Home Office

CARBON MANAGEMENT PLAN 2011-2015

A SUMMARY

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Contact Us

We all want to reduce carbon emissions. You can show your support for the department's commitment to reduce emissions by emailing our sustainable development team at:

sustainabilityenquiries@homeoffice.gsi.gov.uk

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SECTION 1: GETTING STARTED

Ambition

We shall reduce the impacts of our work on the environment and reduce our carbon dioxide (CO_2) emissions, in line with Government ambitions.

The ambition of the Home Office (including our agencies and NDPBs) is to be recognised as a green organisation in the way we do our business.

There are many reasons to reduce our energy use and CO_2 emissions, for example, legislative, Government commitments, financial, regulatory, leadership and technological.

Our target is to reduce CO_2 emissions from directly billed buildings and domestic administrative travel by 25% by 2015 from a 09/10 baseline. This is in line with the greening government commitments (GGC) which can be found HERE

If achieved this will save over 12,000 tonnes of CO_2 and reduce ongoing costs by over £3.374m in 2015 (based on assumed Business as Usual changes in emissions).

The savings achieved will cover the cost of the project investments.

The Home Secretary

As Home Secretary I recognise the importance of the Home Office reducing, where practical, CO_2 emissions arising from its activities. Such a focus will ensure the Home Office is able to effectively contribute to essential short and longer term targets to reduce emissions within the UK Public Sector, as enshrined in the UK Climate Change Act, as well as realising available savings and acting as an exemplar.

The development of the Home Office Carbon Management Programme focuses on delivering practical reductions in CO_2 emissions with effort devoted where the most benefits are to be realised. It involves a range of key partners, including DECC, Carbon Trust, FM Partners and Home Office staff.

I am committed to the Home Office developing good practice, and so ensuring that it is able to share its positive experiences with other public and private organisations as well as its staff. This will include the use of new technology and the Home Office will seek to implement innovative low carbon solutions. I also recognise that the Home Office can learn from other organisations, and will continue to share experiences started within the Carbon Management Programme.

From the Carbon Trust

Cutting CO_2 emissions as part of the fight against climate change should be a key priority for central government organisations. Carbon management is about realising efficiency savings, transparency, accountability and leading by example. The UK government has identified the public sector as key to delivering CO_2 reduction across the UK in line with its Climate Change Act commitments and the Carbon Trust's Central Government Carbon Management Service is designed in response to this. It helps organisations to save money on wasted energy and put it to better use in other areas, while making a positive contribution to the environment by lowering carbon emissions.

The Carbon Trust is pleased to have been working with the Home Office on carbon management since 2009. Most recently, in 2010-11, the Home Office partnered with Carbon Trust on the pilot Central Government Carbon Management programme to realise substantial carbon and cost savings. This Carbon Management Plan commits the Home Office to a target of reducing CO_2 emissions by 25% by 2014/15 and underpins potential financial savings and cost avoidance to the organisation of over £9 million by that date.

Central government organisations can contribute significantly to reducing CO_2 emissions and improving efficiency. The Carbon Trust is therefore very proud to support the Home Office in their on-going implementation of carbon management.

Richard RuggHead of Public SectorCarbon Trust

A Message from our Low Carbon Champion

The Home Office, along with the rest of the civil service, is going through rapid change in response to our structural reform plan and the spending review. We are conscious of our responsibility to the taxpayer to operate as efficiently and transparently as possible within tight budgets, while delivering a high quality service to the public. We also recognise our duty to reduce the impact of our business on the environment by cutting CO_2 emissions; by using resources efficiently and effectively and by eliminating waste.

Reducing CO_2 emissions not only lessens our impact on the environment but also helps the Home Office to reduce costs.

I am pleased with our progress in reducing emissions since 1999/00, especially in 2010/11 which saw a year on year improvement of 17.6%. We also came third in the Prime Minister's interdepartmental competition for headquarters for energy reduction and first in money saved.

In 2010 we commenced an innovative gain-share agreement with one of our facilities manager partners to incentivise and maximise energy reductions. We are already achieving new and exciting benefits from this approach, including remote monitoring and significant improvements in the management of building energy systems, and we hope to build on the successes so far as the contract develops and in a similar agreement with other partners.

