

# Waterford County Council

2008-2012

## Climate Change Strategy



*Rev 14 - 13 mars 2008*

## *Contents*

1. Introduction	Page 2
2. International Agreements / National Climate Change Strategy	Page 3
2.1 International Agreements on Reducing Green House Gas Emissions	Page 3
2.2 Key Steps at Rio and Kyoto	Page 3
2.3 The Purpose of National Climate Change Strategy	Page 4
2.4 Role of Local Authorities within the National Climate Change Strategy	Page 10
3. Waterford County Council Current and Future Green House Gas Emissions	Page 18
4. Structure of Waterford County Council Climate Change Forum	Page 19
5. Waterford County Council Climate Change Forum Project Ideas	Page 23
6. Programme for implementation of Waterford County Council Climate Change Forum Project Ideas	Page 73

## ***Introduction***

The subject of Climate Change is now firmly on the agenda of Local Authorities and in order to implement national policy on a regional / local basis Waterford County Council plan to implement a series of measures that will result in Green House Gas reductions.

Waterford County Council has developed a Climate Change Strategy, which will be implemented through its statutory and non-statutory functions.

### ***Areas of influence where Waterford County Council can have a direct impact on reducing Green House Gas Emissions***

- a. Waterford County Council assets and operations – houses, offices, vehicles, methods of operation.
- b. Improvement of the public's impact through Local Authorities management – planning conditions, waste management, use of our facilities or services.
- c. The alteration of the public's impact through the provision of leadership and initiatives.

In May 2007 Waterford County Council established a Climate Change Forum, which is an internal Waterford County Council forum, which meet periodically to develop policies, and actions, which can realistically and coherently make the maximum contribution to the national effort to address climate change. The forum took the form of a series of workshops using the best available techniques to facilitate decision-making. The direct recommendations from the workshop were analysed and tabulated for implementation and Green House Gas savings were calculated.

Waterford County Council will implement its Climate Change Strategy 2008 – 2012 through the facilitation of the Waterford County Council Planning and Environment Department and nominated persons from departments of each directorates. The Green House Gas savings made over the course of the strategy have been quantified. Additional areas of impact will be quantified / tabulated and implemented over the course of the strategy where applicable.

## ***2. International Agreements / National Climate Change Strategy***

### ***2.1 International Agreements on Reducing Green House Gas Emissions***

It is now accepted that the world, as a whole, is warming up and that the developed worlds consumption of fossil fuels such as oil, coal and gas is a major contributor factor to the warming process.

The Inter-Government Panel on Climate Change predicts that the rise in globally averaged surface air temperature will be between 1.4 °C and 5.8 °C by the end of the century, if no action is taken to limit emissions.

The first international response to the climate change challenge came at the Earth Summit in Rio in 1992 when 137 nations signed up to the UN Framework Convention on Climate Change.

The Kyoto Protocol agreement of 1997 set individual national targets for a package of six green house gases, to be achieved by the commitment period of 2008 -2012.

### ***2.2 Key Steps at Rio and Kyoto***

<b>Rio Summit (1992)</b>
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- ? Reduce Carbon Dioxide emissions back to 1990 levels by 2000.

<b>Kyoto Protocol (1997)</b>
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- ? Targets to reduce emissions of a package of six greenhouse gases, which includes Carbon Dioxide, Methane, Nitrous, Oxide, Hydrofluorocarbons, Perfluorocarbons, and Sulphur hexafluoride to below 1990 levels by the commitment period (2008-2012).
- ? Targets capable of being traded to ensure that the most cost effective solutions are implemented.
- ? Supports for Developing Countries to reduce emissions as their economies grow.

Ireland as a member of the European Union is committed to a concerned response to limit the growth of green house gases emissions to above 13% above 1990 levels in the 2008 – 2012 period. Further targets of reduced CO<sub>2</sub> emissions will set for 2020.

### 2.3 *The Purpose of National Climate Change Strategy*

The National Climate Change Strategy has been developed:

- ✍ To show clearly the measures by which Ireland will meet its 2008 - 2012 Kyoto commitments.
- ✍ To show how these measures position Ireland for the post-2012 period.
- ✍ To identify the areas in which further measures are being researched and developed to enable us meet our eventual 2020 commitment.

The National Climate Change Strategy is based on the following principles:

- ✍ The need to take a long-term view having regard to likely future commitments and the economic imperative for early action.
- ✍ The promotion of sustainable development including thorough integration of climate change consideration in all policy areas.
- ✍ The protection of economic development and competitiveness, utilising market-based instruments with the exploitation of new markets and opportunities.
- ✍ The maximisation of economic efficiency both on a macro-economic basis and within sectors; and an equitable approach to all sector, having regard to the relative costs of mitigation between sectors.

Principal Measures included in the National Climate Change Strategy:

<b>Energy Supply</b> <ul style="list-style-type: none"><li>✍ 15% of electricity to be generated from renewable sources by 2010 and 33% by 2020</li><li>✍ Biomass to contribute up to 30 % of energy input at Peat Stations by 2015</li><li>✍ Support for Combined Heat and Power projects</li><li>✍ National Ocean Energy Strategy</li></ul>	<ul style="list-style-type: none"><li>✍ Support for eco-efficient technology and practices</li></ul>
<b>Industry, Commercial and Services</b> <ul style="list-style-type: none"><li>✍ Building Regulations and Building Energy Rating</li><li>✍ Energy Agreements Programme</li><li>✍ Bioheat and CHP Programmes</li></ul>	<b>Transport</b> <ul style="list-style-type: none"><li>✍ Modal shift to public transport as a result of Transport 21 investment</li><li>✍ Rebalancing of VRT and motor tax, supported by improved mandatory labelling</li><li>✍ Introduction of Biofuels obligation scheme in 2009</li><li>✍ CIE to be required to move to Biodiesel blend</li><li>✍ National efficient driving awareness campaign</li><li>✍ Sustainable Transport Action Plan to be published in late 2007</li><li>✍ Support for inclusion of aviation in EU Emissions Trading Scheme</li></ul>

## Residential

- ✍ Revised Building Regulations in 2008 to aim for 40% improvement on current thermal performance standards
- ✍ Building Energy Rating certification introduced from 2007.
- ✍ Grants for renewable energy heating under Greener Homes Scheme
- ✍ Levy on incandescent bulbs
- ✍ Smart meters to be supplied to all electricity customers
- ✍ Energy Efficiency measures to be funded in social housing programmes

## Agriculture, Land-use and Forestry

- ✍ REPS 4 scheme will support carbon sequestration and reduction of emissions from fertilisers
- ✍ Support for improved manure management
- ✍ Feasibility of anaerobic digestion to be explored
- ✍ Top-up to EU premium for energy crops
- ✍ New supports for afforestation
- ✍ Biomass Harvesting Scheme

## Waste

- ✍ Use of waste biomass in energy production
- ✍ Support for waste-to energy project under REFIT scheme

## Public Sector

- ✍ Energy Efficiency Programme with target of 33% energy saving across public sector by 2020
- ✍ Biomass heating schools

- ✍ All street lighting and traffic lights required to be energy efficient
- ✍ All public sector fleets to be required to move to biofuel blend
- ✍ Carbon offsetting of all official air travel

## Cross-sectoral

- ✍ €15m multi-annual Climate Change Awareness campaign
- ✍ Examination of incentives and disincentives
- ✍ Assessment of potential for domestic offset schemes
- ✍ Major funding for research programmes

## Adaptation

- ✍ Flood Risk Strategy being developed
- ✍ Overall national adaptation strategy to be developed by 2009

## Implementation, Reporting and Review

- ✍ Commission on Climate Change to provide high-level advice to Government on progress and to increase awareness in all sectors
- ✍ High Level Group on Climate Change to coordinate implementation
- ✍ Guidance on cost-benefit appraisal of emission reduction
- ✍ Implementation Status Report, including further measures, to be published each year and presented to Joint Oireachtas Committee
- ✍ Periodic review by Cabinet Committee
- ✍ Third National Climate Change Strategy to focus on post-Kyoto commitments

**Table of Irelands Emissions 1990-2020 (Mt CO<sub>2</sub>)**

	1990	2005	2012	2020	Kyoto requirements
<b>Energy</b>	11.85	16.32	18.74	16.16	13.39
<b>Transport</b>	5.18	13.46	13.99	12.78	5.85
<b>Residential</b>	7.35	7.12	6.83	6.68	8.31
<b>Ind/Com/Services</b>	9.78	11.95	14.19	13.21	11.05
<b>Agriculture</b>	19.75	19.32	17.64	17.64	22.32
<b>Waste</b>	1.46	1.78	1.83	1.83	1.65
<b>Carbon Sinks</b>	0	0	-2.0	-2.0	0
<b>Total</b>	<b>55.37</b>	<b>69.95</b>	<b>71.17</b>	<b>66.3</b>	<b>62.57</b>
<b>Kyoto Target</b>	<b>62.57</b>	<b>62.57</b>	<b>62.57</b>	<b>62.57</b>	<b>62.57</b>

*Inventories and projections (Mt CO<sub>2</sub> by sector)*

Note: Ireland's agreement under the Kyoto Protocol is to limit Green House Gasses emissions by 13% of 1990 levels between 2008 -2012.

**The purpose of Carbon Credits:**

Ireland has made commitments to purchase carbon credits from 2008-2012 of up to 3.6 Millions tones CO<sub>2</sub> per year.

Ireland has obligated to purchase carbon credits to ensure that Kyoto and EU target are met. Over €300 Million has been set-aside in the programme for Government for 2008 to purchase Carbon Credits.

Predicted annual CO<sub>2</sub> Emission saving for Waterford County Council of between 4,000 – 6,000 tonnes CO<sub>2</sub>, will contribute to 0.11 % - 0.12 of Irelands annual commitment to reduce CO<sub>2</sub> emissions. (This figure is subject to revision when more advanced calculation details becomes available)

<b>Green House Gases Sources and Emissions Factors</b>		
<i>Type of Green House Gas</i>	<i>Sources of Green House Gases</i>	<i>Emissions Factors</i>
Carbon Dioxide	Burning of Fossil Fuels, process emissions	1
Methane	Sources are agriculture, waste, gas distribution and coal mining	21
Nitrous Oxide	Sources are Agriculture, transport and nitric acid production	310
Hydro fluorocarbons	Used in Refrigerants, foam blowing and fire fighting	140 to 11700
Perfluorocarbons	Used in electronics manufacture, refrigerants, and released during aluminium smelting	6500 to 9200
Sulphur Hexafluoride	Used in high voltage switch gear, emitted during magnesium smelting,	23900
One tonne of green house gas emissions has the same climate effect as figures highlighted in the emissions factors table for the other five green houses gases		

<b>Carbon Dioxide Conversion Factor</b>				
<i>Fuel Type</i>	<i>Kg CO<sup>2</sup>/KWh</i>	<i>Kg CO<sup>2</sup>/tonne</i>	<i>Kg CO<sup>2</sup>/Litre</i>	<i>Kg CO<sup>2</sup>/therm</i>
Electricity	0.775	-	-	-
Natural Gas	0.198	3142	-	5.5
Gas / diesel oil (Class D)	0.25	-	2.68	-
Petrol	0.25	3135	2.31	-
Heavy Fuel Oil (Class G)	0.26	3117	-	-
Coal	0.325	2419	-	-
Liquefied Petroleum gas (LPG)	0.229	-	1.51	6.277



## **2.4 Role of Local Authorities within the National Climate Change Strategy**

In the context of National Climate Change Strategy that Local Authorities have significant influence over emissions in their local areas, both directly in relation to reducing emissions through their own energy use and procurement activities, in raising awareness and stimulating action in local communities, and indirectly through the exercise of their housing, planning, and other statutory functions.

The National Climate Change Strategy notes that the procurement role of local authorities offers significant potential to address environmental and energy efficiency considerations. In the procurement of social housing, for example, the Best Practice Guidelines on *Quality Housing for Sustainable Communities* note that appropriate design in relation to dwelling layout, levels of insulation, amount and orientation of fuel type, construction materials and measures to limit the use of potable water can contribute to ensuring sustainability.

The National Climate Change Strategy details a list of Planning Guidelines, which support Climate Change Policies and include:

- ✍ **Residential Density Guidelines (1999):** give effect to the Government Policy of encouraging more sustainable urban development through avoiding excessive sub urbanisation and promoting higher residential densities in appropriate locations, especially in conjunction with improved public transport systems.
- ✍ **Guidelines on Sustainable Residential Development**
- ✍ **Wind Energy Guidelines (2006)**
- ✍ **Planning and Development Regulations 2007 –Micro renewable Energy Technologies:** Regulations were recently made to amend the exempt development provisions of the Planning and Development Regulation 2001. There will encourage the uptake of cleaner and cheaper energy from small-scale renewable sources in domestic dwellings. Exemptions, apply to wind turbines, solar panels, heat pumps, and biomass subject to certain conditions in each case.

Two keys principles of the Strategy includes:

- ✍ Maximising access to, and encouraging use of public transport, cycling and walking
- ✍ Developing sustainable urban and rural settlement patterns and communities to reduce distance from employment, services; including public transport.

The National Spatial Strategy is also promoting the physical consolidation of large urban areas, which is required to provide an efficient system of public transport in light of substantial investment that is planned under Transport 21.

As part of that, Waterford County Council Climate Change Forum have developed a Climate Change Strategy to implement policies and practices, which will have significant influence over green house gas emissions in Waterford, both directly in relation to reducing emissions through the following items:

- i. Energy use**
- ii. Procurement Activities**
- iii. Raising awareness**
- iv. Housing/Building Projects**
- v. Planning Policies**
- vi. Transport**
- vii. Waste Management**
- viii. Other Statutory functions**

Waterford County Council is supported by Waterford Energy Bureau, which provides technical support to implement the Climate Change Strategy and other Energy Policies / Strategies within Waterford County Council and among the General Public / Small to Medium Enterprises in Waterford.

**i. Energy Use:**

***Actions Taken by Waterford County Council:***

- ✍ Currently 62 % of all Waterford County Council Electric consumption is powered by green energy from renewable sources.

***Proposed future actions, Waterford County Council will:***

- ✍ Set targets to reduce energy consumption in buildings and through operation of plants and equipments.
- ✍ Continue to include renewable energy technologies in all of its building projects.
- ✍ Maximize opportunities for the generation of heat and electricity from renewable energy sources, in particular take advantage of opportunities in the deregulated energy market through net metering where cost effective to do so.

- ✍ Develop Performance Indicators to monitor CO<sub>2</sub> emissions as direct result actions of Local Authority.
- ✍ Develop and implement a plan to be Ireland first Carbon Neutral Local Authority by 2012.

## **ii. Procurement Activities**

### ***Proposed future actions, Waterford County Council will:***

- ✍ Include a selection criterion favouring the use of “Green low embodied energy products” where all other criteria have been equally met.
- ✍ Green House Gas production shall be included as an award criteria when assesses tenders for the provision of services.
- ✍ Incorporate a selection criterion favouring the use of Green Products and contractors with low carbon footprints, where all other criteria have been equally met.
- ✍ Quantify annually where possible the carbon footprint of all products, services and contractors whom have engaged in work practices with Waterford County Council.

## **iii. Raising awareness**

### ***Actions Taken by Waterford County Council:***

- ✍ The establishment of an Energy Bureau, whose role is to promote and actively assist through energy related project in the development of renewable energy and energy efficiency throughout Waterford County and City with special emphasis on both Local Authorities of Waterford, the General Public and Small to Medium Enterprises (SMEs).
- ✍ The creation of a Waterford Energy Bureau Web Site including information and advise about renewable energy for general public.
- ✍ The installation in Tramore, Dungarvan and Lismore Civic Offices of Public Information Stands, which contain Fact sheets about Energy Efficient Practices, Renewable Energy and Suppliers.
- ✍ The development of an Internal Climate Change Forum commenced in May 2007 and adoption of Climate Change Strategy in early 2008.
- ✍ Wood Energy Schools project in partnership with South East Regional Authority.

- ✍ Participation in Hydrogen Fuel Cell Research project, which is a joint project with Waterford Institute of technology and aims to come up with a design for a fuel cell farm and design lines for?

*Proposed future actions, Waterford County Council will:*

- ✍ Raise awareness to the General Public of Waterford through increasing the displays of information that promotes the reduction of Green House Gas emissions, by means of facts sheets but also via community fora and pre-planning stage.
- ✍ Reduce the energy consumption within its own facilities through education and will improve the measure of energy efficiency practices with its staff. Waterford County Council will develop an energy policy.
- ✍ Promote environmental issue for the young generation with the implementation of Green Schools programme.

**iv. Housing/Building Projects**

*Actions Taken by Waterford County Council:*

- ✍ Secured funding from DEHLG relating to a Scheme for the Installation of “Central Heating in Local Authorities rented Dwellings” and “Improvement Thermal Insulation”. This initiative has significantly contributed to eliminating the risk of fuel poverty in County Council housing stock.
- ✍ Recently installed Water sourced heat pumps provide heating and cooling in Waterford County Council Buildings at Main Offices (Dungarvan) and heating in Area Offices (Lismore and Tramore).
- ✍ Assisting in the roll out of low Income Housing Fuel Poverty Pilot Scheme, which resulted in the installation of central heating and insulation measures in privately owned homes where the occupant was in receipt of a fuel allowance.
- ✍ Solar Water Heating Installation in Materials Recovering Facilities.
- ✍ Currently in progress, the installation Solar Water technologies in 9 houses in Cappoquin and two houses will include Wood Pellet Boilers

*Proposed future actions, Waterford County Council will:*

- ✍ All new local Authority buildings will have a minimum “A3” Energy labelling under the Building Energy Directive.

- ✍ Integrate Energy Efficiency Lighting in all Civic Amenity Site, Bottles Banks and Material Recovery Facilities and will replace all incandescent light bulbs with CFLs (Compact Fluorescent Lamps) and LEDs (Light-emitting Diodes) in all County facilities.
- ✍ Promote water conservation within the Council. In order to achieve that target, Waterford County Council will implement a policy for the efficient usage of water within the County Council Building and will include a requirement for water conservation measures in the design and furnishing of all new public and private buildings.
- ✍ Implement an Energy Audit programme on Energy Usage in County Council Buildings with the target to minimize 10 % CO2 emission in each building.

## **v. Planning Policies**

### *Actions Taken by Waterford County Council:*

- ✍ The creation of a Wind Map for the County, which designates the areas available in Waterford County to develop Scale Wind technologies.
- ✍ Energy Section of County Development Plan
- ✍ Waterford County Council in partnership with the South Eastern Regional Authority and other Local Authorities have developed a South East a Biomass Implementation Plan.

### *Proposed future actions, Waterford County Council will:*

- ✍ Develop a compulsory A3 rating of all new housing through variation of County Development Plan.
- ✍ Introduce requirements demanding highest energy saving standards in planning permission. Ensure that future development will comply with 2005 and 2007 Part L Building Regulation (Conservation of fuel and energy).
- ✍ To ensure the promotion of renewable energy and sustainable energy practices in planning policies in the County Development Plan and Local Area Plan.

## **vi. Transport**

### *Actions Taken by Waterford County Council:*

- ✍ Waterford County Council is a Partner in the development of the Joule Save Program for the design and implementation of new all new roads. The Joule Save

Programme allows Engineers to quantify the energy requirements for all phases of road construction and to compare the different options in terms of energy use.

- ✍ Installation of 2.5 km of Cycle Lanes in the recently constructed road (Kilmeaden Traffic Calming and Riverstown relief road).
- ✍ Waterford County Council will influence the improvement of the public transportation network in order to increase the number of trips made by public transport and to reduce the dependency on private car trips. The formation of “Waterford Rural Transport Initiative” in 2004 has resulted in 45 000's using the service in 2007, with a resulting CO2 Saving of 90 tones.

*Proposed future actions, Waterford County Council will:*

- ✍ Increase the number of passengers carried by Rural Transport Initiative (33 711 in 2004 and 55 000 expected in 2008).
- ✍ Promote alternative transport and develop the length of cycle lanes in County Waterford in all new urban roads and in the proximity of Schools.
- ✍ Develop strategies in order to save CO2 from car transportation by County Council staff by the implementation of video conferencing facilities and for the general public in improving the online services available on WCC web site.
- ✍ Convert all vehicles where permitting to operate on bio fuel.
- ✍ Procure new vehicles that will operate exclusively on Biofuels.
- ✍ Provide additional Bike Parks in all urban area in Waterford County.
- ✍ Introduce new criteria in vehicle taxes and develop Fact Sheet on implication of Carbon Dioxide Emissions levies on Vehicle Registration Tax and Road Tax.

