



## Launch Event – ECCOLAB v2

### Q&A

#### **What are the key difference between ECCOLAB and other existing carbon assessment tools?**

Every version of ECCOLAB includes the power of four dynamic lifecycle models working together to give you the full picture of your project in terms of lifecycle energy, carbon, cost and material flows.

ECCOLAB takes lifecycle analysis beyond accounting – guiding design decision making in a unique and intuitive workspace where you can rapidly explore the complete lifecycle impact of different strategies side-by-side. Use the information you have readily available at each project stage to gain insight, communicate impacts and monitor and report performance against goals.

#### **What are the data sources for the ECCOLAB libraries?**

The ECCOLAB component library is based on EPD, Okebaudat and ICE data and has been carefully curated to ensure that all BS EN 15978 scopes are covered, and biogenic carbon storage is handled correctly throughout the lifecycle. Additional physical performance data to support the energy modelling is based on CIBSE guidance and site wastage data is from WRAP.

#### **How often are ECCOLAB libraries updated?**

The library is maintained and updated by the ECCOLAB team. There is an annual update cycle where key library data is checked and revised to meet current standards.

The ability to add cost inflation risk factors and carbon contingency factors will form part of a future ECCOLAB update.

### **Can libraries be customised for an organisations specific supply-chain?**

ECCOLAB is fully customisable. You can add your own library information and build your own templates, specific to your organisational needs.

The central ECCOLAB libraries are locked to maintain data integrity. Individual organisation libraries have permission controls to ensure that organisational level data has gone through appropriate QA processes.

Using the combined knowledge of the ECCOLAB team, we are always adding new library information, and we can also offer a bespoke service to populate custom libraries to suit your specific requirements.

### **How accurate are costings provided by ECCOLAB?**

The ECCOLAB cost engine is not a replacement for cost consultancy services. The tool provides users with a framework to assess relative lifecycle costs impacts and their interaction with carbon and energy performance.

The default libraries provide a base set of cost information to illustrate functionality, and these costs are benchmarked and updated on an annual basis.

We anticipate that many users will want to adapt and customise cost data to meet their own preferences, and project specific requirements.

### **How does ECCOLAB estimate structural quantities?**

ECCOLAB approximates frame structural quantities at early design stage with either a dynamic model that considers use loadings and spans, or the application of fixed material rates per m<sup>2</sup>. Current dynamic frame models cover insitu reinforced concrete, steel and glulam and are limited to a maximum height of 15-storeys.

Foundations are estimated using either a simple parametric model that is independent of the frame model, or the application of fixed material rates per m<sup>2</sup>. To get accurate results, users are required to choose a foundation strategy that is appropriate to the context and scale of their project.

When detailed structural engineering information is available, the ECCOLAB estimates can be easily overridden with absolute design quantities.

### **How does ECCOLAB link with other modelling and energy software?**

ECCOLAB can import detailed building geometry into your project either from Sketchup with the Gmodeller plug-in or using gbXML and IFC files. ECCOLAB assemblies can be assigned to imported geometry. We are currently in the process of developing further enhancements to the model import / export functionality.

### **Can ECCOLAB interface directly with Passivhaus PHPP?**

Not yet – but we are keen to explore co-ordination with PHPP as part of the future road-map.

### **What are your plans for the energy engine?**

A major update to ECCOLAB's energy engine will be made available in an upcoming release to all users.

This will include a fully integrated lifecycle carbon, cost and energy model for building services including extended libraries and support for CIBSE TM65, alongside modelling of future energy source carbon intensity profiles and carbon pricing.

We are exploring the potential of charting overheating risk analysis results and additional compliance functionality.

### **Can ECCOLAB support the analysis of retrofit projects?**

We have successfully used ECCOLAB to model retrofit projects. When components are assigned to make assembly build-ups, users can specify whether the material is new, existing to be retained or to be disposed, which gives a high degree of flexibility in representing retrofit options.

We recognise the critical importance of prioritising retrofit to achieve zero carbon goals and have plans to substantially develop ECCOLAB's retrofit functionality in the future.

### **What is ECCOLAB's current reporting functionality?**

Current reporting functionality allows for the download of a rich range of charts and underlying data for inclusion in your own reports. ECCOLAB can also export directly to the LETI embodied carbon declaration, and it is possible to export details of individual options along with the underlying EPD and carbon data for full transparency.

### **Does ECCOLAB provide per occupant metrics?**

We currently report total values and per m<sup>2</sup> of GIA but see the value in considering impacts per occupant and will implement this in a future update.

### **Can ECCOLAB be used for other types of projects e.g. infrastructure?**

The current version of ECCOLAB is focused on building analysis, but the architecture of the tool enables the support of many other types of analysis through the import of geometry and the direct entry of material quantities. The version 2 database structure is highly flexible and supports the modelling of a wide range of assets in terms of carbon and cost on an area, weight, volume, area and unit basis.

If you have specific non-building modelling requirements, then please contact the ECCOLAB team to see how we can assist.

### **How can I use ECCOLAB to analyse an estate of buildings?**

ECCOLAB's flexible option-based structure is well suited to handling the analysis of multiple buildings at varying levels of detail in one workspace. An estate version of the tool is in development that will enable decision makers to model, analyse and optioneer quickly across multiple current and future built assets on an estate. Please contact us for further information.

### **Do the plans include all the engines e.g. energy, carbon and costing?**

Yes. ECCOLAB is founded on the concept that decision making should be based on a holistic view of impacts. To support this, every version of ECCOLAB provides all the engines working together in one tool.

### **Is there an educational license option?**

Yes, we will be offering educational licenses for ECCOLAB version 2 on an institutional basis. If you are interested in accessing an educational license, then please do contact us directly.

### **Why don't you offer a 'pay per project' option?**

The ECCOLAB Design plan offers an affordable, fully customisable version of the tool, with the flexibility of monthly billing and the option to cancel anytime which is aimed at sole practitioners or smaller organisations.

This option gives you the ability to create 1 project per month during your subscription period. Once you have finished working with ECCOLAB you are free to cancel your subscription and your data will be retained for a minimum of a year. You can easily re-start your subscription when you next need access to your projects.

### **Can multiple users access the tool simultaneously?**

Payment plans are for a single log-in to the tool and cannot be used simultaneously by multiple users. With the Collaborate license, projects can be shared across ECCOLAB user accounts and libraries can be shared at an organisational level.

### **Can ECCOLAB run on a local machine rather than in the cloud?**

ECCOLAB is designed as a cloud-based application and requires an internet connection and browser for access. We recommend using Chrome, though the application has also been tested successfully on Safari.

### **How can I get the details of my product into the ECCOLAB library?**

If you feel that your product would add to the range and quality of the ECCOLAB base library, then please contact the ECCOLAB team.