Contents

Keith Hampson, Retiring President 3
Mark Hastak, President-Elect 5
Don Ward, Chief Executive 7
“Collaborating for Innovation in the Built Environment” 8
Membership 8
Activities and Services 9
CIB Commissions 10
CIB Student Chapters and Awards 18
Early Career Researchers network 24
World Building Congress 2022 26
Governance 28
Officers and Board 29
Secretariat 31
Third Party Funding Task Group 31
Financial Summary 32

Acknowledgements

We are grateful for permission to use the following photographs in this publication

page 12 - CIB W78 LDAC 2021
page 14 - CIB W78 LDAC 2021
page 16 - Westgate Tunnel Project, Melbourne – MTIA
page 21 - CIB W78 LDAC 2021
page 23 - CIB W78 LDAC 2021
page 25 - Women in Engineering day - MTIA
page 26 - Melbourne skyline - istock
page 27 - World Building Congress 2019 - Hong Kong Polytechnic University
It has been a great honour to lead the organisation along with my fellow Officers and the members of the Board. These have been challenging times. The global Covid-19 pandemic has made it a difficult time for everyone, and traumatic for some who suffered bereavements or serious illness, so I express my heartfelt thanks and appreciation for the hard work and commitment of so many people across the CIB network.

I am delighted that many of us are meeting again in person for the World Building Congress 2022 in Melbourne. Hosting of the World Building Congress is a privilege offered to the President, and I was delighted when Ron Wakefield of RMIT offered to take on this role as a member organisation of Australia’s Sustainable Built Environment National Research Centre (SBEnrc), of which I serve as CEO. Ron and his team have done an amazing job in difficult circumstances over the last two years. I am sure that everyone attending - in person or online - will find it to be an outstanding event. I particularly hope that those attending in person take every opportunity to network, renew existing relationships and form new ones.

When I was elected President at WBC2019 in Hong Kong in June 2019, I set out three priorities to re-energise CIB over my three-year term.

Establish a strong and effective member service team in Ottawa

I was delighted that we were able to recruit Don Ward as CEO, along with Michael Behm as Programme Director and Debbie Gray as Membership and Marketing Manager. Together, they have formed a strong and effective secretariat team.

The pandemic led to the closure of the Ottawa office, so the secretariat will remain a virtual office at least for some time to come, but we are all well familiar with online working and with a new website, more frequent informative newsletters, webinars and improved marketing collateral, the quality of communications is excellent - thank you to the Membership and Communications Committee chaired by Ron Wakefield for overseeing this.
Reinforce high quality, globally collaborative research at the core of our CIB

Programme Committee Chair Kalle Kähkönen and Michael Behm have led significant progress; dialogue between the CIB Board and Working Commissions is much more regular and productive, and the new “CIB Vistas” initiative to be launched at WBC2022 is an exciting and engaging way to reinvigorate the core research of our CIB. Packaged with other initiatives, CIB Vistas will be key in promoting our modern multi- and inter-disciplinary research and innovation agenda supporting the United Nation’s Sustainable Development Goals. A special welcome also to our emerging leaders in several new Coordinators who have stepped up to lead invigorated Task Groups or Commissions. I hope they will be galvanised by the Vistas programme and lead the way in delivering value, not only for their own Commission researchers but more widely for members and the global industry and research community.

My thanks to Albert Chan, Chair of the Student Chapter Committee, who has fostered continued growth amongst our Student Chapters, secured CIB project funding for them, and re-energised our Student Awards including a new one for Best Dissertation. Congratulations to our first winner of this award, Dr. Esmaeel Eftekharian. Albert also worked with Srinath Perera and a new sub-committee to launch the new Early Career Researcher network. This focussed group has quickly engaged with over 100 ‘ECRs’ and is a very exciting and valuable network for CIB to support the development of future research talent and leadership in the built environment.

Strengthen global membership

The global pandemic undoubtedly impacted our membership. We responded by improving communication and the value proposition for existing members as mentioned. We have also initiated a strategy to diversify our revenue sources to reduce our dominant dependence on direct membership subscriptions - and I am most grateful to Vice President Mark Hastak who has led this strategy development.

I thank the Officers, Board members and secretariat of CIB for their excellent efforts over the last three years - and I wish Mark Hastak and the new Board every success in the next triennium. It is the personal relationships formed in CIB which have been the greatest benefit – and pleasure - of my long association with the organisation, which has fundamentally nurtured my own career development. I plan to stay actively engaged in the Board and CIB activities as Immediate Past President and will offer my support wherever it is welcome. I trust that in this capacity, I will be able to catch up with many more members and future members in person as we continue to grow this great organisation.

In closing, I reiterate my deep thanks for the trust placed in me to lead CIB over this past three years. It has been a true honour.

Professor Keith Hampson, CIB President
First of all I would like to pay tribute to Keith Hampson, who has led CIB as President with great distinction for the past three years. It is a shame that the global pandemic somewhat reduced his renowned energy and infectious enthusiasm to online interactions rather than face-to-face activity.

Keith’s career has been intertwined with active engagement and leadership in CIB for 28 years, from his time as an early career researcher to initiator and Coordinator of three Task Groups focussing on industry innovation and R&D systems since 2006, Board member, and Vice-President 2016-2019, as well as an important role in supporting John McCarthy AO in his Presidential term from 2010-2013 when John was Chair of SBEnrc and Keith was CEO (as both still serve today!). With that background, it is no surprise that he plans to be an active and engaged Immediate Past President. I greatly look forward to working with Keith and benefiting from his experience and wisdom.

Keith has always had a passion for more effective industry-research collaboration, and so his endowment of a new award, “The CIB Keith Hampson ECR-Industry Award” is particularly appropriate as well as generous. Thank you Keith.

He will be a hard act to follow, but with luck and support, I will have the advantage of more face-to-face contact with our members and key stakeholders around the world, starting with WBC2022 in Melbourne, Australia. Thank you to Ron Wakefield and RMIT for their superb organisation. I do hope this will be the start of a new outward-facing era for CIB and the profile and value of built environment research and innovation around the world.

I am looking forward to discussing priorities with everyone at WBC2022 and beyond, including the Board and Coordinators and students and early career researchers. I hope people will take the chance to talk to me about our strategy. Thanks to the targeted work of our 2019-2022 Board, we have a solid foundation from which to grow CIB, and the following agenda outlines some of my thoughts for the future.
Membership growth

At our heart, CIB remains a membership organisation, and this has significant advantages. It provides a basis for open and democratic governance, leadership and accountability, and also unlocks resources that CIB has available, in terms of membership effort particularly in the Working Commissions, Task Groups and Student/ECR Chapters. However, the trend in membership is down, and we have challenges to address, including our services and profile. I share with Don Ward the ongoing aspiration to improve the value of membership. It will be important to prevent membership fees being a barrier to participation, and this first requires us to identify alternative and complementary funding mechanisms if we are not to impact the level of service currently provided.

