

## Overview of GaBi Envision

GaBi Envision was developed to offer a simple and easy way to integrate Life Cycle Assessment (LCA) metrics into your product design process, quickly evaluate ‘what-if’ scenarios and effectively communicate environmental impacts. The underlying product models can be created by your in-house sustainability team using GaBi Software or an LCA expert from Sphera can set it up for you.

GaBi Envision allows large groups of users to access the same models, reports, and templates. This ensures that all users have a single basis for their LCA results.

## Getting Started

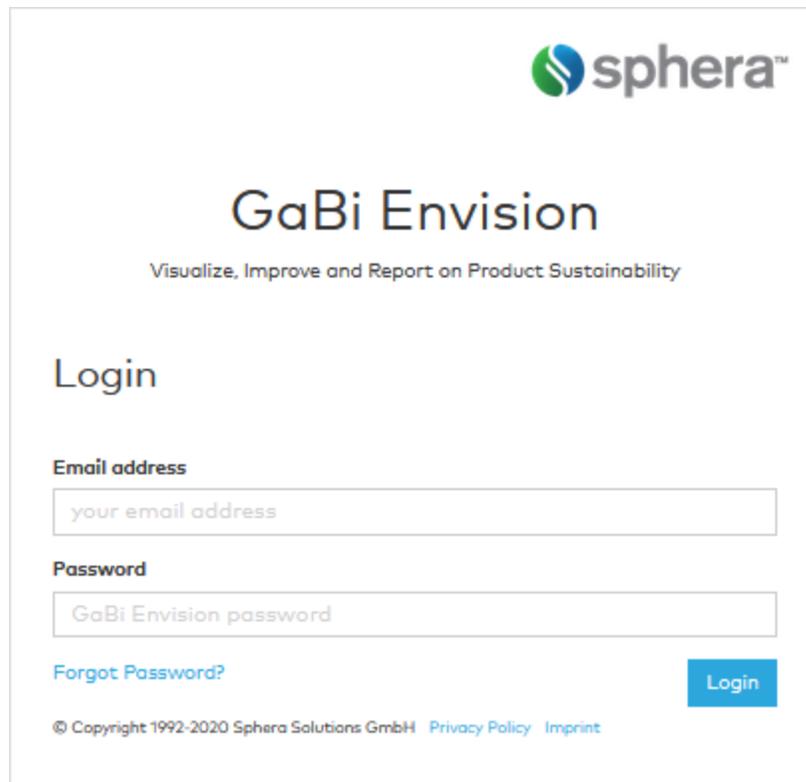
### Learning How to Use GaBi Envision

For the latest information about GaBi Software training, visit <http://www.gabi-software.com/support/training/> or contact your local Sphera office to discuss training options. Also, please visit the GaBi Learning Center at <http://www.gabi-software.com/support/gabi-learning-center/> to view videos that will walk you through specific examples. Stay up to date on the latest GaBi software news by following GaBi on Facebook and LinkedIn.

General Note for usage: If you are using a touch device, action buttons must be double-clicked – one click displays a tooltip, the action is done on the second click.

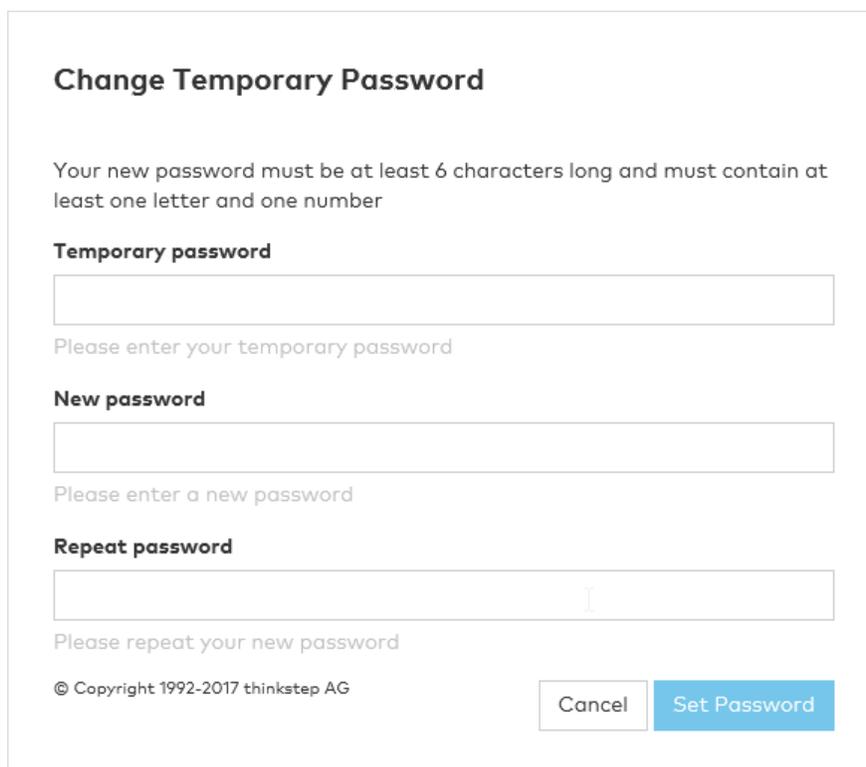
### Logging in

When an Administrator creates a new user account with an email address as login name, the new user will receive an email with a link and a temporary password, which enables them to create their own password. The password will be saved with encryption. The password is never visible to anybody, neither to the user itself, not to any Administrator or the software vendor. The application starts with the login screen.



The login page features the Sphera logo at the top right. Below it, the title "GaBi Envision" is centered, followed by the tagline "Visualize, Improve and Report on Product Sustainability". The "Login" section contains three input fields: "Email address" with a placeholder "your email address", "Password" with a placeholder "GaBi Envision password", and a "Forgot Password?" link. A blue "Login" button is positioned to the right of the password field. At the bottom, there is a copyright notice "© Copyright 1992-2020 Sphera Solutions GmbH" and links for "Privacy Policy" and "Imprint".

If you click on 'Forgot Password?' a new temporary password will be sent to the listed e-mail address. It contains a link you must go to to change your temporary password before login to Envision.



