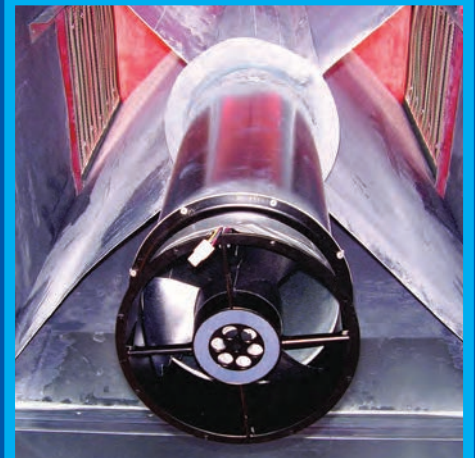




Annual Review 2010/11



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Designed and produced by Ruth Radburn

Printed on Nine Lives recycled paper by Imagedata Ltd.

Front cover images (left to right)

BSRIA thermal imaging equipment in use.

BSRIA model projects report on the University of Surrey Sports Park (see *Delta t* October 2010, page 8).

Monodraught ventilator fitted in the BSRIA reception lobby.

Back cover images (left to right)

BSRIA Information Centre, Helena Boutal, library assistant answers a member enquiry.

Broadmeadows Primary School – Melbourne (Project update see *Delta t* January 2011, page 18).

BSRIA members networking events to provide input to the *Building Regulations*.



David Rintoul, Chairman, BSRIA.

Chairman's statement

The past year has seen a continuation of many, and an introduction of some, significant new Government initiatives for the built environment sector. The Government's *Construction Strategy*, published in May 2011, promises radical changes to construction procurement, cost benchmarking and increasing use of unamended standard forms of contract in the public sector. Questions of design, construction, risk management during and after construction, and the relationships between the parties throughout the project, are intended to be resolved as part of that project's "procurement", underpinned by an integrated design and construction team, so leading to potential cost savings. Future standard form contracts could therefore focus more on operational building performance and less on design inputs (allied to significant transfer of risk through bespoke contract amendment as has historically been the case).

This strategy was followed up by the Government's June 2011 *Low Carbon Construction Action Plan*, in response to the *Innovation in Growth Team Report*. This plan advocates the reform of public procurement, more widespread public sector implementation of Building Information Modelling and collaborative supply chain working. All of these changes will undoubtedly feed through into private sector procurement, particularly when viewed against difficult economic conditions. In short there is a shift from defining project inputs to operational outcomes and this is territory in which BSRIA has been highly active over many years.

This Annual Review demonstrates that BSRIA has continued to help its members and the wider built environment sector prepare for these changes. Support is underpinned by a new Sustainable Building Group, focussing on Facilities Management, Building Services design and practical site forensics.

Additionally, BSRIA continues to develop its Soft Landings Initiative, a procurement and delivery protocol for graduated handover of new and refurbished buildings. This initiative will lead to improved value, elimination of waste and enhanced quality, and so help ensure that buildings meet Government targets on low energy and low carbon.

More generally, BSRIA continues to expand its technical and geographic interests. BSRIA's knowledge is likely to be of ever increasing importance to its members, as much of the anticipated UK growth is in products that meet the green agenda of Government.

BSRIA will continue to work, for the benefit of its members, with Government and industry to help manage the challenges and opportunities arising from implementation of these and other initiatives.

David Rintoul
Chairman, BSRIA

Helping the industry reduce carbon

Chief Executive's review



Andrew Eastwell, Chief Executive.

Carbon reduction has been the dominant theme in nearly all of BSRIA's activities over the past year.

It is not just in the obvious areas like airtightness and building energy assessments that BSRIA has worked this year to help the industry reduce carbon. There is an element of the carbon agenda in every area of our work. Most of our low carbon work is in relation to individual properties but this is not always the most cost-effective way to reduce carbon.



Liz Peace, CBE from the British Property Federation commented:

“from the one planet perspective, we should be looking at reducing resource consumption”.

At the BSRIA Briefing in November we focussed on Engineering Low Carbon Communities. We welcomed Liz Peace as chair and speakers Paul Morrell, OBE, Mahmoud Abu-Ebid, Peter Sharratt and Ian Guest.

Gambi Chiang of BSRIA's Market Intelligence group showed how many renewable technologies can be used much more efficiently on a community scale.

Market Intelligence

Many low carbon projects were undertaken by BSRIA Worldwide Market Intelligence (WMI) in 2011. Andrew Giles, head of Market Intelligence was particularly pleased to announce that BSRIA had been selected by ESTIF (European Solar Thermal Industry Federation) to undertake data collection services in overseas markets. Our first completed report shared in the solar thermal market in Switzerland.

Other new product areas on which we have published studies include gas heat pumps, IT convergence, data centres and passive optical LANs.

WMI more than doubled its private client market intelligence work in the last year to a turnover of £1.2M with the greatest surge seen in BRICS (Brazil, Russia, India, China and South Africa) and

BSRIA Beijing

BSRIA Beijing now has eight staff, all native Chinese speakers and after just two years is a profit-making enterprise. We expect continued growth and profitability into the future. It has a growing client base not only of Chinese manufacturing companies but also with other worldwide players who are examining the burgeoning market within China itself. Last year, the number of private client studies increased significantly and included work on pumps for domestic applications and electric trace heating.

other emerging countries. We were able to deliver this increase through our thirty five in-house research staff, and a similar number of independent overseas-based consultants, all with multi-lingual expertise. The management consultancy business also had its best ever year.

Airtightness

It is not only market intelligence work that takes place overseas: our airtightness team undertook a number of jobs in the Middle East and with enquiries still coming through, are looking to develop work in this area. David Unwin, head of BSRIA's commercial airtightness, said "I see this as an important source for BSRIA. We are well known in the Middle East and will develop air consultancy services there, supported by locally based testing companies."

Back in the UK, BSRIA has provided airtightness testing services for the London 2012 Olympic Park, including the Olympic Stadium, the Velodrome and accommodation in the Athlete's Village.

With airtightness testing becoming mandatory in Scotland, BSRIA has opened a base in Dunfermline to provide both testing and consultancy services.

BSRIA has published *Airtightness: Scotland* (BG 13/2010) and delivered significant input to the *Scottish Building Standards Advisory Document*. We have also provided training courses for airtightness testing in Scotland and a series of webinars on Scottish Standards.

Product Testing

We continue in our quest to add value through our testing services to help manufacturers comply with regulations and keep ahead of the competition in local and international markets. We have developed new facilities for acoustics and corrosion to provide comprehensive test services all under one roof.

BSRIA's new reverberation chamber allows us to meet growing needs for acoustic testing of space heating and cooling products, particularly heat pumps. And, with an added facility to simultaneously measure thermal performance and safety, our clients can be sure to receive their results in good time. Similarly the new standard test facility for chimneys and flues also incorporates corrosion testing. Corrosion resistance must be declared, and having it independently verified is vital for both safety and commercial decision making.

