

SimaPro 9.5

What's new?

Title: SimaPro 9.5 What's new?

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About SimaPro

SimaPro was developed by PRé with the goal of making sustainability a fact-based endeavor. PRé has been a leading voice in sustainability metrics and life cycle thinking development for nearly 30 years, pioneering the field of environmental and social impact assessment. We develop tools that help you create value and drive sustainable change.



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1 Introduction

This document describes the changes in the SimaPro 9.5 software and database (compared to the previous release). The focus of this release has been on data and impact assessment methods - ensuring quality, consistency and accuracy. In terms of software, the current version contains a number of handy new features and small improvements.

We hope you have a smooth experience updating to SimaPro 9.5 and feel free to [reach out to us](#) for feedback and further suggestions for improvements!

2 Software updates

A few new features have been introduced, including:

- Removing unused database and project parameters in the copy tree and export (as CSV) functions
- Deselecting libraries not being used in your project(s) (under File > Database Management). This will save considerable time when opening projects and loading processes. Note: for multi-user installations, this feature is only available for the for Manager
- Filtering on obsolete processes after scanning project(s) (via Tools > Projects to Libraries Links Manager)

In addition, a few small improvements and bugs have been resolved. These include,

- Improvements in the database packing process
- Improvements in [Silent installation](#)
- Clearer warning messages when license deactivation fails
- When exporting to Excel, the option to export to Excel97 (XLS) has been removed (format XLSX remains).
- Selecting/deselecting multiple rows when replacing database parameters

3 Data library changes

3.1 ecoinvent 3.9.1

With the release of ecoinvent v3.9.1, the ecoinvent database integrates around 2000 new and more than 1800 updated datasets, including 271 new products. Sectors updated with this version include Agriculture, Batteries, Chemicals, Electricity, Metals, Pulp and Paper, Oil and Gas, and Waste. More information on new and updated data can be found [here](#).

Not all ecoinvent libraries will be updated after database update

With the release of SimaPro 9.5, only the ecoinvent 3 – allocation, cut-off by classification (unit and system) libraries will be provided by default in the Professional, Update and FullUpdate databases. This is to deter users from using different models within a project, and to improve data management/updates in general.

As such, after updating your database, the ecoinvent 3 – allocation, cut-off by classification data library will show version 3.9.1, while other ecoinvent libraries (APOS and Consequential) will remain unchanged (so their version number may show as 3.8 or earlier).

If you wish to update those additional libraries as well, you can download the latest version from this [webpage](#) and then import them in your updated database.

3.2 Agri-footprint 6.3

Agri-footprint contains inventories of food, feed, and beverage-related ingredients. The LCA database contains almost 5,000 products and processes, most of which are country-specific. Version 6.3 provides some new data and corrects some issues found in the [previous version](#).

[Updated documentation](#) for version 6 regarding methodology and description of data is now also available.

Only Agri-footprint - economic will be updated after database update

Please note that only the default Agri-footprint - economic (unit and system) libraries will be updated after importing the update database. If you wish to update the additional libraries Agri-footprint libraries (mass and energy allocation) as well, you can download the latest version from this webpage and then import them in your updated database.

3.3 Industry data 2.0

3.3.1 Alliance for Beverage Cartons and the Environment (ACE)

A new dataset for liquid packaging board (LPB) from the Alliance for Beverage Cartons and the Environment (ACE) has been added to the Industry data 2.0 library. ACE provides a European platform for beverage carton manufacturers and their paperboard suppliers to benchmark and profile beverage cartons as a safe, circular, and sustainable packaging solution with low carbon benefits. In 2021, ACE published this cradle-to-gate dataset for LPB as used to produce beverage cartons. Data is from 2018 and is based on the average production process of the main European LPB producers. For more information, please visit www.beveragecarton.eu/.

3.3.2 World Steel Association (worldsteel)

In 1996, worldsteel launched its innovative worldwide life cycle inventory (LCI) study for steel products. The study was updated in 2000, 2010, 2017, 2018, 2019, with the latest, 2020 LCI dataset being released at the beginning of 2021. This study contains new global and regional LCI data for 15 steel products, from hot rolled coil to plate, rebar, sections and coated steels. Data for an additional two products (UO pipe and ECCS (tin-free steel)) is also available, but has not been updated at this time. The study has been carried out in accordance with the worldsteel [LCI methodology report](#) and ISO standards 14040 and 14044 and is the most comprehensive and accurate LCI dataset for steel products produced in the world.

