

THE IMPORTANCE OF LIFE CYCLE ESTIMATING IN CONSTRUCTION

Why is Life Cycle Important?

Early life cycle cost and carbon estimation can reduce overall project costs by

15%

The Chartered Institute of Building (CIOB) states that early lifecycle cost and carbon estimation can reduce overall project costs by



39%

of global carbon emissions come from buildings (28% Operational and 11% from construction and materials

The World Green Building Council reports

Decisions made during the early design phase can influence the total lifecycle cost of a project

70%

McKinsey & Company, "Reinventing Construction: A Route to Higher Productivity"

60%

-80% of the total costs over a building's lifecycle is the operational costs.

World Bank, "Sustainable Infrastructure: The Costs and Benefits of Resilient Design"

Understanding the CROME Framework

Capital

Decisions made during the capital phase have long-term implications for both costs and carbon emissions. Investing in sustainable materials and efficient design can reduce future expenses and environmental impact.

Renewal

Planning for renewal helps in budgeting for these future costs and ensuring that upgrades are aligned with the latest sustainability practices, thus reducing the building's overall carbon footprint.

Operational

Optimising energy use and implementing smart building technologies can significantly reduce operational costs and carbon emissions over the building's life.

Maintenance

Proactive maintenance strategies can extend the building's life, reduce unexpected costs, and ensure the building remains energy-efficient, thus minimising both financial and environmental impacts.

End of Life

Planning for end-of-life during the design phase can facilitate material recovery and recycling, reducing waste and lowering the carbon footprint associated with demolition.

Why Choose Sterling for Life Cycle Estimating

01 Integrated Cost and Carbon Estimation

Sterling's life cycle tools are fully aligned with industry standards such as NRM3 and ICMS. This alignment guarantees that your project adheres to the latest guidelines, providing consistency, accuracy, and compliance throughout the project's life cycle.



02 Alignment with Industry Standards

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Code	Title	%	Group	1	2	3	4	5	6	7	8	9
0	CONCRETE											
0	Contractor Management	10%	Contractor Management	£1,962,229.34	£947.76	£110.50	£214.72	£246.74	£79.79	£163.74	£716.09	£291.32
0	Contractor Overheads	10%	Contractor Overheads	£1,178,443.40	£759.29	£37.52	£294.72	£297.77	£299.31	£299.05	£299.46	
0	Base Costs			£1,760,899.84	£298.01	£796.71	£298.61	£1,028.19	£798.84	£798.24	£299.02	£297.10
0	Maintenance contractor's prov.	10%	Base Costs	£1,760,899.84	£298.01	£796.71	£298.61	£1,028.19	£798.84	£798.24	£299.02	£297.10
0	Consultant's/contractor's fees	10%	Base Costs	£1,760,899.84	£298.01	£796.71	£298.61	£1,028.19	£798.84	£798.24	£299.02	£297.10
0	Other employer/contractor main.	10%	Base Costs	£1,760,899.84	£298.01	£796.71	£298.61	£1,028.19	£798.84	£798.24	£299.02	£297.10
0	Risk Allowances											
0	Design Inflation Rate	17%	Risk Allowances	£2,289,203.50	£274.72	£251.14	£205.57	£246.59	£222.82	£221.54	£217.27	£226.41
0	Maintenance Risk	10%	Risk Allowances	£1,346,241.97	£741.00	£147.74	£197.56	£205.64	£19.31	£153.85	£197.80	£150.42
0	Employer change rates	10%	Risk Allowances	£1,346,241.97	£741.00	£147.74	£197.56	£205.64	£19.31	£153.85	£197.80	£150.42
0	Employer other rates	10%	Risk Allowances	£1,346,241.97	£741.00	£147.74	£197.56	£205.64	£19.31	£153.85	£197.80	£150.42
0	Contingent											
0	Discount Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
0	Present Value			19,190,710.09	£2,275.24	£2,177.80	£2,096.29	£2,022.86	£2,059.80	£2,281.38	£2,760.71	£1,961.29
0	Contract	10%		£1,979,710.09	£297.30	£217.80	£208.20	£202.20	£204.19	£224.19	£270.07	£196.10
0	High-Passive Value			21,169,222.02	£2,275.24	£2,177.80	£2,096.29	£2,022.86	£2,059.80	£2,281.38	£2,760.71	£2,017.29
0	Risk and premiums			20,241,226.97	£2,025.19	£2,179.07	£2,024.19	£2,027.09	£2,277.54	£2,024.19	£2,425.97	£2,024.42