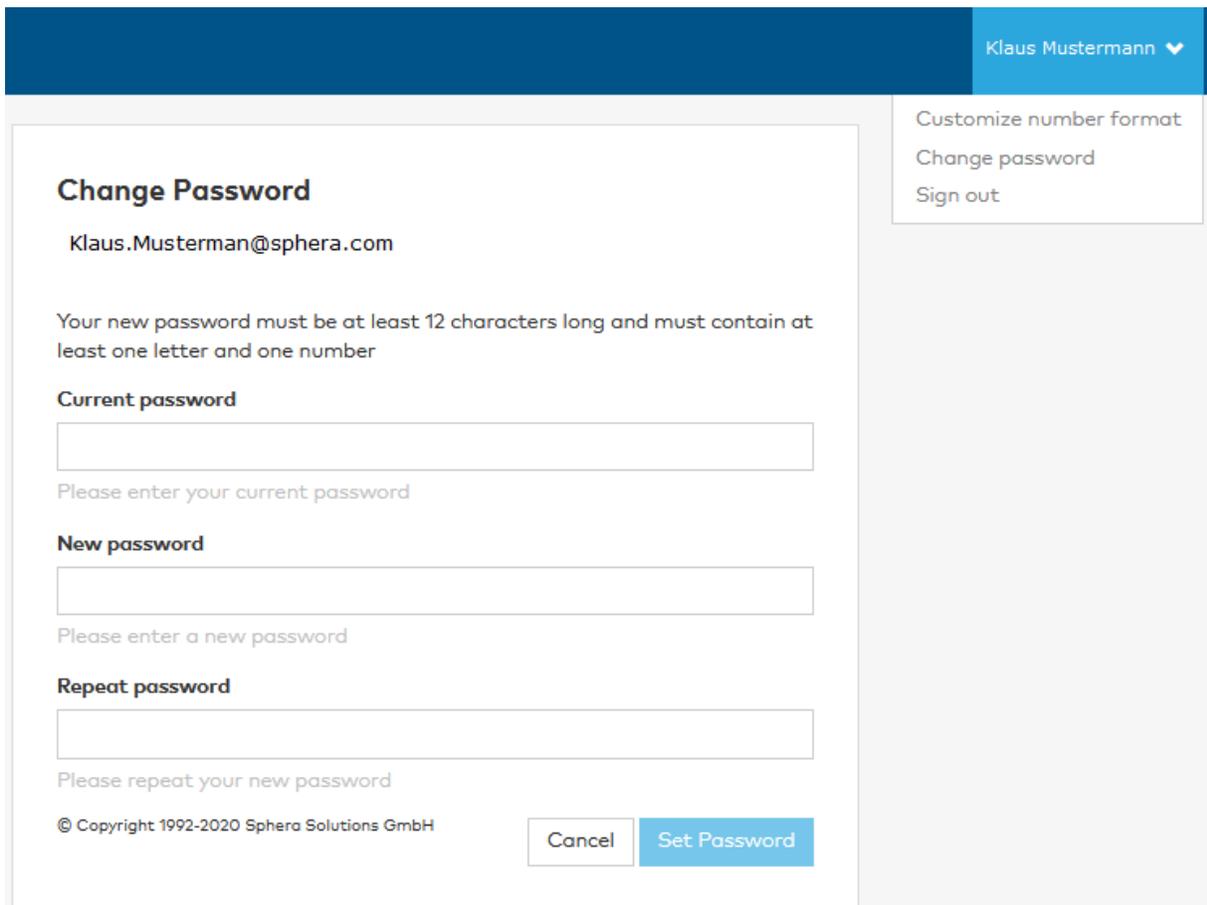
The "Change Temporary Password" page includes a heading and a password requirement notice: "Your new password must be at least 6 characters long and must contain at least one letter and one number". It features three input fields: "Temporary password" with a placeholder "Please enter your temporary password", "New password" with a placeholder "Please enter a new password", and "Repeat password" with a placeholder "Please repeat your new password". At the bottom, there is a copyright notice "© Copyright 1992-2017 thinkstep AG" and two buttons: "Cancel" and "Set Password".

Please note, when logging in, if you type in the wrong password more than 3 times, you will be locked out of GaBi Envision for a short period. If you continue to enter a wrong password, the lockout period will be extended. Your administrator can unlock your account should you require immediate access.

**Special note:** After 10 minutes of inactivity GaBi Envision automatically closes for client data security purposes. The user will be logged out of Envision and asked to login again. Please note that when no calculations are performed, the program will not remember unsaved values in the parameter cells.

## Change Password & Settings

You may change your password, customize the number format, or sign out, with a drop-down menu in the Envision header.



Klaus Mustermann ▾

**Change Password**

Klaus.Musterman@sphera.com

Your new password must be at least 12 characters long and must contain at least one letter and one number

**Current password**

Please enter your current password

**New password**

Please enter a new password

**Repeat password**

Please repeat your new password

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Cancel Set Password

Customize number format  
Change password  
Sign out

## Customize Number Format

You can select either a decimal or scientific format with significant digits and number of decimal places.

You can see the result of your selection in the “Your number format” section.

### Customize Number Format

Note: PDF or RTF reports will maintain the settings from the GaBi model file and charts showing percentages will always have a decimal notation with 2 decimal places.

**Notation type**     Decimal     Scientific

**Decimal separator**    Period (.) ▼  
Choose Comma (,) or Period (.)

**Decimal places**    2 ▼  
Choose the number of decimal places 1 - 5

**Significant digits**    10 ▼  
Choose the number of significant digits 4 - 10

**Digit grouping**    Space ( ) ▼  
Choose None, Space ( ), Comma (,)

**Your number format**

1	➔	1.00
12345678.9	➔	12 345 678.90
123456789.01	➔	1.23e+8

Back
Reset
Save

## User Types

You can select either a decimal or scientific format with significant digits and number of decimal places.

You can see the result of your selection in the “Your number format” section.

Users may have different rights assigned by the administrator for each role they have. As a user, you may have one or more than one role. For example, the administrator may assign many users to have the permissions associated with the role of ‘Product Designer’.

Another role may be defined for e.g. a product manager.

The administrator assigns permissions to each role and will name the roles based on your own organizational needs.

Role permissions are also defined per folder. For example, the product designer may see the design folder, however the product manager can see all design and engineering folders.

Administrators have many more rights than other users and have a separate section of detailed user guidance in this manual. To better understand your permissions as a user, please contact your administrator.

