

# Sustainable Development Review 2012





# Introduction

Welcome to the Willmott Dixon Group Sustainable Development Review 2012



Rick Willmott **Group Chief Executive** 

# Willmott Dixon has a proud heritage. Since 1852 our company has succeeded by applying family values and principles to the work that we do.

Our ongoing investment in sustainable development is borne out of these values; respecting people and relationships, preserving our environment, challenging how we work and embracing innovation. You will see reference to our company values throughout this document, and that's because they sit at the centre of how we operate as a business and how we are working towards achieving our sustainability goals.

But without question there is also a strong business case to continue pursuing this agenda, and I firmly believe that only companies able to make the link between sustainable development and business efficiency will succeed in one of the most challenging times for all of us working to create and maintain the UK's built environment.

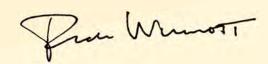
# Forward-Thinking

At Willmott Dixon we have worked hard to understand and substantiate these links, and we are working towards 'connected reporting' whereby environmental, social and financial performance are reported sideby-side. This is illustrated in our Annual Report and Accounts where environmental and social indicators have gained increasing prominence over recent years.

#### Committed

Through this document we hope to clearly communicate the connected benefits of our rigorous, committed and forward-thinking approach to sustainable development. Here are just some of the ways our dedication to people, using energy and other resources wisely, and being a responsible business have delivered growth and prosperity in 2011.

Our 160-year history helps to keep us focused and determined to leave an equally lasting, sustainable legacy. By continuing to stay true to the company's values throughout the organisation, we aim to help create a future to be proud of.



#### Willmott Dixon Values

Human Touch	Relationship Focused	Visible	Entrepreneurial and Direct	Determined to Preserve Our Environment	
Health and safety always comes first	Like minded clients are critical assets	Value and promote our brands and heritage	Investors in great ideas	Committed to ongoing waste reduction	
Recognise 'it's all about people'	Complementary teams	Community	Determined to		
No better place to	are the most efficient	engagement matters	be different	Really reducing our carbon footprint	
develop a career	Promote from within	Be recognised as	Promote change for the better	Carbon Tootprint	
Challenged but contented	where we can	industry leaders and market influencers	Ask "is this in the	Procuring resources	
Charitable support through fundraising	Align behaviour with	Clear vision effectively	company's best interest?"	on a sustainable basis	
Encouraging 'localism'	business goals	communicated	Stretching performance, robust measurement		
	Maka tha suaahu shain a	Demonstrable	robust measurement	Awareness and	
Supporting diversity	Make the supply chain a reflection of the company	professional and ethical integrity	Incentives for all, success shared	adoption of best practice	

# Willmott Dixon Group overview



Founded in 1852, Willmott Dixon Group is one of the UK's largest privately-owned construction, housing and property companies.

Operating across the UK, the Group consists of three main operating divisions - Capital Works, Regen and Support Services. Through these divisions the Group covers all phases of the built environment from investment, design and build, through to maintenance, refurbishment and re-investment.

# **Capital Works**

Major contracting, house building, interior fit-out and refurbishment through the following brands:

#### Construction

Major contracting work on non-residential projects ranging from £1m to £100m across 15 sectors.

#### Housing

Building new homes and refurbishment works for all types of residential accommodation and tenure mixes, delivering up to 1,600 new homes each year.

#### Interiors

Design and fit-out of non-residential accommodation. It includes Kanvas, our specialist interior design and workplace solutions business.

#### Regen

The Regen division specialises in property development and regeneration investment, incorporating mixed use development across a wide variety of private rented housing, commercial and social infrastructure projects. Regen creates value for our equity investment partners, regenerates landscapes and transforms entire communities. Projects are delivered by the Capital Works division.

#### **Support Services**

Specialising in supporting the occupants of the built environment through maintenance and repair schemes until the end of life and further reinvestment, through the following brands:

#### **Partnerships**

Working in collaboration with clients to provide responsive repairs and planned maintenance support to over 150,000 homes across England and Wales.

#### **Energy Services**

Supporting low energy solutions for all Willmott Dixon businesses and their clients. This new company will bring together landlords, investors and suppliers to develop Green Deal funding streams and deliver the upgrade work on homes and non-domestic properties.

#### **Re-Thinking**

Our internal sustainability consultancy develops and recommends strategy and policy for the Willmott Dixon Group and all operating businesses, provides research and development services, and supports implementation of action plans for agreed sustainable development priorities.

#### Willmott Dixon Group structure





Jonathon Porritt
Non-Executive Director

EVERYBODY PLAYS A PART

Willmott Dixon can now demonstrate real returns on its investment in sustainable development – in terms of reduced environmental impact, enhanced social standing, reduced costs and added value.

Take this year's Group Carbon Management Plan. Putting this into place will take a significant outlay of time and money, including engaging staff, installing energy-efficient equipment and improving vehicle fleets and changing the way we work. But, by 2014, it stands to save us 15% of our carbon emissions and £4.5 million over business-as-usual if carried out right. That will build on a satisfying 3.1% absolute reduction in emissions between 2010 and 2011 and an 8.9% relative reduction over the same period.

Our new Energy Services division sells our expertise gained through these efforts – and also stands to generate significant revenues for the Group while it cuts carbon and helps to reduce energy poverty as part of the Government's energy efficiency programmes.

At last, the process of construction is beginning to be radically improved through the application of technology. Our investment commitment to using BIM on 25% of Capital Works projects is driven by that commitment to innovate, as is our launch of off-the-shelf public building project, Sunesis. Both slash cost and waste.

Waste reduction has, of course, been a long-standing concern of Willmott Dixon, and our achievement of diverting 96% of waste from landfill shows what can be achieved given long-term investment.

Investment in people has been another hallmark of the Group's public persona, and with this year's launch of the Willmott Dixon Foundation, we will be able to accurately track all of the great work we are doing for communities as well as developing an over arching strategy to make the best impact.

The Foundation is being set up and run by our dedicated Re-Thinking division, which has been active this year, as ever, in pushing for, developing and measuring our efforts. They are also behind our efforts to push for green development at government level through active involvement in organisations such as the Aldersgate Group and the UK Green Building Council.

While some of our achievements can be measured, the importance of roll-your-sleeves-up sustainability to Willmott Dixon's brand is harder to gauge. But that doesn't make it any less real.

#### **Our Vision**

We will build on our history and reputation to add value to clients and shareholders by:

- · Maintaining a leadership role in the built environment
- Undertaking our activities in a sustainable and responsible manner
- Contributing to society as a whole

# Willmott Dixon will stand out from the crowd by:

Being our clients' first choice in our chosen sectors and delivering Tackling climate change and energy efficiency and to be 1 real satisfaction through the highest quality performance. carbon neutral by 2012. 2 Putting people first and providing our staff with the Smarter use of natural resources and our commitment 6 opportunity to develop and reach their career potential. to having zero waste to landfill by 2012. 3 Continuing to protect our business against variable Engaging our supply chain in a manner that reflects our values. economic cycles. Making a positive difference in the community both 4 8 Aiming to continue year upon year growth in profit. at local and national level.

#### 2011's headline achievements



Our new Energy Services business will provide pioneering Green Deal projects

- Developed our Group Carbon Management Plan, targeting a 15% reduction in carbon emissions from 2010 to 2014
- Worked with the Government's Department for Energy and Climate Change (DECC) in the development of Green Deal policy, enabling us to sign up as a Pioneer Green Deal Provider
- Established our new Energy Services business to drive and deliver low carbon construction and retrofit projects
- 96% of construction, demolition and excavation waste diverted from landfill
- Average company car  $CO_2$  emissions reduced from 135g/km in 2010 to 128g at the end of 2011
- 11,228 hours work experience provided on projects and at offices
- £77,000 paid to staff in 2011 for choosing lower-carbon vehicles

- 87% of employees think we are a leader in our approach to environmental management, according to The Sunday Times Best Green Companies survey 2011
- 35.5 average score under the Considerate Constructors Scheme, 13% above the industry average of 31
- 20% female employees versus a UK Contractors Group (UKCG) average of 13%
- 6.7% of employees from ethnic minorities against a UK construction average of 3.3%
- 10,000 miles claimed under our bicycle mileage reimbursement scheme
- £2.2m invested in training, equivalent to £792 and 3.39 training days per employee
- 99.9% compliance with Construction Skills Certification Scheme programme – the industry leading figure
- Accident frequency rate reduced by 14%, and accident incident rate down by 13% in our Capital Works division
- £338,000 donated in staff time and donations for good causes
- 36 apprentices directly employed, more than 200 engaged across the Group
- 95 trainees employed in our management training scheme
- Gold performance level in the Business in the Community (BITC) Corporate Responsibility Index
- Achieved second place in the NextGeneration annual sustainability benchmark of the UK's top 25 home builders
- Progress against sustainability Key Performance Indicators (KPIs) and reliability of data verified by Bureau Veritas

### The year's outstanding projects



Oakham Primary School

- Houghton Primary Care Centre achieved first BREEAM Healthcare 'Outstanding' rating in the UK and winner of overall BREEAM Award Healthcare category
- Built 280 place Oakham Primary School achieving a 60% energy-efficiency improvement on Building Regulations
- Code for Sustainable Homes Levels 5 and 6 schemes, Peartree Way and Cotney Croft, won Sustain Magazine award in the best construction category
- Construction began on Chester Balmore, one of the largest residential Passivhaus schemes in the UK, for Camden Council
- Green Deal energy retrofit trial of private residential properties undertaken with South Cambridgeshire District Council

- Won a three year extension to provide a repairs, maintenance and 24-hour call out service to 40,000 homes in Birmingham
- Landed contract for Carbon Trust headquarters' interior design and fit out to SKA Gold-rating with whole-life costing
- Won new WWF headquarters contract in Woking
- Affinity Sutton chose us to provide repairs and maintenance to 20,000 homes across London and the South East
- Secured a seven-year contract from Home Group to maintain 17,000 homes in Central and North West England worth £147m
- Delivered Bridport House, the largest residential project built with cross laminated timber
- Regen joint venture with retailer Morrisons chosen by the London Borough of Waltham Forest to develop a 1.5 hectare mixed-use site in Walthamstow, East London
- Started first phase of Dee Park Estate, Reading, a multi-phase residential project being built by Regen in joint venture with Catalyst Housing
- Secured responsive repairs contract covering 6,500 Guinness South homes
- Appointed to build Crouch Hill Community Park, the UK's first zero carbon school 'in use' in Islington with community energy centre providing heat to adjacent housing
- Built Morrisons' exemplar green supermarket in Peterborough, Europe's first to be entirely lit by LED lighting

# About this document

This Review details the Willmott Dixon Group operational performance during 2011, with additional information on our activities in early 2012. It describes our approach to key sustainable development issues, how we have performed against our targets and what we consider to be our current and future challenges. This document is organised according to Willmott Dixon's four themes of sustainability:

- Putting People First
- · Tackling Climate Change and Energy Efficiency
- · Smarter Use of Natural Resources, and
- Responsible Business

Throughout the organisation, our sustainable development work is structured around these four areas – defined over the page – to help us organise our efforts, make sure we are addressing all areas of significance, and effectively communicating our activities, both internally to employees and externally to clients, suppliers and other stakeholders.

You can find your way through the document using the colour-coded sections, one for each area.



**Chris Durkin**Group Director for
Sustainable Development

EVERYBODY PLAYS A PART

#### Your views

We welcome your views on this report and on our plans for the future. Please send us your feedback:

E-mail: sustainable.development@willmottdixon.co.uk

**Post:** Rick Willmott, Group Chief Executive Willmott Dixon Group, Spirella 2, Icknield Way Letchworth Garden City, Hertfordshire SG6 4GY

Electronic copies of this report and further information on sustainable development within Willmott Dixon can be downloaded from www.willmottdixon.co.uk

# **EVERYBODY**PLAYS A PART

While many changes have occurred since Willmott Dixon began publishing annual Sustainable Development Reviews in 2008, one theme remains consistent: **Everybody Plays a Part.** 

We need all those involved with our business and projects to help us achieve our sustainable development goals, and with this report we aim to encourage them to do so by providing insight into how their actions make a difference.

### **Recognition from others**

#### Awards received for the reporting period include:

#### **Building Awards 2011**

Major Contractor of the year

**The Sunday Times Best Green Companies 2011** 17th overall

# The Sunday Times 100 Best Companies to Work For 2011

Top-100 place for the fourth year in a row

#### **European Business Awards**

UK representative for Environmental Leadership award

# **Construction Manager of the Year 2011**Three Silver awards:

- Mark Chamberlain for Aylesbury Waterside Theatre, Bucks
- Richard David for City Centre Campus, Newport
- · Glyn Jones for Gateshead Leisure Centre

## Construction Diversity Awards 2011

Winner: Excellence in performance by a large company

#### Considerate Constructor Scheme Awards 2012

- Most Considerate Site Runner-Up: Chipping Hill Primary School, Essex
- 4 x Gold Awards
- 10 x Silver Awards
- 21 x Bronze Awards

(See p24 for full list of projects)

# Business in the Community (BITC) Corporate Responsibility Index

Gold performance level

# **NextGeneration Sustainability Benchmark**Joint-second place in list of the UK's top 25 home builders



Receiving the Building Award for Major Contractor of the year 2011, from left to right: Anthony Dillon, Rob Lambe, Rick Lee, Colin Enticknap, John Muir, Rick Willmott, Nick Edwards (Construction News Editor) and John Frankiewicz



# **Putting People First**

This section is divided into our clients, staff, suppliers and community. Here you'll find how we work with clients to deliver exceptional projects, encourage our staff to fulfil their potential, prioritise health and safety, work to develop a responsible supply chain and engage with the communities in which we work.

**Pages 8-27** 





# Tackling Climate Change and Energy Efficiency

Here we detail the progress we have made in managing energy use and emissions from our offices, transport and projects, our continued commitment to being carbon neutral by the end of 2012, and how we are working to reduce the energy demand of the buildings we construct.

Pages 28-37





# **Smarter Use of Natural Resources**

We diverted 96% of waste from landfill in 2011. Here we detail how this was achieved and how we plan to continue working towards zero waste to landfill. Our new sustainable procurement policy is strengthening how we buy responsible, low-impact goods, works and services, and a new Environmental Data System collects and reports performance across all of our projects.

Pages 38-47





# **Responsible Business**

This covers leadership, governance, transparency and how we engage with industry and government. The way we set our strategy and develop company structures means we can deliver on our sustainable development aims.

Pages 48-55



# **Putting People First**



Willmott Dixon builds and maintains healthy, sustainable places where people live, learn, work and play.



# At a glance

- Achieved Gold performance level in the Business in the Community (BITC) Corporate Responsibility Index
- Launched AllSafe, a new Group-wide safety initiative
- 86% and 95% average customer satisfaction in Capital Works and Partnerships respectively
- Established the Willmott Dixon Foundation to structure our approach to community investment
- New Energy Services division for Green Deal and retrofit work
- Staff participation in benefits schemes up 18% from 2010 to 2011
- Female and ethnic employment both significantly higher than industry average
- Launch of new Sustainable Procurement Policy
- £338,000 donated or volunteered to charity including 15,235 hours of work time
- Launch of our National Centre for Skills in Birmingham to teach up to 2,000 students a year

Putting People First



A responsible business is one that has built into its purpose and strategy a commitment to deliver sustainable value to society at large, as well as to shareholders, and has open and transparent business practices that are based on ethical values and respect for employees, communities and the environment."

**David Grayson** Chair of corporate responsibility and Director, Doughty Centre for Corporate Responsibility, Cranfield School of Management and Senior Fellow, Corporate Social Responsibility Initiative, Kennedy School of Government, Harvard University

# **Putting People First**

# Recognise 'it's all about people'

We are a business that values our staff, our clients and their teams, and our network of suppliers and subcontractors that work with us.

Positive engagement with all of these groups is fundamental to creating and maintaining sustainable built environments and communities, which is why we see 'Putting People First' as the most important factor in delivering our sustainable development objectives.

As defined in our Vision statement, we work to meet the needs and expectations of all the people we work with by:

**Clients:** Being our clients' first choice and delivering real satisfaction both to them and the occupiers of their buildings.