New value-added propositions

We need to build on the core strengths of CIB, notably our global membership which includes educators not only researchers, potential engagement with students around the world, and connections with the United Nations which trace back to our formation in 1953. I have no doubt that our new Board will also bring new thinking, and I plan to discuss in detail with the Board over the next few months and then I expect we will share a plan to members for wider consultation and, crucially, engagement.

Growing CIB’s profile and influence

As already mentioned, I believe it is important to build on existing relationships and form new ones with key third parties around the world, industry practitioners, policy-makers and regulators. We need to strengthen our relationship with the UN where CIB’s members and agenda have so much to contribute to the Sustainable Development agenda, but I also have in mind bodies such as the World Bank, various global charitable foundations and large global businesses in our sector. A ‘CIB Day’ from 2023 as a focussed profile-raising activity is one initiative on which we have already started work on under Keith’s Presidency.

I wish all in the CIB network a successful triennium and look forward to working together with members, future members and other stakeholders across the globe.

Professor Mark Hastak, Incoming CIB President
Thank you to everyone for your support and encouragement since I became Chief Executive in March 2020. I have thoroughly enjoyed these two years despite hardly being able to meet anyone in person. I am really looking forward to my first CIB World Building Congress in Melbourne to engage with many more members for the first time.

I would like to thank Keith Hampson and the other Officers and Members of the Board for their warm welcome to me and their commitment and hard work to deliver value for our membership and - advancing the cause of research and industry innovation in our sector. I am so grateful to Keith for his leadership, friendship and wise counsel. I would also like to specifically thank Peter Paul van ‘t Veen, who worked tirelessly as Treasurer in what can be an unglamorous behind-the-scenes role. Our Officers in particular know how hard he worked. It is to his great credit that the accounts are handed over in such a clean, tidy and reasonably healthy state. I thank Peter Paul and hope he enjoys a well-earned rest from these duties.

We will continue to feel the impact of the global pandemic for years to come. Many of our members have been impacted financially, budgets are constrained, and the value of travelling to conferences is being questioned. CIB needs to rise to this challenge by evolving our working methods and improving and diversifying our value proposition so that members continue to recognise the unique value of CIB and are willing to support it. This will be one of the biggest issues to address in our next triennium under the Presidency of Mark Hastak, and the ideas for strategic development of CIB which he begins to outline above are very exciting.

I look forward to meeting many more of our members in the months to come and working with you to advance our joint cause. Please contact me at any time if you have any feedback to offer on our work or would like to get more closely involved.

Don Ward, CIB Chief Executive
“Collaborating for Innovation in the Built Environment”

The purpose of CIB (Conseil International du Bâtiment) is to provide a global network for international collaboration in building and construction research and innovation. This global network supports an improved building process and enhanced performance of the built environment. Our scope covers the technical, economic, environmental, organisational and other aspects through all stages of the built environment life cycle. It addresses all steps in the process of basic and applied research, documentation and transfer of the research results, and the implementation and actual application of them, including teaching and education.

Membership

Members in 53 countries around the world
CIB has three categories of membership: Full, Associate, or Individual, and which one organisations choose depends on the level of participation required across the breadth of our research programme. We welcome applications from those with an interest in research or innovation in universities, research or technical organisations, funding bodies, industry and other practitioners from all parts of the world.

CIB’s subscription fees are available to view www.cibworld.org/fee-system-and-how-to-join. Discounts are available for those from Low- or Middle-Income Countries.

Activities and Services

This report provides an overview of the main activities and benefits which CIB provides for our members. These include:

- Working Commissions
- Student Chapters
- Early Career Researchers (ECRs) network
- Conferences and Publications
  - Conferences and Proceedings
  - 30 partner journals
  - Research Roadmaps and other reports
  - ICONDA®CIBlibrary database
  - Webinars
  - ‘CIB in Conversation’

53 Countries

75 Organisations

215 Individual Members

1351 Experts

35 Working Commissions

18 Student Chapters

6 Task Groups

www.cibworld.org
CIB Commissions

These are the core of our work. A CIB Commission is a worldwide network of experts in a defined scientific area who meet regularly and who collaborate in international projects and exchange information on a voluntary basis. Working Commissions have a long-term “permanent” status and a broader programme, scope and objectives, whilst Task Groups have a limited lifetime and objectives.

In normal times most Commissions have annual plenary meetings and produce publications and other events of various kinds including research roadmaps and webinars.

The full list of Commissions is shown in the table, much more information on every Commission is available at cibworld.org/Commissions. Commissions are open to all members with an interest and passion for their theme, and in particular “Early Career Researchers” are welcomed.

<table>
<thead>
<tr>
<th>CIB WORKING COMMISSIONS</th>
<th>CIB TASK GROUPS</th>
</tr>
</thead>
<tbody>
<tr>
<td>W014 – Fire Safety</td>
<td>TG81 – Global Construction Data</td>
</tr>
<tr>
<td>W023 – Wall Structures</td>
<td>TG88 – Smart Cities</td>
</tr>
<tr>
<td>W040 – Heat and Moisture transfer in Buildings</td>
<td>TG91 – Infrastructure</td>
</tr>
<tr>
<td>W055 – Construction Industry Economics</td>
<td>TG96 – Accelerating Innovation in Construction</td>
</tr>
<tr>
<td>W056 – Sandwich Panels (joint-CIB-ECCS Commission)</td>
<td></td>
</tr>
<tr>
<td>W062 – Water Supply and Drainage</td>
<td>TG97 – Nature-Based Solutions for Climate Resilient Buildings and Communities</td>
</tr>
<tr>
<td>W065 – Organisation and Management of Construction</td>
<td></td>
</tr>
<tr>
<td>W070 – Facilities Management and Maintenance</td>
<td></td>
</tr>
<tr>
<td>W078 – Information Technology for Construction</td>
<td></td>
</tr>
<tr>
<td>W080 – Prediction of Service Life of Building Materials and Components</td>
<td></td>
</tr>
<tr>
<td>W083 – Roofing Materials and Systems</td>
<td></td>
</tr>
<tr>
<td>W086 – Building Pathology</td>
<td></td>
</tr>
<tr>
<td>W089 – Education in the Built Environment</td>
<td></td>
</tr>
<tr>
<td>W092 – Procurement Systems</td>
<td></td>
</tr>
<tr>
<td>W096 – Architectural Design and Management</td>
<td></td>
</tr>
<tr>
<td>W098 – Intelligent and Responsive Buildings</td>
<td></td>
</tr>
<tr>
<td>W099 – Safety Health &amp; Wellbeing in Construction</td>
<td></td>
</tr>
<tr>
<td>W101 – Spatial Planning and Infrastructure Development</td>
<td></td>
</tr>
<tr>
<td>W102 – Information and Knowledge Management in Building</td>
<td></td>
</tr>
<tr>
<td>W104 – Open Building Implementation</td>
<td></td>
</tr>
<tr>
<td>W107 – Construction in Developing Countries</td>
<td></td>
</tr>
<tr>
<td>W110 – Informal Settlements and Affordable Housing</td>
<td></td>
</tr>
<tr>
<td>W111 – Usability of Workplaces</td>
<td></td>
</tr>
<tr>
<td>W112 – Culture in Construction</td>
<td></td>
</tr>
<tr>
<td>W113 – Law and Dispute Resolution</td>
<td></td>
</tr>
<tr>
<td>W115 – Construction Materials Stewardship</td>
<td></td>
</tr>
<tr>
<td>W116 – Smart and Sustainable Built Environments</td>
<td></td>
</tr>
<tr>
<td>W117 – Performance Measurement in Construction</td>
<td></td>
</tr>
<tr>
<td>W118 – Clients and Users in Construction</td>
<td></td>
</tr>
<tr>
<td>W119 – Customised Industrial Construction</td>
<td></td>
</tr>
<tr>
<td>W120 – Disasters and the Built Environment</td>
<td></td>
</tr>
<tr>
<td>W121 – Offsite Construction</td>
<td></td>
</tr>
<tr>
<td>W122 – Public Private Partnership</td>
<td></td>
</tr>
<tr>
<td>W123 – People in Construction</td>
<td></td>
</tr>
</tbody>
</table>
Many Commissions’ work programmes continued to be affected by the global pandemic in 2021-22, but the updates below show plenty of activity, in particular in preparation for the World Building Congress in June 2022 in Melbourne, see also page 26 of this report.

