

Crest Nicholson's Action on Climate Change

Annual Review 2008



Avante, Coxheath

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Statement on Climate Change Commitment by Stephen Stone

Managing Risk and Adding Value

Last year the Crest Nicholson Executive Committee reviewed and communicated our [Mission Statement](#) throughout the business.

Our driving ambition is to be the market leader in the design and delivery of sustainable housing and mixed use communities.

A key part of our commitment to sustainability is recognising the importance of understanding and addressing the immediate and longer term challenges posed by climate change. Climate change is particularly important for UK house building because Greenhouse Gas (GHG) emissions from homes contribute approximately 24% of UK GHG emissions.¹ The demolition and construction sector in its entirety is responsible for 32% of the 272m tonnes of waste arisings in England, another major contribution to GHG emissions.²

In 2008 we published our [Climate Change Policy](#) and the senior Board Member responsible for Sustainability has the responsibility for ensuring that ways of addressing the impacts of climate change are integrated throughout our business strategy and activities. We are reviewing the way in which risks associated with Climate Change are incorporated into our Risk Management strategy and processes.

As an integral part of committing to the progressive reduction of our carbon footprint, we work with the UK Government towards the realization of lower and ultimately zero carbon developments. We welcome innovation. In both our 2007 Sustainability Review and in this Climate Change Review we describe how we work with a variety of leading partners to turn sustainability vision via innovative exemplar developments, into practices which will eventually characterise our entire output, helping to drive financial success.

Going forward, we accept the need to continuously challenge ourselves to deliver against the UK Government's stretching sustainability agenda. We see an opportunity for Crest Nicholson to promote leading edge sensitively designed schemes which meet local needs, and to try and drive these more swiftly through planning and into production.

I have no doubt that delivering our Mission will be tough. But tough decisions are going to have to be made if we are to deliver higher sustainability standards, reduce the growing pressure on land, make homes affordable, mitigate and be prepared for the effects of a changing climate, and deliver communities we are all proud and happy to live in.

This is our shared responsibility, alongside outstanding customer service which will prioritise engaging with our customers to help them understand the potential impacts of their lifestyle choices, and equip them to choose a sustainable lifestyle.



Stephen Stone, Chief Executive

¹ UK Climate Change Programme Annual Report 2007

² Waste Strategy for England 2007

1. About the Review

This first Climate Change annual review has been prepared by ESD on behalf of Crest Nicholson to review the company's performance with regards to climate change. The aim of the review is to document evidence on concrete progress in response to the challenges of climate change and to communicate to all of our stakeholders, inside and outside the company, how Crest Nicholson is behaving responsibly to mitigate and adapt to climate change. The detailed report will be made available to all staff via the company intranet and a summary of the findings will be available to a wider public audience via the company website.

This review supplements our annual [Sustainability Review](#), and will be used to help us drive improvement both in reducing our own carbon footprint and in the development of innovative approaches to building sustainable communities.

2. Climate Change Policy

Crest Nicholson recognizes the importance of understanding and addressing the immediate and longer term challenges posed by climate change, we commit to the progressive reduction of our carbon footprint, and to work with the Government towards the realization of lower and ultimately zero carbon developments. We also acknowledge that a changing climate will require us to consider, and where necessary incorporate into future projects, adaptation measures designed to future proof the development.

The senior Board Member responsible for Sustainability has the responsibility for ensuring that ways of addressing the impacts of climate change are integrated throughout our business strategy and activities. Our progress will be reported annually.

Specifically, Crest Nicholson commits to:

- Ensuring we understand the likely adaptation & mitigation measures required for our development activities as a consequence of anticipated climate change.
- Ensuring we understand the risks and opportunities deriving from scientific understanding of and the regulatory response to climate change, and manage them appropriately.
- Continuously engage with our stakeholders and review our approach in relation to their response.
- Ensuring we measure quantitatively our direct and indirect greenhouse gas emissions and other significant climate change impacts in line with globally accepted reporting standards.
- Maintaining an emissions reductions strategy which includes progressive targets for both our direct and indirect impacts.

Objectives

For the direct climate change impacts associated with offices and site operations, we are committed to continuously:

- reducing our consumption of energy and water
- reducing our greenhouse gas emissions, including business travel and site related transport
- reducing our generation of waste, and increasing recycling rates

For the indirect impacts from our planning, design and procurement activities we are committed to:

- Improving the energy and water efficiency of our homes and other buildings, and providing appropriate recycling facilities to enable occupiers to reduce domestic waste
- Continuously reviewing and reducing the impact of our products through improvements to our design and materials specification
- Working with our supply chain to encourage the reduction of their own environmental impacts.

Crest Nicholson believes it has a real opportunity, as well as a responsibility, to engage with our customers on the potential impact of their lifestyle choices. We will provide information and guidance on how their home performs, and how they can further reduce their environmental impacts. We will seek to progressively broaden the opportunities for the occupiers of our developments to choose a sustainable low carbon lifestyle (in respect of both occupancy and travel).