We have been set new stringent commitments by Government and I will do everything in my power to meet these head on. Our sustainability priority is to cut CO_2 emissions, from our estate and travel by 25% by 2015, compared to 2009/10. Together we need to save over 12,000 tonnes of CO_2 by 2015.

The Home Office could not have achieved so much to date, nor deliver in the future without the support of our staff, suppliers and the Carbon Trust. These pages set out our "carbon management plan" until 2015 and will be regularly updated to demonstrate progress and savings achieved. I look forward to the challenges and innovation along the way as we seek a lower carbon future here in the Home Office.

Helen Kilpatrick

Director General Financial and Commercial, Low Carbon and SD champion, Carbon Management Plan Sponsor

Introduction

We have been managing building energy use for over 20 years.

The latest set of Governmental targets ended in 2011 based on 1999/2000 baselines. This performance can be found on Defra's website

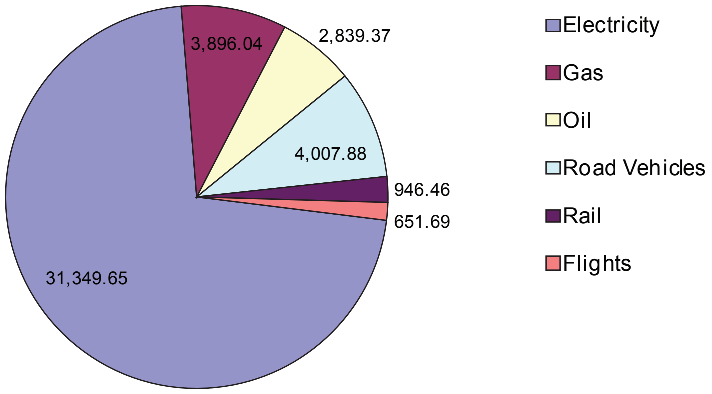
Between January 2009 and March 2011, we have worked with the Carbon Trust and our Facilities Management Suppliers to reduce our CO_2 emissions through two successive phases.

During 2010/11 we concentrated on cutting CO_2 emissions from 29 key buildings by over 17 per cent between 14 May 2010 and 13 May 2011 to meet the Prime Minister's pledge. This performance can be found on the Cabinet Office website

We will reduce CO_2 emissions by 25% by 2014/15: against a 2009/10 baseline to meet the greening government commitments (GGC). The scope will include all our buildings (where we are directly billed) and business-related domestic travel. GGC also requires that we cut domestic business flights by 20% by 2015 from a 2009/10 baseline.

SECTION 2: OUR JOURNEY

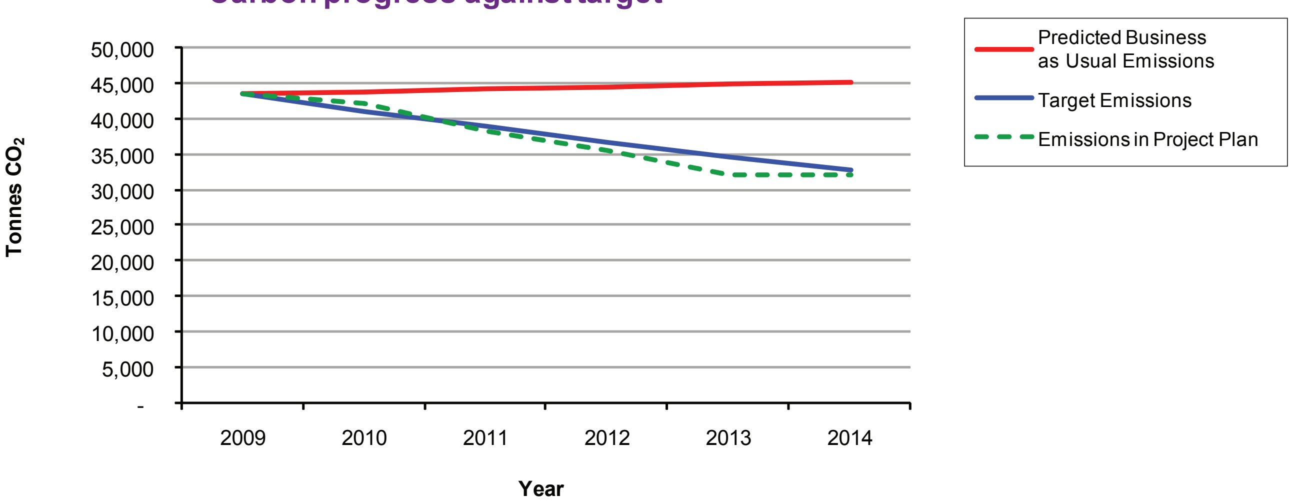
Home Office carbon dioxide emissions baseline 2009/2010