Airtightness "home and away"



Airtightness testing at an academy in Hammersmith



Airtightness testing at an academy in Abu Dhabi

Test and Microclimate



Mitsubishi Electric Ecodan unit under test in BSRIA's new acoustic chamber



Chimneys and flues under corrosion testing

Building Performance Evaluation

2011 saw Building Performance Evaluation (BPE) come of age, with the culmination of research work by the Carbon Trust's Low Carbon Performance Programme (where BSRIA was the Carbon Trust's dissemination contractor) and the Government's injection of £8M of funding through the Building Performance Evaluation Programme. Peter Tse and Roderic Bunn are evaluators for this initiative and perceive that "this shows that interest is gaining ground in actual performance of buildings rather than predicted performance. This signifies a major breakthrough as there can be up to five times the difference in performance between the design target and operational reality."

BPE is an important part of the Soft Landings process – a process that has been gaining much approval through the year. Soft Landings are now part of BREEAM 2011, enabling up to six credits. This initiative is seen as an important way of ensuring that buildings are not only operationally ready but also able to meet the design targets.

Instrument Solutions

BSRIA's Instrument Solutions group provides loggers and monitors for BPE to the BSRIA team and also to universities and other evaluators. We have supported the Energy Saving Trust's solid wall insulation monitoring and the Technology Strategy Board BPE programme with a range of equipment and sensors including coheating tests. The group continues to supply thermal imaging cameras, blower doors, power quality monitors and thousands of other instruments.

But 2011 wasn't just business as usual for Instrument Solutions as one unusual market opportunity materialised. They supplied nine "DustTrak" aerosol monitors and the means to power them, for use in assessing dust emissions from salt pans in the Sua Pan Desert in North East Botswana.

Instrument Solutions



The Sua Pan Desert: Sand is notorious for interference with equipment, as seen in a "Top Gear" drive across this area.



BSRIA BG 28/2011, BREEAM 2011 and Soft Landings

Other new opportunities included the supply of calibrated data logging packages for quality control applications such as sterilization of dentistry tools and autoclave validation.

Thermal imaging

As well as the supply of cameras we also offered a full site service for thermal imaging. Home-owners are now far more aware of how their buildings perform. BSRIA has seen a surge in thermal imaging of private housing, funded by owners or builders requiring an independent assessment following a home owner's concerns.

Design validations

Rather than correcting mistakes after construction it is much better to get the design right in the first place. To help clients achieve this, BSRIA extended its capabilities in computer modelling last year with a more powerful ANSYS CFD package to simulate a wide range of complex flows, including droplet and particle-laden flows, free-surface flows, and flows with chemical reaction and combustion. Thus we will be able to direct our attention to the improvement of a wide range of complex HVAC equipment, while continuing to provide CFD in our traditional areas of room ventilation and wind flow around buildings.

Our capability in mock-up testing continues to extend to a wide range of products and built environments, from museum cabinets and chilled beams through to isolation rooms and data centres.

Thermal Imaging

Colin Pearson received a Condition Monitoring Award at the CM Conference in Cardiff on 21st June for his contribution to condition monitoring.



Colin seen holding the award presented by the Chairman of the Condition Monitoring Committee, Lee Gelman.

BSRIA has now been contracted by the Energy Savings Trust (EST) to monitor 100 solid wall domestic properties that are having insulation retrofitted. We are intensively monitoring temperatures and energy use along with heat flux, thermal imaging and airtightness testing. Initial results show old houses are performing better than expected. The project continues into next year.

Heat flux, thermal imaging and airtightness testing work have also been used to demonstrate how the performance of houses can fall short of the design intent.

Environmental assessment

BSRIA's BREEAM work has become an international enterprise with an office project in Malta.

Another notable project was working with the Diocese of London as the Code for Sustainable Homes Consultant for a new vicarage in Wembley, which met its zero carbon target. The happy occupier stated "We are thankful and privileged to live in the first Code 6 vicarage in the London Diocese. It is a life changing building which will affect how we live and manage our energy consumption".

Operation and maintenance

The O&M Benchmarking Network is celebrating its tenth birthday this year. It continues to earn good support from the industry.

Also for the first time the maintenance KPIs have been analysed by sector. The telecommunications sector had the highest overall score of 9 out of 10 for Relationships, and Insurance had a similarly high score for Innovation and Proactivity. Worryingly though, the scores for Overall Satisfaction declined this year, reflecting both a higher client expectation of what could be achieved and the constraints and margins facing service providers.

Research, publications and training

From design to operation and even demolition and recycling, BSRIA continue to keep the industry

informed of best practice through training and guidance.

New training courses included Heat Pump Design and Integration, Improving Management of Building Services Design, Management of the Commissioning Process, Pre-commissioning Cleaning of Pipework and Project Management for Building Services.

BSRIA also introduced new webinars with a legal theme, in partnership with Clarkslegal, with titles including Avoiding Discrimination claims and Amendments to the Construction Act. Technical seminars still remain popular and cover changes to Part J, Commissioning Management and an Introduction to BREEAM.

BSRIA is a partner in the Knowledge Transfer Network for the Modern Built Environment with responsibility for process efficiency topics, including Building Performance Evaluation and User Behaviour. The project is funded by the UK's Technology Strategy Board.

It is to Europe however that we must now look for most funding for research. The *I3Con project* (Industrial, Integrated and Intelligent Construction) was completed in 2011. Our project leader, Ian Wallis, was singled out for praise by the EU project reviewer and the project's technical management for his excellent dissemination work. This included three substantial publications on innovative construction which are available from BSRIA's library.

For the EU funded CILECCTA project (Construction Industry Life Cycle CosT Analysis) BSRIA has researched plant data and presented the results at the CIBSE Technical Symposium in early September 2011. We will be testing the new software later in 2011. This will considerably extend our expertise and knowledge on whole life analysis and will help provide cutting edge training in both costing and embodied carbon whole life assessment.

Membership

BSRIA welcomed 52 new members during the year. One growing area of activity for members is BSRIA networks, managed by Tracey Tilbry, and providing real value and commercial benefit to our members. We are building on-line resources for both the Young Engineers' Network and the Building Assessment Network. One young engineer quoted "having the chance to speak with the experts and ask them questions was great as well as having the opportunity to make valuable contacts that can improve our standard of work".

A new feature in July 2011 was the *Legislation and Compliance Database*. This was set up as an on-line service by Clare Sinclair following direct feedback in seeking members' needs. In June 2011 BSRIA started the new *Information Centre Quarterly* which replaces, but will be far more extensive, than the former IBSEDEX. BSRIA also kept pace on the social media front with the launch of the BSRIA Blog which at the time of writing had 2,106 views.



Young Engineers' Network

About BSRIA

The Building Services Research and Information Association is a company limited by guarantee. It trades through two subsidiaries - BSRIA Limited which is registered in the UK but trades globally and BSRIA Construction Consulting (Beijing) Limited which is registered in China.

The Association has no shareholders and does not distribute its profits but re-invests in research and guidance for the industry's benefit.

