Town of Cottesloe

2013/2014 Carbon Inventory Report

Reporting period: **1 July 2013 to 30 June 2014**

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Summary

This report summarises the findings from the 2013/2014 Greenhouse Gas Inventory recently completed for the Town of Cottesloe. The Inventory and Report represents the fifth consecutive year of carbon accounting for the Town, starting with a baseline from 2009/2010. As the Town aims to become carbon neutral by 2015 (2015/2016 reporting period), annual data collection and reporting is necessary to track progress and highlight areas for carbon abatement. The 2013/2014 inventory calculated 294.25 tonnes of Carbon Dioxide equivalent ($CO_{2\text{-}e}$) emissions from the Town's operations for the period 1 July 2013 to 30 June 2014. This compares to a baseline greenhouse gas footprint of 806 tonnes of $CO_{2\text{-}e}$ for 2009/2010. A number of abatement actions as well as recording changes have led to the reduction of over 50% of the total footprint. The primary emissions-related activities at the Town for 2013/2014 were:

- Purchased electricity for Council buildings and infrastructure as well as streetlights;
- Petrol combustion from fleet vehicles for transportation (includes work and private use of vehicles); and
- Council-generated waste sent to landfill.

Business travel, paper use and gas make up the rest of the emissions calculated in the inventory.

The Town has successfully achieved its goal of a 15% reduction of emissions from the 2009/2010 baseline year as well as being on track to reach the overarching goal of carbon neutrality by 2015.

Recommendations for the Town following the completing the 2013/2014 inventory are as follows:

1. This report be published on the Town's website by April 2015.
2. The Town continually review boundaries set at the baseline year to determine if they are still appropriate. This may include the inclusion of refrigerants, water use, litter bins, and selected contractors and inclusion of staff travel by taxi.
3. The Town investigate the practicability of offering new staff members a financial increase to their salary package as an alternative to the current practice of automatically providing all senior staff with a vehicle as part of their salary package.
4. The Town encourage the practice of purchasing the voluntary flight offset option for business travel.
5. The Town's staff develop a Carbon Offset Purchasing Guideline.
6. The Town investigate and purchase offsets in accordance with the guideline to bring the Town's footprint to zero net emissions in time for the 2015 (2015/2016 reporting period) goal of carbon neutrality.

Contents

1. Introduction

The 2013/2014 Carbon Inventory Report has been prepared for the Town of Cottesloe (the Town) to report on council-related greenhouse gas (GHG) emissions for the period from 1 July 2013 to 30 June 2014. This report follows the 2009/2010 (baseline year); 2010/2011; 2011/12; and 2012/2013 carbon inventory reports. It provides a summary and brief analysis of the carbon inventory recently completed for the same time period.

Due to its small size, the Town is not obligated to report emissions under state or federal legislation, but chooses to voluntarily assess and publicly report its emissions as a part of its commitment to becoming carbon neutral. Monitoring and reporting on emissions is an important step in taking responsibility for the Town's impact on the environment. Continued development of annual inventories and reports assists the Town in understanding their emissions profile.

In 2010, the Town committed to becoming carbon neutral by the target date of 2015 through following the four step process below:

Step 1 Measure the total GHG footprint at baseline year.
Step 2 Develop a GHG Reduction Plan to reduce highest emission sources.
Step 3 Switch to energy sources that create less GHG emissions.
Step 4 Offset all remaining GHG emissions.

In 2012 the Town developed and published the *Town of Cottesloe Greenhouse Gas Reduction Plan*, which set out a process of carbon abatement (step 2). The Town's approach to becoming carbon neutral involves reducing emissions through least-cost abatement before offsetting any remaining emissions. The plan also established emissions reduction targets including:

- An overall goal of zero net emissions by 2015; and
- A 15% reduction on 2009/2010 emissions by 2015.

A number of abatement actions have been implemented in line with step 3 to reduce the Town's emissions where practical, including the installation of a solar power system at the Civic Centre; a reduction in the number of cars in the Town's fleet; and the implementation of PC power management. The Town also purchased 115 megawatts of Green Power in 2013/2014. Having decreased net emissions by over 60% since baseline reporting, the Town is well positioned to purchase carbon offsets as part of the fourth and final step to becoming a carbon neutral council.

Compilation of this report and inventory involved liaison with management, contractors and staff; sourcing activity data from utility providers; and reviewing invoices. Relevant data was consolidated in the inventory with links to where original data can be accessed. This information is stored securely on the Town's record keeping software. Further information on data access or management can be provided by the Town's Sustainability Officer.

