THE CHARTERED INSTITUTION OF BUILDING SERVICES ENGINEERS

Annual report and financial statements for the year ended 31 December 2017

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1) OBJECTIVES AND ACTIVITIES OF THE CHARTERED INSTITUTION OF BUILDING SERVICES ENGINEERS
("CIBSE"/ THE "INSTITUTION")

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:

1) 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,

2) Advance education and research in building services engineering, and disseminate the useful results of such research.

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 focused 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.

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.
President's Message

In my Presidential Address last May I set out my pledge to embody the spirit and values of being a CIBSE member. I vowed to promote the positive message of the values we believe in, the professionalism we treasure and the aspiration of exchanging best practice among like-minded professionals worldwide.

There are many projects around the world — a few of which I highlighted in my Presidential Address — that are recognised examples of CIBSE members’ engineering skill. These projects demonstrate both our technical skills and, just as importantly, the ‘art’ of the building services engineering profession. What marks such projects out as extraordinary is not just the undoubtedly impressive engineering it took to create them, but the way that the core values of engineers — prestige, professionalism and public interest - were upheld throughout.

As a Chartered Institution, CIBSE helps to define and protect those values and principles of professionalism. We reach out to all engineers, from young practitioners early in their careers to global leaders, providing platforms to guide, influence, inspire and connect. The past year has seen our knowledge creation and dissemination activities grow, along with the many virtual and face-to-face opportunities provided by our groups, societies, divisions and regions. CIBSE extended its reach significantly through its inaugural Build2Perform Live event, which took place last November in London. This flagship industry event brought together 1,400 visitors and 170 speakers to debate the greatest challenges and innovations of the building services sector.

The year also saw CIBSE lay firm foundations for the future, as its board established an inclusivity panel to advise on matters relating to diversity, equality and inclusion. This panel will help to raise awareness and drive action in CIBSE’s work with both staff and with the global membership.

In the UK the past year will sadly be remembered for the tragic fire at Grenfell Tower in London. This reminds us all that our mission to improve building performance is of the utmost importance and has continuing relevance. CIBSE members, including those from the Society of Façade Engineers (SFE), are playing a valuable role in contributing to efforts to extract key lessons from the tragedy. CIBSE champions building performance, and what more important performance characteristic can a building have than to be safe to occupy?

Fostering and promoting improvement of building performance remains CIBSE’s primary strategic focus, with the twin aims of disseminating good practice and helping to equip our buildings and their occupants for future environmental challenges.

Building services engineering is a vital profession for the future wellbeing of people, cities and the planet as a whole. Our work helps to create and maintain the healthy, comfortable and productive places in which we live and work, today and into the future. Wherever we are working in the world, our rigorous science, trusted knowledge and creativity give us the capability to address environmental and business demands.

Our guidance on assessing the risk of overheating in new homes has been a significant contribution to the UK’s growing body of knowledge on one environmental challenge facing our buildings. The design methodology has already been cited in the latest draft London Plan and has been noted by government, illustrating how CIBSE continues to guide policy debate as well as engineering practice.

CIBSE now represents 21,000 members and our global presence is established, as evidenced by the fact that our Australia and New Zealand region celebrated its 30th anniversary in 2017. Our members are spread across
100 countries, working in locations from Yorkshire to Chongqing. Over the last year, we recorded a record output of new knowledge, with 22 additions to our online resource, the Knowledge Portal. The Knowledge Portal is one of our best assets, because it allows anyone who has an interest in CIBSE anywhere in the world to benefit from and contribute to CIBSE’s wider knowledge offering. New titles on the Knowledge Portal included several for the Society of Light and Lighting (SLL) and five additions to the Digital Engineering Series, providing guidance on the application of digital technologies, including Building Information Modelling (BIM).

Digital engineering also provided the theme for a new division joining our line-up in 2017. The new Digital Engineering Society provides a source of support in digital technology and processes in building services engineering and, like CIBSE’s four established divisions, has an essential part to play in promoting excellence.

Across our groups, societies, divisions and regions thanks are due to our huge network of volunteers, who worked tirelessly on the many events and activities taking place over 2017, and also contributed to the programme for the Build2Perform Live conference. We rely on everyone’s help, hard work and support to make such events possible. CIBSE also recognises the efforts of its staff, who have helped our Institution to both improve its established services and develop new initiatives.

This annual report gives a summary of CIBSE’s work over the past year and outlines just a few of the achievements. It also gives a glimpse of the activity to look out for in 2018.
Strategic themes

Theme 1: Improving building performance

CIBSE’s primary function is to foster and promote improvement in the performance of our buildings. Building performance has an impact on the environment, the economy and people’s lives - most of us spend more than 80% of our time in homes, offices, schools and other buildings. 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, forming a fundamental element of the policies driving national emissions reduction targets under the Climate Change Act.

The drive for carbon reduction must go hand in hand with many other aspects of building performance, which impact on user comfort and wellbeing, the surrounding community and client business priorities. Last June’s tragedy at Grenfell Tower in London has highlighted the importance of this work and provides added impetus to the quest for improvement.

CIBSE is a champion of continuous improvement of building performance as a natural consequence of what it does day-to-day, accrediting courses, creating routes to professional registration, training, producing guides, setting standards and advising government and policy makers. All of this gives engineers and society at large a better understanding of the importance and practicalities of creating better performing buildings, to improve the UK’s built environment.

Theme 2: Sharing engineering knowledge

The built environment is complex and constantly changing, 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, building services engineers can help everyone to live and work in safer, healthier and more comfortable spaces, save on their 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 creates and publishes authoritative guidance on subjects of relevance across the industry, to help engineers keep up to date with best practice in technology and standards. CIBSE’s Knowledge Portal makes this knowledge publicly available, and gives access to all our members as a benefit of their membership. The availability of CIBSE guidance through commercial information services extends access to the broader industry.

The whole industry benefits from understanding allied professions and the wider impact that technical developments, new standards and legislative changes have on the built environment. By advancing the education of engineers and keeping them at the forefront of building services research, wider society benefits from better buildings and improved building performance.

Theme 3: Membership

The building services profession forms a significant community, with the potential to make an impact on people, places and the planet. By having the widest possible pool of membership, CIBSE can ensure that building services professionals have access to the latest information and research, and are able to inform and influence the industry as a whole.

CIBSE relies on its members to help generate knowledge for industry and wider public benefit in a variety of specialisms, and across many areas of the world, to ensure that its scope has the greatest possible breadth
and depth. The diversity of CIBSE's membership is important in reaching these goals. CIBSE's benefit to society at large is at its greatest when its knowledge is sourced from the full spectrum of people and professions.

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 highly are given due prominence in the industry. CIBSE also places a high priority on recruiting international members, to ensure that these standards are spread globally, promoting the UK engineering industry abroad.

**Theme 4: Growing CIBSE Services**

CIBSE Services is a commercial organisation, which functions to support the wider charitable aims of CIBSE, by undertaking commercial services that adhere to the aims and ethos of the organisation. This offers support and association with the CIBSE brand to those who provide certification services, together with access to CIBSE knowledge through our training and certification activities.

Such work enables CIBSE to carry out wider charitable actions that are of benefit to society as a whole, such as running the CIBSE Technical Symposium at a cost that enables young engineers and those starting their careers to benefit from the knowledge it produces.

CIBSE Services also exists to raise the profile and status of building services engineering through the delivery of information, including training and certification; to provide a route for all suitable practitioners to deliver high quality outcomes in the areas in which they operate. Through its commercial work, CIBSE Services ensures that this information remains commercially viable, and thereby ensures its continued availability in the long term.

**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 our new Build2Perform Live event all serve to raise wider public awareness of what we do and of the importance of building services engineering to wider 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 engineers, 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.
2) ACHIEVEMENTS AND PERFORMANCE

Improving building performance

Without building services and the engineers who design them, a building would be simply a dark, cold, empty shell. Services engineers have a critical role to play in ensuring that the buildings in which we live and work can be safe, comfortable, promote health and wellbeing and use natural resources efficiently. To keep engineers constantly up to date on the latest engineering, science, best practice technology and standards, CIBSE regularly produces and updates guidance on the practicalities and principles of better building performance.

Technical Memorandum (TM) 59 – Overheating

CIBSE launched a long-awaited method for assessing the risk of overheating in new homes, TM59: Design methodology for the assessment of overheating risk in homes. This is a highly significant publication; recent research findings suggest that as many as one in five homes in the UK becomes unacceptably hot in the summer, and one report suggests that in London the proportion could be as high as 80%. As our climate continues to change overheating will become a greater concern. CIBSE guidance will help to improve this aspect of the performance of new buildings.

Overheated homes pose a health risk: in the 2003 heatwave some 2,000 deaths in England and Wales were attributed to the high temperatures. In spite of this there has never been an agreed method for assessing which building designs are likely to overheat, or any standards to ensure homes are built to minimise overheating risk.

This new guidance is an important step forward, and has already been noted by both central government and the Greater London Authority, who cite it in the latest draft London Plan.

Digital Engineering Series

The CIBSE Digital Engineering (DE) Series has been produced to help the built environment supply chain tackle the practical challenges of digital engineering, and specifically of Building Information Modelling (BIM) processes. Adoption of digital information 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.

In 2017 a further five titles were added to the series:

DE4: Common Data Environments
DE5: Asset Information Requirements
DE6: Security Requirements
DE7: Organisation Information Requirements
DE8: Project Information Requirements

In addition to the guidance several templates and other support files have been developed to support the Digital Engineering Series. These are available free to all users of the CIBSE website, as part of our commitment to supporting the adoption of digital engineering in the construction engineering sector.
Sharing engineering knowledge

Knowledge sharing is one of CIBSE’s strategic roles in the industry. CIBSE serves the industry, its clients and 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.

Over 2017 there was a record output of new knowledge, with 21 new titles added to the Knowledge Portal, the online resource that delivers CIBSE guidance to members and other users. In 2017 we launched a further five titles in the Digital Engineering Series, providing detailed guidance on the application of digital technologies, including Building Information Modelling (BIM), in the engineering services sector. As well as the new online guides, a number of templates have been launched to support the adoption of digital tools by the sector.

Working through the Society of Light and Lighting (SLL), CIBSE publishes guidance on lighting. In 2017 several new titles were published for SLL, including guidance on lighting of stairs, the location of the largest single category of serious accidents in homes. CIBSE also published guidance on overheating in homes, another increasingly topical issue.

In 2017 we published 21 titles, as below:

1. DE3T BIM Execution plan Templates (6 off): Pre-contract; Post-contract; Task Information Delivery Plan (TIDP); Level of Development matrix; Model Review Meeting Agenda & Model Review Meeting Minutes (January)
2. SoPHE Technical Bulletin TB 16-01: Domestic water demand assessment for pipe sizing (February)
3. LUNA project – loading units for water services (with CIBSE & Heriot Watt) (February)
4. Lighting Factfile 12: Lighting and Approved Document B (February)
5. LG0 Lighting Guide 0: Introduction to light and lighting (March)
6. DE4 Common data environments (March)
7. Circadian lighting literature review (by BRE) (March)
8. DE5 Asset information requirements (April)
9. DE5T Asset information requirements: Template (April)
11. TM59 Methodology for the assessment of overheating in homes (April)
12. LG16 Lighting of stairs (June)
13. DE6 Security requirements (July)
14. DE7 Organisation information requirements (August)
15. DE7T Organisation information requirements: Templates (September)
16. LG15 Lighting Guide 15: Transport buildings (September)
17. DE8 Project information requirements (October)
18. DE8T Project information requirements: Template (October)
19. Building for extreme environments: Cold climates (November)
20. Guide to variable refrigerant flow (VRF) air conditioning (December)
21. KS21 Competency Y competency management systems for FM's (December)

This compares to 16 titles published in 2016, 12 in 2015 and 12 in 2014.

We currently have 55 publication projects approved by CIBSE’s Knowledge Management Committee (KMC) for publication in the next 3 years.
Technical Symposium

The CIBSE Technical Symposium is an annual event that provides a valuable opportunity for professionals of all ages to learn about the latest energy performance innovations and research. CIBSE particularly encourages early career professionals to participate.

For 2017 CIBSE joined with the American Society of Heating, Refrigerating and Air Conditioning Engineers ("ASHRAE") to showcase the successful adoption of resilience in the design and operation of buildings. The theme, 'Delivering resilient high performance buildings', was inspired by the 2016/17 CIBSE and ASHRAE presidential themes, respectively, 'Improving performance' and 'Adapt today to shape tomorrow'.

Held at Loughborough University, the symposium featured more than 70 speakers delivering presentations on topics such as holistic design, resilient retrofitting techniques and wellbeing. Each year the symposium aims to set the agenda for the year to come and beyond. The 2017 event included the following highlights and insights:

• Ashley Bateson, partner at Hoare Lea, drew attention to the increasing client focus on health and wellbeing, driven by greater awareness of their links to productivity, corporate reputation and occupant satisfaction.
• Jonathan Atkinson, of Carbon Co-op, challenged the notion of the smart city, and urged the audience to consider a smart city as less of a top-down, planned approach and more of a collaborative, open-source system.
• Using CIBSE Guide A 2006 overheating criteria, overheating in the current climate was predicted to reach 18% of the annual occupied hours in bedrooms, and 12% in living areas.

Technical Journals

CIBSE publishes two technical journals: Building Services Engineering Research and Technology (BSER&T), and Lighting, Research & Technology (LR&T). These continue to go from strength to strength, with BSER&T now published six times a year and LR&T eight times per year, in response to demand from those submitting papers. These significantly increase the role of the Institution in disseminating research to a wide audience.

Papers published in 2017 included one by researchers at University of Bath looking at building modelling, which was reported in national media The Times and The Telegraph, demonstrating the topicality and relevance of the journals.

CIBSE members continue to benefit from online access to both journals as a benefit of their membership.

Societies (Divisions)

CIBSE launched the Society of Digital Engineering (SDE) in 2017 – bringing to five the number of 'Divisions', as they are defined in the by-laws, which CIBSE now operates. These are commonly referred to as 'the societies':

• Society of Light and Lighting (SLL)
• Society of Public Health Engineers (SoPHE)
• Society of Façade Engineering (SFE)
• Society of Digital Engineering (SDE)
• Institute of Local Exhaust Ventilation Engineers (ILEVE)
Membership of the societies is open to all CIBSE members. Each society has its own membership, which is for those who can demonstrate specific engineering competences in the specific discipline of the society.

**The Society of Light and Lighting (SLL)**

SLL represents and embraces all who are interested in the art, science and engineering of light, lighting and its applications. The Society offers authoritative guidance, professional recognition and a range of learned society activities. The SLL is recognised worldwide as an authority on lighting and its applications.

