HIGH-QUALITY BUILDING SERVICES
Based On Whole-Life Value

Summary

International concern over climate change, global poverty and the impact of our lifestyles have generated a need to adopt the principles of sustainable development in all sectors of our lives. The construction sector is one of the least sustainable industries in the world, being responsible for more than 50% of all carbon emissions, consuming vast quantities of natural resources and creating waste and pollution. So how can the industry play its part in reducing its global impact and addressing the challenges that we face now and in the future?

This report describes how the concept of whole-life value (WLV) can be used to influence future building assets and provides a suitable model for addressing the challenges of sustainable development in the construction sector by considering their medium and long-term impacts.

WLV provides a holistic analysis of whole-life activities for built assets, but this report focuses on those aspects that have the greatest impact - building services systems. It concludes that design by analysis, synthesis and evaluation should be aligned to quality and cost and should cover all project phases from initial concept to disposal. The tools of whole-life value have demonstrated significant cost savings in the defence, process and manufacturing industries. Some of the techniques described in this report have been developed by Defence Estates, but are presented here in a format that can be used within the construction industry as a whole and can provide simple and practical guidance to all key stakeholders.

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