

# The Chartered Institute of Building

The Chartered Institute of Building (CIOB) represents for the public benefit the most diverse set of professionals in the construction industry.

The CIOB's role is to:

- Promote the importance of the built environment.
- Lead the industry to create a sustainable future worldwide.
- Encourage leadership potential.
- Set the highest standards in quality, safety and qualification.
- Create an industry where excellence prospers.

We have over 40,000 members around the world, and are considered to be the international voice of the building professional, representing an unequalled body of knowledge concerning the management of the total building process.

CIOB members are skilled professionals with a common commitment to achieving and maintaining the highest possible standards. Chartered Member status, represented by the designations MCIOB and FCIOB, is recognised internationally as the mark of a true professional in the construction industry.



**The Chartered Institute of Building**

Englemere  
Kings Ride  
Ascot  
Berkshire SL5 7TB  
United Kingdom

**Email:** [reception@ciob.org.uk](mailto:reception@ciob.org.uk)

**Tel:** +44 (0)1344 630 700

**Web:** [www.ciob.org.uk](http://www.ciob.org.uk)

Registered Charity 280795



The paper used in the production of this document is made from pulps harvested from sustainable forests, also using sawmill residues and forest thinnings. It is elemental chlorine-free.

# International Policy Handbook



# Contents

Introduction 3

Globalisation 5

Health and Safety 7

Sustainable Development 8

Management 9

Education and Training 10

Innovation and Research 11

Industry Capacity and Availability of Resources  
(including Skills) 12

Social Construction Issues 14

Corruption, Transparency and Ethics 16

Heritage and Conservation 17

Building Control and Standards 18

# Introduction

Today's construction industry is complex and is challenged by many important issues. We must consider those challenges as well as anticipate those that will affect our future.

The Chartered Institute of Building's UK and international policy handbooks express the values and beliefs of the Institute on a wide range of topics. Their purpose is to guide our work and the work of our members for the benefit of the public.

The handbooks are supported by a series of policy statements with more detailed information on relevant issues.

All CIOB policy is developed in consultation with members, in particular CIOB ambassadors, and staff.

‘Globalisation presents new challenges, risks and opportunities for construction professionals, who will increasingly have to compete on the basis of their knowledge and skills’

## Globalisation

Construction worldwide yields an annual output of US\$ 4.6 trillion (€ 3.14 trillion), contributing 8%–10% of the global Gross Domestic Product (GDP). It encompasses a workforce of over 120 million people and billions of transactions each day. Engineering, design and construction activities have a tremendous impact on society.

The majority of global construction output occurs in three major regions:

- The United States: the largest single-country market, with 2006 revenue of US \$1.2 trillion (€ 819 billion).
- Western Europe: the largest regional market, with 2006 revenue of US \$1.4 trillion (€952 billion).
- Asia: a rapidly growing regional market, with estimated 2006 revenue of US \$1 trillion (€ 68 billion). It is a diverse market, encompassing the developed country of Japan as well as the developing countries of China and India.

Significant markets are emerging in other regions, with growth occurring in the South and North of Africa, the Middle East, Latin America and Eastern Europe (including Russia). In 2006, these regions represented a collective output of US \$243 billion (€ 165 billion). As the construction marketplace becomes ever more global and interdependent, the activities in each of these regions will be increasingly felt.

The Chartered Institute of Building (CIOB) encourages the consideration of the construction industry in the context of a global marketplace. Advances in information and communication technologies have made the world smaller, and large construction organisations are becoming more global as goods and services are sourced from around the world.

No player in the industry, regardless of size, location or speciality, is immune to the impacts of globalisation. It presents new challenges, risks and opportunities for construction professionals, who will increasingly have to compete on the basis of their knowledge and skills.

The CIOB has a significant presence around the world, working to establish, promote and maintain standards of excellence in the construction industry. We set the pace on a global scale for the education and professionalism of those who manage the construction of the built environment. We continue to promote best practice and ensure that CIOB membership is widely recognised around the world. This includes establishing links with other recognised bodies internationally.

