

# Leveraging Global Innovation Networks



## CIB Task Group 85: 2011–2014

### Closing Report

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The collaboration between the Sustainable Built Environment National Research Centre and its industry, government and research partners adds significant value to the effectiveness and long-term sustainability of Australia's built environment industry.

We thank our core members for their support:







Distance:	1.84 m
Angle:	65.47°
Volume m <sup>3</sup> /h	14
Concrete Volume	
Used:	0.059 m <sup>3</sup>
Stuck:	0.046 m <sup>3</sup>
Rebound:	0.013 m <sup>3</sup>
Excess:	0.013 m <sup>3</sup>
Waste:	45.5 %

The International Council for Research and Innovation in Building and Construction (CIB) is a global network for international exchange and cooperation in research and innovation in building and construction.

Task Group 85: R&D Investment and Impact, was established to create an international network of knowledge-exchange that would deliver new understandings about leveraging R&D investment in the construction industry.

This report summarises the collaborative work and achievements of TG85, 2011–2014.



# FROM THE COORDINATION TEAM

The focus of TG85 was of significant importance at a national level in Australia, as demonstrated by complementary funding support from the Sustainable Built Environment National Research Centre and the Australian Research Council.

At the international level this support was strengthened by the knowledge integration and in-depth industry analysis provided by our global Task Group network. The willingness of international participants to collaborate and share knowledge and experience through our bi-monthly WebEx meetings and annual face-to-face meetings was a hallmark of this Task Group and contributed in a significant way to the success of the group.

As the Coordinators of TG85, we were energised by the level of support and commitment received from our colleagues from across the globe. We have benefited greatly from this experience at both a personal and a professional level, and look forward to sustaining these relationships into the future.

## TG85 Coordinators



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COMMISSION SECRETARY  
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Australia



# ABOUT TASK GROUP 85: R&D Investment and Impact



In an increasingly globalised construction industry, creating stronger connections and sharing knowledge among industry researchers internationally can lead to improved economic, social and environmental outcomes.

The International Council for Research

and Innovation in Building and Construction (CIB) supports initiatives to improve processes and performance in creating and managing the built environment. In 2011, the CIB established Task Group 85: R&D Investment and Impact, to create an international network of knowledge-exchange that would deliver new understandings about leveraging R&D investment in the construction industry. A key goal was to inform national policies and programs able to enhance R&D investment outcomes.

The TG85 network attracted 40 members from 19 countries, and delivered several important outcomes. An active forum was established to initiate collaboration among individuals, private firms, government agencies and research institutions. Funding from the Australian Research Council, via its Linkage Program (project LP110200256), leveraged initial SBEncr seed funding into a three-year program of work, which enabled a broadening and deepening of project objectives and outcomes. This further enabled the Australian team to engage internationally with TG85 members to produce a reference book as a concrete artefact of this collaboration: *R&D Investment and Impact for the Global Construction Industry*, published by Routledge in June 2014.

# MILESTONES



## 2011

The formation of TG85 is announced at the SB11 World Sustainable Building Conference, Helsinki, Finland, 18–21 October. The founding membership comprises Prof. Keith Hampson, Prof. Aminah Robinson Fayek, Dr Judy Kraatz, Dr Karen Manley, Prof. Geoffrey Shen, Dr Ken Thomas, Prof. Francisco Branco, Dr Rodney Milford, Ms Ntebo Ngozwana, Dr Roine Leiringer, Dr Anna Kadefors.

## 2012

TG85 is developing case study material and analysis for inclusion in an industry-focused book and for academic reference. The group continues to build strategic individual and institutional relationships across the global network, such as with the Australian Built Environment Industry Innovation Council, Office of the Australian Chief Scientist, national research organisations and universities internationally.



## 2013

In May, Australia's Chief Scientist launches TG85's industry-focused publication *Investing for Impact: Constructing a Better Built Environment*, at the CIB World Building Congress in Brisbane, Australia.

**"It is research and development that will create smarter construction operations, processes, techniques"**

– Professor Ian Chubb AC, Chief Scientist of Australia

Investing for Impact: Creating a Better Built Environment can be downloaded at:  
[www.sbenrc.com.au/wp-content/uploads/2013/11/Investing\\_for\\_Impact\\_3MB\\_IP.pdf](http://www.sbenrc.com.au/wp-content/uploads/2013/11/Investing_for_Impact_3MB_IP.pdf)  
and [cibworld.xs4all.nl/dl/publications/TG85\\_ifi.pdf](http://cibworld.xs4all.nl/dl/publications/TG85_ifi.pdf)



## 2013

Also at the World Building Congress, the CIB Programme Committee awards TG85 the commendation for “the most remarkable contributions to the CIB from amongst all the Commission and Theme Group Coordinators and Members”.



## 2014

In June, Routledge publishes the book *R&D Investment and Impact in the Global Construction Industry*, developed from research completed by members of TG85. At the core of the book lies the principle that investment in research and development drives a more productive and innovative construction industry that, in turn, leads to economic growth. It examines drivers and barriers to the delivery of R&D in industry, and includes case studies that were funded by the private and public sectors and translated successfully from research into practice or policy. It also describes how policy makers and industry leaders can better target future investment and maximise the impact of R&D. Importantly, it explains how industry, government and researchers can work to improve productivity while addressing the environmental and social needs of their communities.

