# Ipswich Borough Council
# Impact Programme

## Impact Carbon Management Plan (CMP)

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# Contents

## Foreword

We are very pleased to present this Carbon Management Plan on behalf of Ipswich Borough Council. This document is a clear indication of our determination to take action on the causes of dangerous climate change and follows the commitment that we made by signing the Nottingham Declaration in 2008. It is a tangible demonstration of the environmental priorities in our corporate plan Transforming Ipswich.

Climate change is the greatest challenge facing our planet: it has the potential to limit where we live, patterns of migration, economic growth, equality and could affect the staples of life such as food. In addition to this we have concerns regarding the medium to long-term availability of fossil fuels on which we are currently highly dependant.

It is important that we enable the wider community to take action but also demonstrate our own commitment by concerted effort to reduce our carbon emissions from our own business activities.

This Plan seeks to address these concerns at a local level by reducing both our carbon emissions and increasing energy efficiency in our own estate. It is an important management tool as it provides detailed analysis of a significant area of expenditure and presents a process for managing this. We are proud that we have set ourselves ambitious targets for carbon reduction of 30% within 5 years and 50% by 2021.

This Plan will stimulate positive changes in the way that we manage and plan resource use. We will also use this Plan as a rallying call to our partners across our community in Ipswich.

Councillor Louise Gooch
Portfolio Holder for Environmental Services

## Foreword from the Carbon Trust

Cutting carbon emissions as part of the fight against climate change should be a key priority for local authorities - it's all about getting your own house in order and leading by example. The UK government has identified the local authority sector as key to delivering carbon reduction across the UK inline with its Kyoto commitments and the Local Authority Carbon Management programme is designed in response to this. It assists councils in saving money on energy and putting it to good use in other areas, whilst making a positive contribution to the environment by lowering their carbon emissions.

Ipswich Borough Council was selected in 2008, amidst strong competition, to take part in this ambitious programme. Ipswich Borough Council partnered with the Carbon Trust on this programme in order to realise vast carbon and cost savings. This Carbon Management Plan commits the council to a target of reducing $CO_2$ by 30% by 2013 & 50% by 2021 and underpins potential financial savings to the council of around £2.5 million.

There are those that can and those that do. Local authorities can contribute significantly to reducing $CO_2$ emissions. The Carbon Trust is very proud to support Ipswich Borough Council in their ongoing implementation of carbon management.

Richard Rugg
Head of Public Sector, Carbon Trust

## Management Summary

This Council has recognised its responsibility to be a local leader in tackling the causes of climate change. This means managing and reducing carbon emissions arising from our activities and properties used in delivering services. Carbon reduction is a priority area in our corporate plan 'Transforming Ipswich' under the 'Clean & Green' theme. This commitment was further underlined by our signing of the Nottingham Declaration. We have committed ourselves to be '**A carbon efficient council to lead a low carbon community.'** This fits with drivers that prompt councils to be to be leaders working in partnership with other bodies and setting a local agenda for climate change issues. We will use this project to demonstrate our commitment to this and use it as a springboard to engage with businesses and communities to join with us in reducing carbon emissions. This Plan will be used as a vehicle to incentivise our suppliers, customers and grant aided organisations to work with us to develop a low carbon community.

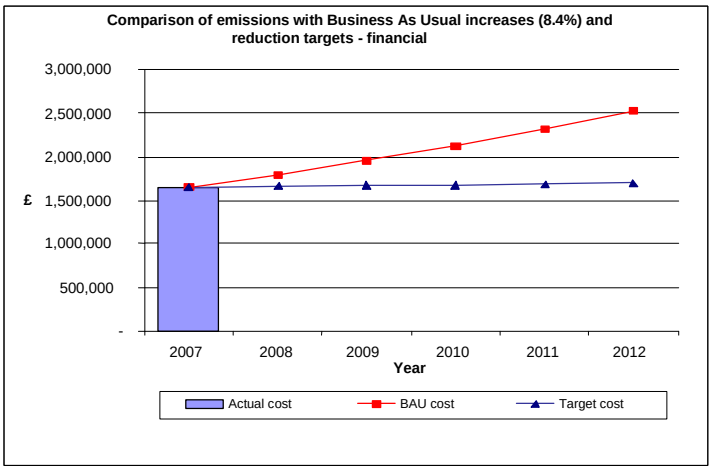
The purpose of this Plan is to set out how the Impact Project will reduce this Council's carbon emissions, establish a baseline from which we can measure that reduction and place energy efficiency at the core of our business practice.

**Baseline.** A key activity in the development of this Plan was the analysis and audit of all sources of carbon emissions, which has given a better understanding of the organisation and the scope for delivering cost and carbon savings. For 2007/08 IBC had a carbon footprint of 10,049 tonnes.

**Target.** We will reduce our $CO_2$ emissions from the 2007/08 baseline by 30% by 2013 and by 50% by 2021.

This equates to over 3,000 tonnes of $CO_2$ the equivalent of the output of 300 homes[1]

**Financial Benefits.** Reducing our carbon emissions through energy and fuel efficiency will deliver savings by reducing the quantity of these commodities purchased. If current patterns of consumption and management (Business As Usual or BAU) continue, costs and emissions will rise due to increasing inefficiency of hardware and average rises in fuel and energy prices. This BAU scenario is set against the Reduced Emissions Scenario of 30% and shown in the table below. This table shows that a 30% reduction will stabilise costs and avoid additional expenditure in the region of £2.5M.

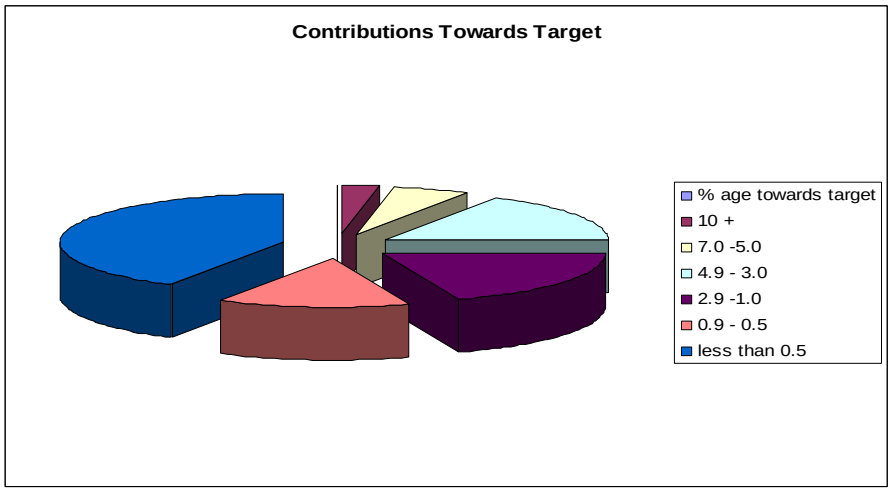



**Funding.** Access to adequate funding and a process for prioritising action is a key success factor. A £300,000 self-financing invest to save fund has been secured to support projects that will reduce carbon and energy. Access to the fund follows energy hierarchy principles in that demand reduction will be the first priority with renewable heat and energy installation following.

[1] Based on emissions from average UK household.

**Governance and Performance Management.** To ensure that this project fulfils its purpose a governance structure has been established. The Impact project is sponsored by Councillor Louise Gooch the Portfolio Holder for the Environment and by Laurence Collins, Corporate Director; supported by a Project Leader, a Board consisting of senior managers and a project team made up of staff involved in conceiving and progressing individual projects. The project has been named 'Impact' to give it identity and drive. To communicate, support and identify issues at grass roots level a staff group 'Transformers' has been established.

**Carbon Reduction Projects and Achieving the Target.** Section 4 lists the projects already identified that will contribute to our reduction target. The projects identified will deliver a 21% reduction against our baseline figure. The shortfall of 9% will be met from projects awaiting quantification, new projects identified by Transformers and energy audits of all operational premises, which will be continued on a cyclical and perpetual basis. In the longer term the use of renewable heat and energy will be utilised. The table below demonstrates that the majority of our target will be met by many projects, which by themselves achieve single figure percentage savings. This confirms that smaller projects add up to a big difference and that projects will not be rejected on the basis of a small contribution to the target.

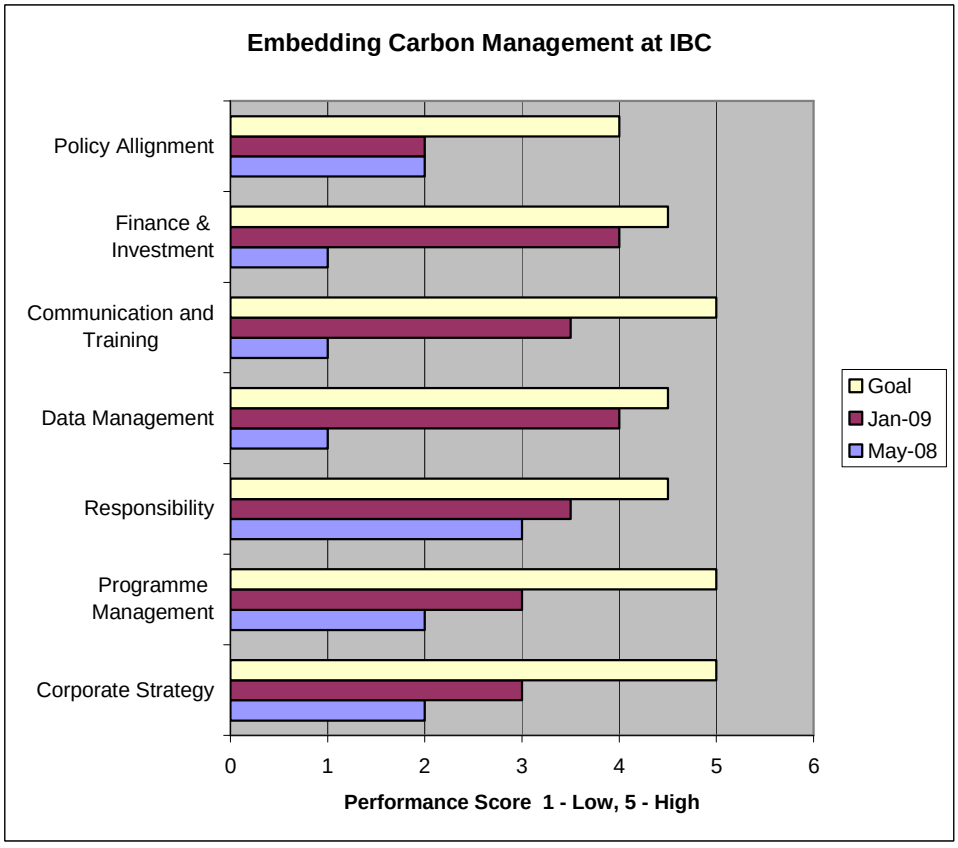



**Embedding Carbon Management Across the Organisation.** It is important that the role of carbon management is recognised as a core activity because of its effect on costs, the environment and to ensure that improvements continue to be realised on an ongoing basis. Key action points to embed carbon management are:

- Corporate $CO_2$ savings are incorporated into the Best Value Performance Plan and reported through Performance Manager system.
- Reduction targets to be devolved to service level through business plans.
- Regular performance reporting.
- Planned communication and training.

**Progress to Date.** There are several individual projects underway which are already delivering results. One example of this is the lighting timers at Grafton House, which by adjusting the length of time that lights remain on for, is now producing savings of about £7,000 per annum. We are using Whitton Sports Centre as a demonstration site where we are conducting thorough energy audits and creating action plans for our findings. These involve not only changes to hardware but also adjustments in staff responsibility and a management regime that involves awareness raising and training. This approach will be rolled out to all sites.

The development of the project to this point has already started to influence the process of embedding carbon management. The table below shows our assessment of our performance against a set of parameters set by the Carbon Trust. Our performance was assessed at the point that we joined the programme, at January 2009 and our long-term goal. This demonstrates progress prompted by the adoption of the project. Our plans to ensure continued progress are detailed at section 6 and at Appendix B.




This Plan presents an opportunity for this Council to set itself as benchmark for proactive environmental behaviour, to develop further environmental improvements beyond the original objectives, create a culture that empowers the organisation at all levels to make pro-environmental and efficiency improvements.

## 1. Introduction

### 1.1 Background to the Borough

Ipswich is a regional city with around 350,000 people in the immediate catchment area. It is the County Town of Suffolk, is at the heart of the Haven Gateway sub region and recognised as an area of major growth.

Ipswich is a key player in Regional Cities East a nationally recognised initiative and we embrace our role in leading the major urban centre for the County. Recognising its position as a regional leader, the Council submitted its initial concept for Unitary Ipswich and Suffolk in April 2008 and awaits the final outcome.

Ipswich is changing rapidly with significant growth planned for the next 15 years. Our population is expected to increase by 20,000 by 2021, an increase of 15%. Major expansion of housing, jobs and higher and further education, along with a renaissance in the heart of Ipswich, require significant investment and other infrastructure.

Ipswich provides a high quality of housing, cultural and leisure opportunities. The town is set within an attractive rural environment with a rich heritage whilst benefiting from well-managed parks and large areas of green space; most people in Ipswich enjoy a high quality of life. There are however pockets of the town where social and economic deprivation are key issues. The Borough Council is working hard with partners to resolve these issues so that everyone in the town has the opportunity to contribute to, and share in, the increasing prosperity of Ipswich. As a result of its urban identity and mixed economy we have a relatively low per capita output of $CO_2$ at 6.1 tonnes per capita.[2]

#### Corporate Plan

Our corporate plan 'Transforming Ipswich' sets out our 10-year vision up to 2015. This vision identifies goals under 6 key themes:

- Clean & Green Ipswich
- Expanding Ipswich
- Safe Ipswich
- Strengthening Communities in Ipswich
- Travel Ipswich
- Vibrant Ipswich

#### Environmental Strategy

In 2007 Ipswich strengthened it's commitment to the environment, the 'Clean and Green' theme and its commitment to the Nottingham Declaration by increasing its environmental strategy function and establishing a dedicated team.

The work of the team can be broken down into three main work streams:

- Ensuring that environmental and climate change awareness is embedded across the organisation through appropriate policy development.
- Reducing our own carbon emissions and developing renewable energy alternatives.

[2] Source Defra 2006 data sets

- Working within the community to raise awareness of and engagement in climate change issues as well as engaging with the business sector.

The relevant themes relating to our Carbon Management Programme are 'Clean and Green Ipswich' which sets the goal ' We will work with the community to make Ipswich a model urban clean and green place' and 'Travel Ipswich' which undertakes to 'reduce the overall impact of travel on the environment'. Within these goals the most relevant are:

- Reduce carbon emissions through promoting renewable energy and energy efficiency.
- Reduce waste by supporting initiatives which reduce, re-use and recycle
- Provide people with a real choice of travel options to reduce reliance on the private car and so minimise congestion.

In addition to these workstreams two of the Council's major functional areas StreetCare and Transportation are certified to ISO 14001 Environmental Management System

### 1.2 Scope and Purpose

This Carbon Management Plan (CMP) is a formal deliverable of Carbon Trust's Local Authority Carbon Management Programme. To emphasise the importance of the programme and to give it extra profile and branding IBC has given it the name **Impact.** This title will be applied to the group and team responsible for the governance of our programme. This Impact CMP sets out the programme and process by which this Council will achieve the targets it has set itself to reduce carbon emissions.

This document covers:

- Sources of IBC emissions.
- Establishes our baseline carbon footprint.
- Targets to reduce the baseline.
- A programme of actions to meet the targets.
- Outlines the management and reporting processes to drive performance and influence success.
- Communicating carbon reduction issues.
- Actions to embed carbon reduction across the organisation.

#### Purpose

This Plan is the basis for how we manage IBC's carbon emissions, energy consumption and is our strategy for addressing National Indicator 185 (the amount of $CO_2$ arisings per annum from the Council's own operations). A key deliverable of this Plan is that it places carbon and energy saving in context as well as bringing actions in one place. Although there have been incidences of good practice it has been difficult for staff to frame proposals in a way to give them increased priority.

Our approach in developing this programme is primarily to apply the energy hierarchy. That is to say that we will focus initially on actions that reduce our demand for energy, then focus on those that switch to fuels with lower carbon emissions and then on developing sources of renewable power.

#### Timescale

The initial period covered is 5 years but the stretch target is to be achieved over lifespan of 13 years

### 1.3 Achievements

In 2006 the Council moved its HQ to a new building with a BREEAM 'very good' rating on a brownfield site which prompted several pro environmental moves including the establishment of a Green Travel Plan and increasing the range of onsite recycling.

The Council is progressing the development of up to 4 large wind turbines around the perimeter of Ipswich.

The Reg Driver Centre in Christchurch Park has made extensive use of green technology including high thermal efficiency, rainwater harvesting, Sedum roof and biomass boiler.

The Council was a pioneer in developing on of the first in-vessel composting facilities in the country as a joint venture with Anglian Water. We were early developers of the 3 bin kerbside recycling system and with our partner authorities developed an award winning partnership for procuring sorting facilities and building capacity in that sector. In recognition of this we were awarded Beacon status for waste in 2006 along with our Suffolk partners.

Ipswich has been a lead partner in establishing CRed Suffolk. Incorporating the UEA model the partnership has used CRed to facilitate mass engagement with the public, develop community carbon footprinting resulting in mobilisation of those communities, offering an advice service to small businesses and organisations as well as providing a research function.

## 2. Carbon Management Strategy

### 2.1 Context and Drivers

The vast majority of the scientific community agrees that accelerating climate change is driven by the increased concentrations of greenhouse gasses in the atmosphere caused by human activity.

Climate change is increasing the ambient temperature of the Earth's atmosphere and breaks the cycle of cooling and warming of the globe that has previously taken place in line with natural variations in the orbit of the Sun.

The consequences of climate change are: melting of Polar ice caps, further extension of deserts, loss of productive land, increased flooding and far greater incidence of extreme weather events. This means that land that is habitable will be reduced and in greater demand, that the ability to produce food is reduced and that there will be reduced biodiversity in flora and fauna.

It is imperative that concentrations of greenhouse gasses are stabilised to slow the rate of increase in temperature to a level that can still support life within tolerable degrees of comfort and allow time to adapt. Currently concentrations of $CO_2$ in our atmosphere are 380 parts per million (ppm) which is a higher concentration than at any time in the last 650,000 years. We are also witnessing the fastest rate of change. In the last 650,000 years the greatest shift in the increase in $CO_2$ was 30 ppm per thousand years, but today we have achieved this level of shift (30 ppm) in just the last 17 years[3].

#### 2.1.1 International Drivers

It is against this background that the international community has sought to drive policy and consensus to achieve stabilisation of emissions. Notable developments have been: 1992 Rio Earth Summit, 1997 Kyoto Protocol, 2006 Stern Review and the EU Energy Directive

#### 2.1.2 National Drivers

In response to this problem HM Government and local government working collectively have established the following drivers:

- 2000. Nottingham Declaration, recognition of the actions that can be taken at local level, a call to action and agreement to lead on climate change issues by signatory councils.
- 2002. Energy Efficiency Commitment – an obligation on the energy industry to reduce energy use by helping their customers to become more efficient.
- UK Climate Change Bill looks likely to set targets for emissions reduction of 80% by 2050.
- Carbon Reduction Commitment (CRC) obliges all energy users over a certain consumption level to engage in energy reduction through a trading scheme.
- Display Energy Certificates (DEC). From October 2008 (derogated until January 2009) medium to large public buildings are required to display the energy efficiency rating of the building.