Wo55 Construction Industry Economics

The main activity in 2021 was the Commission’s participation in the CIB “International Conference on Smart Built Environment” in Dubai in December. This was converted to an online-only event, and one of the themes was the economics and management of smart built environment. The Commission also supported a Sebestyén Future Leaders Award application.

Wo56 Sandwich Panels (joint-CIB-ECCS Commission)

CIB Wo56 together with ECCS TWG7.9 “Sandwich Panels and related Subjects”, forms the “Joint Committee on Sandwich Construction”. This Joint Committee is closely linked to the groups and Commissions of CEN, both in terms of personnel and advice. This involves the TC for the product standard (CEN/TC 128/SC 11 - Double skin metal faced insulating sandwich panels for roofing and cladding) and the WG for the design standard (CEN/TC 250/SC 3/WG 21 - Design of Sandwich Panels) for sandwich panels in building applications.

The Joint Committee is currently working on three documents, so-called “recommendations”. These deal with the design and detailing of sandwich panels in application areas that are not yet covered by standards, guidelines etc. Work on all three documents is running parallel and in close coordination with the aforementioned CEN groups and Commissions: ER Axial loads; ER Point and line loads; ER Torsional/rotational restraint.

In 2021 there was one (online) meeting in March, with a meeting in November in Eindhoven postponed at short notice due to the worsening of the pandemic. This is now scheduled for 2nd-3rd June 2022.

Wo78 Information Technology for Construction

The Commission held its 38th international conference from 11-15 October 2021 in Luxembourg organized by the Luxembourg Institute of Science and Technology in collaboration with Cardiff University and the European Construction Technology Platform. The conference was joint with the 8th Linked Data in Architecture and Construction workshop and was chaired by Dr Sylvain Kubicki and Professor Yacine Rezgui.

A total of 97 full papers were accepted for the conference following full paper review from an initial 113 abstracts and 108 full papers submitted, giving an 85% acceptance rate for papers to the conference. While we had high hopes of running a completely face-to-face conference this was eventually not possible to sustain and we reverted to a hybrid mode conference. There was still an excellent face-to-face presence at the conference with 118 in person and 126 attending online. The Charles Eastman Prize was awarded to Zijian Wang (Technion University of Israel) for his paper entitled “Room Type Classification for Semantic Enrichment of Building Information Modelling Using Graph Neural Networks”.

For 2022 the 39th international conference is planned in parallel to WBC2022 (27th-30th June) in Melbourne and will be chaired by Associate Professor Guillermo Aranda-Mena from RMIT University.

Wo80 Prediction of Service Life of Building Materials and Components

In 2021, CIB Wo80 published two reports, the first on the factor method as a general framework for service life prediction, analysing past and
future trends (CIB publication 421), and the second on the conceptualization of service life prediction and the criteria that triggers the end of service life of buildings and components (CIB publication 423). Both reports are available online at cibworld.org/Commissions/w080-prediction-of-service-life-of-building-materials-and-components.

The collaboration of some members who co-authored the second report gave rise to a publication by invitation in the 10th anniversary special issue of the Buildings Journal, available online at www.mdpi.com/2075-5309/12/2/88/htm.

The annual meeting of CIB Wo80 Commission was held online in July, with the participation of 23 members and guests.

Wo83 Roofing Materials and Systems

The Commission completed its study on the development and performance of thermoplastic polyolefin (TPO) roof membrane systems which were introduced commercially in the early 1990s and now enjoy significant market share in some countries. More than thirty experts shared their experiences and collectively produced a final report “TPO Roof Membrane Systems: A World Historical Perspective and Summary of Best Practice” (Publication 424). The report concludes with a summary of points of current best practice which has been translated into eight different languages.

The Commission has started new work examining the alteration/refurbishment of aged roofs and has held three virtual meetings to date. There is a shortage of published design guidance for the specification and detailed design of refurbished roofs, with responsibility often delegated to contractors and their supply chain. Recognising that in many countries the majority of buildings were originally constructed at a time when there was very little insulation built into the roofs, upgrading the thermal properties of roofs presents a challenge to the industry. This is an environmental goal to reduce energy demand in heating or cooling buildings.

Wo86 Building Pathology

In October this Commission published a report “New trends on building pathology” (CIB publication 422) featuring the collaboration of several members and guests to address the topics of: i) the vision of building professionals; ii) advanced diagnosis methods; iii) uncertainty and risk analysis; iii) decision criteria based on anomalies assessment; iv) forensic engineering approaches; and v) atlas of defects within an inspection system. In this report, a glossary of pathology, diagnosis and maintenance/rehabilitation terms was also added. This report is available at cibworld.org/Commissions/w086-building-pathology.

The annual meeting of the Commission was held virtually with CIB W80 in July, and 23 members and guests participated. Consequently, a joint session CIB W80/86 was planned to submit papers to the WBC2022 conference in Melbourne. There was also a call for papers with deadline in October 2021, for a special issue of the CIB-endorsed International Journal of Building Pathology and Adaptation on “Building Pathology: The past, new approaches and opportunities”.

12
Wo89 Education in the Built Environment

The Commission has partnered with W123 for a session entitled “Enhancing the Education & Work Environment for People in Construction” at WBC2022 in Melbourne. They will also hold a Commission Meeting at WBC2022. There is initial agreement with the Associated Schools of Construction for a special issue of the International Journal of Construction Education and Research that would be based on the papers presented at the CIB World Congress.

Future Plans include identifying other Commissions to partner in holding a conference in either 2023 or 2024. This may be in collaboration with other construction education groups such as Associated Schools of Construction, Council of Heads of Built Environment and others.

Wo96 Architectural Design and Management

This Commission led an online workshop alongside the Architectural Research Center’s Consortium for their conference with the European Association of Architectural Education in May 2022. A significant focus continues to be WBC2022 in Melbourne, where we will join with W101 and TG91 for interactive sessions on Architectural, Spatial and Infrastructure Planning, and the Fourth Industrial Revolution. An interesting variety of papers has been received. One of the objectives of the sessions will be to develop the Research Roadmap.

