

**National Assembly for Wales**  
Assembly Commission

# Annual Environmental Report 2012–13

December 2013



Cynulliad  
Cenedlaethol  
Cymru

National  
Assembly for  
Wales

The National Assembly for Wales is the democratically elected body that represents the interests of Wales and its people, makes laws for Wales and holds the Welsh Government to account.

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**Claire Clancy**  
Chief Executive Officer



**Peter Black**  
Commissioner for Sustainability

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## Foreword

It is our pleasure to present our sixth Annual Environmental Report for the National Assembly for Wales in which we share with you our performance over the past year. Sustainable development lies at the heart of our strategic approach to our business activities and this report details our environmental performance across our key impact areas in a balanced manner which also includes the disclosure of performance that has fallen short of our expectations.

At a time when we are increasingly reminded of the growing demand for natural resources, the pricing pressures this places on markets and how this translates to us as end users, it is reassuring to know that we remain true to our vision for a long term sustainable Assembly.

A key part of our Corporate Strategy is to ensure we use resources wisely in the delivery of our objectives, and to this end we continue to develop and improve the resilience of our existing infrastructure. This is, of course, notwithstanding the invaluable enthusiasm and considerable efforts that our occupants continue to contribute in ensuring that we minimise the impact of our activities on the local environment as much as possible.

We understand the importance of measuring, reducing and reporting the Assembly's carbon footprint as an important aspect of our wider sustainability commitment. We acknowledge that we have a critical role to play in leading by example in mitigating the effects of climate change through innovation, investment and engagement whilst ensuring we continue to deliver a first class service to our Members and the people of Wales.

As we move closer to our 2015 goals, we appreciate the challenges we face, the ambition we must display and the commitment we must demonstrate if we are going to achieve our aspirational vision. In the past year, we have faced some unpredictable climatic conditions, a growing business agenda and an increased expectation from stakeholders to deliver more with less. This provides an unprecedented challenge to ensure we continue to optimise the efficiency of our buildings, make informed decisions through our corporate procurement and project management and engage and embed a sustainable work culture into our business activities.

We are proud of the progress we have made in the last 5 years, particularly in relation to energy efficiency and the development of robust data measurement and reporting procedures. We intend, through continued development and careful consideration of our options, to press forward towards 2015 and beyond with continued commitment and determination.

A handwritten signature in black ink that reads "Claire Clancy". The signature is written in a cursive style.A handwritten signature in blue ink. The signature is highly stylized and cursive, but the name is not clearly legible.

## Introduction

This is the National Assembly for Wales' 6<sup>th</sup> Annual Environmental Report on the sustainability performance of the core administrative estate. The report draws on baseline information and data relating to our environmental performance recorded from previous years for comparative purposes.

The information contained in the report demonstrates our continued enthusiasm, commitment and dedication to environmental responsibility and the steps taken to ensure we maintain our momentum on the journey to a low carbon Assembly.

This, coupled with challenging economic times and unpredictable weather and climate conditions made for unusual environmental performance trends that are not typical of normal Assembly patterns.

However, our commitment to implementing measures to minimise and reduce our environmental impacts remains strong as we continue to embrace opportunities to achieve our goals.



## Performance Highlights

### 15%

reduction in net greenhouse gas emissions (tCO<sub>2</sub>e) since 2008/09

### 4%

reduction in electricity emissions compared to last year.

### 22%

reduction in energy emissions (tCO<sub>2</sub>e) since 2008/09

### 83%

of all waste produced is either recycled or re-used.

### 56%

reduction in waste sent to landfill in 2012/13 compared to previous year

### 8%

reduction in transport related CO<sub>2</sub>e emissions since 2008/09 (-1% in 2012/2013).

### Level 5

certification to the Green Dragon Environmental Standard retained for the sixth year running

Our focus on driving sustainability improvements throughout our business continues to demonstrate our commitment to delivering a low carbon, low energy, low impact estate. Since 2008/09, we have achieved reductions in our direct greenhouse gas emissions of 15% ensuring we remain on target to meet our 3% reduction target per annum. Despite increases in gas use due to a very cold winter, our electricity consumption continues to fall; and the building improvement programme has helped to achieve a reduction of 22% in energy emissions since 2008/09.

We've taken great strides in addressing our waste operations and successfully diverted 56% of all waste from landfill in 2012/13, whilst 83% was recycled or reused. Our volumes of waste generated have also reduced by 21% on the previous year.

Through more sustainable travel choices, we have achieved an 8% reduction in business travel emissions since 2008/09 and have increased the use of rail for travel by 35% over the same period. Ongoing improvements to our accounting systems continue to enhance the accuracy of our data year on year.

We continue to purchase 99% of our paper from legal and sustainable sources and ensure all wood based products are CPET/FLEGT certified. We are committed to sustainable procurement throughout our supply chain with an emphasis on local sourcing where possible.

## About this report

This report has been prepared in accordance with the requirements outlined in Defra's Environmental Reporting Guidelines, June 2013, and in compliance with the greenhouse gas reporting regulation included in the Climate Change Act 2008. The content also meets the requirements of the Green Dragon Environmental Standard 2006 at Level 5. The report supports the headline data included in the Assembly's Annual Report and Statement of Accounts and represents the Assembly's commitment to transparent and public reporting of its environmental performance.

The data presented in the environment section of this report is subject to internal and external audit as part of the Assembly's Environmental Management System (EMS) and in accordance with requirements as expected at Level 5 of the Green Dragon Standard. External assurance is provided for our core data sets supporting our main environmental objectives and targets and our key greenhouse gas (GHG) reduction goals. Currently, our emissions data is not independently verified or assured as this is not a regulatory requirement however this will be explored in future years for completeness and consistency with the financial accounts. As a priority we aim to improve and enhance the accuracy and scope of our reporting data each year and regularly review the methodology for collection internally with key stakeholders.

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## Reporting period

This report covers the period from 1 April 2012 to 31 March 2013. For comparative purposes and completeness, the report includes data for the previous four years to help readers identify trends and year-on-year comparison.

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## Reporting boundary

The report covers the activities, sites and assets in which the Assembly has direct control, but does not account for the GHG emissions from operations in which it owns an interest (in financial terms) but has little or no control. In this context, this refers to Assembly Member Constituency offices which are located all over Wales, home workers and those few staff located in Welsh Government run offices.

For the second year running, in the Annual Report and Statement of Accounts 2012-13 we have extended reporting to include highlight data on the Assembly's economic performance in relation to our principle environmental metrics.

During 2012/13, there were no discontinued operations or changes to the Assembly's portfolio that would have caused significant change and affected the reporting on our sustainability performance. The reporting boundary remains the same as last year, with most data consistent with the activities and operations of the Cardiff Bay estate and where available, and as a minimum, indicator performance on the impacts of the Colwyn Bay office in North Wales. Performance indicator reporting does not currently cover external contractors or suppliers of goods and services although it is intended to progressively include the environmental impacts of these activities in subsequent reporting years.

The boundaries for our corporate footprint are illustrated below.

Table 1: Reporting Boundary

Emission Type	Carbon Source	Emissions included in footprint	Date source	GHG Scope
Fuel Combustion	Gas	<b>YES</b>	Primary	1
Owned Transport	Diesel/Petrol	<b>YES</b>	Primary	1
Process/Fugitive Emissions	AC units/Chillers	<b>YES</b>	Primary	1
Purchased Electricity	Electricity transport and use emissions	<b>YES</b>	Primary	2
Waste Disposal	Waste and Landfill emissions	<b>YES</b>	Primary	3
Business Travel	Depends on mode of travel	<b>YES</b>	Primary	3
Water	Transfer, use and treatment emissions	<b>YES</b>	Primary	3
Occupant Commuting	Depends on mode of travel	<b>NO</b>	Secondary	3
Purchased Materials	Raw materials used in goods	<b>NO</b>	Secondary	3
	Paper purchased	<b>YES</b>	Primary	3
Supply chain emissions	Depends on product/service	<b>NO</b>	Secondary	3
Biomass	Burning of wood chips	<b>YES</b>	Primary	Outside scopes

## Reporting principles

This report is built on the premise of transparent and accurate reporting of our environmental performance. The content aims to provide the reader with an honest overview of our progress, highlighting our successes whilst not forgetting areas in which we haven't performed so well. This report has been prepared with reference to our corporate principles of being open, professional and transparent. To ensure consistency, explanations are provided for any changes in calculation standards, estimates and reference data from those applied in past reports.

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## Base year

From our initial baseline assessment, we had sufficient data with which to develop our carbon reduction strategy for the period 2009-2015. Within this strategy we have a fixed base year of 2008/09 for energy and business travel as the two priority areas for action. This period was chosen as the first year that we had sufficient, accurate data on energy consumption to establish a baseline profile, and enough data on business travel to enable us to set realistic targets.

At the time, we understood that our data quality and capture methodologies were not verified, however it provided us with a platform on which we could move forwards and measure both our absolute and relative performance. Our base year recalculation policy is to recalculate our base year emissions for relevant significant changes (where data becomes available) which equate to or exceed a 5% deviation from the previously calculated data. Despite improvements in the capture of activity and operational data in the years following the base year, we have not recalculated the base year as this data wasn't (and isn't) available for that reporting period. This has been documented in subsequent reports where this data has had a direct impact on our carbon footprint.

However each year, we do apply the current year's emissions factors to all previous years' activity data (including the base year) for the purposes of consistency and comparison as emission factors develop.

## Data Measurement and Analysis

We collate data for all of our wholly owned activities over which we have financial control. The methodology adopted for recording and reporting our activity data is described below.

- ❖ All reported data applies to the financial year of 1 April – 31 March each year.
- ❖ All data is collected internally through dedicated spreadsheets from information derived directly from bills, responsible departments and contractors. Audit trails from source to report are retained and retrievable for verification purposes.
- ❖ Unless otherwise stated, all data represents actual totals.
- ❖ Our environmental data is reported for all activities undertaken by Commission staff, Assembly Members and Assembly Member support staff.
- ❖ Reported data in respect of consumed resources (energy, water, waste) is applicable to the occupants above together with onsite contractors and onsite Welsh Government staff.
- ❖ We report data in both absolute numbers (eg tonnes of waste, kWh of energy consumed) and converted emissions totals in tonnes of carbon dioxide equivalent. All data is converted into CO<sub>2</sub>e using the UK Government GHG Conversion Factors provided by Defra for company reporting. These factors are reviewed and improved each year as scientific understanding of climate change has developed and the most recent set is applied for calculation purposes to all current and previous data sets.
- ❖ Reported data in relation to gas consumption is not normalised for the weather in conjunction with Defra's best practice guidelines for company reporting.
- ❖ We are not a participant in the Carbon Reduction Commitment Energy Efficiency Scheme or any other regulatory scheme and therefore do not disclose data outside of this report and our Annual Report.

## Our Carbon Reduction Strategy

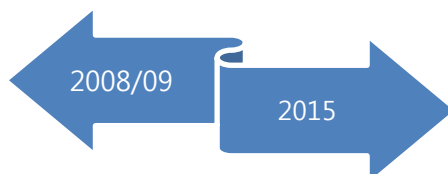
Our strategy for carbon reduction is based on delivering a sustainable Assembly fit for the future in the long term through a programme of improvements in the short term. Back in 2009 we produced a Carbon Management Plan with two specific stretching targets that we believed would shape the Assembly into a low carbon estate. These targets are as follows:

- Reduce energy emissions by 40% by 2015 against the 2008/09 baseline.
- Reduce business travel emissions by 15% against the 2008/09 baseline.