In terms of climate change adaptation impacts, such as flood risk, Crest Nicholson will address these business risks for both our own operations and, wherever feasible and knowable, for our projects.



Stephen Stone, Chief Executive

April 2008

The Sustainability Business Improvement Group will monitor the effectiveness of this Policy and will review it on a regular basis, annually as a minimum.

3. Crest Nicholson's Approach to Climate Change

Sustainability is core to the Crest Nicholson Mission Statement and climate change is explicit in this statement and the accompanying Sustainability and Climate Change Policies. Crest Nicholson recognises climate change both as an opportunity for and a risk to the business and the company is fully committed to responding constructively and positively to these issues. This commitment is clearly set out in the Climate Change Policy and the related company targets and commitments which are detailed in Appendix 1.

During the last twelve months Crest Nicholson has been putting in place a rigorous approach to managing the risks and opportunities associated with climate change. This starts with a visible commitment from the Board - the senior Board Member responsible for Sustainability has the responsibility for ensuring that ways of addressing the impacts of climate change are integrated throughout our business strategy and activities. The Group Finance Director is the member of the Executive Committee responsible for risk management, including those related to climate change, which is explicitly considered in the company's risk assessment processes.

The company's management approach to climate change responds to the Climate Change Policy and the significant climate change risks and opportunities facing Crest Nicholson, which include:

- Competition
- Compliance with regulations and policy
- Availability of developable land
- Flood risk
- Uncertainty about climate change impacts
- Immaturity of low carbon economy, services and markets
- Regional changes in weather
- Energy security
- Cost of carbon
- Consumer demand

The Crest Nicholson Sustainability Team is responsible for operational support in the delivery of the company's response to climate change. They are enthusiastically assisted by a network of Sustainability Champions who ensure sharing of best practice and facilitate data collection and reporting.

Operationally, Crest Nicholson's Workgroups (Design Development, Technical, Commercial, Procurement, Production, Sales & Marketing and Customer Service) are responsible for implementing the group's climate change strategy, with support from the Sustainability Business Improvement Workgroup and external advisers. During 2008 the Sustainability team will be working with the Workgroups in an interactive programme to further develop key material issues, and to integrate specific actions into the business operations.

The successful delivery of development projects which respond to the challenges presented by climate change begins during the land acquisition process where vulnerabilities and mitigation issues are specifically considered. The planning and design teams for each project are selected, where possible, with relevant knowledge of sustainability, including climate change issues, and this is where the platform for climate change mitigation and adaptation measures is set.

The standard Crest Nicholson specification for housing has been reviewed to understand how it can be improved to deliver against Code for Sustainable Homes levels 3, in particular the achievement of the carbon credits ENE1. This work is further informed by detailed studies undertaken for individual development schemes to assess the solutions and costs associated with achieving Code levels higher than level 3. Energy efficiency improvement together with solar hot water and heat pumps are the preferred options for the majority of standard schemes. Larger strategic projects, such as One Brighton, Bath Western Riverside, Oakgrove and One Gallions provide opportunities to consider more innovative solutions utilising Energy Service Companies (ESCos) and district heat and power networks with centralised combined heat and power systems.

Delivering projects sustainably further reduces Crest Nicholson's carbon footprint, and our Sales and Marketing team can focus on demonstrating and facilitating the opportunities for a more sustainable lifestyle to our [customers](#).

4. Carbon Footprint and Measurement of Other Performance Indicators

During the first quarter of 2008 ESD completed a Climate Change Impact Assessment, including carbon footprint, for Crest Nicholson operations.

Methodology, Scope and Boundaries

Methodology: The assessment was compliant with global standards for emissions assessment, in particular the WBCSD-WRI GHG Protocol as required by the Carbon Disclosure Project (CDP) and Global Reporting Initiative (GRI).

Scope and Boundaries: The organisational boundary of the assessment covered the greenhouse gas (GHG) emissions arising from the activities of Crest Nicholson's management operations, for the period 1st November 2006 to 31st October 2007. It included premises electricity and gas consumption, company owned vehicles, business travel, commuting, refrigerant gas loss and waste disposal (plus construction site waste), and commuting by directly employed site workers. A diagram of the scope and boundaries is shown in the figure below.