**Staff:** Providing our staff with the opportunity to reach their career potential, and giving them knowledge to help us deliver our sustainable development aims.

**Suppliers:** Sustainable procurement of goods, works and services in a manner that reflects our values.

**Communities:** Active engagement with the community at local and national levels by developing skills and employment, delivering considerate projects, and investing time and money to make a positive difference.

# National frameworks, local delivery

# **C** Scape

### Working under the Scape framework

Willmott Dixon continues to endorse partnering and framework agreements as the preferred way to deliver quality, cost-efficient and sustainable projects for our clients.

Scape is a local authority-controlled company providing certainty to public sector construction programmes. The Scape framework follows established OJEU procedures to save clients time, money and hassle. Typically, it reduces the time taken to get a project to site by six months.

The review of Scape works in 2011 highlighted some key achievements and benefits of delivery through the Scape framework, including:

- £140,000 of savings generated for every £1m of works procured
- 100% of projects have been delivered on-time and on budget
- Average customer satisfaction questionnaire score is 9 out of 10
- Average 53% of project spend within 20 mile radius, equivalent to £192m reinvested in local communities

The benefits are evidenced through our Scape partnership with North Somerset Council, where from 2009 to June 2012 a total of 24 projects with a combined value of £41m were completed.

Lyndon Watkins, Head of Property and Asset Management at North Somerset Council explains:

"The benefits of working in a genuinely collaborative environment, following simple and straightforward processes, has meant the Council has been able to make efficiency savings in the delivery of projects, construction costs and also in the back office.

Over this period all projects have been delivered to budget and time, which is an incredible achievement. It has also greatly assisted the Council's move to an enabling model of delivering property services, which in the current economic environment has ensured that the Council can maintain a sustainable service to the public."



Scape framework projects are delivering benefits for all stakeholders

# **Putting People First Clients**

Being our clients' first choice and delivering real satisfaction both to them and the occupiers of their buildings.

#### Like minded clients are critical assets

We aim to work with clients who share our long-term vision for a sustainable built environment. We believe that together we have a responsibility to develop and deliver the best possible sustainable solutions in order to minimise the impact and maximise the benefits of the buildings we construct, refurbish and maintain.

To encourage this we have developed a process to understand our clients' priority sustainability requirements and ensure a clear plan is implemented to address these throughout the project delivery.

During project launch workshops our Sustainable Development Matrix is reviewed to identify the sustainable development issues relevant to that project, and pertinent to the client. The output from the workshop is a Sustainability Action Plan which defines an approach to achieving project objectives and identifies responsibility for delivery.

This supports Willmott Dixon's objective to deliver a more sustainable built environment and strengthens relationships with our clients. For the client the Action Plan provides a clear way of setting required outcomes and priorities, and an understanding of how these will be achieved.

Developing a Sustainability Action Plan is a key element of delivering our 10-Point Sustainable Project Criteria for Capital Works projects (see page 52), and during 2012 we will be developing a similar benchmark performance and targeted sustainability plans for our Support Services division.

# Innovative relationships

We continue to seek innovative ways of working to deliver best value to our clients and customers. This includes joining forces with development and delivery partners to strengthen bids, maximise benefits for clients and deliver quality buildings and services for building occupiers.

We have entered into joint venture with Catalyst Housing in partnership with Reading Borough Council to regenerate the 40-year old Dee Park estate into a dynamic new living environment. The exciting vision of the Dee Park Partnership will deliver quality private and affordable homes alongside enhanced facilities such as play areas, care homes, shops and a community centre.

The benefits of these partnering arrangements are equally applicable to property care services, and in 2011 our Partnerships business formed a joint venture with affordable housing provider Acis Group. The limited liability partnership called Galatia secured a five-year, £25m repairs service contract which will see us combine both skill sets to deliver quality and reliability for residents of 5,500 homes in South Yorkshire, Nottinghamshire and Lincolnshire.

We have also developed joint ventures with Scape to develop standardised Sunesis procurement for public buildings (see opposite page) and with Poplar HARCA to renew the seven acre Aberfeldy estate in Tower Hamlets.

# **BIMM** in action

### **Birmingham City University**

Phase 1 of the Birmingham City University project is the largest Willmott Dixon has yet undertaken using BIM technology, with an estimated scheme value of approx £48m.

At Birmingham City University all three main consultants - the architectural, structural and mechanical engineers - used BIM software to provide their drawn information. Our in-house BIMM team (see opposite page) then linked the coordinated models to the delivery programme to look for time and construction efficiencies.

Thanks to the earlier collaboration, the team were able to solve a number of issues before the scheme went on-site. These included points where structural beams clashed with the architectural model and large-scale pipe work being unaccounted for in the structural delivery.

Our subcontract supply chain will adopt BIM technology in the next phase of the project. From beginning to end, the more collaborative approach represents a huge improvement in the way construction projects are run.



Computer generated image of how the Birmingham City University project will look when complete





## Modelling and managing efficiency

Responding to the Government Construction Strategy target for building information modelling (BIM) to be used on all public sector projects by 2016, we aim to adopt this process on 25% of Capital Works projects in 2012. BIM is the process of generating and managing data about a building during its life cycle, and this new way of working is part of our strategy for delivering efficient projects.

Typically BIM uses three-dimensional, real-time, dynamic building modelling software leading to a wealth of benefits including better drawings and team coordination, analysis of clashes prior to construction, accurate bills of quantities, photorealistic representations of the building and identification of dynamic health and safety risk scenarios.

To support the roll-out of the process across the Group, we have created a new, central BIMM team, which will develop our strategy and support project teams across the business. The extra 'M' stands for management, since we will be working with existing models

Our widespread use of BIMM will lead to the delivery of higherquality project information to avoid non-recoverable costs and rework that could have been avoided if project teams were working from the most up-to-date and reviewed information available. The BIM process naturally leads to cost and time savings and more efficient material specification.

#### **Excellence as standard**

Building on our relationship with Scape as their national contractor for major works, we have undertaken a joint venture to develop a standardised product range for public sector clients.

Sunesis delivers high quality, off-the-shelf public buildings to a variety of standard designs and can reduce costs by up to 30%. The education and leisure products will soon be joined by healthcare, civic buildings, law and order and emergency services designs. The first Sunesis project went to site in early 2012 (see case study below).

www.sunesisbuild.co.uk

## Reducing operational and maintenance costs

We aim to work with clients and designers to make informed decisions when specifying materials, and to understand costs associated with their initial purchase, operation, maintenance, repair and replacement over the lifetime of the building.

Our defined life-cycle costing (LCC) methodology and tools support this and help inform decisions to reduce the operation and maintenance costs of a building. We promote LCC assessments and recommendations on all Construction and Housing projects through our 10-Point Sustainable Project Criteria (see page 52).

Examples of where we have added value using WLC include altering energy strategies and making better decisions on cross-corridor fire doors based on component lifespan.

### **Sunesis**

#### A new partnership model for cost and time reduction

In March 2012 our first Sunesis project went to site in Rugby. Oakham Primary School is being constructed using the Keynes model from the range of Sunesis products which also includes Newton, Paxton and Dewey for primary schools, and Mondrian for secondary schools.

The cost savings delivered by Sunesis - up to a third of the cost of a bespoke design - meant that the client was able to commission a brand new school instead of an extension to an existing school.

Councillor David Wright, portfolio holder for resources and corporate governance for Warwickshire County Council said: "Sunesis has enabled us to reduce fees associated with legal issues, feasibility studies and design processes so we could afford to build a new structure, rather than a small extension on the existing building. There's no other comparable product that can deliver a fully designed school to meet the fast track programme we need, and we're pleased to lead its implementation in Warwickshire".

The Design Council CABE - a government body which promotes design and architecture for the public good - has endorsed the model as a "valuable response to the challenges of delivering new schools".

Oakham Primary School is due for completion in time for the new school year in September, and has been quickly followed by Southampton City Council choosing to buy three new schools from the Dewey range.

www.sunesisbuild.co.uk



The Keynes model primary school currently being built in Rugby

# Putting People First Clients

#### New energy expertise

In January 2012 we launched our new Energy Services business to expand our expertise in whole-building energy efficiency and renewable energy solutions. The new company works with both domestic and non-domestic clients to reduce energy consumption, reduce energy costs and meet carbon reduction targets.

Energy Services provides a full energy retrofit service from providing funding advice and design modelling through to carrying out works, performance monitoring and post-occupancy evaluation, and engaging with building occupiers.

The team of Energy Solutions Engineers also helps our Capital Works businesses to deliver energy-efficient new build projects, including design and construction to Passivhaus standards.

In 2011 Willmott Dixon Partnerships became an approved installer for a range of technologies under the Micro-generation Certification Scheme (MCS), allowing our qualified tradespeople to install and maintain renewable energy and heat technologies.

This is further complemented by our approval as a registered training centre and provider with the British Plumbing Enterprise Council (BPEC). This enables us to deliver the BPEC Renewable Energy Awareness programme, providing practical training to staff on the available technologies and how to install, maintain and repair them.

See pages 34 and 35 for more information on how Willmott Dixon and Energy Services are working to deliver low and zero-carbon built environment projects for our clients.

# Measuring performance

## **Domestic post-occupancy evaluation**

Building on our established non-domestic post-occupancy evaluation (POE) process, we have developed a comprehensive in-house method for assessing domestic building energy performance - which will be rolled out during 2012.

It has been created to make sure we continually improve the quality and energy performance of our buildings. Carrying out evaluations on projects is one of our 10-Point Sustainable Project Criteria. During 2012 we aim to assess at least 40% of our new projects (rising by 10% year on year). The findings are also used to help clients optimise the operation of their existing buildings, saving carbon, energy and money.

The method encompasses three elements, which are fundamental to understanding building performance:

- 1. Occupant comfort, satisfaction and behaviour
- 2. Building fabric performance
- 3. Energy and water consumption

The combination of methods will allow us to rigorously assess the factors that lead to high performance (defined as low resource consumption and high occupant comfort/satisfaction) and ensure that these are replicated in future projects.

Evaluations are conducted 12 months after initial occupancy to ensure that occupants have experienced full heating and cooling seasons.

Due to our expertise in non-domestic POEs, the Welsh Local Government Association commissioned us to develop an assessment methodology for POEs across a sample of its school estate, with a view to implementation across the entire estate.

### Passivhaus projects

# Chester Balmore, London Borough of Camden

In 2011, one of the UK's first and largest Passivhaus residential scheme got underway in Archway, North London.

The 53-unit scheme has been modelled by certified Passivhaus designers within our Energy Services team. It incorporates super-insulation to reduce heat loss through the walls, roof and floor and achieves very high levels of airtightness.

Good indoor air quality is provided by a mechanical ventilation with heat recovery system. In modelling an airtight building the team created a thermal bridge-free design, meaning that nothing must break the skin on the insulation. That required careful detailing of joints and interfaces between elements such as floor and roof. Care and attention in construction is also vital to make sure Chester Balmore performs as expected.

Due to the requirements for Passivhaus, careful sourcing of energy-efficient lighting and electrical components was needed to keep consumption within target. The rubble from the block that was demolished to make way for Chester Balmore has been reused on-site with all wood recycled, as well as all cabling and other electrical components from the demolition.

The project is due for completion in summer 2013.



Chester Balmore, Camden



# **Delivering client satisfaction**

In our Capital Works division our clients score our performance across 17 categories, including value for money, communication, creative thinking and innovation, the quality of the building and our management of environmental impacts.

We benchmark our performance against other construction companies through the Constructing Excellence key performance indicators, and we compare performance across operational teams to prioritise areas for special attention.

For projects completing in 2011 we achieved an average score of 86%, exceeding our target of 80%.

Due to their longer duration, our Partnerships contracts have a client satisfaction target clause built into them. On average we achieved 95% client satisfaction over the contracts we serviced in 2011 and met our target levels on all contracts

#### Gold standard fit-outs

Our Interiors business prides itself on delivering quality, sustainable fit-out projects, and recently delivered two high-profile projects in London to Gold-standard Ska Rating - an environmental assessment for non-domestic fit-outs led and owned by the Royal Institution of Chartered Surveyors (RICS). Mott MacDonald's offices at 10 Fleet Place and the Carbon Trust's new Dorset House headquarters - delivered by Kanvas - both achieved certification in early 2012.

# Homes built to Code and other environmental standards in 2011

Certification level	Number
Code Level 6	1
Code Level 5	7
Code Level 4	379
Code Level 3	988
EcoHomes Very Good	79
BREEAM Very Good (extra-care units)	87
Not rated	90
Total certified homes completed	1,541
Total units completed	1,631

#### Projects seeking or achieving BREEAM in 2011

Level targeted	Number
Outstanding	2
Excellent	32
Very Good	115

# **Outstanding projects**

#### **Houghton Primary Care Centre, Sunderland**

In August 2011 Willmott Dixon Construction completed a new type of health clinic, developed for Sunderland Teaching Primary Care Trust.

Houghton Primary Care Centre has put health and wellbeing at the forefront for the local community. It provides a one-stop-shop for a variety of healthcare and leisure services in a convenient location. Healthcare facilities include an illness and injuries unit; physiotherapy, treatment, diagnostics and planned care suites and a rehabilitation unit. Leisure amenities include dance and wellness studios and a multi-use games area.

The project was the UK's first to achieve BREEAM Healthcare 'Outstanding' and won the overall BREEAM Healthcare Award 2012. It demonstrates excellence across a wide range of construction and healthcare-related issues:

- It houses traditional family doctors alongside the types of services that might normally be found in a hospital or a leisure centre. This creates a link between keeping fit and staying well – a vital part of preventative medicine.
- A unique low-carbon ventilation strategy keeps the building at constant temperature all the year around. Houghton includes a thermal wall, which mixes hot and cool air from different places, depending on the climatic temperature.

After completion, Houghton was awarded £63,800 by the Technology Strategy Board (TSB) for building performance evaluation to monitor, record and analyse this special project even more closely until 2014.



Houghton Primary Care Centre

# **Putting People First** Staff

Providing our staff with the opportunity to reach their career potential, and giving them knowledge to help us deliver our sustainable development aims.

# No better place to develop a career

Training and development is embedded within Willmott Dixon's culture. £2.2m was invested in training during 2011, equating to £792 per employee compared to the UK average of £360. During 2011, each member of staff received more than four days of formal training compared to the construction industry average of just over two. Each managing director is personally responsible for the training of their employees, and every year we ask staff for feedback on how well they feel the company is supporting their professional development. Monthly training reports are submitted from across the business and monitored by the Group Human Resources (HR) team.

We run a Management Development (MDL) programme which enables us to promote people internally, rather than external recruitment to meet business needs. Over the past ten years more than 300 people have worked through the scheme, and we currently invest around £15,000 per person to provide a two-month dedicated off-the-job training programme to enable them to progress.

We have developed a comprehensive, four-level training framework that covers strategically important areas of skills development for the Willmott Dixon business: technical, management & leadership, and sustainable development.

At both levels three and four of the programme (MDL3 and MDL4) trainees attend a two-day sustainability leadership training course. The courses have been developed by Re-Thinking with content supplemented by modules from guest presenters, to include the latest developments from around the industry. The well-rounded course ensures future senior managers are fully aware of the need to drive sustainable development through the business.

# **Nurturing talent**

The Willmott Dixon Group Management Trainee scheme was established in 1979 with an initial intake of 20 trainees, and has since become one of the leading programmes in the construction industry. In 2011 we employed 108 management trainees, around 4% of our staff.

In addition to structured management training modules, trainees attend a residential training course provided by ConstructionSkills where they experience hands-on trade skills such as bricklaying, joinery and painting.

The contribution of management trainees is recognised through annual 'Trainee of the Year' awards, won in 2011 by Matt Dickens from Willmott Dixon Construction, Wales and the South West.



Matthew Dickens accepting his award at the Management Trainee of the Year Awards 2011

### Celebrating excellence

### **Construction Manager of the Year Awards 2011**

Three of our staff achieved Silver awards for their work at the Construction Manager of the Year Awards 2011. Below are the projects they delivered, and commentary from the awards

Mark Chamberlain: Aylesbury Waterside Theatre Mark's control of the substantial commercial

risk was impeccable. He built full-size facade and plinth sections to test airtightness before committing to fabrication, and the battery of acoustic tests included a full orchestra taking to the stage.