A reviewer, normally the administrator, has been granted permission to review templates or reports to be published. Once a user changes the status of a template or report, an email is automatically sent to the reviewer requesting the template or report to be evaluated for acceptance.

### **Please Note:**

Buttons, files, and folders are not visible to you, when you do not have the rights to see or use them.

Example:

- If you don't have the right to list a folder, you won't see it.
- If you don't have the right to overwrite a file, you won't see a “Save”-button.
- If you don't have the right to create a new file, you won't see a “Save As”-button.

Please contact your administrator if you need more rights.

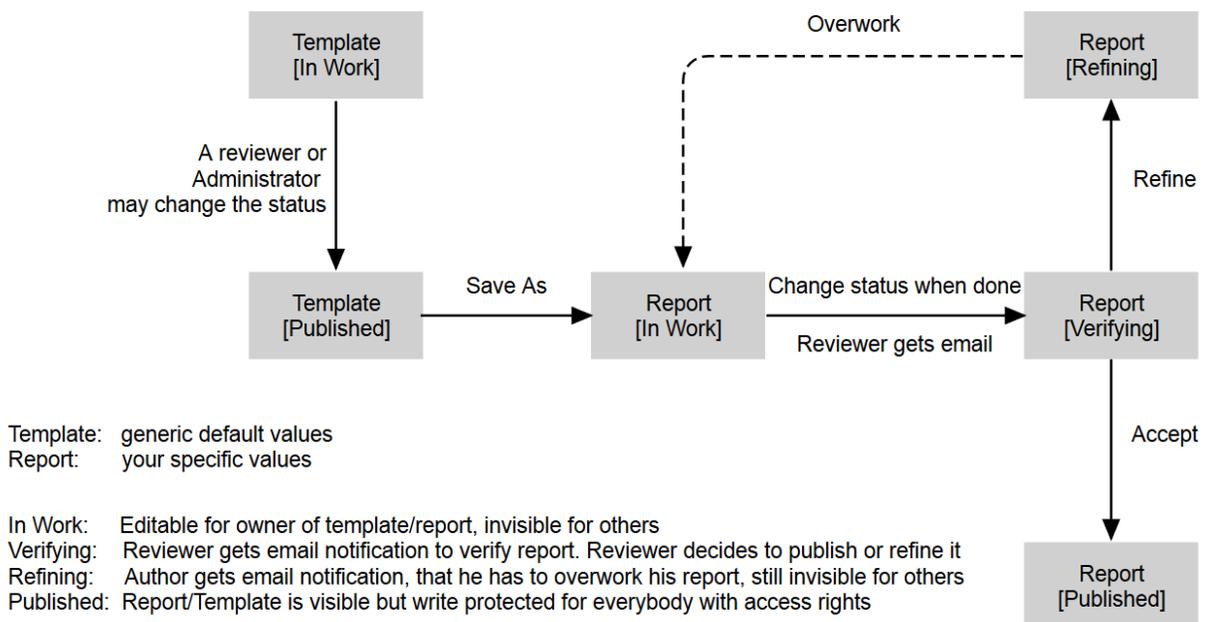
## Using Envision

### Getting Started with Templates

To create a template, a model must first be created in the GaBi software and exported as a gbm file (also called “i-report”) to GaBi Envision. This can be done in-house by a GaBi user or by an LCA expert at Sphera. Some users will have rights to edit and publish a template to make it available for others to use as a starting point for their reports.

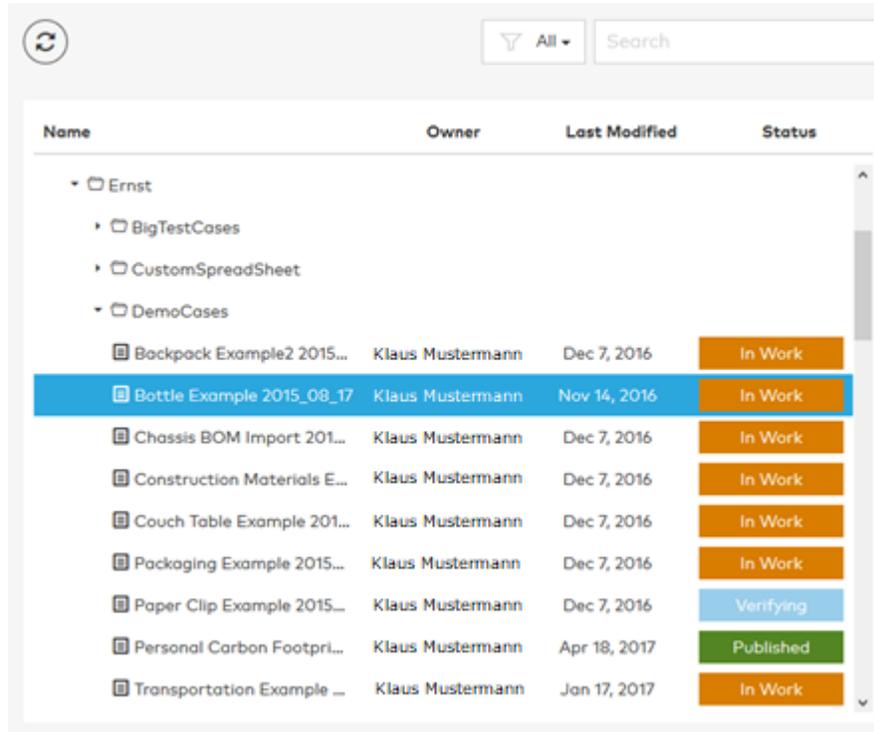
### Using a Template to Create a Report

Open a published template in GaBi Envision and enter in project-specific parameters. You must save your work as a report; the template will be write-protected.



## Entering and Editing Data

In the tree view, open the folder and select the report you wish you edit.