**vii. Waste Management**

*Actions Taken by Waterford County Council:*

- ✍ Integration of five Constructed Wetlands for effluent treatment, with several benefits: Firstly, the primary energy input to operate wetlands is from natural light and secondly, wetlands act as “carbon sinks” which soak up Carbon Dioxide and temporarily store the carbon in wood, roots, leaves and the soil. The constructed Wetlands enable the saving of 7.7 tones of CO2 each year.

- ✍ A small scale Wind Turbine has been installed in the Civic Amenity Site in Tramore, which is generating enough power to light the building.
- ✍ Implementation of a recycling policy, which includes: bag services, browns bins for organic food waste for composting and grey bins for the other waste. In 2007, that action enabled to collect 4,594 tones of residual waste, 2,458 tones of recycling waste and 2,179 tones of organic waste.
- ✍ **Proposed future actions, Waterford County Council will:**
- ✍ Save CO<sub>2</sub> emission in maximizing the energy efficiency forms of Waste treatment.
- ✍ Further quantify the carbon sinks of current and future Constructed Wetlands and replace existing inefficient waste treatment practices in Waterford. This measure will enable the absorption of 347 tones of CO<sub>2</sub> annually.
- ✍ Develop and Implement a strategy that maximizes the Carbon benefits of waste sludge.
- ✍ Maximize the potential of the landfill gas at Tramore and Dungarvan, where practical to do so.

#### **viii. Other Statutory Functions:**

##### ***Actions Taken by Waterford County Council:***

- ✍ Establishment of Agri Co-op Business in 2007 with aims to encourage bio energy and generate investment in biomass energy sources and to give farmers a viable enterprise on their land.

##### ***Proposed future actions, Waterford County Council will:***

- ✍ Utilize its assets portfolio to plant trees, which will use as carbon sinks to absorb CO<sub>2</sub> emissions.

### 3. Waterford County Council Current and Future Green House Gas Emissions

**Table of Waterford County Council Emissions**

<b>CO<sub>2</sub> Emissions for Waterford County Council</b>				
<b>(Tones of CO<sub>2</sub> per year)</b>				
<b>Categories</b>		<b>2005</b>	<b>2006</b>	<b>Expected 2007</b>
<b>Staff Travel</b>		1,447.84	1,341.41	1,500
<b>Electricity</b>	<b>Green accounts (CO<sub>2</sub> saved)</b>	-306	-445	-480
	<b>Brown accounts</b>	966	818	770
<b>Hired Machinery</b>		<b>2,558.30</b>	<b>2,225.10</b>	<b>2,550</b>
<b>Council Machinery</b>		<b>352</b>	<b>281</b>	<b>317</b>
<b>Council Buildings (Heating)</b>		<b>137</b>	<b>191</b>	<b>164</b>
<b>Council Buildings Heat Pumps Installation</b>		<b>352</b>	<b>281</b>	<b>317</b>
<b>Constructed Wet Lands</b>		<b>-7.7</b>	<b>-8.9</b>	<b>-12</b>
<b>Total</b>		<b>5,499.44</b>	<b>4,683.61</b> <b>(-815.83tones)</b>	<b>5,126.00</b> <b>(-373.44tones)</b>

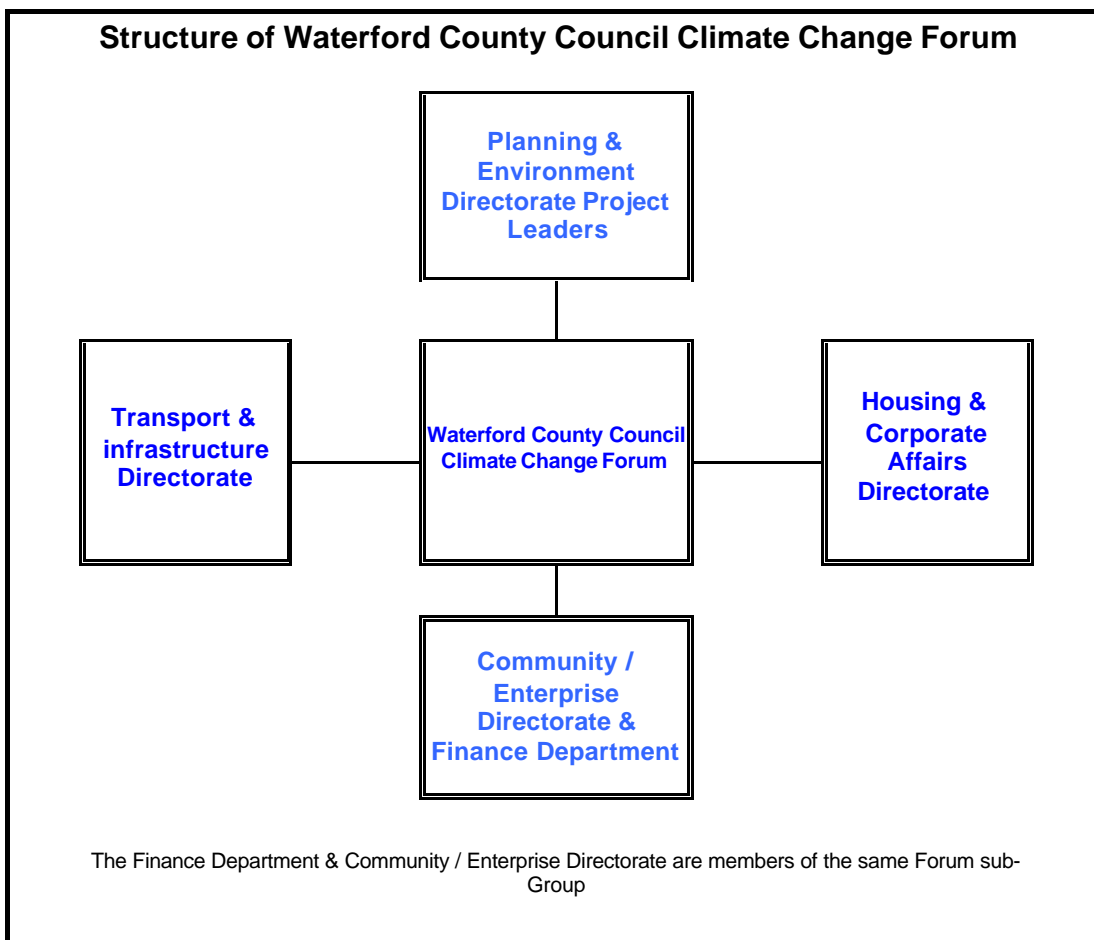
- ? Note: Waterford County Council Greenhouse Gas emissions calculations are based on Carbon Dioxide emissions. The level of other green house gas emissions will be quantified at a later stage and subject to the relevant information being available to facilitate the completion of quantification of calculations.
- ? Note: Table above were calculated on the basis of best available information in calculating CO<sub>2</sub> emission's & may required modifications upon development of National Guidelines for Local Authorities.



#### ***4. Structure of Waterford County Council Climate Change Forum***

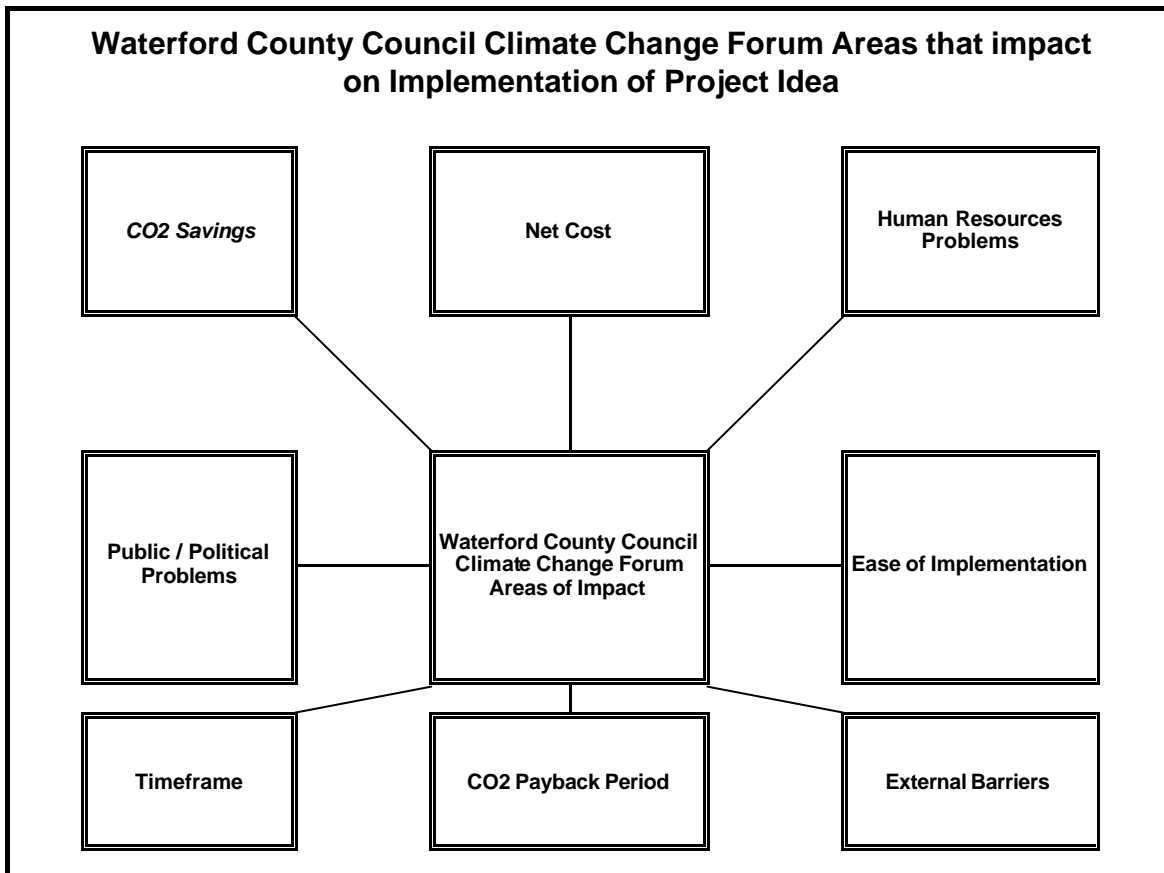
Waterford County Council Planning & Environment Department have developed a Climate Change Strategy. Each Directorate made contributions to the content of the Strategy via a Climate Change Form & through inter departmental meetings with project facilitators from Environment Department. Upon adoption of the Strategy by WCC, each Directorate will be responsible for implementation of Strategy where applicable. A nominated person within each directorate / department will prepare a monthly progress report which, will be returned to WCC Environment Education Officer to monitor implementation of the strategy.

As a means of assisting the implementation of the Climate Change Strategy Waterford Energy Bureau & WCC Environment Education Officer, Senior Engineer Planning and Environment will meet with each Directorate every 3 Months to access progress made and assist in implementation of Climate Change Strategy. WCC Climate Change forum will meet once a year to review implementation of Strategy, and development new project ideas for implementation.






The level of progress for each Directorate will be recorded and scored. An Annual Summary document will be produced which will tabulate the level of progress and the CO<sub>2</sub> Saving made by each Directorate.

<b>Members of Waterford County Council Climate Change Forum</b>				
<i>Directorate</i>	<i>Departments</i>	<i>Sub- Departments</i>	<i>Representative on Climate Change Forum</i>	<i>Waterford County Council Directorate / Department Climate Change Project Facilitator</i>
Planning & Environment	Planning	Planning Control	Valerie Conway	T.B.A
		Forward Planning	Riche Walsh	
		Planning Enforcement		
	Environment	Waste Service	Gabriel Hynes	T.B.A
		Materials Recovery Facility		
		Litter Enforcement	1	
		Waterford Energy Bureau	Liam Fleming	
		Vetinary Service		
		Dog Warden		
		Environmental Education		
Housing & Corporate Affairs	Housing	Design Office	Ann Kiely	T.B.A
		Social Workers	Josephine Mc Grath	
			Mary O'Brien	
		Building Control	David Campion	
		Fire Service	Des O'Brien	
	Corporate Affairs	Corporate Affairs	Catherine Horan	
Transport & Infrastructure	Water Services	Adamstown	Paul Carroll	T.B.A
		Water Services	John O Sullivan	
	Roads	Machinery Yard	Pat Morrissey	
		Regional Area Offices		
		Roads Design	Paul Daly	
	Procurement			
			Ray Moloney	
Community & Enterprise	Community	Library Services	Gerard Enright	T.B.A
		IT & General Purpose	John Houlihan	
		Sports Partnership	Rosarie Kealy	
		Rural Transport Initiative	James O Donohue	
	Enterprise	County Enterprise Board	Rena Cody	
			Kate Murphy	
Finance	Finance	Accounts Payable	Rachel Nealon	
		Internal Audit		



### Areas that Impact Implementation on Project Ideas

Each area of impact was scored via indicator keys into the following categories:

- ✍ A favourable indicator key was highlighted by Green shading  in the relevant indicator key box.
- ✍ A medium indicator key was highlighted by pale blue shading  in the relevant indicator key box.
- ✍ A bad indicator key was highlighted by red shading  in the relevant indicator key box.

The calculation of impact of CO<sub>2</sub> areas indicator key highlighted in red shading instead of a bad CO<sub>2</sub> saving.

## ***5. Waterford County Council Climate Change Forum Project Ideas***

Project No.	Project Idea	Directorate	Section
1	Display information on climate change, energy efficiency and RE	Community and Enterprise	Libraries
2	Increase the roll out of Waterford Rural Transport Initiative	Community and Enterprise	Rural Transport Initiative
3	Promote Renewable Energy among Community For a	Community and Enterprise	Community and Enterprise
4	Bike Parking in all Urban Areas	Transport & infrastructure	Roads
5	Develop & Implement Plan to be first local Authority to be Carbon neutral by 2012	Planning & Environment	Environment
6	Compulsory energy rating through variation of County Development Plan	Planning & Environment	Planning
7	Landscaping	Planning & Environment	Landscaping
8	Distribute energy efficiency information at pre planning stage	Planning & Environment	Planning
9	New Urban roads to include cycle lanes	Transport & infrastructure	Roads
10	Retrofitting cycle lanes to schools	Transport & infrastructure	Roads
11	Use of solar cells in school signs and pay & display machines	Transport & infrastructure	Roads
12	Use Joule SAVE software in calculating the carbon footprint of all new road design projects	Transport & infrastructure	Roads
13	Develop a coordinated strategy for use of Constructed Wetlands in Sewage Treatment	Transport & infrastructure	Water Services
14	Micro Hydro Electricity at Adamstown	Transport & infrastructure	Water Services
15	LEDs lighting in Traffic Management	Transport & infrastructure	Roads
16	Alternative usage for Waste Sludge	Transport & infrastructure	Water Services
17	Conservation of water within the Council	Transport & infrastructure	Water Services
18	Existing vehicles to operate on Biodiesel blend 5%	Transport & infrastructure	Water Services
19	New vehicles to run on Bio Diesel 100%	Transport & infrastructure	Roads
20	Cost Neutral Green Procurement of Products	Transport & infrastructure	Procurement
21	Green House Gas production as an award criterion	Transport & infrastructure	Procurement
22	Tree planting on Council lands which can be used as a Carbon Neutraliser	Transport & infrastructure	Roads
23	Collection of Waste Pallets in Civics Amenity site for utilisation for energy purposes	Planning & Environment	Environment
24	All New Local Authority Buildings to be "A" Rated under the Building Energy Directive	Housing & Corporate Affairs	Housing

Project No.	Project Idea	Directorate	Section
25	Tenant Information Pack	Housing & Corporate Affairs	Housing
26	Servicing Boilers	Housing & Corporate Affairs	Housing
27	Water Conservation measures in New Buildings	Housing & Corporate Affairs	Housing
28	Collection of waste cooking oil at civic Amenity Sites	Planning & Environment	Environment
29	Replace all incandescent light bulbs with CFLs in county Buildings	Housing & Corporate Affairs	Corporate Affairs
30	Monitor paper usage and ensure reuse/reduce policy	Housing & Corporate Affairs	Corporate Affairs
31	Develop Climate Change Performance Indicators	Housing & Corporate Affairs	Corporate Affairs
32	Incentives Conversion of Cars to Biofuel (5% blend of Bioethanol)	Housing & Corporate Affairs	Corporate Affairs
33	Re-use of non-obsolete equipment	C & E; Finance; I.T; Library	Finance & I.T
34	Video Conferencing Facility	C & E; Finance; I.T; Library	Finance & I.T
35	Quantification of CO2 Benefits from recycling	Planning & Environment	Environment
36	Increase use of Online Customer Services	C & E; Finance; I.T; Library	Finance & I.T
37	Utilise landfill gas potential of Tramore and Dungarvan	Planning & Environment	Environment
38	Integrate Renewable Energy Lighting in Civic Amenity Sites, Bottle Banks & MRF	Planning & Environment	Environment
39	Energy Audit per tonne per product stream in the MRF	Planning & Environment	Environment
40	Audit Energy usage in County Council Buildings each year	Planning & Environment	Environment
41	Utilisation of WEB in Mechanical & Electrical related projects	Planning & Environment	Environment
42	Public Education	Planning & Environment	Environment
43	Optimise Energy Efficiency in Treatment Plants & Pumping stations	Transport & infrastructure	Water Services
44	Energy Policy	Planning & Environment	Environment
45	Wind Turbine Installations at Council Pump Houses	Planning & Environment	Environment
46	Green Vehicle Initiative	Housing & Corporate Affairs	Corporate Affairs
47	Water recycling unit	Planning & Environment	Environment

**Directorate: Community & Enterprise**  
**Section: Libraries**

Idea No. 1

**Display Information on Climate Change, Energy Efficiency and Renewable Energy.**

**Brief description:**

All libraries and public offices will have a dedicated stand or section for the display of information related to Climate Change. These areas are to be prominent, user friendly and are to be regularly updated and maintained by staff from the library section. Library service will attempt to source relevant information and Environment section and WEB will provide to the library service all relevant information that comes into their possession. The information may be in paper form or multi-media form.

