



Sustainability Policy of the Office of Public Works (OPW)

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Executive Summary

The Office of Public Works (OPW) commissioned the drafting of a comprehensive Sustainability Policy and sustainability targets to be included in the OPW Statement of Strategy for 2008 - 2011 in July 2007. This report summarises this work.

A consultative process was undertaken with the support of a firm of consultants throughout the OPW to identify sustainability priorities, review current sustainability practice and develop a methodology to improve sustainability practice across the OPW. A review of OPW projects and activities identified a number of examples of good sustainability practice. However, it was also apparent that the various OPW Business Units were not necessarily aware of what others across the organisation were doing. A clear opportunity was identified to disseminate information on good sustainability practice more broadly across the OPW and further still across Government Departments and Bodies

Five sustainability priorities were identified through this consultative process with the OPW. These were based upon the challenges of the European Union Sustainable Development Strategy, upon which the current Irish Sustainable Development Strategy, currently being written, is based.

The OPW's key sustainability priorities are:

- **Reducing energy consumption and greenhouse gas emission**
- **Avoiding the generation of waste through life cycle thinking, reuse and recycling**
- **Green procurement**
- **Improving health and well-being; and**
- **Raising awareness of sustainability issues.**

For each of these sustainability priorities a number of indicators of its success were identified and are set out in the table below,

Sustainability Objectives	Primary Key Performance Indicators (Outputs)
<ul style="list-style-type: none"> To reduce energy consumption and greenhouse gas emissions across the OPW. 	<ul style="list-style-type: none"> Reduce OPW carbon emissions by 15% by 2012 from 2007 levels Reduce energy consumption in public buildings, for which OPW is responsible, by 15% by 2012 from 2007 Levels
<ul style="list-style-type: none"> To reduce and avoid the generation of waste through life cycle thinking and improved reuse and recycling. 	<ul style="list-style-type: none"> 25% waste reduction from 2007 levels across the OPW through improved resource and waste management and improved reuse and recycling by 2012
<ul style="list-style-type: none"> To procure products in a sustainable manner. 	<ul style="list-style-type: none"> 50% of products purchased by the OPW to follow OPW Green Procurement Guidelines by 2012 50% of products provided to other Government departments have a "green" option by 2012 Incorporate sustainable design strategies for all new build and major refurbishments
<ul style="list-style-type: none"> To reduce risks to health and the environment from OPW activities. 	<ul style="list-style-type: none"> Septic tanks/wastewater systems in all OPW occupied buildings to be subject to a risk assessment and any identified as potentially causing health and environmental risk are repaired/reconstructed by 2012 Risk assessments undertaken of all hazardous activities, materials and practices with actions identified and implemented to reduce identified risks by 2012
<ul style="list-style-type: none"> For all OPW staff to have a good understanding of sustainability, OPW's sustainability priorities and how these relate to the way they work. 	<ul style="list-style-type: none"> 100% of OPW staff to have attended sustainability training and to have incorporated sustainability practices into their day-to-day work activities and decisions making processes by 2010.

These high level targets generally have a 5 to 10 year timeframe and are supported by a series of achievable sustainability targets, which are detailed in the main body of this Report. A lead Business Unit is identified in each case charged with achieving the targets. Advice is provided on implementation and how to effectively monitor progress in a manner that involves and informs staff. A supporting document is additionally included which provides an overview of international, European and national strategic trends in sustainable development.

The report was drafted by Golder Associates on behalf of the OPW.

Part 1 - OPW Sustainability Policy and Ojectives

1.0 Draft OPW Sustainability policy and strategy

1.1 Context

Over the past 20 years there has been a growing global realisation that the current development models are unsustainable. In other words, we as a civilisation are living beyond our means. From loss of biodiversity (felling rainforests to over fishing), to the negative effects our consumption patterns are having on the environment and climate, our way of life is placing an increasing burden on the planet.

To this end, it is clear that there is a global need for development to become more sustainable. Sustainable development is widely defined as: 'development which meets the needs of the present generation without compromising the ability of future generations to meet their own needs'¹. Sustainable Development links the economic, social and environmental objectives of society in a balanced way and involves taking a comprehensive view of human betterment by:

- drawing on the social and environmental, as well as the economic, dimensions of welfare and development;
- considering the long term consequences of today's activities; and
- emphasising the importance of international co-operation in arriving at viable solutions.

The Office of Public Works (OPW) is keen to embed sustainability into the core of its activities. The OPW is the delivery arm of many State roles and services. It is therefore important for the OPW to be a leader in sustainability across government. Sustainability will be a key element of the OPW's Statement of Strategy for 2007-2010. This will include a Sustainability Policy and implementation plan which is structured in accordance with the 'Guidelines on the Preparation of Strategy Statements for Ministers and Secretaries Generals/Heads of Offices' (July 2007) (refer to Appendix A for overview of elements and structure of Guidelines).

In developing its Sustainability Policy and implementation plan, the OPW has identified a series of sustainability priorities which are in harmony and consistent with the Irish National Sustainable Development Strategy which is currently under development, and the European Union Sustainable Development Strategy (EU SDS). Five sustainability priority areas have been identified by the OPW. These are:

- reducing energy consumption and reducing greenhouse gas emissions;
- less generation of waste through life-cycle thinking, reuse and recycling;
- green procurement;
- improving health and wellbeing; and
- raising awareness of sustainability throughout the OPW and beyond.

¹ Original definition from the UN Brundtland Commission Report "Our Common Future", 1987

This section of the report provides a draft of sustainability inclusions that could be included into the OPW Statement of Strategy for 2007-2010. The elements include an OPW sustainability mission statement and mandate, environmental analysis, goals, objectives, outputs and outcomes, as set out in the Government Guidelines. As well as providing a stand alone Sustainability Policy Statement.

1.2 Sustainability Policy Statement

The policy statement should clearly indicate that sustainability will be central to and embedded within all OPW activities, and should be considered not just in the present but over the medium and long term. The statement should refer to OPW's core sustainability priorities: energy consumption and carbon emissions reduction, avoidance and reduction of the generation of waste, green procurement, improvement in health and wellbeing, and raising awareness of sustainability issues within the OPW and across its client Government departments.

