

ADAS UK LTD ANNUAL ENVIRONMENTAL REPORT

1 January – 31 December 2011



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EXECUTIVE SUMMARY

The ADAS Group of Companies is one of the UK's largest independent providers of environmental consultancy, research, rural development services and policy advice. We are a preferred supplier to Government departments and a wide range of organisations and businesses in the public and private sectors throughout the UK and abroad.

ADAS UK Ltd (part of the ADAS Group) has more than 450 environmental scientists, consultants and other staff, operating from a network of offices and research sites throughout the UK offering a unique combination of insight and practical experience, underpinned by robust, informed, science-based information for the benefit of our clients. Our great strength is our breadth and depth of expertise spanning the entire environmental sector together with crop and livestock research.

ADAS is proud to be at the leading edge of many science-based activities concerned with key sustainable development issues currently facing society. These include innovative solutions for more sustainable land use, waste management, climate change mitigation and adaptation, renewable energy, biodiversity and quality and quantity of water resources.

This report covers the company's environmental performance for the 2011 calendar year. For the purposes of greenhouse gas emission reporting, performance during this 12 month period is compared to the 1 October 2008 – 30 September 2009 baseline year. The format of the report aims to comply with the ISO 14064 standard for the quantification and reporting of greenhouse gas emissions as well as guidelines published jointly by the Department for Environment, Food and Rural Affairs (Defra) and the Department of Energy and Climate Change (DECC).

The company's carbon footprint is calculated in accordance with Carbon Trust and Defra/DECC guidelines.

GHG emissions for the 2011 calendar year

	<u>Tonnes of CO₂e</u>	<u>% of Net Total</u>
Scope 1	460.5	11
Scope 2	792.0	20
Scope 3	2,825.4	69
Total gross emissions	4,077.9	
Carbon offsets	0	
Green tariff offsets	0	
Total annual net emissions	4,077.9	

GHG emission comparison to previous years (tonnes of CO₂e)

	<u>2011</u>	<u>2009 - 2010</u>	<u>Baseline Year</u> <u>2008 - 2009</u>
Scope 1	460.5 (11%)	385.4 (7%)	434.0 (9%)
Scope 2	792.0 (20%)	719.0 (13%)	682.0 (13%)
Scope 3	2,825.4 (69%)	4,386.6 (80%)	4,016.7 (78%)
Total gross emissions	4,077.9	5,491.0	5,132.7
Carbon offsets	0	0	0
Green tariff offsets	0	0	0
Total annual net emissions	4,077.9	5,491.0	5,132.7

Environmental achievements during 2011 included being selected as an accredited UK Silver Consultancy Partner to the Carbon Disclosure Project.

1. INTRODUCTION

- 1.1 ADAS UK Ltd is committed to operating in an environmentally sustainable manner for everything we do. This includes reducing greenhouse gas emissions (GHGs) associated with our activities whilst maintaining operational efficiency.
- 1.2 The purpose of this report is to report on our environmental performance for the 2011 calendar year in line with the ISO 14064 standard for the quantification and reporting of greenhouse gas emissions and guidelines published jointly by the Department for Environment, Food and Rural Affairs (Defra) and the Department of Energy and Climate Change (DECC).

2. REPORTING PERIOD

- 2.1 This report covers the 2011 calendar year.

3. BASELINE YEAR

- 3.1 For the purposes of GHG emissions reporting the baseline year of 1 October 2008 to 30 September 2009 will be used for future year on year comparisons. The baseline year was the first full financial year when business travel related emissions became available.

3.2 In the event of future changes in site ownership, organisational change, GHG calculation changes or other factors that would have a significant impact on the quantification of GHGs and year-on-year comparisons, any recalculation of baseline year data will be determined in line with a documented procedure within the environmental management system.