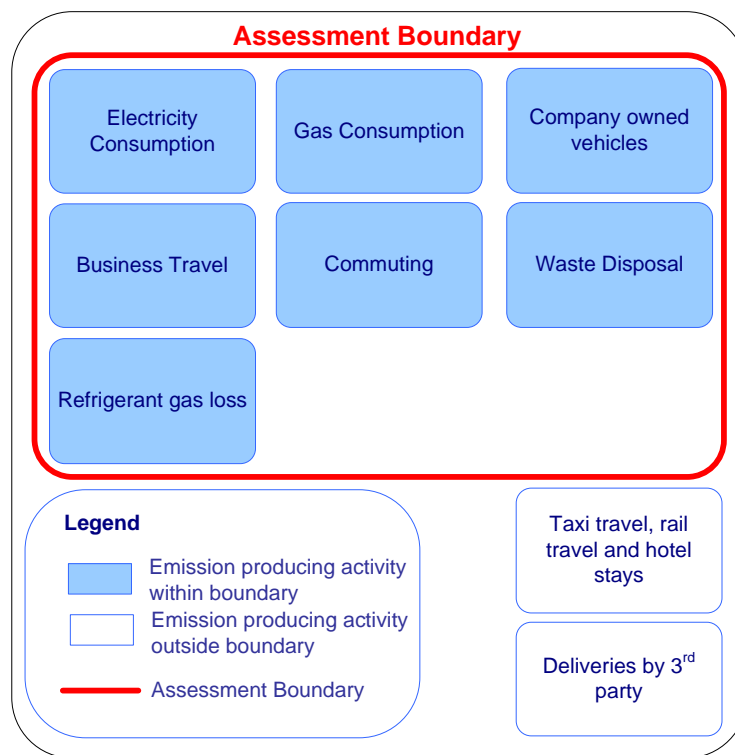


Figure 4.1 Greenhouse Gas Assessment Boundary

Summary of Emissions

ESD estimated that, during that period, the GHG emissions produced from the activities of Crest Nicholson's management operations were equivalent to **3,204 tonnes of CO₂**.

Commuting by Crest Nicholson employees accounted for the greatest portion of emissions with 1,545 tonnes of CO₂e. This included commuting by both office staff and those travelling to construction sites. Business travel (including travel by employee owned cars and air travel) made the next greatest contribution with 728 tonnes of CO₂e. Premises activities (including electricity and gas consumption, waste disposal and refrigerant gas losses) contributed 602 tonnes of CO₂e and company owned vehicles contributed the remaining 329 tonnes of CO₂e.

When normalised by average staff numbers, total emissions equate to **4.15 tonnes of CO₂e per employee per year**. This is at the lower end of typical management operations of a UK company, which in ESD's experience would generate between 3 and 8 tonnes of CO₂e per employee per year on average.

Waste produced at Crest Nicholson's construction sites was also included in the assessment and ESD estimates that, during the time period 1st November 2006 to 31st October 2007, emissions produced from construction site waste disposal were equivalent to **2,508 tonnes of CO₂**.

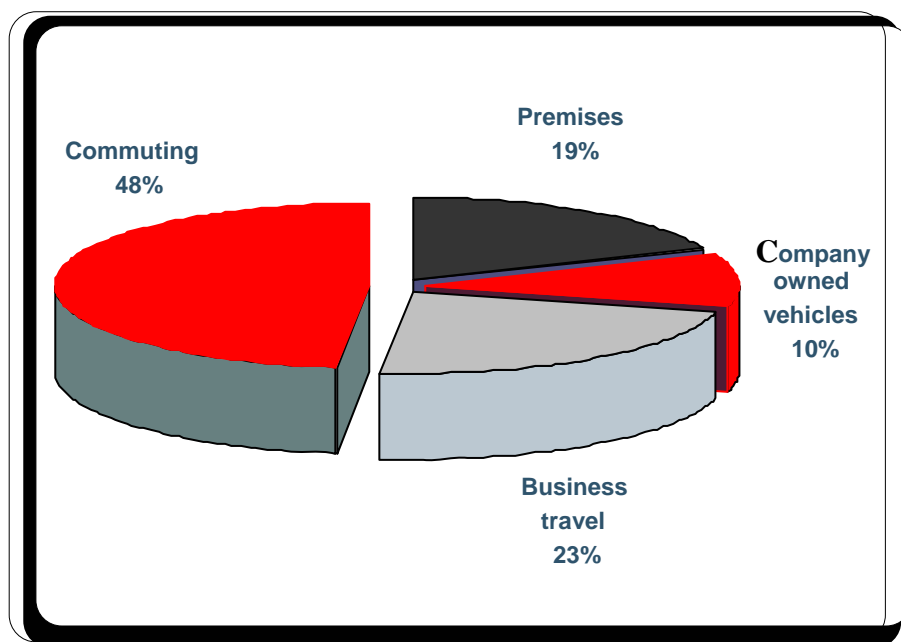


Figure 4.2 Breakdown of GHG Emissions

Recommendations

Based on the findings, ESD made a number of detailed recommendations for Crest Nicholson to reduce its carbon footprint going forward. These are being assessed by the operational Business Improvement Groups to set SMART targets and associated KPIs. Key issues for improvement include:

- Improved robustness of data collection systems.
- An annual review of GHG emissions profile
- To target a reduction in emissions associated with travel and energy consumption.
- To investigate the possibility of increasing use of on-site renewables.
- To reduce the emissions associated with waste disposal and expand recycling initiatives.

Data Synopsis 2007

In addition to this external climate change impact assessment the Crest Nicholson Sustainability Team has collected additional data relevant to climate change, which is summarised below.

