

Isle of Wight Council

Second Carbon Management Plan (CMP) 2015-2020

Contents

Foreword - Councillor Luisa Hillard	Error! Bookm
Section 1: Introduction	4
External Drivers	4
Internal Drivers	5
Section 2: Progress to date	6
Section 3: Reporting to DECC	8
Section 4: Changes to emission's scope	10
Comparing the baselines of the Carbon Management Plans	10
Section 5: Display Energy Certificates	13
Section 6: Carbon Management Projects	14
Near term projects	15
Renewable energy projects	15
Additional projects	16
Summary	18
Section 7: Targets and objectives	19
Section 8: Conclusion	20

Foreword

The financial challenges faced by the council make it even more important that we focus on reducing our energy use and the costs associated with it which are predicted to continue rising in coming years. This is supported by the corporate priority of 'achieving value for money'. Saving money on the Council's overheads means that we have more resource available for the delivery of frontline services.

It is also essential that the council continues to play its part in mitigating climate change which is commonly accepted as one of the biggest challenges facing our communities. We have many policies and projects in place which seek to promote our Sustainable Community Strategy which work towards achieving the corporate priority of 'promoting and encouraging sustainability strategies and initiatives for the benefit of the Island.'

By aiming to reduce our carbon emissions by 50% in just 10 years, the council is setting an example and a challenge to the rest of the Island community and other councils nationally, to follow our lead. Reducing carbon emissions is good for business, good for the environment and good for society.



Cllr Luisa Hillard

Executive Member for Sustainability,
Environment & Public Realm

Section 1: Introduction

The council has successfully delivered its first Carbon Management Plan (CMP) which covered the period 2010-15, exceeding the target of 30% reduction in carbon emissions. This version aims to bring the CMP up to date with recent organisational and legislative changes, whilst introducing a selection of new projects to ensure that the council continues to reduce the carbon emissions from its buildings and activities. The CMP describes an adjusted scope which removes schools from the council's carbon footprint and sets a target for reductions in carbon emissions over the period 2015-20.

External Drivers

National Indicator 185

A revised version of the national indicator has now been devised by Government and requires the annual reporting of scope 1, 2 & 3 emissions (see page 8) in tCO2e (tonnes of CO2 equivalent) to account for both direct and indirect emissions as a result of council operations. This opens the council to public and central government scrutiny over its emissions.

Climate Change & Sustainable Energy Act 2006

The Secretary of State is required to produce an annual 'Energy Measures Report' which outlines local authority actions to improve energy efficiency, increase the production of heat and power from low-emission sources, reduce emissions of greenhouse gases and reduce the number of households in fuel poverty. Every local authority must, in exercising their functions, have regard to the most recently published Energy Measures Report.

Climate Change Act 2008

This act places a legal obligation on the UK government to reduce greenhouse gas emissions by 80% by 2050 (from a 1990 baseline). Carbon budgets set interim reduction targets of 22% by 2012, 28% by 2017 and 34% by 2022. All sectors, including local authorities, will need to contribute.

CRC Energy Efficiency Scheme

This is a mandatory carbon trading scheme which the council was required to participate in until 31^{st} March 2014. The cost of allowances was £12 per tonne of CO2 (subsequently rising to £16.40 / tCO2) and the financial impact on the council is shown in the table below:

Phase 1 CRC costs								
	2010/11 2011/12 2012/13 2013/14							
Corporate (£)	-	49,996	55,074	53,772				
Education (£)	-	81,572	90,389	86,628				
TOTAL (£)	-	131,568	145,463	140,400				

Due to the removal of schools from the CRC Energy Efficiency Scheme and the implementation of various energy efficiency projects, the council has fallen below the energy consumption threshold and will not be required to participate in Phase 2 which runs from April 2014 to March 2019.