This report has been developed with close reference to the standards for the greenhouse gas emissions reporting set out by the Greenhouse Gas Protocol Revised Edition (GHG Protocol) (WRSD 2004) and the National Carbon Offset Standard (NCOS) (DCC 2014).

Town of Cottesloe Profile

The Town of Cottesloe is a small coastal local government in the Western Suburbs of Perth. The Town covers a total area of approximately 4 square kilometers with a population of approximately 7500. During 2013/2014, the Town employed approximately 40 staff. The Town has historically operated out of 2 main buildings, with administration at the Cottesloe Civic Centre and the Town's 'Depot' located at 8 Stack Street, Fremantle. Other buildings and facilities operated by the Town include Anderson Pavilion; beach facilities; playgrounds; ovals and a golf course. Additionally the Town has over 700 streetlights within its boundaries and a fleet of approximately 30 vehicles.

Aims

This Report presents the Town's GHG emission sources and total emissions for the period 1 July 2013 to 30 June 2014. Specifically, the report has been developed in order to:

- Present the Town's GHG Inventory as the fifth consecutive year of GHG emissions reporting;
- Demonstrate leadership as a local government through transparency and initiative in carbon management;
- Identify emissions and financial savings opportunities for the Town.

Explanation of Carbon Accounting

The 3 Scopes

'Scopes' are used to categorise direct and indirect emissions. Scopes were introduced by the Greenhouse Gas Protocol to improve carbon accounting transparency and avoid double counting of emissions. The Town's carbon accounting framework includes three scopes. These are defined by the Greenhouse Gas Protocol as:

Scope 1 Direct GHG emissions occurring as a result of activities that constitute the facility (i.e. the burning of fuel in a vehicle).

Scope 2 Indirect GHG emissions from energy (e.g. electricity) that is generated off site and then purchased for use by the Town of Cottesloe.

Scope 3 All other indirect GHG emissions that have been generated as a consequence of the Town of Cottesloe's activities, but occur from sources not owned or operated by the Town. The Town has less control over indirect GHG emissions and they are often harder to quantify, therefore, the Town has elected to report the minimum required emission-related activities as set out in the NCOS standard.

Occasionally the assignment of emissions sources within a particular scope may be revised. For example in 2011/2012 WALGA recommended local governments report purchased electricity for Western Power-owned streetlights as scope 3 instead of scope 2. This led to a significant change in Cottesloe's emissions footprint in that year as emissions relating to street lighting make up a considerable proportion of the Town's emissions.

Calculating Emissions of Different Activities

Different activities result in different levels of emissions. Most activities result in the emission of several GHG such as Carbon Dioxide (CO2), Methane (CH4) and Nitrous Oxide (N2O). Each of these GHG also has a different level of 'global warming potential'. To simplify calculations, different emissions are displayed as a single unit, Carbon Dioxide equivalent ($CO_{2\text{-}e}$).

In order to calculate a carbon footprint for an activity or an organisation, a unit of measurement for a given activity such as litres of fuel or kWh of electricity is multiplied by a standardised 'emissions factor' to calculate the total quantity of emissions ($CO_{2\text{-}e}$) for that activity. For example: [Litres of diesel used] x [Emissions factor of diesel use] = [Total emissions from diesel use].

Agreed emissions factors are set out by the Federal Government to ensure consistency in reporting emissions. These figures are often revised in line with improved carbon accounting standards. Changes to emissions factors can result in changes to the total footprint of an organisation. The landscape of the Town's 2013/2014 carbon footprint has altered significantly due to changes in emissions factor. Such changes include: decrease in scope 2 purchased electricity from 0.82 to 0.76; decrease in scope 3 purchased electricity from 0.10 to 0.07; and a decrease in gas distributed from a pipeline from 51.33 to 51.20. These changes demonstrate the need to remain up to date with the most accurate calculations and clearly state the emissions factors used (see the carbon inventory for more details).