**Indicator Key: GOOD MEDIUM BAD**

CO2 Saving	Nett Cost	HR Problem	Public/ Political Problems	Ease	Timeframe	CO2 Payback Period	External Barriers
Small							

No.	Tasks	Time/Date	Dependency
1	Audit facilities	12 Weeks	
2	Audit Existing Leaflets	12 Weeks	
3	Assess Scale of Requirement	4 Weeks	1,2
4	Acquire extra/new leaflets & extra racks/stands	12 Weeks	1,3
5	Install Equipment	10 Weeks	4
6	Display Leaflets	Ongoing.	
	Monitoring Implementation and review on 6 month basis upto 2012		

*Directorate: Community & Enterprise*

## Section: Rural Transport Initiative

Idea No. 2

**Increase the roll out of Waterford Rural Transport Initiative.**

### Brief description:

**Increase Service & routes offered by Rural Transport Initiative. Quantity CO2 emission benefits and CO2 cost savings through using RTI. CO2 costs/ to be used in assessment criteria for existing and new routes**

**Indicator Key: GOOD MEDIUM BAD**

CO2 Saving	Nett Cost	HR Problem	Political Problems	Ease	Timeframe	Payback Period	External Barriers
Medium							

No.	Tasks	Time/Date	Dependency
1	Quantify Routes of WRTI & assess routes additional route options	12 Weeks	
2	Quantify CO <sup>2</sup> savings of current service & additional routes	12 Weeks	1
3	Source funding from Government Department to initiate additional services	52 Weeks	1&2
	Annual Monitoring after Implementation up to 2012		

**Directorate: Community & Enterprise**  
**Section: Community & Enterprise**

Idea No. 3

**Promote Renewable Energy among Community Fora**

**Brief description:**

The promotion of the utilisation of renewable energy technology among Community Fora

**Indicator Key:** **GOOD** **MEDIUM** **BAD**

CO2 Saving	Nett Cost	HR Problem	Public/ Political Problems	Ease	Timeframe	CO2 Payback Period	External Barriers
Small							

No.	Tasks	Time/Date	Dependency
1	Quantify need of communities etc.	20 Weeks	
2	Quantify grants available for communities / other groups	4 Weeks	
3	Quantify National / European Policies for development of Renewable Energy Technologies	4 Weeks	
4	Preparation of Documentation relating to Grants & National Policies	8 Weeks	
5	Presentations to community groups etc.	8 Weeks	
	Monitoring Implementation and review on 6 month basis upto 2012		



**Directorate: Roads & Water Services**  
**Section: Roads**

Idea No. 4

*Bike Parking in all Urban Areas*

**Brief description:**

**Implement additional Bike Parks in all Urban areas in Waterford County**

**Indicator Key: GOOD MEDIUM BAD**

CO2 Saving	Nett Cost	HR Problem	Public/ Political Problems	Ease	Timeframe	CO2 Payback Period	External Barriers

No.	Tasks	Time/Date	Dependency
1	Assess suitability of Locations in Urban Areas for Bike Parks	26 Weeks	
2	Develop Plan for Installation of Bike Parks	26 Weeks	
3	Design Procure Bike Parks	20 Weeks	
4	Install Bike Parks	26 Weeks	
5	Monitor Implementation & Usage Bike Parks – Quantify Green House Gas Saving and review on 6 month basis upto 2012		

**Directorate: Planning & Environment**  
**Section: Environment**

Idea No. 5

**Develop and Implement Plan to be first local Authority to be carbon neutral by 2012**

**Brief description:**

**Develop and Implement a Plan to Irelands first Carbon Neutral Local Authority by 2012. Project part of INTERREG funding application submitted in January 2008. (Project to progress subject to funding)**

**Indicator Key: GOOD MEDIUM BAD**

CO2 Saving	Nett Cost	HR Problem	Public/ Political Problems	Ease	Timeframe	CO2 Payback Period	External Barriers
High							

No.	Tasks	Time/Date	Dependency
1	Assess green house gas emissions within the LA	36 weeks	
2	Development plan for implementation to be first locale authority to be carbon neutral	26 weeks	1
3	Implement part 1 of climate change strategy plan	26 week	2
	Plan to be reviewed every 6 month and additional stages of plan to begin until completion in 2012		

**Directorate: Planning & Environment**  
**Section: Fire department//development control**

Idea No. 6

**Compulsory energy rating through variation of County Development Plan**

**Brief description:**

All planning applications for dwellings must furnish an energy Certificate with an “A” Rating. The rating must be determined by the applicant through the utilization of the recently developed “Dwelling Energy Assessment Procedure” (DEAP) software.

**Indicator Key:** **GOOD** **MEDIUM** **BAD**

CO2 Saving	Nett Cost	HR Problem	Public/ Political Problems	Ease	Timeframe	CO2 Payback Period	External Barriers
High							

No.	Tasks	Time/Date	Dependency
1	Quantification of implications through changing of planning policy	26 weeks	
2	Bring policy proposal to SPC for analysis	16 weeks	1
3	Bring policy proposal to Council for approval	8 weeks	1&2
4	Prepare variation of County Development Plan	30 weeks	1,2,3
	Annual Monitoring after Implementation upto 2012		

**Directorate: Planning & Environment**  
**Section: Planning**

Idea No. 7

**Landscaping**

**Brief description:**

Use planning conditions to maximize the amount of trees planted in new developments while not allowing trees to obscure light through buildings. Details on landscaping and sustainable energy to be included in one-off housing guidelines and guidelines for multiple developments.

**Indicator Key:** **GOOD** **MEDIUM** **BAD**

CO2 Saving	Nett Cost	HR Problem	Public/ Political Problems	Ease	Timeframe	CO2 Payback Period	External Barriers
Small							

No.	Tasks	Time/Date	Dependency
1	Research design guidelines of others organisations	26 Weeks	
2	Prepare details for inclusion in House design guidelines for one off houses and Multiple developments	26 Weeks	
3	Print Document & Circulate	12 Weeks	
	Monitoring Implementation and review on 6 month basis upto 2012		

**Directorate: Planning & Environment**  
**Section: Planning**

Idea No. 8

Distribute energy efficiency information at pre planning stage.

**Brief description:**

Development of document relating to all applicable aspects of renewable energy including;

- ? Implications of Building Energy Directive
- ? Micro Renewable Planning Guidelines
- ? Renewable Energy Grants

Information packs to be distributed with application forms.

Indicator Key: **GOOD** **MEDIUM** **BAD**

CO2 Saving	Nett Cost	HR Problem	Public/ Political Problems	Ease	Timeframe	CO2 Payback Period	External Barriers
Small							

No.	Tasks	Time/Date	Dependency
1	Preparation of Renewable Energy Document	16 weeks	
2	Sourcing of resources for printing of document	4 Weeks	1
3	Printing of Document	4 Weeks	2
	Annual Monitoring after Implementation upto 2012		

**Directorate: Transport and Infrastructure**  
**Section: Roads**

Idea No. 9

**New urban roads to include cycle lanes**

**Brief description:**

**All new urban connector roads to have cycle lanes included in their design, with a strategy to link into existing cycles lanes / routes on existing urban roads.**

**Indicator Key: GOOD MEDIUM BAD**

CO2 Saving	Nett Cost	HR Problem	Public/ Political Problems	Ease	Timeframe	CO2 Payback Period	External Barriers
Medium							

No.	Tasks	Time/Date	Dependency
1	Identify existing cycle lanes	16 Weeks	
2	Identify applicable roads within the county	10 Weeks	
3	Submission to Management Team	8 Weeks	
4	Submission to Planning SPC//planning SPC	12 Weeks	
	Monitoring Implementation and review on 6 month basis up to 2012		

**Directorate: Transport and Infrastructure**  
**Section: Roads**

Idea No. 10

**Retrofitting cycle lanes to schools**

**Brief description:**

**Develop a programme for retro fitting of cycle lanes to primary & secondary schools where these are deemed possible.**

**Indicator Key: GOOD MEDIUM BAD**

CO2 Saving	Nett Cost	HR Problem	Public/ Political Problems	Ease	Timeframe	CO2 Payback Period	External Barriers
Medium							

No.	Tasks	Time/Date	Dependency
1	Assessment of potential for cycle lanes	16 weeks	
2	Submission to Management Team	10 Weeks	1
3	Submission to Infrastructure SPC	20 weeks	2
4	Develop plan / structure for installation of cycle lanes	10 weeks	3
5	Source funding for installation of cycle lanes	26 Weeks	4
	Annual Monitoring after Implementation upto 2012		

**Directorate: Transport and Infrastructure**  
**Section: Roads**

Idea No. 11

Use of solar cells in school signs and pay & display machines

**Brief description:**

Analysis of current installations & development of plan for role out of additional installations where warranted.

Indicator Key: **GOOD** **MEDIUM** **BAD**

CO2 Saving	Nett Cost	HR Problem	Public/ Political Problems	Ease	Timeframe	CO2 Payback Period	External Barriers
Small							

No.	Tasks	Time/Date	Dependency
1	Assessment of current installations & development of plan for future installations	16 weeks	
2	Source funding for installations	10 weeks	1
3	Preparation of tender documents	6 weeks	2
4	Assessment of tender documents & awarding of contracts	4 weeks	3
5	Installation of equipment	52 weeks	4
	Annual Monitoring after Implementation upto 2012		



**Directorate: Transport and Infrastructure**  
**Section: Roads**

Idea No. 12

Use Joule save software in calculating the carbon footprint of all new road design projects.

**Brief description:**

Utilisation of Joule Save software in all County Council Road Design Projects, with carbon footprint being part of the scoring criteria when deciding routes & materials used. Specifying that all consultants engaged in design work for Waterford County Council must utilise the software or equivalent & provide Carbon Footprints on related designs.

Indicator Key: **GOOD** **MEDIUM** **BAD**

CO2 Saving	Nett Cost	HR Problem	Public/ Political Problems	Ease	Timeframe	CO2 Payback Period	External Barriers
Medium							

No.	Tasks	Time/Date	Dependency
1	Acquire necessary licences to use software	12 Weeks	
2	Provide appropriate training	20 Weeks	
3	Formulate clause for inclusion in tender documents	12 Weeks	
	Monitoring Implementation and review on 6 month basis upto 2012		

**Directorate: Transport and Infrastructure**  
**Section: Water Services**

Idea No. 13

**Develop a coordinated strategy for use of Constructed Wetlands in Sewage treatment.**

**Brief description:**

**Waterford County Council to develop an assessment matrix in relation to deciding on the use of Constructed Wetlands with a view to maximising their usage over other forms of sewage treatment.**

**Indicator Key: GOOD MEDIUM BAD**

CO2 Saving	Nett Cost	HR Problem	Public/ Political Problems	Ease	Timeframe	CO2 Payback Period	External Barriers
Medium							

No.	Tasks	Time/Date	Dependency
1	Development of matrix for selection of constructed wet lands / other form of sewage treatment	26 Weeks	
2	Utilization of matrix in assessment of future waste treatment projects		1, Up to 2012
3	Performance assessment of existing Constructed Wetlands in operation in Waterford based on historical data	16 Weeks	1
4	Carry out field trial for phosphorous removal improvement on selected site	104 Weeks	3
	Annual Monitoring after Implementation upto 2012		

**Directorate: Transport and Infrastructure**  
**Section: Water Services**

Idea No. 14

**Hydroelectricity at Adamstown/Assessment**

**Brief description:**

Assessment of Hydro Electrical potential at Adamstown Treatment Plant, via utilisation of gravity feed service from reservoir to site.

Indicator Key: **GOOD** **MEDIUM** **BAD**

CO2 Saving	Nett Cost	HR Problem	Public/ Political Problems	Ease	Timeframe	CO2 Payback Period	External Barriers
Medium							

No.	Tasks	Time/Date	Dependency
1	Assessment of potential and recording of result	52 weeks	
2	Obtain Management Team Approval	8 weeks	1
3	Preparation of specification & tender documents	26 weeks	2
4	Advertising and receipt of tenders	20 weeks	3
5	Analysis of tender & appointment of contractor	4 Weeks	4
6	Installation of equipment	26 Weeks	5
	Annual Monitoring after Implementation up to 2012		

**Directorate: Transport and Infrastructure**  
**Section: Roads**

Idea No. 15

*LEDs lighting in Traffic Management*

**Brief description:**

Implement LEDs lighting in all mobile traffics management signs.

Indicator Key: **GOOD** **MEDIUM** **BAD**

CO2 Saving	Nett Cost	HR Problem	Public/ Political Problems	Ease	Timeframe	CO2 Payback Period	External Barriers
<b>Small</b>							

No.	Tasks	Time/Date	Dependency
1	Assess current Traffic Management Signs	12 Weeks	
2	Source Signs with LED lighting	12 Weeks	
3	Procure install Signs with LED lighting	52 Weeks	
	Annual Assess Performance & CO2 Saving and Monitoring after Implementation up to 2012		

**Directorate: Transport and Infrastructure**  
**Section: Water Services**

Idea No. 16

Alternative usage for waste sludge

**Brief description:**

Assessment of current usage of sludges & development of a strategy for utilisation of waste sludges based on best climate change practice

Indicator Key: **GOOD** **MEDIUM** **BAD**

CO2 Saving	Nett Cost	HR Problem	Public/ Political Problems	Ease	Timeframe	CO2 Payback Period	External Barriers
High ?							

Stage	No.	Tasks	Time/Date	Dependency
1	1	Identify Potential and options	26 weeks	
	2	Quantification of current / future sludge volumes	10 weeks	
	3	Quantification of best practice in relation to utilization of sludge & evaluation of current sludge usage	20 weeks	
2		Stage 2 starts on complementation on stage 1 (source funding for alternative sludge project) Annual Monitoring after Implementation of installation up to 2012		

**Directorate: Transport and Infrastructure**  
**Section: Water Services**

Idea No. 17

**Conservation of water within the Council**

**Brief description:**

**Develop & implement a policy for the efficient usage of water within the County Council.**

**Indicator Key: GOOD MEDIUM BAD**

CO2 Saving	Nett Cost	HR Problem	Public/ Political Problems	Ease	Timeframe	CO2 Payback Period	External Barriers
Small							

No.	Tasks	Time/Date	Dependency
1	Quantification of current situation	16 weeks	
2	Development of policy	30 weeks	1
3	Implementation of policy	Up until end	2
	Annual Monitoring after Implementation up to 2012		

**Directorate: Transport and Infrastructure**  
**Section: Roads**

Idea No. 18

**Existing vehicles to operate on Biodiesel blend**

**Brief description:**

Existing vehicles to operate on bio fuel mix as per targets set out in the “National Climate Change Strategy”.

**Indicator Key:** **GOOD** **MEDIUM** **BAD**

CO2 Saving	Nett Cost	HR Problem	Public/ Political Problems	Ease	Timeframe	CO2 Payback Period	External Barriers
Medium							

No.	Tasks	Time/Date	Dependency
1	Assess current vehicle types currently owned by Waterford County Council.	10 Weeks	
2	Development of targets in relation to operation of vehicles on alternative fuels	3 weeks	
3	Source suppliers	4 weeks	
4	Provide infrastructure for fuel storage	8 weeks	
5	Install equipment	16 weeks	
	Annual Monitoring after Implementation up to 2012		

**Directorate: Transport and Infrastructure**  
**Section: Roads**

Idea No. 19

**New vehicles to run on Bio Diesel**

**Brief description:**

**Assess & develop a co-coordinated strategy for purchasing new vehicles to operate on alternative fuels.**

**Indicator Key: GOOD MEDIUM BAD**

CO2 Saving	Nett Cost	HR Problem	Public/ Political Problems	Ease	Timeframe	CO2 Payback Period	External Barriers
High							

No.	Tasks	Time/Date	Dependency
1	Assessment of Current Tender Procedures	12 Weeks	
2	Development of detail to be included in tender document	10 Weeks	
	Monitoring Implementation& technology developments & review on 6 month basis up to 2012		



**Directorate: Transport and Infrastructure**  
**Section: Procurement**

Idea No. 20

**Cost Neutral Green Procurement of Products**

**Brief description:**

The inclusion of a selection criterion favouring the use of “Green Products” where all other criteria have been equally met (Reference to DEHLG guidance documents)

**Indicator Key:** **GOOD** **MEDIUM** **BAD**

CO2 Saving	Nett Cost	HR Problem	Public/ Political Problems	Ease	Timeframe	CO2 Payback Period	External Barriers
High							

No.	Tasks	Time/Date	Dependency
1	Research Criteria for sourcing of low carbon products	26 Weeks	
2	Include Carbon criteria score mechanisms in tender document	12 Weeks	
3	Award contracts based on low carbon performance	26 Weeks	
4	Monitor Performance of product	13 Weeks	
5	Update tender documents to criteria	26 Weeks	
6	Include updated low carbon emissions for products	26 Weeks	
	Monitoring Implementation and review on 6 month basis up to 2012		

**Directorate: Transport and Infrastructure**  
**Section: Procurement**

Idea No. 21

**Green House Gas production as an award criterion in services and works contracts**

**Brief description:**

**The inclusion of a selection criterion specifically referenced to Green House Gas reduction**

**Indicator Key: GOOD MEDIUM BAD**

CO2 Saving	Nett Cost	HR Problem	Public/ Political Problems	Ease	Timeframe	CO2 Payback Period	External Barriers
High							

No.	Tasks	Time/Date	Dependency
1	Research Award Criteria for listing Green House Gas emission	20 Weeks	
2	Develop template for inclusion of Green House Gases as part of scoring Mechanisms	8 Weeks	
3	Include Green House Gas Emission as criteria in tender document	26 Weeks	
4	Monitor Performance of revised award criteria	13 Weeks	
	Up date tender of revised award criteria to include revised selection criteria, Monitoring Implementation and review on 6 month basis up to 2012		

**Directorate: Transport and Infrastructure**  
**Section: Roads**

Idea No. 22

**Tree planting on Councils lands which can be used as a carbon neutraliser**

**Brief description:**

Maximise the use of available Council lands for the planting of Carbon Sinks.

**Indicator Key:** **GOOD** **MEDIUM** **BAD**

CO2 Saving	Nett Cost	HR Problem	Public/ Political Problems	Ease	Timeframe	CO2 Payback Period	External Barriers
High							

No.	Tasks	Time/Date	Dependency
1	Identify all Council land banks	12 Weeks	
2	Selection of suitable sites	24 Weeks	
3	Source suitable indigenous trees	24 Weeks	
4	Develop planting schedule for the various sites	12 Weeks	
5	Implement policy during appropriate planting season	13 Weeks	
	Monitoring Implementation and review on 6 month basis up to 2012		

**Directorate: Planning & Environment**  
**Section: Environment**

Idea No. 23  
*Collection of Waste Pallets in Civics Amenity site for utilisation for energy purposes*

**Brief description:**

**Collection of Waste Pallets in Civics Amenity site for utilisation for energy purposes**

**Indicator Key: GOOD MEDIUM BAD**

CO2 Saving	Nett Cost	HR Problem	Public/ Political Problems	Ease	Timeframe	CO2 Payback Period	External Barriers
Good							

No.	Tasks	Time/Date	Dependency
1	Assess Potential for Collection & Storage of Waste Pallets	16 Weeks	
2	Prepare tender for collection service	20 Weeks	
3	Advertise collection service among general public		2
4	Pilot Scheme	52 Weeks	2
5	Re tender scheme	52 Weeks	
	Quantify Volumes regulated & CO2 Benefits – Re-tender Scheme rewarded ,Monitoring Implementation and review on 6 month basis up to 2012		

**Directorate: Housing & Corporate Affairs**  
**Section: Housing**

Idea No. 24

**All new Local Authority Buildings to be “A” Rated under the Building Energy Directive**

**Brief description:**

**All new Local Authority Buildings to be “A” Rated under the Building Energy Directive**

**Indicator Key: GOOD MEDIUM BAD**

CO2 Saving	Nett Cost	HR Problem	Public/ Political Problems	Ease	Timeframe	CO2 Payback Period	External Barriers
High							

No.	Tasks	Time/Date	Dependency
1	Modify Building Specification for Housing development	16 Weeks	
2	Inclusion of revised specification in new housing projects	12 Weeks	1
3	Monitor performance of specification	36 Weeks	2
4	Monitor house thermal performance and project performance and cost evaluation	70 weeks	3
	Annual Monitoring after Implementation up to 2012		

**Directorate: Housing & Corporate Affairs**  
**Section: Housing**

Idea No. 25

**Tenant Information Pack**

**Brief description:**

**Development of Good Practice Guidelines on minimising CO<sup>2</sup> Emissions from Local Authority Houses.**

**Indicator Key: GOOD MEDIUM BAD**

CO2 Saving	Nett Cost	HR Problem	Public/ Political Problems	Ease	Timeframe	CO2 Payback Period	External Barriers
Small							

No.	Tasks	Time/Date	Dependency
1	Meet with Housing– design layout of document	16 Weeks	
2	Pilot document for tenancy handover course	16 Weeks	1
3	Print document	36 Weeks	2
4	Monitor performance of document	70 Weeks	3
	Annual Monitoring after Implementation up to 2012		

**Directorate: Housing & Corporate Affairs**  
**Section: Housing**

Idea No. 26  
Servicing of Boilers

**Brief description:**

The development of a strategy for the annual (periodic/appropriate/scheduled) servicing of all boilers in Council buildings & rented dwellings.