A contract for the edited book on Architectural Design and Management in the Digital Age: International Perspectives, has been agreed with Wiley. Members of the Commission, other academics and practitioners have been invited to contribute chapters.

We are actively encouraging schools of architecture within university members of CIB to engage with the Commission, and it is extremely welcome that Dr Francesca Perugia has joined W096 as Communications Co-ordinator. We also supported the University of Hong Kong Early Career Researchers Group which was awarded the CIB Sebestyén Future Leaders Award 2021.

Future plans include the identification of research topics suitable for funding applications by international teams and publication in special editions of academic journals.

Wo98 Intelligent & Responsive Buildings

Further to the publication of its Research Roadmap, the Commission members have progressed the Roadmap through a number of book chapters, reports and on-going research. A full list of these is available on the Commission’s web page or on request from the CIB secretariat.

Wo99 Safety, Health, and Well-being in Construction

In 2021 W099 strengthened their partnership with W123 with another successful international joint virtual conference hosted by Glasgow Caledonian University. The Commission which comprises researchers and practitioners engaged virtually in September on the theme of “Changes and Innovations for Improved Wellbeing in Construction”. The international delegates had access to 44 industry and academic papers compiled by 89 authors from eight countries. Highlights include the now traditional Wo99
“Jimmie Hinze” best paper award and the lifetime recognition of Alistair Gibb for his immense contributions to the growth trajectories of both Commissions, in particular, his legacy as a past Wo99 coordinator that mentored those steering the ship of the Commissions.

W102 Information and Knowledge Management in Building

The Commission conducted a survey on techniques and technologies for managing Covid-19 related knowledge. 57 responses were received to an online survey, results revealed that the most common used and effective technology was video conferencing.

Papers were invited for “Architectural design and construction for smart and sustainable buildings and cities” for the journal Architecture Structures and Construction. This is in collaboration with researchers from Australia, China, UK and USA.

Members reviewed abstracts and papers received for WBC2022 for two sessions: “Learning from the pandemic for a smart and sustainable future” and “Managing risk through knowledge management”.


W104 Open Building Implementation

Commission members participated actively in organizing and submitting papers for two conferences - WBC2022 in Melbourne, and UEDC (“The City is [Not] a Tree: The Urban Ecologies of Divided Cities”) in South Africa in July 2022.

“Residential Buildings as infrastructure - Open Building is Practice” edited by Prof. Stephen Kendall was published by Routledge, most of the Commission’s key members as chapter authors, marking a new achievement of academic research and design practice in the global context.

After successful launching a new teaching program on Open Building in Hong Kong in Spring and a summer course in Qingdao, China in 2021, the second round of the course followed by an international forum with speakers from Holland and US is planned for 2022.

The US Open Building Council is organizing an international seminar in May 2022.

Beyond traditional paper publications, the members in China, Japan and Singapore launched a social media group in Wechat with intensive communications on Open Building.

W110 Informal Settlements and Affordable Housing

The objectives of W110 are to do research, public service and education in the informal settlements, incorporating inhabitants’ participation and how stakeholders can partner with communities to create sustainable
livelihood. These activities include the transfer of technologies to assist in the development or improvement of settlements' physical, economic, and social conditions. The research and education can be done through technical and cultural exchange between universities, scientific institutes, NGO or other stakeholders.

During the pandemic in 2021, the research, public service and education were limited, online education is still possible but research and public service were reduced particularly when field survey was needed. Research included: i) Development of Tourism Village based on inhabitants' Participation to Improve Economic Conditions; ii) Concept for Students' Boarding House in the informal settlements to minimize Pandemic Effects; and iii) Resilient Informal Settlements at Disaster Areas. It is hoped this will be published in 2022 as a book.

**W112 Culture in Construction**

As in 2020 the past year was blighted by the global pandemic. We hope to participate in WBC2022 in Melbourne, and we will continue with our focus on research of the ‘soft’ behavioural factors of the industry. Especially challenging, because it is increasingly evident that these factors are of growing importance in the strive for successful processes and satisfied stakeholders.

**W113 Law and Dispute Resolution**

The Commission's aim is to coordinate the identification of and response to the multitude of emerging legal challenges faced by the construction and property industries worldwide. The Commission's recent activities have largely focused on supporting joint projects with other CIB Commissions, including participation in the 2021 CIB International Conference on Smart Built Environment, and preparations for WBC2022.

The focus of activities over the next year will be on publication of a Special Issue, developing links with Early Career Researchers, the establishment of a W113 Student Chapter, and the publication of a Research Roadmap on Law and Dispute Resolution.

**W116 Smart and Sustainable Built Environments**

W116 supported TG96 with the CIB International Conference on Smart Built Environment held in Dubai on 14-16 December 2021. W116 are also working with TG96, W102, W112, W118, W123 and UN’s One Planet Sustainable Buildings and Construction Programme (OPN SBC) on sessions planned for WBC2022. Sessions have attracted strong interest and over 100 abstracts. W116's Smart and Sustainable Built Environment (SASBE) conference series being organised by TU Delft and held with the Ecocity World Summit was postponed and will now be held in February 2022, 450 abstracts have been received.

W116 will be representing the CIB on the Global Consensus on Sustainability in the Built Environment (GLOBE), cibworld.org/global-consensus-on-sustainability-in-the-built-environment. CIB, RILEM, IABSE, fib, ECCS and IASS have established a global expert task force to support sustainable built environment policy development and initiatives by supra-national and national authorities.

The Commission's research journal, Smart and Sustainable Built Environments, published by Emerald has grown steadily and publishes 4-5 editions a year with improved ratings.

**W117 Performance Information in Construction**

This Commission is the world leader in the development of project management, risk management and procurement technology. 2021 test results are proposing that the characteristics of automation and the Best Value Approach (BVA) are congruent and that the implementation of the BVA will increase project performance while decreasing project cost. The research hypothesis is that project performance can only be increased by minimizing the flow of information, the number of stakeholders involved in the project delivery and replacing them with the utilization of expertise. W117 hypothesis include identifying that the role of the client centric model and professionals must be minimized. Impacts of the research will be the...
changing of major concepts in the PMI PMBOK. W117 research results include four case studies of expert vendors in different industries who are testing out the BVA approach. W117 has recently written a manual for vendors and will be putting together another manual for clients to implement the BVA. The most challenging project in 2022 will be the implementation of the BVA in a quality assurance/quality control system to stabilize the performance of the client’s organization that is delivering a major construction project.

**W121 Offsite Construction**

In 2021, the Commission published a Special Issue “Offsite Manufacturing: Industry Transformation and Future Landscape Development” in the Construction Innovation journal. This generated significant additional interest in offsite and has opened up new fields of research, particularly in innovation and agility. In parallel to this, W121 has been developing a new Research Roadmap to replace Publication 372. Initial findings from this will be presented at WBC2022, with a new report planned later in the year. W121 will also be hosting a special session “Offsite Construction: Empowering Future Resilience and Capability” where 18 conference papers will be presented.