2. Setting Boundaries

Boundary setting is a key step in measuring and managing emissions. Boundaries are determined by ownership or 'operational control' of facilities or infrastructure. Only one corporation or organisation can have operational control over a facility at one time. The Town uses the following definition of 'operational control' to determine its boundaries (DCC, 2010):

"The greatest authority to introduce or implement any or all of the following for the Facility:

- *Operating policies;*
- *Health and safety policies;*
- *Environmental policies."*

The organisational and operational boundaries used to develop the carbon inventory are set out in Figure 1. These were determined at a workshop held in 2009, at commencement of the project. Boundaries set for the 2013/2014 inventory and report are based on those used in the baseline inventory. Emission-related activities included and excluded are detailed in the Appendix. It is important to note that activities included and excluded may change over time as reporting methods improve or relevance is re-assessed. As per guidance from NCOS, it is not necessary to include all emissions, as long as any emissions excluded are clearly identified and selection is justified. As the Town is choosing to voluntarily collect and reduce its emissions the emission footprint is the best attempt to collect all relevant activity data and best reflect the actions of the Town.

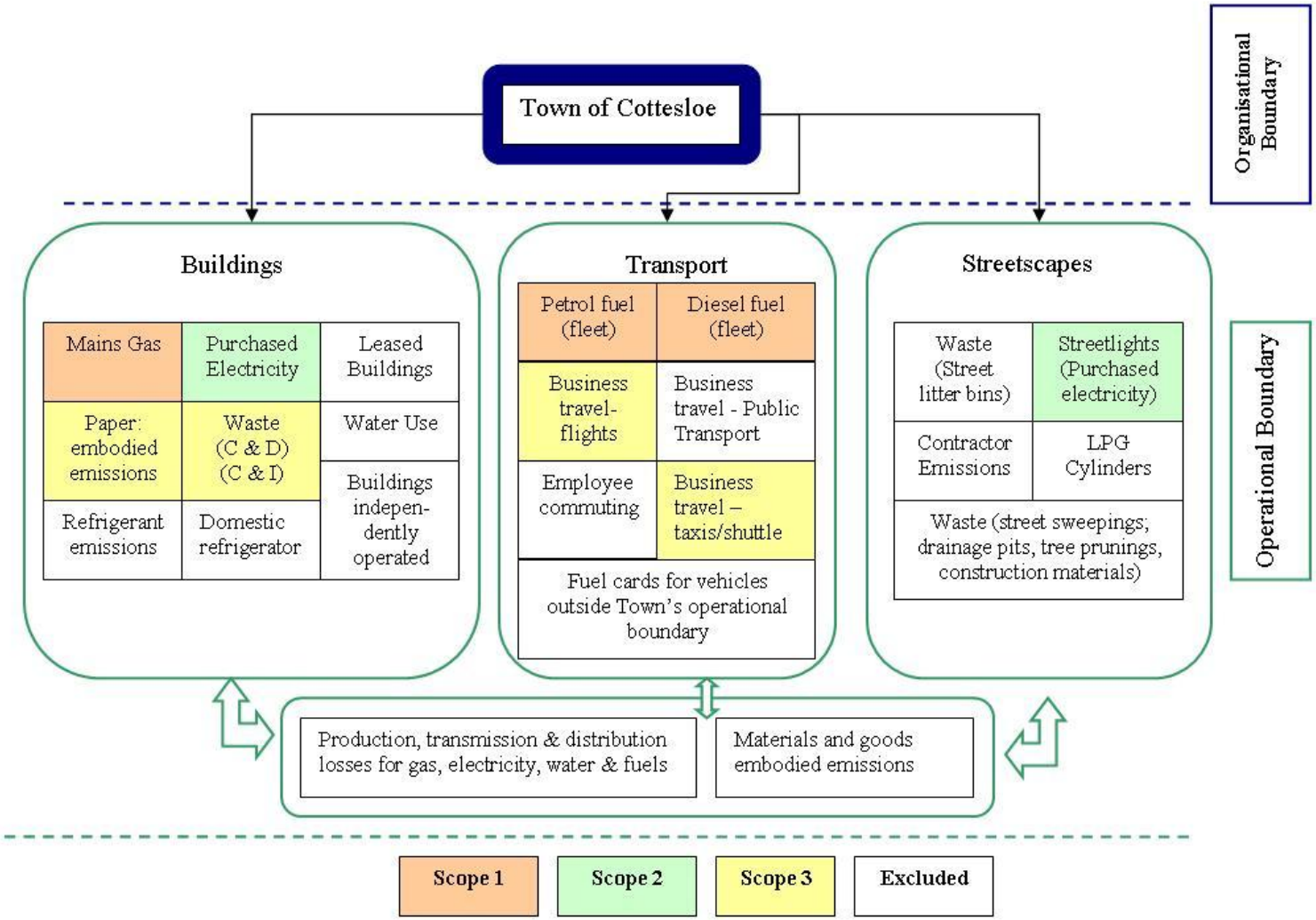

Figure 1: Town of Cottesloe's Organisational and Operational Boundaries for the carbon inventory (Source: Based upon diagram from p 25, GHG Protocol, WRSD 2004)

3. Carbon Inventory

The Town's corporate GHG emission sources are presented in Table 1, as a summary of the 2013/2014 Inventory. The Town's total GHG emissions, or carbon footprint, were calculated to be 294.25 tonnes of $CO_{2\text{-}e}$ emissions for the 2013/2014 financial year.