3.3 Changes since baseline year

3.3.1 Emissions for the 2008 - 2009 baseline year and 2009 – 2010 were based on what was then the company's financial year of 1 October to 30 September. With effect from 1 October 2011 the company's financial year changed to 1 April to 31 March. It was subsequently decided to change GHG emissions reporting to calendar years, starting with those for 2011. The fact that emissions for October to December 2010 are therefore not reported is considered to be inconsequential because reports still cover a full 12 month period and there are no seasonality effects.

3.3.2 Emissions for the 2011 reporting year are based on Defra/DECC conversion factors published in August 2011. The baseline year and 2009 - 2010 emissions were calculated on conversion factors current at the time and have not been adjusted using the 2011 conversion factors.

3.3.3 Electricity and mains water related emissions for the baseline year for sites which were not billed direct were based on comparisons with broadly similar billed sites. Subsequent reporting year emissions at these unbilled sites have been based on office floor area using average consumption figures for the office only sites which were billed direct.

3.3.4 Assessing emissions for leased petrol cars commenced during 2011. This was a further refinement because previously all were assumed to be diesel.

3.3.5 Supplier spend data based on company financial years will continue to be used for calendar year reports. Although offset by a quarter and thereby not for precisely the same period the data will still cover a full 12 months and will therefore be fully representative with no adverse impact on the assessment of GHG emissions.

3.3.6 Internal restructuring with effect from 1 October 2011 reduced the number of business units within the whole ADAS Group from three to two and disbanded the Corporate Responsibility Unit (the latter was referenced in previous environmental reports).

3.3.7 Operational site changes during 2011 are as detailed in this report.

4. COMPANY DESCRIPTION

4.1 ADAS is one of the UK's largest independent providers of environmental consultancy, research, rural development services and policy advice. We are a preferred supplier to Government departments and a wide range of organisations and businesses in the public and private sectors throughout the UK and Ireland

4.2 The company employs more than 450 permanently employed staff plus another 250 fee-paid staff (employed on a day to day basis) working across more than 60 specialisms, including environmental and rural development specialists. Approximately half the staff are office based with the other half being field-based.

5. ORGANISATIONAL BOUNDARIES

5.1 ADAS UK Ltd is a wholly owned subsidiary limited company within the ADAS Group (see Figure 1) incorporated in the UK.

5.2 Registered address is Woodthorne, Wergs Road, Wolverhampton, WV6 8TQ.

5.3 The business of ADAS UK Ltd (hereafter referred to as the 'Company') is conducted via two business units:

- Development Businesses Unit.
- Soils, Agriculture and Water.

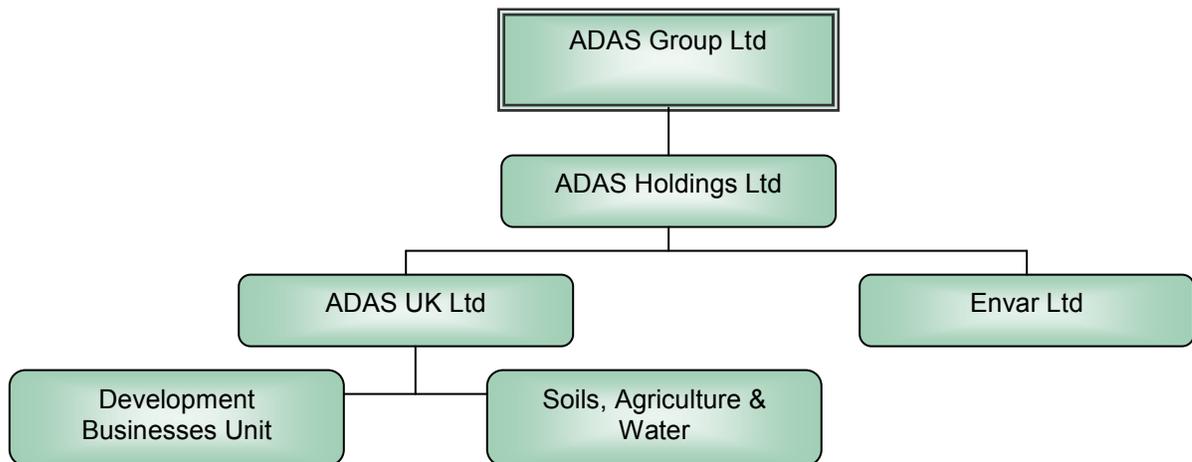
The business units are supported by a number of central groups providing guidance and support on compliance and risk management, Health & Safety, business financial systems, facilities management, procurement, marketing, IT services, personnel and corporate social responsibility matters.