**W122 Public Private Partnership**

A Special Issue of the CIB-Recognised Journal of Built Environment Project and Asset Management (BEPAM) was published in early 2021, having been inspired by the W122 session at WBC2019 in Hong Kong. It was on the theme of “PPP - Theory vs Practice: Charting New Trajectories”. Guest edited by Boeing Laishram and Ganesh Devkar, it contained the Editorial and 9 peer-reviewed papers providing timely insights into topical issues in PPP.

The Commission was a co-organiser and supporter of the June 2021 International Webinar organised by University of Technology Sydney (UTS) entitled: “Optimising Public Private Partnerships for Infrastructure Investments in the aftermath of Covid-19”.

Two sessions will be held at WBC2022 in Melbourne with the theme of “Public Private Partnerships – Past, Present and Future”. A journal Special Issue will be published based on development and further peer-review of selected papers from this conference, maybe supplemented by a general call. It is hoped to include a brainstorming session, which could contribute to an updated Research Roadmap to be developed in 2023 as will a planned book to be edited by Yongjian Ke and Robert Osei-Kyei to capture, consolidate and disseminate the accumulated Body of Knowledge in PPP Project Management.

The W122 website for knowledge-building and exchange set up by Giovanni Migliaccio in 2020 will be linked to the CIB website: cib-w122-ppp.weebly.com.
W123 People in Construction

In its first year as a full Working Commission of CIB, W123 collaborated with W099 for another successful conference as already mentioned above. The new “John Smallwood best paper award” was initiated at the conference, Prof Smallwood was a founding member of the then Task Group and mentored existing leadership of the Commission. W123 also recorded a positive response to a special issue on “Covid-19 in Construction”, the SI has since been published in the Journal of Engineering, Design and Technology (JEDT).

TG81 Global Construction Data

In 2021 the Commission was not able to meet, but WBC2022 should allow the Coordinators to meet and recruit more active members to the Commission. Plans include webinars and workshops, and establishing a global construction database of relevant statistical information to be published annually.

TG91 Infrastructure

The Task Group has focused on the implications of electro-mobility on infrastructure and has prepared a session for the WBC2022 in Melbourne. Through our various research activities we have come to understand that the electrification of transport will have a profound impact on infrastructure in the world’s cities. Ranging from deliberations around charging requirements for EVs, how to use EVs to support the decentralising electricity grid, and how batteries can now remove the need for fossil fuel in land based vehicles, this presents a significant area of research. The Task Group has collaborated directly with the Sustainable Built Environment National Research Centre (SBEnrC) in Australia on a range of projects and we look forward to sharing findings at WBC2022.

TG96 Accelerating Innovation in Construction

TG 96 is focused on promoting research and dissemination activities for knowledge critical to construction industry efforts to accelerate the rate of innovation. The Coordinators successfully organised an international conference in December 2021, published a special issue “Accelerating Innovation for Smart Construction” in Infrastructure Asset Management, and developed a LinkedIn group.

Future plans include a track during WBC2022 in Melbourne, a special issue with Engineering, Construction and Architectural Management Journal, a new conference 2023-2024 and a report on the emerging research agenda in this area.

TG124 Net Zero Carbon Building Design and Construction Practices

This task group was formed in early 2022 and the official launch will be at WBC2022 in Melbourne. The task group aims to bring together the leading construction industry and other experts internationally to debate, research and reduce global construction emissions to create an international community of practice. The task group plans to conduct a global survey on net-zero carbon building design and construction to investigate current practices, available tools and resources, and how to enhance the industry to achieve global net zero carbon targets. The survey findings will lead to publication of a book and inform the future Research Roadmap around this theme.
CIB Student Chapters and Awards

A CIB Student Chapter may be a local, regional, national or even international organised group of students, provided that those students are enrolled at CIB Member universities or other institutions and preferably have an identifiable common interest in the work of one or more CIB Commissions or Priority Themes. CIB has 18 Student Chapters. For more details on the activities of any of these Chapters, please see cibworld.org/student-chapters.

CIB presents two awards for students, in addition CIB has made available an annual budget of €10,000 from its Special Activities budget. These initiatives are described below.

### ACTIVE STUDENT CHAPTERS 2021

| Curtin University, Australia                      | RMIT University, Australia                  |
| Hong Kong Polytechnic University, China P.R.     | University of Salford, UK                   |
| University of Hong Kong, China P.R.              | Tsinghua University, China P.R.             |
| Huddersfield University, UK                      | Virginia Tech, USA                          |
| University of Lisbon, Portugal                   | Western Sydney University, Australia         |
| LSBU, United Kingdom                             | ASOCSA-CIB Association of Schools of Construction of Southern Africa |
| Massey University, New Zealand                   | Hungarian CIB Student Chapter               |
| Middle East Technical University (METU), Turkey  | Wo80 Prediction of Service Life of Building Materials and Components Student Forum |
| Polytechnic of Milan, Italy                      |                                             |
| Purdue University, USA                           |                                             |

### CIB Sebestyén Future Leaders Award

We now hold three competitions for Student Chapters awards, two of which are new initiatives for 2021. The CIB Sebestyén Future Leaders Award is named after the late former CIB Secretary General Prof. Gyula Sebestyén (1980-1993) and dates from 2002. The Award is worth up to 2500 Euros and a call for proposals is issued towards the end of the calendar year.

In April 2021 we were delighted to announce that after receiving four very strong applications all very worthy of funding, indicating renewed interest in the global network of Student Chapters, the 2021 winners of this award was the University of Hong Kong. See overleaf for more information of the winning project, we look forward to hearing the results including at WBC2022.This project aims to propose a prototype communication media model specifically tailored to the construction industry and the academics whose needs are multi-scaled demonstration, immersive information transmission and semi-formal networking. This new model was constructed with the purpose of enhancing visual and auditory perception and experience, triggering positive and efficient
An exploration of a resilient communication model for CIB connecting academics and industrial practitioners in Covid-19

conversations between researchers and practitioners, as well as establishing semi-formal social connections. It would help rebuild a resilient and sustainable communication platform for linking the academics and industry people no matter in the Covid-19 and post-Covid-19 era.

In April 2022 CIB announced that Massey University’s Student Chapter was the 2022 winner. Their study “Lessons learned from the impact of Covid-19 – A case study of skill shortage on the construction workforce” was endorsed by Working Commissions W123 People in Construction and W055 Construction Industry Economics. The study’s overarching question is “How has Covid-19 impacted the current skill shortage in the construction workforce?”. To answer this question, they aim to achieve the following objectives:

1. To examine the impact the current Covid-19 pandemic has on the existing skill shortage in the construction industry.
2. To identify improvement opportunities towards mitigating the impact of Covid-19 on skill shortage in the construction workforce.
3. To develop a recovery guideline that informs the NZ government’s construction spending policy post COVID.
When the project is complete, the Chapter’s report on the outcome of the project will be published along with a CIB news article. The Chapter will also host a webinar to disseminate the results to the CIB community. CIB would like to thank the following Board members who served as judges for this year’s competition: Göran Lindhal, Kalle Kähkönen, Kathy Michell.

