



mayor of london's green procurement code progress review

october 2009



Foreword

By Daniel Silverstone, Chief Executive, London Remade

2008 marked a turning point for the Mayor of London's Green Procurement Code in more ways than one. Against the backdrop of an economic crisis that many were predicting could turn into the worst depression in almost a century, Green Procurement Code members were stepping up their green purchasing activities. Something else was changing too. As energy prices took a roller-coaster ride, greener energy-saving products, that for years had been perceived by many to be expensive or in some way inferior to the standard alternatives, began to be seen in their true light: as sensible business choices.

Members of the Mayor of London's Green Procurement Code have been amongst the first to realise the benefits of buying greener products and services. As this report will show almost 50% more London-based organisations reported their green purchasing activities than last year. Between them they recorded a remarkable £436million of spending on energy efficient products and renewable energy; sustainable timber and recycled content products; and much more besides. This year the code has truly established its credentials as a London benchmark of greenness.

Now another milestone is approaching. In just a couple of months' time, in Copenhagen, the most important climate change summit since Kyoto in 1997 will take place. With a new president in America and signs that some of the large developing nations now share a sense of the urgency and significance of the challenge of climate change, we must hope that the world reaches an ambitious agreement to reduce carbon emissions in the years ahead.

Back at home, Boris Johnson, the Mayor of London has targeted a 60% reduction of carbon emissions by 2025, compared with 1990 levels. To reach such a target will require incredible efforts at many different levels. Procurement has a key part to play. A 2008 report into the carbon footprint of the National Health Service in England attributed 59% of carbon emissions to procurement while building energy use accounted for 22% and travel 18%. This kind of extensive analysis has rarely been performed for such a large organisation but if this pattern is representative then it is clear that we must direct our attention to reducing the carbon intensity of supply chains before it is too late.

Those organisations that choose to go down the route of procuring greener products and services are likely to find that their costs of energy and waste disposal will decrease and that by being more resource efficient they will become more efficient overall.

Organisations that appreciate and strive to achieve these benefits may well be the best placed to survive in these turbulent economic times.

Finally, sincere thanks to Green Procurement Code members, my colleagues at London Remade and to the London Development Agency without whose foresight and financial support none of this would have been possible.



Executive summary

By Graham Randles, Programme Manager, London Remade

Green purchasing is here to stay. That is a key finding of the Mayor of London's Green Procurement Code 2009 progress review survey, which shows that signatories have built significantly on their achievements of the previous year. In spite of the recent economic recession, these organisations have reported an almost 50% increase in spending on green products and services over the last 12 months.

Perhaps even more importantly, green purchasing has now become firmly embedded in members' policies and processes. The Green Procurement Code awards signatories a bronze, silver or gold level which are closely correlated to the levels of the Flexible Framework¹ model of best practice in sustainable procurement, developed by the UK government's sustainable procurement task force.

In 2009 16 organisations achieved the gold level of the Green Procurement Code compared with just 3 in 2008. Many of these were amongst the 24 signatories that reached the silver level in 2008. This year 28 signatories achieved silver and 24 reached the bronze level, which is an encouraging sign for the future.

To put these achievements into context, a gold level of the Green Procurement Code is roughly the equivalent of achieving level 3 of the Flexible Framework. According to a National Audit Office report, published earlier this year, of 22 government departments that reported their progress for 2007-08 only NHS PASA² claimed to be at level 3 by that date and eight departments had only just laid the foundations for sustainable procurement, achieving level 1 of the Flexible Framework.

The National Audit Office also highlighted that while building sustainable procurement capabilities is important, it is not enough. It is also necessary to achieve, monitor and record the outcomes of sustainable purchasing activities. Similarly the European Commission communication of 2008 that states "by year 2010, 50% of all [public sector] tendering procedures should be green" shows the need to focus on outcomes.

The annual Mayor of London's Green Procurement Code progress review survey is perhaps the most comprehensive and detailed study into green procurement in Europe and provides a wealth of information about green purchases made by the member organisations.

This year, respondents reported data on 1,686 green purchases or contracts in 30 different product categories.

We also calculate the environmental benefits that these purchases represent. This is by no means an easy task. Some savings are in the form of reductions in embodied carbon: the CO₂ emissions generated in the production process for the product. Others are in energy savings from using more efficient vehicles and appliances but can only be calculated when either the energy use of the products they are replacing or an industry standard benchmark is known.

However, in spite of these difficulties, we have calculated that the purchases of green products and services reported in the 2009 progress review survey represent 56,220 tonnes of CO₂ emissions avoided and 118,641 tonnes of waste diverted from landfill. These are significant achievements by the members of the Mayor of London's Green Procurement Code.

¹ Procuring the Future (2006). Sustainable Procurement National Action Plan. Recommendations from the Sustainable Procurement Task Force. p.68.

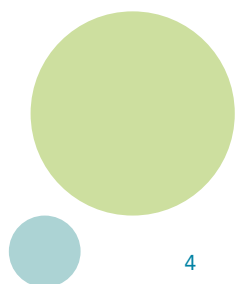
² NHS PASA: National Health Service, Purchasing And Supply Agency

Highlights of achievements

- 183 organisations reported their green procurement activities against the five themes of the government's Flexible Framework model. This is a 45% increase on the number of signatories that reported in 2008.
- 69 of these signatories submitted their survey data for review by an independent third party auditor and were therefore eligible to achieve a gold, silver or bronze level of the Mayor of London's Green Procurement Code. This is up by 38% compared to the previous year.
- 16 signatories achieved the gold level, including all five members of the Greater London Authority (GLA) Group, two London boroughs (Greenwich and Hackney), two large private sector companies (Ove Arup and Mapeley), one major national charity (Cancer Research UK) and six small and medium sized enterprises (SMEs): BioRegional, Forum for the Future, Jam Consult, London Remade, SE2 and Swiftflow.
- 28 organisations achieved the silver level and 24 achieved bronze.
- The number of gold level signatories is up by over 400% from 3 in 2008.
- 28 examples of good practice have been identified in the five priority areas of sustainable procurement across the public, private and third sectors. These case studies have been collected in a new report to be published alongside this progress review and distributed at the Mayor of London's Green Procurement Code awards.
- The total procurement budget reported by the signatories was £15,006,486,797. This represents a 50% increase compared with the total budget reported in 2008.
- £436,339,152 was reported on purchases that addressed an environmental issue ("green spend"), up by 42.5% against the previous year.
- We estimate that the purchases by the Green Procurement Code signatories support 831 jobs.
- Signatories recorded total spending of £149,594,624 on 217,167 tonnes of recycled content products, excluding paper. Building products, aggregates and steel account for over two thirds of the value of these purchases.
- Purchases of recycled content products excluding paper have resulted in the following environmental savings:
 - 113,807 tonnes of material diverted from landfill, an increase of 57% compared with 2008.
 - 46,408 tonnes of CO₂ emissions avoided. This is an increase of more than 100% on last year's figure.
- Over £82 million of spending was reported on waste management including 8 major contracts of over £1 million. A total of 858,406 tonnes of waste has been diverted from landfill.
- A total £4,758,256 was spent by signatories on 5,262 tonnes of recycled paper and card in 2009. These purchases have:
 - diverted 4,834 tonnes (23,021 cubic metres) of waste from landfill
 - avoided 6,381 tonnes of CO₂ emissions
 - saved 145,033,411 litres of water
 - and avoided 130,530 kg of other air pollutants entering the atmosphere
- A total of 3,431 tonnes of CO₂ emissions have been avoided through purchases of good quality combined heat and power (CHP) by Green Procurement Code signatories.
- A further 99,869 tonnes of CO₂ emissions have been avoided through renewable energy supplied to signatories through green tariffs but DEFRA³ guidelines state that we cannot attribute these savings to the purchasing companies.
- More than 50 signatories reported combined spending of £37,223,491 on sustainable natural resources. This is a significant improvement compared with the £4,634,064 reported in 2008. By far the highest proportion of this amount was spent on FSC /PEFC certified timber products, which accounted for £24,470,782 of the total.

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The 2009 Progress Review survey

Baseline – the first survey in 2008

When the Mayor of London's Green Procurement Code was relaunched in October 2007, it incorporated a new annual survey designed to assess how well signatory organisations are incorporating environmental considerations into their purchasing activities. The survey, called the progress review, also aims to track the outcomes of those green procurement activities in terms of the number, value and type of green products and services purchased.

The first survey, conducted in 2008, featured 126 organisations, with a collective procurement budget of around £10 billion and highlighted over £300 million of purchases on green products and services. But the survey was not designed to be an end in itself: it also aims to reward and encourage best practices. It features bronze, silver and gold levels that were awarded in 2008 to the 37 best-performing organisations that submitted their survey data for review by an independent, IEMA⁴ qualified auditor. The standards for these awards were challenging and only 3 organisations achieved gold in 2008.

The first part of the survey that focuses on green procurement practices was linked to the Flexible Framework model of best practice from the government's 2006 Sustainable Procurement Task Force⁵. This model identifies 5 key themes of good practice in green or sustainable procurement: people; policy, strategy and communication; procurement process; engaging suppliers; and measurement and results. At an annual awards ceremony, the Mayor of London's Green Procurement Code rewards signatories for their progress in these same 5 areas. Finally, the annual progress review provides the basis for an action plan for Green Procurement Code signatories to implement over the rest of the year with the aim of progressing through the levels from entry to bronze and then ultimately to gold.

Introduction – the 2009 survey

In 2009 the number of Green Procurement Code members providing data for the progress review survey increased by 45% to 183. The number of signatories that went on to submit their data for auditor review went up by 38% to 69. These increases reflect both the growth in membership of the Green Procurement Code and a rise in the recognition of the value of achieving a bronze, silver or gold level. (See Appendices 1 and 2)

Membership of the Mayor of London's Green Procurement Code is open to London based organisations across all sectors ranging from very large public authorities and international corporations to the smallest SMEs⁶. Consequently the organisations reporting for the progress review also fall into a variety of different groups. These are shown in the following table.

| Group | Number of Signatories |
|----------------------|-----------------------|
| Education | 5 |
| GLA Group | 5 |
| London Boroughs | 29 |
| Large Private Sector | 36 |
| Other Public Sector | 5 |
| SMEs | 96 |
| Third Sector | 7 |
| Total | 183 |

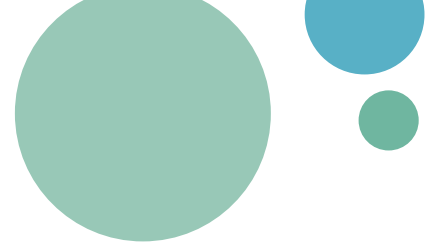
Organisations reporting in the 2009 Progress Review Survey by sector group

As can be seen from the table, all five members of the Greater London Authority (GLA) Group completed the survey, as did 29 of the 33 London boroughs. In total, 87 large organisations completed the survey of which 44 are in the public sector, 36 are private corporations and 7 are in the third sector. 96 small and medium sized enterprises also completed the survey.

⁴IEMA: Institute of Environmental Management and Assessment

⁵Procuring the Future (2006). Sustainable Procurement National Action Plan. Recommendations from the Sustainable Procurement Task Force (SPTF). p.68.

⁶SME: Small and Medium-sized Enterprises, typically with less than 250 employees



This year, 68 signatories of the Green Procurement Code achieved a bronze, silver or gold level, up by almost 90% from 37 the previous year. The number of gold levels awarded went up from 3 in 2008 to 16 in 2009. This may be the greatest achievement of the members this year as the standard required to achieve the silver and gold levels was also raised. It reflects significant progress by those signatories that reported last year as well as a few new members that joined the programme more recently and achieved a high level at the first attempt.

The following signatories achieved a gold, silver or bronze level:

| Gold Level: 16 signatories |
|------------------------------------------|
| BioRegional Development Group |
| Cancer Research UK |
| Forum for the Future |
| Greater London Authority |
| Jam Consult Ltd |
| London Borough of Greenwich |
| London Borough of Hackney |
| London Development Agency |
| London Fire Brigade |
| London Remade |
| Mapeley Estates |
| Metropolitan Police Service |
| Ove Arup & Partners International Ltd |
| SE2 Ltd |
| SwiftFlow |
| Transport for London |
| Silver Level: 28 signatories |
| Ambassador Theatre Group |
| Calverts |
| East London Advanced Technology Training |
| FM Conway Limited |
| I. Waterman (Box Makers) Ltd |
| Karavan Eco |
| Kierbeck Limited |
| London Borough of Croydon |
| London Borough of Islington |

| London Borough of Lambeth |
|-------------------------------------------|
| London Borough of Lewisham |
| London Borough of Newham |
| London Borough of Tower Hamlets |
| London Community Recycling Network |
| Max Fordham LLP |
| NCVO |
| Penguin Group |
| Promo2u.com |
| Proper Oils |
| RGE Services |
| Riot of Colour |
| Seventeen Events |
| Skanska Infrastructure Services |
| St Giles Trust |
| The Sammons Group |
| Urban Planters London West |
| Verlander Walker Ltd |
| Vital Regeneration |
| Bronze Level: 24 signatories |
| 1st Place Children and Parents' Centre |
| Acre Resources |
| Balfour Beatty WorkPlace Limited |
| BASH Creations |
| Bio Products Laboratory |
| Creative Design (Europe) Ltd |
| Creative Environmental Networks |
| DG3 Europe |
| Eco Everyday Ltd |
| Eurodata Systems |
| Groundwork |
| H.A. Marks |
| Halcrow Group Ltd. |
| Inside Job Productions |
| London Borough of Barnet |
| London Borough of Bexley |
| London Borough of Harrow |
| London Universities Purchasing Consortium |
| McDonnell Associates Limited |
| Mouchel |
| Park Inn Hyde Park |
| Playne Creative |
| Richard Edward Limited |
| Workspace Group PLC |

Progress Review

Part one: best practice and Green Procurement Code awards

The first part of the progress review survey consists of 20 questions linked to the 5 themes of the Flexible Framework model. The questions require a self-assessment on a scale of 1 to 10 and signatories that aim to achieve the bronze, silver or gold level must provide evidence of their scores to an IEMA qualified auditor.

The organisations with the highest audited scores against each of the 5 themes are then short-listed for the Mayor of London’s Green Procurement Code awards. The best-performing SMEs were selected for an additional award.

The level of scoring was so high this year that almost all of the shortlisted organisations achieved a perfect score in the categories for which they were selected.

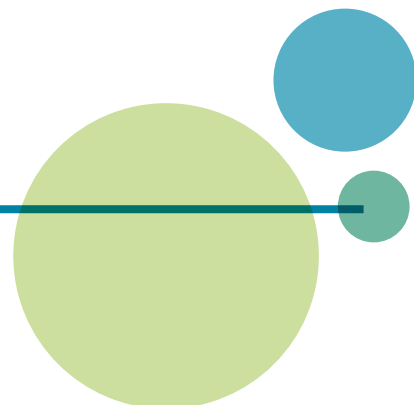
In each of the five categories the shortlisted organisations were then asked to submit a case study relating to their practices and achievements over the previous year.

In last year’s progress review report we provided a brief summary of the activities of the winning organisations in each category. However the number and quality of the case studies we received this year have justified production of a separate best practice report for the Green Procurement Code awards.

This report is available at www.greenprocurementcode.co.uk.

