

Annual Report 2018

CIBSE Annual report & financial statements



<u>Index</u>

What we do
Highlights
President's message
Strategic themes
Sharing engineering knowledge – improving building performance
Developing our membership
Growing CIBSE Services
Raising awareness and driving our profile
Building services awards
Plans for the future
Financial accounts and summary
Members of the Board and Council



Front cover and above: The Enterprise Centre, Architype

What we do

Our charter:

The Chartered Institution of Building Services Engineers (CIBSE) is the professional engineering institution licensed by the Engineering Council that exists to:

- Promote, for the benefit of the public in general, the art, science and practice of engineering services associated with the built environment and industrial processes, known as building services engineering; and,
- Advance education and research in building services engineering, and disseminate the useful results of such research.

CIBSE facilitates improvements in the performance of buildings through the development and sharing of knowledge about buildings and how they perform, and through developing and maintaining our membership of competent and experienced practitioners.

CIBSE supports building services engineers by accrediting courses of study in further and higher education, approving work based training programmes and providing routes to full professional registration and membership, including Chartered Engineer, Incorporated Engineer and Engineering Technician. Once qualified, building services engineers can access a range of CIBSE services, all focussed on maintaining and enhancing professional excellence throughout a career. CIBSE is the standard setter and authority on building services engineering. It publishes guidance and codes, which are internationally recognised as authoritative, and sets the criteria for best practice in the profession, and provides a range of services to our members, industry and the public.

The Institution speaks for the profession and is consulted by government on matters relating to construction, engineering and sustainability. It is represented on major bodies and organisations that govern construction and engineering occupations in the UK, Europe and worldwide. Annual report 2018 & financial statements

12 titles published in 2018



certified energy assessors with CIBSE Certification

More than 20k

CIBSE members in 100 countries

98

member organisations in CIBSE Patrons



<u>18k</u>

average monthly visitors to CIBSE Journal website <u>369</u>

members of Society of Digital Engineering



Special Interest Groups



President's message

In my Presidential Address last May I spoke about the many and varied changes impacting our world, the construction industry and building services engineering. The theme for my presidential year has been how our profession and CIBSE can adapt to the unprecedented changes around us and continue to thrive.



Stephen Lisk

CIBSE's goal is to make the built environment better for people, and as a charity this has put us at the heart of the drive for change in the construction industry. Following the tragic fire at Grenfell Tower in London, CIBSE has been supporting efforts to ensure that lessons are learned and changes implemented. Our Institution responded to Dame Judith Hackitt's Independent Review of Building Regulations and Fire Safety, and CIBSE and our members continue to work in collaboration with government to drive safer multi-storey buildings for their residents. In all, CIBSE responded to 29 consultations and calls for evidence by UK Government, Devolved Administrations and Select Committees last year, which included a significant contribution to the Environmental Audit Committee's report on the pressing concern of heatwaves and adapting to climate change. Like industry and other professional bodies, CIBSE must itself adapt to change. Over the past year we have worked to gain a greater understanding of our own identity, how we can best serve the needs of society and our members, and the ways in which our members want to interact with CIBSE today and into the future. CIBSE is an increasingly diverse global organisation with more than 20,000 members in more than 100 countries around the world. Last year the CIBSE Young Engineers Network – our valued support network for younger members - appointed its first global chair from outside the UK, Munis Hameed, from the United Arab Emirates, and CIBSE ran training courses as far afield as Mauritius and Slovakia. We have also placed greater focus on the diversity of our membership, re-establishing the Inclusivity Panel, to monitor, advise and ensure that the work of all the inspirational people across our profession receives due recognition.

Our Knowledge Portal plays an ever more important role in ensuring that the guidance needed to respond to today's rapid technological, construction and regulatory changes is readily accessible to our global membership and the broader industry. With the Knowledge Portal recording 1,000,000 visits in 2018, this online route is clearly in demand, and CIBSE will be making knowledge available in more new digital formats in the future. Alongside our digital initiatives, events like our Building Performance Awards, Technical Symposium and Build2Perform Live are valuable in providing opportunities for all members, from the newly qualified to business leaders, to meet, update learning, address industry challenges and share experience.

The Institution has active communities around a range of disciplines and reaches out to the industry via 18 Special Interest Groups, which collectively engage with some 45,000 non-members. The values and professionalism of CIBSE and our members are particularly evident in our volunteer communities which develop in line with advancing technology. For example, our Society of Digital Engineering, which provides a forum for those involved in digitising the built environment, has grown its membership threefold since 2017 and hosted its inaugural Digital Engineering Awards at Build2Perform Live in 2018. By shaping and participating in activities like this, our members are positively influencing both their own future and the future of our Institution.

Delivering such change is not always easy. CIBSE is a charity which exists to deliver public benefit while ensuring its continuing relevance for the future and providing today's members with professional recognition, knowledge and support to better serve society. But we all know that construction must change, and, the CIBSE community is committed to being at the forefront of delivering that change. We are leading the way through many corporate collaborations and individual actions in our daily lives, whether through volunteering or setting examples in our workplaces.

That includes the work done by the network of volunteers across our Groups, Divisions, Regions, Networks and Committees, who make so many of our events and activities happen. I would like to thank all our volunteers for their energy and passion in organising events and in rising to the challenge I made in my Presidential Address: to encourage others to follow their lead and be engaged. Thanks are also due to CIBSE's hard-working staff for their commitment to our Institution and its work. Over my presidential year, I continue to be impressed by those who are helping to address and lead change by contributing their knowledge, experience, skills and time for the benefit of our profession, broader society and built environment.

Our annual report gives a summary of CIBSE's work over the past year and outlines the progress we have made. But the process of change is far from over and this annual report gives a flavour of what is to come in the next phase which will be guided by Professor Lynne Jack, Heriot-Watt University's Director of Research, Malaysia, and CIBSE's first woman President.

CIBSE has been supporting efforts to ensure that lessons are learned and changes implemented

"

"

Strategic themes

Theme 1: Improving building performance

Building services are key to keeping building users as safe and comfortable as possible, promoting occupant health and wellbeing, minimising impact on the environment during construction and in use, and driving improved performance and productivity.

CIBSE seeks to foster and promote improvement in the performance of buildings to the benefit of their users, developers and owners, as well as the broader environment and the economy.

Around 40% of the UK's total carbon emissions are associated with its building stock, and the reduction of these emissions is central to lowering the UK's overall carbon footprint as required by the Climate Change Act. In 2017 global energy related CO2 emissions reached a record 32.5 gigatonnes, while economic losses from climate related disasters – such as hurricanes, floods and drought – reached a record \$240 billion, according to the report 'The Economic Case for Climate Action in the United States', by the Universal Ecological Fund. In 2018 the Special Report of the Intergovernmental Panel on Climate Change emphasised the urgency of reducing emissions overall, and therefore the need to improve the performance of buildings.

In the UK, the Independent Review of Building Regulations and Fire Safety has also highlighted the need for buildings to perform. CIBSE is committed to supporting the Review and its implementation.

CIBSE champions continuous improvement in building performance as a natural consequence of what we do day-to-day. It underpins all the work we do, from accrediting courses, creating routes to professional registration, training, producing guidance and publications, setting standards and advising government and policy makers. It is the overarching theme of our national Build2Perform Live event and the focus of celebration at the Building Performance Awards. All of these activities give engineers and the public a better understanding of the importance and practicalities of delivering better performing buildings to improve the UK's built environment.

Building services are key to keeping building users as safe and comfortable as possible

"

Annual report 2018 & financial statements



Centre for Medicine, University of Leicester, Willmott Dixon

Theme 2: Sharing engineering knowledge

Knowledge sharing is one of CIBSE's primary roles in the industry. Working with the industry and its clients, CIBSE serves wider society by developing and disseminating internationally recognised guidance and codes. This knowledge provides authoritative guidance for the design, installation and operation of engineering services in buildings. It enables engineers to keep up to date with best practice in technology and standards, and supports the implementation of policies to improve the safety, comfort and productivity of buildings and reduce their carbon emissions.

The built environment is increasingly complex and interconnected by electrical, heating and controls networks. Technology is constantly evolving and building services engineers need to keep abreast of the changes to deliver the best outcomes for clients and end users. By improving their skills and knowledge they can help everyone to live and work in safer, healthier and more comfortable spaces, be more productive, reduce energy bills, and minimise the environmental impact of buildings. This depends on access to up to date and accurate professional guidance on a range of topics.

CIBSE's Knowledge Portal makes this knowledge publicly available and all CIBSE members have access to the Portal as a benefit of their membership. The availability of CIBSE guidance through commercial information services extends access to the broader industry in the UK and beyond.

Our whole industry needs to better understand allied professions and avoid silo thinking. We must be aware of the impact of technological advances, new standards and legislative changes on the built environment. By advancing the education of engineers and keeping them at the forefront of building services research, society benefits from better performing buildings.