#### Richard David: City Centre Campus, University of Wales, Newport

Richard put his mind into delivering the budget and aesthetics. He took an open book approach to all value engineering to ensure savings were real and transparent, and turned the all too common promise of introducing products that enhanced quality at a lower cost into reality.

Glyn Jones: Gateshead Leisure Centre Approachable and amenable, Glyn showed

great imagination and managed the huge expectations with tact and pragmatism. He built a team that worked hard at making the wish list happen rather than issuing vetoes.



From left to right: Glyn Jones, Richard David and Mark Chamberlain



### Places to learn

# **National Training Centres**

In addition to our existing training facilities in Basingstoke and Scarborough, in 2012 we will be opening a new 'Centre for Skills' in Birmingham – a city where we already employ nearly 1,000 people.

The Centre will work with up to 2,000 students a year on a wide variety of subjects including technical trade skills, emerging technologies, health and safety, supervisor skills and energy efficiency.

Students will also be able to improve their job-seeking abilities - learning how to improve their CV-writing and IT skills - backed-up with career enhancing qualifications such as NVQs and accreditation to the Construction Skills Certification Scheme (CSCS).



Students and staff at our Scarborough training facility

## **Apprentices**

We directly employ a total of 41 apprentices within our Support Services division, with 21 recruited in 2010 and a further 17 during 2011. Apprentices make up around 5% of our trades people.

In our Capital Works division we work with our supply chain to provide apprenticeship opportunities, and are engaged with approximately 200 apprentices across our projects.

Students who have undertaken work experience are encouraged to apply for apprenticeship vacancies and we also work closely with industry providers to recruit apprentices. Successful applicants spend three years studying at a local college, complemented by on-site training under the guidance of a supervisor.

Apprentices are also offered training to become company Construction Ambassadors, working with schools and youth centres to inform young people about the routes into the construction/maintenance industry. All apprentices are automatically offered permanent employment upon completion of their apprenticeships and encouraged to undergo additional training and qualifications.

We have pledged to double our directly-employed apprentices by the end of 2012, to have a 10% representation of apprentices within our total trades workforce and to actively promote the engagement and development of apprentices within the supply chain workforce.

Our strategy is to continue to diversify our workforce and to open our apprenticeship model to all, with a particular focus on provision for women, under-represented minorities and adults. We will do this by working in partnership with groups such as Women and Manual Trades, Union of Construction Allied Trades and Technicians (UCATT) and Sector Skills Councils.

# Outstanding apprentices

### A bright spark

Brannigan Doyle is one of our most outstanding apprentices. The 21-year-old works on our Birmingham City Council contract to repair and maintain its 60,000 properties and has been with the company for two years.

Her dedication and skill has allowed Brannigan to fully complete her Level 3 City and Guilds in Electrical Installation 16 months ahead of schedule. She carries out electrical work in tenants' homes under the supervision of a fully-trained electrician.

Apprenticeship Officer, Steve Merricks, has known Brannigan since beginning to train her at Birmingham Electrical Training College. He calls her "a model student in terms of both attitude and ability," adding that she has produced work at credit and distinction level "within two

and a half years of a four-year apprenticeship programme."

Brannigan says she always wanted to pursue a practical career as a child. "It's not like me to sit back and watch," she says. "I want to have a go myself!" She has also become one of our Construction Ambassadors, showing her desire to pass on her skills and enthusiasm.

We have put Brannigan forward for the UK Contractors' Group's Apprentice of the Year Award and hope she will continue to be a valuable member of the Birmingham team for some time to come. Indeed, we expect her to begin a management trainee programme after she has had plenty of hands-on experience.



Brannigan Doyle



# Putting People First Staff

# Supporting equality, diversity and inclusion

The Willmott Dixon Charter for Equality, Diversity and Inclusion 2011-2014 lays out our aims to continue to be a place where employees feel challenged, contented and included. We have long held the belief that diverse, complementary teams are the most effective, and will continue to do so.

We already employ a workforce that is significantly more diverse than construction industry averages:

- 6.7% of our staff are from black and minority ethnic groups (BME) versus a construction average of 3.3%
- 20% of our staff are female compared with an average 13% in the wider industry

In early 2012 we achieved recognition to use the two ticks disability symbol to reinforce the message that we are positive about employing disabled people. We will look to achieve accreditation with an external equality and diversity body by 2013. We also are an integral member of the UK Contractors' Group (UKCG) Diversity Group, working to raise standards across the industry.

In 2011 all our staff undertook certified training in equality, diversity and inclusion through our customised online training module.



## **Opening Doors**

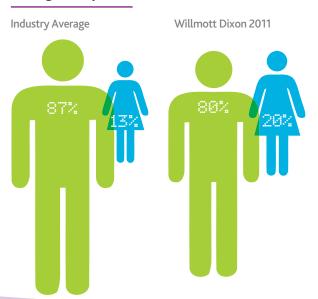
Through our unique Opening Doors scheme we offer training and development opportunities for young people, tenants and local residents in skills such as carpentry, plumbing, joinery and decorating. The scheme comprises The Work Experience Programme, The Building Maintenance Skills Programme and The Willmott Dixon Partnerships Apprentice Programme.

The aim is to attract under-represented groups into the construction and maintenance industries including females, ethnic minorities, disabled persons and vulnerable people who are unemployed or affected by redundancy.

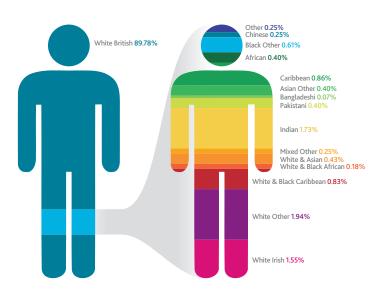
At a minimum, the company pledges to provide work experience placements of up to two weeks for 10 local people but aims to provide more placements, on-site or within an office environment. In 2011 Willmott Dixon provided 11,228 hours of work experience for 168 people who want to gain a foothold in the industry.

In partnership with ConstructionSkills we run a 12-month Building Maintenance Training Course, providing free places for up to 10 local youngsters who are not in employment, education or training. The Building Maintenance course aims to train participants to a competency level that will help them to achieve an NVQ Level 2 in Building Maintenance Operations, helping them to secure future employment and equipping them with the necessary skills to carry out basic upgrades of their own homes.

# Staff gender profile



### Staff ethnicity breakdown





## Sustainable development learning

To support our ambition to lead the sector in sustainable development we continue to build the knowledge and awareness of staff across the Group.

We have enhanced our induction process to include a comprehensive sustainable development training module, named Sustainable Development Level 1 (SDL1). This provides staff with an awareness of over arching sustainability principles and a clear understanding of the company's vision, thereby enabling more informed conversations with our clients and supply chain on our key aims and objectives.

To further develop role-specific knowledge and skills, SDL2 was developed during 2011. Prior to annual performance reviews during the year, each member of staff was required to review their knowledge levels across the following categories: Carbon, Water, Biodiversity, Community Engagement, Waste & Resource Efficiency, Responsible Sourcing and Life Cycle Costing.

Each individual's knowledge levels were then mapped against the requirements for their discipline, identified for each category at three levels: General Awareness, Working Knowledge and Expert Understanding.

The result was identification of knowledge gaps, and individual training plans to be delivered during 2012.

All of our training developments will be delivered via appropriate methods that will include off-the-job training, on-line training, podcasts and coaching.

### Sustainability Forum

The Sustainability Forum is a cross-Group team that brings together specialists from across the Willmott Dixon to coordinate implementation of sustainability initiatives and share best practice. Its guiding practices are:

- To provide a forum for representatives from each Local Company Office (LCO) to learn from other business units' activities and to share best practice and innovation
- To provide a forum to disseminate information from Re-Thinking and other sustainable development teams, and provide a feedback mechanism from the LCOs to help shape strategy and policy
- To continuously improve sustainability performance throughout the design and construction process and the life of the project

#### **Sustainability Forum objectives**

- 1. Improve 10-Point Sustainable Project Criteria performance
- 2. Produce project case studies
- 3. Consult on sustainable strategies
- 4. Increase knowledge of projects delivered by other LCOs
- 5. Support responses to bids
- 6. Support environmental KPI improvements
- 7. Learn from others in industry
- 8. Improve corporate performance

### Investing in great ideas

# Yoong Le's artwork highlights equality and diversity issues

In 2011 we held a national competition to find the best school student's designs for a poster to promote equality, diversity and inclusion throughout the company.

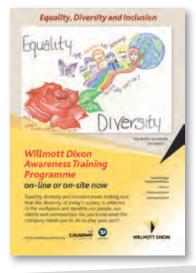
Our regional community co-ordinators encouraged local children between the ages of 14-16 to take part. They considered the benefits of a fairer society as they created designs to our brief. Four finalists were selected, and their posters put up in our offices throughout their area.

Afterwards, Group Chief Executive, Rick Willmott, and Group Chief HR Officer, Rick Lee selected a final design for display throughout the country. The award went to 14-year-old Yoong Le, from Birmingham, whose poster focused on the importance of treating everyone with the same level of respect.



**Above:** Yoong Le with Pauline Chatt, General Manager, Birmingham North

**Right:** The winning poster design



# Putting People First Suppliers

Sustainable procurement of goods, works and services in a manner that reflects our values.

## A new approach to sustainable procurement

In 2011 we revised and amended our Group Sustainable Procurement Policy to support making the right choices by reducing the consumption of primary resources and using materials with fewer negative impacts on the environment. The Policy will be fully implemented across the group by 1st July 2012 and sets out the standards for procurement of **goods**, **works** and **services** that strike a responsible balance between social, economic and environmental factors and has an impact on the whole business.

At the core of the policy is a Sustainable Procurement of Materials & Products Implementation Matrix, which focuses on increasing levels of responsible sourcing over a five year period.

#### Why develop a policy?

Over 80% of our turnover is spent procuring the goods, works and services we need to construct, refurbish and maintain buildings. The policy provides clear minimum standards for us and our supply chain.

This includes limiting greenhouse gases, buying responsibly-sourced materials, maximising resource efficiency, reducing waste, preserving water and preventing exploitation of people. It also allows us to manage our business risks.

The policy was developed by Re-Thinking in discussion with relevant business units, and in close collaboration with many of our preferred manufacturers and suppliers. It was developed in-line with principles contained within British Standard 8903, created to help the construction industry pursue best-practice sustainable procurement.



Launching the new Policy at one of our supply chain conferences

#### **Promoting environmental standards**

#### Supply chain management systems

The performance of our supply chain is fundamental to us achieving the challenging sustainability targets we have set ourselves, and we are providing support and guidance to suppliers to implement environmental management systems (EMS), as required within our Sustainable Procurement Policy.

We have provided EMS training workshops to a wide range of suppliers across our regions to help them develop EMS systems to greater understand and improve their environmental impacts. In March 2012 at one of our regional supply chain conferences in Cardiff, four suppliers were presented with their EMS certificates, achieving BS8555 Phase 3.

David Humphreys of the certifying company, Tarian Management Systems, commented:

"It is very encouraging to see industry-leading sustainability initiatives from Willmott Dixon in actively assisting and encouraging suppliers to install environmental management systems like BS 8555. As a result of this certification, not only does Willmott Dixon receive added assurance that these companies are managing their legislative and pollution risks, but also have robust systems to measure and minimise their environmental impact and utility costs."



(Left to right) David Humphreys of Tarian Management systems presenting BS8555 EMS certificates to Andy Thomas (Morgans of Usk), Nik Mason (Evans Electrical), Kevin Jones (Aberdare Demolition) and Adrian Hurley (FP Hurley & Sons) at Willmott Dixon's Wales & the West supply chain conference, March 2012



# The policy in summary: GOODS

#### Responsible sourcing

We require our supply chain to be able to tell us where materials have come from and provide details of the processes and people employed in producing them.

We have set out a clear strategy around responsible sourcing within our Sustainable Procurement of Materials and Products Implementation Matrix

#### **Embodied impacts**

To enable Willmott Dixon to effectively undertake environmental assessments of products and materials and to quantify these impacts, we have set out what we require from our supply chain within the Implementation Matrix. Material suppliers and manufacturers will now have to provide certified declarations on the embodied impacts of their products.

#### Recycled content

We have set progressive targets for recycled content levels on our construction projects which are measured through our 10-Point Sustainable Project Criteria.

#### Global warming potential (GWP)

To reduce the contribution we make to climate change, we require our suppliers to specify and use substances, (including refrigerants and insulants) with a GWP of less than five, where technically feasible

#### Volatile organic compounds (VOCs)

We are seeking to minimise the impact of materials containing toxic VOCs sourced by Willmott Dixon directly and through its supply chain.

#### Paper and timber

All paper and timber used must either be recycled or, if virgin fibres are used these must have been sourced under an approved, certified chain of custody.

#### Polyvinyl chloride (PVC)

We consider alternatives to PVC with relation to environmental, economic and social impacts. Where PVC is required we will ensure that it is responsibly manufactured and disposed of.

Energy supply and transportation Please see the 'Tackling Climate Change and Energy Efficiency' section (pages 28-37)

#### Packaging

Willmott Dixon will engage with manufacturers, suppliers and contractors to jointly develop strategies in reducing packaging on our projects.

#### Plant

We will endeavour to procure efficiently-sized plant and equipment for the task in hand and of no more than 18 months old and encourage our supply chain to do the same

#### Temporary and fixed offices

When temporary accommodation units (TAUs) are provided by Willmott Dixon on projects which are expected to last eight weeks or more, these will be fitted with energy and water-saving measures and have an Energy Performance Certificate (EPC) rating of B or higher.

When seeking to identify a new fixed office premises, we will give consideration to the likely energy performance of the building and its proximity to public transport networks.

#### **WORKS**

#### Trade contractors

Willmott Dixon will evaluate and procure work through its supply chain members to the extent that they have a comprehensive environmental policy, accredited environmental management system, can demonstrate continuous development and improvement, and are receptive to apprentices and training opportunities.

#### **SERVICES**

#### Professional services

All providers and their employees must comply with the principles and objectives set out within our procurement policy.

#### Information systems

This sets minimum efficiency and energy usage standards for office equipment.

#### Waste

We work with waste service providers who report in accordance with PAS 402: Waste Resource Management Specification for Performance Reporting, or are working towards this standard.

#### Catering

Our supply chain caterers are required to select food from pre-set, nutritionally-balanced menus using Fairtrade produce and food currently in season.

#### Agency labour and site security staff

We ensure agency staff, cleaners, site labour or site security personnel are employed under terms including the National Minimum Wage and the Agency Worker Regulations 2011. We seek to use security firms approved by the Security Industry Authority.

# Reducing embodied impacts

# **Timber construction**

At eight stories, Bridport House in Hackney is one of the UK's tallest multi-storey building to be made entirely from cross-laminated timber (CLT) including the ground floor. Willmott Dixon is a UK market leader in CLT and we have just started on our twelfth project making use of it.

We believe that CLT will become ever more popular due to its low embodied carbon and the fact that it is sourced from sustainable and renewable sources. Building this way is inherently airtight, reducing energy leakage through gaps in the structure and its operational energy.

Research we carried out with the University of Cambridge found that building Bridport with CLT instead of a concrete frame produced 892 fewer tonnes of carbon. When the carbon 'locked up' in the structure is added in, the figure is 2,113 tonnes of carbon saved – equivalent to 29 years of operational energy.

Using this data, the team successfully liaised with the local planning officer to cut the scheme's renewable energy requirement from 20% to 10%.



Bridport House, Hackney

# Putting People First Suppliers

### Helping drive up standards

We recognise that understanding and navigating the sustainability agenda can be a challenge, especially to smaller organisations. That is why we have teamed up with a number of other main contractors in support of the Supply Chain Sustainability School. Launching in June 2012, the School was set up by a number of main contractors and Action Sustainability with a grant from the Construction Industry Training Board (CITB). Its aim is to provide a consistent approach, reduce the burden of training and simplify the task. This will allow supply chains to understand their impacts and prioritise what is important, access new market opportunities and reduce the complexity of implementing sustainability.