**Indicator Key:** **GOOD** **MEDIUM** **BAD**

CO2 Saving	Nett Cost	HR Problem	Public/ Political Problems	Ease	Timeframe	CO2 Payback Period	External Barriers
Medium							

No.	Tasks	Time/Date	Dependency
1	Quantify Council annual oil consumption in housing stock & in building	16 Weeks	
2	Quantify number & type of boiler	12 Weeks	1
3	Strategy document develop	22 Weeks	2
4	Preparation of tender/contract documents	13 Weeks	3
5	Award of contract	4 Weeks	4
6	Operation of contract/ review	52 Weeks	5
	Annual Monitoring after Implementation up to 2012		

**Directorate: Housing & Corporate Affairs**  
**Section: Housing**

Idea No. 27

**Water conservation measures in new buildings**

**Brief description:**

The inclusion of a requirement for water conservation measures in the design & furnishing of all new Council buildings

Indicator Key: **GOOD** **MEDIUM** **BAD**

CO2 Saving	Nett Cost	HR Problem	Public/ Political Problems	Ease	Timeframe	CO2 Payback Period	External Barriers
<b>Small</b>							

No.	Tasks	Time/Date	Dependency
1	Development of water conservation Products	20 Weeks	
2	Inclusion of tender package	6 Weeks	1
3	Monitor review performance of water conservation measure	70 Weeks	2
	Annual Monitoring after Implementation up to 2012		



**Directorate: Planning & Environment**  
**Section: Environment**

Idea No. 28

**Collection of waste cooking oil at civic Amenity Sites**

**Brief description:**

Collection of waste cooking oil at civic Amenity Sites

**Indicator Key:** **GOOD** **MEDIUM** **BAD**

CO2 Saving	Nett Cost	HR Problem	Public/ Political Problems	Ease	Timeframe	CO2 Payback Period	External Barriers
Medium							

No.	Tasks	Time/Date	Dependency
1	Quantify current collection & Quantify future up scaling of scheme	12 Weeks	
2	Pilot scheme at Civic Amenity Sites	52 Weeks	
3	Advertise scheme		1 & until end
4	Re- launch of expanded Scheme		1 & until end
	Annual Monitor Performance & CO2 Saving after Implementation up to 2012		

**Directorate: Housing & Corporate Affairs**  
**Section: Corporate Affairs**

[Idea No. 29](#)

**Replace all incandescent light bulbs with CFLs**

**Brief description:**

**Replace all incandescent light bulbs with CFLs/ LEDs in all County Facilities**

**Indicator Key: GOOD MEDIUM BAD**

CO2 Saving	Nett Cost	HR Problem	Public/ Political Problems	Ease	Timeframe	CO2 Payback Period	External Barriers
Small							

No.	Tasks	Time/Date	Dependency
1	Quantify number / type of light fitting contained within Council Buildings	16 Weeks	
2	Sourcing low Energy Alternatives	16 Weeks	1
3	Quantification of cost	4 Weeks	2
4	Replacement of existing bulbs	30 Weeks	3
	Quantification of result & performance CO2 Saving / source innovative alternatives, Monitoring Implementation and review on 6 month basis up to 2012		

**Directorate: Housing & Corporate Affairs**  
**Section: Corporate Affairs**

Idea No. 30

**Monitor paper usage and ensure reuse/reduce policy**

**Brief description:**

**The development of a Management Policy aimed at minimising the amount of paper used in the organisation. / Envelopes etc.**

**Indicator Key: GOOD MEDIUM BAD**

CO2 Saving	Nett Cost	HR Problem	Public/ Political Problems	Ease	Timeframe	CO2 Payback Period	External Barriers
Small							

No.	Tasks	Time/Date	Dependency
1	Develop guidelines to reduce paper consumption	16 Weeks	
2	Circulation Guidelines	4 Weeks	1
	Monitor Performance consumption & Monitoring Implementation & review on 6 month basis up to 2012		

**Directorate: Housing & Corporate Affairs**  
**Section: Corporate Affairs**

Idea No. 31

**Develop climate change performance indicators**

**Brief description:**

**Develop climate change performance indicators**

**Indicator Key: GOOD MEDIUM BAD**

CO2 Saving	Nett Cost	HR Problem	Public/ Political Problems	Ease	Timeframe	CO2 Payback Period	External Barriers
Small							

No.	Tasks	Time/Date	Dependency
1	Develop performance indicators	16 Weeks	
2	Implementation performance indicators	12 weeks	1
3	Update performance indicators	4 Weeks	
	Circulate results within Organisation & further develop further develop performance indicators and Annual Monitoring after Implementation up to 2012		

**Directorate: Housing & Corporate Affairs**  
**Section: Corporate Affairs**

Idea No. 32

**Incentives conversion of cars to bio fuel & purchase of cars with Low CO2 Emissions.**

**Brief description:**

Develop a scheme similar to the PC purchase scheme to support staff wishing to convert their vehicles to bio fuel.

Inform Staff of benefits of purchasing Vehicles with Low CO2 Emissions

**Indicator Key:** **GOOD** **MEDIUM** **BAD**

CO2 Saving	Nett Cost	HR Problem	Public/ Political Problems	Ease	Timeframe	CO2 Payback Period	External Barriers
High							

No.	Tasks	Time/Date	Dependency
Conversion Car to Biofuels			
1	Research of options for conversion of vehicle's & availability of bio fuels	16 Weeks	
2	Agree conversion costs & mechanisms with conversion kit suppliers / installers	12 Weeks	
3	Circulate the information to staff	8 Weeks	
4	Assess take up of conversion and subsequent CO2 Savings.	On going	
Low emission Vehicle			
1	Assess availability of low emission vehicles & tax implications	26 Weeks	
2	Assess CO2 Saving through operation of low emission vehicle.	12 weeks	1
3	Quantify the cash saving through reduced VRT, Annual Motor Tax, purchase of fuels with low emissions	12 weeks	1
4	Circulate Information to Staff	4 weeks	
5	Assess take up among council staff	On Going	

**Directorate: C&E, Finance, I.T., Library.**  
**Section: Finance & I.T.**

Idea No. 33

**Re-use of non-obsolete equipment**

**Brief description:**

**Re-use of non-obsolete equipment**

**Indicator Key: GOOD MEDIUM BAD**

CO2 Saving	Nett Cost	HR Problem	Public/ Political Problems	Ease	Timeframe	CO2 Payback Period	External Barriers
Small							

No.	Tasks	Time/Date	Dependency
1	Quantification of non-obsolete equipment that can be reused	16 Weeks	
2	Reuse of non-obsolete equipment	52 weeks	1
3	Preparation & continuing update of Registers for non obsolete equipment	Up to the end	2
	Evaluation of resources and uses for non-obsolete equipment on 6 month basis upto to 2012		
	Quantification of CO2 Saving for using non-obsolete equipment on 6 month basis up to 2012		

*Directorate: C&E, Finance, I.T., Library*

**Section: Finance & I.T.**

Idea No. 34

**Video Conferencing Facility**

**Brief description:**

**Develop Video Conferencing Facility in HQ**

**Indicator Key: GOOD MEDIUM BAD**

CO2 Saving	Nett Cost	HR Problem	Public/ Political Problems	Ease	Timeframe	CO2 Payback Period	External Barriers
Medium							

No.	Tasks	Time/Date	Dependency
1	Survey sites for development & installation of videoconferences Facilities at civic Offices, Dungarvan, Lismore, Tramore & Adamstown Treatment Plant.	16 Weeks	
2	Quantify Installation equipment Costs & Sources	12 Weeks	1
3	Install Video Conferences Facility	12 Weeks	1, 2
4	Pilot Video Conference Facility & Train Staff	52 Weeks	1, 2, 3
5	Quantify CO2 savings & Performance of VCF	4 Weeks	1, 2, 3, 4
	After 1 year Monitoring Implementation and review on 6 month basis up to 2012		

**Directorate: Planning & Environment**  
**Section: Environment**

Idea No. 35  
*Quantification of CO2 benefits from recycling*

**Brief description:**

Evaluate the CO2 benefits from recycling

**Indicator Key:** **GOOD** **MEDIUM** **BAD**

CO2 Saving	Nett Cost	HR Problem	Public/ Political Problems	Ease	Timeframe	CO2 Payback Period	External Barriers
Medium							

No.	Tasks	Time/Date	Dependency
1	Quantify CO2 Benefits from recycling	26 Weeks	
2	Assess future options for recycling	12 Weeks	
3	Develop Plan for additional recycling & CO2 benefits	52 Weeks	
4	Implant Plan		3 & Until 2012
5	Advertise Co2 benefits of recycling		3 & Until 2012



**Directorate: C&E, Finance, I.T. Library.**  
**Section: Finance & I.T.**

Idea No. 36

**Increase use of online customer services**

**Brief description:**

**Develop a strategy to maximise the use of E-transactions by customers.**

**Indicator Key: GOOD MEDIUM BAD**

CO2 Saving	Nett Cost	HR Problem	Public/ Political Problems	Ease	Timeframe	CO2 Payback Period	External Barriers
Medium							

No.	Tasks	Time/Date	Dependency
1	Quantify Current Services Available online	16 Weeks	
2	Develop Plan for implementation of additional online facilities	12 Weeks	
3	Increase online facilities	24 Weeks	
4	Promote online facilities	12 Weeks	
5	Monitor online facility and increase utilisation of additional services online	12 Weeks	
	Monitoring Implementation & CO2 Saving & review on 6 month basis up to 2012		

**Directorate: Planning & Environment**  
**Section: Environment**

Idea No. 37

**Utilise landfill gas potential**

**Brief description:**

To seek beneficial uses for land fill gas at both Dungarvan & Tramore landfills

**Indicator Key:** **GOOD** **MEDIUM** **BAD**

CO2 Saving	Nett Cost	HR Problem	Public/ Political Problems	Ease	Timeframe	CO2 Payback Period	External Barriers
High							

No.	Tasks	Time/Date	Dependency
1	Assess output at Tramore	36 weeks	
2	Assess output at Dungarvan	36 weeks	Csb 1 <sup>st</sup> Dec
3	Seek Expressions of Interest Tramore	12 weeks	1
4	Seek Expressions of Interest Dungarvan	12 weeks	2
5	Assess Options Tramore	4 weeks	3
6	Assess Options Dungarvan	4 weeks	4
7	Seek Licence Review for Tramore	30 weeks	5
8	Seek Licence Review for Dungarvan	30 weeks	6
9	Procure Infrastructure for Tramore	39 weeks	5, ff7
10	Procure Infrastructure for Dungarvan	39 weeks	6, ff8
11	Install Infrastructure in Tramore	20 weeks	9
12	Install Infrastructure in Dungarvan	20 weeks	10
	Annual Monitoring after Implementation up to 2012		

**Directorate: Planning & Environment**  
**Section: Environment**

Idea No. 38

**Integrate renewable energy lighting in Civic Amenity Sites, Bottle Banks & MRF**

**Brief description:**

**Integrate renewable energy lighting in Civic Amenity Sites, Bottle Banks & Materials Recovery Facility where possible**

**Indicator Key: GOOD MEDIUM BAD**

CO2 Saving	Nett Cost	HR Problem	Public/ Political Problems	Ease	Timeframe	CO2 Payback Period	External Barriers
Medium							

No.	Tasks	Time/Date	Dependency
1	Assess Options.	26 weeks	
3	Seek Grant Assistance.	26 weeks	1,2
4	Procure Infrastructure.	26 weeks	1,2,3
5	Install Infrastructure.	26 weeks	4
	Annual Monitoring after Implementation up to 2012		

**Directorate: Planning & Environment**  
**Section: Environment**

Idea No. 39

**Energy Audit/Per Tonne Per Product Stream in the MRF**

**Brief description:**

Develop a strategy to minimise the energy usage of the MRF

**Indicator Key:** **GOOD** **MEDIUM** **BAD**

CO2 Saving	Nett Cost	HR Problem	Public/ Political Problems	Ease	Timeframe	CO2 Payback Period	External Barriers
Medium							

No.	Tasks	Time/Date	Dependency
1	Collect Available Information	16 weeks	
2	Audit Energy Usage per product Stream.	12 weeks	1
3	Assess Efficiency.	6 weeks	2
4	Develop Strategy for Efficient Energy Usage.	10 weeks	3
	Annual Monitoring after Implementation up to 2012		

**Directorate: Planning & Environment**  
**Section: Environment**

Idea No. 40

**Audit energy usage in County Council buildings each year**

**Brief description:**

**Audit energy usage in County Council buildings annually**

**Indicator Key: GOOD MEDIUM BAD**

CO2 Saving	Nett Cost	HR Problem	Public/ Political Problems	Ease	Timeframe	CO2 Payback Period	External Barriers
High							

No.	Tasks	Time/Date	Dependency
1	Identify Target Buildings	26 weeks	
2	Draw Up Programme	6 weeks	1
3	Audit	40 weeks	2
4	Report	8 weeks	3
5	Implement Recommendations	10 weeks	4
	Annual Monitoring after Implementation up to 2012		

**Directorate: Planning & Environment**  
**Section: Environment**

Idea No. 41

**Utilisation of WEB in Mechanical & Electrical related projects**

**Brief description:**

The development of a practice to ensure the participation of WEB in Mechanical & Electrical related projects in the County Council.

**Indicator Key:** **GOOD** **MEDIUM** **BAD**

CO2 Saving	Nett Cost	HR Problem	Public/ Political Problems	Ease	Timeframe	CO2 Payback Period	External Barriers
Medium							

No.	Tasks	Time/Date	Dependency
1	Define Mechanical /Electrical Projects	20 weeks	
2	Develop Protocol for Notifying WEB	16 weeks	1
3	Consult with Stakeholders	8 weeks	2
4	Draft Policy	10 weeks	3
5	Achieve Sign-off	8 weeks	4
	Annual Monitoring after Implementation up to 2012		

**Directorate: Planning & Environment**  
**Section: Environment**

Idea No. 42

**Public Education**

**Brief description:**

The development of a public education strategy on the theme of Climate Change

**Indicator Key:** **GOOD** **MEDIUM** **BAD**

CO2 Saving	Nett Cost	HR Problem	Public/ Political Problems	Ease	Timeframe	CO2 Payback Period	External Barriers
<b>Small</b>							

No.	Tasks	Time/Date	Dependency
1	Gather Available Information	16 weeks	
2	Identify Target Audience	8 weeks	
3	Tailor Information	10 weeks	1,2
4	Write Draft Strategy	8 weeks	3
5	Get Management Team Approval	4 weeks	4
6	Consult with SPC	8 weeks	5
7	Publish Strategy	8 weeks	6,5
	Annual Monitoring after Implementation up to 2012		

## Directorate: Transport and infrastructure

Idea No. 43

### Optimise Energy Efficiency in Treatment Plants

#### Brief description:

Optimise Energy Efficiency in Treatment Plants and Pumping Stations.

Indicator Key: **GOOD** **MEDIUM** **BAD**

CO2 Saving	Nett Cost	HR Problem	Public/ Political Problems	Ease	Timeframe	CO2 Payback Period	External Barriers
High							

No.	Tasks	Time/Date	Dependency
1	Quantify energy use in Pumping Stations & Treatments plants	26 Weeks	
2	Develop a co-ordinated Plan for improvement of energy efficiency of Treatment Plants & Pumping Stations	26 Weeks	
3	Implement Plan for improvement in energy efficiency	104 Weeks	
	Monitor Results and Redevelop Plan to include additional Plants on 6 month basis up to 2012		



**Directorate: Planning & Environment**  
**Section: Environment**

Idea No. 44

**Energy Policy**

**Brief description:**

**Develop a co-ordinated Energy Policy for Waterford County Council**

**Indicator Key: GOOD MEDIUM BAD**

CO2 Saving	Nett Cost	HR Problem	Public/ Political Problems	Ease	Timeframe	CO2 Payback Period	External Barriers
High							

No.	Tasks	Time/Date	Dependency
1	Assess Demands of National Policy	16 weeks	
2	Assess Best Practice	6 weeks	
3	Draft Policy	8 weeks	1,2
4	Consult with Stakeholders	8 weeks	3
5	Get Management Team Approval	4 weeks	3,4
6	Consult with SPC	8 weeks	5
7	Publish Policy	6 weeks	6
	Annual Monitoring after Implementation up to 2012		

**Directorate: Planning & Environment**  
**Section: Environment**

[Idea No. 45](#)

**Wind Turbine installation at Council Pump Houses**

**Brief description:**

Examine the feasibility of installing wind turbines that are linked to the grid via Smart Metering at remote pumping stations & progress if feasible.

**Indicator Key:** **GOOD** **MEDIUM** **BAD**

CO2 Saving	Nett Cost	HR Problem	Public/ Political Problems	Ease	Timeframe	CO2 Payback Period	External Barriers
High							

No.	Tasks	Time/Date	Dependency
1	Identify Pump Houses.	26 weeks	
2	Consult with Water Services	4 weeks	1
3	Assess Suitability.	4 weeks	1, ff2
4	Identify Appropriate Technology.	4 weeks	3
5	Grant Approval	26 weeks	4
6	Secure Part VIII.	26 weeks	4
7	Procure Equipment.	30 weeks	5,6
8	Install Equipment.	15 weeks	7
	Annual Monitoring after Implementation up to 2012		

**Directorate: Housing and Corporate Affairs**  
**Section: Corporate Affairs**

**Green Vehicle Initiative**

[Idea No. 46](#)

**Brief description:**

**Develop Fact Sheet on implication of Carbon Dioxide Emissions levies on Vehicle Registration tax and Road tax. Fact sheet to be included in road for renewal notices.**

**Indicator Key: GOOD MEDIUM BAD**

CO2 Saving	Nett Cost	HR Problem	Public/ Political Problems	Ease	Timeframe	CO2 Payback Period	External Barriers
High							

No.	Tasks	Time/Date	Dependency
1	Assess / Tabulate Impact of Vehicle Registration Tax & Motor Tax Carbon Emission	16 Weeks	
2	Develop fact sheet on Carbon Criteria	12 Weeks	1
3	Print Fact sheet and disseminate with Road tax forms and Train Staff on implications of Tax Carbon levy	6 Weeks	2
4	Disseminate Information on Carbon Levy	100 Weeks	3
	Monitor Implementation & Quantify CO2 Saving and review on 6 month basis up to 2012		

**Directorate: Planning & Environment**  
**Section: Environment**

Idea No. 47

Water recycling unit

**Brief description:**

Source of water recycling unit for scale to general public

**Indicator Key:** **GOOD** **MEDIUM** **BAD**

CO2 Saving	Nett Cost	HR Problem	Public/ Political Problems	Ease	Timeframe	CO2 Payback Period	External Barriers
Small							

No.	Tasks	Time/Date	Dependency
1	Source products for utilisation	20 Weeks	
2	Procure water recycling units	16 Weeks	
3	Advertise service to general public	On going up until end	2
	Monitor implementation and quality CO2 saving and review on 6 month basis up to 2012		

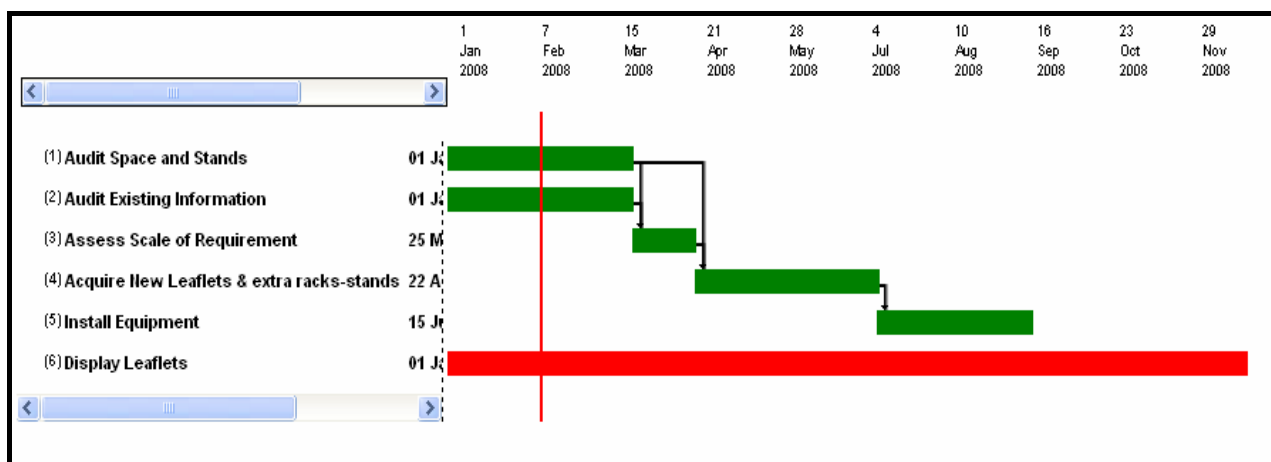
## **6 Programme for implementation of Waterford County Council Climate Change Forum Project Ideas:**