To add impetus to local councils HM Government have introduced a suite of national indicators aimed at driving performance of climate change issues:

[3] Petit et al. Nature (1999). Etheridge et al. JGR (1996)

**NI 185**. The measure of $CO_2$ arising from councils' own operations. An indicator designed to encourage councils to address the levels of consumption in their own operations and to drive reductions.

**NI 186. The amount of $CO_2$ emitted per capita of the population in a local authority area. This indicator measures how the local authority is performing on reducing this output and drives councils to influence their residents and business communities as well as enabling them by supporting practical measures such as home insulation initiatives.**

**NI 188.** This indicator is a measure of how prepared a local authority is for the risks presented by climate change and sets out a road map and staged approach to reaching the desired outcome.

### 2.1.3 Strategic Fit

Locally Ipswich is the key community leader taking a pivotal role in 'One Ipswich' the local strategic partnership with further influence in the Local Area Agreement and Suffolk Strategic Partnership. Ipswich is the partner with the widest set of roles with a responsibility and constituency across the whole Ipswich community.

Ipswich values its leadership role and intends to lead by example. The Council has already taken a leadership stance through its adoption of a travel plan and membership of this Programme, which we intend to use as an example to promulgate our carbon management message both to our One Ipswich partners and to inspire good practice in the business community. This also gives us an opportunity to demonstrate our commitment and sharing of goals to the residents of our town.

The Suffolk Strategic Partnership has identified NI 186 and NI 188 as a key performance area. Carbon reduction at IBC will support this indicator by reducing actual emissions and by communicating a low carbon message.

### 2.1.4 Local Drivers

**Corporate Plan**

Our 2005 – 2015 corporate plan 'Transforming Ipswich' identifies 6 key themes to develop performance:

- Clean & Green Ipswich
- Expanding Ipswich
- Safe Ipswich
- Strengthening Communities in Ipswich
- Travel Ipswich
- Vibrant Ipswich

In addition the Plan identifies four underlying principles, one of which is delivering **'value for money services'**.

The relevant themes relating to our Carbon Management Programme are 'Clean and Green Ipswich' which sets the goal ' We will work with the community to make Ipswich a model urban clean and green place' and 'Travel Ipswich' which undertakes to 'reduce the overall impact of travel on the environment' as well as the underlying themes. Within these goals the most relevant are:

- Reduce carbon emissions through promoting renewable energy and energy efficiency.
- Reduce waste by supporting initiatives which reduce, re-use and recycle.
- Provide people with a real choice of travel options to reduce reliance on the private car and so minimise congestion.

- Delivering value for money services.

**Environment Strategy**

The Council's Environment Strategy identifies the following action points that are relevant to this Plan:

| Action Number | Action |
|---|---|
| 1 | Making Ipswich a low carbon community |
| 5 | Apply best practice to IBC buildings |
| 10 | Review effectiveness of fleet vehicles and use |
| 11 | Integration of whole life costing into IBC procurement |
| 15 | Reduce IBC's environmental impact (footprint) through good housekeeping. |
| 21 | Identify and improve energy efficiency in current IBC building stock |
| 23 | Encourage use of local products and suppliers for IBC |

**Nottingham Declaration**

This Council signed the Nottingham Declaration in 2008, which commits us to taking a proactive role in addressing the causes and consequences of climate change.

**Asset Management Plan**

The Council's Asset Management Plan which outlines how we propose to maximise the benefit from our portfolio of buildings incorporates the aim "To improve the energy and water efficiency of the Council corporate property portfolio" and identifies an action point to undertake energy and water audits as part of this programme.

**Staff perceptions of Climate Change issues**

Staff attitudes and perceptions regarding the need to reduce carbon emissions are a key factor in ensuring success. Through our intranet 'IMPACT' site we have surveyed staff to gauge levels of understanding and commitment.

Overall results are pleasing with over half of staff [4] reporting that they had some understanding of climate change issues whilst a further 42% considered that they knew 'quite a lot' about the issue. In terms of commitment 95% of respondents agreed that the issue was 'quite' or 'very important'. In terms of turning commitment in to action 33% of respondents stated that they knew what was required and were taking action. However, 36% of respondents either did not know how they could make a difference or were unsure. From this information, key issues to address are raising the level of understanding of climate change and educating and empowering staff to make a difference.

Staff perceptions will be checked and reviewed on an annual basis as part of monitoring the progress of the project.

[4] Total number of responses 124

## 2.2 Our Vision

**'Becoming a carbon efficient council to lead a low carbon community'**

Ipswich regards the development of a low carbon community as being a key factor in developing a risk-based approach to many of the challenges facing our community in the future.

Issues such as security of fuel supply, affordability of heat and energy, competitiveness in the commercial sector and the ability to safeguard ourselves against extreme weather events are linked to the effective management of carbon emissions through consumption and disposal. This programme will demonstrate the success of a systematic approach, cost savings and developing a corporate goal in which contributions can be made at all levels of the organisation.

The objectives of this programme are:

- Demonstrate community leadership.
- Mitigate the effects of the rising cost of fuel.
- Contribute to positive culture change in the organisation.
- Support resilience of service delivery in the face of rising cost and scarcity of fossil fuels.
- Promote innovation in the organisation.
- To act as our Delivery Plan for NI 185.

## 2.3 Strategic Themes

Delivery of our programme will be achieved principally by addressing the following areas:

- Creation of a £300,000 self-replenishing invest to save fund to finance projects.
- Systematic review and audit of energy efficiency in our building stock.
- Establishing internal performance targets and league table.
- Improved energy reporting arrangements.
- Ensuring that maintenance programmes address energy reduction and supply chain issues at the procurement stage.
- Staff awareness through a champion's group, communications and training.
- Actions to embed and align carbon management in the corporate management and policy development in the organisation.

## 2.4 Targets

**Ipswich Borough Council will reduce $CO_2$ emissions from Council operations by 30% by 2013 and by 50% by December 2021 from 2007 baseline levels.**

## 3. Emissions Baseline and Projections

### 3.1 Scope

The carbon footprint of IBC for the purpose of the Local Authority Carbon Management Programme has been defined as:

- The carbon emissions that result from all gas and electricity for which IBC pays the energy supplier.
- Transport fuel for which IBC pays the energy supplier.
- Business miles (car only).
- Water for which IBC pays the supplier.
- Waste collected from IBC premises.
- Gas and electricity for which IBC pays the energy supplier.

This definition includes properties such as the IP City Centre development at which IBC recharges the tenants, but excludes properties where tenants receive invoices directly from the energy suppliers. It also excludes properties where IBC supply the energy but do not own or occupy the building, such as the Foyer.

The carbon footprint resulting from this definition will be larger than the carbon footprint to be reported under National Indicator 185. NI 185 covers carbon emissions that result from gas, electricity and road fuel used for operational purposes.

We will seek to include mileage resulting from collection of recycling banks in the future. This outsourced service has only just been bought to our attention and we are working with surrounding districts to collect this data for inclusion in NI 185 reporting. We are also working with National Express East Anglia to establish the number and destinations of train journeys purchased through our contract with them.

### 3.2 Baseline

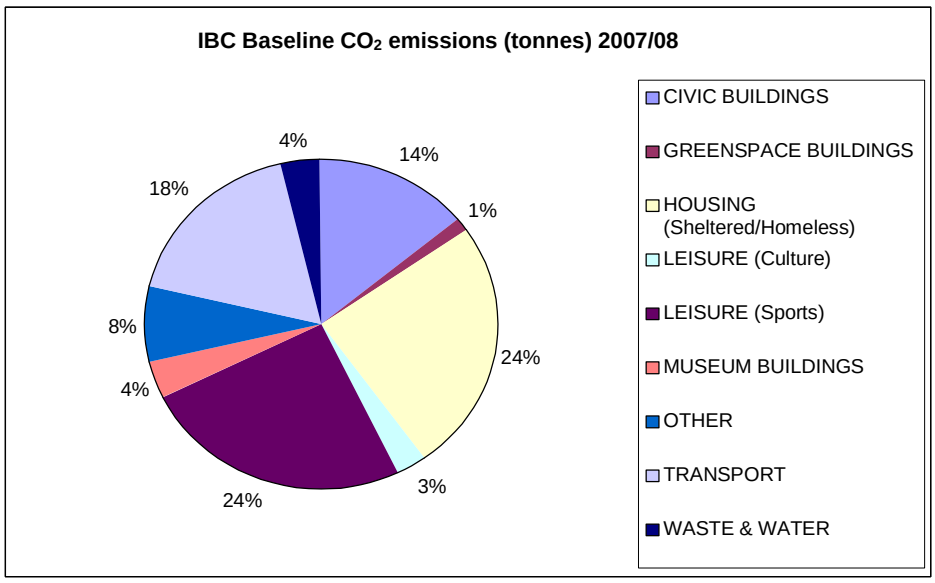
During 2007/08 IBC had a carbon footprint of 10,049 tonnes. This is equivalent to just over 1000 average UK households. This is shown in table 3.1.

**Table 3.1 – Summary table of emissions for baseline year 2007/8**

| | Tota | Buildings and street lights | Transport | Waste and Wate |
|---|---|---|---|---|
| **Baseline $CO_2$ emissions (tonnes)** | 10,049 | 7,102 | 1,883 | 64 |
| **Baseline Cost (£)** | £1,807,231 | £ 1,090,33 | £ 716,394 | £ - |

Figure 3.1 shows the sources of $CO_2$ emissions form IBC's operations. Sheltered Housing/Homeless and Leisure are responsible for 48% of IBC's emissions.

**Figure 3.1 Summary of emissions for baseline year 2007/08**




During 2007/08 IBC half-hourly metered sites used 4,900 MWh. The cut off for organisations subject to the Carbon Reduction Commitment (CRC) is 6,000 MWh consumed at sites with half hourly meters. Therefore, IBC is not subject to CRC. This situation will need to be reviewed once the outcome of LGR is confirmed.

A number of sources have been used establish this baseline. The data source for each emission source can be seen in Table 3.2.

**Table 3.2 Data sources and contacts**

| Emission Source | Data Source | Contact |
|---|---|---|
| **Electricity - Half Hourly metered sites** | EDF energy online meter data | Richard Bettle / Andrew Beschizza |
| **Electricity - Non half hourly metered sites** | Guardian Energy - Electricity invoice database | Richard Bettle / Eddie Cumberland – Guardian Energy |
| **Gas Sites** | Guardian Energy - Gas invoice database | Richard Bettle / Eddie Cumberland – Guardian Energy |
| **Business miles claims** | Pay roll database | Pat Robinson |
| **Waste Collection Diesel** | Fleet manager fuel reports (Ipswich Buses) | Ondraya Plowman |
| **IB Contracts Diesel** | Bunker fuel use sheets | David Gunn |
| **Grounds Maintenance Diesel & Petrol** | Shell Cards Spreadsheet | Janet Strickland - Miller |
| **Other Fuel use** | Aggresso - IBC fuel spend | Sean Salter |
| **Water** | Anglian Water Spreadsheet | Jo Cherrington |
| **Waste** | IBC Wastesaver | Oliver Faiers |

### 3.3 Projections and Value at Stake

The following projections use the Carbon Trust's projection tool and are based on assumptions in energy price increases provided by the Carbon Trust. The large increase in energy prices seen in 2008 and subsequent fall in prices as a result of the recession has made projecting energy costs difficult.

Value at Stake describes the financial benefits related to our proposed targets. The actions proposed in this section will reduce our energy demand and so reduce the liability for expenditure in the future.

#### 3.3.1 Business as Usual - Cost

The cost of energy is extremely volatile at present making this element of the scenario extremely difficult to establish with any level of certainty. The Carbon Trust has suggested a 50% increase in prices over the period of the programme. But the October 2008 electricity and gas prices are around 100% higher than those agreed in October 2007. The prices are likely to fall the in future years as global energy demands reduce because of the recession. The scale and duration of the fall is unclear at present.

The business as usual scenario for energy cost is based on an annual increase of just over 8%, which equals a 50% increase over the period of the programme. Under this scenario the Council's energy cost (incl. transport fuel) will rise from around £1,807,000 to around £2,767,000 an increase of £980,000.

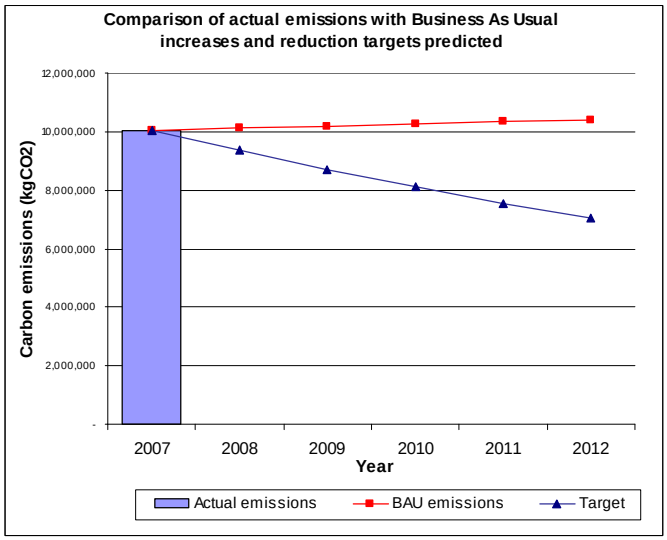
#### 3.3.2 Reduced Emission Scenario - Carbon Footprint

Through this plan IBC hopes to achieve a 30% reduction in $CO_2$ emissions by March 2013. Success will result in a carbon footprint of 7,034 tonnes. To achieve this reduction, IBC carbon emissions will need to fall by around 7% per year.

Figure 3.3 compares the projected $CO_2$ emissions from IBC operations for the business as usual scenario and the reduced emissions scenario.

If IBC's carbon footprint falls at a steady rate of 7% a year, then IBC will have saved over 10,500 tonnes carbon dioxide by March 2013. This is more $CO_2$ than IBC emitted during its base year.

**Figure 3.3 Business as usual emissions v reduced emission scenario emissions.**

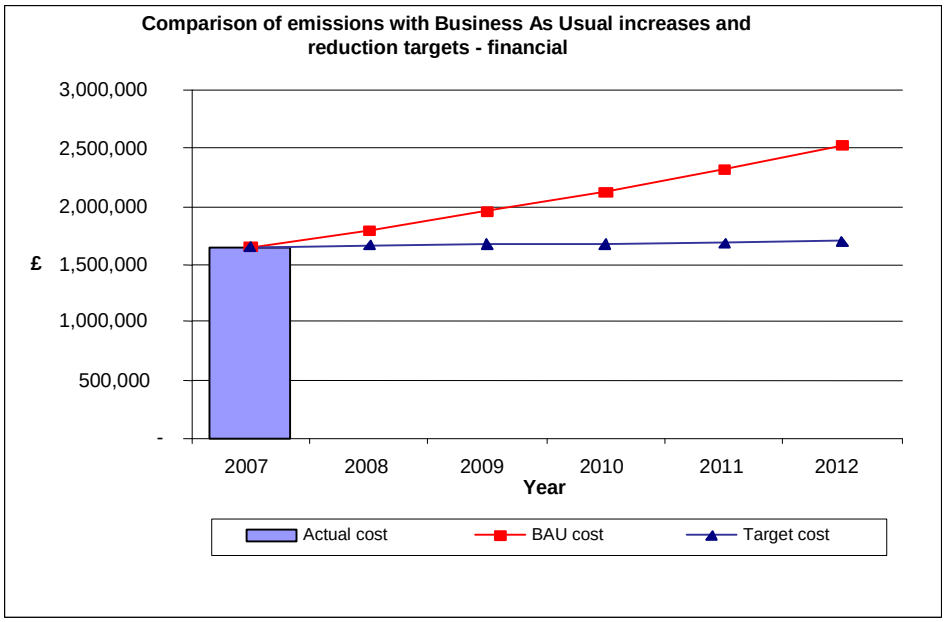


### 3.3.3 Reduced Emission Scenario – Cost

If the Council meets the reduced emission scenario, then the Council's energy costs will increase by £63,000. However this would represent a cost avoidance of over £896,000 per year by 2013 compared to the Business as Usual scenario. It results in a cumulative saving of £2,527,000[5] over the five years.

Figure 3.4 compares the projected energy and fuel costs from IBC operations for the business as usual scenario and the reduced emissions scenario.

**Figure 3.4 Business as usual costs v reduced emission scenario costs**




[5] £339,000 of this would have to be passed on to sheltered housing residents through reduced energy bills.

## 4. Carbon Management Projects

The tables in the following subsections provide a summary of the projects that have been identified and quantified. At this stage as many projects as possible have been included. The projects listed here have come from a number of sources including:

- Existing and forthcoming projects suggested by the Impact Team.
- Savings identified during the Carbon Trust's Energy Audit of five sites.
- Savings suggested during the Opportunities Workshop.

The tables include a number of projects that are being undertaken for none energy efficiency reasons, or have secured funding outside the Carbon Management Fund. The cost of these projects has been included in the table under 'Capital'. More detailed descriptions of these projects can be found in the project descriptions at Appendix C

### 4.1 Existing projects

Table 4.1 lists the projects that have already been undertaken or are being implemented at the moment.

**Table 4.1 Existing Projects**

| Ref | Project | Lead | Cost | | | Annual Saving | | Pay-back* | % of Target | 1st Year of saving |
|---|---|---|---|---|---|---|---|---|---|---|
| | | | Capital £'000 | Invest to save £'000 | Resources | £'000 | $CO_2$ | | | |
| IPS 004 | Insulation of Sheltered Housing Pipe work | Kevin Barnes | Gov't Funded | - | - | 33.4 | 182 | - | 6.1% | 2008/09 |
| IPS 014 | Close IBC social club | N/a | - | - | - | 8.6 | 40 | - | 1.3% | 2008/09 |
| IPS 015 | Grafton House Light Timers | Bob Harvey | - | - | - | 7.1 | 32 | - | 1.1% | 2008/09 |
| IPS 029 | Maintain PC Switch Off campaign | Richard Bettle | - | - | - | 1.1 | 5 | - | 0.2% | 2008/09 |
| IPS 043 | Christchurch Mansion loft insulation | Mark Hunter | | - | - | 0.5 | 3 | - | 0.1% | 2008/09 |
| IPS 035 | Procure A rated pool cars | Richard Bettle | - | - | Existing budget | 1.4** | 3 | - | 0.1% | 2009/10 |
| IPS 003 | M&E review and refurbishment | Mark Hunter | 1,000 | 100 | - | 33.7 | 164 | 3 | 5.5% | 2009/10 |
| Total | | | 1,000 | 100 | | 86 | 429 | | 14% | |

- *pay back period for invest to save funded projects
- **Fuel savings

### 4.2 Planned and funded projects

Table 4.2 lists all the projects that are planned to take place and have funds allocated.