Our baseline, against which we shall measure progress against the 25% target, is 43,691 tonnes $\mathbf{CO_2}$

Carbon Reduction target – five years Trajectory: Built estate and travel

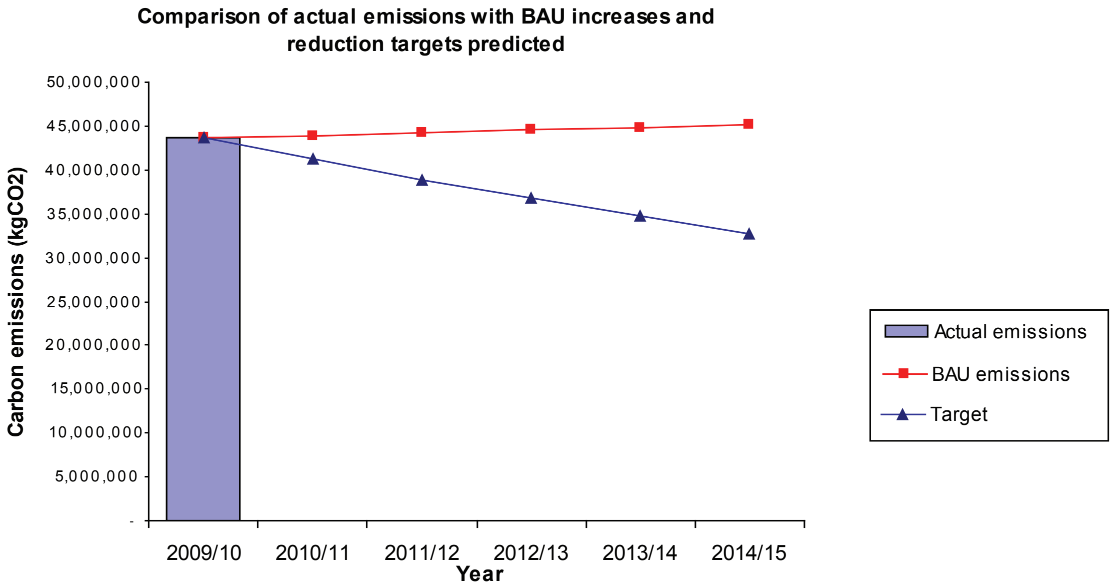
This chart (to be regularly updated) shows the business as usual (BAU) carbon dioxide emissions (Red) through successive years to 2014/15. This assumes the demand for energy and business travel to increase by 0.7% per annum. The Blue line shows where we need to be to deliver over 12,000 tonnes of CO_2 reductions against the baseline (our 25% target). The Green dotted line shows the projected savings if estate consolidations and identified energy saving projects are realised. We are using the Carbon Trust's CMPR tool to track and report progress.



Building closures and energy saving plans are included in this chart.

Value at stake

The following graph shows the carbon and financial value at stake if the Home Office operated business as usual rather than actively seek to reduce its carbon impact.