The key to this project is that up to 80% of contractor spend is with a shared supply chain. This training and awareness-raising programme will therefore address and improve sustainability issues across a significant proportion of subcontractors, helping main contractors to deliver a more efficient construction process and better buildings for clients.

#### www.supplychainschool.co.uk



# Best performer under the Construction Skills Certificate Scheme

Willmott Dixon requires every site worker to have a Construction Skills Certificate Scheme (CSCS) card. Possessing the card shows an agreed level of occupational competence and helps to reduce accidents and drive up on-site efficiencies.

Our compliance with the scheme is audited annually by the UKCG and we were the top scoring company with 99.8% of workers able to show possession of a card. The average for all UKCG members (who are the country's leading contractors) was 96.5%.



The Supply Chain Sustainability School's learning resources can be accessed in a number of formats

# Our awards to suppliers

Each year we reward outstanding suppliers for their work. Here is a selection of the awards given out in 2011.



# Health and safety always comes first



### **Targeting zero accidents**

Health and safety for our employees and subcontractors is prioritised in a number of ways:

- We continue to target zero accidents at work
- Robust procedures implemented through our Group-wide OHSAS 18001-certified health and safety management system
- Policies, training programmes and targeted communication to prioritise safety, including our All Safe campaigns
- Practices and policies are frequently reviewed to ensure they are working and remain effective

### **Our Site Safety Supervisors**

Our project teams always assume ultimate responsibility for on-site health, safety and environmental standards. However, this is shared with our supply chain contractors. As a result they must have the correct level of competency and we continue to provide the Construction Skills Site Safety Plus Course, Site Safety Supervisor (SSS) level training to nominated operatives from every subcontractor that we use, with over 2,000 people now trained by the Willmott Dixon Group.

The outcome of this is to forge better relationships at project level so that the SSS will feel empowered to intervene where necessary and be able to communicate with their own workers and Willmott Dixon staff.

# **Accident frequency rates**

Capital Works accident statistics for 2011 showed reductions in both the accident frequency rate (AFR), down 14% from 0.28 to 0.24, and the accident incident rate (AIR) which is down from 116 to 101, a 13% reduction.

We achieved this downward trend through our attention on worker involvement and housekeeping standards on-site. This includes people on our sites having CSCS cards. We also made sure all subcontractors had a qualified Site Safety Supervisor (SSS) present, and we continued to run our SafeSpace - Clean as You Go campaign.

However, there were increases in both the AFR and AIR in our Support Services business, both of which were up around 10% on 2010.

In 2012, we will continue to train the large number of employees who were transferred to our business via TUPE. Once they are fully up-to-date with our extremely rigorous safety culture, we expect this figure to stabilise and reverse and will continue to work towards a 10% year-on-year improvement.

In order to continue driving up health and safety standards throughout Willmott Dixon, our Group Safety Inspectors visited 1,105 projects in 2011, 100 more than in 2010.

# Taking safety to the next level

# AllSafe

Having increased safety management procedures, we have seen an increase in recording near misses of reportable accidents on-site, demonstrating an increase in safety awareness.

Despite relatively good performance there is plenty we must do before we reach our target of zero accidents. To continue bolstering our standards, we launched AllSafe in March 2012.

This programme represents a new health and safety initiative, to embed safety in everything we do: from a simple repair assignment to a £90m construction project; in our offices, on the move, and in work carried out by sub-contractors on our sites.

AllSafe is developed around four principles:

- Values: No one should suffer pain
- Belief: All accidents can be prevented
- Attitude: Everyone has a zero tolerance attitude to unsafe behaviour
- Behaviour: Everyone looks out for others

Mark French, Group Head of Health and Safety, is currently working with our directors on the best ways to establish AllSafe within their offices and practices. Roll-out of the new programme will be highly visible to all Willmott Dixon employees, subcontractors and visitors to site.



Mark French launching AllSafe in March 2012

# Putting People First Community

Active engagement with the community at local and national levels by developing skills and employment, delivering considerate projects, and investing time and money to make a positive difference.

## **Community engagement matters**

The Group has the equivalent of 20 full-time posts supporting community liaison and voluntary work and has given over 15,000 hours of additional staff time to community-based work and other projects.

We are committed to developing and maintaining an organisation in which differing ideas, abilities, backgrounds and needs are fostered and valued, and as such, encourage staff to participate in an active and meaningful way in their community.

Willmott Dixon provides the opportunity for staff members to become 'employee volunteers'. We take part in national programmes, such as the volunteers' week in June and international volunteers' day in December. The Group raised, donated or volunteered time worth over £338,000 for community activities in 2011, including 15,235 hours spent doing community work.

## Developing a strategic approach to giving

In order to make sure we maximise our community investment, in early 2012 we established the Willmott Dixon Foundation.

The Foundation will bring a more structured approach to community investment and offer a strategic approach.

In its first phase, a group led by Re-Thinking will look at the work we have already carried out and how we can maximise our efforts. It will then work on developing key themes and a strategic approach to identified areas of investment.

Phase two will start after the Foundation reports back to the Holdings Board with its findings.

### Open and transparent

In 2011 we achieved gold status (93%) in the Business in the Community (BITC) Corporate Responsibility Index. This benchmarks our positive contribution to the community alongside our wider impacts. Our status shows our openness and transparency through effective public reporting of our environmental and social issues, corporate responsibility programmes and performance. This result shows a year-on-year improvement by Willmott Dixon, which achieved 80% in 2009 and 91% for 2010.

We scored full marks in two of the five areas measured by the index: Corporate Strategy and Disclosure, with a further 99% in the category of Management, 96% in Integration and 85% in Impact Areas.

Business &

Community

### Charitable support

## Dekamile - Together we are one

Willmott Dixon has been supporting the Dekamile project to provide basic services for a village, Agome-sevah, in Togo, making it our Charity of the Year. Dekamile was started by a few private individuals after they visited the region for a wedding and is now run completely at their expense.

While Dekamile gave the village its first fresh running water and roofs for its two schools, Willmott Dixon staff donated 300 shoe boxes of toys and essentials to the village's children and raised £20,000.

Soon, our involvement deepened and four staff from Willmott Dixon Partnerships - Lincoln Thomas John Saddington, Ade Ajibulo and Clive Jarrett – went out for two weeks to build a health centre and teach villagers how to maintain it. This will save locals a 50 mile walk to the nearest health facility.

www.dekamile.co.uk



Handing out toys donated by our staff to children in Togo



Providing work opportunities for the long-term unemployed at our Gwent Records Office project

# Local employment

# Delivering long-term employment skills

Willmott Dixon recognises the need to provide local employment and source goods and services from areas where we are carrying regeneration projects. This means that local people can directly benefit from the economic activity generated in their neighbourhood.

A social engagement scheme on the Records Office for Blaenau Gwent Council, Wales, shows how construction can involve and directly benefit people living very near to our sites.

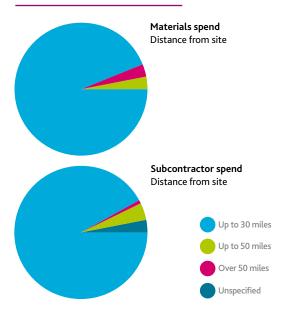
An agreement to provide as many jobs for people as possible on the General Offices project was struck between the Council, construction recruiter Rullion Alltrades and ourselves from the very start of this project.

To set up the programme, Jobcentre Plus and JobMatch collated applicant data from those expressing an interest in construction work. Rullion held an open day to check the health and qualifications of candidates. Meanwhile, we organised our work to accommodate as many local candidates as possible on the former steelworks. Rullion and ourselves then filled the vacancies. Those for whom there was no work were supported by Rullion and placed on other projects, where possible. The process continued for the duration of the project.

The numbers show that we made a very real impact on the local community in Ebbw Vale. As of winter 2011, the project had provided the equivalent to 2,267 days work to local people including 17,000 hours of work for previously unemployed local people living within 10 miles of the site, including labourers, bricklayers, and machine operators and groundworks operators

More than 36 previously unemployed people have worked at the project, and eight candidates placed with Rullion at the General Offices project used this project as a springboard into permanent construction work.

# **Local spend** (Distance from site)



# 14

# **Hayley Walker** Community Engagement Coordinator, Willmott Dixon, Birmingham



"When we carried out a project to remodel and refurbish 12 schools in the Rutland area, one of our stand-out projects in the Community Engagement Plan was creating greenhouses from discarded bottles collected by school children.

The tops and bottoms of the bottles were removed, and the bottles slid onto canes which were then attached to a timber frame.

Using recycled bottles to create greenhouse structures for the school was ideal, because plastic retains heat better than glass and is safer and easier to repair. The timber for the houses was donated by a social enterprise, TREES Group, and the frames were manufactured by young offenders from Glen Parva prison.

We were proud of the project because it showed the values of recycling as well as teaching the kids about biology and biodiversity - two things that Willmott Dixon values as it goes about its own work."



The finished greenhouses





# Putting People First Community

### Industry best on-site performer

The Considerate Constructors Scheme (CCS) aims to improve the image of the construction industry, asking sites to sign up to a set of guidelines promoting best practice, and reducing the negative impacts of projects on local communities. Willmott Dixon is an associate member of the scheme and in 2011 was, once again, the best-performing member with an overall average of 35.1 against an industry average of 32.8. We outperformed our UKCG comparators by 0.71 and non-UKCG comparators by 3.16.

Willmott Dixon has been rewarded for its efforts by winning a number of awards. Out of 8,500 sites registered last year, our Chipping Hill Primary School was runner-up for CCS' Most Considerate Site award.

We also netted four gold, ten silver and 21 bronze awards - only the top 7.5% of sites qualify for this honour.





Stephen Ratcliffe, UKCG Director, handing Lee Suffolk his award for Chipping Hill Primary School (right).

### **Transforming Lives**

#### Considerate Constructors Scheme 2012 Roll of Honour

Most Considerate Site Runner-Up Chipping Hill Primary School, Essex

#### 4 x Gold awards

- Backwell School 6th Form and Lecture Hall, Bristol
- 2. Acklam Grange School, Middlesbrough
- 3. Stockwell Park High School, London
- 4. Mardyke Estate, London

#### 10 x Silver awards

- Birkenhead High School Academy, Merseyside
- 2. Birmingham City University
- 3. Crouch Hill Community Park, London
- 4. Fitton Hill Neighbourhood Centre, Oldham
- 5. Grange SEN School, Manchester
- 6. Haberdashers' Aske's Crayford Academy, Kent
- 7. Northfleet School for Girls, Kent
- 8. Oasis Academy Coulsden, Surrey
- 9. Waingels College, Reading
- 10. Waterhead Academy, Oldham

#### 21 x Bronze awards

- 1. All Saints Academy, Bedfordshire
- 2. Barcroft Primary School, West Midlands
- 3. Christ the King Primary School, Macclesfield
- 4. Dersingham Primary School, London
- 5. Ellingham Primary School, Surrey
- 6. Gordano Growth Project, Bristol
- 7. Gunhild Way Primary School, Cambridge
- 8. Harris Academy, Purley, Surrey
- 9. Healthtec, Walsall
- 10. Landau Forte Academy (Post 16), Tamworth
- 11. Longfield High School, Melton Mowbray
- 12. Yate International Academy
- 13. Oasis Academy, Oldham
- 14. Rotherham Mortuary
- 15. St Francis Primary School, Isle of Wight
- 16. Trinity Anglican Methodist Primary School, Bristol
- 17. Williamstown Primary School, Rhondda Cynon Taf
- 18. Britannia Close, Northolt
- 19. Chawton Park Road, Hampshire
- 20. Dee Park Phase 1A, Reading
- 21. Morrisons, Peterborough





Willmott Dixon is the top performing member of the Considerate Constructors Scheme

# Representing industry to young people

We have around 100 volunteer construction and community ambassadors around the country within Partnerships and Capital Works. Their aim is to improve the number, quality and range of applicants to jobs in the industry. To do this, they forge links with students in secondary schools and further education promoting their sector, profession and company to the community, through school activities, college careers fairs and community events.

Partnerships also help organise our 'opening doors' work experience programmes and work with our branch work experience organisers. In this they must liaise with local, professional work experience coordinators and, where available, with initiatives such as A4e and Job Centre Plus. Our ambassadors undergo training to help them develop in the role. In the past year, our ambassadors have held mock interviews in schools, attended science fairs, held workshops and offered careers advice in schools and help an activity day in Wembley, attracting 300 pupils.



# **Louise Tambini**Projects Director, Keep Wales Tidy

"We were delighted that staff from Willmott Dixon gave up a collected 90 hours of their time to assist our local community groups in their environmental work. Staff from the Cardiff office regularly help Cardiff Rivers Group at weekends on river clean ups, which is of great benefit to both the local community and the environment. The group has set a great example for other companies to follow and we look forward to developing our partnership in the future."





# Positive engagement

#### A shed full of smiles

Willmott Dixon was appointed by St Albans City and District Council to redevelop Westminster Lodge Leisure Centre in March 2011. During the construction the project team received a call from a local school for assistance to solve a major storage issue.

The problem arose after Prae Wood Primary School's shed had been dismantled to make way for a new classroom to allow an additional reception class. As a consequence, the shed's contents were being stored by parents in their garages while they waited for a replacement, and the cost of a new specially built shed meant no replacement was likely in the near future. That changed when Simon Ramage and the Willmott Dixon team stepped in.

Simon explained, "We were approached by the school and its fundraising arm to see if we could

help solve their storage issue. We were delighted to, and I explained we wanted to make an impact in the community and do things that genuinely leave a positive legacy. Getting involved gave us a chance to use our skills and seeing the smiling faces of the pupils and teachers when they saw what we'd created was brilliant!"

Prae Wood head teacher Jackie Stephenson said, "I want to thank Willmott Dixon for their generous help in replacing the storage for the school's equipment, which is so useful in running our fundraising events. They showed just what a caring company they are and are a credit to the wider business community."

The project to replace the existing Westminster Lodge Leisure Centre with a state-of-the-art new complex will finish in autumn 2012.



Simon Ramage with delighted pupils of Prae Wood Primary School

# Putting People First Summary

# DATA

# Willmott Dixon people in numbers, 2011

£13.8m

Staff incentives paid out 2011

15,000

Hours of voluntary staff time to community-based work and other projects

£338,000

Cash, donations or cost of work hours gifted to communities and charities last year

93%

Score in Business in the Community (BITC) Corporate Responsibility Index (Gold status)

35.1

Considerate Constructors Scheme score against an industry average of 32.8

200

Apprentices working in our supply chain

41

Directly-employed apprentices

100

Approximate number of construction community ambassadors

£2.2m

Spent on training in 2011

108

Management trainees

20%

Fall in van accidents over the year, as a result of SafeDriver campaign

6.7%

Employees from black and minority ethnic groups, double the industry average

9%

Staff turnover, below our 10% target

99.9%

Compliance with the Construction Skills Card Certification Scheme

2,000

Total Site Safety Supervisors trained by Willmott Dixon Group

# 2012

# **Actions & Targets**

Complete sustainability action plan for all projects

100% of staff to receive sustainable development training appropriate to their grade and position

Carry out community activity on all projects and RMI contracts

Maintain customer satisfaction above 80% on all Capital Works projects

Use BIM on 25% of all projects

Retain Gold performance level in the Business in the Community Corporate Responsibility Index

Maintain staff turnover below 10%

Provide more than 10 two-week work experience placement opportunities to local people

Double the number of directly employed apprentices by the end of 2012

Have a 10% representation of apprentices in our total trades workforce

Reducing energy use and emissions from our own operations, our supply chain and the buildings we construct.



# At a glance

- Group Carbon Management Plan developed, targeting a 15% reduction in carbon emissions from 2010 to 2014
- Absolute carbon emissions reduced 3.1% from 22,056 tonnes in 2010 to 21,377 tonnes in 2011
- Relative carbon emissions (tonnes per £m) reduced 8.9% from 22.3 in 2010 to 20.3 in 2011
- Average car fleet emissions down from 135g/km in 2010 to 128g/km in 2011
- Penalties imposed on business units for exceeding mileage limits during 2011 totalling £130,000, with the money re-invested into Carbon Management Plan initiatives
- Electronic data capture systems implemented across offices, transport and sites
- Continued commitment to be carbon neutral by the end of 2012

We reduced our carb

(3.1%) from 2010 to 2011

Willmott Dixon will be carbon neutral by the end of 2012\*

46

The United Kingdom's commitment to reduce carbon and other greenhouse gas emissions is now a matter of legal obligation. The strategy by which this might be achieved will reach deep into every aspect of the built environment, and depends for its delivery upon the construction industry working at its best."

