

# 2014-15 Carbon Dioxide Emission Analysis

**Watford Borough Council**  
End of year Report 2014-15

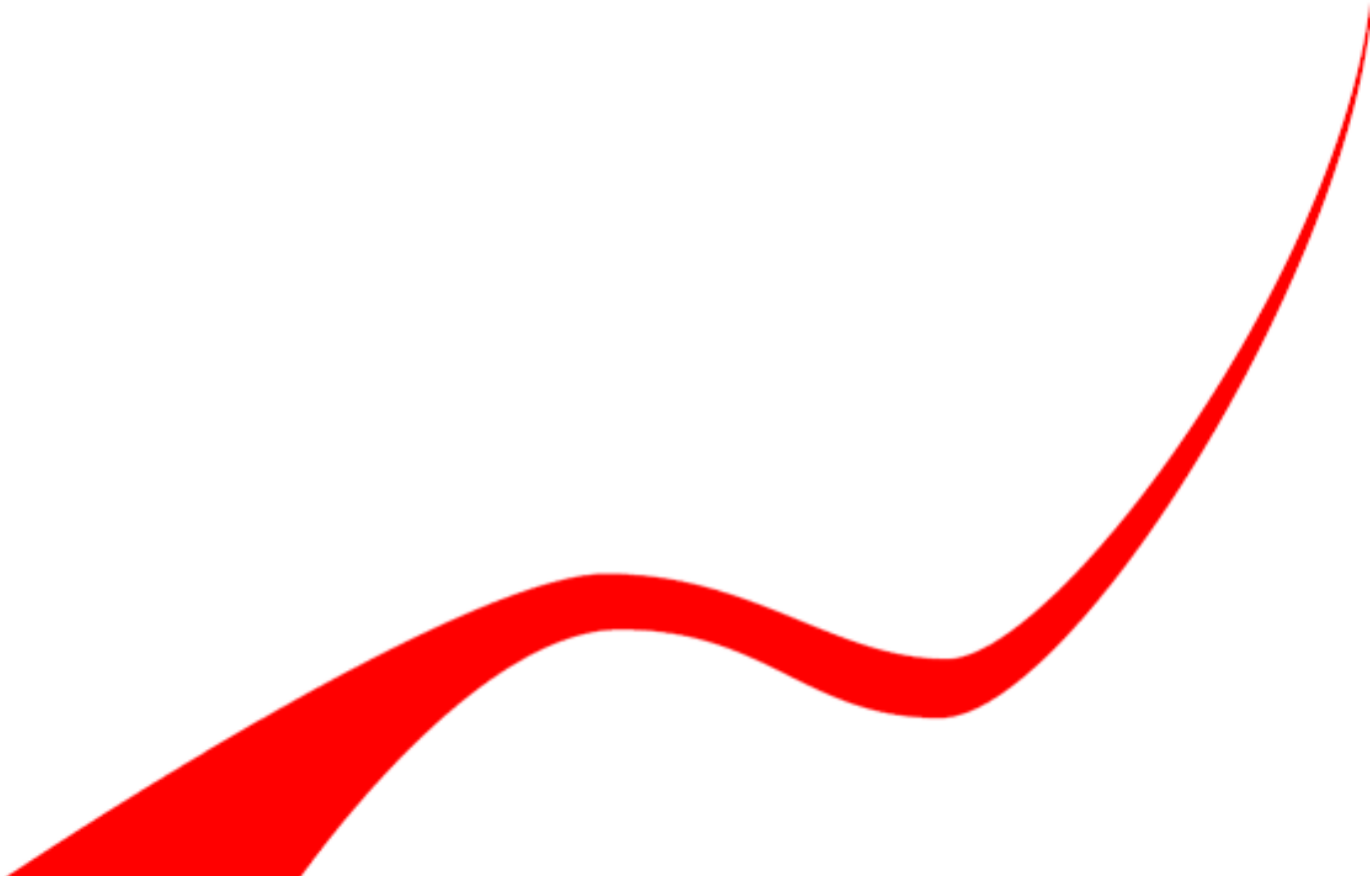
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## I EXECUTIVE SUMMARY

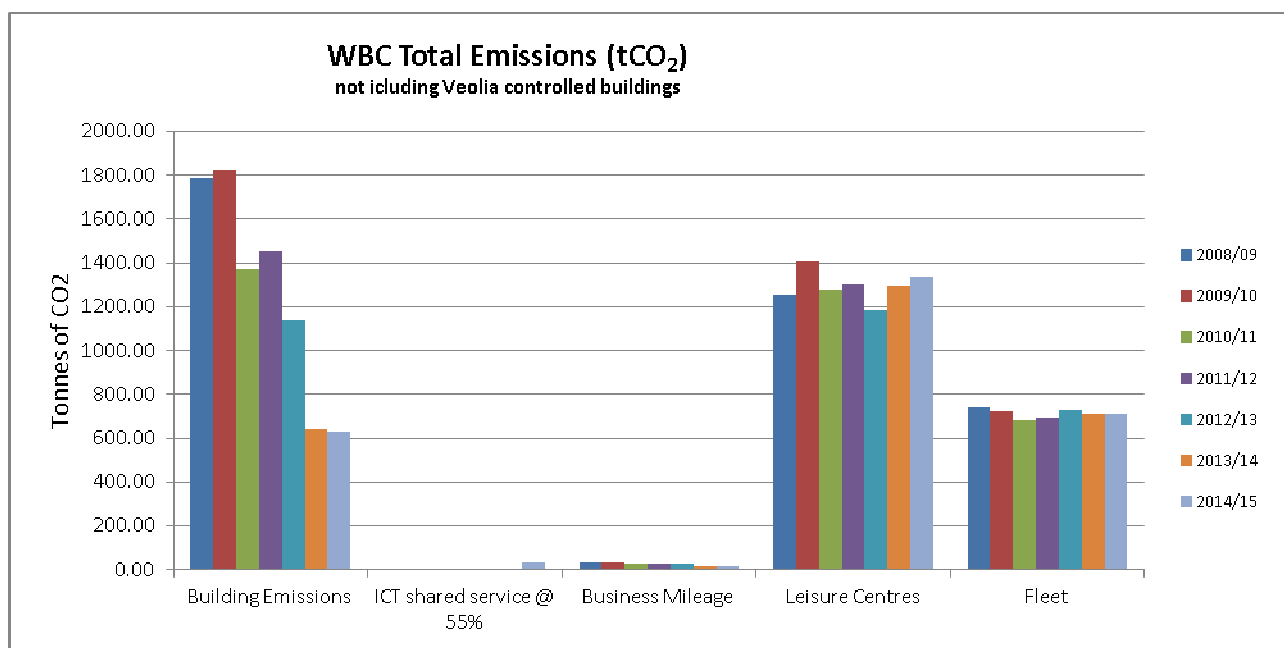
This report outlines the carbon dioxide emissions resulting from the council operations for the full financial year 2014/15. All emissions are provided in tonnes of carbon dioxide (tCO<sub>2</sub>) and utilise the carbon conversion factors specified by DEFRA in “June 2014-environmental reporting guidance and the GHG-conversion-factors web based tool”. Please note; this year the carbon emission factor for electricity increased by an average (generation and transmission) of 11% compared to last year 13-14. This had a significant influence over the calculations results. Please also note that these emissions are absolute values and not corrected for weather differences.