Table 1. Summary of 2013/2014 Carbon Inventory for the Town of Cottesloe

Site	Emissions Source	Consumption	Consumption Units	Tonnes $CO_{2\text{-}e}$	Proportion of total inventory (%)
Scope 1					
Fleet	Vehicle - Petrol	21390.34	L	**48.79**	12.7%
Fleet	Vehicle - Diesel	25450.93	L	**67.98**	17.7%
Buildings	Gas	6284.52	m^3	**0.32**	0.1%
Total Scope 1				**117.10**	**30.6%**
Scope 2					
Buildings & Cottesloe Area	Purchased Electricity	243547.54	kWh	**185.10**	48.3%
Streetlights (Cottesloe owned)	Purchased Electricity	17278.00	kWh	**13.13**	3.4%
Total Scope 2				**198.23**	**51.7%**
Scope 3					
Streetlights (Western Power)	Purchased Electricity - Streetlights	424097.23	kWh	**29.69**	7.7%
Buildings	Waste - Commercial & Industrial	117.88	m^3	**25.93**	6.8%
Cottesloe Area	Waste - Construction & Demolition	210.00	m^3	**5.30**	1.4%
Town of Cottesloe	Business Travel (flights)	25864	$km_{(person)}$	**5.41**	1.4%
Town of Cottesloe	Office paper	1931.8	$kg_{(paper)}$	**1.61**	0.4%
Total Scope 3				**67.93**	**17.7%**
Total Scope 1, Scope 2 and Scope 3 emissions				**383.26**	**100%**
Reduction Measures					
Flight Offsets		**7716.00**	**km**	**-1.61**	
Accredited Green Power (CO Zero/Climate Friendly)		**115000.00**	**kWh**	**-87.40**	
Net Emissions for Town of Cottesloe				**294.25**	

Source of Emissions as a Percentage of Total Footprint: Scopes 1, 2, 3

The breakdown of each source as a percentage of the total footprint is demonstrated in Figure 2. Scope 2 emissions, those generated offsite for council use, made up the largest proportion of the Town's footprint, accounting for over half of the total footprint. Scope 1 emissions, those directly emitted by the Town's actions, made up 30.6% of the total footprint with the Town's fleet responsible for a majority of these emissions. While scope 3 emissions accounted for 17.7% of the footprint. The makeup of the Town's footprint based on the 3 scopes has changed over the years; historically scope 2 emissions have contributed a much larger amount to the total footprint. This is largely related to changes in reporting streetlight emissions (see the Town of Cottesloe Carbon Inventory Report 2011/2012). Similarly, the change in emissions factors directly correlates to the change in the spread of emissions pertaining to the Town's 2013/2014 carbon footprint.