Name	Owner	Last Modified	Status
Ernst			
BigTestCases			
CustomSpreadSheet			
DemoCases			
Bockpock Example2 2015...	Klaus Mustermann	Dec 7, 2016	In Work
Bottle Example 2015_08_17	Klaus Mustermann	Nov 14, 2016	In Work
Chassis BOM Import 201...	Klaus Mustermann	Dec 7, 2016	In Work
Construction Materials E...	Klaus Mustermann	Dec 7, 2016	In Work
Couch Table Example 201...	Klaus Mustermann	Dec 7, 2016	In Work
Packoging Example 2015...	Klaus Mustermann	Dec 7, 2016	In Work
Paper Clip Example 2015...	Klaus Mustermann	Dec 7, 2016	Verifying
Personal Carbon Footpri...	Klaus Mustermann	Apr 18, 2017	Published
Transportation Example ...	Klaus Mustermann	Jan 17, 2017	In Work

The report detail section shows some key parameters for this report. Click on Open to open the report or double-click on the report/template in the list.

Note: If you wish to edit a published template or report, you should save the file with a new name first, because the published template/report itself is write protected.

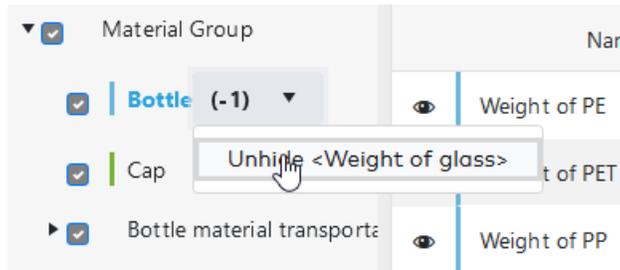
After clicking on 'open', the report will open and show a parameter section. Here the user may choose to view or change the input parameters. After changing parameters, hit "Calculate report" to view the impact of your change.

Name	Base scenario	Alternative I	Alternative II	Comment
Weight of glass	0,15	0	0	[kg] Weight of glass in bottle
Weight of PE	0	0	0,035	[kg] Weight of PE in bottle
Weight of PET	0	0,035	0	[kg] Weight of PET in bottle
Weight of PP	0	0	0	[kg] Weight of PP in bottle
Weight of cap	0,005	0,005	0,005	[kg] Weight of cap
Cap material	Aluminium	Aluminium	PET	Please select the material

A new imported report shows only parameters of the selected folder by default.

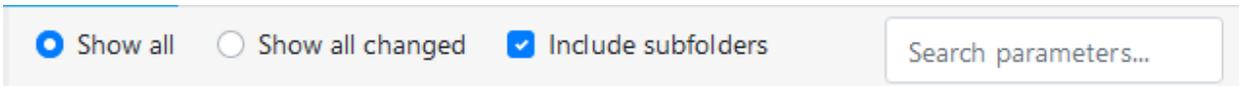
Checking “Include subfolders” shows all parameters of the selected folder and its subfolders. The colored bars allow assignment to the individual folders.

The symbol hides single parameters. The folder in the tree view shows the number of hidden parameters and can unhide the parameters again:



(De-)selecting the checkbox of a folder hides or unhides all parameters of a folder.

The view of the grid can be changed from all entries to show all changed parameters of all subfolders.



Additionally, parameters are easily found by typing a part of its name into “Search parameters...”.

A slide-in section can be opened on the right.

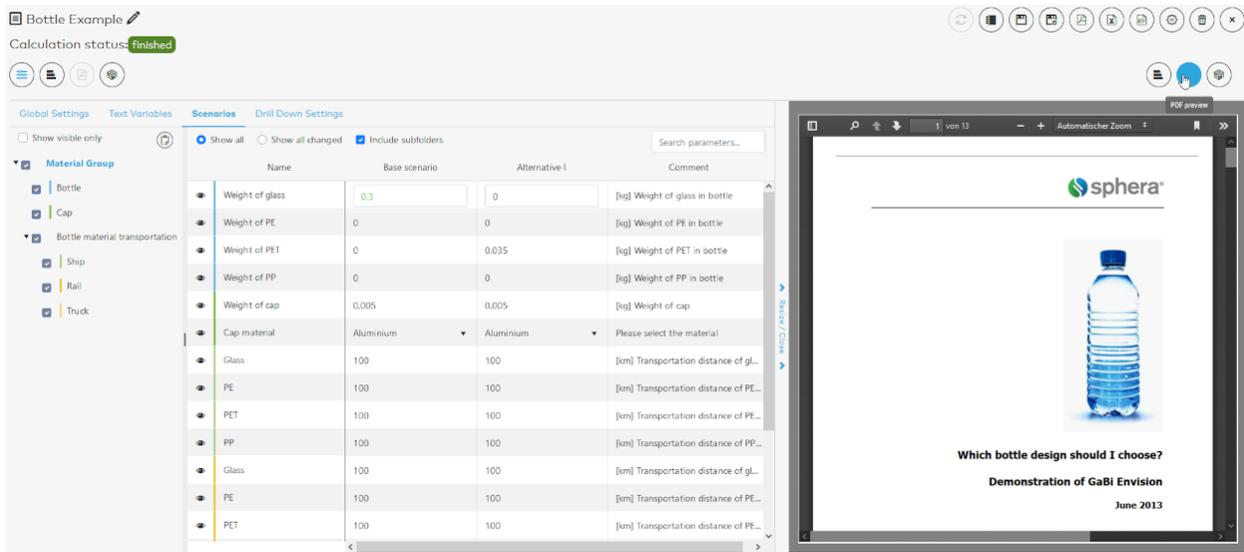
Selecting “Tables and Charts” will show a preview of all tables and charts in the report.

Name	Base scenario	Alternative I	Comment
Weight of glass	0.3	0	[kg] Weight of glass in bottle
Weight of PE	0	0	[kg] Weight of PE in bottle
Weight of PET	0	0.035	[kg] Weight of PET in bottle
Weight of PP	0	0	[kg] Weight of PP in bottle
Weight of cap	0.005	0.005	[kg] Weight of cap
Cap material	Aluminium	Aluminium	Please select the material
Glass	100	100	[km] Transportation distance of gl...
PE	100	100	[km] Transportation distance of PE...
PET	100	100	[km] Transportation distance of PE...
PP	100	100	[km] Transportation distance of PP...
Glass	100	100	[km] Transportation distance of gl...
PE	100	100	[km] Transportation distance of PE...
PET	100	100	[km] Transportation distance of PE...

