## **MES Energy -**

## Review of Eight Associates Technical Report on lifetime carbon analysis of basement extensions for Royal Borough of Kensington & Chelsea

## **Executive Summary**

- The brief given to Eight Associates (EA) by RBKC was to analyse and compare the carbon intensity of both above ground extensions and subterranean developments. The analysis was to include whole life cycle impacts, including all stages of development from sourcing of materials through to the emissions from the building in use.
- The EA report relies on just two case studies of which little detail is provided. This is not an adequate sample size to provide robust data for analysis.
- The two case studies that are provided are described as 'typical' of their type. No evidence is provided in support of this, nor is adequate data provided to test the claims validity.
- There are significant errors in the calculation of both embodied carbon dioxide and carbon dioxide emissions arising from construction.
- There are serious irregularities identified in the methodology used to calculate operational carbon dioxide emissions. The most significant of these is the fact that the SAP2005 calculations on which the calculations are based do not relate to the case studies included in the report.
- The review of the technical document 'Life Cycle Carbon Analysis of Extensions and Subterranean Development in RBKC' produced by Eight Associates has found it to be littered with errors in both the calculations and methodology used and therefore its findings are unsound and any application for a change of planning policy made by RBKC which uses evidence that relies on the EA report should be viewed accordingly.