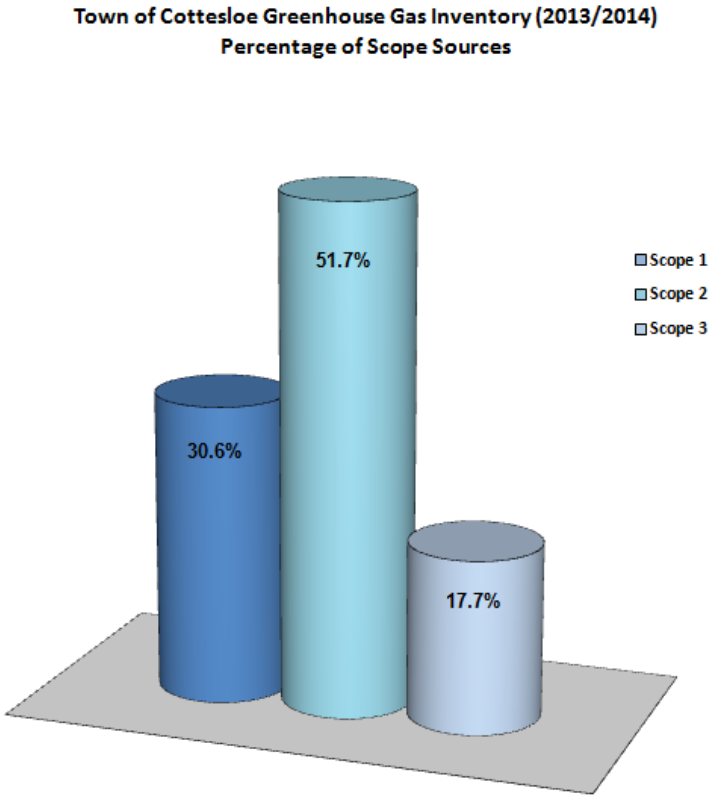

Figure 2. The source of emissions as a percentage of the total footprint, grouped as Scope 1, Scope 2 and Scope 3 emissions (see Table 1 for information on emissions included in each Scope)

Source of Emissions as a Percentage of Total Footprint: Activities

Figure 3 demonstrates the activities identified by the 2013/2014 carbon inventory as generating the most GHG emissions. These were:

1. Purchased electricity for facilities and infrastructure. The Town operates out of 2 main buildings, which require lighting, heating, ventilation and cooling throughout the year. Furthermore, the Town has operational control over a range of other sites such as change room facilities and other community facilities. Bore pumps, used to reticulate Public Open Space and parks, require significant amounts of electricity, particularly in summer. The actual consumption of purchased electricity has decreased by over 8,000 kilowatt hours (kWh) compared to 2012/2013. This can be attributed to the installation of a 15 kilowatt solar system on the Civic Centre at the start of 2013. To date the system has produced 49,206 kWh which corresponds to a saving of 37.4 tonnes of $CO_{2\text{-}e}$ which would have otherwise entered the atmosphere.
2. Petrol and diesel combustion from fleet vehicles for transportation. Emissions from fleet vehicles, including mowers and buggies makes up 30.4% of the Town's footprint. Actual consumption of fuel and therefore emissions from fuel have decreased by almost 10 tonnes of $CO_{2\text{-}e}$ since the last reporting year. In active steps to reduce emissions council sold a number of fuel intensive vehicles in 2011/2012. A significant proportion of staff members are provided with a Council-owned vehicle for commuting and personal use. These emissions figures therefore capture a degree of non-work related travel but it is impossible to separate fuel use. While there is an argument that the Town is responsible for these emissions since it has purchased and supplied the vehicle, it highlights a

potential opportunity for reducing the Town's emissions; however, this will require changes to policy and recruitment practices. It is recommended that the practice of automatically providing new senior staff with a vehicle as part of their salary package be reviewed with an alternative being to offer staff a financial increase to their salary package. This way the number of vehicle's in council's fleet is likely to be less.

3. Purchased electricity for Western Power-owned streetlights. Although the proportion of the total footprint relating to street lighting has decreased in the last few years, sitting at just 11.1% at present, the total consumption and cost relating to this activity consistently remains the highest by a significant amount. This is due to changes in reporting Western Power streetlights as a scope 3 emission as opposed to a scope 2 emission. Without a large financial investment ($100,000+) in upgrading street lighting lamps, there is little the Town can do to abate these emissions, providing a barrier to lowering the cost to council.
4. Waste to landfill. The actual tonnage of waste produced at the Civic Centre and Depot from the Cottesloe area has decreased significantly in 2013/2014. Waste made up 8.2% of the total footprint compared to 21% in 2012/2013. Relocation of the Depot site in 2012/2013 has since led to a gap in data relating to waste therefore figures from the previous year in conjunction with anecdotal sources were used to estimate waste data as accurately as possible. The largest difference from the last financial year is evident in construction and demolition waste, making up just 1.4% of the total footprint in this reporting period. For this waste stream, for the 2013/2014 financial year, invoices from Veolia were supplied therefore no discrepancy exists with calculating the emissions for this particular activity.

While business travel is only a minor contribution to the footprint at 1.4%, the opportunity to offset these emissions is convenient and affordable. In 2013/2014 five return business trips were made and voluntary 'offsets' were purchased for only two of these trips. These two trips therefore resulted in zero emissions. It is recommended that staff are appropriately educated on the purchase of voluntary flight offsets and, when possible, take this option to reduce council's emissions related to business travel. Paper use also made up only a minor portion of the footprint, contributing to 0.4% of emissions.