Theme 3: Membership

The building services profession forms a significant community whose expertise is applied globally to help deliver comfortable, valuable and sustainable buildings. The diversity, breadth and strength of that membership helps CIBSE to ensure that building services professionals have access to the latest information and research and have industry-wide influence.

CIBSE relies on its members to help generate knowledge in a variety of specialisms for industry and public benefit across many areas of the world. The diversity of CIBSE's membership is central to achieving these goals. CIBSE delivers the greatest benefit to society when its knowledge is sourced from the full spectrum of people and professions who form its membership.

CIBSE membership also recognises and accredits expertise, so that those who are competent can be widely and reliably recognised. In this way, CIBSE promotes good practice and ensures that the best engineers who value good building performance are given due prominence in the industry. CIBSE also places a high priority on recruiting international members to ensure these standards are spread globally.

Theme 4: Growing CIBSE Services

CIBSE Services Ltd is the commercial arm of the Institution. It supports CIBSE's charitable aims by delivering products and services that adhere to its aims and ethos.

CIBSE Services helps to raise the profile and status of building services engineering through the delivery of information, including training and certification, which provides a route for suitable practitioners to deliver high quality services.

CIBSE Certification was formed to provide an independent certification body for the approval of personnel. Those who achieve certification must meet and maintain stringent standards, which are independently set. CIBSE Certification is a premium brand in the market. Certified professionals also benefit from the support of CIBSE Certification and access to CIBSE knowledge, training, and events.

The work of CIBSE Services enables the Institution to carry out wider charitable actions that benefit society as a whole, such as running the Technical Symposium at a cost that enables young and newly qualified engineers to benefit from the knowledge it produces.



Theme 5: Raising awareness and driving our profile

To maximise the impact of the work CIBSE does, it is necessary to demonstrate building services engineering in its broadest sense to as diverse an audience as possible. Our monthly CIBSE Journal, the annual Building Performance Awards, the Technical Symposium and the Build2Perform Live event all serve to raise wider public awareness of what we do and of the importance of building services engineering to society. We also raise awareness with policy makers through consultation responses and legislative enquiries and by participating in All Party Parliamentary Groups.

The public benefit of the research CIBSE carries out can be significant, but often the general public is unaware of the issues behind buildings and building performance. Raising awareness helps people to appreciate the benefits of supporting building services engineers in their careers and in their task of improving building performance.

Demonstrating the importance of good building performance, and the link with good building services engineering, reinforces the message that the success of the built environment is crucial to many areas in the public consciousness, from productivity to carbon emissions. Raising public awareness in this way helps to promote dissemination of CIBSE's research.

Killynure Green, Carryduff, Choice Housing Ireland

Sharing engineering knowledge improving building performance

CIBSE strives to create best practice and authoritative guidance on the principles and practical provision of better building performance. helping engineers keep up to date.

In a fast-changing environment that demands digital solutions for the delivery of knowledge and guidance, we are in the process of re-imagining our knowledge generation and delivery processes.

As a charity, our aims are driven by our charter to support 'the Science. Art and Practice of building services engineering, by providing our members and the public with first class information and education services'. In a changing world we are therefore adapting the way we deliver content.

In 2018, 12 titles were published including:

- Commissioning Code L: Lighting
- TM60: Good Practice in the Design of Homes (Homes for the Future Group)
- DE9: Application of Soft Landings and Government Soft Landings in Building Services Engineering
- DE6.1: Cyber Security in Building Services Design
- LG17: Lighting for Retail Premises
- SLL Lighting Handbook
- Working with WELL: Using the WELL Building Tool in the UK - Air













Technical Memorandum (TM) 60 - Design of Homes

TM60 – Good Practice in the Design of Homes is CIBSE's first significant source of guidance on the design of homes and aims to help building services engineers and other professionals working on their planning, design and construction. It describes good practice in the design and delivery of homes that are safe, fit for purpose, resource efficient, low carbon, comfortable, healthy, and easy to operate and maintain.

The guidance can be applied to houses, apartments, student accommodation and care homes, both old and new. Although TM60 is predominately about designing good residential services it also covers the full project life cycle from site analysis through to construction, handover and operation. It highlights the integrated nature of good practice design, where a multidisciplinary approach is often required. Integrated design will require greater collaboration and understanding of the impacts of system selection and various decisions through the design, construction and subsequent occupation and operation of homes.

Digital Engineering Series

The CIBSE Digital Engineering (DE) Series has been developed to help the whole built environment supply chain tackle the practical challenges of digital engineering and building information modelling (BIM). Adoption of digital information management offers the prospect of passing as-built information through to those who own, operate and maintain buildings, enabling them to improve their performance through their life cycle. This concept of a 'golden thread' was a key recommendation of the Independent Review of Building Regulations and Fire Safety.

In 2018 the following titles were added to the series:

- DE6.1: Cyber Security in Building Services Design
- DE9: Application of Soft Landings and Government Soft Landings in Building Services Engineering

In addition, a library of online symbols is being developed, which will provide an agreed set of symbols for use in digital processes. The guidance and library are available digitally on the CIBSE website, as part of our commitment to supporting the adoption of digital engineering.

www.cibse.org/knowledge/cibse-publications/cibse-digitaltools_

New formats for knowledge outputs

CIBSE is already responding to the need for new formats and digital outputs. Both the Digital Engineering Series and Working with WELL are examples of innovative designs and formats. The introduction of Energy Benchmarking and Standard Symbols in 2019 will see the arrival of two new important digital 'tools'. In addition, CIBSE's Knowledge Management Committee has approved 57 outputs for delivery in the next three years.

Technical Symposium

The annual CIBSE Technical Symposium offers a valuable opportunity for professionals of all ages to learn about the latest building services innovations and research. CIBSE particularly encourages early career professionals to participate.

The 2018 theme, 'Stretching the Envelope', looked at the challenges and changes facing our industry. More than 70 speakers considered our responsibility to deliver healthy and productive environments that reach beyond 'business as usual', while addressing the uncertainties of climate, resources, environment, and security.

The Symposium was held at London South Bank University and supported by sponsors Rinnai and Zehnder. More than 200 delegates participated in two days of presentations, discussions, debates and the informal networking that fosters new professional relationships and nurtures existing connections. The papers and proceedings of the Symposium are available online. Several presentations are being developed for publication in Building Services Engineering Research and Technology Journal (BSER&T).

Technical Journals

CIBSE publishes two technical journals: Building Services Engineering Research and Technology (BSER&T), and Lighting,



(I-r) Rowan Crowley, CIBSE; Dr Jennifer Schooling, Centre for Smart Infrastructure and Steve Harris, SNC Lavalin Atkins

Research & Technology (LR&T) – which celebrated its 50th year in 2018. Both Journals continue to go from strength to strength, with BSER&T published six times a year and LR&T eight times a year in response to demand from those submitting papers. These significantly increase the role of the Institution in disseminating research to a wider audience. The Journals are available to CIBSE members as a benefit of membership and have a worldwide subscriber base supported by our publishing partner Sage.

Once again a paper published in BSER&T gained national media coverage. This paper highlighted the longer term implications of rising carbon dioxide concentrations and was written by Professor Tadj Oreszczyn and colleagues at University College London. This coverage demonstrates the topicality and relevance of the journals and the importance of the research they publish.

Divisions (Societies)

The Society of Digital Engineering (SDE) was launched in 2017 and has continued to develop in 2018.

The CIBSE Patrons became the sixth of CIBSE's 'Divisions', as they are defined in the by-laws, in 2018. The six Divisions are:

- Society of Digital Engineering (SDE)
- Society of Façade Engineering (SFE)
- Society of Light and Lighting (SLL)
- Society of Public Health Engineers (SoPHE)
- Institute of Local Exhaust Ventilation Engineers (ILEVE)
- CIBSE Patrons

Membership is open to all CIBSE members. Each Division has its own corporate membership, for those who can demonstrate specific engineering competences in the discipline of the division.

Society of Digital Engineering (SDE)

The Society of Digital Engineering was formed to provide a forum for those involved in digitising the built environment, whether as designers, contractors, manufacturers, clients, facilities managers or software vendors. Membership is open to all those involved in digital engineering, building information modelling (BIM), software for design and analysis of buildings, computer aided facility management and other related activity.

It provides professional recognition to digital engineers and a route to CIBSE membership and registration with the Engineering Council.

The Society has 369 members, 40% of whom are new to CIBSE – this represents an almost threefold growth since 2017.

In 2018 it hosted the inaugural Digital Engineering Awards at Build2Perform Live. It also ran three sessions there dedicated to digital engineering and how it impacts and relates to other activities in which members engage.