Without the knowledge and insight into the other high impact areas of the organisation at that time (which would later be added as targets through the Environmental Management System), we pressed on as we were keen to demonstrate our commitment and enthusiasm for reducing the carbon intensity of our operations and leading by example. Since its approval in 2009, the Assembly's Carbon Management Plan has played an instrumental role in maintaining motivation, retaining focus and delivering year on year improvements and savings across our estate. It provides us with a clear focus on where our investment of time, money and expertise can be targeted and as time has passed and our processing and interpretation of data has improved, the strategy has developed and matured into a vehicle for stepped change. Nevertheless, meeting the target reductions will still take significant effort, some innovative thinking and collaborative working with our occupants if we are to meet our expected outcomes in 2015.

### Our key targets

- Reduce energy emissions by 40% by 2015 against the 2008/09 baseline.
- Reduce net greenhouse gas emissions by 3% per annum compared to the 2008/09 baseline.
- Reduce business travel emissions by 15% compared to the 2008/09 baseline.
- Reduce water consumption by 10% compared to the 2009/10 baseline.
- Reduce waste to landfill by 5% per annum compared to the 2010/11 baseline.



## Additional Information and Relevant Websites

National Assembly for Wales sustainability web pages

[http://www.assemblywales.org/abthome/about\\_us-commission\\_assembly\\_administration/sustainability.htm](http://www.assemblywales.org/abthome/about_us-commission_assembly_administration/sustainability.htm)

National Assembly for Wales Annual Report and Statement of Accounts 2012-13

<http://www.assemblywales.org/bus-home/bus-business-fourth-assembly-laid-docs.htm?act=dis&id=248093&ds=7/2013>

Annual Environmental Reports

[http://www.assemblywales.org/abthome/about\\_us-commission\\_assembly\\_administration/sustainability/corporate\\_greenhouse\\_gas\\_reporting.htm](http://www.assemblywales.org/abthome/about_us-commission_assembly_administration/sustainability/corporate_greenhouse_gas_reporting.htm)

Green Dragon Environmental Standard

[www.greendragonems.com](http://www.greendragonems.com)

National Assembly for Wales Corporate Governance framework.

[http://www.assemblywales.org/abthome/about\\_us-commission\\_assembly\\_administration/comm-corporate-framework.htm](http://www.assemblywales.org/abthome/about_us-commission_assembly_administration/comm-corporate-framework.htm)

Facebook

<https://www.facebook.com/nationalassemblyforwales>

Twitter

<https://twitter.com/assemblywales>

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## Governance

### Corporate Responsibility

Corporate governance is the term used to describe the way in which organisations are directed, controlled and led. The National Assembly for Wales Commission has adopted a defined set of governance principles and supporting provisions set out in our Corporate Governance framework. Together they are intended to help instil an effective operational culture throughout the organisation which, in turn, will aid the process of managing key business risks. The principles and supporting provisions are consistent with the UK Corporate Governance Code and the Good Governance Code for Public Services and they will be used to guide the work of the Commission and its staff.

Sustainability is central to the effective operation of the organisation and as such, the Assembly Commission ensures *'we take a sensible, long-term view about what the organisation is trying to achieve and what it is doing to get there'* in respect of our vision, risks and opportunities. The Chief Executive Officer, Claire Clancy has overall responsibility for sustainability and together with Peter Black, the Commissioner for Sustainability, she approves the environmental policy annually and also approves the Annual Environmental Report following the recommendations of the Environmental Steering Group who undertake the management review and approve the annual sustainability targets and action plan.

The Assembly's board of five Commissioners who are accountable to the Assembly, the people of Wales, and other key stakeholders ensure the Commission's approach to governance remains a key priority in the delivery of our strategic aims. The Commissioners scrutinise and endorse progress against the Carbon Management Plan annually, and in particular ensure we have the resources and direction for achieving our long term goals and continue to comply with regulatory requirements and applicable environmental laws.

The Investment Board, chaired by the Chief Executive, is responsible for approving capital funding for the environmental programme in line with our corporate priorities.

### Regulatory Compliance

The importance of legal compliance continues to be an integral arm of good governance and a key driver for continual improvement in environmental performance. As new and emerging legislation gathers pace, opportunities and risks present themselves and it is our



aim to where possible, react to and anticipate emerging demands arising from the regulatory landscape in a positive manner.

We take our legal obligations very seriously and understand the importance of complying with all relevant environmental legislation and regulation. We understand we have a responsibility and duty of care with regard to the disposal of waste, and the correct interpretation and application of any new legislation as it applies to our business. To help with this, we manage our legislation register through ELUS (Environmental Legislation Update Service), a portal that provides a legislation interpretation service, highlights new legislation and keeps us informed of any updates relevant to the Assembly. Our register is also audited internally and externally twice a year to ensure continued compliance together with annual compliance checks on each piece of applicable legislation.

Throughout 2012/13, there were no breaches of environmental legislation.

## Risk Management

Risk management is an integral part of good governance. We fully understand how our operations and activities interact with, and have a direct impact on the environment and how the environment, both natural and business can directly impact on us. Essentially, the very nature of managing sustainability is tantamount to risk management. The changing and unpredictable climate poses serious threats to business resilience but at the same time provides opportunities for adaptation and mitigation. To this end, we have a Corporate Risk Framework which enables us to regularly scrutinise and position ourselves in relation to sustainability risk from an economic, environmental and social perspective, and this in turn informs our investment priorities and strategic direction in relation to key areas such as the increasing demand for finite resources.

As a leading public institution in Wales, we want to lead by example in corporate sustainability, to create a resilient, sustainable estate that is fit for the challenges of the future. In effect, this is about embedding a consideration of sustainability at the heart of our risk management processes; about managing utility spends and reducing costs, and as importantly it is about reducing our impact on the environment and exposure to negative publicity.

We have taken comprehensive measures to mitigate important risks. These measures include a thorough review of sustainability risks before entering into new, large contracts

and procurement, ongoing reviews of risks for projects and day to day business and investment in key impact areas such as energy and resource efficiency.

## Business Continuity

As the effects of climate change become ever more prevalent on a local, national and international scale and seasonal weather patterns become less predictable, climatic extremes are having a direct impact on the availability of water, food and other natural resources. With a demand for these resources growing, this results in operational business risks resulting from diminishing availability of raw material sources; price fluctuation, budget forecasting and compliance with future climate change legislation.

As part of our current risk management framework and as a future aspect of our Business Continuity Development Programme, we have identified high level risks posed to the Assembly's operations and supply chains in light of severe weather events, or longer term climatic trends. In response we have proposed adaptation measures that would enable us to continue to deliver our business objectives in light of such events (eg loss of electricity) and are trialling these to see how the business would cope. From a mitigation perspective, we have theoretically tested the resilience of our supply chains and identified mitigating actions and responses to ensure continued business sustainability.

## Key environmental impacts

Each year the Assembly undertakes a primary assessment of its key environmental impacts borne out of environmental performance, economic data and stakeholder feedback. This is vital for ensuring we balance our internal and external priorities. This assessment is carried out to ensure we continue to align with our strategic sustainability commitments, our corporate goals, the changing demands of the business in light of an unpredictable political and climatic environment and the identification of emerging issues. From this process, we have identified our key environmental impacts and these are outlined below.

- **Energy and Greenhouse Gases:** Reducing energy use and greenhouse gas emissions of current activities and mitigating future developments.
- **Water Use:** Managing and reducing the Assembly's direct and indirect water footprint to mitigate water scarcity risk in operations and throughout our supply chain.
- **Waste and Recycling:** Creating a culture that understands how to improve resource efficiency through day to day operational decisions, with a clear focus on eradicating waste to landfill whilst enhancing re-use and recycling of materials.
- **Business travel:** Promoting the use of sustainable modes of travel for commuter and business travel, and embracing new and emerging technologies for digital solutions that mitigate the need for travel.
- **Occupant engagement:** developing a culture of engaged occupants that value and understand how they interact with many elements of the environment in their day to day work and to embed an inclusive culture where sustainability features at the heart of all decisions, procurement and operational delivery.
- **Supply Chain engagement:** Understanding and influencing the development of the local supply chain through the profiling and integration of performance of our key suppliers.

## Key Performance Indicators (KPIs)

Based on the information above, we have identified a list of refined key performance indicators that best represent our most significant environmental impacts and provide a holistic representation of progress year on year. This report continues to include all performance metrics relevant to our operations but these provide a clear overview of those performance areas which are key to our strategic sustainability commitments and focus.

Key performance indicators	2010/11	2011/12	2012/13
Total net emissions (Scopes, 1, 2 and 3), tCO <sub>2</sub> e	2,456	2,345	2,371
Total energy emissions, tCO <sub>2</sub> e	1,947	1,828	1,760
Waste to landfill in tonnes,	42.6	39.1	17.2
Recycle and reuse rate, percentage of total	68%	73%	83%
Total water consumption, m <sup>3</sup>	8,183	8,457	11,813
Total business travel emissions, tCO <sub>2</sub> e	129	204	203

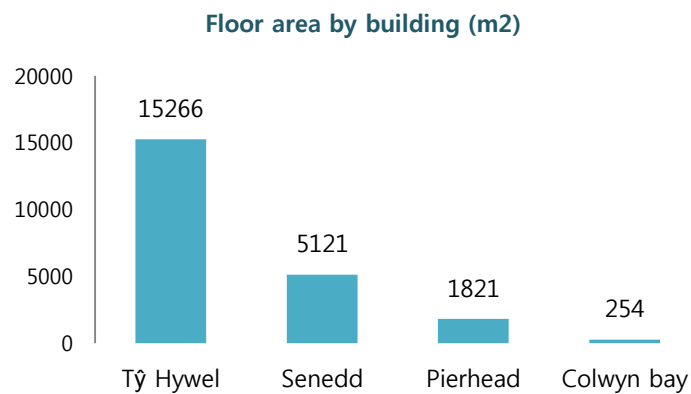
## Who we are

The National Assembly for Wales and the Assembly Commission operate out of four buildings – Tŷ Hywel, the Senedd and Pierhead buildings in Cardiff Bay and a small office in Colwyn Bay. These buildings are a mixture of wholly owned and leased assets. Tŷ Hywel, constructed in the early 1990s is a largely open plan building providing office accommodation for around 700 staff across five floors. The iconic Senedd building houses the Assembly's debating chamber and is constructed to BREAAAM Excellent standards using a mixture of renewable energy technologies for heating, rain water harvesting and mixed mode natural ventilation systems for cooling. The Pierhead is a Grade 1 listed building constructed in 1897 which represents one of Cardiff's most familiar, historic landmarks. It was formally used as the headquarters for the Bute Dock Company. In 2010, the Pierhead was transformed into a Welsh history museum and exhibition open to visitors all year round. Finally, a small number of staff occupy an office area in a small leased, multi tenanted building in Colwyn Bay.

## Size of the estate

The table below outlines the breakdown of the estate by floor area as at 31 March 2013. There has been a marginal increase in occupation of the upper floors in the Pierhead building over the year, however on the whole occupant rates remain relatively constant.

The total floor area remains constant at 22,462m<sup>2</sup>. Tŷ Hywel accounts for 68% of this total area and provides flexible office accommodation for around 700 occupants. The ongoing refurbishment programme in Tŷ Hywel continues to provide modern, flexible, carbon efficient office space with improved facilities and working conditions for Assembly Members and staff.



\*Excludes shared amenities and communal areas used by all ground floor tenants.

## Environmental Management System (EMS)

OUR TARGET	PROGRESS	TARGET 2013/14
Maintain certification to a UKAS accredited environmental management system for the whole Cardiff Bay estate.	 We were successful in retaining certification to Level 5 of the Green Dragon Environmental Standard for the sixth year running.	Maintain certification to a UKAS accredited environmental management system for the whole Cardiff Bay estate.