### We recommend and support:

- Consideration of the construction industry in the context of a global marketplace.
- The highest standards of excellence in construction management.
- Promotion of the industry’s knowledge, skills and innovations in a global marketplace.

## ‘CIOB supports a zero tolerance approach to unsafe and unhealthy practices’

# Health and Safety

The Chartered Institute of Building (CIOB) recognises that health and safety of the workforce is crucial to the success of the construction industry and supports a zero tolerance approach to unsafe and unhealthy practices.

The causes of accidents and extent of ill health in the industry are well known:

- Worldwide, construction workers are three times more likely to be killed and twice as likely to be injured as those in other occupations.
- In Europe, about 1,300 construction workers are killed each year, another 800,000 are injured, and countless others suffer ill health.
- In the US, the construction industry yields the highest number of work fatalities, recording 1,226 deaths in 2006.
- Accidents, such as falls from height and those involving transport both on-and off-site, are common.
- Occupational diseases, such as dermatitis, deafness and asbestosis, cause long-term suffering.
- The economic cost of poor safety and health are vast. Some estimate them to be 8.5% of a construction project's costs.

Industry groups around the world are working to develop creative solutions to improve the safety conditions on the worksite. Examples include:

- In Europe, the Senior Labour Inspector's Committee (SLIC) was started by the European Commission to monitor and campaign for improved safety conditions.
- The US group the Construction User's Roundtable (CURT) has developed the Construction Industry Safety Excellence (CISE) awards to encourage and recognise safety management and improvement efforts.
- The Construction Industry Institute (CII) has developed the CII Benchmarking and Metrics Programme, which sets guidelines and tracks improved safety rates in the US.

The CIOB believes that it is the responsibility of all participants in the construction process, including design, production and facilities management to promote and implement the highest standards of care and zero tolerance of unsafe and unhealthy practices.

The CIOB also maintains that good site conditions are a prerequisite for a safe site and much still needs to be done to improve site conditions. Project overheads and preliminaries should be adequate enough to ensure well organised and safe working conditions.

The Institute recognises that occupational health with regard to stress, depression and anxiety are real issues for many employers and employees within the industry. We believe that guidelines and training should be provided for managers to control employee stress and assess risks to mental health in the workplace.

- Guidelines – [www.city.ac.uk/hr/policies/stressguidelines.htm](http://www.city.ac.uk/hr/policies/stressguidelines.htm).
- Training – [www.city.ac.uk/sd/stressinitiatives.html](http://www.city.ac.uk/sd/stressinitiatives.html).
- Stress assessment – [www.city.ac.uk/hr/dps/policies/stress\\_appa\\_jan05.pdf](http://www.city.ac.uk/hr/dps/policies/stress_appa_jan05.pdf).

In addition, training for individual staff in preventing, recognising and managing personal stress, as well as guidance on support services should be provided. Poorly organised management processes and inferior site conditions are known to contribute to stress, depression and anxiety issues.

The CIOB maintains that accountability for health and safety should lie at the highest level within organisations, led from the board level, and that the irresponsible should be criminally liable both individually and corporately.

It has been shown that migrant workers with low language skills or with vulnerable employment or residency status are exposed to greater risk in the workplace. The CIOB supports the provision of adequate health and safety training for all migrant workers.

**We recommend and support:**

- A zero tolerance approach to unsafe and unhealthy practices.
- Industry and non-industry refusal to go onto sites which are unsafe.
- Continual Professional Development (CPD) in health and safety.
- Industry backed initiatives that work to improve the construction industrys health and safety record.
- The provision of adequate health and safety training for all migrant workers.

**‘A shift is occurring within the global marketplace, with more consumers and investors considering sustainability when making spending decisions’**

## Sustainable Development

Buildings account for a significant proportion of the greenhouse gas emissions that affect global climate change. Studies suggest that buildings account for:

- 45% of all CO<sub>2</sub> emissions in the EU.
- 50% national output of CO<sub>2</sub> in the UK.
- 38% of all CO<sub>2</sub> emissions in the US.