Following the success of the Night of Heritage Light (NoHL) over the previous two years, SLL worked in association with Oxford University and the Oxford Curiosity Carnival to illuminate seven of Oxford's iconic sites and run a 'Pockets of Light outreach, delivering a series of lighting workshops to schools in Oxford and challenging the students aged 11-16 to come up with their own lighting designs for the quad of the Bodleian Library. Three winning designs were selected by a panel of judges, and then realised as part of the Night of Heritage Light.

The SLL Masterclass Series, now presented as the SLL Lighting Knowledge Series and entitled LightBytes, has been reformatted with each of the speakers delivering a bite-sized presentation for each of the four session topics; Design, Specify, Build and Future, with a guest speaker looking at digital engineering.

The Society exhibited at Light Middle East in October, promoting the Society in the UAE region and welcoming new members. For the second year running, the SLL hosted Ready Steady Light Middle East, alongside the exhibition organisers, Messe Frankfurt.

The Society exhibited at Lux Live in November, where the final of SLL Young Lighter of the Year 2017 finals was held, with the winner announced at the Lux Awards.

**The Society of Public Health Engineers (SoPHE)**

The Society runs a programme of events and activities for those specialising in public health engineering. These are offered in London and around the UK regions, as well as in UAE through the local branch.

SoPHE was involved in the first phase of the LUNA Project, a research project looking at the use of loading units in commercial buildings to determine required water supply. The Phase 1 report was published in 2017 and Phase 2 is now underway through a Knowledge Transfer Partnership between CIBSE and Heriot Watt University.

The Society has developed its first technical bulletin on loading units. This series seeks to deliver up-to-date guidance to practising public health engineers and is available from the CIBSE Knowledge Portal.

The SoPHE Graduate of the Year Award which focuses attention on the next generation of engineers was presented at the SOPHE Annual Dinner in November.

**The Society of Façade Engineers (SFE)**

SFE was set up to bring people together in a forum to advance knowledge of façade engineering, promote good practice and ensure that today's increasingly complex building façades meet the many and varying requirements placed on them. Events in 2017 served to bear out need for such knowledge and expertise.

SFE was particularly active in the second half of 2017, in response to the Grenfell Tower fire. A working group on façade performance was set up to develop a detailed response to the Independent Review of Building Regulations and Fire Safety, led by Dame Judith Hackitt. The Grenfell Tower fire has brought this specialist
discipline into the spotlight, and emphasised the importance of the Society in recognising competent members, based on formal professional membership recognition requirements.

The Institute of Local Exhaust Ventilation Engineers (ILEVE)

ILEVE exists to recognise competence in the practical application of local exhaust ventilation and to raise awareness of the importance of good air quality and ventilation in workplaces.

The Institute’s Competence Cards, which are issued to members as evidence of their peer assessed and evidence competence, provide a benchmark for LEV competence standards. ILEVE has worked with the HSE and other professional and trade bodies in the sector to raise awareness of the need for local exhaust ventilation to safeguard workplace health, and to promote the competence requirements. There is also an ongoing effort to support engineers seeking to meet the competency requirements, to help move the industry’s skills forward, and to spread knowledge about its expertise to other industries.

ILEVE exhibited and ran CPD sessions at the British Occupational Hygiene Society conference in February 2017, reaching out and raising awareness of specialist LEV systems and practitioners.

Society of Digital Engineering

The Society of Digital Engineering (SDE) has been formed to provide a forum for those involved in digitising the built environment, either as designers, contractors, manufacturers, clients, facilities managers or software vendors. The SDE has had its soft launch in September 2017, with its official launch taking place at Build2Perform in November. Already, SDE has more than 135 members, 40% of whom are new to CIBSE.

The Society has its own classes of membership and designatory (post-nominal) letters for those who are suitably qualified and experienced in digital engineering. Membership of the SDE will also provide affiliate grade membership of CIBSE for those who are not already CIBSE members, and CIBSE membership benefits, including access to the CIBSE Journal and Knowledge Portal.

Membership is open to all those involved in digital engineering, building information modelling (BIM), software for design and analysis of buildings, computer aided facilities management and other related activities.

The aims of the Society are:

- To provide professional recognition to digital engineers
- To give a route to CIBSE membership
- To give a route for digital engineers to achieve CEng status
- To provide best professional guidance
- To provide training programmes for professional development
- Speaking for and representing the profession
- Connecting the creators and users of digital information in the built environment.

www.cibse.org/Society-of-Digital-Engineering-SDE
Special interest groups

CIBSE has 18 special interest groups covering a range of topics. Participation in these is open to all with an interest in the topic, regardless of whether or not they are members. Through this mechanism, 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
2. Building Simulation
3. Chimneys and Flues
4. CHP and District Heating
5. Daylight
6. Electrical Services
7. Energy Performance
8. Facilities Management
9. Healthcare
10. Heritage
11. Homes for the Future
12. HVAC Systems
13. Information Technology (IT) & Controls
14. Intelligent Buildings
15. Lifts
16. Natural Ventilation
17. Resilient Cities
18. School Design

In 2017 a HVAC systems group was launched to encourage the efficient design, installation and operation of heating, ventilation and air conditioning systems.

The groups run a variety of technical activities and provide knowledge and information through a range of channels. The Natural Ventilation Group and the CIBSE ASHRAE Group provide regular newsletters to those registered with the Group. The Natural Ventilation Group also provided articles for CIBSE Journal and for the Journal of REHVA, the European Federation of HVAC Societies. The CIBSE ASHRAE Group also provides a regular programme of technical webinars involving speakers from around the world.

Other groups have contributed actively to the development of new CIBSE Guidance. The Homes Group completed a TM which provides guidance on good practice in the integration of building services into dwellings, including single family dwellings and apartments. They also contributed to the development of CIBSE TM59 on Overheating. The Facilities Management Group developed guidance on facilities management competences, KS21. The Resilient Cities Group ran a major workshop at the start of 2017 looking at the various aspects of resilience in urban settings. And the CHP and District Heating Group continues to contribute to the Code of Practice for District Heating and associated training and guidance. The CIBSE Lifts Group also run a programme of technical activity and maintain CIBSE Guide D, the Lifts Guide.

In 2017 a HVAC Group was established to address some of the core issues around heating, ventilation and air conditioning. The Healthcare and Schools Groups were also relaunched with new committees to develop their respective programmes.

All of these Groups, together with the Building Simulation Group, Heritage Group and Young Energy Performance Group contributed to the to Build2Perform Live programme, in November, providing speakers and developing content.
Finally, the CIBSE Heritage Group maintained a steady programme of meetings on heritage matters, allied to their ongoing work curating and collecting an unparalleled archive of information on historic building services installations, equipment and manufacturers. Much of this is accessible via their webpages.

Networks

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 consists of a committee, which organises technical and networking events in their local area. A centre can consist of young engineers who happen to live or work in that area or may be formed at a place of learning and consist of students.

The aims of YEN are to:
- Promote a positive and welcoming image.
- Provide a platform for new thinking, novel approaches to design and knowledge exchange.
- Ensure that young engineers engage more closely with our professional institution at an early stage in their careers.
- Encourage more women to join the building services profession.
- Establish a link with CIBSE Council.
- Promote building services engineering to school and university students.
- Guide young engineers towards a long term career in building services.

In 2017 the YEN Global Conference was held in Dubai, with a four-day programme of visits to some of the major projects in the region, including the sustainable city of Masdar in Abu Dhabi, participation in the region’s first technical conference on ‘Sustainability in tall buildings’, and the annual dinner of the CIBSE UAE region. This gave some 25 early career professionals first hand exposure to the challenges of building in the Gulf region.

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 around the world.

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.

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), with CIBSE members in more than 100 countries outside the UK.
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 during 2017. Each region is driven by a committee of dedicated volunteers, who aim to promote the intellectual welfare of members and improve understanding of building services engineering among other professions and society in general, by organising periodic meetings and other activities related to the built environment.

In March, the Region organised a series of half day seminars looking at the benefits and challenges of measuring, metering and managing energy use in buildings.

The Australia and New Zealand region celebrated their 30 year anniversary in 2017. The celebrations culminated in a cocktail function at Melbourne’s Sea Life Aquarium, with local dignitaries attending along with CIBSE President, Peter Y Wong. The event also included the presentation of the student and young engineer awards.

The Yorkshire region held another very successful awards event in 2017. Almost 400 built environment professionals came together in November to celebrate with the shortlisted award nominees and category winners. The event is now firmly established as an industry highlight in the region and has helped to raise the profile of CIBSE in the area.

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

Inclusivity Panel

In 2017 the CIBSE Board decided to form an Inclusivity Panel to advise and engage with the Board on:

- All matters relating to diversity, equality and inclusion - with a view to improving organisational awareness and performance in these areas among both staff and the global membership;
- CIBSE's obligations under the Diversity in Engineering Concordat, by engaging with frameworks proposed by the Royal Academy of Engineering's Diversity and Inclusion team and, where beneficial, other professional institutions;
- The prioritisation of inclusivity issues that have particular relevance to CIBSE, together with plans for addressing these issues.

The Panel made good progress in 2017 with an action plan for 2018 that includes the following key aims:

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

Growing CIBSE Services

CIBSE Journal

2017 was another successful year for the CIBSE Journal, starting with the launch of a new design. As well as bringing the Journal up to date, and introducing a more contemporary look and feel, the new design introduced a new Journal logo, which fits better with its online presence.

The Journal has continued to bring readers high-quality, in depth articles, reflecting the diversity of interests and specialisms of CIBSE membership. A notable example is the feature on the restoration of the Palace of Westminster, written with the CIBSE Heritage Group.

The magazine has also proved its credentials to handle changing news in a sensitive, informative and well-considered manner, with its coverage of the devastating Grenfell Tower fire and subsequent analysis of the response.

Across 2017 the magazine has featured interviews with a range of industry figureheads, including Max Fordham; Paul Flatt, CEO, Hurley Palmer Flatt; Andrew Swain-Smith, chair of building services at BDP; Debbie Hobbs, head of sustainability at Legal & General Investment Management; and Andy Wall, SES Engineering Services.

The magazine has continued to support CIBSE events and initiatives across the year, with coverage of: the Building Performance Awards; Build2Perform Live; Digital Engineering Series; Young Engineers Awards; CIBSE Technical Symposium; and CIBSE Publications, as well as coverage of other groups and society events across the year.

During the year the Journal produced four supplements on: schools and education facilities; hotel and leisure facilities; commercial heating and a CPD directory guide.

Online, the CIBSE Journal website and jobs site have continued to support the print publication, with visitor numbers increasing steadily across the year.

www.cibsejournal.com
jobs.cibsejournal.com
Certification

During 2017 CIBSE Certification continued to certify the competence of energy professionals with 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. We are now at the midpoint of the Energy Savings Opportunity Scheme (ESOS) cycle, and by December had registered more than 200 ESOS Lead Assessors.

In 2017, CIBSE Certification continuously worked to raise the profile of the scheme to reinforce the reputation of Low Carbon Consultants (LCCs) and Low Carbon Energy Assessors (LCEAs) for high quality, expert services.

For CIBSE Certification, the LCC Register is an important means of raising competence across the industry. Our UKAS accreditation to certify Energy Management Systems against ISO50001 means that CIBSE Certification can support companies operating Energy Management Systems, by providing third party verification that their systems are being operated in conformity with the Standard. In 2017 CIBSE Certification completed their application programme to extend this capability to certify Quality Management Systems in conformity with ISO9001. As part of their application for ISO14001, they carried out their first ISO14001 audit.

www.cibsecertification.co.uk

* Separate regulations apply in Scotland

Training

During 2017 CIBSE Training aligned the three main areas of business, face to face/in-house, professional learning and online learning, delivering a joined up approach that will enable continued growth to meet demand from both members and the wider supply chain.

New e-learning modules released in 2017 include the online Digital Engineering Series, with development of soft skills modules following. A range of further modules is being researched and developed. The reintroduction of the face-to-face ESOS course was met positively, and CIBSE’s new customer relationship management (CRM) system is proving increasingly effective in supporting the marketing of all areas of training, as well as facilitating improved service.

In-house training, where we take the course to the client, grew exponentially in 2017, with the average number of delegates increasing from seven to 12 by the end of the year. Organisations trained came from both the public and private sector.

Summary statistics for 2017:

- Face-to-face courses: 124
- In-house courses: 70
- Professional learning (Energy Assessor) courses: 49
- Total courses in 2017: 243, averaging 20 per month
- Delegates trained: 2187
- Online learning – 2874 active users.

www.cibse.org/training

Knowledge Portal (KP)

The Knowledge Portal provides all CIBSE members with access to the full range of CIBSE guidance as a benefit of membership, allowing access to authoritative guidance online, anywhere and at any time. This gives
members the reassurance that the services they provide to their clients can be based on current and up-to-date guidance — including the 22 new CIBSE titles added in 2017.

The portal also makes CIBSE’s knowledge accessible to all, on payment. Revenue from the portal contributes to the maintenance and development of CIBSE’s guidance, which includes:

- CIBSE Guides
- Application Manuals (AM)
- Codes of Practice
- Lighting Guides
- Commissioning Codes
- Technical Memoranda (TM)
- Knowledge Series

A wealth of other CIBSE content is only available on the KP, including case studies and research papers submitted to the various Technical Symposia.

www.cibse.org/knowledge

Raising awareness and driving our profile

A key priority for CIBSE throughout the year was to raise the public profile of the Institution, in order to support 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
(21-22 November 2017)

In its inaugural year, Build2Perform Live launched at London Olympia, where it welcomed 1400 visitors and 170 speakers, and hosted 70 technical sessions. The event featured technical content from ten CIBSE special interest groups, three CIBSE divisions, the Young Engineers Network (YEN), Build2Perform Live exhibitors, and speakers from across the industry.

Build2Perform Live is a free event that facilitates the sharing of CIBSE knowledge to the benefit of the wider built environment. It covered topics including: lighting spaces, wellbeing, BIM and digital engineering, natural ventilation, facilities management, heritage buildings, combined heat and power (CHP) and district heating, energy efficiency, daylighting, building simulation, and design of housing.

Across the top streams, there was a consistent focus on providing specific building performance session takeaways, which attendees could apply in their work.

Build2Perform Live also hosted the launch of the CIBSE HVAC Systems special interest group, Building Performance Awards shortlist celebration, Society of Digital Engineers Hall of Fame and the launch of the 2018 CIBSE Green Infrastructure Design Challenge.

Engaging with Government

CIBSE interacts with government and other external stakeholders, such as the Committee for Climate Change, Royal Academy of Engineering and the British Standards Institution, in policy and technical fields. We contribute to a number of government departments, including the Ministry of Housing, Communities and Local Government (MHCLG), and Department for Business, Energy and Industrial Strategy (BEIS). We also work with
the Health and Safety Executive (HSE) on the occupational health strategy, with a particular focus on preventing occupational lung disease.

Our objective is to provide government with clear advice on the engineering options, opportunities and challenges relating to policy for the built environment, as well as the companies and engineers working in the sector and its supply chain.

