

# Annual Environmental Report

The Castle Climbing Centre

2010



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## EXECUTIVE SUMMARY

This is the third Annual Environmental Report of High Performance Sports (The Castle Climbing Centre, The Castle Cafe and The Castle Shop) and fulfils our obligations set out in our Sustainability Policy. This report is our best attempt at analysing our environmental impact as a business between January and December 2010.

## Carbon Footprint

We measure our Carbon Footprint using the Carbon Trust's methodology. These guidelines changed last year, so where the change has affected our figures we've made a note of this. This year our footprint came to **117.09 tonnes of CO<sub>2</sub>e<sup>1</sup>**. This is 7.98 tonnes less than last year – a modest 6% decrease. Most of our footprint is due to our electricity (70%) and gas (26%) consumption. However, to give a complete picture of our environmental impact we report on the sustainability dimension of everything else we do from the parties we host to our printing choices.

## Inputs

From the 1<sup>st</sup> of August 2010, The Castle took over the operations of the on-site climbing shop. Not only does the shop help us to diversify our business and provide a complete service for our customers, it has also given us the opportunity to engage with suppliers about sustainability. We also temporarily moved our offices into last year's eco-build project (Training Room 3) and built a new efficient Office which we moved into in January 2011.

## Outputs

We are sending less waste to landfill and more of our waste is being recycled. The biggest change in this area has been our industrial size composter which has produced 1.5 tonnes of compost over the year.

## Travel

Travel is just 2% of our total carbon footprint, but we are committed to addressing this aspect of our business too. In 2010 we logged 33,524 km in business travel (34% more than in 2009) but our carbon footprint remained roughly the same as the previous year. This is because more trips were being made by train.

## Energy &amp; Resources

Gas consumption has decreased by about 12%, but electricity consumption remains the same. We've installed the edd:e Environmental Monitoring Unit on all our circuits to analyse where we are using the most power. Our water consumption has decreased slightly, still using mains water to irrigate the garden.

## Garden

This is the first year in which we've seen our new garden through all the seasons. The Cafe was able to benefit from a bountiful summer harvest and we welcomed two new bee hives. We've also made mini-allotments available to garden volunteers and our local community as part of the Capital Growth scheme.

## Events

We continue to try to keep our events low-impact by careful selection of suppliers and good waste management. Our second annual Garden Party built on the success of last year to highlight what we've achieved so far.

## Grants

In 2010 we disbursed most of the funds from the 2009 Environmental Awards. We decided to continue with the project, albeit on a smaller scale, through our new Employee Eco-Grant award. Castle staff can apply for a grant to cover their time as they volunteer for good causes. The first grants were awarded in 2011.

## R &amp; D

Our main investment in 2010 continues to be in Research and Development of the plans to convert our site into a low energy building. A specialist design team is looking at how we can further develop our climbing areas while making our Victorian building as energy efficient as possible.

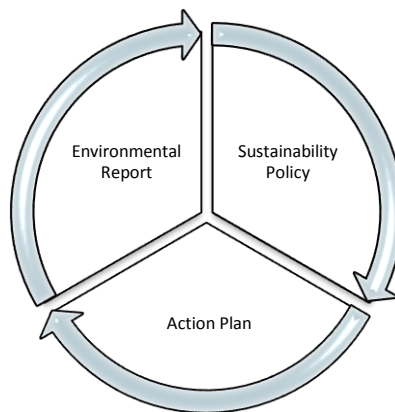
## Conclusion

Following the initial enthusiasm for our sustainability project and the initial flurry of 'quick-wins' in the first year, in 2010 we proved our real commitment to this cause. We continue to seek long-term solutions and we are forced to do so in an increasingly competitive and difficult financial environment. The gains this year are very modest, but we expect that the groundwork we're laying for the future will bear fruit over the next few years and that we'll see more radical improvement in the years to come with our end goal to be carbon neutral by 2015.

**Audrey Seguy and Claire Lee**  
September 2011

<sup>1</sup> CO<sub>2</sub>e = Carbon Dioxide equivalent and includes other greenhouse gas emissions.

## OUR ENVIRONMENTAL MANAGEMENT SYSTEM



The **Action Plan** starts with the targets that are set out in our **Sustainability Policy**. It is reviewed regularly by the Core Management Team. From 2011 it will be regularly published so that all staff can see our progress. Our annual **Environmental Report** monitors our management of our environmental impact.

We reviewed our Sustainability Policy in June 2010 to update it with changes to our business as well as findings from our research. The main changes were:

- We changed the name from 'Environmental' Policy to 'Sustainability' Policy. Sustainability refers to Environmental, Economic and Social sustainability which is a more accurate description of what we're trying to achieve.
- We described our goals with developing the garden.
- We changed one of our targets from water neutral to not using mains water for the garden (see R&D section further down).
- The policy was signed by Core Management Team in addition to the Board of Directors to show staff commitment to the project.
- We added The Castle Shop.

## ENVIRONMENTAL AWARDS / ACCREDITATION

## THE MAYOR OF LONDON'S GREEN PROCUREMENT CODE

In 2010 The Castle signed up to the Mayor of London's Green Procurement Code (MGPC) in a further bid to commit ourselves to reducing the effects of our activities on the environment. As signatories of the code, we were audited initially on our 2009 Environmental Report and procurement practices. We were awarded the gold level (highest) for sustainable procurement. The challenge now will be to show continual improvement in order to keep our gold level award.

[www.greenprocurementcode.co.uk](http://www.greenprocurementcode.co.uk)

## CARBON FOOTPRINT

## ORGANISATIONAL BOUNDARIES

We calculated the carbon footprint of the trading activities and premises of High Performance Sports Ltd: The Castle Climbing Centre, The Castle Café and, as of 1 August 2010, The Castle Shop. We also have an office in Buxton. We do not include other companies that operate within the centre such as Urban Rock (until 31 July), Bikemech, RAT, TAG and Geckos.

## SCOPE FOR CO<sub>2</sub>E EMISSIONS

The Carbon Trust uses the following classification for calculating a carbon footprint:

- Scope 1 emissions – Emissions produced on-site (e.g. gas consumption, manufacturing)
- Scope 2 emissions – Emissions that the company is directly responsible for, though they were released off-site (e.g. electricity, water)
- Scope 3 emissions – Emissions that we are indirectly responsible for (e.g. purchasing finished goods, waste, customer travel).

For the purposes of calculating our carbon emissions we have included all Scope 1 and Scope 2 emissions and travel directly associated with the business. As a general rule Scope 3 emissions are not counted because one organisation's Scope 3 emissions are another organisation's Scope 1 or 2 emissions, but they may be included in the Environmental Report.

Our Scope 1 and 2 emissions consist of:

- Energy consumption
- Water usage/treatment
- Travel for business use and staff trips

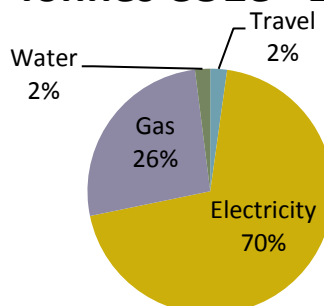
## METHODOLOGY

To determine our carbon footprint we have used the Carbon Trust footprint calculator where possible. This uses the Defra GHG conversion factors. Where data has been unavailable we have used the Defra figures directly from the "2010 Guidelines to Defra / DECC's GHG Conversion Factors for Company Reporting: Methodology Paper for Emission Factors" (October 2010.) Changes in the conversion figures from 2009 to 2010 have been identified and, where relevant, have been explained in the footnotes.