**Directorate: Community & Enterprise**

**Section: Libraries**

*Idea No. 1: Display Information on Climate Change, Energy Efficiency and Renewable Energy*

Monitoring Implementation and review on 6 month basis up to 2012

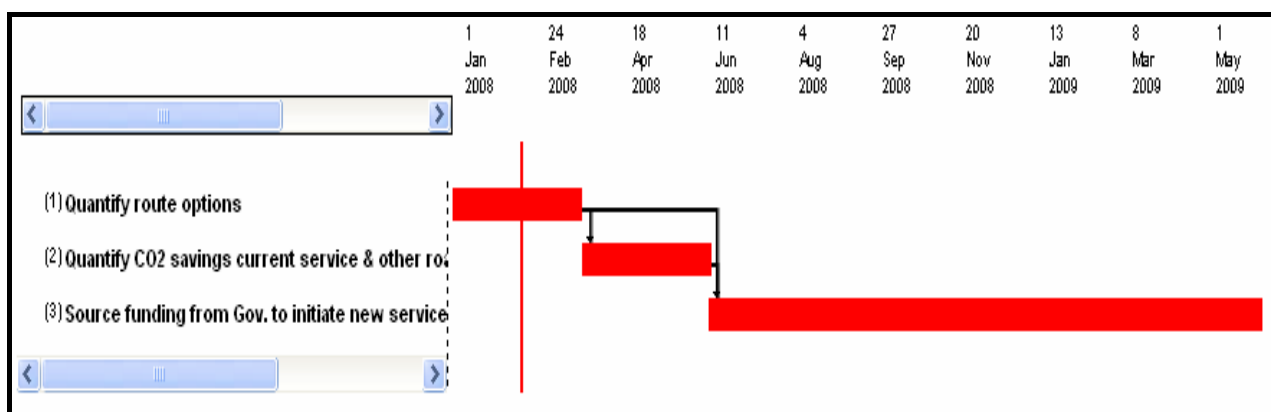


**Directorate: Community & Enterprise**

**Section: Rural Transport Initiative**

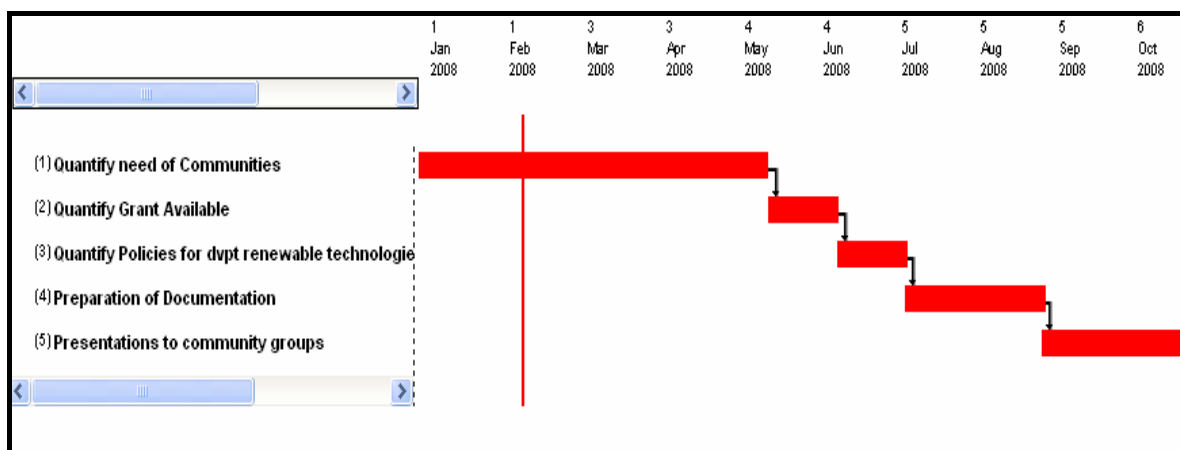
*Idea No. 2 Increase the roll out of Waterford Rural Transport Initiative.*

Annual Monitoring after Implementation up to 2012



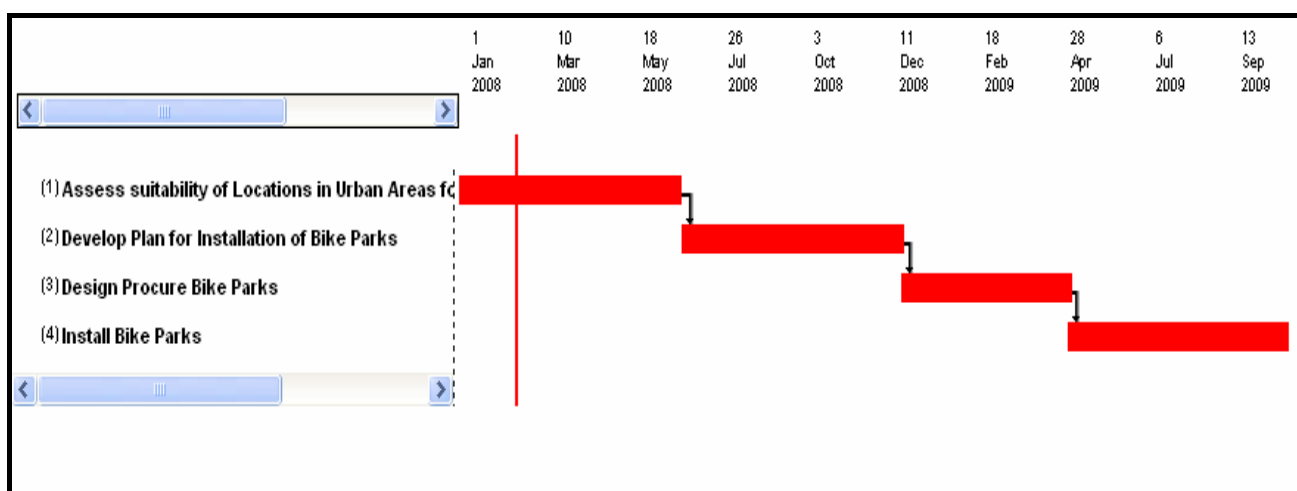
**Directorate: Community & Enterprise**  
**Section: Community & Enterprise**

**Idea 3: Promote Renewable Energy among Community Fora**  
 Monitoring Implementation and review on 6 month basis up to 2012



**Directorate: Roads & Water Services**  
**Section: Roads**

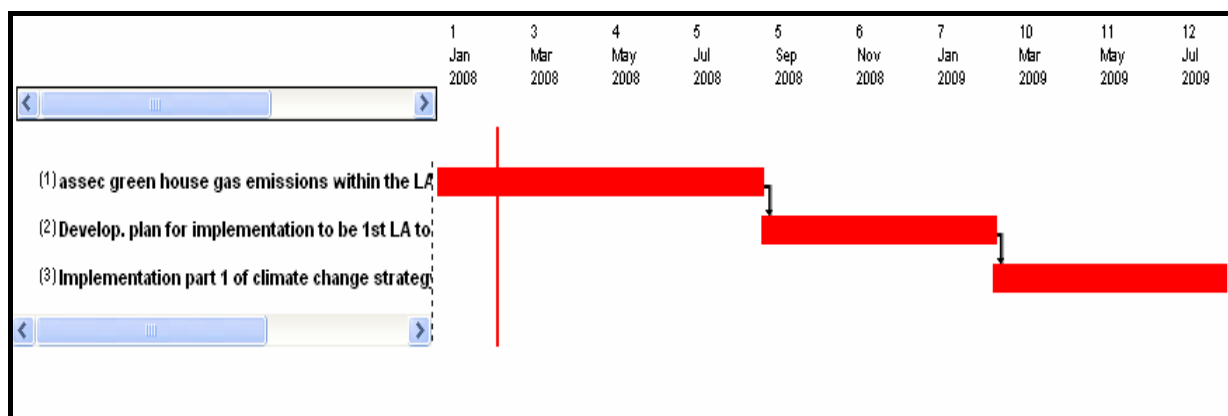
**Idea 4: Bike parking in all urban area**  
 Monitor Implementation & Usage Bike Parks – Quantify Green House Gas Saving  
 and review on 6 month basis up to 2012



**Directorate: Planning & Environment**  
**Section: Environment**

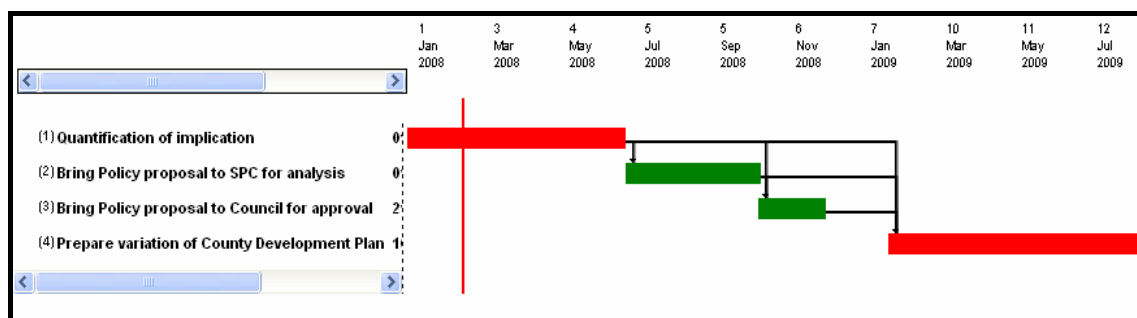
**Idea 5: Develop and implement Plan to be first local Authority to be carbon neutral by 2012**

Plan to be reviewed every 6 month and additional stages of plan to begin until completion in 2012



**Directorate: Planning & Environment**  
**Section: Fire department//development control**

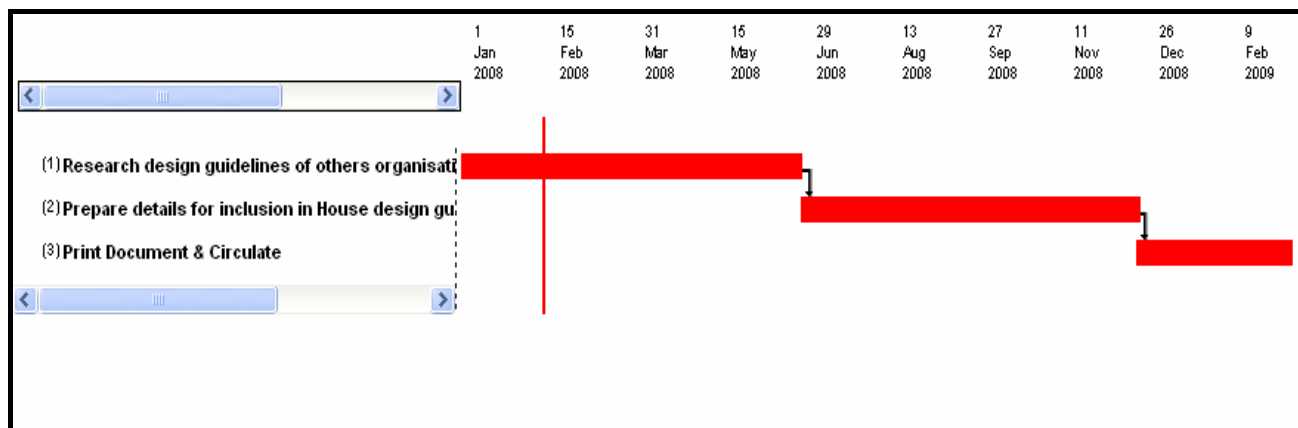
**Idea 6: Compulsory energy rating through variation of County Development Plan**  
 Annual Monitoring after Implementation up to 2012



**Directorate: Planning & Environment**  
**Section: Planning**

**Idea 7: Landscaping**

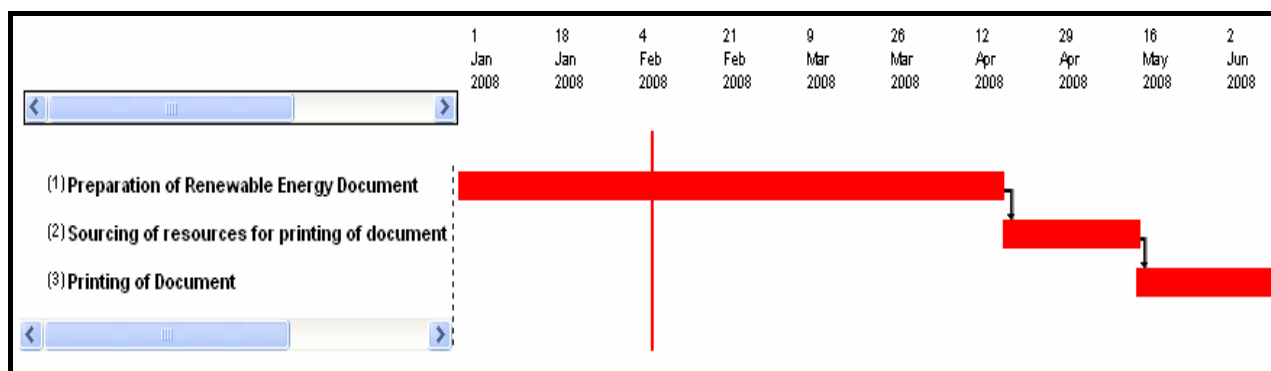
Monitoring Implementation and review on 6 month basis up to 2012



**Directorate: Planning & Environment**  
**Section: Planning**

**Idea 8: Distribute Energy Efficiency Information at pre planning stage**

Annual Monitoring after Implementation up to 2012



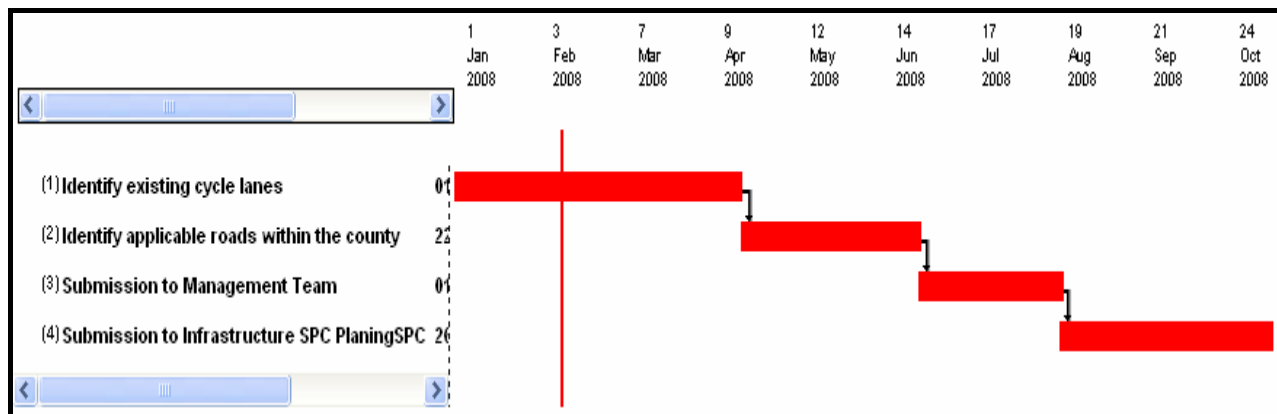


**Directorate: Roads & Water Services**

**Section: Roads**

**Idea 9: New Urban Roads to include cycle lanes**

Monitoring Implementation and review on 6 month basis up to 2012

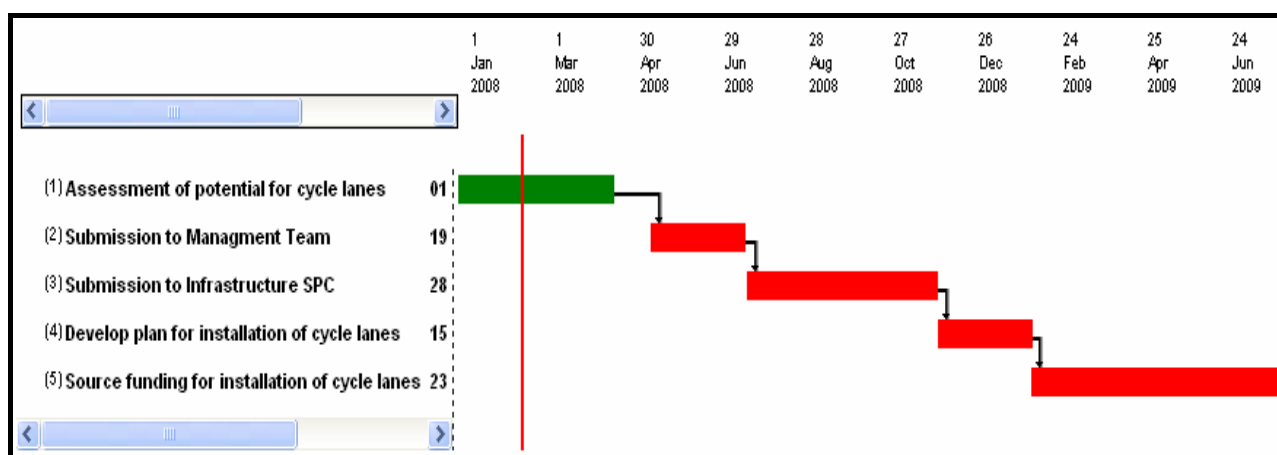


**Directorate: Roads & Water Services**

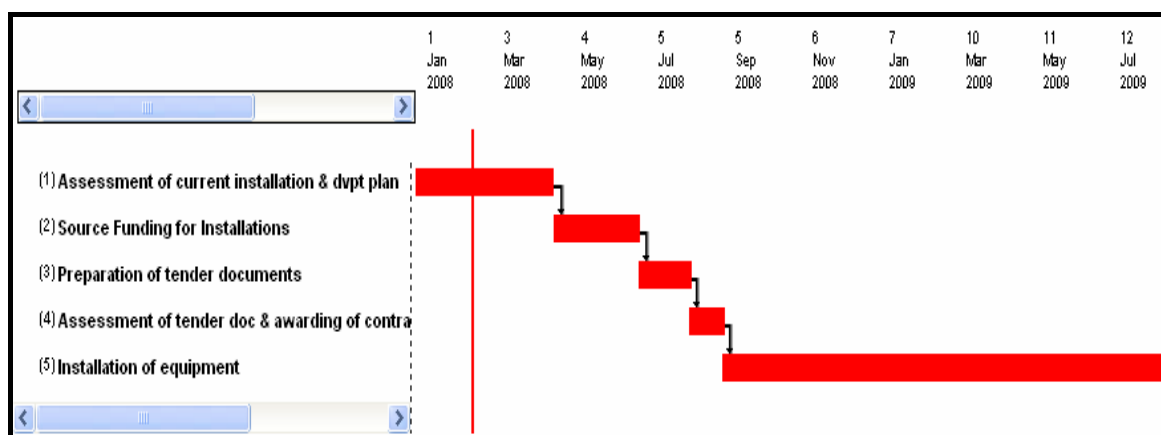
**Section: Roads**

**Idea 10: Retrofitting cycle lanes to schools**

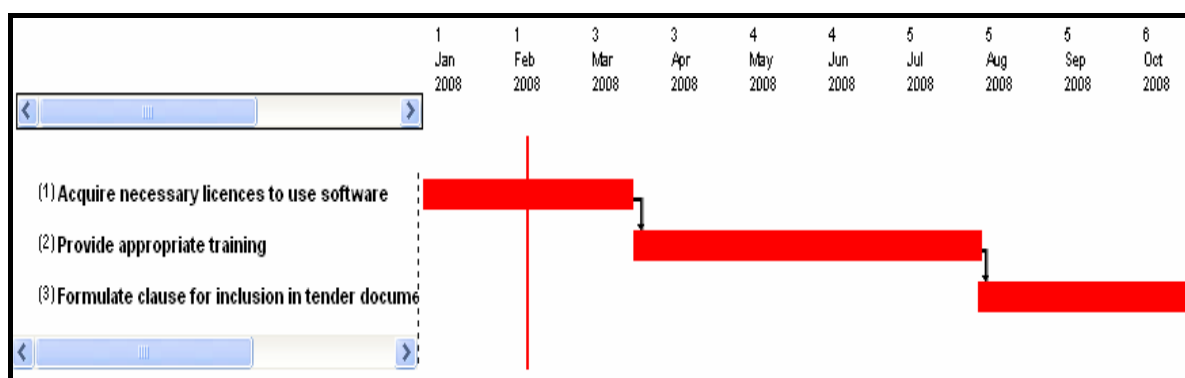
Annual Monitoring after Implementation up to 2012