	2007	2006	2005
Average home energy efficiency (SAP Rating)	78 (out of 100, 2005 version 9.80) 104 (out of 120, 2001 version 9.70)	81	79
Number of homes certified as EcoHomes	94 (EcoHomes replaced by CSH)	469	645
% of Group Suppliers with an EMS	33%		
Construction waste to Landfill (tonnes)	5,219*		
Construction waste recycled %	77%*		
Site Carbon dioxide (tonnes CO ₂ e)	4,531	4,155	
Percentage of developments submitted for planning with recycling facilities	28		

Figure 4.3 Climate change data 2006 & 2007

** Represents 74% of all construction waste by group spend (£) previous years measures were by volume and are not comparable.*

5. Improving Performance: Office & Site

Crest Nicholson reduced its operational carbon footprint during 2007, principally through the purchase of 'green tariff' electricity for the head office in Chertsey and 10% of site offices. Defra currently states that, 'a zero conversion factor can only be applied if your company has entered into a renewable energy source contract with an energy supplier that has acquired Climate Change Levy Exemption Certificates (LECs) for the electricity supplied'. By choosing to buy electricity on a renewable tariff for their head office, the emission of approximately 454 tonnes of CO₂e per year was avoided.

Crest Nicholson is aware that OFGEM and the Energy Saving Trust are currently running consultations in collaboration with Defra to review the guidelines on renewable tariffs. Revised conversion factors will incorporate the output of this review which may result in companies being unable to apply a zero factor to electricity sourced from a renewable tariff. Crest Nicholson will review its position in relation to green tariffs following the publication of the final guidance.

The greenhouse gas (GHG) emissions arising from the activities of Crest Nicholson's management operations defined in section 4.2, for the time period 1st November 2006 to 31st October 2007 were equivalent to 3,204 tonnes of CO₂. Emissions from Crest Nicholson's six offices accounted for 19% of this total. The charts below show the electricity and gas consumption for those offices against typical and best practice benchmarks.

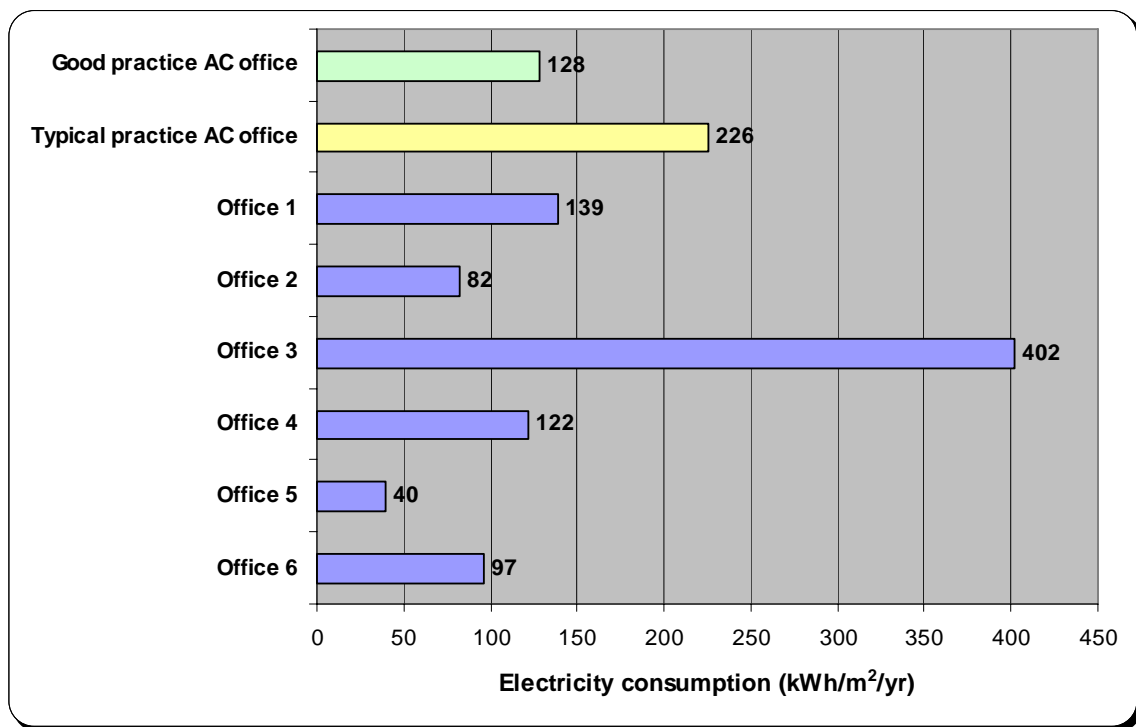
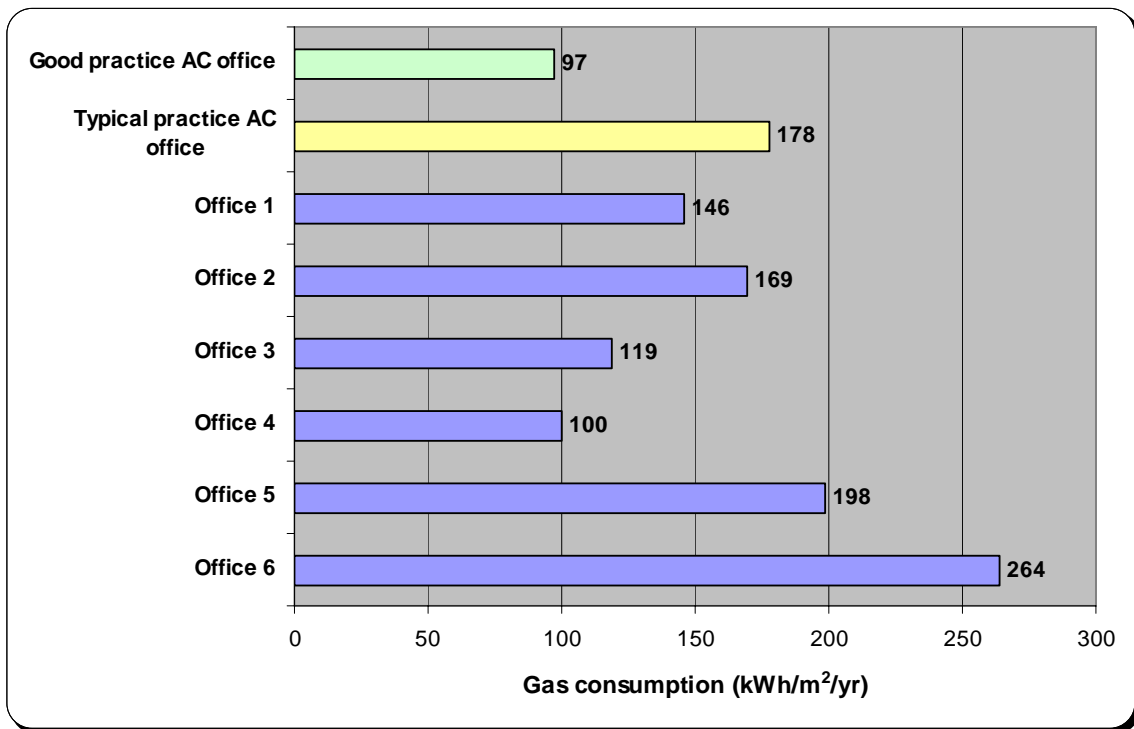