**Table 4.2 Planned and funded projects**

| Ref | Project | Lead | Cost | | | Annual Saving | | | | |
|---|---|---|---|---|---|---|---|---|---|---|
| | | | Capital £'000 | Invest to save £'000 | Resources | £'000 | $CO_2$ | Pay-back* | % of Target | 1st year of saving |
| IPS 005 | Transformers (Environmental Champions Group) | Barbara Moss Taylor | - | - | Staff Time/ Existing Budget | 25 | 123 | - | 4.1% | 2008/09 |
| IPS 026 | Grafton House –Decommission of unnecessary Halogen Spots | Bob Harvey | - | - | - | 0.5 | 2 | - | 0.1% | 2008/09 |
| IPS 011 | Christchurch Mansion Install CFL's | Clive Norman | - | - | Existing Budgets | 14.3 | 64 | - | 2.1% | 2008/09 |
| IPS 006 | Monitoring and Targeting Programme | Richard Bettle | - | - | Staff time | 25 | 123 | | 4.1% | 2009/10 |
| IPS 007 | Procurement Policy | Andrew Beschizza | - | - | Staff time | 25 | 123 | - | 4.1% | 2009/10 |
| IPS 008 | Server Virtualisation | Howard Gaskin | 100 | - | - | 22 | 102 | - | 3.4% | 2009/10 |
| IPS 024 | Fore Street Pool Refurbishment | Mark Hunter | 150 | - | - | 12.3 | 64 | - | 2.0% | 2009/10 |
| IPS 016 | Maidenhall SC – Sports Hall Heating Schedule | Steve Wardle | - | - | Staff time | 3.2 | 18 | - | 0.6% | 2009/10 |
| IPS 018 | Northgate SC– Sports Hall Heating Schedule | Steve Wardle | - | - | Staff time | 2.7 | 15 | - | 0.5% | 2009/10 |
| IPS 031 | Gainsborough SC – Sports Hall Heating Schedule | Steve Wardle | - | - | Staff time | 0.6 | 4 | - | 0.1% | 2009/10 |
| IPS 032 | Switch off all MFD's at night | Richard Bettle | - | - | Staff time | 0.5 | 2 | - | 0.1% | 2009/10 |
| IPS 033 | Grafton House - set air con'd rooms to 22C (20C) | Bob Harvey | - | - | - | 0.4 | 2 | - | 0.1% | 2009/10 |
| IPS 034 | Grafton House – Fit timers to drink coolers | Bob Harvey | - | - | Existing budget | 0.1 | 0.5 | - | 0.02% | 2009/10 |
| IPS 001 | Crown Pools Refurbishment | Mark Hunter | 500 | - | - | 79 | 398 | - | 13.3% | 2010/11 |
| Total | | | 750 | - | | 228 | 1040 | | 35% | |

* pay back period for invest to save funded projects

### 4.3 Planned projects

Table 4.3 contains projects that will be taken forward, but either need further research before funding can be confirmed, or require a longer lead in time than the projects in Table 4.2.

**Table 4.3 Planned projects**

| Ref | Project | Lead | Cost | | | Annual Saving | | Pay-back* | % of Target | 1st year of saving |
|---|---|---|---|---|---|---|---|---|---|---|
| | | | Capital £'000 | Invest to save £'000 | Resources | £'000 | $CO_2$ | | | |
| IPS 009 | Crematorium Working practices | Mike Grimwood | - | - | - - | 15 | 82 | | 2.7% | 2009/10 |
| IPS 010 | Crown Car Park T5 Converters | Richard Bettle | - | 6 | - | 17.4 | 78 | 0.35 | 2.6% | 2009/10 |
| IPS 036 | Corporate Loft Insulation project | Mark Hunter | | 25 | | 8.8 | 48 | 2.82 | 1.6% | 2009/10 |
| IPS 012 | Whitton SC – energy review | Steve Wardle | | 6.6 | Staff time | 3 | 14 | 3 | 0.5% | 2009/10 |
| IPS 020 | Gainsborough SC – Voltage Optimisation | Mark Hunter | | 8.6 | - - | 3 | 14 | 3 | 0.5% | 2009/10 |
| IPS 041 | Move 40k casual mileage to pool cars | Richard Bettle | - | - | Existing budget | 2.3 | 5 | - | 0.2% | 2009/10 |
| IPS 037 | Museum Double glazing | Mark Hunter | TBC | | | 0.9 | 5 | - | 0.2% | 2009/10 |
| IPS 045 | Grafton House Replace Spots with LED's | Bob Harvey | - | - | Existing Budgets | 1.4 | 6 | | 0.2% | 2009/10 |
| IPS 019 | Server room temp – increase to 22C | Howard Gaskin | - | | - - | 3.3 | 15 | - | 0.5% | 2010/11 |
| Total | | | 150 | 46.2 | | 38 | 267 | | 9% | |

***** pay back period for invest to save funded projects

### 4.4 Development Stage projects

The projects listed in Table 4.4 will hopefully be implemented during the life of the Impact plan. These projects need more research to establish the cost effectiveness of the project.

**Table 4.4 Development Stage projects**

| Ref | Project | Le d | Cost | | | Annu al Savi g | | | | |
|---|---|---|---|---|---|---|---|---|---|---|
| | | | Ca ital £ 00 | Inv st to sa e £ 00 | Reso rces | ' 000 | $CO_2$ | F y-b ck* | % of Ta get | 1st ear f sa ing |
| IPS 042 | Sub 3.5 tonnes – Driver training | Mark Hunter | | | | 17 | 39 | - | 1.3% | 2009/10 |
| IPS 013 | Gipping House Biomass Boiler | Mark Hunter | | 54 | | 15 | 28 | 3 | 0.9% | 2009/10 |
| IPS 023 | IB Contracts – Driver Training | Ondraya Plowman | | | Existing Budget | 5.1 | 12 | - | 0.4% | 2010/11 |
| IPS 022 | IB Contracts Satellite tracking | Ondraya Plowman | TBC | | | 2.7 | 6 | - | 0.2% | 2010/11 |
| IPS 044 | Solar Panels at Whitton SC | Richard Bettle | 1.5 | 1.9 | | 0.64 | 4 | 3 | 0.2% | 2009/10 |
| IPS 002 | Hybrid Refuse Trucks | Ondraya Plowman | | | Existing Budget | 22 | 234 | - | 7.8% | 2011/12 |
| IPS 037 | Crematorium Upgrade Project | Mark Hunter | TBC | | | 6 | 33 | - | 1.1% | 2012/13 |
| Total | | | | 56 | | 68 | 356 | | 12% | |

*pay back period for invest to save funded projects

### 4.5 Projected achievement towards target

The total $CO_2$ savings resulting from the implementation of all of the projects listed above is 2,155 tonnes. This equates to a 21% reduction of the IBC baseline carbon footprint, or 70% of our target.

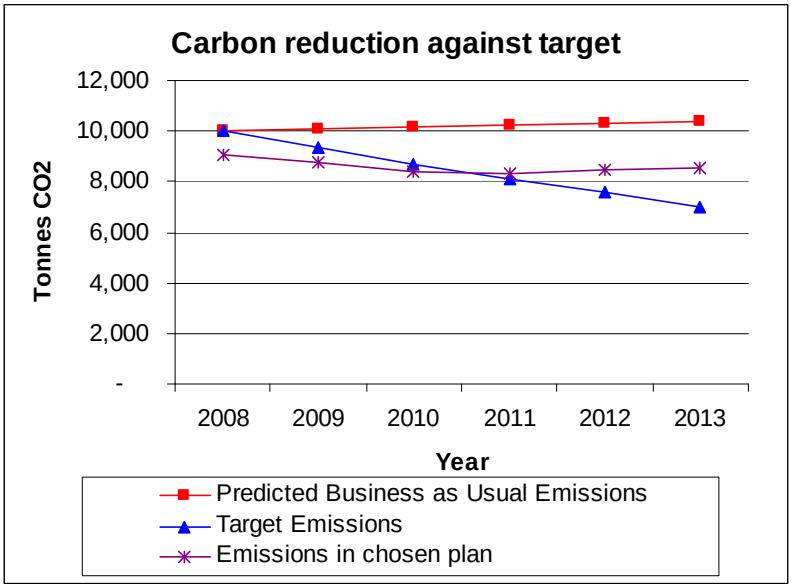
The Carbon Trust guidance suggests that equipment and management practices are assumed to be less efficient and effective over time. The rate of decline is known as the 'persistence factor'. Chart 4.1 shows progress towards our target over the life of this carbon management plan and includes persistence factors.

As a result of the reducing efficiency of all equipment (persistence factor) the $CO_2$ savings from these projects will reduce over time.

This highlights the need to continue to identify projects throughout the life of the programme. During the development of this plan another 30 potential projects were identified and will be quantified during 2009/10. More projects will be identified through energy audits of IBC property and as a result of technology developments.

The projects identified to date focus on energy efficiency. Future carbon savings are going to increasingly focus on renewable energy technologies. To this end the news of inclusion of feed in tariffs for renewable energy projects up to 5MW in the Energy Bill is to be welcomed. Progress of this initiative in the bill and the price of the feed in tariffs will be monitored.

**Chart 4.1 Carbon Reduction Against Target**



## 5. Carbon Management Plan Financing

### 5.1 Assumptions

The value at stake cost analysis uses the 2007/08 gas and electricity prices and March 2008 diesel price. These prices are:

- Electricity Price – 7.7 p per kWh.
- Gas Price – 2.4p per kWh.
- Diesel – £0.95p per litre.

However, to calculate the savings from the projects 2008/09 prices have been used. By October 2008 the price of diesel bought through Ipswich buses had fallen back to £0.98. Due to strong indications that the price will drop further in November the March 2008 diesel price has been used to calculate any savings from reduced fuel use. The prices used are:

- Electricity Price – 11.9 p per kWh.
- Gas Price – 3.4p per kWh.
- Diesel – £0.95p per litre.

The price increases in the value at stake calculations (Section 3) were based on 2007/08 prices. The savings delivered by the projects are based on 2008/09 prices. These prices have been used in the following calculations.

### 5.2 Benefits – quantified savings

Table 5.1 shows the annual cost and carbon savings from the projects identified in section 4. These savings take into account the life span of projects and the persistence factor (see section 4.5), resulting in a reduction in savings. This highlights the need to identify new projects throughout the life of the programme. The financial savings represent reduced spend on energy and fuel. They do not include capital expenditure or carbon management invest to save fund repayments.

**Table 5.1 financial and carbon savings profiled against actions in Carbon Management Plan**

| | 2008 '09 | 2009 '10 | 2010 '11 | 2011 '12 | 2012 '13 | 2013 '14 |
|---|---|---|---|---|---|---|
| **Cumulative annual cost saving** | **£65,559** | **£265,939** | **£331,361** | **£336,149** | **£320,544** | **£305,565** |
| **Annual $CO_2$ saving** | **329** | **1,341** | **1,691** | **1,867** | **1,813** | **1,760** |
| **% of target achieved** | **11%** | **45%** | **57%** | **62%** | **61%** | **59%** |

### 5.3 Financial costs and sources of funding

Table 5.2 sets out the funding required to implement the projects set out in Section 4. The projects are either funded through Capital Programme, or through the Impact Invest to Save fund. Table 5.2 is split into four parts, Annual costs, Available funding, Unallocated funding and Unfunded.

In general the projects funded though the Capital Programme are being undertaken for non-carbon reduction reasons, but will result in reduced carbon emissions.

The projects funded through the Invest to Save fund are being undertaken for carbon reduction reasons and need to achieve a 3-year pay back. The repayments to the Invest to Save fund will be available for future projects. The replenishment of the fund can be seen in the unallocated funds section of Table 5.2.

To date, no projects have been put forward to the Invest to Save fund. A number of projects have been identified that will achieve the payback criteria and these will be put forward to the Invest to Save fund early in 2009/10.

**Table 5.2 Financial costs and sources of funding**

| figures in £ | 200 3/09 | 2009 10 | 2010 11 | 2011 12 | 2012/ .3 | 2013 14 |
|---|---|---|---|---|---|---|
| **Annual costs:** | | | | | | |
| **Total annual capital spend** | - | 1,301,350 | 500,000 | - | - | - |
| **Total annual invest to save costs** | - | 202,100 | - | - | - | - |
| **Total costs** | - | 1,503,450 | 500,000 | - | - | - |
| **Available fundi g:** | | | | | | |
| **Total annual capital funding** | - | 1,301,350 | 500,000 | - | - | - |
| **Total annual invest to save funding** | 300,000 | 300,000 | 172,003 | 246,107 | 320,210 | 320,210 |
| **Total funded** | 300,000 | 1,601,350 | 672,003 | 246,107 | 320,210 | 320,210 |
| **Unallocated fun ling** | | | | | | |
| **Total annual ca ital unallocated fun ling** | - | - | - | - | - | - |
| **Total annual inv st to save unalloc ted funding** | 30( 000 | 97,90( | 172,0( 3 | 246,10 ' | 320,210 | 320,21( |
| **Total unallocated funds** | 300,000 | 97,900 | 172,003 | 246,107 | 320,210 | 320,210 |
| **Unfunded:** | | | | | | |
| **Total annual capital shortfall** | - | - | - | - | - | - |
| **Total annual invest to save shortfall** | - | - | - | - | - | - |

### 5.4 Impact Invest to Save Fund

The Capital Programme includes a £300,000 fund specifically to invest in carbon saving initiatives. The key criteria for the fund are as follows:

- Initially projects must have a payback of no longer than 3 years.
- Service areas in which the investment is made must return the investment over 3 years. The first repayment will be made in the April following completion of the project.
- 10% p.a. interest is added to the sum to be repaid.
- In year 4 service areas will retain the cost savings to their own budgets.
- Assessment of applications to the fund will be made by the Impact Board (listed at 7.1).

## 6. Actions to Embed Carbon Management at IBC

This section discusses the steps that we will take to ensure that carbon & energy management become a core consideration in the Council's corporate business planning from strategic to operational levels.

At the start of this programme officers considered how this organisation performed against the Carbon Trust's matrices of best practice. The table at Appendix A outlines our assessment of the Council at May 2008, the current position and what we expect to achieve by 2012. The matrix identifies best practice on a scale of 1 to 5, of which 5 is the best. For most factors we have identified our goal as a '5' but for a small number of factors a score of '4/5' has been identified because not every characteristic listed for that top factor fit with practices at Ipswich. Table 6.1 below summarises our progress towards the goals. The actions outlined in this section support this journey and are summarised in a table of actions at Appendix B

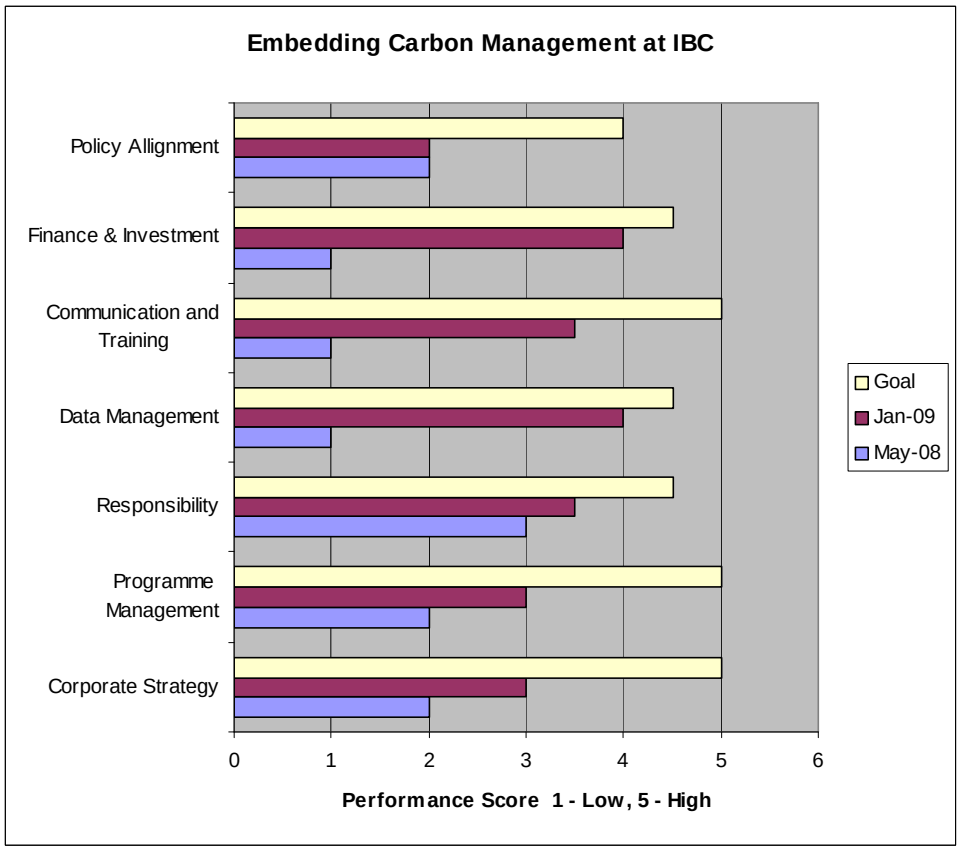
In order to develop best practice at IBC actions need to be taken across several areas:

- Corporate Strategy.
- Programme Management.
- Responsibility.
- Data Management.
- Communication and Training.
- Finance and Investment.
- Policy Alignment.

A sample of actions to address these issues include:

- Establishing a new structure of responsibility to ensure monitoring of meters at small sites.
- Ensuring that messages and progress are reported externally.
- Developing links and sharing experiences with external partners.
- Development of top level and operational level targets.
- Monitoring staff knowledge and attitudes.
- Including a progress report for the actions in Appendix B in the annual progress review (see 7.5).

**Table 6.1 Embedding Carbon Management at IBC**




### 6.1 Corporate Strategy – embedding $CO_2$ saving across the organisation

The Impact programme has been adopted by Ipswich Borough Council as a Corporate Project in recognition of its contribution to the Transforming Ipswich Agenda and reports on progress will be referred to in the Annual Report. The following actions will be taken to embed $CO_2$ savings in all our activities:

- Corporate annual $CO_2$ savings targets incorporated into the Annual Report.
- Corporate annual $CO_2$ targets included in Performance Manager System.
- Operational areas allocated $CO_2$ reduction targets to be incorporated into business plans.
- Establishment of individual carbon footprints for all IBC operational buildings with performance league.
- 6 monthly reporting of performance to Directors Team.

#### 6.1.1 Annual Corporate $CO_2$ targets.

Each year the Council will produce its Annual Report. This document records the Council's performance against the national indicator sets and the priorities that it has set in the Transforming Ipswich Plan. The national indicator NI185 will automatically be reported in this document. However, through the inclusion of the Council's sheltered housing, the baseline for the IMPACT programme is more comprehensive than the statutory level. To address this a local indicator will be established which will allow us to report on this enhanced level.

To assist in monitoring and addressing performance, all indicators both local and national are collated and reported electronically through the Performance Manager system. Output is regularly reported to Executive Committee, reviewed by the Strategic Overview and Scrutiny Committee whilst the Annual Report is presented to Full Council.