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

We are actively participating in and contributing to the ongoing response to the Grenfell Tower fire. Staff and volunteers are contributing to several aspects of the ongoing work.

**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**

Working with public relations agency Ridgemount PR, in 2017 CIBSE placed 24 feature articles in a variety of publications; including Property Journal, Public Sector Building, and Energy in Buildings and Industry. This year’s highlights, where we achieved multiple features, included: the CIBSE Building Performance Award winners, celebrating best practice; digital and the launch of the Society of Digital Engineers; the Technical Symposium; and overheating in homes.

After the tragic events of the Grenfell Tower fire, Martin Kealy, who chairs the CIBSE Guide E: Fire Safety Engineering steering group and is a prominent fire engineer and CIBSE member, appeared briefly on the BBC 10 o’clock news, ITN and CNN on behalf of CIBSE. He observed that there was a need to understand the reasons for the speed of fire spread.

**CIBSE website**

Following the CIBSE website integration with CIBSE’s new customer relationship management (CRM) system in 2016, the focus for 2017 shifted to improving the user experience across the site. Changes included the introduction of Google custom search to make it easier to find content on the site, smoother access to CIBSE’s technical journals (BSER&T and LR&T) and an improved journey for users on logging in to the site. By the end of the year, nearly 28,000 users had registered with the website.

[www.cibse.org](http://www.cibse.org)
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 and CIBSE’s annual event Build2Perform Live, and is used by CIBSE and the industry to amplify messages about improving and optimising the performance of buildings.

#Build2Perform hosts seven podcasts on a range of subjects with members and industry figures. Highlights this year were an interview with Ant Wilson from AECOM on the occasion of the award of his MBE and his career journey, and Dr Anastasia Mylona, research manager at CIBSE, on CIBSE TM59: Design methodology for the assessment of overheating risk in home, on the research behind the guidance.

www.soundcloud.com/build2perform

Twitter, LinkedIn
CIBSE’s social media activity on Twitter and LinkedIn continued to grow in reach and engagement. Twitter followers grew by 12% and LinkedIn by 15% in 2017, providing the ability to reach more people with our publications, meetings, 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
www.cibse.org/linkedin

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 member feedback through the Hong Kong region member survey and is building a presence alongside other CIBSE regions, special interest groups, and divisions, who are already using Facebook to engage with their audiences. Facebook also provides a commercial platform for our events, awards and training programmes.

www.facebook.com/cibse

Blog
The CIBSE #Build2Perform blog provided a view on more than 20 initiatives across the Institution, which received almost 48,000 views. The most popular blogs included:

- Transforming a Slough waste-recycling centre using green infrastructure — a review of the project that won the 2017 Green Infrastructure Design Challenge
- Plan – Do – Check – Act – ISO 5001 and the business opportunities associated with it
- Gothic revival – the radical refurbishment of New Court, part of Trinity College, Cambridge
- Health warning – the impact of indoor air quality on the comfort and well-being of students
- The next step – BIMHawk and where it fits into the BIM landscape

www.cibseblog.co.uk
Building services awards

Building Performance Awards
(7 February 2017)

In 2017 the Building Performance Awards celebrated their tenth anniversary. The Awards reflect the crucial changes that have taken place over the last ten years, and are a leading event for those striving to deliver a better built environment. They recognise the individuals, teams and companies going above and beyond in their commitment to creating buildings that deliver comfort, efficiency and sustainability for their whole lifespan.

Judged by a diverse panel of experienced professionals from across the built environment supply chain, the awards require entrants to provide at least one year’s operational performance data for buildings to demonstrate their achievements in delivering outstanding building performance.

The 2017 winners were announced at a dinner attended by more than 750 guests at the Grosvenor House Hotel, in London, on 7 February 2017. The University of Bradford’s Department of Estates and Facilities won the overall prize of Building Performance Champion, in recognition of its tight-knit team, which demonstrated an admirable commitment to excellence. This was the second time University of Bradford has been crowned the overall winner, after they won Client of the Year and Carbon Champion in 2012. The judges said ‘This entry was really exceptional and blew the others out of the water. They went far beyond where they needed and way above their institutional needs.’

To coincide with the 10th year, the 2017 Awards introduced a new Test of Time award to reflect the Awards’ legacy and to reward continued high performance in a previous winner. The Award went to British Land.

www.cibse.org/bpa

FACADES 2017 (7 December 2017)

Organised by the Society of Façade Engineering, the annual Façade of the Year competition recognises and rewards excellence in façade design and engineering, and aims to draw attention to the importance of facades in modern architecture. The 2017 winners of the competition, which was launched in 2013, were announced at the Glass Supper on 7 December in London.

The UK division of Danish-based Ramboll won the Façade of the Year New Build for the Blavatnik Building, Switchhouse Extension of the Tate Modern, London. Octatube won the Refurbishment category for the new
entrance at the Victoria & Albert Museum, London. The Outstanding Façade Innovation Award was given jointly to Bellapart and Arup Façade Engineering for their work on the new entrance for the Berkeley Hotel in London’s Knightsbridge.

The Happold Brilliant Award
Winner: MidKent College
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 award was received by Kim Howes, lecturer in building services engineering, on behalf of MidKent College.

Ken Dale Travel Bursary
Winner: St John Townshend, graduate building services engineer at Hydrock Consultants
St John Townshend was awarded the 2017 Ken Dale Travel Bursary for his proposal to research air pollution in the built environment. His project looked at how people have responded to indoor air quality, and the methods of reducing indoor air pollutants. His trip took him across India, China, South Korea and Singapore.

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

CIBSE Gold Medals
Winners: Lou Bedocs and Geoffrey Brundrett

The CIBSE Gold Medal is the highest award that CIBSE bestows on an individual, and recognises a lifetime of excellence in building services engineering, and an exceptional contribution to the improvement of the profession.

Lou Bedocs was recognised for his contribution to the industry over his 53 year career in lighting. During that career he has been vice president of CIBSE and chairman of the Lighting Division (now SLL), been awarded two Leon Gaster Medals, has received the SLL Lighting Award, and is honorary president of the Lighting Industry Federation.

Geoffrey Brundrett received the award in recognition of his contribution to the industry at regional, national and international level across his 55 year career. He gained an international reputation for his contribution to the understanding and control of legionella – for which he received a CIBSE bronze medal in 1992.

President’s prize- The Undergraduate Award (sponsored by Hays Building Services)
Winner: Patrick Tanner, London South Bank University
Patrick Tanner from London South Bank University won the 2017 CIBSE Undergraduate Award for his final year project, ‘Investigation into potential CO₂ and energy savings due to specification of electrical cabling based on energy efficiency criteria’.

A trophy was also awarded to London South Bank University in acknowledgement of its achievements.

The award, sponsored by Hays Building Services, has been running for more than 20 years and 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, based on understanding and knowledge in building services engineering, science and design, as well as originality and high quality visual information. The award is the subject of an open competition and has an annual closing date.
Society of Light and Lighting (SLL) Young Lighter of the Year Award (16 November 2017)
The SLL Young Lighter of the Year Award is open to all lighters under the age of 30 and provides a unique platform to their knowledge and research on a lighting subject. It serves to encourage young lighters to develop their knowledge and to provide an incentive for the leading young practitioners to enhance their skills.

Matt Hanbury, founder of Lightly Technology, won the 2017 competition, and the prize for Best Presented Paper, with his presentation and paper, Ultra-thin Surface Light Sources: Picking up where OLED stalled.

Amir Nezamdoost won the Best Written Paper Award for his paper, ‘A new manual blind use pattern for annual energy and daylight simulation’.

Society of Public Health Engineers (SoPHE) Young Engineer of the Year Award
The SoPHE Young Engineer Award challenges applicants, aged 18-35, to develop an engineering solution to a specified problem for that year’s entrants. The 2017 award was won by Alistair Hayden, a lead signalling communications engineer at Transport for London, for his design of a simple adaptor to aid water filtration. His entry impressed the judges for its thorough research and was considered an appropriate, scaleable and sustainable proposal.

This year the SoPHE worked with Engineers Without Borders and their partners Caminos de Aqua in Mexico for the award.

Young Engineers Awards (12 October 2017)
The 22nd Young Engineers Awards (YEA) were held on 12 October in London, with an audience of over 150 drawn from the industry, and friends and family of the finalists. They were once again notable for the very high standard of entries as finalists highlighted the industry’s young global talent, with entrants from Europe, America and Australia. The awards aligned with CIBSE President, Peter Y Wong’s Presidential Address, linking engineering to art, and highlighting the creativity of engineering.

CIBSE ASHRAE Graduate of the Year 2017
The CIBSE Graduate of the Year prize at the Young Engineers Awards recognises excellence in the early stages of the engineer’s career. The shortlisted finalists are among the best young engineers in the profession, and this award requires finalists to prove that they also have the best soft skills by delivering five minute presentations on a theme.

Raphael Amajuoyi delivered his presentation in response to the question, ‘Is engineering an art, and should building services professionals be more creative in the way they approach projects?’ His calm and collected presentation referenced Italian mathematician Fibonacci’s sequence – which is seen in art, architecture and engineering, and demonstrated how BIM tools can help engineers to be creative in their projects.

CIBSE Employer of the Year Award 2017
Winner: InTandem Systems Ltd
The Employer of the Year awards recognise employers that have shown excellence and innovation in developing the engineers of the future. This year’s overall prize was won by InTandem Systems Ltd, which also took the title in the Small Employer category. InTandem impressed the judges with their commitment to nurturing and retaining young talent.

The Large Employer of the Year category was won by Norman Disney and Young, and the winner in the Medium Employer of the Year category was Elementa Consulting.
THE CHARTERED INSTITUTION OF BUILDING SERVICES ENGINEERS

Annual report and financial statements for the year ended 31 December 2017

Full list of award winners in 2017:

CIBSE Gold Medals
- Lou Bedocs
- Geoffrey Brundrett

CIBSE Silver Medals
- Peter Kinsella
- Stuart MacPherson
- Paul Ruffles
- Colin Wilson

Bronze Medals for Service to the Region:
- Stephen Goodhead – CIBSE Yorkshire
- Gerald Israel – CIBSE South Wales
- Chung Keung Mok – CIBSE Hong Kong
- Keith Maloney – CIBSE Merseyside & North West
- Michael Rhead – CIBSE North East
- Vincent Wing Chun Luk – CIBSE Hong Kong
- Brian Whitehead – CIBSE Merseyside & North West

Honorary Fellowship
- Andrew Saville
- Professor Pan Yonghua

Carter Bronze Medal
- Ian Knight

Napier Shaw Bronze Medal
- Dr Matthew Eames

The Happold Brilliant Award
- MidKent College

Ken Dale Travel Bursary
- St John Townshend

President’s Prize: CIBSE Undergraduate Award
- Patrick Tanner

Society of Light and Lighting Young Lighter of the Year Award
- Matt Hanbury
Society of Public Health Engineers Young Engineer of the Year Award

- Alastair Hayden

Young Engineers Awards

- CIBSE ASHRAE Graduate of the Year: Raphael Amajuoyi
- CIBSE Employer of the Year: InTandem Systems Ltd

CIBSE Building Performance Awards

- Building Performance Champion/Facilities Management Team: University of Bradford’s Low Carbon Estate – University of Bradford - Department of Estates and Facilities
- Test of Time: British Land
- Building Performance Consultancy of the Year (up to 100 employees): Elementa Consulting
- Building Performance Consultancy of the Year (101-1000 employees): Max Fordham
- Building Performance Consultancy of the Year (over 1000 employees): AECOM
- Building Performance Training Programme: BREEAM Associate – BRE Academy
- Collaborative Working Partnership Award: RNLI Porthdinllaen, Gwynedd – Hoare Lea
- Energy Management Initiative Award: Knowledge-based Energy Management of Swire Properties Hong Kong Portfolio – Swire Properties
- Energy Efficient Product or Innovation of the Year: Sentinel Kinetic Advance – Vent-Axia
- Energy Saving Product or Innovation of the Year: Guru Pinpoint – Guru Systems
- Project of the Year - Commercial/Industrial: Jaguar Land Rover Engine Manufacturing Centre (JLR EMC), Wolverhampton – Ove Arup & Partners
- Project of the Year - International: DPR Net Positive Energy San Francisco Office, USA – Elementa Consulting, Member of Integral Group
- Project of the Year - Leisure: Refurbishment of Main Kitchen of Fredericks Restaurant – TAG Catering Equipment
- Project of the Year - Public Use: Keynsham Civic Centre – Max Fordham
- Project of the Year - Residential: Tigh-na-Croit, Gorstan (nr Garve) – HLM

FAÇADES 2017 (Society of Façade Engineering)

- Façade of the Year New Build: Ramboll – Blavatnik Building, Switchhouse Extension of the Tate Modern
- Façade of the Year Refurbishment: Octatube – Victoria & Albert Museum entrance
- Outstanding Façade Innovation: Bellapart and Arup Façade Engineering – Berkeley Hotel entrance

Plans for the future

Theme 1: Improving building performance

We will continue to drive improved performance of our built environment through a whole building life cycle approach to design, operation and maintenance. We will continue to showcase good practice through the CIBSE Journal, Awards and other communications.
As the reviews of industry practice in the wake of the Grenfell Tower disaster continue, CIBSE will support the work of the various enquiries in every appropriate way, seeking as far humanly possible to eliminate the risk of such an event ever happening again.

**Theme 2: Sharing engineering knowledge**

We will lead by working with our members, and industry, to provide best practice knowledge, guidance and learning at point-of-use to continuously improve the performance of buildings and the communities they serve.

We will continue to review the means by which we make engineering knowledge and guidance available to our members, the wider industry and public, and maintain a wide ranging programme of knowledge development.

**Theme 3: Developing our membership**

Plans for future membership development are in place and include a number of initiatives to improve the current membership offering and support the future growth of membership. These initiatives include:

- Continued promotion of CIBSE membership to those participating in CIBSE special interest groups, and the advancement to professional membership grades for current affiliate members;

- The development of an online process for membership applications. This will greatly improve the user experience for applicants and also deliver greater efficiencies to back office processes;

- 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:

- 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 new 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.
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 fair 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.

In 2017, total income decreased slightly to £6.9M, with lower investment income and slight drops in fees from charitable services and trading subsidiary income offsetting a modest rise in membership income. Total expenditure reduced by £143K, with savings in trading subsidiary costs and research outweighing increased expenditure in other areas. The Institution’s expenditure reflects continued investment in the delivering the Institution’s strategic aims to develop and enhance the work of the Institution, and in the Institutions IT Strategy to ensure that maximum value can be delivered from the overhaul of its systems.

As a result, net expenditure before gains on investments reduced to £398K, a reduction of around £60K compared with the 2016 results.