Our 600 member companies come from all parts of the supply chain. Membership of BSRIA enables organisations to demonstrate that they are leading the industry through innovation and best practice.

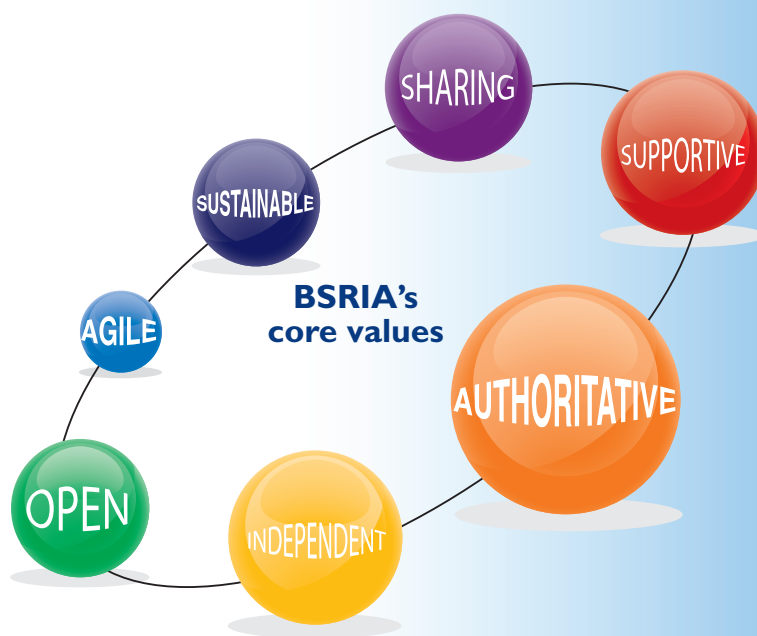
The membership elects the Board of Directors of the company and an advisory Council (see page 12).

The accounts on the page opposite are for the BSRIA group of companies, as submitted for adoption at the AGM.

Key statistics:

- ▶ £11 million turnover
- ▶ 160 staff
- ▶ 4,000 m² of laboratory space
- ▶ Offices in the UK, Germany, France, Spain, China, North America and Malaysia
- ▶ Over 600 corporate members, covering many thousands of people.

“Our mission is to enable the building services and construction industries and their clients to enhance the value of the built environment, by improving the quality of their products and services, the efficiency of their provision and the effectiveness of their operation.”



We are committed to the low carbon agenda and supporting clients and the industry in reducing energy and carbon use. For many years, we have been working to reduce the environmental impact of our own buildings, and are keen to work with our members to trial low carbon technologies.

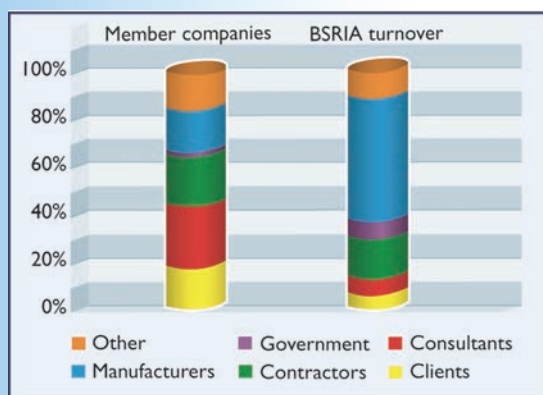
The boilers serving our laboratory building must be one of the oldest fully condensing installations in UK. Supplied by Atlantic Boilers in 1989 they have been in continuous trouble-free service since that time. The same boiler house also runs a Dachs 5(kWe) micro CHP unit supplied by Baxi, which has run continuously since its installation in 2004. It is an efficient match with the boilers since it employs a fully condensing exhaust. The CHP unit saves us an estimated 10.5 tonnes of carbon, and nearly 50% of our costs of this aspect of our energy use.

Our main reception lobby sports a Monodraught ventilator with PV driven fan to control summer overheating. The rest of the office building and conference area has recently been upgraded with Trend controls. This was a particularly tricky retrofit in a 20 year old VAV system but with fans now driven with variable speed drives we estimate fan power savings of around 20%. We are benefitting from significantly enhanced occupant satisfaction in the building. We are now trialling a variety of T5 LED replacement tubes retrofitted into existing luminaires (bypassing the old magnetic ballasts) and these are indicating savings of around 60% whilst maintaining the same lighting level.

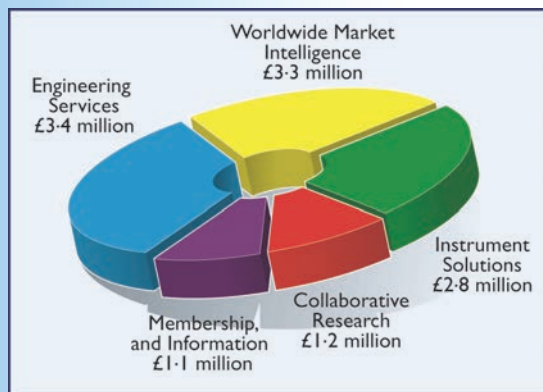
All of this gives us first-hand user experience and not just lab measurements to build our knowledge base of many technologies.



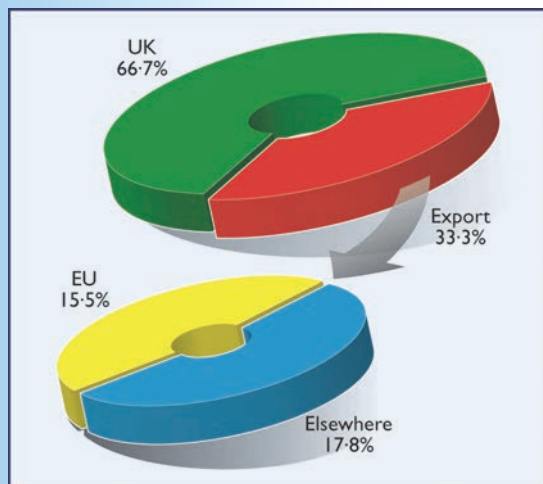
Turnover growth 2002-2011.



Customer group.



Turnover by types of work.



Worldwide turnover breakdown.

GROUP BALANCE SHEET

As at the 27th March 2011

	Group 2011	Group 2010
	£000	£000
FIXED ASSETS		
Tangible assets	3,833	3,932
Intangible fixed assets	-	-
Investments	-	-
	3,833	3,932

CURRENT ASSETS

Stock and work in progress	231	273
Debtors	2,472	2,760
Cash at bank and in hand	1,375	956
	4,078	3,989

CREDITORS:

Amounts falling due within one year	- 2,354	- 2,583
TOTAL ASSETS LESS CURRENT LIABILITIES	5,557	5,338

CREDITORS: Amounts falling due after more than one year

Defined benefit pension scheme liability	3,848	4,215
Accumulated fund	2,498	2,128
Revaluation reserve	66	66
Pension reserve	- 3,848	- 4,215
Exchange adjustment reserve	65	61
	5,557	5,338

GROUP INCOME & EXPENDITURE ACCOUNT

Period Ended the 27th March 2011

	2011	2010
	£000	£000
Income	11,828	10,954
Direct expenses	-5,132	-4,822
Surplus of income over direct expenses	6,696	6,132
Other expenses	-5,747	-5,329
Surplus of income over expenditure before interest	949	803
Interest receivable and similar income	0	0
Interest payable & retirement fund	-270	-524
Surplus of income over expenditure	679	279
Tax on surplus	5	10
Surplus of income over expenditure transferred to the accumulated fund	684	289

Full statutory accounts are available from:
www.bsria.co.uk/about/accounts.

