

## LCA Software

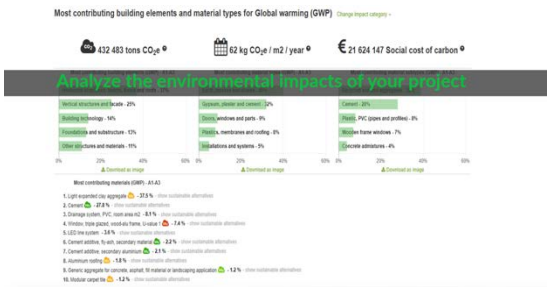
- Able to use to analyze environmental impact of buildings.
  - Identify most contributing materials and particular building elements to the CO2 emissions and social cost.
  - Analyze embodied carbon in building materials.
- Output can be used to meet LEED requirements (up to five points)
- Considers before and after operation, including construction material production, transportation to site, and on-site construction, as well as maintenance, refurbishment, and end-of-life/recycling of building materials.
- Can be used to perform takeoffs and life-cycle costing, prepare a complete bill of materials.
  - Includes all materials, even smaller materials (e.g. paint).



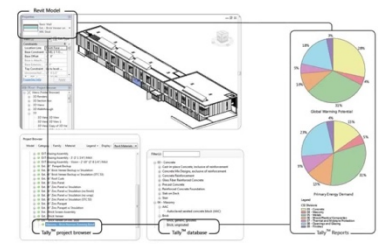
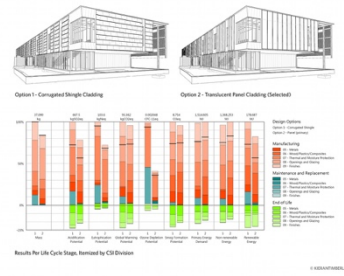
- Partnership with integrated Environmental Solutions (IES).
- Originated in Finland.
- Available as standalone software and Revit plugin.
- Able to use Revit structural drawings as input file.
- Select which categories to export (e.g. walls, windows, etc.).
- Isolate and map materials to database.
- Used in Evolv1 feasibility study.
- Life cycle impacts from construction. materials outputs:
  - Global warming potential
  - Acidification
  - Eutrophication
  - Ozone depletion potential
  - Formation of ozone in lower atmosphere
  - Primary energy

- Developed by architecture firm, KieranTimberlake (USA based); KT Innovations.
- “Only application fully integrated with AutoDesk Revit”.
- Utilizes thinkstep GaBi LCA database
- Utilized by large American companies, such as Walter P Moore.
- Easy to use, does not require any modelling skills.
- Available for educational use
- Compare multiple designs to each other and base case, side-by-side.
- Better UI/UX and presentation of data.

➤ Source: <https://www.oneclicklca.com/>



Tally™ can be used to compare design options.



➤ Source: <https://choosetally.com/>;  
<https://www.bdcnetwork.com/meet-tally-%E2%80%93-revit-app-calculates-environmental-impact-building-materials>