Watford Borough Council’s reported activities for 2014-15 is as follows;

- **Buildings and stationary:** Watford Borough Council (WBC) has reported on council owned and managed properties. WBC has a number of properties run by a third party company: Veolia. Veolia contribution is not included within this report based on the DECC guidance on ownership arrangement and in order to avoid double counting. The council owned buildings and the properties run by Veolia are listed in the section “Buildings and Stationary”. The summary of emissions in Table 1 below outlines the carbon dioxide emissions from the council owned buildings throughout the years. Carbon dioxide emissions from Veolia are also provided for information.
- **Business mileage:** Mileage data in 2014/15 were again documented according to the fuel type used (e.g., petrol, diesel etc.) and the engine size. This allows for better accuracy of emission. From 2010, the business mileage had been recorded and sorted according to engine size only. This level of detailed recording is to be continued.
- **Leisure:** Complete data was available for Woodside and Central leisure centres. However reconciliation of bills and meter readings is still to be finalised.
- **Fleet:** The fleet vehicles used by Watford Borough council staff are leased from Veolia. Emissions for 2014/15 have been calculated on the basis of the average diesel consumption over the past three years. This allowance has been used for consistency of the reporting as more detailed data were not available.  
Watford Borough Council owns an electric pool car, however there is no carbon dioxide emissions to account for. The electricity used to charge that car is included in the lease fee.

**Table 1:** 2014/15 carbon footprint (tCO<sub>2</sub>) against previous years since 2008/09. Veolia managed buildings' emissions have been reported for information only.

Tonnes of CO <sub>2</sub>	2008/09	2009/10	2010/11	2011/12	2012/13	2013/14	2014/15	% variation from 2008/09	% variation from 2013/14
Veolia building emissions				786.42	450.16	17.95	254.65		
ICT shared service @ 55%							31.18		
<b>Building Emissions</b>	1787.32	1824.78	1372.94	1453.06	1135.45	641.80	632.29	-65%	-1%
<b>Business Mileage</b>	34.64	33.98	29.33	30.36	28.68	18.88	18.65	-46%	-1%
<b>Leisure Centres</b>	1257.68	1405.42	1281.09	1304.70	1186.96	1297.36	1335.26	6%	3%
<b>Fleet</b>	741.16	723.94	684.39	692.40	729.90	710.02	714.12	-4%	1%
<b>Total</b>	<b>3820.81</b>	<b>3988.12</b>	<b>3367.74</b>	<b>3480.51</b>	<b>3081.00</b>	<b>2668.05</b>	<b>2731.50</b>	<b>-29%</b>	<b>2%</b>



**Figure 1:** Total 2014/15 CO<sub>2</sub> emissions by source compared against previous years.

## 2 BUILDINGS AND STATIONARY

Watford Borough Council (WBC) owned properties and the properties run by Veolia, a third party company, were separated in 2013-14 and 2014-15. Below is the detailed list of WBC and Veolia's buildings (Tables 2 & 3). Only some energy data from the Veolia properties were available this year. Hence in order to maintain consistency on the results; decision was made to only report on the council owned properties.

**Table 2:** Watford Borough Council owned properties reporting list for 2014/15.

Electricity	Gas
Cheslyn House	Cheslyn House
Farraday House (communal lighting and fire alarm) <sup>1</sup>	
Garage Compound 73/83 Tolpits lane Watford (Gar 02 King George)	
Garages Chester Road	
Harebreaks Adventure Playground (main hall)	Harebreaks Adventure Playground (main hall)
Harebreaks Adventure Playground office	
Harwood Adventure Playground	Harwood Adventure Playground
Car Park The Avenue (Island Car Park)	
Garage Compound Queens Road	
Garage Lighting Liverpool Road Garage Compound	
Garage Compound Balmoral Road	
Garage Compound Lower Paddock Road	
'Outside Toilet The Parade (WB310)	
Outside Toilet 133 The Parade (pop up loo)	
Pond Fountain	
Garages compound St Albans Road	
Longspring car park <sup>1</sup>	
The Parade High Street Watford <sup>1</sup>	
Historical marker Lower paddock <sup>1</sup>	
Town Hall - Main Buildings & CO	Town Hall - Main Buildings & CO meter 1, 2 & 3
Town Hall Water Feature	
Town Hall Watford; +subway	No gas
Watford Museum	Watford Museum
Woodside stadium	

<sup>1</sup> 2014-15 additional WBC owned buildings to the reporting in red.

**Table 3:** Veolia run properties list:

Electricity	Gas
Callowland Dressing Rooms	
Cassiobury Park Public Convenience/ changing room	Cassiobury Park Changing Rooms
Cassiobury Park Old Kiosk by car park	
Cassiobury Park Changing Rooms - pool	
North Watford Cemetery	Not managed by WBC
North Watford Cemetery Chapel	Not managed by WBC

Electricity	Gas
North Watford Cemetery Office	Not managed by WBC
Cemetery Chapel	Not managed by WBC
Cemetery Lodge	Cemetery lodge?? Vicarage road/ Not managed by WBC
Car Park Gade & Public Conveniences	Mess Room Shepherds Road/ Gade car park PC
Garston Park Pavilion	Not managed by WBC
Holywell Ext Allotments	
Paddock Road Nurseries	Paddock Road Nurseries
King George V Playing field Pav & Change Rms	
King George V Playing Fields all weather field	
Public Convenience (Ashby rd.)	
Garston Manor Refuse Complex & Community room	Not managed by WBC
Wiggenhall Depot <sup>2</sup>	Wiggenhall Depot

2: WBC has a license agreement with Veolia and is responsible for 49% of the costs of energy (gas and electricity) of the Depot.

Since 2010-11 Watford Borough Council (WBC) and Three Rivers District Council (TRDC) have some shared services. Each authority has a number of staff located in each other's buildings. This has an impact on the repartition of the associated emissions. This year, 16.9% of Watford Town Hall's total emissions have been deducted from WBC emissions and counted as TRDC's emissions. Similarly, 4.9% of shared services from Three Rivers House (TRH) emissions have been included in WBC's emissions. Table 4 shows the emissions for the shared services.