### 6.1.2 Operational Area Targets

Individual operational areas will be set carbon reduction targets based on the $CO_2$ emissions directly under their control. For example, some service areas only have direct influence on staff travel whilst others have direct control of buildings and a vehicle fleet. Operational area targets will take account of these differences. Progress in reducing emissions will be compared across the organisation and incorporated into Business Plans. One particular opportunity is to work with operational managers to encourage and support migration to low emission vehicles. This will be achieved by supporting the procurement of low emissions vehicles for our fleet as they become commercially viable; and to analyse operational areas to support migration from use of employees' private cars to pool cars which are likely to be lower emissions and more cost effective.

### 6.1.3 Carbon Footprints for Buildings

Each building in our estate for which IBC pays the energy costs will be foot printed. Energy use, water consumption and waste to landfill will be monitored. Progress in reducing the footprints will be compared across the organisation and incorporated into Business Plans.

### 6.1.4 Reports to Director's Team 6 Monthly

Directors Team consists of the Chief Executive and Directors. This represents the top tier of management in the organisation. A report will be made twice a year on the progress towards our target.

### 6.1.5 Annual Reports to Executive

An annual report summarising progress against the criteria set out in table 7.5 Annual Progress Review, will be submitted to Executive.

## 6.2 Responsibility – being clear that saving $CO_2$ is everyone's job

Achieving success in carbon management, maintaining momentum and commitment to continuing improvement can only be achieved when all levels of the organisation understand the issues and have a sense of ownership and ability to make a contribution. Actions outlined at 6.1 detail a 'top down' approach that drives teams to perform through structures that place the responsibility for carbon reduction with managers. This process will be matched by actions to engage all levels of staff and provide opportunities to make contributions to the process.

This approach fits with the 'Investors in People' principles that have been adopted by this Council, enabling staff to understand how their role fits with corporate aims and to give input into how these can be delivered.

To achieve this we have now branded the programme **Impact** and launched **Transformers,** our carbon and environmental champions group.

Transformers will meet six times per year. Their programme includes education on climate change issues, communications, travel, supply chain issues and developing ideas for key events such as Energy Savings Week. This group is open for anyone in the organisation to join with an aim of

representation from every service area. The Transformers Group will have a presence on the Impact Team through a nominated representative.

At present only environmental strategy posts give specific reference to carbon reduction. The Council underwent a substantial restructure in 2007 and has recently completed job analysis for single status harmonisation. It would therefore, be inappropriate to change job descriptions at this time. However, any changes as a result of local government reorganisation would give an opportunity to align descriptions with a new corporate plan.

In addition to these measures, we will develop a mechanism in our Building and Design Team to notify any proposed repair and maintenance action or measure that would deliver energy savings, so that prioritisation and access to funding can be made at an early stage.

### 6.3 Data Management – measuring the difference, measuring the benefit

The exercise in carbon footprinting this Council has given us the opportunity to catalogue points of energy use and metering as well as reinforcing the importance of regular meter reading.

The Council's sites of highest electricity consumption have automated electricity meter reading, but this still leaves over 50 sites that warrant regular electricity and gas meter reading. A proposal to streamline the process of making and reporting readings has been approved by Directors Team. The procedure allocates the task as a key responsibility within the relevant service area and requires that the data is sent to the Climate Change Officer by email in the specified format and frequency. This data is collated and then shared with this group of staff together with values on a monthly basis. The benefits of this process are that staff can see that their data is being used and that they can monitor it and have progress acknowledged.

Progress against our target will be monitored by updating the footprinting spreadsheet every 6 months with reports in the first instance to the Impact Board & Team and then reporting to Director's Team.

The Impact Team will monitor individual carbon saving projects with reporting by exception to the Impact Board. The Climate Change Officer will provide data to individual project leads to aid monitoring whilst those funded through the invest to save programme will be required to confirm and pass on financial savings.

**Our progress against targets will be communicated to staff through the 'Staff News' publication and through the Impact intranet pages.**

### 6.4 Communication and Training – ensuring everyone is aware

Our key communication tool is the strong identity for the programme supported by the intranet pages, poster & flyer communications and the use of council publications. Our Communications Plan can be found at Appendix D. Impact intranet pages now incorporate pro-environmental information and discussion. This is the place where staff and councillors can visit to find out more about the programme but also find information key to their employment, such as the travel plan guidance, which is stored there. This means that staff and councillors are more likely to visit this site, which increases the exposure to the concept of carbon management and reinforces its position as a core activity. We will tailor communication specifically for our councillors recognising the key role that they play in developing policy and in disseminating messages to our residents and key partners. We will also make use of our reception areas to create displays. Communicating with manual staff and those working at outstations is very important. We will make use of Transformers to distribute our message but also back this up with printed material where access to computers is not a feature of the job.

**Induction.** The ideal time to develop a low carbon culture is when an employee or councillor joins the organisation. We use recruitment and induction to embed positive behaviour in the following ways:

- All new staff advised of the Travel Plan at offer of employment.

- All new staff are required to attend induction. Induction courses include a presentation on environmental and carbon reduction at IBC.
- Introducing the Impact Programme and intranet site.
- Communications regarding the Travel Plan will detail the benefits of sustainable travel *before* provision for car parking is discussed.
- Explaining requirements to switch off IT equipment.
- Explaining sources of carbon emissions within service areas.
- Outlining the work of the Transformers Group and extending an invitation to join.
- Introducing the Impact programme at induction for councillors.

### 6.4.1 Monitoring Staff Attitudes

The Impact site includes a short questionnaire, which is used to monitor staff attitudes to carbon management. The site will be regularly refreshed and staff encouraged to visit through lighthearted quizzes with prizes that will give an indication of levels of understanding and attitude. Levels of staff awareness and attitudes will be measured annually and incorporated into the review process to gauge progress.

### 6.4.2 Communicating Our Successes

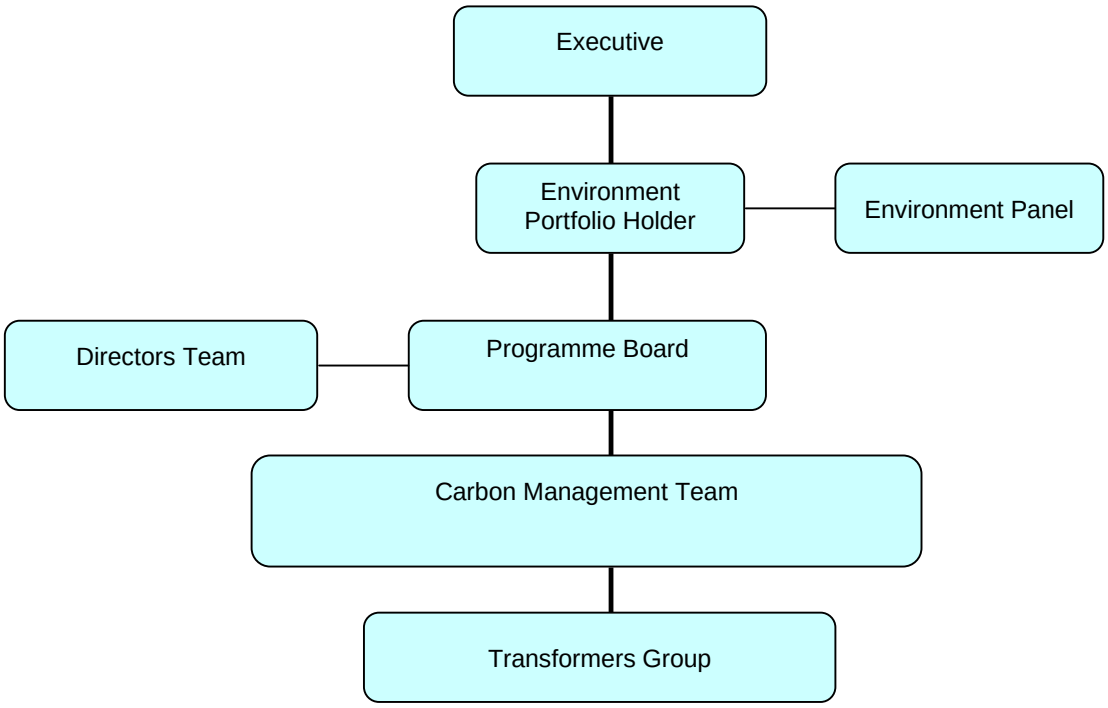
As stated earlier we consider this programme as rallying cry to our external partners and community to act. We will communicate our successes through our website, our publication 'Ipswich Angle', displays at our Customer Service Centre and through press releases.

## 6.4 Policy Alignment – saving $CO_2$ across our operations

All Council policies and strategies will be examined when they are reviewed to check for the impact of each of these on carbon management will be considered. Local Government Review is likely to mean that all policies are reviewed if a new organisation is established. It is vital that the effect on emissions is considered at the time of reorganisation. In the meantime we will produce an 'Environmental Code of Practice' as a short guide to ensure that interim development does not have a negative environmental impact and promotes positive actions.

## 7 Programme Management of the CM Programme

The Council has recognised this programme as a corporate project acknowledging the importance of its deliverables and expecting a high level of governance. The project cuts across almost every activity of the Council and helps to achieve culture change in that involves diverse areas at all levels to achieve a central goal. In order for the programme to succeed it is important that a strategic overview is maintained and that blockages are identified and removed at the earliest opportunity. Project Sponsor Laurence Collins is a Director and is ideally placed at the head of the organisation to drive change. Project Leader, Deputy Leader and Impact Team Chair meet with the Sponsor each fortnight to discuss progress and identify any issues causing concern.



### 7.1 The Impact Board – strategic ownership and oversight

The Impact Board meets quarterly and its main roles are to provide strategic direction, drive performance and remove blockages to progress. The Board reviews the minutes of Impact Team meetings and pursues issues arising from this. Team members make reports to the Board via the Chair of the Team and may be invited to attend to support items. Items for the agenda are agreed with the Chair of the Board at regular meetings with Project Lead, Deputy Lead and Team Chair. The Impact Team may request that items are raised with the Board and individual monitoring of projects are reported to the team if they slip against the agreed parameters.

#### 7.1.1 Impact Board – Terms of Reference

- Champion and provide leadership on carbon management.
- Set and review the strategic direction and targets.
- Own the scope of the Carbon Management Programme and prioritise the list of carbon reduction projects.
- Monitor progress towards meeting the objectives and targets.
- Remove obstacles to successful completion of CM projects.
- Ensure that there is a framework in place to coordinate projects in the CM Programme.
- Review and champion plans for the financial provision of CM projects.
- Oversee Programme Governance.
- Approve applications to the invest to save fund.

**Table 7.1 The Impact Board**

| **Impact Board** | |
|---|---|
| **Role** | **Name and position** |
| Chair & Project Sponsor | Laurence Collins. Director |
| Project Sponsor | Cllr Louise Gooch. Portfolio Holder for the Environment |
| Board Member | Jon Hudson. Group Manager Accounting Services |
| | Max Stocker. Head of Communications and Design |
| | Matthew Ling. Head of Environmental Services |
| | Mike Deane. Head of StreetCare |
| | Joe Howarth. Head of Housing Services |
| | Billy Brennan. Head of Cultural & Leisure Services |
| | John Stebbings. Chair of Impact Team |
| | Carmel McQuaid. Marks & Spencer's National Sustainability Manager |

### 7.2 The Impact Team – delivering the projects

The Impact Team meets a minimum of quarterly with meetings aligned to fall shortly before Impact Board meetings. The benefit of this is that it allows prompt and timely elevation of issues that need to be reported to or require the agreement or action of the Board. The Terms of Reference of the Team are given below.

#### 7.2.1 Impact Team -Terms of reference

- To provide general input into the programme.
- Support the Project Leader.
- Ensure that carbon management is integrated across the Council.
- Act as champions of carbon reduction in the organisation.
- Support the provision and development of baseline data.
- Identify projects.
- Develop project definitions and quantification.
- Implement project.
- Report on progress of project to Carbon Management Board.
- Develop a service-based focus on carbon reduction initiatives across the organisation.

**Table 7.2 The Impact Team**

| **Impact Team** | | |
|---|---|---|
| **Role** | **Name and position** | **Contact details** |
| Team Chair | *John Stebbings*<br>*Major Project Officer* | *01473 432208*<br>*john.stebbings@ipswich.gov.uk* |
| Project Leader | *Barbara Moss-Taylor*<br>*Environmental Strategy Officer* | *01473 432098*<br>*barbara.mosstaylor@ipswich.gov.uk* |
| Deputy Project Leader | *Richard Bettle*<br>*Climate Change Officer* | *01473 432089*<br>*richard.bettle@ipswich.gov.uk* |
| Impact Team members | *Mark Hunter*<br>*Building & Design Services Co-ordinator* | *01473 432808*<br>*mark.hunter@ipswich.gov.uk* |
| | *Mike Gregory*<br>*Asset & Capital Performance Manager* | *01473 433215*<br>*mike.gregory@ipswich.gov.uk* |
| | *Jennie Dines*<br>*Communications Officer & Web Editor* | *01473 432207*<br>*jennie.dines@ipswich.gov.uk* |
| | *Howard Gaskin*<br>*IT Infrastructure Manager* | *01473 433891*<br>*howard.gaskin@ipswich.gov.uk* |
| | *Ondraya Plowman*<br>*Fleet Manager* | *01473 432430*<br>*ondraya.plowman@ipswich.gov.uk* |
| | *Kevin Barnes*<br>*Sheltered Housing Services Manager* | *01473 433324*<br>*kevin.barnes@ipswich.gov.uk* |
| | *Debbie Reeve*<br>*Clean Space Manager* | *01473 432427*<br>*debbie.reeve@ipswich.gov.uk* |
| | *Andrew Beschizza*<br>*Procurement Manager* | *01473 433906*<br>*andrew.beschizza@ipswich.gov.uk* |
| | *Steve Wardle*<br>*Snr Assistant Manager* | *01473 433610*<br>*stephen.wardle@ipswich.gov.uk* |
| | *Alan Huffey*<br>*Surveying Manager* | *01473 432752*<br>*alan.huffey@ipswich.gov.uk* |
| | *Tim Snook*<br>*Operations Manager (Sports & Swimming Centres)* | *01473 433505*<br>*tim.snook@ipswich.gov.uk* |
| | *David Mansfield*<br>*Manager (Regent Theatre)* | *01473 433715*<br>*david.mansfield@ipswich.gov.uk* |

### 7.3 Succession planning for key roles

Financial resources are a key concern for this Council; all vacant posts are subject to a rigorous business evaluation before permission is granted to replace a departing member of the team. The business rationale and link to the programme is summarised in the table below. In addition to this Local Government Reorganisation may result in this authority being replaced by a unitary authority. Any successor authority will establish a new executive and constitution, whilst it is not possible to state what will be the priorities for a new body, the councils identified by the Boundary Commission to lead this process (IBC & Suffolk County Council) have both engaged in the Carbon Trust's LACM programme.

**Table 7.3 Succession Planning**

| Post | Impact Role | Business Case/ link to Impact programme | Alternative options |
|---|---|---|---|
| Director | Corporate Sponsor & Impact Board Chair | Has overall responsibility for the delivery of NI185. | For role to be passed to another Director |
| Environmental Strategy Officer | Project Lead | Delivery in carbon reduction is implicit in job description. | Workload taken up by Climate Change Officer |
| Climate Change Officer | Deputy Project Lead | Delivery in carbon reduction is implicit in job description. | Some workload taken up by Environmental Strategy Officer |
| Major Projects Officer | Impact Team Chair | The role is pivotal in ensuring effective project management in the organisation and provides an important link with the commercial sector. | The role to be taken by another member of Impact Team |

#### 7.3.1 Role of the Climate Change Officer

The Climate Change Officer is responsible for the measurement and collation of all carbon emissions data and this forms a significant proportion of that post's workload. Given the amount of time allocated to this task there would be considerable difficulties in finding sufficient capacity elsewhere in the workforce if this post were disestablished.

### 7.4 Ongoing stakeholder management

The groups and individuals identified in the table below will have a degree of influence and impact on the programme. The table identifies the nature and extent of involvement together with the proposed means of communication.

**Table 7.4 Stakeholder Management**

| Individual or Group | Influence | Impact | Their interest or issues | Means of Communication & by whom | Frequency |
|---|---|---|---|---|---|
| Councillor Louise Gooch. Portfolio Holder Environment | H | H | To develop environmental improvement at IBC<br>Promote environmental agenda across the organisation<br>To raise IBC's profile as a leader on Environmental issues, promotion of renewable energy & energy efficiency and to use this as an example to community & business | Portfolio Holder briefing by Project Sponsor/ Project Leader<br>Through membership on Impact Board | Fortnightly |
| Councillor John Carnall. Portfolio Holder Finance including HR and Property | H | H | Cost / budgets<br>Value for money<br>Need to balance expenditure on Carbon Reduction with other repairs and maintenance issues in Capital Programme and exploring other methods of finance | Portfolio Holder briefing by relevant officer, Project Sponsor/ Project Leader, Head of Finance<br>Group Manager- Accounting Services<br>Project Leader to present business case when options fully evaluated | Monthly |
| Executive Councillors | H | H | Overall performance of the Council, costs, impact of programme on performance of other activities of the Council. | Through progress reports. | Annually |
| Councillors | H | M | Influence of Executive Councillors, policy direction, representing constituents and communicating council issues<br>Representatives on outside bodies. | Councillors update by email<br>One to one updates by Project Leader or relevant Board member dependant on issue. | 6 monthly or less if there are specific items of progress |
| Environment Panel | M | M | Acts as an advisory body to Portfolio Holder for the Environment, represents wide range of environmental issues | Regular updates to Panel by Project Leader | Bi-monthly |

| Individual or Group | Influence | Impact | Their interest or issues | Means of Communication & by whom | Frequency |
|---|---|---|---|---|---|
| Chief Executive & Directors | H | H | Cost / budgets, value for money, national performance indicators, performance against key objectives; fit with key I.B.C strategies & 3 year plan | Communications via project sponsor and progress reports to Directors' Team | Fortnightly |
| Head of Environmental Services | H | H | Line manager for Project Leader. Delivery & performance for NI 185. Overall Environmental performance of the Council | Through one to one management meetings. Through membership on Impact Board | Fortnightly |
| Marks & Spencer (Critical Friend) | H | H | To act as an exemplar<br>To promote 'thinking outside of the box'<br>Reality checks | Through attendance at Impact Board meetings and through direct communications by Impact Team Chair<br>Sharing of experiences by each organisations Green Champions | Bi monthly |
| Heads of Service | H | H | Balancing capacity, finance & service delivery issues against opportunities to realise revenue savings & contributing to corporate goals | Cascaded from Heads of Service on Impact Board to Heads of Service Group meetings. | Bi monthly or as required (meet monthly) |
| Operational Managers | H | M (varies) | Balancing capacity, finance & service delivery issues against opportunities to realise revenue savings & contributing to corporate goals. Recognition of actions | Cascaded through Heads of Service and directly from members of Carbon Management Team to their own operational teams. | Bi monthly or as required (team meetings are usually not less than fortnightly) |
| Transformers Group | M | H | Influencing staff to adopt pro-environmental behaviour, raise awareness of environmental issues | Through attendance at Transformers Group, access to Impact intranet site (open and members pages) | Bi monthly |
| Ipswich Central members | M | L | Influencing & promoting carbon reduction actions amongst membership to increase competitiveness & business reputation | Major Projects Officer to communicate key messages to Ben Collins, Ipswich Central Project Coordinator, for distribution to wider membership.<br>Ben Collins: 0845 155 3030<br>ben@ipswichcentral.com | Monthly |
| LSP | M | M/L | Shared goals through LAA process.<br>To influence awareness raising | Communicate through Renu Mandal, Communities Manager. | Bi monthly following Impact Team & |

| Individual or Group | Influence | Impact | Their interest or issues | Means of Communication & by whom | Frequency |
|---|---|---|---|---|---|
| | | | of carbon management issues | | Board Meetings |
| Finance &, Procurement | H | M/H | To address issues of whole life costing, capital funding against revenue savings | Through representation on Impact Board & Team | Bi monthly |
| Communications | H | H | Raise profile of IBC actions to improve its environmental performance & efficiency. To ensure communication with all staff | Through representation on Impact Board & Team | Bi monthly |
| IT, Building Management, Leisure | H | H | To improve energy efficiency & realise revenue savings for the organisation. Recognition of actions | Through representation on Impact Board & Team and through cascading from Heads of Service | Bi monthly |
| Staff | M | H | Various. From high level of acknowledgement & action for energy efficiency & carbon savings; to an unwillingness to make any behaviour changes. Key concerns about this affects ability to perform duties | Communications through Impact intranet site, communications through Transformers, issue specific communications, induction training and through Staff News | Ongoing access to information available at all times |
| Union | M | M (Depends on issue) | Issues that impact on staff terms & conditions, ability of staff to carry out duties. Some of the unions represented have now adopted some 'green' principles. | Project Leader to consult on key issues. | Dependant on issue |

### 7.5 Annual progress review

Monitoring our progress at regular intervals is vital to ensure that we achieve the targets within the timescales set and ensure that resources are adequately directed.

