

REPORT TO: POLICY AND RESOURCES COMMITTEE - 12 JANUARY 2015

REPORT ON: REPORTING ON SCOTLAND'S CLIMATE CHANGE DECLARATION: YEAR 6 - 2013/14

REPORT BY: CHIEF EXECUTIVE

REPORT NO: 4-2015

1. PURPOSE OF REPORT

1.1 To inform Committee of the work undertaken over the last year in support of the Council's commitment to Scotland's Climate Change Declaration (SCCD).

2. RECOMMENDATIONS

2.1 It is recommended that Committee note the contents of the Year 6 SCCD Progress Report.

3. FINANCIAL IMPLICATIONS

3.1 Any costs associated with the implementation of the Scottish Climate Change Declaration will generally be contained within existing revenue and capital budgets.

4. MAIN TEXT

4.1 As signatories to Scotland's Climate Change Declaration, each Scottish local authority is committed to taking action across a range of key areas. These can be summarised as:

- Providing effective leadership, governance and management on climate change;
- Reducing the local authority's own 'corporate' greenhouse gas emissions from their estate, services and functions;
- Taking action to reduce emissions from the local authority area;
- Assessing the risks of climate change impacts and working with others to adapt to the impacts of climate change;
- Developing effective partnership working and climate change communications, including producing an annual statement of plans, activities and achievements.

4.2 As part of the commitment to the SCCD the Council is voluntarily requested to *"publish an annual statement on the monitoring and progress of our climate response, detailing targets set, actions taken, outcomes achieved and further actions required"*.

5. POLICY IMPLICATIONS

5.1 This report has been screened for any policy implications in respect of Sustainability, Strategic Environmental Assessment, Anti-Poverty, Equality Impact Assessment and Risk Management. There are no major issues.

6. CONSULTATION

6.1 Directors of Corporate Services, City Development, Environment and the Head of Democratic and Legal Services have been consulted on the content of this report.

7. **BACKGROUND PAPERS**

None.

David R Martin
Chief Executive

27 November 2014

**REPORTING ON SCOTLAND'S
CLIMATE CHANGE DECLARATION:
Year 6 - 2013/14**

Dundee City Council

11th November 2014

Scotland's Climate Change Declaration

2013-14 Reporting Template

Governance, Leadership and Management of Climate Change

Background Information

Local Authority Name	Dundee City Council
Number of Staff	6,384 (FTE)
Number of Council Operated Premises	257
Annual budget	£610,391,000 (gross exp.)

Each of Scotland's 32 local authorities signed **Scotland's Climate Change Declaration¹** in early 2007. The Declaration is a public statement wherein local authorities acknowledge the reality and implications of climate change and their responsibility to respond effectively. The Declaration also welcomes the actions of the UK and Scottish governments and the opportunities for local authorities to work in partnership with others in responding to climate change.

As a signatory to Scotland's Climate Change Declaration, Dundee City Council is committed to taking action across a range of key areas:

1. Providing effective **leadership, governance and management** on climate change.
2. Reducing the local authority's **own 'corporate' greenhouse gas emissions** from their estate, services and functions.
3. Taking action to reduce **emissions from the local authority area**
4. Assessing the risks of climate change impacts and working with others to **adapt to the impacts of climate change**.
5. Developing effective **partnership working and climate change communications**, including producing an annual statement of plans, activities and achievements.

This Annual Report focuses on these five key areas.

The principles of effective Declaration reporting include:

- Providing clear, consistent and comparable information.
- Linking climate change reporting with existing reporting requirements and the Council's own performance improvement agenda.
- Showing clearly how climate change is being integrated into Council and Community Planning agendas, especially through Single Outcome Agreements.
- Highlighting key achievements and initiatives
- Communicating with the community, making the report easy to understand and available to the public.

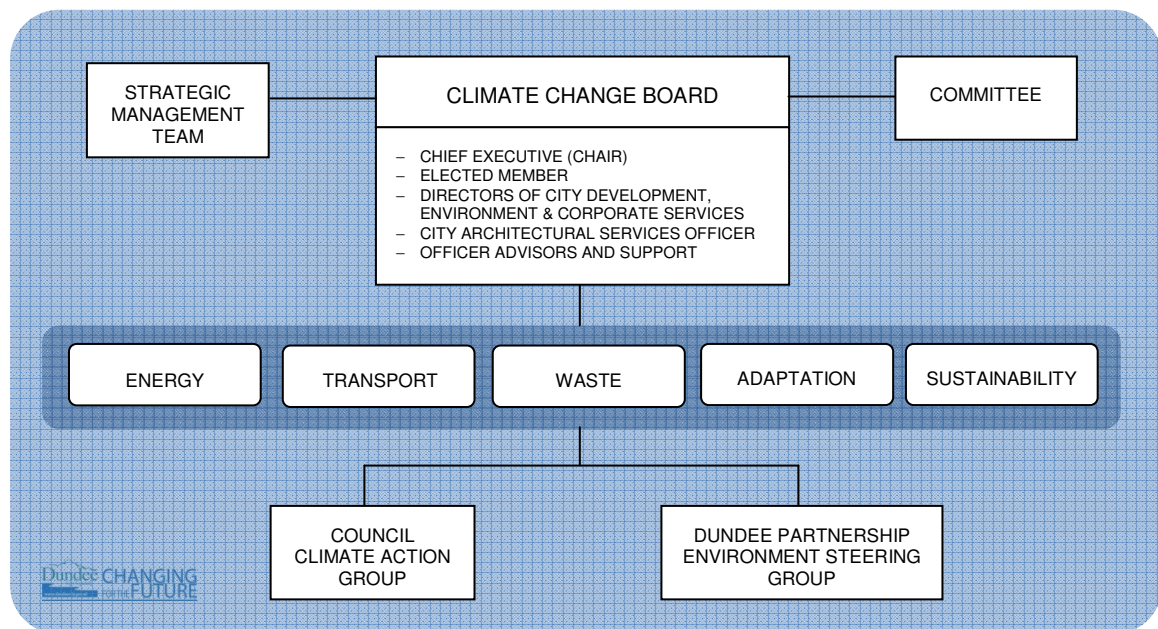
Governance and Leadership

Dundee City Council became a signatory to Scotland's Climate Change Declaration (SCCD) on 16th January 2007. In September 2008 the Dundee Partnership Forum² signed and endorsed a 'Supporting Scotland's Climate Change Declaration' for the city.

The Council's Climate Change Board is responsible for overseeing progress on climate change activity and in turn reports to the Council's Policy and Resources Committee (Figure 1). The Board is chaired by the Chief Executive and comprises Directors from relevant departments, who are responsible for leading on aspects of climate change work as well as Elected Member representation. The Board meets every two months to discuss Energy, Transport and Waste issues. Wider sustainability issues (e.g. policy, procurement, biodiversity) are considered when required and annual reports are provided on Adaptation and Air Quality. Support to the Board is provided in the form of advisors, officers involved in the day to day implementation of climate change related activities.

