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Best of BREEAM 2017

Exceptional sustainable places and project teams from the BREEAM Awards 2017

**GROWING
PRODUCING**

Driving the value case for sustainability

The entries for this year's BREEAM Awards demonstrate the commitment that clients continue to make to sustainability as a force for good. They also shine a light on the value of a whole building approach to sustainability, a space that BREEAM has occupied for more than 25 years.

It is important for BREEAM to continue to work with industry to clearly show the value that the use of BREEAM brings. Existing research on this topic and new research due to be published in March is clear and more compelling than it has ever been. What is really exciting is that we are starting to see a market no longer only driven by lowest capital cost but also through higher asset value of buildings driven by higher rents, lower running costs as well as increased tenant satisfaction and retention.

Another significant trend is the expansion of BREEAM to assess existing buildings both during the In-Use phase and during significant refurbishment and fit-outs. In part, this is because the investors are starting to see this as a good way to manage the risk and return in their real estate portfolio investments. More generally, people understand the importance of a building's inherent performance and the importance of how the way it is used contributes to that – whether it be ensuring a high-spec building does indeed perform to a high standard, or more modest and older buildings achieving their best possible potential.

BREEAM continues to expand internationally. We are now in 77 countries, with a significant step made recently into the US market for BREEAM In-Use, as well as many other new countries across the world.



Gavin Dunn
Director, Building Performance Group, BRE

“Sustainability can deliver increased value in buildings”

BREEAM's increasing international presence, has also most recently been characterised by our collaboration with other Standards. Last year, for example, BRE joined forces with the WELL Building Institute to align the BREEAM and WELL standards. This was a response to direct feedback from developers who want to certify their buildings for both sustainability and health and wellbeing.

Then on the other side of the world, we have been working to ensure that BREEAM is compatible with China's Three Star Standard, enabling international investors or developments looking to attract international tenants, to both certify and receive incentives using the local standard, while gaining international recognition and comparability delivered by BREEAM.

So with sustainable and healthy buildings beginning to be recognised in terms of the business value they bring, in addition to benefits for occupants, local communities and the wider environment, I wish all this year's entrants the very best of luck and look forward to continuing the good work with the wider BREEAM family.



Follow us on Twitter
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The judges

Shortlists drawn from the highest scoring buildings in each BREEAM scheme were put before a panel of eminent industry judges. They made the final choice of winner, taking into account the BREEAM score achieved alongside a range of other factors. These included:

- The balanced achievement of high levels of performance against the breadth of sustainability criteria covered in BREEAM
- The degree to which the shortlisted project has gone beyond typical or normal practice in design and construction, refurbishment or management. This takes into account the nature of the project, the complexity of functional requirements and the level of budget available, as well as the degree of innovation.
- The replicability of the solutions adopted for other projects in the sector through the dissemination of best practice, including design, technology, construction, management practices and skills.

The judges for the 2017 awards:

Jane Wakiwaka	Sustainability Manager, The Crown Estate
Martin Hurn	Brand Director, Ecobuild
John Cole	Head of Sustainability, MoJ/Home Office/CPS
Rebecca Pearce	Head of Sustainability EMEA, CBRE.
Bill Gething	Professor of Architecture, UWE
Alan Yates	Technical Director, BRE Global and chair of the judging panel



Our thanks go to the judges for their diligent approach to this difficult task.



The sponsors

EcoBuild

Awards Partner and sponsor of the Assessors of the Year category

Ecobuild 2017 is the key event for the sustainable built environment. Unrivalled conference content and speakers, interactive features and multiple seminar theatres with partners including BRE, UK-GBC, ICE and CIBSE, plus the latest suppliers, innovations, technologies and future materials. Ecobuild is the industry's platform to share, debate and discover what's next in sustainable construction. Register free at www.ecobuild.co.uk



Category Sponsors

Air Quality Plan Industrial

Congratulations to bol.com from everyone here at Air Quality Plan – specialists in Indoor Air Quality testing. May your celebrations be long into the night!



Daikin Air Conditioning UK Ltd Offices New Construction, In-Use, Refurbishment & Fit-Out

Daikin Air Conditioning UK Ltd is proud to congratulate all our winners and shortlisted projects for their achievement. Your dedication and enthusiasm are inspiring, and keep us motivated to further invest in helping obtaining even more credits in the future. Keep up the good work!



Energist UK Country First

Energist UK is your independent specialist for planning, sustainability, building regulations and one of the fastest growing BREEAM teams. The Energist team would like to congratulate all the Country First winners.



Home Quality Mark

HQM helps housebuilders to demonstrate the high quality of their homes and to differentiate them in the marketplace. At the same time, it gives homebuyers and tenants the confidence that the new homes they are choosing to buy or rent are well designed and built, and cost effective to run.



Kingspan Insulation Education & Healthcare

Kingspan Insulation is extremely pleased to sponsor the Education and Healthcare Category, and wishes to congratulate the Atlas Building for their dedication in building to the highest of standards. Kingspan Insulation is a market leading manufacturer of optimum, premium and high performance rigid insulation products and insulated systems for building fabric and building services applications.



MLM

MLM is a multidisciplinary engineering and environmental consultancy and corporate approved inspector, providing services throughout the UK and internationally covering Environment, Planning and Development, Buildings and Infrastructure, Compliance and Sustainability.



Supporters

GRESB

We are pleased to partner with GRESB for the first time this year in creating new award categories to recognise responsible real estate investment.



