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# Assurance of Games Travel Offset Scheme

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Summary Report  
Prepared for the Commission for a Sustainable London 2012

By

**THOMSON REUTERS POINT CARBON**

Prepared by: Sumeet Manchanda, Thomson Reuters Point Carbon  
Prepared for: Emma Synnott and Jemma Percy, Commission for a Sustainable London 2012

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## Introduction

Thomson Reuters Point Carbon (“Point Carbon” / “PC”) was appointed by the Commission for a Sustainable London 2012 (“the Commission”) to provide assurance services in relation to the travel offset scheme for the London 2012 Olympic and Paralympic Games (“London 2012” / “Games”). The London Organising Committee for the Olympic and Paralympic Games (LOCOG) appointed energy company BP as the “official Carbon Offset Partner” for the Games. BP operated the travel offset scheme for the Games as an addition to their existing and ongoing carbon management initiative known as “BP Target Neutral”.

BP Target Neutral is an initiative that provides information and tools primarily through a website ([www.bptargetneutral.com](http://www.bptargetneutral.com)) but also other channels such as Facebook, to support the reduction of carbon footprints. The information and tools are structured around three topic areas: ‘Reduce, Replace and Neutralise’. Participants are encouraged to reduce their travel emissions, for example by replacing car journeys with public transport, by driving ‘smarter’, driving less and maintaining vehicles better. Participants are also encouraged to consider new fuel-efficient vehicle technologies such as high efficiency engines and improved tyres, or products that may support vehicle efficiency such as “BP Ultimate Fuels” and BP’s “Castrol” lubricants. The ‘Neutralise’ stream encourages participants to offset the carbon emissions from unavoidable travel, and provides the facility to offset.

The Commission required the assurance work to determine at a moderate level whether the London 2012 component of BP Target Neutral had met its own objectives. In determining and documenting this, it was hoped that the work would also assist in the learning legacy aspects of the Games by providing a reference for organisers of future, similar events.

The assurance work was largely carried out between July and September 2012, beginning a few days before the start of the Olympic Games and concluding the majority of the work a few days after the close of the Paralympic Games.

The assurance work covered the following aspects of BP Target Neutral:

- methodology related to the calculation of volumes of carbon dioxide to be offset
- offset procurement and application methodology
- efforts to influence behaviour change in spectators

The following limitations were placed on the scope of work:

- the assurance work was conducted only in relation to the London 2012 aspects of BP Target Neutral.
- neither the London 2012 travel offset nor the overall Games carbon footprint forecasts (see ODA, 2011 and LOCOG, 2010) were analysed.

The Commission’s Assurance Framework was adapted and used for this work. A best practice framework was also developed for, and applied to each aspect of BP Target Neutral examined.

The main sources of information for the assurance work were:

- The BP Target Neutral website
- LOCOG and ODA published materials
- Published carbon footprint methodology
- Interviews with the BP Target Neutral team
- Unpublished materials provided by the BP Target Neutral team

The assurance work relied heavily on interviews as there was limited existing documented material available to describe the umbrella aspects of the London 2012 component of BP Target Neutral, such as overall aims, targets or behaviour change influencing methods. The BP Target Neutral team however provided documents detailing many aspects of their work, such as offset procurement, behaviour change research and carbon volumes calculation methodology. A list of references is provided at the end of this report.

### Obligations, goals and targets

The contractual obligation on BP Target Neutral as the Official Carbon Offset Partner for London 2012 was to offset the emissions of the 2012 “Games Family Transport Services” (defined as “those cars, buses and coaches provided by LOCOG to support the operation of the 2012 Games and whose refuelling is the contractual responsibility of the Partner to LOCOG”<sup>1</sup>), up to a maximum of 35,000 tonnes carbon dioxide equivalent (tCO<sub>2</sub>e) greenhouse gases.

In addition, BP Target Neutral offered free offsets to Games spectators and the wider ‘Olympic family’ and ran a campaign to increase awareness and participation in the offer. A number of spectators participated, and the travel emissions of media representatives, selected country delegations and selected athletes were also offset. Some London 2012 corporate partners also chose BP Target Neutral to offset their Games related emissions.

The BP Target Neutral team provided the following details of their targets for London 2012 and related achievements:

- Secure 5-8 offsetting business partners. This target has been exceeded as 13 business partners had been secured as of August 2012.
- Offset at least 300,000 individual Games-related journeys. This target was exceeded as 501,412 journeys had been offset as of 30 November 2012, including 426,693 spectator journeys. The total number of spectator tickets for London 2012 was estimated by Lord Coe in a BBC interview<sup>2</sup> just before the Games as around 11 million. Official figures on the number of spectators who actually attended are not available. Assuming that between 50 and 100 percent of 11 million ticketholders attended the Games, spectator journeys offset represent between 3.88 and 7.76 per cent of spectator journeys completed.