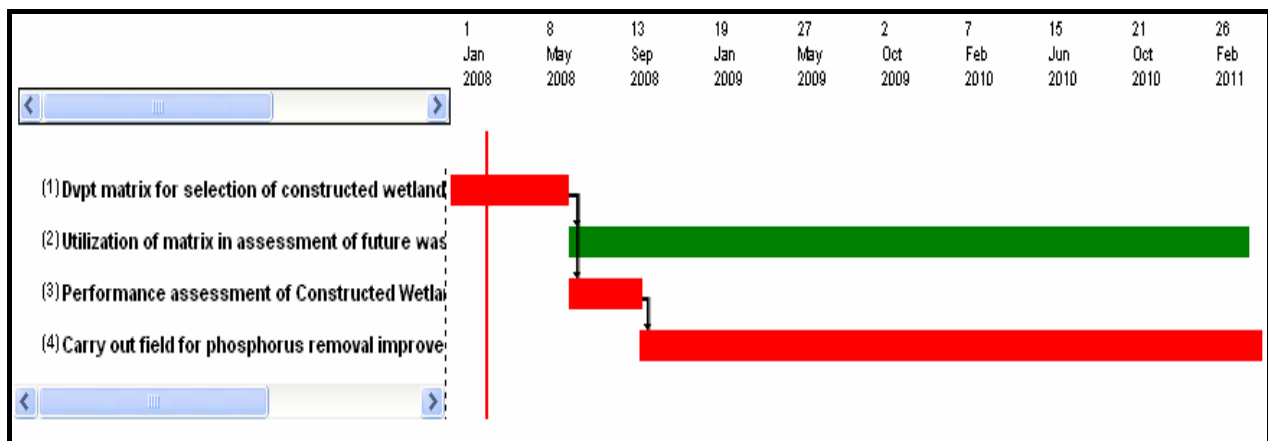
***Idea 11: Use of Solar cells in school signs and pay & display machines***  
**Annual Monitoring after Implementation up to 2012**



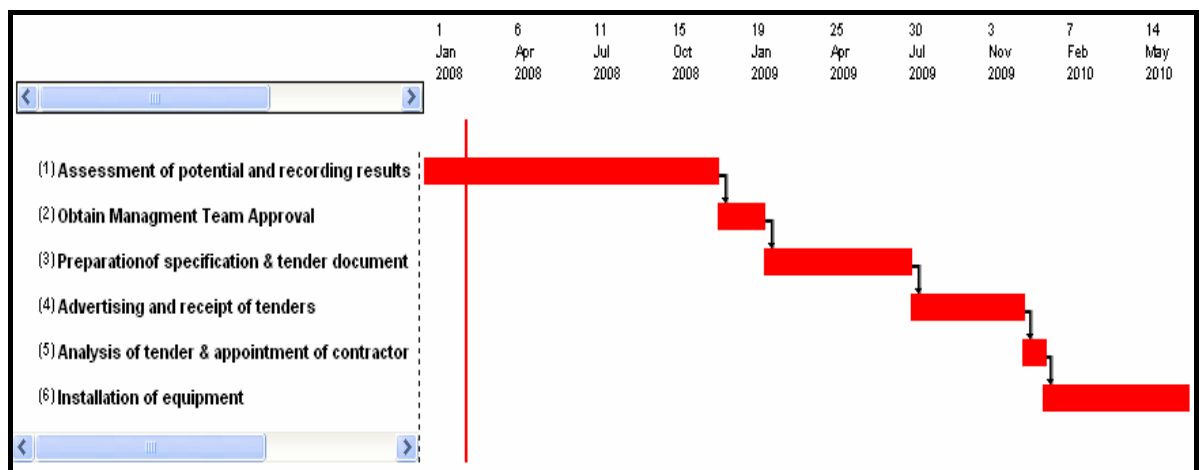
***Idea 12: Use Joule Save software in calculating the carbon footprint of all new road design project***  
**Monitoring Implementation and review on 6 month basis up to 2012**



***Idea 13: Develop a coordinated strategy for use of Constructed Wetlands in Sewage Treatment***  
**Annual Monitoring after Implementation up to 2012**



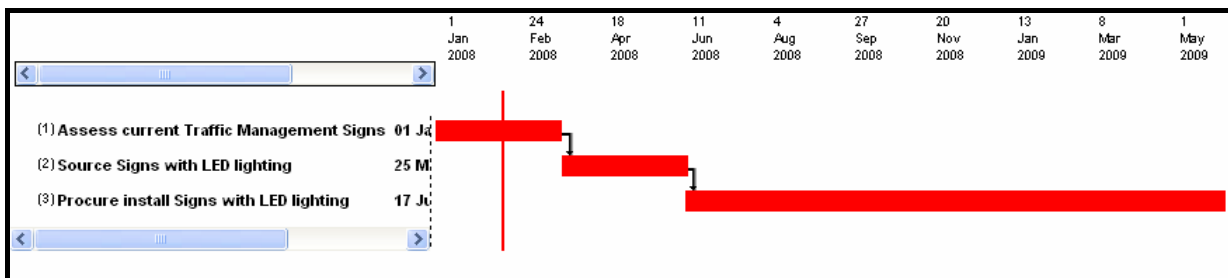
***Idea 14: Hydro electricity in Adamstown/Assessment***  
**Annual Monitoring after Implementation up to 2012**





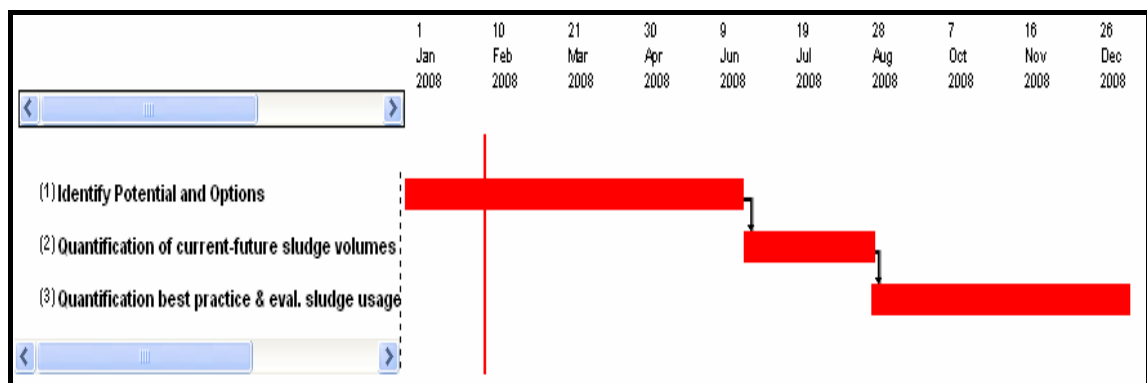
**Directorate: Roads & Water Services**  
**Section: Roads**

**Idea 15: LEDs lighting in Traffic Management**  
 Annual Assess Performance & CO2 saving and Monitoring after Implementation  
 up to 2012



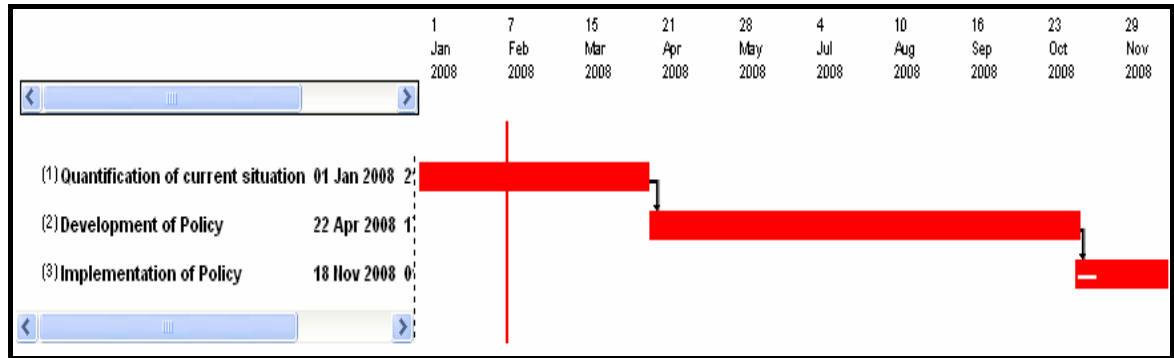
**Directorate: Roads & Water Services**  
**Section: Water Services**

**Idea 16: Alternative usage for Waste Sludge**  
 Stage 2 starts on complementation on stage 1 (source funding for alternative sludge  
 project).Annual monitoring after Implementation of installation up to 2012



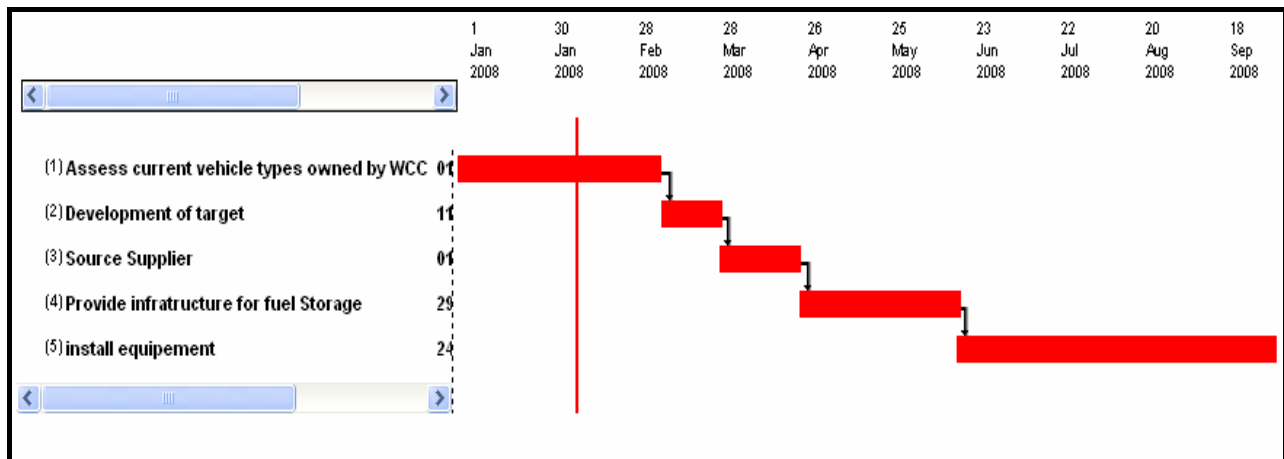
**Directorate: Roads & Water Services**  
**Section: Water Services**

***Idea 17: Conservation of Water within the Council***  
Annual Monitoring after Implementation up to 2012



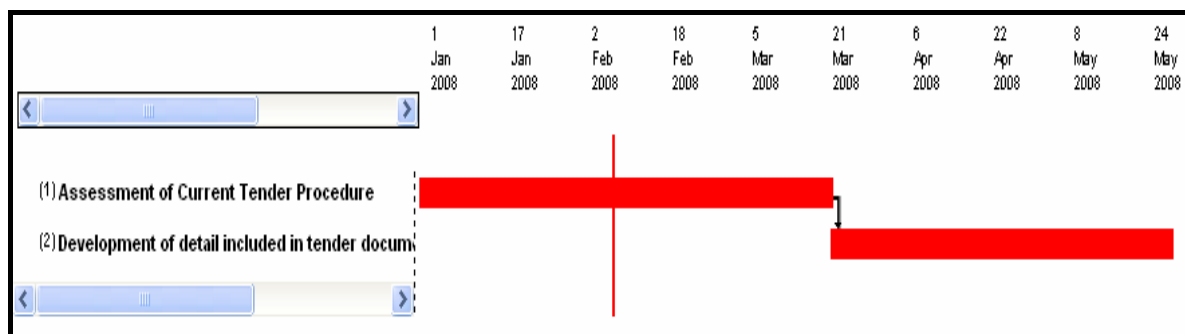
**Directorate: Roads & Water Services**  
**Section: Roads**

***Idea 18: Existing Vehicle to operate on Biodiesel blend***  
Annual Monitoring after Implementation up to 2012



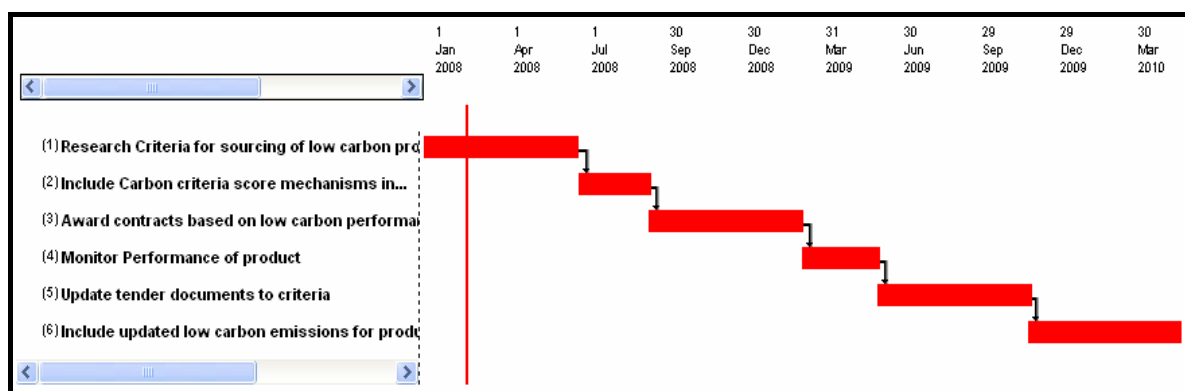
**Directorate: Roads & Water Services**  
**Section: Roads**

**Idea 19: New Vehicle Run on Bio Diesel**  
 Monitoring Implementation & technology developments & review on 6 month basis up to 2012



**Directorate: Roads & Water Services**  
**Section: Procurement**

**Idea 20: Cost Neutral Procurement of Products**  
 Monitoring Implementation and review on 6 month basis up to 2012



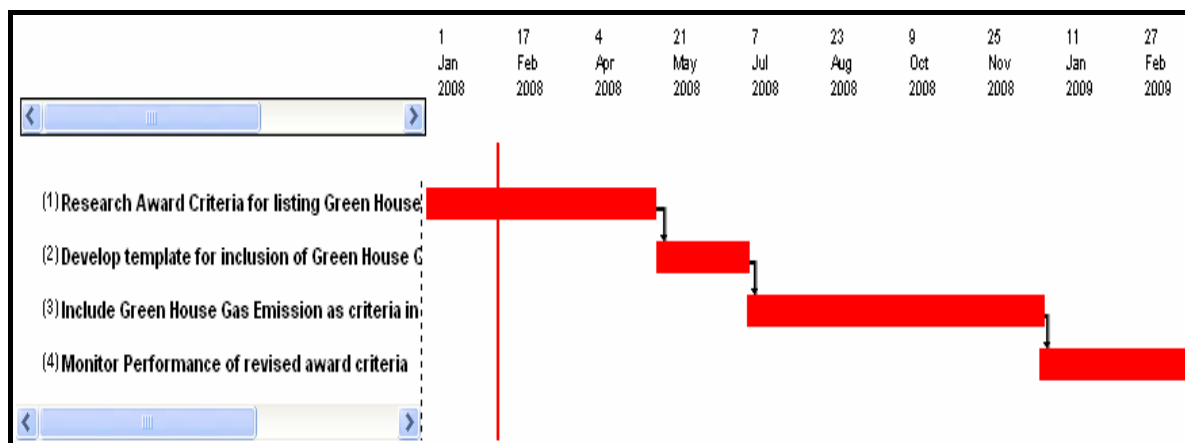
**Directorate: Roads & Water Services**

**Section: Procurement**

**Idea 21: Green House Gas production as an award criterion in services and works contracts**

Up date tender of revised award criteria to include revised selection criteria,

Monitoring Implementation and review on 6 month basis up to 2012

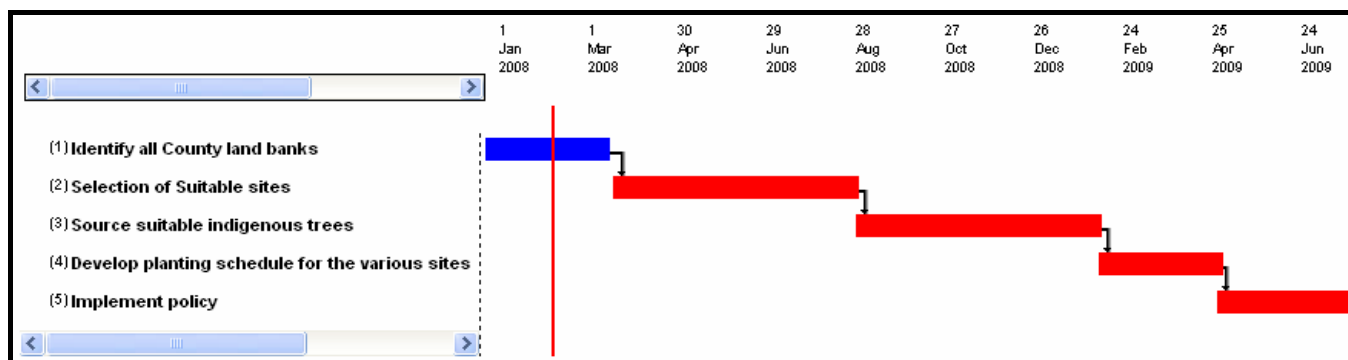


**Directorate: Roads & Water Services**

**Section: Roads**

**Idea 22: Tree planting on Councils lands, which can be used as carbon neutralizer**

Monitoring Implementation and review on 6 month basis up to 2012





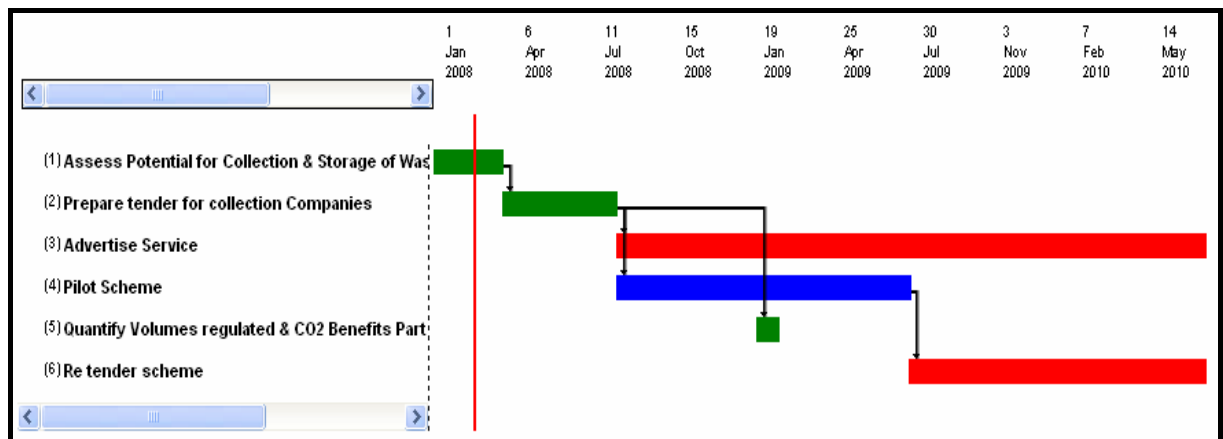
**Directorate: Planning & Environment**  
**Section: Environment**