The Chartered Institute of Building (CIOB) recognises global warming as one of the most serious challenges facing the world in the 21st Century and that innovation is key to reducing emissions, or increasing their capture or sequestration.

We believe a shift is also occurring within the global marketplace, with more consumers and investors considering sustainability when making spending decisions. This change is driven by governance and legislation; a greater awareness and understanding of the issues; but also by the business benefits that can be materialised as a result of sustainable development.

We believe that many of the solutions lie at the source of the problem, and would encourage governments and industry to focus on the decarbonisation of our energy supply. If this can be achieved, decarbonisation of all building stock will follow, as the industry moves to innovate and respond to the changing market.

It is important to promote the construction of new zero-carbon buildings (both domestic and non-domestic) but also to promote the technologies that will allow the industry to make significant gains through upgrading existing stock and making it more energy efficient. The CIOB is a member of the Society for the Environment and able to award the Chartered Environmentalist qualification.

We believe a great deal can be achieved through education, training and Continual Professional Development (CPD) at all levels of the industry's workforce. We also recognise the importance of global commitments and regulation to ensuring the best interests of the public and society are met.

Key improvements can be delivered across energy, water, biodiversity, waste and materials, through to improvements in procurement, supply team integration, design, simplification, innovation and the people agenda.

### **We recommend and support:**

- Coordinated and joined-up action of industry and governments worldwide.
- The development, implementation and measurement of agreed global targets and initiatives for government and industry to drive change.
- The use of innovative solutions to reduce the carbon footprint of activities within the construction sector.
- A greater focus on moving towards the decarbonisation of our energy supply.
- A greater focus on upgrading existing stock.
- The reduction, and ultimately elimination of waste in construction through improved design, procurement, and greater re-use and recycling of resources.
- Water conservation and wildlife habitat enhancement.
- A committed, skilled and adaptable workforce working in an environment of zero accidents and incidents.
- The Chartered Environmentalist qualification.
- Continual Professional Development (CPD) in sustainability and the built environment.

The Society for the Environment represents the primary environmental disciplines and champions the culture of a sustainable environment by nurturing and harnessing the resources, knowledge, expertise and achievements of its constituent bodies.

**‘The continuous pursuit of excellence in construction management is key to greater collaboration, satisfaction of the client and delivery of successful projects’**

## Management

The Chartered Institute of Building (CIOB) has been leading both the promotion and development of management best practice in construction for over 50 years and it remains at the core of the Institute’s professional qualification. This extends from the supervision of construction, through to site management, corporate management and embraces both project and facilities management.

The CIOB considers that the continuous pursuit of excellence in construction management is the key to greater effective collaboration, the continued satisfaction of the industry’s client requirements and the sustained delivery of successful projects in the 21st Century.

The progressively expanding and competitive global market place has reduced the construction industry’s resources, causing its clients to demand increasingly efficient and technologically complex solutions. These solutions are often required in shorter time scales and tighter financial constraints, whilst simultaneously satisfying the industry’s responsibility to the environment and society. The CIOB recognises these challenges and believes that the industry is in a strong position to continue to meet these aims and satisfy the client’s expectations.

CIOB research has demonstrated real concern with the quality of time management on many construction projects. The research demonstrates the need for systematic project planning and control, and the use of all available technologies, in order to minimise delays and risks to clients, contractors and other parties.

The CIOB supports the development of a code of practice for the management and control of time on construction projects. We also recognise the need for education and training to raise the standards of planning, programming and scheduling.

### **We recommend and support:**

- Promoting best practice in management processes.
- Greater training and educational focus on business skills, including human resource management, financial management and legal studies.
- Further onus on information technology skills.
- The use and promotion of effective time management tools.
- The development of a code of practice for the management and control of time on construction projects.
- Continuous Professional Development (CPD), training and education to raise the standards of planning, programming and scheduling.

