



[THE] ASSOCIATION FOR ENVIRONMENT CONSCIOUS BUILDING
COMPANY NO 5336768

ANNUAL REPORT

COVERING THE PERIOD OCTOBER 2012 TO SEPTEMBER 2013

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INTRODUCTION

AECB Chair: Chris Herring

This is my last introduction to an annual report: at our AGM in July, I stepped down as Chair to be succeeded by Peter Wilkinson as Chair and Fran Bradshaw as Vice-Chair. However as I chaired the majority of the year I have the privilege of introducing this annual report.

For me, the last year has seen two momentous events. One was global. One personal. Both highly symbolic. The first, global, event was of course of moment when we reached 400 parts per million. This year for the first time probably since the mid-Pliocene, around 3 million years ago, average daily atmospheric carbon dioxide levels reached 400 ppm. The Pliocene has been described as “...the last gasp of warmth before the slow slide into the Ice Ages.” with temperatures several degrees higher than today, and sea levels possibly 10s of metres higher. It is of course a purely arbitrary point, but never the less a highly symbolic one. As George Monbiot commented in his usual plangent style, “...this is a moment of symbolic significance, a station on the Via Dolorosa of environmental destruction.” We are on an apparently unstoppable path to 450 ppm and beyond, and the almost unimaginable consequences for our species and much of life on earth.

In my introduction to the annual report last year I talked about the process we go through in properly accepting what the science is telling us about climate change. In particular I talked about Professor Clive Hamilton’s book, ‘Requiem for a Species’. For those who don’t know it, the title seems to say it all: a bleak prognosis for our species as we head into climate catastrophe. There is nothing novel here, just a thorough summary of the existing science. However, what I have found interesting is what he has to say about where we go from there. He outlines the grieving process, through despair, acceptance, and finally action based on clear sighted understanding of the true state of things. This is not of course a linear process but a cycle in which we will continue to re-engage, deepening our acceptance and refining our actions: our way of living.

Of course there is a perfectly valid question: if we truly accept our current position, how can we really act? Is there any point? Inherent in this question is the role of hope. But what is the nature of this hope? Is it false hope, based on a denial of the true state of the world? Is that what we are about in the AECB? Creating false hope when it is clear that what we are doing is so limited in the face of the almost inconceivable challenge we now face. Well, we are pretty clearly hard wired towards optimism. Creating ‘benign fictions’ about ourselves, our world and the future appears to be a strong adaptive mechanism, enabling us to operate optimally in our environment. So we clearly need to be very cautious about hope. In the Greek myth, when all of the evils of mankind had escaped, only one item remained in Pandora’s box. This was hope. At its worst, hope is a blind alley; an illusion which makes us feel safe when we should be facing up to danger. It could be argued that that is where we are as a species right now. However, at its best, coupled with real acceptance, hope is a defining quality of our shared humanity, a quality which makes us so much more as a species.

This brings me neatly to my second, very personal, momentous event of the year – the birth of my first grandson, Leo. As for many others, this has for me brought starkly into focus the key question: how do we live with bringing new life into the world we are bequeathing them? And similarly, how do continue to work for the good in the face of increasingly appalling prospects? Within the AECB we continue to do our very best in one sector of human activity: construction. We share this common commitment. We share the hope that acting well, and acting skillfully will in some way contribute to the common good. Maybe it will mitigate to some small degree what we are doing as a species; maybe it will save us from ourselves a bit. Certainly it shows what we can and could do with our buildings to alter our fatal trajectory to some degree, as well as our impact on other planetary boundaries. And certainly it demonstrates hope that we could make the world work just a little better.

The AECB is predominantly a networking organization, so its key role is to enable the sharing of our skills and our experience together, both building and sharing our knowledge. And I would say also sharing hope. The question is, what do we make of this knowledge? How do we disseminate it beyond our own sometimes limited circles. Well, many of us are building exemplars, or doing exemplary work which can and will inspire others. As Wolfgang Feist often says about Passivhaus, getting exemplary buildings on the ground is the most powerful way of spreading the word. Many of us are also taking our knowledge and skills out into the mainstream industry, and making a difference at a larger scale. It is a regular experience that while the AECB may not be formally represented on many policy committees, you will never the less find that key participants may be AECB members. This seems to me an excellent example of the way the AECB works at times behind the scenes to support policy, acting as a support network for its members, helping to build knowledge and expertise through support and mutual sharing.