Corporate Investment in Responsible Real Estate

– for real estate investment companies that are making the strongest commitment to the use of building certifications in managing their portfolio. The judging criteria for this award is based on the proportion of total existing portfolio formally assessed and certified through generally accepted building certifications and the level of commitment to drive the achievement of higher levels through corporate policies. The winners of this award for 2017 are:

Altarea Codigem

Bouwinvest REIM

CeGeREAL

Cromwell Property Group

Neinver SA

Société Foncière Lyonnaise

Steen & Ström

Unibail-Rodamco

Leadership in Responsible Real Estate Investment

– for the individual that has made the most valuable contribution to driving more sustainable real estate investment, and shown a personal commitment to driving sustainable investment and management within their own organisation through the use of building certifications. The winner for 2017 is:

Christophe Garot, Unibail-Rodamco

The addition of these two award categories reflects BREEAM's increasing focus on wider portfolio performance and the opportunity to link with organisations such as GRESB to drive improved performance.

Congratulations to the organisations and individuals above from both BREEAM and GRESB.

This year's BREEAM Awards shortlist

Project	Client / Developer	Assessor	Score %	Rating	Architect	Contractor
Education & Healthcare						
GlaxoSmithKline's Carbon Neutral Laboratory for Sustainable Chemistry	University of Nottingham	AECOM	94.1	Outstanding	FDG Fairhursts	Morgan Sindall
Atlas Building	Eindhoven University of Technology	MAT25	93.86	Outstanding	Team V Architects	
South Lanarkshire College	South Lanarkshire College	Easlar	90.4	Outstanding	Austin-Smith:Lord	CCG Scotland
Wimbledon College of Art	University of the Arts London	Carbon Plan	88.1	Outstanding	Penoyre & Prasad	R. Durnell & Sons
Ysgol Gymraeg Ffwrnes	Carmarthenshire County Council	Melin Consultants	85.9	Outstanding	Austin-Smith:Lord	WRW Construction
Industrial						
Bentley Works	Cementation Skanska	RSK Group	94.6	Outstanding	IBI Taylor Young	Skanska Construction
DC2, Prologis Park	Prologis UK	Eight Associates	91.3	Outstanding	Stephen George and Partners	Winvic Construction
Van Loon Vlees	Van Loon Vlees	MAT25	89.64	Outstanding	RBK Food Projects	Wijnen Bouwgroep
bol.com Fulfillment Center	bol.com	C2N	89.52	Outstanding	FGK Architecten	Van Wijnen, Unica, Van Delft
Costa Coffee, Paradise Street	Costa Coffee / Prologis	XCO2 Energy	89.1	Outstanding	Michael Sparks Architects	VolkerFitzpatrick
Green Build Hub	Cornwall Sustainable Building Trust / The Eden Project	Ward Williams Associates	89.1	Outstanding	PBWC	Gilbert & Goode
Mixed Use & Other						
Dockhead Fire Station	London Fire Brigade / Blue3	Boom Collective	93.4	Outstanding	BDP	Kier
University of Hertfordshire Student Accommodation Phase 3	University of Hertfordshire / ULiving	RSK Group	91.8	Outstanding	Wilmore Iles	Bouygues UK
Royal Agio Cigars	Royal Agio Cigars Duizel (Highlands Beheer)	MAT25	90.67	Outstanding	Bo.2 Architectuur en Stedenbouw	Remmers Bouwgroep
Energy Academy Europe	University of Groningen	BenR / DGMR	89.62	Outstanding	Broekbakema / De Unie	Bouwcombinatie Friso-Koopmans
University of Hertfordshire Student Accommodation Phase 2	University of Hertfordshire / ULiving	RSK Group	89.04	Outstanding	Wilmore Iles	Bouygues UK

This year's BREEAM Awards shortlist (continued)

Project	Client / Developer	Assessor	Score %	Rating	Architect	Contractor
Offices (In-Use)						
Bayer Lyon Saint-Pierre	Bayer France / Edisimmo	ARP-Astrance	86.7 / 86.8	Outstanding	Babylone Avenue Architectes / CRB Architectes	
Kings Place	Deka Immobilien / WestInvest InterSelect / Savills	RPS	74.5 / 95	Exc/ Outstanding		
7 More London Riverside	PricewaterhouseCoopers LLP	Ingleton Wood	77.05 / 86.55	Exc/ Outstanding	Foster & Partners / BDP	
Le Beauvaisis	ICADE	Artelia	71 / 79.5	Excellent	CALQ Architecture	
Messine	SCI Allianz Messine / AREF / GIE Rothschild & Cie	ARP-Astrance	71.3 / 78.2	Excellent		
Offices (New)						
Geelen Counterflow	Geelen Counterflow	Duurzaamheidscoach.nl	99.94	Outstanding	Architecten en Bouwmeesters	Geelen Counterflow / Wagemans Bouwadvies
Triodos de Reehorst	Triodos Bank / JOINOntwikkeling	Techniplan / DGMR	94.71	Outstanding	RAU	JP van Eesteren
EUIPO AA3 Building	European Union Intellectual Property Office (EUIPO)	Servicios Ambientales Integrales del Norte	90.85	Outstanding	RUBIO Arquitectura	FCC Construcción
IKEA Hubhult	IKEA Fastigheter / Forsen Projekt	Bengt Dahlgren Syd	89.8	Outstanding	Dorte Mandrup Arkitekter	Peab Sverige
Central Square, Leeds	M&G Investments / Roydhouse Properties / Marrico Asset Management	Method Consulting	89.7	Outstanding	DLA Design	Wates Construction
Offices (Refurb and Fit-Out)						
80-100 Victoria Street	Land Securities	RES Design	92.3	Outstanding	KKS	ISG
55 Amsterdam	Gecina	GreenAffair	87.7	Outstanding	Naud et Poux	
7-10 Waterloo Place	Waterloo London / Barings Real Estate Advisors	Watkins Payne Partnership	82.4	Excellent	Morrow & Lorraine	Scott Osborn
6 Erskine Road	Durley Investment Corporation	Eight Associates	78.18	Excellent	Lyndon Goode	Primus Construction