## TOTAL CO<sub>2</sub>E EMISSIONS

	CO <sub>2</sub> e - 2010	CO <sub>2</sub> e - 2009	CO <sub>2</sub> e - 2008
Total emissions	<b>117.09 tonnes</b>	125.07 tonnes	136.79 tonnes
Per visitor	<b>769g</b>	784g	889g
Per staff member	<b>1.63 tonnes</b>	1.95 tonnes	2.63 tonnes
Per square meter (2000 m <sup>2</sup> )	<b>0.059 tonnes</b>	0.063 tonnes	0.068 tonnes
Per square meter climbing area (1500 m <sup>2</sup> )	<b>0.078 tonnes</b>	0.083 tonnes	.091 tonnes

### Tonnes CO<sub>2</sub>e - 2010



	Tonnes CO <sub>2</sub> e - 2010	Tonnes CO <sub>2</sub> e - 2009	Tonnes CO <sub>2</sub> e - 2008
Travel	<b>2.59</b>	3.01	4.73
Electricity	<b>81.52</b>	83.07	85.73
Gas	<b>30.74</b>	36.48	44.26
Water	<b>2.34</b>	2.51	2.07
<b>TOTAL</b>	<b>117.09</b>	125.07	136.79

## INPUTS – PRODUCTS PURCHASED

### THE CASTLE CAFE

In December 2009 we hired a new Cafe Manager, Thomas Salah, and asked him to make sourcing cafe products sustainably a priority. Over the course of 2010 we tried different suppliers and products and changed our menu to incorporate more organic/ethical products. A complete list of our suppliers and products, including changes we've made is in **Appendix A – Cafe Supplies**.

The biggest change for the Cafe in 2010 was incorporating the garden produce. Without a kitchen, and with only a small oven and steamer, we found it challenging to use all the products efficiently, but managed to introduce a number of new items such as roasted courgettes, cucumbers, salads, roast potatoes, roast beans and fresh herbal teas.

We purchased a bicycle trailer in December to use for picking up supplies. Currently it is used twice a week to collect Mother Earth dishes. Just this one change could save 32kg of CO<sub>2</sub>e over taking the bus or 63 kg CO<sub>2</sub>e over driving by car<sup>2</sup>.

From December 2009 we stopped using blue roll in the Cafe to wipe down and began using tea towels. These are washed weekly using environmentally friendly products by one of our cleaners who lives locally.

### THE CASTLE SHOP

On the 1<sup>st</sup> of August 2010 The Castle Shop took over operations from Urban Rock and opened for business. The new shop is part of High Performance Sports Ltd and allows us to further our sustainability agenda in the shop, as we have done in the Cafe.

- We stopped handing out plastic bags to customers. We offer the re-usable cloth bags instead for large purchases and smaller paper bags for books and DVDs.
- We decided to use Patagonia as our main supplier of technical clothing (jackets, down, etc.) Patagonia are industry leaders in environmentalism and have accurate records of the impact of their products. (<http://www.patagonia.com/eu/enGB/environmentalism>)
- We advertise shoe resoling as an alternative to buying new climbing shoes.
- The Shop banks with the Co-operative Bank, a choice we made because of their ethical policy (<http://www.goodwithmoney.co.uk/ethical-banking>)

In the coming year we hope to improve on our record with the following:

- Increase the proportion of clothing made from organic fibers (cotton, bamboo) or recycled materials;
- Promote climbing equipment made in the UK (DMM, Wild Country);
- Have chalk available by the scoopful to decrease packaging;
- Investigate new suppliers of low-impact equipment and clothing;
- Refurbish the shop to improve the efficiency of the heating, ventilation and lighting.

## CLEANING / MAINTENANCE

### CLEANING

<sup>2</sup> Based on Defra GHG conversion factors 2009. 89.1g / km for buses and 170g/km for a medium class diesel car.

- Our toilet rolls are made from recycled paper. We were able to use less toilet rolls just by asking the cleaners to stop refilling the dispensers before they ran out. The DMs now refill dispensers as required.
- Tea towels are cleaned weekly by a local cleaner using eco-friendly detergent.

## MAINTENANCE

Throughout 2010 we experimented with different lighting options. We have approximately 125 fluorescent light fittings around the centre and we didn't want to throw away the casings needlessly. We finally found a good solution in December 2010 with the E-matic Linear Converters. These converters allowed highly efficient T5 bulbs to fit within our old casings, giving us savings of over 50% per tube and a longer life span. We are slowly converting all of our old light fittings to these new ones and expect to have this finished in 2012.

## ECO CUBES

We have popped a small blue cube into each of the urinals that allow us to operate water free urinals. This saves us 648 litres per day, which is a staggering 235,425 litres per year. Each cube is made up of pro-biotic microbes which compete with nasty bacteria for food and effectively starve them out.

## PROPERTY DEVELOPMENT

### NEW OFFICE BUILD

Building on our experience with Training Room 3, detailed in last year's report, we used many of the same materials in the construction of our new office.

- We have opted for timber instead of steel for the supporting structure and staircase. All timber is FSC. No MDF.
- Plasterboard containing recycled gypsum was sourced although we couldn't get 100% recycled.
- Insulation: We reviewed several types of natural insulation including wool, hemp, recycled newspaper but we settled on Steicoflex which is made from wood fibre (FSC).
- We used non-PVC wiring.
- We have fitted an under floor heating system because it will work well with low energy heating systems like ground source heat pumps. This is a low temp water system. We also pump heat generated by our server into the office.
- Walls: ECOS solvent free environmentally friendly paint <http://www.ecospaints.com/>
- Lights: 2 LED panels (33W) and one LED office light activated with a motion sensor.
- We've tried to maximise the natural daylight by fitting an external glass door, skylight and glass floor.
- Natural Ventilation system with stack effect.
- Re used old doors rather than purchase new ones.
- We purchased carpet tiles from Renewal Carpet Tiles. These are made of 70% recycled content and are 100% recyclable. The gel backing of the tiles is made with 'RenewGel<sup>®</sup>', as opposed to PVC or bitumen ensuring the product is cleaner, safer and greener. <http://www.renewalcarpettiles.com/>

## CLIMBING WALLS & CLIMBING EQUIPMENT

### HOLDS

Our 2009 report on sustainable sourcing of climbing holds concluded that we should favour polyurethane holds over the more commonly found polyester resin holds and that the only other factor we had control over was production location. Unfortunately, we were not able to find a UK producer that matched both of these criteria with the quality we required. In 2010 we purchased polyester resin holds from two UK manufacturers (Core Climbing and Holdz). We were able to source polyurethane holds from a German supplier (Revolution). "All of our climbing holds use stronger, cleaner, and more environmentally sound Polyurethane with at least 10% recycled and natural materials". <http://www.revolutionclimbing.com/>

Supplier	Location
Core Climbing	Sheffield
Holdz	West Yorkshire
Revolution Holds	Germany

### ROPES AND OTHER CLIMBING EQUIPMENT

We regularly need to replace our ropes and climbing equipment. This is done through the shop (Urban Rock until 31 July, The Castle shop from 1 August). Our biggest expense is replacing the climbing rope. In 2010 we replaced 1200 m of climbing rope, slightly less than previous years (1500m) which may be a result of the decrease in visits. All of our old rope is re-used for knot tying practice or given to organisations using it for non-climbing purposes.