Net gains on investments of £153K during the year reduced the net expenditure to £245K, although this was around £26K more than in the previous year due to very high levels of investment gains during 2016.

There was an actuarial gain on the defined benefit pension scheme of £180K, following a loss of £218K during 2016. The triennial valuation of the scheme carried out as of 1st April 2017 indicated that continued recovery plan funding was required, however, in spite of the positive results shown in the financial Statements.

These movements resulted in a net decrease in funds of £65K to £2.644M in 2017, from £2.709m in 2016. This small decrease is attributable to investment and pension scheme gains cancelling out the bulk of the net expenditure before consideration of those items.

The cash balance increased to £738K from £336K in 2016, as a result of improved performance of the new CRM system allowing the prompt 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 £0.4m (2016: £0.6m), 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 and Governance Sub Committee.
Risk management

It is the responsibility of the Board as the Trustees of the Institution to examine the major operational and business risks which the Institution faces and to establish appropriate systems to manage significant risks.

The Trustees have identified a loss of contact with, and relevance to the membership and failure to develop and maintain appropriate and relevant content for the Knowledge Portal, as a major operational risk to CIBSE and its subsidiary. The Knowledge Management Committee review and update content on a regular basis and communication with members through Council, Regions, Societies and Groups, election of Board and Council Members is in place to mitigate this risk so as ensure continuous provision of service and development.

Financial sustainability has been identified as a principal financial risk for both the charity and its subsidiary company. A key element in the management of financial risk is a regular review of available liquid funds to settle debts as they fall due, regular liaison with the bank, and active management of trade debtors and creditors balances to ensure sufficient working capital.

Attention has also been focussed on non-financial risks arising from processing online payment transactions, fire, health and safety of employees and members. These risks are managed by ensuring accreditation is up to date, having robust compliance policies and procedures in place, and regular awareness training for staff.

Risk is assessed as part of the consideration of all new projects, and the Finance Sub Committee is charged with the detailed examination of the Institution’s Risk Register and the presentation of an annual review of the Institution’s overall risk profile for the Board’s consideration. This review has identified and assessed the major risks faced by the Institution, and confirmed that appropriate control systems have been established to manage those risks. The Board will continue to review the overall risk profile on an annual basis, and to consider specific and substantial risks as they arise.

The Board has also noted, however, that the UK’s decision to leave the European Union has potentially significant consequences for the Building Services Industry and for the Institution, but that there is considerable uncertainty as to what the impact, if any, might be. The Board has accordingly agreed for the time being to maintain an additional section in the Risk Register referring specifically to risks that may be associated with Brexit.

4) STRUCTURE, GOVERNANCE AND MANAGEMENT

The Chartered Institution of Building Services Engineers is governed by its Royal Charter and By-Laws, which were awarded in 1976 and last amended in 2010, when they were substantially streamlined by the removal of many former By-Laws into a new set of Regulations. Following a further review carried out in 2015, the Board in 2016 approved and introduced an updated set of rules, terms of reference and operational procedures for the many Committees and Sub Committees that assist in the work of the Institution.

The members of the Board of the Institution are the Trustees of the Charity. The Board is composed of the Officers of the Institution (the President, the President Elect, the three Vice Presidents, the Honorary Treasurer and the Immediate Past President) and five additional members who are elected for a three year term of office. Apart from the office of President, which is filled automatically by the previous year’s President Elect, all positions are directly elected by and from the membership of the Institution according to rules set out in the Royal Charter, By-Laws and Regulations.

The Board is required to nominate candidates each year for all forthcoming vacancies, which it does in the light of advice received from its Nominations Committee. All newly appointed Trustees are provided with an information pack containing relevant information on their role, including Charity Commission guidance on Trustees’ responsibilities. In addition, training on Trustees’ responsibilities is carried out annually.
The Board meets every two months to direct the business of the Institution and is assisted by the House & Remuneration Sub Committee (which deals with terms and conditions of employment of the Chief Executive and senior staff and ad hoc issues) and the Finance, Risk, Audit & Governance Sub-Committee (which deals with budgeting, management and financial accounts, audit, risk and governance issues). The Standing Committees of the Institution (the Education, Training & Membership Committee, Technology Committee, Professional Conduct Committee, Publications & Research Outputs Delivery Committee and the Regional Liaison Committee) report to the Board and have delegated authority within their spheres of activity.

The Institution’s trading subsidiary CIBSE Services Limited is governed by Directors, appointed by the Board of the Institution, who meet regularly to monitor and direct its activities. The purpose of CIBSE Services Limited is to generate income for the Institution through the development and operation of commercial activities which are aligned with and support the objectives of the Institution. The Chair of CIBSE Services Limited makes regular reports to the Board of the Institution.

The Chartered Institution of Building Services Engineers Hong Kong Ltd is a company limited by guarantee registered in Hong Kong. It was established to handle the operation of the CIBSE Hong Kong Region in order to meet local legislative requirements, and ultimate control of the company rests with the CIBSE Board through the appointment of its directors. The Hong Kong region otherwise operates in the same manner as other CIBSE regions, but under the auspices of this local incorporation.

Key management personnel remuneration

The Board of Trustees is responsible for the governance and overall control of the Institution. The Chief Executive conducts the business of the Institution on a day to day basis under the direction of the Board of Trustees, supported by the senior management staff of the Institution.

All Trustees give of their time freely and no Trustee remuneration was paid in the year. Details of trustee expenses and related party transactions are disclosed in Note 8 to the accounts.

Trustees are required to disclose all relevant interests and register them with the Chief Executive and in accordance with the Institution’s policy withdraw from decisions where a conflict of interest arises.

The pay of the charity’s Chief Executive and senior management staff is reviewed annually by the House & Remuneration Sub Committee, which is a sub-committee of the Board of Trustees comprising the President, President-Elect, Immediate Past President and Honorary Treasurer. Authority is delegated to the House Sub Committee to appraise the performance of the Chief Executive and to approve any increase to the remuneration of the Chief Executive and of the senior management staff. A range of factors are considered in this process, including job performance, price and earnings inflation, market conditions and comparisons with other professional institutions.

Public benefit

We have referred to the guidance contained in the Charity Commission’s general guidance on public benefit when reviewing our aims and objectives and in planning our future activities.
5) REFERENCE AND ADMINISTRATIVE DETAILS

The Institution is a Registered Charity, under charity registration no. 278104. Its principal office is at 222 Balham High Road, London SW12 9BS.

Investment powers

The Institution has powers contained within its Royal Charter and By-Laws which provide for investment of funds in such manner as the Board thinks fit, subject to any requirements of law.

The investment objective is to generate a stable income stream to support the on-going activities of the Institution whilst achieving capital growth over the long term. The Institute seeks to produce the best financial return within an acceptable level of risk.

Trustees

The following were members of the Board and thus Trustees of the Charity during the whole year, unless otherwise stated:

Ashley Bateson (from 9th May 2017)
Adrian Catchpole (from 9th May 2017)
Paddy Conaghan
John Field
Susan Hone-Brookes
Lynne Jack
Chris Jones (from 9th May 2017 to 10th May 2017)
Kevin Kelly (from 9th May 2017)
Stephen Lisk
Stuart MacPherson
Nick Mead (to 9th May 2017)
Kevin Mitchell (from 9th May 2017)
Tadj Oreszczyn (to 9th May 2017)
David Pepper (to 9th May 2017)
Andrew Saville (to 9th May 2017)
Peter Y Wong

Chief Executive Officer
Stephen Matthews

Members of the Consultative Council
All Board members are also members of Council
Past Presidents:
Nick Mead, Peter Kinsella

Elected Members:
Colin Ashford, Eleanora Brembilla, Carol Clark, Tessa Guy, Geraldine O’Farrell, Cathie Simpson, Mariana Trusson

Co-Opted Members: Wally Gilder

Patrons Representative: David Fitzpatrick

Divisional Representatives:
Richard Caple (SLL)
Steve Vaughan (SoPHE)
Graham Dodd (to September 17) Savario Passetto (SFE)
Les Copeland (SDE)
Jane Bastow (ILEVE)

Young Engineers Network: David Mather

WiBSE: Laura Dunlop

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 Committee: Mariana Trusson
• Technology Committee: Bryan Franklin
• Professional Conduct Committee: Adrian Catchpole
• Knowledge Management Committee: David Hughes
• Regional Liaison Committee: Stephen Lisk

Group Representatives:
• ASHRAE: Stephen Gill
• Building Simulation: Hazim Awbi
• Chimneys & Flues: Jim Kinnibrugh
• CHP and District Heating: Phil Jones
• Daylight: John Mardaljevic
• Electrical Services: Tony Sung

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THE CHARTERED INSTITUTION OF BUILDING SERVICES ENGINEERS

Annual report and financial statements for the year ended 31 December 2017

- Energy Performance: Tadj Oreszczyn
- Facilities Management: Geoff Prudence
- Healthcare: Mark Walker
- Heritage: Neil Sturrock
- Homes for the Future: Ashley Bateson
- 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
- North West: Colin Lehane
- East Anglia: Jonathan Page
- Northern Ireland: Jonathan Grimshaw
- East Midlands: David Guzzetta
- Ireland: Paul Martin
- HCNE: Austin Williamson
- Scotland: Karen Warner
- South Wales: Justin Thomas
- HCNW: Rashmikant Patel
- HCSE: Richard Davies
- South West: Joshua Eckett
- HCSW: David Wigley
- Southern: Samantha Pope
- Hong Kong: Wai Yip Stanley Chow
- West Midlands: Lionel James
- Merseyside & North Wales: Sai Man Alfred Leung
- Yorkshire: Simon Owen
- North East: Philip Oliver
- UAE: Raef Hammoudah

Principal bankers
National Westminster Bank Plc
128 Balham High Road
London SW12 9AE

Auditor
Moore Stephens LLP
150 Aldersgate Street
London, EC1A 4AB

Principal solicitors
Beale & Company
Garrick House
27-32 King Street
Covent Garden
London WC2E 8JD

Investment advisors
CCLA Investment Management Limited
80 Cheapside
London
EC2V 6DZ
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:

Peter Wong
President
22 March 2018
Independent auditor’s report to the Trustees of The Chartered Institution of Building Services Engineers

Opinion

We have audited the financial statements of The Chartered Institution of Building Services Engineers (the 'charity') for the year ended 31 December 2017 which comprise the Consolidated Statement of Financial Activities, Consolidated Statement of Financial Position, Consolidated Cash Flow Statement and notes to the financial statements, including a summary of significant accounting policies. The financial reporting framework that has been applied in their preparation is applicable law and United Kingdom Accounting Standards, including FRS 102 “The Financial Reporting Standard applicable in the UK and Republic of Ireland” (United Kingdom Generally Accepted Accounting Practice).

In our opinion the financial statements:

- give a true and fair view of the state of the charity’s affairs as at 31 December 2017 and of its incoming resources and application of resources, for the year then ended;
- have been properly prepared in accordance with United Kingdom Generally Accepted Accounting Practice; and
- have been prepared in accordance with the requirements of the Charities Act 2011.

This report is made solely to the charity’s Trustees, as a body, in accordance with Chapter 3 of Part 8 of the Charities Act 2011 and regulations made under section 154 of that Act. Our audit work has been undertaken so that we might state to the charity’s Trustees those matters we are required to state to them in an auditor’s report and for no other purpose. To the fullest extent permitted by law, we do not accept or assume responsibility to anyone other than the charity and its Trustees as a body, for our audit work, for this report, or for the opinions we have formed.

Basis for opinion

We conducted our audit in accordance with International Standards on Auditing (UK) (ISAs (UK)) and applicable law. Our responsibilities under those standards are further described in the Auditor’s responsibilities for the audit of the financial statements section of our report. We are independent of the charity in accordance with the ethical requirements that are relevant to our audit of the financial statements in the UK, including the FRC’s Ethical Standard, and we have fulfilled our ethical responsibilities in accordance with these requirements. We believe that the audit evidence we have obtained is sufficient and appropriate to provide a basis for our audit opinion.

Conclusions relating to going concern

We have nothing to report in respect of the following matters in which the ISAs (UK) require us to report to you where:

- the Trustees’ use of the going concern basis of accounting in the preparation of the financial statements is not appropriate, or
- the Trustees have not disclosed in the financial statements any identified material uncertainties that may cast significant doubt about the charity’s ability to continue to adopt the going concern basis of
accounting for a period of at least twelve months from the date when the financial statements are authorised for issue.

Other information

The trustees are responsible for the other information. The other information comprises the information included in the annual report, other than the financial statements and our auditor’s report thereon. Our opinion on the financial statements does not cover the other information and, except to the extent otherwise explicitly stated in our report, we do not express any form of assurance conclusion thereon.

In connection with our audit of the financial statements, our responsibility is to read the other information and, in doing so, consider whether the other information is materially inconsistent with the financial statements or our knowledge obtained in the audit or otherwise appears to be materially misstated. If we identify such material inconsistencies or apparent material misstatements, we are required to determine whether there is a material misstatement in the financial statements or a material misstatement of the other information. If, based on the work we have performed, we conclude that there is a material misstatement of this other information, we are required to report that fact.

We have nothing to report in this regard.

Matters on which we are required to report by exception

We have nothing to report in respect of the following matters where the Charities Act 2011 requires us to report to you if, in our opinion:

- the information given in the Trustees’ Annual Report is inconsistent in any material respect with the financial statements; or
- sufficient accounting records have not been kept; or
- the financial statements are not in agreement with the accounting records and returns; or
- we have not received all the information and explanations we require for our audit.

Responsibilities of Trustees

As explained more fully in the Trustees’ responsibilities Statement set out on page 33, the Trustees are responsible for the preparation of the financial statements and for being satisfied that they give a true and fair view, and for such internal control as the Trustees determine is necessary to enable the preparation of financial statements that are free from material misstatement, whether due to fraud or error.

In preparing the financial statements, the Trustees are responsible for assessing the charity’s ability to continue as a going concern, disclosing, as applicable, matters related to going concern and using the going concern basis of accounting unless the trustees either intend to liquidate the charity or to cease operations, or have no realistic alternative but to do so.

Auditor’s responsibilities for the audit of the financial statements

Our objectives are to obtain reasonable assurance about whether the financial statements as a whole are free from material misstatement, whether due to fraud or error, and to issue an auditor’s report that includes our
opinion. Reasonable assurance is a high level of assurance, but is not a guarantee that an audit conducted in accordance with ISAs (UK) will always detect a material misstatement when it exists. Misstatements can arise from fraud or error and are considered material if, individually or in the aggregate, they could reasonably be expected to influence the economic decisions of users taken on the basis of these financial statements.

A further description of our responsibilities for the audit of the financial statements is located on the Financial Reporting Councils website at: www.frc.org.uk/auditorsresponsibilities. This description forms part of our auditor’s report.

