ALDERSGATE GROUP

BETTER REGULATION FOR A SUSTAINABLE BUILT ENVIRONMENT

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Foreword

The built environment is the fabric within which most of us in the UK lead our daily lives. Our homes, offices, schools, hospitals, leisure facilities, public buildings, and the infrastructure which supports and connects them, are central to the way in which we live, work and spend our leisure time.

The built environment is of huge significance – in many ways immeasurable – to our cultural identity, our quality of life, and our economic vibrancy. But we also know how significant the contribution of the built environment is to the growing and urgent environmental pressures which we face; both globally and locally, and which stand to undermine that socio-cultural and economic integrity.

It is now a commonly recognised fact, for example, that buildings in the UK account for around 44%[1] of our territorial carbon emissions. The construction of buildings accounts for 33% of all waste generated in the UK[2]. The average person consumes around a tonne of water every week[3] with half of the UK's consumption arising from the construction and occupation of buildings[4].

We also know that the built environment will become increasingly hostile as the impacts of climate change take hold. Prolonged periods of hot weather will intensify with major implications on human health, comfort and productivity; the risk of flooding will grow further still; and drought and water shortages will become more common occurrences.

In this respect, we face a suite of massive and interconnected challenges in the UK, and indeed globally. These challenges confront policy-makers, those responsible for the design, construction and management of the built environment, and all of us who occupy buildings and use the physical infrastructure which knits them together.

We, the Aldersgate Group, believe that better environmental regulation must be a fundamental and driving ingredient in the way in which we respond to these challenges: enforcing better performance in new buildings and stimulating a step change in the performance of existing stock.

Government, both at a UK and devolved level, has set out an ambitious and laudable roadmap for regulatory change, particularly in respect of the energy performance of new buildings. However, aspects of the current regulatory framework, particularly post-completion testing, must be improved significantly to ensure that higher standards are achieved in practice, and in a way that is fair and robust.

1
McAllister of Cyril Sweett (2007) *'Transforming Existing Buildings: The Green Challenge'*, RICS Research, The Royal Institute of Chartered Surveyors, London

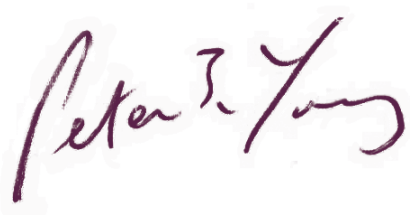
2
BERR (2007) *'Draft Strategy for Sustainable Construction – A Consultation Paper'*, BERR, London

3
DEFRA (2008) *'Future Water: The Government's Water Strategy for England'*, DEFRA, London

4
BERR (2007) *'Draft Strategy for Sustainable Construction – A Consultation Paper'*, BERR, London

Of greater significance however, is the performance of our existing building stock, yet at the moment policy in this area is far less advanced than it is for new development. Evidence suggests that the carbon footprint of existing domestic and commercial buildings continues to grow[5]; and all the while we only replace buildings – currently a resource intensive activity in itself – at a rate of between 1% and 1.5% per year[6]. The legacy of unsustainable construction, ill equipped to deliver our needs for the future, will frustrate not only our, but future generations, endeavours to deliver a low carbon economy.

If we are to have any hope of reducing emissions in the UK by 80% by 2050, we must rapidly and consistently reduce the impact of existing and new buildings and the wider built environment. The purpose of this report is to present the key issues, evidence and proposals for robust regulatory action so that far greater progress can be made across the UK in addressing our highly unsustainable built environment.



Peter Young
Chairman, Aldersgate Group

5
CLG (2007) *'Monitoring the Sustainability of Buildings – progress reports to parliament on sustainability and measures to improve compliance with Part L of the Building Regulations'* www.communities.gov.uk

6
PSCA International (2007) *'Reducing the Carbon Footprint of Business'*, available at www.publicservice.co.uk/feature_story.asp?id=8075&topic=Sustainable%20futures – accessed 21.04.08

Introduction

'Government has yet to grasp the importance of the urban environment for environmentally sustainable development and a good quality of life in the UK.'