### CLIMBING WALLS

We refurbished sections of our bouldering walls in 2010- a corner of the Mezz and the Panels. We use only FSC timber for these builds.

### OFFICE

### FURNITURE

We needed some new office chairs so we researched 'eco' chairs and found a company called **Steelcase** who manufacture chairs to a high environmental standard. We then located a company who refurbish these chairs second hand (being good quality they can take some refurbishing). We purchased 5 chairs to try them out. <http://www.steelcase.co.uk/en/company/environment/pages/overview.aspx>

### IT: COMPUTERS AND PHONES

In March 2010 we developed an IT roadmap, providing a framework to help plan and coordinate technology developments which will ultimately intertwine with the Castle's Sustainability Policy and culminate in energy usage reductions and improve user experience.

### PRINTERS

Office printer	2010	2009	2008
Monthly average – B&W	2,347	3,913	1,050
Monthly average - Colour	2,835	3,006	2,510

Though our monthly average appears to have improved over previous years, this is not entirely accurate because some of the printing has been diverted to the new Reception Printer. The new printer uses a different technology to store ink which minimises waste. The ink is kept in a solid wax state and heated up when required. Unused ink does not dry up or evaporate.

### STATIONERY

We purchase almost all our stationery with the Green Stationery Company who provide a large range of products that are either made from recycled material, easily recyclable or both. Examples are: biodegradable wallets, recycled dividers, recycled punch pockets, recycled marker pens, recycled water markers, recycled sticky notes, recycled tyre mouse mats and recycled plastic rulers.

### PUBLICATIONS

We've begun a subscription to *Permaculture* magazine, available at our Cafe, for both the staff and customers to read. *The Jellied Eel* and *Ethical Eats*, two local specialist publications are also available in the cafe.



## OTHER EQUIPMENT / CLOTHING

## LOCKERS

We replaced the key locks on all the lockers in the centre with coin return locks. Whilst we could have replaced the entire locker units for the same price, we preferred to modify the doors to and retro-fit the new locks instead. This meant that over 300 lockers did not go to the scrap heap and we've been able to reuse some of the locks for cupboards around the centre.

## CLOTHING

We purchased staff t-shirts and hoodies in 2010. These were all from the Continental 'Earth Positive' range which uses organic cotton. The credentials and benefits of this label were highlighted in our 2009 annual report.

## OUTPUTS: WASTE PRODUCED

## WASTE TO LANDFILL

## WASTE TO LANDFILL – HACKNEY COUNCIL WASTE COLLECTION

In 2009 the landfill waste figure is an estimate based on an audit done before we changed many of our purchasing policies. In 2010 between Jan and Dec Hackney collected 1 x 1100ltr bin per week. The maximum load weight of 1100ltr bin is 440kg, but we have estimated the average load to be 40kg (using data from Defra).

		Weight(kg)
2009	90 x 1100ltr bins	3600kg
2010	52 x 1100ltr bins	2080kg

Ray Eckermann conducted a review of what was going in both the council bin and the recycling bin over 2 days. This was sorted into correct waste streams and it was found that, since we started recycling more at the end of 2009, approx 90% of what Ray found in the council bins could actually be recycled. Following a campaign to make it easier to recycle, our landfill bins have significantly less recyclable materials.

Composition of non-recyclable waste to landfill: Duct tape, Finger tape, Break cables & blocks (Bikemech), Latex Gloves (Bikemech), Inner Tubes & Tyres (Bikemech), Paint tins, Climbing shoes and food contaminated recyclables.

The composition of the landfill bins is an estimate on an audit done early in 2010.

Landfill		tonnes <sup>3</sup>	CO2e <sup>4</sup>	kg CO2e
<b>2010</b>				
Miscellaneous	56%	1.16	81 <sup>5</sup>	93.96
Plastic	26%	0.544	34	18.50
Paper	8%	0.168	580	97.44
Aluminium	5%	0.104	21	21.84
Metal	5%	0.104	21	21.84

<sup>3</sup> Based on common volume-to-weight conversion factors (Environment Agency, WRAP). See Appendix B.

<sup>4</sup> Net kg emitted per tonne of waste disposed based on DEFRA figures GHG Conversion factors, August 2011 (Appendix B)

<sup>5</sup> This is the same conversion factor used for 2009 miscellaneous waste.

<b>2010 Total</b>		2.08		<b>0.317 tonnes CO<sub>2</sub>e</b>
<b>2009 Total</b>		3.60		<b>.341 tonnes CO<sub>2</sub>e</b>

The main source of difference between the 2009 and 2010 figures is that we used a conversion factor of 81 (net kg CO<sub>2</sub>e emitted per tonne of waste) for 'miscellaneous waste'. Had we used this same figure

## SKIPS

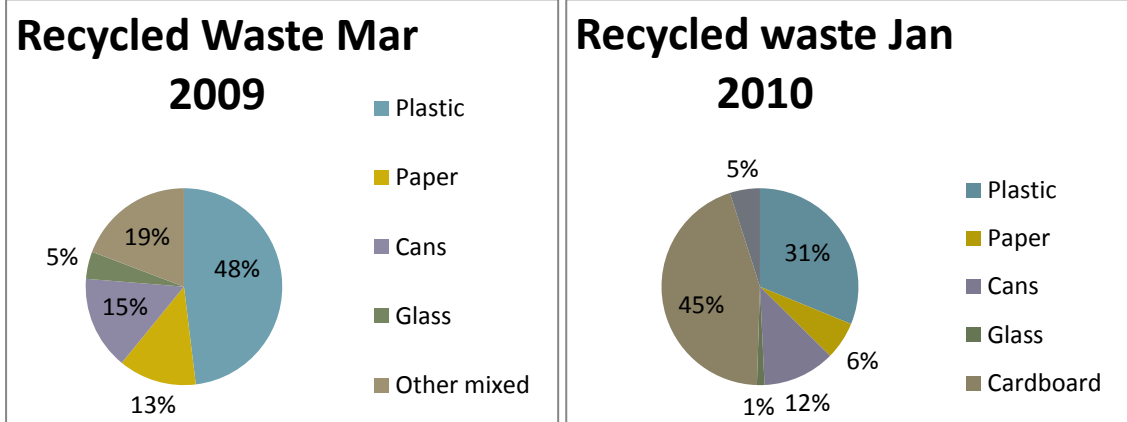
In 2010 we changed skip suppliers from BTS to McGrath Skips. They have a Materials Recovery Facility (MRF) in Hackney and estimate that around 98% of the waste they collect is recycled. We hired a total of 4 skips from them in 2010. These were usually filled by old building materials with an average 40kg per m<sup>3</sup> of waste.