The SDE works closely with the CIBSE Digital Steering Group, which works to create the products and services used by members. In 2018 the Digital Steering Group has:

- Created the first batch of standard symbols, hosted on the CIBSE website and freely accessible to all
- Completed the first nine digital engineering publications seven of which are also eLearning modules available on the CIBSE eLearning platform and through our partner member, Excitech, via their Pinnacle eLearning platform
- Continued to provide our Fundamentals of BIM course, both at CIBSE and in-house
- Created and launched the CoDEC (Certificate of Digital Engineering Competency) scheme, initially for manufacturers, but with the aim of extending it to other sectors of our industry

The Society of Façade Engineering (SFE)

The Society of Façade Engineering brings together the disciplines involved in the process of design, supply, installation, testing and operation of building façades in a forum where they can work together to advance knowledge and practice in façade engineering. The Society includes architects, façade engineers, building services engineers, structural engineers and contractors.

The Society promotes good practice to enable today's increasingly complex building façades to meet the many and varying performance criteria, including safety, weather-tightness, thermal performance, ventilation, lighting, solar control, and acoustics.

The Society also serves to recognise the competence and engineering credentials of those involved in the façade industry. Membership is open to individuals with an involvement in façade engineering.

In 2018 the Society actively contributed to work in response to the Grenfell Tower fire. A working group on façade performance was set up to respond to the Independent Review of Building Regulations and Fire Safety and to provide guidance to members on the emerging issues and regulatory changes. The Grenfell Tower fire has brought the discipline of façade engineering into the spotlight and emphasised the importance of the Society in recognising competent members based on formal professional membership recognition requirements. The Society is contributing to the ongoing work on professional competence in response to the Independent Review.

The Society of Light and Lighting (SLL)

The Society welcomes all who are interested in the art, science and engineering of light, lighting and its applications. Lighting designers, consulting engineers, researchers, students, academics, manufacturers and sales staff all contribute to its membership. It offers authoritative guidance, professional recognition and a range of technical events. SLL is recognised worldwide as an authority on lighting and its applications.

The Society published updates to several Lighting Guides, including LG1: Industrial Lighting, LG13: Places of Worship. New Guides, LG17: Retail Lighting and LG18: Lighting for Licensed Premises, were published and the Lighting Handbook was completely rewritten.

The SLL LightBytes series was presented at two venues in 2018 and at LuxLive in London and continues in 2019. The series was presented in partnership with sponsors Fagerhult, Thorlux, Zumtobel and Xicato. Developed in association with the CIBSE Facilities Management Group, it focussed on four topics: how to specify a luminaire, retrofit and upgrade, emergency lighting and the Internet of Things, and formed the basis of the lighting session at Build2Perform Live.

The Society exhibited at LuxLive in November, where the final of the SLL Young Lighter of the Year Award was held, with the winner announced at the Lux Awards.

The Society exhibited at Light Middle East in October, promoting the Society in the United Arab Emirates (UAE) region and welcoming new members. This supports our members in the region and promotes CIBSE and UK knowledge and expertise. At this event SLL hosted the third Ready Steady Light Middle East.

Society of Public Health Engineers (SoPHE)

The Society aims to provide a higher profile and focus for public health engineers.

There are currently 65 companies registered as SoPHE Industrial Associates who wish to be involved with the Society's work and support the technical programme.

The Society runs a programme of technical events through the year, which are open to all in the industry. These cover various aspects of water, drainage, energy, sustainability and legislation. They also include projects incorporating cutting edge engineering solutions which go beyond current design practices and challenge the industry norms.

In 2018 the Society partnered with the Chartered Institute of Plumbing and Heating Engineering and Havering College, London, to develop the Havering College Plumbing Centre of Excellence, launched in autumn 2018, to provide advanced training in the public health discipline.



The Institute of Local Exhaust Ventilation Engineers (ILEVE)

The Institute was established to promote air quality in the workplace and to reduce ill health and death due to occupational lung disease caused by airborne contamination and hazardous substances in the working environment. There are around 8,000 new cases of occupational lung disease annually, making it a significant problem for all those affected, their families and dependants and a serious burden on the healthcare system.

The Institute recognises competence in the practical application of local exhaust ventilation and seeks to raise awareness of the importance of good air quality and ventilation in workplaces. The Institute's Competence Cards are issued to members as proof of their peer assessed and evidenced competence and to provide a benchmark for LEV competence standards. ILEVE offers a path to full professional registration for engineers in local exhaust ventilation and a means to maintain and enhance professional standing.

ILEVE works with the Health and Safety Executive (HSE) and with other professional and trade bodies to raise awareness of the need for local exhaust ventilation to safeguard workplace health and promote competence.

ILEVE exhibited and ran CPD sessions at the British Occupational Hygiene Society conference in February and with the CIBSE HVAC Group at Build2Perform Live, reaching out and raising awareness of specialist LEV systems and practitioners.

CIBSE Patrons

CIBSE Patrons is a network of businesses that collaborate to give financial, technical and moral backing to a wide range of initiatives led by CIBSE. There are currently 98 member

The Enterprise Centre, Architype

organisations in CIBSE Patrons, including consulting engineering practices, manufacturers, contractors, and trade bodies.

The Patrons' primary focus is on 'nurturing talent'. They support a wide range of initiatives designed to attract, encourage and improve the recruitment, development, training and retention of engineers on behalf of the industry at large. This support ranges from the production of careers booklets, to the sponsorship of bursaries, to their growing role as lead supporter of the CIBSE Young Engineers Awards.

The Patrons are long term supporters of two of the UK's leading engineering and construction-focused educational charities: the Arkwright Scholarship Trust, and Design, Engineer, Construct. In 2018 they presented £1,500 to their Arkwright scholar, Holly Farrow, a student at Stamford School, Lincolnshire.

In late 2018 the CIBSE Patrons were formally made a CIBSE Division in order to better align and strengthen their relationship with the Institution. This will enable Patrons to work increasingly closely and effectively in support of CIBSE, for example by joining and supporting the Technical Symposium planning committee, assisting the development of new CIBSE knowledge, and supporting Build2Perform Live.

In 2019 the Patrons will celebrate their 40th anniversary, providing the opportunity to raise their profile, celebrate their achievements, unveil plans for the future and attract new members.

Special Interest Groups

The 18 Special Interest Groups cover topics ranging from day-lighting and lifts to controls and electrical services. Participation is open to all who are interested, whether or not they are CIBSE members. A key objective for the groups is to promote CIBSE membership.



Louvre Abu Dhabi, BuroHappold Façade Engineering

Through the groups, CIBSE engages with some 45,000 non-members with a specific interest in one or more of the topics covered by the groups:

1. ASHRAE	10. Heritage
2. Building Simulation	11. Homes for the Future
3. Chimneys and Flues	12. HVAC Systems
4. CHP and District Heating	13. Information Technology (IT) & Controls
5. Daylight	14. Intelligent Buildings
6. Electrical Services	15. Lifts
7. Energy Performance	16. Natural Ventilation
8. Facilities Management	17. Resilient Cities
9. Healthcare	18. School Design

The groups run a variety of technical activities and provide knowledge and information through a range of channels. The Natural Ventilation Group provides a regular newsletter to those registered with the group. The CIBSE ASHRAE Group provides a regular programme of technical webinars, involving speakers from around the world.

The Homes for the Future Group led the development of TM60 – Good Practice in the Design of Homes, which provides guidance on the integration of building services into dwellings, including single family dwellings and apartments. The CHP and District Heating Group continues to contribute to the update of the Code of Practice for District Heating and associated training and guidance. The Lifts Group also runs a programme of technical activities, including an annual oneday technical seminar, and maintains CIBSE Guide D, the Lifts Guide. In 2018 the Heritage Group maintained a steady programme of meetings on heritage matters allied to its ongoing work curating and collecting an unparalleled archive of information on historic building services installations, equipment and manufacturers. Much of this is accessible via its webpages. The Group archives are a unique and invaluable source of knowledge of heritage building services systems and provide access to historic material which is unmatched in any other location.

The Energy Performance Group had a busy year with a series of technical events, called Power Hours, featuring several speakers and lively debate. It also provides a regular news service to members on energy related matters and is working on several topical briefings.

Several groups contributed to the Build2Perform Live programme, providing speakers and developing content, which enabled the spread of technical coverage at the event to reflect the very broad range of expertise within the Institution.



Energy Action

Developing our membership

CIBSE is the leading professional body for the building services profession, with more than 20,000 members in more than 100 countries.

CIBSE members are part of a network that offers professional support and expertise across the globe. They work in partnership with other professional bodies, construction and engineering firms worldwide to deliver engineering excellence in the built environment.