5.4 The main activities of these business units are as follows:

Development Businesses Unit – Provision of consultancy and research focusing primarily on farm animal health, land management and planning, ecology, vegetation management, waste management; chemicals in the environment; renewable energy and sustainability in the environment and in food chains.

Soils, Agriculture and Water – Provision of consultancy and research focusing primarily on agricultural and horticultural crop production and crop usage, the control of crop pests and diseases, crop nutrition, soil and water management, sustainable livestock production and sustainable farming systems.

ADAS Group Operational Structure



5.5 Corporate Social Responsibility

The ADAS Group continues to implement a Corporate Social Responsibility (CSR) initiative encompassing:

- The natural environment.
- The company's relationship with clients and suppliers.
- Staff and their workplace.
- The company's role in the community.

The Head of the Bid Unit, Marketing and Business Development is responsible for delivery of the CSR initiative and reports directly to the Group Managing Director on such matters.

Corporate environmental objectives are approved by the Executive who fully support the CSR initiative.

The Group Compliance Manager is responsible for the subsequent measuring, monitoring and reporting of performance against environmental objectives, including GHG emissions.

6. OPERATIONAL BOUNDARIES

6.1 The main office locations during the 2011 calendar year were follows:

Wolverhampton (Head Office)	Boxworth (near Cambridge)
High Mowthorpe (near Malton)	Gleadthorpe (near Mansfield)
Drayton (near Stratford-upon-Avon)	Milton Park (near Oxford)
Leeds	Pwllpeiran (near Aberystwyth)
Preston	Rosemaund (near Hereford)

6.2 There were also smaller offices at Arthur Rickwood (near Ely), Bristol, Bury St. Edmunds, Cardiff, Chippenham, Dublin, Edinburgh, London, Newcastle upon Tyne, Ruthin, Starcross (near Exeter), Terrington (near Kings Lynn) and a field site at Brimstone Farm (near Faringdon).

6.3 The locations owned by the company during the reporting year were Boxworth and Wolverhampton. Others were either leased or rented.

6.4 Responsibility for the management of each office location, excluding the Head Office, is designated to one of the business units.

6.5 The Group takes responsibility for GHG emissions that it can directly control or influence at these sites.

7. SITE CHANGES SINCE 2008 - 2009

7.1 Occupation of small office sites at East Malling (near Maidstone) and Salisbury were terminated during the 2009 – 2010 reporting year.

7.2 A new office site opened in Chippenham (Wiltshire) in October 2010 and the offices in Bury St. Edmunds and Dublin were closed during 2011.

7.3 These changes had no significant effect on year on year comparisons of GHG emissions and no recalculations of baseline data were required.

8. GHG EMISSIONS

8.1 Emission Categories

8.1.1 In line with Defra/DECC guidelines, greenhouse gas emissions are categorised as follows:

Scope 1 – Direct emissions: Activities owned or controlled by the company that release emissions straight into the atmosphere.

Includes emissions from company owned road vehicles, off-road vehicles and equipment, fossil fuels used on ADAS sites (e.g. gas and heating oil) and releases from air conditioning and refrigeration equipment.

Scope 2 – Electricity indirect: Emissions released into the atmosphere associated with the consumption of purchased electricity, heat and cooling.

Includes consumption of purchased electricity for which the company is billed direct by the supplier and estimations where electricity charges are part of lease or rental agreements.

Scope 3 – Other indirect: All other activities that release emissions into the atmosphere as a result of company activities.

Includes supply-chain emissions caused during the production of goods and services bought by the company, business travel by employees, work-related commuting by office based employees, leased road and off-road vehicles, mains water supply and emissions from sold products.