4 Changes to impact assessment methods

Three new impact assessment methods have been introduced with this data update. An overview of these new methods is provided below, in addition to a summary of small updates to existing methods.

For more details on each method, please see the comment section of the individual methods, or refer to the [Methods manual](#).

4.1 New | Environmental Footprint 3.1 (adapted)

This constitutes the impact assessment method developed by the European Commission to be used in the context of the Environmental Footprint (EF) initiative. The Environmental Footprint 3.1 method is the [latest version available](#) and the one to be used by Product Environmental Footprint Category Rules (PEFCRs) and Organisation Environmental Footprint Sector Rules (OEFSRs), as well as PEF and OEF studies, developed during the EF Transition Phase. This implementation of the Environmental Footprint 3.1 method was adapted to better correspond with the substances used in SimaPro data libraries. The original version of the method is distributed in a dedicated SimaPro [EF 3.1 database](#).

The differences between version 3.0 and 3.1 are the updated climate change, acidification, photochemical ozone formation, human toxicity and ecotoxicity impact categories. Please note that the EF 3.0 Method (adapted) and has been moved to the Superseded section of the Methods library.

Extensive information on how this method has been implemented in SimaPro can be found in the [Methods manual](#).

4.2 New | EN 15804 + A2 Method (adapted)

The EN 15804 standard covers Environmental Product Declarations (EPDs) of Construction Products. The 2019 A2 revision of this standard has [aligned their methodology](#) with the Environmental Footprint method, except for their approach on biogenic carbon. According to the EN 15804, biogenic carbon emissions cause the same amount of Climate change as fossil carbon, but can be neutralized by removing this carbon from the atmosphere. Accounting for temporary

and permanent carbon storage is not allowed. Therefore, the EN 15804 standard provides a set of requirements to prevent this accounting.

Thus, this method is identical to the Environmental Footprint 3.1 (adapted) method above, except for a few characterization factors in both the Climate Change and Climate Change – Biogenic impact categories.

Substance	Compartment	CF EN 15804 +A2	CF Environmental Footprint 3.1
Carbon dioxide (biogenic)	Emission	1	0
Methane (biogenic)	Emission	29.8	27
Carbon dioxide (biogenic)	Resource	-1	0

The difference to the former EN15804 + A2 method is the adoption of the new EN15804 reference package based on the EF 3.1 reference package instead of on the EF 3.0 reference package. Please note that the former EN15804 + A2 method and has been moved to the Superseded section of the Methods library.

4.3 New | Mineral resources dissipation (Poncelet et al. 2022)

Poncelet et al (2022) describes the dissipative flows for mineral resources, meaning minerals that become inaccessible for future use. This study expands upon previous works (Poncelet et al (2019)) and extends their coverage to provide characterization factors (CFs) for the average dissipation rate (ADR) and lost potential service time (LPST) for 61 metals.

The socio-economic impacts due to dissipation of different mineral resources are evaluated by applying the market prices of metals to these midpoint methods thereby quantifying also CFs at endpoint level. The impact category indicators at endpoint level are potential value loss rate (PVLRL) and lost potential value (LPV).

The characterization factors for the indicators LPST and LPV consider three time horizons: 25 years, 100 years, and 500 years. Furthermore, normalization and weighting are not included in this method.

Further references, and extensive information on how this method has been implemented in SimaPro can be found in the [Methods manual](#).

4.4 Updates of existing methods

A number of substances and methods have also been updated:

- Characterization factor of Methane, biogenic has been corrected in all (applicable) methods
- Characterization factor of Methane, land transformation has been added/corrected in all (applicable) methods
- Metal ions with specified valency have been added with the same characterization factor as the ions with unspecified valency, respectively vice versa, in all (applicable) methods
- Ecological Scarcity 2021: In addition to the above, added "Organic carbon, placed in landfill" and "Waste mass, total, placed in landfill" to the impact category Waste, non radioactive

- Land use biodiversity (Chaudhary et al., 2015): correction of a few substance mappings

For more details on the changes, please see the comment section of the individual methods.

Finally, the EF 3.0 Method (adapted) and the EN 15804 + A2 methods have been moved to the Superseded section. These will no longer be maintained as newer versions are available - users are advised not to use these methods. Documentation of superseded methods can still be found [here](#).

5 Contact us

Please contact us or your [local partner](#) if you have questions about these changes in the SimaPro software or database, or if you have any other questions related to the update.

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