Climate change is addressed as part of the Council's Sustainable Development Framework with action supported through the Climate Change programme. Performance is reported via the Council's Online Plan and Performance monitoring databases.

Figure 1. Climate Change Governance



Management – Incorporating Climate Change into other key policy

- **Dundee Partnership Single Outcome Agreement (2013-2017)**³

The SOA for Dundee presents long term ambition for improved outcomes in the city and high level indicators which will measure change, again over the long-term. The SOA sets a direction for the Dundee Partnership along with challenging performance targets. The Dundee Partnership Environment Steering Group is tasked with implementing Dundee Outcome 10 "Our People will live in a low carbon, sustainable city".

- **Dundee Partnership SOA Delivery Plan (2013-2017)**⁴

The SOA delivery plan describes the short-term actions which will make an individual contribution to improving the quality of life in the city and, when taken together, form a comprehensive programme for change across all outcomes. Thirty four actions were initially agreed for Outcome 10, grouped into the following Intermediate Outcomes:

- a) Dundee mitigates and adapts to the effects of climate change for the transition to a low carbon economy.
- b) Dundee has an accessible, integrated and sustainable travel network.
- c) Dundee has sustainable waste management systems that reduce environmental impacts of waste production.
- d) Dundee has a clean, healthy and safe environment with improved air, land and water quality.
- e) Dundee has an attractive and sustainable natural environment where the built heritage is valued and protected.

- **The Council Plan (2012-2017)**⁵

Commits the organisation to reducing its carbon footprint and sets a priority focus to attract jobs in the renewable energy industry.

- **Sustainable Development Framework (March 2011)**⁶

The framework aims to facilitate the integration of sustainable development into all Council policies, services and activities, through strategic corporate and service level action. Recognising that Climate Change and carbon management will play an increasing role in the Council's efforts in achieving sustainable development Climate Change has been identified as a priority Sustainable Development theme for action. Within the framework, the Sustainable Development Policy Statement publicly affirms the organisation's commitment to ensuring an improved and sustainable quality of life in the city and contains principles that relate to climate change.

- **Corporate Asset Management Strategy (2011-2015)**

Guides the acquisition, use and disposal of the Council's assets to make the most of their service delivery potential and manage the related risks and costs over their entire life. The six key areas of asset ownership (Buildings and Property; Roads Infrastructure; Council Housing; Open Space; Vehicle Fleet and ICT) recognise the need to minimise their impact on the environment and reduce carbon emissions.

- **Strategic Development Plan - TAYplan (2012-2032)**⁷

Recognises the long term implications of climate change and sea level rise. It supports the switch to a low carbon economy and zero waste economy by providing for appropriate infrastructure and improvements in our resilience to climate change and other potential risks. It seeks to deliver better quality development and places which respond to climate change by ensuring resilience built into the natural and built environments through a presumption against development in areas vulnerable to coastal erosion, flood risk and rising sea levels.

- **Local Development Plan (2014-2019)**⁸

In considering the delivery of the TAYplan vision there are several cross-cutting issues relating to climate change resilience that have informed the preparation of the Dundee Local Development Plan:

- Recognising that new developments will have to contribute positively to mitigating the causes of climate change and put in place adaptation measures to future proof places.
- Recognising the need to ensure that climate change resilience is built into the natural and built environment.
- Recognising the need to ensure that high resource efficiency and low/zero carbon energy generation technologies are incorporated within development to reduce carbon emissions and energy consumption to meet Scottish Government standards.

- **Local Housing Strategy (2013-2018)**⁹

The LHS is the primary strategy for the provision of housing and associated services to address homelessness, meeting housing support needs and tackling fuel poverty. Tackling climate change has been identified as one of a number of main areas for consideration within the strategy given the major role housing can play in reducing emissions.

- **Dundee City Council Staff Travel Policy (Sept 2011)**¹⁰

This policy will reduce staff need to travel for work and, when they do need to travel, explicitly prioritise walking, cycling, public transport and car share over single-occupancy car. This will not only reduce carbon emissions from travel, but also contributed to cost savings and the Council's duty of care to its employees and others. The increased use of Electric Vehicle pool cars also ensures that those trips made by car are as sustainable as possible.

- **Energy Management Policy (2012-2020)**¹¹

The adoption of the Energy Policy demonstrates the City Council's commitment to the principles of responsible energy and water management in its operational buildings. The City Council will aim to improve its energy and water efficiency and reduce its energy and water consumption in line with the targets set out in this policy.

- **Dundee Air Quality Action Plan (Jan 2011)**¹²

Sets out measures together with targets and indicators to achieve the compliance with the objectives for NO₂. It supports the integration of local air quality considerations within the Council's wider policies, strategies and plans, particularly those relevant to sustainable development, reduction in greenhouse gases and carbon emissions.

Priorities for the Year Ahead

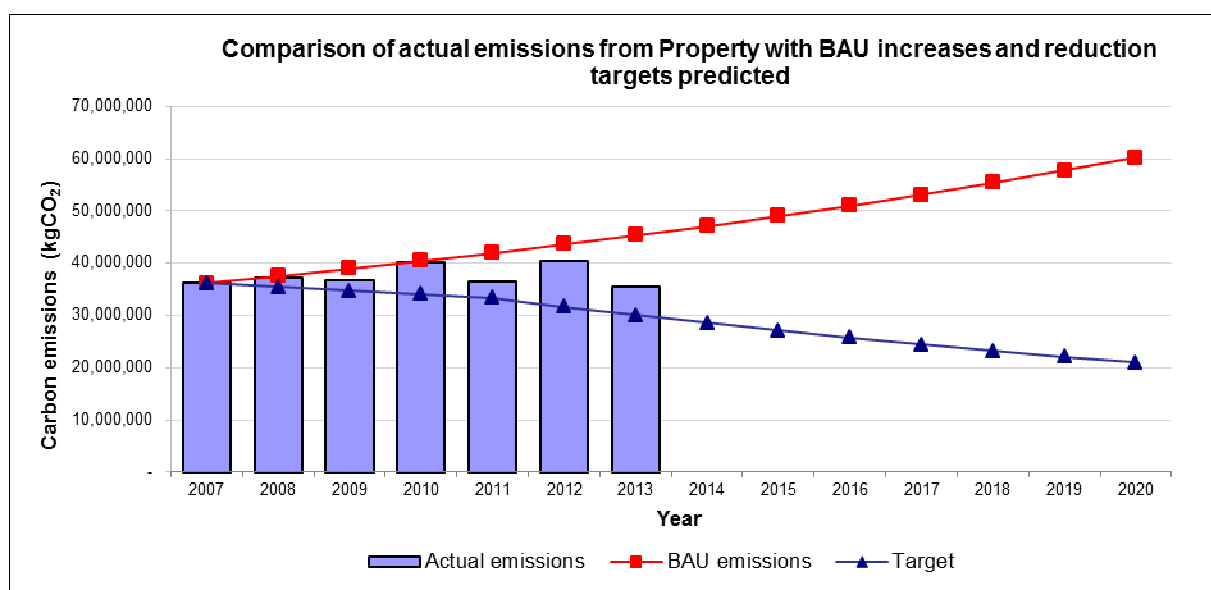
- ❖ Deliver the **Single Outcome Agreement 2013-2017** and develop the SOA Delivery Plan.
- ❖ Deliver the new **Council Plan 2012-2017**.
- ❖ Continued investment in the **energy management programme** to ensure continued improvements in CO₂ reduction
- ❖ Implement and monitor the **Staff Travel Plan** and Staff Travel Policy.
- ❖ Continued use of **Strategic Environmental Assessment**¹³ to consider and integrate climate change (mitigation and adaptation) matters into plans, programmes and strategies.
- ❖ Development of an online **Integrated Impact Assessment tool** that will assist Committee report authors to consider the likely impacts of their report (including climate related issues) and provide details on any required mitigation action to overcome negative impacts.