Similarly, the core operation of the AECB is also building off the skills and expertise of all of us, the membership, to take forward new initiatives. As you know the AECB established the Passivhaus Trust, which we can be very proud is promoting and supporting the Passivhaus standard and methodology in the UK. In fact the Passivhaus Trust is now being held up internationally as an exemplar organization. It is now the second largest affiliated organization (after Germany) to the International Passive House Association, and I think the fastest growing. So we can be justly proud of creating bedrock on which Passivhaus can be developed in the UK. Now in development is the Carbonlite Retrofit scheme, addressing the biggest challenge of all in our building stock – retrofit. Then there is the Carbonlite training programme, and of course I could go on.

With the birth of my grandson, I have continually been brought back to thinking about future generations. Both the 'next' generation, that is those just coming into training or professional practice, and the 'next but one' like my grandson, Leo. We – all of us – the AECB, need to be finding ways of transferring this incredible body of skills, experience and knowledge to a new generation moving into our industry. I would say that we have a moral responsibility to do so, and I am not entirely convinced at the moment that we are really managing this very well. I would suggest that we should all reflect on how we are going to do this. It might mean being open to new ways of communicating as an organization. This could be a challenge. It certainly

means all of us offering training, mentoring and support wherever we have the opportunity, or can create it. And then I think we need to be mindful of Leo's generation. This is the generation who will truly inherit our appalling legacy. The generation who may have to struggle with several degrees of temperature rise and a planet which is in massive flux. We, and our previous recent generations created this warming world. They are the ones who will inherit it. So the greatest challenge, as I see it, to all of us and to our shared organization is how to most effectively pass on what we know and support these generations in the challenges we know we are bequeathing them.

It has been my privilege to have been chair of this association for 8 years, and I feel hugely grateful to have had the opportunity to serve in this role for so long. But this year I decided to step down because after 8 years, I think it is healthy for any organisation to have change, and I think this year was an excellent time for this particular change. For the coming year, I believe we have a strong board of Trustees, an excellent chairing team in Peter and Fran, all able to compliment and support our able executive team, headed up by our CEO, Andy Simmonds. After 18 years on the board, and 8 years chairing, I have of course seen both highs and lows for our association. But I believe we are now an extremely robust organisation, which is growing in both confidence and influence, while retaining the incredible loyalty of a very passionate membership – that's all of us. I shall continue to serve my current term as trustee, and intend to continue to play an active part in the Association. I shall also be continuing of course as chair of the Passivhaus trust, along with other ongoing commitments.

We can all learn from each other, and I would also say that the world needs to learn from us. I hope we will all continue to promote this learning and development with the creativity, open mindedness and commitment which have always distinguished the AECB and its membership.

AECB PROGRESS AND ACTIVITIES

Chief Executive: Andy Simmonds

CarbonLite Retrofit (CLR)

AECB is developing a retrofit programme that is both independent and complementary to the Green Deal. The Association will support and assist its members to deliver better retrofit practice, whilst helping to minimise risks to occupants, building and their businesses.

The programme is intended to explain and illustrate, in plain English, applied building physics relating to heat and moisture, in a retrofit context.

Currently the AECB is undertaking a broad literature review to assess the current level of understanding of both the building physics and real and potential risks associated with various retrofit solutions. Particular areas of retrofit risk are being identified – for example, making airtight and insulating suspended timber floors; internal wall insulation; working with non standard constructions; as well as areas where more effective approaches than currently adopted are possible, such as cavity wall and roof and attic insulation. Issues relating to the ‘building performance gap’ will underpin the programme throughout.

Heating controls, ventilation strategies and non domestic building sector issues e.g. lighting and equipment will also be covered in due course.

The AECB retrofit monitoring ‘Hygrotrac Project’, as well as other UK monitored projects, will be used to inform the programme on an ongoing basis.

AECB are developing a CarbonLite Retrofit online training course and examination with WARM, as part of the CLR Programme, allowing successful participants to use the AECB self-certification system for projects (similar to AECB Silver Certification).

Certified projects should be able to attract ECO funding through our partner Yorkshire Energy Services and discounted mortgages through our other partner Ecology Building Society. Other Partners and associated financing options will be explored as and when opportunities arise. The CLR is intended to support AECB members currently working or planning to work in the retrofit market, whilst also raising public awareness, educating building owners and practitioners and increasing confidence across the board for low energy retrofit activity.