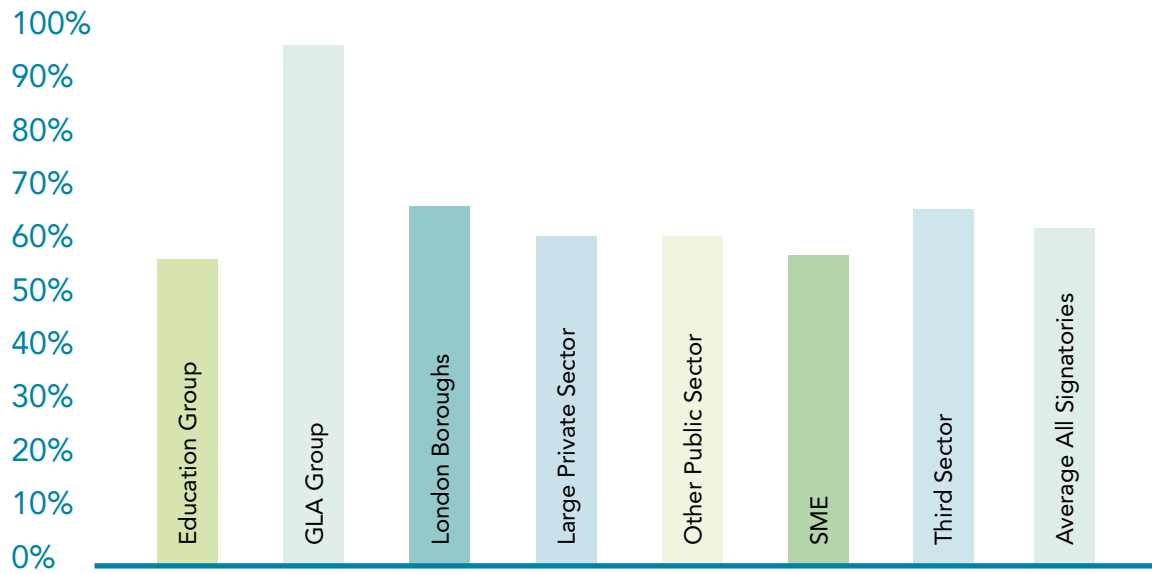
The following section is a brief summary of the scores, by sector group, against each of the five themes of the Flexible Framework, along with the names of the award winners and other short listed organisations.

| Group | Number of signatories | Average total scores (%) | Average people scores (%) | Average Policy scores (%) | Average process scores (%) | Average supplier scores (%) | Average measurement scores (%) |
|----------------------------|-----------------------|--------------------------|---------------------------|---------------------------|----------------------------|-----------------------------|--------------------------------|
| Education | 5 | 56 | 52 | 64 | 52 | 76 | 41 |
| GLA Group | 5 | 96 | 94 | 100 | 91 | 97 | 97 |
| London Boroughs | 29 | 66 | 60 | 74 | 66 | 75 | 60 |
| Large Corporates – Private | 36 | 60 | 54 | 69 | 58 | 68 | 54 |
| Other Public | 5 | 60 | 52 | 75 | 52 | 62 | 56 |
| SME | 96 | 57 | 56 | 65 | 54 | 62 | 46 |
| Third Sector and Other | 7 | 65 | 59 | 73 | 62 | 72 | 62 |
| Total signatories | 183 | | | | | | |
| Average all signatories | | 61 | 57 | 69 | 58 | 67 | 52 |



| Group | Total Scores (%) |
|-------------------------|------------------|
| Education | 56 |
| GLA Group | 96 |
| London Boroughs | 66 |
| Large Private Sector | 60 |
| Other Public Sector | 60 |
| SMEs | 57 |
| Third Sector | 65 |
| Average All Signatories | 61 |

Total Part One Scores (%)



The Green Procurement Code awards

People

The people section of the survey includes five questions about such aspects as whether or not there is a sustainable procurement “champion” in the organisation, the level of sustainable procurement training that staff have received as well as the objectives and incentives for procurement staff. The scores expressed as percentages of the maximum available for each sector group are shown below:

People award

Winner: Mapeley Estates

**Highly commended:
Greater London Authority**

Other shortlisted:

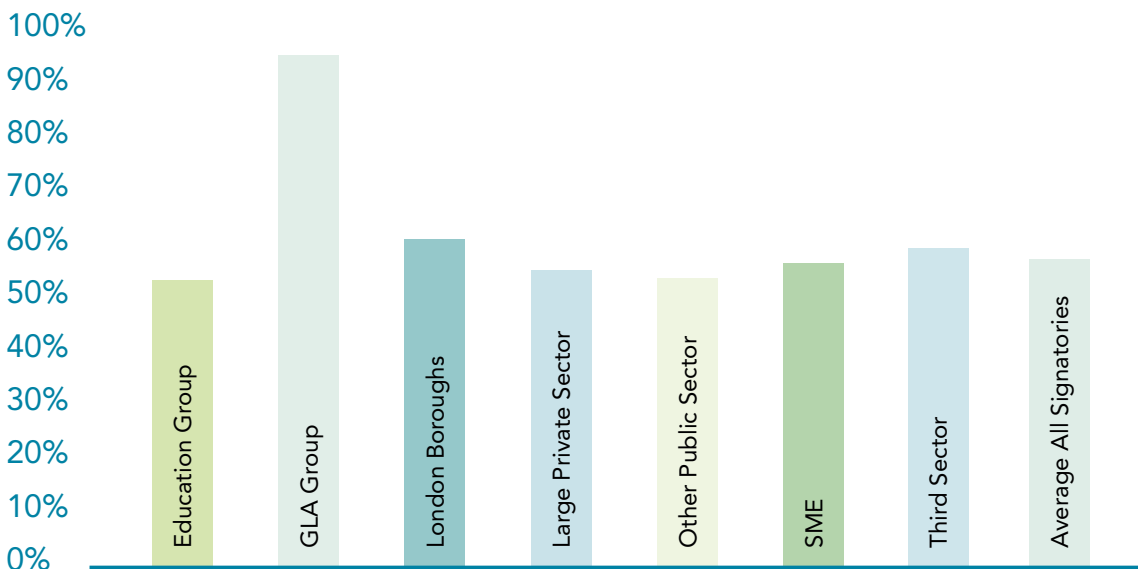
London Borough of Greenwich

Jam Consult

Ove Arup & Partners International Ltd

| Group | People Scores (%) |
|-------------------------|-------------------|
| Education | 52 |
| GLA Group | 94 |
| London Boroughs | 60 |
| Large Private Sector | 54 |
| Other Public Sector | 52 |
| SMEs | 56 |
| Third Sector | 59 |
| Average All Signatories | 57 |

Average People Scores (%)



Policy, strategy and communication

This section asks about the organisation’s sustainability objectives and about the policies and strategies in place to deliver these objectives. Higher scores are awarded where policies and strategies are linked and related to other organisational objectives.

The following table shows the scores for the sector groups:.

| Group | Policy Scores (%) |
|-------------------------|-------------------|
| Education | 64 |
| GLA Group | 100 |
| London Boroughs | 74 |
| Large Private Sector | 69 |
| Other Public Sector | 75 |
| SMEs | 65 |
| Third Sector | 73 |
| Average All Signatories | 69 |

Policy, strategy and communication award

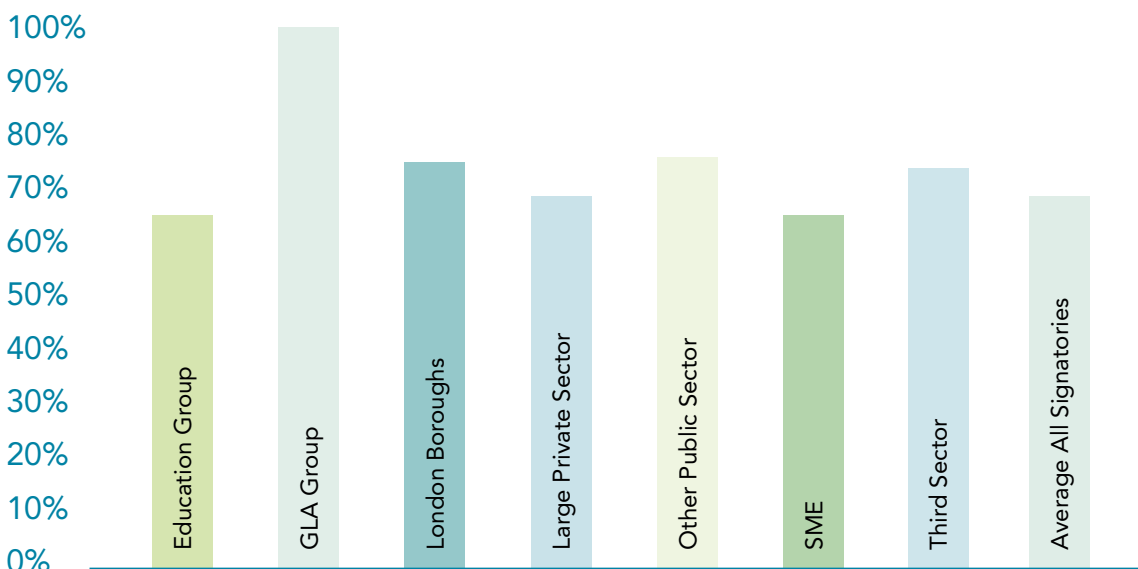
Winner:
Metropolitan Police Service

Highly commended:
London Borough of Greenwich
London Borough of Lewisham

Other shortlisted:

BioRegional Development Group
Eurodata Systems
FM Conway
Greater London Authority
Mapeley Estates
Urban Planters London West

Average Policy Scores (%)



Procurement process

The procurement process part of the survey aims to establish the extent to which green procurement is embedded within an organisation. It includes questions about expenditure analysis, and asks how well the organisation has assessed its sustainability impacts. It goes on to assess how these impacts are addressed in contracts, supply chain management and through setting targets with suppliers. The sector scores are shown below:

| Group | Process Scores (%) |
|-------------------------|--------------------|
| Education | 52 |
| GLA Group | 91 |
| London Boroughs | 66 |
| Large Private Sector | 58 |
| Other Public Sector | 52 |
| SMEs | 54 |
| Third Sector | 62 |
| Average All Signatories | 58 |

Procurement process

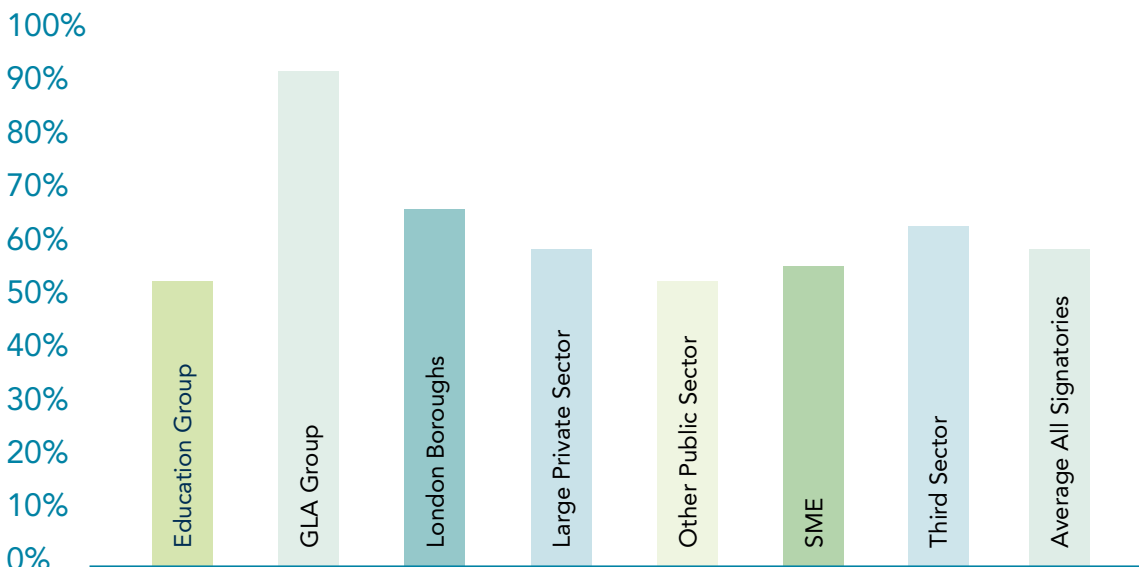
Winner: London Fire Brigade

**Highly commended:
Ove Arup & Partners
International Ltd**

Other shortlisted:

SE2

Average Procurement Process Scores (%)



Engaging suppliers

In this section signatories are asked questions relating to their understanding of the supplier base and the process of supplier engagement. It begins with their expenditure analysis as this is considered a pre-requisite of the process and goes on to ask about specific types of engagement activity. The scores for the sector groups are as follows:

| Group | Engaging Suppliers Scores (%) |
|-------------------------|-------------------------------|
| Education | 76 |
| GLA Group | 97 |
| London Boroughs | 75 |
| Large Private Sector | 68 |
| Other Public Sector | 62 |
| SMEs | 62 |
| Third Sector | 72 |
| Average All Signatories | 67 |

Engaging suppliers award

Winner: London Borough of Lambeth

Highly commended: Transport for London

Other shortlisted:

Cancer Research UK

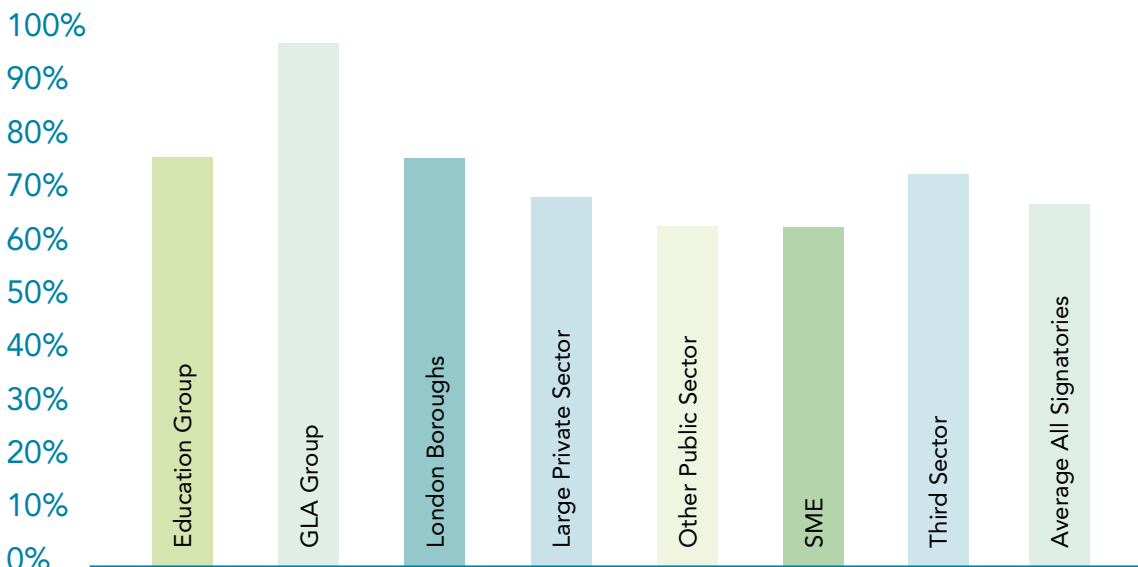
London Borough of Lewisham

Metropolitan Police Service

Promo2U

St Giles' Trust

Average Engaging Suppliers Scores (%)



Measurement and results

In the measurement and results section, the questions aim to assess how far organisations have been able to measure performance and results. This is how the sector groups scored:

| Group | Measurement and Results Scores (%) |
|-------------------------|------------------------------------|
| Education | 41 |
| GLA Group | 97 |
| London Boroughs | 60 |
| Large Private Sector | 54 |
| Other Public Sector | 56 |
| SMEs | 46 |
| Third Sector | 62 |
| Average All Signatories | 52 |

Measurement and results award

Winner: Transport for London

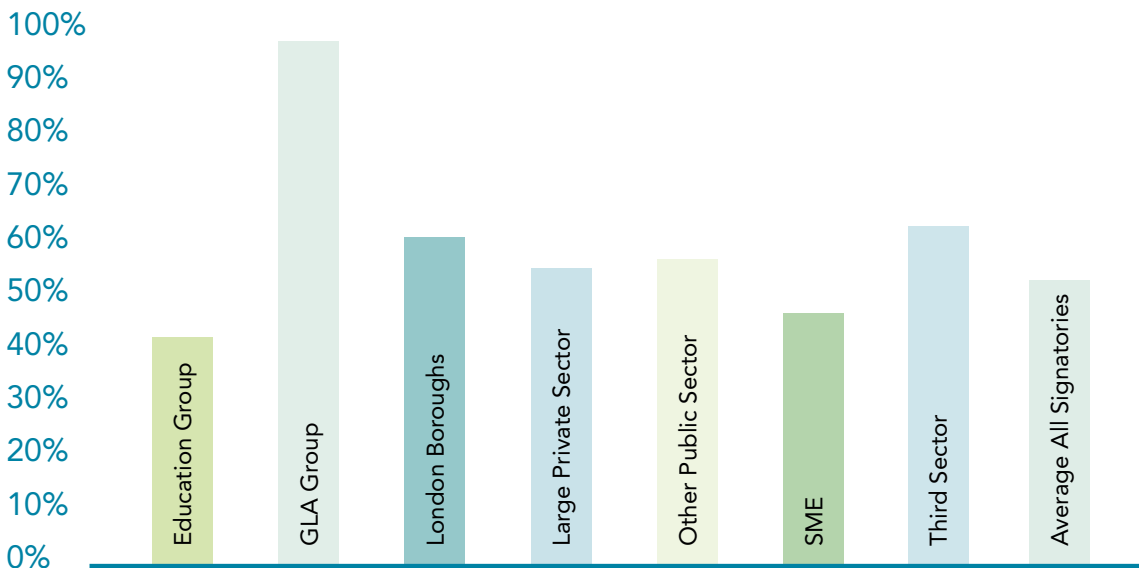
**Highly commended:
London Fire Brigade**

Other shortlisted:

Penguin Books

Seventeen Events

Average Measurement & Results Scores (%)



Best performing SME

As already mentioned, part one of the progress review survey is linked very closely to the Flexible Framework model of best practice created by the government's Sustainable Procurement Task Force. Although the intention of the Flexible Framework, as its name implies, is that it should be applicable to all kinds of organisations, in reality some of the activities are more applicable to larger entities. Because this means it is difficult for SMEs to compete against larger organisations for the Green Procurement Code awards we have introduced a special award this year for the best performing SME. The winner and other nominees are as follows:

Best Performing SME award

Winner: Forum for the Future

**Highly commended:
SwiftFlow**

Other shortlisted:

BioRegional Development Group

Jam Consult

SE2

GLA Group

The members of the Greater London Authority (GLA) Group merit a special mention in this section. The five organisations – Greater London Authority, London Development Agency, London Fire Brigade, Metropolitan Police and Transport for London – scored consistently highly in all sections in part one of the survey with an average total score of 96%.

