



# Energy Balance Evaluation

## Key Values

Project Name:  
 Project Location: Cheltenham  
 Activity Type: Multiple  
 Evaluation Date: 02/02/2010 14:30

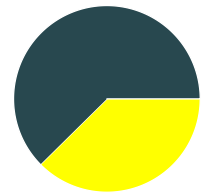
Tempered floor area: **3,243.30** m<sup>2</sup>  
 Ventilated volume: **10,245.42** m<sup>3</sup>  
 Outer heat capacity: **12.46** J/m<sup>2</sup>K

### Calculated heat transfer coefficients:

Building shell average: **0.75** U values [W/m<sup>2</sup>K]  
 Roofs: **0.20 - 0.25**  
 External walls: **0.29 - 0.75**  
 Basement walls: -  
 Openings: **1.30 - 1.80**

## Energy Consumption

Source	Yearly total		Yearly specific	
	kWh/year	GBP/year	kWh/m <sup>2</sup> ,year	GBP/m <sup>2</sup> ,year
37 % Natural gas	139554	3488	43.03	1.08
63 % Electricity	231533	2315	71.39	0.71
<b>Total:</b>	<b>371087</b>	<b>5804</b>	<b>114.42</b>	<b>1.79</b>



**371087 kWh**  
**114.42 kWh/m<sup>2</sup>**

## Carbon Footprint

CO<sub>2</sub> emission as a result of operating this building is 150 tonnes CO<sub>2</sub>/year

This amount of CO<sub>2</sub> is absorbed in one year by 0.8 hectares (roughly equivalent to 1.4 football fields) of tropical forest.



## Monthly Energy Balance