Royal Commission on Environmental Pollution, 2007

The Aldersgate Group believes that high environmental standards, particularly in the use of our natural resources, are essential for our future economic well-being and for the competitiveness of the UK economy. Our first report 'Green Foundations: Better Regulation and a Healthy Environment for Growth and Jobs', sets out this case. The Group also believes that tackling the environmental performance of the built environment, especially buildings, is a fundamental concern for the UK economy, and that better regulation and fiscal incentivisation have major roles to play in stimulating transformational change.

We therefore welcome the increased policy attention currently being placed by Government on the built environment, and are encouraged by ambitious targets to realise zero-carbon new homes and zero-carbon new non-domestic buildings in England by 2016 and 2019 respectively. The Scottish Government's ambition for zero-carbon new buildings (both domestic and non-domestic) by 2016–17, as recommended by the Sullivan Report, is also to be commended[7]. However, we are deeply concerned that current policy and regulation is fragmented, inconsistent and weakly applied. We are also concerned that proposed regulatory and fiscal measures stand to reinforce and exacerbate existing limitations and, in some cases, lead to perverse outcomes.

This lack of consistency and regulatory rigour is already undermining the potential role of the built environment in securing a sustainable future for the UK economy. It also undermines the competitive advantage that should accrue to those companies and organisations that have shown leadership in responding to sustainable development priorities.

The Aldersgate Group believes that:

1 A sustainable built environment is good for business and good for competitiveness

2 Far greater regulatory and fiscal emphasis is needed on improving the environmental performance of our existing building stock

3 Key new market-based instruments designed to improve the performance of existing buildings risk giving rise to perverse environmental and economic outcomes

4 More robust implementation of existing regulations is needed urgently to achieve compliance and stimulate innovation in the delivery of new buildings

5 Government is failing to show the leadership expected of it on its own estate

Whilst this report focuses on the carbon and wider environmental impacts of new and existing buildings, the Aldersgate Group acknowledges fully that delivering improved performance in buildings must go hand in hand with raising standards in urban and building design. It is imperative that we create and maintain distinctive, vibrant places that people want to live and work in and which are underpinned by equitable, accessible public services and socio-cultural infrastructure.

7 Scottish Government (2007) *'A Low Carbon Building Standards Strategy for Scotland'* Report of a panel appointed by Scottish Ministers Chaired by Lynne Sullivan 2007

1 Good for business; good for competitiveness

'If the UK is to compete successfully in the global marketplace, we urgently need to tackle the environmental performance of property. Attracting and retaining the best people, maximising productivity and maintaining the credibility of the UK plc brand are all dependent on a sustainable and high-quality built environment'

Liz Peace CBE, Chief Executive, British Property Federation, 2008

The link between sustainability and economic competitiveness is well established. Paradoxically, buildings in the UK are highly inefficient in their use of energy and natural resources, and are the principal source of the energy demand which is driving climate change. This is a massive drain on the UK economy, not simply because of accelerating energy and material costs, but because poor environmental performance has significant adverse effects on public health and workforce productivity. In a nutshell, poor environmental performance in the built environment critically undermines our economic potential and competitiveness in an increasingly challenging global marketplace.

Business leaders around the world support the view that tackling the environmental performance of buildings through good governance and strong regulation presents a major economic opportunity[8]. Within the real estate sector, it is recognised increasingly that there are key commercial drivers for improving environmental performance[9], not least because buildings which compare unfavourably to their peers are now expected to face longer void periods, discounted value and accelerated obsolescence in both the rental and equity markets.

Existing and emerging drivers for improved environmental performance of buildings include:

1. Pressure from investors and commercial occupiers who are concerned with brand reputation in an increasingly environmentally conscious society
2. Protection of asset and rental values in a market where environmental performance is emerging as a differentiator of stock (accentuated at times of weaker market activity)
3. Attracting and retaining high-calibre employees who are concerned with the principles of responsible business
4. Compliance with legislation e.g. Building Regulations
5. Resilience in the face of climate change impacts on building integrity, insurability and productivity
6. Resilience in the face of energy price volatility, resource depletion and material cost increases, including in relation to carbon shadow-pricing
7. Unlocking public funding opportunities, particularly that of the Housing Corporation (pending the inception of the Homes and Communities Agency in April 2009) which will contribute to the delivery of over 155,000 new homes in the next 3 years alone.