8.2 GHG Quantification

- 8.2.1 A process based on the Carbon Footprint Calculator produced by the Carbon Trust is used to calculate greenhouse gas emissions. This is a nationally recognised and accepted methodology approved by Government.
- 8.2.2 The methodology used covers all 6 Kyoto greenhouse gases of carbon dioxide (CO₂), methane (CH₄), hydrofluorocarbons (HFCs), nitrous oxide (N₂O) perfluorocarbons (PFCs) and sulphur hexafluoride (SF₆).
- 8.2.3 Data is entered into an in-house GHG emissions database consistent with Carbon Footprint Calculator (CFC) methodology which automatically converts energy usage figures (e.g. electricity, gas and heating oil consumption) and business travel miles into carbon dioxide equivalent emissions (CO₂e) using the conversion factors in Table 1. These are based on Defra/DECC's GHG Conversion Factors for Company Reporting published in August 2011.

Table 1.

STANDARD GHG CONVERSIONS

Gas (natural)	0.18360 kg CO ₂ e/kWh
Electricity	0.52462 kg CO ₂ e/kWh
Heating (gas) oil	3.0595 kg CO ₂ e/litre
ADAS owned & leased diesel vehicles	
<i>Conversion rate based on emissions for a large diesel car over 2 litres</i>	
ADAS owned & leased petrol vehicles	0.34133 kg CO ₂ e/mile
<i>Conversion rate based on emissions for a medium size petrol car 1.4 – 2.0 litres</i>	
Purchased diesel	2.6676 kg CO ₂ e/litre
Purchased petrol	2.3117 kg CO ₂ e/litre
Air – domestic	0.26527 kg CO ₂ e/mile
Air - short haul	0.15584 kg CO ₂ e/mile
Air – long haul	0.17937 kg CO ₂ e/mile
Train	0.09090 kg CO ₂ e/mile
Light rail/Tram	0.11503 kg CO ₂ e/mile
Tube	0.11846 kg CO ₂ e/mile
Bus/Coach	0.23941 kg CO ₂ e/mile
Motorcycle	0.19171 kg CO ₂ e/mile
Ferry	0.18680 kg CO ₂ e/mile
Hire cars/taxis: Diesel	0.31147 kg CO ₂ e/mile
<i>Conversion rate based on emissions for an average size diesel car (passenger road transport rate)</i>	
Hire cars/taxis: Petrol	0.33577 kg CO ₂ e/mile
<i>Conversion rate based on emissions for an average size petrol car (passenger road transport rate)</i>	
Staff relocation travel: Diesel vehicles	0.29121 kg CO ₂ e/mile
<i>Conversion rate worked out based on emissions for a medium size (1.7 – 2.0 litres) diesel car (passenger road transport rate)</i>	
Staff relocation travel: Petrol vehicles	0.34133 kg CO ₂ e/mile
<i>Conversion rate worked out based on emissions for a medium size (1.4 – 2.0 litres) petrol car (passenger road transport rate)</i>	
Mains water supply	0.3400 kg CO ₂ e/cubic metre

8.3. Scope 1 Emissions

8.3.1 Mains gas

Only used at the Milton Park and Wolverhampton sites. Emissions were based on consumption confirmed from billing data using the natural gas conversion factor in Table 1. Bills for Wolverhampton included usage by tenants where it was estimated that based on previous usage monitoring, 22% was ADAS consumption.

8.3.2 Heating oil

Used at the Arthur Rickwood, Boxworth, Drayton, Gleadthorpe, High Mowthorpe, Pwllpeiran and Rosemaund sites. Emissions were based on consumption confirmed from billing data using the heating oil conversion factor in Table 1.

At the Drayton site up until 2009 there were separate tanks for heating oil and red diesel for farm vehicles. Since then red diesel is stored in a single tank and used for both purposes. An estimation based on previous bill data is that 60% is used for farm vehicles and 40% for office heating.