It will be necessary to measure progress against the following areas:

- Level of emissions set against the baseline and the percentage reduction.
- Progress of projects identified in section 4.
- Utilisation of the £300K invest to save fund.
- Reduction energy use set against a business as usual scenario.
- Comparison of current energy spend set against cost that would have been incurred without energy reduction.
- Identification of new projects to meet shortfall against targets.
- Progress against the actions listed in Appendix Ai to embed carbon management in the organisation.

In addition to this the Carbon Trust will require an annual report outlining progress and recording the reduction in carbon emissions.

**Table 7.5 Annual progress review**

| Action | Scope | Responsibilit | Reported to | Frequency |
|---|---|---|---|---|
| Monitoring of projects | To maintain overview of projects appended to this plan and any new proposals | Impact Team members (co-ordinated by Project Lead & Deputy Project Leader) | Impact Team<br>Impact Board by exception | Bi monthly |
| Monitoring of emissions reduction from completed projects | To check that completed projects are achieving the carbon savings predicted and revising our profiling accordingly | Climate Change Officer & individual project leads | Impact Team & Board | Quarterly |
| Monitoring $CO_2$ emissions against overall target | To check reductions in emissions as compared to the profiles set out in section 4 | Impact Team | Impact Board & Directors Team | 6 monthly |
| Service Area & building emissions performance | To check reductions in emissions from individual service areas and buildings | Operational Managers supported by Climate Change Officer | Impact Board & Directors Team | Annually |
| Fuel cost savings for Invest to Save Fund | To ensure repayment of capital sums into the fund | Operational managers and Group Manager Accountancy | Impact Board<br>Capital Monitoring Team | Annually |
| Report overall performance | To report actual performance against NI 185 and enhance LACM target. | Project Leader | Impact Board & Team<br>Directors Team<br>Executive Committee<br>(via Best Value Performance Plan, Performance Manager System and separate report) | Annually |
| Opportunities Workshops | To review progress against profiled expectations of reduced emissions. Identifying new projects and reviewing profiling and targets | Impact Team & Board | Directors Team & Executive Committee (through Best Value Performance Plan) Performance Manager System and separate report) | 6 monthly |

**Appendix A: Carbon Management Matrix – Embedding**

| IBC SCORE | CORPORATE STRATEGY | PROGRAMME MANAGEMENT | RESPONSIBILITY | DATA MANAGEMENT | COMMUNICATION & TRAINING | FINANCE & INVESTMENT | POLICY ALIGNMENT * |
|---|---|---|---|---|---|---|---|
| 05/08 | 2 | 2 | 3 | 1 | 1 | 1 | 2 |
| PRESENT | 2 | 3 | 3 | 4 | (PART) 4 | (PART) 4 | (PART) 3 |
| GOAL | 5 | 5 | 4/5 | 4/5 | 5 | 5 | 4 |
| **BEST** | • Top level target allocated across organisation<br>• $CO_2$ reduction targets | • Cabinet / SMT review progress against targets on quarterly basis<br>• Quarterly diagnostic reports provided to Directorates<br>published externally | • CM integrated in responsibilities of senior managers<br>• CM part of all job descriptions<br>• Central $CO_2$ reduction advice available<br>• Green Champions leading local action groups | • Quarterly collation of $CO_2$ emissions for all sources<br>• Data externally verified<br>• M&T in place for:<br>o buildings<br>o waste | • All staff given formalised $CO_2$ reduction:<br>o induction and training<br>o communications<br>• Joint CM communications with key partners<br>• Staff awareness tested through surveys | • Finance committed for 2+yrs of Programme<br>• External funding being routinely obtained<br>• Ring-fenced fund for<br>initiatives | • $CO_2$ friendly operating procedure in place<br>• Central team provide advice and review, when requested<br>• Barriers to $CO_2$ reduction<br>removed |
| | • $CO_2$ reduction commitment in Corporate Strategy<br>• Top level targets set for $CO_2$ reduction<br>• Climate Change Strategy reviewed annually | • Sponsor reviews progress and removes blockages through regular Programme Boards<br>• Progress against targets routinely reported to Senior Mgt Team | • CM integrated in to responsibilities of department heads<br>• Cabinet / SMT regularly updated<br>• Staff engaged though Green Champion network | • Annual collation of $CO_2$ emissions for:<br>o buildings<br>o street lighting<br>o transport<br>• Data internally reviewed | • All staff given $CO_2$ reduction:<br>o induction<br>o communications<br>o CM matters communicated to external community | • Coordinated financing for $CO_2$ reduction projects via Programme Board<br>• Finances committed 1yr<br>• Some external financing | • Comprehensive review of policies complete<br>• Lower level policies reviewed locally<br>being considered |
| | • $CO_2$ reduction vision clearly stated and published<br>• Climate Change Strategy endorsed by<br>Cabinet and publicised with staff | • Core team regularly review CM progress:<br>o new opportunities | • An individual provides full time focus for $CO_2$ reduction and coordination across the organisation<br>engaged | • Collation of $CO_2$ | • Environmental / energy group(s) given ad hoc: | • A view of the cost of $CO_2$ reduction is developing, but finance remains ad-hoc<br>• Some centralised resource allocated<br>• Finance representation on CM Team | • All high level and some mid level policies reviewed, irregularly<br>• Substantial changes<br>savings |
| | • Draft Climate Change Policy<br>• Climate Change references in other strategies | | • $CO_2$ reduction a part-time responsibility of a<br>champions | • No $CO_2$ emissions data compiled<br>• Energy data compiled on a regular basis | • Regular awareness campaigns<br>• Staff given CM information on ad-hoc basis | | • Partial review of key, high level policies<br>• Some financial quick wins made |
| **Worst** | • No policy<br>reference | | reduction responsibility | • No $CO_2$ emissions data<br>• Estimated billing | training | $CO_2$ reduction projects | for $CO_2$ reduction |

* Major operational policies and procedures, e.g. Capital Projects, Procurement, HR, Business Travel

**APPENDIX B: Actions to Embed Carbon Management at Ipswich Borough Council**

| Carbon Matrix Category | Actions | Timescale | Owner |
|---|---|---|---|
| Corporate Strategy | Incorporate carbon reduction into Corporate Strategy at next review | June 2009 | Directors Team |
| | That carbon management becomes a management 'must do' and a regular item for team meetings. | June 2009 | Directors Team |
| | Publish Impact Carbon Management Plan | March 2009 | Project Leader |
| | Incorporate carbon reduction into Business Plans | March 2010 | Operational Managers and Heads of Service |
| | Publish Climate Change Strategy | May 2009 | Project Leader & Dep Project Leader |
| Programme Management | Bi- monthly monitoring of projects | April 2009 | Impact Board & Team |
| | Quarterly reporting to Directors Team | June 2009 | Project Leader |
| | Annual Report to Executive | July 2009 | Project Leader & Deputy Project Leader |
| | Publish performance against targets externally on an annual basis | July 2009 | Deputy Project Leader & Communications Officer |
| | Reports to Directors on progress in their directorate | Oct 2009 | Project Leader & Dep Project Leader |
| | Annual Review, including projects and communications plan | July 2009 | Project Leader |
| Responsibility | Transformers Group allocated full programme of activity | April 2009 | Project Leader & Dep Project Leader |
| | Establish emissions baseline for all operational areas and all operational buildings | March 2010 | Deputy Project Leader |

| | | | |
|---|---|---|---|
| | **Regular communications with all Heads of Service on carbon reduction** | **May 2009** | **Impact Board, Director & Project Leader** |
| **Data Management** | **Implementation of energy monitoring system (see 6.3 of Impact CM Plan)** | **June 2009** | **Deputy Project Leader & heads of Service** |
| **Communication & Training** | **Conduct annual survey of staff attitudes & awareness** | **Jan 2010** | **Communications Officer** |
| | **Refresh & review Communications Plan annually** | **Jan 2010** | **Communications Officer** |
| | **Develop & strengthen links with external partners, use this to deliver joint messages and support actions.** | **Ongoing** | **Director & Chair of Impact Team** |
| | **Publish Impact Travel Plan and standardised summary- to be published on Impact intranet site and to be communicated to job applicants and new staff.** | **April 2010** | **Dep Project Lead** |
| | **Continue to give carbon reduction training at induction** | **Ongoing** | **Environmental Strategy Team** |
| **Finance & Investment** | **Invest to Save fund allocated to projects once M & E Review complete** | **May 2009** | **Group Manager Accounting Services** |
| **Policy Alignment** | **Review of all policies to check for adequate consideration of carbon reduction issues** | **July 2010** | **Project Leader** |
| | **Environmental Code of Practice published as an interim measure** | **April 2009** | **Project Leader** |

**Appendix C: Definition of Projects**

**Project Timescale**

- start date: 2009/10
- estimated completion date (when it will deliver savings): 2010/11
- interim deliverable / decision points: Executive – Dec 2008

| | |
|---|---|
| **Project:**<br>**Reference:** | **Crown Pools Refurbishment**<br>IPS001. |
| **Owner (pers on)** | Mark Hunter (Building & Design Services Co-coordinator) |
| **Department** | Building and Design Services |
| **Description** | Ensure a 30% reduction in energy consumption is delivered through the refurbishment of Crown Pools |
| **Benefits** | • Financial savings: £ 79,000 first year<br>• Payback period: N/A<br>• $CO_2$ Emissions reduction: 398 tonnes of $CO_2$<br>• 4% reduction of baseline carbon footprint<br>• 13% of target |
| **Funding** | • Major M&E equipment to be updated through refurbishment fund. £500,000 allocated. No additional cost to Carbon Management Fund<br>• No additional operational costs.<br>• Source of funding: Capital Programme.<br>• Decision on funding to be made in December 2008 |
| **Resources** | • Additional resource: Consultants will be invented to tender for the design of the refurbishment project. |
| **Ensuring Success** | •<br>• Principal risks:<br>o Budget for refurbishment is reduced.<br>o Executive decide on an alternative future for site |
| **Measuring Success** | • Annual building performance certificates issued by Climate Change Officer.<br>• Review energy performance 12month after completion of works. |
| **Notes** | Funding approved in Dec 2008 |

**Project Timescale**

- start date: 2011/12
- estimated completion date (when it will deliver savings): 2011/12
- interim deliverable / decision points: Find out date of next lease renewal

| | |
|---|---|
| **Project:**<br>**Reference:** | **Hybrid Refuse Collection Vehicles**<br>IPS002. |
| **Owner (pers on)** | Ondraya Plowman (Fleet Manager) |
| **Department** | StreetCare – Cleanspace |
| **Description** | Diesel Hybrid refuse collection vehicles are currently on trial in Scandinavia. The proposal is to replace existing 10-vehicle fleet with these vehicles at the earliest opportunity. Initial results show the vehicles use 30% less diesel than conventional refuse collection vehicles. But are expected to cost 30% more. . |
| **Benefits** | • Financial savings: £ 102,000 first year (£22,000 Net)<br>• Payback period: N/A<br>• $CO_2$ Emissions reduction: 234 tonnes of $CO_2$<br>• 2.3% reduction of baseline carbon footprint<br>• 8% of target<br>• |
| **Funding** | • Each truck is estimated to cost £40,000 more than a basic Refuse Collection Vehicle.<br>• Vehicles would be procured through a purchase/leaseback process. The extra cost of the vehicles will be paid for through reduced diesel costs. |
| **Resources** | • Research time for the Fleet Manager |
| **Ensuring Success** | • Fleet manager to monitor the development of these vehicles.<br>• Principal risks:<br>o Payback will change if the estimated prices are different to initial indications or fuel prices change<br>o Vehicles do reach market as scheduled<br>o Vehicles do not perform as suggested |
| **Measuring Success** | • Monitor fuel consumption using current procedures.<br>• Review reliability of estimates after six months |
| **Notes** | |

**Project Timescale**

- start date: 2009/10
- estimated completion date (when it will deliver savings): 2009/10
- interim deliverable / decision points: Consultant report on current state of the estate.

| | |
|---|---|
| **Project:**<br>**Reference:** | **M&E review**<br>IPS003. |
| **Owner (pers on)** | Mark Hunter |
| **Department** | Building and Design Services |
| **Description** | Review of all M&E equipment in the estate to identify poorly performing equipment for priority replacement. Expected to deliver a 2% reduction in the estates energy consumption |
| **Benefits** | • Financial savings: £ 33,000 first year<br>• Payback period: N/A<br>• $CO_2$ Emissions reduction: 164 tonnes of $CO_2$<br>• 1.6% reduction of baseline carbon footprint<br>• 5.5% of target |
| **Funding** | • Report and equipment replacement to be funded through maintenance budget. No additional cost to Carbon Management Fund.<br>• Projects with 3 year paybacks will be considered for funding through the invest to save fund, up to £100,000.<br>• No additional operational costs.<br>• Source of funding: Capital Programme.<br>• Report on the state of M&E in estate due March/April 2009 |
| **Resources** | • Additional resource: |
| **Ensuring Success** | •<br>• Principal risks:<br>o Maintenance budget is reduced or required for other projects. |
| **Measuring Success** | • Annual building performance certificates issued by Climate Change Officer.<br>• Review energy performance 12month after completion of works. |
| **Notes** | |

**Project Timescale**

- start date: 2008/09
- estimated completion date (when it will deliver savings): 2008/09
- interim deliverable / decision points: None

| | |
|---|---|
| **Project:** | **Insulate Sheltered Housing Pipes and Pumps** |
| **Reference:** | IPS004. |
| **Owner (pers on)** | Kevin Barnes |
| **Department** | Sheltered Housing Manager |
| **Description** | Insulate all valves and pipes in the sheltered housing scheme. Installer estimates that 984,000kWh per year will be saved by this scheme. |
| **Benefits** | • Financial savings: £ 33,000 first year<br>• Payback period: N/A<br>• $CO_2$ Emissions reduction: 182 tonnes of $CO_2$<br>• 1.8% reduction of baseline carbon footprint<br>• 6% of target |
| **Funding** | • Funded through a National Government imitative to improve energy efficiency of sheltered housing schemes. No additional cost to Carbon Management Fund<br>• No additional operational costs.<br>• Source of funding: External. |
| **Resources** | • Additional resource: None. |
| **Ensuring Success** | •<br>• Principal risks:<br>o Savings are not as great as those highlighted by the carbon trust audit. |
| **Measuring Success** | • Annual building performance certificates issued by Climate Change Officer.<br>• Reduced gas consumption<br>• Check areas only heated by unlagged pipes are cooler. |
| **Notes** | If it gives measurable savings then roll out to non-sheltered housing sites. |

**Project Timescale**

- start date: November 2008
- estimated completion date (when it will deliver savings): 2009 - onwards
- Terms of reference and branding agreed November 2008

| | |
|---|---|
| **Project:** | **Transformers** |
| **Reference:** | IPS005 |
| **Owner (pers on)** | Barbara Moss Taylor (environment strategy officer) |
| **Department** | Environment Strategy |
| **Description** | Transformers will be our energy champions. They will highlight opportunities to the CMT and pass on energy saving tips to all teams within the organisation. |
| **Benefits** | • Financial savings: £ 25000<br>• Payback period: N/A<br>• $CO_2$ Emissions reduction: 123 tonnes of $CO_2$<br>• 1.2% reduction of baseline carbon footprint<br>• 4% of target |
| **Funding** | • Project cost. £0<br>• Operational costs: £3000 per year. First year to buy energy monitors form transformers to use in their own areas.<br>• Source of funding: Existing Budget<br>• When will funding be decided: 1st April 2009 |
| **Resources** | • Additional resource: Transformers will be given 1-2 hours every two months to attend meetings within work time.<br>• Environmental Strategy and Communication team to provide staff time to organise meetings. |
| **Ensuring Success** | • Enthusiastic volunteers are required for this project to work. A varied and entertaining programme of events is required to keep the transformers engaged.<br>• Principal risks: No budget for promotion, not enough volunteers recruited. |
| **Measuring Success** | • Number of volunteers recruited<br>• Number of projects suggested by Transformers.<br>• Over night energy consumption<br>• Review progress - March 2010 |
| **Notes** | |

**Project Timescale**

- start date: December 2008
- estimated completion date (when it will deliver savings): 2009/10
- interim deliverable / decision points: Launch online meter reading programme March 09

| | |
|---|---|
| **Project:** | **Monitoring and targeting programme** |
| **Reference:** | IPS006 |
| **Owner (pers on)** | Richard Bettle |
| **Department** | Environmental Strategy |
| **Description** | Introduce monthly meter readings to all sites that use gas (50). Monitor use to ensure early identification of variations. Produce quarterly energy consumption reports for CMB. Produce Annual certificates to building managers |
| **Benefits** | • Financial savings: £ £25,000<br>• Payback period: N/A<br>• $CO_2$ Emissions reduction: 123 tonnes of $CO_2$<br>• 1.2% reduction of baseline carbon footprint<br>• 4% of target |
| **Funding** | • Project cost: Staff time to set up the reporting spreadsheet and online shared area.<br>• Operational costs: Staff time to monitor the energy use, produce the reports and certificates<br>• Source of funding: Internal<br>• Permission to undertake this has been granted |
| **Resources** | • Additional resource: time for building managers to take monthly meter readings and complete the online form.<br>• This project will be delivered within current staff time. |
| **Ensuring Success** | • Identify correct employees to make readings.<br>• Principal risks: Reliant on Climate Change Officer driving the reminders and monitoring the energy consumption. |
| **Measuring Success** | • Reduced energy consumption.<br>• Quarterly updates Carbon management Team and Board |
| **Notes** | |