In essence the purpose of CLR is to:

- Improve the understanding of existing buildings in terms of type, construction and building physics both before and after retrofit
- Increase confidence in using retrofit to improve comfort levels, reduce running costs and greenhouse gas emissions from operational energy
- Help close the performance gap
- Reduce risks to the building structure and the health of occupants

- Promote more robust and reliable strategies and retrofit measures
- Encourage ambitious but realistic whole building targets for thermal performance
- Promote a whole building approach considering carefully the hygrothermal performance of the building fabric and building ventilation in the context of climate change
- Add value to the AECB membership package to help retain existing members and encourage new members

By:

- Using and making accessible high quality existing knowledge and expertise
- Providing accessible and affordable but comprehensive and interactive training
- Creating a certification scheme to certify retrofit projects
- Encourage members to monitor retrofit projects and share results
- Encourage investment in Research and Development by industry and Government where required

Hygrotrac Project – a typical Case Study

Currently AECB members have around 12 projects where the Hygrotrac system has been installed. One of these is by Arboreal Architects who are nearing completion of construction works for the thermal upgrade of a Grade II listed townhouse in London which is designed to the AECB Silver Standard, though not yet certified. In May 2013 we installed 15 Hygrotrac sensors into the building with the aim of monitoring the hygrothermal performance of the walls after the application of internal wall insulation. Four sensors measure ambient conditions on the inside, outside, cold loft space and chimney flue while the remaining eleven sensors have been built into the masonry structure of the building, mainly located at the junction of the inner face of the masonry and the newly applied insulation. Each sensor is wireless and has a 10-15 year battery life. The sensors transmit data to a gateway connected to the internet and information is stored on the GEC Hygrotrac website. The system was straightforward to set up and install though much consideration was given to the location of each sensor and the detail of how they were installed into the walls.

The moisture probes of each Hygrotrac sensor have been mounted onto 'standardised' blocks of timber (in this case Douglas Fir) which will equilibrate to the moisture content of the masonry. Each sensor will therefore provide valuable information about the likely moisture content of the various timber joists, sills and wall plates embedded in the masonry structure. The sensors will also record the temperature and relative humidity at each location – thus providing data on the hygrothermal gradients across each wall.

So far, the data collection (May to September 2013) has recorded the construction phase of the project. When the sensors were installed into the masonry and covered with a layer of 15mm lime plaster the recorded data revealed high levels of WME (sometimes up to 30%) as expected but these have shown a consistent pattern of drying out over the last 5 months. When the house is occupied by our client and the wetter winter months set in we will be able to monitor the hygrothermal performance of each sensor and hopefully make observations about the effectiveness of each insulation type (aerogel, woodfibre and calstherm) with u-values ranging from 0.16 to 0.6 W/m²K.

AECB Website Redevelopment

In February 2013 AECB were proud to launch the redeveloped website which has undergone extensive work to create a modern, fresh, user friendly site for both members and non members. The website was further updated in July 2013 with the launch of the new AECB logo and identity which will be rolled out on all stationery, literature and marketing material.

The main aims of the website redevelopment work were to:

- Increase member/user satisfaction by providing clearer routes through the site to appropriate information
- Improve information accessibility and usability, improving the information architecture which gives a clear overview of the websites major content areas and features; reducing the number of clicks to reach any given destination and highlighting new or important content to visitors
- Promote benefits of AECB membership and services providing a prominent, clear and attractive presentation of the services and resources that AECB can provide its members.
- Increase membership levels i.e. joining and renewing membership online, improving and simplifying the work flow of the membership subscription and renewal process
- Increase administrative control over content by implementing a content management system
- Improve security and reliability and to ensure that the website is accessible for all users including those with visual impairment or other disabilities.

AECB BOARD

Secretary to the Trustees: Neill Lewis

The Board of Directors of AECB Limited have met in Birmingham to conduct routine business five times during the year and there was a short meeting following the AGM to appoint Officers.

The minutes of each meeting are published on the website at www.aecb.net.

FINANCE

Finance sub-group: Mischa Hewitt, Peter Wilkinson

Finance and Administration Officer: Sally Hall

Membership did not quite reach the forecasted budget figure but despite the wider ongoing economic situation recession most members renewed and continued their support. New membership levels remained stable with average membership for the year at around 1400.

It is reported that the AECB website/database redevelopment was completed within budget. The Board agreed to extend the contract with Gill Rivers (Business Operations Manager) for a further year, funded from reserves.

The AECB Board approved the proposal and business plan for the new Carbonlite Retrofit project to be funded from AECB reserves. The project, led by Andy Simmonds, commenced early on in the period with the set up phase. It is now in the development phase, which is also spread over the next financial year (2013/14).