**Idea 23: Collection of Waste Pallets in Civics Amenity site for utilisation for energy purposes**

Quantify Volumes regulated & CO2 Benefits –

Re-tender Scheme rewarded, Monitoring Implementation and review on 6 month

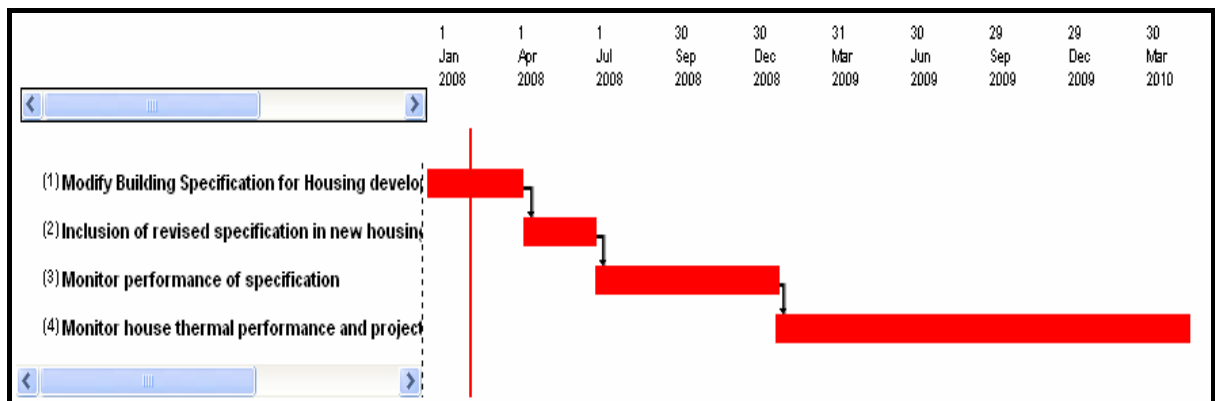
basis up to 2012



**Directorate: Housing & Corporate Affairs**  
**Section: Housing**

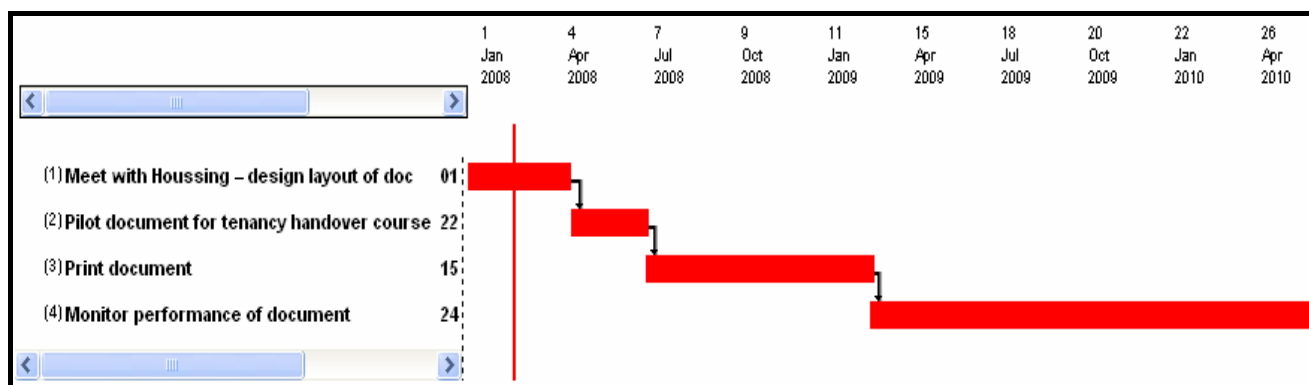
**Idea 24: New Local Authority Building to be “A” Rated under the Building Energy Directive**

Annual Monitoring after Implementation up to 2012



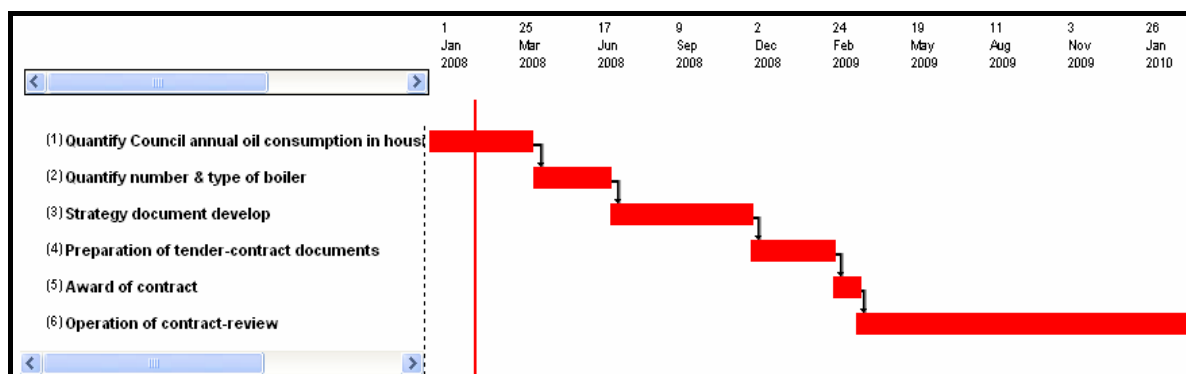
**Directorate: Housing & Corporate Affairs**  
**Section: Housing**

**Idea 25: Tenant Information Pack**  
Annual Monitoring after Implementation up to 2012



**Directorate: Housing & Corporate Affairs**  
**Section: Housing**

**Idea 26: Servicing of Boilers**  
Annual Monitoring after Implementation up to 2012

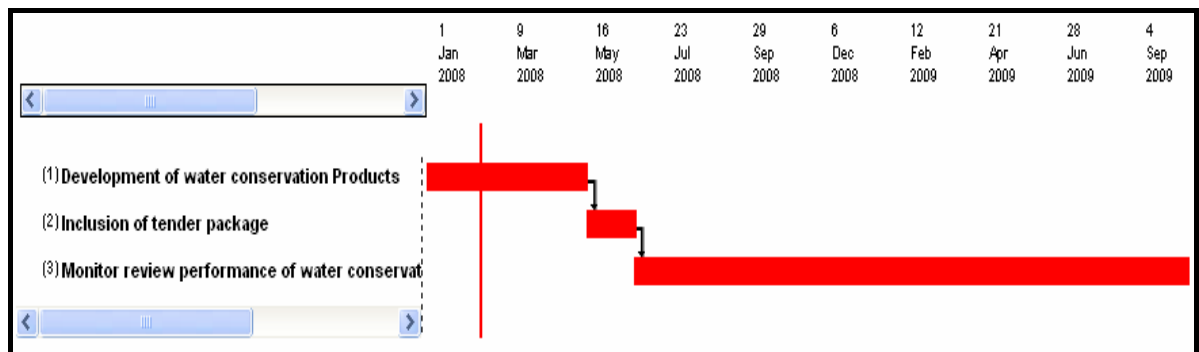


**Directorate: Housing & Corporate Affairs**

**Section: Housing**

**Idea 27: Water Conservation measures in new buildings**

Annual Monitoring after Implementation up to 2012

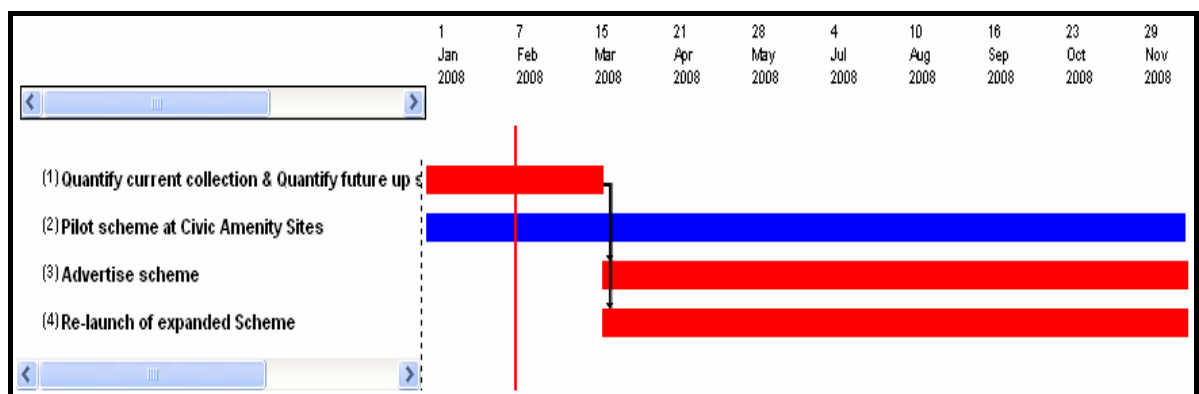


**Directorate: Planning & Environment**

**Section: Environment**

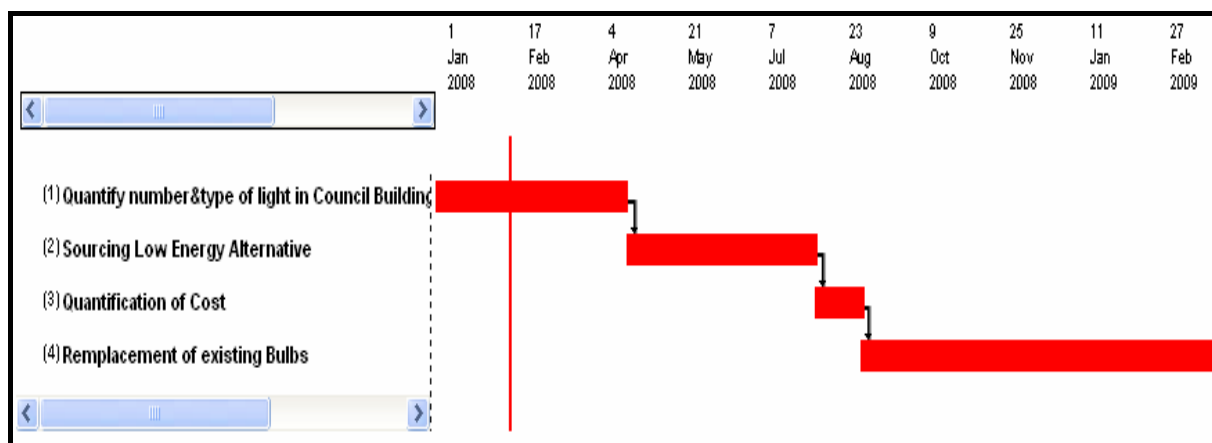
**Idea 28: Collection of waste cooking oil at civic Amenity Sites**

Annual Monitor Performance & CO2 Saving after Implementation up to 2012



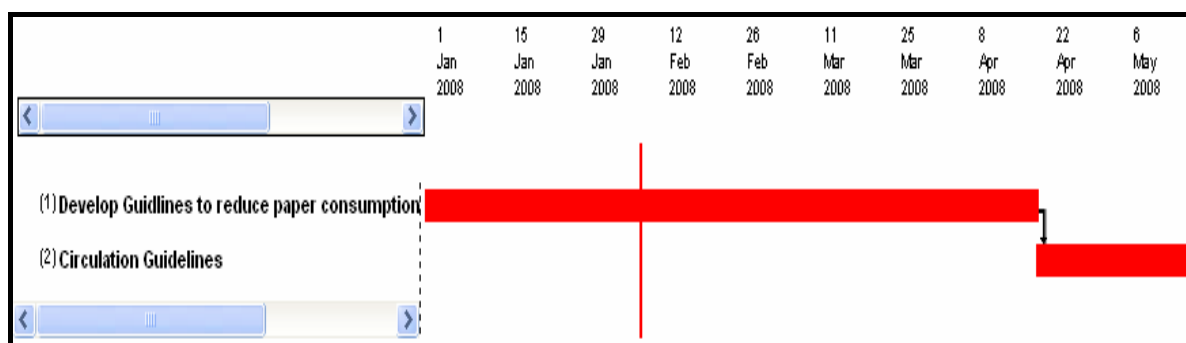
**Directorate: Housing & Corporate Affairs**  
**Section: Corporate Affairs**

**Idea 29: Replace all incandescent light bulbs with CFLs / LED's**  
 Quantification of result & performance CO2 saving / source innovative  
 alternatives, Monitoring Implementation and review on 6 month basis up to 2012



**Directorate: Housing & Corporate Affairs**  
**Section: Corporate Affairs**

**Idea 30: Monitor Paper usage and ensure reuse/reduce policy**  
 Monitor Performance consumption & Monitoring Implementation & review on 6  
 month basis up to 2012



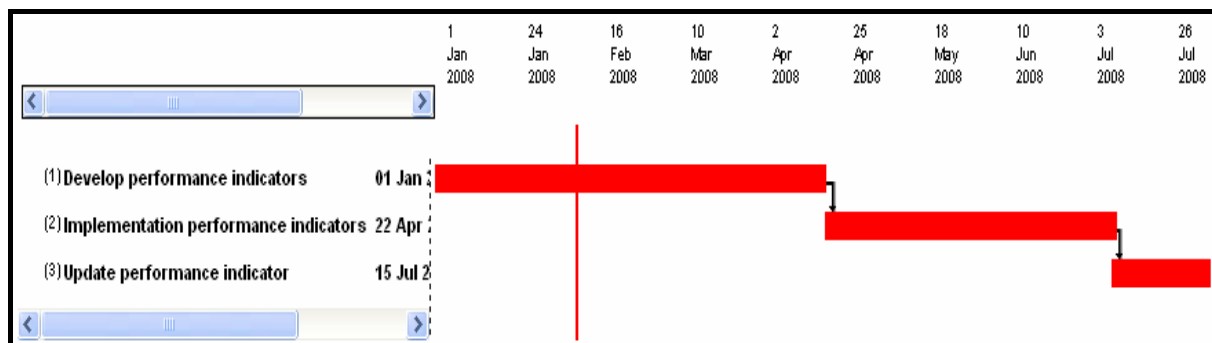
**Directorate: Housing & Corporate Affairs**

**Section: Corporate Affairs**

**Idea 31: Develop climate change performance indicators**

Circulate results within Organisation & further develop further develop

performance indicators and Annual Monitoring after Implementation up to 2012



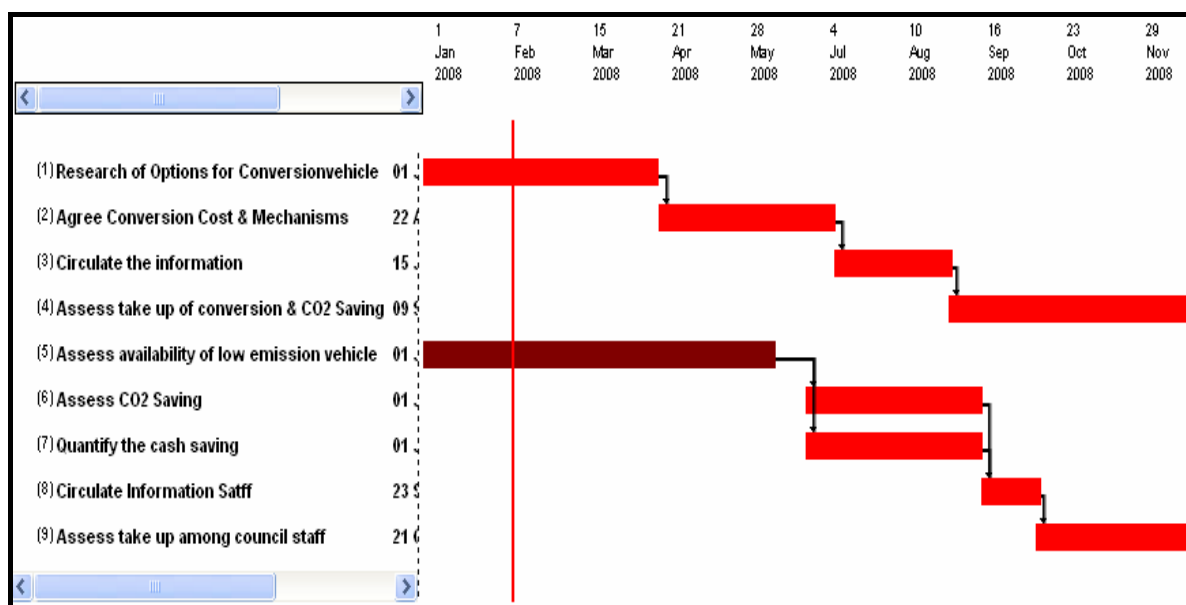
**Directorate: Housing & Corporate Affairs**

**Section: Corporate Affairs**

**Idea 32: Incentivise conversion of cars to biofuel & purchase of cars with low CO2 Emissions**

Assess take up of conversion and subsequent CO2 Savings & Assess take up

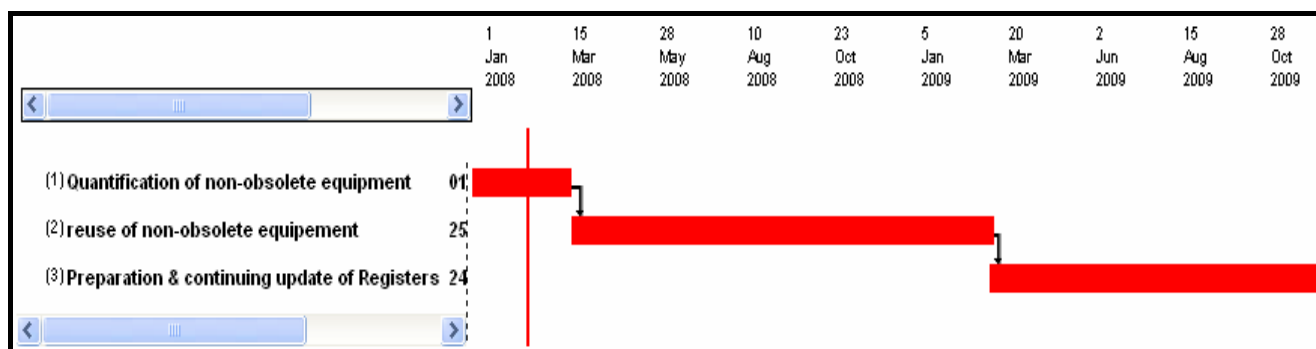
among council staff until to 2012



Directorate: C&E, Finance, I.T., Library.  
Section: Finance & I.T.

**Idea 33: Re-use of non-obsolete equipment**

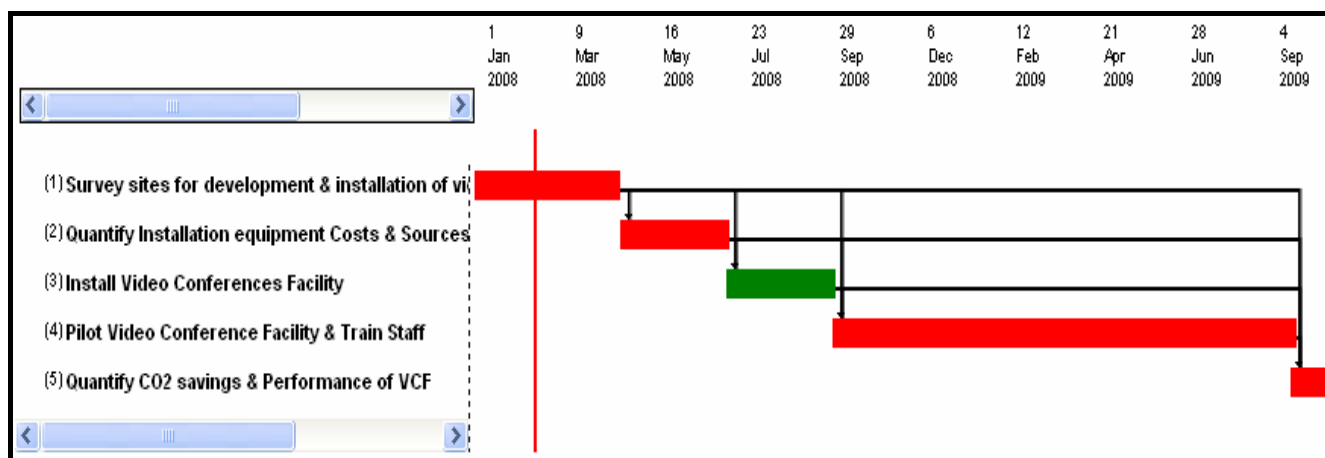
Quantification of CO2 Saving for using non-obsolete equipment on 6 month basis  
up to 2012



Directorate: C&E, Finance, I.T., Library.  
Section: Finance & I.T.