In 2014-15, an ICT team was recruited and housed mainly in Three Rivers House. The ICT carbon footprint was calculated on staff basis, 2 workers at Watford town hall and 29 at TRH. To reflect this repartition in CO<sub>2</sub> terms, 1.01% and 15.8% of the overall energy consumption have been deducted from Watford town hall energy and TRH respectively. The results of these proportions have been added together to reveal the assumed energy consumption of the ICT team. That total has then been redistributed 55% to WBC and 45% to TRDC on the basis of shared workload.

**Table 4:** Proportion of carbon dioxide (tCO<sub>2</sub>) contribution for shared services

Year	TRH contribution to WBC town hall tCO <sub>2</sub>	WBC Town hall contribution to TRH tCO <sub>2</sub>	ICT rated share of services for WBC (55%) tCO <sub>2</sub>
2014-15	4.9% TRH contribution to WBC town hall tCO <sub>2</sub>	16.9% of WBC Town hall contribution to TRH tCO <sub>2</sub>	ICT rated share of services for WBC (55%) tCO <sub>2</sub>
<b>Total</b>	<b>13.2</b>	<b>102.65</b>	<b>31.18</b>
2013-14	8% TRH contribution to WBC town hall tCO <sub>2</sub>	15% of WBC Town hall contribution to TRH tCO <sub>2</sub>	
<b>Total</b>	<b>23.98</b>	<b>89.7</b>	
2012-13	14% TRH contribution to WBC town hall tCO <sub>2</sub>	12% of WBC town hall contribution to TRH tCO <sub>2</sub>	
<b>Total</b>	<b>45.14</b>	<b>65.3</b>	
2011-12	14% TRH contribution to WBC town hall tCO <sub>2</sub>	12% of WBC town hall contribution to TRH tCO <sub>2</sub>	
<b>Total</b>	<b>48.43</b>	<b>68.1</b>	
2010-11	12% TRH contribution to WBC town hall tCO <sub>2</sub>	17.2% of WBC town hall contribution to TRH tCO <sub>2</sub>	
<b>Total</b>	<b>44.71</b>	<b>69.0</b>	

**Table 5:** Carbon dioxide emissions from WBC buildings – totals for both electricity and gas related carbon dioxide emissions (tCO<sub>2</sub>).

In Tonnes of CO <sub>2</sub>	2008-09	2009-10	2010-11	2011-12	2012-13	2013-14	2014-15	Variation from 2008-09	Variation from 2013-14
Cheslyn House	12.38	16.75	8.40	7.63	18.02	20.57	12.18	-2%	-41%
<b>Farraday house (communal lighting and fire alarm)<sup>1</sup></b>							0.16		NA
Garage Compound 73/83 Tolpits lane Watford	5.48	5.49	5.41	10.25	5.54	0.00	4.14	-24%	
Garages Chester Road	0.42	0.38	0.79	0.30	0.31	0.37	0.33	-20%	-10%
Harebreaks Adventure Playground (main hall)	9.03	15.04	7.88	7.41	17.28	8.31	4.37	-52%	-47%
Harebreaks Adventure Playground office	0.60	0.00	0.00	0.00	1.05	0.12	8.65	1348%	7161%
Harwood Adventure Playground	5.65	9.78	11.70	4.12	12.19	6.10	9.47	68%	55%
<b>Car park Longspring<sup>1</sup></b>							0.67		NA
Car Park The Avenue (Island Car Park)	0.21	0.21	0.21	0.13	0.19	0.00	0.00	-100%	NA
Garage Compound Queens Road	0.00	0.00	0.00	0.00	0.40	0.35	0.32		-11%
Garage Lighting Liverpool Road Garage Compound	0.00	0.00	0.00	0.00	0.38	0.40	0.26		-35%
Garage Compound Balmoral Road	0.00	0.00	0.00	0.00	0.40	0.35	0.32		-11%
Garage Compound Lower Paddock Road	0.00	0.00	0.00	0.00	0.21	0.09	0.21		127%
'Outside Toilet The Parade (WB310)	0.00	0.00	0.00	0.00	1.35	2.05	1.89		-8%
Outside Toilet 133 The Parade	0.00	0.00	0.00	0.00	1.95	0.88	1.17		32%
Pond Fountain	60.68	5.25	5.23	10.85	5.66	0.00	0.00	-100%	nd
Garages compound St Albans Road	0.13	2.47	3.55	1.67	0.13	0.18	0.19	45%	6%
Town Hall - Main Buildings & CO <sub>2</sub>	984.60	904.06	671.02	547.63	522.29	532.29	517.92	-47%	-3%
Town Hall Water Feature	3.51	4.01	3.06	4.22	2.10	0.00	0.06	-98%	nd
Town Hall Watford; +subway	3.43	0.76	12.72	14.46	4.64	0.15	3.65		NA
Watford Fields Portacabin		0.03	9.91	0.09	0.05		0.00		NA
Watford Museum	75.66	53.99	58.20	36.28	57.87	43.07	46.85	-38%	9%
<b>Historical marker, Lower Paddock Rd<sup>1</sup></b>							0.01		NA
Woodside stadium	0.93	55.93	0.00	21.41	31.43	26.48	19.48	2001%	-26%
<b>Total</b>	<b>1162.69</b>	<b>1074.16</b>	<b>798.07</b>	<b>666.46</b>	<b>683.46</b>	<b>641.80</b>	<b>632.29</b>	<b>-46%</b>	<b>-1.48%</b>

Note: *nd*: no data available due to re development at the Pond fountain and the Town hall water feature. For the garages in Tolpits lane and the Island car park, there has been very minimal usage.

<sup>1</sup> 2014-15 additional WBC owned buildings to the reporting **in red**.

<sup>2</sup> Town hall related emissions are adjusted to include proportion of shared services every year.