**Project Timescale**

- start date: April 2009
- estimated completion date (when it will deliver savings): 2009/10
- interim deliverable / decision points: Launch new agresso system

| | |
|---|---|
| **Project:** | **Procurement Policy** |
| **Reference:** | IPS007 |
| **Owner (pers on)** | Andrew Beschizza/Barbara Moss Taylor |
| **Department** | Procurement |
| **Description** | Review all major contracts to establish carbon impact.<br>Establish requirement for technical checks on all procurements that use energy to ensure minimal impact on carbon footprint.<br>Review procure guidelines to ensure minimal environmental impact |
| **Benefits** | • Financial savings: £ £25,000<br>• Payback period: N/A<br>• $CO_2$ Emissions reduction: 123 tonnes of $CO_2$<br>• 1.2% reduction of baseline carbon footprint<br>• 4% of target |
| **Funding** | • Project cost: TBC – cost adding technical check requirement to agresso<br>• Operational costs: Staff time review all major contracts<br>• Source of funding: Internal |
| **Resources** | • Additional resource: time for purchases that use energy to be checked. This should take no more than 4 hours. |
| **Ensuring Success** | • Identify products that use energy<br>• Identify employees using procurement cards for this type of purchase.<br>• Principal risks: Slowing down of procurement process.<br>Employees use procurement cards to avoid checks.<br>Availability of technical approvers. |
| **Measuring Success** | • Carbon impact of new contracts identified.<br>• Carbon impact of new purchases identified.<br>• Review procurement procedure in Oct 09. |
| **Notes** | |

**Project Timescale**

- start date: December 2008
- estimated completion date (when it will deliver savings): 2009/10
- interim deliverable / decision points: Staff training completed. Service area support for upgrade established

| | |
|---|---|
| **Project:** | **Server Virtualisation** |
| **Reference:** | IPS008 |
| **Owner (pers on)** | Howard Gaskin |
| **Department** | IT infrastructure manager |
| **Description** | Introduce server virtualisation on all suitable servers. |
| **Benefits** | • Could reduce energy demand by between 50% and 80%.<br>• A 50% saving has been assumed when calculating the savings.<br>• Financial savings: £ £22,000pa<br>• Payback period: N/A<br>• $CO_2$ Emissions reduction: 102 tonnes of $CO_2$<br>• 1.0% reduction of baseline carbon footprint<br>• 3.4% of target |
| **Funding** | • Project cost: Total cost around £100,000.<br>• Operational costs: No additional operational costs.<br>• Source of funding: Existing ICT capital budget<br>• Permission to undertake this is being sought<br>• Reduced risk during disaster management, as servers would not need to be physically moved to a new location. |
| **Resources** | • Additional resource: Staff training to be able to operate and maintain the new servers.<br>• This project will be delivered within current staff time. |
| **Ensuring Success** | • Identifying suitable funding mechanism. Funded through existing ICT capital budget.<br>• Principal risks: Servers do not perform as required. Savings not achieved |
| **Measuring Success** | • Server virtualisation undertaken.<br>• Reduced energy consumption on server room sub meters.<br>• When success will be measured / evaluated: Continue to monitor energy use in server room. |
| **Notes** | Servers are 'owned' by service areas, rather than corporately. Energy bills are part of building service charge to service area. The complex nature of paying for the servers has lead ICT to not make an application to the invest to save fund. |

**Project Timescale**

- start date: Current
- estimated completion date (when it will deliver savings): April 2009
- interim deliverable / decision points: HR Approval – Dec 2008

| | |
|---|---|
| **Project:** | **Crematorium Working Practices** |
| **Reference:** | IPS009 |
| **Owner (pers on)** | Mike Grimwood |
| **Department** | Environmental Services |
| **Description** | Alter firing times to minimise number of start up sequences, which take 4 hours. |
| **Benefits** | • Financial savings: £ 15,000<br>• Payback period: N/A<br>• $CO_2$ Emissions reduction: 82 tonnes of $CO_2$<br>• 0.8% reduction of baseline carbon footprint<br>• 2.7% of target |
| **Funding** | • Project cost: No capital costs<br>• Operational costs: None<br>• Source of funding: N/A |
| **Resources** | • Additional resource: New working practices<br>• Delivered within existing resources |
| **Ensuring Success** | • Key success factors: Approval to alter working practices.<br>• Principal risks: HR/union does not support change in working practices |
| **Measuring Success** | • Annual building performance certificates issued by Climate Change Officer<br>• Energy used measured reviewed quarterly. |
| **Notes** | |

**Project Timescale**

- start date: Current
- estimated completion date (when it will deliver savings): April 2009
- interim deliverable / decision points: Awaiting onsite engineers report.

| | |
|---|---|
| **Project:** | **Crown Car Park T5 converters** |
| **Reference:** | IPS010 |
| **Owner (pers on)** | Richard Bettle |
| **Department** | Environmental Strategy |
| **Description** | Fit T5 converters to the existing T8 lights at Crown Car Park |
| **Benefits** | • Financial savings: £ 17,374<br>• Payback period : 4 months<br>• $CO_2$ Emissions reduction: 78 tonnes of CO2<br>• 0.8% reduction of baseline carbon footprint<br>• 2.6% of target. |
| **Funding** | • Project cost: £6,000<br>• Operational costs: £0<br>• Source of funding: From electricity budget as payback is under 1 year.<br>• Once payback is confirm by on site engineer |
| **Resources** | • Additional resource :Installation costs. These could be minimised by installing converters as exiting bulbs fail.<br>• Consider paying for all lights to be changed at once rather than as bulbs fail, as earlier savings will cover extra costs. |
| **Ensuring Success** | • Future of Crown Car Park confirmed and pay back is shorter than life span.<br>• Principal risks: Converters do not perform as claimed. Car park lifespan reduced. |
| **Measuring Success** | • Annual building performance certificates issued by Climate Change Officer<br>• Energy used measured reviewed quarterly. |
| **Notes** | |

**Project Timescale**

- start date: Current
- estimated completion date (when it will deliver savings): Savings will build as old bulbs fail. All should be replaced in the next 6 months.
- interim deliverable / decision points: None.

| | |
|---|---|
| **Project:**<br>**Reference:** | **Christchurch Mansion – Install Energy Efficient Lamps**<br>IPS011 |
| **Owner (pers on)** | Clive Norman |
| **Department** | Museum Services |
| **Description** | Replace all conventional bulbs with CFL's. Approximately 800 60W incandescent bulbs are in use at the Mansion. |
| **Benefits** | • Financial savings: £ 14,266<br>• Payback period: N/A<br>• $CO_2$ Emissions reduction: 64 tonnes of $CO_2$<br>• 0.6% reduction of baseline carbon footprint<br>• 2.1% of target. |
| **Funding** | • Project cost: £0<br>• Operational costs: £0<br>• Source of funding: Paid for through existing lamp replacement budget. |
| **Resources** | • Additional resource: No additional Resources. Replacement undertaken as part normal maintenance. |
| **Ensuring Success** | • Ensure suitable level of light is achieved. Use higher wattage CFL's.<br>• Principal risks: Lamps do not perform as advertised. Light is insufficient for requirements. |
| **Measuring Success** | • Annual building performance certificates issued by Climate Change Officer<br>• Energy used measured reviewed quarterly. |
| **Notes** | |

**Project Timescale**

- start date: Jan 09
- estimated completion date (when it will deliver savings): Feb 09
- interim deliverable / decision points: Application to Carbon Management Fund Dec 2008.

| | |
|---|---|
| **Project:** | **Whitton Sports Centre – Energy Review –** |
| **Reference:** | IPS012 |
| **Owner (pers on)** | Steve Wardle |
| **Department** | Leisure Services |
| **Description** | o Install Voltage optimisation at all leisure facilities. Trial at Whitton and then roll out to all sites if savings are realised.<br>o An energy audit of Gainsborough Sports Centre by the carbon trust found that a 10% saving could be achieved by scheduling the heating of the sports hall to bookings. This principle has been applied to all four sports halls.<br>o The energy reviewed also identified a number of other projects that would save energy. Many of these are to be included as part of a refurbishment. The need for BMS was identified to control new boilers for space heating. This will not save 30% by itself, however if also used to control sports hall lighting and heating of the sports hall then a sufficient pay back could be achieved to use the invest to save fund. |
| **Benefits** | • The following are based on manual heating controls and voltage optimisation.<br>• Financial savings: £ 3,000<br>• Payback period: 3 Years (for the voltage optimisation element)<br>• $CO_2$ Emissions reduction: 14 tonnes of $CO_2$<br>• 0.1% reduction of baseline carbon footprint<br>• 0.5% of target |
| **Funding** | • Project cost: £6,600<br>• Operational costs<br>• Source of Capital funding: Carbon Management Fund<br>• Source of Revenue funding: Energy cost savings |
| **Resources** | • Additional resource: |
| **Ensuring Success** | • Support from Leisure Services.<br>• Principal risks: Savings are not achievable within budget. |
| **Measuring Success** | • Annual building performance certificates issued by Climate Change Officer<br>• Energy used measured reviewed quarterly. |
| **Notes** | |

**Project Timescale**

- start date: 2009
- estimated completion date (when it will deliver savings): Winter 2009/10
- interim deliverable / decision points: Timing of boiler replacement at Gipping House

| | |
|---|---|
| **Project:**<br>**Reference:** | **Gipping House – Biomass Boiler**<br>IPS013 |
| **Owner (pers on)** | Mark Hunter |
| **Department** | Building and Design Services |
| **Description** | Install a biomass boiler at Gipping House. Operations at Gipping House currently generate 60 tonnes of waste wood. IBC currently pays to dispose of this waste. If it could be chipped it could be used to fuel an onsite boiler. |
| **Benefits** | • Financial savings: £ 5000 plus reduced waste disposal costs of £9000. Not all wood will be required for the Gipping House boiler the remainder could be sold to Green space for use at the Reg Driver centre. This income will ensure the project costs are covered in three years.<br>• Payback period: 3 years<br>• $CO_2$ Emissions reduction: 28 tonnes of CO2<br>• 0.3% reduction of baseline carbon footprint<br>• 0.9% of target. |
| **Funding** | • Project cost: £54,000<br>• Operational costs: £0<br>• Source of funding: Carbon Management Fund |
| **Resources** | • Additional resource: A wood chipper and storage area will be required. |
| **Ensuring Success** | • Identify when boilers are scheduled for replacement.<br>• Principal risks: Storage area cannot be found. Current estimated price does not pay back. Emissions from treated waste wood. |
| **Measuring Success** | • Annual building performance certificates issued by Climate Change Officer<br>• Energy used measured reviewed quarterly. |
| **Notes** | |

**Project Timescale**

- start date: March 2008
- estimated completion date (when it will deliver savings): March 2008
- interim deliverable / decision points: None

| | |
|---|---|
| **Project:**<br>**Reference:** | **Close IBC social Club**<br>IPS014 |
| **Owner (pers on)** | N/A |
| **Department** | N/A |
| **Description** | Close IBC social club. |
| **Benefits** | • Financial savings: £ 8,664<br>• Payback period: N/A<br>• $CO_2$ Emissions reduction: 40 tonnes of CO2<br>• 0.4% reduction of baseline carbon footprint<br>• 1.3% of target |
| **Funding** | • Project cost: £0<br>• Operational costs: £0<br>• Source of funding: None |
| **Resources** | • Additional resource: None |
| **Ensuring Success** | • Already closed<br>• Principal risks: N/A |
| **Measuring Success** | • Annual building performance certificates issued by Climate Change Officer<br>• Energy used measured reviewed quarterly. |
| **Notes** | The club is now closed. |

**Project Timescale**

- start date: April 2008
- estimated completion date (when it will deliver savings): April 2008
- interim deliverable / decision points: None

| | |
|---|---|
| **Project:**<br>**Reference:** | **Grafton House – Lighting, standby setting**<br>IPS015 |
| **Owner (pers on)** | Bob Harvey |
| **Department** | Building and Design Services |
| **Description** | Alter the standby settings so lights go into standby mode after 30 minutes of no movement, rather the 2 hours as originally set. |
| **Benefits** | • Financial savings: £ 7,140<br>• Payback period: N/A<br>• $CO_2$ Emissions reduction: 32 tonnes of CO2<br>• 0.3% reduction of baseline carbon footprint<br>• 1.1% of target |
| **Funding** | • Project cost: No Costs<br>• Operational costs: £0<br>• Source of funding: N/a |
| **Resources** | • Additional resource: None |
| **Ensuring Success** | • This will be dependent of use of building in controlled areas as to effectiveness of change |
| **Measuring Success** | • Annual building performance certificates issued by Climate Change Officer<br>• Energy used measured reviewed quarterly. |
| **Notes** | The savings quoted are based on reduced electricity consumption since April 2008. There have been no other significant variations in energy use. |

**Project Timescale**

- start date: April 2009
- estimated completion date (when it will deliver savings): April 2009
- interim deliverable / decision points: Understanding of current heating controls

| | |
|---|---|
| **Project:** | **Maidenhall SC – Sports hall heating schedule** |
| **Reference:** | IPS016 |
| **Owner (pers on)** | Steve Wardle |
| **Department** | Leisure Services |
| **Description** | An energy audit of Gainsborough Sports Centre by the carbon trust found that a 10% saving could be achieved by scheduling the heating of the sports hall to bookings. This principle has been applied to all four sports halls. |
| **Benefits** | • Financial savings: £ 3,232<br>• Payback period: N/A<br>• $CO_2$ Emissions reduction: 18 tonnes of CO2<br>• 0.2% reduction of baseline carbon footprint<br>• 0.6% of target. |
| **Funding** | • Project cost: £0<br>• Operational costs: £0<br>• Source of funding: N/A |
| **Resources** | • Additional resource: required to turn on heating prior to bookings and turn off after bookings. |
| **Ensuring Success** | • Educate staff as to why we are asking them to alter current procedures.<br>• Principal risks: Controls not accessible to staff. Staff not turning heating off after bookings. Complaints of being cold. Halls are fully occupied when IBC operate them. SCC does not reduce the fuel charge. |
| **Measuring Success** | • Annual building performance certificates issued by Climate Change Officer<br>• Energy used measured reviewed quarterly. |
| **Notes** | |

**Project Timescale**

- start date: 2009
- estimated completion date (when it will deliver savings): 2009
- interim deliverable / decision points: Performance results from Gainsborough SC trial

| | |
|---|---|
| **Project:**<br>**Reference:** | **Maidenhall SC – Voltage Optimisation**<br>IPS017 |
| **Owner (pers on)** | Steve Wardle |
| **Department** | Leisure Services |
| **Description** | Install Voltage optimisation at all leisure facilities. Trial at Gainsborough and then roll out to all sites if savings are realised. |
| **Benefits** | • Financial savings: £ 3,641<br>• Payback period: 1.76<br>• $CO_2$ Emissions reduction: 16 tonnes of $CO_2$<br>• 0.2% reduction of baseline carbon equivalent |
| **Funding** | • Project cost: £6,426<br>• Operational costs: £0<br>• Source of funding: Carbon Management Fund |
| **Resources** | • Additional resource feasibility study to be undertaken by Bob Harvey. |
| **Ensuring Success** | • Educate staff as to why we are asking them to alter current procedures<br>• Principal risk: Energy savings not realised due to technology at the end of life of performance of electrical equipment. |
| **Measuring Success** | • Annual building performance certificates issued by Climate Change Officer<br>• Energy used measured reviewed quarterly. |
| **Notes** | Suffolk County Council owns this site and this would make installation of the equipment complicated. This may be revisited after the decision on unitary status has been made in July 2009 |

Deferred

**Project Timescale**

- start date: April 2009
- estimated completion date (when it will deliver savings): April 2009
- interim deliverable / decision points: Understanding of current heating controls

| | |
|---|---|
| **Project:** | **Northgate SC – Sports hall heating schedule** |
| **Reference:** | IPS018 |
| **Owner (pers on)** | Steve Wardle |
| **Department** | Leisure Services |
| **Description** | An energy audit of Gainsborough Sports Centre by the carbon trust found that a 10% saving could be achieved by scheduling the heating of the sports hall to bookings. This principle has been applied to all four sports halls. |
| **Benefits** | • Financial savings: £ 2,730<br>• Payback period: N/A<br>• $CO_2$ Emissions reduction: 15 tonnes of CO2<br>• 0.1% reduction of baseline carbon footprint<br>• 0.5% of target. |
| **Funding** | • Project cost: £0<br>• Operational costs: £0<br>• Source of funding: N/A |
| **Resources** | • Additional resource: required to turn on heating prior to bookings and turn off after bookings. |
| **Ensuring Success** | • Educate staff as to why we are asking them to alter current procedures.<br>• Principal risks: Controls not accessible to staff. Staff not turning heating off after bookings. Complaints of being cold. Halls are fully occupied when IBC operate them. SCC does not reduce the fuel charge. |
| **Measuring Success** | • Annual building performance certificates issued by Climate Change Officer<br>• Energy used measured reviewed quarterly. |
| **Notes** | |

**Project Timescale**

- start date: 2010
- estimated completion date (when it will deliver savings): 2010
- interim deliverable / decision points:

| | |
|---|---|
| **Project:**<br>**Reference:** | **Grafton House – Server room temperature**<br>IPS019 |
| **Owner (pers on)** | Howard Gaskin |
| **Department** | ICT |
| **Description** | Adjust server room air conditioning controls to increase the temperature of the server room from 20C to 22C. |
| **Benefits** | • Financial savings: £ 3,275<br>• Payback period: N/A<br>• $CO_2$ Emissions reduction: 15 tonnes of $CO_2$<br>• 0.1% reduction of baseline carbon footprint<br>• 0.5% of target. |
| **Funding** | • Project cost: £0<br>• Operational costs: £0<br>• Source of funding: N/A |
| **Resources** | • Additional resource: Production of risk analysis. |
| **Ensuring Success** | • Ensure senior management support for this project.<br>• Principal risks: Potential reduced lifespan of servers. |
| **Measuring Success** | • Annual building performance certificates issued by Climate Change Officer<br>• Energy used measured and analysed quarterly. |
| **Notes** | This was originally scheduled for 2009, but a server has been running hot. This project will be implemented when the virtual servers are in place. |

**Project Timescale**

- start date: April 2009
- estimated completion date (when it will deliver savings): May2009
- interim deliverable / decision points:

| | |
|---|---|
| **Project:**<br>**Reference:** | **Gainsborough SC – Voltage Optimisation**<br>IPS020 |
| **Owner (pers on)** | Steve Wardle |
| **Department** | Leisure Services |
| **Description** | Install Voltage optimisation at all leisure facilities. Drops voltage to 220V. Trial at Gainsborough and then roll out to all sites if savings are realised. |
| **Benefits** | • Financial savings: £ 3,127<br>• Payback period: 3 years<br>• $CO_2$ Emissions reduction: 14 tonnes of $CO_2$<br>• 0.1% reduction of baseline carbon footprint<br>• 0.5% of target |
| **Funding** | • Project cost: £8,600<br>• Operational costs: £0<br>• Source of funding: Carbon Management Fund |
| **Resources** | • Additional resource: Feasibility study to be undertaken by Bob Harvey. |
| **Ensuring Success** | • Educate staff as to why we are asking them to alter current procedures.<br>• Principal risks: Energy savings not realised due to technology at the centres. Loss of performance of electrical equipment. |
| **Measuring Success** | • Annual building performance certificates issued by Climate Change Officer<br>• Energy used measured reviewed quarterly. |
| **Notes** | |