All five organisations submitted their data for review by an independent IEMA qualified auditor and all achieved the gold level. This was an improvement on 2008 when only the London Fire Brigade and Transport for London were awarded gold.

It is clear that the Mayor of London's own organisations are leading by example in green procurement and are setting a high standard for other organisations to follow.



Part two: outcomes

Procurement overview

The number of organisations reporting on their annual procurement spending with third party organisations, increased by 38% this year to 145 and, in total, the combined spending power reported rose to £15 billion. This is an increase of 50% compared to last year's survey. In total, Green Procurement Code signatories recorded 1,686 green purchases or contracts with a total value of £436,339,152. This is an increase of £130,077,215, or 42.5% compared with the 2008 survey.

The SME sector showed the largest increase in signatories reporting to the Green Procurement Code with a 115% rise from last year. The number of large private sector companies reporting rose by 75% from 16 to 28. Overall the average annual procurement spend per signatory decreased by 11% to £8.3 million, reflecting the relative increase in SME signatories reporting.

| Group | Number of organisations reporting | Annual procurement spending with third party organisations | Average annual procurement spend per signatory 2007/08 | Average annual procurement spend per signatory 2008/09 |
|------------------------|-----------------------------------|------------------------------------------------------------|--------------------------------------------------------|--------------------------------------------------------|
| Education | 4 | £188,800,000 | £22,940,566 | £47,200,000 |
| GLA Group | 5 | £3,077,200,000 | £600,737,283 | £615,440,000 |
| London Boroughs | 26 | £8,113,745,402 | £228,223,301 | £312,067,131 |
| Large Private Sector | 28 | £2,998,498,033 | £21,748,192 | £107,089,215 |
| Other Public | 4 | £310,500,000 | £93,066,667 | £77,625,000 |
| SME | 73 | £89,743,362 | £1,888,740 | £1,229,361 |
| Third Sector and Other | 5 | £228,000,000 | £14,617,867 | £45,600,000 |
| Grand Total | 145 | £15,006,486,797 | £9,364,025 | £8,318,970 |

Category overview

In part two of the progress review survey signatories are asked to provide a breakdown of their spending according to the Pro-Class procurement classification system. This is a system that is used by the London boroughs in the London contracts register. For the purpose of the progress review, two additional categories were added to make the system more relevant for private sector organisations: raw materials and goods for resale. Of the £15 billion total procurement budget reported by the signatories, just under a third, £4.5 billion, was reported against 31 individual product categories, as shown in the following table:



| Product Categories | Total Spend in this Category |
|---------------------------------------------------|------------------------------|
| Building Construction Materials | £579,406,739 |
| Catering | £64,294,046 |
| Cemetery & Crematorium | £162,994 |
| Cleaning & Janitorial | £34,752,768 |
| Clothing | £5,868,193 |
| Consultancy | £728,611,179 |
| Custom category – Goods for resale | £1,589,709 |
| Custom category – Raw materials for manufacturing | £100,164,255 |
| Domestic Goods | £2,644,265 |
| Education Supplies | £53,445,176 |
| Environmental Services | £221,717,780 |
| Facilities & Management Services | £436,475,586 |
| Financial Services | £108,081,243 |
| Furniture | £22,816,220 |
| Health & Safety | £17,832,457 |

| | |
|---------------------------------------------|-----------------------|
| Highway Equipment & Materials | £64,865,382 |
| Horticultural | £15,055,705 |
| Human Resources | £292,875,631 |
| ICT (Information Communication Technology) | £257,201,178 |
| Legal Services | £93,538,334 |
| Leisure Services | £14,346,859 |
| Mail Services | £9,658,697 |
| Medical | £27,094,756 |
| Social Community Care Supplies & Services | £281,434,038 |
| Sports / Playground Equipment & Maintenance | £2,502,493 |
| Stationery | £19,973,144 |
| Traffic Management | £35,833,592 |
| Transport | £63,327,319 |
| Utilities (not Telephones – see ICT) | £177,477,619 |
| Vehicles (not Buses – see Transport) | £111,991,630 |
| Works (Construction / Repair / Maintenance) | £686,951,470 |
| Grand Total | £4,531,990,457 |



One of the aims of the progress review survey is to assess the proportion of total purchasing by signatories that is spent on green products and services. Last year this was reported as only 3.1%. However this was an unsophisticated estimate. It failed to take account of the significant levels of purchasing in categories where there is minimal scope to address an environmental impact. This is typically the case in services categories such as financial and professional services, consultancy and recruitment or employment services.

These categories may represent a very high proportion of the procurement budgets of many organisations. For example the consultancy category has the highest total value of any single category in the 2009 survey at £728,611,179.

The breakdown for the top 20 categories by the value of spending reported on green products and services in 2009 is as follows:

| Product Category | Value of Purchase / Contract (£'s) | Number of purchases recorded |
|---------------------------------------------------|------------------------------------|------------------------------|
| Works (Construction / Repair / Maintenance) | £91,523,016 | 31 |
| Environmental Services | £84,715,460 | 74 |
| Building Construction Materials | £56,557,633 | 119 |
| Utilities (not Telephones – see ICT) | £45,657,935 | 59 |
| Custom category – Raw materials for manufacturing | £31,989,261 | 18 |
| Vehicles (not Buses – see Transport) | £28,945,612 | 38 |
| Transport | £18,290,372 | 45 |
| Catering | £14,945,741 | 146 |
| ICT (Information Communication Technology) | £11,650,031 | 80 |
| Highway Equipment & Materials | £10,990,472 | 20 |
| Horticultural | £10,243,006 | 23 |
| Stationery | £8,293,607 | 653 |
| Furniture | £6,717,285 | 44 |
| Cleaning & Janitorial | £4,950,077 | 164 |
| Facilities & Management Services | £2,327,433 | 75 |
| Leisure Services | £2,291,064 | 9 |
| Consultancy | £2,240,508 | 30 |
| Social Community Care Supplies & Services | £1,610,032 | 2 |
| Custom category – Goods for resale | £225,073 | 11 |
| Mail Services | £167,523 | 10 |

It is interesting to note that the greatest numbers of green purchases recorded are in lower value categories such as stationery, cleaning and janitorial and catering.



Unfortunately it is difficult to compare the value of purchases of green products and services against total category spending because, as previously mentioned, only a third of the total procurement budget reported was broken down by category. We therefore identified 45 organisations that provided a category breakdown for at least 70% of their procurement budgets to

analyse their green spending as a percentage of their total category spending. We also limited the analysis to categories in which the European Commission has defined green public procurement (GPP) product criteria.

The results are shown in the table below:

| Product Category | Green Spend in this Category | Green Spend as % of Category Spend |
|---------------------------------------------------|------------------------------|------------------------------------|
| Horticultural | £3,541,199 | 80.1% |
| Custom category – Raw materials for manufacturing | £24,760,918 | 66.7% |
| Highway Equipment & Materials | £2,515,000 | 55.0% |
| Vehicles (not Buses – see Transport) | £1,442,666 | 55.0% |
| Works (Construction / Repair / Maintenance) | £23,768,454 | 47.0% |
| Transport | £983,731 | 44.6% |
| Utilities (not Telephones – see ICT) | £169,368 | 43.7% |
| Furniture | £535,193 | 40.3% |
| Cleaning & Janitorial | £128,600 | 35.4% |
| ICT (Information Communication Technology) | £273,945 | 30.2% |
| Stationery | £2,250,250 | 28.9% |
| Catering | £254,972 | 24.9% |
| Custom category – Goods for resale | £149,795 | 18.8% |
| Building Construction Materials | £2,812,231 | 13.1% |
| Clothing | £17,552 | 5.6% |



These results present a much clearer picture of the level of spending on green products and services relative to total category spending than we were able to provide in last year's report. It provides some interesting insights. For example the highest proportion of spending on green products is in the horticultural category at 80.1%. On the other hand, in the stationery category, where the highest number of green purchases was recorded, only 29% of the total purchases by value were green.

It is perhaps less surprising to see that there was a high proportion of green spending in the category of raw materials for manufacturing as this reflects the fact that environmentally conscious companies are attracted to join the Green Procurement Code. The high percentage of green spending in the highway equipment and materials category can probably be

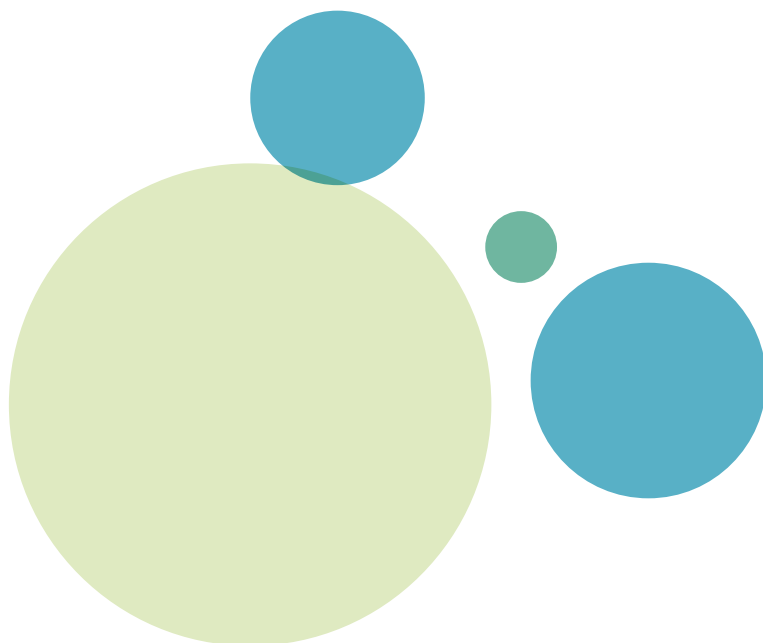
attributed to significant purchases of recycled content aggregates.

There was also a high proportion of purchases of green vehicles, which may be explained by the fact that fuel efficient vehicles are a "Quick Win" for environmentally conscious purchasers. Finally it should be noted that the 45 companies that were selected for inclusion in this analysis were chosen because they had provided a detailed breakdown of their procurement by category. Not all of these companies submitted their survey data for an independent audit so we cannot be completely sure that all of the purchases reported would meet recognised green criteria.

However yet another picture emerges when we look at the green spend in the selected categories by sector group, as shown in the following table:

| Group | Total Spend in Selected Categories | Total Green Spend in Selected Categories | Green Spend as % of Category Spend |
|----------------------|------------------------------------|------------------------------------------|------------------------------------|
| Education | £1,720,000 | £458,873 | 26.68% |
| GLA Group | £433,199,179 | £471,719 | 0.11% |
| London Boroughs | £173,293,441 | £32,436,640 | 18.72% |
| Large Private Sector | £86,562,855 | £25,349,021 | 29.28% |
| Other Public Sector | £496,455 | £283,834 | 57.17% |
| SME | £6,969,924 | £4,481,591 | 64.30% |
| Third Sector | £8,558,000 | £122,266 | 1.43% |
| Grand Total | £710,799,854 | £63,603,944 | 8.95% |

This shows that the real average of green spending as a proportion of total category spending for the selected product categories is just under 9%. This average is heavily influenced by a relatively low value of green spend reported by one member of the GLA Group in a single category where the total value of purchases was over £400 million.



KPIs and targets

Key Performance Indicators (KPIs) enable signatories to monitor the success of green procurement initiatives. All signatories are asked to report on their top five KPIs and targets relating to sustainable procurement. The table below shows the most commonly cited environmental impacts that were addressed by reported KPIs.

| Environmental impact | Number of organisations reporting KPIs |
|---------------------------|----------------------------------------|
| Waste to landfill | 81 |
| Energy use | 72 |
| CO ₂ emissions | 61 |
| Natural resource use | 56 |
| Water use | 28 |
| Air pollution | 16 |
| Hazardous chemicals | 11 |
| Biodiversity | 7 |

Below are some examples of KPIs and targets reported in the progress review survey that can help measure success in addressing specific environmental impacts:

Note: environmental KPIs and measured benefits reported in the progress review survey appear in a variety of different units. The most common abbreviations used for units are kg (kilogrammes) and t (tonnes) for both waste diverted from landfill and CO₂ (carbon dioxide) emissions avoided. Other units mentioned in this section include l (litres), £K (thousand pounds), KWh (KiloWatt hours), m² (square metres), m³ (cubic metres), km (kilometres), g (grammes) and µg (micro grammes).