Project	Client / Developer	Assessor	Score %	Rating	Architect	Contractor
Residential						
Tribe Apartments	Ancoats Residential Holdings Ltd	Energy Council	86.4	Outstanding	Pozzoni Architecture	
The Ark	Ertzberg	Bopro	86.2	Outstanding	Stephane Beel Architect	Aannemingen Janssen
126 Pavilion Road	Cadogan Estate	Sturgis Carbon Profiling	83.4	Excellent	Latitude Architects	Richardsons (Nyewood)
Craven Hill Gardens	Hempel Holdings	Mendick Waring	80.4	Excellent	TF Architecture	Bouygues UK
Quadrant 4	Allford Hall Monaghan Morris	AECOM	79.2	Excellent	Allford Hall Monaghan Morris	Sir Robert McAlpine
Retail (In-Use)						
Heuvel Eindhoven	CBRE Global Investors	W4Y	86.42 / 90.82	Outstanding	DunnettCraven / Walter Brune Architekt Düsseldorf / Van Aken Architecten Eindhoven	Strukton Worksphere / STB / Webeasy / Herman de Groot Ingenieurs
Euralille	Unibail-Rodamco	Bopro	81.3 / 86.8	Exc/ Outstanding		
Roppenheim The Style Outlets	Roppenheim Outlet SNC / Neinver Asset Management	ARP-Astrance	75.8 / 87.3	Exc/ Outstanding		
Zenia Boulevard	Immochan España	Asla Green Solutions	74.25 / 86.58	Exc/ Outstanding		
Vélizy 2	Unibail-Rodamco	Bopro	73.1 / 87.3	Exc/ Outstanding		
Retail (New)						
Lidl, Coslada	Lidl Supermercados	Ecotec Enginyers	90.85	Excellent	Proingest Arquitectura e Ingeniería	Ramos Catarino
Lidl, Växjö	Lidl Sverige	COWI	89	Outstanding	Arkitektgården	Peab Sverige
CIFI Sustainable Demonstration Building	CIFI Group	Shenzhen Nottingham Sustainable Dev Inst	85.2	Outstanding	Song Und Partner Atelier	Henan Jingda Construction and Engineering
4-5 King John Court	Shoreditch Village	Eight Associates	78.9	Excellent	Studio Anjo	Bouygues UK
2 King John Court	Shoreditch Village	Eight Associates	78.9	Excellent	Studio Anjo	Bouygues UK

For full project listings go to www.greenbooklive.com/breem

For case studies and further details on the shortlisted projects go to www.breem.com/awards

Assessor Awards

The presentation of Assessor Awards is based on the highest average BREEAM assessment scores over the previous calendar year, subject to a minimum number of assessments. There is one award for Assessor Company of the Year, and three for individuals as Assessors of the Year. The organisation and individuals listed below have each achieved constantly high scores under BREEAM.

Assessor Company of the Year

Sweco UK

A forward thinking engineering consultancy, Sweco combines a multi-disciplinary approach with access to international expertise to deliver robust and sustainable solutions. With 14,500 employees, Sweco is Europe's leading engineering, environmental and design consultancy which plans and designs the communities and cities of the future. Each year, Sweco carries out tens of thousands of projects in approximately 70 countries globally. In the UK, Sweco has particular expertise in the fields of sustainable buildings, building services, energy, transportation, environment, asset management and water. This is the third occasion Sweco have been awarded the prestigious Assessor Company of the Year Award, highlighting their sustained success in embedding sustainability within their building designs.

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Assessors of the Year

Dan McLellan, WSP | Parsons

Dan is a Senior BREEAM Consultant within the environmental planning business of WSP | Parsons Brinckerhoff, with four years of experience providing BREEAM advice and assessment services. As both a New Construction and Communities assessor, he has worked on a broad portfolio of projects varying in size and use.



Herve Moal, ARP-Astrance

Herve is Innovation and Strategy Director at ARP-Astrance, a real estate consulting company based in Paris, with strong sustainable expertise gained on various projects over the past decade. Herve was one of France's first BREEAM Assessors and BREEAM In-Use Auditors, who along with colleagues helped three clients to receive BREEAM Awards in 2016.



James Warne, Boom Collective

James is a Director of BOOM Collective, an environmental engineering design practice that prioritises the balancing of the triple bottom line of economy, environment and social values within the context of the project's performance.



Congratulations to all our Assessor winners!

Country First Awards

Country First Awards are given to the Assessor who undertakes the very first BREEAM assessment in a particular country. They are presented in recognition of the assessor's work in a new territory.

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Ilya Ulyanov, Belarus

Ilya Ulyanov is the co-founder of Geoengine, a leading consultancy that offers BREEAM certification services in Russia and the CIS, working on 20 green building projects in Russia, Armenia and Belarus since 2009. Ilya was the BREEAM Assessor for Omega Tower, an office building constructed in 2014, developed by commercial real estate company CJSC Belyzhmash.



Heloise Couvert, Morocco

Heloise works for Etamine, a consultancy that helps its clients to incorporate environmental quality into their projects. For the 'Le Clos d'Anfa' housing scheme in Casablanca, Etamine encouraged its client Amundi to design energy and resource-efficient homes, achieving comfort for residents through better air quality, ventilation and acoustics.



Ksenia Agapova, New Zealand

Ksenia is Head of Sustainability Services at JLL, Russia & CIS. In 2015 JLL helped the Lumley Center in Auckland to achieve BREEAM In-Use certification, the first building to do so in New Zealand. Since its establishment in Russia, JLL Sustainability Services has certified more than 38 buildings in Russia and CIS countries.