1.3 Mission Statement and Mandate

The OPW's overall Mission Statement should include reference to sustainability. A suggested Mission Statement could read:

*The OPW is first and foremost a service organisation. Its ethos is client focus, timely delivery and value for money in a **sustainable** manner.*

The OPW may wish to consider including sustainability as a separate item within its delivery structure mandate. A suggested inclusion is provided below:

Sustainability: *sustainability will be central to and embedded within all OPW's activities related to providing property and construction services, flood risk management services, procurement services and heritage services.*

1.4 Environmental Analysis

Sustainability should be included as a separate heading within the OPW's 'other key factors in our environment' which looks at relevant issues to ensure that OPW's actions reflect the conditions within which the OPW currently operates. A suggested inclusion is provided below:

Sustainability

Sustainability is a key driver of Government strategy with environmental and sustainable development objectives set out clearly in a number of Government strategy documents, such as the National Climate Change Strategy 2007-2012, 'Making Ireland's Development Sustainable' and the European Union Sustainable Development Strategy.

The incorporation and embedding of sustainability principles within the core activities of the OPW has huge implications for the organisation in both the short and long term. It will not be 'business as usual'. The OPW has identified and will focus on five core sustainability issues over the next 10 year period. These five core areas have been identified through consultation throughout the organisation and represent the priority areas where OPW can have the greatest impact and make measurable progress towards becoming a sustainability leader in all its diverse areas of practice and service delivery. The five selected sustainability areas are:

1. *energy consumption and carbon emissions reduction*
2. *avoidance and reduction in the generation of waste*
3. *green procurement*
4. *improving health and wellbeing; and*
5. *raising awareness of sustainability issues within the OPW and across its client Government Departments.*

1.5 Goals, Objectives, Strategies, Outputs and Outcomes

Overarching OPW Sustainability Goal (Key Objective):

To fully integrate the principles of sustainable development into the services and day-to-day activities of the OPW and for the OPW to become a sustainability leader in all its diverse areas of practice and service delivery.

Objectives: *The OPW will achieve its sustainability objectives by focusing on five key areas for improvement over the five year period from 2007 to 2012. These areas are:*

- *Energy consumption and greenhouse gas emissions;*
- *Waste generation;*

- Procurement of products;
- Human and environmental health;
- Awareness of sustainability and appreciation of its relevance by all OPW staff.

How Sustainability Objectives will be Achieved: The OPW sustainability objectives will be achieved by:

- Setting clear and achievable targets
- Communicating targets throughout the entire organisation
- Engaging staff at all levels and within all Business Units in contributing towards achieving the targets
- Measuring and communicating progress towards targets on a regular basis and in a clear and simple manner
- Recognising staff contributions towards achieving targets and celebrating successes

OPW's overall sustainability objectives and specific targets under the five key focus areas within the next five year strategic planning period are summarised in Table 2.1 below:

Table 1.1 – Summary of proposed OPW sustainability objectives

New Strategy: Sustainability Goal	Sustainability Objectives	Primary Key Performance Indicators (Outputs)	Responsibility allocation	Secondary Performance Indicators (Outcomes)
To fully integrate the principles of sustainable development into the services and day-to-day activities of the OPW.	<ul style="list-style-type: none"> • To reduce energy consumption and greenhouse gas emissions across the OPW. 	<ul style="list-style-type: none"> • Reduce OPW carbon emissions by 15% by 2012 from 2007 levels • Reduce energy consumption in public buildings, for which OPW is responsible, by 15% by 2012 from 2007 Levels • Incorporate sustainable design strategies for all new build and major refurbishments 	<ul style="list-style-type: none"> • Heads of Business Units (MAC level) • Operations level Managers 	Refer to specific sustainability objective, outcomes and activities table
	<ul style="list-style-type: none"> • To reduce and avoid the generation of waste through life cycle thinking and improved reuse and recycling. 	<ul style="list-style-type: none"> • 25% waste reduction from 2007 levels across the OPW through improved resource and waste management and improved reuse and recycling by 2012 	<ul style="list-style-type: none"> • Heads of Business Units (MAC level) • Operations level Managers 	Refer to specific sustainability objective, outcomes and activities table
	<ul style="list-style-type: none"> • To procure products in a sustainable manner. 	<ul style="list-style-type: none"> • 50% of products purchased by the OPW to follow OPW Green Procurement Guidelines by 2012 • 50% of products provided to other Government departments have a "green" option by 2012 	<ul style="list-style-type: none"> • Heads of Business Units (MAC level) • Operations level Managers 	Refer to specific sustainability objective, outcomes and activities table
	<ul style="list-style-type: none"> • To reduce risks to health and the environment from OPW activities. 	<ul style="list-style-type: none"> • All OPW occupied septic tanks/ wastewater systems to be subject to a risk assessment and any identified as potentially causing health and environmental risk are repaired/reconstructed by 2012 • Risk assessments undertaken of all hazardous activities, materials and practices with actions identified and implemented to reduce identified risks by 2012 	<ul style="list-style-type: none"> • Heads of Business Units (MAC level) • Operations level Managers 	Refer to specific sustainability objective, outcomes and activities table
	<ul style="list-style-type: none"> • For all OPW staff to have a good understanding of sustainability, OPW's sustainability priorities and how these relate to the way they work. 	<ul style="list-style-type: none"> • 100% of OPW staff to have attended sustainability training and to have incorporated sustainability practices into their day-to-day work activities and decision making processes by 2010. 	<ul style="list-style-type: none"> • Heads of Business Units (MAC level) • Operations level Managers 	Refer to specific sustainability objective, outcomes and activities table

1.6 OPW's Sustainability Strategy

In pursuit of becoming a leader in sustainable development across Government the OPW has undergone a consultative exercise to identify its key sustainability priorities which reflect those of Government. From these priorities, a series of intended actions have been identified and tasked to lead Business Units. These can be found in Part 1, Section 3 of this report.

In pursuing these actions the OPW will continue in a consultative manner whereby the different Business Units 'buy into' the process and become engaged in helping to achieve the overall sustainability targets. Raising awareness of sustainability issues will be a priority first step. This will include encouraging all staff to consider their day-to-day activities and actions, with a view to identifying opportunities for contributing to the OPW sustainability goals.

Different Business Units have been identified as lead Units for different sustainability targets and activities. Each Business Unit will examine how they will undertake these activities and which sections within the Unit will lead and contribute to specific tasks. The Sustainability Task Force will provide strategic and practical support to the Business Units.