Some London boroughs have expressed KPIs and targets in relation to National Indicators (NI)

Waste to landfill

- Tonnage or % of waste recycled or diverted from landfill
- All construction contractors:
 1. To provide a Site Waste Management Plan for new build or retrofit valued at £250K or above

2. Ensure levels of recycled contents of materials are above 20%
3. Monitor and reduce the tonnage of waste per unit of construction activity

- 95% of waste arisings to be recycled at our own recycling facility

Energy use

- KWh per employee (electricity and gas) / Tonnes of CO₂ emitted per £100K turnover
- % of renewable electricity benchmarked as 30% of utilities spend
- % reduction of "light and heat" spend
- Departments to source at least 10% of electricity from renewable energy / Departments to source at least 15% of electricity from CHP
- Source electricity from a 100% green tariff where available
- Major developments to have 20% renewable energy from onsite sources
- Specific contracts targeted at measuring energy use, for example the Sport Accord Programme Inclusive Fitness Initiative
- % reduction in energy usage for lighting within the main office
- Increase energy efficiency per m². Targets: by 15% by 2010, relative to 2001/02, and by 30% by 2020

CO₂ emissions

- Average fleet emissions in g CO₂/km / Carbon footprint
- % reduction in CO₂ emissions of the fleet vehicles
- % of bio diesel used to run a vehicle
- % reduction of CO₂ emissions for the top 30 suppliers
- % reduction in CO₂ emissions specified in the FM and Leisure management contracts
- % reduction in CO₂ emissions for the London office
- 2.5% reduction of the carbon footprint over the coming 12 months

For London boroughs

- NI 185: 15 % reduction in CO₂ emissions from local authority operations on a 2005 baseline / 10 % of reduction in CO₂ emissions from the council buildings by 2011/2012 against 2007/2008 levels
- NI 188: tonnes of CO₂ per square meter GIA

Natural resource use & recycled content

- 100% of timber to be legally and sustainably sourced
- 100% of new builds and retrofits to achieve BREEAM "very good" rating
- 20% of aggregates to come from recycled sources
- % consumables eco-labelled / % IT equipment eco-labelled / % online stationery orders / % recycled content in paper
- Each recycled grade used contains at least 25% recycled content from either post industrial, post consumer or depolymerised sources
- For all materials purchased, 50% must have a sustainable element
- Increase percentage of recycled content or sustainable stationery by 10%
- Use at least 10% recycled content in buildings (by value)
- Tonnes of packaging / turnover
- Quantity of steel purchased which is made from recycled material and purchased from local sources

Water use

- 3 % reduction in water usage at Head Office
- 10% reduction in the process water used in relation to turnover by the end of 2008
- % reduction in water usage for a specific machine

Air pollution

- 100% of the vehicle fleet to be fuelled by LPG
- Relevant contracts to include pollution clauses and requirements for use of green fuels where possible

For London boroughs

- NI 194: % of reduction in NO_x and primary PM10 emissions
- Number of times when a specific pollutant exceeds the legal threshold:
 - PM10: 50 µg/m³, < 35 times a year
 - NO₂: 200 µg/m³, < 18 times a year
- Total NO_x emissions (tonnes) from buses (g per passenger km)
- Total PM10 emissions (tonnes) from buses (g per passenger km)

Hazardous chemicals

- % reduction in chemical waste
- Reduction in volumes of more hazardous pesticides and other laboratory chemicals
- % of collection for specific types of hazardous chemicals
- Reduction in the volume and quantity of chemicals purchased by the hotel
- Remove or replace chemicals with a lower hazard rating
- Number of environmental incidents (pollution)

Biodiversity

For London boroughs:

- NI 197 – proportion of sites where positive conservation management has been or is being implemented
- % of parks that have received a Green Flag Award
- Non-decline of populations of indigenous species

Fuel use

- 2.5% reduction in fuel use

Sustainable Procurement (SPTF Flexible Framework)

- Level 1 - Foundation - completed
- Level 2 - Embedding - completed
- Level 3 - 2009
- Level 4 - 2009
- Level 5 - 2010

Measurable benefits

Below are some examples of measurable benefits reported by signatories as a result of their KPIs and targets:

CO₂ emissions

- Reduction of the average fleet emissions from 148g CO₂/km to 143 CO₂/km
- 12% decrease in total deliveries
- Savings of 25t of CO₂ through recycling
- Savings of 1.5t of CO₂ a year through 76% reduction in energy usage for lighting
- Savings of 14t of CO₂ through 50% use of bio diesel for each vehicle of the fleet
- Savings of 5.5t of CO₂ through the purchase of 3.3t of recycled paper
- Reduction of the carbon footprint by 8% to 102t CO₂ per annum
- Reduction of CO₂ emissions from HQ building by 7%
- 17.09% reduction in emissions from 1990 levels based on provisional figures, 16.4% reduction was confirmed for 07/08
- 15% reduction in electricity usage

Water

- Savings of 501,000 litres of water in manufacture through purchasing of 3.3t of recycled paper
- Reduction in water consumption of 27% through purchase of new "waterless" urinals
- Reduction in water use in relation to turnover of 33% through purchase of new technology
- 68m³ of water a year saved by use of hippos

Waste

- Avoidance of 4,950 plastic containers thrown away by replacement of plastic bottle with re-useable glass bottle
- 47% of the waste produced in council buildings diverted from landfill
- Recycling of 95% of waste from a specific site, which represents a 39% improvement compared to 2007
- 58% of waste was recycled
- Increase of 13% in recycling rate
- 55% reduction in chemical waste
- 60% decrease in general waste due to extensive recycling. Onsite water system has saved 80t of carbon dioxide from entering the atmosphere

Financial

- Reduction of the "light and heat" spend by 30%
- Reduction of tonnes of packaging/turnover from 1t/£400 to 1t/£800
- Reduction of 43% in spend through switching to greener stationery supplier
- Reduction of 33.45% in the cost of cleaning/disposal
- Savings of £3,000 by reducing 90% of hazardous chemicals in cleaning procedure



Suppliers overview

Purchases were reported from approximately 680 suppliers. Using Companies House data from the FAME database⁷ we were able to find data on turnover and employees of 272 of these suppliers. The most recent combined total turnover of the 272 companies is just over £530 billion and the total number of employees of these organisations is just over 770,000 according to the FAME database.

By comparing the value of reported purchases with the turnover and number of employees of each of these companies, we estimate that the purchases by signatories support 831 jobs. This is slightly less than last years 1,333 jobs. The reason for this may be that this year we have seen a large increase in the value purchases recorded from large companies within the energy and waste sectors.

The total spend recorded with suppliers based in London was just over £93 million. The top five suppliers, ranked by the total value of purchases reported are:

Top five suppliers by value in 2008/09

Overbury PLC

Apollo, GBS, Makers/Mears

Enterprise, North London Waste Authority, ICSL

Accord

Geoffrey Osborne Ltd

Veolia ES UK Ltd

The order changes significantly when the suppliers are ranked by the number of purchases recorded. The top five are shown below:

Ranked by no. of purchases 2008/09

Office Depot

Harper Office

Solus

Entrees International

Avenance

The leading companies by value are typically suppliers of lower volume, high value products and services in areas such as facilities management, building services and utilities. The most frequently reported suppliers by number of purchases are mostly providers of high transactional volume products such as office supplies.

⁷ FAME: Financial Analysis Made Easy, Bureau van Dijk, 2008.



Calculating the benefits of green procurement

Recycled content products and waste management

By Stewart Rutherford, Project Manager

The Department for Environment, Food and Rural Affairs (DEFRA) has predicted that landfill capacity in the UK is due to reach capacity by 2020. The scenario for London is somewhat more severe with landfill sites due to reach capacity by 2010.

The market for recycled content products is an essential part in “closing the loop” of the recycling process. As demand for recycled content products grows, vendors are increasingly obliged to seek recycled content alternatives to add to their stock-lists. The use of recycled materials in products also lessens the demand for virgin materials which reduces the impact on biodiversity, habitat loss and typically saves energy during the manufacturing process.

A London government department purchased 116 Think office chairs from Steelcase. This chair is the first-ever product to achieve the highest BIFMA environmental standard. It is also the first product to ever receive Cradle to Cradle™ product certification from McDonough Braungart Design Chemistry (MBDC). The chair is up to 98% recyclable by weight. Disassembly for recycling takes about five minutes using common hand tools. The level of recycled content is up to 40%.

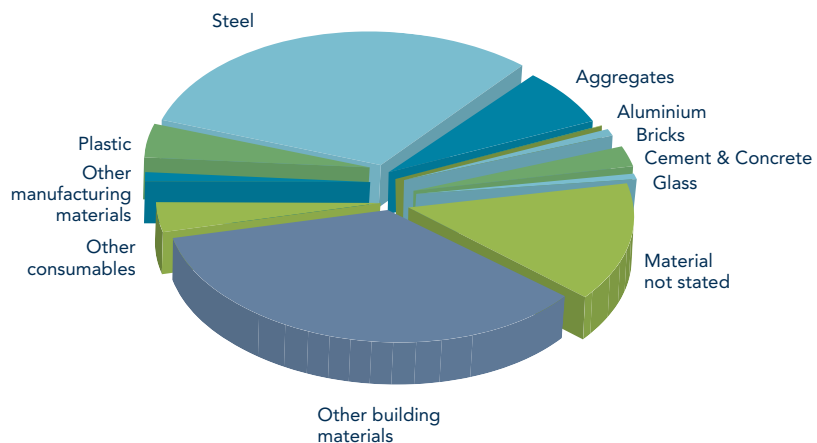
This year, Green Procurement Code signatories reported spending of £149,594,624 on recycled content products. This represents over a third of the total reported spending on green products and services and an increase of 55% on last year’s figure. 444 individual purchases were reported across 18 different product categories. These figures do not include purchases of recycled content paper which are covered in the next section of the report.

The table below shows the recycled content materials reported:

| Material | Total Value Reported |
|-------------------------------|----------------------|
| Aggregates | £10,619,250 |
| Aluminium | £46,369 |
| Bricks | £1,200,000 |
| Cement and concrete | £3,532,030 |
| Glass | £300,068 |
| Material not stated | £21,491,893 |
| Other building materials | £52,277,579 |
| Other consumables | £5,658,132 |
| Other manufacturing materials | £1,689,292 |
| Plastic | £6,148,811 |
| Steel | £46,631,200 |
| Total | £149,594,624 |

A total of £67,628,859 was reported on construction materials, including aggregates, bricks, cement, concrete and other materials. Together these accounted for over 45% of the total of £149.6 million reported on recycled content products.

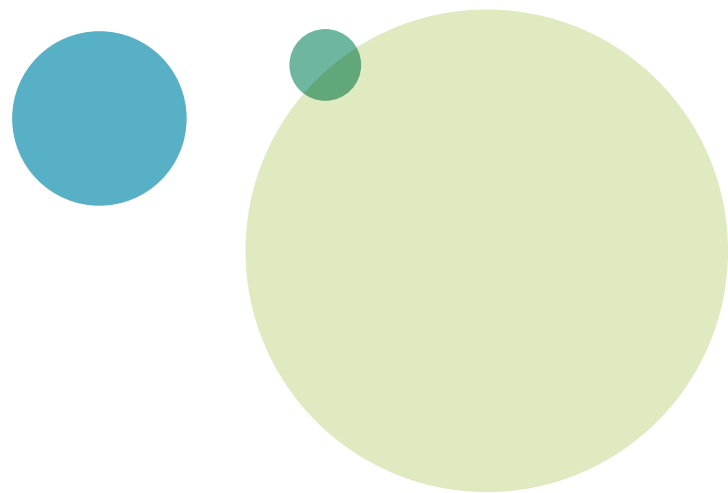
Proportion of spend in recycled content products by material



Environmental Benefits:

It is not possible to calculate environmental benefits for every individual purchase reported in the progress review survey. This is down to a number of factors including data quality, products containing mixed materials and in some cases the research on environmental benefits of a product or material having not yet been carried out.

We have however been able to quantify the environmental benefits for products representing over a quarter of the overall value of purchases submitted, a total of £34,424,520. See table below:



| Measurable savings from Recycled Content Products | | | |
|---------------------------------------------------|-------------------------------|-----------------------------------------|-----------------------------------------|
| Material | Tonnage of Material Purchased | Tonnage CO ₂ Emissions Saved | Tonnage of Waste Diverted from Landfill |
| Steel | 33,004 | 42,905 | 33,004 |
| Concrete/Cement | 40,164 | 3,299 | 23,909 |
| Aggregates | 143,999 | 204 | 56,894 |
| Totals | 217,167 | 46,408 | 113,807 |

Through the purchases made by Green Procurement Code signatories the following savings have been made:

- 113,807 tonnes of material diverted from landfill
- 46,408 tonnes of CO₂ emissions avoided

Through the purchase of 460 fleece uniforms, each made from 30 PET bottles, a London government department diverted 13,000 PET bottles from landfill, which is equivalent to 200kg of PET.

In addition to diverting waste from landfill through purchases of recycled content products, Green Procurement Code signatories have recycled 858,406 tonnes of waste, spending a total of £82,412,691 on waste management services.

Eight signatories reported contracts worth over £1 million with the highest value contract being worth over £18 million.

| Waste Management | | |
|--------------------------------------------|---------------------------------|----------------------------------------------------|
| Total Tonnage Waste Diverted from Landfill | Total Spent on Waste Management | Major Contracts Reported (Greater than £1 million) |
| 858,406 | £82,412,691 | 8 |

Paper

By Majken Moller, Senior Project Manager

Every year the UK consumes approximately 12.5 million tonnes of paper and board. More than 4.7 million tonnes is estimated to end up in the waste stream*.

Recycled content paper may not save trees in general, as trees are grown for a range of markets but it does divert waste from landfill, which would otherwise biodegrade and generate methane. Paper can, according to the recycling industry, be recycled up to five times before the paper fibre gets too short. Recycling paper also saves water and emissions compared to the pulping process of virgin wood fibre for paper.

Most paper from virgin fibre comes, according to the NAPM⁸, from softwood forests and forest plantations (either softwood or from eucalyptus plantations). Monoculture forest plantations are often managed in a way that reduces biodiversity drastically and the few remaining natural old-growth forests in Scandinavia, North America and Siberia are under increasing pressure from logging, both legal and illegal, to be turned into secondary forest and plantations. Paper is rarely made from wood from rainforest but rainforest is cleared to make way for eucalyptus plantations which support only a fraction of native plant and animal species found in the natural ecosystem. The demand for paper accounts for about half of the commercial timber cut worldwide**.

⁸ NAPM: National Association of Paper Manufacturers

* (Source: WRAP "Environmental Benefits of Recycling" 2006)

** (Source: WWF "The WWF guide to buying paper")

Best Practice

Best practice can be achieved by specifying paper with a high recycled content (see Appendix 4 for DEFRA's best practice standards)

- ensure printing on both sides
- limit uncollected printouts by introducing password protected printing
- change the paper used from 100gsm and 80gsm to 70gsm - this could reduce your paper consumption by 14%.

Specifying paper with a high percentage recycled content will generate a market for the recycled content paper industry and reduce environmental impacts such as water use, greenhouse gas emissions and air pollutants. A study from WRAP showed the environmental benefits of recycling paper compared with using virgin paper. Manufacturing 1 tonne of 100% recycled content paper saves the environment an average of 1.32 tonnes of CO₂ compared to the manufacture of virgin paper. The study took into account the complete lifecycle including the assumption that the paper might otherwise be disposed of in either landfill or by being incinerated.

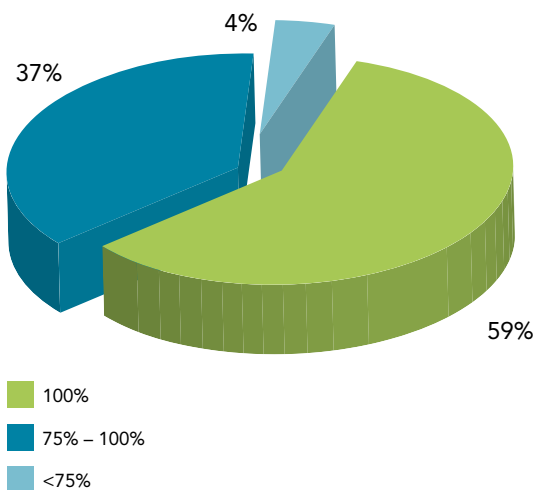
Cradle to Cradle thinking implies that you should close the loop and reuse resources; materials should go back into the production of new materials just as nature reuses nutrients in its lifecycle. For specific printing jobs, where there may not be a suitable recycled content option, paper from FSC or PEFC accredited forests should be specified.



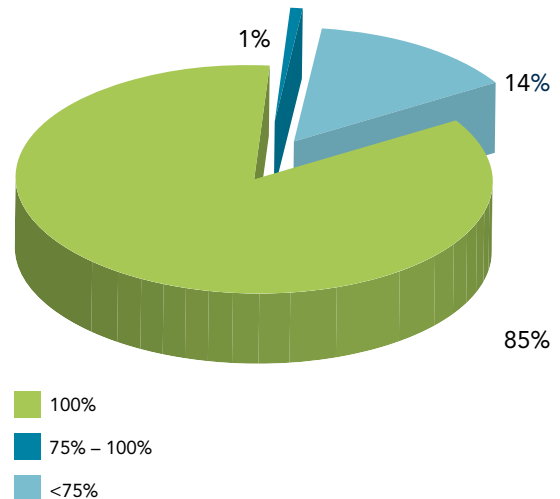
This year Green Procurement Code signatories purchased a total of 5,249 tonnes of paper and card with recycled content. This consists mainly of copier paper plus some packaging and card. The percentage recycled content of the paper reported shows that the higher percentages are being purchased. However, what the data does not show is the proportion of recycled paper purchased compared to virgin paper or 100% FSC.

The majority of the recycled content paper reported (59%) is of 100% recycled content and only 4% is below 75% recycled content. The figures below represent the proportion of recycled content in paper purchased by signatories overall and by sector. Most of the paper in the charts relates to copier paper, printed publications and some card. The graphs do not include purchases of tissue paper or paper purchased from certified sustainable forests.