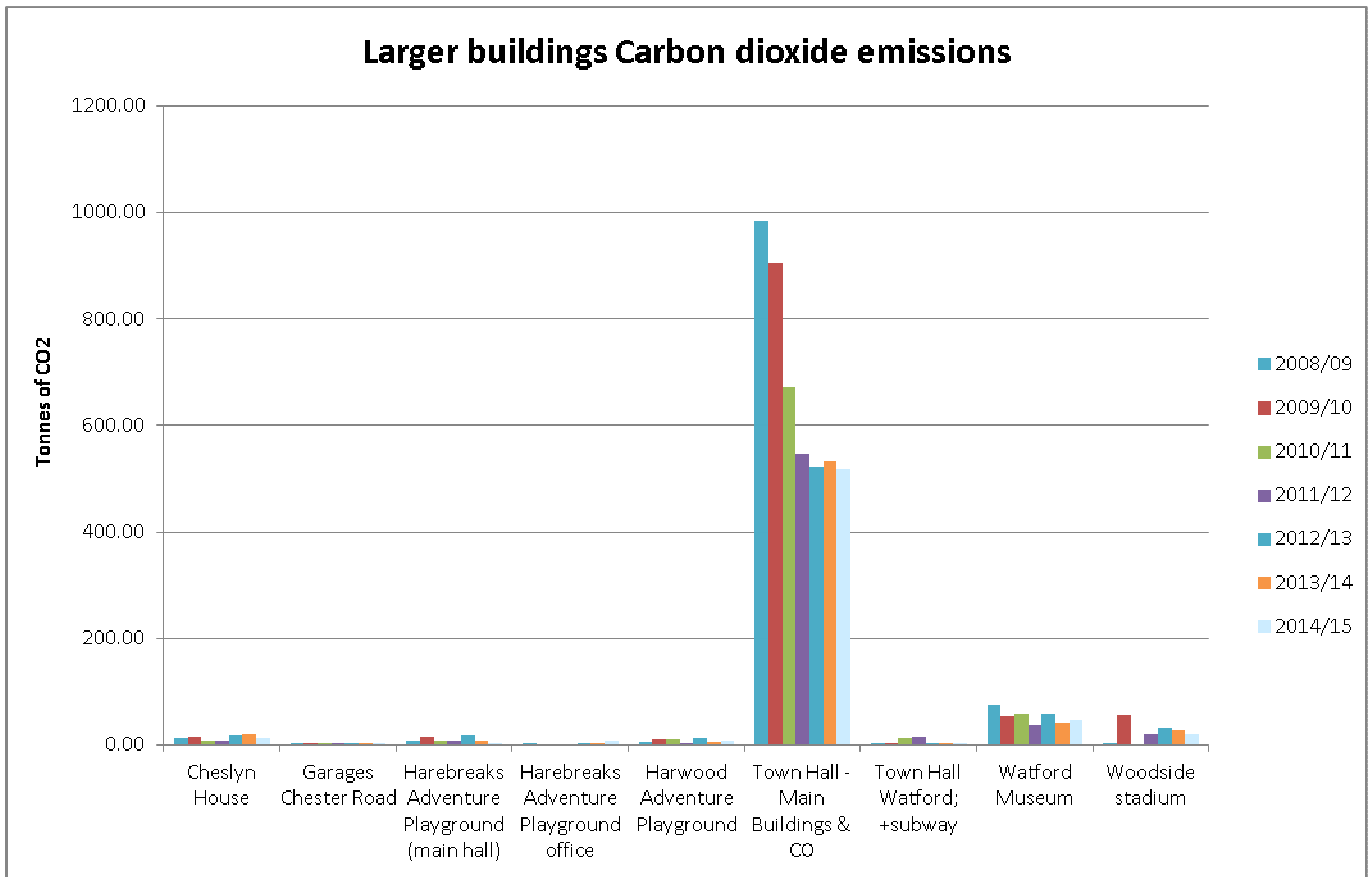


Figure 2: Larger buildings CO<sub>2</sub> emissions contribution, for 2014/15 compared against previous years

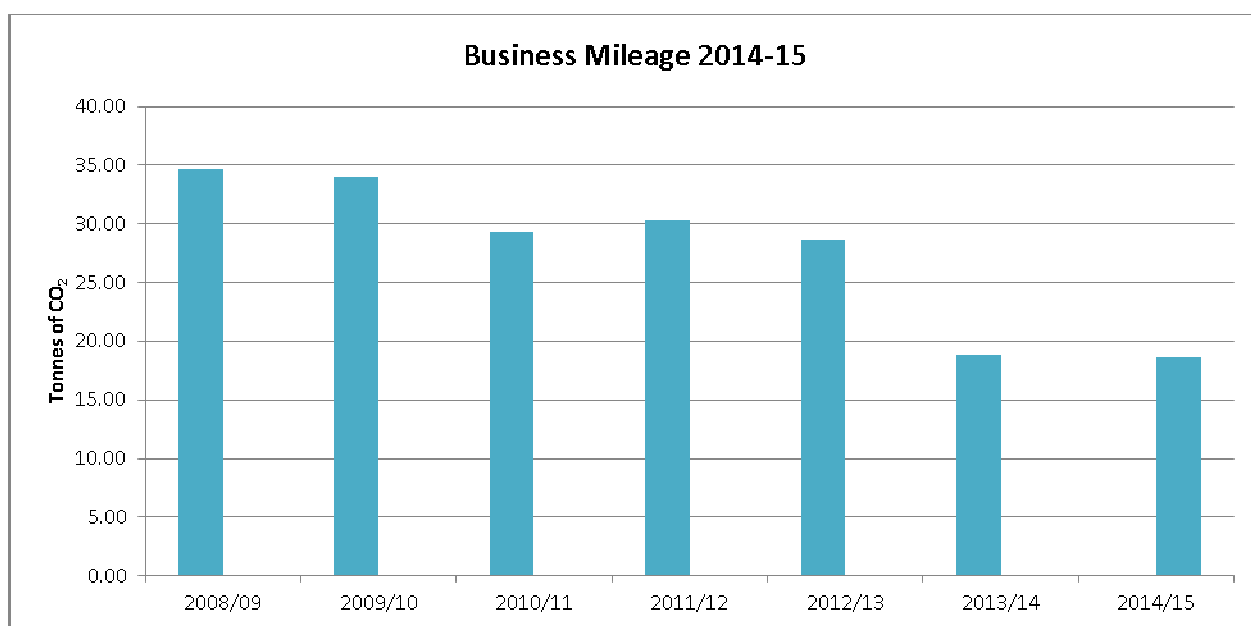
**Comments:** This year WBC total carbon dioxide emissions related to buildings usage, have decreased by 1.5%. A review of energy meters associated with buildings ownership data was carried out this year aiming to add consistency and accuracy to the report. The buildings highlighted in red in Table 5 have been added to the list due to the reconciliation process. The car park, Faraday house lights, and the historical marker related emissions are too small to make any difference in the overall total of building emissions. The council continues to contract out a number of buildings to Veolia. Full data on these allocated properties were not available for this year carbon emission report. Data collection of electricity and gas consumption for all buildings would be beneficial.