OPW's Strengths

Over the past few years a number of the OPW Business Units have developed and initiated a variety of successful sustainability activities. These have been documented and serve as opportunities for further and improved sustainable development across the OPW in line with the new Sustainability Policy.

A Sustainability Task Force has been set up to initiate and drive the sustainability agenda across the OPW. The Sustainability Task Force will continue to play a key leadership role in the continued development and implementation of the sustainability policy across the OPW.

Opportunities

Building upon existing good practice in sustainability and through actively pursuing the OPW's challenging sustainability targets, the OPW can become a leader in Sustainable Development in Ireland. The OPW will record and communicate its progress and contributions to sustainability and will take the opportunity to work with client Government Departments/Offices and Agencies to influence their actions in a more sustainable way.

Challenges

There are a number of key challenges facing the OPW. These are associated with provision of sufficient resources particularly in the short- to medium term, and in ensuring effective communication and support across the eight OPW Business Units. The key challenges are:

- Ensuring there are sufficient and skilled resources to kick-start this ambitious programme – this will be important particularly in terms of bringing staff on board and providing support during the initial stages when people are less familiar with the concepts of sustainable development.
- Sufficient resources for training and awareness-raising. Raising awareness of staff in sustainability will be fundamental to the ultimate success in meeting OPW's sustainability targets. All staff will need to be engaged and active in examining and improving their day-to-day working practices and to strive to undertake them in a more sustainable manner.
- Co-ordination between the Business Units. To ensure that good practice and lessons learnt are effectively disseminated, the Business Units will need to ensure that they are communicating effectively with one another. The Sustainability Task Force should act as a conduit to this.
- Business Units should assign key sustainability leaders to take overall responsibility for meeting the targets assigned to their Business Unit and in keeping staff motivated and up to date on progress.
- Decentralisation – the OPW is due to decentralise to Trim, Co. Meath in 2009 and regionalise to Kanturk Co. Cork and Claremorris Co Mayo. The OPW is also responsible for procuring office buildings for all decentralising Government Departments and agencies.

- Scepticism. There is a certain degree of scepticism across the population broadly to sustainability and various issues associated with it. However, the Irish Government is committed to development in a more sustainable manner, as is the OPW. Strong and decisive leadership within the OPW in meeting its sustainability challenges will be vital to its overall success.

Risks

The greatest risks are associated with lack of buy-in and engagement of staff across the OPW. Without staff at all levels of the OPW taking decisive actions to improve the sustainability performance of the OPW it will be difficult to achieve the targets set. Motivation and strong leadership are essential for success. Failure to succeed in meeting the agreed sustainability targets could represent a potential risk to the reputation of the OPW.

2.0 Context to the development of the OPW sustainability priorities

2.1 Introduction

This section provides the context from which the OPW sustainability Policy and strategy was developed and includes a brief overview of the OPW Business Units activities, their sustainability priorities and the overall sustainability priorities across the OPW. These were determined through a series of consultative workshops and meetings undertaken during July and August 2007. During these workshops and meetings, Business Unit representatives were asked to identify their top three sustainability priorities for their particular Business Unit. These priorities were selected from the translated sub-themes from the seven sustainability challenges of the European Union Sustainable Development Strategy (EU SDS). (refer to Appendix B for further details on the EU SDS themes and translated sub-themes). The EU SDS was used as a starting point as the current Irish Sustainable Development Strategy is currently under development and is to be based upon and reflect the EU SDS, whilst taking account of Ireland's specific sustainability needs.

For each Business Unit, the priorities of the individual representative were aggregated and each Business Unit's combined top priorities determined. These are shown in Table 2.1 below. Further detail on the workshops, meetings and prioritisation process can be found in the **'Interim Report on the development and drafting of a sustainability policy for the Office of Public Works'** (August 2007).

This section also provides an overview of existing sustainability good practice being undertaken across the OPW. These were identified from the workshops and meetings and also through a series of site visits to "typical" examples of OPW activities and projects². The site visits were undertaken during August 2007.

2.2 Overview of the OPW Management Structure

The OPW's senior management structure is organised around the interlinking entities of the Board and the Management Advisory Committee.

The Board comprises a Chairman and two Commissioners and is the legal entity referred to in relevant legislation and regulations concerning the Commissioners of Public Works.

The Board and the Directors of Architecture, Engineering Services and Corporate Services, together comprise the Management Advisory Committee (MAC). The MAC is the Senior Management group, which advises the Minister of State, on policy and directs the operational activities and functions of the OPW. It also advises and supports the Board in the exercise of its statutory functions.

The operations of the OPW are carried out by eight Business Units, each directed by a member of the MAC. These are:

- Architectural Services;
- Engineering Services;
- Facilities Management Services;
- Government Supplies Agency;
- Heritage Services;
- Project Management Services;
- Property Maintenance Services;
- Property Management Services.

The Business Units are supported centrally by the Corporate Services Unit managed by the Director of Corporate Services.

² The Setanta Centre, Dublin; the Children's Science Museum, Dublin (currently at design stage); an Arterial Drainage maintenance operation, Trim, Co. Meath; Procurement of uniforms for Gardaí.

2.3 Summary of activities of the Business Units

Table 2.1 - A summary of the functions of the eight OPW Business Units and the key sustainability priorities identified by each Business Unit.

Business Unit	Activities	Interrelations	Sustainability Priorities
Architectural Services	<ul style="list-style-type: none"> design public sector buildings (preparatory, preliminary design, sketch scheme, tender documentation, contract, defects liability); site and building inspections; provide architectural advice provide project management advice provide conservation advice provide urban design and landscape advice 	Architectural Services design buildings, co-ordinate the design teams and provide architectural advice.	<ul style="list-style-type: none"> Re-use and adaptation of existing buildings Optimisation of development potential Sustainable design strategies Energy consumption Reduction of GHG emissions Social & environmental performance of products and processes
Engineering Services	<ul style="list-style-type: none"> Mechanical & Electrical Services 	As part of Engineering Services they give advice to Architectural Services on Mechanical and Electrical services.	<ul style="list-style-type: none"> Reduction of GHG emissions Energy consumption Social & environmental performance of products and processes Resource efficiency and use of eco-innovations
	<ul style="list-style-type: none"> civil and structural engineering services fabrication service arterial drainage, flood defence maintenance & flood risk management flood relief works hydrometric data collection regulation of works to watercourses procurement and maintenance of plant and equipment 	They undertake drainage works, and other works connected to rivers and floods. Flood relief works undertaken with assistance from Project Management Services.	<ul style="list-style-type: none"> Protection of public health threats Use of non-renewable material resources Loss of biodiversity Life style related and chronic disease
Project Management Services	<ul style="list-style-type: none"> manages projects in terms of delivering new constructions, refurbishment, conservation, and major maintenance works by means of Project Management Plan (PMP) ISO manual work closely with Engineering Services on flood relief programme Services offered include: <ul style="list-style-type: none"> development of brief advice on, and management of, procurement and compliance issues advice on planning, Health and Safety quantity surveying 	Project Management Services coordinate the work of Architects, Engineers and other services at the project stage on behalf of the client.	<ul style="list-style-type: none"> Green procurement Raising awareness of sustainability issues Energy consumption Pollutant emissions