Moore Stephens LLP
Chartered Accountants and Statutory Auditor
150 Aldersgate Street
London
EC1A 4AB

Moore Stephens is eligible to act as an auditor in terms of section 1212 of the Companies Act 2006
THE CHARTERED INSTITUTION OF BUILDING SERVICES ENGINEERS

CONSOLIDATED STATEMENT OF FINANCIAL ACTIVITIES FOR THE YEAR ENDED 31 DECEMBER 2017

<table>
<thead>
<tr>
<th>Note</th>
<th>Unrestricted Funds 2017 £</th>
<th>Restricted Funds 2017 £</th>
<th>Total Funds 2017 £</th>
<th>Unrestricted Funds 2016 £</th>
<th>Restricted Funds 2016 £</th>
<th>Restated Total 2016 £</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>INCOME FROM:</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Charitable activities</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Members' subscriptions</td>
<td>2,967,359</td>
<td>49,109</td>
<td>3,016,468</td>
<td>2,941,083</td>
<td>52,683</td>
<td>2,993,766</td>
</tr>
<tr>
<td>Fees receivable for charitable services</td>
<td>723,889</td>
<td>13,980</td>
<td>737,869</td>
<td>752,019</td>
<td>13,100</td>
<td>765,119</td>
</tr>
<tr>
<td>Other trading activities</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Trading subsidiary companies</td>
<td>3,092,052</td>
<td></td>
<td>3,092,052</td>
<td>3,141,437</td>
<td></td>
<td>- 3,141,437</td>
</tr>
<tr>
<td>Investments</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Investment income</td>
<td>62,468</td>
<td></td>
<td>62,468</td>
<td>90,338</td>
<td></td>
<td>90,338</td>
</tr>
<tr>
<td><strong>Total income</strong></td>
<td>6,845,768</td>
<td>63,089</td>
<td>6,908,857</td>
<td>6,924,877</td>
<td>65,783</td>
<td>6,990,660</td>
</tr>
</tbody>
</table>

| **EXPENDITURE ON:**                         |                          |                        |                   |                          |                        |                      |
| Raising funds                              |                          |                        |                   |                          |                        |                      |
| Trading subsidiary companies               | 2,961,532                |                        | 2,961,532         | 3,468,394                | -                      | 3,468,394           |
| Charitable activities                      |                          |                        |                   |                          |                        |                      |
| Membership                                | 1,747,664                |                        | 1,747,664         | 1,525,217                | -                      | 1,525,217           |
| Publications                              | 490,986                  |                        | 490,986           | 463,738                  | -                      | 463,738             |
| Technical                                 | 556,814                  | 55,670                 | 612,484           | 512,989                  | 69,273                 | 582,262             |
| Regional & special interest groups         | 1,195,091                |                        | 1,195,091         | 1,091,773                | -                      | 1,091,773           |
| Research                                  | 298,741                  |                        | 298,741           | 318,193                  | -                      | 318,193             |
| **Total expenditure**                      | 7,250,828                | 55,670                 | 7,306,498         | 7,380,304                | 69,273                 | 7,449,577           |

| **Net (expenditure)/income before gains on investments** | (405,060) | 7,419 | (397,641) | (455,427) | (3,490) | (458,917) |
| **Net gains on investments** | 152,906 |                        | 152,906 | 240,053 | - | 240,053 |
| **Net (expenditure)/income** | (252,154) | 7,419 | (244,735) | (215,374) | (3,490) | (218,864) |

| **Other recognised losses** |                          |                        |                   |                          |                        |                      |
| Actuarial gain/(loss) on defined benefit pension scheme | 180,000 | - | 180,000 | 218,000 | - | 218,000 |
| **Net movement in funds** | (72,154) | 7,419 | (64,735) | (433,374) | (3,490) | (436,864) |

| Fund balances brought forward at 1 January 2017 | 2,621,591 | 87,409 | 2,709,000 | 3,054,965 | 90,899 | 3,145,864 |
| Fund balances carried forward at 31 December 2017 | 2,549,437 | 94,828 | 2,644,265 | 2,621,591 | 87,409 | 2,709,000 |

All amounts relate to continuing activities.
The notes on pages 38 to 56 form part of these financial statements.
## Consolidated and Institution Balance Sheets as at 31 December 2017

<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Fixed assets</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Intangible assets</td>
<td>9</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Tangible assets</td>
<td>10</td>
<td>807,308</td>
<td>520,856</td>
<td>552,728</td>
</tr>
<tr>
<td>Investments</td>
<td>11</td>
<td>1,712,939</td>
<td>1,712,941</td>
<td>2,060,035</td>
</tr>
<tr>
<td><strong>Total fixed assets</strong></td>
<td></td>
<td>2,520,247</td>
<td></td>
<td>2,612,763</td>
</tr>
<tr>
<td><strong>Current assets</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Stocks of publications</td>
<td>12</td>
<td>17,702</td>
<td>17,702</td>
<td>17,314</td>
</tr>
<tr>
<td>Debtors</td>
<td></td>
<td>2,919,779</td>
<td>2,780,933</td>
<td>3,057,556</td>
</tr>
<tr>
<td>Cash at bank and in hand</td>
<td></td>
<td>738,028</td>
<td>524,842</td>
<td>275,055</td>
</tr>
<tr>
<td><strong>Total current assets</strong></td>
<td></td>
<td>3,675,509</td>
<td>3,323,477</td>
<td>3,349,925</td>
</tr>
<tr>
<td><strong>Liabilities</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Creditors: Amounts falling due within one year</td>
<td>13</td>
<td>(3,812,491)</td>
<td>(3,361,930)</td>
<td>(3,363,417)</td>
</tr>
<tr>
<td><strong>Net current liabilities</strong></td>
<td></td>
<td>(136,982)</td>
<td>(38,453)</td>
<td>(13,492)</td>
</tr>
<tr>
<td><strong>Net assets excluding pension scheme asset</strong></td>
<td>14</td>
<td>2,383,265</td>
<td>2,195,344</td>
<td>2,599,271</td>
</tr>
<tr>
<td>Defined benefit pension scheme asset/(liability)</td>
<td>19</td>
<td>261,000</td>
<td>(27,000)</td>
<td>(27,000)</td>
</tr>
<tr>
<td><strong>Total net assets</strong></td>
<td></td>
<td>2,644,265</td>
<td>2,456,344</td>
<td>2,572,271</td>
</tr>
</tbody>
</table>

### The funds of the charity

<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Restricted Funds</td>
<td>14</td>
<td>94,828</td>
<td>94,828</td>
<td>87,409</td>
</tr>
<tr>
<td>Unrestricted funds</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>General fund</td>
<td>15</td>
<td>1,237,001</td>
<td>1,049,080</td>
<td>1,289,293</td>
</tr>
<tr>
<td>Designated funds</td>
<td>15</td>
<td>1,312,436</td>
<td>1,312,436</td>
<td>1,195,569</td>
</tr>
<tr>
<td><strong>Total charity funds</strong></td>
<td>18</td>
<td>2,644,265</td>
<td>2,456,344</td>
<td>2,572,271</td>
</tr>
</tbody>
</table>

Approved and authorised for issue on behalf of the Board of Trustees on 22/3/18

P Wong  
President  

S MacPherson  
Honorary Treasurer  

The notes on pages 38 to 56 form part of these financial statements.
### CONSOLIDATED STATEMENT OF CASH FLOWS FOR THE YEAR ENDED 31 DECEMBER 2017

<table>
<thead>
<tr>
<th>Note</th>
<th>2017 £</th>
<th>2016 £</th>
</tr>
</thead>
<tbody>
<tr>
<td>I. Net cash used in operating activities</td>
<td></td>
<td></td>
</tr>
<tr>
<td>II. Net cash flow from investing activities</td>
<td></td>
<td></td>
</tr>
<tr>
<td>III. Reconciliation of net cash flow to movement in net funds</td>
<td></td>
<td></td>
</tr>
<tr>
<td>IV. Notes to the cash flow statement</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

#### I. Net cash used in operating activities

<table>
<thead>
<tr>
<th>Description</th>
<th>2017 £</th>
<th>2016 £</th>
</tr>
</thead>
<tbody>
<tr>
<td>I. Net cash used in operating activities</td>
<td>(5,073)</td>
<td>(983,048)</td>
</tr>
</tbody>
</table>

#### II. Net cash flow from investing activities

<table>
<thead>
<tr>
<th>Description</th>
<th>2017 £</th>
<th>2016 £</th>
</tr>
</thead>
<tbody>
<tr>
<td>Income from investments</td>
<td>62,468</td>
<td>90,338</td>
</tr>
<tr>
<td>Proceeds from sale of investments</td>
<td>500,000</td>
<td>700,000</td>
</tr>
<tr>
<td>Purchase of property, plant and equipment</td>
<td>(154,973)</td>
<td>(185,475)</td>
</tr>
<tr>
<td>Net cash flows from investing activities</td>
<td>402,422</td>
<td>(378,185)</td>
</tr>
</tbody>
</table>

#### III. Reconciliation of net cash flow to movement in net funds

<table>
<thead>
<tr>
<th>Description</th>
<th>2017 £</th>
<th>2016 £</th>
</tr>
</thead>
<tbody>
<tr>
<td>Increase/(decrease) in cash</td>
<td>402,422</td>
<td>(378,185)</td>
</tr>
<tr>
<td>Change in net cash funds resulting from cash flows</td>
<td>402,422</td>
<td>(378,185)</td>
</tr>
<tr>
<td>Net cash funds at 1 January 2017</td>
<td>335,606</td>
<td>713,791</td>
</tr>
<tr>
<td>Net cash funds at 31 December 2017</td>
<td>738,028</td>
<td>335,606</td>
</tr>
</tbody>
</table>

#### IV. Notes to the cash flow statement

I. Reconciliation of net income to net cash flow from operating activities

<table>
<thead>
<tr>
<th>Description</th>
<th>2017 £</th>
<th>2016 £</th>
</tr>
</thead>
<tbody>
<tr>
<td>Net expenditure for the reporting period (as per the Statement of Financial Activities)</td>
<td>(244,735)</td>
<td>(218,862)</td>
</tr>
<tr>
<td>Net gains on investments</td>
<td>(152,906)</td>
<td>(240,053)</td>
</tr>
<tr>
<td>Investment income</td>
<td>(62,468)</td>
<td>(90,338)</td>
</tr>
<tr>
<td>Depreciation charges</td>
<td>156,177</td>
<td>125,211</td>
</tr>
<tr>
<td>(Increase)/decrease in stocks of publications</td>
<td>(388)</td>
<td>50,813</td>
</tr>
<tr>
<td>Decrease/(increase) in debtors</td>
<td>634,741</td>
<td>(2,805,834)</td>
</tr>
<tr>
<td>(Decrease)/increase in creditors</td>
<td>(227,494)</td>
<td>2,305,015</td>
</tr>
<tr>
<td>Decrease in pension asset to liability</td>
<td>(108,000)</td>
<td>(109,000)</td>
</tr>
<tr>
<td>Net cash used in operating activities</td>
<td>(5,073)</td>
<td>(983,048)</td>
</tr>
</tbody>
</table>

II. Analysis of changes in net funds excluding term deposits

<table>
<thead>
<tr>
<th>Description</th>
<th>At 01/01/2017 £</th>
<th>Cash Flows 31/12/2017 £</th>
<th>At 31/12/2017 £</th>
</tr>
</thead>
<tbody>
<tr>
<td>Short term deposits (deposited on 24 hour notice)</td>
<td>115,786</td>
<td>357,171</td>
<td>472,957</td>
</tr>
<tr>
<td>Cash at bank and in hand</td>
<td>219,820</td>
<td>45,251</td>
<td>265,071</td>
</tr>
<tr>
<td>Total cash and cash equivalents</td>
<td>335,606</td>
<td>402,422</td>
<td>738,028</td>
</tr>
</tbody>
</table>

The notes on pages 38 to 56 form part of these financial statements.
1 GENERAL INFORMATION

The Chartered Institution of Building Services Engineers is a charity registered in England and Wales, registration number 278104. It is governed by its Royal Charter and By-laws which were awarded in 1976 and last amended in 2010. The registered office is 222 Balham High Road, London, SW12 9BS.

2 ACCOUNTING POLICIES

The principal policies adopted, judgements and key sources of estimation uncertainty in the preparation of the financial statements are as follows:

2.1 Basis of accounting

The financial statements have been prepared under the historical cost convention with items recognised at cost or transaction value unless otherwise stated in the relevant note(s) to these financial statements. The financial statements have been prepared in accordance with Accounting and Reporting by Charities: Statement of Recommended Practice applicable to charities preparing their accounts in accordance with the Financial Reporting Standard applicable in the UK and Republic of Ireland (FRS 102) (effective 1 January 2015) - (Charities SORP (FRS 102)), the Financial Reporting Standard applicable in the UK and Ireland (FRS 102) and the Charities Act 2011.

The Chartered Institution of Building Services Engineers meets the definition of a public benefit entity under FRS 102.

The Trustees consider that there are no material uncertainties about the Institution’s ability to continue as a going concern. The most significant areas of judgement and key assumptions that affect the items in the financial statements relate to the estimation of the defined benefit pension scheme’s assets and liabilities (see Note 2.17 and Note 19).

2.2 Financial statements of the Institution and its trading subsidiaries

The financial statements include the consolidation of CIBSE Services Limited and The Chartered Institution of Building Services Engineers Hong Kong Limited (CIBSE Hong Kong Limited), both wholly owned subsidiaries of the Institution.

No separate Statement of Financial Activities has been presented for the Institution. The results of the Institution for the year ended 31 December 2017 are included in Note 16.

Exemption from the requirement to disclose transactions between the Institution and its subsidiary companies has been taken under section 33.1A of FRS 102 as transactions occur between wholly owned members.

The Institution has taken advantage of the disclosure exemption permitted by FRS 102 of the requirements of Section 7 Statement of Cash Flows to not disclose a charity-only Statement of Cash Flows.

2.3 Funds

The Institution has divided its funds into categories according to their nature and purpose as follows:

Unrestricted funds

Funds available for the Institution to pursue all of its objectives under its Royal Charter and comprise:

General fund

This represents the undesignated accumulated surpluses from funds available for the general objectives of the Institution.

Designated fund

Funds designated to pursue a particular objective or group of objectives under the Royal Charter and comprise:

Research Fund

This fund has the objectives of raising and designating funds for the purpose of enabling research to advance the art, science and practice of building services engineering.
2 ACCOUNTING POLICIES (continued)

Education Fund
CIBSE established this fund with the objective of raising and designating funds to enable CIBSE to further education in the art, science and practice of building services engineering.

Richard Tully Family Publication Fund
This fund was established by the designation of a gift from Richard E J Tully, with the objective of funding awards to encourage the continued publication of good engineering practice in the profession of building services engineering.

Domestic Building Services Panel Fund
This fund has the objectives of raising and designating funds for the purpose of enabling research to advance the art, science and practice of building services engineering for Domestic Heating publications.

