
LIFE-CYCLE COSTING TOOLS

This section profiles two free software programs (BLCC and eVALUator) that help building owners and design teams assess the financial life-cycle costs and benefits of various environmental systems investments.

Building Life-Cycle Cost (BLCC) v. 5.1-02



<http://www.eren.doe.gov/femp/techassist/softwaretools/softwaretools.html>

FORMAT:	Software (Windows) – Online download
APPLICATIONS:	Analyzes capital investments in buildings by evaluating the relative cost-effectiveness of alternative buildings and building systems or components (e.g., energy and water conservation or renewable energy systems); for new or existing, institutional and commercial buildings. Useful for project in which higher capital investment costs will result in lower future operating and maintenance costs.
INTENDED USERS:	Government agencies, building owners, developers, project managers, budget/financial analysts
CREATED BY:	National Institute of Standards and Technology (NIST) / Federal Energy Management Program (FEMP)
COST:	Free

Advantages:

- Contains modules for analyzing energy and water conservation and renewable energy projects
- Useful for both government (local, state, federal) and private-sector projects
- Calculates net savings, savings-to-investment ratio, adjusted internal rate of return, and years to payback
- Can be enhanced with use of associated stand-alone programs, which include DISCOUNT, EMISS, ERATES (FEMP also provides other software tools, such as FRESA (Federal Renewable Energy Screening Assistant)
- User-friendly

eVALUator v. 3.0



<http://www.energydesignresources.com/tools.html>

FORMAT:	Software (Windows) – Online download (or CD-ROM)
APPLICATIONS:	Building life-cycle cost assessment of financial benefits, such as reduced energy cost and increased employee productivity and tenant satisfaction, resulting from building investments
INTENDED USERS:	Building owners, developers, facility managers, architects, engineers, budget analysts
CREATED BY:	Energy Design Resources
COST:	Free

Advantages:

- Provides year-by-year cash flow analysis (net present value of lifecycle costs and savings, savings-to-investment ratio, and adjusted internal rate of return), net cash flow, annual gross profit, annual net income, project value
- Takes into account financing costs, tax implications, energy costs, replacement costs and intervals, operation and maintenance costs, opportunity costs (discount rates), inflation, loan terms, salary costs, average occupancy, and other parameters
- Automatically performs an "uncertainty analysis" to help quantify the level of risk associated with specific decisions
- Includes an online help utility function
- User-friendly

[Note: This program is available on the Energy Design Resources free CD-ROM, along with eQuest and SkyCalc.]

Section Endnotes

- i These are based on the goals and strategies outlined in the LEED™ 2.0 Green Building Rating System, developed by the U.S. Green Building Council.
- ii Ibid.
- iii Ibid.
- iv Ibid.
- v Ibid.