EU Energy Performance of Buildings Directive

This Directive requires any public building with a floor area greater than $500m^2$ to have a Display Energy Certificate (DEC) and Advisory Report (AR). DEC's must be displayed in a prominent position and make the energy performance of council buildings more open to public scrutiny. Revisions to the scheme will reduce this area to 250m2 by 2015, although the Government has recently opened a consultation on how the requirements of the EU Directive are met.

Internal Drivers

Nottingham Declaration on Climate Change

As a signatory to the Nottingham Declaration on Climate Change, the council is required to have in place a plan for reducing the carbon emissions from its activities and to publicise this plan.

Rising Energy Costs

Despite recent falls, fossil fuel prices have risen dramatically during recent years, a trend that is not expected to change in the future. The council's gas and electricity supply contracts show an increase in cost of some 36% during the period 2008-15. The council spends some £1 million per year on energy (excluding schools) and these rising prices strengthen the business case for energy efficiency and for the generation of heat and power from renewable sources.

Corporate Plan

The council's desire to become a high-performing, cost-effective council has led it to review its building portfolio with a view to disposing of those buildings which are no longer required. This will result in the disposal of a number of energy inefficient buildings, reducing energy costs and emissions.

Sustainable Development Strategy

The Island's Strategy for Sustainable Development requires the council to show leadership in environmental management and carbon reduction.

Section 2: Progress to date

The council's carbon emissions, including schools, for the first 4 years of the Carbon Management Plan are shown below:

	2009/10 (baseline)	2010/11	2011/12	2012/13	2013/14	% change from baseline
Stationary sources						
Grid electricity	12,263	11,266	10,424	10,679	10,429	-15%
Electricity generated from onsite renewable sources	1	1	1	7	35	-
CHP	86	98	98	30	37	-
Liquid fuels	791	681	309	127	212	-73%
Gaseous fuels	5,215	5,602	4,103	4,670	4,876	-6.5%
Travel						
Fleet	974	823	472	344	331	-66%
Business	1,038	868	599	380	379	-63%
Further sources						
Refrigerant gas	11	14	14	2	2	-81%
Waste	94	94	94	91	91	-3%
Water	85	73	73	61	69	-18%
Actual total (tCO2)	20,559	19,520	16,187	16,389	16,271	
Cumulative reduction since baseline year (%)	0	5%	21%	20%	21%	

Reasons for increased emissions during 12/13 include;

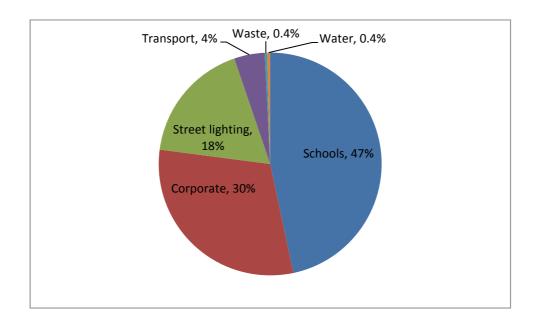
The increase in emissions during 12/13 is the result of increased energy use in buildings and can be attributed to:

- Sites converted from oil to gas were essentially using fuel delivered in the previous financial year when the carbon emissions would have been counted.
- Sites which were under refurbishment during 11/12 used very little energy, but came back into use during 2012/13.
- Sites such as County Hall virtually doubled its gas consumption during 2012/13 to accommodate new out of hours working requirements of relocated teams.

The council is currently 3% behind its original target (and scope) of 6% year on year reduction after 4 full years (i.e. 21% reduction against target of 24%).

A breakdown in emissions for 2013/14 is shown below:

Original emissions scope by % - 16,389tCO2



The Isle of Wight Council (including schools) has reduced CO₂ emissions from its activities by 21% during the period 2009/10 to 2013/14. This represents savings of 5% per year.

In 2013/14, the council (including schools) was responsible for the emission of 16,271 tonnes of CO2 from energy use.

It should also be noted that the council has made significant improvements in data management during the first 4 years of the CMP, with the installation of some 180 smart meters across corporate and school buildings. With schools no longer being directly managed by the Isle of Wight Council, 57 smart meters now remain within the council's portfolio.