Warm Company (SW) Ltd continued to run the CarbonLite CEPH training courses, see www.carbonlite.org.uk, under contract with the AECB. The AECB receives a fee per delegate but during the end of the term the split was changed to a flat rate percentage of course income received, based on previous figures, averaged out. Four successful Carbonlite Passivhaus Designer courses were held during the period plus one ad hoc course.

Work continued on the AECB/TSB low energy database. Some of this work was funded by the Technology Strategy Board (www.aecb.net/featured/low-energy-buildings/).

The AECB continued to make a surplus from the sale of the Passivhaus Planning Package (PHPP) software and sales were steady. In September 2013 the AECB (named person being Chris Herring) entered into a new contract with the Passivhaus Institute as an official reseller of the new version - PHPP 8 (2013) which was out in September 2013. There are discounts available for existing users, bulk supplies and educational institutions.

Despite the lower than normal attendance again at the 2013 Annual Conference held at the Norcroft Centre, University of Bradford in July, a reasonable surplus was made.

The Edward Walker legacy income of £10,000 from the 2009/10 period has not yet been allocated. Next year's budgets are being developed and the Board is considering an appropriate use for this generous and much appreciated legacy.

The accounts are published separately and are in the members' area of the website at www.aecb.net.

CONFERENCE AND AGM

Conference sub-group: Fran Bradshaw, Geoff Stow

Conference Secretariat: Karen Purvis



The 2013 AECB Conference was held at the Norcroft Centre, University of Bradford with the theme “**healthy buildings & sustainable water**”. The Conference focused on what it is like living and working in well designed and healthy sustainable buildings, as well as designing and building them, and also thinking about water – the theme of 2012’s weather!

Lothar Moll, who describes himself as a construction ecologist, was one of the guest speakers at the Conference this year. Lothar became a pioneer of the biological and ecological movement in Germany, establishing the first ecological Builders Merchant, and the first information resource about biological and ecological building methods. In 1986 he developed an ecological airtightness system which became the humidity variable vapour check we know as Intello, it was endorsed by the Fraunhofer Institute of Building Physics, and led to the launch of ProClima in 1994.

The Conference was a great success and we would like to thank the staff at the University and all of those who presented workshops. As has been discussed in previous years it was very hard to get bookings even though the venue was booked very early and the programme issued as early as possible. The numbers were very small considering the amount of work involved in organising the event. However, feedback on the whole was very positive with the usual compliments and complaints about the food.

2013 Annual AECB Conference



A short video overview of what the AECB Conference is all about can be seen at <http://www.youtube.com/watch?v=SxSB1Et1E1s> -

BUSINESS DEVELOPMENT AND PROMOTION

PR & Marketing sub-group: Gary Wilburn and Nidhi Shah



Redesigning our identity is always a difficult and time consuming task, and one upon which we all have a point of view! All members and Trustees of the AECB alike share a passion and commitment that the Board felt should be reflected in the organisations image and brand. This was a subject which we all knew needed discussion and review but one which is always easy to side step and leave alone.

It was therefore, with great pleasure, that the AECB, in its true and full glory, relaunched in July 2013 as AECB - the association for environment conscious building. With no confusing strap lines and arguably outdated use of the term "Sustainable".

The development of our branding has been taken on an evolutionary, not revolutionary journey. Reinforcement of our core ethos and ethics includes returning to the use of the full AECB text and we hope this will be used proudly by us all. This along with the new strapline "building knowledge" brings clarity of message, freshness and authority to our brand. Working closely with a graphic designer, we focused on a less is more approach with earthy, natural colours and a sharp typographic look. Discussing, researching and listening to our members over the months we came to the conclusion that two simple words "building knowledge" best supported our title as AECB. Construed in different and contrasting ways this simple strap line aims to subtly support and strengthen our brand, we very much hope you agree.

Reinforcement of our values, history and environmental credentials through this new look brings a more approachable image to the association and one which both members and non-members will appreciate. The new colour way and balance of our new logo allows stronger application to all mediums and promotional material. This will be carefully applied in the coming months to all internal and external needs and policed by our staff and in time, we hope by you all.

We very much hope you approve of this new look and we will continue to apply this across all forms of AECB literature, website and our outward facing image.