Other_selected_impact_categories	Base scenario	Alternative I
Acidification Potential (AP) [kg SO2 eq.]	1,81e-3	3,42e-4
Eutrophication Potential (EP) [kg Phosphate eq.]	2,33e-6	3,87e-5

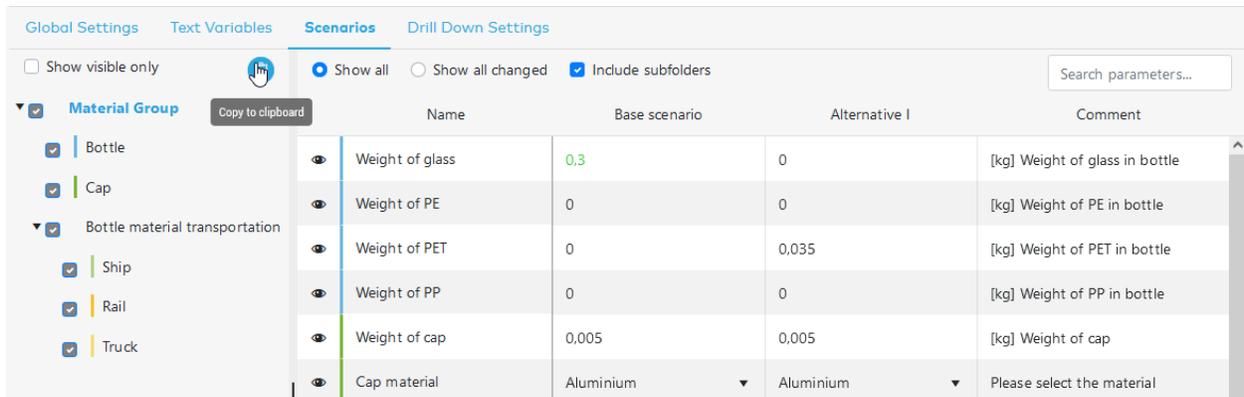
Selecting “Preview PDF” will show a preview of the final report.



Tip: Use the Ctrl-button and the mouse wheel to zoom in and out on open reports pages.

## Copy to Clipboard

You can use the “Copy to Clipboard” action to copy Global Settings, Text Variables or Parameters to the clipboard.



You can use the “Toggle formatting of numbers” function to get the full accuracy of table data, and then select any table entries and use CTRL to copy the selection to the clipboard.

Primary\_Energy\_Demand
Toggle formatting of numbers. .00 → 0

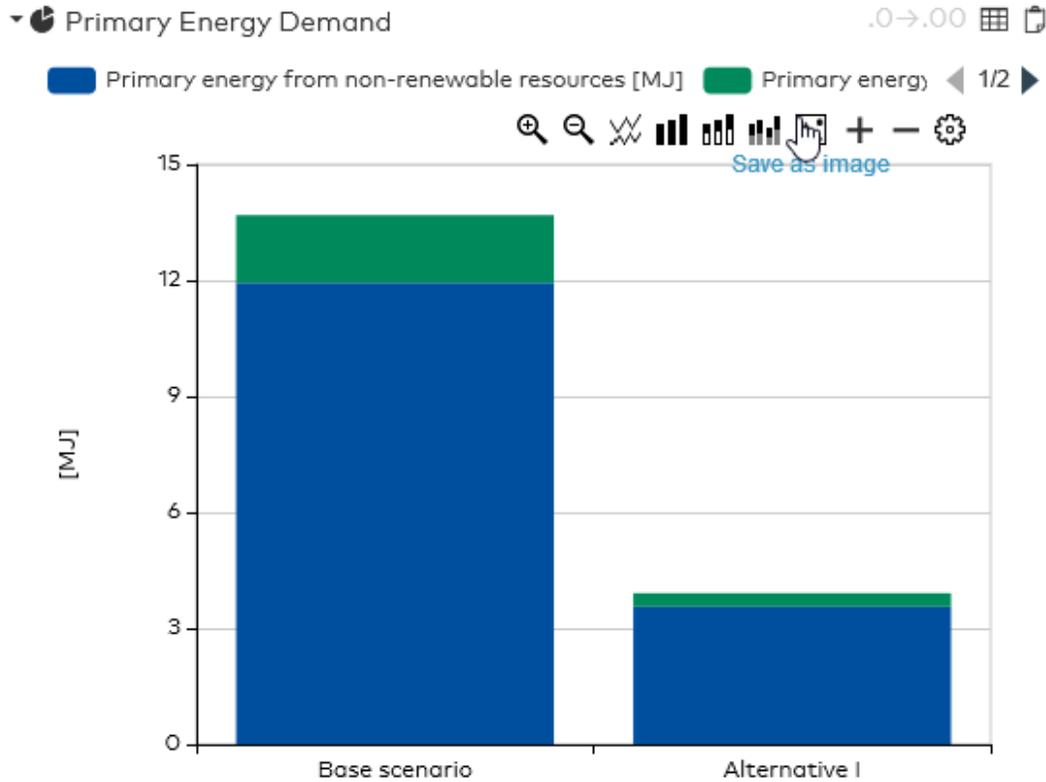
Parameter	Base scenario	Alternative I	Alternative II
Primary energy total [MJ]	1466.16865837678	4.40804176918477	3.57455423409255
Primary energy from non-renewable resources [MJ]	1362.22867257211	4.01298067738195	3.38684673361472
Primary energy from renewable resources [MJ]	103.939985804671	0.395061091802816	0.187707500477829

Charts can be converted to tables, and their data again copied to the clipboard.