**Project Timescale**

- start date: Jan 2009
- estimated completion date (when it will deliver savings): Jan 2009
- interim deliverable / decision points: Understanding of current heating controls

| | |
|---|---|
| **Project:**<br>**Reference:** | **Museum Loft Insulation**<br>IPS021 |
| **Owner (pers on)** | Clive Norman |
| **Department** | Museum Services |
| **Description** | An energy audit of Ipswich Museum by the C Trust found that there was no insulation in the loft. This pr wi ring insulation levels to current building regulations in ar s ace that are suitable. |
| **Benefits** | • Financial savings: £ 2,410<br>• Payback period: 2.78<br>• $CO_2$ Emissions reduct 3 nes of $CO_2$<br>• 0.1% reduction o e rbon footprint |
| **Funding** | • Project cost: £ 7<br>• Operational s £<br>• Source n g N/A |
| **Resources** | • A ditiona e urce: N/A |
| **Ensuring Success** | • Su por rom B&DS<br>• Prin risks: None. |
| **Measuring Success** | • Annual building performance certificates issued by Climate Change Officer<br>• Energy used measured reviewed quarterly. |
| **Notes** | The cost of installation of the insulation is to high to achieve three-year payback, due to the working above double height ceilings. |

Cancelled

**Project Timescale**

- start date: April 2010
- estimated completion date (when it will deliver savings): April 2010
- interim deliverable / decision points: Procurement research

| | |
|---|---|
| **Project:**<br>**Reference:** | **IB Contracts – Satellite Tracking**<br>IPS022 |
| **Owner (pers on)** | Ondraya Plowman |
| **Department** | Fleet Management/IB Contracts |
| **Description** | IB contracts employees are allowed to take their vans home at night and at weekends to reduce the need to make trips back to the depot at the beginning and end of the day. The Satellite tracking will remove the opportunity for employees to use their vehicles out of hours. |
| **Benefits** | • Financial savings: £ 2,700<br>• Payback period: N/A<br>• $CO_2$ Emissions reduction: 6 tonnes of $CO_2$<br>• 0.1% reduction of baseline carbon footprint<br>• 0.2% of target. |
| **Funding** | • Project cost: TBC<br>• Operational costs: TBC<br>• Source of funding: IB Contracts service area. |
| **Resources** | • Additional resource: monitoring report of trips avoided. |
| **Ensuring Success** | • Ensure it demonstrates a fuel saving.<br>• Principal risks: If the tracking system shows that there is no un necessary mileage currently being undertaken then there will be no savings. |
| **Measuring Success** | • Monitor number of trips to depot avoided.<br>• Diesel saved. |
| **Notes** | |

**Project Timescale**

- start date: 2011
- estimated completion date (when it will deliver savings): 2011
- interim deliverable / decision points: Report on savings achieved by other examples. Yet to be undertaken.

| | |
|---|---|
| **Project:** | **IB Contracts – Driver Training** |
| **Reference:** | IPS023 |
| **Owner (pers on)** | Ondraya Plowman |
| **Department** | Fleet Management/IB Contracts |
| **Description** | The Energy Saving Trust are offering driver training as part of a fleet review. We will participate in this fleet review and have all van drivers trained to driver more economically. |
| **Benefits** | • Financial savings: £ 4,358<br>• Payback period: TBC<br>• $CO_2$ Emissions reduction: 12 tonnes of $CO_2$<br>• 0.1% reduction of baseline carbon footprint<br>• 0.4% of target. |
| **Funding** | • Project cost: TBC<br>• Operational costs: TBC<br>• Source of funding: Depends on payback period. If under one year it will be funded through IB Contracts fuel savings. If over one year this may be funded through the carbon management fund. |
| **Resources** | • Additional resource: Climate Change Officer to undertake research on savings achieved by other organisations. |
| **Ensuring Success** | • Ensure it demonstrates a fuel saving.<br>• Principal risks: Does not pay for its self. Savings are short lived. |
| **Measuring Success** | • Increased miles per gallon.<br>• Reduced fuel consumption. |
| **Notes** | |

**Project Timescale**

- start date: Jan 09
- estimated completion date (when it will deliver savings): Feb 09
- interim deliverable / decision points: Application to Carbon Management Fund Dec 2008.

| | |
|---|---|
| **Project:**<br>**Reference:** | **Fore Street Pool – Refurbishment**<br>IPS024 |
| **Owner (pers on)** | Mark Hunter |
| **Department** | Building and Design Services |
| **Description** | Ensure a 30% reduction in energy consumption is delivered through the refurbishment of Fore Street Pool |
| **Benefits** | • Financial savings: £ 12,000<br>• Payback period: N/A<br>• $CO_2$ Emissions reduction: 64 tonnes of $CO_2$<br>• 0.6% reduction of baseline carbon footprint<br>• 2% of target. |
| **Funding** | • Project cost: £150,000<br>• Operational costs: Non identified<br>• Source of Capital funding: Capital expenditure<br>• Source of Revenue funding: N/A |
| **Resources** | • Additional resource: Consultants will be invented to tender for the design of the refurbishment project. |
| **Ensuring Success** | • Support from Leisure Services.<br>• Principal risks: Savings are not achievable within budget. |
| **Measuring Success** | • Annual building performance certificates issued by Climate Change Officer<br>• Energy used measured reviewed quarterly. |
| **Notes** | |

**Project Timescale**

- start date: 2009
- estimated completion date (when it will deliver savings): 2009
- interim deliverable / decision points: Performance results from Gainsborough SC trial

| | |
|---|---|
| **Project:**<br>**Reference:** | **Whitton SC – Voltage Optimisation**<br>IPS025 |
| **Owner (pers on)** | Steve Wardle |
| **Department** | Leisure Services |
| **Description** | Install Voltage optimisation at all le ure facilities. Trial at Gainsborough and then roll out to all sites if savi s are realised |
| **Benefits** | • Financial savings: £ 2<br>• Payback period: 1.<br>• $CO_2$ Emissions re tion: 11 tonn s of $CO_2$<br>• 0.1% reduction aseline ca on print<br>• 0.2% of targ |
| **Funding** | • Project c st £7,200<br>• Opera costs: £0<br>• So funding: Carb Management Fund |
| **Resources** | • A itional reso ce: easibility study to be undertaken by Bob rvey. |
| **Ensuring Success** | • Educate sta to why we are asking them to alter current procedur<br>• Princi is: Energy savings not realised due to technology at the tr Loss of performance of electrical equipment. |
| **Measuring Success** | • A al building performance certificates issued by Climate hange Officer<br>• nergy used measured reviewed quarterly. |
| **Notes** | |

**Project Timescale**

- start date: Jan 2009
- estimated completion date (when it will deliver savings): Jan 2009
- interim deliverable / decision points: Carbon Management Board approved trial on floor 4 on the 02/02/09.

| | |
|---|---|
| **Project:** | **Grafton House – Remove Halogen Spots Accent Lighting** |
| **Reference:** | IPS026 |
| **Owner (pers on)** | Bob Harvey |
| **Department** | Facilities Management |
| **Description** | Grafton House has 23 halogen spotlights per floor, plus lift lights. 6 per floor are primarily for accent lighting. As these are low voltage they cannot be replaced with CFL equivalents. These accent lights will be switched off. |
| **Benefits** | • Financial savings: £ 550<br>• Payback period: N/A<br>• $CO_2$ Emissions reduction: 2 tonnes of $CO_2$<br>• 0.1% reduction of baseline carbon footprint<br>• 0.1% of target. |
| **Funding** | • Project cost: £0<br>• Operational costs: £0<br>• Source of funding: N/A |
| **Resources** | • Additional resource: None. |
| **Ensuring Success** | • Gain senior management and health and safety support for their removal.<br>• Principal risks: Use of space near these lights changes requiring them to be turned back on. |
| **Measuring Success** | • Annual building performance certificates issued by Climate Change Officer<br>• Energy used measured and analysed quarterly |
| **Notes** | |

**Project Timescale**

- start date: 2009
- estimated completion date (when it will deliver savings): 2009
- interim deliverable / decision points: Performance results from Gainsborough SC trial

| | |
|---|---|
| **Project:**<br>**Reference:** | **Northgate SC – Voltage Optimisation**<br>IPS027 |
| **Owner (pers on)** | Steve Wardle |
| **Department** | Leisure Services |
| **Description** | Install Voltage optimisation at all leisure facilities. Trial at Gainsborough and then roll out to all sites if savings are realised. |
| **Benefits** | • Financial savings: £ 2,083<br>• Payback period: 1.76<br>• $CO_2$ Emissions reduction: 9 tonnes of CO<br>• 0.1% reduction of baseline carbon footpr |
| **Funding** | • Project cost: £3,675<br>• Operational costs: £0<br>• Source of funding: Carbon M em und |
| **Resources** | • Additional resourc : Fe hil stud to be undertaken by Bob Harvey. |
| **Ensuring Success** | • Educate staff as t e asking them to alter current procedures.<br>• Principal risks E g avings not realised due to technology at the ce L of pe rmance of electrical equipment. |
| **Measuring Success** | • Annu uil g rmance certificates issued by Climate Chang ffi<br>• Energy easured reviewed quarterly. |
| **Notes** | Suffolk County Co ncil owns this site and this would make installation of the equipment complicated. This may be revisited after the decision on unitary status has been made in July 2009 |

Deferred

**Project Timescale**

- start date: 2009
- estimated completion date (when it will deliver savings): 2009
- interim deliverable / decision points: M&E equipment review as part of IPS003

| | |
|---|---|
| **Project:** | **Christchurch Mansion** |
| **Reference:** | IPS028 |
| **Owner (pers on)** | Mark Hunter |
| **Department** | Building and Design Services |
| **Description** | Install new high efficiency gas boilers in Christchurch Mansion. |
| **Benefits** | • Financial savings: £1,2[illegible]<br>• Payback period: 3[illegible]<br>• $CO_2$ Emissions reduction: 8 tonnes of CO2<br>• 0.1% reduction on baseline carbon footprint |
| **Funding** | • Project cost: £8,000<br>• Operational costs: £0<br>• Source of funding: Carbon Management Fund |
| **Resources** | • Additional resource: Technical study to be undertaken by Bob Harvey. |
| **Ensuring Success** | • Principal risks: Boilers identified as priority during the M&E report and included as part of projects savings. |
| **Measuring Success** | • Annual building performance certificates issued by Climate Change Officer<br>• Energy used measured reviewed quarterly. |
| **Notes** | |

Incorporated in Project IPS003

**Project Timescale**

- start date: 2008
- estimated completion date (when it will deliver savings): 2008
- interim deliverable / decision points: None

| | |
|---|---|
| **Project:** | **Continue PC Switch Off campaign** |
| **Reference:** | IPS029 |
| **Owner (pers on)** | Richard Bettle |
| **Department** | Environment Strategy |
| **Description** | In January 2008 the Chief Executive emailed all staff asking employees to turn off their pc over night.<br>When a PC is left on over night a message is now displayed on the screen stating that the PC was left on and the user name has been recorded.<br>Around 50 PC's (out of 800) are left on overnight average. This campaign needs to be stepped up to tackle the remaining persistent offenders. |
| **Benefits** | • Financial savings: £ 1,145<br>• Payback period: N/A<br>• $CO_2$ Emissions reduction: 4 tonnes of $CO_2$<br>• 0.1% reduction of baseline carbon footprint<br>• 0.2% of target. |
| **Funding** | • Project cost:<br>• Operational costs: £50<br>• Source of funding: Exiting budget |
| **Resources** | • Additional resource: Use transformers to distribute rewards to employees that switch off PC's |
| **Ensuring Success** | • Educate staff as to why we are asking them to alter current procedures.<br>• Principal risks: None |
| **Measuring Success** | • Annual building performance certificates issued by Climate Change Officer<br>• Quarterly night use report from ICT manager. |
| **Notes** | |

**Project Timescale**

- start date: Jan 2009
- estimated completion date (when it will deliver savings): Jan 2009
- interim deliverable / decision points: Understanding of current heating controls

| | |
|---|---|
| **Project:**<br>**Reference:** | **Whitton SC – Sports hall heating schedule**<br>IPS030 |
| **Owner (pers on)** | Steve Wardle |
| **Department** | Leisure Services |
| **Description** | An energy audit of Gainsborough Sports Centre by the carbon trust found that a 10% saving could be achieved by scheduling the heating of the sports hall to bookings. This principle has been applied to all four sports halls. |
| **Benefits** | • Financial savings: £ 693<br>• Payback period: N/A<br>• $CO_2$ Emissions reduction: 4 to ns of CO2<br>• 0.04% reduction of baselin ca n footprint |
| **Funding** | • Project cost: £0<br>• Operational costs: £0<br>• Source of funding: N/ |
| **Resources** | • Additional res ce: required to rn on heating prior to bookings and turn off a bookings. |
| **Ensuring Success** | • Educate taf as to why we e asking them to alter current proced re.<br>• Pri pa isks: Controls s accessible to staff. Staff not turning hea in off after l oc ings. Complaints of being cold. |
| **Measuring Success** | • A ual building pe fo nance certificates issued by Climate hange Office<br>• Energy use n stored reviewed quarterly. |
| **Notes** | |

**Project Timescale**

- start date: April 2009
- estimated completion date (when it will deliver savings): April 2009
- interim deliverable / decision points: Understanding of current heating controls

| | |
|---|---|
| **Project:** | **Gainsborough SC – Sports hall heating schedule** |
| **Reference:** | IPS031 |
| **Owner (pers on)** | Steve Wardle |
| **Department** | Leisure Services |
| **Description** | An energy audit of Gainsborough Sports Centre by the carbon trust found that a 10% saving could be achieved by scheduling the heating of the sports hall to bookings. This principle has been applied to all four sports halls. |
| **Benefits** | • Financial savings: £ 642<br>• Payback period: N/A<br>• $CO_2$ Emissions reduction: 4 tonnes of $CO_2$<br>• 0.03% reduction of baseline carbon footprint<br>• 0.1% of target. |
| **Funding** | • Project cost: £0<br>• Operational costs: £0<br>• Source of funding: N/A |
| **Resources** | • Additional resource: required to turn on heating prior to bookings and turn off after bookings. |
| **Ensuring Success** | • Educate staff as to why we are asking them to alter current procedures.<br>• Principal risks: Controls not accessible to staff. Staff not turning heating off after bookings. Complaints of being cold. |
| **Measuring Success** | • Annual building performance certificates issued by Climate Change Officer<br>• Energy used measured reviewed quarterly. |
| **Notes** | |

**Project Timescale**

- start date: Jan 2009
- estimated completion date (when it will deliver savings): April 2009
- interim deliverable / decision points: facilities manager/security guards agreement to switch off MFD's during nightly patrol. Awaiting confirmation that ICT can arrange for an automated message to be sent informing users that a MFD is switch off if they send documents to it.

| | |
|---|---|
| **Project:** | **Grafton House – Overnight switch off of Printer's** |
| **Reference:** | IPS032 |
| **Owner (pers on)** | Bob Harvey |
| **Department** | Facilities Management |
| **Description** | The Multifunctional Devices (printers, photocopiers and fax machines) use 40W in standby. Using timing clocks to switch these off will invalidate the manufacturers guarantee. Printing have agreed to allow the security guards to switch off the MFD's during their patrols. Notices will be put up stating that staff can turn them back on if they are needed out of hours. |
| **Benefits** | • Financial savings: £ 502<br>• Payback period: 0<br>• $CO_2$ Emissions reduction: 2 tonnes of $CO_2$<br>• 0.02% reduction of baseline carbon footprint<br>• 0.1% of target. |
| **Funding** | • Project cost: £0<br>• Operational costs: £0<br>• Source of funding: N/A |
| **Resources** | • Additional resource: Security guards to turn of MFD's during patrol. Notices to be put in place. ICT to arrange for warning message |
| **Ensuring Success** | • Educate staff as to why we are asking them to alter current procedures.<br>• Principal risks: Complaints from out of hours staff. Security Guards not agreeing to undertake this task. |
| **Measuring Success** | • Annual building performance certificates issued by Climate Change Officer<br>• Energy used measured and analysed quarterly. |
| **Notes** | |

**Project Timescale**

- start date: Jan 2009
- estimated completion date (when it will deliver savings): April 2009
- interim deliverable / decision points:

| | |
|---|---|
| **Project:** | **Grafton House – Meeting room air conditioning set point** |
| **Reference:** | IPS033 |
| **Owner (pers on)** | Bob Harvey |
| **Department** | Facilities Management |
| **Description** | Raise the point at which the air conditioning kicks in from 20C to 22C. Only the facilities manager can actually alter the controls in the meeting rooms. Employees can only turn the air condition on and off. Install notices asking employees to check if the heaters are on before turning the air-conditioning on. |
| **Benefits** | • Financial savings: £ 420<br>• Payback period: 0<br>• $CO_2$ Emissions reduction: 2 tonnes of $CO_2$<br>• 0.02% reduction of baseline carbon footprint |
| **Funding** | • Project cost: £0<br>• Operational costs: £0<br>• Source of funding: N/A |
| **Resources** | • Additional resource: None |
| **Ensuring Success** | • Educate staff as to why we are asking them to alter current procedures.<br>• Principal risks: Complaints from employees that meeting rooms are too hot. |
| **Measuring Success** | • Annual building performance certificates issued by Climate Change Officer<br>• Energy used measured and analysed quarterly. |
| **Notes** | Review comments and look to move to 24C in the future. |

**Project Timescale**

- start date: April 2009
- estimated completion date (when it will deliver savings): April 2009
- interim deliverable / decision points:

| | |
|---|---|
| **Project:** | **Grafton House – Timers on water coolers** |
| **Reference:** | IPS034 |
| **Owner (pers on)** | Bob Harvey |
| **Department** | Facilities Management |
| **Description** | Install plug in timers on water coolers |
| **Benefits** | • Financial savings: £ 103<br>• Payback period: 0.47<br>• $CO_2$ Emissions reduction: 0.5 tonnes of $CO_2$<br>• 0.01% reduction of baseline carbon footprint<br>• 0.02% of target |
| **Funding** | • Project cost: £48<br>• Operational costs: £0<br>• Source of funding: Reduce energy costs |
| **Resources** | • Additional resource: None |
| **Ensuring Success** | • Educate staff as to why we are asking them to alter current procedures.<br>• Principal risks: Complaints from employees that work out of hours. |
| **Measuring Success** | • Annual building performance certificates issued by Climate Change Officer<br>• Energy used measured and analysed quarterly. |
| **Notes** | |