Technical Publications

Publications Panel:

Nick Cullen – Hoare Lea Consulting Engineers
 Mitch Layng – Prudential Property Investment Managers
 Jim Mellish – Skansa Rashleigh Weatherfoil
 Les Smith – Cudd Bentley Consulting
 Richard Tudor – WSP Group
 Wander ter Kuile – Waterloo Air Products

Airtightness Scotland (BG 13/2010)
BREEAM 2011 and Soft Landings (BG 28/2011)
Building Manual and User Guide (BG 26/2011)
Building Services Legislation (D 3/2010)
Commissioning Job Book (BG 11/2010)
Commissioning Water Systems (BG 2/2010)
Embodied Carbon (BG 10/2011)
Energy Efficient Pumping Systems (BG 12/2011)
Floor Void Airtightness (BG 12/2010)
Illustrated Guide to Mechanical Cooling (BG 1/2010)
Pitstopping (BG 27/2011)
Rules of Thumb (BG 9/2011)
Soft Landings for Schools (BG 9/2010)
Structural Fixings for Ductwork (BG 10/2010)
Underfloor Heating and Cooling (BG 4/2011)

All publications are available for members to download from www.bsria.co.uk/bookshop

Training and Events

BSRIA Briefing 2010 – Engineering Low Carbon Communities

Training courses

Domestic Airtightness Testing
 Improving Management of Building Services Design
 Introduction to Building Operation and Maintenance
 Introduction to Commissioning
 Introduction to Electrical Building Services
 Introduction to Fire in Buildings
 Introduction to Mechanical Building Services
 Introduction to Renewables
 Introduction to the Building Regulations
 Life Cycle Costing – Theory and Practice
 Management of the Commission Process
 Practical Energy Management
 Pre-commission Cleaning of Pipework
 Project Management for Building Services
 Thermography Level 1 PCN
 Understanding BREEAM
 Understanding Part L and Part F of the Building Regulations

Further information from www.bsria.co.uk/training-and-events

Networks

Building Information Modelling
 – *BIM Network Meeting*

Building Environment Assessment
 – *BREEAM 2011*, July 2011
 – *Workshop*, July 2011

Operation and Maintenance Benchmarking
 – *Successful Partnership in FM*, April 2010
 – *Compliance in FM*, July 2010
 – *Compliance Special Interest Meeting*, September 2010
 – *Operating Energy Efficient Buildings*, November 2010
 – *Best Practice for FMs*, March 2011
 – *Which way to work*, July 2011

Energy and Sustainability
 – *Reducing Energy in Lighting*, May 2010
 – *Building Regulations Consultation*, August 2010
 – *Adapting to Climate Change*, December 2010
 – *Solar Technologies*, March 2011
 – *Developing the Built Environment*, June 2011

Soft Landings User Group

Young Engineers

– *Integrated Low Carbon Projects*, March 2011
 – *Meet the Expert*, June 2011

Further information from tracey.tilbry@bsria.co.uk

Webinars

Airtightness
 BIM – An Introduction
 Biomass – Lessons Learned
 Commissioning – Lessons Learned
 Controls
 KPIs and Benchmarking
 Legislation
 Life Cycle Costing
 Meet the author
 Operation and Maintenance
 Soft Landings – An Introduction
 Testing Buildings for Compliance and Sustainable Performance
 O&M Benchmarking Network – Energy, Actions Speak Louder than Words
 O&M Benchmarking Network – Reducing Energy in Lighting

Further information from www.bsria.co.uk/training-and-events

MEMBERSHIP, INFORMATION, NETWORKS AND TRAINING

Membership administration and support, member networks and webinars, and technical information to members, including BSRIA's own publications and training activities.

Anne King MBE BA MBA MCIM

Tracey Tilbry ABIFM

Michael Doig DipM

Kathie Bull

Emily Higgins

Clare Sinclair MA, MCLIP

Helena Boutal BSc

Richard Forster I Eng, MILE, MCIBSE, MSL

Olivia Greenstreet MA

Bozena Wright MA

David Bleicher MEng

Alex Goddard BA

Glenn Hawkins BEng

Ruth Radburn

Gerry Samuelsson-Brown BSc

Joy Wallbanks

Roderic Bunn BA FRSA

SUSTAINABLE BUILDINGS GROUP

Consultancy services including BREEAM and Code for Sustainable Homes, condition monitoring, maintenance strategy, plant and system investigations, building performance evaluations, whole life costing, condition surveys and research projects.

Jo Harris MSc ABIFM

David Churcher BSc MBA

Sharon Docherty

Ian Wallis MSc AMIM

Reginald Brown MSc MBCS CEng MInstE

Ralph Bell

Salim Deramchi BSc

James Parker BEng MSc AMIMechE

ProfGradIMMM

Peter Tse MEng

Colin Pearson BSc CEng MCIBSE MIEEE

MInstNDT

Sarah Birchall BEng

Graham Dudman BSc MIEE

Irena Saniuk MSc

Allan Wilson

WORLDWIDE MARKET INTELLIGENCE

Information about market size and structure, including forecasts and strategic development matters on building services and related markets, in the form of published reports, private client services and management consultancy.

Andrew Giles MA
Anette Meyer Holley BA

Natalie Bentz MA
Phil Bowring
John Boutal
Ele Calio BA
Saziye Dickson ACIM
David Garwood MSc
Alfonso Oliva MA
Pablo Urien Vicario BSc

Tim Page
Elaine Alford
Abdel Eljijida MA
Aline Breslauer MA
Greg Corty BA PhD (France)
Alex Detre (North America)
Brian Hicks MA (Germany)
Karen Hudson
Balinder Kaur BSc
Scott Taylor

Jeremy Towler BBA Dipl Betr Oek
Raphael Chalogany MA
Oleksiy Danilin MSc
Marek Kurza MA
Lone Hansen MA
Summer Chardine MSc CEng MIET
Martin Chiesa MA
Simon Hofer MSc
Sukant Rout MBA
Piero Russo MA

Krystyna Dawson MA
Marta Fiorentini MA
Jung Park MA
Gambi Chiang MSc MCIM MASHRAE
(Malaysia)

Johannes Fritsch MA
Zoltan Karpathy MA

COMMERCIAL AIRTIGHTNESS

Airtightness consultancy and testing for commercial buildings, and specialist enclosures.