Zsombor Barta, Serbia

Zsombor is Director of Sustainability at the Sentient Group, Central and Eastern Europe's largest independent construction consultancy company. He is also a certified BREEAM International Assessor and a Board member of the Hungary Green Building Council. The Blue Center office building, constructed in 2009 in New Belgrade, underwent BREEAM certification because the client wanted its sustainability aspirations based on an internationally-recognised standard.



Gail Williams, United Arab Emirates

Gail Williams, a Principal Sustainability Consultant at WSP | Parsons Brinckerhoff, which has expertise ranging from urban planning, and engineering iconic buildings to designing sustainable transport networks. The Al Zahia Development in the Emirate of Sharjah, is the first BREEAM Communities assessment to achieve certification in the United Arab Emirates. The mostly residential development comprises a mixture of town houses and villa designs in addition to garden apartments.



Education & Healthcare

BREEAM certified schools and other education centres provide high-quality learning environments with reduced operational costs. They also act as invaluable learning aids for students and exemplars of sustainability for the wider community.

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South Lanarkshire College, Low Carbon Teaching Building, UK

South Lanarkshire College, Low Carbon Teaching Building, UK

The UK's first building to achieve BREEAM Outstanding for both Design and Post-Construction Review stages, this educational facility not only uses passive design and low carbon technologies to reduce energy demand but also acted as a learning tool for students throughout its development. Innovations include a ventilation strategy that harnesses East Kilbride's notoriously high wind speeds.

Ysgol Ffwrnes Primary School, Llanelli, UK

This school, the first in Wales to achieve BREEAM Outstanding, exemplifies low carbon sustainability, but also demonstrates how good collaboration between the client, design and construction teams can achieve credits more easily. The school uses a combination of features, including a 700 m² photovoltaic array, natural ventilation, high levels of insulation, and air-source heat pumps.

Wimbledon College of Art, University of the Arts London, UK

Designed to take best advantage of orientation, the building maximises daylight, natural ventilation and night-time cooling to provide high quality, multi-purpose spaces for a range of courses. A timber frame glulam structure was adopted as a low embodied carbon solution, with an asymmetrical gabled roof acting as a prime location for photovoltaic panels. Together with high levels of insulation and air tightness, the building achieved an A+ EPC rating.

GlaxoSmithKline's Carbon Neutral Laboratory for Sustainable Chemistry, University of Nottingham, UK

The first carbon neutral laboratory of its kind in the UK, the building reflects the Centre's aim to conduct research to the highest clean and green standards. In addition to low carbon technologies such as mechanical ventilation in each lab and a PV array covering 45% of the roof area, the Centre uses equipment to reduce greenhouse gas emission from the leakage of refrigerants and SuDs to help minimise water course pollution.



Ysgol Ffwrnes Primary School, Llanelli, UK



Wimbledon College of Art, University of the Arts London, UK



GlaxoSmithKline's Carbon Neutral Laboratory for Sustainable Chemistry, University of Nottingham, UK



And the winner is...

Atlas Building, Eindhoven University of Technology

Eindhoven is a global centre of smart technology and the university wanted a building that matched its reputation. The ambitious project also demonstrated how a 16-story, semi-vacant building constructed in the mid twentieth century, can be transformed into a comfortable low carbon building for this century. Among the many innovations is a smart glass membrane façade containing triple anti-glaze, with insulation values of a double-skin façade. The judges noted the strong health and wellbeing aspects of the project, and its value to the research community and as a demonstrator to other projects moving forward.

Industrial

This year's crop of buildings not only demonstrate what can be done to reduce their carbon impact but also how industrial facilities can be made healthier and more comfortable places to work in.

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Costa Coffee, Paradise Street, London

Costa Coffee's roastery is the largest in Europe and aims to be the world's most sustainable. Responsibly sourced construction materials was of critical importance as was the minimisation of waste. Solar PV and thermal panels, air source heat pumps and rainwater harvesting are among the features that have resulted in a 68% reduction in CO₂ emissions and a 60.5% reduction in water consumption.

Van Loon Vlees, Son, Eindhoven **HIGHLY COMMENDED**

The design of this meat processing plant, constructed on the site of a former abattoir, is fully optimised for the needs of the production process so as to minimise the building's surface area and thermal loss. Likewise, the building harnesses the energy and resources from the production process. For example, excess heat from the cooling and air pressure systems are used to heat the offices and water for showers and cleaning. The judges awarded a 'Highly Commended' to this project, noting its range of clever technical solutions and the close alignment of a building solution to production needs.

Bentley Works, Doncaster, UK

This engineering and manufacturing facility used by Skanska is a great example of how an old industrial site can be transformed into a modern zero carbon facility. Among the environmental features is a PV array generating 43,500kwh per year and a biomass boiler reducing CO₂ emissions by 30%. A heater that runs on waste bio-oil from plant maintenance helps remove difficult-to-treat waste.

Green Build Hub, Cornwall, UK

The Cornwall Sustainable Building Trust's building aims to demonstrate the value and deliverability of sustainable construction. As such, the project aimed to demonstrate best practice in project and financial management through a series of workshops. Key features include six SIPS panels, which can be replaced with panels for testing sustainable products and recycled tyre bales that form retaining walls. Low carbon features include PV panels and air source heat pumps. Although this was not the eventual winner, the judges described this project as a 'real gem'.

DC2, Prologis Park Dunstable, UK

This distribution centre constructed on brownfield land, has been designed with passive measures at its heart. The warehouse has high levels of air tightness, natural light from rooflights and a Brise Soleil to reduce solar gain. Other features include a 230kWp rooftop PV array and a SolarWall® 'passive solar collector' that provides pre-heated air to office areas and improves indoor air quality.



