New feature: Scenario Analysis

You can now calculate multiple scenarios at once using menu 'Calculation -> Calculate Excel Scenarios'

Areas of application:

If you are using only one Umberto model to compare different:

- Plants/locations
- Countries
- Concepts/improvement measures, etc. with each other

Notes:

- As the name suggests, scenarios are managed via Microsoft Excel and Live Links to Umberto
- Moreover, you can export LCIA raw data including all information (depending on which LCIA factors are activated, this also includes the CO_2 footprint and other parameters)

Step by Step Instructions:

An example excel file with documentation (ScenarioAnalysis.xlsx) can be found in your LCA+ documents folder (for Umberto LCA+ user) or Efficiency+ documents folder (for Umberto Efficiency+ user) after the first start of Umberto.

Step 1: On sheet 'LiveLinks' enter / update the list of parameters, while providing a proper unit for the specific parameter or material in the Unit column (units are optional). Do not edit the value column manually, it is filled automatically.

Step 2: On sheet 'Scenarios' replenish consecutive scenarios with different parameter value sets at your needs.

Step 3: On sheet 'Scenarios' determine a scenario calculation range for the calculations ahead ('Start ID' and 'End ID').

Step 4: When sheet 'LCIA RawData' contains any data you want to keep then take a copy of that sheet. You can use these if you want to analyze the results later or compare them with later scenario calculations.

Step 5: In Umberto open the corresponding model and create missing / maintain existing Live Links where appropriate. Link with the 'Value' column on the 'LiveLinks' sheet, not with the parameter values on the 'Scenarios' sheet!

Step 6: Save the Excel file, close it and leave it closed till the end of all scenario calculations.

Step 7: In Umberto launch the scenario calculations (menu 'Calculation -> Calculate Excel Scenarios').

Step 8: (Optional): In case for comparing more than 50 scenarios, expand the range of the name 'Szenarienmatrix'.

Step 9: (Optional): In case for comparing more than 17 parameters, expand the range of the name 'Parametermatrix'.