### 3 STAFF BUSINESS MILEAGE

**Table 6:** 2014/15 Carbon dioxide emissions from business mileage.

	2008/09	2009/10	2010/11	2011/12	2012/13	2013/14	2014/15	Variation from 08/09	Variation from 13/14
<b>Total business miles</b>	89,611	88,421	90,035	94,017	80,543	61,007	57,024	-36%	-6.5%
<b>Tonnes of CO<sub>2</sub></b>	<b>34.64</b>	<b>33.98</b>	<b>29.33</b>	<b>30.36</b>	<b>28.68</b>	<b>18.88</b>	<b>18.65</b>	<b>-46%</b>	<b>-1.2%</b>



**Figure 4:** 2014/15 Business emissions compared against previous financial years.

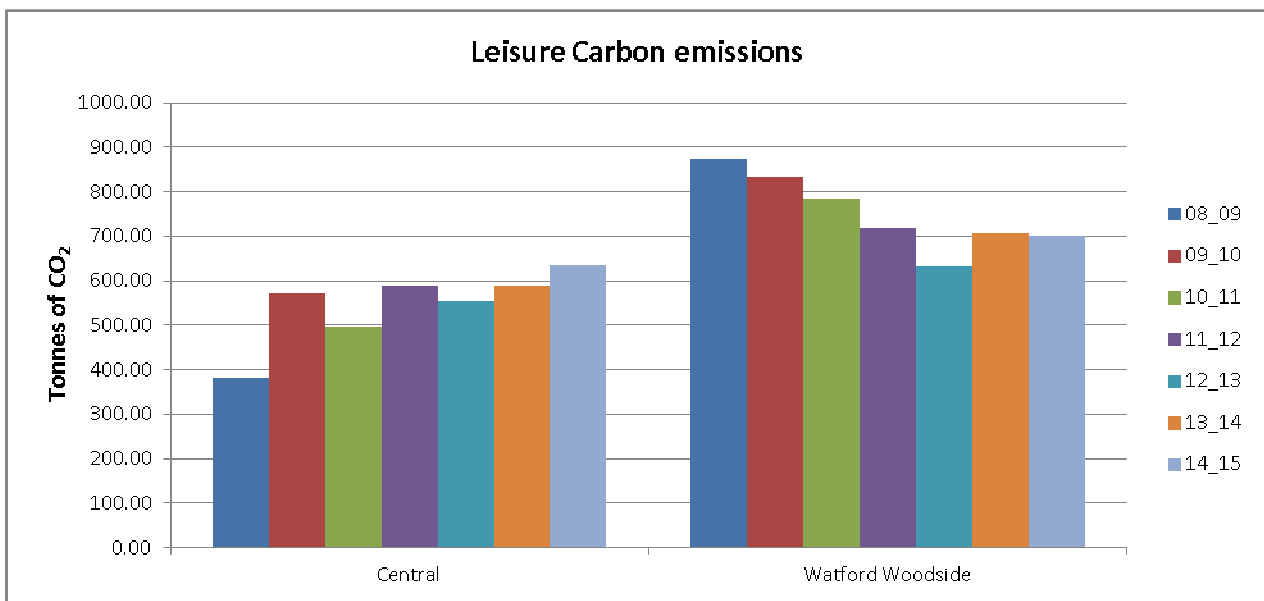
**Comments:** CO<sub>2</sub> emissions related to business mileage in 2008/09 and 2009/10 were calculated according to fuel type and engine size. From 2010 onwards, the business mileage had been recorded and sorted according to engine size only. The carbon dioxide emission factor used was representative of *unknown fuel* and *small, medium and large* engine size. This year 2014/15 the mileage was recorded again according to fuel type and engine size. This allows for better accuracy of emission calculation. The total mileage covered by Watford staff has reduced by 6.5% compared to last year; however the related emissions were only 1.2% lower than 2013-14.

## 4 LEISURE

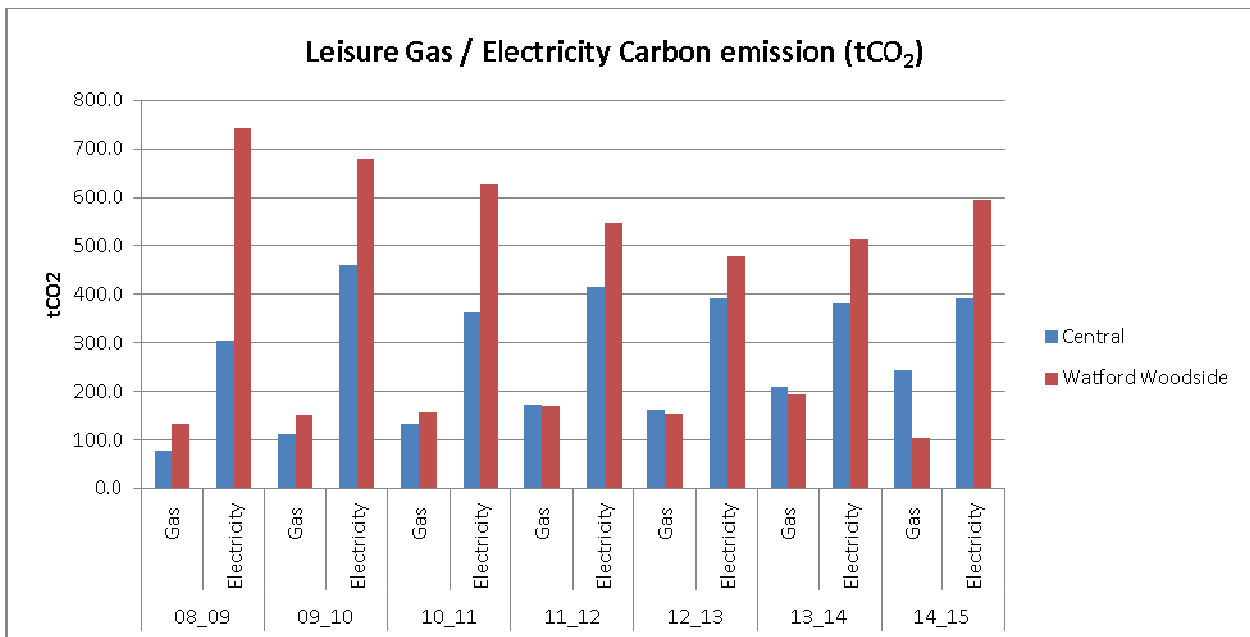
The leisure centres for Watford borough council are Watford Central and Watford Woodside Centre.