Skips	Size (m <sup>2</sup> )	tonnes waste
McGrath skip July 10	6.12	0.2448
McGrath skip July 10	6.12	0.2448
McGrath skip Oct 10	6.12	0.2448
McGrath skip Dec 10	6.12	0.2448
<b>Total</b>	<b>24.48</b>	<b>0.979</b>

Skips		Tonnes <sup>6</sup>	Kg CO <sub>2</sub> e per tonne <sup>7</sup>	kg CO <sub>2</sub> e
Wood	50%	0.490	792	388.08
Aggregate	40%	0.392	0	0
Misc (mixed commercial/industrial)	5%	0.049	199	9.751
Metals	5%	0.049	21	1.029
				398.86
<b>2010 Total</b>		<b>.979</b>		<b>0.40 tonnes CO<sub>2</sub>e</b>
<b>2009 Total</b>		<b>.734</b>		<b>0.35 tonnes CO<sub>2</sub>e</b>

## RECYCLING

We conducted a Recycling Waste audit in March 2009 and another in January 2010. The results are compared in the charts below.



<sup>6</sup> Based on volume-to-weight conversion factors used by EA and WRAP (see Appendix B)

<sup>7</sup> Using 2011 DEFRA GHG conversion factors (see Appendix B)

As a response to the 2010 recycled waste audit we have made some changes;

- Cafe staff to ensure no food waste is placed into recycling – these go into our composting instead.
- Separate glass collection, as it can no longer go in with mixed general recycling.
- Cafe to stock larger tins and jars of certain products (storage dependant) to limit packaging waste.
- Cafe/Cleaners to purchase cleaning and dishwashing products in large volume tubs (10litre +)
- Office to ensure we use both sides of a sheet of paper before placing into recycling
- Continued communication to staff and customers about what can go into the recycling bin.

Our recyclable waste carriers, Greenerworld, provide us with some data about what we've recycled.

- Cardboard – 750kg
- Mixed recycling – 10,070 kg
- Total cost: £2,802.09 pa

Recycling data below is based on an average weight per full 1100ltr bin broken down as per the 2010 recycled waste audit.

Recycling		tonnes <sup>8</sup>	CO <sub>2</sub> e per tonne <sup>9</sup>	kg CO <sub>2</sub> e
Cardboard		0.75	-713	-534.75
<b>Mixed:</b>				
Cardboard	45%	4.5315	-713	-3230.96
Plastic	31%	3.1217	-1250	-3902.13
Paper	6%	0.6042	-713	-430.79
Glass	1%	0.1007	-315	-31.72
Aluminium	12%	1.2084	-9000	-10875.6
Polystyrene	5%	0.5035	-259	130.41
<b>2010 total</b>	<b>100%</b>	<b>10.07</b>		<b>-19.14 tonnes</b>

We had two extra glass collections in June (10xbags) and December (12xbags) following our summer and xmas events.

Overall we have largely reduced the amounts of recycling waste produced within the Castle by reducing the amounts of packaging coming into the Centre in the first place.

## COMPOSTING

We purchased a Ridan composter in 2010 to replace the 2 large compost tumblers we had which could not cope with the amount of waste. We estimate we have produced the following amount of compost in 2010;

**Jan – May:** 5kg/day = 750kg (old compost tumblers)  
**June – Dec:** 1.5 tonnes (Ridan composter)  
**Total :** 2.25 tonnes

Composting		tonnes <sup>10</sup>	CO <sub>2</sub> e per tonne <sup>11</sup>	kg CO <sub>2</sub> e
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<sup>8</sup> Based on common volume-to-weight conversion factors (Environment Agency, WRAP). See Appendix B.

<sup>9</sup> DEFRA figures GHG Conversion factors, August 2011 (see Appendix B)

<sup>10</sup> Based on common volume-to-weight conversion factors (Environment Agency, WRAP). See Appendix B.

<sup>11</sup> DEFRA figures GHG Conversion factors, August 2011 (see Appendix B)

Composting		tonnes <sup>10</sup>	CO <sub>2</sub> e per tonne <sup>11</sup>	kg CO <sub>2</sub> e
Kitchen waste		2.25	30	67.50
<b>2010 total</b>				<b>.068 tonnes CO<sub>2</sub>e</b>
<b>2009 total</b>				<b>.04 tonnes CO<sub>2</sub>e</b>

We use the compost in our garden to help grown new plants. Had we put this kitchen waste to landfill we would have produced .821 tonnes CO<sub>2</sub>e.

## WASTE SUMMARY

Waste type - carrier	Amount (tonnes)	Tonnes CO <sub>2</sub> e
Landfill – Hackney Council	2.08	.317
Skip - McGrath	.979	.40
Recycling – GreenerWorld	10.07	-19.14
Composting	2.25	.068
<b>2010 total</b>	<b>15.579</b>	<b>-18.355</b>
<b>2009 total</b>	<b>16.696</b>	<b>-18.67</b>
<b>2008 total</b>	<b>12.496</b>	<b>-15.24</b>

## TRANSPORTATION

For the purposes of this report we have included all transport costs that we incur directly such as route setter travel expenses, Steve's trips from Buxton and any other business trips. We have not included personal commuting, customer transport and deliveries.

### TRIPS REQUIRED BY BUSINESS & MODE OF TRANSPORT

A complete table of trips made is in **Appendix C – Business Transport**. What is encouraging from the table below is that we've travelled further than in 2009, but will a smaller carbon footprint!

Method of travel	Total distance (km)	Total CO <sub>2</sub> e	% of total km	% of CO <sub>2</sub> e
Train	30,545km	1.70 (+28%)	95% (+ 6%)	75%
Underground	77.8km	0.0057 (-57%)	0.23%	0.25%
Bus	242km	0.02 (+100%)	0.72%	0.88%
Car	2669.4km	0.55 (-57%)	7.96% (down from 11% in 2009)	24%
<b>2010 Totals</b>	<b>33,534.20 km</b>	<b>2.27 tonnes</b>		
<b>2009 Totals</b>	<b>24,999.30 km</b>	<b>2.29 tonnes</b>		
<b>2008 Totals</b>	<b>18,853.40 km</b>	<b>1.7999 tonnes</b>		