Low Carbon Construction report, HM Government Innovation & Growth Team

# **Reducing our impact**

We consume electricity and gas to provide us with heating, lighting and cooling for comfortable environments, and electrical technology increases our productivity. We travel and commute in vehicles mostly powered by fossil fuels, and machinery and electrical equipment allow us to undertake tasks more quickly.

Energy consumption enables efficient working practices, but it is not always used in the most efficient way. This unnecessary consumption, alongside inevitable increases in energy prices and security issues, mean that inefficiencies must be addressed, and we all need to reduce our dependence on fossil fuels.

As a business we are working to address this in a number of ways, including:

- · Investing in reducing the energy demands of our offices and site cabins
- Reducing the emissions of our vehicles, seeking to reduce miles driven and rewarding people for choosing low-carbon cars
- Specifying energy-efficient appliances, equipment plant and machinery
- Continually developing systems to enable us to monitor, report and target energy consumption

Initiatives such as these will help us to reduce costs and reduce our impact on climate change. To further mitigate our impact, we remain committed to being carbon neutral in our operations\* by the end of 2012.

We are also working hard to improve the energy efficiency of the buildings we construct to enable our clients and building occupiers to reduce energy costs and their impact on climate change. The buildings we construct, refurbish, repair and maintain will consume energy for many years to come, and ensuring they represent an efficient, low-carbon legacy is perhaps our greatest challenge.



**John Frankiewicz** Divisional CEO, Willmott Dixon Capital Works and UK Green Building Council Trustee



EVERYBODY PLAYS A PART "The built environment accounts for around 50% of all UK emissions, and the construction sector therefore clearly represents a key opportunity for the UK in meeting the mandate to reduce emissions by 80% by 2050.

Willmott Dixon is aiming to drive these opportunities throughout our business and beyond; to show leadership in delivering low-energy building design and low-impact construction, energy-efficient repairs and maintenance services, and crucially to help to provide the understanding and tools for occupiers to minimise the life-cycle carbon impact of the buildings."



# Tackling Climate Change and Energy Efficiency

### **Managing Energy Use and Emissions**

We have been actively seeking to reduce energy use and emissions for a number of years, and during 2011 initiated steps to formalise a reduction TRUST programme through the development of a Carbon Management Plan. Engaging with the Carbon Trust for advisory services, we strengthened our boundaries for carbon footprinting and reporting (see opposite page), and reviewed our approach to carbon management.

The Carbon Management Plan sets out a programme to reduce emissions and targets a 15% reduction per £m of turnover by 2014, compared to a 2010 baseline. Initiatives already identified to work towards this 15% reduction across our offices, transport and site will require a seven-figure investment by the company.

However, the Plan also identifies a strong business case to invest in these energy reduction measures. We have predicted that without intervention our energy costs will increase from £6m in our 2010 baseline to £13m by 2014 given projected business growth and energy price rises. If we achieve the planned reductions in energy consumption, this will reduce projected 2014 costs to below £10m, realising savings of more than £4.5m from 2011 to 2014.

In 2012, we will be developing individual plans for each region in order for them to take local responsibility for emissions over and above reductions anticipated through the delivery of Group-level policy. During 2012 we will also be reviewing plans for certification or third party assessment of our Carbon Management Plan.

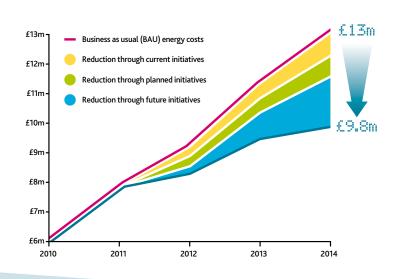
# **Becoming Carbon Neutral**

The overriding aim of the Carbon Management Plan is to reduce the energy use and carbon emissions of our operations. However, it will not be possible to eliminate all of these in the foreseeable future. We wish to mitigate the impact of these emissions as far as possible, and therefore have a commitment to offset our emissions to become carbon neutral in our operations by the end of 2012.

Becoming carbon neutral will involve investing in projects outside of our own business – through the purchase of carbon offset credits – that have measured and permanent emissions reductions, and all projects we invest in will be verified by recognised third-party organisations.

Our offset strategy is being developed with recognised PAS 2060 principles, and we have commenced discussions with potential offset partners to identify projects that resonate with our company vision and values.

# Carbon management: Projected energy cost savings



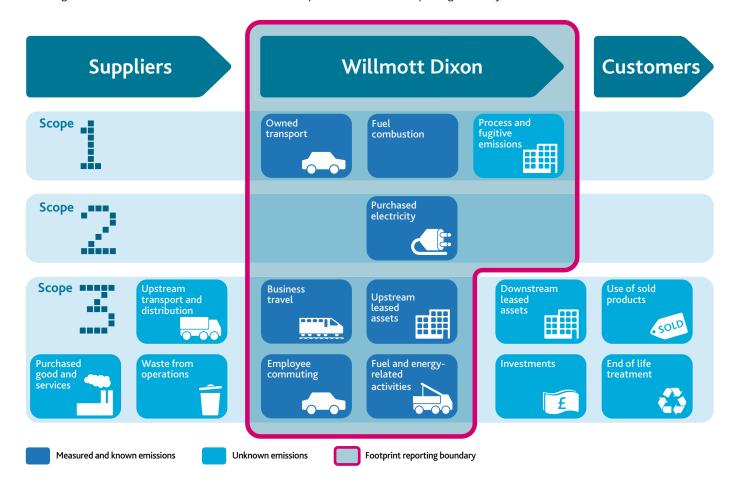




"The strategic-level commitment at Willmott Dixon to reduce our impact on climate change is clear. Investing significant sums of money to reduce emissions based on projected future savings demonstrates the responsible and forward-thinking nature of the company, and we truly believe that our Carbon Management Plan will help us to become more efficient in our use of energy, and to become more efficient as a business."

# **Carbon Emissions and Operational Boundary**

The diagram below illustrates Willmott Dixon's carbon footprint and defines our reporting boundary.



# Summary of Greenhouse Gas (GHG) 2011 emissions

CO <sub>2</sub> e emissions (Tonnes)		Perforn	% Change	
	Notes	2010 (Baseline)	2011	2010/2011
Scope 1	1	11,665	11,368	(2.5%)
Scope 2	2	4,280	3,183	(25.6%)
Total Scope 1 and 2 emissions		15,945	14,551	(8.7%)
Willmott Dixon Scope 3 emissions	3	2,298	3,053	32.9%
Total Willmott Dixon emissions		18,243	17,604	(3.5%)
Subcontractor emissions	4	3,813	3,773	(1.0%)
Total reported emissions	5	22,056	21,377	(3.1%)

#### Notes

- a. Company vehicles where fuel is purchased/remunerated by Willmott Dixon. b. Direct fuel combustion by Willmott Dixon, for example gas in offices and diesel in generators.
- 2. Emissions associated with consumption of purchased electricity.
- 3. Emissions from business travel and commuting in private vehicles.
- 4. Emissions from direct combustion of fuels by sub-contractors on our sites.
- 5. Emissions associated with the activities noted above have been determined on the basis of measured and estimated energy and fuel use, using Defra/DECC's GHG Conversion Factors for Company Reporting for the relevant period.

CO <sub>2</sub> e intensity (Tonnes/£m turnover)		Performance		% Change	2014 Target	
Notes		2010 (Baseline)	2011	2010/2011	Reduction % (2010 baseline)	Intensity
Total Scope 1 and 2 emissions	1,2	16.1	13.8	(14.2%)	15.0%	13.7
Total Willmott Dixon emissions	1,2,3	18.4	16.7	(9.3%)	15.0%	15.7
Total reported emissions	5	22.3	20.3	(8.9%)	15.0%	19.0

# **Tackling Climate Change** and Energy Efficiency

## **Reducing energy consumption**

A number of initiatives already in place achieved real reductions during 2011, with numerous new initiatives developed as part of our Carbon Management Plan. They are all aimed at driving further reductions across our offices, transport and sites for 2012 and beyond.

#### Offices

Whilst electricity and gas consumption within our offices contributes a relatively small proportion of our overall direct emissions (5%, 819 tonnes) it is essential to address all aspects of our footprint. Our offices present an opportunity to demonstrate energy performance contracting in operation and show leadership in addressing our impacts.

Detailed office sustainability surveys undertaken in 2010 assessed existing building fabric, building services and other operational factors that could influence energy performance. A range of cost-efficient energy improvement measures to be applied as a retrofit to each office was then developed and approved by the Willmott Dixon Board. This committed the company to installing £240,000 of capital measures to improve efficiency across the Willmott Dixon office estate, and work commenced in early 2012.

In tandem with this, our office energy metering and monitoring programme completed during 2011. Installation of automated metering equipment across our estate provides real-time information and reporting which will enable us to measure the reductions achieved through our improvement programme. In 2012 we are also piloting an energy management process and behaviour change programme, and visual reporting of real-time office performance will provide a major benefit in implementation of any local energy management initiatives.

#### Sites

Our construction-sites represent 39% of our overall direct emissions (6,740 tonnes). The majority of emissions resulted from diesel combustion in generators and machinery, accounting for 4,018 tonnes, with 2,406 tonnes and 316 tonnes resulting from electricity and gas consumption respectively.

To reduce the impact of our site accommodation we have specified eco-cabins on all new projects from September 2011. The additional low-carbon features of these cabins will deliver savings though lower energy consumption. We are continuing to engage with our cabin provider in 2012 to further improve their performance.

Our Sustainable Procurement Policy states that we endeavour to procure all plant and equipment efficiently-sized for the task in hand and no more than 18 months old. This plant is more energy-efficient and cost-effective to run and reduces CO<sub>2</sub>. NOx and particulate emissions from engines.

The emissions figures above relate to energy and fuel directly procured by Willmott Dixon, but we recognise that our supply chain also procures fuel and energy for consumption on our sites, with subcontractor emissions measured to be 3,773 tonnes in 2011. Our Sustainable Procurement Policy encourages our supply chain to adopt the same standards as our own for plant and equipment employed on our sites.



Eco-cabins are specified on all new projects, and we are working with our cabin provider to further improve the efficiency of these

# Fleet car emissions (g of CO<sub>2</sub> per km)









# **Transport**

In 2011 our cars emitted 6,937 tonnes of  $\rm CO_2$  and our vans 2,596 tonnes, accounting for a combined 56% of our overall direct emissions. Improving our performance in this area is paramount to achieving our targeted emissions reduction levels, and we are investing significant finances and resources into developing the best low-carbon solutions for our transport fleets.

# Rewarding responsible vehicle selection

We have a 'green bonus' scheme in place to reward employees for selecting low-emission vehicles, and in 2011 paid out more than £77,000. Since 2007, more than £340,000 in green bonuses have been paid to Willmott Dixon staff resulting in a more efficient fleet, both in terms of emissions and reduced running costs. During 2011 this scheme – previously aimed at company car users only – was extended to employees opting to receive a car allowance and purchase private vehicles.

## Maximum mileage limits

Reducing the number of miles driven for business purposes is a key element of our transport emissions reduction plan, and we have imposed maximum mileage limits for individuals' business travel and commuting. Business units face penalties if these are exceeded, with total fines levied for 2011 mileage totalling £130,000, with the money to be re-invested into carbon reduction initiatives. See the example to the right of how these limits help to reduce miles driven by our employees.

#### Modern fleet technology

In 2012 we will be reviewing options for our van fleet to operate on compressed natural gas (CNG) and compressed biomethane gas (CBG). Benefits of doing this could include reduced fuel cost, emissions reductions and improved local air quality through reduced nitrogen oxides (NOx) and particulate emissions.

# Mark French Group Head of Health and Safety, Willmott Dixon



EVERYBODY PLAYS A PART "Our health and safety inspectors travel the length and breadth of the country to enforce consistent standards across all projects. The team reviewed their business travel strategy to reduce mileage and as a result miles driven fell by 24,749 between 2009 and 2010. New initiatives further reduced this by 16,908 miles in 2011, resulting in an overall fall in miles driven from 187,329 miles in 2009 to 145,672 in 2011, a reduction of 22%.

Reducing mileage for the Group health and safety site inspectors was a major challenge, because we have a separate reward scheme which requires every site to be visited four times every six months, including visits by different inspectors to ensure fair and open audits. We are very proud that we have been able to reduce our miles driven by such an extent, whilst ensuring delivery of our rigorous standards across all projects"



### **Efficient fleets**

# Committed to reducing transport impacts

Willmott Dixon is a Certified member of the Energy Saving Trust's (EST) Motorvate scheme, which demonstrates an ongoing commitment to a programme of carbon reduction from our vehicles fleet.

To achieve this level of membership we have had an EST Green Fleet Review and have demonstrated robust fleet data, achieving EST standards which is audited annually to enable monitoring and target setting. Membership gives us access to expert advice and information on latest fleet technologies which will help us to continually reduce our emissions from transport activities.

David Watts of the EST comments:

"Willmott Dixon has taken a comprehensive approach to reducing the carbon emissions from its transport operations. In the five years that EST has supported the team at Willmott Dixon with its sustainable transport strategy, the company has successfully implemented a wide range of policies designed to reduce vehicle emissions and business mileage."



David Watts, Fleet Partnership Manager, EST

# The buildings we construct, refurbish and maintain

The ongoing operation of the buildings we construct represents our greatest impact on climate change and we continue to employ innovative construction solutions and technologies designed to improve building energy efficiency. The Government has taken steps to reduce the impact of our buildings on the environment by introducing a number of measures, including zero carbon targets for new build, and the Green Deal for the retrofit of existing properties.

Willmott Dixon sees this development as an opportunity to contribute to a better built environment. The company has structured itself to deliver these opportunities, including the creation of a new business unit, Willmott Dixon Energy Services, in January 2012 (see page 10).

We are committed to continue researching and developing low-carbon building design, construction and maintenance, with some of the initiatives we are already undertaking outlined within these pages

#### Certified installations

In 2011 Willmott Dixon Partnerships became an approved installer for a range of micro-generation technologies under the Micro-generation Certification Scheme (MCS). The MCS accreditation will allow Willmott Dixon's qualified trades people to install and maintain micro-generation technologies used to produce electricity and heat from renewable sources.

This is complemented by our approval as a registered training centre and provider with the British Plumbing Enterprise Council (BPEC) enabling us to deliver the BPEC Renewable Energy Awareness programme. This allows us to provide practical training to project managers and supervisors on the available technologies and how to install, maintain and repair them.

## Zero carbon buildings

A coordinated approach to the design, construction handover and occupation of buildings will be required if all new homes are to be zero carbon by 2016, and all new non-domestic buildings zero carbon by 2019 as the Government plans. As well as being energy-efficient in design and construction, the new generation of buildings must be build-able, habitable and easy to use to ensure they perform as intended.

Willmott Dixon is currently engaged in a range of projects targeted at understanding and improving the energy and carbon performance of the buildings we construct, refurbish and maintain. Specialists within the new Energy Services business are able to undertake extensive testing on completed projects such as thermal imaging, airtightness tests, in-situ U-value measurements, energy monitoring and site audits. Coheating tests are also undertaken on projects we have delivered – whereby actual heat loss is compared with the designed heat loss prediction.

Another example of research includes looking at the performance of the lighting in our offices in the Grade II listed, Edwardian Spirella Building in Letchworth, where the Willmott Dixon head office is located. We have installed comprehensive sub-meters and monitoring equipment and will be trialling a variety of different lighting system combinations and controls. Results from this trial will help us understand which systems and controls are most effective, both for reducing our own energy consumption and for installation in our projects.

#### Zero carbon in-use

#### Crouch Hill, London Borough of Islington

We made great progress on the UK's first zero carbon in-use school last year. Ashmount Primary School and Bowlers Nursery are being built on a community heat and power network, meaning that excess energy will be exported to local housing. The energy centre is powered by a biomass boiler and a gas-fired combined heat and power (CHP) unit.