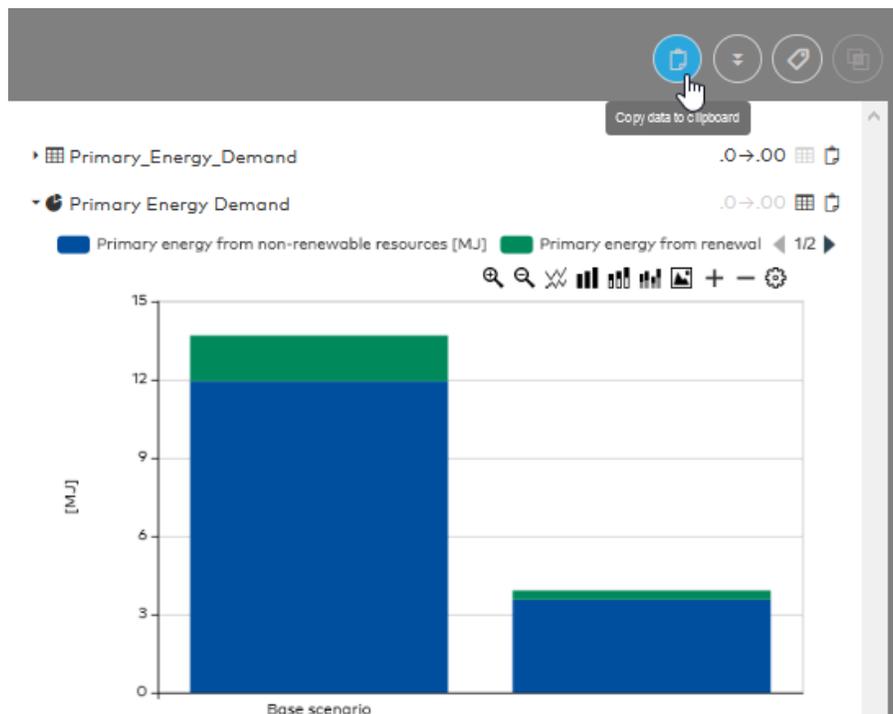
Primary Energy Demand
Show chart as table.

Parameter	Base scenario	Alternative I	Alternative II
Primary energy from non-renewable resources [MJ]	1362.229	4.013	3.387
Primary energy from renewable resources [MJ]	103.94	0.395	0.188

Charts can be saved as image, both from the tables and chart preview as well as from the pdf preview:



All charts and tables can be copied to clipboard as well.



## Doing a Quick “What if” Investigation

Investigate the impact of a change by entering or changing data for a scenario in the ‘parameters’ section tab. Click on the ‘Edit Scenarios’ button to change or add more scenarios.

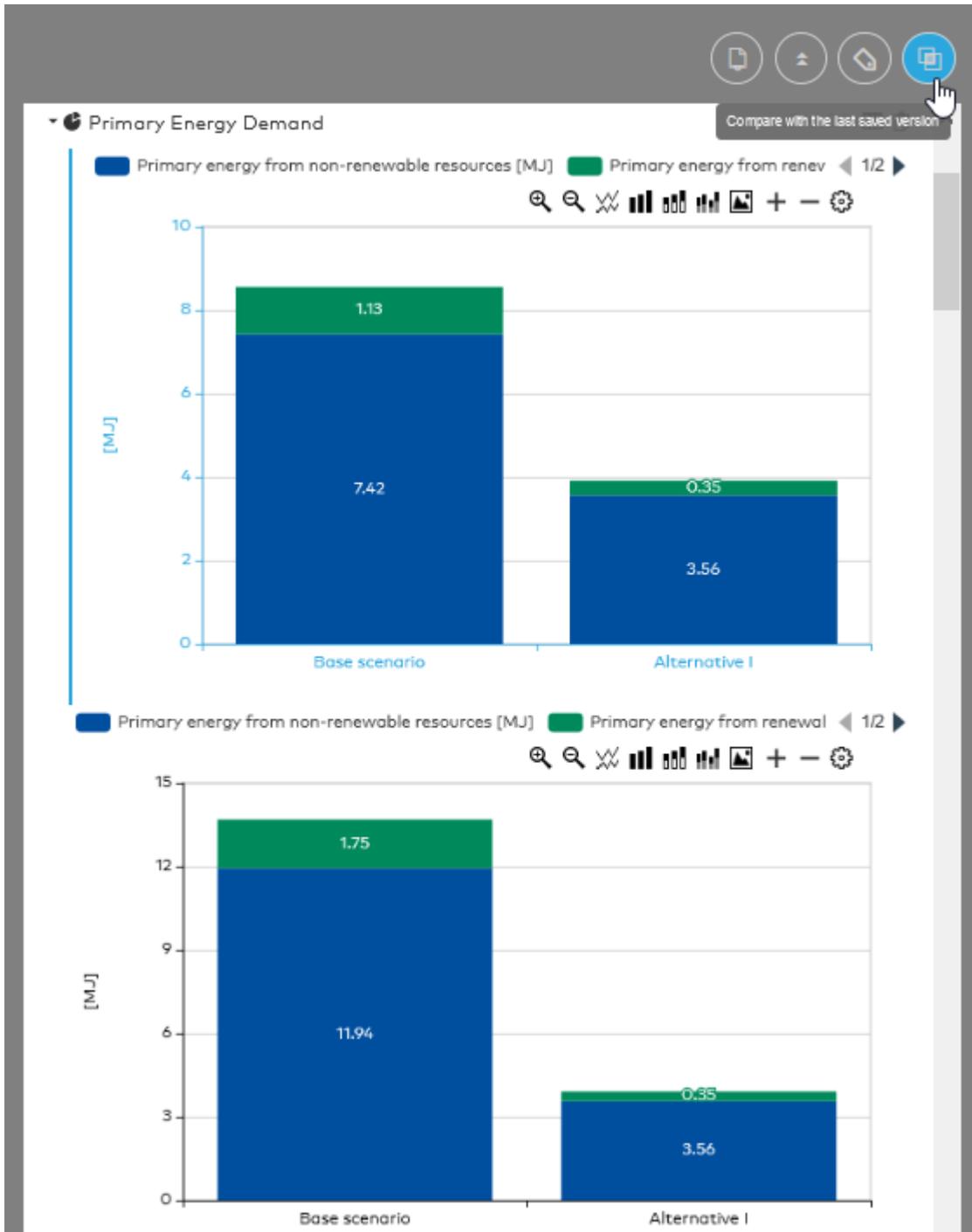
If you hide a scenario, the column for this scenario will be hidden in the parameter section, so no one can change values for hidden scenarios.

If you delete a scenario, all diagrams and tables will adapt and will not display any columns/lines/numbers or bars for the deleted scenario. A bar chart for three scenarios converts into a bar chart for 2 scenarios...

To view the results, click “Calculate report” and see the changes in the Tables and Charts. Select “Compare with last saved version” to evaluate the change of the impact in blue.

	Base scenario	Alternative I
Primary energy total [MJ]	8.55 (13.68)	3.92
Primary energy from non-renewable resources [MJ]	7.42 (11.94)	3.56
Primary energy from renewable resources [MJ]	1.13 (1.75)	0.35

Changes in Charts can also be seen above each other – the new information is marked by a blue line. Below you can see the diagram representing the parameter configuration of the last saved version:



If you are satisfied with your changes you can save this report or save a new report with the “Save As” button.

