

Release notes June 19th, 2023



Release highlights

BUILDING & INFRA LCA

- New tool for QNG compliance in Germany new
- New tool for BR18 compliance in Denmark new
- Major updates to infrastructure LCA tools new
- One Click LCA plugin for Archicad
- One Click LCA plugin for Solibri (BETA)
- Lots of new generic LCA data, e.g. lightweight ready-mix concrete & flooring materials

EARLY DESIGN & ECODESIGN

- New Japan region in Carbon Designer 3D new
- International region in Carbon Designer 3D with EN15804+A2 data available for more tools

PRODUCT LCA & EPD SOFTWARE

- ✓ New Concrete EPD Generator for easy & costefficient concrete EPDs at scale new
- ✓ EPD Generator for IES v2 with Ecoinvent 3.8 data & lots of usability improvements new
- New feature to easily manage manufacturing sites data for all your EPDs new



Building & Infrastructure LCA



New tool for QNG compliance in Germany



New building LCA tool compliant with requirements set by the federal government in Germany for QNG (Qualitätssiegel Nachhaltiges Gebäude), the new seal of quality of sustainable building in the country.

A new building LCA calculation tool for QNG, the quality of sustainable building in Germany, is now available. This tool can be used to calculate LCA for various building types and it includes a government -provided database for materials, energy and default values for building technology systems.



This QNG building LCA tool will now be evaluated for approval by the federal government in Germany. Once approved, the tool can be used to attain the official QNG seal of quality certification (levels "PLUS" or "PREMIUM") by independent bodies on behalf of the Federal Ministry of Building.

QNG is a government seal of quality for buildings. A prerequisite for the award of the seal of quality is proof of the fulfilment of general and special requirements for the ecological, socio-cultural and economic quality of buildings. Read more on the QNG website.

If you are interested in adding the tool to your subscription or wish to enquire about QNG approval status, please contact sales@oneclicklca.com.







Plan availability



New tool for BR18 compliance in Denmark



One Click LCA's building LCA tool compliant with BR18 regulatory requirements set by Bygningsreglementet in Denmark is now available to make compliance easier for you.

A new building LCA tool compliant with BR18 regulatory requirements set by Bygningsreglementet in Denmark is now available, including a new set of generic data published by the regulating authority.

The BR18 building regulation requires that all new buildings in Denmark applying for a building permit must document their environmental impact over 50 years lifespan through Life Cycle Assessments (LCA). New buildings above 1000 m² must comply with the limit value of 12 kg CO₂ equivalent /m² /year, and a voluntary low carbon class sets the limit value at 8 kg CO₂ equivalent /m² /year.

To calculate LCA, you can use both industry EPDs (based on +A1 and +A2 amendments of the EN 15804 standard) and generic data from the Danish BR18 database, including standard values for building technology systems for various building types as well as regressive energy scenarios.

Life cycle stages A1-A3, B4, B6, C3, C4, and D are included in the LCA analysis. The climate impact is calculated in units of kg CO₂ equivalents per m² per year over a period of 50 years. The specific rules for area calculation is included in the analysis. You can find out more on our website.

If you are interested in adding the tool to your subscription, please contact sales@oneclicklca.com.









Major updates to infrastructure LCA tools

Major updates available to infrastructure LCA tools for EN-17472, PAS 2080 and BREEAM compliance.

Our key calculation tools for infrastructure projects are updated with major usability and compliance improvements, with compliance updates focusing on EN-17472 and PAS 2080:2023 standards.

If you are interested in adding these tools to your subscription, please contact sales@oneclicklca.com.

- ✓ Add energy and construction site operation data while adding materials. You can also specify how impacts are divided between LCA stages, e.g. product, construction site, maintenance and repair.
- ✓ Create groups of materials, add energy and construction site LCA stage impacts, and then save them as your private constructions so they are easily available for all your future infrastructure projects (Expert licence required)
- ✓ **Set wastage separately for each material** when adding construction materials. When adding new materials, a default wastage value is automatically applied.
- ✓ Edit Service life for maintenance and repair at use stage to define frequency
- ✓ Use filters to speedily enter Construction site operations and Use phase data
- ✓ Use EPDs with +A2 data in the Infrastructure carbon EN-17472 tool

Updated LCA tools:

- ✓ Infrastructure carbon EN-17472
- ✓ PAS 2080
- ✓ PAS 2080 HS2 edition
- ✓ BREEAM Infrastructure









New data to help you calculate more accurately

We have created lots of generic data:

- ✓ 29 Concrete resources with focus on lightweight ready-mix concrete
- ✓ 13 Flooring resources with linoleum, vinyl, cork and hardwood
- ✓ 12 Raised floor systems with wood, steel and cementitious materials
- ✓ 11 Carpet resources with various materials, weights and surface pile weights
- ✓ 4 Ceramics resources: ceramic glazed tile, porcelain glazed tile, sanitary ceramic
- ✓ 68 Constructions specific to the Japan region, including foundations, columns, beams, walls, finishes, slabs, parapets, staircases, windows and doors (available in all tools that allow EN15804+A1 data)

You can find full details about updates to generic data in our Help Centre.