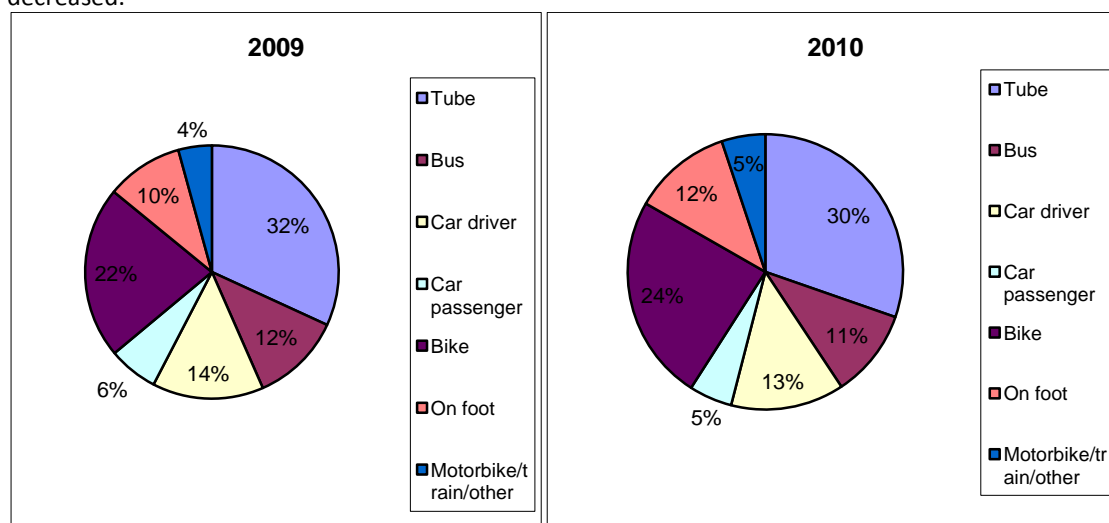
### STAFF TRIPS TRAVEL PAID FOR BY THE CASTLE

Date	Description	Cost	Litres/km	CO <sub>2</sub> e <sup>12</sup>
01/07/2010	N. Yorkshire staff trip	£131.35	845.5km	
15/11/2010	N. Wales staff trip (DMM)	£67.55	435 km	
	<b>2010 Total</b>		<b>1281 km</b>	<b>0.29 tonnes</b>
	<b>2009 Total</b>		<b>2654 km</b>	<b>0.72 tonnes</b>
	<b>2008 Total</b>		<b>4208 km</b>	<b>0.75 tonnes</b>

<sup>12</sup> Based on Carbon Trust's Carbon Footprint Calculator (using DEFRA GHG conversion factors).

## CUSTOMER MODES OF TRANSPORT

Although not included in our carbon footprint, every year (in March) we do a survey of how our customers get to the Castle. The results are summarised in the chart below. It is encouraging to see that year on year more people are cycling or walking to The Castle and that the percentage of drivers/passengers has slightly decreased.



## ENERGY & RESOURCES

### ELECTRICITY

In 2010 we installed **Edd:e** – an electricity monitoring unit attached to each circuit board. By monitoring energy usage and identifying where it is going we will be able to use energy more efficiently. The system was also meant to give us data on gas and water usage, but these features never worked properly so we're only analysing our electricity data.

We use the Deep Green tariff from Green Energy which claims to have zero carbon emissions. However, the Carbon Trust insists that unless renewable energy comes direct from source (eg a solar panel or wind turbine on site) it should be counted as grid power. The Deep Green tariff buys only energy generated from waste, anaerobic digestion, hydro, solar and wind<sup>13</sup>.

### CASTLE CLIMBING CENTRE

Source	kWh		CO <sub>2</sub> e <sup>14</sup>
Green Energy (2010)	149014		81.52
<b>Total 2010</b>			<b>81.52</b>
<b>Total 2009</b>			<b>82.85</b>
<b>Total 2008</b>			<b>85.73</b>

### BUXTON OFFICE

Source	kWh		CO <sub>2</sub> e <sup>17</sup>
Green Energy (2010)	512		0.28
<b>Total 2010</b>			<b>0.28</b>
<b>Total 2009</b>			<b>0.22</b>
<b>Total 2008</b>			<b>0.42</b>

<sup>13</sup> <http://www.greenenergy.uk.com/FuelMix/Default.aspx>

<sup>14</sup> As per the Carbon Trust's Carbon Footprint Calculator.



## GAS

## CASTLE CLIMBING CENTRE

Source	kWh		CO <sub>2</sub> e <sup>17</sup>
Eon	159229		30.74
		<b>Total 2010</b>	<b>30.74</b>
		<b>Total 2009</b>	<b>35.23</b>
		<b>Total 2008</b>	<b>43.01</b>

## BUXTON OFFICE

Source	kWh		CO <sub>2</sub> e <sup>17</sup>
Estimated amount	6727 estimated		1.25 tonnes
		<b>Total 2010</b>	<b>1.25 tonnes</b>
		<b>Total 2009</b>	<b>1.25 tonnes</b>
		<b>Total 2008</b>	<b>1.25 tonnes</b>

## WATER

## CASTLE CLIMBING CENTRE

Source	m <sup>3</sup>	Million litres <sup>15</sup>		CO <sub>2</sub> e <sup>16</sup>
Water supply (Thames Water)	2252	2.252		765.68kg
Wastewater	2252	2.252		1576.40kg
			<b>Total 2010</b>	<b>2.34 tonnes</b>
			<b>Total 2009</b>	<b>2.48 tonnes</b>
			<b>Total 2008</b>	<b>2.04 tonnes</b>

There has been a slight decrease in our water consumption (2563 m<sup>3</sup> in 2009), which may be accounted for by the use of the Eco Cubes in the urinals (see Inputs: Cleaning/Maintenance). This is an encouraging result given that we were still using mains water to irrigate the garden in 2010.

## BUXTON OFFICE

Source	m <sup>3</sup>	Million litres		CO <sub>2</sub> e
Estimated amount	29 (supply)	.029		8kg
	29 (waste)	.029		20kg
			<b>Total 2010</b>	<b>0.03 tonnes</b>
			<b>Total 2009</b>	<b>0.03 tonnes</b>
			<b>Total 2008</b>	<b>0.03 tonnes</b>

<sup>15</sup> 1m<sup>3</sup>=1000 litres

<sup>16</sup> As per DEFRA's GHG conversion factors at 340kg CO<sub>2</sub>e per million litres for water supply and 700kg CO<sub>2</sub>e per million litres for water treatment (2009 factors of 276kg and 693kg respectively).

## GARDEN

Following an initial observation and planning period in 2009, we were ready to start planting and harvesting in 2010.

- Fruit trees and bushes were planted early in 2010. We've harvested raspberries and strawberries this year but the fruit trees and rhubarb will not be harvested until 2011, after another year's growth.
- We planted a new hedgerow along the front near the roadside of the Castle. Nick Quinn, a medicinal herbalist, selected native English hedgerow bushes, shrubs and trees. These will not only shelter us from noise pollution from the road, but also provide a great habitat for wildlife and interesting things for us to harvest – hazel, crab apple, silver birch, elder, hawthorn and blackthorn, and some others we are trying out such as goji berries and cherry plum trees.
- April saw us planting up more vegetables for the Castle and a variety of herbs on the hill, in addition to an apricot tree, fig trees, grape vines and a kiwi plant.



- The Castle's own garden plots have done really well with the salads. In 2010 the café has been harvesting fresh mixed leaf salad (including a mix of herbs and edible flowers) every other day. We've not had to buy any salad or cucumbers all summer! The café has also been enjoying a glut of other seasonal specialities, including; courgettes, cavolo nero, French beans, beetroot, carrots, potatoes and squashes.

- Also, there have been some very lovely fresh herb tea infusions, such as mint, lemon verbena, lemon balm and fennel. We've been making the most of the lovely young fresh nettles. The café uses them to make nettle tea and Ida makes nettle feed for the garden. It's a great free source of nitrogen for the plants.