As well as the energy centre, the project also features improved parklands and a new youth centre. The £13m scheme will be rated BREEAM 'Outstanding' and offers an example of how community energy distribution can be carried out to improve energy efficiency and reduce carbon.



Crouch Hill, Islington



# **David Adams** Technical Director, Willmott Dixon Energy Services and Director, Zero Carbon Hub



EVERYBODY PLAYS A PART "Willmott Dixon sees the need to provide low and zero carbon developments to clients and building occupiers as an exciting opportunity. The multiple benefits of pursuing low-carbon new buildings and the Green Deal finance for retrofit include not only reduced energy bills and emissions, but also increased energy security, job creation and comfortable home environments for many. Willmott Dixon Energy Services has an in-depth understanding of how energy-efficient design and technologies can deliver reduced energy in use – which is how we will support the business."

# **Assured performance**

There is a recognition within the industry of a performance gap between 'designed' and 'in-use' energy consumption. As a result of increasing energy costs and regulatory drivers such as the Carbon Reduction Commitment Energy Efficiency Scheme (CRCEES), clients are becoming increasingly aware of this gap and are starting to demand assurances that specified levels of performance can be achieved over the lifetime of their buildings.

Willmott Dixon welcomes this approach and has started working with clients to deliver assured energy performance for their projects. An example is at the Keynsham Regeneration project for Bath and North-East Somerset Council, where the project team has clear objectives of delivering in-use performance to achieve an A-rated 'in-use' Display Energy Certificate (DEC), in addition to a 'designed' A-rated Energy Performance Certificate (EPC).

# **Soft Landings**

Delivering assured energy performance demands processes which give our clients and building users the best possible support when occupying a new building.



The Soft Landings Framework approach, which we are managing at all stages of the Keynsham Regeneration Project, is a key part of delivering this performance. Many aspects of Willmott Dixon's project management, pre-handover and post-handover support already reflect the Soft Landings approach. On Keynsham extra focus and resources will ensure that heating, lighting and ventilation controls are adapted for both energy efficiency and ease of use.

# **Post-Occupancy Evaluation**

Post occupancy evaluations give us a greater understanding of end-user energy consumption, provide invaluable information and data to feed back into the design and build of future projects, and lead to more sustainable projects for clients.

Our POE process combines an occupant survey, interviews and an analysis of energy consumption data, to identify lessons learned and provides recommendations for subsequent projects. These give us particularly useful information on building energy performance compared to design intent.

#### **Green Deal**

The Green Deal is a government initiative which will enable building owners to have energy efficiency retrofit works undertaken at reduced or no up-front cost, with repayments lower than the savings on energy bills.

Willmott Dixon is fully engaged with this exciting development. At a policy level we have been integral in the development of Green Deal and ECO, the energy efficiency subsidy initiative, and in April 2012 signed an agreement with Government to be a Pioneer Green Deal Provider. In parallel to this, we expanded our capabilities within low energy retrofit by working on a ground breaking scheme with South Cambridgeshire District Council. The project delivered retrofit to private residential homes at Rampton Drift, Longstanton, all of which will be monitored for two years to see how they perform in use. Energy-saving measures installed in the homes included solid wall and tile hanging insulation, solar panels and super-efficient boilers worth a total of £320,000.

In 2012 Willmott Dixon will commence a 3 year programme to install energy-efficient measures to more than 2,000 homes in Wales as part of the Welsh Government ARBED programme.

# Reducing embodied carbon

#### **Carbon budgeting**

World Wildlife Fund (WWF) planned a very energy-efficient building for its headquarters in Woking. Because the operational energy had been reduced to levels far below most existing buildings, mitigation efforts were shifted to embodied carbon. Willmott Dixon is working with project partner Sturgis Carbon Profiling to build the HQ according to whole-life costing measurements. Part of the plan involves the creation of a budget for all carbon emitted in the construction process and building materials – down 31% when measured against a building-specific benchmark. 11% of this budget relates to material specification, transport of materials, energy used on-site, subcontractors travelling to and from the site and plant used in building the project.

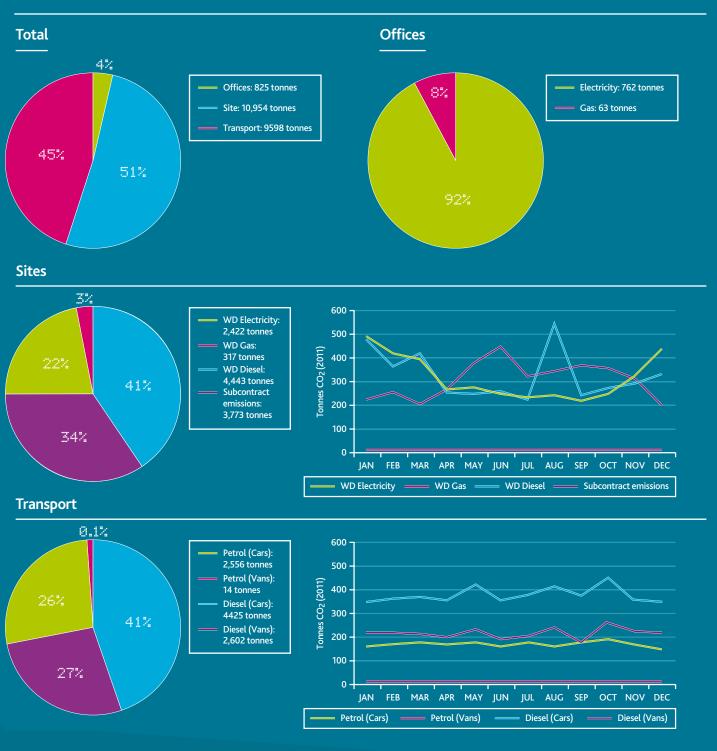
In practice, this means when we carry out any changes on the building, such as switching window suppliers, we have to ensure our substitutions stay within the carbon budget. We are also involved in an ongoing data collection exercise on-site, using meters to analyse energy use from day-to-day, including the consumption in cabins, on computers, and in heaters. By analysing this data and identifying peaks and anomalies we are be able to focus on areas where there is excessive use of energy.



World Wildlife Fund headquarters

# Tackling Climate Change and Energy Efficiency Summary

# 



Green Bonus payments to staff since 2007 for selecting lower-emitting vehicles

## 2012

## Actions & Targets

Fully implement Carbon Data Capture System for reporting office, transport and site emissions

Implement the Carbon Management Plan across the whole of the business

Reduce emissions from our offices, transport and sites by 2.5% per £m turnover compared to 2011

Seek certification or third party assessment of our Carbon Management Plan

Reduce maximum emissions to 130g CO<sub>2</sub>/km for new company cars

Review options for our van fleet to operate on low-carbon and alternative fuels

Target average emissions from sites of 1,100kg per £100,000 project value

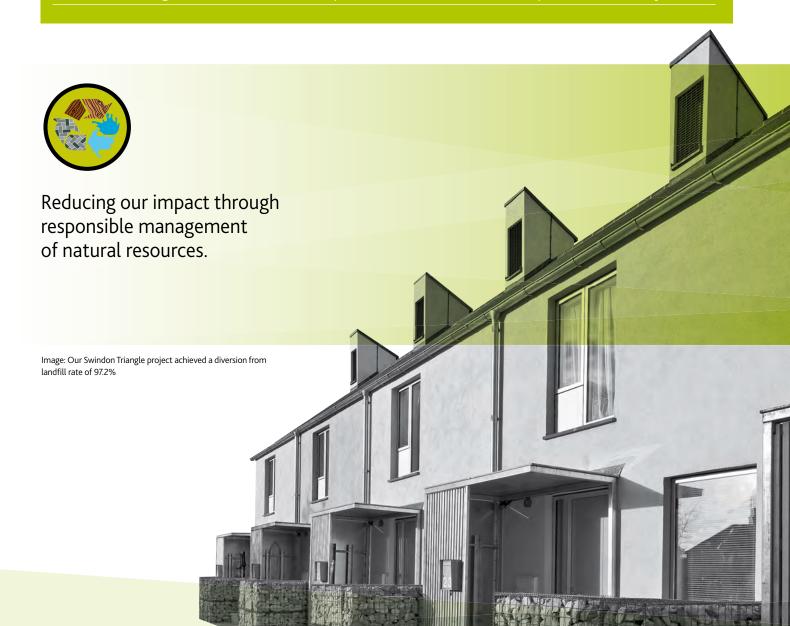
Expand our understanding of Scope 3 emissions outside of our direct control

Develop embodied carbon objectives for Capital Works projects

Implement carbon offset strategy to become carbon neutral in our operations by the end of 2012

## At a glance

- Group Sustainable Procurement Policy fully revised and updated
- New Environmental Data System (EDS) developed and implemented across all Capital Works projects
- 96% of construction, demolition and excavation waste diverted from landfill
- Construction waste generated per £100,000 reduced from 10.5m3 in 2010 to 9.8m3 in 2011
- · Waste Action Plan developed to help drive towards achieving zero waste to landfill
- Several material takeback schemes trialled and implemented, including insulation and plastic materials
- Continued reporting of waste performance to industry, via WRAP's Waste to Landfill Reporting Portal
- 22 employees achieved City & Guilds Level 2 NVQs in Sustainable Waste Management
- Construction-related water consumption per £100,000 fell 14% from 11.7m³ in 2010 to 10.0m³ in 2011
- · Increased average client scores for both impact on the environment and impact on biodiversity



## Managing our impacts

As a company with core activities in construction, refurbishment, repairs and maintenance, our work inevitably involves the procurement of materials, generation of waste and water consumption. The construction industry as a whole consumes more materials and generates more waste than any other industry.

Willmott Dixon has to play its part in reducing the impact of construction on natural resources. During 2011 we continued to work in a number of areas towards achieving this, including:

- Developing a fully revised and updated Group Sustainable Procurement Policy
- Contributing to key industry bodies encouraging and adopting responsible sourcing principles
- Further embedding processes to eliminate and manage waste
- Developing an Environmental Data System to measure, monitor and report our on-site activities

Willmott Dixon aims to intelligently manage resources in order to protect renewable and non-renewable resources, water, biodiversity and ecological habitats.



## Martin Ballard Group Environment Manager, Willmott Dixon



EVERYBODY PLAYS A PART "Willmott Dixon's structure for environmental management enables delivery of best-practice across the Group. The team of environmental managers with additional support from sustainability managers and Re-Thinking ensures all sites and branches are visited on a regular basis. Integrated Management Systems across Capital Works and Partnerships have fully embedded environmental procedures, with systems being developed during 2012 to audit projects for their compliance with the new Sustainable Procurement Policy."

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Responsible sourcing of construction products is an ethos of supply chain management and product stewardship, encompassing social, economic and environmental dimensions."

BRE Global



Clients gave us a 10 out of 10 score on 23 sites for effective management of environmental issues on our sites during 2011

## Responsible procurement

During 2011 we set out to review and amend our Group Sustainable Procurement Policy and the resulting document includes clear aims and objectives governing our procurement of goods, works and services. It also shows how they should strike a responsible balance between social, economic and environmental factors.

The new policy addresses a number of issues including responsible sourcing, embodied impacts, recycled content, global warming potential, volatile organic compounds, paper, timber, PVC and energy supply.

The policy has been communicated to all key manufacturers, suppliers and subcontractors, asking for feedback on how implementing its requirements could impact on their business, and the service they provide to us.

The policy was published in February 2012 for immediate implementation across the business, with compliance to be audited from July 2012.

To ensure our efforts are in-line with Government and industry direction, we develop initiatives and targets, and review performance against the Strategic Forum for Construction's action plans, published to deliver the aims of the Strategy for Sustainable Construction.

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Jane Thornback Sustainability Policy Advisor, Construction Products Association and Coordinator of the Strategic Forum for Construction's Sustainable Construction Task Group



"It is encouraging to see leading construction companies such as Willmott Dixon setting ambitious sustainability goals linked directly to the industry action plans of the Strategy for Sustainable Construction.

More importantly it is good to know that they are reviewing the action plans and implementing robust processes to enable them to deliver on the key industry goals."

EVERYBODY PLAYS A PART

## Responsible sourcing implementation matrix

	1st July 2012	End of 2013	End of 2015
Procurement of Timber	All fixed timber and timber products (including hoardings) must be sourced with either PEFC or FSC with the appropriate chain of custody documentation.	All fixed timber and timber products and temporary materials such as scaffolding boards and formwork used on any Willmott Dixon Project must be sourced with either PEFC or FSC and the appropriate chain of custody documentation.	All timber and timber products (including Pallets) used on any Willmott Dixon Project must be sourced with either PEFC or FSC and the appropriate chain of custody documentation.
Procurement of Materials and Products	Suppliers to be working towards ISO14001 or BS8555 and Responsible Sourcing standard such as BES6001, or developing sector specific BS8902 or equivalent.	Suppliers must have ISO14001 or BS8555 and be working towards Responsible Sourcing standard such as BES 6001, or developing sector specific BS 8902 or equivalent.	Suppliers must have ISO14001 or BS8555, Willmott Dixon will procure with a strong preference towards manufacturers that have formal certification of responsible sourcing such as BES 6001 or BS8902.



## Responsible sourcing

## Reinforcing sustainable projects

Willmott Dixon is a scheme council member for Eco-Reinforcement, which is a third-party certification scheme developed by the reinforcing steel industry to comply with BES 6001 Responsible Sourcing of Construction Products.

Willmott Dixon has a preference for using materials that are responsibly sourced, and steel certified to this standard was recently used at both the City Centre Campus for the University of Wales, Newport, and the new Royal Welsh College of Music and Drama, Cardiff.



 ${\it City Centre Campus, Newport, University of Wales}\\$ 



## Improved measurement and reporting

We have collected some of the most detailed environmental data in the construction industry, recording all energy, water and waste performance across all projects since 2006. During 2011 we took significant steps to further improve this through the development of a bespoke, online Environmental Data System (EDS). Our new system will provide a wide range of benefits to the business, including:

- Improved flexibility for sites to record environmental key performance indicator (EKPI) data
- Increased accuracy and robustness of data measurement and reporting
- Up-to-date reporting at site, regional, divisional, and company-wide levels, accessible by all Willmott Dixon staff

The tool will also allow us to track all carbon emissions across the business, following the introduction of systems to capture transport emissions, and emissions from offices.

In 2012 we are developing advanced reporting functions which will allow all staff across the Group to access live environmental performance data and specify bespoke reporting according to their needs.

### **Increasing environmental awareness**

## Developing a qualified workforce

In early 2012 Willmott Dixon Partnerships presented 22 employees from the Birmingham branch with their City & Guilds Level 2 NVQs in Sustainable Waste Management. We were among the first in the construction industry to adopt this qualification and invested around £100,000 towards supporting members of staff in gaining this qualification across the business.

Willmott Dixon Partnerships' Operations
Director in the Midlands, Asha Patel, presented
the team with their certificates and said,
"This is a great achievement for individual team
members. It's also a sign that we are equipping

our staff with the right tools and qualifications so that they are prepared for environmental changes and challenges that the industry may face in years to come."

The awards were made during Adult Learners' Week, which is an annual event co-ordinated by the National Institute of Adult Continuing Education (NIACE). It celebrates learners and promotes the benefits of learning vocational skills and leading to a qualification.



Birmingham employees awarded their Level 2 NVQs in Sustainable Waste Management

#### Towards zero waste to landfill

Our procurement of goods, materials and services inevitably leads to the creation of waste; both in the installation of newly-procured materials and the removal of existing materials.

In 2008 Willmott Dixon set an ambitious and industry-leading commitment to divert all construction, demolition and excavation waste from landfill by the end of 2012. We have worked hard towards achieving this, and are pleased with our progress with annual diversion from landfill rates increasing year-on-year from 60% in 2007 to 96% in 2011. During the year we generated 678,100m³ of waste, with 25,500m³ sent to landfill.

Key to achieving our goal is identifying which waste streams are still being be sent to landfill, eliminating them or finding ways these materials can be reused, recycled or recovered. This includes designing out and working to avoid generating these wastes, developing takeback schemes with manufacturers, and working with waste management companies able to divert these wastes from landfill.