MEMBERSHIP & LOCAL GROUPS

Membership Officer: Peter Wilshaw, Neill Lewis

Local Groups Co-ordinator: Debbie Mauger

The membership for the year in question stands at circa 1400 representing no change since the 2011/2012 Annual Report. As has been reported in previous years the membership remains diverse from our loyal 'hard core' members to a more fluid group of members who may join for only a short period of time.

It is pleasing to report that the number of Local Groups has increased to over 20 (although some groups are relatively inactive). Meetings are 'mini conferences' and fulfil the same needs as the Annual Conference – an opportunity to recharge batteries, learn and share knowledge and talk with like minded people. However, Local Groups also engage with interested non-members giving the opportunity to promote AECB membership and influence both local and national government.

The Local Groups have started engaging with Transition Towns following a recent meeting with between the Local Groups Co-ordinator and Rob Hopkins with the opportunity of a guest blog on "Transition Culture" (www.transitionculture.org/2013/02/04/exploring-the-potential-symbiosis-of-transition-groups-and-aecb-groups/). As a result, Rob Hopkins has also agreed to speak at a forthcoming AECB Conference. There have been an increasing number of joint events of AECB Local Groups with other organisations including CIOB, CIAT, RIBA, Green Register and NFB.

Local Group events held at colleges/universities have increased throughout the year and it is planned to encourage more engagement with both students and lecturers. Networking and socialising is an important element of Local Group meetings along with CPDs, presentations and an increase in site visits which have proved popular.



Member of the Wales/Cymru Local Group visit the home of Keith and Sally Hall in Llandysul



Nottingham Local Group Open Homes



Members of the Cornwall Local Group visit Edge O Cliff, Carbis Bay, Cornwall



Members of the Gloucestershire, Herefordshire and Worcestershire Local Group inside the mediaeval hall at The Master's House, Ledbury

APPENDIX 1: BOARD MEMBERS, STAFF AND PROFESSIONAL ADVISORS

Trustees (Directors) to the AGM in July 2013

Paul Bourgeois
Frances Bradshaw
Nick Grant
Chris Herring
Mischa Hewitt
Neill Lewis
Nidhi Shah
Geoff Stow
Gary Wilburn
Peter Wilkinson
Peter Wilshaw

Officers to the AGM in July 2013

Chair: Chris Herring
Secretary to the Trustees: Neill Lewis
Treasurer: Peter Wilkinson
Company Secretary: Peter Wilkinson

Trustees (Directors) after the AGM in July 2013

Julia Bennett
Paul Bourgeois
Frances Bradshaw
Nick Grant
Chris Herring
Mischa Hewitt
Paul Jennings
Neill Lewis
Nidhi Shah
Gary Wilburn
Peter Wilkinson
Peter Wilshaw

Officers after the AGM in July 2013

Chair: Peter Wilkinson
Vice-Chair: Frances Bradshaw
Secretary to the Trustees: Neill Lewis
Treasurer: Paul Bourgeois
Company Secretary: Peter Wilkinson

Chief Executive Officer: Andy Simmonds
Business Operations Manager: Gill Rivers
Finance and Administration Officer: Sally Hall
Network newsletter: Chris Lord-Smith
Website sub Editor and Membership Administrator, Emma Furniss

Auditors
Building Society
Bankers

Keith Bridgford & Co Limited
Ecology Building Society
The Co-operative Bank

APPENDIX 2: ATTENDANCE AT MEETINGS

DATE OF MEETING		OCT 5	DEC 7	MAR 1	JUN 7	JUL 13	SEP 6
AECB DIRECTORS							
Paul Bourgeois		1	0	0	1	1	0
Fran Bradshaw		1	1	1	1	1	1
Nick Grant		1	1	0	1	1	0
Mischa Hewitt		0	1	0	0	0	1
Chris Herring		1	1	1	1	1	0
Neill Lewis		1	1	1	1	1	1
Nidhi Shah		1	1	1	1	1	0
Geoff Stow		0	1	1	1	Retired At the AGM	
Peter Wilkinson		1	1	1	1	1	1
Peter Wilshaw		0	1	1	0	1	1
Julia Bennett		Elected at the AGM				1	1
Paul Jennings		Elected at the AGM				1	1
TOTAL DIRECTORS PRESENT		7	9	7	8	10	7
AECB OFFICERS	POST/S HELD						
Andy Simmonds	Chief Executive Officer	1	1	1	1	0	1
Sally Hall	Finance and Administration Officer	No requirement to attend meetings					
Gill Rivers	Business Operations Manager	No requirement to attend meetings					
	TOTAL PRESENT	8	10	8	9	10	8