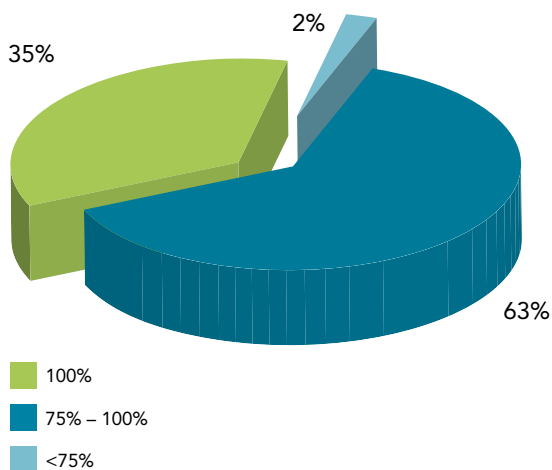
Breakdown of recycled content paper reported across all sectors 2008/2009



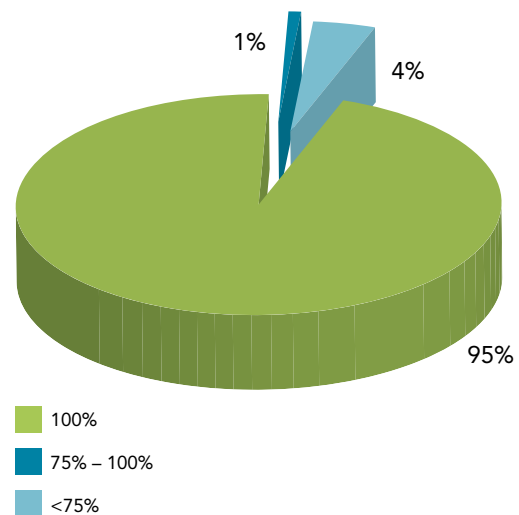
Breakdown of recycled content paper reported by the private sector 2008/2009



Breakdown of recycled content paper reported by the public sector 2008/2009



Breakdown of recycled content paper reported by SMEs 2008/2009



The use of e-procurement brings environmental and financial benefits: a university saved over 130 reams of paper a year by using corporate purchasing cards, e-requisitioning and e-tendering

The table below shows the environmental savings from buying recycled content paper compared to buying paper from virgin sources. The data is broken down by sectors and the majority is based on copier paper and paper for publications. The savings only capture a fraction of the savings generated from purchasing recycled content paper, as signatories also recorded large amounts of paper based stationery where savings could not be calculated because the weight was not specified.

| Sector | Total Spend £ | Tonnage purchased | Recycled content tonnage | M ³ diverted from landfill | Tonne CO ₂ emissions saved | Litres of water saved | Air pollutants in kg saved |
|----------------------|---------------|-------------------|--------------------------|---------------------------------------|---------------------------------------|-----------------------|----------------------------|
| GLA group | 412,909 | 843 | 732 | 3484 | 966 | 21,949,911 | 19,755 |
| London Boroughs | 2,428,335 | 1,514 | 1,375 | 6549 | 1,816 | 41,261,611 | 37,135 |
| Other public bodies | not given | 400 | 350 | 1667 | 462 | 10,500,000 | 9,450 |
| Large Private Sector | 974,856 | 772 | 694 | 3305 | 916 | 20,821,120 | 18,739 |
| Education | 38,550 | 27 | 27 | 131 | 36 | 822,588 | 740 |
| Third sector | 127,633 | 87 | 83 | 397 | 110 | 2,499,985 | 2,250 |
| SME | 775,973 | 1,618 | 1,573 | 7489 | 2,076 | 47,178,194.7 | 42,460 |
| Total | 4,758,256 | 5,262 | 4,834 | 23021 | 6,381 | 145,033,411 | 130,530 |

Environmental savings based on paper purchases reported (excludes tissue paper)

This means that purchases made by signatories to the Mayor of London's Green Procurement Code have:

- Diverted 23,021 cubic metres of waste from landfill
- Avoided 6,381 tonnes of CO₂ emissions
- Saved 145,033,411 litres of water
- avoided 130,530 kg of other air pollutants entering the atmosphere

Energy efficient products

By Cyril Jobard, Project Manager

The energy required to support our economies and lifestyles provides tremendous convenience and benefits. But there is a rising concern about the effects and the costs of this economic growth on ecosystems and human health. Since the industrial revolution, the development of consumerism has relied upon an increasing use of energy, coming mainly from fossil fuels, which are finite resources.

Although continuous improvements in energy-efficient technologies are being made, these are being offset by an ever-increasing level of consumption worldwide. Today, there are three main sources for energy use; transportation, building and production. Transportation is the world's fastest-growing form of energy use, accounting for nearly 30% of world energy use and 95% of global oil consumption. Worldwide, people use about a third of all energy in buildings—for heating, cooling, cooking, lighting, and running appliances.

Building-related energy demand is also rising rapidly, particularly within our homes. Home appliances are the world's fastest-growing energy consumers after automobiles, accounting for 30% of industrial countries' electricity consumption and 12% of their greenhouse gas emissions (Worldwatch Institute). All consumer products have associated and compounding energy inputs, and the largest share of global energy consumption goes into producing our vehicles, appliances, buildings, and even our clothes and food.

The decreasing quantities of fossil fuels and increasing demand for these sources of energy has dramatic consequences and will drive the rise in energy costs for the next decades. So there is clearly a need and a business case to become more energy-efficient.

A university has developed an in-house software solution to monitor the status of devices on the network. A pilot project monitored two device populations during term time, a group of secured PCs and a set of open access teaching room PCs, and found that the incidence of overnight idle power consumption was 5% and 30% of the pools respectively. These figures have justified the need for a strategy to eliminate unnecessary carbon and cost. The Faculty of Business, Computing and Information Management (BCIM) expects to reduce wasted power consumption and the associated overheads to zero by September 2010 in time for the start of the next academic year. Consumables will also be monitored on a per-printer basis to identify carbon sink points and investigate alternative hardcopy provision.

Initiatives to promote energy-efficiency can be classified in two ways: those that focus on reducing energy use during a company's operations or activities, and those that focus on reducing energy use associated with the product life-cycle.

1. Buildings and Operations

Since 2008, Display Energy Certificates (DECs) have been required for buildings with a total useful floor area over 1,000m² that are occupied by a public authority providing a public service. The DECs show the actual energy usage of a building.

The Carbon Reduction Commitment (CRC) is a cap and a trade emissions scheme which will be launched in January 2010. It will be mandatory for all organisations whose electricity use was greater than 6,000 MWh in 2008.

2. Products

There is a growing commitment from the UK government and the European Union, to recommend and promote minimum energy efficiency standards for an increasing number of product categories. For example the European Commission has developed the Energy Using Products Directive and, in the UK, the Office of Government Commerce (OGC) promotes its Buy Sustainable Quick Wins standards. This push for energy efficiency in products is supported by certification schemes such as Energy Star, EPEAT, ISO14025 and BREEAM.

The role of supra-national regulations is also important and can lead to a ban on some specific products. For example, since 2009, 27 European countries are now starting to phase out traditional incandescent light bulbs (100+W) over the next three years. The switch to more energy-efficient models will bring energy savings of 25% to 75% compared to the traditional bulbs.

This year 53 Green Procurement Code signatories reported purchases of energy-efficient products and services, which is almost twice as many as in 2008. The three main product categories reported are still: ICT (ICT hardware, reprographics equipment), utilities, building and construction materials, and highway equipment and maintenance (for example street lighting).

A London Borough purchased energy-efficient street lighting equipment. They replaced:

- 841 35W Sox and 55W Sox lamps with 841 45W Cosmo lanterns
- 357 55W Sox with 357 60W Cosmo lanterns
- 366 125W and 70W lamps with 366 60W Cosmo lanterns

By doing this they achieved savings of 193,376 KWh of electricity, 85 tonnes of CO₂ emissions and £23,922 per annum

Most of the organisations have taken an individual product approach, buying energy-efficient computers, laptops and monitors. However, it is worth mentioning that a few signatories have taken a more strategic approach by setting targets for the overall environmental performance of the complete office IT system, switching to a thin client system (network computer without a hard disk drive).

The purchase of energy-efficient products is a quick win. It is directly linked to energy costs, so it can bring substantial cost savings. For example, over the last year, 13 signatories achieved the following benefits through the purchase of energy-efficient IT hardware: 77 tonnes of CO₂, 170,000 KWh, resulting in £18,400 cost savings. The most common suppliers of Energy-Star computers and laptops are HP, Fujitsu Siemens, and Dell.

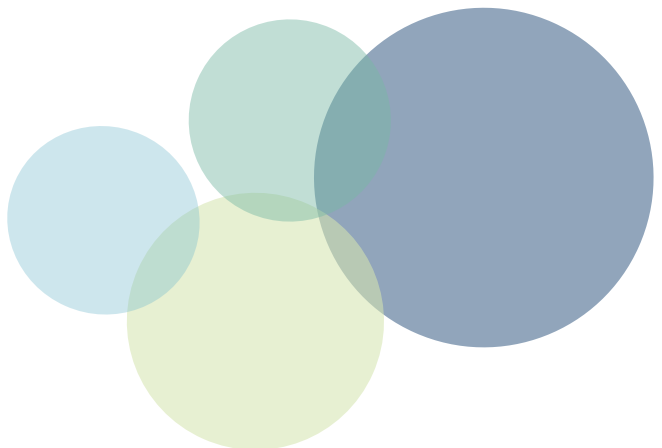
A London government department has replaced 287 CRT monitors with a power consumption of 61W with TFT monitors with a power consumption of 35W, achieving an energy saving of about 17,006 KWh. Assuming that the cost of a KWh was 10.88p for 2008-2009 (Eurostat), they saved over £1,850. The estimated environmental savings are 7.8 tonnes of CO₂.

A London government department replaced 602 desktops with energy-efficient models that use an average 141.5KWh per annum instead of 202.8KWh. This has led to savings of almost 37,000 KWh, 17 tonnes of CO₂ emissions and over £4,000.

A private environmental consultancy replaced 1,582 laptops with more efficient models with an energy consumption of 39.18 KWh per annum. Assuming that a standard model uses 97.33 KWh per annum, they achieved savings of 42 tonnes of CO₂ emissions, 92,000 KWh of electricity and £10,010.

A national charity replaced 4 freezers with energy-efficient models that use on average 12.2 KWh a day instead of 26.3 KWh a day. This has led to savings of over 20,588 KWh, a year, 9.4 tonnes of CO₂ emissions and over £2,240.

A construction company has replaced its bottled water service with 2,000 plumbed-in water chillers in 440 sites mobilised to date. The CO₂ reduction has been calculated at 295 tonnes of CO₂ per annum.



Buying renewable energy

By Graham Randles, Programme Manager

The generation and supply of electricity is widely known to be one of the major sources of greenhouse gas emissions around the world. Since the Kyoto Protocol set targets for developed world countries to reduce their greenhouse emissions, and particularly CO₂ emissions, the UK and the EU have established a variety of targets and initiatives to reduce emissions from electricity generation. Some of the UK initiatives relating to renewable energy are shown in the table below.

2001: Renewable Directive (RD) from the European Union. It proposed that Member States adopt national targets for renewables that were consistent with reaching the overall EU target of 12% of energy (22% of electricity) from renewables by 2010.

2002: Renewables Obligation (RO) from the UK government. It is an obligation on all electricity suppliers to supply a specific proportion of electricity from eligible renewable sources.

2003: Energy White Paper – promote energy efficiency and a low carbon economy. For the first time, the environment was put at the heart of Government's energy policy, causing energy efficiency and renewables to feature prominently in the White Paper, as the main ways of delivering carbon cuts.

2007: New negotiations on RD, setting the UK's share at 15% of final energy consumption coming from renewable sources.

2008: Review of the Energy White Paper. Renewable Energy Strategy. Sets out how to achieve the target defined in the White Paper.

Purchasing electricity from renewable sources is often thought to be a suitable strategy for organisations wanting to reduce their carbon emissions or to go "carbon neutral." However very often this electricity is delivered via the national grid and is purchased via a green tariff.

The national grid does not differentiate between green and what is sometime called "brown" electricity so buying from a green tariff does not mean that the electricity has been generated from a renewable source. The electricity company must simply be able to prove that it has bought an equivalent amount of renewable electricity to satisfy all of its customers on green tariffs.

As mentioned above, all electricity companies have been obliged to supply a proportion of their electricity from renewable sources for some time now. It is therefore debatable as to whether customers buying electricity on a green tariff contribute to an increase in the amount of renewable energy generated or whether it they are simply helping the power companies to meet their legal obligations. For this reason DEFRA's guidelines state that individual companies should not claim carbon savings from electricity purchased from green tariffs.

On the other hand, locally generated renewable energy does lead to savings of CO₂ emissions when it substitutes for energy purchased from the national grid.



Green Procurement Code signatories reported purchasing substantial amounts of renewable energy in the 2009 progress review. However the majority of these purchases related to green tariffs rather than locally generated renewable energy such as good quality combined heat and power (CHP). Some signatories reported their own calculations of the carbon savings of these energy purchases and in the remaining cases we have calculated the CO₂ equivalent (CO₂ eq⁹) emissions savings, based on the DEFRA greenhouse gas reporting guidelines (see Appendix 5 – Methodology). The table below shows the energy purchased and the associated CO₂ eq savings.

Although 99,869 tonnes of CO₂ emissions have been avoided through renewable energy supplied to signatories through green tariffs, we cannot attribute these savings to the purchasing companies.

A total of 3,431 tonnes of CO₂ emissions have been avoided through purchases of good quality combined heat and power by Green Procurement Code signatories.

⁹ CO₂ equivalent: carbon dioxide is not the only greenhouse gas and others, such as methane, are many times more potent in their global warming potential. To provide a consistent unit of measurement greenhouse gas emissions may be expressed in terms of their CO₂ equivalent.

| CO ₂ emissions savings from renewable electricity from green tariffs self-reported by signatory (tonnes) | CO ₂ emissions savings from CHP compared to National Grid self-reported by signatory (tonnes) | CO ₂ emissions savings from renewable electricity from green tariffs calculated (tonnes) | CO ₂ emissions savings from CHP compared to National Grid – calculated (tonnes) |
|---------------------------------------------------------------------------------------------------------------------|----------------------------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------|
| 46,272 | 1,073 | 53,597 | 2,358 |



Sustainable natural resources

By Hara Xirou, Senior Project Manager

European and other major economies depend on natural resources for their prosperity but current patterns of increasing consumption are causing environmental degradation globally. As with most developed regions, the EU is highly dependent on imported resources, and therefore it needs to ensure that all resources originate from sustainable sources. In July 2008, WWF estimated that 16% to 19% of all timber imports in the UK derive from alleged illegal or suspicious sources¹⁰.

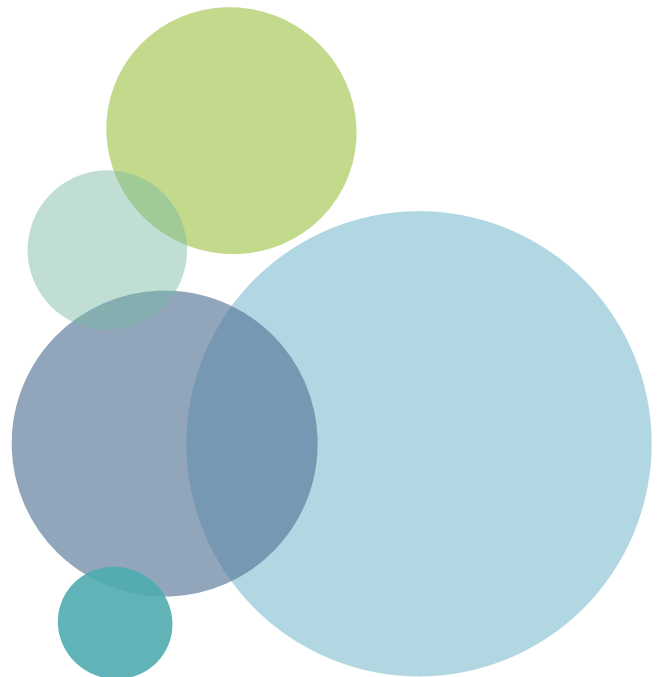
The EU established the European Ecolabel¹¹ in 1992 to be a recognisable environmental label across the region. The aim of the EU Ecolabel is to promote the design, production, marketing and use of products which have a reduced environmental impact during their entire life cycle.