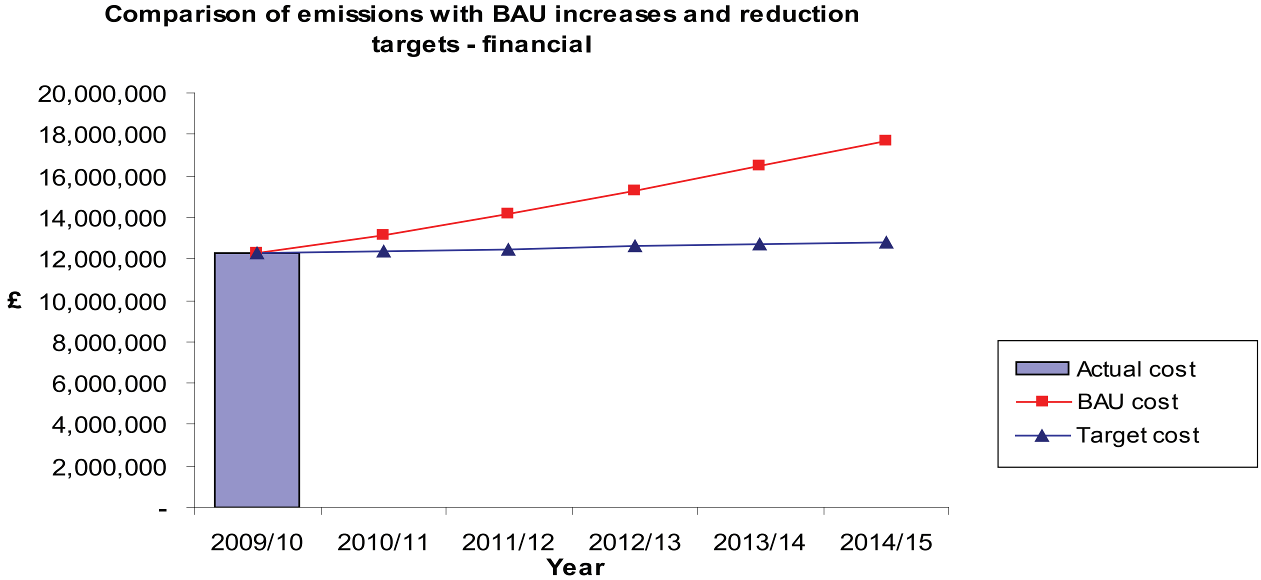
The cumulative carbon value at stake over the 5 years of this Plan (potential carbon savings of plan against a Business as Usual trajectory) amounts to 38,606 tonnes CO_2 .

Year	2011	2012	2013	2014	2015
Total value at stake (tonnes Carbon)	2,745	5,356	7,841	10,206	12,458
Cumulative value at stake (tonnes Carbon)	2,745	8,101	15,942	26,148	38,606

Financial Value at stake

Anticipating rises in energy prices (5.3% per annum has been assumed) and the cost of fuel for travelling (assumed 8.4% per annum) the cumulative financial value at stake over the 5 years of this Plan (potential cost savings of plan against the Business as Usual trajectory) amounts to £9,643,759.

Year	2011	2012	2013	2014	2015
Total value at stake (£)	582,496	1,207,718	1,879,011	2,599,987	3,374,547
Cumulative value at stake (£)	582,496	1,790,214	3,669,225	6,269,212	9,643,759



This does not include the costs of the CRC Energy Efficiency Scheme (CRC) which adds a further £0.4m to energy costs in 2012. Reducing our reliance on increasingly costly energy and fuel and achieving our target reduction in emissions means that we therefore reduce our CRC costs and have the opportunity to avoid over £9m of costs.

Assumptions

Buildings in scope are sites where at least one energy invoice is received per annum. CO_2 emissions are based on invoiced consumption and not meter reads. Meter reads are used to validate invoices. It does not include building energy where we do not get a utility bill (e.g. landlord service charge), carbon from waste or water and carbon from our supply-chain, (e.g. out-sourced emissions from servers, overseas flights, temporary asylum accommodation).

We may amend our baseline if required to do so in accordance with Cabinet Office guidance.

Assumptions for this Project Plan (subject to revision to align with GGC)

Cost of energy:			
Electricity	0.08p per kW		
Gas	0.05p per kW		
Oil	0.04p per kW		
Carbon Conversion Factors:			
Carbon from Offices (Baseline Year)		**Carbon from Offices (2010-11 onwards)**	
The factors below are taken from Defra's GHG conversion factors for company reporting published September 2009		The factors below are taken from Defra's GHG conversion factors for company reporting published October 2010	
Electricity	0.54055 Kg CO_2 per kW	Electricity	0.54160 Kg CO_2 per kW
Gas	0.18358 Kg CO_2 per kW	Gas	0.18485 Kg CO_2 per kW
Oil	0.25215 Kg CO_2 per kW	Oil	0.26475 kg CO_2 per kw
Carbon from Travel (Baseline Year)		**Carbon from Travel (2010-11 onwards)**	
The factors below are taken from Defra's GHG conversion factors for company reporting published June 2008		The factors below are taken from Defra's GHG conversion factors for company reporting published October 2010	
Petrol car (up to 1.4 litre engine)	0.2912 Kg CO_2 per mile	Petrol car (up to 1.4 litre engine)	0.2784 Kg CO_2 per mile
Diesel car (up to 1.7 litre engine)	0.2435 Kg CO_2 per mile	Diesel car (up to 1.7 litre engine)	0.2336 Kg CO_2 per mile
Diesel car (1.7 to 2.0 litre engine)	0.3027 Kg CO_2 per mile	Diesel car (1.7 to 2.0 litre engine)	0.2912 Kg CO_2 per mile
National Rail	0.0602 Kg CO_2 per Km	National Rail	0.0534 Kg CO_2 per Km
Eurostar	0.0177 Kg CO_2 per Km	Eurostar	0.0150 Kg CO_2 per Km
Domestic Air travel	0.175 x 109% Kg CO_2 per Km	Domestic Air travel	0.1715 x 109% Kg CO_2 per Km