**Project Timescale**

- start date: 3.11.08
- estimated completion date (when it will deliver savings): immediate Savings will be over a period of time
- interim deliverable / decision points

| | |
|---|---|
| **Project:** | **Vehicle Fleet Manager to procure all vehicles for IBC** |
| **Reference:** | **IPS069** |
| **Owner (pers on)** | Ondraya Plowman |
| **Department** | StreetCare |
| **Description** | Centralised vehicle procurement. Ensuring new vehicles all achieve 130g$CO_2$ per km, where this information is available. |
| **Benefits** | • Financial savings: Not able to quantify<br>• Payback period: on going<br>• $CO_2$ Emissions reduction: [x] tonnes of CO2<br>• % of target – the percentage of your $CO_2$ saving target will this project annually contribute |
| **Funding** | • Project cost, nil<br>• Operational costs:<br>• Source of funding: |
| **Resources** | Fleet manager will need to research vehicle types to ensure the most efficient vehicle is procured. Project will be delivered within current resources |
| **Ensuring Success** | • |
| **Measuring Success** | Fuel efficiency will be measured against old fleet<br>$CO_2$ savings will be measured against old fleet |
| **Notes** | |

**Project Timescale**

- start date: March 2009
- estimated completion date (when it will deliver savings): March 2009
- interim deliverable / decision points:

| | |
|---|---|
| **Project:** | **Pool cars - Procure Band A cars** |
| **Reference:** | IPS035 |
| **Owner (pers on)** | Richard Bettle |
| **Department** | Climate Change Officer |
| **Description** | Procure Band A pool cars. Pool cars will be procured on a leaseback arrangement. The cost of this procurement arrangement costs less than the current hire agreement. |
| **Benefits** | • Financial savings: £ 1,400 (diesel savings)<br>• Payback period: N/A<br>• $CO_2$ Emissions reduction: 3 tonnes of $CO_2$<br>• 0.03% reduction of baseline carbon footprint<br>• 0.1% of target. |
| **Funding** | • Project cost: £0<br>• Operational costs: £0<br>• Source of funding: Purchase leaseback arrangement. Utilise the current pool car funding arrangements. |
| **Resources** | • Additional resource: Support from Fleet Manager to obtain the best price. |
| **Ensuring Success** | • Reduce the cost of operating the pool cars.<br>• Principal risks: Pool cars are more expensive than the current arrangement. |
| **Measuring Success** | • Fuel Consumption monitored by Climate Change Officer<br>• |
| **Notes** | |

**Project Timescale**

- start date: April 2009
- estimated completion date (when it will deliver savings): Winter 2009/10
- interim deliverable / decision points:

| | |
|---|---|
| **Project:**<br>**Reference:** | **Corporate Loft insulation Project**<br>IPS036 |
| **Owner (pers on)** | Mark Hunter |
| **Department** | Building and Design Services |
| **Description** | Insulate loft spaces in major sites with no loft insulation.<br>Sports centres, Gipping House, Lansdeer Play Centre may need insulation, all need further investigation.<br>Corn exchange/Town Hall Christchurch mansion and Regent theatre have been insulated.<br>See project IPS021 for details of the museum. The following assume that Sports centres, Gipping House, Lansdeer Play Centre can be insulated easily and pay back will be in less than 3 years. |
| **Benefits** | • Financial savings: £ 8800<br>• Payback period: 3 years<br>• $CO_2$ Emissions reduction: 48 tonnes of $CO_2$<br>• 0.5% reduction of baseline carbon footprint<br>• 1.6% of target. |
| **Funding** | • Project cost: £25000<br>• Operational costs: £0<br>• Source of funding: Invest to save fund. |
| **Resources** | • Additional resource: B&DS to request quotes and arrange for work to be undertaken |
| **Ensuring Success** | • Undertake inspections of the loft spaces.<br>• Principal risks: loft spaces are awkward resulting in high cost and long paybacks. |
| **Measuring Success** | • Fuel Consumption monitored by Climate Change Officer<br>• |
| **Notes** | |

**Project Timescale**

- start date: April 2009
- estimated completion date (when it will deliver savings): Winter 2009/10
- interim deliverable / decision points:

| | |
|---|---|
| **Project:**<br>**Reference:** | **Museum Double Glazing**<br>IPS037 |
| **Owner (pers on)** | Mark Hunter |
| **Department** | Building and Design Services |
| **Description** | Replace existing single glazed windows with double glazed units. |
| **Benefits** | • Financial savings: £ 850<br>• Payback period: NA<br>• $CO_2$ Emissions reduction: 5 tonnes of $CO_2$<br>• 0.05% reduction of baseline carbon footprint<br>• 0.2% of target. |
| **Funding** | • Project cost: £TBC<br>• Operational costs: £0<br>• Source of funding: Capital Programme. |
| **Resources** | • Additional resource: B&DS to request quotes and arrange for work to be undertaken |
| **Ensuring Success** | •<br>• Principal risks:<br>o Funding required for other maintenance projects.<br>o Energy consumption not as great as expected. |
| **Measuring Success** | • Fuel Consumption monitored by Climate Change Officer<br>• |
| **Notes** | |

**Project Timescale**

- start date: 2012
- estimated completion date (when it will deliver savings): 2012
- interim deliverable / decision points: New build or refurbishment, decision to be made in 2009.

| | |
|---|---|
| **Project:**<br>**Reference:** | **Crematorium upgrade project**<br>IPS039 |
| **Owner (pers on)** | Mark Hunter |
| **Department** | Building and Design Services |
| **Description** | The crematorium will either be refurbished or a new facility built. Include at least a 15% energy saving requirement in the tender document. |
| **Benefits** | • Financial savings: £ 6000<br>• Payback period: N/A<br>• $CO_2$ Emissions reduction: 33 tonnes of $CO_2$<br>• 0.3% reduction of baseline carbon footprint<br>• 1.1% of target. |
| **Funding** | • Project cost: £5,000,000<br>• Operational costs: £0<br>• Source of funding: Capital Programme |
| **Resources** | • Additional resource: B&DS to arrange tender process and arrange for work to be undertaken once decision has been made on route to take. |
| **Ensuring Success** | • Ensure energy saving requirements are included in the tender.<br>• Principal risks: Capital funds required for other projects. |
| **Measuring Success** | • Fuel consumption monitored by Climate Change Officer<br>• |
| **Notes** | |

**Project Timescale**

- start date: April 2009
- estimated completion date (when it will deliver savings): 2009/10
- interim deliverable / decision points:

| | |
|---|---|
| **Project:** | **Move casual mileage to pool cars** |
| **Reference:** | IPS041 |
| **Owner (pers on)** | Richard Bettle |
| **Department** | Environment Strategy |
| **Description** | The new pool cars are more efficient than the average car used by employees. This project seeks to move 40k business miles currently undertaken in employees own vehicles to the pool cars through increased utilisation of the pool cars and increasing the size of the pool car fleet. The service areas undertaking the highest amount of casual mileage will be approached first. This project forms part of the travel plan. |
| **Benefits** | • Financial savings: £ 2,300<br>• Payback period: N/a<br>• $CO_2$ Emissions reduction: 5 tonnes of $CO_2$<br>• 0.05% reduction of baseline carbon footprint<br>• 0.2% of target. |
| **Funding** | • Project cost: £0<br>• Operational costs: £0<br>• Source of funding: Extra pool cars will be procured through the usual purchase/leaseback scheme and paid for through recharges to services areas. This will cost the council less per mile than paying casual user rate. |
| **Resources** | • Additional resource: |
| **Ensuring Success** | • Work with service area to ensure a commitment to use the pool cars before procure extra cars.<br>• Principal risks: service areas not prepared to switch to use of the pool cars. |
| **Measuring Success** | • Fuel Consumption monitored by Climate Change Officer<br>• Business mileage claims reduced. |
| **Notes** | |

**Project Timescale**

- start date: 2009/10
- estimated completion date (when it will deliver savings): 2009/10
- interim deliverable / decision points:

| | |
|---|---|
| **Project:** | **3.5 tonne licence holders driver training** |
| **Reference:** | IPS042 |
| **Owner (pers on)** | Ondraya Plowman |
| **Department** | Fleet management |
| **Description** | All HGV drivers have to have driver training, which includes how to drive economically. This element of the driver training should be extended to cover all fleet drivers. These are estimated to produce 5% savings in fuel use across a fleet |
| **Benefits** | • Financial savings: £ 17,000<br>• Payback period: N/a<br>• $CO_2$ Emissions reduction: 39 tonnes of $CO_2$<br>• 0.4% reduction of baseline carbon footprint |
| **Funding** | • Project cost: £<br>• Operational costs: £TBC<br>• Source of funding: |
| **Resources** | • Additional resource: |
| **Ensuring Success** | • Principal risks: Drivers do not use the efficient driving skills once they have completed the course. |
| **Measuring Success** | • Fuel Consumption monitored by Climate Change Officer |
| **Notes** | |

**Project Timescale**

- start date: 2008/
- estimated completion date (when it will deliver savings): 2008/09
- interim deliverable / decision points:

| | |
|---|---|
| **Project:**<br>**Reference:** | **Christchurch Mansion loft insulation**<br>IPS043 |
| **Owner (pers on)** | Mark Hunter |
| **Department** | Building and Design Services |
| **Description** | During the planned roof refurbishment wool insulation was installed between the vaulted ceilings and the new roof. Approximately 10% of the roof was suitable for insulation. |
| **Benefits** | • Financial savings: £ 450<br>• Payback period: N/a<br>• $CO_2$ Emissions reduction of $CO_2$<br>• 0.02% reduction of bas carbon footprint<br>• 0.1% of target |
| **Funding** | • Project cost: £<br>• Operational c<br>• Source of funding: Capital Programme |
| **Resources** | • Additional resource: |
| **Ensuring Success** | • Principal risks: |
| **Measuring Success** | • Reduced gas use monitored by Climate Change Officer and reported through building performance certificates<br>• |
| **Notes** | |

Implemented

**Project Timescale**

- start date: 2009/10
- estimated completion date (when it will deliver savings): 2009/10
- interim deliverable / decision points:

| | |
|---|---|
| **Project:** | **Solar panels at Whitton SC** |
| **Reference:** | IPS044 |
| **Owner (pers on)** | Richard Bettle/Mark Hunter |
| **Department** | Climate Change Officer/ Building and Design Services |
| **Description** | Install solar hot water panels to provide a proportion of the hot water for showers. Both hot water boilers are old and may need replacing. Only replace one boiler and use capital funding that would have gone on the second boiler to reduce the cost to the invest to save fund ensuring that 3 year pay back is achieved. |
| **Benefits** | • Financial savings: £ 650<br>• Payback period: 3<br>• $CO_2$ Emissions reduction: 4 tonnes of $CO_2$<br>• 0.04% reduction of baseline carbon footprint<br>• 0.2% of target. |
| **Funding** | • Project cost: £6,500<br>• Operational costs: £0<br>• Source of funding: 50% funding from LCBP. £1900 invest to save fund, £1350 capital programme |
| **Resources** | • Additional resource: B&DS M&E survey results |
| **Ensuring Success** | • Principal risks: Boilers not due for replacement at this time. Roof in unsuitable for installing solar panels. |
| **Measuring Success** | • Fuel Consumption monitored by Climate Change Officer |
| **Notes** | |

**Project Timescale**

- start date: 2009/10
- estimated completion date (when it will deliver savings): 2009/10
- interim deliverable / decision points:

| | |
|---|---|
| **Project:** | **Grafton House Replace spot lights with LED bulbs** |
| **Reference:** | IPS045 |
| **Owner (pers on)** | Richard Bettle/Bob Harvey |
| **Department** | Climate Change Officer |
| **Description** | Replace 50W halogen spotlights that are not accent lighting with 5W LED bulbs. |
| **Benefits** | • Financial savings: £ 1400<br>• Payback period: TBC<br>• $CO_2$ Emissions reduction: 6 tonnes of $CO_2$<br>• 0.06% reduction of baseline carbon footprint<br>• 0.2% of target. |
| **Funding** | • Project cost: £TBC<br>• Operational costs: £0<br>• Source of funding: If less than one year – Electricity budget. If less than three years – Invest to save fund. |
| **Resources** | • Additional resource: |
| **Ensuring Success** | • Trial lights on 4e before deploying throughout the building.<br>• Principal risks: bulbs do not provide sufficient lux levels. |
| **Measuring Success** | • Electricity use monitored by Climate Change Officer |
| **Notes** | |

**Impact Communications Plan**

Clear communication is key to the success of Ipswich's Impact carbon reduction programme.

Communications for the programme have two separate sets of messages - those aimed internally at staff, and those aimed externally at the public: -

- External comms

  Explain what IBC is doing, particularly focusing on any events or activities that are planned which involve staff.

  Link in with any regional/national/international events to make the most of increased media interest.

- Internal comms

  The Carbon Trust identifies staff engagement as a key factor in the success of a carbon management programme so it is important that staff understand the programme and are encouraged to get involved.

  'Transformers' are essential to the programme. They are the council's 'ambassadors' who will help promote the programme across the organisation, as well as feeding back any comments and/or new suggestions from service areas to the Impact Board/Team.

Key external messages (to demonstrate what we are doing):

- Ipswich Borough Council is serious about 'going green';
- This is not just an ambition of the senior leadership, it is supported by staff throughout the organisation;
- Ipswich Borough Council has been accepted onto the LACM programme, which is a great honour and achievement.

Key internal messages (to encourage staff interest, enthusiasm and, most importantly, involvement):

- This programme affects everyone at IBC and there are opportunities for all to get involved;
- Small changes can make a big difference;

- We want to embed environmental awareness in the culture of IBC, so it becomes second nature to all that work here.

Main communication channels:

- Face-to-Face (meetings, open days/'drop-in' info sessions, manager briefings etc);
- Electronic (intranet/website/bulletin board/emails);
- Print (Angle/specific LACM newsletter/posters/leaflets/press releases etc);
- Other (TV & radio coverage of specific events).

External communications:

| Activity | Timeframe | Detail | Completed | Who |
|---|---|---|---|---|
| Signage in IBC premises | | A poster/sign is needed at IBC reception areas to explain the work Impact are doing & the commitment IBC has made to reduce its carbon footprint / energy consumption etc | | BMT/RB/CB<br>JS<br>JD |
| Angle copy/pics | Monthly, from March 2009<br><br>March<br>April<br>May<br>June<br>July/August<br><br>September<br>October<br>November<br>December | Articles/features when appropriate<br><br>Suggested theme/topic:<br>Impact 'launch' & intro M&S as critical friend<br>Sport Relief/FFW –energy generating bike<br>Walk to Work Week & Cool Suffolk winners<br>LACM annual review?<br>Bike week/World Environment Day/Liftshare Day<br>World CarFree Day<br>Energy Saving Week<br>LACM Awards<br>Review of the year/progress so far | Ongoing | BMT/RB/CB<br>JS<br>JD/MS |
| Press | Ongoing as required | Press releases/photo calls/activities as appropriate<br><br>1. Introduce Impact & what we are doing based on link with M&S. Feb 09<br>2. New pool cars – press release & pic. Possible press invite for green driving course/test drive etc. Feb/March 09 – this may | Ongoing | BMT/RB/CB<br>JS<br>JD/MS |

| | | | | |
|---|---|---|---|---|
| | | need two releases - for local media and for trade press | | |
| Website | Ongoing updates as required. | Environmental pages on www.ipswich.gov.uk.<br><br>Rewritten to include more approachable information about what we are doing to be environmentally friendly, as well as detail about LACM and what is happening.<br><br>Set up friendly URL www.ipswich.gov.uk/impact to go straight to climate change pages and be used on external publicity.<br><br>Note, these pages will change as part of the current website upgrade (due May 09). | Jan/Feb 09 – content update complete | RB<br>CB<br>JD |

Internal communications:

| | | | | |
|---|---|---|---|---|
| Transformers<br>(Staff group) | Meet 6 times a year<br><br>Launch:<br>Drop-in session 19.12.08<br>First meeting 23.01.09<br><br>March | The Transformers will meet regularly to share ideas and comments on the programme with the Team/Board. They are the key tool to involve service areas - e.g. Transformers should feature on Team Meeting agendas.<br>*How to monitor progress?*<br><br>Suggested themes/topics:<br>Terms of Ref/ M&S Feedback / PC Switch Off campaign / Walk to Work Week etc<br>Planning for June events and a special Transformers summer event / | Y - launched | RB/CB<br>JS<br>JD |

| | | | | |
|---|---|---|---|---|
| | May<br><br>July<br>September<br>November | Meet M&S champions / Feedback from PC Switch Off campaign<br>Planning for Transformers summer event / feedback / M&S links<br>Preparation for Energy Saving Week<br>A year in the life of a Transformer… Achievements so far & plans for next year. | | |
| Staff intranet (sharepoint site) | Ongoing updates as required<br><br>Launched Nov 08 | Including:<br>*LACM Programme details<br>*Top 10 Projects (quick fixes and/or longer term)<br>*Ideas bank – to pool staff ideas<br>*Contacts: Environment team<br>*Transformers information (how to get involved, who's who etc)<br>*Events calendar<br>*Interesting reading/documents<br>*Competition/offer details<br>*News/press releases<br>*Re-written Travel Plan | <br>Y<br><br>Y<br>Y<br>Y<br>Y<br>ongoing<br>ongoing<br>ongoing<br>Y | RB/CB<br>JD/SH |
| Impact Board and Team Sharepoint site | Ongoing as required | Sharepoint site to help share documents between Board/Team. | | JS<br>BMT/CB |
| Staff updates | Ongoing - monthly<br><br>Feb<br>March<br>April<br>May | Information to be included in the new monthly Staff News email newsletter<br>Suggested topics/themes:<br>Introducing the Transformers<br>New pool cars and Travel Plan reminder<br>Walk to Work Week<br>Bike Week / World Environment Day / Liftshare Day activities<br>LACM annual review? | Y | RB/CB<br>JD<br>JS |

| | | | | |
|---|---|---|---|---|
| | June<br>July<br>August<br>September<br>October<br>November<br>December | <br>World CarFree Day activities<br>Energy Saving Week – activities<br>Energy Saving Week – hints & tips<br>LACM Awards?<br>Review / update of what has happened so far and looking forward to what's planned for 2010 | | |
| Training | Started 11 Sept 08 | Impact issues to be introduced to staff at induction and included in Corporate Induction training day. | Y | BMT/CB<br>KC |
| Recruitment | | Travel Plan info to be included with Job Packs and on website etc – explain IBC's commitment / what is being done | | BMT/CB<br>Mal (HR)<br>SH |
| Travel Plan drop in sessions | TBC | To keep staff informed about the Travel Plan, its benefits and any updates | | BMT/RB/CB |
| Internal signage/posters | ASAP | Displays around the workplace to demonstrate IBC commitment and explain Impact.<br>Reception at Grafton and outposts<br>Posters in bathrooms – is there a schedule?<br>Impact display by 4th Floor vending machine<br>Posters/magnets to remind about – lights, windows, radiators, photocopiers etc | | RB/CB<br>JD/SH<br>JS |
| Survey | Annually | Periodically check levels of awareness amongst staff through the annual staff survey. | | BMT/RB/CB |