8 Dahl, Arthur Lyon (2004). *'The competitive edge in environmental responsibility'*, p. 103–110. In Michael E. Porter, Klaus Schwab, Xavier Sala-i-Martin and Augusto Lopez-Claros, The Global Competitiveness Report 2004–2005. World Economic Forum. Houndsmill, UK and New York: Palgrave Macmillan.

9 www.driversjonas.com/sustainability

There can be no doubt that these commercial drivers are stimulating demand for improved environmental performance within some parts of the property sector; particularly in relation to the supply of new commercial buildings and dwellings. But the lack of effective regulation in relation to both new buildings and existing stock dampens the competitive advantage for innovators, not least because the lack of transparency in building performance means that both investors and occupiers are vulnerable to 'greenwash'.

It is little surprise therefore, that despite the proven economic case for resource efficiency and sustainable development, credible examples of 'sustainable buildings' remain a market exception. Poor performance remains endemic across much of the sector and currently stands to compromise any prospect we have of achieving national targets for emissions reductions, resource consumption and waste generation.

In many instances, this is exacerbated by uncertainty and land-use planning risk at the local level in relation to infrastructure provision[10], despite the fact that the principles of resource efficiency and waste minimisation are now strongly embedded in national planning policy. The Aldersgate Group would welcome, in the context of the need for improved integration of energy, water and waste efficiency within the national policy framework, significantly improved expediency at the local level on the planning and procurement of sustainable resource management infrastructure.

10
OGC (2006) *'OGC Kelly Report to the Financial Secretary to the Treasury – Improving competition and capacity planning in the municipal waste market'* www.ogc.gov.uk

2 Tackling existing buildings

We only replace the UK building stock at a rate of around 1% per annum. Whilst there is now significant policy and regulatory focus on improving the environmental performance of new buildings, enhancing the performance of existing stock presents a far bigger opportunity. It is also more challenging. Fundamentally however, tackling the performance of existing stock – both in the residential and non-domestic sectors – is crucial if we are to achieve national emissions reductions targets and wider policy objectives on resource efficiency.

Non-domestic buildings

Reasons for persistent poor performance in the non-domestic sector are complex but ultimately boil down to a core set of interconnected issues.

Lack of awareness

There is a persistent and often underestimated lack of awareness within both the private and public sectors on the commercial and operational risks of environmental degradation and climate change. Where high-level commitments to sustainable development have been made, there can be a strong disconnect from the reality of investment and operational decision-making, often characterised by an absence of systems and protocols to implement corporate policy at the operational level (in relation to acquisitions, asset management and building occupancy).

Poor measurement

Robust measurement of environmental performance at the building, portfolio and geopolitical level remains limited and inconsistent. This provides weak intelligence on which to base investment and building management decisions, and reduces the potential for market-wide benchmarking through which stock differentiation, competition and risk management can be driven.

– There is a myriad of performance measurement tools with little or no integration, many of which reinforce the disconnect between different stages and actors in the property lifecycle.

– The use of lifecycle analysis is limited, meaning that the comparative impacts of refurbishment and redevelopment are usually not understood.

– There is limited use of post-occupancy evaluation tools across the property sector.

– EPC asset ratings are not particularly useful as an energy management tool, principally because the calculation methodology takes no account of actual energy consumption by occupiers.

– Evidence of the relationship between improved energy performance and other key performance indicators, such as occupancy comfort and productivity, is poorly understood.

Supply and demand

Fiduciary duties mean that investors can only justify capital expenditure when this will effectuate safeguarded or improved returns and this leads to reticence about enhancing environmental performance where there is unproven demand from occupiers. Despite recent high-profile statements from Government and some corporate organisations on occupational commitments and environmental performance, location and cosmetic appeal continue to dominate requirements in the mainstream commercial market.

Insufficient incentive

Energy and environmental costs as a proportion of total business running costs are relatively small, despite recent marked increases in energy and material prices. Furthermore, undertaking significant refurbishment works to enhance environmental performance outside of normal lease breaks has a major impact on rental income for investors and on business continuity for occupiers. There is insufficient regulatory and fiscal incentive to overcome these impacts.

Existing homes

Many of these underlying causes of persistent poor performance in the non-domestic sector apply to existing residential stock too, which alone accounts for 27% of UK carbon emissions. In particular, low public awareness, high levels of apathy and limited financial incentives are pertinent. Notwithstanding, it has been shown that delivering an 80% reduction in carbon emissions from existing homes is achievable by 2050, subject to appropriate policy interventions by Government[11].