Section 3: Reporting to DECC

The council is required by Government to publish details of its carbon emissions in tonnes of CO2 equivalent (tCO2e). This measure takes account of all the greenhouse gas emissions and converts them into the equivalent output of CO2. The council is also required to separate its emissions into Scope 1, 2 and 3 as defined below:

Scope 1 – Direct emissions: Emissions from activities owned or controlled by your organisation that release emissions into the atmosphere. Examples of Scope 1 emissions include emissions from combustion in owned or controlled boilers, furnaces, vehicles; emissions from chemical production in owned or controlled process equipment.

Scope 2 – Energy indirect: Emissions released into the atmosphere associated with your consumption of purchased electricity, heat, steam and cooling. These are emissions that are a consequence of your organisation's activities but which occur at sources you do not own or control.

Scope 3 – Other indirect: Emissions that are a consequence of your actions, which occur at sources which you do not own or control and which are not classed as Scope 2 emissions. Examples of Scope 3 emissions are business travel by means not owned or controlled by your organisation, waste disposal which is not owned or controlled, or purchased materials or fuels.

The data for the baseline year (2009/10) and the first 4 years of the Carbon Management Plan are shown in the tables below:

IWC CARBON EMISSIONS (tCO2e)							
			2009/10	2010/11	2011/12	2012/13	2013/14
SCOPE 1	DIRECT	tCO2e	7,324	7,419	5,059	5,223	4,998
SCOPE 2	INDIRECT	tCO2e	11,087	9,982	8,626	8,987	8,538
SCOPE 3	OTHER INDIRECT	tCO2e	2,869	2,408	1,944	1,704	894
Out of scope			0	0	0	0	8
Total gross emissions		tCO2e	21,280	19,808	15,629	15,914	14,438
% reduction since bas	seline (2009/10)		0	7	27	25	32

IWC CARBON EMISSIONS (tCO2e)									
	2009/10	2010/11	2011/12	2012/13	2013/14				
Stationary sources									
Grid electricity	11,965,345	10,785,354	9,363,413	9,696,649	8,542,460				
Liquid fuels	938,107	681,558	308,774	126,550	200,243				
Gaseous fuels	5,389,639	5,801,304	4,246,988	4,763,973	4,475,220				
Transport	1			r					
Fleet	1,203,762	1,130,185	649,913	407,646	330,580				
Business	1,190,414	848,611	506,205	359,869	330,180				
Further sources	,			ı					
Waste	380,520	380,520	389,580	407,037	407,037				
Water	212,680	180,929	164,567	152,544	152,544				
Actual total (tCO2e)	21,280	19,808	15,629	15,914	14,438				
Reduction since baseline year (%)	0	7	27	25	32				

Note, the council's carbon footprint has been restated for all years in order to account for material changes to the conversion factors provided by Defra for company reporting purposes.

The Isle of Wight Council has reduced emissions from its activities by 32% during the period 2009/10 to 2013/14 when stated in tCO2e (tonnes of carbon dioxide equivalent).

This represents savings of 8% per year.

Section 4: Changes to emission's scope

In order to better reflect legislative and operational changes affecting the council, the emission's scope is being changed as follows:

Energy consumption in buildings –. Schools will be excluded from scope with only those corporate buildings occupied by the council being kept in scope. This is because schools are no longer included in the council's carbon footprint for the CRC; the council no longer has access to schools' energy consumption data through smart meters; and because capital budgets are fully devolved to schools so the council has no control over expenditure and therefore no ability to reduce their carbon emissions.

Refrigerant Gases – With the removal of the majority of air-conditioning units across council buildings during 2010-13, there is little benefit in spending time collating this data. For this reason, refrigerant gasses will no longer be in scope.