David Unwin MA
Lesley Sharpe
Sarah Stapleton
Tom Jones BSc
Ben Cheeseman MSc MIMechE

Tim Radburn
Jonathon Askem
Edward Bramwell
Karl Belcher
Kayleigh Docherty
Ray Myler
Karl Olsson
Gordon Park
Paul Potter
Graham Waring

INSTRUMENT SOLUTIONS AND DOMESTIC AIRTIGHTNESS

Hire, calibration and sales of a comprehensive range of building services and construction instruments, airtightness testing services for dwellings and sales and calibration of blower doors for airtightness testing.

David Stephens
Michelle Kinch
Alan Gilbert BA

IEng MIET
Michael Bray
Dick Langston
Andrew Lennard
Allan Monday
David Newell BSc
Matthew Newland
Allan Nichols
Terry Penman
Tony Pettitt

Martin Trotter BSc
Jo Morgan
Steven Osborne
Dean Tovey
Darren Walkden
Darin Warren

Stacey Ward

Alan Thorn
Mark Winter
Chris Knights
Paula Clare
Andrew Frisby BSc,
AMIA

Dan Hodgkinson
Joe Matic
Peter Liebhardt
Simon Feeley
Paul Dooley
Steven Chambers
John Jackson
Mick Hampson
Stewart Inman
David Whitehall
Tony Wicks
Darren King

TEST & MICROCLIMATE

Computer and physical modelling and site investigation and research projects, product testing to British, European and other standards, witness testing on-site and bespoke testing for projects.

William Booth BA
Keith Atkinson PhD
Brenda Curzon

Colin Judd BEng AMIMechE
Blanca Beato Arribas MEng
Calum Maclean MPhys
Craig Sawyer BEng BSc

Philip Stonard
Michael Evans
Andrew Freeth HND
Tom Garrigan BSc
Rebecca Hogg MEng AMIA
Mark Roper BEng AMIMechE

Arnold Teekaram BSc PhD AMIMechE
Ray Biggs
David Butler
Mark Lightfoot BSc
Graham Price
Alf Russell

MANAGEMENT TEAM

Andrew Eastwell* Chief Executive
BTech CEng CPhys MInstP FCIBSE
William Booth BA
Andrew Giles MA
Jo Harris MSc ABIFM
Anne King* Marketing Director MBE BA
MBA MCIM
Mike Smith* Engineering Director BEng
CEng MCIBSE MASHRAE Finstr
David Stephens
John Turner* Finance Director
FCCA FCMA
David Unwin MA

*Also executive director

SUPPORT SERVICES

FINANCE

Zoran Matic BA
Tracie Ayling
Colleen Brady
Pam Gofford
Donna Hall
Elaine Holmes
Anne Owen
Carole Warder
Chris Marney BA

ADMINISTRATION

Fran Cooper
Julie Biggs
Gillian Brock
Tina Bull
Wendy Kenyon
Caroline McFarlane
Stewart Rickard
Pauline Wayne

INFORMATION TECHNOLOGY

Malc Leary
Steve Jordan
Lee Byron
Karen Comber

SALES & MARKETING

Aleksandra Bury BA MCIM
Lynette Smith
Graeme Owen BA DipM ACIM
Catherine England BA

WORKSHOP & FACILITIES

John Hope
Mark Pettitt
Anne Cook
Sue Coulson
June Pettitt
Mark Rickard
Garry Taylor
Val Taylor

BSRIA CONSTRUCTION CONSULTING (BEIJING) LTD

This group provides information for the Chinese market, in the form of published reports, private client services and management consultancy.

Oliver Peng BA, MA
Yuan Li BA
Martin Li BSc, MSc
Cissy Liu BSc, MSc

Bruce Wang BA
Ray Wang BSc
David Wang BA, MA
Angela Yu BSc, MA

BSRIA Directors 2011

Non Executive

David Rintoul
Les Smith
Tony Fleming
Jim Mellish
Tom Smith

Chairman
Vice Chairman

Executive

Andrew Eastwell
Anne King
Mike Smith
John Turner

Chief Executive

BSRIA Council 2011

Clients

Phil Greenwood
Mitch Layng

Association of University Engineers
Prudential Property Investment Managers

Consulting Engineers

Andrew Brookes
Nick Cullen
David Featherstone
Keith Reed
Les Smith
Tom Smith
Richard Spencer
Ant Wilson
Jeff Wood

URS/Scott Wilson
Hoare Lea Consulting Engineers
Building Services Design
Aspire Defence
Cudd Bentley Consulting
WSP Group
Dunwoody
AECOM
Foreman Roberts Consulting

Contractors

George Adams
Alan Cole
Bill Colledge
John Forster
Jim Mellish
Simon O'Hea
Stuart Thompson
John Whyte

SPIE Matthew Hall
SES
Colledge Trundle & Hall
Interserve
Skanska Rashleigh Weatherfoil
Colt International
Morgan Sindall (Ipswich)
MJN Colston

Manufacturers

Colin Biggs
Tony Fleming
Wander ter Kuile
Chris Monson

Nuaire
JS Humidifiers
Waterloo Air Products
Trend Control Systems

Other Members

Chris Burgess
David Rintoul
Cedric Sloan

CR Burgess Commissioning
Clarkslegal
FETA

Government Members

Paul de Cort

DCLG

CIBSE

Stephen Matthews

CIBSE

Co Opted

Chris Davidson
Joe McCaffrey

Geothermal International
College of Estates
Management

BSRIA Members

Clients

Allen & Overy LLP
Asda Wal-Mart
AstraZeneca plc
Bank of England
Baptist House Ltd
Barbican Centre
Barclays Bank plc
Barnsley Hospital NHS
Foundation Trust
BBSRC
BNP Paribas
Boots UK Ltd
BP International Ltd
British Telecommunications plc
Broadgate Estates Ltd
Canary Wharf Management Ltd
Cancer Research UK
Chevron Ltd
City of London Corporation
City of Newcastle Upon Tyne
Council
City University London

Corporate Property, Prudential
Credit Suisse
Credit Suisse - NY
DEFRA
Department of Health
East Sussex Hospitals NHS Trust
Envirotec Ltd
Essex County Council
Estate Support Svc Newcastle
European Bank for
Reconstruction
First Great Western
Fujitsu Services Ltd
G4S Integrated Services
Gilead Sciences Europe Ltd
Glasgow Caledonian University
Great Ormond St Hospital for
Children
Hampshire County Council
Health Facilities Scotland
Hiscox
HSBC Banks plc
Imperial College London

John Lewis plc
JP Morgan Chase Bank
Kensington & Chelsea College
Kingston College
KPMG LLP
KUSCO Ltd
Lancashire County Property
Group
Land Securities Group plc
Legal & General Assurance Ltd
Level 3 Communications LLC
Lloyds Banking Group
London Borough of Newham
London Fire Brigade
Manchester Metropolitan
University
Marks & Spencer plc
Metropolitan Police Office
Monsoon Accessorize Ltd
Motability Operations Ltd
Mouchel Business Services Ltd
Museum Association
National Air Traffic Services Ltd