In the UK, the Green Claims Code sets out the standard of information that the public can expect to be given about the environmental impacts of consumer products. The UK Government first launched the code in 1998, following wide consultation with business, consumer and environmental organisations. It has now been updated to take account of the new international standard on environmental claims, ISO 14021, which has been developed by standards bodies around the world.

A range of different green labels has been established by the UK Government that covers: ecolabels, energy labels, organic and food labels, product specific labels and timber products such as FSC and PEFC Trademark. In 2009, DEFRA published an updated guide of European eco labeled products and services including cleaning and janitorial, copying and graphic paper, tissue paper, soil improvements, textiles and paints¹².

The Mayor of London's Green Procurement Code aims to reduce the negative environmental impact of London based organisations that purchase goods and services. The results below demonstrate a high level of activity in purchasing sustainable and ethical products. In the year 2008/9, more than 50 signatories purchased sustainable natural resources.

The total value reported on 2008/09 for sustainable and eco products reached £37,223,491. This is a significant improvement compared with last year where signatories only reported £4,634,064 on products with eco-label certification. By far the highest proportion of this amount was spent on FSC /PEFC certified timber products, which accounted for £24,470,782 of the total¹³.



¹⁰ www.proforest.net/cpet/files/Timber%20Guide.pdf -

¹¹ The Ecolabel is backed by all EU Governments, and managed by DEFRA in the UK in partnership with TUV NEL Ltd.

¹² Sources:

<http://ec.europa.eu/environment/natres/studies.htm>
<http://ecolabel.defra.gov.uk/pdfs/shoppers-guide.pdf>

<http://ecolabel.defra.gov.uk/intro.htm>

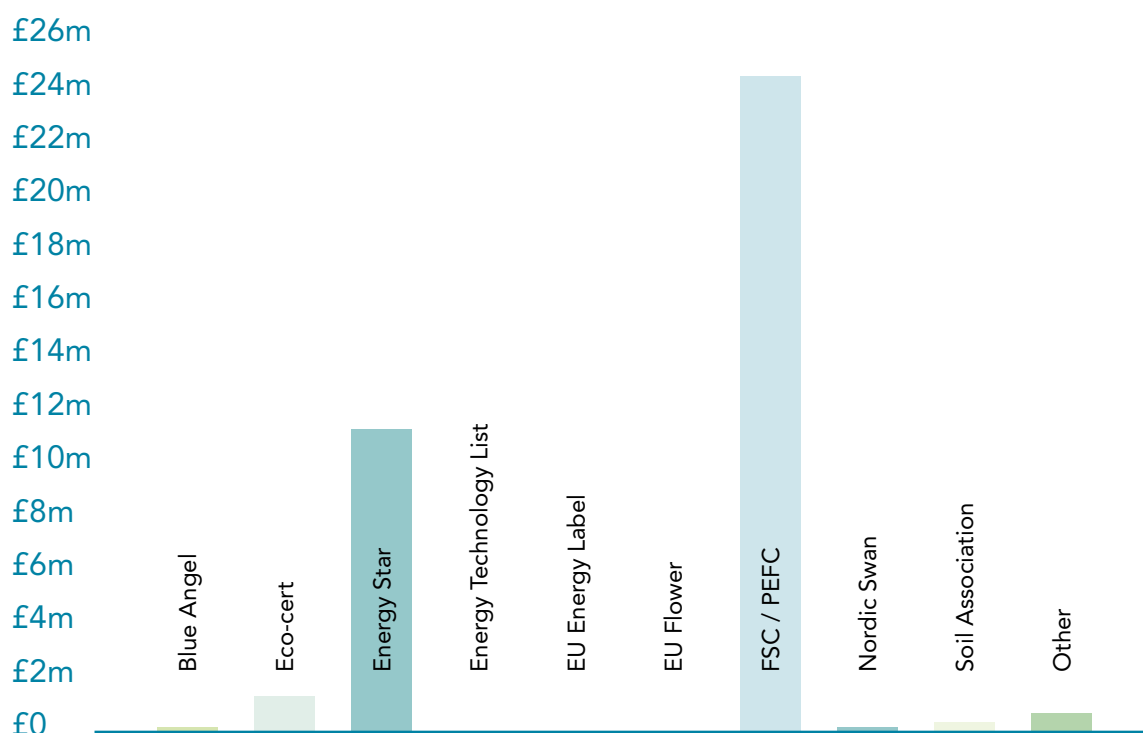
<http://ecolabel.defra.gov.uk/>

¹³ It should be highlighted that not all the eco label certified products, specifically the FSC/PEFC ones, were audited by the external assessors during the Progress Review Audit phase. Therefore we assume that all FSC and PEFC certified

A large private sector construction company purchased £3,400,000 worth of FSC certified timber pallets for a building and construction project for a healthcare unit.

A major UK charity purchased £65,000 worth of Soil Association certified locally produced organic vegetables in 2008/09.

Total Purchase Value for Eco-label Products



Local authorities reported spending £27,199,729 on FSC certified products; the highest of the sectors. The large corporate sector reported £5,169,874 but purchased a broader range of eco-labeled products (FSC, PEFC, Nordic Swan, Soil Association, EU Flower). Compared to last year's figures, local authorities reported a higher spend on eco-labeled products than

the large corporate sector and this could indicate an increase in the significance of measuring and reporting on products with eco-label certification.

The amount spent on eco-label products, by type of organisation, is presented in the following table:

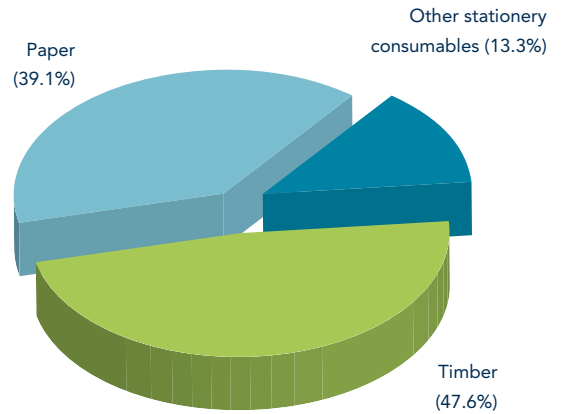
| Sector | FSC | PEFC | Blue Angel | Nordic Swan | Eco-Cert | Soil Assoc | Energy Star | EU Energy Label | EU Flower | Other (fairtrade/organic) | Totals |
|----------------------|-------------|----------|------------|-------------|----------|------------|-------------|-----------------|-----------|---------------------------|-------------|
| Education | £684,374 | | | | | | £453,903 | | | | £1,138,277 |
| GLA Group | £1,073,552 | | £24,900 | £7,886 | £292,363 | | £626,132 | | £27,840 | | £2,052,673 |
| Local Authorities | £17,251,690 | £118,713 | £200,000 | £105,116 | £253,797 | | £8,249,526 | £798,557 | | £222,330 | £27,199,729 |
| Large Private Sector | £4,105,684 | £17 | £2,339 | £8,173 | £285,645 | £109,246 | £369,483 | | £288,211 | £1,076 | £5,169,874 |
| SME | £1,185,024 | £27,959 | £2,222 | £9,470 | £6 | £61,389 | £211,379 | £18,258 | | | £1,515,707 |
| Third Sector | £23,312 | £457 | | £216 | | £65,000 | £58,246 | | | | £147,231 |

Signatories in all 6 sectors purchased FSC and Energy Star certified products. It is apparent that signatories purchased the highest amount on products with FSC certification (£24,323,636) and Energy Star rating (£11,312,652).

In 2008/09, 46 signatories including educational institutions, local authorities, private corporations, SMEs and third sector organisations reported purchases of FSC certified timber products. These products could be split into three main categories, paper, timber and other consumables, including:

- Printing paper
- Cleaning products (paper tissue, hand towel, toilet roll)
- Sundry stationery (notepads, pens, folders)
- Books
- Timber
- Office furniture
- Street furniture
- Cemetery and crematorium equipment
- Building and construction (fencing and decking, doors and frames, kitchen units)

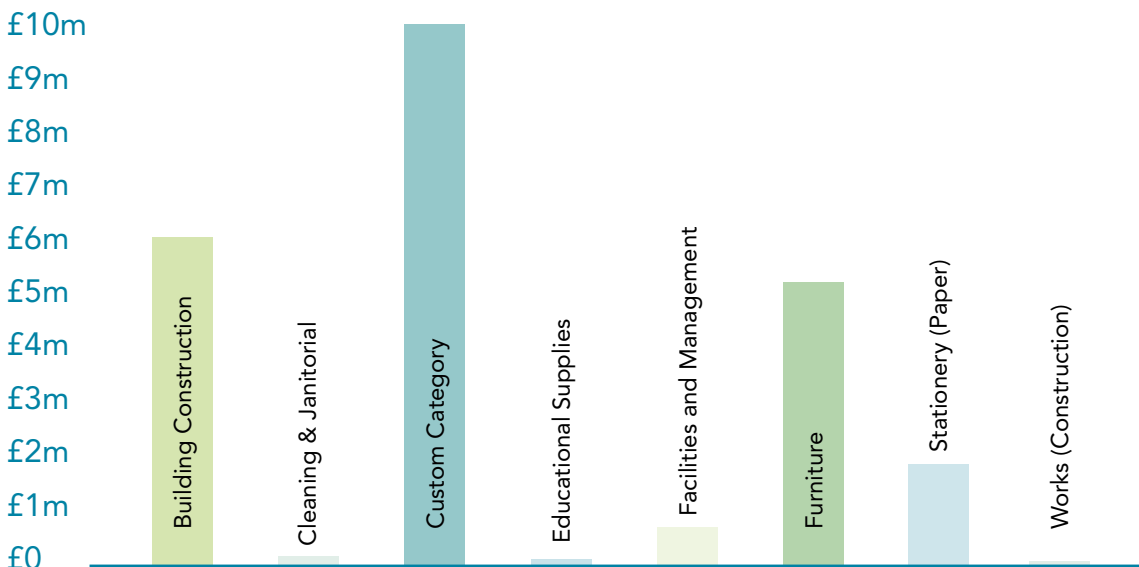
Composition of FSC / PEFC certified products



The highest spend reported on FSC and PEFC certified products in 2008/09 was in the raw materials for manufacturing category, reaching £11,010,864. This was followed by building and construction materials, reaching £5,926,394. Furniture with FSC / PEFC eco-label certification valued £5,172,139.

The sectors in which FSC and PEFC certified products were reported are presented in the table below:

Sectors in which FSC and PEFC products are used



Non-toxic chemicals

By Cyril Jobard, Project Manager

The use of harmful and toxic chemicals and the impact that they have on the environment is widely recognised as one of the major sources of industrial pollution and is therefore heavily regulated. Most of the products designed and manufactured today have to comply with environmental legislation on Health and Safety or Regulation on Hazardous Substances (RoHS), but this varies between regions of the globe. For example, Europe has more stringent regulations on the use of chemicals in product manufacturing than the USA. According to different studies, there are over 100,000 synthetic chemicals in commerce today.

Although legislation prevents manufacturers selling products that contain a certain level of toxic chemicals, more could still be done, within the mainstream chemistry industry, to phase out and replace traditional chemicals with more sustainable alternatives. However, there is a movement in the international community, around scientists and designers such as Michael Braungart and William MacDonough, which promotes

a new approach to chemistry and design. For example, the Cradle to Cradle™ methodology brings solutions to reduce and ultimately avoid any negative impacts of products on the environment throughout their entire life cycle.

In the 2009 progress review survey, 33 Green Procurement Code signatories reported a higher spend on non-toxic chemicals than last year. The main product categories reported are: cleaning materials and building and construction materials (e.g. paint and finishing or roofing materials). However, there is a clear gap in data provided by signatories.

A national charity reported the purchase of a non-toxic chemical, GelRed. It is a safer alternative to the commonly used Ethidium Bromide. GelRed has successfully passed environmental safety tests in compliance with CCR Title 22 Hazardous Waste Characterization. As a result, GelRed is not classified as hazardous waste, thus can be safely disposed of, providing convenience and reducing cost in waste disposal.



Glossary

Sox:

Low-pressure sodium. It is a type of High-intensity discharge (HID) lamps, used for example in street lighting

CRT:

Cathode Ray Tube. The tube of a television or monitor in which rays of electrons are beamed onto a phosphorescent screen to produce images. Often used as a generic term for a computer monitor. (<http://www.pctechguide.com>)

TFT:

Thin Film Transistor. A type of LCD flat-panel display screen, in which each pixel is controlled by from one to four transistors. TFT technology provides the best resolution of all the current flat-panel techniques. TFT screens are sometimes called active-matrix LCDs.

CCR:

California Code of Regulations. The official compilation and publication of the regulations adopted, amended or repealed by state agencies pursuant to the Administrative Procedure Act (APA). Acutely hazardous waste is any waste that is listed in 22 CCR, Chapter 11, Article 4, as an EPA-defined "P-listed" hazardous waste. These wastes typically are toxic or reactive. Acutely hazardous waste is a federal definition, whereas extremely hazardous waste (see definition below) is a State of California definition.

BIFMA:

Business and Institutional Furniture Manufacturer's Association. This North American Association develops safety and performance standards which are intended to provide manufacturers, specifiers, and users with a common basis for evaluating safety, durability, and the structural adequacy of the specified furniture, independent of construction materials. All accredited standards developers must follow the American National Standards Institute (ANSI) essential requirements.

MBDC:

McDonough Braungart Design Chemistry. MBDC is a product and process design firm dedicated to transforming the design of products, processes, and services worldwide. The firm was founded in 1995 by William McDonough and Michael Braungart to promote and power "the Next Industrial Revolution" through intelligent design. They employ Cradle to Cradle Design to create products and systems that contribute to economic, social, and environmental prosperity

PET:

Polyethylene Teraphtalate. It is a thermoplastic polymer resin of the polyester family and is used in synthetic fibers; beverage, food and other liquid containers; thermoforming applications; and engineering resins often in combination with glass fiber. This plastic is recyclable. Once recycled PET is used in car bumpers, furniture, skis, surfboards, carpet yarn, polyester fiber, films and sheets, and moulded parts

Conclusions

The 2009 progress review survey for the Mayor of London's Green Procurement Code shows that signatories have made significant improvements in all aspects of green purchasing over the last year.

First of all, we have seen a much higher number of organisations participating in the 2009 survey and submitting their data for auditor review. This is also reflected in the 50% increase in the total procurement budget of the reporting signatories, which is now over £15 billion!