The council's revised carbon footprint is therefore comprised of carbon emissions relating to:

- ✓ Buildings (excluding schools)
- ✓ Street lighting
- ✓ Business travel
- ✓ Fleet vehicles
- ✓ Water consumption
- ✓ Office Waste

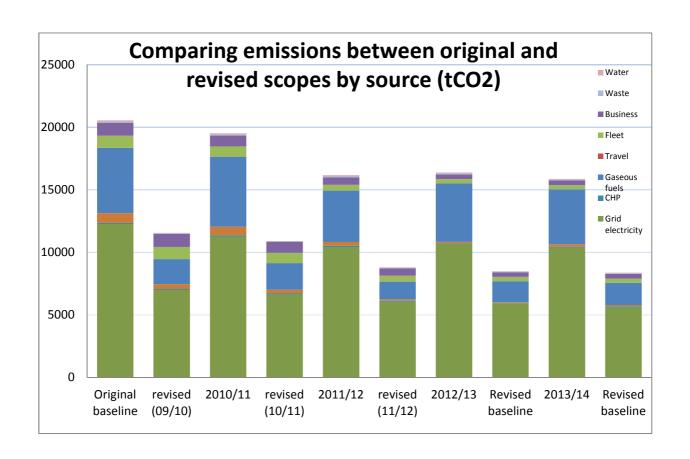
Outsourced services will continue to be included where the administrative burden of collecting the emissions data can be justified. Therefore, services which are expected to produce in excess of 1% of the council's footprint (circa 85tCO2 per year) will be included.

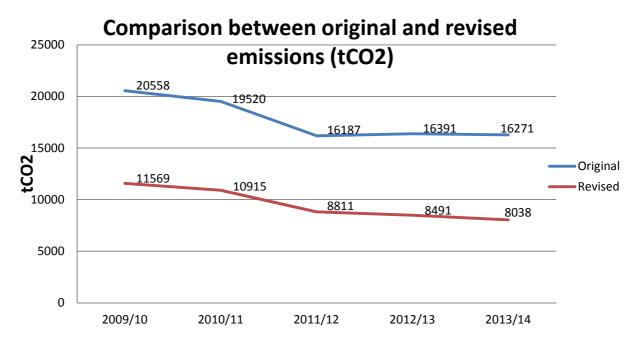
Considerable work has been undertaken by the Highways PFI team in developing a tool to capture the carbon impact of the Highways PFI contract. Further work will be carried out on this tool to enable it to be utilized for other significant contracts going forwards. Alternatively, another option for capturing emissions from outsourced services is to utilise the 'Government conversion factors for company reporting' available at http://www.ukconversionfactorscarbonsmart.co.uk/.

The revised baseline for the CMP is determined by re-calculating the 09/10 emissions based on the new scope. This produces a new 09/10 baseline of 11,569 tCO2.

Comparing baselines of the two Carbon Management Plans

Having agreed the change in scope for the council's carbon footprint, it is necessary to adjust the emission's totals in previous years so that progress against the new scope can be seen. The graphs below show the revised emissions for the baseline year (2009/10) and the first 4 years of the Carbon Management Plan:





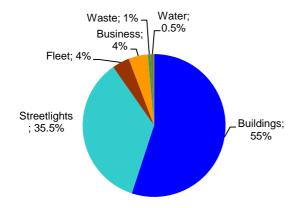
The graphs show that under the original scope, the CMP managed a total reduction in carbon emissions of 20.9% over 4 years while the revised scope would see a reduction of 30.5% during this time.

Reduction in carbon emissions from 2009/10 baseline (%)							
	2009/10 2010/11 2011/12 2012/13 2013/14						
Original Scope	0	5%	21.3%	20.3%	20.9%		
Revised Scope	0	5.7%	23.8%	26.6%	30.5%		

Taking the last year for which full data is available, the breakdown in emissions under the new scope for 2013/14 is as follows:

	CO2 (tonnes)	%	Estimated Cost (£)
Buildings and street lights	7,277	90.5%	£ 1,500,000 ¹
Transport	688	8.5%	£ 300,000
Further scope	72	1%	£ 200,000
	8,038	100%	£2,000,000

A more detailed breakdown of emissions is shown below:



Category		tCO2 2012/13	%
Buildings and	Buildings	4,431	55%
Street lighting	Streetlights	2,846	35.5%
Transport	Fleet		4%
Transport	Business	357	4%
Further scope	Waste	43.5	1%
Water		29	.5%
_		8,038	100%

Under the new scope, the Isle of Wight Council has reduced CO₂ emissions from its activities by 30% during the period 2009/10 to 2013/14.