National Gallery
NHS Business Services Authority
Nomura International plc
Prudential Property Investment
Managers
Royal Holloway University
of London
Royal Household Property
Section
Royal Mail Group Facilities
Management
Royal Surrey County Hospital
NHS Trust
Sainsbury's Supermarkets Ltd
Savvis UK Ltd
Science & Technology Facilities
Council
Science Museum
Sellafield Ltd
Shell Real Estate Services
Sheraton Hotels UK Ltd
Shetland Islands Council
Smith & Nephew Medical Ltd

South Lanarkshire Council
 South Staffordshire Healthcare
 NHS Trust
 St Albans City & District Council
 STFC, Daresbury Laboratory -
 Estates Management
 Telereal Trillium
 Tesco Stores Ltd
 The British Council
 The County of Herefordshire DC
 The Open University
 The Royal Bank of Scotland
 The University of Greenwich
 The University of Reading Estates
 Turner Broadcasting System
 Europe Ltd
 University of Bath
 University of Bristol
 University of Essex
 University of Glasgow
 University of Greenwich
 University of Leeds
 University of Portsmouth
 University of Southampton
 University of Surrey
 University of Warwick
 University of Wolverhampton
 Estates
 Wandsworth Borough Council
 Wembley National Stadium Ltd
 WestLB AG

Consulting Engineers

ABB Eutech Ltd
 ACTS Partnership
 AE Robb & Associates
 AECOM
 AEDAS London
 Air & Water Consultants Ltd
 Andrew Reid & Partners LLP
 Applied Energy Ltd
 Aqua Protec Ltd
 ARCADIS AYH plc
 Arup
 Aspire Defence
 Atelier Ten Consulting
 Engineers Ltd
 Atkins Consultants Ltd
 Austin Company of UK Ltd
 Babcock Infrastructure Services
 Banyard Consulting
 BDSP Partnership Ltd
 Beadmore Associates
 Bennett Williams Partnership
 (Midlands) Ltd
 BMT Fluid Mechanics
 Building Design Partnership
 Building Environment Engineers
 Building Services Design
 Building Services Group Ltd
 Building Services Partnership
 Buro Happold Management Ltd
 Butler & Young Associates
 Capita Symonds Ltd
 CB Richard Ellis Ltd
 CBG Consultants
 CBS Design Consultants
 Chapman Bathurst
 Chesterfield WT Consultants
 Clifford Chance LLP
 CML Sustain Commissioning
 Management Ltd

Commtech Commissioning
 Services S.A.
 Core Group Ltd
 Crossley Associates
 Cudd Bentley Consulting Ltd
 Cundall
 Cuthbert Axten D'Cruze
 David Miles & Partners
 Davie & McCulloch
 Davies Partnership
 Designbrook Ltd
 Dome Consulting Ltd
 Dowling Blunt Ltd
 DRAC Consulting Ltd
 Dunwoody LLP
 E3 Consulting Engineers
 EC Harris LLP
 Edward Pearce LLP
 Elementa Consulting Ltd
 Engineering Services Consultancy
 Engineering Services Design
 Practice
 Environmental Engineering
 Partnership
 Ernest Griffiths
 ES Consulting Engineers
 FHP Engineering Services
 Solutions
 Flatt Consulting Ltd
 Foggo Associates
 Forbes Leslie Network Ltd
 Foreman Roberts Consulting Ltd
 GDM Partnership
 Gifford LLP
 Graham Powell Consultants
 Gravellye Engineering
 Associates Ltd
 Grontmij Ltd
 GW Grey & Associates
 Halcrow Yolles
 Haleys Ltd
 Hannaford Upright
 Harley Haddow LLP
 Harrison Varma Construction Ltd
 Haskoning UK Ltd
 HBS Consulting Engineers Ltd
 Healthy Buildings International
 Henderson Green Partnership Ltd
 High-Point Rendel
 Hill Lawrence Ltd
 Hilson Moran Partnership Ltd
 HLM Architects
 Hoare Lea Consulting Engineers
 Holloway Partnership
 Hulley & Kirkwood
 hurleypalmerflatt Ltd
 IBE Consulting Engineer Inc
 ICAX Ltd
 Intention Solutions Ltd
 Jacobs UK Ltd
 JDP
 John Packer Associates
 Johnathan Hart Associates
 Jones King Partnership
 JRB Environmental Design Ltd
 Kehr & Tucker
 King Shaw Associates
 Kut Partnership
 Leonard Engineering Design
 Associates
 Max Fordham LLP
 McBains Cooper Consulting Ltd
 McCann & Partners

Mecserve Ltd
 Mervyn Hayes Associates
 MH Associates Ltd
 Michael Jones & Associates LLP
 Mott MacDonald Ltd
 Mouchel Ltd
 Neil R Horswood Services
 Norman Bromley Partnership LLP
 Norman Disney & Young
 NPS Group
 NPS Property Consultants Ltd
 OD Projects Ltd
 P McCaul Environmental
 Consulting Engineers
 Parsons Brinckerhoff Ltd
 Peter Brett Associates LLP
 Pettit Singleton Associates LLP
 Pinnacle ESP Ltd
 PMC Partnership
 Poxy Energy Ltd
 Promode Building Services
 Consultancy
 Ramboll UK Ltd
 RHB Partnership LLP
 Richard Stephens Partnership Ltd
 Robert Sommerville Associates
 Roger Parker Associates
 RSP Consulting Engineers LLP
 SA Walsh Specialist CE & Expert
 Witness
 Scicluna & Associates
 Selanya Consulting Engineers
 Silcock Dawson & Partners
 Silcock Leedham Consulting
 Engineers Ltd
 Skelley & Couch LLP
 Slender Winter Partnership
 Spencer Mayes Ltd
 Status Design Associates LLP
 Steensen Varming (Australia)
 Stuart McCurry & Partners Ltd
 T&C Technology L.L.C
 The Environmental
 Consultancy Ltd
 The Hampden Consultancy
 TPS Consult
 Troup Bywaters + Anders
 Tuckers Consultancy Ltd
 URS/Scott Wilson
 Utilivista Ltd
 Valco Services Ltd
 Vector Design Consultancy Ltd
 Venables Associates Ltd
 Vitec Webber Lenihan Ltd
 Waterman Building Services
 Watson & Sole Associates Ltd
 WSP Buildings Ltd
 WYG
 Zisman Bowyer & Partners LLP