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<sup>1</sup> BP and LOCOG (2010)

<sup>2</sup> <http://www.bbc.co.uk/news/uk-politics-18049658>

- The volume of carbon offsets had reached 99,027 tonnes by 30 November 2012. According to the BP Target Neutral team, higher volumes had been hoped for; their understanding of the reasons for the lower-than-hoped volumes were: 1. the lower proportion of participation from spectators from overseas, whose average emissions were an order of magnitude higher than those of UK-resident spectators; and 2. low emissions from the Games Fleet which were 9,509 tonnes as compared to the working maximum estimate of 35,000 tonnes (of course, lower-than-anticipated emissions in themselves are to be welcomed as a much better outcome than higher offset volumes).

Final figures relating to numbers of journeys offset, and offset volumes, were provided by the BP Target Neutral team on 30 November 2012 as follows:

| Origin of offsets   | Volumes (tCO <sub>2</sub> e) | No of journeys |
|---|------------------------------|----------------|
| Spectator journeys  | 59,502                       | 426,693        |
| <i>Of which corporate partners</i>                                    | <i>14,716</i>                | <i>35,966</i>  |
| National Olympic and Paralympic Committees and wider "Olympic Family" | 25,906                       | 74,719         |
| <i>Of which Games Fleet</i>   | <i>9,509</i>                 | <i>N/A</i>     |
| <i>Of which Games Makers (volunteers)</i>                             | <i>3,050</i>                 | <i>70,000</i>  |
| Partner Fleets  | 13,619                       | N/A            |
| <b>Totals</b>   | <b>99,027</b>                | <b>501,412</b> |

A detailed methodology was developed to assign emissions factors and calculate CO<sub>2</sub>e volumes for the various groups whose Games related travel emissions were to be offset. According to the methodology report (ERM, undated), individual emission factors were calculated for spectator travel from the 40 countries from where LOCOG expected most travellers (the 'top 40' countries). An estimate of air travel emissions was determined based on the distance from the capital city airport within each country of origin to London Heathrow. For a small number of countries of origin (where the country is large and the capital is closer to London than the majority of the population, such as the USA), a weighted average distance from the four most populated cities in each country was used. To capture the emissions associated with travel from those countries not in the 'top 40' described above, a series of regional emission factors were developed. These regional emission factors were determined either by using an average from the relevant countries within the 'top 40' or, where a region was not represented within the top 40, by referring to the distance from the capital city of the furthest mainland country within the region. All remaining countries of origin were then assigned to one of these regions, based on UN categorisations.

To give a few examples, a spectator travelling from anywhere in the UK would be assigned a travel footprint of 21 kgCO<sub>2</sub>e. A spectator from anywhere in the USA would be assigned a travel footprint of 4,653 kgCO<sub>2</sub>e. A spectator travelling from Cameroon would be assigned a regional footprint of 4,778 kgCO<sub>2</sub>e, the same as a spectator travelling from any of the following: Angola, Central African Republic, Chad, Democratic Republic of the Congo, Equatorial Guinea, Gabon and Sao Tome and Principe.

The Point Carbon team used several considerations to assess the robustness of the methodology, such as the following questions: did the assumptions err on the conservative side rather than the optimistic?; were standard greenhouse gas conversion factors used?; was the recommended Radiative Forcing Index (RFI) used?; would the necessary simplifications to the model not result in lower emission volumes? This review found that the travel emissions calculation method and model were robust.

BP Target Neutral did not offer London 2012 spectators the opportunity to calculate their emissions relating to the distance travelled or mode of travel. This was because of concern that having to calculate individual-specific offsets would be perceived as too complex and laborious by too many people resulting in a lack of engagement. This may be true of many spectators. However given the option, some interested spectators may have enjoyed interacting with the model and understanding the numbers to some extent, perhaps deepening their engagement with the subject.