**Table 7:** Carbon dioxide emissions from leisure centres (tCO<sub>2</sub>).

tCO <sub>2</sub> emissions	2008/09	2009/10	2010/11	2011/12	2012/13	2013/14	2014/15	Variation from 08/09	Variation from 13/14
Central	382.84	572.73	497.24	587.65	554.20	590.02	634.74	66%	8%
Watford Woodside	874.84	832.69	783.85	717.05	632.77	707.34	700.52	-20%	-1%
<b>Total</b>	<b>1257.68</b>	<b>1405.42</b>	<b>1281.09</b>	<b>1304.70</b>	<b>1186.96</b>	<b>1297.36</b>	<b>1335.26</b>	<b>6%</b>	<b>3%</b>



**Figure 5:** Leisure centres total emissions from base year to 2014/15



**Figure 6:** Leisure centres emissions split electricity and gas from base year to 2014/15

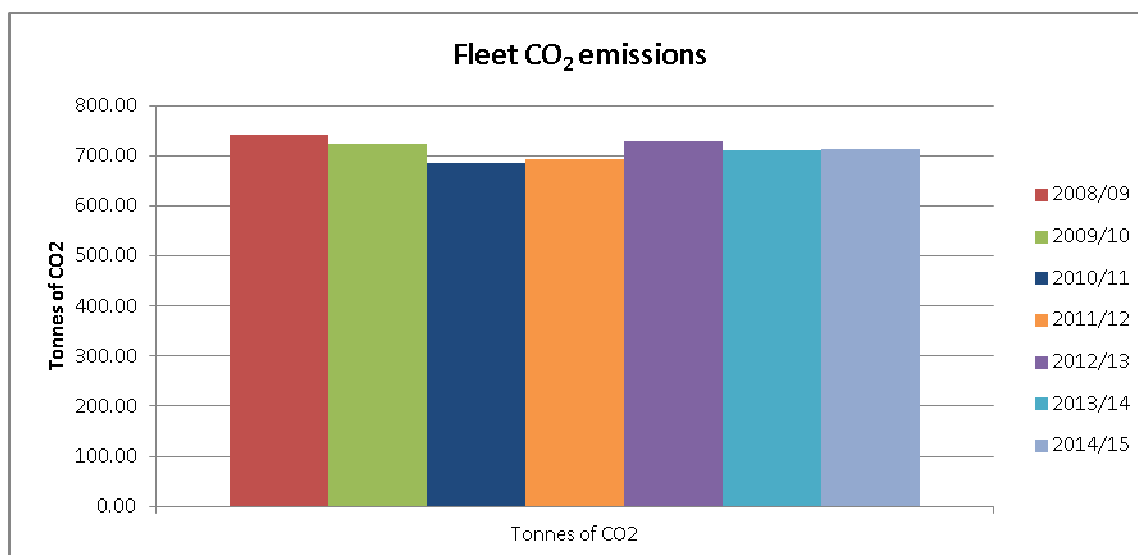
**Comments:** Central and Watford Woodside centres combined emissions have risen by 3% compared to last year.

Leisure centres are run by a third party organisation on behalf of the council. Reconciliation of gas and electricity metering data, including meter reads and bills, has been put in place this year; however difficulties arose as originals utility bills have been directly sent to the third party head office and copies are not kept at the centres or forwarded to WBC. Reconciliation was not fully possible, leaving the data to be interpreted. Hence the gas related emissions at Watford Woodside may not be so low this year.

## 5 FLEET

**Table 8:** 2014/15 fleet emissions (tCO<sub>2</sub>) compared against previous financial years.

	2008/09	2009/10	2010/11	2011/12	2012/13	2013/14	2014/15	% variation from 2008/09	% variation from 2013/14
Fleet Diesel litres	280604	274083	268072	270087	284718	275147	276651	-1%	0.55%
Tonnes of CO <sub>2</sub>	741.16	723.94	684.39	692.40	729.90	710.0	714.1	-4%	0.58%



**Figure 7:** 2013/14 tCO<sub>2</sub> emission from fleet compared to previous years.

**Comments:** Table 8 shows that emissions generated by the council's fleet have increased by 0.58% compared to last year. Fuel consumption data per department were not available this year. WBC staff use leased vehicles for services. WBC staffs do not keep record of the fuel used; only Veolia (lease holder) is responsible for this. Accordingly, an average consumption over the past 3 years has been used.

## 6 RECOMMENDATION

**Buildings and Stationary:** Ownership of the buildings and the reporting strategy for the Carbon Dioxide Report and the GHG Report need to be reviewed. The council need to define the owned council property list according to the DECC guidelines.

**Fleet:** It is advised to keep record of the fleet vehicles, and their respective fuel use within their respective department (i.e. number of vehicles, type, weight, age ...). A better communication with Veolia is needed to collect accurate data.

**Leisure:** Reconciliation of gas, electricity meters, meter reads and bills is to be continued. Scanned copies of bills could be requested on a regular basis.

**Leisure, Buildings and Stationary:** Any installation of renewable technology would benefit larger buildings' energy security. Benefit would also come from purchasing green tariff electricity to allow for carbon offsets.

## 7 CONCLUSION

Carbon Emission reporting started in 2008-09, under the NI185 reporting scheme. At that time projected emissions and target reduction were set. WBC had set the overall target for a 30% reduction over 5 years for – buildings & leisure activities, transport & business mileage, from 2008 baseline.

### Extract from Watford Borough Council Climate Change Strategy written in July 2010:

#### 2.4 The Council's operational emissions

Within the Borough wide emissions is the Council's contribution resulting from its operational activities. National Indicator 185 focused on these emissions and has provided the Council with a very comprehensive carbon **baseline (2008/09)** which includes all sources of CO<sub>2</sub> emissions. This review has identified a number of actions that the Council has or is considering implementing to help reduce the Council's own carbon footprint, including:

- Establishing an energy / climate change champions action group
- Undertake a programme of energy/climate change awareness training for all staff
- Assign the Head of Legal and Property Services as the lead officer for coordinating delivery of corporate energy savings

Based on these and several other action points identified, the Council has signed up to the Local Authority Carbon Management (LACM) Action Plan, which is run by the Carbon Trust.

The plan aims to implement a number of actions to reduce the **council's carbon emissions by 30% over a 5 year period** and has been endorsed by the Carbon Trust.

6	Council Operations
6.1	Through Local Authority Carbon Management, Assign the Head of Legal and Property Services as the lead officer for coordinating delivery of corporate energy savings and reporting to the Head of Environmental Services who retains overall responsibility for carbon management. (LACM) plan. Ongoing until 2016.
6.2	Establish an energy task group including facilities managers and key personnel from all service areas to identify, develop and implement energy savings from all operational Council buildings and activities. This group will be chaired by the Head of Legal and Property Services and acts as the delivery and monitoring mechanism for activity. Include production of a SMART Action Plan of proposals for energy saving measures to council buildings. Through LACM. Ongoing until 2016.
6.3	Continue work currently underway to produce holistic carbon baseline for the Councils operations as required under the former NI185 and ensure mechanisms are in place for

	ongoing monitoring. NI185 has been scrapped by Government; however, identical data is required by Government and therefore being collected for this purpose and the LACM plan.
6.4	Continue to review ICT systems and equipment and move to latest low energy options e.g. virtualisation (where applicable) and continued roll out of thin client.
6.5	Actively promote occasional home working policy for employees.
6.6	Commit to achieving exemplary standards in all new build and during refurbishment of corporate facilities where cost effectiveness can be demonstrated.
6.7	Establish a 'green champions' group with representatives from all departments.
6.8	Provide training for champions and awareness raising sessions for all staff.
6.9	Develop new corporate induction training package on carbon and climate change.
6.10	Continue and put in place to procure 'green tariff' –low and zero carbon electricity supply where available.
6.11	Implement the measures introduced in the Council's recently revised Green Travel Plan.
6.12	Review and update the procurement policy to ensure purchasing decisions do not contribute to increasing the Council's carbon footprint, and where possible reduce it.
6.13	Develop & implement a checklist to ensure the impacts on the Councils carbon footprint are duly considered for all purchasing decisions. (updating of procurement policies with specific reference to carbon footprints of suppliers).