Figure 5.1 Electricity consumption per square metre per year

Figure 5.2 Gas consumption per square metre per year



Following a survey by the Carbon Trust a range of additional measures have been undertaken by Crest Nicholson to reduce the carbon footprint from office activities both behavioural and technology based. Waste recycling has been increased from 9 to 22%, particularly through a mixed waste (plastic, cardboard, paper & aluminium) recycling service for the Chertsey office.

Emissions produced from construction site waste disposal were equivalent to 2,508 tonnes of CO₂. The reduction of site operations climate change impacts have proved more difficult to achieve during the past year, and will be a focus for action going forward. During 2008, the Sustainability Team will continue to work with WRAP and ensure that the lessons learnt from the Avante 'waste neutral' project will be shared with other delivery teams. (For further details please see the Avante Case Study on the Crest Nicholson [website](#)). Site waste management plans will be implemented comprehensively across the company in 2008.

A training and awareness campaign is underway to raise awareness of climate change and wider environmental issues. A Sustainability Pocket Response Card was launched and issued to all site staff, including subcontractors. This was developed to encourage best practice on site in line with Crest Nicholson's sustainable development and climate change policies.

6. Training

The Code for Sustainable Homes has been introduced by the UK Government to strengthen building regulations and address climate change. With the help of external experts, the Crest Nicholson Sustainability Team has devised a training programme to introduce and familiarise operational staff across all disciplines on the basics of the Code for Sustainable Homes, its implications for the business and Crest Nicholson's approach to tackling climate change. The corporate objective is to speed up delivery of the new requirements deploying best practices from our leading exemplar projects. As well as a detailed introduction into the structure, credits, associated technologies, management and the overall purpose of the Code, the workshop emphasises the need to build sustainable communities, and facilitate more sustainable lifestyles.

This focus on comprehensive training enables Crest Nicholson to move together, to increase the general awareness of climate change issues, and continuously improve our approach to optimise sustainable design.

A similar programme is now being developed for the build teams, to allow those on site to understand the importance of their actions and workmanship in achieving higher standards in sustainable delivery.

In May 2007, a Sustainability Workshop was hosted for all of the land buying and development staff in Crest Nicholson. The workshop included a range of external speakers from ESD, Cyril Sweett and Ipsos MORI covering:

the business drivers; policy development; company progress; Code for Sustainable Homes; customer demand; the company's approach; energy and water technical issues; and illustrated by four case studies, including zero carbon developments.

Two training sessions have been held with the Executive Board to raise awareness of climate change risks and opportunities for the business and to discuss strategic implications for the business.