### Offset procurement

In providing the assurance services, the Point Carbon team explored if the offset procurement process ensured the following principles:

- Genuine/ real reductions: that all emissions reductions made (and the project activities that led to them) are genuine and actually occurred
- Permanent: that all emissions reductions are permanent and irreversible
- Measurable: that all emissions reductions are quantifiable (against a defensible baseline) and used accepted measurement tools.
- Verified: are independently verified by a competent individual or organisation
- Unique: that all the emissions reductions allocated to the projects have not been allocated to any other project
- Additional: that the carbon reductions 'would not have occurred anyway'

In procuring offsets, BP Target Neutral followed the ICROA (International Carbon Reduction and Offset Alliance) Code of Practice, which aims to define international best practice for offset-inclusive carbon management. All projects in Target Neutral's London 2012 portfolio were registered under one of three internationally accepted offset Standards – the Climate Action Reserve (CAR), Verified Carbon Standard (VCS) or Gold Standard. BP's tender for offset projects also placed criteria additional to the requirements of the offsetting standards bodies, in particular on social responsibility.

In the selection process, the BP Target Neutral team depended upon three checks and balances: 1. the independent Standard; 2. An experienced and unbiased NGO panel who helped prepare a shortlist; and 3. a site visit to conduct a personal check on social impacts. As most providers would be content with depending on the Standard, it is clear that the due diligence by the Target Neutral team went further than is usual among many offset providers, particularly on issues of good governance and social impact.

BP Target Neutral sourced one project from each of the six permanently inhabited continents. This was the same model as the offset scheme for the Vancouver Winter Games 2010, and according to

BP was done to reflect the global nature of London 2012. Using six different locations also increased the possibility of choosing a variety of sectors and methodologies. The projects selected for London 2012 were:

| Project  | Location                                      | Project type           | Standard  |
|--|---|------------------------|---|
| Meru and Nanyuki Community Reforestation Project | Meru and Nanyuki, Kenya                       | Reforestation          | VCS and Climate Community Biodiversity (CCB) Standard |
| Tongcheng Kaidi Biomass Power Project            | Tongcheng, Anqing City, Anhui Province, China | Biomass                | VCS   |
| Ankara Landfill Gas to Energy Project            | Ankara, Turkey                                | Landfill Gas to Energy | Gold Standard   |
| Wind Farms in New Caledonia                      | Prony and Kafeate, New Caledonia              | Wind Farms             | Gold Standard   |
| Methane Capture at Holsum Dairies, Wisconsin     | Wisconsin, USA                                | Biogas                 | CAR   |
| Rio Ceramics Biomass                             | State of Rio de Janeiro, Brazil               | Biomass                | VCS and Social Carbon                                 |

For London 2012, BP Target Neutral did not provide spectators with the opportunity to choose the projects from where their emissions would be offset. Credits were retired from a spread, i.e. retired proportionately from all projects rather than complete retirement one by one, or retire unevenly. This allowed for all the projects to 'be kept alive' for as long as possible. However, the Point Carbon team felt that requesting a preference from consumers may have helped secure deeper engagement. For example, consumers may have a preference for projects of a certain technology type, or those located in their own region, or with specific social benefits etc.

### Communications and Behaviour Change

In 2011, BP commissioned two independent consultancy organisations to conduct research on encouraging behaviour change through Target Neutral. The research<sup>3</sup> made recommendations on topics such as messaging, information on different communications channels and incentivising participation. The Point Carbon team found that these recommendations have been acted upon in the context of London 2012, e.g. by providing participation incentives as detailed below.

A wide spectrum of communications and information channels was used to reach spectators and athletes, to increase awareness of, and engagement with the offering. Among the most significant channels were the BP Target Neutral website, two 'pods' and a large activation – a 'giant periscope' – on the Olympic Park, a Facebook page and mentions on LOCOG emails to ticket-holders. Some

<sup>3</sup> Behaviour Change (2011) and Good Business (2011)



channels seem to have been more effective than others, especially the periscope which was in a prominent location and which, according to BP Target Neutral, attracted 100,000 visitors. The Point Carbon team was impressed by the range of channels used.

According to the BP team, the two driving principles behind their communications were “clarity” and “approachability”. While the Point Carbon team felt that the communications were largely approachable, a clear ‘umbrella narrative’ was not seen that would necessarily explain to London 2012 spectators why BP was running the Target Neutral scheme. Many consumers may not see an obvious reason for a major fossil fuel supplier to run a carbon reduction and offset initiative, and as such, a narrative may have been useful in inspiring more understanding and trust among consumers.

Two incentives were offered to encourage spectators to offset: 1. free offsets, and 2. a unique Games experience – a free photo opportunity in the Olympic Park. BP Target Neutral also encouraged participation by using messaging around creating a ‘world record’ for carbon offsetting at a single event. According to BP Target Neutral’s research, no previous such record has been registered, and although the messaging was heavily used, BP have decided not to register the record themselves. The reason provided was that the messaging was a mechanism to help motivate participation in the programme, rather than an end in itself. However in the opinion of the Point Carbon team, registering the ‘record’ would likely increase the visibility of the figures achieved, perhaps encouraging others to try to better it and therefore ensuring a stronger legacy.