We have also added around 1500 industry datapoints (EPDs). Details in Help Centre.







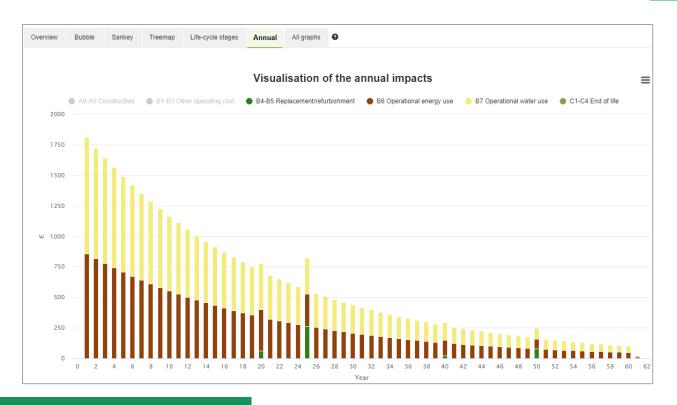


Breakdown graph for Life Cycle Cost tools

A new graph is available for Life Cycle Cost (LCC) tools displaying annual cost by life cycle stage.

When using our Life Cycle Cost calculation tools, you now have access to a new graph displaying annual cost by life cycle stage throughout the project calculation period. As with all results graphs, you can download both the chart as an image and the annual values as an Excel spreadsheet.

If you are interested in adding LCC tools to your subscription, please contact sales@oneclicklca.com.











One Click LCA plugin for Archicad

Transfer bill of materials data from Archicad for life cycle assessment in One Click LCA

The One Click LCA plugin for Archicad is available to customers starting June 20th. With the plugin, you can easily transfer bill of materials data from the model open in Archicad to One Click LCA for life cycle assessment.

One Click LCA offers tools for Life Cycle Assessment (LCA) automation with integrations to a multitude of industry software. With this new, plugin-based integration you can easily export bill of materials data from your models in Archicad and easily automate LCA using One Click LCA.

This solution can be used by architects, contractors, engineers and designers globally to automate LCA calculations for over 60 different standards, regulations and certifications.

This new plugin works with Archicad 26 for Windows. Please read the instructions and download the installer in our Help Centre.

<u>Archicad by GRAPHISOFT</u> is a software tool for architects working in the architecture-engineering-construction (AEC) industry for designing buildings from the conceptual phase all through to the construction phase.



Why One Click LCA plugin for Archicad?

- Save time & effort with LCA by seamlessly transferring data from Archicad to One Click LCA
- ✓ Get more accurate LCA results with data from your actual design models
- ✓ Comply with +60 LCA standards & certifications globally with the #1 easy & automated LCA software



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One Click LCA plugin for Solibri (BETA) SOLIBRI



Transfer data from Solibri for LCA & see material impacts within Solibri

Why One Click LCA plugin for Solibri?

- ✓ Save time & effort with LCA by seamlessly transferring data from Solibri to One Click LCA
- **Get most accurate LCA results** with data from unified models at detailed & as built design stages
- **✓** Reduce project impacts by reviewing material impacts data directly in Solibri to select and source low-carbon materials
- Increase employee expertise with low-carbon materials as they see for themselves how choices impact project results & the environment
- Comply with +60 LCA standards & certifications globally with the #1 easy & automated LCA software

The One Click LCA plugin for Solibri is available to select customers starting June 5th. With the plugin, you can easily transfer model data from Solibri to One Click LCA for life cycle assessment, and examine environmental impacts for all building materials directly in Solibri.

One Click LCA and Solibri are jointly offering tools for Digital Construction to solve Life Cycle Assessment (LCA) automation. This new, plugin-based integration lets customers use models in Solibri, validate the data and easily automate LCA using One Click LCA.