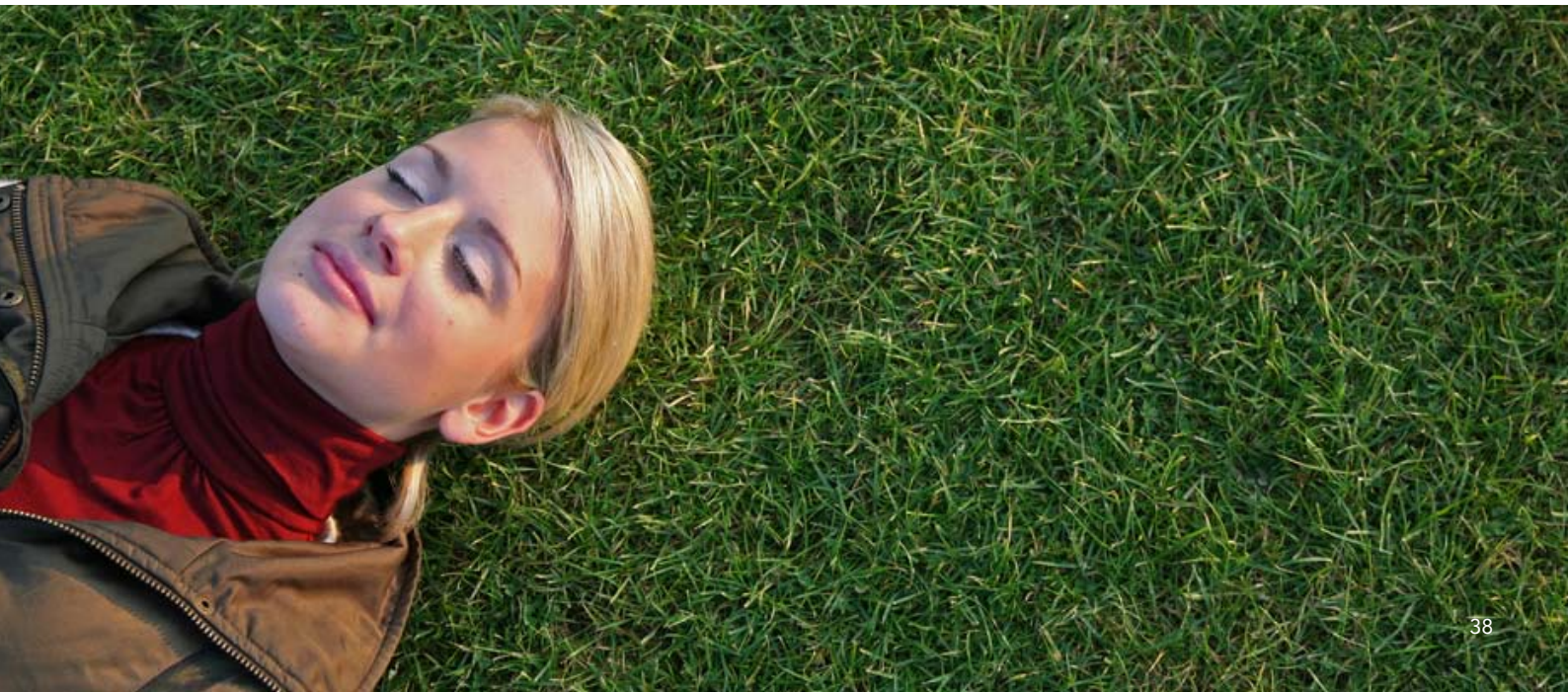
Secondly we have seen great improvements in green procurement practices and the extent that these are now embedded within the signatory organisations. These advances are highlighted by the increase in the number of signatories achieving the gold level, from 3 in 2008 to 16 in 2009.

We have also been able to identify 28 examples of best practice in green procurement: enough to justify publication of a separate report, which is available at www.greenprocurementcode.co.uk.

Next we have seen a major increase in the number and value of green products and services reported. The number of purchases increased from 1,416 in 2008 to 1,686 this year and the total value of green purchases increased by over 40% to £436,339,152.

Finally, our analysis has shown the significant environmental benefits from the green products and services purchased by signatories. 56,220 tonnes of CO₂ emissions have been avoided and 118,641 tonnes of waste diverted from landfill as a result of the green purchases made by signatories. These figures do not include the 99,869 tonnes of CO₂ emissions avoided through renewable energy supplied to signatories through green tariffs and the 858,406 tonnes of waste recycled, through the £82 million spent on waste management services.

We would like to thank the Green Procurement Code signatories for their efforts in making these achievements and the London Development Agency for its support of the programme.



Appendix 1:

Green Procurement Code signatories at 31 March 2009

| | | | |
|--------------------------------------------|--------------------------------------------------|---------------------------------------------|----------------------------------------------------|
| 1st Place Children and Parents' Centre | City of London | Enplex Ltd | Greenlight Business Solutions Ltd |
| 5E Ltd | Clarkes Caterers | EnterpriseMouchel | Green-Works |
| A Brighter Future CIC Ltd | Clearspring Limited | Environmental Business Products | Griffin Fire |
| A1Secured Ltd | Clearvue Media Ltd | epitype | Groundwork London |
| Accountability Recruitment Ltd | Clownfish | Ernst & Young | H.A Marks Construction & M&E |
| Acre Resources | Cluttons LLP | ESD-(part of the Camco Group) London Office | Haime & Butler Designers |
| Action Sustainability | Code IT Group | ETC UK Ltd | Harper Office |
| ACtive Entertainment Management Ltd | COI | etc venues | HBV Enterprise |
| Alium Partners | Colliers CRE | Ethos Recycling | Helix3d Ltd |
| Ambassador Theatre Group | Columbia Pictures Corporation Ltd | Eurodata Systems | Henderson Global Investors |
| Amicus Horizon | Community Clean | Event Communication | Hotham School |
| AndersElite | Community Hub | Eversheds LLP | HTi Imaging Ltd. |
| Any Junk | Computer Aid International | Excel Maids | Huntress Search Ltd |
| Arcola Theatre Production Company | Connect Group Consulting Limited | Excelian | HW Search & Selection Ltd |
| Arena Online Ltd | Connect Support Services Ltd | Exchange Group | Hyder Consulting |
| Ashurst | ConstructionResale.co.uk | F1 Colour Ltd | I. Waterman (Box Makers) Ltd |
| Aviva Investors | Corner-2-Corner Cleaning Services | Factorydesign | IAMBE |
| AZOGRAPHICS | Creative Design (Europe) Ltd | Family Action | Impact Executives |
| Badenoch & Clark | Creative Environmental Networks | Fellows' Associates | Information Horizons Ltd |
| Balfour Beatty Workplace | Credentials Ltd t/a Step Ahead | First Impressions Last Longer | Ink Group |
| BAM Construct UK Ltd | Crescent Lodge | First Mile | Institute of Environmental Management & Assessment |
| BASH Creations | Cresswell Office Services Ltd | First Protocol Event Management Ltd | Investec |
| Bay Media | Crossrail | FM Conway Limited | Island House Community Centre |
| BCCP Ltd | Cultural Industries Development Agency | Focus Skills Limited | Jam consult ltd |
| Bio Products Laboratory | Cygnets Properties & Leisure PLC | Ford Motor Company | James McNaughton Group |
| BioRegional Development Group | DABD | Fortis Investments | JCCS Ltd |
| Bite Communications | Dbi Consulting | Forum for the Future | Jestic & Whiles Architects |
| British Academy of Composers & Songwriters | Digby Morgan | Freelance | jpg co. & communications |
| British Airways | Digitile Ltd | Fresh RM Ltd | Jo Moulds |
| Brunel University | Dirty Harry's | Futures Supplies & Support Services Ltd | K & M IT Services Ltd |
| Bunzl plc | Dr Brian Dear | fwdesign | k4creative |
| Business Eco Ltd | Drivers Jonas | Geco | Karavan Eco |
| Bywaters (Leyton) Limited | East European Business Club Ltd | George Henderson & Partners Ltd | Keylogo Ltd |
| C B Richard Ellis | EC Harris | Gifford | Kierbeck Limited |
| Calverts | Ecochariots | Glass and Glazing Federation | King Sturge LLP |
| Cancer Research UK | Ecochip UK CIC | Global Action Plan | Kinnarps UK Ltd. |
| CarbonCred ltd | ecoConnect | Global Fashion Sourcing | Kiwi Movers |
| Carillion Facilities Services | ECT Group CIC | Gogen Ltd | KPMG |
| Centre for Cities | ECT Group CIC | Granger Hertzog | Kwik Sweep |
| CFDG | Edge Structures | Greater London Authority | Laidlaw & Constable Ltd |
| Change UK Recruitment Ltd | Edward Cullinan Architects | Greater London Enterprise Ltd. | Laing O'Rourke |
| Chase Zander | ELATT (East London Advanced Technology Training) | Green Motion Ltd | Lakehouse |
| Chimento Consulting Group Limited | Electoral Commission | Green Park Interim & Executive Resourcing | Land Securities |
| Citizens Advice | Elliott Thomas Ltd | Green Signature | Lee Valley Regional Park Authority |
| | Energy Saving Trust | | Legal and General Group plc |
| | | | Leisure Support Services Ltd |

| | | | |
|----------------------------------------------|---------------------------------------------|------------------------------------------------|-------------------------------------------------|
| leit-Werk Ltd | London Voluntary Sector Training Consortium | Prospero Recruitment | SSR Personnel Services Ltd |
| Lexis PR | Lunar Events Limited | Quills Office Supplies Ltd | St Giles Trust |
| Live Nation | Lyreco UK Ltd | Rainkal EcoDevelopers | Sterecycle |
| London Borough of Barking and Dagenham | Mapeley Estates | re:resolution human capital consulting limited | Steria Services Limited |
| London Borough of Barnet | Marks and Spencer | Regent Technical Facilities Ltd | Stream Products One Ltd |
| London Borough of Bexley | Mattinson Partnership | Reliance Facilities Management Limited | Supplies Team |
| London Borough of Brent | Max Fordham LLP | Renewal Programme Community Dev. | Supply Chain Future Ltd |
| London Borough of Camden | McDonnell Associates Limited | RGE Services | SustainAbility |
| London Borough of Croydon | McGee Group | Richard Edward Limited | SwiftFlow |
| London Borough of Enfield | Mears Group | Riot of Colour | Team Fusion Ltd |
| London Borough of Enfield | Metro | RLN London | TFA Interior Projects Ltd |
| London Borough of Greenwich | Metro And Tube Services Ltd. | Romax | The BPRI Group |
| London Borough of Hackney | Michael Page International | Royal Borough of Kensington and Chelsea | The Clean Space Partnership |
| London Borough of Hammersmith and Fulham | Mil-tek Environmental Solutions Ltd | Royal Borough of Kingston upon Thames | The Environment Trust |
| London Borough of Haringey | MITIE Interiors | Royal Court Theatre | The Olive Grows Ltd |
| London Borough of Harrow | Morgan Hunt | Royal Mail Group | The Pavement |
| London Borough of Havering | Morgan Law | RPM Ltd | The Pavement |
| London Borough of Hillingdon | Morgan Sindall | RS Consulting | The Plus Team |
| London Borough of Hounslow | Mott MacDonald Ltd | Rubbish Express Ltd | The Royal Botanic Gardens, Kew |
| London Borough of Islington | Mouchel | Rullion Engineering Personnel | The Sammons Group |
| London Borough of Lambeth | MVM London Ltd | Rush Couriers | Theatre Projects Consultants |
| London Borough of Lewisham | National Deaf Children's Society | Sapere Aude UK | Thinking Flowers? |
| London Borough of Merton | Natural History Museum | SE2 Ltd | Threadneedle Asset Management Limited |
| London Borough of Newham | Navig8 | SEFGP (South East Food Group Partnership) | Transport for London |
| London Borough of Redbridge | NCVO | Sethire.com Limited | Trident Printing |
| London Borough of Redbridge | NES UK Ltd | Seven46 | Trueform Engineering Limited |
| London Borough of Richmond upon Thames | Net Impact NUBS | Seventeen Events | Twining Enterprise |
| London Borough of Southwark | Nexmark | SITA UK Ltd | University College London |
| London Borough of Tower Hamlets | Nicholas Hare Architects LLP | Skanska Construction Public and Education | University of the Arts London |
| London Borough of Waltham Forest | North London Chamber of Commerce | Skanska Infrastructure Services | UnLtd - the Foundation for Social Entrepreneurs |
| London Borough of Wandsworth | Northgate | Skills & Enterprise Development Academy (SEDA) | Urban Planters London West |
| London Business College | Oakleaf Partnership | Skillset | Veolia ES Southwark Ltd |
| London Business College | Paper Round Ltd | Skive Creative | Verlander Walker Ltd |
| London Community Recycling Network | Park Inn Hyde Park | Smart contracts Limited | Verve Communications Ltd |
| London Development Agency | Park Royal Partnership Group | Smartly Green Limited | Vital Regeneration |
| London Fire and Emergency Planning Authority | Pearce Distribution Services | Social Enterprise London | Vitesse plc |
| London Overground Rail Operations Ltd | Penguin Group | South East Enterprise | VMA Group |
| London Probation Service | Plantforce | Southbank Centre | Wannabeco |
| London Recycling Limited | Platform | Specialist Schools and Academies Trust | Wiremat Ltd |
| London South Bank University | Playne Creative | Square Mile Coffee Roasters | Workspace Group PLC |
| London Sustainability Exchange | Praesto Training and Development Ltd | | WSP Environmental |
| London Universities Purchasing Consortium | Prevista | | Your Skills Net Community Interest Company |
| | Pringle Richards Sharratt | | Zarak Group |
| | Promise Training Centre | | Zoological Society of London |
| | Promo2u.com | | |
| | Proper Oils | | |

Appendix 2:

Progress Review Responses – survey overview

| Completed | Part 1 | Part 2 | Audited 2008-09 |
|--------------------------------------------|--------|--------|-----------------|
| 1st Place Children and Parents' Centre | ✓ | ✓ | Yes |
| A1Secured Ltd | ✓ | ✓ | |
| Acre Resources | ✓ | ✓ | Yes |
| Alium Partners | ✓ | ✓ | |
| Ambassador Theatre Group | ✓ | ✓ | Yes |
| Amicus Horizon | ✓ | | |
| Arcola Theatre Production Company | ✓ | | |
| Ashurst | ✓ | ✓ | |
| Asperity Employee Benefits Ltd | ✓ | | |
| AZOGRAPHICS | ✓ | | |
| Badenoch & Clark | ✓ | | |
| Barts and the London | ✓ | | |
| BASH Creations | ✓ | ✓ | Yes |
| BB Workplace | ✓ | ✓ | Yes |
| BCCP Ltd | ✓ | | |
| Bio Products Laboratory | ✓ | ✓ | Yes |
| BioRegional Development Group | ✓ | ✓ | Yes |
| British Academy of Composers & Songwriters | ✓ | ✓ | |
| Brunel University | ✓ | ✓ | |
| Bunzl plc | ✓ | ✓ | |
| Burlington Uniforms Ltd | ✓ | ✓ | |
| Bywaters (Leyton) Limited | ✓ | ✓ | |
| C B Richard Ellis | ✓ | ✓ | |
| Calverts | ✓ | ✓ | Yes |
| Cancer Research UK | ✓ | ✓ | Yes |
| CFDG | ✓ | | |
| Change UK Recruitment Ltd | ✓ | | |
| City of London | ✓ | | |
| Clownfish | ✓ | ✓ | |
| Cluttons LLP | ✓ | ✓ | |
| Code IT Group | ✓ | | |
| Community Clean | ✓ | | |
| Contracts IT Ltd | ✓ | ✓ | |
| Creative Design (Europe) Ltd | ✓ | ✓ | Yes |
| Creative Environmental Networks | ✓ | ✓ | Yes |
| Crossrail | ✓ | ✓ | |
| Dbi Consulting | ✓ | ✓ | |

| Completed | Part 1 | Part 2 | Audited 2008-09 |
|-------------------------------------------------------|--------|--------|-----------------|
| Department of Communities and Local Government (DCLG) | ✓ | ✓ | |
| DG3 Europe | ✓ | ✓ | |
| Digby Morgan | ✓ | ✓ | |
| Eco Everyday Ltd | ✓ | ✓ | Yes |
| Ecochariots | ✓ | | |
| Ecochip UK CIC | ✓ | ✓ | |
| ELATT (East London Advanced Technology Training) | ✓ | ✓ | Yes |
| Elliott Thomas Ltd | ✓ | ✓ | |
| Enplex Ltd | ✓ | ✓ | |
| ESD-(part of the Camco Group) London Office | ✓ | ✓ | |
| Eurodata Systems | ✓ | ✓ | Yes |
| Event Communication | ✓ | | |
| Eversheds LLP | ✓ | ✓ | |
| Factorydesign | ✓ | ✓ | |
| First Impressions Last Longer | ✓ | | |
| First Protocol Event Management Ltd | ✓ | | |
| FM Conway Limited | ✓ | ✓ | Yes |
| Ford Motor Company | ✓ | ✓ | |
| Fortis Investments | ✓ | | |
| Forum for the Future | ✓ | ✓ | Yes |
| fwdesign | ✓ | | |
| Gifford | ✓ | | |
| Glass and Glazing Federation | ✓ | ✓ | |
| Granger Hertzog | ✓ | | |
| Greater London Authority | ✓ | ✓ | Yes |
| Groundwork London | ✓ | ✓ | |
| H.A Marks Construction & M&E | ✓ | ✓ | Yes |
| Haime & Butler Designers | ✓ | ✓ | |
| Halcrow | ✓ | ✓ | Yes |
| Havco | ✓ | ✓ | |
| HBV Enterprise | ✓ | ✓ | |
| Henderson Global Investors | ✓ | ✓ | |
| Huntress Search Ltd | ✓ | | |
| I. Waterman (Box Makers) Ltd | ✓ | ✓ | Yes |
| IC2 CCTV & Security Specialists (UK) Ltd | ✓ | | |
| Inside Job Productions | ✓ | ✓ | Yes |
| Institute of Environmental Management & Assessment | ✓ | ✓ | |