In addition, fuel poverty is a major economic and public health issue within the residential sector which is currently being exacerbated by rapidly increasing energy prices. It has recently been estimated that as many as one in six households are living in fuel poverty, the highest proportion in over 10 years[12]. Paradoxically, those that are most vulnerable to the impacts of increasing energy costs are those least able to access the capital needed to make themselves more resilient to it by making their home more energy efficient.

We want Government to:

1 Work with industry to deliver a high-profile awareness-raising campaign for investors and occupiers on the benefits of improving the performance of commercial buildings

2 Work with industry to publish a Code of Practice on measuring the environmental performance of occupied buildings in the non-domestic sector. Adoption of the Code should be a mandatory requirement of funding for capital expenditure

3 Extend the system of operational energy ratings (required for public buildings in England and Wales from 1st October 2008) to all non-domestic buildings by the end of 2009

4 Introduce and progressively tighten minimum standards for residential and non-domestic property transactions so that it becomes illegal to re-sell or let those properties with the lowest EPC asset ratings

5 Analyse and report on the costs and benefits of introducing water efficiency ratings to complement EPCs and Display Energy Certificates

6 Strengthen financial incentives for building owners and occupiers. In particular:

- A Align Stamp Duty Land Tax to asset ratings for energy performance, with a nil rating for A-rated stock
- B Explore the potential for local Business Rates to be aligned to annual changes in the occupational energy rating
- C Extend the current system of Enhanced Capital Allowances to include products and services which deliver improvements to the fabric of existing buildings
- D Introduce a reduction in the VAT rate on refurbishment materials and systems which deliver environmental benefits and improve energy performance
- E Introduce feed-in tariffs to incentivise the introduction of on-site renewable energy generation
- F Make capital allowances and low-interest loans available to homeowners to improve the energy performance of their dwellings, measured on a whole-house basis, linked to income or local tax rebates for those that improve their domestic energy performance and increased rates for those that take no action

11 Centre for Sustainable Energy, Association for the Conservation of Energy and Moore, R. Dr (2008) 'How Low – Achieving optimal carbon savings from the UK's existing housing stock' WWF-UK, Godalming.

12 www.guardian.co.uk/business/2008/jan/20/utilities.householdbills

3 Enforcing standards in new buildings

'This is not the time for a quick in and out approach. We need to be here for the long-term if we are to win the war against climate change.'

Hilary Reid-Evans, Head of Sustainability Initiatives, Quintain Estates, 2008.

'Achieving a Sustainable Economy' is one of the five guiding principles of sustainable development defined in the UK Strategy, Securing the Future[13]. Enshrined in this is the 'polluter pays' principle, through which the social and environmental costs of economic activity fall on those who impose them. Well designed and **robustly enforced** regulation is the primary means by which this principle is implemented. However, the recent Hampton Review[14] concluded that there remains wide variations and inconsistencies in the application of national standards by local authority regulators in general, leading to uncertainty for business and implying that key elements of the Government's own principles of sustainable development are not being applied in practice.

The Environmental Audit Committee and House of Lords Select Committee on Science and Technology have both previously stated their alarm at the 'apparent ease and possible extent of non-compliance with Part L of Building Regulations' in England[15]. Since then, CLG has introduced a range of enabling measures to improve implementation of Building Regulations by local authorities and industry, but it is difficult to know the impact that this is having on compliance. Evidence suggests that enforcement at the local level remains weak[16], but there are no comprehensive records at the national level against which to judge the effectiveness of local authority enforcement.

Government in England has now set a very bold and ambitious roadmap for regulatory change leading to the delivery of zero-carbon homes by 2016. More recently, it has set targets for the delivery of zero-carbon schools by 2016, zero-carbon new buildings in the public sector by 2018 and zero-carbon new commercial buildings by 2019. The Scottish Government has also set out an ambitious target of achieving zero-carbon new buildings by 2016–17. These are clearly very positive steps and are welcomed unreservedly by Aldersgate Group. The Welsh Assembly Government has a policy commitment to realise zero-carbon new homes by 2011 in the event of Building Regulation devolution, although we are not aware that any in-depth analysis has been undertaken from a deliverability perspective.

