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W82 - Futures Studies in Construction

Sustainable development and the future of construction

CIB Report
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The report is the result of the International CIB W82 Project aimed to answer the following question: "What will be the consequences of sustainable development on the construction industry by the years 2010?"

The study focused on investigating the relationship, and clearly defining the links, between the principles of sustainable development and the construction sector.

The (Kibert) definition for sustainable construction: "the creation and responsible management of a healthy built environment based on resource efficient and ecological principles " was taken as a starting point in 1995 when the project was launched. The objective was to interpret and describe its meaning in different participating countries and, if appropriate, to give it a better definition from their national points of view.

The project has involved the collaboration of experts from countries in Western and Eastern Europe, North America, South Africa and Asia, with the objective of producing this CIB Publication in time for the CIB Gavle Congress. The Publication comprises fourteen national reports and an international synthesis, which compare visions from various countries on what comprised the notion of "sustainable construction".

The following countries supplied a national report: Belgium, Finland, France, Hungary, Ireland, Italy, Japan, Malaysia, Netherlands, Romania, South Africa, Spain, United Kingdom, United States of America.

Sustainable construction has different approaches and different priorities in various countries. Some of them identify economic, social and cultural aspects as part of their sustainable construction framework, but it is raised as a major issue only in a few countries.

The main emphasis in national definitions lies on ecological impacts on the environment (biodiversity, tolerance of the nature and resources). The problems of poverty and underdevelopment or social equity are sometimes ignored in the definitions of sustainable construction and in addition to economic prerequisites or social questions, numerous other variables and their importance differ from country to country.

Such features as density and demography of population, national economy and standard of living, geography and natural hazards, availability of land and water, energy production and supply, the structure of the building sector or the quality of the existing building stock etc. have also influence and interpretation in national definitions.

The contents of both the international synthesis and the 14 national reports are based on answers given to the following five questions:

1. What kind of buildings will we build in 2010 and how will we adapt existing buildings?
2. How will we design and construct them?
 - o What does this entail for initiating, designing, constructing, maintaining, operating and demolishing buildings?
3. What kind of materials, services and components will we use then?
 - o What does this entail for manufacturers of building products and systems?
4. What kind of skills and standards will be required?
 - o What does this entail for human resources and skills needed in the construction industry?
5. What kind of cities and settlements will we have in 2010?
 - o What does this entail for city planners and the built environment?

As well as answers to these five questions both the national report and the international synthesis contain:

- o strategic recommendations with the international synthesis including a separate chapter on Sustainable Construction and New Business Opportunities.
- o examples of Best Practices concerning the implementation of the various priorities for Sustainable Construction as perceived in the participating countries.

Price

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Order from:

CIB General Secretariat
P.O. Box 1837
3000 BV Rotterdam
The Netherlands
Tel: +31.10.411 0240
Fax: +31.10.433 4372
E-mail: secretariat@cibworld.nl

