



## What's New in SimaPro 9.0

# Colophon

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## 1 Introduction

This document describes the changes in the SimaPro 9.0 software and database. In this new version, we focused on the foundations of SimaPro – moving to an updated database system, and an updated license and activation server. For users, the focus has been on databases - ensuring quality, consistency and accuracy of the data and impact assessment methods.

We trust that the 9.0 release offers you enhanced contents in various data libraries that you are looking for.

## 2 Software updates

We have worked hard on transitioning to a more recent version of the Nexus database (SimaPro database format) for improved performance and paving the way for future data developments. We also updated our license generator and activation server. It is important to note that for SimaPro 9, there have been no changes to the [system requirements](#).

### SimaPro 9 versus SimaPro 8 licenses

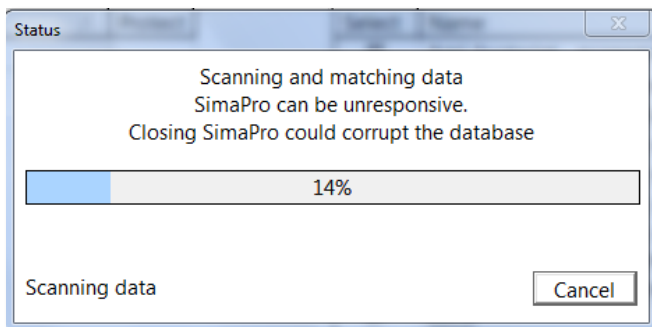
With the changes in the license and activation servers introduced with SimaPro 9, it is important to keep in mind that:

- A SimaPro 8 license can be used to install and activate SimaPro 9.
- A SimaPro 9 license cannot be used to install and activate SimaPro 8.

That means with your current SimaPro 8 registration code, you can use both SimaPro 8 or update to SimaPro 9. However, when you renew your service contract, you will receive a SimaPro 9 registration code which will only work with SimaPro 9.

Even though most of the work has been on the back-end, there are some notable improvements and fixes for users, including:

- Improved calculation and data loading speed
- New feature for Faculty, Classroom (and Compact) licenses: ability to [switch between libraries](#), which can improve calculation speed
- Registering SP as COM service works again
- Sometimes SimaPro appeared unresponsive during a database import. This caused users to force SimaPro to shut down and thus risk database damage. We hope this update progress message will help prevent this:



- It is now possible to select multiple projects to delete from the 'Open project' dialogue box.
- A new notification has been added, indicating parameter names may not contain special characters.
- Fix on Excel XLSX problem with latest version of Excel

## 3 Updated data libraries

### 3.1 ecoinvent 3.5

The new update to ecoinvent includes new and updated datasets, including:

- **Aquaculture and fish capture**  
For the first time, datasets on aquaculture and fish capture are published in ecoinvent. Datasets related to anchovy, hake and tuna capture as well as trout and tilapia aquaculture were added. Fish processing activities, such as canning, curing and freezing are also included.
- **Pulp and board production**  
The European sulfate pulp and corrugated board supply chains have been updated with the latest data from the respective industry associations.
- **Aluminium**  
The update of the aluminium supply chain features the latest data provided by the International Aluminium Institute. New regional datasets for some activities provide an even higher resolution and more transparency in this sector.
- **Waste treatment**  
The expansion of the waste sector offers 150 new disposal activities, including unsanitary landfill, open burning and open dumping. Additionally, 500 new country specific disposal mixes are made available for 37 European countries plus Brazil, Colombia, Peru, India and South Africa.
- **Hard coal**  
Version 3.5 now covers more than 95% of the global hard coal supply chains, showing global trade flows and regional hard coal mixes. New data on coal mining in India and South Africa include different types of mines. Key emissions from mines were updated for all geographies.

- **Continuously updated electricity sector**

Version 3.5 covers close to 100% of (statistically represented) global electricity generation, in 142 countries. Current and future electricity mixes are available on a country or even region-specific level. New data on concentrated solar power from parabolic trough and solar towers was added.