This represents savings of 7.5% per year.

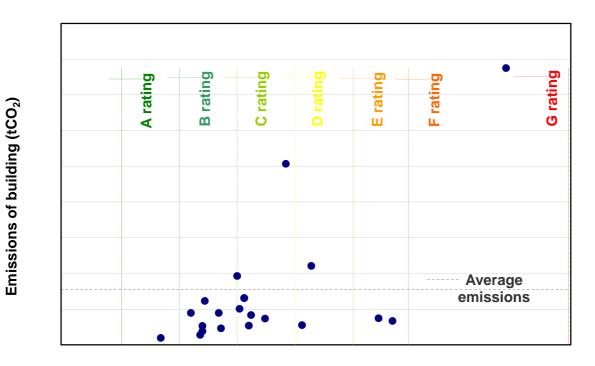
12

¹ Includes the cost of street lighting which is paid by Island Roads on behalf of the council.

Section 5: Display Energy Certificates

The council is required to produce a Display Energy Certificate (DEC) for most public buildings, which shows its energy performance according to a series of bands from A to G. Buildings rated A are the most energy efficient and those rated G are the least energy efficient.

The graph below illustrates the current (2013) DEC ratings of non-school buildings with areas in excess of 500m2. The UK average building emissions is also shown for comparison.



DEC Score

The G rated building with the highest emissions is County Hall where the high energy consumption is mainly attributable to the server farm. Work is underway to investigate cloud hosting of data which would significantly reduce energy consumption and improve the building's DEC score.

Section 6: Carbon Management Projects

Energy and carbon saving projects have been identified to inform the CMP targets over the period of this plan.

Unforeseen additions to the existing carbon footprint which need to be offset by other projects include;

- Acquisition of Somerset care homes which are estimated to be accountable for some 300 tCO2
 per year and will be included within the council's carbon footprint from 2013 onwards. This is
 an estimated increase of some 3.5%.
- Out of hours heating of County Hall to accommodate newly relocated teams with more diverse
 working patterns. Historically, this office was heated for normal office hours (8am to 5pm
 Monday to Friday), but recent changes to working patterns have necessitated half of the
 building being heated 24hours a day, 7 days a week. This represents an increase in gas
 consumption of approximately 100% or 100tCO2, representing an increase in the overall
 carbon footprint of some 1%.

Project	Financial (Gross)	tCO ₂	
Acquisition of care homes	-£71,459	-299.9 tCO2	
County Hall extra heat	-£14,300	-101.2 tCO2	

As a result of the necessity to reduce services provided by the council to meet budget deficits, it is envisaged that further property rationalisation will occur in forthcoming years. Little is known at this point as to the extent of these changes and so the figures below can only be very approximate.

	Annual Savings (yr 1)			
Project	Financial (Gross) tCO ₂			
Reorganization: 2014-15	£6,253	47.8 tCO2		
Reorganization: 2015-16	£7,468	48.1 tCO2		

Assumptions

It should be noted that in all the calculations, the following assumptions have been made:

- Savings are based on consumption rather than cost as we cannot predict future price rises
- Savings are allocated to the year the investment was made, although in reality this will be a more complex picture, depending on the nature of the project.