**‘The CIOB requires core standards of construction education of its members to ensure relevance and application to meet the needs of an ever developing industry’**

## Education and Training

The Chartered Institute of Building (CIOB) plays a leading role in the development and continual improvement of educational standards at a national and international level.

The CIOB accredits a range of various international degrees. The CIOB has also developed a number of partnerships with international organisations as a way of supporting our membership. Through partnerships with similar organisations such as the American Council for Construction Education, and the National Board for Construction Management Accreditation, we recognise each others’ standards in educational accreditation. Through membership of the National Academic Register for International Qualifications (NARIC) we are also able to benchmark vocational and academic qualifications.

The CIOB requires core standards of construction education of its members to ensure relevance and application to meet the needs of an ever developing industry. This framework consists of Construction Technology, Construction Environment, Specialism and Skills.

Higher education provides the foundation for management careers in construction. The CIOB accredits university courses in construction management which provide the core curriculum for fast tracking management careers. However, the Institute recognises that managers in the construction industry come from a range of built environment disciplines and looks for a higher level of management education to be made available within these other programmes.

The CIOB believes that the industry should also be attracting graduates of non-cognate disciplines into construction. The CIOB Graduate Diploma Programme offers non-cognate graduates the opportunity to achieve the appropriate professional development and in turn the potential for management careers in construction.

The CIOB also offers a vocational route to becoming competent construction managers. With an ever-increasing demand from various stakeholders to produce competent, qualified construction professionals, vocational education is a core element of the CIOB’s future development.

The CIOB seeks a greater level of engagement between industry and higher education with industrial placement being the norm for students studying these programmes.

Management in construction is a demanding career requiring heavy financial investment in projects. It is therefore essential that the industry attracts the highest calibre students into higher education and retains them as professionals in the industry.

All CIOB members are responsible for maintaining their professional qualification through Continual Professional Development (CPD). CPD is the process of regularly assessing current and future skill and knowledge requirements relevant to your responsibilities, then planning and implementing an ongoing programme of training and development to address these needs.

The achievement of professionalism at all levels within the construction industry is at the core of CIOB work. The ultimate requirement in the industry is for professionally qualified people, who are competent, to manage construction processes.

### **We recommend and support:**

- Greater interaction between industry and education.
- Development of new programmes to support industry’s changing needs.
- Industrial placement being the norm within education in construction.
- Ongoing training and personal development (including CPD).

**‘Innovation is a key driver of society's need for an efficient and sustainable built environment’**

## Innovation and Research

Innovation is a key driver of society's need for an efficient and sustainable built environment. As construction projects evolve with growing complexity, it is clear that innovation and research will become increasingly vital in the future.

The Chartered Institute of Building (CIOB) believes that in an increasingly knowledge-driven global economy, greater investment is needed to support innovation and assist effective transfer and exploitation of existing knowledge.

While there is often a view that innovation is the industry's responsibility, the CIOB believes that there are also important implications for national economies and for the delivery of public projects. The CIOB supports tax credit systems that incentivise research and development in the construction industry.

Construction companies are increasingly turning to innovation and new technologies to solve some of today's biggest problems. However studies have shown that one of the main barriers to innovation is fear that new technology would not be widely applicable or recognised in the industry. There is therefore an important role for industry in realising, emphasising and communicating the benefits of innovation, such as cost savings, increased productivity, efficiency and quality.

The CIOB continues to recognise its role in facilitating dialogue and collaboration between practitioners, researchers, policy makers and education providers. The Institute maintains that new solutions to construction challenges occur only when individuals are inspired to think in new ways and such inspiration should be a primary goal for all professional bodies, government and industry alike.

### **We recommend and support:**

- Greater investment - to support innovation and assist effective transfer and exploitation of existing knowledge.
- Tax credit systems that incentivise research and development in construction.
- Better promotion of the benefits of innovation throughout all levels of the industry.
- Professional bodies that facilitate thought-leadership, inspiration and continual improvement within the construction industry.
- Further collaboration between government, education providers and the industry to innovate, progress and research.