Society of Light and Lighting Fund
This fund has the objective of funding the operations of the Society of Light and Lighting Fund.

Ken Dale Fund
This fund was established following receipt of a legacy from past president Ken Dale designated to advance the art, science and practice of building services engineering in his name.

Restricted funds
These funds have been received by the Institution with specific restrictions on their use within the objectives of its Royal Charter and comprise:

Patrons Fund
This fund was formed to provide a base for financing activities of concern to the building services industry as a whole, for which adequate funds were not available within the unrestricted funds of the Institution, and to provide liaison between the Institution and its members with the commercial organisations involved in building services engineering.

2.4 Branches, groups and regions
The activities of branches, groups and regions, together with their assets and liabilities are incorporated within these accounts.

2.5 Income
Subscriptions
Subscriptions due are treated as income for the periods to which they relate. Subscriptions received in respect of future years are carried forward in the financial statements as deferred income until the relevant subscription year.

Legacies
Legacies are included in the Statement of Financial Activities where probate was granted prior to the balance sheet date and a distribution is considered probable and the amount can be reliably estimated.

Donations and grants
Donations and grants are included in the financial statements when receivable.

Volunteers
CIBSE as an organisation relies heavily on its volunteers to allow it to carry out the wide variety of work that it does, across a range of fields within building services. Attempting to provide such in-depth knowledge for an industry as diverse as building services is an enormous undertaking, and would be impossible without the hundreds of experts who give their time and resources to the Institution and work to remain on the forefront of technology.

Carrying out a variety of roles on a voluntary basis for CIBSE, from contributing to technical papers, to serving on the board and deciding strategy, to helping at events and with media requests, the volunteers give substantial resources at a time when the industry has never been more stretched.
2 ACCOUNTING POLICIES (continued)

Volunteers (continued)
However, as it is impractical to place a monetary value on the volunteers’ contribution due to the absence of a reliable measurement basis, the contribution of volunteers are not included as income in the financial statements.

Fees received for charitable services
These represent amounts receivable in respect of goods or services during the year.

Investment income and gains
Investment income, including any tax recoverable thereon, is included in the financial statements in the year in which they are receivable. Investment gains and losses are incorporated in the financial statements as they occur. Unrealised gains and losses arising from the valuation of investments, together with any movements in such gains are separately identified within the financial statements.

2.6 Expenditure
Expenditure is accounted for on an accrual basis and is recognised where there is a legal and constructive obligation to pay for the expenditure.

Charitable expenditure comprises expenses incurred on the defined charitable purposes of the Institution. Cost of raising funds comprises expenses incurred in enhancing and maintaining the public image of the Institution and expenditure incurred in trading activities that raise funds.

Governance costs comprise expenses incurred in the governance of the Institution and its assets and are primarily associated with constitutional and statutory requirements.

Each category includes direct expenses and staff costs, together with an allocation of overhead costs based on a combination of direct staff costs and activity levels.

The IT infrastructure investment category has been removed as it is no longer a separate ongoing investment.

2.7 Intangible fixed assets
Goodwill arising on an acquisition of trade and assets represents the difference between the fair value of the consideration paid and the fair value of the net assets acquired. It is capitalised and amortised through the profit and loss account over the estimate of its useful economic life of three years.

Goodwill is amortised on cost at 50% in the first year and, 30% & 20% over the next two years after consideration of its estimated useful life of 3 years.

2.8 Tangible fixed assets
Tangible fixed assets are stated at historical cost less depreciation. Equipment renewals due to technological changes are charged to the Statement of Financial Activities as incurred. Depreciation is provided at rates calculated to write off the cost less estimated residual value on a straight-line or reducing balance basis over their estimated useful lives as follows:

<table>
<thead>
<tr>
<th>Asset Type</th>
<th>Depreciation Method</th>
</tr>
</thead>
<tbody>
<tr>
<td>Freehold land</td>
<td>No depreciation</td>
</tr>
<tr>
<td>Freehold buildings</td>
<td>2% per annum on cost or subsequent valuation</td>
</tr>
<tr>
<td>Computer equipment</td>
<td>20% - 55% per annum on cost</td>
</tr>
<tr>
<td>Furniture and equipment</td>
<td>20% per annum on written-down value or cost</td>
</tr>
</tbody>
</table>

2.9 Investments
Listed investments are a form of basic financial instrument and are initially recognised at their transaction value and subsequently measured at their fair value as at the balance sheet date using the closing quoted market price. The Statement of Financial Activities includes the net gains and losses arising on revaluation and disposals throughout the year.

Unlisted investments comprise investments in subsidiaries which are measured at cost less impairment.
2  ACCOUNTING POLICIES (continued)

2.9 Investments (continued)
A source of financial risk faced by the charity is that is that of volatility in equity markets and investment markets
due to wider economic conditions, the attitude of investors to investment risk, and changes in sentiment
concerning equities, particularly currency risk, and within particular sectors or sub sectors.

2.10 Impairments
Assets not measured at fair value are reviewed for any indication that the asset may be impaired at each balance
sheet date. If such indication exists, the recoverable amount of the asset, or the asset’s cash generating unit, is
estimated and compared to the carrying amount. When the carrying amount exceeds it’s recoverable amount, an
impairment loss is recognised in the Statement of Financial Activities unless the asset is carried at a revalued
amount where the impairment loss is a revaluation decrease.

2.11 Financial Instruments
The company only has financial assets and financial liabilities of a kind that qualify as basic financial instruments.
Basic financial instruments are initially recognised at transaction value and subsequently measured at their
settlement value with the exception of bank loans which are subsequently measured at amortised cost using the
effective interest method.

A financial asset is derecognised only when the contractual rights to cash flows expire or are settled, or
substantially all the risks and rewards of ownership are transferred to another party, or if some significant risks and
rewards of ownership are retained but control of the asset has transferred to another party that is able to sell the
asset in its entirety to an unrelated third party. A financial liability (or part thereof) is derecognised when the
obligation specified in the contract is discharged, cancelled or expires.

2.12 Stocks
Finished stocks relate to technical publications and are stated at the lower of cost and net realisable value. Cost
comprises the price of purchasing, printing, binding and compilation.

2.13 Debtors
Trade and other debtors which are receivable within one year and which do not constitute a financing transaction
are initially measured at the transaction price. Trade debtors are subsequently measured at amortised cost, being
the transaction price less any amounts settled and any impairment losses.

A provision for impairment of trade debtors is established when there is objective evidence that the amounts due
will not be collected according to the original term of the contract. Impairment losses are recognised in the
statement of financial activities for the excess of the carrying value of the trade debtor over the present value of
the future cash flows discounted using the original effective interest rate. Subsequent reversals of an impairment
loss that objectively relate to an event occurring after the impairment loss was recognised. are recognised
immediately in the statement of financial activities.

2.14 Cash at bank and in hand
Cash at bank and in hand include cash and short term highly liquid investments with a short maturity of three
months or less from the date of acquisition or opening of the deposit.

2.15 Creditor
Creditors and provisions are normally recognised at their settlement amount after allowing for any trade discounts
due.

2.16 Holiday pay accrual
A liability is recognised to the extent of any unused holiday pay entitlement which has accrued at the balance sheet
date and carried forward to future periods. This is measured at the undiscounted salary cost of the future holiday
entitlement so accrued at the balance sheet date.
2 ACCOUNTING POLICIES (continued)

2.17 Pension contributions
The Institution operates a non-contributory pension scheme providing benefits based on final pensionable salary. The assets of the scheme are invested with an insurance company and are totally separate from those of the Institution. This scheme was closed to new members in 1999. The Institution has fully adopted the disclosures set out in section 28 of FRS 102. The difference between the fair value of the assets held in the Institution's defined benefit pension scheme and the scheme's liabilities measured on an actuarial basis using the projected unit method are recognised in the Institution's Balance Sheet as a pension scheme asset or liability as appropriate. The carrying value of any resulting pension scheme asset is restricted to the extent that the Institution is able to recover the surplus either through reduced contributions in the future or through refunds from the scheme.

Changes in the defined benefit pension scheme asset or liability arising from factors other than cash contributions by the Institution are charged to the Statement of Financial Activities in accordance with section 28 of FRS 102. The Institution contributes to a stakeholder pension scheme operated by Aviva and is open to all employees. The annual contribution payments are charged to the Statement of Financial Activities.

2.18 Taxation
The Institution is registered as a charity, registration number 278104, and in consequence it is exempt from taxation on income arising from and expended on its charitable activities.

2.19 Foreign currencies
Transactions in foreign currency are recorded at the rate ruling at the date of the transaction. Monetary assets and liabilities are translated at the rate of exchange ruling at the balance sheet date. All differences are taken to the Statement of Financial Activities.

2.20 Judgements and key sources of estimation uncertainty
Estimates and judgements are continually evaluated and are based on historical experience and other factors, including expectations of future events that are believed to be reasonable under the circumstances. There are no estimates and assumptions that are considered to have a significant risk of causing a material adjustment to the carrying amounts of assets and liabilities within the next financial year.

2.21 Ex-gratia payments
Ex-gratia payments are recognised at the settlement amount when they are paid out.
### 3 CHARITABLE SERVICES INCOME

Fees receivable for charitable services for the year is derived from:

<table>
<thead>
<tr>
<th></th>
<th>Unrestricted funds</th>
<th>Restricted funds</th>
<th>Total 2017</th>
<th>Unrestricted funds</th>
<th>Restricted funds</th>
<th>Total 2016</th>
</tr>
</thead>
<tbody>
<tr>
<td>Training delegate Fees</td>
<td>96,413</td>
<td>13,980</td>
<td>110,393</td>
<td>82,552</td>
<td>13,100</td>
<td>95,652</td>
</tr>
<tr>
<td>Publications</td>
<td>265,479</td>
<td>265,479</td>
<td>254,745</td>
<td>254,745</td>
<td>-</td>
<td>254,745</td>
</tr>
<tr>
<td>Societies fees</td>
<td>38,463</td>
<td>38,463</td>
<td>99,392</td>
<td>99,392</td>
<td>-</td>
<td>99,392</td>
</tr>
<tr>
<td>Sundry</td>
<td>103,407</td>
<td>103,407</td>
<td>97,880</td>
<td>-</td>
<td>97,880</td>
<td></td>
</tr>
<tr>
<td></td>
<td>723,889</td>
<td>13,980</td>
<td>737,869</td>
<td>752,019</td>
<td>13,100</td>
<td>765,119</td>
</tr>
</tbody>
</table>

### 4 INVESTMENT INCOME

Investment income for the year is derived from:

<table>
<thead>
<tr>
<th></th>
<th>Unrestricted funds</th>
<th>Restricted funds</th>
<th>Total 2017</th>
<th>Unrestricted funds</th>
<th>Restricted funds</th>
<th>Total 2016</th>
</tr>
</thead>
<tbody>
<tr>
<td>Listed Investments</td>
<td>62,370</td>
<td>-</td>
<td>62,370</td>
<td>88,767</td>
<td>-</td>
<td>88,767</td>
</tr>
<tr>
<td>Cash deposits</td>
<td>98</td>
<td>-</td>
<td>98</td>
<td>1,571</td>
<td>-</td>
<td>1,571</td>
</tr>
<tr>
<td></td>
<td>62,468</td>
<td>-</td>
<td>62,468</td>
<td>90,338</td>
<td>-</td>
<td>90,338</td>
</tr>
</tbody>
</table>

### 5 EXPENDITURE

<table>
<thead>
<tr>
<th></th>
<th>Staff Direct Costs</th>
<th>Other Direct Costs</th>
<th>Staff Support Costs</th>
<th>Other Support Costs</th>
<th>Restated 2017 Total</th>
<th>Restated 2016 Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>Expenditure on raising funds</td>
<td>825,361</td>
<td>2,136,171</td>
<td>-</td>
<td>-</td>
<td>2,961,532</td>
<td>3,468,394</td>
</tr>
<tr>
<td>Trading subsidiary companies</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>Expenditure on charitable activities</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>Membership</td>
<td>487,867</td>
<td>176,334</td>
<td>609,934</td>
<td>473,529</td>
<td>1,747,664</td>
<td>1,525,217</td>
</tr>
<tr>
<td>Publications</td>
<td>110,717</td>
<td>64,895</td>
<td>177,539</td>
<td>137,835</td>
<td>490,586</td>
<td>463,738</td>
</tr>
<tr>
<td>Technical</td>
<td>180,781</td>
<td>146,849</td>
<td>160,358</td>
<td>124,496</td>
<td>612,484</td>
<td>582,262</td>
</tr>
<tr>
<td>Regional &amp; special interest groups</td>
<td>173,862</td>
<td>512,561</td>
<td>286,354</td>
<td>222,314</td>
<td>1,195,091</td>
<td>1,091,773</td>
</tr>
<tr>
<td>Research</td>
<td>56,862</td>
<td>140,145</td>
<td>57,271</td>
<td>44,463</td>
<td>298,741</td>
<td>318,193</td>
</tr>
<tr>
<td></td>
<td>1,835,449</td>
<td>3,176,955</td>
<td>1,291,457</td>
<td>1,002,637</td>
<td>7,306,498</td>
<td>7,449,577</td>
</tr>
</tbody>
</table>
6 SUPPORT COSTS

The support costs have been allocated on the following basis:

<table>
<thead>
<tr>
<th>Support cost</th>
<th>Basis of allocation</th>
<th>£</th>
<th>£</th>
</tr>
</thead>
<tbody>
<tr>
<td>Administration staff and welfare</td>
<td>Staff time</td>
<td>1,291,457</td>
<td>1,123,604</td>
</tr>
<tr>
<td>Temporary staff, recruitment &amp; consultants</td>
<td>Direct allocation to projects</td>
<td>51,508</td>
<td>33,620</td>
</tr>
<tr>
<td>Meeting costs</td>
<td>Direct allocation to projects</td>
<td>53,075</td>
<td>18,307</td>
</tr>
<tr>
<td>Office costs</td>
<td>Total number of employees</td>
<td>136,060</td>
<td>54,458</td>
</tr>
<tr>
<td>Premises</td>
<td>Area occupied basis</td>
<td>78,916</td>
<td>40,143</td>
</tr>
<tr>
<td>IT</td>
<td>Direct allocation to projects</td>
<td>289,078</td>
<td>142,700</td>
</tr>
<tr>
<td>Legal &amp; professional fees</td>
<td>Direct allocations to project</td>
<td>118,398</td>
<td>35,535</td>
</tr>
<tr>
<td>Depreciation</td>
<td>Direct allocation to projects</td>
<td>62,501</td>
<td>24,589</td>
</tr>
<tr>
<td>Bad debt</td>
<td>Actual</td>
<td>55,443</td>
<td>(4,395)</td>
</tr>
<tr>
<td>Marketing</td>
<td>Direct allocation to projects</td>
<td>89,421</td>
<td>162,350</td>
</tr>
</tbody>
</table>

Governance costs

<table>
<thead>
<tr>
<th>Governance costs</th>
<th>Basis of allocation</th>
<th>£</th>
<th>£</th>
</tr>
</thead>
<tbody>
<tr>
<td>Auditor’s remuneration - statutory audit</td>
<td>Direct allocation to projects</td>
<td>19,611</td>
<td>17,148</td>
</tr>
<tr>
<td>Auditor’s remuneration - non-audit services</td>
<td>Direct allocation to projects</td>
<td>-</td>
<td>1,066</td>
</tr>
<tr>
<td>AGM &amp; annual report cost</td>
<td>Direct allocation to projects</td>
<td>12,832</td>
<td>2,902</td>
</tr>
<tr>
<td>Trustees expenses</td>
<td>Direct allocation to projects</td>
<td>35,795</td>
<td>9,962</td>
</tr>
</tbody>
</table>

<p>| | | | |</p>
<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td>68,238</td>
<td>31,078</td>
</tr>
</tbody>
</table>

**Total Support Costs:** 2,225,856 1,630,911
7 STAFF COSTS

<table>
<thead>
<tr>
<th>Description</th>
<th>2017</th>
<th>2016</th>
</tr>
</thead>
<tbody>
<tr>
<td>Wages and salaries</td>
<td>2,454,848</td>
<td>2,497,033</td>
</tr>
<tr>
<td>Temporary staff and agency fees</td>
<td>123,169</td>
<td>80,829</td>
</tr>
<tr>
<td>Social security costs</td>
<td>263,185</td>
<td>255,174</td>
</tr>
<tr>
<td>Pension costs:</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Defined contribution pensions</td>
<td>108,047</td>
<td>97,829</td>
</tr>
<tr>
<td>Defined benefit pensions</td>
<td>35,000</td>
<td>34,000</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td>2,984,249</td>
<td>2,964,865</td>
</tr>
</tbody>
</table>

The average number of employees during the year, who were all engaged in the activities of the Institution and its subsidiaries, was: 64 in 2017 and 60 in 2016.