7. Delivering Sustainable Communities

SixtyK Homes

In 2006 Crest Nicholson led the SixtyK Consortium to become a preferred bidder for the ODPM's 'Design for Manufacture' Competition. The successful design achieves EcoHomes Excellent and delivers significant climate change benefits through controlled off-site manufacture of Structural Insulated Panels (SIPS) reducing on-site energy and water usage; improved energy efficiency including passive solar design, better air tightness ($3\text{m}^3/\text{m}^2/\text{hr}$), passive ventilation and mechanical ventilation with heat recovery (MVHR); on-site gas CHP; and on-site renewable PV electricity & reduced waste on-site.

The homes were designed to deliver up to a 70% improvement on Building Regulations Part L (2002), which is roughly equivalent to a 50% improvement on the present Building Regulations Part L (2006) and 25% better than the expected 2010 Regulations. These homes are now being delivered in Newport Pagnell on the site of the former Renny Lodge Hospital, at the Rowan site in Mitcham, Surrey and the former Linton Hospital site in Maidstone, Kent.



Figure 6.1 Avante, Coxheath

The Code for Sustainable Homes

The launch of the Code for Sustainable Homes and the mandatory carbon credits combined with the regular reviews of the Building Regulations Part L has required a fundamental review of new housing delivery at Crest Nicholson. This has been informed by the success of the SixtyK housing design and is being used to improve the standard specification.

The Code for Sustainable Homes was quickly recognised as not simply a development of EcoHomes but a significant step-change to the way in which new developments will need to be made more sustainable. Gone were the simple credits achieved by locating a bus stop or chemist near the site and in came real carbon reduction requirements, focus on areas of low flooding and use of sustainably sourced materials.

Crest Nicholson set up an action group led by one of our Managing Directors and consisting of the various specialist disciplines (Sustainability, Technical, Production, Buying and Commercial) to ensure that cost effective solutions to meeting the Code were developed.

The Team were challenged with producing a guidance document for the Crest Nicholson Group which would ensure the achievement of Code Level 3 not just in a practical, cost effective manner but also one that was of real appeal and benefit to the end user, the Customer.

The challenge of meeting the Code was not a simple one; it required careful study of the Code requirements to fully understand the implications, followed by in-depth research of possible solutions. The task was complicated by the Code guidance being only in draft form when the project started, meaning that it was an ever moving feast with changes occurring as BRE and users interacted to update the document. In addition, industry suppliers were not in a position to fully respond to the requirements of the code which requires full chain of custody for materials, and supporting documents.

One key area of the Code (ENE1) requires a Carbon Reduction of 25% over the Building Regulations SAP derived Target Emission Rate to meet Code Level 3. The Crest Nicholson team met with many suppliers, both from the UK and Europe, to explore Biomass boilers, Heat Pumps, CHP, Solar Hot water, Photovoltaic, and simple fabric improvements as potential methods of achieving the 25% CO₂ reduction.

Recognising the advantages and disadvantages of the range of renewable technologies it was clear that only Biomass and Heat Pumps offered one stop solutions to the 25% CO₂ target reduction whereas Solar and PV would require improvements to the fabric of the building as well. Concerns also exist over the market's ability to service and repair the new technologies.

As a basis for action, the team has produced a Crest Nicholson Code for Sustainable Homes Guide to compliance.

In addition to this CfSH Guide, a new Sustainable Procurement Policy has been developed, which specifically addresses climate change and an Environmental Assessment process with specific climate change criteria is used in supplier selection.

The Procurement Team has reviewed the standard water specification against the CSH requirements, and the Crest Nicholson standard specification from January this year will require that all sites going through planning will achieve a maximum of 105l/p/d, in accordance with Code level 3.

A fit for purpose review is also being undertaken to provide improved low energy lighting in new homes.

Additional detailed studies have been undertaken for individual development schemes for the achievement of Levels 4 and 6 of the Code.

8. Climate Change Best Practice Project Case studies

In addition to the planned improvement to the Crest Nicholson standard specification, a number of strategic projects are underway which are both pushing the climate change agenda and informing the improvements to the delivery of the standard specification, including:

- SixtyK house
- One Brighton
- Bath Western Riverside
- Avante

Detailed case studies for these projects, highlighting the climate change adaptation and mitigation measures, can be found on the Crest Nicholson [website](#).

9. Stakeholder Engagement on Climate Change

Tackling the industry response to Climate Change requires a high level of sharing and learning together.

Crest Nicholson actively engages with a wide range of stakeholders specifically with regards to climate change. Some examples are.

Industry Groups

UK Green Building Council (GBC), including Zero Carbon Task Group

Crest Nicholson is fully supportive of the zero carbon agenda, and the need to find practical, deliverable solutions, and was selected to join the UKGBC's Zero Carbon Task Group to represent the development industry. The role of the Task Group, formed in November 2007, is to review the current definitions of 'zero carbon' in the Code for Sustainable Homes, and as defined by the UK Treasury as it relates to the use of 'off-site' renewable energy.

Crest Nicholson has provided input, including the practical experience in Case Studies, to assist in assessing options for defining zero-carbon in a way which will facilitate maximum deployment, whilst ensuring the environmental targets are preserved.