To demonstrate our commitment to achieving the highest standards of environmental stewardship, the Assembly ensures the mitigation of environmental impacts through the operation of a UKAS accredited environmental management system (EMS). For the last six

years, we have been certified to Level 5 of the Green Dragon standard (a Welsh standard broadly equivalent to ISO14001), the highest level attainable. The system is implemented across the whole Cardiff Bay estate and externally audited annually.

The management system provides a systematic and methodical approach to minimising the impact of our activities and operations on the environment. Through a staged process of planning, implementing and reviewing our response to those impacts, it enables the Assembly to take corrective action and modify our practices, ensuring that environmental management remains a key priority of our daily business. The EMS also ensures that as an organisation, we address the environmental issues that are relevant and thoroughly incorporated into normal business operations, to continually improve our environmental performance standards, ensure compliance with relevant legislation and the achievement of efficiency gains and resulting financial savings where possible.

The system is expected to deliver continual improvement in environmental performance to meet the requirements of re-certification, and we are proud to have maintained this for the past six years at Level 5. It provides a systematic means of collecting and managing data and provides a robust baseline through which we can assess performance. This in turn provides us with an up to date profile of our progress against the documented objectives and targets. We improve and develop the system year on year as we enhance our understanding of our environmental impacts and ensure the evolution of our processes and procedures in light of changes in the business world relevant to our operations.

## Our significant environmental impacts

A key part of understanding the Assembly's impact on the environment is the identification of the direct and indirect ways in which the organisation interacts with the environment. To achieve this, we assess the aspects and impacts of our operations through the Assembly's corporate risk assessment framework, and develop operational and management strategies to minimise these impacts. Each year we undertake an analysis of our significant impacts to ensure we continue to address our core priorities. The analysis reveals that energy, water, transport, supply chain and use of paper remain our highest priorities and at the same time they represent our biggest challenges. We fully understand that our primary aim is to ensure we provide a working environment in which our Members and staff can deliver outstanding value and service and that we need to be able to do this through improved resource efficiency.

While our most material impacts remain fairly consistent each year, this reflects the relatively consistent nature of our business, our buildings and our work. However, this does not mean we do not seek out new opportunities to influence more sustainable solutions that may arise from longer term trends such as declining biodiversity, energy security and water scarcity. In particular we appreciate we need to do more to fully understand the indirect impacts of our work on our supply chain and local communities whilst at the same time addressing the expectations of our stakeholders.

Environmental Aspects and impacts			
Aspect	Activity	Impact	Significance rating
Use of energy	Heating and lighting, powering IT equipment, air conditioning and server rooms.	Resource depletion, air pollution - greenhouse gas emissions by electricity generators, use of renewable energy resources (+ve)	30
Buildings use of water	Catering/Dishwashing, Chillers/Humidifiers, Heating, Showers, Washbasins/WCs, Cleaning/Building cleaning	Greenhouse gas emissions, resource depletion, use of grey water (+ve)	30
Waste management	Disposal of landfill waste, glass, plastic, composting (food waste), cardboard, tins, fluorescent tubes, furniture, ink toners, replacement fittings.	GHG emissions, resource depletion, use of water, oil, leather, nutrients put back in soil from composting (+ve), reduced use of chemical fertilisers (+ve)	20
Paper use	Printers, office activities, e-mails, copying, publications	Resource depletion, raw materials, 100% recycled paper supply (+ve)	30
Transport	Business travel, official travel, home to office travel, parking facilities.	Noise and air pollution, GHG emissions, water and land pollution, congestion.	30
Delivery of goods/ materials from supply chain	Fuel consumption, noise and traffic congestion from transport to and from site, spillage from deliveries.	GHG emissions by suppliers/ deliveries, Environmental impacts of suppliers, resource depletion, land contamination.	30

## Management Review

Each year as a requirement in Green Dragon, our environmental management system is subjected to a full management review to ensure its continued effectiveness as a vehicle for delivering continual environmental improvement and its relevance to the changing business demands of the Assembly. The review is undertaken by the Environmental Steering Group and it provides them with an opportunity to scrutinise and critically appraise our progress whilst collectively suggesting and agreeing improvements for the coming year. They also approve the Annual Environmental Report which is then sent to Claire Clancy and The Commissioner for Sustainability for final approval.

This year, and in a more timely fashion, the environmental policy and objectives and targets were agreed soon after the conclusion of the financial year. Therefore, during the management review the group collectively reviewed the following:

- Progress against actions raised in the previous review
- An appraisal of the results of the internal and external audits
- Performance against targets in 2012/13
- The Annual Environmental report
- The communication programme for engaging occupants in sustainable working.

On the whole the group were pleased with progress across the main impact areas, however noted the impact that the weather had on our energy performance and the need for regular monitoring of performance to ensure unusual spikes or trends are picked up and acted on quickly. They also appreciated that as we move closer to our 2015 goals we need to be clear about our focus for improvement, investment and dialogue with our key stakeholders.

## Environmental Policy

Our environmental policy aims to reflect our key values in ensuring we carry out our operations and activities in a sustainable and responsible manner. Following a number of fundamental changes to the Assembly's business in recent years such as the onset of the Forth Assembly, a number of new Assembly Members, revised corporate values and a 'yes' vote in the referendum affording us more powers, it was felt the Environmental Policy and



the Sustainable Paper policy should be reviewed accordingly to ensure they represent our current values and strategic direction.

This was carried out by the Environmental Steering Group in May this year and collectively they endorsed the policies before they were finally approved by The Commissioner for Sustainability.

## Environmental Policy Statement 2013-14

The National Assembly for Wales Commission, ensures the provision of the property, staff and services required for the effective functioning of the National Assembly for Wales. Our aim is to be an exemplary organisation in terms of sustainability, and to ensure the efficient delivery of our services with due regard to the principle of promoting sustainable development.

Our day-to-day operations have an impact on the environment, arising mainly through the consumption of resources (energy, water and paper), travel and the generation of waste.

The National Assembly Commission commits to:

Ensure the efficient use of our buildings, and seek opportunities to promote the sustainable credentials of our estate, in particular the Senedd to our stakeholders, the public and visitors alike.

- Ensure all members of staff, Members and their staff and other building users fully understand the contribution they can make to improve environmental performance.
- Minimise the use of natural resources in the delivery of our services, specifically energy, water and paper, minimise waste and prevent pollution.
- Dedicate appropriate time and resource to improving the energy efficiency of our estate.
- Reduce the need to travel, where appropriate; and promote responsible and sustainable travel in the performance of our duties.


- Place sustainability considerations at the heart of transparent decision-making processes and integrate purchasing principles which favour those products and services which cause the least harm to the environment.
- Plan, adapt and ensure sufficient measures/resources are in place to future proof our assets against the challenges of a changing climate.
- Comply with all relevant environmental regulations, standards and other codes of practice.
- Monitor and report progress against stretching objectives and targets to ensure continuous improvement.
- Develop a culture of environmental responsibility amongst our occupants, contractors, suppliers and visitors to our buildings.
- Require our suppliers and contractors to ensure that goods and services procured support our environmental policy.
- Ensure the continued certification to, and operation of an established UKAS accredited environmental management system through demonstrable improvements in our environmental performance.

This policy statement applies to the whole Assembly estate (comprising of Tŷ Hywel, Senedd, Pierhead and the Colwyn Bay office) and will be reviewed annually and made available to all staff of the National Assembly for Wales through our intranet site, and any other interested parties through our website. It will be contractually binding on suppliers who use our premises and will be made available to anyone on request.

## Our progress

**+1.1%**Increase in total net scopes  
1-3 emissions.

## Greenhouse Gas Emissions

OUR TARGET	PROGRESS	TARGET 2013/14
Reduce net greenhouse gas emissions by 3% per annum compared to the 2008/09 baseline	 Net emissions increased by 1% compared to last year but we remain on target in relation to cumulative reductions since 2008/09.	Reduce net greenhouse gas emissions by 3% per annum compared to the 2008/09 baseline

We measure direct greenhouse gas emissions in carbon dioxide equivalent (CO<sub>2</sub>e), and update our carbon footprint calculations annually to reflect latest Government guidance. Greenhouse gas emissions are reported in two ways: gross emissions (that treat electricity from renewables in the same way as 'brown' electricity), and net emissions (that treat electricity from renewables as zero carbon and allow for operational offsets). Emission factors used to calculate GHG emissions have been taken from the Department for Environment, Food and Rural Affairs (Defra) 2012 Conversion Factors for Company reporting.

Our greenhouse gas emissions are categorised into Scopes 1-3 emissions in accordance with standardised principles for company reporting. All prior-year Scope 1, 2, and 3 emissions data vary to some extent from previously reported values, either in the Annual Report and Statement of Accounts or the Annual Environmental Report because of updates to emissions factors, methodologies, improvements to data collection processes and correction of minor errors found upon repeated review.

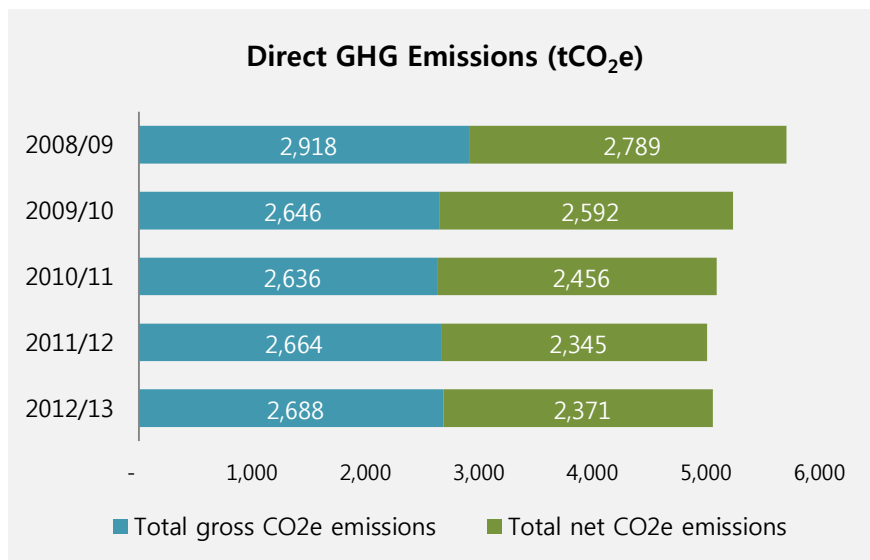
The Assembly's gross greenhouse gas emissions have increased by 1% in 2012/13 and have reduced by 8% since 2008/09. Net emissions have increased by 1.1% in 2012/13 and reduced by 15% since 2008/09. This

partial increase in CO<sub>2</sub>e emissions from 2011/12 is reflected by the prolonged demand for heating during a long, cold winter in which the average temperature from October to March was just 6.1 degrees, a drop of 2.6 degrees on the same period in the previous year; together with insignificant reductions in business travel emissions. Despite this increase, we remain on course to achieve our target reduction of 3% per annum, cumulatively since 2008/09.

**Gross direct greenhouse gas emissions**

**8%**

reduction in total gross greenhouse gas emissions since 2008/09 (tonnes CO<sub>2</sub>e)



**Net direct greenhouse gas emissions**

**15%**

reduction in net gross greenhouse gas emissions since 2008/09 (tonnes CO<sub>2</sub>e)

## Scope 1 and 2 emissions

The Assembly's GHG emissions are largely attributable to high carbon intensity levels associated with the consumption of energy, in particular electricity.