1. Near term projects

A number projects have been identified for the near term. Some of these will be implemented during 2014/15 with existing resources whilst the remainder are planned for implementation during 2015/16 as part of the building maintenance programme:

	Cost		Annua	l Savings		
Project	Capital	Operational	Financial (Gross)	Carbon (tCO2)	Pay back (yrs)	Net Present Value(£)
County Hall - commissioning of new lighting	£900	£0	£1,261	6.5 tCO2	0.7	£9,591
Jubilee stores - lighting upgrade	£1,941	£0	£751	3.9 tCO2	2.6	£1,451
LED street lighting (phase 1)	£0	£0	-	612.9 tCO2	0.0	-
Fire stations - appliance bay lighting upgrade	£3,400	£0	£570	2.9 tCO2	6.0	£3,163
County Hall - calorifier	£1,500	£0	£660	3.6 tCO2	2.3	£7,880
Sandown Fire Station - separate hot water system	£2,000	£0	£780	5.5 tCO2	2.6	£10,856
Adopt council wide heating & cooling policy	£0	£0	£11,700	82.8 tCO2	0.0	£32,779
Dinosaur Isle - LED gallery 1	£1,500	£0	£374	1.9 tCO2	4.0	£4,664
LED street lighting (phase 2)	£0	£0	-	612.9 tCO2	0.0	-
Gouldings - replacement tumble drier	£3,000	£0	£222	1.4 tCO2	N/A	-£1972
Gouldings - replacement boilers	£10,000	£0	£1,366	9.7 tCO2	7.3	£5,737
Freshwater Library - lighting upgrade	£3,000	£0	£176	0.9 tCO2	N/A	-£970
Adelaide- LED lighting upgrade	£3,000	£0	£464	2.0 tCO2	6.5	£2,347
Medina Theatre - LED spotlights	£1,311	£0	£294	1.5 tCO2	4.5	£2,077
Dinosaur Isle – waterless urinals	£1,400	£200	£727	0.1 tCO2	2.7	£4,671

The impact of these projects, combined with the estimated re-organisation contribution, is expected to decrease carbon emissions by some 780.8tCO2 (6.7%) during 2014/15 and 667.8 tCO2 (5.7%) during 2015/16. It should be noted that a significant proportion of these savings will come from the Highways PFI contract which will be converting the street lighting across the Island to LED. This, combined with the implementation of the council's dimming and trimming policy, is anticipated to make significant energy savings.

All the projects highlighted above will generate a corporate saving, apart from 'LED street lighting'. No financial saving will be made from improved energy efficiency of street lighting as the contract is now with Island Roads, with the council paying a fixed rate for energy consumption within this contract. As a significant outsourced service, carbon emissions will continue to be captured within the council's footprint.

2. Renewable energy projects

Further opportunities for renewable energy installations have been identified and are quantified in the table below:

	Cost		Annual Sav	rings (yr 1)		
Project	Capital	Operational	Financial (Gross)	Carbon (tCO2)	Pay back (yrs)	Net Present Value(£)
Thompson House Biomass to replace oil heating	£5,500	0	£7,500	87tCO2	N/A	£112,500
Westridge PV - 11kWp	£15,000	0	£2,540	5.4 tCO2	6	£48,000
County hall Sea street PV - 11kWp	£15,000	0	£2,540	5.4 tCO2	6	£48,000
Dinosaur Isle PV – 11kWp	£15,000	0	£2,540	5.4 tCO2	6	£48,000
Seaclose Offices PV - 11kWp	£15,000	0	£2,540	5.4 tCO2	6	£48,000
Medina Leisure PV - 11kWp	£15,000	0	£2,540	5.4 tCO2	6	£48,000
Newport Fire PV - 10kWp	£10,600	-£1,100	£824	4.2 tCO2	5.5	£21,108
Adelaide club PV - 11kWp	£15,000	0	£2,540	5.4 tCO2	6	£48,000
Gouldings PV - 7.5kWp	£8,100	-£950	£717	3.7 tCO2	4.9	£19,376
Ryde fire station PV - 4kWp	£6,500	-£550	£382	2 tCO2	7.0	£8,868
PV window tinting for county hall	TBC	ТВС	твс	твс	твс	твс

These projects would contribute carbon savings of 129 tCO2 per year or 1.1% of the total.