From May 2010 staff were encouraged to get out and help in the garden by offering them a limited number of paid hours a month. Between May and December 2010, 34 hours were spent working in the garden by various members of staff.

And it's not just the staff that can benefit from helping out in the garden. We developed our own local Exchange Trading System, offering volunteers the chance to earn 'Castle Quids' for their help. These in turn can be exchanged for a free climb or course. After a full year of activity we have given away approx 70 credits.

There has been an article in the Stoke Newington Gazette about our Garden (3 June 2010). BBC Radio 4 Farming Today is covering the progress of the Garden over the next 2 years.

## COMMUNITY MINI-PLOTS

As plot number 102 of the Capital Growth scheme we've handed over some mini-allotments (1m x 2m) to garden volunteers, staff and neighbours. These volunteers meet for garden workdays and can take home all the produce they grown on their own Castle plot. In 2010 we had 19 plots taken.

## USING WASTE STREAMS

The garden has also enabled us to close the loop with several waste streams. The 1.5 tonnes of compost that we've produced over the year will be used for mulching all those new fruit trees and bushes we planted in the first year.



In 2010 we took on a big project to create a swale in the garden (pictured left), headed by the CEO of the Castle, Steve Taylor. The purpose of the swale is for water from the men's changing rooms, (sinks and showers) to run through it and add extra infiltration into the soil. We will be planting lots of trees and shrubs in the mounds in front of the swale. We hope to get this planted and started by the start of spring next year.

We've also recycled materials from a neighbouring construction site, including wood for raised beds, steel toe cap wellies, and a smoker's shelter which we've

turned into a greenhouse. Tom Trimmins, one of our garden volunteers lent us his services and fitted it out with lots of shelves.

## GROWING COMMUNITIES

The Growing Communities micro site has done really well in its first season! Since June, there has been up to 70 kilos of salad harvested! All produce is sold to restaurants on Stoke Newington Church Street; Fat Cat Cafe, Alistairs and the Three Crowns. Leftover salad is used in the Castle Cafe. In October our site started going through an organic conversion through the Soil Association. It will take 2 years until we're a fully certified organic site. <http://www.growingcommunities.org/>

## ONE POT PLEDGE

In 2010 we also supported the One Pot Pledge campaign by offering customers, staff and locals alike to come and sow a seed and take it away with them in an effort to encourage people to try growing their own veg. <http://www.onepotpledge.org/>

## BEEES

Our first bee hive was delivered by Ian, our expert beekeeper in June and a second one was delivered a few weeks later. We'll be letting them settle in the first year and not harvesting them at all. In 2011 Ian will be running beekeeping courses here at The Castle and we can expect our first Castle honey harvest.

## CASTLE EVENTS

Over the course of the year we have held three big events. At each of these we have tried to keep waste to a minimum and source our supplies responsibly.

### THE CASTLE GARDEN PARTY – 13<sup>TH</sup> JUNE 2010

Since the launch party to promote our Environmental Policy in 2009, we decided to have a garden party each year to promote the publication of the annual environmental report and to let our customers and the local community know what changes we have made throughout the year.

- We served organic beer, ale and cider
- Pangea Project provided vegan food
- Taste of Freedom sold ice creams, made from fresh but unwanted fruit that otherwise would have been wasted.
- Bamboo bikes and other bamboo products on sale.

Finally, we've had some press coverage - see: <http://www.thisislondon.co.uk/lifestyle/article-23825044-this-castle-is-a-growth-area.do>

- Pangea Project provided a vegetarian BBQ
- We served organic ale, lager and cider
- Stalls included eco products, bamboo bikes and woodworking workshops

### THE REEL ROCK TOUR & BONFIRE – 6<sup>TH</sup> NOV 2010

- Stocks Farm provided the organic 'locally' produced sausages and the baked potatoes and salad came straight from our own garden
- We served organic ale, lager and cider
- Biodegradable plates left from a previous event were used and burnt on the bonfire afterwards (pictured right)



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## THE CASTLE XMAS PARTY – 11<sup>TH</sup> DEC 2010

- Shambhu's provided a vegan buffet including desserts
- We served organic ale, lager, cider and spirits
- Compostable plates and recyclable cutlery – which was washed and returned to Shambhu's to re-use
- Biodegradable, recyclable plastic glasses used for the party afterwards

## ENVIRONMENTAL GRANTS

### 2009 ENVIRONMENTAL AWARDS

Following the award of £29,500 in November 2009, we were able to distribute the funds in 2010 and start seeing some results:

- Dean Plant began a 6 month internship with Greenpeace;
- The Saha Atitsva Foundation in India were able to purchase and install solar panels for their eco-farm;
- Magnificent Revolution converted an old shipping container into their new HQ at Hackney City Farm;
- Cordelia was able to get started with her beekeeping in North Wales;
- Growing Communities had educational signs made for several of their organic sites.

Pangea Project unfortunately closed and did not purchase the trailer bike. We are still holding the £6k grant for Community Action Nepal who are in the process of securing local funds for the health post in Ghap, Nepal.

### CASTLE STAFF ECO-GRANTS

Following up from the success of the 2009 Environmental Awards we wanted to keep giving some of our profits to good projects. The staff Eco-Grants award scheme was rolled out in December 2010 to all staff members. The purpose of the eco-grants is to allow Castle staff the financial freedom to volunteer for projects that aim to better the environment, reduce the impact of communities on the environment, and foster a deeper understanding of environmental issues in both local communities and the wider public. Through the scheme Castle Staff apply to take time off from their jobs to work on projects for the environmental group of their choice while the Castle pays a stipend to help cover their salary while they're away. The groups/project of their choice gets quality Castle staff for free!

The first round of applications will be selected in Spring 2011.

## RESEARCH AND DEVELOPMENT

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### WATER NEUTRALITY

As we've learnt more about sustainability, we've realised that there are rarely straightforward answers. For example, in our 2009 Environmental Policy we stated that our aim was to be 'water neutral' by 2015. We thought that this would be easy to achieve by using our vast roof surfaces to harvest rainwater. However, the situation is more complex. We commissioned Lean Green Consulting to give us some recommendations. We concluded that the energy required to store and treat water to drinking standard was not worth the savings in water. Furthermore, because we are in the middle of a city, mains water is actually very efficient because the pipes run right underneath us! Lean Green Consulting also advised us on solar panels and weather monitoring station (to gather data for a wind turbine).

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### ENERGY EFFICIENCY

The bulk of our investment to date has been in developing a passive Heating, Cooling and Ventilation strategy. To this end we've put together a design team who include:

- Mott Macdonald (formerly Fulcrum)- specialists in passive systems for older buildings;
- Cook Townsend Architects

- Price & Myers structural engineers
- Alan Baxter structural engineers

This project will involve major redevelopment to the whole building and will incorporate the following measures:

- Insulating the roof;
- Eliminating sources of heat loss through design;
- Applying heat efficiently only to areas that require them;
- Creating natural ventilation using our building's design features such as the chimney.

## CONCLUSION – LOOKING AHEAD

### CARBON FOOTPRINT

I think that it will be a few years before our investment pays off and we start seeing real decreases in our Carbon Footprint. This is because we are still gathering data about our electricity use (the largest share of our footprint) to find out where we can save. Secondly, the main changes that would get us off gas heating in the winter, won't be taking place until our planning application has been approved by Hackney Council and English Heritage.