Despite this, since 2008/09 we have continued to make reductions in our overall absolute Scope 1 & 2 emissions through a targeted improvement programme of energy efficiency initiatives resulting in a cumulative reduction from 2,572 tonnes of CO<sub>2</sub> equivalent (CO<sub>2</sub>e) in 2008/09 to 2,152 tonnes of CO<sub>2</sub>e in 2012/13.

GHG Emissions	2008/09	2009/10	2010/11	2011/12	2012/13
Scope 1	434	356	359	297	392
Scope 2	2,138	2,044	1,947	1,828	1,760
Total	2,572	2,400	2,306	2,125	2,152

### Scope 2 greenhouse gas emissions

**378t**

reduction in scope 2 greenhouse gas emissions since 2008/09 (tonnes CO<sub>2</sub>e)

Following steep reductions in Scope 1 emissions since 2008/09 predominantly from incremental improvements in heating efficiency, building management system optimisation and mild winters, the winter over the past year brought extreme, prolonged cold weather. As a result emissions increased by 32% on last year representing our highest consumption rates since 2008/09 accounting for the inclusion of business travel emissions from owned vehicles and refrigerant gas emitted from the operation of air-conditioning units, chillers and heat pumps which has been added to the Scope 1 boundary in the last two years as a result of improved data capture.

## Scope 3 emissions

The National Assembly's Scope 3 GHG emissions currently include emissions associated with business travel, waste generation, water consumption and treatment. It is acknowledged that total indirect emissions are likely to be far larger than this as we currently don't include emissions attributable to our suppliers activities or the commuting of our occupants, however we hope to include this as our accounting systems continue to develop. As business travel emissions account for around 90% of our reported Scope 3 emissions, the modes of transport used heavily influence the footprint attributable to these indirect emissions.

GHG Emissions	2008/09	2009/10	2010/11	2011/12	2012/13
Scope 3	217	192	150	220	219

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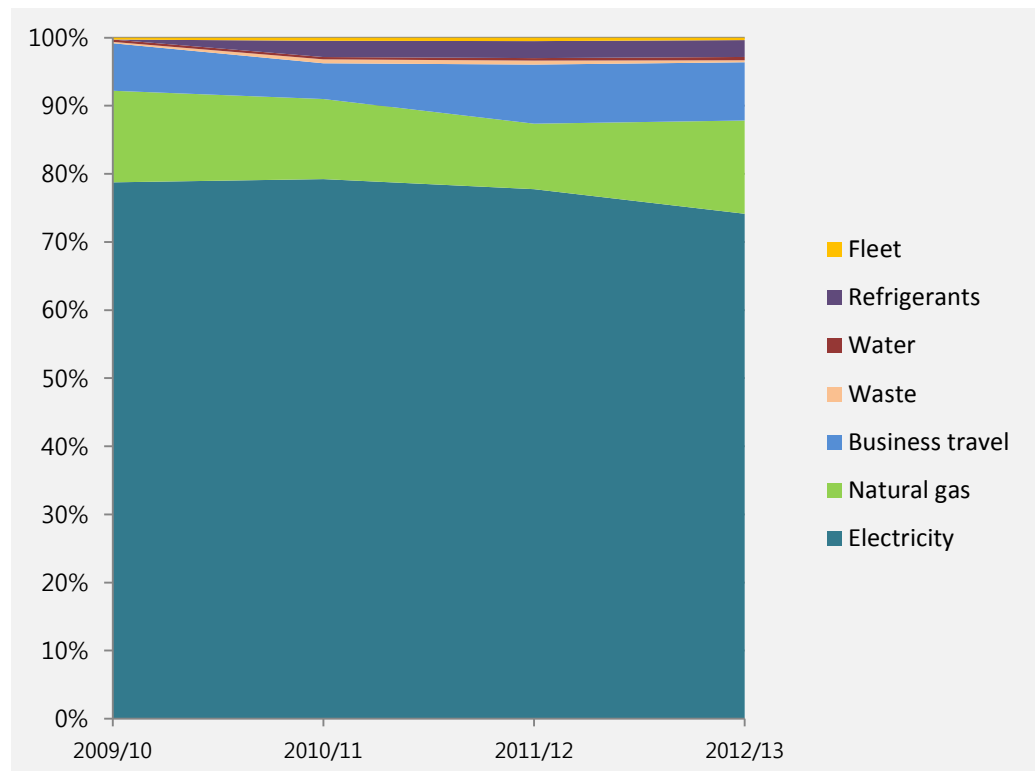
**-0.5%**

reduction in total scope 3  
emissions compared to last year.

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## Emission trends

In the financial year 2012/13, the total carbon footprint comprises the following emission sources in order of the size of contribution and illustrates trends in comparison to previous years.



In order of the size of contribution, the primary sources of emissions were:

- Purchased electricity from the grid (74%)
- Natural gas consumption predominantly for heating and hot water (14%)
- Business travel (8.5%)
- Refrigerants (2.5%)

Electricity represents one of the most carbon intensive fuels and this is reflected in the proportionate share of the footprint it occupies. The Assembly's operations rely heavily on the supply of grid electricity for all its functions and much of the investment available is channelled towards reducing this reliance. Together with natural gas consumption they contribute around 88% of the total emissions from the estate, an increase

of 16% compared to 2011/12. However, despite the increase in gas consumption in 2012/13, electricity consumption and emissions continue to drop. Business travel emissions represent the second largest contributor to the carbon footprint amounting to 8.5% of the total, a marginal increase of 6% compared to last year despite a slightly lower emissions total.

As a result of improved recycling practices and Defra's changes to the conversion factors, waste no longer represents a significant source of emissions and has been surpassed by refrigerants (2.5%) used through the operation of air conditioning units, chillers and heat pumps. Some of this equipment contains harmful CFC's which are being phased out as part of government legislation and will need to be replaced accordingly with less polluting refrigerant gases. This piece of work is under review pending a phased implementation.

Despite only occupying marginal proportions of the total footprint, both water emissions and fleet emissions are not overlooked in respect of improvements as the economic and availability impacts associated with natural water resources are of increasing concern as demand increases, and fleet emissions are regulated through the use of efficient vehicles, bio-diesel (for the outreach bus) and reduced use of the cleaning bus through changes to rotas and working hours.



## Energy

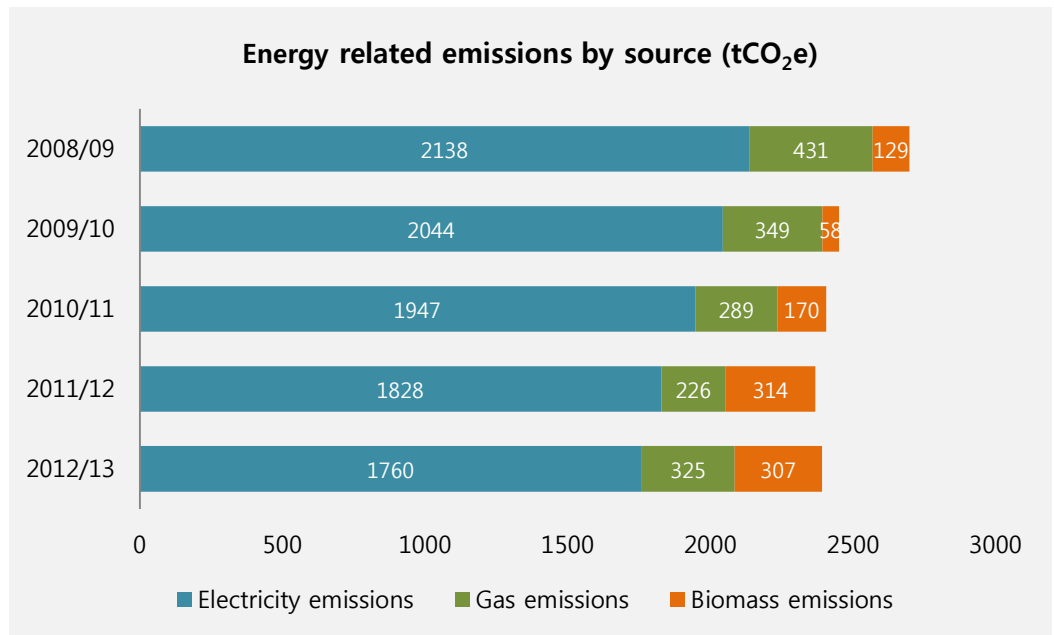
OUR TARGET	PROGRESS	TARGET 2013/14
Reduce net energy emissions by 40% by 2015 compared to the 2008/09 baseline.	<b>X</b> Net energy emissions increased by 1.5% compared to last year.	Reduce net energy emissions by 40% by 2015 compared to the 2008/09 baseline.

Energy use in our buildings comprises our largest source of direct greenhouse gas emissions (88%) and represents our top priority for reducing our carbon footprint. Gross related energy emissions have decreased by 11.5% compared to 2008/09. As a result of increased use and reliability of biomass as the primary heating source for the Senedd, net energy related CO<sub>2</sub>e emissions have decreased by 22% over the same period. Electricity emissions continue to be the most significant operational impact with a share of total gross energy emissions amounting to 85% or 1760 tonnes of CO<sub>2</sub>e. Since 2008/09, we have achieved emissions reductions of 17% for electricity and 25% for natural gas. This has been offset by an increase in biomass consumption of 135% over the same period.

### Energy greenhouse gas emissions

**22%**

reduction in net energy greenhouse gas emissions since 2008/09 (tonnes CO<sub>2</sub>e)

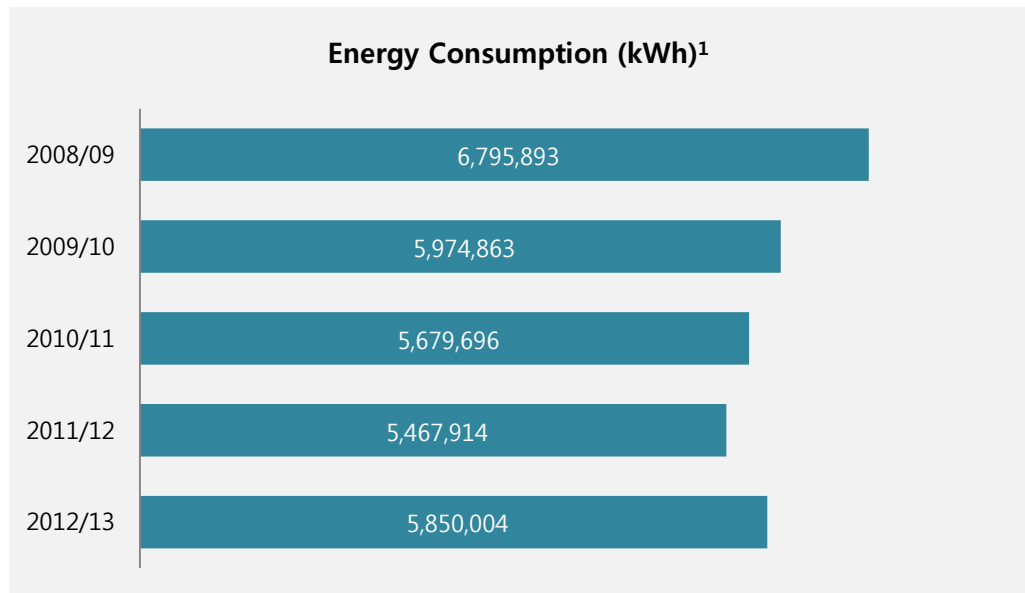


During 2012/13, energy consumption across the Assembly increased by 7% compared with 2011/12 but accounting for this, it has decreased cumulatively by 9% since 2008/09. The increase in consumption was largely attributable to extended gas use for heating throughout the cold winter resulting in a 44% increase compared to a 4% reduction in electricity consumption over the same period.

