with parallel fan powered terminal
- ✓ Dedicated outdoor air system with chilled beam or waters source heat pump

*Note: New One Click LCA public constructions are generally available in all tools automatically. That said, tools follow different certification schemes and data restrictions may apply in some cases.*

# Newly integrated EPDs and energy profiles

- ✓ 800+ newly integrated EPDs since mid-June
- ✓ 3 new electricity profiles for UK (FES 2021):
  - ✓ Consumer Transformation scenario
  - ✓ Leading the way scenario
  - ✓ System transformation scenario

# RE2020: Validation des nouvelles typologies et MàJ RSEE

De nouvelles fonctionnalités sont disponibles et de nouvelles corrections ont été apportées aux calculs pour l'outil RE2020:

- ✓ Il est à présent possible de valider des projets de bâtiments de bureaux et d'écoles (primaires et secondaires), grâce à l'intégration des nouveaux seuils réglementaires RE2020.
- ✓ Le RSEE a été mis à jour et intègre par exemple le composant vide, les matériaux réutilisés ou encore les FDES issues de configurateurs.
- ✓ Les impacts de la parcelle ont été corrigés et sont maintenant exportés à tous les niveaux requis dans le RSEE.
- ✓ Les impacts des matériaux réutilisés sont correctement pris en compte dans les différents indicateurs.

# RE2020: Validation for new typologies and RSEE update



Summary of new features and calculation improvements in the RE2020 tool:

- ✓ **It is now possible to validate office and educational building projects thanks to the implementation of the new RE2020 thresholds**
- ✓ RSEE has been updated and integrates new functionalities (empty component, reused material, FDES from “configurator”)
- ✓ Parcel zone impacts have been corrected and are now exported at all necessary levels in the RSEE
- ✓ Impacts of reused materials have been corrected in the calculations

# RE2020: Importer les matériaux depuis un RSEE



Menu principal > lots forfaitaires > Saisir les données : RSET et données du projet

lots forfaitaires

## 1. Charger le Récapitulatif Standardisé d'Étude Thermique (RSET)

Vous devez charger un RSET v8.1.0.0 provenant d'un outil énergétique agréé et cliquer sur "Lire le RSET". Pour importer les données, veuillez ensuite cartographier chaque bâtiment et zone présents dans le RSET en l'associant à une conception de votre projet. Consultez l'article sur l'import du RSET.

RSET XML - RE2020

RS2E\_2022.D1E1C1.xml Supprimer

Choose File No file chosen (xml) (max. 1 Fichiers / 9 MB)

Lire le RSET/RSEE

Conception    Bâtiment    Zones    Parcelle    Importer les matériaux du RSEE dans la conception

lots forfaitaires 1    test    Zone 3    Zone 1    Zone 4    Zone 2    Importer le RSEE

paramètres re-lancera l'ensemble des calculs et la modification des résultats.

Phase de conception : 1 conceptions    Paramètres    Nouvelle conception    Comparer les données    Carbon Designer 3D    Outils

Outil	Unité	2 - lots forfaitaires 1
RE2020	kg CO <sub>2</sub> e	Saisir les données

Ajouter des données

- Matériaux de construction
- Énergie et eau
- Chantier (Cliquez pour ajouter les données manquantes)
- Production locale d'énergie
- Description du bâtiment
- Importer des données
  - Importer un fichier Excel ou gbXML

Pour accélérer la saisie ACV d'un projet RE2020, il est possible d'importer les matériaux et leurs propriétés directement depuis un RSEE. Guide méthodologique:

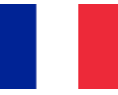
## 1. Sur "Saisir les données : RSET et données du projet":

1. Charger le RSEE (bouton "choose file").
2. Cliquer sur "Lire le RSET/RSEE" puis cartographier la conception.
3. Cliquer sur "Importer le RSEE" pour télécharger le fichier Excel (incluant les matériaux), depuis le RSEE.

## 2. Sur "Description du bâtiment", ou directement sur votre conception (voir capture d'écran), cliquer sur "Importer un fichier Excel ou gbXML".

- ✓ Vous pouvez réutiliser le RSEE de projets similaires, pour éviter une nouvelle saisie complète.
- ✓ Compatible avec les RSEE issus d'autres logiciels.

# RE2020: Import materials from an RSEE



Main > lots forfaitaires > Input data : RSET et données du projet

Cancel Save

## lots forfaitaires

1. Upload the **Récapitulatif Standardisé d'Étude Thermique (RSET)** or convert the **Récapitulatif Standardisé d'Étude Énergétique et Environnementale (RSEE)** and environmental data import.