#### Obsoleteecoinvent 3.4 data

A number of processes from ecoinvent 3.4 are no longer supported and are considered obsolete. PRé created special replacement files to allow you to change most of these obsolete links in your projects from ecoinvent 3.4 to the correct processes in ecoinvent 3.5 in a fast and easy way. More information on this and on how to use the replacement files is described in the update manual.

However, please note that replacement is not possible for some processes. Please review the spreadsheet '[List of Obsolete Processes without Replacement ei 3.4 to 3.5](#)' to check the reason why the ecoinvent 3.4 activity does not exist in ecoinvent 3.5 anymore.

## 3.2 Industry Data 2.0

There were minor updates to this data library: the process 'Steel Wire Rod\_GLO' was updated and Worldsteel submitted corrections to PAH flow across several datasets.

# 4 Changes to impact assessment methods

This release includes new methods: EF method (adapted), EPD (2018), Environmental Prices and Cumulative Energy Demand (LHV)). ReCiPe 2016 has also been substantially updated to include normalization and weighting data. In addition, corrective updates were made in Cumulative Energy Demand and AWARE methods.

For more details on each method, please see the comment section of the individual methods, or the methods manual in SimaPro (via Help> Data Manuals> Methods Manual).

## 4.1 EF method (adapted)

EF method is the impact assessment method of [Environmental Footprint \(EF\)](#), the initiative of the European Commission. The method includes characterization, normalization and weighting. The implementation is based on EF method version 2.0.

The method was originally developed to be used with EF-compliant datasets, which use the nomenclature of the ILCD flow list. In order to make it compatible with other datasets provided in SimaPro, we aligned the flow names with SimaPro nomenclature, and removed flows not used by SimaPro libraries, such as regionalized land use flows.



Since the method was modified, it is not suitable for conducting the EF-compliant studies but can be used for other assessments. The original version of the method will be distributed in the dedicated SimaPro EF database planned for release in April 2019.

## 4.2 EPD (2018)

This method is an update of EPD (2013), covering the changes introduced to the method in 2018. Namely, change of the characterization factors for photochemical oxidant formation (used to be based on CML-IA, now ReCiPe 2008) and inclusion of Water scarcity (based on AWARE).

## 4.3 Environmental Prices

Environmental Prices is a method developed by CE Delft for expressing environmental impacts in monetary terms. Environmental prices thus indicate the loss of economic welfare that occurs when one additional kilogram of the pollutant finds its way into the environment. Normalization is not included, but CE Delft developed two weightings sets:

- Dutch Environmental Prices (2015) – based on average emissions in the Netherlands in 2015,
- European Environmental Prices (2015) – based on average emissions in the EU28 in 2015.

## 4.4 Cumulative Energy Demand (LHV)

This method is a variation of Cumulative Energy Demand, based on fuels' lower heating values (LHV). Cumulative Energy Demand (CED) is calculated from data published by Ecoinvent and expanded by PRé for energy resources available in the SimaPro database. Normalization is not a part of this method. In order to get a total ("cumulative") energy demand, each impact category is given the weighting factor 1.

## 4.5 Cumulative Energy Demand

Characterization factors of 6 flows were modified. Originally, these flows come from ILCD, which reports lower heating value, and needed conversion to higher heating value.

## 4.6 ReCiPe 2016

The most relevant updates are:

- implementation of regionalized water consumption category (in endpoint version),
- inclusion of normalization (endpoint and midpoint) and weighting sets (endpoint).

It is important to mention that method developers published only normalization factors and weighting factors from ReCiPe 2008 were implemented by PRé to allow single score result.

Additionally, there was a correction in Mineral resource scarcity to include Titanium dioxide instead of wrongly characterized Titanium oxide.

## 4.7 AWARE

In this minor update we added characterization factors for missing geographies (NORDEL, UCTE, UCTE without Germany, WEU) and any new water flows. All characterization factors were also corrected to include four significant digits.

## 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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