Reducing Corporate Emissions

Targets

Local Authority	Target and Document Source (please provide link)
Dundee City Council	5% per annum to 2020 (Energy Management Policy 2012-2020) ¹⁴

Performance



	Total CO ₂ emissions from Property							
Dundee City Council	2007/08	2008/09	2009/10	2010/11	2011/12	2012/13	2013/14	2019/20
BAU scenario total (t)	36,185	37,525	38,934	40,414	41,969	43,605	45,324	57,688
Reduced Emission Scenario (t)	36,185	35,462	34,753	34,057	33,376	31,692	30,092	22,054
Emissions Actual (t)	36,185	37,163	36,781	40,274	36,451	40,276	35,444	

Corporate Reporting – Further Information (Council Estate only)

Area	Performance (2013-14)	Annual variation
(a) Electricity	38,294,319 kWh	↓ 8%
(b) Gas	77,912,003 kWh	↓ 18%
(c) Street lighting	11,009,508 kWh	↓ 3%
(d) Fleet	4,164 tCO ₂ e	↓ 5.7%
(e) Business travel	597 tCO ₂ e	↓ 22%
Carbon Reduction Commitment-related emissions	30,203 tonnes	
CRC-related expenditure	£362,436	
Energy expenditure (gas and electricity)	£6,720,300	
Water consumption	350,572m ³	
Water expenditure	£1,330,000	

Waste data from the Council estate and staff travel (commute) are not currently measured.

Action to Reduce your Corporate Emissions

Area	Initiatives
Energy Management	<ul style="list-style-type: none"> The Council's Energy Management Action Plan contains 36 actions aligned under four strategic themes of Management Support; Behaviour Change; Data Collection & Implementation and Physical Measures. Feasibility and cost assessments were undertaken for the first phase of physical improvements and surveys begun for the second phase. Through the Central Energy Efficiency Fund (CEEF) 12 projects totalling £198,000 were agreed. A further 7 projects totalling £83,000 were in assessment stage. A working group was set up to establish standard specifications for all new-build and refurbishment projects to ensure low carbon design and operation. Energy Management Team worked with the Education and I.T. Departments to review pc usage and look at opportunities to optimise potential energy savings. Preparation of an Education Department energy management programme with targeted workshops for 85 Head teachers, Business Managers, and Facilities staff. Possible roll out to other departments if successful. Introduced measures to improve efficiency of energy and water supply management resulting in significant credits via bill paying process. Proactive management of Building Energy management Systems (BEMS) and control settings contributed to reduction in gas consumption.
Street lighting	<ul style="list-style-type: none"> Implementation of a Lantern replacement program throughout Dundee funded from capital programme and a successful bid for external funding from Scottish Futures Trust. Introduction of an electronic control gear allowing the lanterns to be dimmed from mid-night to 5:00am has shown further reductions in energy and carbon emissions (street lights are dimmed by 30% during these hours).
Staff travel	<ul style="list-style-type: none"> The introduction of the Staff Travel Plan in 2013 has seen a considerable drop in the amount of mileage claimed by staff. The target for the year was a 25% reduction in mileage, but this is estimated to be in the region of 40%. A number of initiatives have been promoted to increase the take up of cycling (Bike Boost, Cycle to Work), Bus Travel (multi-journey bus tickets, dundeetravelinfo) and walking (staff travel policy).
Fleet	<ul style="list-style-type: none"> 2013/14 vehicle replacement programme estimated to reduce the carbon emissions by approximately 75 tonnes per annum. 37 fully electric vehicles in operation and it is estimated will complete approximately 200,000 pure electric miles in the year to date. With improved utilisation and training it is believed that this figure can be increased and produce a further reduction in environmental impact. Continued development of the council's EV charging infrastructure with the council now having 24 x 7kw posts (48 points) and 4 Rapid Chargers in total, with 8 posts and 1 rapid charger being available for the public initially. Introduction of fuel cards in 2013 for certain parts of the HGV fleet has proved very successful with not only a reduction in mileage travelled by each vehicles but also savings in terms of fuel costs and unproductive time. Fleet Telematics Guidance prepared in November 2013 and system now being rolled out across all users departments. The system can be used to identify under utilised vehicles, providing information for the route optimisation projects as well as monitoring idling time, speeding events and total miles travelled. Routesmart Officers employed to utilise route optimisation software with initial trial project with the Corporate Laundry section identifying a maximum mileage saving of

	<p>40% on the current routes. Project now looking at Waste collection service review where it is hope significant savings in terms if mileage can be achieved.</p> <ul style="list-style-type: none"> • Council joined the local ECO stars Fleet Recognition Scheme in December 2013. This scheme is set up to recognise Efficient and Cleaner operating fleets. In recognition of the council's commitment to improving operation efficiency, reducing fuel consumption and reducing vehicle emissions they received an impressive 4 stars.
Waste	<ul style="list-style-type: none"> • The Climate Change Board commissioned an Internal Waste Management Strategy to review internal waste recycling services and develop a phased rollout plan supported by a programme of engagement and education amongst staff. • The Waste Disposal Capital Works Review Team worked closely with Zero Waste Scotland and 6ix Consulting to improve methods of waste disposal within the Council's replacement heating, kitchen and bathroom programme. The percentage of waste segregated is up from 30% to 70% and high value scrap recovered, up from 36% to 81%. • Participated in the Zero Waste Scotland scheme to increase the use of recycled products in construction. As of 31st March 2014, 79% of construction waste is recycled.

Biodiversity

- The Local Development Plan (adopted Dec 2013) re-affirms 35 '**Sites of Importance for Nature Conservation**' (SINCs) as well as delivering protection for nationally and internationally designated sites. Policies in the LDP protect SINCs from adverse development and encourage the Council to develop guidance on Green Networks.
- Establishment of Street Trees in the Waterfront Development.
- Trialled wildflower mixes on the Law to encourage pollinators and committed to trial Yellow Rattle to improve biodiversity of grassland and sustainable planting in annual bedding areas investigated with biodiversity attracting species.
- The Council continued to protect Scotland's only urban population of Red Squirrels through Grey Squirrel control.
- Supported by the Council, Friends of Riverside Nature Park were shortlisted finalists of the Nature of Scotland Awards. The group also developed an action plan to protect and improve the 33ha park for biodiversity.
- A bid to the HLF to improve the biodiversity of the Law, Dundee's most prominent landmark, included meadow establishment and management of woodland.
- Several areas of new native tree planting in Whitfield (2ha) funded by Community Regeneration Fund.
- Biodiversity focus for Dundee Community Gardens Network day in March 2014.