CIBSE provides members with:

- Unlimited access to the Knowledge Portal, with digital access to all CIBSE guidance
- Subscription to the CIBSE Journal, CIBSE email newsletter, BSER&T and LR&T Journals
- Preferential rates on printed copies of publications from CIBSE and other publishers
- Extensive opportunities for professional development and networking



(I-1) Kevin Kelly, CIBSE Vice-President; Colin Moynihan, Airflow Services; Jen Kennedy, Arup; Mona Holtkötter, CIBSE Ireland Vice-Chair; Derek Elton, Wilo; John Burgess, Arup at CIBSE Ireland 50th Anniversary dinner

Regions

The Institution is organised on a regional basis. There are 16 regions in the UK and four overseas – in Ireland, Australia and New Zealand, Hong Kong and the United Arab Emirates (UAE). There are also Chapters in Canada, China (Shanghai and Chongqing), Qatar, Singapore and Sri Lanka.

The CIBSE regions in the UK and around the world continued to play a major role in the Institution in 2018. Each region is driven by a committee of dedicated volunteers who aim to engage with members and improve understanding of building services engineering among other professions and society in general, by organising periodic meetings and other activities relating to the built environment.

Events and activities in the regions would not happen without the effort and enthusiasm of more than 200 CIBSE members who give their time to promote building services engineering, organise events for continuing professional development (CPD), provide networking opportunities and support those looking to become professionally registered.

The Ireland region celebrated its 50th anniversary in 2018. More than 700 people attended its celebration dinner and awards ceremony in December. Three awards were presented on the night to companies that demonstrated particular excellence in building services engineering.

The Australia and New Zealand (ANZ) region ran a regional roadshow in the autumn titled 'The Anatomy of the Smart Building'. An international panel of speakers presented to over 250 delegates on how to deliver smart, energy efficient infrastructure. The 20 regions are:

- Australia & New Zealand
- East Anglia
- East Midlands
- Home Counties North East
- Home Counties North West
- Home Counties South East
- Home Counties South West
- Hong Kong
- Ireland
- Merseyside & North Wales
- North East
- North West
- Northern Ireland
- Scotland
- South Wales
- South West
- Southern
- United Arab Emirates
- West Midlands
- Yorkshire

Young Engineers Network (YEN)

The CIBSE Young Engineers Network is a global network of regional centres offering a forum and support network for young engineers within CIBSE. Each centre is run by a committee of young engineers who organise technical and networking events in their area. A centre can consist of young engineers who live or work in that area or may be university or college based.

YEN exists to:

- Promote a positive and welcoming image for building services, especially for those who did not study the discipline at university
- Enable young engineers to engage more closely with CIBSE at an early stage in their careers
- Encourage more women to join and remain involved in the building services profession
- Establish a formal link with CIBSE Council and Board
- Help younger engineers to promote building services engineering to school and university students
- Guide young engineers towards a long term career in building services

In 2018 YEN appointed its first global chair from outside the UK – Munis Hameed, who is based in United Arab Emirates (UAE) – further emphasising the international reach of the network.

Encouraging engineers of tomorrow

CIBSE continues to promote a career in building services engineering to school-age children through careers fairs and STEM ambassadors in schools. CIBSE has produced a suite of material designed specifically for students and their parents. The Career Guides explore what it is like to work in the building services industry, highlight the benefits of working in the sector and provide clear guidance on how to develop a career as a building services engineer.

The Guides are freely available to download on the CIBSE website at: <u>www.cibse.org/careers</u>

CIBSE membership also runs a programme of visits to universities to promote membership of the Institution and building services engineering as a career overall.

Inclusivity Panel

We believe that an inclusive culture brings resilience, creativity and innovation – qualities that deliver both better buildings and a stronger building services engineering community. CIBSE is working hard to ensure that our organisation and profession are welcoming to all, for the benefit of all.

The panel continues to work on delivery of its three key aims:

- Improve awareness and understanding of inclusivity and diversity across CIBSE, and embed these concepts within the Institution's strategic aims
- 2. Improve the breadth and quality of data captured about staff and members 'protected characteristics'
- 3. Increase the proportion of female members and registrants



BuroHappold Engineering

<u>Growing CIBSE</u> <u>Services</u>

In 2018 CIBSE Services' business streams made good progress through the use of the new Salesforce CRM (Customer Relationship Management) software, developing marketing activities and focusing on providing products and services to meet demand.

Developments included:

- New trainers and courses, increased in-house courses and online learning activities and grew its customer base
- CIBSE Certification gained ISO 9001 accreditation, and grew its Energy Savings Opportunity Scheme (ESOS) Register
- A complete review of the knowledge generation process, introduction of digital tools such as Energy Benchmarking and development of Digital Engineering Series eLearning modules
- CIBSE Journal attracted plaudits from members and supply chain and launched new digital hubs
- The Technical Symposium and Build2Perform Live attracted more sponsors, delegates and exhibitors



Women's Breakfast, Build2Perform Live



CIBSE Journal

The CIBSE Journal continued to cement its editorial reputation in 2018 with its high quality news and technical coverage and detailed building features, and notably with its ongoing, measured reporting of the Independent Review of Building Regulations and Fire Safety in the wake of the Grenfell Tower fire of 2017.

The Journal continued its focus on fire safety engineering by hosting a smoke control round table discussion in September, sponsored by Colt, bringing together specialists from the Smoke Control Association, Hoare Lea, Arup, Cundall, BuroHappold, Spie UK, BRE Global and CIBSE.

Throughout 2018 the magazine published high-quality in-depth case studies and articles reflecting the diversity of interests and specialisms of CIBSE members. These included features on: the façade engineering for Zaha Hadid Architects' Morpheus Hotel in China; the Building Performance Award winning Oriam, Scotland's Sports Performance Centre; lighting design on London's Crossrail; heat recovery at the University Arms Hotel in Cambridge; and a report on a major BRE study on biophilic office design. The Journal also continued to support CIBSE events and initiatives with coverage of the Building Performance Awards, Build2Perform Live, Young Engineers Awards, Technical Symposium, new CIBSE guidance, and Group and Division events.

There were six stand-alone supplements in 2018. These were: school and education facilities, commercial heating, building information modelling (BIM)/digital engineering, hotel and leisure facilities, lighting, and a continuing professional development (CPD) directory guide.

Two new digital hubs on cooling and pipework were launched on the Journal website as sponsored sections in 2018. These brought together all content for the subject in one area and helped the continued growth of high quality visitors – the monthly average is 18,000 users. This is supported by regular social media activity to highlight main features and news stories.

www.cibsejournal.com jobs.cibsejournal.com

Certification

In 2018 CIBSE Certification continued to certify the competence of energy professionals. It recorded more than 750 certified energy assessors for the purposes of the Energy Performance of Buildings Regulations, including 60 in Scotland, and more than 900 Low Carbon Consultants.

CIBSE Certification continuously worked to raise the profile of its certification schemes to reinforce the reputation of Low Carbon Consultants (LCCs) and Low Carbon Energy Assessors (LCEAs) as a high quality, expert service and an important means of raising competence across the industry.

Throughout 2018 there has been a steady increase in new applicants joining our Energy Savings Opportunity Scheme (ESOS) Register, as the 2019 reporting year approached.

Our UKAS accreditation to certify energy management systems against ISO 50001 and ISO 9001 means that CIBSE Certification can support companies operating energy management systems or quality management systems by providing third party verification that their system operation conforms to the standard.

www.cibsecertification.co.uk

Training

2018 proved another busy year of development and progress for CIBSE's growing portfolio of training activities. Seven new courses were introduced to the training programme, including half-day courses that enabled us to focus on key regulatory updates and pilot new delivery methods. Subjects included below ground drainage, practical project management and the new London Plan. To meet the demand for new courses CIBSE Training recruited new trainers and welcomed all our trainers to a CIBSE Trainer Network designed to encourage them to share knowledge and techniques, help us develop new courses and provide feedback from delegates.

Demand for CIBSE's in-house training – where we take the course to the client – continued to expand, with 80 courses delivered to clients around the UK, and international interest resulting in bookings in Mauritius and Slovakia.

CIBSE Training worked with the Certification and Knowledge teams to host a Knowledge Hub at Build2Perform Live, attracting many delegates and promoting the new 2019 training programme and the newly designed online learning portal.

Customer service has been a major focus in 2018 with all training events being redesigned in the customer relationship database (CRM), providing more information to clients and enhanced user experience. Automation has also enabled us to improve processes for delegates, including the provision of booking notifications, exam results, CPD certificates and online evaluation forms.

Summary statistics for 2018 include:

- Face-to-face courses: 95
- In-house courses: 80
- Professional learning (energy assessor) courses: 36
- Total courses: 211
- Delegates trained: 1831
- Online learning 1,750 active users

www.cibse.org/training

Knowledge Portal (KP)

The CIBSE Knowledge Portal provides our members with access to the full range of CIBSE guidance as a benefit of membership, allowing online access to guidance anywhere and at any time. The Knowledge Portal is continually updated with new knowledge, including guidance, codes, research papers, case studies, and presentations.