CIB Best Dissertation Award

This award was launched in 2021 for the best Doctoral thesis from within the CIB Student Chapter network. The Award consist of a Certificate and a cash fund of €2,500. Three outstanding early career researchers presented their doctoral research at CIB’s first ever Best Doctoral Research Awards competition in November 2021. Over 30 members attended the event, and the three finalists selected to present were:

**Dr. Esmaeel Eftekharian** completed his PhD in Infrastructure Engineering Western Sydney University, in 2021, and is currently a senior postdoctoral research associate in School of Mechanical and Manufacturing Engineering at the University of New South Wales, Sydney, Australia. His thesis title was “Investigation of Buoyant Plume Wind Enhancement”.

**Dr. Jessica Borg** completed her PhD at RMIT University in 2020 and is a Lecturer of Organisation, Work and Management at RMIT University. Her thesis was titled, “Work Readiness of Project Management Graduates in Construction: A Multi-method Multi-vocal Qualitative Study”.

**Dr. Ahmed Daoud** completed his PhD at London South Bank University in 2021 and is an Assistant Professor in the Civil Engineering Department at British University of Egypt. His thesis was titled, “Materials Procurement Conceptual Framework for Minimising Wastes in the Egyptian Construction Industry”.

Each candidate presented an 8-minute presentation followed by discussion with the judges. The full presentation can be found on CIB's YouTube channel, [www.youtube.com/watch?v=PXEsRkO39es&t=3307s](https://www.youtube.com/watch?v=PXEsRkO39es&t=3307s). CIB is grateful to three excellent judges for reviewing the written applications, engaging in insightful discussion with the top 3 finalists and selecting the overall winner: Dr. Graeme Larson, University College of Estate Management, Reading, UK, and Coordinator of Wo65, Organisational and Management in Construction; Dr. Theo Haupt, Nelson Mandela Metropolitan University, South Africa and CIB Board Member; and Dr. Andrew Agapiou, University of Strathclyde, and Coordinator of W113, Law and Dispute Resolution.

Dr. Esmaeel Eftekharian was declared the winner of the award and was awarded €1,500. As runners-up, Drs. Borg and Daoud were each awarded €500.
CIB Student Chapter funding
In 2021 the CIB Student Chapters Committee awarded funding to two collaborative proposals from Student Chapters.

Collaborative Research Award #1: RMIT University; Hong Kong Polytechnic University; Massey University; Tsinghua University; University of Hong Kong; Western Sydney University.

A progress update meeting with all participating universities was organised in March 2022, and the project is on schedule to present at WBC2022. The researchers have identified several interesting opportunities for CIB’s ECR network and Student Chapters to play a more active role in PhD training and employability. For example, grant application training workshop and mini grant application competition, which could provide training in terms of research funding applications that many of the interviewees consider essential but was missed during their PhD journey. More results from all participating universities will be disseminated during the employability workshop at WBC2022.

Collaborative Research Award #2: University of Salford; Politecnico di Milano.

The aim is to link the perspectives of ECRs, practitioners, and entrepreneurs to the ongoing global conversations on post-COVID evolution in the construction industry. A two-day virtual forum to bring together key perspectives from different countries and professions related to construction to explore the effects and aspirations of actors from academia, practice and entrepreneurial businesses is proposed. The research will provide a global forum for networking among stakeholders in the built environment such as ECR, academics, and entrepreneurs. A presentation of this initiative is scheduled for WBC2022.

2022 World Building Congress travel grants
In 2022 the €10,000 collaborative funding was re-purposed to provide travel stipends for students and early careers to attend WBC2022 in Melbourne. Twenty-three students and early careers researchers were awarded travel support funding. It is hoped this funding will help alleviate personal cost and leverage cost sharing with their universities and research institutes, and we look forward to seeing everyone at the Congress.
Other highlights from Student Chapters in 2021-22

In August 2021, this Chapter extended its collaboration efforts by organising another successful research seminar titled “Innovative Information Technology in the Built Environment”, with other Student Chapters from RMIT, Western Sydney University, and the University of Hong Kong participating.

In September 2021, Massey CIBSC started work on its contribution to the collaborative research project mentioned above on “Higher Degree by Research (HDR) training in Built Environment”. We have collected perceptions and expectations of academic and industry stakeholders on current HDR training programs in New Zealand.

In our second year we are honoured to have won the CIB Sebestyén Future Leaders Award 2022 for our research proposal “Lessons learned from the impact of Covid-19 – A case study of skill shortage on the construction workforce”. This is described elsewhere in this report.

Aiming to renew our Student Chapter with new PhD students, we announced a membership call in April 2021, as a result of which three new students of the Architecture, Built Environment and Construction Engineering Department were added to the team. The fresh perspectives and novel ideas revived our activities and with the guidance of previous and experienced CIB members of Polimi helped us to win CIB funding for the joint program with the University of Salford on Post-Covid Collaborations Models, which is reported elsewhere in this report.

Finally, a member of our student chapter has been appointed to CIB’s Student Chapter Committee, which will broaden Polimi’s networks and open new collaboration opportunities with other CIB student chapters worldwide as well as benefiting CIB.

In the past year, we have collaborated closely with several student chapters across the world on research webinars, our CIB-funded collaborative research project and activities for students at WBC2022. The funded project described elsewhere in this report offers an invaluable opportunity for our chapter members to experience global research collaboration, it is also a very interesting topic that allows us to review our PhD journey from a future-career perspective, and we have been able to identify several potential opportunities for the chapter to contribute to the PhD training improvements. The results and findings from this project will be presented and discussed during the student chapter activities at WBC2022.
This Student Chapter organised a “Student Sunset Social” in April 2021 in collaboration with the Centre for Smart Modern Construction (c4SMC). The event was an informal gathering for students at the School of Engineering, Design and Built Environment to share their thoughts on the impact of the pandemic on their academic, financial, and social life with fellow students. A short video representing the experiences and lessons learnt by the students during 2020 in view of the Covid-19 pandemic can be viewed at youtu.be/mGyX5i2E-g. We participated in a collaborative research seminar hosted by the Massey University Student Chapter in August 2021 on the theme of “Innovative Information Technology in the Built Environment”.

Our President 2020/21, Buddhini Ginigaddara, was featured on CIB in Conversation in August 2021, this is available on youtube via cibworld.org/cib-in-conversation. In the conversation, she shared her experiences as a PhD candidate at WSU and as President of the WSU Student Chapter.

A panel discussion on “Construction Management/Built Environment Research Methodology: Past, Present and Future” was held in November, as a prelude to the election of the new executive committee of the chapter. The panel was chaired by Professor Srinath Perera, and comprised Professor Mike Kagioglou, Associate Professor Xiaohua (Sean) Jin, and Dr Robert Osei-Kyei.

The Chapter is currently participating in the collaborative research project described elsewhere in this report on stakeholders’ perceptions on current PhD training programs in Built Environment and their expectations for potential improvement, and how to prepare PhD candidates with better employability.