**Idea 34: Video Conferencing Facility in HQ**

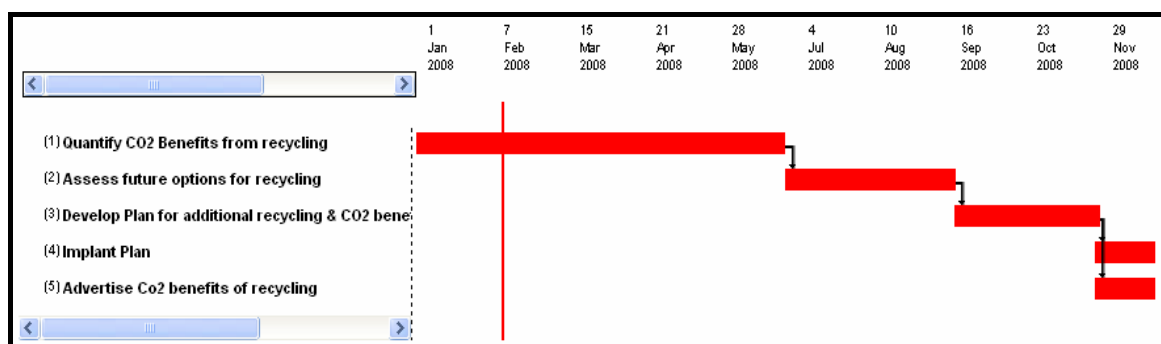
After 1 year Monitoring Implementation and review on 6 month basis up to 2012



**Directorate: Planning & Environment**  
**Section: Environment**

**Idea 35: Quantification of CO2 benefits from recycling**

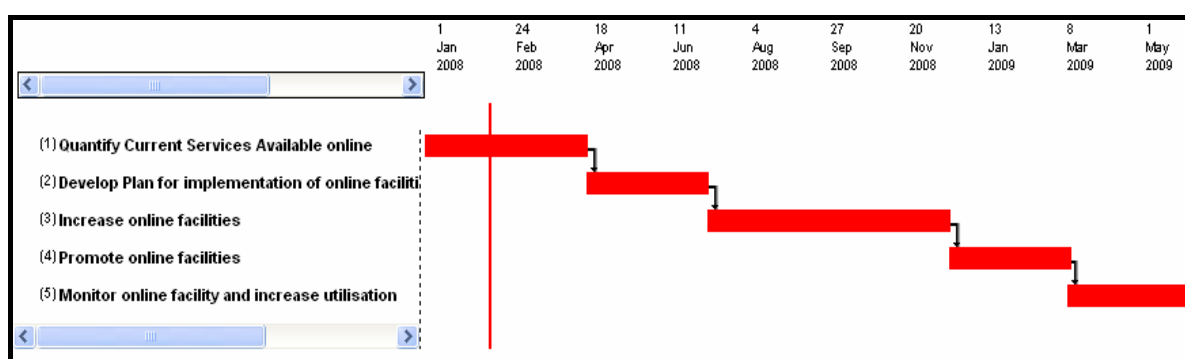
Advertise Co2 benefits of recycling & Implement Plan until 2012



**Directorate: C&E, Finance, I.T., Library.**  
**Section: Finance & I.T.**

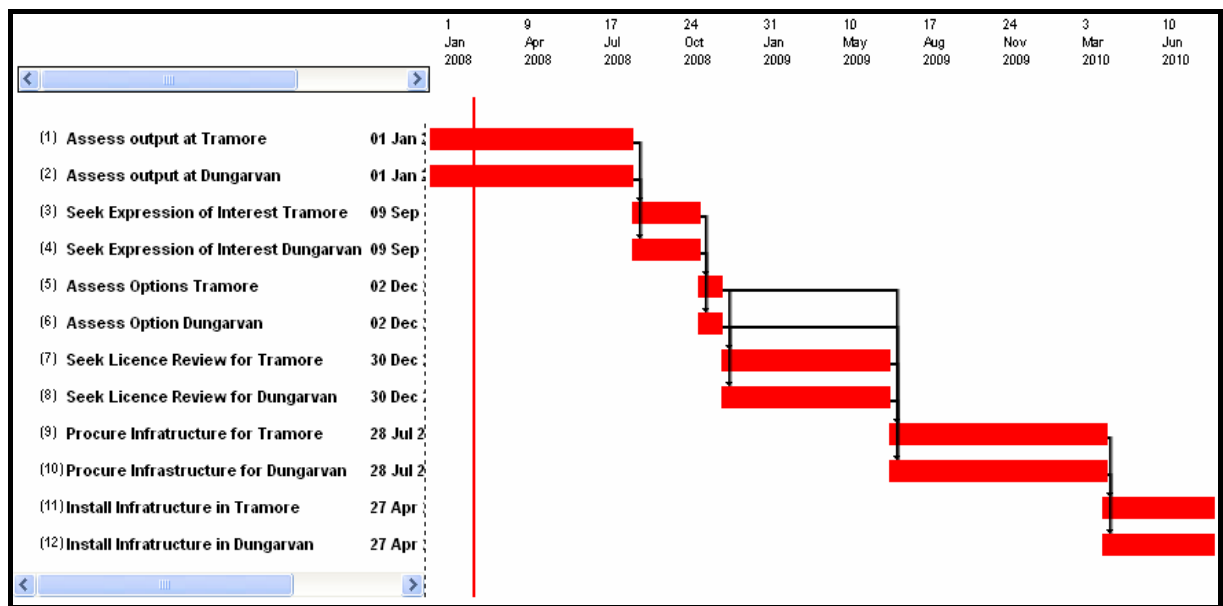
**Idea 36: Increase use of online Customer services**

Monitoring Implementation & CO2 saving & review on 6 month basis up to 2012



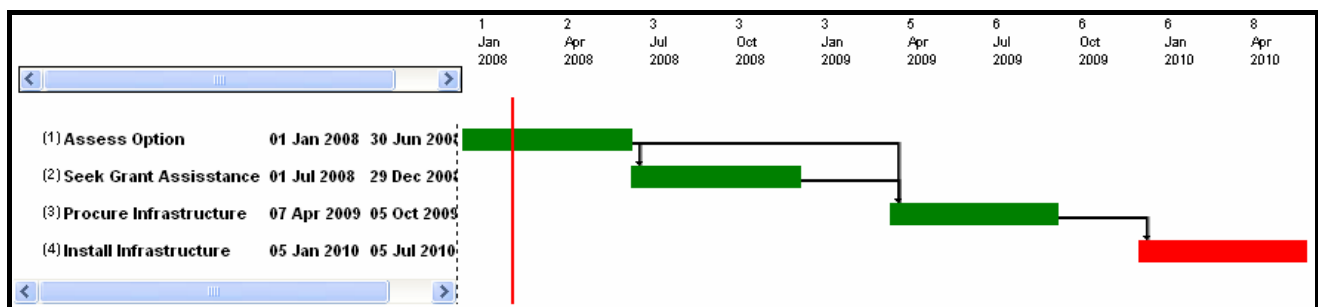
**Directorate: Planning & Environment**  
**Section: Environment**

**Idea 37: Utilise Landfill gas potential**  
**Annual Monitoring after Implementation up to 2012**



**Directorate: Planning & Environment**  
**Section: Environment**

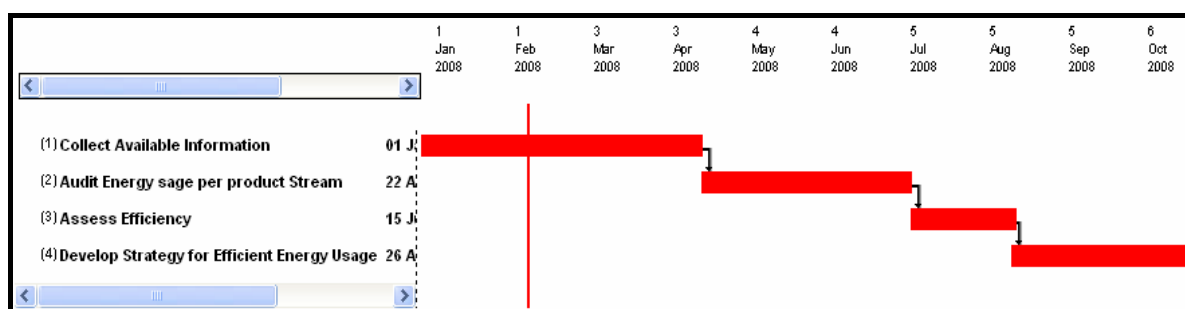
**Idea 38: Integrate Renewable energy lighting in Civic Amenity Sites, Bottle Banks & MRF**  
**Annual Monitoring after Implementation up to 2012**





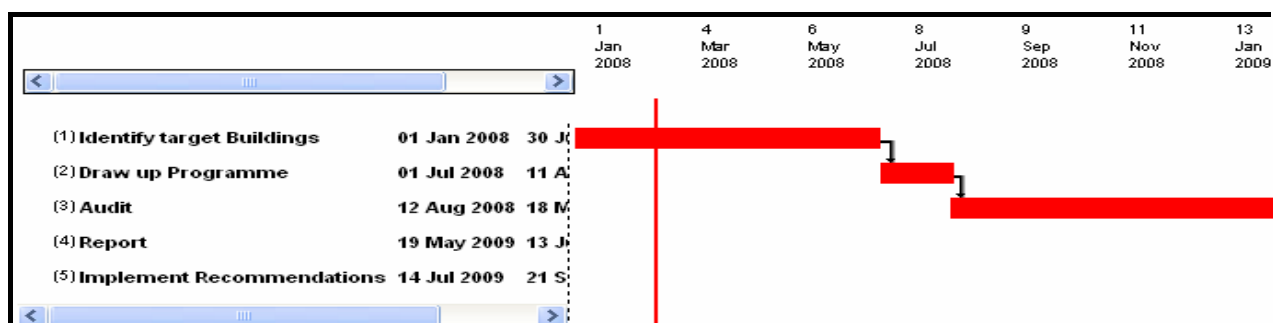
**Directorate: Planning & Environment**  
**Section: Environment**

**Idea 39: Energy Audit/Per Tonne per Product Stream in the MRF**  
Annual Monitoring after Implementation up to 2012



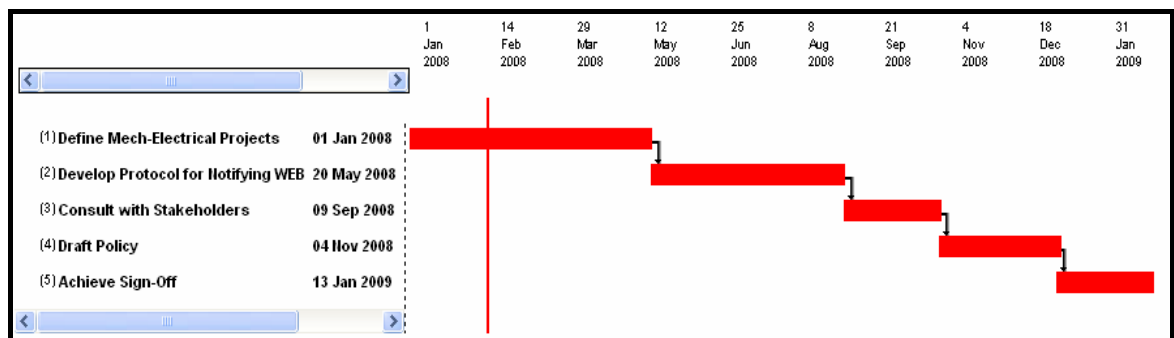
**Directorate: Planning & Environment**  
**Section: Environment**

**Idea 40: Audit Energy usage in County Council buildings each year**  
Annual Monitoring after Implementation up to 2012



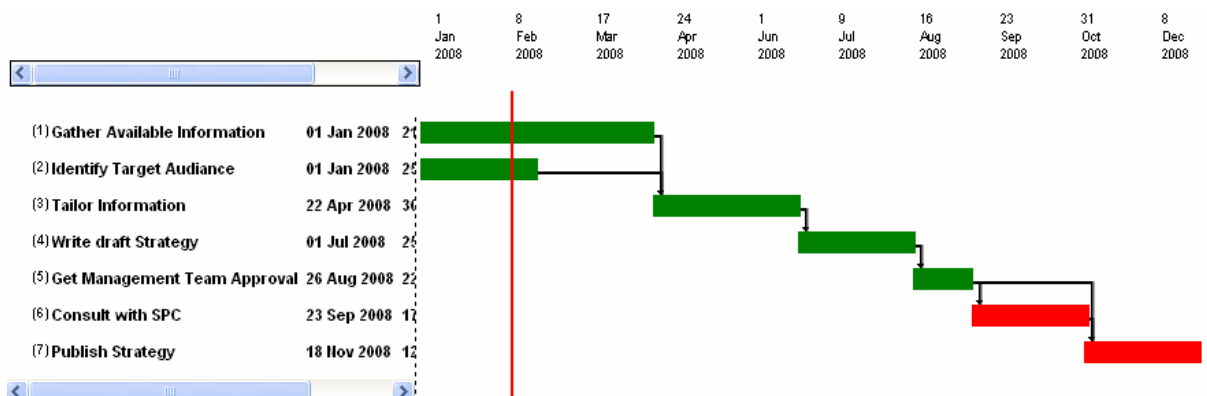
**Directorate: Planning & Environment**  
**Section: Environment**

**Idea 41: Utilisation of WEB in Mechanical & Electrical related projects**  
Annual Monitoring after Implementation up to 2012

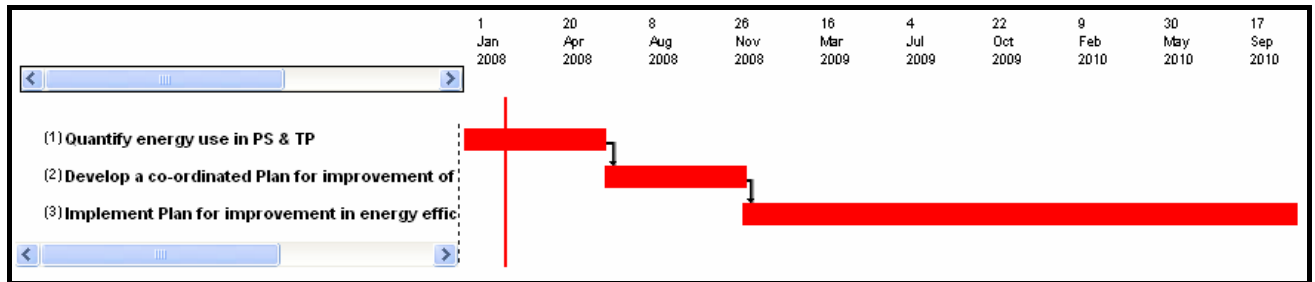


**Directorate: Planning & Environment**  
**Section: Environment**

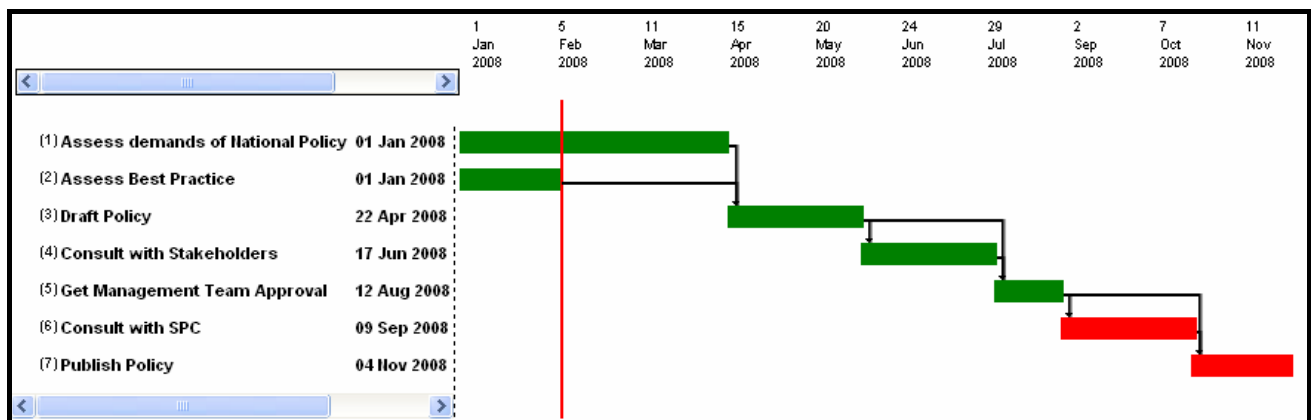
**Idea 42: Public Education**  
Annual Monitoring after Implementation up to 2012



**Idea 43: Optimise Energy Efficiency in Treatment Plants**  
**Monitor Results and Redevelop Plan to include additional Plants on 6 month basis up to 2012**

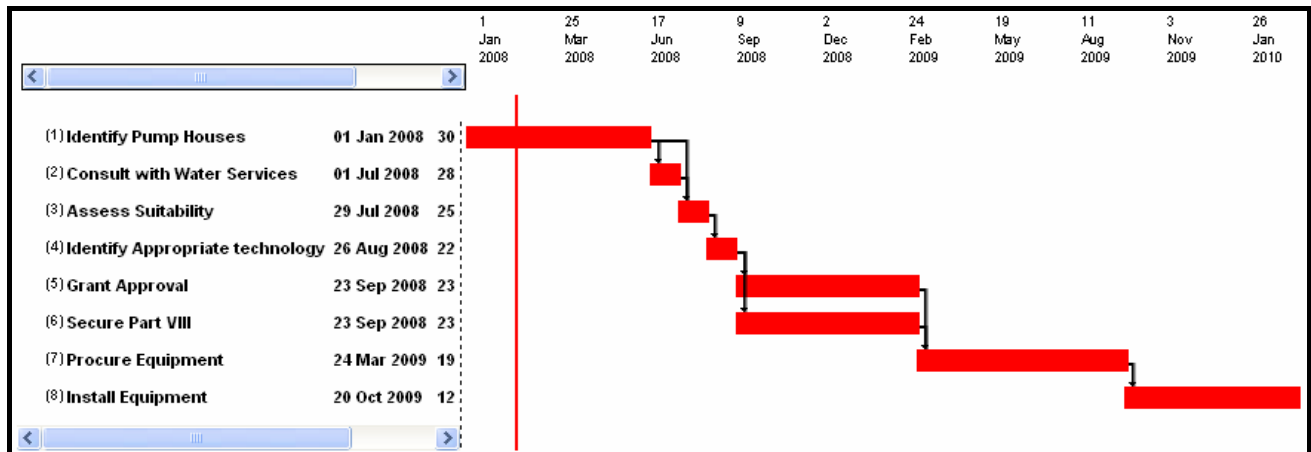


**Idea 44: Energy Policy**  
**Annual Monitoring after Implementation up to 2012**



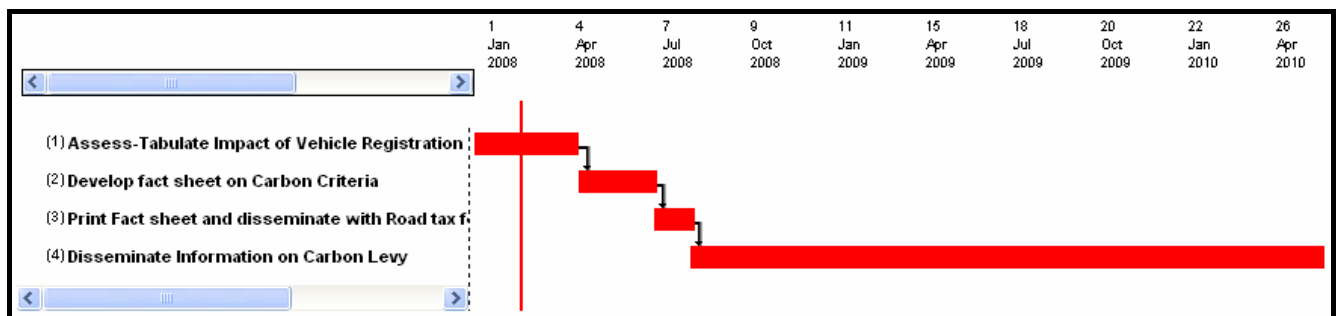
**Directorate: Planning & Environment**  
**Section: Environment**

**Idea 45: Wind Turbine installation at Council Pump Houses**  
**Annual Monitoring after Implementation up to 2012**



**Directorate: Housing & Corporate Affairs**  
**Section: Corporate Affairs**

**Idea 46: Green Vehicle Initiative**  
**Monitor Implementation & Quantify CO2 saving and review on 6 month basis up to 2012**



***Idea 47: Water recycling unit***  
**Monitor implementation and quality CO2 saving and review on 6 month basis**  
**up to 2012**