All Trustees give of their time freely and no Trustee remuneration was paid in the year (2015: £Nil).

The key management personnel of the parent charity, the Institution, comprise the Trustees, the Chief Executive Officer and the senior management team. Total employee benefits of key management personnel for the year under review, excluding the Trustees were £793,078 (2016: £740,368).

Neither of the Institution's wholly-owned subsidiaries employ staff directly. As a result, the key management personnel and their aggregate employee benefits for the group is the same as the Institution as disclosed above.

The number of employees earning total emoluments of £60,000 or more:

<table>
<thead>
<tr>
<th>Range</th>
<th>2017</th>
<th>2016</th>
</tr>
</thead>
<tbody>
<tr>
<td>£60,001 to £70,000</td>
<td>2</td>
<td></td>
</tr>
<tr>
<td>£70,001 to £80,000</td>
<td>2</td>
<td>2</td>
</tr>
<tr>
<td>£80,001 to £90,000</td>
<td>1</td>
<td>2</td>
</tr>
<tr>
<td>£90,001 to £100,000</td>
<td>-</td>
<td>1</td>
</tr>
<tr>
<td>£100,001 to £110,000</td>
<td>1</td>
<td>1</td>
</tr>
<tr>
<td>£180,001 to £190,000</td>
<td>1</td>
<td>1</td>
</tr>
</tbody>
</table>

Contributions in the year for provision of the pension schemes in respect of the above higher paid employees amounted to £61,155 for 7 staff (2016: £58,129 for 6 staff).

During the year, an ex-gratia payment amounted to £26,700 was paid to S Gilmour upon ceasing engagements with the Institution as of 7 March 2017.
8 TRANSACTIONS WITH TRUSTEES AND RELATED PARTY TRANSACTIONS

The Trustees of the Institution are the members of Board, who are drawn, from time to time, from the membership of the Institution. No member of Board received any remuneration or benefits-in-kind for their duties as Trustees (2016: Nil).

Members of the Board of Trustees are reimbursed for travelling and other expenses whilst engaged on the activities of the Institution.

Reimbursements were made as follows:

<table>
<thead>
<tr>
<th></th>
<th>2017</th>
<th>2016</th>
</tr>
</thead>
<tbody>
<tr>
<td>Reimbursed to 9 Trustees</td>
<td>32,637</td>
<td>10,411</td>
</tr>
</tbody>
</table>

Under the terms of the Royal Charter & Bylaws, the Institution is empowered to make reasonable and proper payments to members for services actually rendered to the Institution. This power includes Trustees, in their capacity as members of the Institution. In their capacity as members of the Institution, Trustees are obliged to pay annual subscriptions due to the Institution and are entitled to take advantage of the services offered by the Institution and its subsidiary company, on the same terms offered to all members, or to the general public. Where members or their connections provide services to, or utilise any other services or facilities of the Institution, the amounts paid to or charged by the Institution are based on either:

- Standard rates paid by the Institution to members and non-members alike, for services such as lecturing or interviewing of candidates; or
- Rates negotiated on behalf of the Institution, independently of the member involved, by the Board, or their delegated committee, based on competitive tenders or general commercial rates.

During the year, the Institution is aware that payments have been made by the Institution for commercial services provided to it, or charges made by the Institution for utilising other services or facilities of the Institution, by certain Members of the Board of Trustees, or their connections, as follows:

During 2017, there were no speaker fees paid to Trustees (2016: £Nil)
THE CHARTERED INSTITUTION OF BUILDING SERVICES ENGINEERS

NOTES TO THE CONSOLIDATED FINANCIAL STATEMENT FOR THE YEAR ENDED 31 DECEMBER 2017

9  INTANGIBLE FIXED ASSETS

<table>
<thead>
<tr>
<th>Group</th>
<th>Cost or valuation</th>
<th>Accumulated Amortisation</th>
<th>Net Book value</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Goodwill £</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Balance at 1 January 2017 and at 31 December 2017</td>
<td>Balance at 1 January 2017 and at 31 December 2017</td>
<td>At 31 December 2016 and at 31 December 2017</td>
</tr>
<tr>
<td></td>
<td>155,572</td>
<td>155,572</td>
<td></td>
</tr>
</tbody>
</table>

10  TANGIBLE FIXED ASSETS

<table>
<thead>
<tr>
<th>Group</th>
<th>Freehold Property</th>
<th>Computer Equipment</th>
<th>Furniture &amp; Equipment</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>£</td>
<td>£</td>
<td>£</td>
<td>£</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Cost</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Balance at 1 January 2017</td>
<td>426,000</td>
<td>930,874</td>
<td>321,195</td>
<td>1,678,069</td>
</tr>
<tr>
<td>Additions</td>
<td>-</td>
<td>154,973</td>
<td>-</td>
<td>154,973</td>
</tr>
<tr>
<td>Balance at 31 December 2017</td>
<td>426,000</td>
<td>1,085,847</td>
<td>321,195</td>
<td>1,833,042</td>
</tr>
</tbody>
</table>

Accumulated depreciation

| Balance at 1 January 2017          | 113,616           | 474,941            | 281,000               | 869,557 |
| Charge for the year                | 5,680             | 140,145            | 10,352                | 156,177 |
| Balance at 31 December 2017        | 119,296           | 615,086            | 291,352               | 1,025,734 |

Net book value

| At 31 December 2017                | 306,704           | 470,761            | 29,843                | 807,308 |
| At 31 December 2016                | 312,384           | 455,933            | 40,195                | 808,512 |
### 10 TANGIBLE FIXED ASSETS (continued)

<table>
<thead>
<tr>
<th>Institution</th>
<th>Freehold Property</th>
<th>Computer Equipment</th>
<th>Furniture &amp; Equipment</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>£</td>
<td>£</td>
<td>£</td>
<td>£</td>
</tr>
<tr>
<td><strong>Cost</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Balance at 1 January 2017</td>
<td>426,000</td>
<td>313,309</td>
<td>317,936</td>
<td>1,057,245</td>
</tr>
<tr>
<td>Additions</td>
<td>-</td>
<td>30,629</td>
<td>-</td>
<td>30,629</td>
</tr>
<tr>
<td>Balance at 31 December 2017</td>
<td>426,000</td>
<td>343,938</td>
<td>317,936</td>
<td>1,087,874</td>
</tr>
</tbody>
</table>

| Accumulated depreciation     |                   |                    |                       |         |
| Balance at 1 January 2017    | 113,616           | 112,339            | 278,562               | 504,517 |
| Charge for the year          | 5,680             | 46,469             | 10,352                | 62,501  |
| Balance at 31 December 2017  | 119,296           | 158,808            | 288,914               | 567,018 |

| Net book value               |                   |                    |                       |         |
| At 31 December 2017          | 306,704           | 185,131            | 29,022                | 520,856 |
| At 31 December 2016          | 312,384           | 200,970            | 39,374                | 552,728 |
### 11 FIXED ASSETS INVESTMENTS

<table>
<thead>
<tr>
<th></th>
<th>Group</th>
<th></th>
<th>The Institution</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Balance as at 1 January 2017</td>
<td>2,060,033</td>
<td>2,519,980</td>
<td>2,060,035</td>
<td>2,519,982</td>
</tr>
<tr>
<td>Sale of units</td>
<td>(500,000)</td>
<td>(700,000)</td>
<td>(500,000)</td>
<td>(700,000)</td>
</tr>
<tr>
<td>Net gains on investments</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Gains on sale of investments</td>
<td>159,120</td>
<td>195,243</td>
<td>159,120</td>
<td>195,243</td>
</tr>
<tr>
<td>Net gain on revaluation at 31 December 2017</td>
<td>(6,214)</td>
<td>44,810</td>
<td>(6,214)</td>
<td>44,810</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Balance as at 31 December 2017</td>
<td>1,712,939</td>
<td>2,060,033</td>
<td>1,712,941</td>
<td>2,060,035</td>
</tr>
</tbody>
</table>

Investments are made up of:

- **Listed Investments**: 1,712,939 2,060,033 1,712,939 2,060,033

**Trading subsidiaries:**

- 100% interest in CIBSE Services Limited 2 2
- 100% interest (100% Group / 50% The Institution) in The Chartered Institution of Building Services Engineers Hong Kong Limited

<table>
<thead>
<tr>
<th></th>
<th>Group</th>
<th></th>
<th>The Institution</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Listed Investments cost at 1 January 2017</td>
<td>1,458,080</td>
<td>1,962,837</td>
<td>1,458,080</td>
<td>1,962,837</td>
</tr>
<tr>
<td>Less sale of units</td>
<td>(340,881)</td>
<td>(504,757)</td>
<td>(340,881)</td>
<td>(504,757)</td>
</tr>
<tr>
<td>Listed Investments cost at 31 December 2017</td>
<td>1,117,199</td>
<td>1,458,080</td>
<td>1,117,199</td>
<td>1,458,080</td>
</tr>
</tbody>
</table>

The listed investments are managed on behalf of the Institution by CCLA Investment Management Limited.

The significance of financial instruments to the ongoing financial sustainability of the Institution is considered in the investment powers section of the Trustees' Annual Report. The basis of fair value for listed investments is equivalent to the market value, using the mid-market price.
THE CHARTERED INSTITUTION OF BUILDING SERVICES ENGINEERS

NOTES TO THE CONSOLIDATED FINANCIAL STATEMENT FOR THE YEAR ENDED 31 DECEMBER 2017

12 DEBTORS

<table>
<thead>
<tr>
<th></th>
<th>Group 2017</th>
<th>Group 2016</th>
<th>The Institution 2017</th>
<th>The Institution 2016</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>£</td>
<td>£</td>
<td>£</td>
<td>£</td>
</tr>
<tr>
<td>Trade debtors</td>
<td>2,498,403</td>
<td>3,174,355</td>
<td>2,167,891</td>
<td>2,733,971</td>
</tr>
<tr>
<td>Amounts owed by group undertakings</td>
<td>-</td>
<td>-</td>
<td>309,293</td>
<td>45,417</td>
</tr>
<tr>
<td>Prepayments and accrued income</td>
<td>279,509</td>
<td>291,056</td>
<td>221,250</td>
<td>189,060</td>
</tr>
<tr>
<td>Other debtors</td>
<td>141,867</td>
<td>89,109</td>
<td>82,499</td>
<td>89,108</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>2,919,779</td>
<td>3,554,520</td>
<td>2,780,933</td>
<td>3,057,556</td>
</tr>
</tbody>
</table>

13 CREDITORS: AMOUNTS DUE WITHIN ONE YEAR

<table>
<thead>
<tr>
<th></th>
<th>Group 2017</th>
<th>Group 2016</th>
<th>The Institution 2017</th>
<th>The Institution 2016</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>£</td>
<td>£</td>
<td>£</td>
<td>£</td>
</tr>
<tr>
<td>Trade creditors</td>
<td>285,113</td>
<td>459,850</td>
<td>168,033</td>
<td>254,017</td>
</tr>
<tr>
<td>Accruals</td>
<td>145,323</td>
<td>178,582</td>
<td>129,381</td>
<td>131,171</td>
</tr>
<tr>
<td>Deferred income: amounts received in advance for subscriptions &amp; services</td>
<td>3,001,426</td>
<td>2,978,436</td>
<td>2,776,183</td>
<td>2,693,110</td>
</tr>
<tr>
<td>Taxation and social security</td>
<td>143,607</td>
<td>194,839</td>
<td>79,948</td>
<td>82,415</td>
</tr>
<tr>
<td>Other creditors</td>
<td>237,022</td>
<td>228,278</td>
<td>208,385</td>
<td>202,704</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>3,812,491</td>
<td>4,039,985</td>
<td>3,361,930</td>
<td>3,363,417</td>
</tr>
</tbody>
</table>

Deferred income

<table>
<thead>
<tr>
<th></th>
<th>Group 2017</th>
<th>Group 2016</th>
<th>The Institution 2017</th>
<th>The Institution 2016</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>£</td>
<td>£</td>
<td>£</td>
<td>£</td>
</tr>
<tr>
<td>At 1 January 2017</td>
<td>2,978,436</td>
<td>1,001,456</td>
<td>2,693,110</td>
<td>660,434</td>
</tr>
<tr>
<td>Amounts released to income</td>
<td>(2,978,436)</td>
<td>(1,001,456)</td>
<td>(2,693,110)</td>
<td>(660,434)</td>
</tr>
<tr>
<td>Amount deferred in the year</td>
<td>3,001,426</td>
<td>2,978,436</td>
<td>2,776,183</td>
<td>2,693,110</td>
</tr>
<tr>
<td>At 31 December 2017</td>
<td>3,001,426</td>
<td>2,978,436</td>
<td>2,776,183</td>
<td>2,693,110</td>
</tr>
</tbody>
</table>
THE CHARTERED INSTITUTION OF BUILDING SERVICES ENGINEERS