CIBSE knowledge is also available for non-members to purchase through the Knowledge Portal. Revenue from the Portal contributes to the ongoing improvement and development of CIBSE's guidance, including:

- CIBSE Guides
- Technical Memoranda
- Application Manuals
- Codes of Practice
- Lighting Guides
- Commissioning Codes

In 2018 there were 1 million visits to the Knowledge Portal from 211 countries. There were 50,000 downloads from our Portal, and 100,000 downloads from external licensed services, such as IHS.

www.cibse.org/knowledge



Maggie's Barts, Arup Façade Engineering and Sir Robert McAlpine



Pomona: Ultra-Low Energy Lab Eliminates Performance Gap, California, Elementa Consulting

Raising awareness and driving our profile

CIBSE worked to raise the public profile of the Institution throughout 2018, maximising reach through the use of diverse communication routes, including events, digital media and conventional news outlets. This effort supports the wider use of the Institution's knowledge and expertise to deliver better buildings and shape the debate around key issues in the building services sector.

Build2Perform Live (27-28 November 2018)

Build2Perform Live, at London Olympia, celebrated the vital work of the CIBSE community, welcoming 1700 visitors and 170 speakers and hosting 50 technical sessions. Once again the CIBSE Special Interest Groups, Divisions and Young Engineers Network (YEN) were key to producing a lively and busy programme. There was also a programme of CIBSEapproved exhibitor technical content to update attendees on the latest technical product information.

Build2Perform Live is a free to attend event that facilitates the sharing of CIBSE knowledge to the benefit of the wider built environment. Key topics in this year's programme were: building simulation and digital engineering to support predictable and better outcomes; air quality; natural ventilation; daylighting; health and wellbeing, with a focus on how to provide a more productive environment for occupants; energy independence; and hydrogen as a fuel source and heat networks, which provided updates on the changing energy landscape. There was a consistent focus for sessions to provide specific building performance 'takeaways' which attendees could apply in their work.

A Women's Breakfast was organised for the first time this year, under the auspices of the CIBSE Inclusivity Panel, with a discussion on the theme: How can we make the working environment more inclusive? Attended by women and men, the session explored how we can practically encourage more inclusive workplace cultures and practices in the built environment industry.

Engaging with Government

CIBSE engages with a number of government departments and other external stakeholders, such as the Committee for Climate Change, Royal Academy of Engineering and the British Standards Institution, on policy consultations and development in technical fields relevant to the Institution.

We work with the Ministry of Housing, Communities and Local Government (MHCLG), and Department for Business, Energy and Industrial Strategy (BEIS), as well as with NHS Improvement and the Department for Education. We also work with the Health and Safety Executive (HSE) on the occupational health strategy, with a particular focus on preventing occupational lung disease, with the Institute for Local Exhaust Ventilation Engineers hosting the LEV Forum with the HSE.

Our objective is always to provide government with clear engineering advice on policy options and opportunities, and to support government in addressing the challenges relating to policy for the built environment. Wherever possible, we work with the companies and engineers working in the sector and in its supply chain to deliver objective advice to government and other stakeholders that contributes to our overall aims by sharing knowledge to improve the built environment.

Through our focus on building performance we seek to raise awareness in government of the impacts of policy on delivering buildings that perform safely and effectively for the benefit of their users and the businesses that own or operate them.

We have been actively committed to the ongoing response to the Grenfell Tower fire. Staff and volunteers are contributing to several aspects of the ongoing work, and Dr Hywel Davies, CIBSE Technical Director, led a Government working group on the future of the Approved Documents in the early part of 2018. CIBSE contributed responses to 29 consultations and calls for evidence by Select Committees in 2018 (the full list is available at www.cibse.org/consultations). In addition, Dr Anastasia Mylona, CIBSE Head of Research, gave evidence to the Environment Select Committee on the issue of overheating in buildings. Her evidence featured strongly in the report that was published in July. This supported CIBSE's recommendation for the Building Regulations to explicitly address overheating.

Strengthening the future of the industry

The UK has one of the longest and most vibrant histories of engineering in the world and a long tradition of delivering engineering innovation, but its future depends on the ability to train new generations of engineers to fill the growing demand.

The next generation of young engineers also needs to be trained to strive for better building performance and to value sustainability. CIBSE actively supports engineers starting their careers, encouraging young people into engineering and assisting the growth of those already in the industry, as well as working to diversify the sector to reach untapped sources of talent.

Media relations

In 2018 CIBSE worked with public relations agency Ridgemount PR to place 28 feature articles across 20 publications, including Architecture Today, Building Magazine, MBS TV and Energy in Business & Industry. CIBSE distributed 23 press releases covering our major events, new publications and commercial undertakings, and these were published across a wide variety of industry outlets.

The Environmental Audit Committee (EAC) report, Heatwaves: Adapting to Climate Change, was published in the summer. It considered the risks to human health, wellbeing and productivity associated with heatwaves and



University of Oxford © Dan Paton www.danpaton.net

high temperatures and the level of the UK's present resilience to them. Its publication coincided with record-breaking high temperatures across the UK. CIBSE made a significant contribution to the report, including the inquiry's findings and its recommendations to government. CIBSE is cited extensively in its recommendations on the Building Regulations and the wider regulatory framework.

The EAC's report attracted a high level of media attention. As a result, Julie Godefroy, CIBSE Head of Sustainability, Dr Anastasia Mylona, CIBSE Head of Research, and CIBSE Vice President, Ashley Bateson, were able to share CIBSE's knowledge in interviews featured on the BBC London early evening television news, BBC News at 6pm and 10pm, BBC Breakfast television, BBC regional radio news and Radio 4's You and Yours programme.

CIBSE website

The current CIBSE website was four years old in 2018 and plans for a fundamental review of the content and navigation of the site were initiated. These changes will be rolled out in 2019. Particular areas being looked at include the online purchasing experience, the MyCIBSE area and online directories, such as the Directory of Member Practices. 2018 also saw an update to the website's content management system to improve the administration and security of the site.

Social media

#Build2Perform

CIBSE #Build2Perform continues to be at the centre of the conversation about building performance. It brings together conversations across all CIBSE social media platforms, the CIBSE Journal, CIBSE's annual Build2Perform Live event, the Technical Symposium and is used by CIBSE and the industry to amplify messages about improving and optimising the performance of buildings. #Build2Perform hosts eight podcasts on a range of subjects with members and industry figures.

www.soundcloud.com/build2perform

Twitter, LinkedIn

CIBSE's social media activity on Twitter and LinkedIn continued to grow in reach and engagement. Twitter follower numbers grew by 8%. LinkedIn made significant changes to its platform this year and as a result, we are making more active use of the CIBSE Corporate page. Overall the combined social media growth in 2018 was 25%, enabling us to reach more people with our publications, Special Interest Groups, technical meetings, events and product offerings. Our social media channels are also becoming an important point for debate, amplification of issues and opportunity for engagement.

In addition to the CIBSE account, many CIBSE Regions, Special Interest Groups, Divisions and Networks host their own social media accounts, providing an even wider reach and impact.

www.twitter.com/cibse https://www.linkedin.com/company/cibse/ https://www.linkedin.com/groups/75555/

Facebook

At the end of 2017 CIBSE launched a Facebook presence to join our other social media platforms. The page was launched in direct response to feedback from the Hong Kong region member survey and is building a presence alongside other CIBSE Regions, Special Interest Groups, and Divisions, which are already using Facebook to engage. Facebook also provides a commercial platform for our events, awards and training programmes.

www.facebook.com/cibse

Energy Action

Blog

In 2018 we introduced guest bloggers to the CIBSE blog to provide different voices and views. Since launch, the CIBSE blog has been viewed 75,000 times, with both new and old blogs continuing to be popular.

The 2018 blogs included:

- CIBSE in schools: How your expertise can help children building services engineer James Collins uses his skills to help a school achieve more
- Heatwaves: CIBSE champions better performance in homes – Dr Anastasia Mylona, CIBSE, champions better and cooler homes
- My path to engineering Holly Farrow, CIBSE Patrons Arkwright scholar, shares her journey and passion for engineering
- Graduate of the Year 2017 Winner Raphael Amajuoyi shares his story
- Employer of the Year 2017 InTandem reflect on how their win has affected them
- European Parliament approves revised EPBD Dr Hywel Davies, CIBSE Technical Director, provides detailed analysis
- Is Gross Domestic Product (GDP) running on empty? Tony Dennis, CEng MCIBSE, on the shortfalls of using GDP to measure national wellbeing
- So much for taking back control Dr Hywel Davies, CIBSE, highlights some concerns about the EU Withdrawal Bill

www.cibseblog.co.uk



Build2Perform Live exhibition

CHANNEL	2018	2017	2016	2015
Facebook follows	600	224	-	-
Twitter followers	22,900	21,210	19,000	16,370
Blog views	75,000	47,950	53,359	24,337
LinkedIn group & company members	33,445	25,613	22,210	21,163
Podcast listens	3,367	2,483	1,100	-

Building services awards

Building Performance Awards (6 February 2018) Now in their 11th year, the awards provide the ultimate recognition of outstanding building services engineering practice. They support and celebrate the quest for a more sustainable built environment and have increasingly come to stand for ethical, sustainable and environmentally sound business.