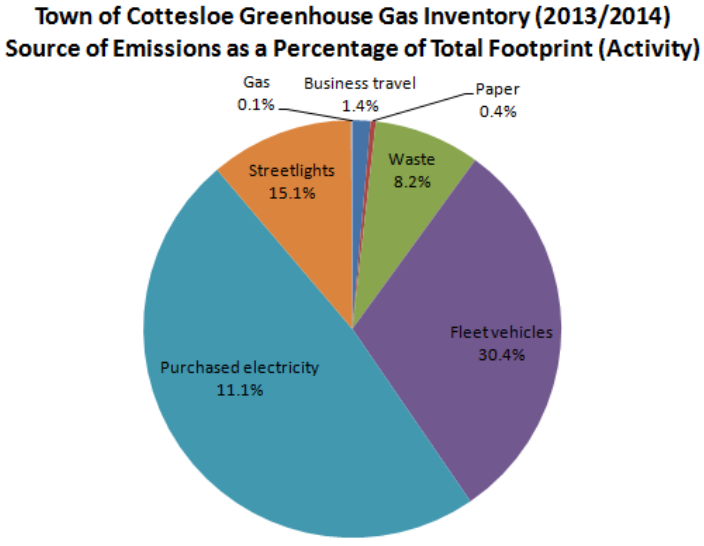

Figure 3. Activity Source of Emissions as a Percentage of Total Footprint.

Council's Carbon Footprint: Changes since Baseline

The Town has demonstrated an encouraging decreasing trend pertaining to its total carbon footprint. Total emissions have decreased by over 500 tonnes $CO_{2\text{-}e}$ since the baseline year.

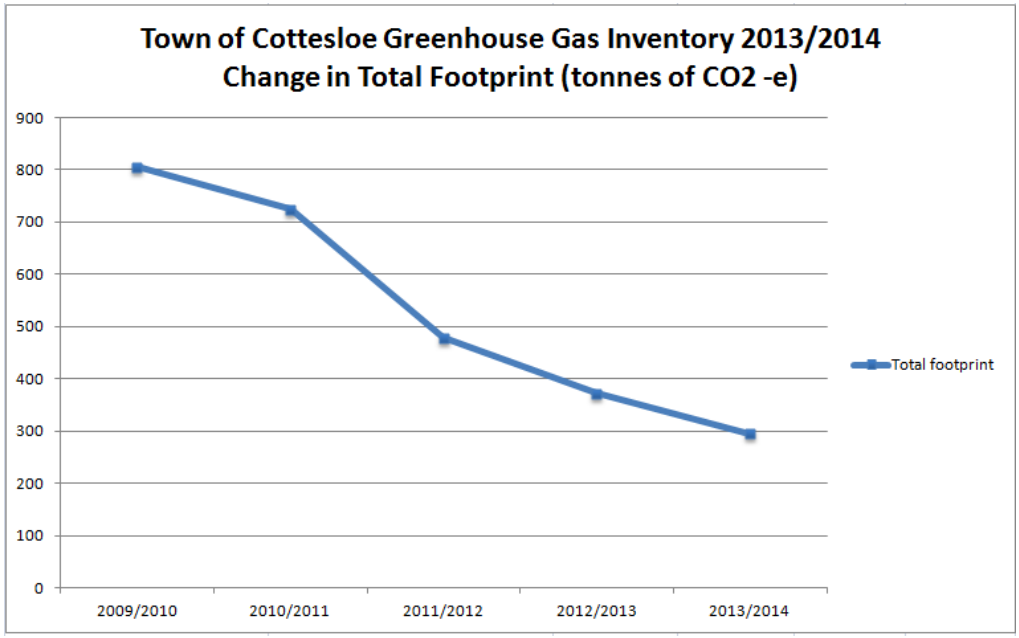

Figure 4. Change in total footprint since baseline year

In light of these reductions the Town has been successful in meeting its goal of a 15% reduction in actual 2009/2010 emissions, alongside being on target to achieving the overall goal of zero net emissions by 2015 through the purchase of offsets.

4. Implications

The Town has elected to voluntarily collect and report its GHG emissions through inventories and reports. These inventories and reports are a part of a voluntary process of reducing emissions and becoming 'carbon neutral'. The Town has chosen to follow the standards set out in NCOS by the Department of the Environment for voluntary carbon accounting, unless there is conflict with other council policy (e.g. purchasing local offsets).

As mentioned in section 1, 'Calculating Emissions of Different Activities', emissions factors are regularly reviewed and recalculated by the Federal Government in order to reflect improved, up to date and best-practice carbon accounting standards. Changes in emissions factors or general reporting standards can alter the total carbon footprint of an organisation by reapportioning the total percentage each emissions-related activity is responsible for. This proves to be an implication when making direct comparisons of the carbon inventory from year to year, thus, it is important to look at actual consumption in conjunction with actual emissions rather than solely the total percentage breakdown of the footprint. For this reason it is also important to identify changes in reporting or emissions factors clearly within the carbon inventory report.