Property Management Services	<ul style="list-style-type: none"> management of the State's property portfolio procurement of office accommodation for Government Departments, Offices and Agencies. 	Property Management Services work with Project Management Services and Architectural Services when selecting the location and coordinate the management of the property.	<ul style="list-style-type: none"> Avoid generation of waste Life cycle thinking Reuse & recycle Energy consumption Public passenger transport Reducing environmental impact
Property Maintenance Services	<ul style="list-style-type: none"> Maintenance of building fabric of Government property stock Responsible for minor capital works 	Property Maintenance Services coordinate the work of Architects, Engineers and Contractors when maintaining buildings.	
Facilities and Event Management Services	<ul style="list-style-type: none"> event management, grounds maintenance, security and waste management 	Deal with additional non-property and non-project related management issues of specific buildings.	
Heritage Services	Responsible for: <ul style="list-style-type: none"> National Monuments, Historic Properties, 	Deal with property of historic and natural value.	
Government Supplies Agency (GSA)	Procurement of a variety of goods, supplies and services including protective clothing, uniforms, cars, energy, office supplies and janitorial supplies.	Provide goods for all above Services and other Departments outside the OPW	<ul style="list-style-type: none"> Avoid generation of waste Life cycle thinking Reuse & recycle Use of renewable energy sources including biomass Transport fuels including biofuels Production & use of chemicals & pesticides that do not pose risk to human environment

2.4 Business Unit Sustainability Priorities

Following the workshops and meetings with representatives from all of the OPW Business Units, the priorities of each of the Business Units were aggregated and the overall sustainability priorities for the OPW as a whole determined. Five clear priorities came out from this prioritisation process. These were:

- Energy consumption and reducing green house gas emissions
- Avoiding the generation of waste through life cycle thinking, reuse and recycling;
- Green procurement;
- Protection again health threats; and
- Raising awareness of sustainability issues, which is a cross-cutting theme touching on all aspects of sustainability.

These priorities have been the basis for the subsequent development of the OPW policy, strategy and targets.

2.5 Review of sustainability-orientated practice in the OPW

The workshops, meetings and site visits provided a good understanding of current sustainability-orientated practice, and identified opportunities to develop these further. The site visits also provided an insight to some of the practical constraints facing OPW in embedding sustainability practice across the organisation. It is also apparent that the various Business Units were not necessarily aware of what others across the organisation are doing. There is a clear opportunity to disseminate information on good sustainability practice more broadly across the OPW and further still across Government. These examples also provide a basis from which good practice can be expanded and further developed across the OPW. A summary of sustainability- orientated practice currently being undertaken within the different Business Units is presented in Table 2.2.

Table 2.2 - A summary of existing sustainability good practice across the OPW

Architectural Services
<ul style="list-style-type: none"> • Tradition of and maintenance of designing quality building with a long life span; • Experience and expertise in restoration and adaptation of existing buildings; • Quality Management System that meets the requirements of IS EN ISO 9001:2000 and provides for design reviews and audits of projects; • Developing an output specification with sustainable strategies and sustainable construction materials; • Working with M&E Services to include passive ventilation and other best practice energy efficiency initiatives in building design; • BREEAM trained staff, use BREEAM as a basis during design, developing bespoke BREEAM system with M&E for OPW specific needs; • Sustainability included in Public Private Partnership [PPP] tenders and Design Build tenders (since September 2002) • Initiated and maintained the Sustainable Design and Universal Access Work Group; • Life cycle tool currently under development.
Engineering Services
<ul style="list-style-type: none"> • Many hydrometrics chart-recorders utilise solar powered data loggers & starting to use digital data loggers • M&E Services design best practice in terms of energy use, for example, drive towards passive ventilation over air conditioning, utilise computer modelling during early design phase to consider factors such as natural lighting. • BREEAM trained staff, use BREEAM as a basis during design, developing bespoke BREEAM system with Architectural Services for OPW specific needs • Some opportunity to reduce energy consumption of electrical equipment and appliances during routine and ad hoc maintenance replacing old with more energy efficient new • Energy consumption data-loggers currently targeted at buildings over 1000m². Identified energy wastage and opportunities for savings • Currently piloting energy awareness project. Most successful when top management commitment. Typically 15% energy savings achieved • Examining various alternative energy sources, in particular wood pellets
<ul style="list-style-type: none"> • Utilise Portland cement substitutes from recycled furnace ash. • Some ad hoc office recycling
<ul style="list-style-type: none"> • Examining option of using biofuels in vehicle fleet (currently a contentious issue) • Use bio-degradable engine oil and long-life hydraulic oil in excavator fleet for arterial drainage maintenance
<ul style="list-style-type: none"> • Holistic and consultative approach to river catchment management to reduce impact of flooding, including examining reinstatement of flood plain areas, use of both traditional structural solutions together with softer non-structural solutions, such as flood warning systems – reduce risk to life, mental stress, hardship and public health issues associated with flooding • Have run public awareness campaigns on flooding and flood risk management
<ul style="list-style-type: none"> • Both within Drainage Maintenance and many other broader flood risk management functions, there is a significant amount of consultation with environmental stakeholders, NGOs, etc. as part of their processes • Significant effort taken to reduce impact of dredging work on the environment – all operators have been trained in environmental practices and use a 10 point good practice plan. Conduct a range of environmental research projects and proactively complete river enhancement in partnership with Fisheries Board.