The annual objectives of this Student Chapter anchor on three directions: Annual public events, research projects, and brand building.

Key public events were the 2021 Fall welcome party, a scholarly seminar on blockchain technology and green building life cycle analysis, a 2022 Lunar New Year workshop, and a research forum on Innovative design and construction technologies in May. In addition, two groups in the Chapter are working on two CIB funded projects described elsewhere in this report.

In 2022 we will re-construct the Chapter’s HKU WeChat public account. Currently, WeChat is the most popular social media among Hong Kong and mainland China students, and the account has become a crucial platform to promote academic seminars and student events at the faculty of architecture HKU and beyond.
Early Career Researchers network

Our worldwide Early Career Researchers (ECR) network was announced in December 2020 to support the development of the next generation of researchers in our sector. CIB defines ECRs as those researchers with less than 5 years’ research experience or within 5 years of obtaining a PhD or other terminal degree – although it is not necessary for ECRs to hold any specific level of qualification, the network is fully inclusive no matter the level of formal educational qualification, and participants may work within a university, an industry research or technology organisation, or a construction or manufacturing firm for example.

ECRs are researchers who are potentially engaged in research or innovation activities to impact the construction and built environment sectors. They are ambitious and looking to develop their career, so development of research skills, connections with researchers and stakeholder organisations around the world, and profile and recognition are some of the opportunities they are looking for.

To engage as widely as possible with this important community, CIB offers complimentary Individual Membership of CIB for up to two years to anyone who is eligible and wishes to join the network.

ECR Network activities

As well as participation in Working Commissions of direct relevance to their research, the network provides a programme of online events to add value for early career researchers and for CIB members. The calendar of events in 2021 was as follows:

- 4 February. Meet the Editor with Prof Stephen Emmitt, Building Research & Information (BR&I).
- 23/24 February. Initial ECR Networking Event. Over 60 ECRs from 23 countries attended 2 events to meet each other virtually and learn about each others’ research interests.
- 22/23 March. ECR event with Coordinators. Eleven Coordinators presented their Commission and Task Groups to the ECR network. Almost 50 ECRs attended the events and engaged in dialogue about with the Coordinators about their research agendas.
- 3 May. Meet the Editor with Prof Paul Chan, Construction Management & Economics.
- 15 September. Finding Research Funding. The session was moderated by ECR subcommittee Chair, Srinath Perera. Panelists included Suzanne Wilkinson, a Professor of Construction Management in the New School for Built Environment, Massey University, and Professor Dilanthi Amaratunga, Chair in Disaster Risk Management at the University of Huddersfield, UK.
- 14 October. Becoming a better journal article reviewer. This panel included Prof Vivian Tam, University of Western Sydney, Editor-in-Chief, International Journal of Construction Management and Farzad Rahimian, Editor, Smart and Sustainable Built Environment.
- 30 November. Meet the Editors series with Prof Mohan Kumaraswamy, Built Environment Project and Asset Management.
ECR activities at WBC2022 in Melbourne

**ECR Interactive Session WBC2022 – Wednesday 29 June, 3:30pm. Unravelling the Early Career Journey in the Built Environment**

This interactive session is aimed at all Early Career Researchers and researchers at other stages interested and/or working with early career academics. All are welcome to join this forum to share their experiences and engage in an important and often overlooked dialogue seeking a clearer understanding of ECRs’ perspectives on several prevalent issues including work life balance, transitions, progression, and promotion. Attendees will be able to share their perspectives to provide insight and guide CIB as the organization addresses these issues in a proactive, constructive way and spearheads supportive solutions for this important demographic.


This panel session will be led by Emerald Publishing and will be valuable for all researchers and Early Career Researchers in particular. The focus will be on strategies for writing papers for publication, scholarly engagement as a reviewer, and how to become an editorial board member of a journal.
World Building Congress 2022

Every third year, at the conclusion of the CIB triennium, CIB organises its Triennial World Building Congress. The primary aim is to provide a platform for all building and construction experts in the world, both in and outside the CIB community, to come together and exchange their expertise. More information and links to previous conferences' content is here: [cibworld.org/world-building-congress](http://cibworld.org/world-building-congress).

In 2022 RMIT University’s School of Property, Construction and Project Management in Melbourne are our co-hosts for the 22nd World Building Congress WBC2022 from 27th–30th June 2022, under the title “Building our Future: Informing practice to enhance the lives of current and future generations”.

Over 400 papers have been received and a similar number of participants are expected, whether in person or online in the first World Building Congress to be held in hybrid mode. The programme has up to ten parallel sessions at any time with the following ‘tracks’:

- Future-proof cities
- Knowledge and learning
- New ways of working
- Planning, partnerships and law
- Sustainable lifecycles
- Technology and innovation
- CIB Student Chapter and ECR sessions.
Hong Kong Polytechnic University’s Department of Building and Real Estate hosted the World Building Congress in 2019. Sub-themes were

- Smart Buildings & Infrastructure
- Smart Transportation & Mobility
- Smart Planning
- Design & Construction
- Smart Utilities & Facilities Management
- Smart Environment
- Smart Governance
- Policy & Economy
- Smart People & Living
- Smart Service

There were over 450 participants from 30 countries, 400 Papers and 4,000 proceedings pages. More information is available here: www.polyu.edu.hk/bre/docdrive/CIBWBC2019/welcome.html
Governance

CIB is an Association under the jurisdiction of Netherlands law. Since 2019 the CIB secretariat is provided by an operating company AIBC (the Association for Innovation in Building and Construction) which is registered as a Not-for-Profit company in Ottawa, Canada, and controlled through a majority of Members and Directors from the CIB Board.

Board and Committee Structure

CIB’s organisation chart shows the pre-eminence of the General Assembly of Members and the important role of the standing committees.
Officers and Board

The Board is appointed by the General Assembly every third year at the World Building Congress, and for the period 2019-2022 it consists of the individuals shown below.

President

Keith Hampson, Australia
SBEnrc, Curtin University

Vice Presidents

Mark Hastak, USA
Purdue University
(Chair of the Third-Party Funding task group)

Chelydra Percy, New Zealand
BRANZ – Building Research Association of New Zealand

Hon. Treasurer and Chair of the Administration Committee

Peter Paul van’t Veen, Netherlands
TNO

Chair of the Programme Committee

Kalle Kähkönen, Finland
Tampere University of Technology

Chair of the Marketing & Communications Committee

Ron Wakefield, Australia
RMIT University

Chair of the Student Chapters Committee

Albert Chan, Hong Kong, China PR
Hong Kong Polytechnic University
Board Members

Thorkild Ærø, Denmark
SBi – Danish Building Research Institute

Michael Lacasse, Canada
National Research Council/Construction Research Centre

Janne Tähtikunnas, Finland
RIL – Finnish Association of Civil Engineers

Göran Lindahl, Sweden
Chalmers University of Technology

Hisham Elkadi, UK
University of Salford

Lúcia Helena de Oliveira, Brazil
University of São Paulo Escola Politécnica (USP)