The 15 awards recognise the individuals, teams and companies who push further in their commitment to buildings that deliver comfort, efficiency and sustainability to ensure they are fit for purpose for their lifespan.

Entries must provide at least one year's operational performance data in order for buildings to demonstrate their achievements in delivering excellence in building performance. This year the diverse panel of judges, featuring industry experts, particularly noted that entries spoke of the importance of learning from the experience of operating the building.

The 2018 winners were announced at the awards dinner at the Grosvenor House Hotel in front of more than 750 guests. The University of Oxford Carbon Reduction Programme won the overall Building Performance Champion Award, also taking the Facilities Management Team of the Year Award for its management of its 400 buildings. Judges said that what the team had achieved in tackling carbon emissions in its estate could be replicated across the higher education sector.

www.cibse.org/bpa



2018 Building Performance Awards winners

CIBSE Digital Engineering Awards 2018 (27 November 2018)

The Society of Digital Engineering launched its annual awards in 2018. The awards were established to recognise innovation, leadership and best practice in digital engineering – a discipline that has become fundamental to the design of high performance buildings.

Judges were impressed by the high response to the new awards scheme, which attracted a number of international entries.

SNC-Lavalin Atkins was recognised as the overall Digital Engineering Champion for its consistent application of high quality digital design. It also won in the Best Process and Application category for its Digital Blueprint technology.

Michal Dengusiak of BuroHappold Engineering won Best Digital Engineer for his work across the digital spectrum of the organisation, exploiting a range of data tools to help the company streamline its business and drive improved building design.

FAÇADES 2018 (6 December 2018)

Organised by the Society of Façade Engineering, the annual Façade of the Year Awards, now in its sixth year, delivers the façade industry's longest running and most prestigious awards. The awards recognise and reward excellence and achievements in the field of façade engineering, raising the profile and drawing attention to the importance of the discipline in modern architecture. The 2018 winners, announced at the Glass Supper in London, demonstrated the diverse and remarkable nature of what can be achieved with façade engineering.

Arup Façade Engineering and Sir Robert McAlpine won the Innovation Award for Maggie's Barts in London. The Refurbishment Award was won by Arup Façade Engineering for the University of Leicester – Engineering Building. BuroHappold Façade Engineering took the New Build Award for the Louvre Abu Dhabi.

Green Infrastructure Design Challenge Winner: Green Roof Shelters

The competition, run by CIBSE and the UKCIP's (UK Climate Impacts Programme) ARCC (Adaptation and Resilience in a Changing Climate) network, challenges companies to design buildings that demonstrate how green infrastructure can contribute to wellbeing of occupants, improving indoor air quality and resilience to climate change. The winning design from Green Roof Shelters takes necessary structures, such as bus stops, bin storage units or bike sheds, and turns them into individual ecosystems.

The Happold Brilliant Award Winner: Leeds Beckett University

The annual Happold Brilliant Award is presented by CIBSE to the university department judged to offer the best balanced accredited course in the discipline of building services engineering. The judging panel was impressed with the quality of the courses, the enthusiasm for teaching and the extensive support offered to students. The award was presented to Mike White on behalf of Leeds Beckett University.

Ken Dale Travel Bursary

Winners: Lucy Pemble, studying an MSc in Sustainable Engineering Management for International Development, Swansea University, and Antoni Sapina Grau mechanical engineer, WSP. For the first time in its history the annual Ken Dale Travel Award was awarded to two people.

Lucy Pemble won for her research topic investigating electrical demand management practices in different geographical and development contexts, and the opportunities and challenges presented by photovoltaics and electrical vehicles and building integration. Her trip took her to Zambia, South Africa, America and Wales.

Antoni Sapina Grau researched resilience and adaptive capacity for climate change, visiting outstanding buildings designed and adapted to consider the impact of current and future climate, to illustrate how to improve adaption and resilience of buildings. He visited China, Hong Kong, Australia and America.

The bursary offers young building services engineers the opportunity to experience technical, economic, environmental, social and political conditions in another country to examine how these impact on the practice of building services engineering.

President's Prize – The Undergraduate Award Winner: Jake Piner, Portsmouth University

Jake Piner won the CIBSE Undergraduate Award 2018 for his final year project: Analysing the Benefits of a Well-Engineered Building Control System. A trophy was also presented to Portsmouth University in acknowledgement of its achievements.

The award, sponsored by Hays Building Services, is designed to encourage students to develop their potential and aim for excellence. It is awarded to students in their final year of a building services course accredited by CIBSE, and recognises their academic achievements.

Society of Light and Lighting (SLL) Young Lighter of the Year Award Winner: Emma Beadle, WSP

The SLL Young Lighter of the Year Award is open to anyone with an interest in light and lighting under the age of 30. It provides a unique platform to illustrate their knowledge and research on a lighting subject and encourages young lighters to develop their knowledge and enhance their skills.

Emma Beadle from WSP won the competition and the prize for Best Written Paper with her presentation and paper: Children's Utopian Vision of the City: Co-Designing Lighting Masterplans Through Play and Exploration.

Katia Kolovea won Best Presentation for her paper: Light as a Medium to Enhance Communication in Urban Spaces.

Society of Public Health Engineers (SoPHE) Young Engineer of the Year Award Winners: Yasmin Chamadia and Darryl How, Arup

The annual SoPHE Young Engineers Award challenges applicants, aged 18-35, to develop an engineering solution to a specified problem. The 2018 awards were run in association with Engineers Without Borders UK and Caminos de Agua and sought designs for a low-cost refillable cartridge for a filtration system for groundwater. Winners Yasmin Chamadia and Darryl How from Arup won with their FlexiFiltro design. The judges were impressed by their clever and practical solution, using simple components to create an inexpensive resilient design.


Elementa Consulting

Young Engineers Awards

The Young Engineers Awards (YEA) encompass the CIBSE ASHRAE Graduate of the Year and Employer of the Year awards. Now in their 23rd year, the awards celebrate the industry's best examples of young talent and give recognition to those companies championing the next generation of engineers through a commitment to education, on the job training and mentoring.



Reanna Taylor, Young Engineer of the Year 2018

CIBSE ASHRAE Graduate of the Year 2018 Winner: Reanna Taylor (née Evans), NG Bailey

The Graduate of the Year Award recognises excellence in the early stages of the engineer's career. The shortlisted finalists are among the best young engineers in the profession. The award required the eight finalists to prove that they also had the best soft skills, by delivering a five minute presentation on a given theme.

Reanna Taylor, a graduate of Leeds Beckett University and a senior project engineer at NG Bailey, won for her measured and confident presentation in response to the question: Recent events have raised questions about how the industry manages and monitors professional competence and upholds technical standards – what does this mean to you as an engineer and where does the engineer's responsibility begin and end? She said integrity and accountability contribute towards the pinnacle of engineering compliance, alongside technical skills.

Runners up were Hannah Müller-Jones and Gemma Taylor, and so for only the second time in the award's 23-year history the top three places were taken by women.

CIBSE Employer of the Year Award 2018 Winner: Elementa Consulting

The Employer of the Year Awards recognise employers that have shown excellence and innovation in developing the engineers of the future. For the second year in a row Elementa Consulting was recognised for its exceptional commitment to supporting and mentoring newly qualified engineers, winning in the medium-sized company category, before being crowned overall champion.

SI Sealy won the small company category, and Aecom was the winner in the large company category.