Property Management Services

- Consideration given to access to Government buildings by the public who utilise public transport

Heritage Services

- The Botanic Gardens are looking at the use of 'alternative' energy sources for heating their greenhouses on a pilot basis
- Work with Bórd Fáilte (tourist board) on awareness raising on Irish Heritage and recognise an opportunity to include sustainability

Government Supply Agency (GSA)

- Report has been commissioned by GSA on identifying the most fuel efficient vehicles on the market
- "green" fuels (bio-diesels, ethanol, etc.) have been made available to all Government Departments
- Cleaning and janitorial products are moving in the direction of all being "eco/green" products due to high demand from prison and Gardaí (80% of all cleaning products procured through GSA)
- Checks of manufacturing suppliers overseas to ensure minimum health and safety standards, no child or exploitation of labour etc.

Corporate Services

- IT Department looking to reduce the energy consumption and number of servers
- Newer printers have power-save mode
- Library services attempt to encourage shift away from paper documentation
- All electrical equipment disposed via WEEE accredited recycling company
- Some computers which have reached the end of their useful life within the OPW are sent on to schools in Africa via Camara
- Furniture department recycle unwanted furniture where possible
- Plan to include use of "eco/green" cleaning products as requirement in new cleaning contracts for 51 St Stephen's Green and Hatch Street Buildings
- Property Maintenance use only certified sustainability sourced hardwood timber and tend to use water-based paints except where high gloss finish is required.

General

- The OPW Green Team has undertaken various activities to raise awareness of environmental and sustainability issues – bottom up approach has had limited success in spite of large efforts from those involved.
- The workshops undertaken as part of this project have provided a catalyst for various individuals to find out more about sustainability and what other Business Units are doing

3.0 Opportunities and methods for implementing further sustainability practice

The workshops and site visits undertaken identified a variety of sustainability activities already being undertaken. These existing examples of good sustainability practice provide substantial opportunity for further development across the OPW.

These opportunities can be realised by a combination of efforts, including setting sustainability targets and through the allocation of responsibilities to each of the Business Units. Engaging with staff across the OPW at all levels will be essential to success and should involve raising awareness to sustainability issues and helping each person to examine and change their day-to-day practices in line with the overall OPW sustainability goals.

The public image of OPW is important and the OPW will want to demonstrate its “green” credentials, not only through policy commitments, but through demonstrating actions on the ground.

It is important that the focus on sustainability remains broad and that social, socio-economic and economic issues are considered as well as just environmental issues. The key sustainability priorities identified by the OPW, targets and proposed activities/ actions (found in Section 4) in themselves incorporate the broader aspects of sustainability, but it will be important that the OPW maintains focus on the social aspects of these as well as the more obvious environmental outcomes, i.e. the impact on people by the activities and involvement of people in achieving the targets.

The following provides some broader discussion around the targets and activities identified later in Section 4 and provides some suggested methodology to facilitate their progress.

3.1 Energy consumption and reducing Green House Gas Emissions

There are a number of challenges facing the OPW in improving energy consumption and reducing greenhouse gas emissions. One of the main challenges is that individual sections are not responsible for paying their utility bills (utility bills are paid centrally), which not only remove the direct financial incentives to reduce utility bills but also means that Departments do not monitor their energy or water consumption.

The OPW (Mechanical and Electrical) Engineering Services is currently undertaking an energy monitoring programme which is providing information to Departments involved in the programme on their energy consumption. In parallel to this, Engineering Services have piloted an energy conservation project. The feedback from this pilot has been very positive and the levels of energy use has decreased on average by 15%, from changes in actions of those involved, through turning off electrical appliances, lights, etc. This pilot is in the process of being expanded across owned and occupied Government buildings over 1000 m². It is also clear that there a number of high energy users, such as the IT Department, who would benefit from specific energy monitoring of their activities. This could enable them to firstly realise their scale of energy usage and also to monitor the impact of any energy efficiency changes they wish to implement. Consideration should be given to expanding the energy monitoring activities to specifically identified high energy users.

From an energy management perspective, it would clearly be highly advantageous for individual sections to be responsible for their own energy bills. However, the current centrally managed system is unlikely to change in the short to medium term. Measuring energy usage through other means, such as those being utilised by the Mechanical and Electrical Services, appears to provide a good alternative. The key to encouraging change will include raising awareness to energy conservation, providing individual Departments with information on their energy consumption and the equivalent carbon footprint, providing baseline information for typical energy consumption for similar types of building (so that comparisons can be made against the norm or good practice), providing guidance on how to undertake energy conservation measures, providing “good stories” of how other Departments have reduced their energy consumption and providing incentive schemes. Typical energy conservations measures are likely to initially include: replacing incandescent light bulbs with energy-efficient bulbs, replacing heating systems with more efficient systems, improving the insulation properties of buildings (roofs, walls, doors, windows, etc.), auto-off switches for heating and lighting when rooms are vacated, replacing old appliances with “A” rated appliances, etc.

The logical next step as progress develops and lessons are learnt from the energy conservation activities, is to expand the energy

monitoring activities further to buildings smaller than 1000 m², and to explore opportunities for buildings where Government only occupy certain floors.

The OPW are already utilising best practice guidance in energy-efficient design, for example, through using and developing BREEAM for OPW's specific needs. By combining high energy-efficient design and monitoring energy consumption during building occupation and use, best practice can be further refined.

OPW are improving energy consumption and reducing greenhouse gas emissions through consideration of energy consumption during construction activities. The OPW can include contractual requirements for Site Waste Management Plans for example, whereby greenhouse gas emissions can be reduced through diverting waste from landfill, efficient ordering and associated reduced transport miles, etc.

The OPW may want to be seen to be promoting renewable energy sources. Solar panels and micro-turbines are highly visual evidence of the use of renewable energy sources and the incorporation of these in OPW activities and projects where feasible should be given consideration. Where it is not possible to incorporate these "on-site" renewable energy sources into new design or to retrofit to existing properties, exploration of purchasing a proportion of delivered energy from renewable suppliers (who supply the grid) should be examined and the proportion purchased reported in parallel to the energy conservation and efficient measures.