Costa Coffee, Paradise Street, London



Van Loon Vlees, Son, Eindhoven



Bentley Works, Doncaster, UK



DC2, Prologis Park Dunstable, UK



Green Build Hub, Cornwall, UK

And the winner is...

Bol.com Fulfilment Centre, Waalwijk, NL

On peak days around 2,000 employees work at the facility serving more than 6.5 million Bol.com customers. Parent company Ahold-Delhaize therefore wanted a healthy and pleasant environment. To this end the building employs daylight harvesting as well as acoustic, lighting and colour design. Low carbon features include five wind turbines and heat recovery in mechanised areas. The judges noted the high level of replicability on this project, the resilience of the design solution and focus on staff health and wellbeing.



Mixed Use & Other Buildings

The four buildings shortlisted demonstrate the ambition of the clients to create highly sustainable and energy efficient buildings that improve operational costs and the comfort and health of occupants.

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MLM

Dockhead Fire Station, London

Fire-fighting can be a stressful job and the building was designed with sustainability, lower operating costs and comfort for the occupants in mind. The London Fire Brigade wanted to demonstrate that the Mayor's London Plan 20% carbon reduction target was achievable and so a Micro-CHP for heating and hot water was specified along with solar PV for electricity, plus a green roof. Natural daylighting and ventilation improve comfort.

University of Hertfordshire, College Lane

The University of Hertfordshire College Lane student accommodation project, delivered in partnership with ULiving and constructed by Bouygues UK, involved the demolition of existing accommodation, refurbishment of 500 rooms and the construction of 2,511 new rooms, social spaces, informal learning spaces, common rooms, gym and flexible hub, the oval. An energy centre is also being built to provide heating and power as well as providing power to the University's academic buildings. The site is largely car free and retains large areas of existing mature planting, with an addition of wildflower meadow and pond. Safe and secure pedestrian linkages and movements between other parts of the College Lane campus have all created a truly wonderful campus environment.



Dockhead Fire Station, London



University of Hertfordshire, College Lane

And the winners are...

Energy Academy Europe, Groningen, Netherlands

This building, which houses a mix of educational facilities and offices has been designed to inspire and help the exchange of ideas among the academic and industry tenants. Among the features are a 'solar chimney' to help natural ventilation, a 'fauna tower' to help biodiversity and a roof that incorporates solar PV panels and rooflights. The judges noted the leading edge nature of the project and the commitment of the team to 'zero carbon' construction and operation.



Royal Agio Cigars, Duizel, Netherlands

The project involved the careful renovation of the original 1911 office and factory and the construction of new production halls that is sympathetic to the existing building and surroundings. Materials were used from demolished buildings, including rubble granulate that reduced the number truck journeys to remove debris. Low carbon features include more than 4,000 m² PV array and LED lighting. The significant 're-use' element in this project impressed the judges, and the focus on staff health and wellbeing as a driver in decision-making.



Offices – In-Use

This year's entrants demonstrate the desire of owners and tenants to work together to create spaces that improve not only the operational performance of the building but also wellbeing and performance of occupants.

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Bayer Lyon Saint-Pierre, Lyon

The HQ, built in 2002, reflects the Bayer's CSR strategy, which is focused on responsibility to its employees, the local community and wider society. For example, indoor air quality has been improved and the canteen refurbished, while a recycling programme is geared towards local charities. Landscaping features and LED lighting improve biodiversity and reduce energy.

Le Beauvaisis, Paris

This office of financial services company ICADE is in a former warehouse built 160 years ago, which was poorly adapted into offices in the 1980s. District heating provides 40% of the building's renewable energy, the rest provided by low energy lighting, air source heat pumps, dual-flow ventilation and cold beam diffusion.

Messine, Paris

This grand building, constructed at the turn of the twentieth century, houses the famous Rothschild investment bank. The tenant, building owner and asset manager have worked closely to create a comfortable and healthy building. For example, a detailed programme of indoor air quality, pollution and lighting test was carried out. Smart energy management solutions also help occupants to monitor energy usage.

7 More London Riverside, London

PwC's largest building is also London's first office to receive BREEAM Outstanding and reflects the company's commitment to sustainability. Among the innovations are CCHP units that run on cooking oil collected locally and which provide 50% of cooling, heating and power required from renewables. A zig-zag façade reduces solar gain and glare, while providing natural daylight. Overall CO₂ emissions are 86% lower than other air conditioned high prestige offices.



Bayer Lyon Saint-Pierre, Lyon



Le Beauvaisis, Paris



Messine, Paris



7 More London Riverside, London



And the winner is...

Kings Place, London

This building combines offices, restaurants and two concert halls and as such operates beyond that of a normal inner city office building. The goal was therefore to create a healthy, comfortable environment for tenants and visitors alike. For example the building has been designed intelligently using solar gain and glare control, with passive cooling achieved through ventilation displacement. The office space is insulated with a corrugated triple glass section that envelopes 60% of the building. The judges were impressed with the way in which the project team had used BREEAM In-Use as a benchmark for planned improvement over time, and the strong, collaborative working with managers and tenants.

Offices – New Construction

These high-spec European offices are statements of intent for the clients: beautifully designed buildings that contribute towards a low carbon, sustainable vision for the future, while functioning perfectly for the occupants.

Sponsored by




EUIPO Building, Alicante, Spain

EUIPO Building, Alicante, Spain

This building emulates the European Union Intellectual Property Office's AA2 building, which was the first to receive a BREEAM Outstanding in Spain, Portugal and Italy in 2015. The building has been designed to reduce CO₂ emissions by over 71% and primary energy consumption by almost 67%. This will be achieved through features such as a geothermal facility for heating and cooling, and a building management system that monitors energy and water consumption.