Sustainable Procurement

This information has been obtained from the most recent Flexible Framework self-assessment that was completed as part of the annual Procurement Capability Assessment (PCA).

	Current Performance Level (Level 0-5)	Target
People	3	To be at level 3 by end 2014/15
Policy	3	To be at level 3 by end 2014/15
Process	4	To be at level 3 by end 2014/15
Suppliers	3	To be at level 3 by end 2014/15
Monitoring and Reporting	2	To be at level 3 by end 2014/15
Overall	3	To be at level 3 by end 2014/15

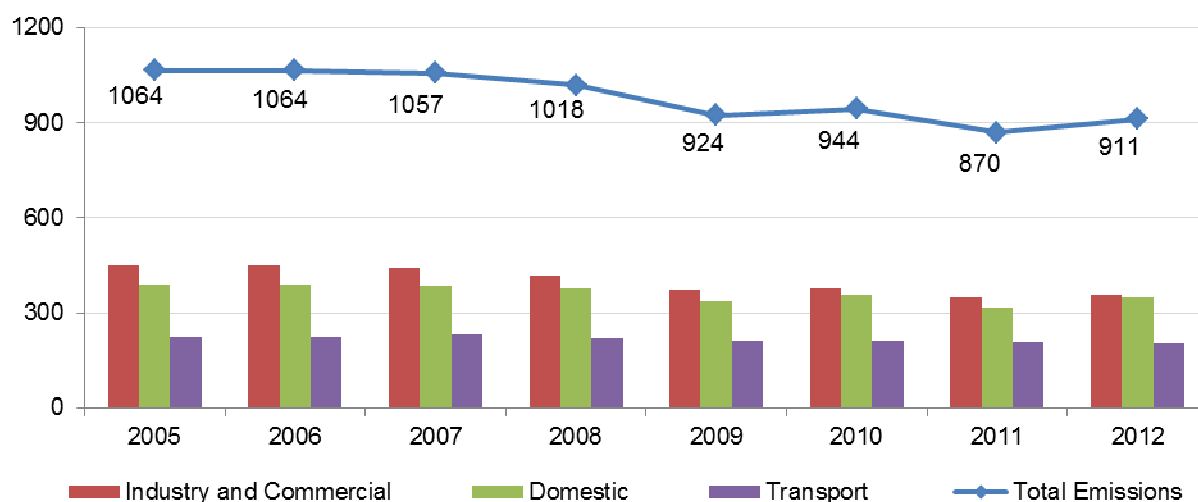
- The Council launched an innovative resource-redistribution tool - **WARPit**¹⁵ - making it easy for staff to obtain unwanted resources within the Council and beyond, reducing procurement spend and waste disposal costs, as well as minimising waste and reducing carbon emissions. By the end of March 2014, WARPit had helped the Council divert almost 8 tonnes of waste, saved 2,800 tonnes of CO₂ and saved the Council and its partners £57,866 in avoided procurement costs.
- The Council made a silver pledge under **WWF's 'What Wood You Choose' campaign**¹⁶ to improve our procurement of sustainable timber products for Council construction and maintenance/repairs projects. The Council has exchanged gathered evidence with WWF throughout 2013, undertaking additional checks on the level of compliance being achieved, and continuing to encourage contractors to achieve chain of custody.
- The **Tayside Procurement Consortium**¹⁷ (TPC) is the collaborative procurement team created by Dundee, Angus and Perth and Kinross Councils, in association with Tayside Contracts to manage collaborative procurement activity on behalf of the three Tayside Councils. All TPC contracts are now awarded on Most Economically Advantageous Terms which takes into account corporate social responsibility and considers Sustainability; Environmental management; Fair trade and ethical procurement when awarding contracts. A local 10 Point Supplier Support Plan was approved by the TPC Board in April 2013 with progress made on all ten targets over the reporting period. In addition, a Community Benefits in Procurement (CBiPs) policy has been agreed and currently being implemented.

Priorities for the Year Ahead (2014-15)

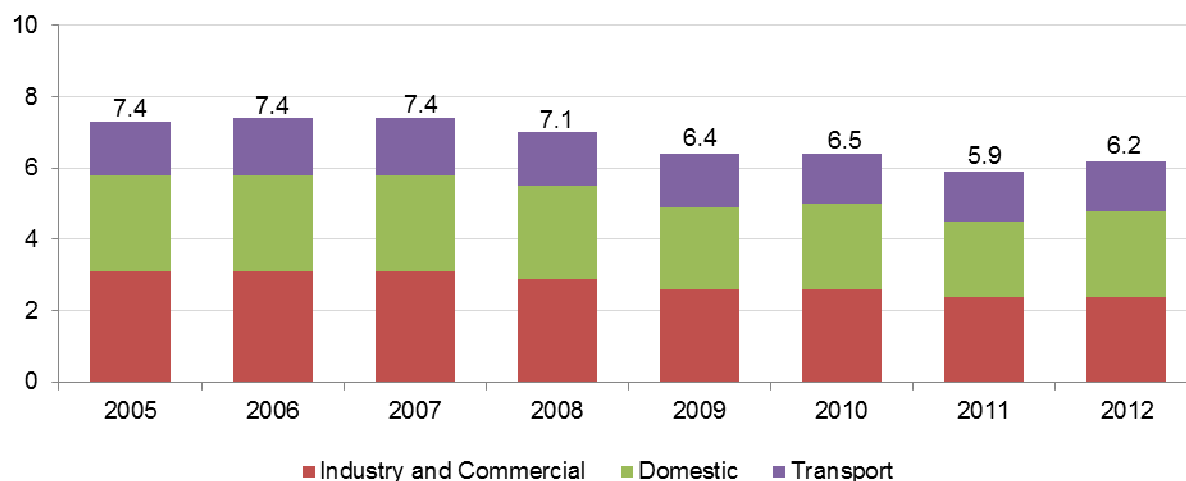
Area	Priorities for 2014-15
Energy Management	<ul style="list-style-type: none"> ❖ Explore and develop a corporate photovoltaic scheme for Council properties. ❖ Investigate consumption alert system and procure energy consuming equipment and services to minimise carbon impact. ❖ Identify and implement potential savings through CRC reporting.
Street lighting	<ul style="list-style-type: none"> ❖ It is expected that the continued replacement of higher wattage lanterns with LED lanterns will lead to further reductions in energy and estimated carbon reduction of 5% as well as a reduction in the overall amount of maintenance required.
Staff travel	<ul style="list-style-type: none"> ❖ With further rationalisation of properties and improved use of pool cars and public transport it is hoped to further reduce the impact of the grey fleet on the environment.
Fleet	<ul style="list-style-type: none"> ❖ The next 12 months will see the further development of the Council's use of electric vehicles, electric charging stations and car pools, these will be closely monitored to determine their environmental impact and carbon savings. These developments will work in tandem with the utilisation of fuel saving technologies within the vehicles, the drive to maintain the age profile of the fleet and the ongoing commitment to driver training, to help reduce vehicle emissions. ❖ The Corporate Fleet Section are keen to further develop the use of EV's especially in the van sector; however the market is still developing and we are waiting for the market to offer vehicles which may prove more suitable to our needs. This area offers a great deal of scope for further expansion but trials will have to be run to make sure the vehicles meet the working requirements of departments.
Waste	<ul style="list-style-type: none"> ❖ Implement standardised city council-wide recycling services to include the recycling of food waste from all applicable Council premises. This is anticipated to be introduced in City Centre locations before expansion across the Council property portfolio.
Biodiversity	<ul style="list-style-type: none"> ❖ Roll out of annual wildflower meadows throughout Dundee – improving biodiversity value of grassland areas whilst reduction of mowing frequency. ❖ Trial of efficacy of yellow rattle in supressing grass growth. ❖ Establishment of further wildlife friendly sustainable planting. ❖ Further tree planting in Whitfield as part of Master Plan. ❖ Continuation of Grey Squirrel control.
Procurement	<ul style="list-style-type: none"> ❖ Expand the WARPit regional sharing network to include more charities and 3rd sector enterprises