This solution can be used by contractors, engineers and designers globally to automate LCA calculations for over 60 different standards, regulations and certifications. One Click LCA and Solibri are committed to making LCA assessments easy, accurate and timely.

Solibri is a leading data model analysis solution for the construction industry. Solibri offers tools for quality assurance of information models, checking compliance, coordinating the design process, analysing and reviewing the design, and checking building regulations.

As this is a completely new plugin, we initially make it available in limited BETA. To participate in the BETA program, please contact our customer success team at support@oneclicklca.com.



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More info on material data cards in Revit plugin

The One Click LCA plugin for Autodesk Revit now provides more information when you open the data card for a specific construction material. This update is available with all recent versions of the One Click LCA plugin for Autodesk Revit.

The following data has been added to the data card and will be visible if it exists for the material:

- Material description
- ✓ Applicable Product Category Rules (PCR)
- ✓ Biogenic CO2 storage
- Service life for the material
- Thermal conductivity
- ✓ Warning text
- Material verification status as text instead of a number as before











Early design & Ecodesign





New Japan region in Carbon Designer 3D

Japan region and related data is now available in Carbon Designer 3D. This new region developed in cooperation with Sumitomo reflects local seismic conditions and current construction practices.

The region contains 3 structural frames that are aligned with local seismic conditions. This update also includes 68 new constructions specific to the region, including foundations, columns, beams, walls, finishes, slabs, parapets, staircases, windows and doors.

These constructions are now available with the "Life Cycle Carbon, Japan 2022 (recommended)" tool and other building LCA tools with EN15804+A1 data.

This new region is automatically available to all users with a subscription for the Carbon Designer 3D add-on and "Life Cycle Carbon, Japan 2022 (recommended)" tool.. Please contact sales@oneclicklca.com to activate your subscription.



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International region in Carbon Designer 3D with EN15804+A2 data available for more tools

The International region in Carbon Designer 3D with EN15804+A2 compliant data is now available for more building LCA tools.

This new region is a variant of the pre-existing "International" region where all resources have been reviewed to ensure compliance with EN15804+A2. All resources with exclusively EN15804+A1 impacts have been replaced with resources that have EN15804+A2 impacts.

We have also created new constructions with EN15804+A2compliant resources that are available with the new region. These constructions were created as variants of pre-existing constructions. Pre-existing constructions have not been edited in this process.

This new region is automatically available to all users with a subscription for the Carbon Designer 3D add-on. Please contact sales@oneclicklca.com to activate your subscription.

The new "international" region is now available with these tools:

- ✓ Level(s) life-cycle carbon (EN15804 +A1/+A2)
- Level(s) life-cycle assessment (EN15804 +A2)
- Carbon footprint, NS 3720
- Whole life carbon assessment new 2022, GLA / RICS / Green Mark
- Net Zero Carbon Tool new
- Life Cycle Carbon Global new





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Product LCA & EPD Software





New Concrete EPD Generator for easy & cost-efficient concrete EPDs at scale (1/2)

The Concrete EPD Generator is a new tool specifically tailored for concrete and helping you create Environmental Product Declarations (EPDs) easily and affordably.

Concrete is the most used material on the planet, causing 4 gigations of carbon emissions a year. Buyers know this and are looking for ways to reduce their impact. Concrete EPDs provide reliable environmental data that buyers value and help them choose your products.

The tool is built using lots of automation, templates and pre-verified data so you can generate fully compliant, third-party verified EPDs and publish them with EPD Hub, even without a big budget and lots of experience.

What is different about the new Concrete EPD Generator?

- ✓ Tailor-made for concrete, with required generic data and all qualifying raw material EPDs
- ✓ Integrated EPD publishing and 3rd party verification with EPD Hub
- Outstanding training and customer support provided by One Click LCA
- \checkmark Ready to use EPD templates for ready-mix concrete (pre-cast available soon)
- ✓ Compliant with ISO 21930:2022 and EN 15804:2012+A2:2019

Please contact sales@oneclicklca.com to activate your subscription.







New Concrete EPD Generator for easy & cost-efficient concrete EPDs at scale (2/2)

The new Concrete EPD Generator makes it much easier and faster to create EPDs due to a multitude of automations and usability improvements.