| Completed | Part 1 | Part 2 | Audited 2008-09 |
|----------------------------------------------|--------|--------|-----------------|
| Jam consult ltd | ✓ | ✓ | Yes |
| Jestico & Whiles Architects | ✓ | ✓ | |
| Karavan Eco | ✓ | ✓ | Yes |
| Kierbeck Limited | ✓ | ✓ | Yes |
| KPMG | ✓ | ✓ | |
| Laing O'Rourke | ✓ | | |
| Lakehouse | ✓ | ✓ | |
| Lee Valley Park Authority | ✓ | ✓ | |
| London Borough of Barking and Dagenham | ✓ | ✓ | |
| London Borough of Barnet | ✓ | ✓ | Yes |
| London Borough of Bexley | ✓ | ✓ | Yes |
| London Borough of Brent | ✓ | | |
| London Borough of Camden | ✓ | ✓ | |
| London Borough of Croydon | ✓ | ✓ | Yes |
| London Borough of Ealing | ✓ | ✓ | |
| London Borough of Enfield | ✓ | ✓ | |
| London Borough of Greenwich | ✓ | ✓ | Yes |
| London Borough of Hackney | ✓ | ✓ | Yes |
| London Borough of Hammersmith and Fulham | ✓ | ✓ | |
| London Borough of Haringey | ✓ | ✓ | |
| London Borough of Harrow | ✓ | ✓ | Yes |
| London Borough of Havering | ✓ | ✓ | |
| London Borough of Hillingdon | ✓ | ✓ | |
| London Borough of Hounslow | ✓ | ✓ | |
| London Borough of Islington | ✓ | ✓ | Yes |
| London Borough of Lambeth | ✓ | ✓ | Yes |
| London Borough of Lewisham | ✓ | ✓ | Yes |
| London Borough of Merton | ✓ | | |
| London Borough of Newham | ✓ | ✓ | Yes |
| London Borough of Redbridge | ✓ | ✓ | |
| London Borough of Southwark | ✓ | ✓ | |
| London Borough of Tower Hamlets | ✓ | ✓ | Yes |
| London Borough of Wandsworth | ✓ | ✓ | |
| London Business College | ✓ | | |
| London Community Recycling Network | ✓ | ✓ | Yes |
| London Development Agency | ✓ | ✓ | Yes |
| London Fire and Emergency Planning Authority | ✓ | ✓ | Yes |

| Completed | Part 1 | Part 2 | Audited 2008-09 |
|----------------------------------------------|--------|--------|-----------------|
| London Probation Service | ✓ | ✓ | |
| London Recycling Limited | ✓ | ✓ | |
| London Remade | ✓ | ✓ | Yes |
| London South Bank University | ✓ | ✓ | |
| London Universities Purchasing Consortium | ✓ | ✓ | Yes |
| London Voluntary Sector Training Consortium | ✓ | ✓ | |
| Mapeley Estates | ✓ | ✓ | Yes |
| Max Fordham LLP | ✓ | ✓ | Yes |
| McDonnell Associates Limited | ✓ | ✓ | Yes |
| McGee Group | ✓ | ✓ | |
| Metropolitan Police Service | ✓ | ✓ | Yes |
| Mouchel | ✓ | ✓ | Yes |
| National Deaf Children's Society | ✓ | | |
| Natural History Museum | ✓ | ✓ | |
| NCVO | ✓ | ✓ | Yes |
| OFGEM | ✓ | ✓ | |
| Olive 360 | ✓ | ✓ | |
| Ove Arup | ✓ | ✓ | Yes |
| Paper Round Ltd | ✓ | ✓ | |
| Park Inn Hyde Park | ✓ | ✓ | Yes |
| Park Royal Partnership Group | ✓ | ✓ | |
| Penguin Group | ✓ | ✓ | Yes |
| Playne Creative | ✓ | ✓ | Yes |
| Promo2u.com | ✓ | ✓ | Yes |
| Proper Oils | ✓ | ✓ | Yes |
| Public and Commercial Services Union | ✓ | ✓ | |
| re:solution human capital consulting limited | ✓ | ✓ | |
| Reliance Facilities Management Limited | ✓ | ✓ | Yes |
| RGE Services | ✓ | ✓ | Yes |
| Richard Edward Limited | ✓ | ✓ | Yes |
| Riot of Colour | ✓ | ✓ | Yes |
| RLN London | ✓ | | |
| Royal Borough of Kensington and Chelsea | ✓ | ✓ | |
| Royal Borough of Kingston upon Thames | ✓ | ✓ | |
| Royal Court Theatre | ✓ | ✓ | |
| Royal Mail | ✓ | | |
| SE2 Ltd | ✓ | ✓ | Yes |

Appendix 3:

Eco-Labels

Eco-labels usually cover a wide range of environmental impacts across the lifetime of a product, from production and use through to disposal. Eco-labels ensure the protection of natural resources or habitats, or minimisation of energy consumption in manufacture or use. Some labels focus mainly on agricultural or ethical aspects.

In the Progress Review survey signatories reported on their green spending with regard to a number of different categories such as building construction materials, furniture and stationery. Within these categories many of the purchases recorded have been awarded eco-labels. Eco-label or green label products must be independently certified and have to meet strict criteria for all the main environmental impacts across their whole life cycle.

The main eco-label products that were recorded in the Progress Review are outlined below:

Timber Products:

- FSC (Forest Stewardship Council)
- PEFC (Programme for the Endorsement of Forest Certification schemes)



The Trademark of the Forest Stewardship Council indicates that the wood used to make a product comes from a forest which is well managed according to strict environmental, social and economic standards. The forest of origin has been independently inspected and evaluated according to the principles and criteria for forest management agreed and approved by the FSC.

www.fsc-uk.org

FSC-GBR-669

FSC trademark © Forest Stewardship Council A.C.

| Completed | Part 1 | Part 2 | Audited 2008-09 |
|-------------------------------------------------|--------|--------|-----------------|
| SE2 Ltd | ✓ | ✓ | Yes |
| Serious Marketing | ✓ | | |
| Seventeen Events | ✓ | ✓ | Yes |
| Severnprint Ltd | ✓ | ✓ | |
| SITA UK Ltd | ✓ | | |
| Skanska Construction Public | ✓ | ✓ | |
| Skanska Infrastructure Services | ✓ | ✓ | Yes |
| Skive Creative | ✓ | ✓ | |
| Smart contracts Limited | ✓ | ✓ | |
| Southlondon.biz c/o Merton Chamber of Commerce | ✓ | ✓ | |
| Specialist Schools and Academies Trust | ✓ | ✓ | |
| Sprout Design | ✓ | | |
| St Giles Trust | ✓ | ✓ | Yes |
| Sterecycle | ✓ | | |
| SustainAbility | ✓ | | |
| SwiftFlow | ✓ | ✓ | Yes |
| Technology Project Services | ✓ | | |
| The Royal Botanic Gardens, Kew | ✓ | ✓ | |
| The Royal Society of Medicine | ✓ | ✓ | |
| The Sammons Group | ✓ | ✓ | Yes |
| Thinking Flowers? | ✓ | ✓ | |
| Transport for London | ✓ | ✓ | Yes |
| University College London | ✓ | | |
| University of the Arts London | ✓ | ✓ | |
| UnLtd - the Foundation for Social Entrepreneurs | ✓ | | |
| Urban Planters London West | ✓ | ✓ | Yes |
| Veolia ES Southwark Ltd. | ✓ | ✓ | |
| Verlander Walker Ltd | ✓ | ✓ | Yes |
| Verve Communications Ltd | ✓ | | |
| Vital Regeneration | ✓ | ✓ | |
| VMA Group | ✓ | ✓ | |
| Westminster City Council | ✓ | ✓ | |
| Westminster TranServ | ✓ | | |
| Wiremat Ltd | ✓ | ✓ | |
| Workspace Group PLC | ✓ | ✓ | Yes |
| Zoological Society of London | ✓ | ✓ | |
| SE2 Ltd | ✓ | ✓ | Yes |



The PEFC Council (Programme for the Endorsement of Forest Certification schemes) is an independent organisation whose logo provides an assurance that its certified wood and paper products have been independently audited as

coming from sustainably managed forests.

PEFC/16-44/01

www.pefc.org

There are FSC-certified products available in the UK in all the following categories:

- Construction materials (including board materials used for form work)
- Street and landscape furniture (including seats, bollards and bus shelters)
- Office furniture
- Office paper
- Graphic papers
- 'Biomass for heating and power generation (including wood pellets)

Organic Labels



www.soilassociation.org

The word "organic" is defined by law. One characteristic of organic farming is that it strictly limits use of artificial chemical fertilisers and pesticides.

The word "organic" can be used on food products only if they are produced according to regulations, and farmers and processors must be certified by an approved organisation.

Organic standards don't just apply to food. Additional private standards used by authorised bodies increasingly cover other products, including textiles, cosmetics, wood products and composts. The Soil Association organic standard is the most widely known in the UK but there are many others.

European Ecolabels



The EU Flower label is an official Europe-wide award for non-food products that minimise impacts on the environment. Products must be independently certified, and have to meet strict criteria for all the main environmental impacts across their whole life cycle. Defra

runs the scheme in the UK, where the Flower's range includes cleaning and detergent products, paints, toilet tissue, clothing and tourist accommodation.



www.ecolabel.nu



www.blauer-engel.de

Some countries or areas also have national schemes, like the Nordic Swan in Scandinavia and the Blue Angel in Germany, shown below.

Eco-certification



Eco-certification is one of the key supports for principled green markets along with greener public policy and reliable public information systems that inform about basic issues related to sustainability.

Eco-certification is where an independent agency tests or verifies that a certain more sustainable practice has been followed in the production of a given good or service.

Appendix 4:

The revised draft minimum mandatory specifications are shown below:

DEFRA is currently consulting on revisions to the best practice standards for paper and has developed a new set of specifications under the "Buy Sustainable Quick-Wins" banner. Day to day use of office copier paper will remain at 100% post consumer recycled content but additional criteria have been added to the specification.

The revised draft minimum mandatory specifications are shown on the right:

Draft Quick Wins Specifications Copying and Graphic Paper

Minimum mandatory specifications

(Based on environmental and economic impact analysis across the product life-cycle and taking account of market capacity issues)

- 100% recycled content: to include only post-consumer recovered fibres, in accordance with the NAPM definition of genuine recovered fibre: http://www.napm.org.uk/recycled_mark.htm
- All papers must be at least Elemental Chlorine Free (ECF) or Process Chlorine Free (PCF)
- No Optical Brightening Agents (OBAs) should be added

The recommended best practice specifications for graphic paper have been raised from 50% to 75% recycled content and the remaining fibre must come from sustainable forest sources as below:

Paper for Professional Purposes / Printed Publications

Minimum mandatory specifications

(Based on environmental and economic impact analysis across the product life-cycle and taking account of market capacity issues)

- Minimum 75% recycled content: to include only post-consumer recovered fibres, in accordance with the NAPM definition of genuine recovered fibre: http://www.napm.org.uk/recycled_mark.htm. The recycled content must be Elemental Chlorine Free (ECF) or Process Chlorine Free (PCF)
- Of the non-recycled content (25% or less), the virgin fibre used must be sourced from a sustainably managed forest, preferably with external certification, or at a minimum with a defined internal management system. All virgin fibre must be Totally Chlorine Free (TCF)
- No Optical Brightening Agents (OBAs) should be added

Appendix 5:

Methodology

When organisations sign up to the Mayor of London's Green Procurement Code they make a commitment to complete the annual progress review survey. This involves reporting on their green purchasing practices (part one) and providing details of green purchases or contracts in a range of product categories (part two). Those signatories that wish to achieve the bronze, silver or gold level of the Green Procurement Code must submit their survey data for review by an IEMA qualified auditor.

The 2009 progress review survey relates to activities and purchases or contracts for the period from April 2008 to March 2009 inclusive. Signatories may enter data into the online progress review survey tool at any time during the year but the majority of the data for the 2009 survey was collected between April and June 2009. Most of the auditor reviews took place in May and June 2009.

Some signatories found the collection of purchase data to be challenging but the leading signatories organised workshops and training for their procurement staff, assisted by members of the Green Procurement Code team. In every case these workshops were instrumental in helping the signatories concerned to record a high number of purchases in a broad range of categories. Signatories who had submitted data for the 2008 progress review generally found the process much easier this time around and reported more complete data.

Once the final data has been submitted it is aggregated by the Mayor of London's Green Procurement Code team at London Remade. First the data from the online survey tool is downloaded into individual spreadsheets for each signatory, then it is combined into master databases of part one and part two data.

The data is then analysed to provide the results that are set out in this report. During the data analysis, it is not uncommon to find errors or discrepancies in the data that must be checked with individual signatories. An example may be a large contract where the full contract value has been recorded but the relevant green element is only a proportion of that contract. Where possible we have tried to identify the value of the green elements of reported contracts and purchases.

We may also adjust the data so that purchases can be analysed in consistent units.

For example, a simple product such as copier paper may be recorded as sheets, boxes, reams or packs. We convert these disparate units to one standard unit (in this example it is reams) that can then be converted to a more meaningful measure (in this case tonnes) for the calculation of environmental benefits. All adjustments made to the original data are recorded in the master database.

The last stage of the process is to conduct a peer review of the part one scores and to calculate the environmental savings from information that could be used in part two. The single biggest problem in analysing the environmental benefits is that many of the purchases recorded do not contain sufficient detail to make a meaningful assessment.

We have used a variety of sources to calculate the carbon emissions savings of the recorded purchases. These savings fall generally into two categories: savings from products in use due to energy or fuel efficiency and savings in embodied energy, typically due to use of recycled materials in the production of the products.

The main reference sources for calculations of carbon savings are as follows:

- DEFRA's greenhouse gas conversion factors (Sept. 2009), used for savings from purchases of renewable energy, combined heat and power, steel and aggregates. Ref:<http://www.defra.gov.uk/environment/business/reporting/conversion-factors.htm>
- WRAP's Environmental Benefits of Recycling report (Sept. 2006) used for savings from purchases of recycled paper and card
Ref:http://www.wrap.org.uk/downloads/Recycling_LCA_Report_Executive_Summary_Sept_2006_eac17d2a.2839.pdf
- University of Bath's Inventory of Carbon and Energy v.1.6, used for savings from purchases of cement and concrete. Available at: <http://people.bath.ac.uk/cj219/>
- PWC Sustainability's report for the European Commission: Collection of statistical information on Green Public Procurement in the EU: Report on methodologies, used for benchmarking purchases of energy efficient products against industry averages
Ref: http://ec.europa.eu/environment/gpp/studies_en.htm

Appendix 6:

The Mayor of London's Green Procurement Code steering group

Daniel Silverstone
London Remade (Chair)

Katherine Adams / Matthew Galvin
Transport for London / GLA Group Central Responsible Procurement Team

Roy Anklesaria / Richard Walsh
Audit Commission

Roy Ayliffe / Helen Alder
Chartered Institute of Purchasing and Supply (CIPS)

Faraz Baber
London Councils

Martin Baxter
Institute of Environmental Management and Assessment (IEMA)

Sally Dagli
London Development Agency

Barbara Morton
Sustainable Procurement Ltd.

Andy Murray / Sarah Fletcher
London Borough of Lewisham

Graham Randles
London Remade

Arthur Stitt
Calverts

Billie Waters
Ove Arup and Partners

Kay Williams
DEFRA

Appendix 7:

The Mayor of London's Green Procurement Code team

London Remade

Chief Executive

Daniel Silverstone

Programme Manager

Graham Randles

Senior Project Managers

Majken Moller

Katy Read

Hara Xirou

Project Managers

Cyril Jobard

Stewart Rutherford

Communications and Events Manager

Ritu Arora

Communications and Events Officer

Jodi Lloyd

Project Delivery Partners

Action Sustainability

Lead contacts: Emma-Jane Allen & Kavita Shial

Mouchel Management Consultancy

Lead contacts: David Goatman & Sonya Bhonsle