Contractors

Abesco
 Abyss Technical Services Ltd
 ACJ Air Conditioning Jersey Ltd
 Airtech Premier
 Alumet Systems (UK) Ltd
 Anderson Mechanical Services
 Aqua Environmental Services
 Aquatreat Chemicals Services Ltd
 Armstrong Integrated Ltd
 Artic Building Services Ltd
 Ashford Environmental Services Ltd
 Atlantic Boilers
 Babil LLC
 Bailey Ltd
 Balcomm Ltd
 Balfour Beatty Engineering
 Services Ltd
 BAM Design
 BAM Nuttall Ltd
 Barrow & Brooks Ltd
 Bifrost Engineering Services Ltd
 BK Gulf LLC
 Bouygues UK
 C&I Controls
 Carillion plc
 CH Lindsey & Son Ltd
 Chemflow Environmental Ltd
 Cheshire Contracting &
 Control Ltd
 Cleartech Water Solutions Ltd
 Clearwater Technology Ltd
 Close Technical Services
 COFLEY
 Colledge Trundle & Hall Ltd
 Comserve Ltd
 Crosscount Environmental
 Engineering Ltd
 Crown House Technologies Ltd
 Dewco Ltd
 DMG Delta
 Drugasar Ltd
 DT Technical Services
 Ductclean (UK) Ltd
 E.ON UK
 Ecovert FM
 Elmdon Technical Management
 Ltd
 EMCOR Group (UK) plc
 Ensys Ltd
 Envirocure Ltd
 Essex Services Group Plc
 Evolution Water Services Ltd
 Fielder Technical Services
 First Property Services Ltd
 Four Seasons Group
 Future Water Ltd
 GBS (Building Services) Ltd
 General Environmental Services Ltd
 Goldenway Electomechanical
 Works LLC
 Gratte Brothers Group
 GSH UK Ltd
 Guernsey Air Conditioning Ltd
 Harvey Group plc
 Henley Water Ltd
 Heywood Chemical Cleaning
 Hockley Building Services Ltd
 Hygeia Environmental Services Ltd
 Ian Williams Ltd
 Imtech Aqua Ltd
 Imtech G&H Ltd
 Interserve Facilities
 Management Ltd
 Inviron Ltd
 ISG Interior Services Group
 UK Plc
 ISS Facility Services Ltd
 Jasun Envirocare Plc
 JCA Group
 John Noad (Ceilings) Ltd
 Kebble Environmental Services Ltd
 King Environmental Services Ltd
 Klimatec Ltd
 Leakbusters Ltd
 Lorne Stewart plc

Mala Engineering Ltd
 Mercury Engineering Ltd
 Michael J Lonsdale Ltd
 Mid Essex Heating (London) Ltd
 MITIE Engineering Services Ltd
 Mitton Mechanical Services
 MJN Colston Ltd
 Molden Technical & Consulting
 Projects Co
 Morgan Sindall (Ipswich)
 Morgan Sindall Plc
 Musketeer Services Ltd
 MW Services Water Treatment
 (UK) Ltd
 Norland Managed Services Ltd
 Ocean Facilities Services Ltd
 One Facility Ltd
 Orostream Air Conditioning Ltd
 Pennine Water Treatment
 Services
 PH Commissioning Specialists Ltd
 PH Water Technologies
 Pillinger Controls Ltd
 Premier Plant Engineering Ltd
 Primary Water Treatments
 Protechnical Services
 Pure Group
 Quotehedge Ltd
 R&S Building Services Engineers Ltd
 Reliance Facilities
 Management Ltd
 Rolfe Contracting Ltd
 Royce Group Ltd
 Saudi International Test &
 Balance Co
 Serco Defence Science &
 Technology
 SES Ltd
 Sir Robert McAlpine Ltd
 Skanska Rashleigh Weatherfoil Ltd
 Skilz (UK) Ltd
 Specialist Independent Building
 Services
 SPIE Matthew Hall Ltd
 SR Industrial Ltd
 Sutton Services International Ltd
 Swiftclean UK Ltd
 Taylor & Stapleton Solutions
 Ten Group Services Ltd
 Triobiz LLC
 Vinci Construction Ltd
 W Wright Electrical Ltd
 Warnings Contractors Ltd
 Water Environmental
 Treatment Ltd
 Wates Construction Ltd
 Wilden Services Ltd
 Willmott Dixon Construction Ltd

Manufacturers

Advanced Air (UK) Ltd
 Aereco Ventilation Ltd
 Airedale International
 Airflow Developments Ltd
 Altecnic Ltd
 ALU+Ltd
 AO Smith Water Products
 Aspect Environmental Ltd
 Autron Products Ltd
 Belimo Automation (UK) Ltd
 Biddle Air Systems Ltd
 Brooke Air Diffusion Ltd
 Caice Acoustic Air Movement Ltd
 Castleoak Timber Frame Ltd
 Climaveneta UK Ltd

Colt International Ltd
 Comyn Ching & Co (Solray) Ltd
 Conex Universal Ltd
 Construction Specialties Inc
 Crane Building Services & Utilities
 Daikin Airconditioning UK Ltd
 Dresser – Rand
 Dunbrik (Yorks) Ltd
 Dunham Bush Ltd
 Durapipe UK
 Eaton-Williams Ltd
 Ecolec
 Elta Group Ltd
 ENWA Water Treatment
 ESC Global Ltd
 ET Environmental Ltd
 Fernox - Alpha-Fry Technologies
 Europe
 FG Eurofred Ltd
 Flakt Woods Ltd
 Fluevent Engineering Services Ltd
 Fluke (UK) Ltd
 Frenger Systems Ltd
 Frese Ltd
 GEA Denco Ltd
 George Fischer Sales Ltd
 Geothermal International Ltd
 Gilberts (Blackpool) Ltd
 Gripple Ltd
 H Docherty Ltd
 Halton Products
 Haverland UK
 Heatstore
 Herz Valves UK Ltd
 Horne Engineering Ltd
 HRM Boilers Ltd
 HVC Supplies (Stourbridge) Ltd
 Hydroelectric Ltd
 Hydropath Holdings Ltd
 Hydrotec (UK) Ltd
 Ice Energy Heat Pumps Ltd
 Invensys Climate Controls
 Itho Ventilation Ltd
 Johnson & Starley Ltd
 Dravo Division
 Johnson Controls Ltd
 JS Humidifiers plc
 Kohler Mira Ltd
 Lutron EA Ltd
 Maincor Ltd
 Marflow Hydraulics Systems
 MHS Boilers Ltd
 Midtherm Flue Systems Ltd
 Mitsubishi Electric UK Ltd
 Monodraught Ltd
 Nuaire Ltd
 PAR Louvre Systems Ltd
 Polypipe Terrain
 Portakabin Ltd
 Quinn Radiators Ltd
 Rega Ventilation Ltd
 Renson Ventilation nv
 Riello UPS Ltd
 Rinnai UK Ltd
 Rointe UK
 Ruskin Air Management
 Sauter Automation Ltd
 SAV Systems Ltd
 Schiedel Chimney Systems Ltd
 Schneider Electric UK Ltd
 Sensotherm Europanel Ltd
 Siemens Building Technologies Ltd
 SMARTD Chiller Group Inc
 Smiths Environmental
 Products Ltd

