



Johannesburg Earth Summit—what next?

A. Macnair, *Buro Happold*

Alastair Macnair of Buro Happold considers the influence of the Johannesburg Earth Summit on the built environment.

1. INTRODUCTION

In September 2002, delegates, national government organisations and businesses from countries around the world gathered in Johannesburg, South Africa. Their ultimate aim was a clear set of goals to solve the long-term problems of poverty, environmental degradation and unsustainable development.

But where are the sweeping changes putting sustainability at the centre of building design? You probably won't see anything for some time, as the agreements outlined in Johannesburg are not legally binding conventions but a voluntary code that governments have pledged to work towards. They may one day form the basis of laws but, for now, they are reliant on individual countries making voluntary changes. However, on the positive side, the Earth Summit did take another significant step forward in creating a worldwide agreed strategy to tackle some of the most serious problems facing the planet. And that in itself should be something to celebrate.

2. MOVING TO NEW TECHNOLOGIES

While the desire of the world community for sustainability within construction is admirable, at present the UK construction industry doesn't value these factors when compared to cost and profit drives. Consider the recent changes to U-values to see how much resistance there was to a small move towards energy-efficient design principles.

How would such a conservative industry react to the proposal of a fully holistic design approach that moved away from traditional technologies in favour of more innovative or potentially untried solutions? Resistance towards adopting the values embodied with the Earth Summit document is understandable but, if based on cost or profit, is potentially founded in fear rather than fact.

The best examples of sustainable development do not just have 'interesting' or 'green' features that make them different—it is that these were achieved at the same or even cheaper price than a traditional building. This approach can result in significant savings in running costs, not to mention the positive image that accompanies any such environmental development. As sus-

tainable design provides image, quality and financial benefits, so the market will demand better examples of such buildings, just as the race to build tall was synonymous with quality and success in 1930s America.

3. CHANGING DESIGN ROLES

It is not just the physical components of a building that may be forced to change however; more importantly are the people who work to create them, with the traditional roles of consultants becoming increasingly blurred. Architects will need to consider a range of engineering and design issues as an integral part of the building, and engineers will have to look at the building shape and form as a part of their engineered strategy.

But how far will we need to go before we find ourselves sharing the same job, one scientifically biased and the other artistically? Job titles such as 'director of sustainability' may currently sound far-fetched but, as the focus of design changes, the requirement for new roles to meet these challenges may well be inevitable.

Just as improving the way goods were manufactured led to diverse shifts in employment patterns, how knowledge is valued in a knowledge-based society can equally lead to radical changes. If a building no longer requires the pipes, cables or air-conditioning in the way that it once did, then it will no longer require the knowledge, and therefore people, needed to design and build them.

4. ADAPTING TO CLIENT NEEDS

In the construction industry's desire to create sustainable buildings, it may begin to realise that the way in which it values, retains and updates its knowledge base could be insufficient to meet future demands. The industry is still learning to function in a rapidly developing society and is somewhat reluctant to deviate from what it has always known.

Changes in the industry will be influenced by changes in law and regulation, and the Earth Summit may form a large part of that. While some might be content to sit and wait, safe in the knowledge that such laborious legal routes will not affect them for years to come, ultimately more dynamic markets will shape and drive the industry towards what its clients want, and not what it does not.