At the High Mowthorpe site heating oil from the ADAS supply was used by a third party occupier who it was estimated consumed 12%, with the balance being ADAS consumption.

8.3.3 Company owned road vehicles

Emissions were based on an assessment of annual mileage and calculated using the ADAS owned diesel conversion factor in Table 1 plus an assessment of white diesel fuel purchased by ADAS sites multiplied by the purchased diesel conversion factor in Table 1.

8.3.4 Company owned off-road vehicles and equipment

Includes all-terrain-vehicles, quad bikes, Landrovers, agricultural tractors, combine harvesters etc. Emissions were based on an assessment of red diesel fuel purchased by those ADAS sites operating these types of vehicles multiplied by the purchased diesel conversion factor in Table 1.

8.3.5 Fugitive emissions

An inventory of air conditioning systems and refrigeration equipment is maintained. Refrigerant (including fridges and freezers) and air conditioning unit GHG emissions were calculated using the Defra/DECC GHG conversion factors for emissions from the operation of refrigeration and air conditioning equipment.

8.3.6 Total Scope 1 emissions for 2011 (tonnes CO₂e)

	<u>2011</u>	<u>2009 - 2010</u>	<u>Baseline</u> <u>Year</u>
Mains gas	104.1	113.2	117.7
Heating oil	179.5	125.1	137.3
Company owned road vehicles	82.2	61.0	80.7
Purchased white diesel	32.1	27.1	27.7
Company owned off-road vehicles	60.3	58.6	70.3
Fugitive emissions	2.3	0.4	0.3
TOTAL SCOPE 1 EMISSIONS	460.5	385.4	434.0

8.4 Scope 2 Emissions

- 8.4.1 Different methodologies were used to calculate GHG emissions associated with electricity consumption at ADAS sites depending on whether bills were received direct from the supplier or if electricity charges were part of lease or rental payments to landlords.
- 8.4.2 Bills were paid direct for the sites at Arthur Rickwood, Boxworth, Brimstone Farm, Chippenham, Drayton, Edinburgh, Milton Park, Preston, Pwllpeiran and Wolverhampton.
- 8.4.3 Electricity charges at the Gleadthorpe and Rosemaund sites were paid by the respective landlords, who then recharged ADAS for a percentage of consumption and provide meter readings (the landlords being the other occupants at these sites).
- 8.4.4 Part of the Wolverhampton site was occupied by tenants. Therefore based on previous monitoring of usage it was estimated that 22% of total site usage is consumed by ADAS.
- 8.4.5 Electricity costs for other sites were either covered as part of lease or rental agreements, by service charges or recharges by landlords. In these circumstances emissions were calculated based on office floor area and the average consumption per floor area for those sites which are billed direct.
- 8.4.6 Actual usage data from bills received and calculated consumption figures was entered into the GHG emissions database and converted into CO₂e using the electricity conversion factor in Table 1.
- 8.4.7 ADAS purchases green electricity from suppliers for all sites where the company are in control of grid supplies. In accordance with the Carbon Trust Carbon Footprint Calculator this is entered into the GHG emissions database as 'grid' electricity because the renewables entry is for self-generated electricity (e.g. such as that from on-site wind turbines).

No green tariff offsets are claimed because green electricity from one supplier comes partly from nuclear power. Under OFGEM rules offsets can only be earned for 100% renewable green energy and apparently nuclear power is ineligible.

8.4.8 Total Scope 2 emissions for 2011 (tonnes CO₂e)

	<u>2011</u>	<u>2009 - 2010</u>	<u>Baseline Year</u>
Electricity	792.0	719.0	682.0
TOTAL SCOPE 2 EMISSIONS	792.0	719.0	682.0

8.5 Scope 3 Emissions

8.5.1 Business travel emissions

The distance travelled by all conceivable modes of transport is listed on every travel and expenses claim submitted by staff. These distances are then entered in the GHG emissions database and converted into CO₂e using the conversion factors in Table 1.