Veillez charger un RSET version 2021.E1.0.0 (2022.E1.0.0 après le 25/07/22), provenant d'un outil énergétique agréé, ou un RSEE version 2021.D1E1C1 (2022.D1E1C1 après le 25/07/22), et cliquer sur "Lire le RSET/RSEE". Pour importer les données énergétiques et administratives, veuillez ensuite cartographier chaque bâtiment et zone présents dans le RSET/RSEE en l'associant à une conception de votre projet. Consultez l'article sur l'import du RSET.

RSET/RSEE XML - RE2020

RS2E\_2022.D1E1C1.xml Delete

Choose File No file chosen (xml) (max. 1 files / 9 MB)

Read from RSET

Design Batiment Zones Parcelle Import RSEE materials into design

lots forfaitaires 1 test Zone 3 Zone 1 Zone 4 Zone 2 Import RSEE

Design phase: 2 designs Parameters Add a design Compare data

Tool	Unit	Value
RE2020	kg CO <sub>2</sub> e	6 912 668

Graphs - RE2020, Global warming

All impact categories Life-cycle stages Elements Compare elements Elements an

RE2020 - All i

125 % PENRM Use of m 2 - 1: 9315910

- View results
- Data inputs
  - Building materials
  - Energy and water
  - Construction site
  - Local production of energy
  - Building description
- Import data
  - Import Excel or gbXML files

Import of material properties (quantity..) from an RSEE file is now enabled:

- In **"Input data: RSET et données du projet"**:
  - Upload the RSEE ("choose file" button).
  - Click on "Read from RSET/RSEE", then map your design(s)
  - Click on "Import RSEE" to download the Excel from the RSEE which contains the details of all materials
- In **"Building description"**, or **directly in your design** (see Screenshot), click on "import Excel or gbXML files"
  - ✓ Ability to reuse the RSEE from similar projects and make only small changes specific to this project.
  - ✓ Compatibility with other software's RSEE.

# Other building LCA tool updates

- ✓ MPG NMD3.0: Reuse is now getting accounted in results as per NMD requirements
- ✓ Previously announced changes have been released in the past weeks:
  - ✓ GLA/RICS tool: B4 impacts for waste treatment and transportation of replacements have been added to the results. Old designs need to be re-saved to get the B4 stage calculated
  - ✓ PAS 2080 with HS2 extensions: Transportation impacts from the section "Materials used on the construction site - A5" are being added to A5 stage instead of A4. Designs need to be resaved to get the A5 stage calculated




# Product LCA & EPD software



# New Product Carbon Footprint (CFP) report

## Product Carbon Footprint

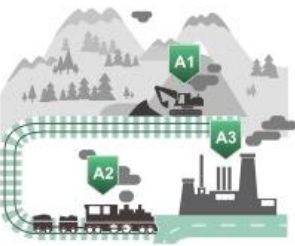
Created with One Click LCA EPD generator - [oneclicklca.com/pre-verified-epd-generator](https://oneclicklca.com/pre-verified-epd-generator)



**Global Warming Potential**  
quantifies a product's contribution towards global warming. This is referred to as carbon footprint and sometimes embodied carbon.

**Standards compliance**  
These are ISO 14021 self-declared results, calculated according to ISO 14040 and ISO 14044 standards. The results follow ISO 21930/EN 15804+A2, but do not fully comply with them.

**Scope of the carbon footprint**  
The results have a cradle-to-gate scope, comprising raw materials extraction and supply (A1), transport (A2) and final manufacturing (A3).



**Carbon footprint - Self declared** Report date:

**Declared unit**  
**Mass of declared unit (kg)**  
GWP-fossil, A1-A3 (kgCO2e)  
GWP-total, A1-A3 (kgCO2e)

Manufacturer

Address

Contact details

Website

Product name

Product reference

Place of production

Period for data

**Product description**

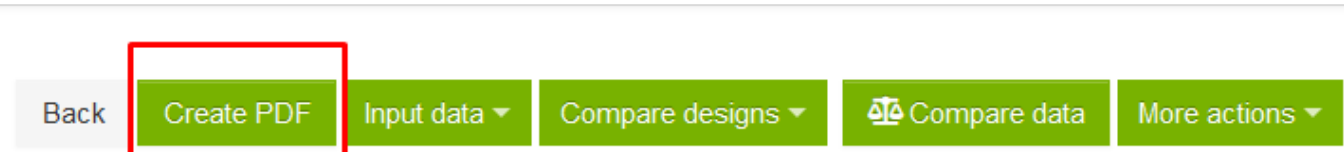
**System boundary**

Product stage			Assembly stage		Use stage							End of life stage				Beyond the system boundaries		
A1	A2	A3	A4	A5	B1	B2	B3	B4	B5	B6	B7	C1	C2	C3	C4	D	D	D
X	X	X			Modules not declared													
Raw materials	Transport to site	Manufacturing	Transport	Assembly	Use	Maintenance	Repair	Replacement	Refurbishment	Operational energy	Operational water	Deconstruction	Transport	Waste processing	Disposal	Reuse	Recovery	Recycling