Scope

Our baseline comprises 65 sites, more than double we reported on previously. The Serious Organised Crime Agency (SOCA) and National Police Improvement Agency (NPIA) are not currently included in the baseline. Sustainability reporting in our annual report is similar (but will include SOCA and NPIA (from 2012). The GGC targets are for buildings and travel but CRC Energy Efficiency scheme is just buildings.

We also required to collect data to buy "offsets" for business air travel and collect "real time data" for our Headquarters building.

We are working with our FM suppliers, DECC and Cabinet Office to minimise the resources required to collect data and report it. We will endeavour to be clear about the sources of our data, assumptions, quality, scope and the baseline period when we present this data to avoid any confusion.

Defra has recently published a carbon footprint (for eight departments) based on total spend. This comprises total estimated supply chain emissions as well as out-sourced emissions which can be found on Defra's web site

SECTION 3: GETTING TO OUR DESTINATION

Project Plan

This Plan will realise significant carbon and financial savings. Presently 80% of our target will be met through estates rationalisation and a further 20% through energy efficiency projects.

Together with Cabinet Office, DECC, our ICT, facilities and fleet managers we are identifying further emission reduction projects against a backdrop of revised Departmental business plans and the spending review. Reduced staffing levels, tight budgets, changes to the services we provide, new technological advances and a building lease moratorium make planning for carbon dioxide emissions complex.

Projects will be funded from existing resources whenever this is possible and typically for 2-3 year paybacks. Finance for larger projects is available from one of our facilities management suppliers. With the latter we also have a gain-share mechanism to incentivise the identification and delivery of no- and low-cost measures.

Ref	Project	Capital Cost	Annual Savings (yr 1)		Pay back (yrs)	% of Target	Implementation Year
			Financial (Gross)	tCO_2			
1	Estate Rationalisation	£0	£151,850	1016.7 tCO_2	0.0	9.32%	2009
2	Estate Rationalisation	£0	£341,197	2241.4 tCO_2	0.0	20.55%	2010
3	Estate Rationalisation	£0	£361,759	2263.3 tCO_2	0.0	20.75%	2011
4	Estate Rationalisation	£0	£531,631	3363.5 tCO_2	0.0	30.83%	2012
5	Estate Rationalisation	£0	£51,015	328.1 tCO_2	0.0	3.01%	2013
6	Estate Rationalisation	£0	£105,975	586.1 tCO_2	0.0	5.37%	2009
7	Estate Rationalisation	£0	£211,949	1172.2 tCO_2	0.0	10.74%	2010
8	Estate Rationalisation	£0	£220	1.2 tCO_2	0.0	0.01%	2012
9	Estate Rationalisation	£0	£44	0.2 tCO_2	0.0	0.00%	2013
10	Ecovert Energy Saving Programme	£0	£104,730	657.3 tCO_2	0.0	6.03%	2010
11	Amey payment by results	£40,000	£45,225	307.6 tCO_2	7.7	2.82%	2010
12	Amey payment by results	£40,000	£45,225	307.6 tCO_2	7.7	2.82%	2011
13	Amey payment by results	£40,000	£45,225	307.6 tCO_2	7.7	2.82%	2012
14	Sandford House Energy Upgrade	£154,600	£87,100	544.6 tCO_2	15	4.99%	2011
15	Waterside Court Energy Upgrade	£13,400	£1,856	11.4 tCO_2	15	0.10%	2011

Carbon Management Funding and responsibility

Each key project will only realise significant carbon and financial savings if it is carefully managed and monitored. This table sets out the governance for each one. This table will be updated regularly.