#### Energy consumption (kWh)

**14%**

reduction in energy consumption since 2008/09

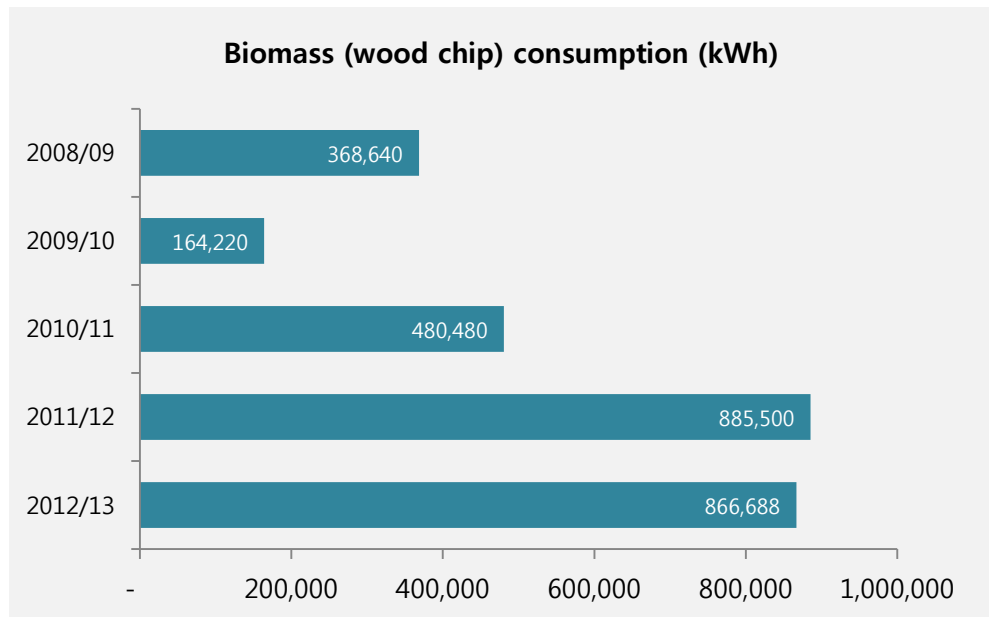


<sup>1</sup>Consists of electricity, gas and biomass fuels.

### On site renewables consumption

A key aspect of the Senedd's BREAAAM 'excellent' rating was the fitting of a 360kw, modulating binder biomass boiler as the primary heating source for the building. Although not exclusively used (the building has a supply of natural gas in the event of failure, excess heating demand or fuel supply shortages) during 2012/13, the biomass boiler accounted for 81 per cent of the total resources required for heating. The continued optimisation, regular monitoring and management of the boiler has resulted in year on year increases in its reliability, improvements in functionality and enhanced efficiency.

To improve burning efficiency further, the supply of wood chips was changed to a grade containing lower moisture levels, resulting in drier chips that enhanced heating efficiency and reduced the frequency of deliveries. Woodchip is sourced from a local supplier on a demand led basis that ensures a reliable supply as required whilst mitigating supplier travel emissions where possible.



Biomass emissions are classed as being 'outside scopes 1-3' as the emissions generated through the burning of the fuel are reabsorbed during the growth phase. Therefore, they are only counted during the reporting of gross emissions where emissions from renewables are treated the same as brown electricity.

To enhance the efficiency of the biomass boiler during prolonged cold spells, we installed four buffer vessels into the system that were capable of holding and then circulating significantly larger volumes of hot water around the system during peak periods. The vessels are fully insulated and prevent waste heat from escaping the system thereby channelling this into maintaining a higher volume of hot water for heating. This also reduces the reliance and consumption of natural gas in times of high demand where previously, the biomass boiler has struggled to cope.

### **Energy Programme**

The Assembly's energy strategy focuses on three main strands: an ongoing programme of building improvements across the estate; a refurbishment and retrofit programme designed to enhance energy efficiency and improve comfort; and the encouragement of occupant engagement to improve buy-in and sustainable working practices. Capital investment initiatives are subject to scrutiny and available funds but form a key part of

the commitment with the Carbon Management Plan to be a low carbon estate by 2015. Our primary focus lies with Ty Hywel, an office block comprising five floors which comprises 62% of total energy use.

Initiatives delivered in 2012/13 included:

- the replacement of halogens with LEDS (light emitting diodes) within the Assembly chamber to minimise glare and save energy;
- the continued optimization of building management systems to ensure that lighting, heating, ventilation and air conditioning systems operate as efficiently as possible
- refitting solar film throughout the ground floor of Ty Hywel to reduce solar heat gain and glare;
- continued roll-out of motion sensor lights across offices in Ty Hywel;
- a reduction in the demand supply for electricity in Ty Hywel and the Senedd as a result of improved energy efficiency;
- improved controls of the ground source heat pump in the Senedd leading to savings in energy and fault finding;
- the installation of variable speed drives to reduce pump speed and facilitate better control.
- the decommissioning of a server farm and refurbishment into an office.

## Cooling Systems

Air conditioning systems throughout the Assembly are a significant potential source of GHG emissions due to their use of hydrofluorocarbons (HFCs). Legislation requires that usage of these is phased out by December 2014 and we are planning the phased replacement of these units with more energy efficient, cost effective models that contain R407A, a far less polluting gas in all air conditioning units, chillers and heat pumps across the estate. This will not only reduce the carbon emissions associated with 'in use' leakage of these gases but also reduce running costs.

## Indirect Emissions – Scope 3

Our indirect emissions are those emissions that the Assembly produces through its activities, but occur from sources not owned or controlled by the Assembly. These include the following:

- business travel,
- occupant commuting,
- supply chain (procurement),
- waste
- water

Reporting indirect emissions raises a number of potential challenges and resource requirements in capturing and recording data and as guidance and processes develop, we will be better placed to report more comprehensively on this area of our business. We fully appreciate our total indirect emissions will be larger than they currently are.

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# 83%

Of all waste recycled or re-used in 2012/13.

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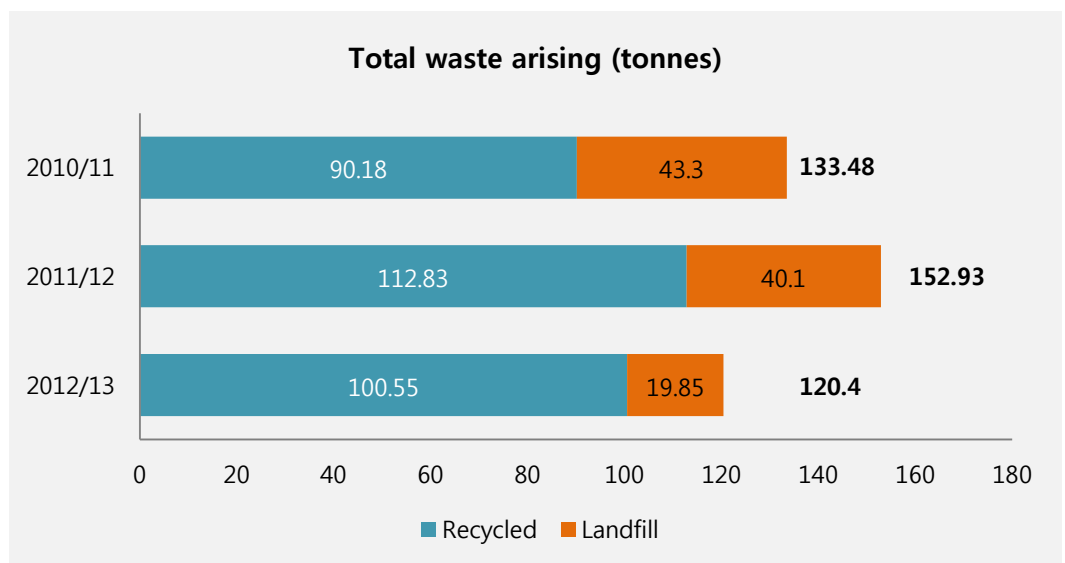
## Waste and Recycling

OUR TARGET		PROGRESS	TARGET 2013/14
Reduce waste to landfill by 5% per annum compared to the 2010/11 baseline.	✓	An increase of 50% in waste diverted from landfill compared to the previous year.	Reduce waste to landfill by 5% per annum compared to the 2010/11 baseline.
Reduce the volume of waste arising by 1.3% per annum in accordance with the Welsh Government Zero Waste Strategy.	✓	Achieved a 21% reduction in volume of waste generated far exceeding the current target	Reduce the volume of waste arising by 1.3% per annum in accordance with the Welsh Government Zero Waste Strategy.

Our ultimate goal is to achieve zero waste to landfill by 2018. Although the minimisation of waste is our first priority, we are developing and encouraging a recycling-oriented waste management system to achieve minimization in waste to landfill. The nature of our business means that on the whole our waste streams are relatively consistent and the majority of waste (paper, card, plastics, glass) stems from recycled materials thereby reducing our environmental impact through the disposal of this waste. This culture also assists in reducing the economic cost of waste disposal and reduces the need for raw materials.

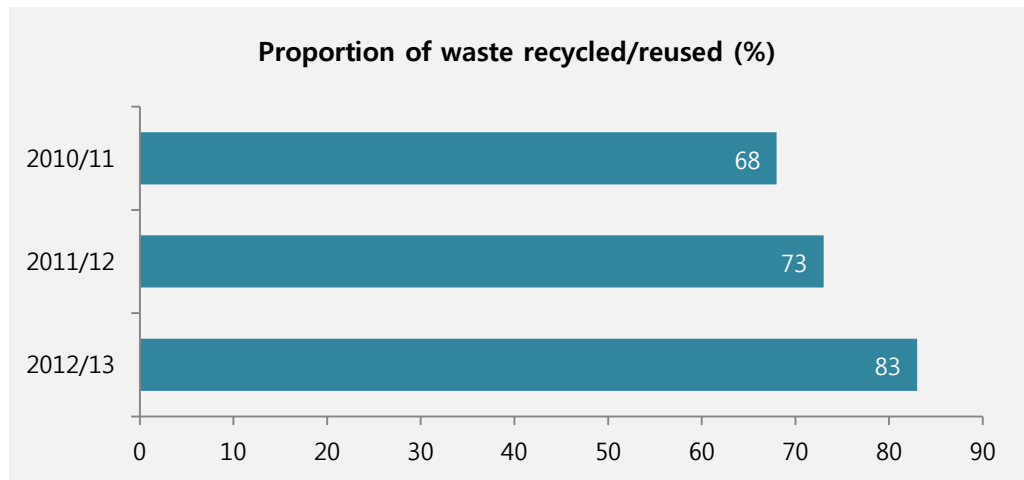
The accuracy of our data has improved this year with the consolidation and centralisation of all waste collection services into one contract and we continue to work with our waste contractors to fully understand the downstream impacts and outlets for all our waste.

In 2012/13, we produced a total of 120 tonnes of waste. Of this, 83% was reused or recycled – a rate that has increased by 12% since 2010/11. Our waste to landfill continues to drop sharply with a total of 19.85 tonnes or just 16% being disposed of in this way in 2012/13. This is a 50% drop on the previous year and a 54% drop on the baseline year - 2010/11. As we strive to achieve our target of zero waste to landfill by 2018, we will continue to seek out new re-use and recycling solutions or the use of alternative materials to eliminate landfill waste completely.