IKEA Hubhult, Malmö, Sweden

The global meeting place for all of IKEA's operations, the four-storey building includes meeting rooms and numerous creative and open spaces. Its sustainability credentials matches IKEA's philosophy. For example, on-site PV and off-site wind farms supply all its electricity, while 42 tons of food waste is collected annually and converted into bio-gas.



IKEA Hubhult, Malmö, Sweden

Triodos Bank, Reehorst Estate, Netherlands **HIGHLY COMMENDED**

Set in a nature conservation area, the design is strongly influenced by the surrounding environment, from the building's shape and form, its wooden structure, through to the use of green roofs and landscaping that encourage biodiversity. The building is energy neutral, relying on heat pumps and a 3,100 m² solar PV mounted in the parking area. The judges awarded a Highly Commended to the project, noting the degree of care and consideration taken to integrate and enhance biodiversity, and the innovative approach to construction and delivery.



Triodos Bank, Reehorst Estate, Netherlands

Central Square, Leeds

Central Square is a spectacular new £53 million office and leisure complex located within a 2 minute walk of Leeds train station. An emblem of the city's ambition, the landmark development binds together a dynamic business district to create a vibrant new destination for the public and tenants. It is an excellent example of how investing in a highly sustainable and innovative speculative building adds to market value and successfully attracts high profile tenants keen to champion their own sustainability/CSR agendas.



Central Square, Leeds

And the winner is...

Geelen Counterflow, Haalen, Netherlands

Geelen wanted a zero carbon building that generated at least the same amount of renewable energy as was used in its operation. It also wanted the building to be constructed according to lean principles and using 'Cradle-to-Cradle' materials. The building is constructed with multiple layers of timber connected by beechwood dowels and low carbon features include a PV array generating 50% more electricity than is consumed annually. Robust team integration, including the supply chain, impressed the judges, as well as the attractive and innovative design and robust cradle-to-cradle approach.



Offices – Refurbishment & Fit-Out

This year's three entries demonstrate how older buildings can be reinvigorated into high-performing offices that are sustainable, energy-efficient and comfortable places to work in, combining the need for better operational costs, while reducing carbon emissions.

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6 Erskine Road Offices, London

The project involved the refurbishment of Building 4 and the construction of Building 5 within a site consisting of six buildings. Following a dynamic thermal simulation, the refurbishment will include insulation to the walls and new insulated roofing, plus the replacement of windows. Solar PV and thermal roof panels will be installed, together with air source heat pumps and green roofs, plus zoned lighting and user controls to manage lighting and energy use.

55 Amsterdam, Paris

Constructed in the 1920s, the building boasts internal courtyards, balconies and green terraces, combining historical architecture and a vision of the modern workplace. Good levels of insulation and double glazing, together with rooftop solar thermal panels and heating and cooling supplied by district heating has resulted in energy consumption 45% lower French regulatory requirements.

7-10 Waterloo Place, London

This Grade II listed building is located just off Piccadilly in central London and was built in the early 1900s. It was once the Bank of Montreal premises and has since been occupied by Lloyds Bank as well as providing tenanted office accommodation. The project involves the full refurbishment of the existing office space and common parts to create Grade A speculative office space. The design team faced many challenges resulting from hidden elements of the listed structure but throughout maintained a focus on delivering the project without compromising the sustainable aspirations of the team.



6 Erskine Road Offices, London



55 Amsterdam, Paris



7-10 Waterloo Place, London



And the winner is...

80-100 Victoria Street, London

Collaboration between the client and project team lay at the heart of this project to improve the sustainability and healthiness of Land Securities' new HQ. The result is a building that maximises staff wellbeing through improved natural light and air quality, plus a juice bar and contemplation room. The building also uses a high percentage of recycled materials. The judges noted highly innovative nature of the project, and the commitment by the developer to spread the lessons learnt from the project experience.

Residential

Whether it is updating historic and sometimes unloved buildings, or developing a building for an emerging property market, all this year's entries demonstrate how new technologies and approaches can create sustainable and healthy living spaces of the future.

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Quadrant 4, London, UK

Quadrant 4, London, UK

Located in the Soho Conservation Area, The Crown Estate wanted a building with exceptional sustainability that respected the historic character of the area. This is most apparent with the retention of the original façade, while existing elements have been upgraded or replaced to improve insulation and energy efficiency. Other improvements include LED lighting and metering in each apartment to monitor energy use. A CHP unit in the adjacent Quadrant 3 provide heating and cooling.



31-35 Craven Hill Gardens, London, UK

31-35 Craven Hill Gardens, London, UK

Situated in the Bayswater Conservation Area these 19th Century stucco-fronted townhouses have been converted from a hotel into 18 apartments. The project targeted sustainability throughout the building's lifetime, particularly energy efficiency measures. High performance internal insulation double glazed timber windows has led to almost a 78% CO₂ reduction. The building also boasts a CHP units and roof-mounted PV panels.



126 Pavilion Road, London, UK

126 Pavilion Road, London, UK

Located in the heart of a conservation area within the Cadogan Estate, this former mews house has been designed to both BREEAM and the Passivhaus EntePHit Standards, while retaining its historic character. Breathable external insulation has been added to the façade, with windows and roof-lights replaced with triple-glazed timber units. The building has an MVHR unit with CO₂ sensors and energy management controls.

The Ark, Ertzberg, Belgium **HIGHLY COMMENDED**

Part of a new sustainable development, the Ark is an assisted living residential scheme that also houses a crèche. Assisted living is an emerging market in Belgium and this buildings includes many of the features for adaptable living. Not only does each apartment have bathrooms for wheelchair users and a Wi-Fi thermostat for floor heating but the ground floor has an online service that allows residents to order shopping for delivery to the door. The judges awarded the project a Highly Commended status, noting its forward thinking around the issue of providing assisted living accommodation.



