

CONSTRUCTION IN A CHANGING CLIMATE

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ABSTRACT

The construction industry is experiencing continually increasing commercial pressure together with internal reorganisation and shifting public opinion, at a time when climate change is beginning to manifest itself through global warming. This paper will examine consequent trends and changes at various levels in the industry from the three perspectives implied in the deliberately ambivalent title:

- Financial: a growing emphasis on efficiency and profit, but continuing low investment in R&D and a massive requirement for improved infrastructure world-wide;
- Organisational: partnering, life cycle cost analysis, and the need to raise skill competence at all levels;
- Environmental: the potential impact of large trans-national schemes, balanced against the ability to enhance the built heritage.

In particular, it is now realised that the manufacture of cement on a global scale emits large quantities of carbon dioxide. These emissions make a significant contribution to climate change, but the concrete for which it is produced is of considerable strategic importance to construction. Given these conflicting demands and impacts, how sustainable is the construction industry? Can it adapt to changing weather patterns and convert the challenges it faces into business opportunities?