The following calculations and graph have been taken from the NI 185 targets and are based on the overall CO<sub>2</sub> reduction goal of 30% – 24% from Buildings and leisure and 6% from Transport and Business mileage.

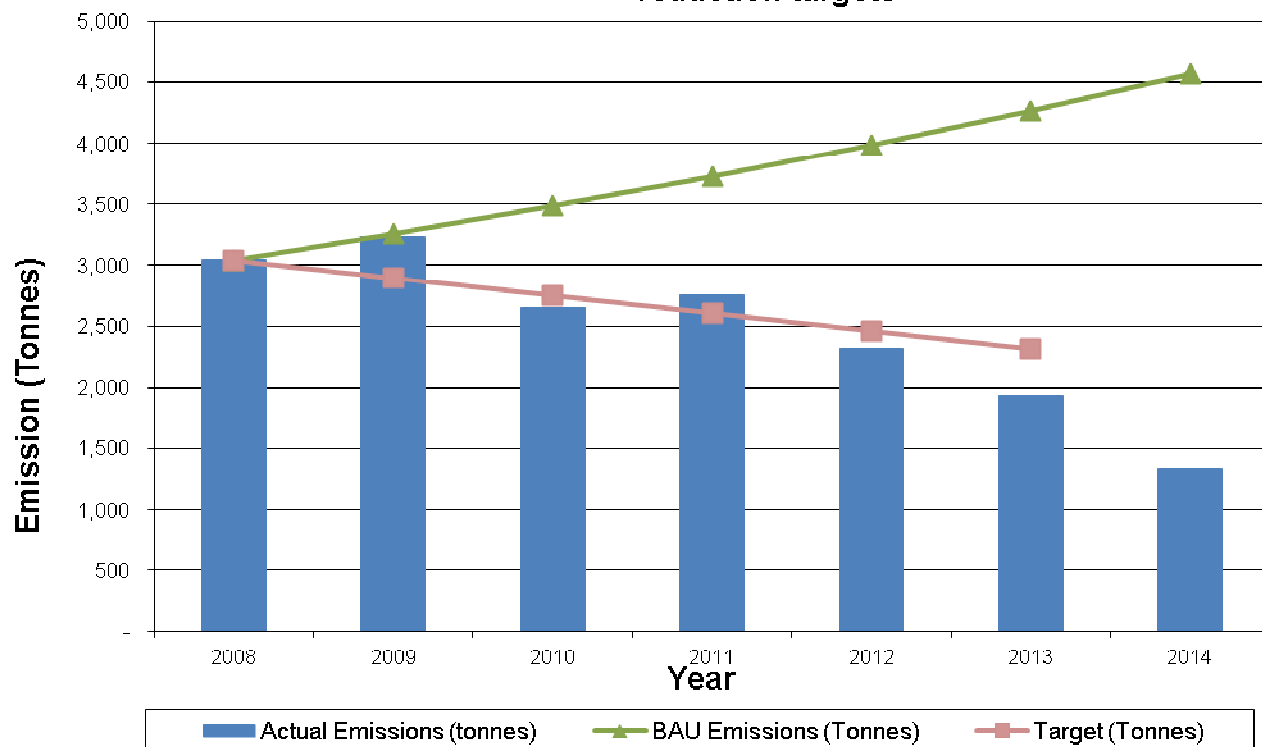
### **Buildings and Leisure:**

Base year	2008	Year end
BAU Consumption Increase per year	7%	
Target Reduction over 5 years	24%	2013

	Actual Emissions (tonnes)	BAU Emissions (Tonnes)	Target (Tonnes)
Year	tCO <sub>2</sub>	tCO <sub>2</sub>	tCO <sub>2</sub>
2008	3,045.01	3,045.01	3,045.01
2009	3,230.21	3,258.16	2,898.85
2010	2,654.03	3,486.23	2,752.69
2011	2,757.76	3,730.27	2,606.53
2012	2,322.42	3,991.38	2,460.37
2013	1,939.15	4,270.78	2,314.21
2014	1,335.26	4,569.74	

NB: The actual emissions totals include the changes in guidance over the years.

### Comparison of building & leisure emissions with BAU increases and reduction targets



With respect to the Building and Leisure category, it is to be noted that the reporting list in 2008-09 was considerably different from the current list as shown in the following summary table. The intensity of carbon dioxide emissions reported reflects these changes.

	2008-09		2014-15	
	Electricity	Gas	Electricity	Gas
1	Advice Centre	Bill Everett Centre (Swimming Pool Ext)	Cheslyn House	Cheslyn House
2	African Caribbean Resource Centre	Cassiobury Park Changing Rooms	Farraday House (communal lighting and fire alarm)	
3	Callowland Dressing Rooms	Centre Point Community Centre	Garage Compound 73/83 Tolpits lane Watford (Gar 02 King George)	
4	Cassiobury Park Changing Rooms	Cheslyn House	Garages Chester Road	
5	Cassiobury Park Kiosk Pool	Harebreaks Adventure Playground	Harebreaks Adventure Playground (main hall)	Harebreaks Adventure Playground (main hall)
6	Cassiobury Park Paddling Pool	Harebreaks Adventure Playground	Harebreaks Adventure Playground office	
7	Cassiobury Park Public Convenience	Harwood Adventure Playground	Harwood Adventure Playground	Harwood Adventure Playground
8	Cemetery Chapel	Holywell Community Centre	Car Park The Avenue (Island Car Park)	
9	Cemetery Lodge	Leavesden Green Community Centre	Garage Compound Queens Road	
10	Centre Point Community Centre	Meriden Community Centre	Garage Lighting Liverpool Road Garage Compound	
11	Cheslyn House	Mess Room Shepherds Road	Garage Compound Balmoral Road	
12	Chester Road Allotments	Orbital Community Centre	Garage Compound Lower Paddock Road	
13	Gade Car Park Public Conveniences	Paddock Road Nurseries	'Outside Toilet The Parade (WB310)	