- ✓ Use a wide range of existing ready-mix concrete templates created by EPD and concrete experts, or import your own, and use these templates to easily add bill of materials and other parameters
- ✓ Use the **manufacturing site feature to model your manufacturing sites** only once and then load this data for all your EPDs and designs (read more about this feature on the next page and notes that after creation, the manufacturing site needs to be verified by a certified EPD Hub auditor before you can use it to create verified EPDs)
- ✓ Use **simple transportation and installation questions** to input transportation distance, installation loss percentage and energy consumption (MJ) to automatically calculate impacts.
- ✓ Automatically calculate the end of life impacts of the concrete based on the materials mass based on a fixed end of life scenario created by EPD and concrete experts.
- ✓ Publish EPDs instantly once generated (the Concrete EPD Generator is currently being verified). for approval as an end to end tool by EPD Hub, with customer availability expected in July 2023)







New feature to easily manage manufacturing sites data for all your EPDs

The new feature to manage manufacturing site data lets you model your manufacturing site only once and then load this data for all your EPDs and designs. This is especially helpful if you have lots of manufacturing sites and are creating EPDs at scale.

You can find the manufacturing site data management page under the company account page to edit the following data:

- ✓ Descriptive information, e.g. Site name, company name, e-mail, place of production
- ✓ Manufacturing site energy consumption, waste generation, ancillary materials and product packaging (your private constructions are available in these questions)
- ✓ Applicable tools and applications for the site in question (multiple tools can be selected)

This feature is available with the Concrete EPD Generator, One Click LCA Pre-Verified EPD Generator and EPD Generator for EPD Hub V2.









EPD Generator for IES v2 with Ecoinvent 3.8 data

EPD Generator for IES v2 is a new tool designed to speed up EPD creation with lots of usability improvements and availability of Ecoinvent 3.8 data. Currently being verified for approval, customer availability is expected in July 2023.

You can choose to migrate existing projects to the new tool or switch to the new tool with new projects only. Note: All existing EPD tools, incl. EPD Generator for EPD Hub v1 with Ecoinvent 3.6 data, remain also available. Contact our Customer Success team at support@oneclicklca.com to get help with tool activation and migration.

Key usability improvements

- ✓ "Materials (A1-A3)" and "Manufacturing (A3)" queries now combine data entry for Ecoinvent data points, One Click LCA EPDs and LCA profile data into one set of questions and one import CLASS.
- ✓ "End of life (C-D)" query combines modules C1-C4 into a single question so more complete end of life scenarios can be created with the "Create a group" function. You now select C1, C3, or C4 module for all entries. "End of life transport (C2)" is reported via an additional question.

Ecoinvent 3.8 data availability

- ✓ New datapoints are available and many previously existing datapoints have been updated or corrected
- ✓ Ecoinvent 3.8 introduces a new system model, 'Allocation, cut-off, EN15804', developed by Ecoinvent to help EPD practitioners comply with EN15804&A2:2019 (CEN/TC 350 2019) and harmonize standard indicators calculation.
- ✓ Key differences of 'Allocation, cut-off, EN15804' to previous 'Allocation, cut-off by classification' system model are (a) cut-off point between the primary and secondary system, and (b) calculation of inventory indicators required in EPDs. These differences mean that for some datasets, the emissions in 3.8 will be different to previous versions.
- ✓ You can read more about our update to Ecoinvent version 3.8 data in our Help Centre article.





Plan availability BUSINESS





EPD Generator for EPD Hub v2 usability improvements

Easily download EPD results as an Excel file and new option to balance energy impacts in the same LCA stage when using EPD Generator for EPD Hub v2.

You can now easily download your EPD results summary from the Results page with EPD Generator for EPD Hub v2 – simply navigate to "Core environmental impact indicators -EN 15804+A2, PEF" and click "Download Results Summary". This is especially useful if you want to publish your EPDs also with other EPD operators, such as PEP Ecopassport.

Energy as material balancing



Further, energy impacts (Use of energy as materials) can now be automatically balanced in the same LCA stage. As background, to better satisfy the requirements of different LCA modelling methods, with previous releases in May, we separated energy and biogenic carbon balancing and introduced dedicated, automatic "Biogenic carbon balancing" and "Energy balancing" features."









One Click LCA Pre-Verified EPD Generator usability improvements

Data quality score is pre-filled in Background report and enjoy automatic energy balancing within the same LCA stage when using One Click LCA Pre-Verified EPD Generator.

For ease of use, the data quality score is now pre-filled in the Background report.

Further, **energy balancing** now occurs automatically within the same LCA stage. As background, to better satisfy the requirements of different LCA modelling methods relevant for different products, with previous releases in May we removed energy balancing from a common balancing feature and instead introduced dedicated, automatic "**Biogenic carbon balancing**" and "**Energy balancing**" features.





