



# Glasgow Schools PFI Project

## Scotland

The £1.2bn deal to renovate 29 secondary schools in Glasgow has demonstrated that consideration of whole life performance at all stages of the design and construction process can produce significant savings in capital and operating costs of a building.

Building Performance Group's role was to assist the bid team with expert advice on Whole Life Performance (WLP). Throughout the bid process BPG provided advice on component specification, maintenance planning, life cycle costing and durability for the refurbishment, extension and rebuilding of Glasgow's 29 secondary schools. They are to be rebuilt or completely upgraded and refurbished providing the city's 30,000 secondary school pupils with modern learning facilities as well as the latest computer and internet technology and ensure that every school is equipped with a technologically advanced system by 2002.

Out of a significant life cycle fund, BPG was able to assist in achieving savings through life cycle choices and option appraisals sufficient to construct 12 new schools rather than the three originally intended by the brief.

Although the building may be unique, the constituent parts are likely to be standard components. However, the component choice is not analysed merely on its capital cost, but usually on the net present value (NPV) of the component over the whole life cycle including purchase, installation, regular maintenance, repair and replacement.

**Client:** 3ED (Glasgow) Limited  
**Project Type:** Expert advice on whole life performance (WLP) of components and assemblies  
**Sector:** Construction, facilities management, M+E maintenance  
**Duration:** One year  
**Contract Value:** £200,000



## Benefits of life cycle analysis

- Operating and maintenance costs can be designed down if considered during the design process. (80 per cent of maintenance costs are fixed in the first 20 per cent of the design process)
- Capital costs can be reduced by avoiding over-elaborate specifications
- Service charges and rents can be both realistic and competitive
- It encourages appropriate funds to be put in place to protect its value
- Funding stream is optimised to obtain finance at the most advantageous rates
- Predictions can be made to allow optimisation and best use of Capital Allowances
- Sinking funds are accurately established A framework is established to manage change throughout its life