The repeal of the Carbon Tax in July 2014 saw a decrease in prices of certain commodities and services, most notable to council, purchased electricity. This change, however, has minimal impact on council's total spending. An increasing trend can be observed in utility tariffs, with the cost of purchased

electricity rising by 11% since 2012. With fuel, electricity and waste costs likely to increase in future, it is prudent for the Town to identify ways to reduce their reliance on GHG intensive activities, suppliers and products in order to save significant amounts of money.

5. Next Step: Offsets

As previously outlined, the Town is following a four-step process with the goal of becoming a carbon neutral council. The Town has been progressing through the four stages and has approached the final step. Step 1 was completed with the development of a baseline inventory for 2009/2010. In 2012, step 2 was completed with the development of the GHG Reduction Plan.

The Town has implemented a number of abatement measures as part of step 3 as well as purchasing non-polluting sources of energy with the aim of reducing GHG emissions. Now that the Town has reduced its total footprint by over 60% since baseline reporting and abated its emissions as much as practical, the Town will complete the fourth and final step and investigate the purchase of offsets in order to bring the carbon footprint to zero net emissions.

Carbon offsetting requires council to invest in projects that reduce greenhouse gas emissions or sequester carbon from the atmosphere in order to compensate for remaining emissions that the Town produces. It is recommended that the Town endorse a Carbon Offset Purchasing Guideline to ensure that all carbon offset transactions reflect best-practice standards as well as taking into account best value for money. The guideline will assist council in purchasing offsets that are credible, ensuring that emissions reductions are verifiable, quantifiable and permanent.

Reporting of the Town's carbon inventory is undertaken per financial year, therefore, carbon offsets will be purchased to cancel out all remaining emissions from the 2015/2016 carbon inventory, consequently, fulfilling council's resolution to become carbon neutral by 2015. In order to ligitimise claims of carbon neutrality it is recommended that the 2015/2016 carbon inventory is audited by a suitably qualified, third-party auditor. The 2015/2016 inventory will be presented to council at the start of the 2015/2016 financial year.

6. Recommendations

Recommendations for the Town following the completing the 2013/2014 inventory are as follows:

1. This Report be published on the Town's website by April 2015.
2. The Town continually review boundaries set at the baseline year to determine if they are still appropriate. This may include the inclusion of refrigerants, water use, litter bins, and selected contractors, and inclusion of staff travel by Taxi.
3. The Town investigate the practicability of offering new staff members a financial increase to their salary package as an alternative to the current practice of automatically providing all senior staff with a vehicle as part of their salary package.
4. The Town encourage the practice of purchasing the voluntary flight offset option for business travel.
5. The Town's staff develop a Carbon Offset Purchasing Guideline.
6. The Town investigate and purchase offsets in accordance with the guideline to bring the Town's footprint to zero net emissions in time for the 2015 (2015/2016 reporting period) goal of carbon neutrality.

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Appendix

Emissions Sources Included

Table 1. Emissions sources included in the boundary for the Town's carbon Inventory 2013/2014

Emissions Source	Scope	Justification/Explanation
Petrol fuel (fleet)	Scope 1	The Town consumed petrol for transportation. As the Town allows private use of vehicles, some of these emissions relate to personal use.
Diesel fuel (fleet)	Scope 1	The Town consumed diesel for transportation and works machinery.
Natural Gas	Scope 1	The Town consumed pipeline distributed natural gas at a number of sites.
Purchased electricity (buildings)	Scope 2	The Town consumed purchased electricity for lighting, heating, cooling and miscellaneous activities at Council owned buildings.
Purchased electricity (streetlights - Cottesloe)	Scope 2	The Town consumed purchased electricity for streetlights, owned and operated by Cottesloe.
Purchased electricity (bores & infrastruct)	Scope 2	The Town consumes purchased electricity to power water bores and other infrastructure in parks and open spaces.
Purchased electricity (streetlights – Western Power)	Scope 3	The Town consumed purchased electricity for Western – Power owned streetlights. This is included as Scope 3 from 2011/12 onwards as WALGA has recommended the reporting of streetlights as Scope 3 emissions as of 2011/12.
Business travel - flights	Scope 3	Business flights have been included in the carbon inventory since NCOS recommends that business travel should be included as a minimum standard for carbon accounting.
Paper use	Scope 3	Paper use has been included since it is a major product used in the office and NCOS recommends that paper use should be included as a minimum standard for carbon accounting.
Waste Commercial and Industrial (C & I) Construction and Demolition (C & D)	Scope 3	All waste disposed to landfill from Council operations was included since it is an area that the Town could target to reduce emissions. NCOS recommends that disposal of waste generated by an organisation should be included as a minimum standard for carbon accounting.