Theo Haupt, South Africa
Nelson Mandela University

Chrisna Du Plessis, South Africa
University of Pretoria

Bart Ingelaere, Belgium
BBRI – Belgian Building Research Institute

Péter Tóth, Hungary
ÉMI

Thomas Kirmayr, Germany
Fraunhofer Building Innovation Alliance, Fraunhofer Institute for Building Physics

Patricia Tzortzopoulos Fazenda, UK
University of Huddersfield

Brian Kleiner, USA
Virginia Tech

Qiang Xu, China PR
Shanghai Research Institute of Building Sciences,
Guests of the Board

Alex Abiko, Brazil
University of São Paulo – Escola Politécnica

Ammar Peter Kaka, UAE
Heriot Watt University Dubai

Kathy Michell, South Africa
University of Cape Town (UCT)

Srinath Perera, Australia
Western Sydney University (Chair of the Early Career Researchers sub-committee)

Sayeed Bakhtiyari, Iran
Building and Housing Research Center

Elections for the Board for the next triennium 2022-2025 will be held at the General Assembly in June 2022, after an open and transparent process of nomination which began in October 2021 and followed the requirements of the CIB Constitution. We are grateful for members’ interest in standing for the Board and look forward to working with them all.

Secretariat

Don Ward was appointed Chief Executive in March 2020 after a career in industry research, change programmes and best practice initiatives.

Michael Behm
Michael is CIB’s Programme Director, he was appointed in January 2020 and also holds an academic position at East Carolina University.

Debbie Gray
Debbie is the Membership and Marketing Manager, she joined CIB in October 2019 and also keeps an overview of our finances and manages our contract book-keeper and other service providers.

Third Party Funding Task Group

CIB Vice President Mark Hastak of Purdue University USA has chaired a task group to identify and secure opportunities for diversifying and growing CIB’s revenue through non-membership sources. Targets include charitable Foundations, other research funders, industry organisations in the built environment with an interest in the innovation space, eg digital construction, or with exposure to the risks of eg climate change. We welcome dialogue with any such stakeholders.
Financial Summary

For the year ending 2021 a summary of the audited accounts is as follows. The full annual report will be presented on behalf of the Board at the General Assembly in June 2022, and will be available thereafter to members on the CIB website alongside the report of the Committee of Examination appointed to review these accounts on behalf of the members.

Profit and Loss (figures in €000s)

<table>
<thead>
<tr>
<th></th>
<th>Balance 2021</th>
<th>Budget 2021</th>
<th>Balance 2020</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Income</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Membership fees</td>
<td>268</td>
<td>350</td>
<td>347</td>
</tr>
<tr>
<td>Other operating income</td>
<td>44</td>
<td>16</td>
<td>16</td>
</tr>
<tr>
<td><strong>Gross margin</strong></td>
<td><strong>313</strong></td>
<td><strong>366</strong></td>
<td><strong>363</strong></td>
</tr>
<tr>
<td><strong>Expenditure</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Personnel</td>
<td>10</td>
<td>8</td>
<td>131</td>
</tr>
<tr>
<td>AIBC</td>
<td>257</td>
<td>250</td>
<td>0</td>
</tr>
<tr>
<td>Office expenses</td>
<td>1</td>
<td>2</td>
<td>173</td>
</tr>
<tr>
<td>Donations and gifts</td>
<td>-</td>
<td>-</td>
<td>2</td>
</tr>
<tr>
<td>Depreciation</td>
<td>-</td>
<td>-</td>
<td>0</td>
</tr>
<tr>
<td>Special Activities</td>
<td>18</td>
<td>35</td>
<td>11</td>
</tr>
<tr>
<td>Doubtful debts</td>
<td>14</td>
<td>40</td>
<td>49</td>
</tr>
<tr>
<td><strong>Total Costs</strong></td>
<td><strong>300</strong></td>
<td><strong>378</strong></td>
<td><strong>365</strong></td>
</tr>
<tr>
<td><strong>Result</strong></td>
<td><strong>12</strong></td>
<td><strong>31</strong></td>
<td><strong>-3</strong></td>
</tr>
<tr>
<td>Financial and other costs</td>
<td>2</td>
<td>2</td>
<td>4</td>
</tr>
<tr>
<td><strong>BALANCE</strong></td>
<td><strong>10</strong></td>
<td><strong>29</strong></td>
<td><strong>-7</strong></td>
</tr>
</tbody>
</table>
### Balance Sheet  (figures in €000s)

<table>
<thead>
<tr>
<th>Assets</th>
<th>End 2021</th>
<th>End 2020</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Fixed assets</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Tangible fixed assets</td>
<td>0</td>
<td></td>
</tr>
<tr>
<td>Financial fixed assets</td>
<td>50</td>
<td>50</td>
</tr>
<tr>
<td></td>
<td>50</td>
<td>50</td>
</tr>
<tr>
<td><strong>Current assets</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Receivables, prepayments</td>
<td>249</td>
<td>0</td>
</tr>
<tr>
<td>and accrued income</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Cash and cash equivalent</td>
<td>172</td>
<td>149</td>
</tr>
<tr>
<td></td>
<td>421</td>
<td>149</td>
</tr>
<tr>
<td></td>
<td>471</td>
<td>198</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Liabilities</th>
<th>End 2021</th>
<th>End 2020</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Reserves and funds</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Operations reserve</td>
<td>172</td>
<td>162</td>
</tr>
<tr>
<td><strong>Current liabilities</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Trade creditors</td>
<td>9</td>
<td></td>
</tr>
<tr>
<td>Debts to participants</td>
<td>26</td>
<td>19</td>
</tr>
<tr>
<td>Accruals and deferred income</td>
<td>264</td>
<td>18</td>
</tr>
<tr>
<td></td>
<td>299</td>
<td>37</td>
</tr>
<tr>
<td></td>
<td>471</td>
<td>199</td>
</tr>
</tbody>
</table>
First World Building Congress in Rotterdam
Sustainable Construction made a CIB Priority Theme
"50 years of international co-operation to build a better world" published

1953
1993
2002

Consell Internationale du Bâtiment established
158th numbered report published
CIB Sebestyén Future Leaders Award launched for Student Chapters

1959
1995
2003
First World Building Congress in Rotterdam

Sustainable Construction made a CIB Priority Theme

158th numbered report published

CIB Sebestyen Future Leaders Award launched for Student Chapters

“50 years of international co-operation to build a better world” published

Conseil Internationale du Bâtiment established

Secretariat office relocated to Ottawa

Don Ward appointed as the 10th Secretary General/CEO

Keith Hampson elected as 25th CIB President at World Building Congress in Hong Kong

121st Board meeting hosted by Aalborg University, the first to be held online

Mark Hastak elected as 26th CIB President at World Building Congress in Melbourne

22nd World Building Congress in Melbourne in June
Organisations can join as Full, Associate or Individual members, our Full members as of June 2022 are as follows:

CIB is the global network for research and innovation in construction and the built environment

Published June 2022

www.cibworld.org
Email us at secretariat@cibworld.org for more details

This report is printed on sustainably sourced material