Ultimately, the credibility of these world-leading regulatory programmes risk being undermined by national and local Government failure to implement the existing frameworks effectively.

Not only is robust enforcement necessary to drive higher standards[17], but it is also crucial for monitoring and evaluating the impact of new regulation and to measure progress towards national emissions reduction targets and other key policy objectives. Furthermore, weak enforcement tempers the competitive advantage of those in the industry who choose to be proactive and go beyond the regulatory baseline. It is these innovators who offer the greatest promise in realising the vision of zero carbon sustainable developments, so weakening their competitive incentive runs counter to the shared policy objectives of Government and industry.

Worryingly, it would appear that Energy Performance Certificates (EPCs), which are now required for the construction, sale and letting of dwellings and non-domestic buildings, will also be subject to weak enforcement within the non-domestic sector. Aldersgate Group understands that local authorities, which are responsible for the enforcement of EPCs, are already being advised by Government to be lenient because of concerns about industry capacity. This represents flawed logic and is unacceptable.

Creating a sustainable built environment is without doubt a massive challenge. Meeting that challenge requires new and strengthened regulatory tools to help catalyse higher standards in the design, construction and management of buildings, but it also requires making much better use of existing

13 HM Government (2005) *'Securing the Future: delivering UK sustainable development strategy'* TSO, London

14 www.berr.gov.uk

15 HOUSE OF LORDS Science and Technology Committee (2005) *'2nd Report of Session 2005–06: Energy Efficiency'* TSO Ltd, London

16 For example: Monbiot, G (2006) *'The Inspectors Who Look the Other Way'* www.monbiot.com; ECA & HVCA Joint Statement (March 2008) *'Government 'failing to deliver' on Part L'*; Grigg, P (2004) ibid; Published FOI responses by Cardiff City Council, Carlisle City Council, Mid Sussex District Council.

17 Wingfield et al (2007) *'Lessons from Stamford Brook – Understanding the Gap between Designed and Real Performance'* www.leedsmet.ac.uk/as/cebe/projects/stamford.

tools, particularly given the time that it often takes for new legislative proposals to reach fruition. Whilst Government is putting in place a range of enabling measures to improve capacity in the Building Control sector, there remains an urgent need for existing regulation to be implemented far more effectively than is currently the case.

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www.berr.gov.uk

We want Government to:

1 Significantly extend post-completion performance testing of non-domestic buildings and dwellings against Building Regulations, ensuring that data is fed back to inform future reviews of Part L in England and Wales and Section 6 of the Scottish Building Standards

2 Publish annually comprehensive records of local authority performance in the enforcement of Part L in England and Wales and Section 6 in Scotland

3 Require listed developers to disclose annually their record of post-completion performance against Part L in England and Wales and Section 6 in Scotland

Whilst making better use of existing tools to drive higher energy efficiency standards in new buildings is crucial, the Aldersgate Group is conscious that there are limited regulatory provisions for driving wider resource efficiency, with water efficiency a matter of particular concern. We therefore support the principle of a whole building performance standard approach, enshrined in Building Regulations, for water consumption in new homes, and for domestic uses in commercial and public buildings where this is practicable. We also support the principle of regulating water efficiency standards for fixtures and fittings as a complement to whole building standards.

Much has been written about the impact of the construction sector on climate change and resource consumption in the UK. We welcome the ambitious targets set out Government's draft Sustainable Construction Strategy[18], but we urge the public sector at large to do more now by making optimal use of its procurement power for driving higher resource efficiency.

We recommend that:

4 Contracts for public sector new build and refurbishment projects are awarded to those that consistently deliver on public sector sustainable construction targets, excluding those who do not

4 Getting the definitions right

Sustainable development is a holistic approach in which the pursuit of economic objectives embraces, and is integrated with, a framework of social justice and environmental limits. Reducing carbon emissions to tackle climate change is an important, indeed critical, aspect of sustainable development, but it is not the only ingredient. Together, Government and industry must ensure that the pursuit of climate change objectives does not lead to perverse outcomes from a wider environmental and socio-economic perspective.

Measuring environmental performance

Sustainability measurement and reporting is becoming a mainstream mechanism for assessing business accountability. It plays an increasingly important role in the way companies position themselves to customers, employees, investors, the community, industry and political stakeholders. Furthermore, with sustainability targets becoming increasingly set as regulation, measurement against these targets is essential to define focus and assess progress. While the benefits of sustainability reporting are compelling, if not managed appropriately the delivery can be complex and costly.