Rail and air travel tickets can be booked through the designated booking agent who provides quarterly spreadsheets listing the distance that would be travelled (for air travel broken down into domestic, short haul or long haul). This data is entered into the GHG emissions database and converted into CO₂e using the conversion factors in Table 1.

8.5.2 Commuting emissions

A biennial survey of office based staff commuting practices is carried out from which office commuting CO₂e emissions are calculated. Such a survey was completed during 2011.

8.5.3 Leased road vehicles and off-road vehicles

Emissions for leased road vehicles were based on actual mileage multiplied by the leased vehicle diesel or petrol conversion factors in Table 1. No leased off-road vehicles were used.

8.5.4 Supply chain emissions

Indicative estimates of indirect emissions generated by other organisations as part of the process of providing goods and services to the company are calculated using current Defra/DECC conversion factors for supply chain emissions based on spending on products. The approach is based on a methodology produced by the Centre for Sustainability Accounting (CenSA), University of York which covers all 6 Kyoto greenhouse gases.

Emissions for the 2011 calendar year are based on extrapolation of spend data for the company financial year of 1 October 2010 – 30 September 2011, thus providing data for a full 12 months, albeit offset by one quarter. The data is considered to be fully representative with no adverse impact on the assessment of emissions.

Emissions calculated as Scope 1 and 2 are excluded from Scope 3 (e.g. electricity, mains gas, heating oil and agricultural products supply).

8.5.5 Water usage

Emissions associated with mains water consumption are calculated based on metered quantities where water bills were paid direct. For sites where water bills were paid by landlords and recharged as part of lease or rental costs, emissions were calculated based on office floor area and the average consumption per floor area for those office only sites which are billed direct.

The total estimated quantity is multiplied by the current Defra/DECC life cycle conversion factor for water supply as listed in Table 1.

Annual mains water usage was estimated to be 20,196 m³ (compared to a baseline year figure of 23,053 m³ and a 2009 – 2010 figure of 18,062 m³). This includes usage for farming activities and/or crop experimental research at the Arthur Rickwood, Drayton, Boxworth and Pwllpeiran sites.

8.5.6 Total Scope 3 emissions for 2011 (tonnes CO₂e)

	<u>2011</u>	<u>2009 - 2010</u>	<u>Baseline Year</u>
Business travel:			
Car, Bus & Coach	540.9	627.5	642.0
Train, Tram & Tube	28.5	30.3	35.5
Air	45.6	52.7	53.2
Other	0.1	0.3	0.5
Office commuting	375.5	301.0	301.0
Leased road vehicles	51.5	54.4	29.7
Mains water supply	6.9	5.4	6.9
Supply chain	1,776.4	3,315.0	2,947.9
TOTAL SCOPE 3 EMISSIONS	2,825.4	4,386.6	4,016.7

8.6 Interpretation

8.6.1 Our interpretation of the Defra/DECC GHG quantification and reporting guidelines is that emissions from company owned vehicles are Scope 1.

8.6.2 All leased vehicles are on operational leases and therefore our interpretation of the Defra/DECC quantification and reporting guidelines is that such emissions are Scope 3.

8.7 Exclusions

8.7.1 Emissions associated with field-based staff working from home are excluded because the company has no direct authority, rights of entry or influence on private domestic premises and in any event it would be very difficult to quantify emissions related to business activities separately from domestic consumption.

8.7.2 Emissions directly related to the growing of farm crops and keeping of farm livestock are excluded because of year to year variability. Purchased farming products are therefore excluded from Scope 3 supply chain emission calculations.

8.7.3 Emissions relating to the procurement of assets/capital items have been excluded because inclusion will lead to distortion of year on year comparisons.

8.7.4 Farming activities

During 2011 ADAS farmed 1,434 ha of field crops and maintained 28 ha of woodland, mostly on a tenancy basis (i.e. a total of 1,462 ha compared to 1,329 in the baseline year). Farm livestock are kept at three sites.

Cropped areas and livestock numbers are continually variable. It is therefore only possible to provide best estimates of GHG emissions for which PAS 2050 methodology has been used.