Full list of award winners in 2018

CIBSE Silver Medals

- Brian Charlesworth
- Seamus Homan
- Geraldine O'Farrell

Bronze medals for service to the Region

- Dr Eric Roberts CIBSE West Midland
- Peter Howson CIBSE Scotland
- Grahame Kelly CIBSE North East
- Manus Freeman CIBSE Australia & New Zealand
- Peter Whalley CIBSE Australia & New Zealand
- Cheung Kwok Heng CIBSE Hong Kong

Carter Bronze Medal

- Roderic Bunn and Ljiljana Marjanovic-Halburd

Napier Shaw Bronze Medal

 Junli Zhou, Cheng Ye, Yan Hu, Hassan Hemida, Guoqiang Zhang and Wei Yang

The Happold Brilliant Award

- Leeds Beckett University

Ken Dale Travel Bursary

- Lucy Pemble and Antoni Sapina Grau

President's Prize: CIBSE Undergraduate Award

- Jake Piner

Society of Light and Lighting Young Lighter of the Year Award

- Emma Beadle

Society of Public Health Engineers Young Engineer of the Year Award

Darryl How and Yasmin Chamadia

Young Engineers Awards

- CIBSE ASHRAE Graduate of the Year: Reanna Taylor (née Evans)
- CIBSE Employer of the Year, overall winner and medium company winner: Elementa Consulting
- Employer of the Year, small company: SI Sealy
- Employer of the Year, large company: Aecom

CIBSE Building Performance Awards

- Building Performance Champion/Facilities
 Management Team: University of Oxford Carbon
 Reduction Programme University of Oxford
- Building Performance Consultancy (up to 100 employees): Elementa Consulting
- Building Performance Consultancy (101–1000 employees): BDP
- Building Performance Consultancy (over 1000 employees): BuroHappold Engineering
- Collaborative working partnership: The NEDO (New Energy & Industrial Technology Development Organisation)
 Project – NPS North West
- Learning and Development: Sustainability Matters Landsec
- Energy Management Initiative: Beyond The 6 Star NABERS Barrier, Melbourne, Australia – Energy Action
- Energy Efficient Product or Innovation: NewMass BuroHappold Engineering
- Energy Saving Product or Innovation: Q-Floor Q-Bot
- Project of the Year Commercial/Industrial: The Enterprise Centre – Architype/BDP
- Project of the Year Leisure: Oriam Max Fordham
- Project of the Year Public Use: Centre for Medicine, University of Leicester – Willmott Dixon
- Project of the Year Residential: Killynure Green, Carryduff – Choice Housing Ireland
- Project of the Year International: Pomona: Ultra-Low Energy Lab Eliminates Performance Gap, California, USA – Elementa Consulting

Digital Engineering Awards

- Best Process and Innovation: SNC-Lavalin Atkins Building Design Digital Blueprint
- Best Innovation: BuroHappold Engineering Single Analysis Model
- Best Project/Collaboration project £10m or less: TheTuen Mun School Dental Clinic, The Electrical and Mechanical Services Department of the Hong Kong Special Administrative Region
- Best Project/Collaboration project over £10m:
 Engineering Research Centre, Brown University, BuroHappold Engineering
- Best Consultancy: BuroHappold Engineering
- Best Manufacturer: Legrand Electric
- Best Digital Engineer: Michal Dengusiak, BuroHappold Engineering
- Digital Engineering Champion: SNC Lavalin Atkins

FAÇADES 2018 (Society of Façade Engineering)

- Façade of the Year New Build: BuroHappold Façade Engineering – Louvre Abu Dhabi
- Façade of the Year Refurbishment: Arup Façade Engineering – University of Leicester, Engineering Building
- Façade of the Year Innovation: Arup Façade Engineering and Sir Robert McAlpine – Maggie's Barts

Green Infrastructure Design Challenge

- Green Roof Shelters



Green Roof Shelters



Emma Beadle, SLL Young Lighter of the Year

Plans for the future

Theme 1: Improving building performance

The outcome of the Independent Review of Building Regulations and Fire Safety has highlighted a number of areas where there is a need to drive improved performance of our built environment. These occur not just in design and construction, but through the whole building life cycle, including operation and maintenance. We will continue to deliver guidance to support this and to showcase good practice through CIBSE Journal, our awards, Build2Perform Live, Technical Symposium and other technical activities and communications.

CIBSE will support the work of the various inquiries into the Grenfell Tower disaster in every appropriate way, seeking as far as humanly possible to eliminate the risk of such an event ever happening again. We will continue to support the ongoing reviews of industry practice, regulations and guidance.

Theme 2: Sharing engineering knowledge

We will continue to work with our members and the wider industry to provide best practice knowledge, guidance and learning at point-of-use to support the further improvement of the performance, safety and comfort of buildings and the communities they serve.

We will continue to review our delivery of engineering knowledge and guidance to our members, the wider industry and public, and maintain a wide-ranging programme of knowledge development.

Theme 3: Developing our membership

Supporting engineers into CIBSE membership and professional registration remains at the centre of what the Membership Department does. We continue to develop initiatives to increase professional competence.

These initiatives include:

- Individual support to candidates ready to apply for MCIBSE and ACIBSE, including report writing workshops and phone surgeries
- Continued promotion of CIBSE membership to those participating in CIBSE Special Interest Groups, and the advancement to professional membership grades for current Affiliate Members
- Becoming an end point assessor for the newly established, employer led, apprenticeship qualifications for building services. This important industry role will help CIBSE to ensure that high standards are protected and building services professionals qualifying through these routes are well supported in the future
- Improving inclusion and diversity within the CIBSE membership through the activities of the newly established Inclusivity Panel. One of the key aims of the Panel is to improve the number of CIBSE female members and registrants

Theme 4: Growing CIBSE Services

We will support industry by developing resources that help to: deliver comfortable, valuable and sustainable buildings; support technical excellence, business success and individual achievement; and provide best practice knowledge, guidance and learning.

CIBSE Services will grow and widen its products and services to support the objectives outlined above, including:

- Increasing the scope and range of its face-to-face and online training (learning and development)
- Increasing the uptake of current certification services and expanding the certification offer with new certification and accreditation services
- Generating information, data and guidance, and developing the digital skills of members and others in the industry to deliver efficient, accessible products and services for members and the industry

Theme 5: Raising awareness and driving our profile

We will continue to maximise the impact of the work CIBSE does and to demonstrate building services engineering in its broadest sense to as diverse an audience as possible. We will use the monthly CIBSE Journal, annual Building Performance Awards, Technical Symposium and Build2Perform Live to raise wider public awareness of what we do and of the importance and value of building services engineering to society. We will continue to raise awareness with policy makers through consultation responses, legislative enquiries and participation in All Party Parliamentary Groups.





Financial accounts and summary

The Institution's Annual Accounts are presented to comply with the Charities Act 2011, its Royal Charter and By-Laws and to meet all applicable accounting standards including the Statement of Recommended Practice – Accounting and Reporting by Charities and the Financial Reporting Standard applicable in the UK and Republic of Ireland (Charities SORP FRS 102). Investments are shown at market value and the Annual Accounts incorporate the assets, liabilities, income and expenditure of the Regions. The results of the Institution's commercial subsidiary CIBSE Services Ltd and The Chartered Institution of Building Services Engineers Hong Kong Ltd are incorporated into the Consolidated Accounts.

Total income for 2018 was £7m. This was similar to the previous year, with increased income from trading subsidiaries being offset by lower fees receivable for charitable activities as a result of the transfer of Publications activity to CIBSE

Services Ltd. Total expenditure reduced to £6.9m, with the removal of Publications costs considerably outweighing increased Research costs during the year. The Institution continues to invest in delivering the Institution's strategic aims to enhance the effectiveness of its IT systems, but costs were effectively controlled during the year.

"

The Institution continues to invest in delivering the Institution's strategic aims

"

As a result, net income before gains on investments was $\pounds103k$, a substantial turnaround from the net expenditure of $\pounds397k$ in the previous year. Losses on investments of $\pounds47k$ were incurred however, resulting in a net income figure of $\pounds55k$.

There was an actuarial loss on the defined benefit pension scheme of £160k, furthering the £14k loss reported in the previous year. The Institution continues to fund the recovery plan agreed following the triennial valuation of the scheme carried out as of 1 April 2017.

As a result, there was a net decrease in funds to £2.346m, from £2.450m in 2017. This is attributable to investment and pension scheme losses exceeding the operational surplus on the Institution's activities.

The cash balance increased to £855k from £738k in 2017 as a result of continued improvement to the collection of membership subscriptions.

Reserves policy

The Institution has a reserves policy to maintain a level of funds that is sufficient to meet four months of payroll expenditure, any unplanned contingencies and to accommodate investment for new initiatives. The Board considers that the Institution's overall level of funds is sufficient for these purposes, but the free reserves of the Institution have reduced as a result of strategic investments in recent years. The intention of the Board is to rebuild free reserves to previous levels over time.

At the year end, the Institution held free reserves of $\pounds 0.28$ m (2017: $\pounds 0.23$ m), being the amount of funds available excluding restricted and designated funds, and less reserves held as tangible fixed assets.

It is the view of the Board that any expenditure from reserves should be applied only to finance new initiatives which will make a substantial contribution to the delivery of the Institution's strategic charitable objectives, and that the cost of existing activities should be met from incoming revenues from year to year. Any decision on the use of reserves rests with the Board on the advice of the Hon. Treasurer and the Finance, Risk, Audit & Governance Sub Committee.