Vehicle transport contributes a significant proportion to overall global carbon emissions. There is an on-going international debate regarding the use of certain bio-fuels and how sustainable these are. At this current point in time there is no conclusive decision one way or the other as to whether bio-fuels are sustainable fuels. A recent UN report³ said bio-energy represents an "extraordinary opportunity" to reduce greenhouse gas emissions. But it warned that "rapid growth in liquid bio-fuel production will make substantial demands on the world's land and water resources at a time when demand for both food and forest products is also rising rapidly." There are also concerns about loss of biodiversity of the development of mono-crops and associated soil loss and nutrient leaching, as well as both positive and negative impacts on livelihoods. At this time it would be prudent for the OPW to focus on other methods of reducing their emissions from vehicles through frequent and thorough servicing and maintenance of existing vehicles (including ensuring vehicles are operating with properly inflated tyres) and selecting energy efficient vehicles when purchasing new vehicles. Encouraging staff to drive in a manner that reduces fuel consumption is also important (reducing hard acceleration, etc.).

3.2 Avoiding the generation of waste through life cycle thinking and reuse and recycling

The OPW is currently undertaking a variety of recycling and waste reduction activities, a number of which tend to be on an ad-hoc basis, with individuals taking a personal lead. Commitment from senior management and an overarching OPW waste reduction policy would provide a good starting point to formally support and develop these initiatives. Easy quick wins, such as reducing paper usage can provide a focus for staff and quick and tangible results. Such activities should include: reducing volumes of use through only printing what is required, double side printing, use of recycled paper and recycling paper to be disposed, etc. Staff should be actively involved in identifying opportunities to reduce paper waste to facilitate "buy in" to the process and provide incentive for implementation. Broader office recycling schemes, which introduce other opportunities for recycling such as cans, card, plastic, glass, printer cartridges, etc. can be introduced as enthusiasm is initiated. Items such as electrical appliances fall under WEEE regulations so there is a legal requirement on electrical suppliers to take back electronic equipment. Where the OPW are replacing electrical equipment they can legally require the supplier to take away and recycle the old equipment.

Greater use of electronic data rather than paper based documentation was identified by a number of the Business Units as an opportunity for reducing the volume of paper usage, particularly for distributing reports and documents across Government, for procurement purposes, reference material, etc. However, consideration should also be given to reducing the size of documents even when in electronic format, as people often print out documents. Clearly any actions to reduce paper usage needs to go hand-in-hand with awareness raising activities and associated incentives.

Within the construction environment the OPW should explore opportunities within contractual arrangements to require contractors to produce and adhere to a Site Waste Management Plan, which should not only reduce the volume of waste going to landfill but also encourage efficient material procurement and reduce waste production on site.

³ UN Energy "Sustainable Bioenergy: A Framework for Decision Makers"

During design stages there are obvious opportunities to specify recycled materials in design and specify fittings which reduce resource use. For example, although the cost of waste and wastewater supply and treatment is relatively low in Ireland at the moment, given the trend across the rest of Europe this is likely to change, and opportunities should now be explored to reduce water wastage through for example, specifying low flow water fittings, grey-water reuse, etc.

3.3 Green procurement

The Government Supply Agency (GSA) currently provide "green" items within their various supply catalogues. However, the up-take of such products by recipient Government Departments is variable, either through lack of awareness, lack of will or lack of information. The OPW has the opportunity to take a lead in this direction initially by implementing and developing a policy to procure more sustainably. As a starting point the OPW can follow the lead set by the Prison Service in procuring "green" or "eco" janitorial and cleaning products. Based on this experience and lessons learnt sustainable procurement activities can be expanded and developed further to include for example, recycled paper, recycled printer cartridges, other green/recycled office consumables, forest stewardship council (FSC) wood and wood products, crushed recycled aggregates, blast furnace cement replacement, etc. There are many examples of Government Departments developing similar green procurement initiatives across the world. A good example is Santa Monica Environmental Preferable Purchasing⁴ in the United States. To encourage sustainable "green" procurement, involvement of the staff that use the products will be vital to success. For example, in Santa Monica where they have been developing and using an Environmental Preferable Purchasing system since the mid 1990s they have involved staff and end-users in selecting and evaluating products from the beginning.

The GSA procure a number of items, such as Garda uniforms, from overseas developing and less developed countries. They currently undertake some initial monitoring of working conditions within the manufacturing facilities prior to the start of new contracts, however, this is not well formalised. The GSA should consider utilising international guidance on minimum working standards, such as those developed by the International Labour Organisation (ILO) and SA 8000 and also for minimum environmental standards (various available from the World Bank, IFC, etc.). There is currently some discussion of involving a local based consultant in the countries where such facilities are used to carry out ongoing monitoring of facilities. The GSA could consider using the skills of a local NGO or a locally based international NGO experienced in international labour conditions and also in environmental issues.

There are further opportunities to build upon the energy efficiency and waste reduction measures suggested above in improving the sustainability of the procurement of goods and materials in the built environment. Utilising existing tools the OPW have and are currently developing such as, the sustainable life cycle assessment tool and the bespoke BREEAM based sustainability tool, provide opportunity for improved specification and procurement of environmentally sustainable construction and building materials and influencing developers and contractors to operate in a more sustainable manner on site. Similarly, in operation and maintenance, Property Maintenance Services can examine their procurement (and disposal) procedures for replacement materials, equipment, furniture, etc. and explore the opportunity to replace these with items or materials from a more sustainable source, either utilising the GSAs labelled "green" products or utilising other tools within the OPW.

Consideration should be given to extending the requirement to use "green" or "eco" cleaning products within the OPW and their cleaning contractors. This was identified by a number of OPW representatives as something they would like to consider at the next contract renewal stage. Cleaning and facilities management contracts could be appropriately reviewed to include a requirement for such cleaning products to be used. Some thought and consideration will be needed to define what is meant by "green" cleaning products. Utilising the EU eco-labelled products could provide a good starting point.

3.3.ii Sustainable Timber requirements

The OPW requires wood that is used for construction in its projects to be legal and sustainable in accordance with European Union regulations regarding public procurement.

Contractors must avoid sourcing illegally logged timber in accordance with the EU illegal logging action plan known as Forest Law Enforcement, Governance and Trade (FLEGT).

⁴ The City of Santa Monica's Environmental Purchasing: A Case Study, United States Environmental Protection Agency report EPA742-R-98-001, March 1998.
Green Building and Construction Guidelines, City of Santa Monica, 2000.
Environmentally Preferable Purchasing 2002/2003 Annual Report, City of Santa Monica, 2004.

Endangered species on the C.I.T.I.E.S should not be used.