'With construction output increasing at such a rate around the world, the ability of the industry to meet demand in the long-term is becoming an even more significant issue'

# Industry Capacity and Availability of Resources (including Skills)

With construction output increasing at such a rate around the world, the ability of the industry to meet demand in the long-term is becoming an even more significant issue. Key drivers of the industry's capacity to meet this demand are labour and skills, and the availability of raw materials.

## Labour and Skills

The construction industry has always, and will always, supplement its workforce from abroad. However there is a concern that the availability of skilled workers around the world has escalated into near crisis mode, and that firms do not see a quick end to the problem.

As the rate of ageing begins to outpace the rate of new births in many countries, there is growing pressure on the working population, with labour supply diminishing. It is clear that efforts to mitigate this shortage around the world will require creative approaches, shared knowledge and collaboration amongst all players in the industry.

The Chartered Institute of Building (CIOB) would like to see a strategic approach taken to the education and training of the construction workforce. This should be based on projections of industry demand, and recruitment to universities and colleges.

Apprenticeships will have a key role to play in closing skills gaps, and industry and governments have a responsibility to promote and incentivise apprenticeship programmes.

Professional institutions like the CIOB should facilitate the coming together of industry and education through the support of education and training programmes, which meet the requirements of a changing industry and are fit for purpose.

### **We recommend and support:**

- Governments and industry working together to promote and incentivise apprenticeship programmes.
- A strategic approach to the education and training of the construction workforce.

## Availability of Raw Materials.

The long-term availability of raw materials is a significant issue for the global construction industry.

China and Europe do not have the raw materials to cope with large increases in demand. There is likely to be inflationary pressure on material supply in the future driven by availability. This presents an issue of long term supply that needs to be considered, especially in relation to the delivery of UK public sector projects.

The availability and cost of materials has a serious impact on contractors on long-term fixed price contracts, resulting in contractors being unwilling to commit to future long-term contracts without significant risk premiums being built into their bids. The problem is most pronounced in longer, more complex projects and other large projects that are often in the national interest.

The CIOB believes that a key way to address this capacity problem is to promote innovation, research and development in the sector.

**We recommend and support:**

- Promotion of innovation, research and development in the construction industry.

‘The provision of suitable housing of an adequate standard is a basic human need that must be achieved for all sections of society.’

# Social Construction Issues

## Housing

The Chartered Institute of Building (CIOB) believes that the provision of suitable housing of an adequate standard is a basic human need that must be achieved for all sections of society. For those whose housing need cannot be met by the mainstream housing market, affordable housing may be supplied by specialist providers or as part of private developments under local planning polices.

The CIOB supports the redevelopment of sites in existing urban areas in preference to new greenfield development. Sustained action is required to tackle imbalances and inequality in housing provision through the renovation and improvement of substandard accommodation, and where appropriate, removal of redundant capacity by demolition.

The CIOB promotes high standards in all construction-related aspects of the provision of affordable housing.

### We recommend and support:

- The redevelopment of existing urban areas in preference to the development of greenfield sites.
- Residential developments to provide for a mix of tenures and dwelling types with affordable housing being fully integrated into - and externally indistinguishable from - areas of privately owned dwellings [large monotenure developments should be avoided].
- The use of off-site manufacturing techniques and other modern methods of construction to speed up construction on site and to improve building performance.
- Greater incentives and legislation for more energy efficient and environmentally sustainable buildings including support to improve the environmental performance of existing housing stock.
- The use of smart housing and technology and other innovative products.

## Equal Opportunities

The CIOB believes that women and ethnic minorities have an equal contribution to make in construction and the industry is currently missing a significant opportunity by not heavily promoting itself to these groups.

Many industries, including the construction industry, harbour discrimination in pay through unequal pay systems. The CIOB recognises the positive contribution that women make within the industry and calls for women to be paid at the same rate as their male colleagues.