A lot of measurement is already happening, particularly on energy use and emissions. But it is coming from lots of different directions, including different parts of Government, and it doesn't all join up. In some cases it is leading to impractical instruments which stand to disenfranchise industry from the bold environmental vision that Government has set.

For example, there is a disconnect between the emissions factors calculation methodology of the proposed Carbon Reduction Commitment with Defra best practice guidelines for greenhouse gas emissions reporting. Not only is this inconsistency unhelpful, but it stands to undermine the credibility of existing carbon disclosure in the UK and compromise investment in renewable technologies.

To really understand how business is progressing we need corporate reporting using common frameworks, including at the building level, against which integrated regulatory measures are implemented. In this respect, we reiterate the recommendations of our earlier report, *'Carbon Costs: Corporate Carbon accounting and Reporting'*[19], whilst also calling for a step change in the take up of standardised measurement of other key environmental impacts associated with building performance, such as water consumption and waste generation.

Defining zero-carbon

The challenge of meeting our renewable energy generation target must not be underestimated. Under the EU Commitment, the UK must deliver 15% of its total energy supply from renewable sources. The zero carbon new buildings programme could be a vital tool in reaching this target.

The goals for zero-carbon new buildings, both at Westminster and in Scotland, are perhaps the most ambitious policies that domestic Governments have introduced. These are the right targets, with the right level of ambition, at a time when we have to make radical changes. Governments must listen to those in the industry with the innovation and determination to succeed, and tackle the barriers that they encounter.

There are genuine technological, skills deficit and cultural obstacles to be overcome, but the first obstacle is the definition of zero carbon itself. Governments must work to ensure long-term consistency across departments and between Westminster and the devolved administrations, whilst allowing sufficient flexibility so that its targets for homes and non-domestic buildings are achievable, without reducing the level of ambition on emissions reductions overall.

To its credit, Government in Westminster recognised that industry needed clarity on the future direction of Building Regulations but has issued different definitions of zero carbon in relation to different policies.

To support the launch of the Code for Sustainable Homes, the definition provided by CLG included an option for offsite renewables to be incorporated as part of the delivery solution. Treasury subsequently

19 www.aldersgategroup.org.uk/reports

announced a stamp duty relief scheme to incentivise zero carbon homes constructed up to 2012 using a definition that excluded the use of offsite renewables that weren't connected to the development by a private wire. The definition in the Code for Sustainable Homes was then amended to be consistent with that of the Treasury.

HM Treasury's definition of zero carbon has caused widespread confusion and introduced problems for delivery. The Renewables Advisory Board has estimated that at least 11.6% of new homes will be unable to meet the current definition of zero carbon[20], whilst the UK Green Buildings Council has more recently suggested a figure of between 10% and 80%[21]. No such analysis has yet been undertaken for non-domestic buildings, but technical constraints are likely to be even more pronounced in some circumstances. However, the reality of technical constraints will vary – potentially significantly – between administrations, with, for example, much greater potential for certain micro-renewables in some locations[22]. Government is faced with the reality that the only way to realise the ambition of its zero-carbon policies – which the Aldersgate Group supports unreservedly – is to re-introduce delivery flexibility in respect of zero-carbon technologies, all the while ensuring that stringent standards of energy efficiency and on-site renewables are achieved in all cases, providing the highest possible requirement for minimising energy demand, before any provision of off-site renewables is pursued. This standard must be set at a level which requires the industry as a whole to follow best available practice, with sufficient flexibility to ensure that the standard tightens as technology improves.

Ultimately, a mature relationship between Government and industry is needed, where Government sets the levels of performance and timetables but responds appropriately to industry advice on the practicalities of delivery. Meanwhile, the industry has to recognise that its previous practice has been unsustainable and that it needs to fundamentally change its product and its delivery models, while maintaining profitability.