Contractors are required to demonstrate their compliance with the OPW's timber sustainability requirements. Such compliance should be demonstrated by credible evidence of verification that shows that the timber is both legal and sustainable. There are a number of existing commercial certification systems that are acceptable, namely CSA, FSC, PEPC and SFI. However, the OPW recognises that other sources and forms of proof and verification that timber is legal and sustainable may be submitted to demonstrate compliance with its legal and sustainability requirements. Such sources or forms of verification should take the form of "verification of source" under the terms of the European Union procurement policies; an appropriate chain of custody standard; the requirements for the protection of endangered species; and independent assurances of sustainable forestry practices.

3.4 Improving health and well-being

The key driver in this area for OPW is specifically associated with water quality and in particular uncontrolled leaching of untreated wastewater from septic tanks. Reducing environmental and human health impact particularly of undersized and/or poorly maintained septic tanks is of concern. This is potentially a huge issue, which is likely to require an assessment of all OPW septic tank systems to determine the state of repair and maintenance (frequency of desludging, clogging of soak-away, etc.), prioritisation of required repairs/rebuilds and securing funding to instigate repairs and provide on-going maintenance and desludging.

More broadly within this area of health, safety and well-being of all staff, temporary and permanent is the inclusion of raising awareness and undertaking assessments of the use of hazardous materials. This might include assessing the use of items such as gardening chemicals used at OPW managed properties, exploring opportunities to reduce road traffic accidents, for example through providing those who drive regularly for work purposes with advance driving assessment and training, and exploring opportunities for recording near-miss accidents and learning from these to ensure that similar incidents in the future do not become accidents.

The broader remit of the OPW's commitment to whole-catchment flood risk management will include taking into account the impacts of flooding on human health, both physical and psychological. It is important that as part of the OPW sustainability objectives, the existing commitments to reducing the negative impacts to human health of flooding are incorporated.

3.5 Raising awareness of sustainability issues

Raising awareness of sustainability issues is the key to the success of all the other sustainability objectives. It will be important that in developing a sustainability message across the OPW that it is clear, consistent and not preached. In achieving this a combination of the following actions are recommended:

- Setting clear and achievable targets
- Communicating targets throughout the entire organisation
- Engaging staff at all levels and within all Business Units in contributing towards achieving the targets
- Measuring and communicating progress towards targets on a regular basis and in a clear and simple manner
- Recognising staff contributions towards achieving targets and celebrating successes

There are a variety of opportunities which can be developed to facilitate awareness raising of sustainability issues including providing introductory workshops to all staff and more specific training in focal areas such as energy awareness, waste reduction and recycling, biodiversity etc. It will also be important to present positive messages wherever possible. This project has identified a number of examples of existing good sustainability practices. These need to be disseminated across the OPW and the lessons learnt from them and expanded upon. It will also be important that OPW staff at all levels are involved in developing the actions and activities required to achieve the proposed sustainability targets. Success will be dependent on all of the OPW recognising that every person has a contribution to make to improving the sustainability performance of the organisation, by examining their day-to-day activities and identifying how they as individuals can change things to a more sustainable way of working.

Different Business Units within the OPW have had and will continue to have different experiences in implementing sustainability practice. Opening up communications between the different Business Units to learn from each others experiences and examining opportunities to develop competition between the Business Units can provide motivation for improvement. The existing Sustainability Task Force can provide a reference point for disseminating best practice but also in providing conduits for the Business Units to come together to discuss progress, as well as providing the driving force for incentive schemes, such as competitions to reach certain targets. The Sustainability Task Force should give consideration to whether they should be contact points for advice on sustainability best practice or should develop a relevant contact list of a broader range of individuals more broadly across the OPW to approach for advice. Additionally, for all large projects, consideration should be given to undertaking a sustainability appraisal to determine whether the project could be undertaken in a more sustainable manner. A core team of sustainability experts within OPW (this could initially be the Sustainability Task Force) could review such projects and provide an assessment based upon the key sustainability priority areas identified by the OPW.

There are also massive opportunities to influence outside the OPW. Just one example is the Visitor Services (Heritage Services) where an opportunity was identified during the Business Units workshops to work with Bórd Fáilte (Tourist board) and Department of Education and Science in including sustainability issues within the existing Irish history and culture education provided through the Visitors Centres. Realising these opportunities not only present the sustainability message to the general public, presenting a good image for the OPW, but also will require the engagement of staff to demonstrate what sustainability means to them.

3.6 Others Issues

It is important that the Business Units across the OPW communicate and work together towards their shared objective of a more sustainable OPW which is a recognised leader in sustainability across Government. The Sustainability Task Force, and prior to this the Green Team, as well as other dedicated individuals have provided an excellent starting point for communication and cross Business Unit working with a sustainability focus. It will be important that this cross Business Unit working is maintained and that the sustainability support advice is continued and expanded across the OPW.

Resources are a vital issue. Identifying a champion whose job, at the very least in the short to medium term, is to promote sustainability across the organisation and provide advice and guidance for the Business Units would provide an excellent driving force. Dedicating an individual as a champion, supported by the Sustainability Task Force, will provide focus and drive to embedding sustainability across the organisation. This individual will need to be someone relatively senior and should report directly to the MAC.

It will be important to not only raise awareness of sustainability issues across OPW but also enable staff to relate sustainability to their day-to-day activities. Providing capacity building and training opportunities goes some way towards this. However, encouragement from sustainability champions, providing easy “quick” win examples of how actions and activities can be undertaken in a more sustainable way provide incentives for change.

Being able to measure progress is obviously an important aspect of demonstrating the improved integration of sustainability principles and actions within the OPW. The targets and related activities have been developed to enable measurement wherever possible. Baselining will also be important to be able to demonstrate success (and also identify where additional resources or effort is required).