Reducing Area-wide Emissions

	Total area-wide emissions ktCO _{2e}							
Dundee City	2005	2006	2007	2008	2009	2010	2011	2012
Total Emissions	1064	1064	1057	1018	924	944	870	911
Industry and Commercial	451	451	441	419	372	379	348	358
Domestic	391	390	385	378	338	356	316	348
Transport	222	223	231	221	213	210	206	205



	Per capita emissions tCO _{2e}							
Dundee City	2005	2006	2007	2008	2009	2010	2011	2012
Total Emissions	7.4	7.4	7.4	7.1	6.4	6.5	5.9	6.2
Industry and Commercial	3.1	3.1	3.1	2.9	2.6	2.6	2.4	2.4
Domestic	2.7	2.7	2.7	2.6	2.3	2.4	2.1	2.4
Transport	1.5	1.6	1.6	1.5	1.5	1.4	1.4	1.4



Measuring Area-wide emissions

In common with most UK local authorities, Dundee City Council is not directly measuring carbon emission from the Dundee area. The DECC data above provides the best available estimate of area-wide emissions. Currently, direct carbon measurement represents a potentially costly and technically challenging undertaking for the Council to progress at this time.

The Council is currently using the above measurements to raise awareness of the importance of area-wide emissions. The Council is working with a number of partners to determine priority areas to target for reductions. For example, the area-wide consumption footprint indicates that housing and transport are the largest components, and the production figures indicate that industry, commercial and public sector are the largest impacts.

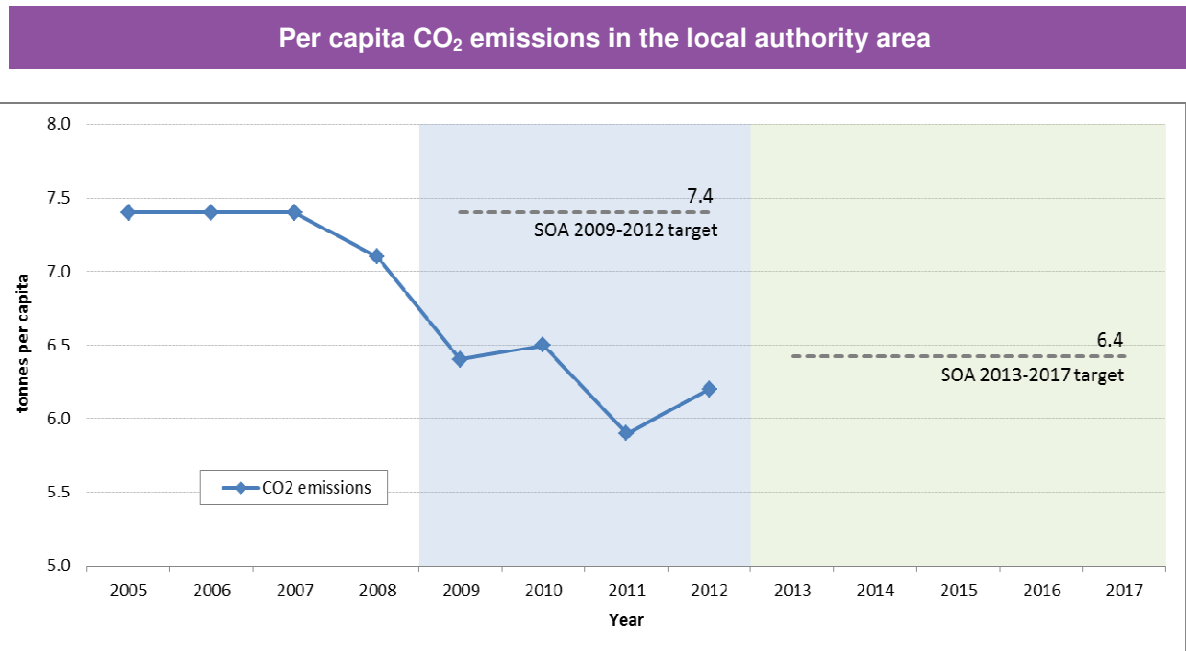
- Following TACTRAN workshop on public sector Climate Change duties, a **Transport Carbon Assessment Stage 1 Report**¹⁸ was prepared in November 2012 by consultants Atkins. This sets out baseline forecasts and projections for land transport emissions to 2032 for both the Tactran region and the TAYplan Strategic Development Plan region and constituent Councils, with the aim of informing the Partnership's own and other public sector partners' understanding of issues and approaches to meeting statutory obligations and targets under the Climate Change Act 2009. The Partnership has agreed to procure further work on investigating transport carbon emissions mitigation options and prioritisation, reviewing the RTS Monitoring Framework with a view to embedding carbon abatement within this, and assessment of the requirement for a Climate Change adaptation strategy.

Previous annual reports have highlighted some examples of analysis work on area-wide emissions including:

- **Postgraduate students** studying MSc in Spatial Planning at the University of Dundee carried out analysis of Dundee's ecological/carbon footprints using the SEI REAP software. Questions were posed by the Dundee Partnership for the Environment to teams of students requiring them to identify the key footprinting issues for Dundee, data comparisons, limitations in the software, information gaps and to assess policy shifts required to affect a positive change in Dundee's ecological and carbon footprints.
- **SUSTAY** - on behalf of SusTay (a grouping of public sector bodies in Tayside) Scottish Enterprise has engaged with Carbon Captured Ltd/University of Manchester to carry out a carbon emissions inventory and workshops using 'Greenhouse Gas Regional Inventory' (GRIP) tool. There are three levels of the work.
 1. Audit - GRIP will inventorise carbon emissions within the Tayplan area.
 2. Scenario workshops will be held. During these the attendees cover scenarios to try and reduce emissions in line with the Climate Change Bill - 42% by 2020 and 80% by 2050.
 3. Strategic discussions are undertaken which will put in place action to meet the targets.
- In March 2012 Solar Cities Scotland in association with Dundee Artists in Residence (D-AiR) and the Hannah Maclure Centre will host a **community visioning workshop** to create a vision of how Dundee can become a low carbon city and help meet 2050 targets. The Event is being run as part of a series of events around world water day and will be delivered by an IPCC expert using the GRIP tool.