Only 3% of the construction workforce is currently represented by ethnic minorities. Both women and ethnic minorities should be considered to support diverse recruitment, especially considering the current skills shortages and demand for construction. The CIOB supports large scale construction projects which aim to recruit a diversity of workers from the local community.

The CIOB believes the problem can be tackled in schools and in the earliest careers guidance given to pupils to eradicate stereotyping.

### **We recommend and support:**

- Tailored construction careers advice for women.
- Promotion of careers in construction to attract more atypical recruits.

## **Migrant workers**

The global construction industry is increasingly reliant on migrant workers to combat skills shortages and meet construction demand. The CIOB believes that these workers should be treated fairly and that their health, safety and welfare is protected.

In order for the industry to utilise migrant workers to their full potential, appropriate language training must be considered. This is essential if a migrant worker has experience in management, but may have been overlooked due to language barriers.

### **We recommend and support:**

- Training for migrant workers.
- Fair treatment towards migrant workers.

# Corruption, Transparency and Ethics

**‘Corruption cannot be overcome without political commitment’**

## Corruption, Transparency and Ethics

The Chartered Institute of Building (CIOB) recognises that the construction industry is a particularly susceptible environment for corruption in both the developing and developed world, as construction projects usually involve a large number of participants in a complex contractual structure.

Bribery in relation to the award of contracts is the most visible form of corruption, notably when contracts are for major works. However corrupt practices can be found at each phase of a construction project; during planning and design, in the award of contracts, during the construction process and during the operation and maintenance of projects after construction is finished.

The CIOB maintains that corruption cannot be overcome without political commitment. It is estimated that more than US\$4 trillion is spent annually on government procurement worldwide.

### **We recommend and support:**

- The development and implementation of industry-wide anti-corruption mechanisms.
- Transparency International’s The Integrity Pact.
- Transparency International’s ‘Minimum Standards for Public Contracting’.
- International financial institutions blacklisting companies known to be corrupt.
- The CIOB will investigate any complaints against its members and if the complaint is proven, will discipline members with the potential penalty of excluding them from membership.

**'The Chartered Institute of Building (CIOB) supports best practice in the conservation of our global heritage'**

## Heritage and Conservation

The Chartered Institute of Building (CIOB) supports best practice in the conservation of our global heritage, which over time requires proper maintenance and will be altered and regenerated due to a change of use.

The CIOB believes that to ensure the world's historic buildings are not lost forever; greater numbers of people are trained to carry out appropriate maintenance, and to implement sympathetic repairs using both traditional and new scientific methods and materials.

The CIOB recognises the need to increase our understanding of the character of places, including the value and significance people attribute to them. The Institute calls for greater levels of targeted international research to identify priorities and provide the basis for informed decisions.

### **We recommend and support:**

- The promotion of management best practice in building conservation.
- The promotion and development of conservation projects and maintenance management accreditation of companies and courses.
- The development of conservation management through links with education and practice.
- Continuing professional development in conservation techniques.

**‘Internationally the CIOB is actively involved in the development and promotion of building control systems that are fit-for-purpose and result in high standards of construction’**

## Building Control and Standards

The Chartered Institute of Building (CIOB) supports building control systems that result in the delivery of buildings which are safe, healthy, sustainable and accessible for everyone.

Internationally, the CIOB is actively involved in the development and promotion of building control systems that are fit-for-purpose and result in high standards of construction.

The Institute supports building control systems that are ‘functional’ rather than prescriptive, to preserve the freedom and ability of designers to innovate. We also believe that building control systems should be evidence based, and designed to achieve a particular positive goal, or to avoid a very negative effect.

The CIOB believes that building control systems and the planning systems should be closely integrated to ensure a seamless system for consumers and building professionals alike.

The CIOB believes that building control systems must be reviewed to ensure they are fit-for-purpose in the future, and make a direct contribution to tackling climate change.

### **We recommend and support:**

- A building control system that is functional rather than prescriptive.
- An integrated and seamless approach to building control and planning.
- Revision of building control systems to ensure they are fit-for-purpose in the future.