The council is currently investigating the business case for solar photovoltaic (PV) installations on a number of its buildings and will take this forward if the business case is attractive.

It should be noted that, due to the length of financial incentives offered by Government, renewable energy projects would provide a long-term income stream to the council beyond the point where investment is repaid.

Due to current grid constraints, PV projects are limited to approximately 11kWp for larger (3 phase electricity) sites and one third of this capacity for buildings with a single phase supply.

3. Additional projects for consideration

Looking ahead, there are numerous additional energy saving projects which could be implemented if funding is made available. These have been quantified, as far as possible, in the table below:

	Cost		Annual Savings (yr 1)			
Project	Capital	Operational	Financial (Gross)	Carbon (tCO2)	Pay back (yrs)	Net Present Value(£)
County Hall - adaption of heating circuits to accommodate out of hours working	£25,000	£0	£11,700	82.8 tCO2	2.1	£109,754
Office recycling champions	£100	£0	£0	0.4 tCO2	0	-£100
Guildhall - 7 day storage heater timers	£200	£0	£1,908	9.8 tCO2	0.1	£8,415
Offices - PC power management settings on all laptops	£0	£0	твс	твс	0.0	твс
Plant room insulation (various sites)	£16,000	£0	£2,687	19 tCO2	5.9	£22,237
Heat recovery from servers	£25,000	£0	£5,356	32.5 tCO2	4.7	£45,947
Hydroboil plus replacement over standard hydroboil (replace or new)	£120	£0	£21	0.1 tCO2	5.7	£56
7 Heathfield Rd - conversion from oil to gas	£5,000		£1,553	2.3 tCO2	3.2	£20,593
Sea Street - decentralised heating, new gas combi boiler	£8,000		£1,100	5.5 tCO2	7.3	£10,129
Sandown fire station - boiler room insulation	£200	£0	£52	0.4 tCO2	3.8	£657
Sandown fire station - lagging of internal heating pipes to control heating	£170	£0	£61	0.4 tCO2	2.8	£837
Heights BMS	£25,000	£0	£6,240	44.2 tCO2	4	£51,869
Shower water heat recovery (various sites)	£13,700	£0	£2,486	16.7 tCO2	5.5	£14,936
Barry Way - lighting upgrade	£2,161	£0	£835	4.3 tCO2	2.6	£1,608
Vending miser (Leisure centres)	£600	£0	£400	2.3 tCO2	1.4	£1,393
Cavity Wall insulation – care homes	£25,000	£0	£3,900	27.6 tCO2	6.4	£39,278
County Hall - destratification of council chamber	£1,000	£0	£234	1.7 tCO2	4.3	£1695
Medina leisure centre - backwash water recovery	£10,000	£500	£1,726	0.2 tCO2	8.2	£7,430
Micro CHP in Gouldings, Adelaide and Newport fire station	£65,000	£1,800	£8,310	32.1 tCO2	10	£9,876

Collectively, these projects would provide a carbon saving of some 282 tCO2 or 2.4% of the total.

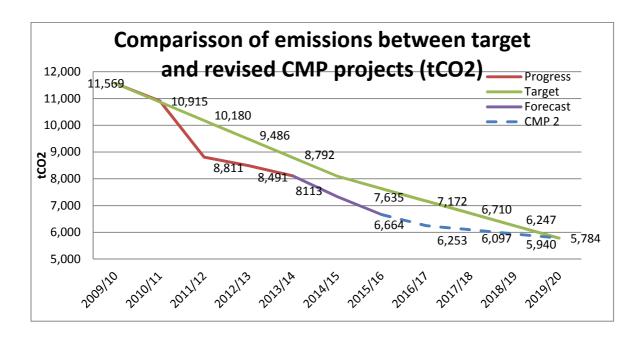
Funding for these projects has not yet been allocated and could be the subject of future capital bids. A number of projects fall within the council's current invest-to-save criteria, whilst interest-free loan funding is available for a package of projects from Salix Finance as long as, together, the payback period is less than 5 years. Where an external funding source is used, the council must stay within its overall borrowing limits.