CABE Sustainablecities.org.uk

Crest Nicholson is one of four private sector partners working with CABE to develop an on-line resource to promote thinking on how sustainable urban design and management can help cities decrease greenhouse gas emissions and adapt to a changing climate. Crest sponsored the 2-day Hothouse launch event in October 2007, and continue to provide on-going input into the structure, content, marketing, and implementation of the climate change manual for the Core Cities.

House Builders Federation (HBF)

Crest Nicholson is an active member of the HBF and contributes to relevant consultations on sustainability and climate change issues, such as the consultation on the Code for Sustainable Homes.

London First

The Development Director for Crest Nicholson Regeneration is a member of the London First Steering Group, contributing in particular to the Decentralised Energy Study looking at how the proposed target of generating 25% of London's energy from decentralised sources can be delivered efficiently.

Government

Crest Nicholson is a signatory of the ***Communities & Local Government 2016 Taskforce's Commitment***. This is an expression of real commitment that Crest Nicholson will work in partnership to realise the governments 2016 targets for zero carbon homes.

Waste & Resource Action Programme (WRAP)

Working with WRAP, Crest Nicholson participated in a field trial of the Zero Net Waste method, using the Avante housing development as a case study. As part of the trial the site management team were trained in the use of WRAP's Recycled Content toolkit, full details of the case study can be found on the Crest Nicholson and WRAP websites.

Renaissance Southend / Brentwood Town Centre Partnership

The Managing Director for Crest Nicholson Eastern is an honorary Director for The Brentwood Town Centre Partnership, leading a number of key tasks to ensure the continuing sustainability of Brentwood town centre. He is also a Non-Executive Director for Renaissance Southend Ltd, an Urban Regeneration Company for Southend on Sea

NGOs

NextGeneration

Crest Nicholson is a member of NextGeneration, a multi-stakeholder initiative launched by WWF, Insight Investment and the Housing Corporation, and designed to drive best practice in sustainability, including climate change, in the UK house building industry. The initiative:

- Benchmarks developers' strategy, management systems and performance.
- Provides members with market intelligence and tools to encourage good practice.
- Facilitates networking events for members to share experiences and best practice.

WWF Forest & Trade Network (WWF-UK FTN)

Crest Nicholson's Sustainable Timber Procurement Policy was developed with advice from the WWF-UK FTN. Members of the WWF-UK FTN commit themselves to tracing their timber and paper products back to the forest source.

Sponge Sustainability Network

Crest Nicholson is an enthusiastic supporter of the Sponge Sustainability Network and sponsored the 2007 launch of the Eco Chic or Eco Geek: Desirability of Sustainable Homes report, which includes market research on home buyers attitudes to sustainable homes. This report demonstrated a market demand for sustainable homes; a direct connection in home buyers' minds between sustainability and action on climate change; and an increasing awareness of energy and water consumption.

Customers

We aim to provide all homeowners with not only a sustainable environment, but a greater understanding of how to minimise their own environmental impacts. To increase customer awareness we now provide comprehensive information packs within our marketing suites.

At the time of moving in, all purchasers are presented with a Crest Nicholson 'Guide to Greener Living', which introduces sustainable living, and the significance of climate change. A Home Owners Guide is also provided, which contains instructions as to how to optimise operational efficiency of the home and ensure it is adequately maintained. The Home Owner Guide is currently being updated to include site specific information, for example transport links and local amenities.

Our One Brighton development provides a wealth of information for potential purchasers on the sustainability attributes of the scheme and explains the concept behind One Planet Living™. The marketing suite and sales literature demonstrates how everyone can make small changes to reduce their impact on climate change and reduce their ecological footprint. One Brighton recently won the Next Generation sustainability 'Mystery Shopper' award for 2008 due to the high level of information provided in the marketing literature and the in-depth knowledge of the sales team.

Our People

Raising awareness of climate change issues amongst our staff is critical to delivering our objectives. We engage with staff in a number of ways, the Sustainability team communicate regularly with staff through the Group intranet, Grapevine, as well as through office and site based training initiatives, and a monthly briefing. The central Sustainability team is supported by our regional network of Sustainability Champions, helping to share and disseminate information on climate change.

Sustainability is included as a section in the Employee Survey and elicited a number of suggestions from staff on reducing emissions from commuting and business travel, as well as energy conservation and reduction of waste. A copy of the 'Guide to Greener Living' has been circulated to all staff via the Grapevine intranet

Suppliers

ESCo Partnerships

Crest Nicholson recognises that to deliver significant GHG emissions necessary for higher levels of the Code requires effective partnerships with third party Energy Services Companies (ESCos). Crest Nicholson is working closely with a number of partners, including EcoCentroGen, to provide energy solutions for climate change mitigation.

Car Plus

The Project Executive for Crest Nicholson Regeneration is a Director of Car Plus, a registered charity set up to re-think car use and promotes car clubs in the UK. They give info, advice and support to communities, Local Authorities and partner associations on developing car share clubs across the UK, and other initiatives encouraging people to re-think car use.