In assuring the behavioural change measures, the Point Carbon team found that the answer to the following considerations was positive:

- Is there enough information, and is the information disseminated in a manner that is effective at raising awareness?
- Are the communications clear and consistent?
- Is behaviour change made as easy and cheap as possible for the consumer?
- Are there reminders built into the communications?
- Are there incentives built into the measures?

There were two considerations where the Point Carbon team found that more could have been done:

- Are the communications designed in such a way that may inspire confidence and trust in the consumer? Although the reviewers’ general response to this question would be yes, providing an umbrella narrative to explain the reasons for BP to run Target Neutral may have inspired even more trust and confidence amongst the public.
- Is there any measurement of the impact of the measures, and a feedback loop to build in improvements? The reviewers found that a feedback mechanism had been put in place where BP Target Neutral acquired email addresses of spectators who signed up, with e-newsletters being sent to these addresses. However, at the time of the review, forward measurement of the impact of the behaviour change measures had not yet been factored into these communications. Organisers of future similar events would do well to ensure that impact measurement and related feedback mechanisms are designed at the outset of behaviour change initiatives, as this will help maximise their effectiveness.

### Use of carbon offsets at other events

Although carbon offsets have been used for many previous events such as Beijing 2008 and the last two FIFA World Cups, the level of detail available varies considerably. Very different approaches to offsets have been used at different events:

- For the FIFA World Cup in Germany in 2006, 100,000 tonnes of greenhouse gases were offset with funding from FIFA, the football association and two private sponsors. According to calculations by Oeko Institut and WWF Germany, this amount exceeded the net emissions caused by the World Cup which were estimated at 92,000 tonnes (Oeko-Institute, 2003 and Useful Simple Projects, 2012).
- According to UNEP (2009), additional GHG emissions caused by the Beijing Olympic Games (but not the Paralympic Games) in 2008 were measured as 1.81 million tonnes CO<sub>2</sub>e. According to data provided to them by the organisers, this entire amount was more than offset by related emissions-saving activities such as pollution control in industries and traffic control measures (with the latter measure alone reportedly saving as much as 0.8 million tonnes). The data and calculations behind these figures are not publicly available or verifiable.
- The organisers of the Vancouver 2010 Winter Olympic Games secured sponsorship to offset the whole of the 118,000 tonnes of what they termed 'direct' emissions, which did not cover spectator travel or accommodation. Spectators were facilitated in offsetting their emissions for a fee, with an estimated 6% of spectators doing so (VANOC, 2010).

The contexts in which different events are held can be very different. For example, far fewer spectators usually visit a Winter Games; some host cities have better public transport infrastructure than others; decision-makers may choose to offer free, or payable offsets; organisers may have less or more focus on offsets compared to local emissions reductions; and so on.

Despite the differences in contexts, it would appear that carbon offsets, especially for travel, will remain part of carbon management strategies for major events. It would be valuable for organisers of future events if full details of carbon management strategies and achievements were published for all events. In relation to travel offsets, organisers of future events should ensure that offset providers publish as detailed a breakdown as possible of actual travel undertaken and offset.

### Conclusions

In summary, the main findings of this technical review were that:

- BP's own target for the number of journeys offset was exceeded, however the volumes of carbon offset were lower than they had hoped for, primarily due to lower participation from spectators travelling from outside the UK

- The offset procurement process in some ways exceeded best practice by not simply using internationally accepted standards but additionally considering social impacts as part of the selection process, conducting site visits and taking project selection advice from independent NGO representatives
- The carbon volumes calculation method was robust, conservative in its approach, and used accepted and relevant emissions factors
- The efforts to influence behaviour change were admirable in the number of information and communication channels used, however an umbrella narrative may have helped, as would earlier action on planning impact measurement.

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<sup>4</sup> BP Target Neutral Advisory and Assurance Panel (AAP)

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BP Target Neutral travel emission forecast model.

Sample of Verified Emissions Reduction Purchase Agreement (VERPA) used for London 2012 offset purchases.

Screenshot of Markit Environmental Registry showing volumes of VER holdings and retirements as of 14 September 2012.

List of 'touch points' agreed with LOCOG's communications calendar.

ERM emission factors to calculate the average emissions per country per spectator.

Testimonial from offset project provider confirming that due diligence was more rigorous than normal.