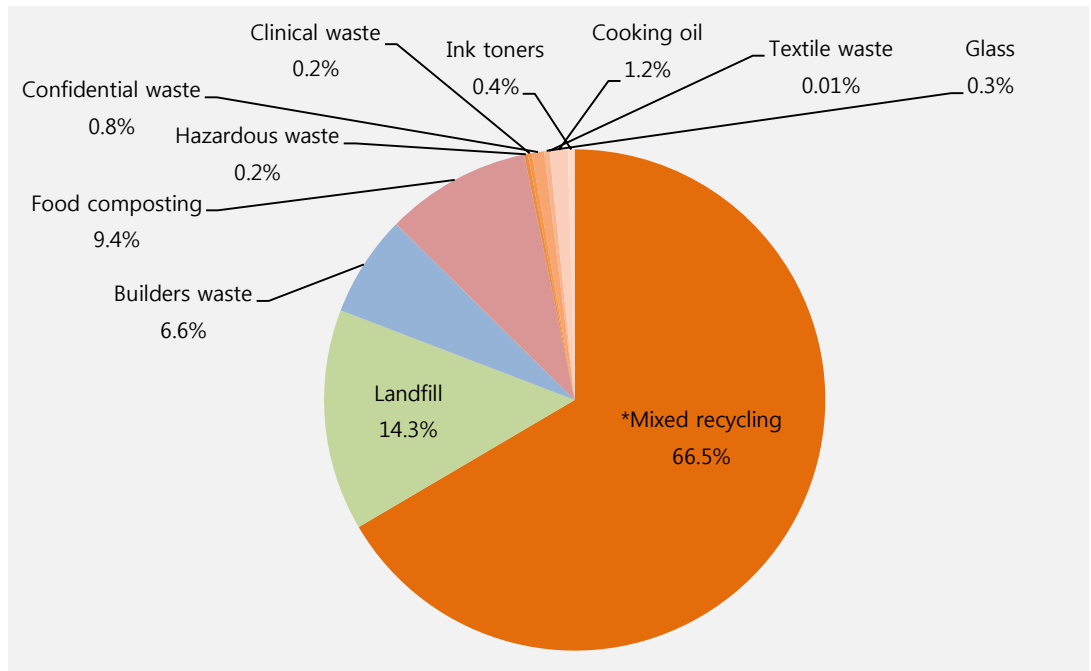
We encourage all our occupants to take steps to reduce their operational waste and recycle any materials that can be recycled in each of our buildings. We ensure the appropriate provision of clearly labelled, adequately sized waste facilities that allow the simple segregation of waste materials. The vast majority of occupants within Ty Hywel do not have personal waste bins and these have been replaced by recycling points around each floor. We also provide information, posters, webpages and guidance on which materials can be recycled with a view to ensuring that as technology, waste processing and contractor performance improves, we will ensure our occupants are made aware of these changes in terms of how it affects them.





### Waste streams

Despite the relative consistency of our waste output, the diversity in the types of waste that we produce on a daily basis is quite broad. A breakdown of all the sources of waste that arise from our operations can be seen below, which also provides a broad overview of the complexities of segregation and the need for local recycling services that can deal responsibly with this waste.



\*Mixed recycling consists of paper, cardboard, plastics and cans.

## Electrical Waste

In accordance with the Waste Electrical and Electronic Equipment (WEEE) Regulations, as a producer of WEEE, the Assembly is responsible for ensuring the legal and responsible disposal of all waste electrical items. This includes TVs, fans, washing machines, catering equipment, PCs and monitors which are taken back for recovery, reuse or recycling by our supplier. Unfortunately at present we do not have accurate data on the volume of WEEE generated on an annual basis, however this will be included in our waste profile as it becomes available.

## Food waste

Since June 2009, we have ensured the segregation, storage and collection of all food waste produced on the Assembly estate. This includes all plate waste, food preparation waste and any food from occupant kitchens around Ty Hywel. Compost caddies are provided across the Assembly to encourage the segregation of food waste which are emptied daily to prevent odour and pests. Food waste collected from the Assembly is composted, to make a high quality fertile soil and used in reclamation projects around Cardiff. In 2012/13, the Assembly diverted 11.3 tonnes of food waste from landfill, amounting to a total of 41.5 tonnes since the initiative began in 2009.

## Waste vegetable oil

In association with our onsite catering contractor, we ensure all waste vegetable oil (used in the preparation of food for the restaurant) is stored and then collected by a local contractor who in turn recycles it by converting it into bio-diesel fuel which is used to power traditional, agricultural machinery and vehicles.

## Project waste

From time to time, we undertake minor and major projects, constructions and refurbishments, all of which generate waste. It is our aim that contractors are briefed on ensuring the suitable recycling of materials from these projects so that sound environmental practices are carried out throughout the supply chain as well as incorporating the principles of sustainability throughout the

planning stage, particularly in relation to the procurement of recycled materials where possible, re-use of existing waste materials and an emphasis of responsible segregation and recycling of waste.

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# 99%

Of all paper purchased is  
100% recycled.

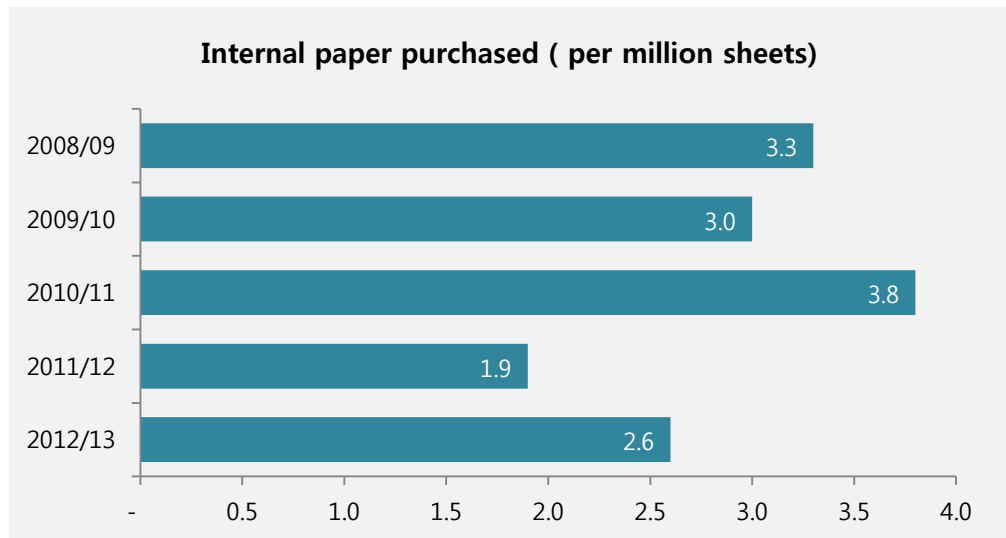
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## Paper use

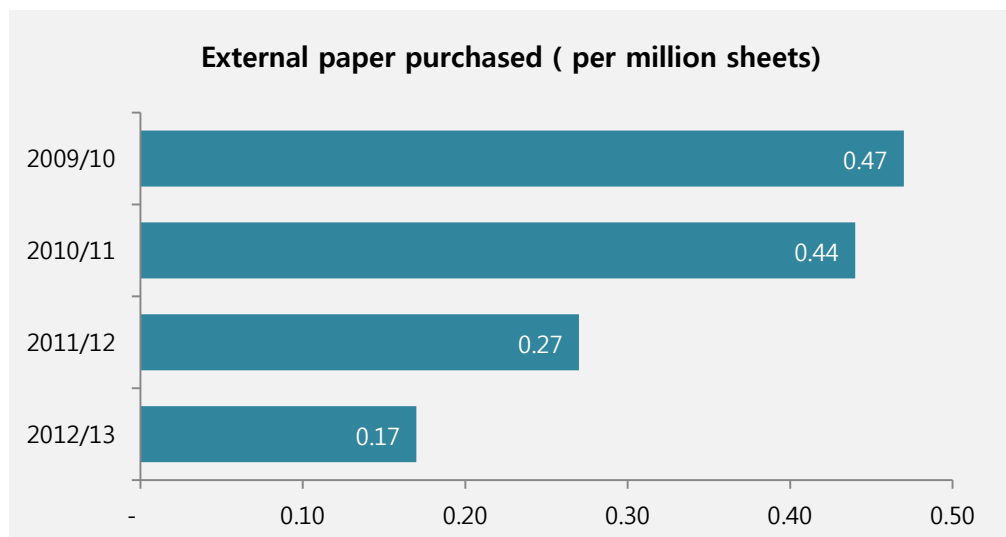
OUR TARGET	PROGRESS	TARGET 2013/14
Ensure 95% of all paper stock purchased for copying and printing is 100% recycled and/or from legal and sustainable sources.	✓ At least 99% of all paper stocks purchased for printing and copying were 100% recycled and/or from legal and sustainable sources.	Ensure 95% of all paper stock purchased for copying and printing is 100% recycled and/or from legal and sustainable sources.

In our line of work, we rely heavily on the use of paper for the purposes of normal business but also for ensuring committee members, Assembly Members and other Assembly Commission staff have the relevant documentation for reference in advance of and during meetings. To this end, we have a Sustainable Paper Policy that commits all occupants to purchase 100% recycled paper from legal and sustainable sources. The vast majority of our paper stock is purchased through our onsite print unit and is Forestry Stewardship Council (FSC) recycled and EU Ecolabel certified. Less than 1% are from known, legal source virgin material, certified by the Programme for Endorsement of Forest Certification Scheme (PEFC).

In the past year, our paper volumes have increased on the previous year by 37% to 2.6 million A4 sheets (or equivalent). This is still well below 2010/11 levels and is representative of increasing business demands and print volume output in respect of reports, committee papers and general paper use.



Similarly, our reliance on external print supply has reduced again this year continuing the downward trend as our capacity and ability to meet more diverse print requirements inhouse have increased. In 2012/13, we commissioned just four print jobs externally amounting to 0.17 million A4 sheets (or equivalent), a reduction of 37% on last year and 64% on 2009/10.



## Printer toner bottles

The multi-functional print devices used in our onsite print room use more unconventional toner bottles instead of standard ink cartridges to provide a higher quality and more efficient print process. Until recent times, the responsible disposal of these bottles has proved troublesome due mainly to the lack of infrastructure and poor facilities to deal with this waste here in the UK and the fact that there is no economic value in toner bottles.

As a result of customer requests and consumer pressure, a solution has now been created which provides a single point source supplier who recycle, recover and reuse 100% of the used toner bottle materials in the UK so that they do not end up in landfill.

The Assembly has taken advantage of this scheme and in the past year alone recycled 0.09 tonnes of toner bottles.

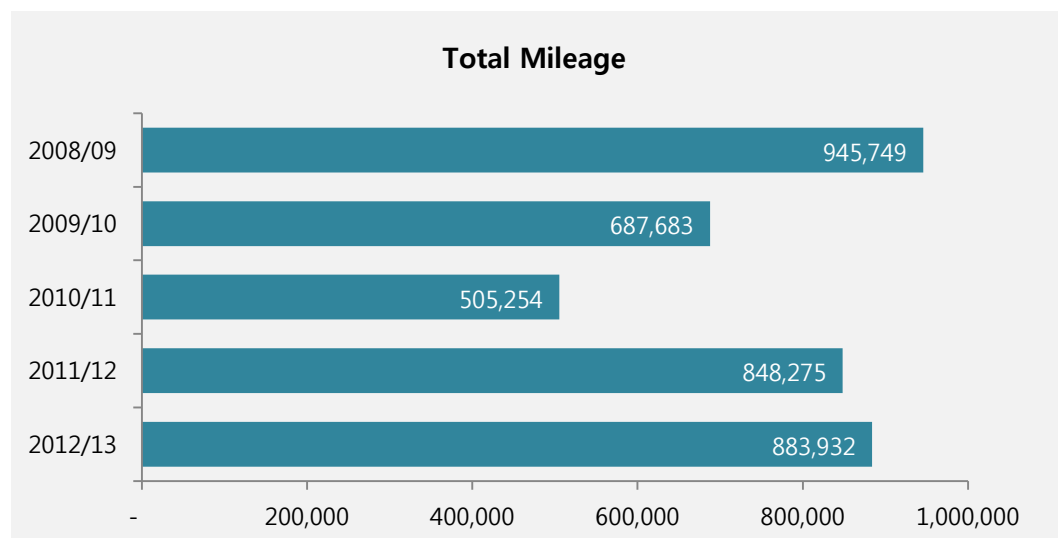
**35%**

increase in the use of rail for business travel in the last five years.