The Ark, Ertzberg, Belgium



And the winner is...

Tribe Apartments, Manchester, UK

Tribe Apartments achieved a BREEAM Outstanding post-construction rating for three separate 13 storey flat blocks providing 192 modern, spacious apartments. The domestic refurbishment project won "The Sustainable Housing Scheme of the Year" at the Housing Excellence Awards 2016. The existing 1950s construction was transformed with a wrap-around thermally efficient façade, centralised heating and hot water via a biomass boiler with heat meters and LED lighting. Internal water consumption reduced by 25% and CO₂ emissions by 65% compared to a new build apartment. The judges noted the strong commitment from the client and project team, and how the upgrade makes the most of the existing materials and structure as well as opportunities for enhancement.

Retail – In-Use

Visitor footfall to these shopping centres is in the tens of millions and so these retail establishments are perhaps the most outward-facing examples of sustainable buildings to the general public. Improvements to their fabric and operation can have a direct and highly significant impact on their commercial value.

Roppenheim The Style Outlets, Roppenheim, France

This retail village, one of 18 owned by property company Neinver, places sustainability at the heart of its shopping experience. For example, more than 10 waste streams from the village are recycled lighting sensors reduce energy in the offices. Landscaping, green walls, bird houses and bee hives encourage biodiversity.

Vélizy 2, Vélizy-Villacoublay, France

When it was opened in 1972, this shopping mall was the largest commercial centre in France. Driven by COP21 and its strategy to reduce carbon emissions by 50%, the owner Unibail-Rodamco is improving the building's performance the use of sensors, water saving equipment and improved recycling and a new roof to increase natural ventilation and daylight.

Zenia Boulevard, Alicante, Spain

This shopping centre has embraced low carbon sustainability as a reflection of its values. Its focus has been on energy efficiency particularly the use of LED lighting, the installation of lighting motion sensors and the use of a building management system to monitor water and energy consumption.

Euralille, Lille, France

This shopping centre has approximately 12 million visitors per year and driven by COP21 and its strategy to reduce carbon emissions by 50%, the owner Unibail-Rodamco is improving the building's performance through the use of measures such as water saving equipment and improved recycling. The judges applauded Unibail's impressive level of corporate commitment, shown in this project and other projects shortlisted in the BREEAM Awards in previous years.



Roppenheim The Style Outlets, Roppenheim, France



Vélizy 2, Vélizy-Villacoublay, France



Zenia Boulevard, Alicante, Spain



Euralille, Lille, France



And the winner is...

Heuvel Eindhoven, Netherlands

Built in 1992, this is the largest shopping centre in CBRE's Dutch portfolio. Between 2010 and 2013, the centre was in decline, with higher service charges due to rising energy costs, lower tenant satisfaction, matched by lower footfall. However, improvements have helped reverse this, with visitor numbers the highest they have ever been. Energy consumption, for example has fallen by 38% due to LED lighting and efficient elevators and escalators and indoor air quality has also been improved. The judges noted the use of BREEAM In-Use to drive successive improvements over a four year period, and the high level of occupant engagement.

Retail – New Construction

Committing to sustainability can help differentiate your retail establishment in highly competitive market but significantly reduce energy and waste, which is what these buildings are doing.

2 King John Court (Block E), London, UK

Part of the Shoreditch Village urban quarter, this mixed development benefits from a CHP unit providing heating and power to the site. Block E is a retail unit that required the tenant to sign a green lease. Among the features is a green roof, energy-efficient lighting with movement controls and low water consumption sanitary appliances.

CIFI Sustainable Demonstration Building, Beijing, China

This building serves to demonstrate net zero energy in the cold regions of northern China, where there is a relatively higher energy consumption for heating in the winter and cooling in summer. The building, which has constructed with precast fabricated wood, is designed using passive principles such as the incorporation of a convex element to the roof. Features include solar PV and thermal panels and an air source heat pump. The judges responded positively to this project, noting its breadth of innovation and its role as a clear demonstrator of potential for buildings of this type.

Lidl Supermarket, Coslada, Spain

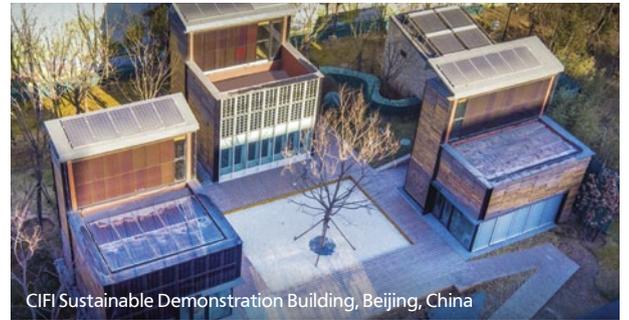
This is Lidl's flagship project, which it hopes to be an example for its other stores. It is also the first retail building in southern Europe to incorporate water and energy reduction measures. Among these are the use of natural light and LEDs, an energy monitoring system, rainwater collection and landscaping with drought resistant plants.

4-5 King John Court (Block F), London, UK

Part of the Shoreditch Village urban quarter, this mixed development benefits from a CHP unit providing heating and power to the site. Block F is a retail unit that required the tenant to sign a green lease. Among the features are low-VOC products to improve indoor air quality, the use of materials with a low environmental impact and energy-efficient lighting with movement controls.



2 King John Court (Block E), London, UK



CIFI Sustainable Demonstration Building, Beijing, China



Lidl Supermarket, Coslada, Spain



4-5 King John Court (Block F), London, UK



And the winner is...