### INPUTS

We still have some room for improvement in the Cafe. From October 2011 we hope to have a kitchen on-site in which we can use more of this produce. Through our work with the Shop we've learnt that sustainability is increasingly important to many climbing manufacturers/suppliers, which is very encouraging. This gives us the chance to increase our range of products with the lowest impact possible.

### OUTPUTS

In 2011 we are moving to another waste carrier, Bywaters, who will collect all of our waste and sort it at their Materials Recovery Facility (MRF). This should mean even less waste going to landfill. We will continue to audit our waste streams to look for ways to reduce our waste even further.

### ENERGY & RESOURCES

Our aim is to have the garden irrigated using only harvested rainwater by 2012. To accomplish this, we're building rainwater collection tanks behind our climbing walls and in other storage spaces. We continue to analyse data from our environmental monitoring units (edd:e). We are also gathering data on wind conditions to find out if a wind turbine is a feasible option.

### GARDEN

The garden will continue to be a centrepiece to our sustainability project, producing organic and very local produce for the Cafe. The main challenges are keeping the volunteer team and paid staff enthused about the project and integrating it into our Cafe even more.

### AWARDS AND INCENTIVES

To keep the momentum up, we are going to apply for awards and accreditation. This will give us the continual monitoring and hopefully positive feedback that we need to keep this project going. We're already recognised in the industry as leaders in sustainability, but we realise that we must keep acting and making changes for us to achieve the targets we set for ourselves by 2015. In order to keep staff motivated, we are continuing to offer grants for up to £6k per year for staff to be able to give their time working for environmental charities and causes.

Sustainability is about making the right decisions for the long term. There is more than just an environmental dimension- sustainable businesses must also be viable commercially. Although we have not been hit by the recession as hard as other businesses, we have seen a decrease in our sales at a time when we need to be



investing in the future of our business. We think that we're making the right decisions and that because we're looking at long-term rather than short-term gains our business will emerge stronger through the uncertain economic times ahead.

## APPENDIX A – LIST OF CAFE SUPPLIES

- The table below shows our supplier list in 2010. I have highlighted in green changes that we have made to be a more sustainable cafe. Items in grey were discontinued in the course of the year.

Supplier	Item Desc.	Organic?	Fairtrade?	Notes / Other?
Cafe connections	cloths, scourers, napkins			Recycled bleach free napkins
Dairy Crest (PD Dairy)	Milk	X		Reusable bottles and local
	Juice			Local
Dorset County Foods Ltd	Bacon/Ham	X		Local
Espresso Warehouse	Abyss Chocolate Powder	X	X	
Infinity	Muesli			
	Dried fruits/nuts	X (some organic)		
	Cookies	X		
	Rocks cordials	X		
	Sweetcorn			
	Clipper Tea	X		
	Pesto			
	Choc Spread			
	Jams			
	Chutney			
	Vegetable Spread			
	Honey			
	Sugar			
	Ecover products			
Halladay & sons	Red Bull			
	Just Juice			Discontinued
	Snickers, Twix, Mars			Stopped getting Nestle products in April 09
	Gum, Starburst			
JDs Foods Group	Tray Bakes			
	Burts crisps			Made in Devon
	Cakes			
	Soups			UK based
	Innocent smoothies and juices			Local
Lucozade shop	Lucozade powder			Eliminates bottles
Marigold Health Foods	Clive's pies	X		Vegan. Made in Devon. They use palm oil, however, is organic and from sustainable farming practices in Columbia. They are constantly looking for an alternative.
	Tyrrels crisps			Local and natural
	Eat Natural bars			Local and natural
	Pulsin protein snacks			Made in Gloucestershire
	Coffee Beans	X	X	
	Organic Welsh Butter	X		
	Mozzarella, Brie & Cheddar	X		

Supplier	Item Desc.	Organic?	Fairtrade?	Notes / Other?
Ocado / Waitrose	Groceries, Tea	X		Discontinued using Ocado in 2010
Pangea Project	Main Course stews	X		Company disbanded in 2010
Simple Simon	Pasties			Discontinued in 2010
	Patties			
	Muffins			
Shaun's Bars	Nut bars			Not organic but no palm oil or artificial additives. Locally produced
Celtic Bakers Ltd	Bread	X		
	Flapjacks	X		
	Brownies	X		
Valley Industrial products	Dishwasher Detergent, latex gloves			
Infinity Foods Co Op Ltd	Clipper Teas	X		Feb 2010
	Herbal Teas	X		
	Divine Choc Bars	X		
Mother Earth Health Foods	Main Meals – pasta, rice, risotto etc	X		Vegetarian meals. Began using Mother Earth in August 2010
Sainsbury's	Tuna			Line caught tuna – most sustainable
Ripple Farm				Discontinued
Castle Garden	Veg, Salad, Fruit & Herbs	X		The majority of our salad comes from our own garden. Plus a good variety of veg and summer berries. We also use our own home-grown herbs to make natural herbal teas
Growing Communities	Salad	X		Not a supplier but we often take excess salad from them that they cannot sell

## APPENDIX B – WASTE EMISSIONS CONVERSION FACTORS

The following conversion table is based on the **2011 Guidelines to Defra/DECC's GHG Conversion Factors for Company Reporting**. These are different from the figures used in previous years which are listed below for comparison.

Material	Net kg CO <sub>2</sub> e emitted per tonne of waste treated			kg CO <sub>2</sub> e emitted per tonne waste PRODUCED
	Recycling <sup>17</sup>	Composting	Landfill	
Card & paper (mixed assumed 25% paper, 75% board)	-219	57	580	1017
Aggregate (rubble)	-4		0	8
Plastic (average)	-1171		34	3179
Plastic (dense)	-1170		34	3281
Plastic (film)	-1042		34	2591
Wood	-817	285	792	666
Glass	-366		26	895
Aluminium	-9245		21	9844
Metals (Scrap0	-2241		21	3159
Kitchen/food waste		-39	450	3590
Garden/plant waste		-42	213	0
Mixed municipal waste	-1679	-15	290	2053
Mixed commercial and industrial waste	-1082	-30	189	1613

Figures from the Defra GHG conversion factors 2009:

Material	Net kg CO <sub>2</sub> e emitted per tonne of waste treated			kg CO <sub>2</sub> e emitted per tonne waste PRODUCED
	Recycling	Composting	Landfill	
Card & paper	-713	57	550	950
Plastic (dense)	-1500		40	3100
Plastic (film)	-1000		35	2500
Wood	250	250	930	256
Glass	-315		10	840
Aluminium	-9000		10	11000
Kitchen/food waste		30	365	2428
Garden/plant waste		57	210	89
Est. impact of other materials	-259	7	81	2,860

We used the same conversion factors supplied by WRAP as in previous years.<sup>18</sup>

Common volume-to-weight conversion factors (tonnes per cubic metre)	
Paper and card 0.21	Mixed household waste 0.17
Glass containers 0.33	Mixed commercial waste 0.14
Textiles 0.15	Metals 0.38
Rubble 0.54	Cans 0.04

<sup>17</sup> We have used the conversion factors for closed loop recycling (recycling material back into the same product) instead of open loop (recycling materials into other products).