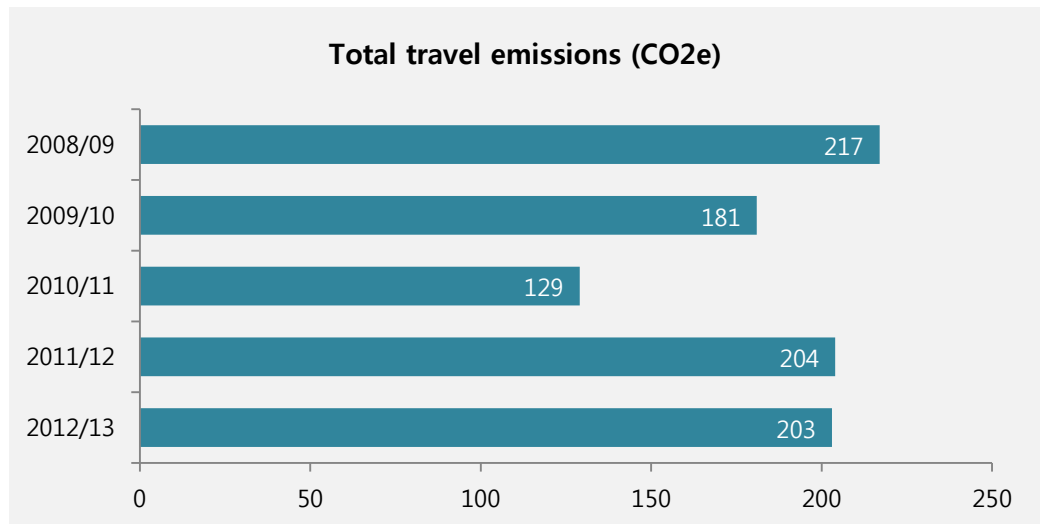
## Business Travel

OUR TARGET	PROGRESS	TARGET 2013/14
Reduce business travel emissions by 15% compared to the 2008/09 baseline.	— A marginal reduction of 1% in travel emissions was achieved but we remain on target.	Reduce business travel emissions by 15% compared to the 2008/09 baseline.

During 2012/13, reported mileage increased on the previous year by 4% yet transport related CO<sub>2</sub>e emissions reduced marginally by 1%. The increase in mileage is largely attributable to an increase in rail travel for business thereby reflecting the small reduction in emissions that result from extensive use of this low carbon mode of transport. Since 2008/09, reported mileage and transport-related CO<sub>2</sub>e emissions have reduced by 6.5% and 8% respectively. In mileage terms, this represents a reduction of 61,817 miles in the same period.



Unlike other organisations that may have consistent work patterns from year to year, the Assembly is almost unique with the peaks and troughs in business travel that arise from irregular activity, particularly prior to and immediately following elections. This means our travel profiles often fluctuate over a four year period, making it difficult to draw accurate conclusions on travel behaviours.



Overall CO<sub>2</sub>e emissions from business travel have decreased by 1% compared with 2011/12. Despite an increase in mileage, this represents an encouraging shift in occupant behaviour as far as choices for modes of travel are concerned, not forgetting the impact that manufacturer improvements are having on decarbonising cars, planes, buses and the national rail network. In respect of air travel in particular, there has been a drop in the emissions conversion factor compared to previous years which has an added impact.

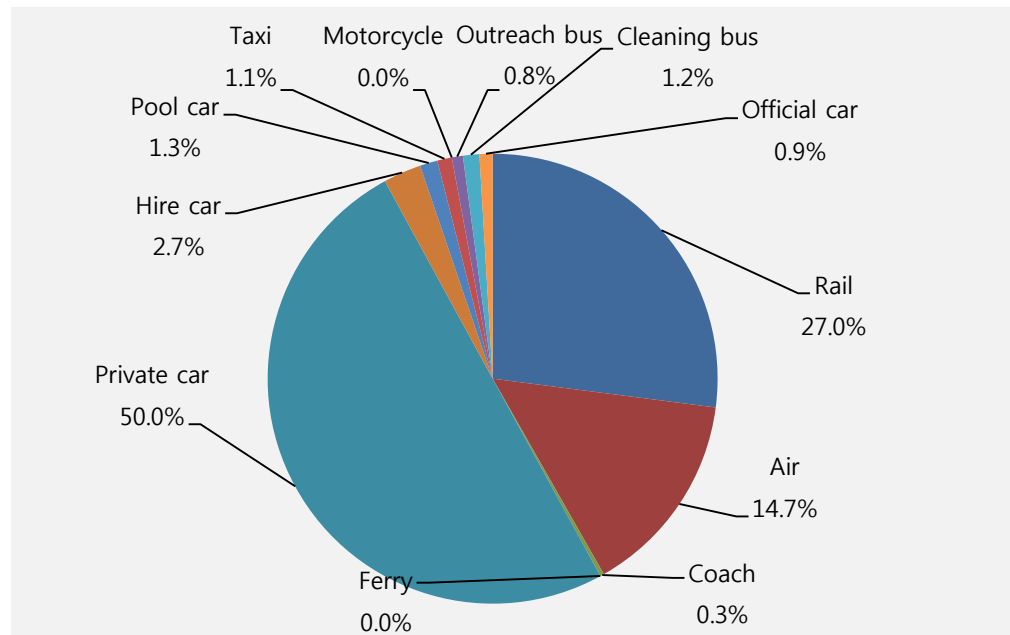
### Hire cars

The Assembly has a hire car contract which places stringent guidelines on the acceptable emissions limit of the car fleet for Assembly business use and a policy that commits staff to order small cars as standard unless it's deemed absolutely necessary (and approved) that a larger car is required. It requires that all cars irrespective of size, must have CO<sub>2</sub>e emissions of less than 150g/km. Since it was introduced in 2010, we have reduced the



average emissions rating of our hire cars to 111g/CO<sub>2</sub> and 95 per cent of all rentals were in cars with an engine size of 1.6l or below. This in turn has resulted in emissions savings of 54% compared to 2008/09.

**Business travel by mode – miles travelled (%)**



Car travel continues to dominate with a 50% share of all business mileage, however we have reduced our use of private cars for business travel by 5.8% on the previous year. This goes hand in hand with an increase in rail travel for business of 24% compared to the previous year and by 35% in the last five years. We have increased the use of the low emission pool car by 63 per cent on the previous year leading to a reduction in mileage attributable to both hire cars and private cars amounting to 54% since 2008/09.

## Commuter Travel

Although we don't currently record emissions attributable to our occupant's commuting, we will aim to improve the accountability and transparency of our Scope 3 emissions by including estimates of these emissions from next year, in the first instance.

Over the past five years, we have taken steps to improve the availability and access to a raft of sustainable travel measures and facilities such as car sharing, 'salary sacrifice' schemes for bicycles, public transport season ticket loans, a low emission pool car for staff, interest free loans for the purchase of bikes, and increasingly flexible IT to promote work 'outside the office' and even during public transport journeys to make productive use of travel time.

Together with improved cycle paths, the introduction of car parking charges in 2010, shower and wash facilities and secure cycle storage and lockers, these schemes have directly contributed to reduced congestion and increased availability of valuable parking spaces in Ty Hywel.

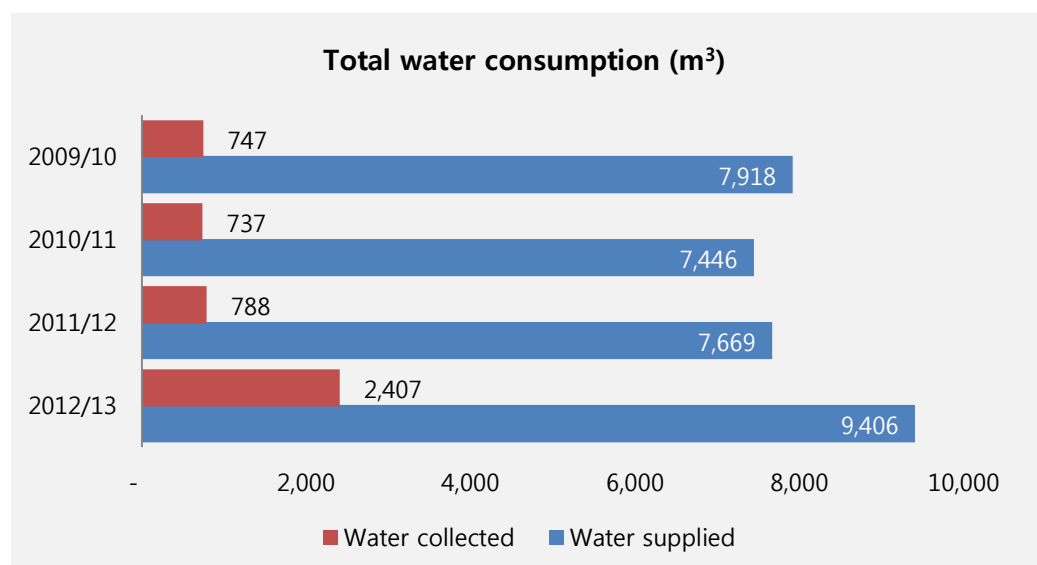
**13%**

reduction in water consumption in Ty Hywel .

## Water

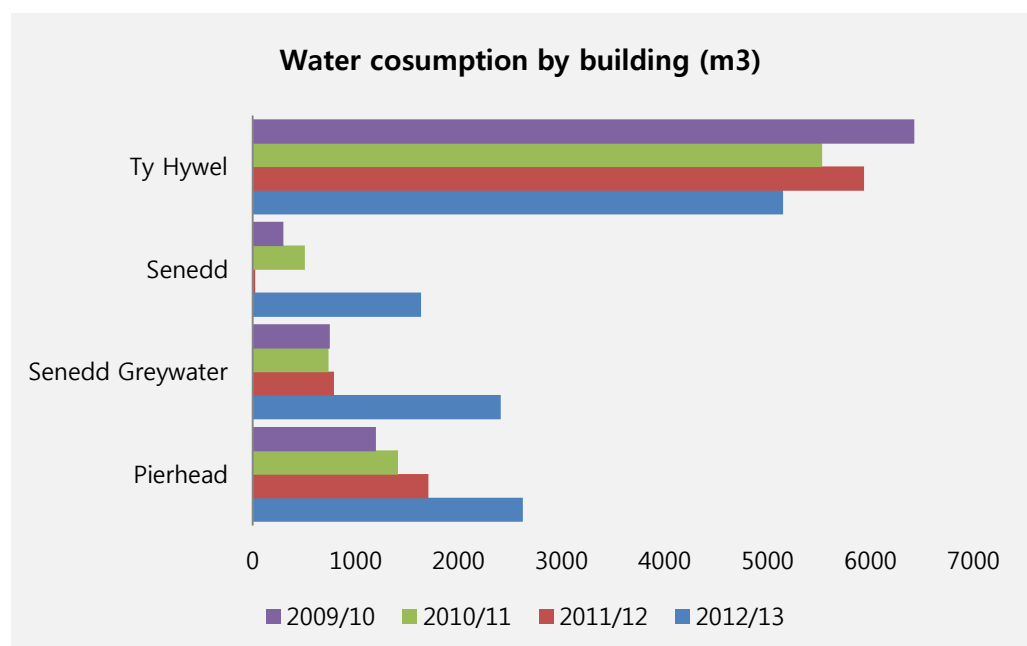
OUR TARGET	PROGRESS	TARGET 2013/14
Reduce water consumption by 10% by 2015 compared to the 2009/10 baseline.	<b>X</b> Consumption increased by 23% on the previous year.	Reduce water consumption by 10% by 2015 compared to the 2009/10 baseline.