NOTES TO THE CONSOLIDATED FINANCIAL STATEMENT FOR THE YEAR ENDED 31 DECEMBER 2017

14 RESTRICTED FUNDS — Group and Institution

<table>
<thead>
<tr>
<th>Patrons Fund</th>
<th>31 December 2016</th>
<th>Balance</th>
<th>Income</th>
<th>Expenditure</th>
<th>31 December 2017</th>
<th>Balance</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>£</td>
<td>£</td>
<td>£</td>
<td>£</td>
<td>£</td>
<td>£</td>
</tr>
<tr>
<td></td>
<td>87,409</td>
<td>63,089</td>
<td>(55,670)</td>
<td>94,828</td>
<td>94,828</td>
<td></td>
</tr>
</tbody>
</table>

See Note 2.3 for description of funds

15 UNRESTRICTED AND DESIGNATED FUNDS — Group

<table>
<thead>
<tr>
<th>Fund Name</th>
<th>31 December 2016</th>
<th>Balance</th>
<th>Income and gains</th>
<th>Expenditure</th>
<th>Other recognised losses</th>
<th>31 December 2017</th>
<th>Balance</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>£</td>
<td>£</td>
<td>£</td>
<td>£</td>
<td>£</td>
<td>£</td>
<td>£</td>
</tr>
<tr>
<td>Research Fund</td>
<td>552,994</td>
<td>226,725</td>
<td>(197,007)</td>
<td>-</td>
<td>-</td>
<td>582,712</td>
<td></td>
</tr>
<tr>
<td>Education Fund</td>
<td>55,346</td>
<td>3,025</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>58,371</td>
<td></td>
</tr>
<tr>
<td>Richard Tully Family Publication Fund</td>
<td>114,334</td>
<td>4,133</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>118,467</td>
<td></td>
</tr>
<tr>
<td>Domestic Building Services Panel Fund</td>
<td>164,805</td>
<td>45,179</td>
<td>(26,316)</td>
<td>-</td>
<td>-</td>
<td>183,668</td>
<td></td>
</tr>
<tr>
<td>Society of Light and Lighting</td>
<td>206,369</td>
<td>268,406</td>
<td>(206,955)</td>
<td>-</td>
<td>-</td>
<td>267,820</td>
<td></td>
</tr>
<tr>
<td>Ken Dale Fund</td>
<td>101,721</td>
<td>3,677</td>
<td>(4,000)</td>
<td>-</td>
<td>-</td>
<td>101,398</td>
<td></td>
</tr>
<tr>
<td>Designated Funds</td>
<td>1,195,569</td>
<td>551,145</td>
<td>(434,278)</td>
<td>-</td>
<td>-</td>
<td>1,312,436</td>
<td></td>
</tr>
<tr>
<td>General Fund</td>
<td>1,426,022</td>
<td>6,501,396</td>
<td>(6,690,417)</td>
<td>-</td>
<td>-</td>
<td>1,237,001</td>
<td></td>
</tr>
<tr>
<td>Unrestricted Funds</td>
<td>2,621,591</td>
<td>7,052,541</td>
<td>(7,124,695)</td>
<td>-</td>
<td>-</td>
<td>2,549,437</td>
<td></td>
</tr>
</tbody>
</table>

See Note 2.3 for description of funds

16 RESULTS OF THE INSTITUTION

<table>
<thead>
<tr>
<th></th>
<th>2017</th>
<th>2016</th>
</tr>
</thead>
<tbody>
<tr>
<td>Total income</td>
<td>£3,675,070</td>
<td>£3,702,942</td>
</tr>
<tr>
<td>Total expenditure</td>
<td>(4,123,904)</td>
<td>(3,991,372)</td>
</tr>
<tr>
<td>Net expenditure before gains on investments</td>
<td>(448,833)</td>
<td>(288,430)</td>
</tr>
<tr>
<td>Net gains on investments</td>
<td>152,906</td>
<td>240,053</td>
</tr>
<tr>
<td>Net expenditure after gains on investments</td>
<td>(295,928)</td>
<td>(48,377)</td>
</tr>
<tr>
<td>Actuarial loss on defined benefit pension scheme</td>
<td>180,000</td>
<td>218,000</td>
</tr>
<tr>
<td>Net movement in funds</td>
<td>(115,928)</td>
<td>(266,377)</td>
</tr>
</tbody>
</table>
17 TRADING SUBSIDIARIES

The Group has two wholly owned subsidiaries, CIBSE Services Limited (company registered no. 03645473), which is incorporated in the UK and The Chartered Institution of Building Services Engineers Hong Kong Limited, which is incorporated in Hong Kong. CIBSE Services Limited carries out various activities in pursuance of the charitable aims of the Institution and operates various commercial activities. CIBSE Services Limited donates its taxable profit to the Institution. The principal activities of The Chartered Institution of Building Services Engineers Hong Kong Limited are the provision of conferences and exhibition services.

A summary of the trading results and net assets of the subsidiaries for 2017 are shown below. Audited accounts for both subsidiaries are filed with their respective Registrars.

<table>
<thead>
<tr>
<th></th>
<th>CIBSE Services Limited</th>
<th>CIBSE HK Limited</th>
</tr>
</thead>
<tbody>
<tr>
<td>Turnover</td>
<td>£3,124,540</td>
<td>£163,083</td>
</tr>
<tr>
<td>Cost of sales</td>
<td>(2,216,063)</td>
<td>(175,116)</td>
</tr>
<tr>
<td>Administration expenses</td>
<td>(845,283)</td>
<td>-</td>
</tr>
<tr>
<td>Operating profit</td>
<td>63,194</td>
<td>(12,033)</td>
</tr>
<tr>
<td>Interest receivable</td>
<td>31</td>
<td>-</td>
</tr>
<tr>
<td>Net profit before gift aid</td>
<td>63,225</td>
<td>(12,033)</td>
</tr>
<tr>
<td>Amount donated to the Institution</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>Amount retained by the subsidiary</td>
<td>63,225</td>
<td>(12,033)</td>
</tr>
</tbody>
</table>

The aggregate of the assets, liabilities and funds was:

<table>
<thead>
<tr>
<th></th>
<th>CIBSE Services Limited</th>
<th>CIBSE HK Limited</th>
</tr>
</thead>
<tbody>
<tr>
<td>Fixed assets</td>
<td>£285,629</td>
<td>£822</td>
</tr>
<tr>
<td>Net current (liabilities)/assets</td>
<td>(183,157)</td>
<td>£84,626</td>
</tr>
<tr>
<td>Net assets</td>
<td>102,472</td>
<td>£85,448</td>
</tr>
</tbody>
</table>

Funds

<table>
<thead>
<tr>
<th></th>
<th>CIBSE Services Limited</th>
<th>CIBSE HK Limited</th>
</tr>
</thead>
<tbody>
<tr>
<td>Called up share capital</td>
<td>2</td>
<td>-</td>
</tr>
<tr>
<td>Reserves</td>
<td>102,470</td>
<td>£85,448</td>
</tr>
<tr>
<td></td>
<td>102,472</td>
<td>£85,448</td>
</tr>
</tbody>
</table>
### 18 Analysis of Consolidated Net Assets Between Funds

<table>
<thead>
<tr>
<th>Description</th>
<th>Unrestricted Funds £</th>
<th>Restricted Funds £</th>
<th>Total 2017 £</th>
</tr>
</thead>
<tbody>
<tr>
<td>Fund balances at 31 December 2017</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Fixed assets</td>
<td>807,308</td>
<td>-</td>
<td>807,308</td>
</tr>
<tr>
<td>Investments</td>
<td>1,712,939</td>
<td>-</td>
<td>1,712,939</td>
</tr>
<tr>
<td>Current assets</td>
<td>3,580,681</td>
<td>94,828</td>
<td>3,675,509</td>
</tr>
<tr>
<td>Current liabilities</td>
<td>(3,812,491)</td>
<td></td>
<td>(3,812,491)</td>
</tr>
<tr>
<td>Net Assets excluding pension scheme liability</td>
<td>2,288,437</td>
<td>94,828</td>
<td>2,383,265</td>
</tr>
<tr>
<td>Defined benefit pension scheme liability</td>
<td>261,000</td>
<td>-</td>
<td>261,000</td>
</tr>
<tr>
<td>Net assets including pension scheme liability</td>
<td>2,549,437</td>
<td>94,828</td>
<td>2,644,265</td>
</tr>
</tbody>
</table>
19 CIBSE PENSION SCHEMES

CIBSE operates both a defined contribution and a defined benefit pension scheme which require contributions to be made separately to administered funds for the benefit of the employees. The defined contribution scheme was opened in November 2001 and employer contribution commenced in April 2007.

Final salary pension scheme
The defined benefit scheme has been reported under section 28 of FRS 102. The most recent valuation was at 1 April 2014. The assumptions which had most significant effect on that valuation were:
(i) future long term average salary increases pre-retirement of 5.1% per annum.
(ii) future long term average salary increases post-retirement of 3.5% per annum.

This actuarial valuation showed that the market value of the scheme’s assets was £3,454,000 and that their actuarial value was 92% of the benefits that had accrued to members after allowing for expected future salary increases. The actuarial valuation recommended that the rate of contributions be increased to 33.9%. The Trustees and the Employer agreed to additional Employer contributions of £108,000 p.a. from 1 April 2014 until the Funding Valuation shortfall is addressed. The actuarial valuation calculated the Funding Valuation shortfall is expected to be addressed over 3 years from 1 April 2014 until 28 February 2017. The payments are payable by the last day of February each year and are due to remain the same over the period.

Based on the current schedule of contributions the estimated contribution to be paid over to the scheme in 2017 is at least 33.9% p.a of the pensionable salary roll, on a monthly basis.

The number of employees in the scheme at 31 December 2017 were:

<table>
<thead>
<tr>
<th></th>
<th>2017</th>
<th>2016</th>
</tr>
</thead>
<tbody>
<tr>
<td>Active employees</td>
<td>2</td>
<td>3</td>
</tr>
<tr>
<td>Deferred pensioners</td>
<td>21</td>
<td>23</td>
</tr>
<tr>
<td>Pensioners</td>
<td>11</td>
<td>8</td>
</tr>
</tbody>
</table>

The financial assumptions used by the actuary to calculate the scheme liabilities under FRS 102 were as follows:

<table>
<thead>
<tr>
<th></th>
<th>2017</th>
<th>2016</th>
</tr>
</thead>
<tbody>
<tr>
<td>Rate of increase in salaries</td>
<td>4.50%</td>
<td>4.50%</td>
</tr>
<tr>
<td>Rate of increase in pensions in payments accrued before 6 April 1997</td>
<td>3.00%</td>
<td>3.00%</td>
</tr>
<tr>
<td>Rate of increase in pensions in payments accrued after 6 April 1997</td>
<td>3.00%</td>
<td>3.00%</td>
</tr>
<tr>
<td>Discount rate</td>
<td>2.40%</td>
<td>2.60%</td>
</tr>
<tr>
<td>Retail price inflation</td>
<td>3.30%</td>
<td>3.30%</td>
</tr>
</tbody>
</table>
19 CIBSE PENSION SCHEMES (continued)

<table>
<thead>
<tr>
<th></th>
<th>2017 £'000</th>
<th>2016 £'000</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Analysis of the amount charged to expenditure</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Current service cost</td>
<td>(36)</td>
<td>(40)</td>
</tr>
<tr>
<td>Total service cost</td>
<td>(36)</td>
<td>(40)</td>
</tr>
<tr>
<td><strong>Net interest costs</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Interest income on plan assets</td>
<td>112</td>
<td>137</td>
</tr>
<tr>
<td>Interest expense on defined benefit obligation</td>
<td>(111)</td>
<td>(131)</td>
</tr>
<tr>
<td>Net return</td>
<td>1</td>
<td>6</td>
</tr>
<tr>
<td>Total pension costs charged to the Statement of Financial Activities</td>
<td>(35)</td>
<td>(34)</td>
</tr>
</tbody>
</table>

**Analysis of the actuarial loss recognised in the Statement of Financial Activities**

Actual return on plan assets, excluding interest income | 253 | 348 |
Experience gains and losses arising on the scheme liabilities | 9 | 20 |
Changes in assumptions underlying the present value of the scheme liabilities | (82) | (586) |
Total actuarial losses recognised in the Statement of Financial Activities | 180 | (218) |

**Analysis of the pension accounting information under FRS 102 is shown below**

**Amount recognised in the Balance Sheet**

Present value of defined benefit obligation | (4,406) | (4,273) |
Fair value of plan assets | 4,667 | 4,246 |
Net defined benefit (liability)/asset | 261 | (27) |

**Change in defined benefit obligation**

Defined benefit obligation at beginning of period | (4,273) | (3,658) |
Current service costs | (36) | (40) |
Interest expenses | (111) | (131) |
Remeasurement arising from changes in assumptions | (82) | (586) |
Remeasurements arising from experience | 9 | 20 |
Benefits paid | 87 | 122 |

<table>
<thead>
<tr>
<th></th>
<th>2017 £'000</th>
<th>2016 £'000</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
### 19 CIBSE PENSION SCHEMES (continued)

**Change in plan assets**

<table>
<thead>
<tr>
<th></th>
<th>2017</th>
<th>2016</th>
</tr>
</thead>
<tbody>
<tr>
<td>Assets at beginning of year</td>
<td>4,246</td>
<td>3,740</td>
</tr>
<tr>
<td>Interest income</td>
<td>112</td>
<td>137</td>
</tr>
<tr>
<td>Actual return on plan assets, excluding interest income</td>
<td>253</td>
<td>348</td>
</tr>
<tr>
<td>Employer contributions</td>
<td>143</td>
<td>143</td>
</tr>
<tr>
<td>Benefits paid</td>
<td>(87)</td>
<td>(122)</td>
</tr>
<tr>
<td><strong>Assets at end of year</strong></td>
<td>4,667</td>
<td>4,246</td>
</tr>
<tr>
<td><strong>Actual return on assets</strong></td>
<td>365</td>
<td>485</td>
</tr>
</tbody>
</table>

**Asset class split**

<table>
<thead>
<tr>
<th></th>
<th>2017</th>
<th>2016</th>
</tr>
</thead>
<tbody>
<tr>
<td>Equities</td>
<td>57%</td>
<td>55%</td>
</tr>
<tr>
<td>Property</td>
<td>4%</td>
<td>5%</td>
</tr>
<tr>
<td>Corporate Bonds</td>
<td>6%</td>
<td>6%</td>
</tr>
<tr>
<td>Gilts</td>
<td>32%</td>
<td>33%</td>
</tr>
<tr>
<td>Cash</td>
<td>1%</td>
<td>1%</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td>100%</td>
<td>100%</td>
</tr>
</tbody>
</table>