Targets for the reduction of area-wide emissions

The Dundee Partnership Single Outcome Agreement (2013-2017) 'Outcome 10' states that: "Our people will live in a low carbon, sustainable city". To help achieve this, a strategic 'above the waterline' target was set to reduce area-wide emissions by 2017.



- This DECC indicator has been used since the start of the SOA 2009-2012 process. When this indicator was updated for the SOA 2013-2017, a target was set to maintain a 2010 figure (latest data available at that time) of 6.5 tonnes per capita.
- Figures for 2012 are now the latest available, published by DECC in July 2014 and show that from 2005 to 2012 there has been a 16% reduction in per capita CO₂ emissions in the Dundee local authority area. This is ahead of the 13% reduction for Scotland as a whole over the same period.
- From 2005 to 2012 there have been emissions reductions in road transport, industrial, commercial and domestic sectors.
- In 2012, 39% of end-user CO₂ emissions were attributed to the Industry and Commerce sector, 38% to the domestic sector and 23% to road transport.

Area-wide partnership actions

Area	Action in 2013-14
Energy	<ul style="list-style-type: none"> • Dundee City Council is participating in the Scottish Cities Alliance,¹⁹ formed by the Scottish Government to take forward a programme of collaborative action on four key areas: connected cities, sustainable cities, knowledge cities and vibrant & cultural cities. The Scottish Government is supporting the SCA with a £5 million Cities Investment Fund. The Sustainability Cities Action Team are progressing 3 initiatives that will help support the cities in the transition to a low carbon economy: <ul style="list-style-type: none"> – Heat Mapping provides a fundamental tool in Dundee’s transition to a low carbon economy by providing valuable information on current heat loads within the city. It can also assist in delivering projects on the ground by modelling future heat supply and demand scenarios for investment in new developments. It will provide a means for the Council to identify links between heat sources and heat demand to optimise resources and maximise investment opportunities. In conjunction with the Scottish Government, the Council developed a GIS-based Heat Map and supported the Scottish Government and AECOM to develop a Heat Map Manual for all Scottish Local Authorities. – Energy Efficient Street Lighting - the Scottish Futures Trust and the Council’s Street Lighting Team (inc. Chair of SCOTS Street Lighting Network), have developed a Toolkit to assist Local Authorities understand the investment costs along with the carbon and financial benefits of investing in energy efficient street lighting. The Toolkit and feasibility study will allow Local Authorities to analyse the impact of investing in energy efficient street lights, both in terms of future energy costs and meeting carbon reduction targets. It is recognised that affecting an investment into the Council’s street lighting assets has the potential to deliver significant savings and protect against future energy costs rises. – A commission to prepare a ‘Mini’ Stern Review²⁰ for Dundee has been agreed to be taken forward in 2014. The review will have a clear focus on assessing the economic benefits from the low carbon agenda for Dundee including employment opportunities, job creation and skills development. The review will assess the range of low carbon options available to Dundee, the scope for their deployment, the carbon savings and financial returns and the implications for the local economy as well as identifying where Dundee could collaborate with other cities where there may be economies of scale.
Homes and Communities	<ul style="list-style-type: none"> • Housing Department has continued to work towards the achievement of Scottish Housing Quality Standard (SHQS) including installation of physical measures for energy efficiency and carbon reduction: <ul style="list-style-type: none"> – Replaced electric central heating systems with gas central heating in 120 tenanted properties across the city. – Replaced electric storage heating with gas-fired district heating in 240 high-rise flats and a further 240 nearby low-rise flats including, for the first time, owner-occupied flats within the Council stock. All 480 have also benefitted from external insulation through ECO (from SSE) and HEEPS:ABS funding. – District heating and external cladding schemes with funding through ECO (Energy Company Obligation) funding from Scottish Gas and HEEPS:ABS (Home Energy Efficiency Programme Scotland: Area Based Schemes) funding from the Scottish Government. • Through a number of innovative approaches Dundee Energy Efficiency Advice Project²¹ (DEEAP) is tackling fuel poverty in Dundee. Over the past year the project has met or exceeded all targets with total savings made by the project for families in Dundee amounting to £1.5 million. Throughout the year DEEAP has dealt with 4,836 energy enquiries, renegotiated £448,679 fuel debts and completed applications to write off in excess of £23,000 of fuel debts. It has also targeted areas of high deprivation to help families register for Warm Home Discount which credits £135 of

	<p>electricity credit throughout winter months to disadvantaged families. A total of 1,118 families are now registered, saving £150,930 on fuel bills. In addition, DEEAP officers assisted 2,714 families in crisis with emergency fuel payments in partnership with Scottish Welfare Fund. DEEAP also help families to maximise benefit claims, with £261,106 awarded during the year. As well as visits to all new Council tenants, the project engages with families through nurseries, primary schools and breakfast clubs; with sick and disabled people through Maggie's Centre, Dundee Carer's Project and other health organisations; and with older people through sheltered housing.</p> <ul style="list-style-type: none"> • The Dundee Waterfront Partnership²² commissioned BREEAM to prepare a report on the actions needed to achieve BREEAM Sustainable Communities²³ Status. Dundee City Council, Scottish Enterprise and the University of Abertay continue to work together to realise the objective of attaining the status and become an exemplar for sustainable economic development.
Business	<ul style="list-style-type: none"> • The Dundee Renewables²⁴ partnership continues to build a renewable energy industry for Dundee. With a 160 hectares of land available now for supply chain development and Operations & Maintenance support, the focus for Dundee Renewables is very much on all Energy opportunities, including Oil & Gas which has seen an upturn in Inward Investment enquiries and has already secured 39 new jobs (70 in next 2 years). Four Scottish offshore wind farms have been granted planning consent, resulting in a flurry of activity to support developers with their preparation with local content information (covering skills and training facilities) for the next steps which is to secure government funding. Granting consent for these developments will enable them to bid for an offshore wind contract for difference (CfD) under the UK Government's Electricity Market Reform process. • By marketing, attending and exhibiting at key offshore wind events, Dundee Renewables is known and recognised within many levels of businesses and associations. A number of business engagement supply chain and meet the buyer events were held in 2013/14 in partnership with Scottish Development International, Scottish Enterprise, and other Local Authorities. There are now 88 businesses listed on Dundee Renewables Green Directory.²⁵
Transport	<ul style="list-style-type: none"> • City's EV charging infrastructure expanded by other organisations in the city, leading to Dundee being seen as one of the leading examples of how to promote EV's use, this is expected to encourage a wider uptake of EV's in the area, creating further environmental benefits. It is estimated that up to 8 rapid chargers will be available by summer 2015, deployed city wide. • Green bus funding, made available by Transport Scotland, and supplemented by funding from Dundee City Council enabled National Express Dundee to introduce a fleet of 9 Electric hybrid double decker buses in 2013. Further investment in new buses by Stagecoach and National Express Dundee has seen the age profile of the city's bus fleet drop considerably in the last 2-3 years. • Launched in January 2012, Common Wheels²⁶ continue to operate the first Car Club in Dundee. Common wheels is a 'pay by the hour' car club allowing residents and employers access to shared cars, reducing the need for personal car ownership. Members can make use of car club vehicles as and when they need them, without any of the cost and hassle of owning a car. Car club membership also encourages people to think more about their journey, only taking the car when it's the best option, so helping to cut car use and tackle climate change. • The Council has established a Cycling and Active Travel working group to provide strategic overview to the wide range of initiatives on-going to support cycling as a leisure, sporting and functional activity. A cycling forum is to be established to improve dialogue between Council officers and the city's cycling community. • The Council has been involved in two recent European projects: <ul style="list-style-type: none"> – Ecomobility project that developed a toolkit to assess the transport sustainability of small to medium sized European cities. Dundee achieved a bronze award and received this at the ECOMM conference in Gavle, Sweden. – The ENCLOSE project is a freight project that is to raise awareness of the challenges of energy efficient and sustainable urban logistics in European small