The Assembly Estate is a large but non-intensive user of water. Our primary water impacts come from office building potable water use, catering and sanitation, public facilities in our buildings, cleaning and cooling equipment. In 2012/13, total metered water consumption across the estate amounted to 9,406m<sup>3</sup> an increase of 23% on the previous year, with an average water consumption of 2.4m<sup>3</sup> per m<sup>2</sup>. Our direct water consumption trend is generally flat in terms of volume and revenue although we consumed significantly higher volumes of grey water over this period.



Although it does not currently represent a significant operating cost, water consumption remains a significant environmental impact as far as our key material impacts are concerned and we appreciate the need to manage our consumption of this undervalued resource will continue to grow in importance as availability of resources become more stressed. Therefore, reducing water risk and cost exposure makes good business sense. We are not yet in a position to fully understand the indirect impacts of water consumption through the procurement of our goods and services, and we need to enhance our ability to analyse embodied water in projects and materials, to fully understand our total direct and indirect footprint as it relates to our activities.

We have improved our monitoring and recording of water data through the installation of sub-meters on each building providing half-hourly readings on a day to day basis, which helps us detect abnormal consumption.



This year, an undetected leak in the Senedd resulted in the unfortunate loss of large volumes of water which have directly skewed our ability to accurately report on our actual consumption. Encouragingly, following a raft of water efficiency measures installed last year, direct water consumption in Ty Hywel dropped by 13%. However, as the Senedd and

Pierhead buildings are public venues which provide public facilities, direct water consumption from these buildings is often related to visitor numbers. Although there was only a small rise in visitor numbers to the Senedd compared to 2011/12, visitors to the Pierhead increased by 74%. Accordingly, water consumption increased by 54%. This is less of an issue in the Senedd as provision of water for toilet flushing is largely provided through natural, collected water supplies. In the Pierhead, we need to enhance the water efficiency of the public facilities to reduce mains water consumption resulting from frequent use.

### Grey Water (collected water)

Our consumption of collected water is metered the same as mains water consumption. In an effort to enhance our understanding of 'low flow' volumes of consumed grey water, we installed a more sensitive meter on the system which monitors and records flow rates at lower levels than a standard meter. This has greatly improved our ability to track water consumption data from the grey water system and in particular it highlights any abnormalities with day to day consumption.

Looking ahead, we need to do more to reduce direct water use in our operations to demonstrate commitment and to ensure we understand the impacts and solutions available to our supply chain. We are currently in the process of trialling waterless urinals with a view to rolling them out across the estate and as part of planned toilet refurbishments, we will ensure the installation of water efficient fixtures as standard.

## Sustainable Procurement

OUR TARGET	PROGRESS	TARGET 2013/14
Start a supplier engagement programme to provide assurance on the environmental standards and profiles of high spend suppliers.	Some progress on supplier profiling has been achieved.	Aim to embed sustainable assessment into procurement processes and project management.

Our procurement values aim to put sustainability at the heart of everything we do to improve the sustainability impacts of the Assembly's activity. We are developing a diverse supply chain that ensures value for money, supports small suppliers, encourages local growth and facilitates a joined up approach to socially responsible procurement. Over the last year we have strengthened the professional resource in our procurement team which in turn has enhanced the centralised approach to a variety of procurement functions, strengthened relationships and reduced commercial risk.

Over the past few years we have taken significant steps to formalise procurement procedures, and in particular embed sustainability considerations from the outset. This includes the following:

- the development of a Sustainability Risk Assessment for all contracts over £25k;
- completion of the Government's Flexible Framework to benchmark performance and ensure a consistent approach to sustainable procurement is maintained and enhanced;
- a comprehensive spend analysis by commodity to highlight areas of high spend (and potentially) high environmental impact;
- the inclusion of sustainability criteria in all contract tender specifications;

- request suppliers tendering for environmentally sensitive contracts to submit their environmental policy;
- built sustainability considerations into the planning stage and throughout the project lifecycle;
- the adoption of supply positioning and risk mapping for all contracts over £25k;
- the adoption of e-procurement for large contracts where feasible to improve processes and consistency in responses

Looking ahead, we aim to develop supplier profiles for our top 5 suppliers based on environmental impact so we can develop a portfolio of suppliers' corporate responsibility credentials and understand the impacts associated with our supply chain.

We will also ensure the inclusion and assessment of KPIs within contract review meetings to ensure performance is tracked and improved and to encourage suppliers to find ways of reducing our collective environmental impacts.

### Engaging with our suppliers

The Assembly's supply chain represents a diverse range of small, medium and large enterprises that fulfil the goods and service requirements of our estate on a day to day basis. We fully understand the need to drive a sustainable supply chain through the identification, measurement and management of our indirect impacts. Through regular engagement with key suppliers in the first instance, we hope to build stronger, responsible relationships that can facilitate the identification of more sustainable ways of working and solutions that meet our needs in a cost effective manner. As our key suppliers (and commodities) account for a large proportion of our expenditure, it is vital they share our values and goals. Therefore, we ensure that we communicate our requirements to our suppliers so they can help create a culture in which sustainability is valued and considered at every opportunity.

We work very closely with our onsite contractors, in particular our Catering contractor to provide a sustainable, ethical and locally sourced service.

This includes the following:

- sourcing food from suppliers across Wales thereby investing back into the local economy and reducing transport and waste;
- preparing food on site to reduce waste and preventing over ordering;
- menu planning and the reuse of fresh vegetables in other meals to minimise waste;
- the composting of all food and plate waste from the onsite restaurant;
- an increasing range of freedom foods and fair trade goods where available;
- all cooking oil used in the onsite restaurants (approximately 3,000 litres per year) is stored, collected and converted into bio-diesel for use in agricultural machinery.

We also encourage a systematic, consistent approach to environmental management amongst our onsite suppliers, all of which are certified (as a minimum) to ISO 14001 and therefore share the same values and goals as us in relation to continual environmental improvement. As we move forwards we will continue to review our processes, tools and templates to further adopt best practice, develop a supplier profile database, work with key suppliers and continue to develop the skills of our team to identify and adopt sustainable procurement practices and objectives as part of a balanced value approach.



## Engaging with our occupants

OUR TARGET	PROGRESS	TARGET 2013/14
Create an occupant communication strategy to engage and involve all building occupants in 'working sustainably'.	 We have continued to develop informative guides and dashboards that will expand the range of communication mediums we use to engage our occupants.	Create an occupant communication strategy to engage and involve all building occupants in 'working sustainably'.

The performance of our buildings is only as sustainable as the people that use them. We understand how important it is for our occupants to be informed about what is happening from a facilities and sustainability perspective in our business and to know that their contributions and views are valued. The importance of engaging our workforce in 'thinking and working' sustainably and the influence that they as a collective group can have on the operation of our buildings are instrumental. One of the greatest challenges is providing relevant and meaningful information for our range of internal stakeholders that ensures the continued motivation and enthusiasm to embrace the sustainability agenda and adapt to a culture where our thought processes and decision making become embedded with sustainability considerations. Progress against key strategies, new initiatives and achievements, changes to processes and improvements to our buildings are regularly communicated to ensure all occupants are fully aware of the work we do and how it impacts on them and how they can contribute as individuals.

We currently undertake a range of communication activities which include:

- A dedicated suite of Sustainability pages on the National Assembly for Wales website detailing performance highlights and our policies and strategies to sustainable development;  
[http://www.assemblywales.org/abthome/about\\_uscommission\\_assembly\\_administration/sustainability.htm](http://www.assemblywales.org/abthome/about_uscommission_assembly_administration/sustainability.htm)

- A dedicated intranet site for Sustainability including the full environmental management system;
- Targeted inductions on sustainability for all new starters.
- Press releases and publication of the Assembly's environmental achievements and initiatives;
- Dedicated guides, posters and drop in sessions for key sustainability initiatives;
- Corporate reporting on our sustainability performance in the Annual report and Accounts
- Publication of an Annual Environmental Report and a link to the full report on the Assembly website;
- Information and involvement in various environmental events, such as Energy Saving Week, Earth Hour and Bike Week.

### Carbon Offsetting

During the development of our Carbon Management Strategy, it was fully appreciated that carbon neutrality would only be possible with some form of carbon offsetting. It was calculated that the challenging targets proposed would enable us to get to a point where we hoped our operations would be as efficient as they can be. However, in this scenario and for business operations to continue as required, there will still be a level of residual emissions from our use of fossil fuels, travel, water and other natural resources that cannot be avoided. Notwithstanding developments in technology, particularly in the renewables sector and cost reductions in small scale installations that may benefit from Government support mechanisms such as the Green Deal, to this point we have decided not to offset any of our emissions. As a result of good progress, we have not had the requirement to employ offsetting but we will keep this under review as we move closer towards 2015.

## The year ahead

As we approach the final stage of the Commission's strategy to achieve carbon neutrality on the Assembly estate, we can be proud of our achievements so far that have largely materialised without the need for significant investment. This progress should also be applauded when set against times of austerity, significant business events such as the referendum and election and unpredictable weather over the past years which have impacted on our performance.

We appreciate it is going to be challenging to achieve our key carbon reduction targets by 2015. From the beginning, the success of the strategy was predicated on investing significantly in the buildings across our estate and in particular our most energy hungry building, Tŷ Hywel.

As a result, in the short term we plan to take stock of our performance so far. We will review our position in relation to our key emissions reduction targets and refresh our options as we move towards 2015 and beyond. We will commission a further options appraisal to account for developments in technology, Government legislation and regulations, and consider our short, medium and long term solutions to sustainable development and climatic challenges on our journey towards a low carbon Assembly.

We will focus on developing programmes with a continued emphasis on resource efficiency, further energy efficiency improvements and innovations, sustainable procurement, the development of relationships and profiles of our key suppliers, fostering partnerships with suppliers to develop collective sustainability benefits whilst minimising our consumption of raw materials where possible.

We will do more to inform, engage and inspire our occupants to understand their individual and collective impacts, encourage ideas, feedback and dialogue to nurture a collective responsibility towards sustainable development.

In the short and long term, we will not rest on our laurels. We will continue to streamline, improve and capture more data associated with our

activities – our commuter travel, our supplier travel, our indirect emissions associated with goods and services. This will enable us to fully understand our complete emissions profile (both direct and indirect) and influence the way in which we engage with our stakeholders. We understand we have more work to do in relation to social interaction and reporting, biodiversity and ensuring we develop systems and initiatives that reflect the attitudes and expectations of our stakeholders.

We will carefully consider the important role that current technology and emerging technologies play in the sustainability and facilities management arena, whilst seeking out opportunities to learn from others. We are approaching a challenging time on our journey in which we have the opportunity to demonstrate our continued commitment to become a leading sustainable public institution.