We continue to work towards our commitment and a number of projects we completed in the year demonstrated that diversion from landfill performance in excess of 98% is achievable (see table below).

## Committed to ongoing waste reduction

Construction waste generated for every £100,000 project value was reduced to 9.8m³ in 2011, down from 10.5m³ in 2010. In 2012 we will be strengthening our reporting of the amount of construction waste we generate, and from 2013 this will be used as the key measurement and targeted area for waste management performance improvement.

Re-Thinking delivered a number of 'Designing Out Waste' workshops to Willmott Dixon design teams, in-line with WRAP guidance. This training encourages teams to follow the five 'lean' principles, designing for:

- Reuse and recovery
- Waste efficient procurement
- Off-site construction
- Deconstruction and flexibility
- Materials optimisation
- We continue to work with WRAP in a number of areas to minimise waste and increase resource efficiency across our business.

Additionally we have developed guidance and improved processes to encourage more demolition and excavation wastes to be re-used and recycled on-site, as a preference to the material leaving our sites as waste. Examples include more than 25 projects where we have adopted the Contaminated Land: Applications in Real Environments (CL:AIRE) protocol. This re-classifies excavated material that would previously have been waste by showing potential re-uses for it. CL:AIRE also includes processes for managing the material and having it approved by qualified professionals. Additionally the WRAP Quality Protocol is used where possible across projects to re-classify inert waste as a material for re-use on-site or off-site.

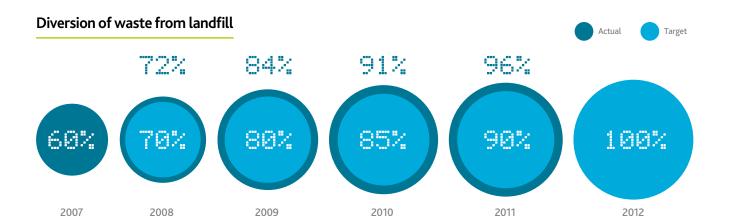


#### Top performing sites completed in 2011

Project	Waste diverted from landfill
Coulsdon College	99.2%
Netherhall ATP	98.9%
Red Lion Street	98.6%
Grange SEN School	97.5%
Royal Welsh College of Music & Drama	97.5%
Bridport House	97.3%
The Triangle, Swindon	97.2%



Royal Welsh College of Music & Drama



## **Managing waste**

We aim to manage wastes on our sites in the most efficient way by encouraging re-use and recycling on-site, maximising segregation and ensuring we are working with waste contractors with the highest diversion from landfill rates.

Our detailed Site Waste Management Plan (SWMP) data allows us to identify waste streams that are still difficult to divert from landfill, and we are acting on this by working with a number of manufacturers to trial and implement takeback schemes for these materials. In 2011 and early 2012 we asked all of our main suppliers to provide information on takeback schemes they operate.

We are also working with product suppliers to apply the waste hierarchy to the management of waste materials and encourage re-use ahead of recycling and recovery, for example making use of discarded furniture and the repair and repatriation of pallets. In addition to improving our management of waste and increasing diversion from landfill, these initiatives result in direct cost savings.

Our Sustainable Procurement Policy states that we aim to work with waste contractors reporting their performance in accordance with PAS 402, which is a specification for performance reporting for waste management organisations. In 2011 we worked with industry bodies to encourage a greater number of waste contractors to adopt the standard across England and Wales.

To maximise diversion of demolition waste from landfill, in early 2012 we developed a new pre-demolition audit process which will strengthen our engagement with contractors to identify more efficient ways of managing materials from this phase.

#### **Recycled content**

Our target to divert 100% of waste from landfill through minimising and managing waste is a responsible aim, but we also recognise the need to 'close the loop' by specifying materials with higher recycled content, thereby helping to create markets for the materials we and others are recycling. This will help to reduce the quantities of material sent to landfill and use of virgin materials.

The takeback schemes we are developing with manufacturers - in addition to improving diversion from landfill - also promotes closed-loop recycling thereby increasing the recycled content of their materials.

Our new Sustainable Procurement Policy strengthens our aims in this area, and we encourage and incentivise projects to increase the recycled content of materials procured through our 10-Point Sustainable Project Criteria (see page 52), which sets increasing targets across Construction and Housing projects.

## **Closed-loop recycling**

#### Kingspan takeback scheme

During 2011 we identified that 8% of the construction waste we were sending to landfill was insulation material, and have worked to develop solutions to improve the management of insulation waste.

Engaging with Kingspan Insulation we trialled a takeback scheme at our Landau Forte Academy project in Tamworth. During the trial 230kg of insulation material was returned to Kingspan for recycling and reuse. The cost of operating the takeback scheme was identified to be cost-neutral compared with removal from site by a traditional waste management company.

Following the successful trial, the takeback scheme is now available on all Willmott Dixon projects. We are also continuing engagement with a number of other material manufacturers and suppliers to develop new takeback schemes and to improve the management of their waste materials.

Karen Jones, Business Development Manager at Kingspan comments: "By working with Kingspan to help develop takeback scheme, Willmott Dixon not only reduces the quantity of insulation waste it sends to landfill, but also promotes the benefits of the scheme across the industry."



Kingspan insulation takeback scheme

## Preserving the environment

We strengthened environmental management across the business with the appointment of Martin Ballard as Group Environmental Manager in 2011. Martin's role is focused on ensuring ongoing compliance and best practice across the regions, promoting environmental sustainability, assurance and visibility of performance reporting, and realising the efficiencies available through a coordinated Group-wide approach.

Regional Environmental Managers work with preconstruction teams to undertake early assessments of project risks. The resulting project-specific environmental plans are implemented by site teams, with regular risk-based visits from environmental professionals ensuring ongoing implementation and review of these plans.

Our ISO 14001-certified management systems are now fully embedded within divisional integrated management systems (IMS). Our robust processes are delivering best practice on our projects, demonstrated in 2011 during which time we had no significant spills on any of our sites, and we received no fines or sanctions for environmental non-compliance.

We also aim to reduce the impact of the buildings and development we construct by exploring the viability of environmental infrastructure in all of our developments, and to installing these technologies where possible.

#### Careful use of water

Construction activity demands water use. However we attempt to both reduce water consumption and reuse water across our sites, working closely with our subcontracted partners to achieve this.

We monitor, target and report water consumption across all of our Capital Works projects, with water meters fitted separately to cabin and site supplies where possible. This allows site teams to identify trends in water consumption and identify areas for improvement. Meter readings are taken on a monthly basis and fed into our Environmental Data System (EDS), with data collected and performance reported in-line with Constructing Excellence environmental key performance indicator guidelines.

We challenge how and where we use our water, encouraging saving and reuse wherever practicable. Water butts and rainwater attenuation tanks are used where possible, catching water from site cabin roofing and later using it on-site for simple tasks such as tool and boot washing, wheel washes and dust suppression. Other activities requiring significant consumption of water include commissioning of swimming pools and plastering for housing projects.

From 2007 to 2011 we reduced water consumption per £100,000 from  $12.9 \text{m}^3$  to  $10.0 \text{m}^3$ , a decrease of more than 22%.

#### Water usage (m3 / £100,000)













Our new Environmental Data System - metering and monitoring environmental performance data across all Capital Works projects

## Mindful of biodiversity

We take great care to identify and protect the plants and animals living on and around our sites. When necessary, mitigation measures are undertaken and their success monitored through on-site inspections. We work with our supply chain and conduct tool box talks to raise understanding and awareness, with appointment of biodiversity champions when working on or near sensitive areas. Site teams undertake inspections and these are routinely supplemented with visits by environmental professionals to check that the correct mitigation measures are in place. They also work with our site teams to develop protection and enhance provisions where possible.

We take pride in how our site teams respond to the discovery of wildlife on our sites, having watching briefs on more sensitive sites such as otters on our Kingswood site at Conisbrough. Mitigation for some rarer species such as the fast-declining colony of dingy skippers we found at Penrhos. Environmental alerts are used to highlight events and share good practice across the business on discovery of protected wildlife on our sites.

#### Positive feedback on the rise

Each month across all of our Capital Works projects we ask our clients to score us on the measures we take to manage our impact on the environment and biodiversity.

Clients tell us they appreciate the attention given to minimising and mitigating our impact and it is encouraging to see that scores across all of our Construction projects continue to increase. Average scores received during 2011 of 8.66 and 8.67 for our impact on the environment and on biodiversity respectively, continue a trend of year-on-year improvement since 2005.

Projects are scored on a monthly basis, and during 2011 a total of 23 sites scored an average of 10 out of 10 for impact on the environment, with 26 sites achieving this for their impact on biodiversity.

In 2012 we will work to develop additional evidence-based indicators to measure our overall impact on the environment and on biodiversity.

## **Customer perception scores**

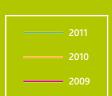


# Smarter Use of Natural Resources Summary

## 

## Waste diverted from Landfill 2009 - 2011



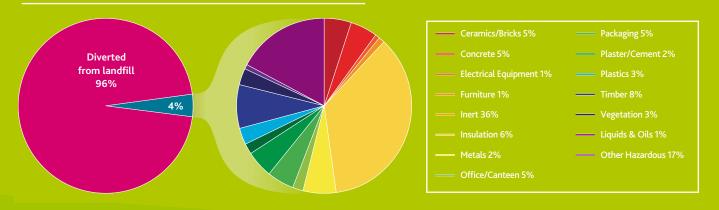


## % Waste diverted by activity





## 2011 CD&E Waste diverted and streams sent to landfill





## 2012

## **Actions & Targets**

Fully implement and embed Sustainable Procurement Policy requirements across the Group

Extend the Environmental Data System (EDS) across Willmott Dixon Support Services activities

All projects targeted to exceed 95% diversion of waste from landfill during 2012

Transparently report detailed waste performance data against our commitment to send zero waste to landfill by the end of 2012

Reaffirm ongoing commitment to achieve zero waste to landfill beyond 2012

Reduce construction waste generated per £100,000 by 5%

Implement all Waste Action Plan items to work towards achieving zero waste to landfill

Reduce construction process water consumption per £100,000 by 5%

Work to measure and reduce water consumption within our offices

Develop new indicators to measure and report impact on the environment and biodiversity

# Responsible Business

Developing leadership, governance and stakeholder engagement to deliver our corporate sustainability objectives.

## At a glance

- Improved governance and structure to drive sustainable development throughout the Group
- · Updated headline corporate goals including key sustainable development elements
- Engaged Forum for the Future to support development of Group sustainability objectives
- Secured Gold performance level in the Business in the Community (BITC) Corporate Responsibility Index
- Achieved joint-second place in national sustainable housing benchmark, NextGeneration
- Sustainability reporting to Global Reporting Initiative level B
- New integrated systems to manage, measure and report performance



Image: The Willmott Dixon Re-Thinking Board is influential in the development of corporate objectives





## Clear leadership

Responsibility for our sustainable development strategy sits at the very top of the organisation.

#### It includes:

- · Identifying internal and external sustainability needs
- Developing proposals to meet them and ways to measure them, and ensuring these targets are met
- Understanding and informing senior management of government and industry direction
- Assessing the changing needs of our clients and using innovation to inform business strategy

Our most senior people remained in charge of the various aspects of our programme:

- Rick Willmott, Group Chief Executive, holds responsibility for the Group strategy. Divisional CEOs report to him on their progress
- John Frankiewicz, Divisional CEO of Capital Works is Group Director with responsibility for health and safety
  - Chris Durkin, Divisional CEO of Support Services is Group Director with responsibility for sustainable development and chairs the Re-Thinking Board
- Jonathan Porritt, Founder Director and Trustee of Forum for the Future is a Non-Executive Director on both Holdings and Re-Thinking Boards

## Developing our strategy

Last year we worked with Forum for the Future to identify risks and opportunities for our business until 2020. Our work together built upon targets we had previously agreed for 2012 with zero waste to landfill and carbon neutral being the headline targets for this period.

This work resulted in new, Group-wide goals around sustainable development for our headline strategy, which have been adopted at Board level.

Achieving these goals is now our top priority.

## Our goals

To be a sector leader in sustainable development by:

- Reducing our carbon footprint and decoupling our business growth from carbon emissions
- Reducing our environmental impacts and our use of natural resources
- Investing in communities and the wellbeing of people



At a time when business could not matter more, it could not be trusted less. In the way we pay ourselves, present ourselves and conduct ourselves, now is the time to be more transparent, more responsible and more accountable."

Sir Roger Carr President, Confederation of British Industry (CBI), May 2012

## **Responsible Business**

## A structure for delivery

We have developed a structure that allows us to:

- Set a clear strategy and direction of travel for sustainable development across the Group
- Apply relevant, challenging and industry-leading targets
- Develop appropriate policies and processes that can be incorporated into our integrated management systems
- Ensure staff have the knowledge and awareness to help us deliver our aims

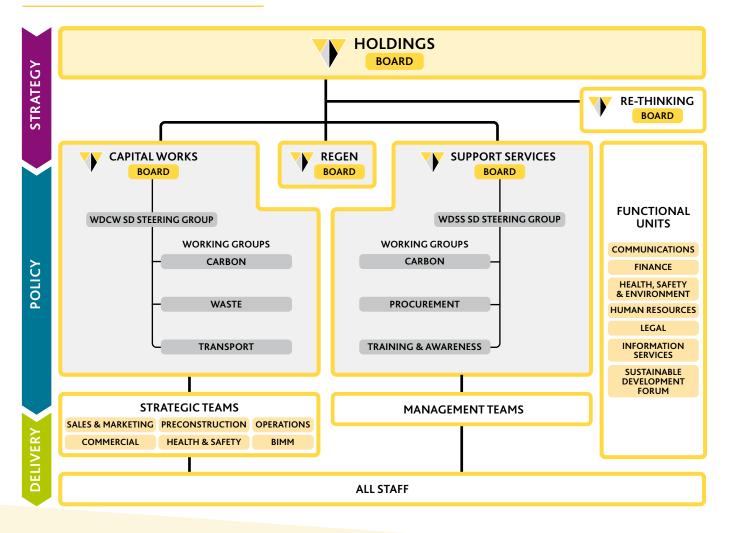
Headline sustainability strategies and goals are developed by the Holdings and divisional boards. Sustainable Development Steering Groups within Capital Works and Support Services meet regularly to coordinate strategy delivery by developing the necessary policy.

Working Groups consisting of employees in relevant influential positions develop proposals and processes to deliver policy requirements, which are implemented within management systems by strategic and management teams.

The Re-Thinking team has a presence and influence at all stages, to ensure strategy, policy, processes and delivery are consistently applied, and implemented in-line with leading industry practice.

Importantly, the structure provides a two-way communication which allows staff to influence development of policy and procedures, and recommend improvements when required.

## Sustainable Development Governance



## Working with others

Our people are active in some of the most influential and important organisations pushing to improve environmental standards, boost design and building quality and influence government in favour of sustainable development.





















EVERYBODY PLAYS A PART

# **Rob Lambe**Managing Director, Willmott Dixon Re-Thinking and Energy Services

As chair of the UK Contractors Group (UKCG) Environmental Sub-Group, and through active involvement with organisations including the UK Green Building Council, Rob is engaged in driving sustainable development within the built environment. Rob is also a Director of the Aldersgate Group, an alliance of leaders from business, politics and society that drives action for a sustainable economy.



EVERYBODY PLAYS A PART

# **David Adams**Director, Willmott Dixon Energy Services

David was instrumental in founding the Zero Carbon Hub which oversees the delivery of Zero Carbon new homes and reports to DCLG's 2016 Task Group. He developed and promoted the 'Pay As You Save' low energy financing concept for upgrading the energy-efficiency of existing homes which is being taken forward by the Government in the Energy Act 2011 as the Green Deal.



EVERYBODY PLAYS A PART

## John Frankiewicz Divisional CEO, Willmott Dixon Capital Works

John is a trustee of the UK Green Building Council (UKGBC). The membership organisation campaigns for a sustainable built environment. In 2011, we played a part in the organisation's Green Deal road shows, which helps prepare the supply chain for this major policy shift and convey the views of industry to Government. We were also represented in the UKGBC's Sustainability Training and Education Programme (STEP) Task Group.