Smiths Environmental Systems Ltd
 Stokvis Energy Systems
 Stovax Ltd
 System Uvex Ltd
 TA Hydraulics
 Thorn Lighting Ltd
 Timoleon Ltd
 Toshiba Carrier UK Ltd
 Trane (UK) Ltd
 Trench Heating Ltd
 Trend Control Systems Ltd
 TROX UK Ltd
 Turner & Wilson
 Unit Products Ltd
 Uponsor Ltd
 Vent Axia Ltd
 VES Andover Ltd
 Victaulic
 Waterloo Air Products plc
 Wavin UK
 Wozair Ltd
 Zehnder Group UK Ltd

Other Members

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 ABL Technical Services
 Acuity Management Solutions Ltd
 AJB Hightech Ltd
 Andrew Wilkes Management Ltd
 Association of Plumbing & Heating
 Association of University
 Engineers
 Atomic Weapons Establishment
 Bickerdike Allen Partners
 Birmingham City University
 British Board of Agreement
 British Council for Offices
 BSS Group plc
 Building Research
 Establishment Ltd
 Calor Gas Ltd
 Cambridge Assessment
 Carbon Trust
 Cardiff University
 CCS Services Ltd
 CIBSE
 Clarkslegal LLP
 Clydebank College
 CML International (Dubai)
 College of Estates Management
 Commissioning Management Ltd
 Comtech (ASIA) Ltd
 CR Burgess Commissioning Ltd
 Davis Langdon & AECOM
 Defence Estates (USF)
 DIT Library
 ECA
 End Systems Ltd
 English Heritage
 Enterprise Ireland
 Eurocom Technical Services Ltd
 Eurofins Environmental Services Ltd
 Europa Nationwide Technical
 Services
 FETA
 Field Fisher Waterhouse LLP
 Goodman Real Estate Advisor
 Grant Engineering (UK) Ltd
 Group Management Electrical
 Surveys Ltd
 H&V Commissioning Services
 Heron Water Services
 Hilti (GB) Ltd
 IHS Ltd
 Impact Partnership

Integrated Water Services Ltd
 JCS Ltd
 Kings College London
 Knights Commissioning Services
 Latis Scientific Ltd
 Lend Lease Design
 London South Bank University
 Loughborough University
 MACE Group
 Marquis & Lord Ltd
 Modern Building Services
 Moore Environmental
 Commissioning Ltd
 Network Rail
 NHBC Technical
 Nottingham Trent University
 Oakleaf Technical Services Ltd
 Partnerships for Schools
 Phoenix Commissioning
 Services Ltd
 Pricewaterhouse Coopers
 Q Commissioning
 Management Ltd
 Sheffield Hallam University
 Smartcool Systems (UK) Ltd
 Smoothflow Commissioning Ltd
 South Tyneside Metropolitan BC
 Southend Borough Council
 Space Air Conditioning Daikin
 Sutton International LLC
 Syngenta AG
 Tameside College
 Taylor & Stapleton Engineering Ltd
 TG Lynes Ltd
 The University of Gloucestershire
 The University of Manchester
 The University of Reading
 Towerite Ltd
 TRADA Technology Ltd
 Turner & Townsend
 University College London
 University of Brighton
 University of Dundee
 University of Glamorgan
 University of Kent
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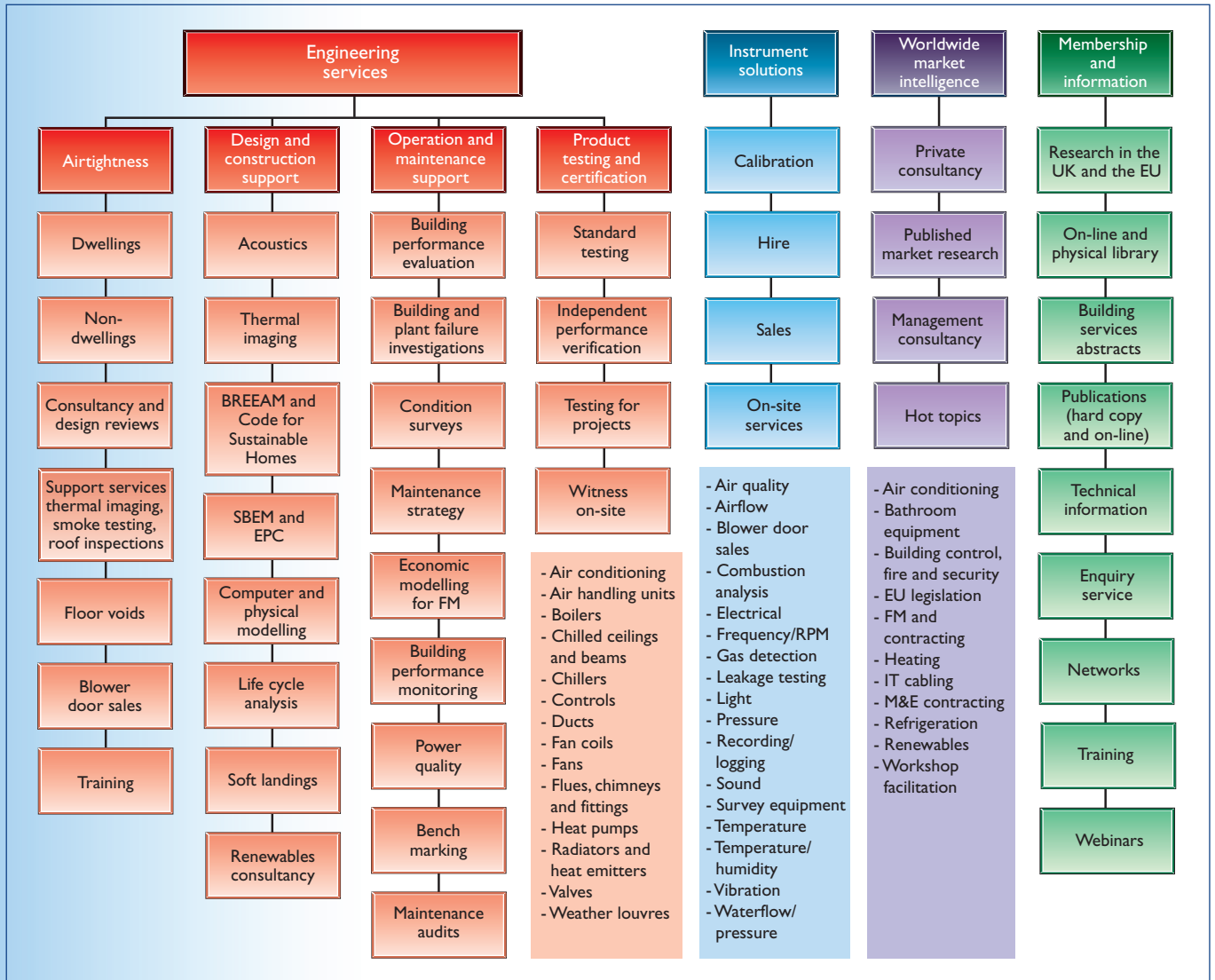
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