Lidl Supermarket, Växjö, Sweden

This is the first retail building in Sweden to achieve BREEAM Outstanding at the interim stage and Lidl would like it to serve as a sustainability exemplar for other retailers. The focus was for long-term operation and management. Features include heat recovery of waste heat from refrigerated areas, LED lighting and electric charge points for cars. The judges noted the major focus on BREEAM as a driver of value and the programme to roll-out positive design and construction concepts embodied in this store to a wider portfolio.

New Talent

Designed to recognise up and coming talent in the BREEAM world, a new category – the BREEAM New Talent Award – is now in its second year. The nominations for this new award are created from the most successful students in the BREEAM Accredited Graduate (AG) course. The three students scoring the highest marks in the AG course last year are:

The nominees for the 2017 award are:

- **Ross Brudenell** – Southampton Solent University
- **Iu Sheng** – Reading University
- **Matthew Theloke** – Waterford Institute of Technology

The BREEAM AG Course is run by BRE Academy, and provides a BREEAM-based complement to existing academic programmes for built environment and sustainability undergraduates and postgraduates. It allows universities to connect with BREEAM in both UK and international markets.

For 2017, the judges found it impossible to choose between two of the three nominees and so made a joint award to Ross Brudenell and Matthew Theloke. Congratulations to Ross and Matthew!

Pauline Traetto, Director of BRE Academy says: “Congratulations to all three students who have made the shortlist for this new award. Providing students and graduates with industry relevant qualifications & skill sets to support academia, individuals and industry with employability and to pursue best practice in the marketplace is paramount to us.”

More information on BREEAM AG and BRE Academy’s BREEAM-related learning and development can be found at www.breacademy.com

**Many congratulations
to all the candidates
involved!**

Thank You

Thank you to the clients, BREEAM assessors and project teams who supplied images and information for this document.

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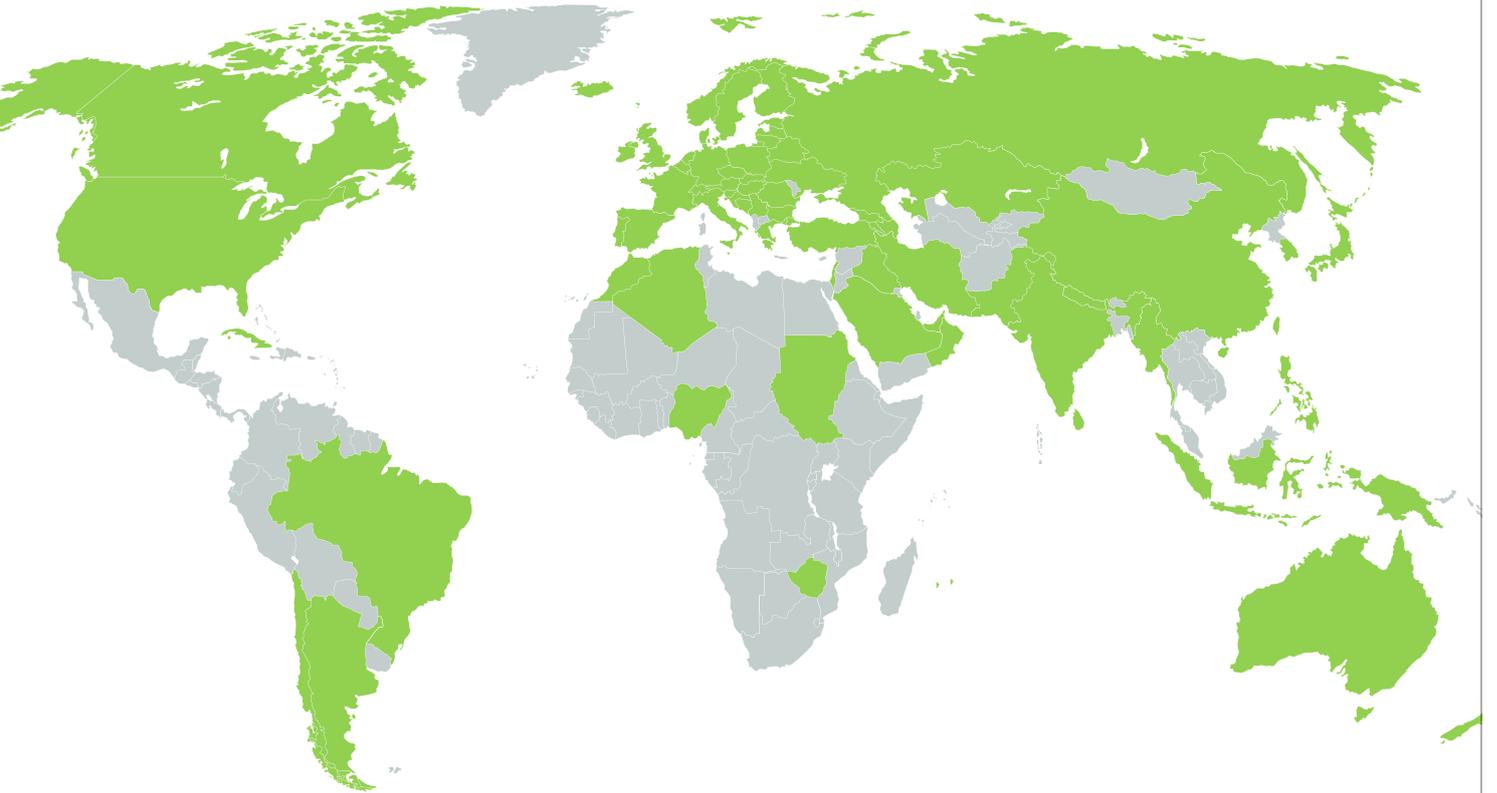
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For more on the award winners, log onto www.breem.com/awards

**Congratulations to all entrants
and winners of the 2017
BREEAM Awards**

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