<sup>18</sup> See WRAP Tool Conversion factors found here:

[http://www.wrap.org.uk/construction/tools\\_and\\_guidance/reporting\\_portal.html](http://www.wrap.org.uk/construction/tools_and_guidance/reporting_portal.html)

Common volume-to-weight conversion factors (tonnes per cubic metre)	
Nappies 0.39	Batteries 1.40
Wood 0.19	Soil 1.06
Food 0.20	Plastics 0.21
Garden waste 0.51	Tyres 0.47



## APPENDIX C – TRANSPORT TABLES

## TRAIN TRAVEL

Date	Description		Distance	CO <sub>2</sub> e
07/01/2010	Steve Taylor return train journey from Buxton to London		512km	
22/01/2010	Steve McClure return train journey from Sheffield to London		530km	
18/03/2010	Gareth Parry train travel from Bristol to London (return)		342km	
16/03/2010	Ben Levey train travel from Euston to Manchester (return)		631km	
29/03/2010	Audrey Seguy train travel from Euston to Manchester (return)		631km	
30/03/2010	Steve Taylor 5 return train journeys from Buxton to London		5120km	
23/04/2010	Gareth Parry train travel from Bristol to London (return)		342km	
30/04/2010	Neil Mawson return train from Sheffield to London		530km	
05/05/2010	Steve McClure return train journey from Sheffield to London		530km	
01/06/2010	Gareth Parry return train journey from Sheffield to London		530km	
25/06/2010	Neil Mawson return train journey from Sheffield to London		530km	
17/06/2010	Steve Taylor 9 train journeys from Buxton-London		4608km	
10/06/2010	Return train journey for 14 people from Tottenham Hale to Broxbourne		36km	
28/05/2010	Gavin Symonds return train journey from Dorset to London		338km	
19/08/2010	Aron Tarajani return train journey from London to Eridge		121km	
28/08/2010	Steve McClure return train journey from Sheffield to London		530km	
21/07/2010	Steve Taylor 5 train journeys from Buxton-London		1280km	
09/07/2010	Neil Mawson return train journey from Sheffield to London		530km	
06/08/2010	Neil Mawson return train journey from Sheffield to London		530km	
02/07/2010	Audrey Seguy return train journey from London to Leicester		318km	
18/08/2010	Gareth Parry train travel from Bristol to London		171km	

28/09/2010	Gareth Parry train travel from Bristol to London (return)		342km	
02/11/2010	Steve Taylor 6 train journeys from Buxton-London		1536km	
12/10/2010	Steve Taylor return train journey from Buxton to Manchester		60km	
20/10/2010	Gareth Parry train travel from Manchester to London (return)		607km	
05/10/2010	Steve Taylor 8 return train journeys from Buxton-London		4096km	
05/10/2010	Steve Taylor train journey from London to Kent		75km	
08/10/2010	Neil Mawson return train journey from Sheffield to London		530km	
05/11/2010	Audrey Seguy & Iwona Kulczynska-Evans return train journey from London to Bristol		376km	
05/11/2010	Audrey Seguy return train journey London to Manchester		631km	
14/12/2010	Steve Taylor 6 return train journeys from Buxton-London		3072km	
21/12/2010	Neil Mawson return train journey from Sheffield to London		530km	
		2010 Total	30,545km	1.70 tonnes
		2009 Total	21,999km	1.32 tonnes
		2008 Total	13,207km	.80 tonnes

## LONDON UNDERGROUND TRAVEL

Date	Description		Distance	CO <sub>2</sub> e <sup>19</sup>
06/01/2010 13/01/2010	Ollie Barker 2 return tube journeys from Manor House to Pimlico		44km	
07/02/2010	E Uiterwijk travel to visit potential site at Covent Garden		18km	
28/09/2010	Gareth Parry tube journey from Liverpool Street to Manor House		7.9km	
20/10/2010	Gareth Parry tube journey to Manor House		7.9km	
		2010 Total	77.8km	.0057 tonnes
		2009 Total	209km	.01 tonnes
		2008 Total	35km	.0027 tonnes

## BUS TRAVEL

Date	Description		Distance	CO <sub>2</sub> e <sup>20</sup>
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<sup>19</sup> Based on DEFRA's updated GHG emission factors for passenger rail travel at 74.6 CO<sub>2</sub>e per passenger km (2009 factors of 78.6g pkm).

<sup>20</sup> Based on Carbon Trust's Carbon Footprint Calculator (using DEFRA GHG conversion factors).

Date	Description		Distance	CO <sub>2</sub> e <sup>20</sup>
27/01/2010	Gareth Parry return Stansted Express coach journey to London		109km	
13/07/2009	Gareth Parry return bus journey from Liverpool Street to Stoke Newington		14km	
16/02/2010	E Uiterwijk travel to carpet shop on Holloway Road		6.6km	
01/06/2010	Gareth Parry bus journey to The Castle		3.4km	
28/09/2010	Gareth Parry return airport coach journey to London		109km	
		2010 Total	242km	0.02
		2009 Total	No data	No data
		2008 Total	No data	No data

## CAR TRAVEL

Date	Description		Litres	CO <sub>2</sub> e <sup>21</sup>
01/02/2010	J Bamford streetcar to N7 9NH		2.4 miles	
16/02/2010	E Uiterwijk collects trellis		8.4 miles	
07/04/2010	Ben Levey taxi x 2 to ABC meeting		3 miles	
23/06/2010	RAW Bamboo Bikes attendance at Castle Garden Party – Hebden Bridge return		422 miles	
09/06/2010	Cafe/Reception trip to Hoddesdon via minibus		36.2 miles	
01/07/2010	Mike Langley trip to Glastonbury with Greenpeace		338 miles	
16/07/2010	Mike Langley travel expenses		12.4 miles	
16/07/2010	Gavin Symonds travel expenses		152 miles	
25/10/2010	Mark Croxall travel expenses		267 miles	
05/10/2010	Steve Taylor taxi – Kent		12.5 miles	
05/10/2010	Steve Taylor taxi – Buxton to Macclesfield		11.2 miles	
05/11/2010	Audrey Seguy taxi – Bristol		4 miles	
07/11/2010	Tom Randall travel expenses		346 miles	
14/12/2010	Audrey Seguy collecting goods for xmas party		40 miles	
14/12/2010	Audrey Seguy taxi – Stockport BMC		3.6 miles	
		2010 Total	2669.4 km	0.55 tonnes
		2009 Total	2791.3km	0.96 tonnes
		2008 Total	5555 km	.99 tonnes

<sup>21</sup> Based on Carbon Trust's Carbon Footprint Calculator (using DEFRA GHG conversion factors).

## APPENDIX D - VISITOR NUMBERS/ANNUAL STATISTICS

	2010	2009	2008
Total visits	152,251	159,526	153,786

## STAFF NUMBERS

	2010	2009	2008
Castle Climbing	32	28	27
Castle Shop	5	0	0
Castle Cafe	8	10	9
Freelance	27	26	16
<b>Total</b>	<b>72</b>	<b>64</b>	<b>52</b>