	and medium size historic towns and the opportunities to achieve significant improvements and benefits by implementing suitable and effective measures, schemes and framework approaches. This project assisted the Council and TACTRAN ²⁷ in developing a Sustainable Urban Logistics Plan ²⁸ (SULP) for the City. The SULP identifies issues, objectives and proposes interventions to overcome the problems associated with city logistics.
Waste & Resource Efficiency	<ul style="list-style-type: none"> The Central Waterfront Team of engineers responsible for designing and implementing £100million of new infrastructure as part of the Dundee Central Waterfront Masterplan developed systems to ensure that sustainability is taken into consideration during the design, procurement and construction stages. A number of initiatives were implemented to improve resource efficiency including a drainage network to separate surface water from foul water; use of recycled materials from local demolition projects into the structure of the new road network and at Craig Harbour in advance of the V&A construction. As a result of these and other initiatives the team has been able to update their Environmental and Quality Management Systems and achieve significant savings by reducing landfill costs.

Area-wide priorities for the year ahead (2014-15)

Area	Action in 2014-15
Energy	<ul style="list-style-type: none"> ❖ Establish a Dundee Partnership Environment Steering Group to explore potential collaborative opportunities amongst the city's public sector organisations.
Homes and Communities	<ul style="list-style-type: none"> ❖ Working towards the achievement of SHQS by end march 2015. After this, priority will be in achieving the new Energy Efficiency Standard for Social Housing (EESH) within its first reporting period to 2020. This will include carrying out a large project of external wall insulation to those properties in the Council stock (and owners within this i.e. ex-Council) which cannot benefit from cavity-wall insulation. ❖ Examine possibilities it could provide for Housing to install renewable technologies via Renewable Heat Incentive (RHI) to determine whether they represent the most cost-effective means of providing tenants with low-cost heat.
Business	<ul style="list-style-type: none"> ❖ Continue to work in partnership with ten local authorities through East Coast Renewables to promote the east coast as a viable location.
Transport	<ul style="list-style-type: none"> ❖ Council's Corporate Fleet section have been assisting local taxi companies in developing their electric taxi fleet with this area is set to develop significantly within 2014 further adding to the cities status in this technology. It is aimed to have 30 zero emission EV Nissan Leafs in service as taxis and private hires by November 2014, with an aim of 100 EVs in service by summer 2015 making this Europe's largest EV taxi fleet. Dundee 203020 Electric's depot at the former Bowbridge Works will have the world's most concentrated single site rapid charging infrastructure and this will be available for public use. ❖ During the latter half of 2014/15 the Council and Co-Wheels Car club, with assistance from Developing Car Clubs in Scotland and Energy Savings Trust will introduce seven EV car club vehicles. These vehicles will give shared mobility to up to 500 people. ❖ Stagecoach East Scotland will introduce additional Electric Hybrid buses in Spring 2015. The Council is exploring a commercialisation study within the Scottish Cities Alliance and with support from the EU funded Hydrogen Fuel Cell Joint Undertaking. ❖ Multi million investment by the Council, Sustrans, TACTRAN and Scottish Government in pedestrian and cycle facilities that encourage active travel uptake and in in traffic management measures around schools ensures pupil safety and gives confidence to parents and pupils to travel

	sustainably to and from school.
Waste & Resource Efficiency	❖ Implement phase 1 of the Council's Major Service Change for household waste , incorporating revised collection services and uplift frequencies for all applicable commodities under the terms of the Waste (Scotland) Regulations 2012.

Climate Change Adaptation

This section of the template has been developed in conjunction with [Adaptation Scotland](#) to align with their 5 Steps to Managing your Climate Risks Guidance published in 2014.

Responsibility and Progress

This area of climate change action is relatively undeveloped in the Council. The Climate Change Board is responsible for overseeing progress on meeting the duties of the Climate Change (Scotland) Act 2009, including those related to climate change adaptation. Several departments have statutory duties or service delivery functions which involve responses to a changing climate (e.g. planning, policy, design of buildings, flood management, contingency planning, biodiversity).

Current Situation, Future Threats and Opportunities

- The **Dundee Coastal Study Stage 2**²⁹ (August 2013) identifies a framework within which local flood alleviation and coastal erosion defence schemes are developed at different locations along Dundee's 16.9km of coastal frontage. As part of the development of the programme, an Options Workshop was held to consider the types of coastal defences in each of the nine geographical management sections. The study identified that there is a risk of coastal flooding within Central Dundee, Broughty Ferry, Riverside Drive and Dundee Airport.
- Two **climate change adaptation workshops**³⁰ were held in 2013 in partnership with Adaptation Scotland to raise awareness and train colleagues on adaptation, as well as identify where policy changes could be made to promote greater integration of climate change adaptation measures.

Climate Change Adaptation – Risks

- All Council strategies, plans and programmes continue to undergo **Strategic Environmental Assessment (SEA)**³¹ to assess their environmental impact including climate change adaptation risk and opportunities.

Climate Change Adaptation - Actions

- From a full Economic Appraisal of the Dundee Coastal Study Stage 2, progression of two **flood protection schemes** are currently underway:
 - Broughty Ferry – Glass Pavilion to Bridge Street and Bridge Street to the Council Boundary: This section of Rock Armour Revetment works has been fully designed and has received Planning Permission as well as a Marine Scotland Licence and permission from Crown Estates. An application for funding to Scottish Government was submitted in December 2013, however the Council were unsuccessful in that bid. It is proposed that a further bid will be made in the next round of Central Government funding anticipated in Autumn 2014.
 - City Quay, Central Waterfront and Riverside Drive to Dundee Airport: The design of flood protection measures for this section of the coastline is currently underway with a Planning Application submission being progressed. The aim is to ensure that designs are complete and Planning Permission is granted prior to the release of the next round of Central Government funding.
- The Council's Flooding Team developed of a computerised **Watercourse Inspection and Maintenance Model** which pulls together watercourse information, photographs, inspection records, repair and

maintenance schedules which were all previously held separately. The result is a geographic mapping system which allows for easy reference and updating, and “at a glance” access by the public. The system will enable the Council to develop a surface water management plan to help reduce the risk of local flooding from future extreme rainfall.