This Product Carbon Footprint report is generated with One Click LCA EPD generator and can be used to easily demonstrate self-declared carbon footprint information. It is not an Environmental Product Declaration (EPD). If you require EPDs, [One Click LCA EPD generator](https://oneclicklca.com) can be used to seamlessly create EPDs with a seamless verification and publishing process. Read more at [www.oneclicklca.com](https://oneclicklca.com).

For fast declaration of your product's carbon footprint, you can now use the Product Carbon Footprint (CFP) report. Highlights:

- ✓ Available with all licenses and all EPD tools
- ✓ Visual, easy-to-understand one page report
- ✓ Self-declared, no need to wait for verification
- ✓ Click the 'Create PDF' button to download



Note: this is not a substitute for a third-party verified EPD where one is required.

# New info query in EPD Generator for EPD Hub

## 2. Allocation

Allocation is required if some material, energy, and waste data cannot be measured separately for the product under investigation. In this study, as per EN 15804, allocation is conducted

1. Allocation should be avoided.
2. Allocation should be based on physical properties (e.g. mass, volume) when the difference in revenue is small.
3. Allocation should be based on economic values.

Please choose the appropriate options from the questions below according to the allocations done in this study:

Question	Answer	
Raw materials	<input type="text" value="No allocation"/>	<a href="#">Compare answers -</a>
Packaging materials	<input type="text" value="Allocated by mass or volume"/>	<a href="#">Compare answers -</a>
Ancillary materials	<input type="text" value="Allocated by mass or volume"/>	<a href="#">Compare answers -</a>
Manufacturing energy and waste	<input type="text" value="Allocated by mass or volume"/>	<a href="#">Compare answers -</a>

Allocation, details for the verifier (not shown in EPD) [Compare answers -](#)

## 3. Averaging

If you have declared your product as an average, then report here the type of average according to the specifications in the EPD Hub GPI, the averaging method, as well as the variability in GWP-fossil for A1-A3 cannot be more than 10 %. This information is shown on the EPD.

If the EPD is declared as an average of multiple products, factories, or manufacturers, the variability of the results in the GWP-fossil indicator for modules A1-A3 needs to be reported.

Question	Answer	
Type of average	<input type="text" value="No averaging"/>	<a href="#">Compare answers -</a>
Averaging method	<input type="text" value="Not applicable"/>	<a href="#">Compare answers -</a>
Variation in GWP fossil for modules A1-A3	<input type="text" value="0"/> %	<a href="#">Compare answers -</a>

Representativeness of the average (shown on EPD) [Compare answers -](#)

If the EPD is declared as an average of multiple products, factories, or manufacturers, then describe here the representativeness of the average; the range of locations, products and

## 4. Additional information for the verifier (not shown on EPD)

List of excluded processes (not shown on EPD) [Compare answers -](#)

List here the materials, processes, and energy consumption which have been excluded from the study. If no processes have been excluded this field can be left empty.

The following text is pre-filled in the software generated documents and should not be changed:  
The study does not exclude any modules or processes which are stated mandatory in the Standards and PCR. The study does not exclude any hazardous materials or substances.  
The study includes all major raw material and energy consumption. All inputs and outputs of the unit processes for which data is available are included in the calculation. There is no neglect

- Cut off process 1
- Cut off process 2
- Cut off process 3

Documentation of other estimates and assumptions (not shown on EPD) [Compare answers -](#)

If needed, document here any other estimations and assumptions that have been made but not stated elsewhere in the EPD.

To speed up EPD creation, we have re-designed the query where you enter EPD data.

- ✓ In the “**EPD description**” query, you can either:
  - (i) enter a single text block, or,
  - (ii) select pre-defined values from a limited set of options in a drop-down list.
- ✓ Data entered in response to the “**List of excluded processes (not shown on EPD)**” question is not included in the EPD. Instead, it is passed as background documentation for the verifier.
- ✓ “**Allocation**” and “**Averaging**” questions each have a drop-down and an optional text field for details.
- ✓ “**Estimates and Assumptions**” question is for any additional information.