APPENDIX – TARGETS & COMMITMENTS

Operational Energy (sites and offices)

- a. Introduce staff awareness schemes, and increase the number of regional offices and sites connected to a renewable electricity tariff by the end of 2008.
- b. Define scope boundaries and improve the quality of data for site energy consumption for the next reporting year.
- c. Develop requirements in tender documents for suppliers and sub-contractors to provide appropriate information on the environmental & climate change performance of products and materials, and strategies for mitigation by December 2008.

Short term Operational Energy Targets

- a. Stabilise CO₂ emissions arising from office & site activities over the next reporting year.
- b. Develop robust systems to collect data for site energy & water consumption, and establish a baseline against which to set quantitative targets

Long term Operational Energy Targets

- a. A 25% reduction in CO₂ emissions arising from offices and sites by 2020
- d. During 2009 review the phasing of the carbon footprint reduction programme and set interim targets

Product - Energy Efficiency

- a. Over the next 12 months establish a post construction programme to monitor the effectiveness of energy efficiency measures. Work with external stakeholders to identify areas for improved energy efficiency within standard specification
- b. Develop a post construction review process to identify good practice and incorporate lessons learnt into future developments
- c. We will review the data and set a SAP rating target for the next reporting period.

Operational Water Consumption (Sites & Offices)

- a. Introduce water saving measures to regional offices (hippos, flow regulators, etc)
- b. Develop robust systems to collect data for site energy & water consumption, and establish a baseline against which to set quantitative targets. Work with water companies to establish accurate consumption data and meter readings for regional offices.
- c. Stabilise operational water consumption during next reporting year.

Product - Water Efficiency

- a. Research and test water recycling products and systems to become part of the standard specification where appropriate
- b. Work with our supply chain to understand how water efficiency can be further improved.
- c. Report water efficiency KPI - litres/person/day, based on standard specification.

Product Performance Water

- a. All new dwellings to be submitted for planning applications from January 1st 2008 are to be designed to achieve the water component of the Code for Sustainable Homes level 3.

APPENDIX – TARGETS & COMMITMENTS

Construction Waste

- a. In conjunction with implementing Site Waste Management Plans, improve overall waste management practices.
- b. Continue to work with Waste contractors to establish more accurate data.
- c. Work with key suppliers to implement packaging take back schemes and to reduce damaged materials to site.
- d. Reduce wastage by implementing suitable provision for safe storage of materials on-site.
- e. Continue to work with WRAP to reduce construction waste impacts.
- f. Increase the use of prefabricated systems to reduce wastage on site.

Waste reduction

- a. Reduce total construction waste sent to landfill by 10% during the next reporting year.
- b. Reduce construction waste sent to landfill by 50% by 2011.

Development Waste

By November 2008:

- a. Work with local stakeholders to reduce domestic waste through improved waste segregation.
- b. Increase the provision of information to homeowners on recycling facilities in the local area.
- c. All new sites to incorporate recycling facilities, compatible with the local collection scheme, with a view to reducing domestic waste and increasing recycling on developments.
- d. Report KPI on % developments with recycling facilities - data currently being collected.

Office Waste

- a. In 2008, introduce initiatives to reduce waste production within our regional offices (double sided printing, glasses as opposed to plastic cups etc)
- b. In 2008, work with regional sustainability champions to raise awareness of green office initiatives
- c. During the next year reduce office waste to good practice benchmark of 200 kg/annum/employee
- d. Increase office recycling rates by 10% over the next year.

APPENDIX – TARGETS & COMMITMENTS

Construction Transport

- a. In this reporting period, conduct a carbon intensity study on a selected development to assess the emissions associated with building materials and construction activities, to include site worker commuting
- b. By the next reporting period establish systems to monitor carbon dioxide emissions from construction-related transport activities on-site
- c. Work with contractors and suppliers to encourage use of alternative low carbon fuels
- d. Develop the information to be required from suppliers in order to understand the embedded transport energy in both raw material and finished product.

Office Transport

- a. Reduce GHG emissions associated with commuting by promoting car sharing, and encouraging employees to walk or cycle to work, or to use public transport
- b. Company Car Fleet: From 1st Nov. 2008 set a maximum cap on emissions for new company cars at 195g/CO₂ (down from 225) and from 1st Nov 2009 at no more than 15% above industry average, (currently at 165).
- c. From 1st Nov 2009 the car allowance entitlement will be restructured to encourage staff to drive vehicles with lower emissions and to discourage high emission vehicles.
- d. To research the average CO₂ emissions from the existing company car fleet (including those cars for which a car allowance is paid) with a view to setting new standards designed to reduce average fleet emissions over time.

Development

- a. We will provide cycle storage on all new projects submitted for planning from 1st January 2008.

Existing Business targets

- a. To Implement an EMS in accordance with the guidelines by the end of 2009
- b. To identify and implement a user-friendly, distributed cost-effective system for acquiring CR data
- c. To implement internal and external assurance procedures for CR data assurance