Converting a SimaPro model to ILCD format

1. Introduction

In the context of the Environmental Footprint Pilot Project, SimaPro users need to convert their life cycle inventory models to ILCD format. SimaPro does not support export in ILCD format, but does support export in EcoSpold 1 format. Data in EcoSpold 1 format can be converted to ILCD format with the openLCA converter tool.

Version 3.0 of the openLCA converter did not completely map all substances and their (sub)compartments between SimaPro and the ILCD format. To address this problem, PRé has created additional mapping files that properly map the data used in SimaPro to the ILCD format. To allow you to use these new mapping files, the openLCA format converter has been updated to version 3.1.

Below you find instructions on how to export your model from SimaPro and to convert the data to ILCD format.

2. Exporting from SimaPro

Please note that it is only possible to export and convert SimaPro processes. You cannot export product stages. If your model makes use of product stages, we recommend you save the inventory results of a product stage as system process. A system process is the final inventory result saved as a single process. As such it does not contain any modeling details. You can simply save as system process. First calculate results for your product stage. In the inventory tab, use a right mouse click and choose "Save as system process". This avoids remodeling your work so that the model is using processes only.

Exporting to EcoSpold 1 format is only possible in the SimaPro Analyst, Developer and PhD versions.

Please follow the instructions below to export data from SimaPro in EcoSpold format:

1. In SimaPro, open the project from which you want to export data. Select the process which you need to convert to ILCD. You can select multiple processes by holding the CTRL key and clicking the processes you want to select.

2. Under File in the SimaPro tool bar, select Export. A window with export options will appear.

- As *Output type*, select "EcoSpold v1 file".
- Under *Selection* you define which processes are to be exported. If you check the option "include sub product stages and processes" SimaPro will include all processes needed to create the

complete process tree. This can be a substantial amount of processes; therefore it is not recommend choosing this option unless you really need these processes.
- Under *EcoSpold options*, please make sure the following options are <u>unchecked</u>:
  - Use multiple xml files
  - Export mapping file
  - Export ElementaryFlows.xml

  Make sure the following option is <u>checked</u>:
  - Ecoinvent compatible.

3. Click OK. A new window will appear where you can select the folder where the data is saved and where you enter a file name for the exported dataset. Note that exported data are saved as a single XML file. Click Save to start the export.

3. Installing the OpenLCA converter and SimaPro mapping files

Please note that you must have Java installed on your computer to use the OpenLCA converter. You can download Java for free via www.java.com.

1. Go to http://www.pre-sustainability.com/data-conversion-tool-ilcd-format.
2. Download the OpenLCA converter ("converter_3.1.jar") and save it in a new folder on your computer or server.
3. Download the SimaPro mapping files ("OpenLCAConverterFilesforSimaPro804.zip") file. After downloading, unzip the file to another folder. This can be a subdirectory of the folder that you created for the OpenLCA converter.
4. Using Windows Explorer, start the Converter by double clicking on "Converter_3.1.jar" in the folder where you saved the file. If you see an error message stating that no program is associated with this file type, you must install Java or update current your Java installation and associate the .jar extension with "Java(TM) Platform SE Binary".
5. Once the Converter is open, click on Database in the top menu. Under "Database folder" select the folder in which you unzipped the mapping files. The converter will automatically read the new mapping files and will add additional files to this folder. Do not enter any text into the "Query" field, this will be automatically populated.

6. You are now set up to start the conversion of data from EcoSpold to ILCD format.

4. Using the OpenLCA converter

Please be aware that conversion of data is very slow. The conversion may require between several minutes to several hours, depending on the amount of processes and flows included in the data. We recommend starting the conversion and then allow the tool to work in the background.

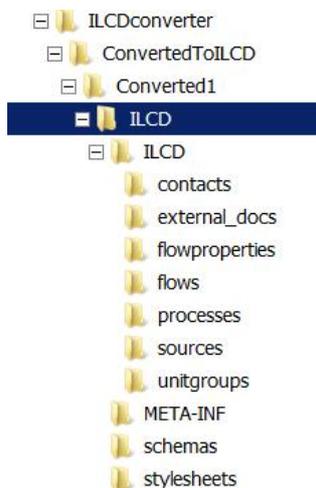For general instructions on using the OpenLCA converter, please see the manual available from http://www.pre-sustainability.com/data-conversion-tool-ilcd-format.

1. Using Windows Explorer, start the Converter by double clicking on "Converter_3.1.jar" in the folder where you saved the file.
2. Click on Conversion in the top menu.
   - Under "Source", select the XML file (the file you exported from SimaPro in EcoSpold 1 format) that you want to be converted in the Source field.
   - Under "Target", specify the folder where you want to save the newly created ILCD files. You must create a new folder for each conversion. Within the specified folder, a new folder called ILCD will be created in which multiple subfolders and files will be stored.
   - Check the "Use proxies in mappings" option. This means that several specific flows will be converted to a less specific flow, but it will remain compatible with the ILCD methods.
   - Select ILCD as target format in the drop down box (the default choice is EcoSpold 1).
   - Click on the green arrow to start the conversion.

3. After the conversion is complete, the converter will display the number of files created. This can be a substantial number as each individual flow is converted to a separate file.
   - When you click on the globe button the same information will be shown in your browser to facilitate easy access.
   - To access the folder with the converted data, click the folder button .
   - To check if the created data comply with the ILCD format rules, click the validate button .

5. The converted data are saved as a series of folders and files created in a subfolder of the target directory with the name "ILCD". In the screenshot below the folder holding the data is ../ILCDconverter/ConvertedToILCD/Converted1/ILCD.

5 Support

If you have questions about the export or conversion procedure, please contact PRé Consultants via e-mail at support@pre-sustainability.com.

For questions about the working of the OpenLCA Converter, please contact its creator GreenDelta via http://www.openlca.org/web/guest/contact.