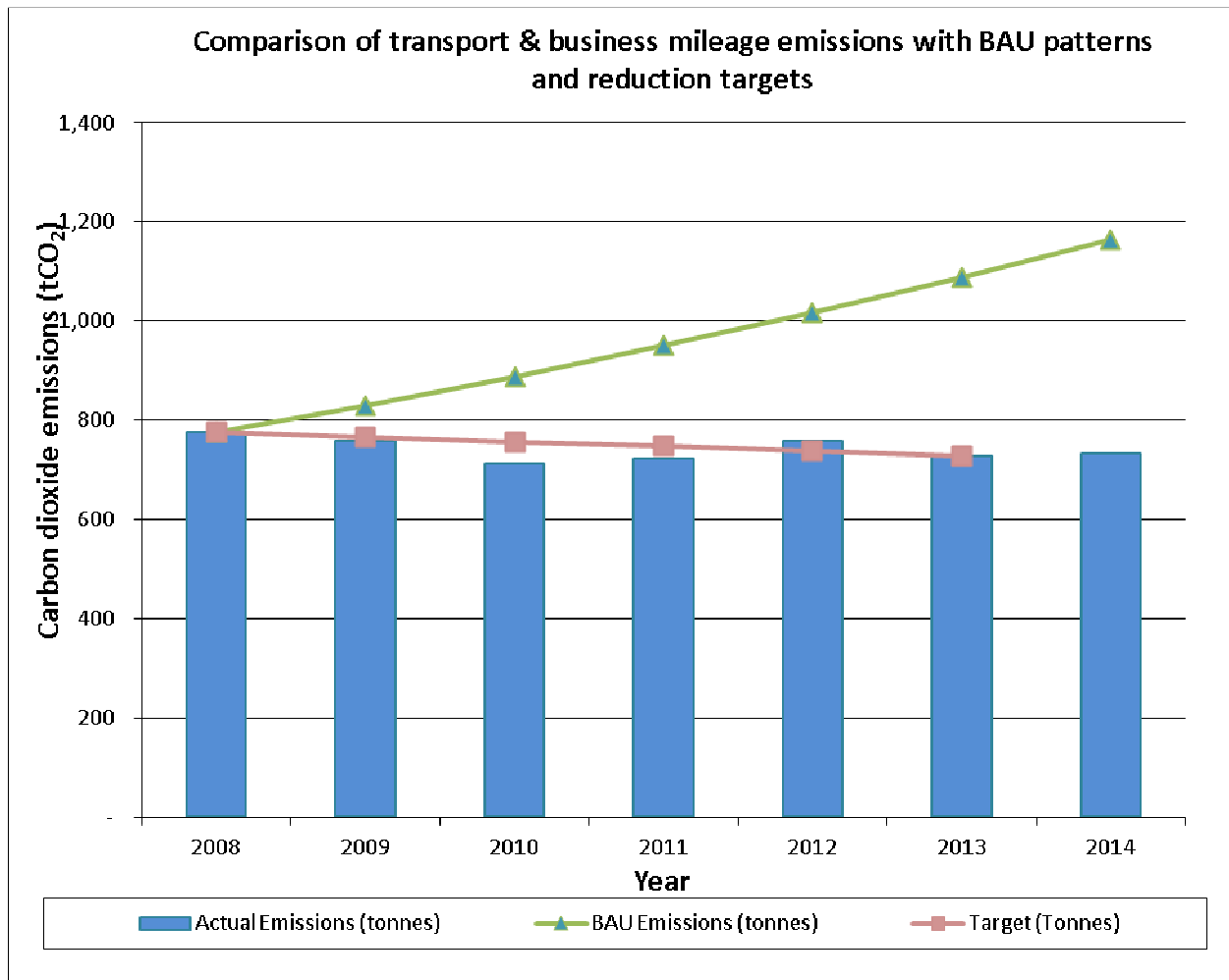
14	Gar 02 King George	Town Hall - Main Buildings & CO	Outside Toilet 133 The Parade (pop up loo)	
15	Garages Chester Road	Watford Museum	Pond Fountain	
16	Garston Manor Community Room	Watford Womens Centre	Garages compound St Albans Road	
17	Garston Park Pavilion	Wiggenhall Depot	Longspring car park	
18	Harebreaks Adventure Playground	Watford Central Leisure Centre	Lea farm groundsman rooms	
19	Harwood Adventure Playground	Watford Woodside Leisure Centre	Historical marker Lower paddock	
20	Holywell Community Centre		Town Hall - Main Buildings & CO	Town Hall - Main Buildings & CO meter 1
21	Holywell Ext Allotments		Town Hall Water Feature	Town Hall - Main Buildings & CO meter 2
22	Island Car Park		Town Hall Watford; +subway	Town Hall - Main Buildings & CO meter 3
23	King George V Playing Fields		Colosseum	Town Hall - Main Buildings & CO meter 4
24	Knutsford Playing Field (Watford Rugby Club)		Watford Museum	Town Hall - Main Buildings & CO meter 5
25	Leavesden Green Community Centre		Watford Central Leisure centre	Colosseum gas part of Town hall gas meter.
26	Leavesden Green Stewards House		Woodside stadium (Stand & Toilet)	Watford Museum
27	Meriden Community Centre			
28	Orbital Community Centre			
29	Paddock Road Nurseries			
30	Pav & Change Rms Kng George V Play(New)			
31	Pond Fountain			
32	Public Convenience			
33	Refuse Complex Garson Manor			
34	Sports Pavilion			
35	St Albans Road Garages			
36	Town Hall - Main Buildings & CO			
37	Town Hall Water Feature			
38	Town Hall Watford			
39	Watford Fields Portacabin			
40	Watford Museum			
41	Watford Women's Centre			
42	Wiggenhall Depot			
43	Woodside Stadium 1			
	Woodside Stadium 2			
44	Watford Central Leisure Centre			
45	Watford Woodside Leisure Centre			
46	Radius House			



**Transport and Business mileage:**

Base year	2008	Year end
BAU Consumption Increase per year	7%	
Target Reduction over 5 years	6%	2013

	Actual Emissions (tonnes)	BAU Emissions (tonnes)	Target (Tonnes)
Year	tCO <sub>2</sub>	tCO <sub>2</sub>	tCO <sub>2</sub>
2008	775.80	775.80	775.80
2009	757.91	830.11	766.49
2010	713.72	888.21	757.18
2011	722.75	950.39	747.87
2012	758.59	1,016.92	738.56
2013	728.90	1,088.10	729.25
2014	732.77	1,164.27	



**Conclusion:** The 24% CO<sub>2</sub> reduction target in buildings and stationary, as well as the 6% reduction target in CO<sub>2</sub> emissions from transport and business mileage was achieved in 2013.