An alternative option would be what is commonly termed 'contract energy management', where a third party is engaged to identify and finance energy saving measures and the savings are then shared between the parties. This option reduces the overall benefit to the council, but will be kept under review.

Summary

A summary of the potential Carbon Management projects is shown below:

	2014/15	2015/16	Renewables	Additional projects
Capital cost	£25,672	£7,280	£120,700	£222,251
Revenue saving (p.a.)	£15,556	£3,789	£24,668	£48,569
CO2 saving (p.a.) – tCO2	776.2	672.8	129.3	282.3
Total % Carbon Saving	6.7%	5.7%	1.1%	2.4%



Assuming progress continues as planned:

An overall reduction of 4,312tCO2 by the end of 2014/15 represents an overall reduction of some 37% over the 5 years of the CMP.

An overall reduction of 4,905tCO2 at the end of 2015/16 represents a carbon saving of some 42% over 6 years.

Both of the above forecasts are heavily dependent on a reduction in emissions as a result of the Highways PFI contract, specifically the installation of LED street lighting across the Island. If the new street lighting does not reduce energy consumption as expected, future reduction targets will be much more difficult to achieve.

Section 7: Targets and objectives

Using the revised scope, the council has reduced its carbon emissions by 30.5% over the first 4 years of the CMP, against a target of 24% (6% reduction per year). To some extent this has been achieved through a reduction in staff numbers and closure of surplus office buildings, but there has also been investment in the most cost-effective carbon reduction projects.

Full data for 2014/15 is not yet available, but it is anticipated that savings could be as much as 6.7%, resulting in a reduction in carbon emissions of 37% over the five year plan, against a target of 30%.

With the pipeline projects for 2015/16 contributing a further reduction of 5.1%, the total reduction by March 2016 could be in the region of 42%, assuming LED street lighting makes the full savings anticipated. However, beyond that point, savings will be harder to achieve, particularly as the council has reduced staffing and no longer has a specialist energy management function. Projects have been identified which will contribute a further 3.5% reduction and there are likely to be further savings from reorganisation; however, resources for the implementation of carbon saving initiatives will be under greater pressure.

Bearing in mind the benefits of carbon and energy reduction, and the fact that the UK aims to reduce its total carbon emissions by at least 80% by 2050, this CMP will set a target of a further 20% reduction in CO2 emissions from council buildings and services. In addition to the 30% target from the first CMP (2010-15) this means the council will reduce its carbon emissions by 50% in the 10 year period from 2010 to 2020.

In order to give the council greater flexibility in times of financial constraint, annual targets will not be set. However, the council will monitor progress on an annual basis and will consider increasing the reduction target should it achieve the new target ahead of schedule or provide additional resources should progress be slower than anticipated.

The target for the Carbon Management Plan 2015-2020 will be to reduce carbon dioxide emissions from council buildings and services by a total of 50% from the revised 2009/10 baseline.

Section 8: Conclusion

With the publication of the original Carbon Management Plan, the council set itself an extremely challenging target of 6% year-on-year reductions in carbon emissions, representing a 30% reduction over the 5 years of the Plan. At the end of the fourth year, the council had already exceeded the target, with reductions of 30.5%.

In common with many local authorities, the council is experiencing an unprecedented period of change, with large-scale budget cuts and jobs losses, resulting in a reduction in the resources available for energy and carbon management. Nevertheless, it remains the case that reductions in energy consumption will reduce both carbon emissions and costs, helping the council achieve a more sustainable financial position.

In light of this new reality, the CMP 2015-20 will aim to reduce carbon emissions to 50% of those measured in the baseline year of 2009/10. This will be measured using the revised scope which defines the council's carbon footprint according to the requirements of the CRC Energy Efficiency Scheme.

Progress will be reviewed annually to ensure that the council is on track to achieve this target.