Ref	Project	Approved	Source of funding	Responsibility	Implementation	Comment
1	Estate Rationalisation	No	tbc	DG F&C	Business Unit/Head of unit HOPG	
2	Estate Rationalisation	No	tbc	DG F&C	Business Unit/Head of unit HOPG	
3	Estate Rationalisation	No	tbc	DG F&C	Business Unit/Head of unit HOPG	
4	Estate Rationalisation	No	tbc	DG F&C	Business Unit/Head of unit HOPG	
5	Estate Rationalisation	No	tbc	DG F&C	Business Unit/Head of unit HOPG	
6	Estate Rationalisation	No	tbc	DG F&C	Business Unit/Head of unit HOPG	
7	Estate Rationalisation	No	tbc	DG F&C	Business Unit/Head of unit HOPG	
8	Estate Rationalisation	No	tbc	DG F&C	Business Unit/Head of unit HOPG	
9	Estate Rationalisation	No	tbc	DG F&C	Business Unit/Head of unit HOPG	
10	Ecovert Energy Saving Programme	No	tbc	Head of unit HOPG	HOPG	
11	Amey payment by results	Yes	ESES	Head of unit HOPG	ESES	Annual fee
12	Amey payment by results	Yes	ESES	Head of unit HOPG	ESES	Annual fee
13	Amey payment by results	Yes	ESES	Head of unit HOPG	ESES	Annual fee
14	Sandford House Energy Upgrade	No	UKBA	UKBA	ESES	
15	Waterside Court Energy Upgrade	No	UKBA	UKBA	ESES	

SECTION 4: THE ENGINE ROOM

Our stakeholders

Success is dependant upon working collaboratively. Without the support of the Carbon Trust, DECC, Cabinet Office and Home Office staff this would not have been possible.

Ministers and senior officials

Lynne Featherstone is the Department's Sustainable Development Minister and Helen Ghosh, the Permanent Secretary, has overall responsibility for this agenda.

Helen Kilpatrick, the Director General, Financial and Commercial is the senior official designated our Low Carbon Champion. Helen is a member of the Home Office Supervisory Board and is also the Senior Owner for climate change adaptation and for the departmental carbon budget. Helen chairs the Estates and Sustainability Board (ESB) to which progress on this Plan is reported.

The Sustainability Implementation Group (SIG), chaired by the Director of Shared Services, will be responsible for monitoring progress bi-monthly. Our governance arrangements involve senior and working-level representatives from HR, ICT, finance, commercial, estates, communications, and fleet as well as all our HO organisations.

Lynne Featherstone
Minister

Helen Ghosh
Permanent Secretary

Helen Kilpatrick,
Low Carbon Champion

Home Office Staff

We will ensure that all our staff have access to information on climate change and sustainability through our intranet and regular features across our media. We will continue to raise the awareness of staff more generally through media friendly campaigns, regular internal events and news items. More specific awareness and skills development is being made available for staff with specific responsibilities (e.g. commercial and estates staff, those involved in the leasing and management of property, information technology, fleet management and travel) and a new e-learning package is going live this year.

The Public

We will measure and report our progress in our Annual Report and on our own website. We report in real-time on our energy consumption at our headquarters. The general public will play a role in holding us to account.

Other departments

We shall be guided by the relevant policy leads and support all relevant committees led by DECC, Defra and Cabinet Office. Wherever possible we look to work with other departments and the police and share our experiences. The Home Office manages on behalf of Ministry of Justice the National Offender Management Service's probation estate. Similarly we share estate and facilities with some other Departments such as HM Revenue & Customs and Foreign & Commonwealth Office.

Our suppliers

In 2011 we commenced an innovative payments by results agreement with one of our facilities management suppliers to incentivise and maximise energy reductions. Through the use of the Supplier Relationship Management team and individual Commercial Managers, we are well positioned to influence supply chain behaviour. The HO has therefore developed a number of initiatives to encourage and embed CSR into its procurement requirements and will expect suppliers to respond to these requirements in their tenders and offers.

REPORTING PROGRESS