- All development within the City is controlled to ensure that it complies with government guidance given and that where appropriate, **Sustainable Urban Drainage Systems** (SUD's) are incorporated. The SUDS group meet with developers and their Agents to review proposed developments and to offer guidance on acceptable measures for dealing with surface water and to ensure that development does not encroach inappropriately into the flood plain. Developers and their agents are actively encouraged to participate in pre-application discussions with this group to facilitate the development process.

Climate Change Adaptation – Next Steps

- The Council, in partnership with Scottish Water, Angus Council and Perth and Kinross Council, is preparing an **Integrated Catchment Study** which will provide a collaborative sustainable approach to reducing flooding incidents within the boundaries of Dundee City.
- The Council is currently working in partnership with Angus Council, Aberdeenshire Council, Perth and Kinross Council, Scottish water and SEPA to prepare the **first Local Flood Risk Management Plan** for the Tay Estuary and Montrose Basin Local Plan District. This is a requirement of the Flood Risk management (Scotland) Act 2009 and will be published in 2016. The Plan will be reviewed on a 5 yearly basis and updated as necessary.

Priorities for the coming year (2014-15)

- ❖ Through the Scottish Cities Alliance, prepare a ‘Mini-Stern Review’ of Dundee to provide a high level indicative assessment of the economic risks of potential climate change adaptation impacts at the local city level.
- ❖ Identify climate change adaptation challenges and opportunities in Dundee. Plan and implement work required to address these.

Communications and Behaviour Change Initiatives

- The Council continues to participate in this international **Eco Schools**³² programme designed to promote environmental awareness in a way that links to many curriculum subjects, including citizenship; personal, social and health education and education for sustainable development. As of end March 2014, 42 schools had attained the Bronze Award, 26 had attained Silver and 7 had gained Green Flag status.
- **Solar Cities Scotland**³³ continue to implement their Dundee Green Challenge project that works with Community Representative structures from the West End and North East Wards of Dundee to engage residents in a three stage behaviour change programme that will encourage 2600 households to take up low carbon living. This is currently being delivered alongside a household renewable energy and insulation advice service giving tailored guidance on how to improve residents homes through the installation of energy saving measures and renewable energy technologies.
- The Following Climate Challenge Fund grants were awarded in Dundee during 2013/14:
 - **Church Carbon Saving project** was awarded £204,835 in October 2013 to promote behaviour changes towards low carbon lifestyles, increase the uptake of low carbon transport and install energy efficiency measures in two buildings in the West End of Dundee, Grade A listed St Marks Church on Perth Road and the community centre on Greenfield Place.
 - **Town Information Centre** was awarded £152,272 in October 2013 to run The **Maxwell Centre Community Garden and Environment project** which will give the community the chance to grow fruit, vegetables and herbs locally, thus reducing food miles and packaging waste. The project will also address air pollution, conservation and the sustainability of food through learning and development opportunities.
 - **University Student Trading and Innovative Enterprise DUSTIE** was awarded £59,370 in December 2013 to work with the local community to increase energy efficiency and decrease car use through their **Carbon Crusher project**. Energy efficiency advice will be provided through a Green Advice Centre and by trained student advisors that will visit homes. The move away from cars towards lower carbon alternatives will be facilitated by activities such as cycle lessons, maintenance classes and hire bike promotion. These measures will help the community reduce carbon emissions, taking action on climate change while saving money.
- Solar Cities Scotland, DEEAP and Camperdown Wildlife Centre worked together to run interactive education sessions with schools across Dundee, teaching pupils about climate change, renewable energy technologies as well as practical and simple carbon saving actions they can take to help.
- A variety of activities promoting www.tactranliftshare.com are being undertaken throughout 2013/14 including during National Liftshare Week in October. These include radio promotions, outdoor advertising and focussed events with Councils and Universities in the region.
- The Council participated in Earth Hour³⁴, 29th March 2014.

Capacity Building

- The Council established a **Climate Action Group** in 2013 to help cascade communication and embed carbon management across all departments. Speakers are invited from a range of disciplines to raise awareness amongst staff.
- Eighteen **Energy Management training sessions** had been carried out for over 260 staff (including Building Co-ordinators) that set out the Council's policies, strategy and communication efforts for reducing energy usage.
- A corporate **Thermal Comfort Policy** was developed in March 2014 to provide guidance on comfort conditions for staff whilst minimising excessive energy use.
- **Energy checklist** distributed to all Council education establishments in March 2014 with additional energy briefing sessions for staff.
- In early 2014 the Council launched '**Empower**', an interactive online awareness tool to help employees play a part in achieving energy and carbon savings in the workplace and in the home. There are currently 133 active users with 657 pledges made.
- A **Sustainable Development E-Learning module** was introduced in 2013 that enables staff to better understand the statutory and other drivers for the Council regarding sustainability; what strategic action the Council is taking to meet its sustainability duties and what actions staff can take to help make Dundee more sustainable.

Priorities for the Year Ahead (2014-15)

- ❖ Continue to improve partnership reporting for Scotland's Climate Change Declaration.
- ❖ Work in partnership to improve community capacity on climate change issues.
- ❖ Further develop and support internal capacity through the Climate Action Group.

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 - ² <http://www.dundeepartnership.co.uk/content/dundee-partnership-forum>
 - ³ <http://www.dundeepartnership.co.uk/content/single-outcome-agreement>
 - ⁴ [http://www.dundeepartnership.co.uk/sites/default/files/SOA%20Delivery%20Plan%202013-2017%20\(09.10.13\).pdf](http://www.dundeepartnership.co.uk/sites/default/files/SOA%20Delivery%20Plan%202013-2017%20(09.10.13).pdf)
 - ⁵ http://www.dundeecity.gov.uk/dundeecity/uploaded_publications/publication_3480.pdf
 - ⁶ <http://www.dundeecity.gov.uk/reports/reports/57-2011.pdf>
 - ⁷ <http://www.tayplan-sdpa.gov.uk/>
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 - ⁹ <http://www.dundeecity.gov.uk/sites/default/files/publications/LHS%202013%20-%202018%20Final.pdf>
 - ¹⁰ <http://www.dundeecity.gov.uk/reports/reports/413-2011.pdf>
 - ¹¹ <http://www.dundeecity.gov.uk/reports/reports/470-2012.pdf>
 - ¹² <http://www.dundeecity.gov.uk/environment/airquality/>
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 - ³² <http://ecoschoolsscotland.org/>
 - ³³ <http://www.solarcityscotland.org.uk/>
 - ³⁴ http://scotland.wwf.org.uk/how_you_can_help/wwfs_earth_hour/