Due to the level of variability and consequent uncertainty, farm related emissions are reported here for indicative purposes only and are not included in the corporate carbon footprint.

Figures include material related emissions (e.g. fertilisers, plant protection products, seed) and soil emissions.

8.7.5 Estimated farming related GHG emissions for 2011

<u>Crop</u>	<u>Area</u> (ha)	<u>Total Emissions</u> (tonnes CO ₂ e/year)	<u>Baseline Year</u> <u>2008 – 2009</u> (tonnes CO ₂ e/year)
Winter wheat	46	198	197
Winter beans	0	0	3
Winter oilseed rape	10	39	10
Permanent grass	1,281	1,535	514
Rough grazing	0	0	908
Temporary grass	0	0	21
Woodland	28	0	0
Willow coppice	94	0	0
Reed canary grass	3	0	0
Miscanthus	0	0	0
Total	1,462	1,772	1,653

<u>Livestock</u>	<u>Animals/</u> <u>Year</u>	<u>Total Emissions</u> (tonnes CO ₂ e/year)	<u>Baseline Year</u> <u>2008 – 2009</u> (tonnes CO ₂ e/year)
Cattle	191	515	886
Sheep	2,679	795	915
Pigs	79	68	44
Poultry	389	30	1
Total		1,408	1,847

Overall total for ADAS farming		3,180	3,499
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The total figure for 2011 indicates a 9.1% reduction in emissions compared to the baseline year. The 2009 – 2010 emissions figure for ADAS farming was 3,221 tonnes CO₂e (1,732 tonnes from crops and 1,490 tonnes from livestock).

In the baseline year some grassland was recorded as rough grazing. For subsidy purposes this is now recorded as permanent grass, a change that has no effect on emission calculations.

8.8 GHG sinks

8.8.1 A sink is defined as a physical unit or process that removes GHGs from the atmosphere.

8.8.2 Although there are areas of woodland, short rotation coppice and miscanthus on some of the company's sites that would remove GHGs from the atmosphere absorption is difficult to quantify. These are relatively small in area and their effect has therefore been considered insignificant.

9. CORPORATE CARBON FOOTPRINT

GHG emissions for the period 1 January to 31 December 2011 compared to 2009 – 2010 and the baseline year of 1 October 2008 to 30 September 2009 (tonnes of CO₂e)

	<u>2011</u>	<u>2009 - 2010</u>	<u>Baseline Year</u> <u>2008 – 2009</u>
Scope 1	460.5 (11% of total)	385.4 (7% of total)	434.0 (9% of total)
Scope 2	792.0 (20%)	719.0 (13%)	682.0 (13%)
Scope 3	2,825.4 (69 %)	4,386.6 (80%)	4,016.7 (78%)
Total gross emissions	4,077.9	5,491.0	5,132.7
Green tariff offsets	0	0	0
Total annual net emissions	4,077.9	5,491.0	5,132.7

Comparisons to the 1 October 2008 – 30 September 2009 baseline year:

- Overall total reportable emissions were down by 20.5%, primarily attributed to a substantial decrease in supply chain emissions.
- Scope 1 emissions were up overall by 6.7%. While main gas emissions fell by 13.6% heating oils emissions were up by 30.7%, mainly attributed to the prolonged periods of cold weather during the winter.
- Scope 2 emissions were up by 6.1%. Again this is mainly attributed to the prolonged periods of cold weather during the winter.
- Scope 3 emissions were down by 29.6%, primarily attributed to a 39.7% fall in supply chain emissions due to a substantial reduction in supply chain spending.
- Combined Scope 1 and 2 emissions were up by 12.2%.
- Business travel related emissions were down by 15.9%.

10. INTENSITY RATIOS

10.1 Total Scope 1 and 2 emissions/£1k gross turnover = 45.5 kg CO₂e based on a turnover of £27.5m (compared to baseline year figure of 41.3 and a turnover of £27.0m), i.e. up by 10.1%.