The book is launched at the SB14 World Sustainable Building Conference in Barcelona, Spain, 28–30 October.



## Beyond 2014

CIB will build on the work completed by TG85 and establish a new Task Group: Information Integration in Construction (ICON) to help create a more effective and reflective industry and deliver benefits to public and private asset owners. The new Task Group will focus on:

- efficient knowledge creation, preservation and integration across the life-cycle of constructed facilities
- relevant, reliable, interoperable and long-lasting data and information gathering and analysis
- monitoring and feedback from end-users into the different stages of design, construction and asset management of buildings and infrastructure.

This new Task Group will build on the legacy of the individual and institutional partnerships developed through TG85.

Additional initiatives, including joint international research projects and publications, will also be pursued for mutual benefit.

# TG85 IN NUMBERS

Commencing in 2011 with just 11 members, global team membership grew to 40 members. Between 2011 and 2014, 17 meetings were conducted via Webex or face-to-face.

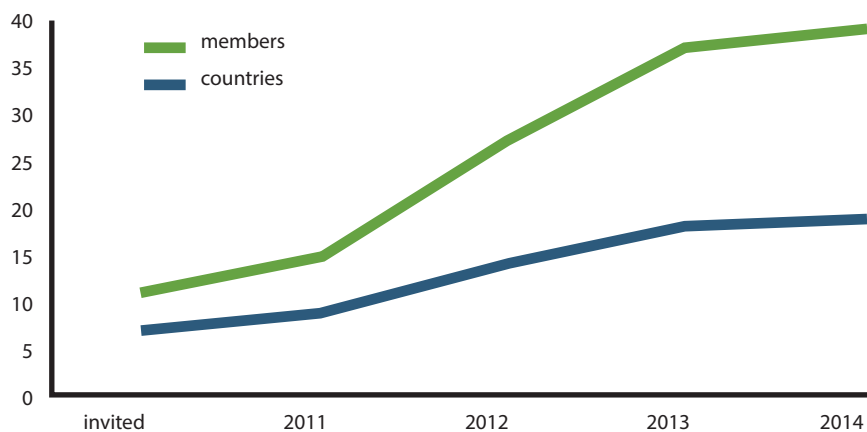
## Initial planned outputs

- 2011: launch of the Task Group website
- 2013: publication of a CIB report with a description of R&D initiatives
- 2013: publication of a CIB report on R&D investment strategies.

## Final achieved outputs

- 2011: project website, [www.sbenrc.com.au](http://www.sbenrc.com.au) (Project 2.7)
- 2012: Hampson, KD, Erfarenheter från två bygginnovationsprogram i Australien (Experiences From Two Construction Innovation Programmes in Australia, in Swedish). In Bygginnovationers förutsättningar och effekter (Contexts and effects of construction innovations), ed. J. Bröchner, pp96-102. VINNOVA Rapport VR 2012:09. Stockholm: Verket för Innovationssystem/Swedish Governmental Agency for Innovation Systems, 2012.
- 2013: Hampson KD, Kraatz JA, Sanchez AX and Herron NA, Investing for Impact: Constructing a Better Built Environment, Brisbane: Sustainable Built Environment National Research Centre.
- 2013: several peer-reviewed conference papers and presentations by TG85 members, based on country reports, at the CIB World Building Congress, Brisbane, 5–9 May.
- 2014: Hampson KD, Kraatz JA and Sanchez AX, R&D Investment and Impact in the Global Construction Industry, Abingdon, Oxon: Routledge.

## Growing International Collaborations





# COLLABORATING INSTITUTIONS



## Australia

Sustainable Built Environment National Research Centre (SBEnc)

Curtin University

Queensland University of Technology

Griffith University

## Brazil

University of São Paulo

## Canada

University of Alberta

McMaster University

University of New Brunswick

## Denmark

Danish Building Research Institute (SBI)

## Finland

Aalto University

VTT Technical Research Centre of Finland

Built Environment Programme, Tekes

## France

Scientific and Technical Centre for Building (Centre Scientifique et Technique du Bâtiment – CSTB)

## Germany

Research Association for Steel Application

## Hong Kong

The Hong Kong Polytechnic University

The University of Hong Kong

## India

Tata Housing Development Company

## Ireland

Waterford Institute of Technology

## New Zealand

The University of Auckland

Unitec

## People's Republic of China

Tsinghua University

## Portugal

## University of Lisbon

## South Africa

Construction Industry Development Board (CIDB)

## Sweden

Chalmers University of Technology

## Netherlands

University of Twente

Eindhoven University of Technology

HAN University of Applied Sciences

## Norway

Norwegian University of Science and Technology (NTNU)

## United States of America

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For information about the book *R&D Investment and Impact in the Global Construction Industry*, and to order copies (20% discount code: DC365), visit [www.routledge.com/9780415859134](http://www.routledge.com/9780415859134)

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