Save

Bottle Example

Calculation status: finished

## Verifying Reports

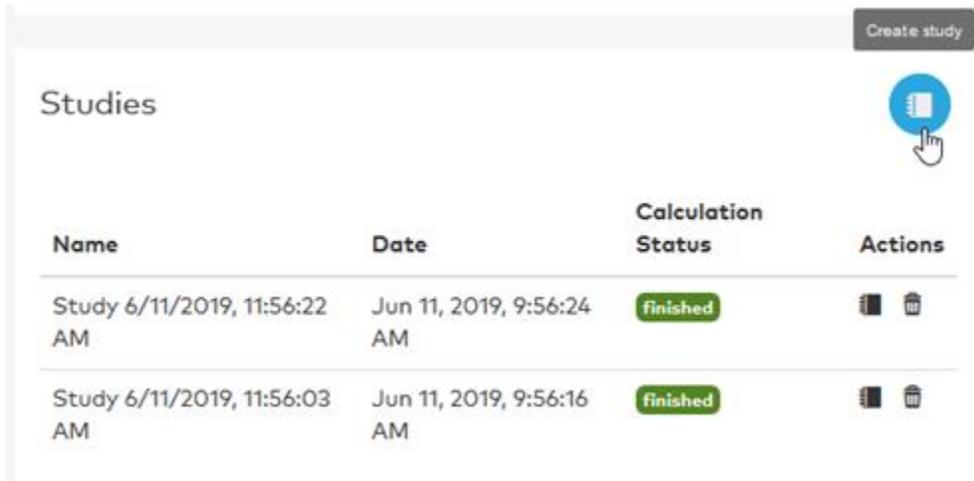
Once you have entered project-specific data into your report and recalculated the results, it is time to send the report file to a reviewer for verification. Once a report is in the 'Verifying' status, an email is automatically sent to the reviewer(s). The reviewer(s) may send the report back to the user for further work and put the report in the 'Refining' status. Once the report is verified by the reviewer, it will have the 'Published' status and becomes write-protected. A published report cannot be changed anymore, but with "Save As" new versions may be created and used.

## Communicating Results

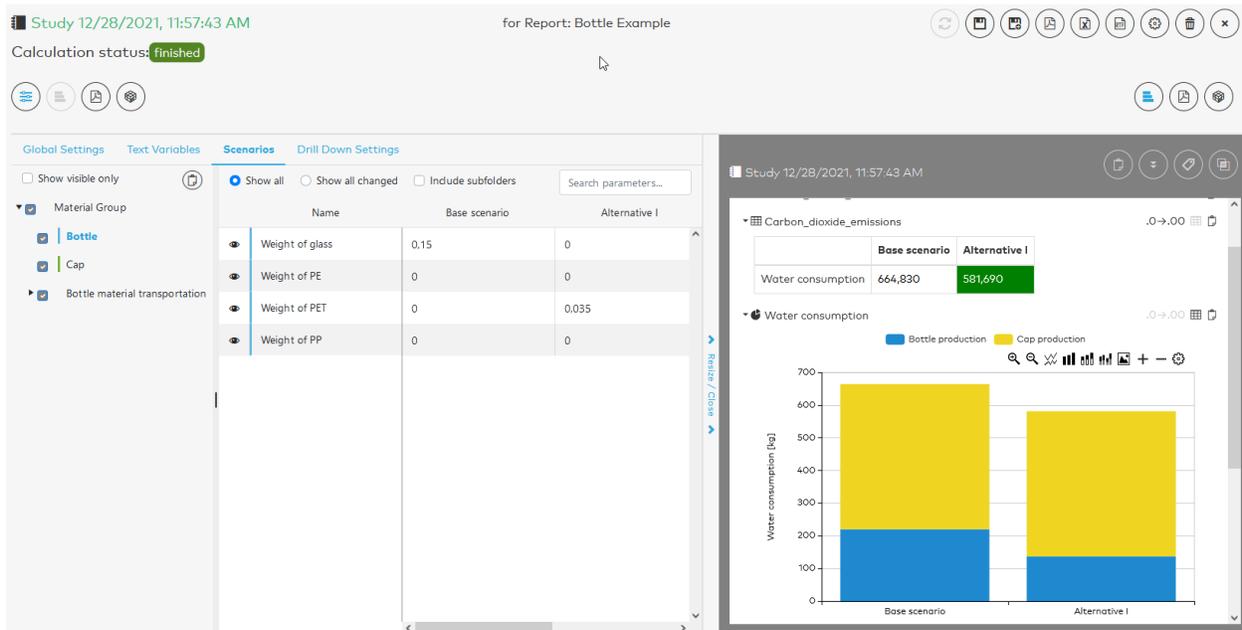
Users may communicate results with other GaBi Envision users by saving a published report for viewing. To communicate with non-GaBi Envision users, there is the option to print results into a PDF or RTF file for sharing. Individual charts and tables and report chapters may also be saved for sharing within your company.

## Creating “What If“-Studies

Click on “Create Study” to create different “What if” scenarios for your report. A list of available studies will be listed in the Study section of your report.