The Aldersgate Group calls for:

1. Clarity across Government departments and amongst the devolved administrations on the definition of zero-carbon buildings

2. Adoption by Government of the a clear definition of zero-carbon buildings reflecting that proposed by the UK Green Buildings Council so that

   A All new buildings must meet strict minimum energy efficiency parameters as part of the definition of 'zero carbon', both in terms of the building design and appliances where supplied by developers. All new buildings should seek to mitigate all predicted carbon emissions from all energy uses via on- or near-site solutions

   B Where this is not technically possible, a minimum level of carbon mitigation must be required (e.g. 100% regulated energy) on- or near-site

   - Off-site solutions could be allowed, without requiring private wire networks, provided that they are demonstrably additional (e.g. with all ROCs retired), and have been built specifically to deliver the energy needs of the development
   - The developer can pay into a 'Community Energy Fund' that will ensure equal or greater net carbon savings are delivered through new additional installations

3. The extension of these principles to the definition of zero carbon non-domestic buildings

4. More demonstration projects to show wider industry what can and should be achieved

5. Continued dialogue between Defra and the property industry on the iteration of Carbon Reduction Commitment proposals, in particular to ensure that emissions factors for energy consumed by individual participants are consistent with best practice guidelines on carbon disclosure

20 Renewables Advisory Board (2007) *'The role of on site renewable energy generation in delivering zero carbon homes'* www.renewables-advisory-board.org.uk

21 UK Green Buildings Council (2008) *'Zero carbon Task Group Report'* www.ukgbc.org

22 See for example, *'Micro-wind turbines in urban environments: an assessment'* BRE Trust report FB17

23 Government is expected to consult upon a definition of 'near site' generation later this year. For the purpose of this report, 'near site solutions' are premised on the principle of renewable energy generation outside of the site curtilage from which dedicated supply is provided to the new development.

5 Leadership on the public sector estate

The recent Commission on Environmental Markets and Economic Performance (CEMEP) report[24] highlighted the role of the public sector in helping to create a market for low carbon technologies which further stimulates investment by the private sector. The 2007 report of the Sustainable Procurement Task Force also highlighted the importance of Government leadership, the principles of which were endorsed and reflected by Government itself through a range of far-reaching commitments in the UK Government Sustainable Procurement Action Plan[25].

The Aldersgate Group is disappointed that Government has so far failed to lead by example on this critical issue for the UK economy and environment.

Since 2002, it has been a requirement for all new Government construction projects to achieve a BREEAM (or equivalent) 'excellent' rating, and all refurbishment projects to achieve at least 'very good' rating, under the Government's 'Common Minimum Standards'. Despite these requirements, Government has a woeful procurement record on environmental performance.

The recent National Audit Office report, 'Building for the Future: Sustainable Construction and Refurbishment on the Government Estate' highlighted that in 2005–06 only 9 per cent of public sector building projects achieved the BREEAM aspect of the 'Common Minimum Standards.'

The Sustainable Development Commission's report 'Sustainable Development in Government 2007' highlighted that in 2006–2007 only 46 out of 351 new build and refurbishment projects completed in 2006–07 were even assessed against BREEAM. Of these, only 28 met the 'Common Minimum Standards' for all new build projects to meet a BREEAM 'excellent' rating and all refurbishment projects to meet a 'very good' rating. This is equivalent to 8 per cent of all building projects.

Inconsistent policy is also evident. Despite the 2002 Common Minimum Standards requiring all new projects to achieve an 'excellent' rating, the education Annex in the Government's Sustainable Procurement Action Plan only requires all major new-build projects under the Building Schools for the Future Programme to achieve a minimum BREEAM rating of 'very good'. The Environmental Industries Commission, a Member of Aldersgate Group, recently tabled a Parliamentary Question on this to the Secretary of State for Children, Schools and Families who confirmed in response that 'the Department currently has no plans to require new-build schools to meet a minimum BREEAM rating of excellent.'

A recent Public Accounts Committee report, 'Improving the Efficiency of Central Government's Use of Office Property', concluded that most Government Departments know very little about the environmental performance of their individual buildings. The report also concluded that Departments do not have data on the level of energy consumed for three out of ten Government buildings. It is hardly surprising then, that nearly two-thirds of Government departments are not on track to reduce carbon emissions from their operations by 12.5% by 2010/11[26].

The Aldersgate Group calls on Government to radically improve its procurement record in relation to the environmental performance buildings and building services.

24 www.defra.gov.uk/environment/business/commission/pdf/cemep-report.pdf

25 www.sustainable-development.gov.uk

26 www.sd-commission.org.uk/sdig2007/

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