- 10.2 Business travel emissions/business mile travelled = 0.256 kg CO₂e (compared to baseline year figure of 0.254), i.e. up by 0.8%.
- 10.3 Water use/staff member = 44.8 cubic metre/head (based on 450 staff) compared to a baseline year figure of 55.5 (based on 415 staff), i.e. down by 19.2%.

11. WASTE MANAGEMENT

- 11.1 ADAS has a contract with a recycling led waste management company under which office waste streams at the company's main sites are managed with the objective of maximising quantities sent for recycling and minimising amounts sent to landfill.
- 11.2 For the 2011 reporting year 55% of waste by weight was sent for recycling with 45% sent to landfill (compared to baseline year figures of 28% and 72% respectively and 61% and 39% respectively for 2009 - 2010).
- 11.3 Confidential waste paper was also sent for recycling via a bag scheme operated by the main stationery supplier.

12. PROGRESS IN REDUCING OUR ENVIRONMENTAL IMPACTS

- 12.1 Measures taken to reduce the company's carbon footprint have included:
- All purchased electricity is from renewable resources.
 - Implementation of an energy management system designed to be compliant with the BS EN 16001 Energy Management System standard.
 - Systems implemented can assess emissions for all conceivable types of business related travel.
 - Increased use of telephone conferencing (increased from an estimated average baseline year figure of 17,000 minutes per month to an estimated 32,670 minutes per month), thereby reducing business travel related GHG emissions. This represents an increase of 92% compared to the baseline year.
 - Use of video conferencing facilities at four sites, thereby reducing the need to travel to meetings.
 - Implementation of a 'ban-the-bin' programme at the main sites with the aim of pre-sorting recyclable office waste.

13. ENVIRONMENTAL TARGETS

13.1 From baseline year data longer term environmental targets have been set including the following parameters:

2015 Target	2011 Performance
Reduce Scope 1 emissions by 10% by 2015 compared to 2008 - 2009.	Up by 6.7%.
Reduce Scope 2 emissions by 10% by 2015 compared to 2008 - 2009.	Up by 6.1%.
Reduce business travel GHG emissions to 0.200kg CO ₂ e/mile by 2015.	0.256 kg CO ₂ e/mile.
Send 80% of business waste for recycling by 2015.	55% sent for recycling.
Reduce emissions to 60kgs CO ₂ e/£1k turnover by 2015.	45.5kgs CO ₂ e/£1k turnover.
Reduce mains water usage/staff member by 10% by 2015.	Down 19.2%.

The CSR Group within the company is responsible for setting corporate environmental targets and monitoring performance.

14. PERFORMANCE ACHIEVEMENTS 2011

14.1 Selected as an accredited UK Silver Consultancy Partner to the Carbon Disclosure Project.

14.2 Obtained independent verification that the quantification and reporting of GHG emissions for 2009 – 2010 was compliant with the ISO 14064 standard.

14.3 No significant environmental incidents.

14.4 No environmentally related prosecutions.

14.5 In relation to client contracts:

- Over 12,000 trees planted as part of land management contracts.
- An estimated 3.6m trees surveyed in connection with the management of over 30,000km of overhead power lines.

- 430 sites screened for potential renewable energy projects.
- 75 resource efficiency audits carried out for small and medium sized enterprises.

15. ISO 14064 COMPLIANCE

15.1 This report has been prepared in accordance with the ISO 14064 standard on greenhouse gas emissions.

16. VERIFICATION

16.1 The main emissions data in this report has been verified via an internal audit. The declared emissions are considered to be a true reflection of performance and the data has been accurately reported.

17. REFERENCES

1. BS ISO 14064 Greenhouse gases, 2006, British Standards Institution
2. Guidance on how to measure and report your greenhouse gas emissions, PB13309, September 2009, Department of Energy & Climate Change (DECC) and Department for Environment, Food and Rural Affairs (Defra)
3. 2011 Guidelines to Defra/DECC's GHG conversion factors for company reporting, August 2011
4. PAS 2050 Specification for the assessment of the life cycle greenhouse gas emissions of goods and services, 2008, British Standards Institution