Emissions Sources Excluded

The following sources are documented to ensure transparency and adequate justification for exclusion. These include all *potential* emissions from Council-related activities, but for a variety of reasons, cannot be included in the inventory.

Table 2. Emissions sources excluded from the Town's carbon Inventory 2013/2014

Emissions Source	Scope	Justification
Refrigerant emissions (domestic fridge)	Scope 1	Emissions from the domestic refrigerator have been excluded since they were considered to be negligible.
Refrigerant emissions (air conditioner)	Scope 1	The Town has approximately ten air conditioning units that service the Civic Centre building. These were considered to have a low contribution to the emissions footprint and so were excluded from the carbon inventory.
LPG cylinders	Scope 1	The Town has one portable LPG cylinder for the barbeque at the Depot, which has been excluded from the carbon inventory since it is considered to have negligible contribution to the Town's emissions footprint.

Employee commuting (personal vehicles)	Scope 3	This inventory aims to present the major emissions under the Town's operational control. Employee commuting does not fit within the objectives set but it may be partly addressed through initiatives such as a Sustainable Travel Allowance. Commuting in a Council-owned vehicle is included as Scope 2 emissions.
Employee commuting & Business Travel (public transport)	Scope 3	Public transport is considered to be difficult to measure and likely to be a marginal part of the transport used by most employees. At this stage it has been excluded from the carbon inventory for the Town.
Fuel cards for vehicles outside the Town's operational boundaries	Scope 3	Fuel cards that the Town manages for external use (e.g. TAPSS minibus and staff vehicles) have been excluded since they are not under the operational control and hence fall outside the boundaries for the Town's carbon inventory.
Waste (street litter bins)	Scope 3	The Town aims to include waste from street litter bins as part of their carbon inventory but the availability and quality of data is not yet sufficient. Data capturing methods will be put in place so that waste from litter bins can be included in future inventories.
Waste (tree prunings; street sweepings, drainage pits, construction materials)	Scope 3	Tree prunings and other vegetation waste from the Town's operations is all mulched and re-used. Construction materials are collected by a contractor who reclaims and recycles almost all of the content. Contaminated soils and sands from street sweeping are remediated and then sold as soil after the process is complete. Since these products are claimed and re-used they have been excluded from the Town's carbon inventory.
Contractors	Scope 3	Emissions generated from contractors and the activities that they are hired to do for the Town have been excluded from the inventory but may be included in future inventories if data can be calculated to a satisfactory level of accuracy.
Water use and associated production and distribution emissions.	Scope 3	Water use (and associated production and distribution emissions) has been excluded since it is not considered to be a major emissions source. Water use may be included in future inventories.
Emissions from extraction and transport of petrol	Scope 3	The Town has chosen to exclude emissions from extraction and transport of petrol since the Town has an inability to affect these emissions.
Emissions from extraction and transport of diesel	Scope 3	The Town has chosen to exclude emissions from extraction and transport of diesel since the Town has an inability to affect these emissions.
Emissions from fuel extraction and T&D line losses for purchased electricity	Scope 3	The Town has chosen to exclude emissions from extraction and T & D line losses for purchased electricity since the Town has an inability to affect these emissions.
Emissions from extraction, transport, and line losses of natural gas	Scope 3	The Town has chosen to exclude emissions from extraction, transport and line losses of natural gas since the Town has an inability to affect these emissions.
Materials and Goods embodied emissions	Scope 3	Emissions generated from materials and goods embodied emissions have been excluded but may be included in future inventories if data can be calculated to a satisfactory level of accuracy.
Leased and Independently Operated Buildings	Scope 3	All Leased and Independently managed Council owned buildings have been excluded from the Town's carbon inventory since they fall outside the chosen boundary of "operational control".
Business travel – taxis/shuttles	Scope 3	Taxis and Shuttles have previously been included, however estimating mileage and fuel use became problematic and inaccurate. Figures for Taxis were not representative of emissions and have been excluded for 2013/14. This will be reviewed next year.