Consolidated statement of financial activities for the year ended 31 December 2018

	Unrestricted 44	Restricted unds	Total د	Unrestricted cu funds	Restricted دی funds	Restated Total ୟ 2017
INCOME FROM:	~	~	~	~	~	-
Charitable activities						
Members' subscriptions	3,086,868	49,570	3,136,438	2,967,359	49,109	3,016,468
Fees receivable for charitable services	318,812	13,878	332,690	723,889	13,980	737,869
Other trading activities						
Trading subsidiary companies	3,495,430	-	3,495,430	3,092,052	-	3,092,052
Investments						
Investment income	59,181	-	59,181	62,468	-	62,468
Total income	6,960,291	63,448	7,023,739	6,845,768	63,089	6,908,857

Consolidated statement of financial activities for the year ended 31 December 2018

	Unrestricted funds	Restricted funds	Total 2018	Unrestricted funds	Restricted funds	Restated Total 2017
EXPENDITURE ON:	£	£	£	£	£	£
Raising funds						
Trading subsidiary companies	3,050,453	-	3,050,453	2,961,532	-	2,961,532
Charitable activities						
Membership	1,505,673	-	1,505,673	1,747,664	-	1,747,664
Publications	-	-	-	490,986	-	490,986
Technical	617,738	46,600	664,338	556,814	55,670	612,484
Regional & special interest groups	1,197,051	-	1,197,051	1,195,091	-	1,195,091
Research	503,224	-	503,224	298,741	-	298,741
Total expenditure	6,874,139	46,600	6,920,739	7,250,828	55,670	7,306,498

Consolidated statement of financial activities for the year ended 31 December 2018

	Unrestricted funds	Restricted funds	Total 2018	Unrestricted funds	Restricted funds	Restated Total 2017*
	£	£	£	£	£	£
Net (expenditure)/ income before gains on investment	86,152	16,848	103,000	(405,060)	7,419	(397,641)
Net gains on investment	(47,344)	-	(47,344)	152,906	-	152,906
Net (expenditure)/income	38,808	16,848	55,656	(252,154)	7,419	(244,735)
Other recognised losses						
Actuarial gain/(loss) on defined benefit pension scheme	(160,000)	-	(160,000)	(14,000)	-	(14,000)
Net movement in funds	(121,192)	16,848	(104,344)	(266,154)	7,419	(258,735)
Fund balances brought forward at 1 January 2018	2,355,437	94,828	2,450,265	2,621,591	87,409	2,709,000
Fund balances carried forward at 31 December 2018	2,234,245	111,676	2,345,921	2,355,437	94,828	2,450,265

Consolidated and Institution balance sheets as at 31 December 2018

	Group		The Institution	
	2018	2017 Restated*	2018	2017 Restated*
Fixed assets				
Intangible assets	-	-	-	-
Tangible assets	698,584	807,308	472,451	520,856
Investments	1,665,595	1,712,939	1,665,597	1,712,941
Total fixed assets	2,364,179	2,520,247	2,138,048	2,233,797
Current assets				
Stocks of publications	27,493	17,702	-	17,702
Debtors	855,656	776,523	222,057	637,677
Cash at bank and in hand	906,885	738,028	807,116	524,842
Total current assets	1,790,034	1,532,253	1,029,173	1,180,221
Liabilities				
Creditors: Amounts falling due within one year	(1,853,292)	(1,669,235)	(1,484,237)	(1,218,674)
Net current liabilities	(63,258)	(136,982)	(455,064)	(38,453)
Net assets excluding pension scheme asset	2,300,921	2,383,265	1,682,984	2,195,344
Defines benefit pension scheme asset/(liability)	45,000	67,000	45,000	67,000
Total net assets	2,345,921	2,450,265	1,727,984	2,262,344

Consolidated and Institution balance sheets as at 31 December 2018

	Group		The Institution	
	2018	2017 Restated*	2018	2017 Restated*
The funds of the charity				
Restricted funds	108,766	94,828	108,766	94,828
Unrestricted funds				
General fund	981,248	1,043,001	363,311	855,080
Designated funds	1,255,907	1,312,436	1,255,907	1,312,436
Total charity funds	2,345,921	2,450,265	1,727,984	2,262,344

*It should be noted that the 2017 comparative figures in respect of the defined benefit pension scheme are shown as restated because the Institution has reduced its defined benefit pension scheme asset due to the fact that it cannot recover the surplus through refunds or deficit contributions as per the Pension Scheme rules.

It should also be noted that the 2017 comparative figures in respect of debtors and creditors are shown as restated as they have been reduced to account for members who may not take up ongoing membership once membership subscriptions invoices were raised.

<u>Members of the</u> <u>Board and Council</u>

As of 31 December 2018:

President: Stephen Lisk President-Elect: Lynne Jack Vice President: Ashley Bateson Vice President: Kevin Kelly Vice President: Stuart MacPherson Hon Treasurer: Adrian Catchpole Immediate Past President: Peter Y Wong

Elected Members of the Board Les Copeland Susan Hone-Brookes Kevin Mitchell P L Yuen

Co-opted Members Nick Mead Atif Rashid

Chief Executive Officer Stephen Matthews

Members of the Consultative Council All Board members are also members of Council

Past Presidents Nick Mead John Field

Elected Members

Colin Ashford Eleanora Brembilla Carol Clark Tessa Guy Maria Longo

Co-Opted Members Wally Gilder Paddy Conaghan

Patrons Representative David Fitzpatrick

Divisional Representatives lain Carlile (SLL) Jonathan Gaunt (SoPHE) Savario Passetto (SFE) Les Copeland (SDE) Dean Greer (ILEVE)



CIBSE AGM 2018

Young Engineers Network

Munis Hameed

YEN Mentor

Andrew Saville

WiBSE Laura Dunlop

Inclusivity Panel

Atif Rashid

REHVA Andy Ford/David Fisk

Fellows Network

Geoff Prudence

EC(UK) Board Rep

George Adams

Standing Committee Chairs

- Education Training and Membership: Vince Arnold
- Communication Commitee: Mariana Trusson
- Technology Committee: Vacant
- Professional Conduct Committee: John Armstrong
- Knowledge Management Committee: David Hughes
- Regional Liaison Committee: Stephen Lisk

Group Representatives

- ASHRAE: David Green
- Building Simulation: Darren Woolf
- Chimneys & Flues: Jim Kinniburgh
- CHP and District Heating: Huw Blackwell
- Daylight: John Mardaljevic
- Electrical Services: Tony Sung

- Energy Performance: Mark Dowson
- Facilities Management: Geoff Prudence
- Healthcare: Frank Mills (Acting)
- Heritage: Andrew More
- Homes for the Future: Tom Lelyveld
- HVAC Systems: Tony Day
- Information Technology (IT) & Controls: Vacant
- Intelligent Buildings: Derek Clements-Croome
- Lifts: Len Halsey
- Natural Ventilation: Martin Liddament
- Resilient Cities: George Adams
- School Design: Andrew Wright

Regional Representatives

- ANZ: Paul Angus
- East Anglia: Nicola Booth
- East Midlands: David Guzzetta
- HCNE: Austin Williamson
- HCNW: Olu Babalola
- HCSE: Richard Davies
- HCSW: Darren Warmington
- Hong Kong: Wai Yip Stanley Chow
- Ireland: Paul Martin
- Merseyside & North Wales: Martin Tunnicliffe
- North East: Bobo Ng
- North West: Colin Lehane
- Northern Ireland: Nigel Jess
- Scotland: Karen Warner
- South Wales: Justin Thomas
- South West: Carla Bartholomew
- Southern: Sean Gibson
- United Arab Emirates (UAE): Reid Donovan
- West Midlands: Jos Brownlie
- Yorkshire: Kayley Lockhead

Trustees' responsibilities

The Trustees are responsible for preparing the Trustees' report and the financial statements in accordance with applicable law and United Kingdom Accounting Standards (United Kingdom Generally Accepted Accounting Practice).

The law applicable to charities in England & Wales requires the Trustees to prepare financial statements for each financial year which give a true and fair view of the state of affairs of the Institution and the Group and of the incoming resources and application of resources of the Institution and the Group for that period. In preparing these financial statements, the Trustees are required to:

- select suitable accounting policies and apply them consistently;
- observe the methods and principles in the Charities SORP;
- make judgements and estimates that are reasonable and prudent;
- state whether applicable accounting standards have been followed, subject to any material departures disclosed and explained in the financial statements; and
- prepare the financial statements on the going concern basis unless it is inappropriate to presume that the Institution and the Group will continue in operation.

The Trustees are responsible for keeping adequate accounting records that are sufficient to show and explain the Institution's transactions and that disclose with reasonable accuracy at any time the financial position of the Institution and the Group and enable them to ensure that the financial statements comply with the Charities Act 2011. They are also responsible for safeguarding the assets of the Institution and the Group and

hence for taking reasonable steps for the prevention and detection of fraud and other irregularities.

The Trustees are responsible for the maintenance and integrity of the corporate and financial information included on the Institution and the Group's website. Legislation in the United Kingdom governing the preparation and dissemination of financial statements may differ from legislation in other jurisdictions.

Approved by the Board of Trustees and signed on its behalf by:



Stephen Lisk President

The Chartered Institution of Building Services Engineers 222 Balham High Road, London, SW12 9BS

General Enquiries: +44 (0)20 8675 5211 Email: info@cibse.org Website: www.cibse.org CIBSE is a registered charity: number 278104