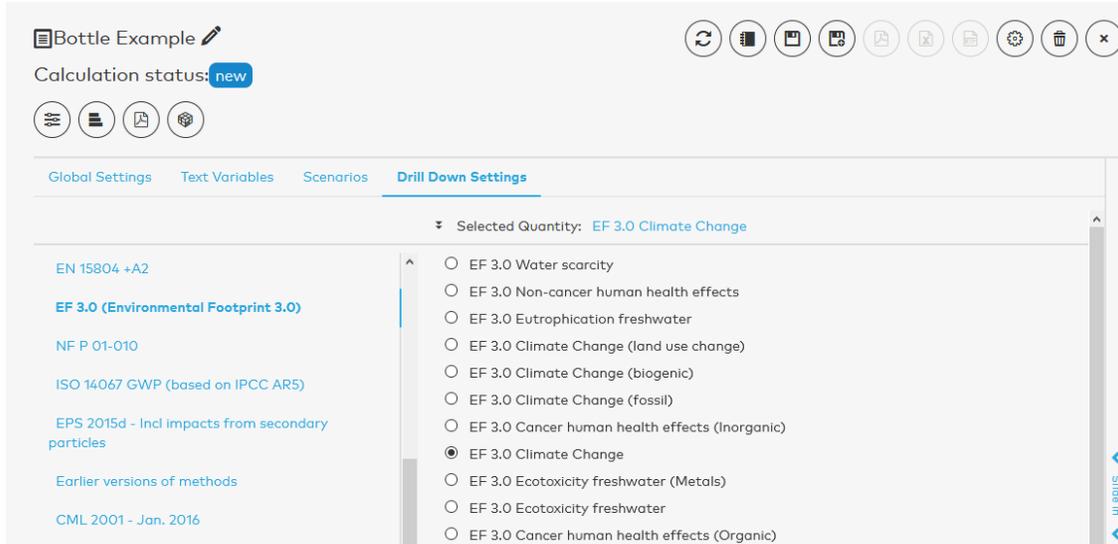
For a new study you may change parameters to specify the “What if” scenario you want to investigate. Hit the slide-in and Tables & Charts or PDF Preview, to view the results or report of your study.



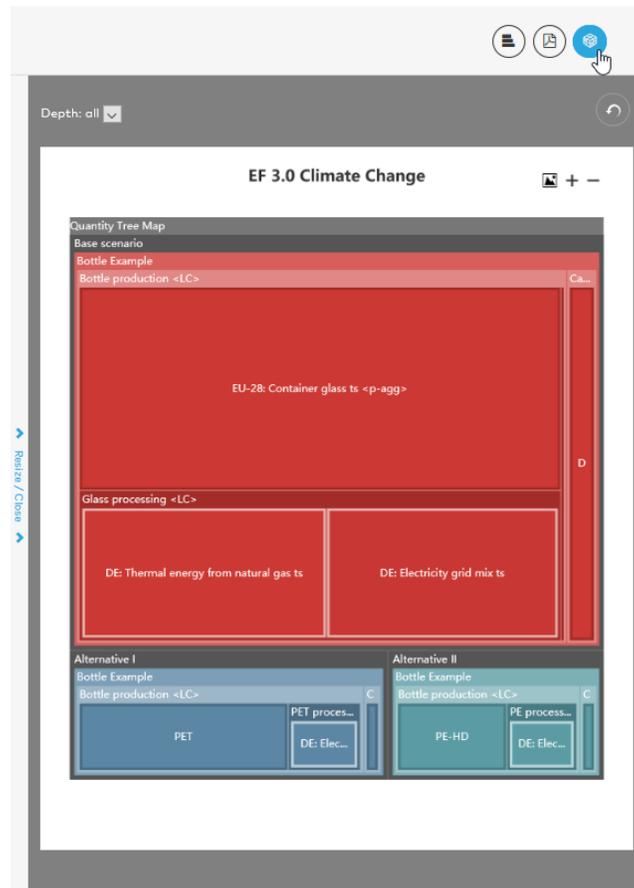
Your study will now also be listed on the report’s detail page in the study section.

## Drill Downs

Drill downs can be used to further analyse the LCA results for a specific environmental indicator. Please note, that you will need a drill down license to use this capability. First specify the environmental indicator you wish to investigate in the drill down settings tab of your open report.



After calculating select the Drill Down action for the slide in panel and check out the tree map.



## Importing Parameters with Excel

Use the parameter Spreadsheets (Excel) area to upload data from an Excel sheet. Users may manage parameters in an Excel file. There, you can enter or calculate them and easily import them back into GaBi Envision. You can even design your own Excel tools which can be published and provided to others with your reports (please be aware that you need to maintain the original position of cells for correct import). Within the Excel area, users may export a blank template based on their model, by clicking on 'Download blank spreadsheet'.

### Parameter Spreadsheets (Excel)



Or you can download an Excel spread sheet with your current parameters.

### Parameter Spreadsheets (Excel)



Another option is to create a custom template, which has your company logo on it, and other customized features, if you are sending it out to your suppliers for information. To do so, start by creating a blank datasheet and then making and saving changes as desired. Please note you cannot change the location and naming of the parameter values, but you may add additional sheets and simply connect the parameter values with links to other cells and formulas.

Once the datasheet, standard or custom, has been filled out in Excel, save it, close Excel and click on 'Import Datasheet'. This will open your report with the imported parameter values, and you can investigate the impact of your changes. You must save the report, so that the imported datasheets will be listed in the space below, attached to the report/template. Now other users can download your custom spreadsheet.

### Parameter Spreadsheets (Excel)



Name	Imported	
Bottle Example_update	Klaus Mustermann	Apr 18, 2017, 10:40:44 AM 

## GaBi Solutions – GaBi Software and GaBi LCA Data

**GaBi** is a modelling, reporting & diagnostic software tool for LCA practitioners that drives product sustainability during design and planning.

It provides:

- Carbon Footprint calculation
- Life Cycle Engineering (environmental, economic and social analysis)
- Life Cycle Costing studies
- Life Cycle Working Environment studies
- Classical material and energy flow analysis
- Design for Environment applications
- Greenhouse Gas Accounting

**GaBi Envision** is an intuitive LCA tool that is designed for non-LCA experts. It enables design teams to quickly evaluate ‘what-if’ scenarios in product and process design optimization. A GaBi model together with GaBi Databases underly GaBi Envision, ensuring the most robust modelling and content to provide reliable results. Users modify parameters and view the environmental impacts immediately.

**GaBi DfX** is the bill of materials (BOM) import tool and product lifecycle management (PLM) integration module for rapid LCA and compliance analysis of complex assemblies. If you want to consider different regulations during product design, such as the EU Directives for end-of-life vehicles, for electrical and electronic equipment waste, or for the restriction of hazardous substances while simultaneously keeping the environmental performance of your product in focus - then GaBi DfX is your tool. GaBi DfX is compatible with GaBi LCA models and GaBi Envision.

**GaBi Databases** are the largest internally consistent collection of life cycle inventory data with ready-to-use profiles representing most industries. Sphera ensures consistent methods and boundaries in their construction. Over 30 years of life cycle expertise is captured in GaBi Databases, with the most accurate Life Cycle Inventory profiles based on primary industry data.