EVERYBODY PLAYS A PART

# Steve Cook Principal Consultant, Willmott Dixon Re-Thinking

Steve chairs the UKCG Materials task group which is developing the main contractor organisation policy around improving the sustainability of its procurement. He is also helping to develop the BES 6001 responsible sourcing scheme for the Eco-Reinforcement Sector Scheme Council.

## Re-Thinking how we work

## Re-Thinking, our in-house sustainability consultancy

We are one of the few construction firms with an internal research consultancy dedicated to sustainability. Re-Thinking is a team within the Willmott Dixon Group that drives change and delivers viable solutions to address the risks and opportunities of a sustainable built environment, to position Willmott Dixon as a leading organisation.

Re-Thinking's overriding aim is to identify, develop and implement sustainable solutions that enable the Group to:

- Demonstrate sustainable development leadership in the market sectors in which Willmott Dixon operates
- Establish a competitive advantage
- Increase customer satisfaction and loyalty
- · Deliver enhanced margin and turnover

The Re-Thinking team, which has extensive expertise in environmental and social science, works directly with:

- Willmott Dixon Holdings and all operating businesses
- · Policy makers and influencers
- · Partner organisations

Re-Thinking aims to dramatically influence the way Willmott Dixon operates, striving to create a step change in the sustainability of the built environment and enhancing the wellbeing and quality of people's lives.

Projects initiated and developed by Re-Thinking during 2011 include the Group Sustainable Procurement Policy, the online Environmental Data System to capture and report performance, and establishing the Willmott Dixon Foundation.

## **Responsible Business**





### **Integrated Management Systems**

Willmott Dixon has always been focused on good environmental practice across its businesses. Previously separate ISO-certified environmental and quality management systems helped us to comply with regulation, use resources more effectively, reduce costs and gain credibility. They have helped us prevent pollution and reduce waste so effectively on sites. There were no pollution incidents and impact to the environment from our activities.

In 2011, we introduced an integrated management system (IMS) that standardises procedures with our quality management systems across all our companies. It was launched after two years' intense work gathering, researching, clarifying and designing both the back-end and user interface.

The resulting system, independently certified to ISO 14001 and 9001, ensures we have clear policies and procedures to help our employees carry out their work in a way that protects the environment across all projects. The benefits of this unified system is even more efficiency and cost-saving, as well as the ability to identify best practice in one company and share it across all.

The IMS has been developed to complement our Group-wide OHSAS 18001-certified health and safety systems.

## Benchmarking performance

The Business in the Community (BITC) Corporate Responsibility Index benchmarks our positive contribution to the community alongside our wider impacts. In 2011 and 2012 we achieved Gold status (93%) showing our openness and transparency through effective public reporting of our environmental and social issues, CR programmes and performance. This result shows a year-on-year improvement by Willmott Dixon, which achieved 80% and 91% in the previous two years.

Key achievements include achieving 100% in Corporate Strategy and Disclosure and 98% for both Community Management and Environmental Management. One specific area identified for improvement is the quality of the 'impact' data we submit, largely due to not being third-party checked. We worked to improve this during 2011 and early 2012 by engaging Bureau Veritas to verify key sustainability data and the reliability of information (see page 55).

We also participate in the NextGeneration annual sustainability benchmark of the UK's top 25 home builders. In 2011 we were awarded joint second place, with an overall score of 75%, up from sixth place the previous year.

## **Demonstrating continual improvement**

### Our 10-Point Sustainable Project Criteria

Our 10-point sustainable project criteria (10PSPC) give us a way to encourage and demonstrate continual improvement in our Capital Works schemes against a range of social, economic and environmental sustainability measurements. It has become the watchword for best-practice on-site, not least because of an incentive mechanism that can increase bonus payments based on regional 10PSPC performance.

This uplift was introduced to encourage project teams to maximise achievement of 10PSPC criteria to drive delivery of sustainable projects for our clients.

During 2012 we will be developing a similar benchmark performance criteria for our Support Services division.

		2010	2011	2012	2013 & 14
1	Client commitment to a sustainable project	Yes	Yes	Yes	Yes
2	BREEAM rating	Excellent	Excellent	Excellent	Outstanding
	Code for Sustainable Homes	Level 3	Level 4	Level 4	Level 4
3	Sustainability action plan	Yes	Yes	Yes	Yes
4	Energy Performance Certificate rating	В	В	А	Α
5	Recycled content by value	>25%	>25%	>25%	>30%
6	Waste diverted from landfill	>85%	>90%	>95%	100%
7	Sustainability health checks & post-occupancy evaluation	Yes	Yes	Yes	Yes
8	Life-cycle cost and life-cycle assessment undertaken	Yes	Yes	Yes	Yes
9	Considerate Constructors Scheme undertaken	>34	>34	>34	>35
10	Directly-associated community project	Yes	Yes	Yes	Yes

## Global Reporting Initiative (GRI) data

The Global Reporting Initiative (GRI) has pioneered the development of the world's most widely used sustainability reporting framework, which organisations can use to measure and report their sustainable development performance. This report has been produced in accordance with the latest GRI G3.1 guidelines, self declared as compliant to Level B.

We have reported on the required G3.1 indicators, or otherwise declared that they are not included. We have adopted the Performance Indicators and Sector Supplement approach hence we are reporting on a minimum of 20 additional items from a list of defined economic, environmental and social impacts.

This review features GRI data and statistics for 2011, and incorporates the governance, financial and employment data in the Willmott Dixon Annual Report and Accounts 2011. We have no subsidiaries, joint ventures or out sourced operations that would have significantly affected comparability from period to period.

In addition to reporting in-line with GRI G3.1 Guidelines, our progress against selected sustainability key performance indicators (KPIs) and the reliability of associated information and data has been verified by a third-party organisation (see page 55).

GRI Reference	Included	Page
1. STRATEGY AND ANALYSIS		
1.1 CEO Statement	Partially	ARA p3
1.2 Key impacts	Partially	ARA p3
2. ORGANISATIONAL PROFILE		·
2.1 Name of organization	Fully	р3
2.2 Brands, products & services	Fully	p3
2.3 Operational structure	Fully	p3, ARA p72-73
2.4 Location of head office	Fully	P6
2.5 Countries of operation	Fully	p3
2.6 Nature of ownership	Fully	p3, ARA p67
2.7 Markets served	Fully	р3, ОВС
2.8 Scale of organisation	Fully	ARA p50, 58,
2.0 Scale of organisation	rutty	72-73
2.9 Significant changes	Fully	ARA p4-6
2.10 Awards received	Fully	p5, 6
3. REPORT PARAMETERS		
3.1 Reporting period	Fully	р6
3.2 Date of previous report	Fully	P53
3.3 Reporting cycle	Fully	P6
3.4 Contact	Fully	P6
3.5 Process for defining content	Fully	p6, 53
3.6 Boundary of the report	Fully	p6
3.7 Limitations on scope	Fully	p53
3.8 Reporting on joint ventures	Fully	p53
3.9 Data measurement	Fully	p53
3.10 Restatements	Fully	p53
3.11 Significant changes	Fully	p53
3.12 Standard disclosures table	Fully	p53
3.13 External assurance	Fully	p53, 55
4. GOVERNANCE, COMMITMENT AND ENGAG	FMFNT	
4.1 Governance structure	Partially	ARA p2
4.2 Chair/Executive roles	Fully	ARA p2
4.3 Board structure	Partially	ARA p2
4.4 Employee recommendations	Fully	p50
4.5 Compensation linkages	Not	рэс
4.6 Avoiding conflicts of interest	Partially	ARA p69
4.7 Governance body composition	Not	7.11.0 г. роз
4.8 Values	Fully	p2, 4
4.9 Procedures of governance body to identify	Partially	p49-50
sustainability performance	. 3	F .5 50
4.10 Process to evaluate governance body performance	Partially	p49-50
4.11 Precautionary approach	Fully	p49
4.12 External charters and initiatives	Fully	p51-52
4.13 Memberships and associations	Fully	p51-52
4.14 Stakeholder groups engaged	Partially	p8-27, 51
4.15 Identifying stakeholders	Partially	p8-27, 51
4.16 Approaches to stakeholder engagement	Partially	p8-27, 51
4.17 Stakeholder engagement topics and concerns	Partially	p8-27

GRI	Reference	Included	Page
ECON	OMIC INDICATORS		
EC1	CEO's statement	Yes	02-03
EC2, E	C3, EC4, EC5, EC6, EC7, EC8, EC9	Yes	02-03
EC6 I	Local supply policy	Partially	p23
EC7	Local hiring policy	Partially	p23
EC3, E	C4, EC5, EC8, EC9	Not	
ENVIR	ONMENTAL INDICATORS		
EN3	Direct energy consumption	Fully	p31
EN4	Indirect energy consumption	Fully	P31
EN5	Energy saved	Fully	p31
EN6	Direct energy reduction initiatives	Fully	p28-37
EN7	Indirect energy reduction initiatives	Fully	p28-37
EN8	Water withdrawal by source	Partially	p44
EN14	Managing biodiversity impact	Fully	p44-45
EN16	Direct & indirect GHG emissions	Fully	p31
EN17	Other GHG emissions	Fully	p31
EN18	GHG reduction initiatives	Fully	p28-37
EN22	Waste quantity and disposal	Fully	p42
EN23	Significant spills	Fully	p44
EN26	Mitigating environmental impact	Fully	p18-19, 28-47
	Environmental regulation and legislation ompliance	Fully	p44
	N2, EN9, EN10, EN11, EN12, EN13, EN19, EN20, EN21, EN24, EN25, EN27, EN30	Not	
SOCIA	AL: LABOUR PRACTICES AND DECENT WO	RK INDICATORS	
LA3	Employee benefits	Partially	p14-17
LA4	Collective bargaining agreements	Partially	p14-17
LA12	Performance reviews	Partially	p14-17
LA1, LA LA13, I	A2, LA5, LA6, LA7, LA8, LA9, LA10, LA11, LA14	Not	
SOCIA	AL: HUMAN RIGHTS INDICATORS		
HR9	Violations	Fully	p16
HR1, F HR11	HR2, HR3, HR4, HR5, HR6, HR7, HR8, HR10,	Not	
SOCIA	AL: SOCIETY INDICATORS		
SO5	Public policy positions	Fully	p51
SO1, S	O2, SO3, SO4, SO6, SO7, SO8	Not	
SOCIA	AL: PRODUCT RESPONSIBILITY INDICATOR	RS	
	Cubatantista di sancalainta	Fully	None
PR8	Substantiated complaints	rutty	TAOTIC

ARA: Annual Report and Accounts 2011 OBC: Outside back cover

## An external perspective





**Paul King**Chief Executive, UK Green Building Council

EVERYBODY PLAYS A PART

From my experience of working closely with Willmott Dixon as an active member of the UK Green Building Council, and as evidenced in this report, I'm sure this company will continue to invest, innovate and be a leading provider of solutions in this field. And building a brighter future for Britain will mean a brighter future for all of Willmott Dixon's stakeholders too.

Over the last few months I've had the pleasure of exploring the many ground-breaking lessons the industry has learned from delivering the London Olympics, by far the greenest to date. But even building London 2012 is a small undertaking compared with the challenge of building Great Britain 2050. For starters, 80% of the homes and other buildings we'll be occupying in 2050 will be ones that we are living and working in today. And yet somehow we have to deal with the challenge of giving people the mid 21st century quality of life they'll aspire to, while emitting 80% less carbon emissions (that's equivalent to our carbon emissions in 1850), and using a whole range of other resources far more efficiently. So the chances are that while much of our future built environment may look disarmingly similar, it will be underpinned by an industry that is almost unrecognisable from the one we know today. Sustainability can sometimes appear overwhelmingly complex. But on another level it is really very simple. It is about making sure that we do things today that help future generations to meet their needs. So it follows that sustainable business is really just figuring out how you will meet your customers' future needs – and surely that should be a priority for any business.

Building the Britain that will meet peoples' needs and aspirations for decades to come is central to Willmott Dixon's business, whether that is the design and construction of new Zero Carbon homes and buildings that anticipate the regulatory requirements of 2016 and beyond, or gearing up to be a Pioneer Green Deal Provider - a mechanism that is designed to enable people to reap the benefits of energy efficiency today and to pay for them from the savings they will make on their energy bills over time – to begin the refurbishment revolution we urgently need to see if we are to get our 26 million existing homes fit for the future.

But these are challenging times for the built environment industry. Consecutive falls in construction during the first two quarters of 2012 have mirrored the UK's double-dip recession. This is an industry that represents a huge slice of the country's GDP, an enormous provider of jobs, and that builds and maintains the fabric of our society – our homes, our schools, hospitals and our workplaces. It has a vital role to play in creating the foundations for our future prosperity. And as (even) the CBI recently noted, the choice between growth and green is a false one. Yes, economic recovery has to be the Government's top priority, but to coin a phrase, 'it's the green economy, stupid!'

From the London Olympics to Zero Carbon we have seen that given clear targets, policy consistency and direction, the leaders in this industry will invest, innovate and deliver solutions that meet our economic, social and environmental needs. From my experience of working closely with Willmott Dixon as an active member of the UK Green Building Council, and as evidenced in this report, I'm sure this company will continue to invest, innovate and be a leading provider of solutions in this field. And building a brighter future for Britain will mean a brighter future for all of Willmott Dixon's stakeholders too.

## **Independent Verification Statement**

Bureau Veritas was commissioned to verify Willmott Dixon's progress against selected sustainability Key Performance Indicators (KPIs) and the reliability of associated information and data.



## Scope and methodology

To form our opinion Bureau Veritas conducted the activities outlined below;

- · Interviews with KPI owners
- Review of supporting documentation (e.g. policies, procedures, reports, email correspondence)
- Review of aggregated project and divisional data sets (e.g. waste and carbon)
- · Interrogation of spreadsheets and selected data sampling
- Review of processes for data collection and aggregation

The KPI period assessed relates to 1 January 2011 to 31 December 2011, covering all Willmott Dixon Group businesses.

## **Bureau Veritas Opinion**

It is Bureau Veritas' opinion, based on the assessments made and the evidence reviewed, that the above table is an accurate reflection of progress against the KPIs which is representative of the data collected at Group.

Bureau Veritas is confident that no material information has been withheld which could affect stakeholders' ability to make informed judgments on Willmott Dixon's 2011 performance.

Bureau Veritas has made a number of recommendations which the Group should address, in order to improve its approach to managing and reporting sustainability activities. These recommendations are provided as a separate management report.

#### **Limitation and Exclusions**

Excluded from the scope of our work was:

- · Any information not directly linked to the selected KPIs
- Company strategy and position statements (including any expression of opinion, belief, aspiration, expectation or aim)

A limited sample of site specific source data (e.g. waste transfer notes) and records were reviewed as part of this assessment

## Statement of Independence

Bureau Veritas is an independent professional services company that specialises in quality, health, safety, social and environmental management advice and compliance with over 180 years history in providing independent verification and assurance services. Bureau Veritas has implemented a code of ethics across its business which ensures that all our staff maintain high standards of integrity and independence. We believe our verification assignment did not raise any conflicts of interest. Our team completing the work has extensive knowledge and experience of conducting verification over sustainability information and systems.

#### Assessment of Achievement

KPI	Level of Achievement
Willmott Dixon has a robust process for gathering and reporting its carbon footprint.	Processes are applied which permit the Group to determine its carbon footprint. The verification exercise has enabled the processes to be tested and strengthened, which has resulted in more robust data and associated carbon footprint.
Diversion of 90% or more waste from Landfill.	Capital Works – 99.8%  Construction – 95.5% Interiors – 97.3%  Housing – 96.6%
An average score for the Considerate Constructor Scheme which exceeds 34 out of 40.	Fully achieved (average score of 35.5).
Invested £338,000 in community support activities during 2011.	Fully achieved.
To capture Accident Frequency Rate and Accident Incidence Rate for 2011.	Capital Works: 2011 AFR 0.24 and AIR 101 Support Services: 2011 AFR 0.97 and AIR 856.23
Willmott Dixon invested £2,200,832 in training staff during 2011.	Fully achieved.