One of the key lessons to come from the workshops, meetings and site visits undertaken as part of this project, was that there are a lot of good examples of sustainability actions already taking place within and across the OPW. A number of these are known about across various Business Units within the OPW but there is a significant opportunity for the various Business Units to learn from each other and to work more closely together on sustainability (and probably other) issues. The Sustainability Task Force will be key to this. A number of key recommended activities have been identified which could improve the dissemination of good sustainability practice and greater co-ordination between the Business Units on issues of sustainability. These are set out below:

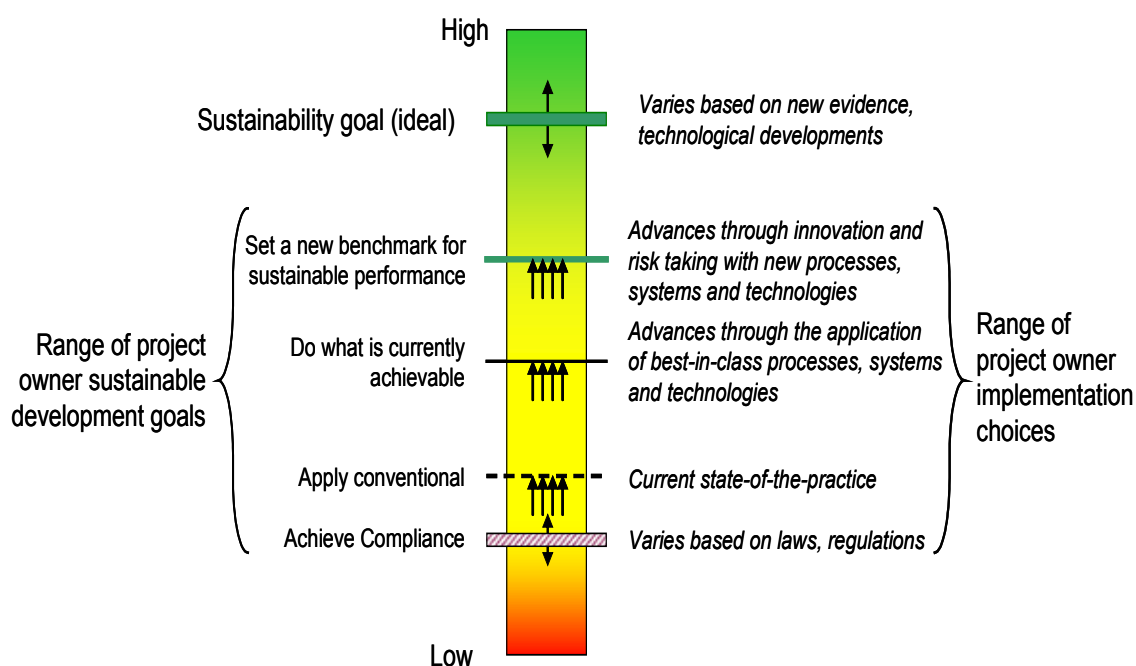
- Ensure that there is at least one representative from each of the OPW Business Units and Corporate Services included within the active OPW Sustainability Task Force;
- For large projects the Sustainability Task Force should use each others expertise and knowledge to feed into the design to ensure that not only the immediate construction phases are more sustainable but on-going maintenance and ultimate decommissioning is considered within the sustainability agenda. This could be undertaken at an overview level through group email or may require more formal inputs such as discussion workshops;

- The Sustainability Task Force should be considered as a conduit for good sustainability practice. Consideration should be given to develop best practice case studies, information sheets, etc based on existing experience within OPW. The Sustainability Task Force should consider providing a telephone/email contact(s) for other OPW staff to contact if they have a query regarding sustainability;
- Within each work or management group within the OPW Business Units, individuals should be identified and tasked with responsibility for improving the sustainability practice of their group. The Sustainability Task Force should provide support and encouragement to sustainability team leaders, including providing incentives such as competitions, group prizes, etc.
- Although the OPW plans to move from 51 St. Stephen's Green in the next couple of years, it would be advisable to concentrate on developing and implementing as many of the sustainability priority tasks as practically feasible within the OPW head office. This would present a clear example to other OPW staff and also to other Government Departments and the wider community of OPW's commitment to sustainability.

4.0 Sustainability objectives, targets and proposed activities

This section identifies targets for the OPW to consider in setting its sustainability agenda. Targets and activities have been developed in consultation within the OPW and based upon the sustainability aspirations of the organisation, as well as what is practical and achievable in the short to medium term. Activities have been developed based upon existing good sustainability practice already being undertaken in the OPW and upon opportunities identified during the course of this study.

The OPW targets are focused on delivery and will act as a catalyst for effective change across the OPW. They can also act as a driver for change across many other Government Departments and State Agencies. The targets show leadership and a willingness to challenge the organisation, whilst the activities provide practical means by which this change can take place.



The tables below provide sustainability goals, high sustainability performance targets and a series of achievable sustainability performance targets for each of the OPW sustainability priority areas. Associated activities have been provided and lead and supporting Business Units identified.

Key to tables

Abbreviation	Busines Unit	Abbreviation	Lead/support Business Unit
A	Architectural Services	L	Lead Business Unit
E	Engineering Servcies	S	Support Business Unit
FM	Facilities Management		
GSA	Government Supplies Agency		
H	Heritage		
PM	Project Management		
PrMai	Property Maintenance		
PrM	Property Manaagement		
CS	Corporate Services		

4.1 Energy consumption and reducing Green House Gas Emissions

		OPW wide targets	Suggested Activities	AS	ES	FMS	GSA	HS	PMS	PMMain	PMAn	CS
Sustainability Outcome		Energy consumption and Green House Gas Emissions reduced across OPW										
High sustainability performance targets		20% OPW Carbon emission reduction by 2017 from 2007 levels 15% OPW carbon emission reduction by 2012 from 2007 levels Reduce energy consumption in public buildings by 20% by 2017 from 2007 Levels Reduce energy consumption in public buildings by 15% by 2012 from 2007 Levels										
Achievable sustainability performance targets		A1. Implement energy awareness campaign across all of the OPW and 25% of tenant Government Departments by 2010.	B1.1 Base-line current energy consumption for OPW and other building participating in expanded energy awareness campaign. B1.2 Prepare a 'Lessons Learned Report' from current energy awareness pilot project - record problems that have been identified during the awareness raising pilot project and when using energy loggers. Describe procedure applied for addressing the problems encountered both with staff approach (pilot project) and with energy measuring (loggers). Develop expanded energy awareness campaign based on lessons learnt. B1.3 Roll out energy awareness project to tenant Government buildings. Aim for minimum of 15% energy savings from each building from current operational levels. On basis of the OPW staff awareness raising campaign, share best practices with other Government Departments.	L	L							
		A2.1 Expand energy monitoring to all OPW occupied buildings and 25% of tenant Government Departments managed by OPW over 500m ² by 2010. A2.2 Sub-metering of high energy user sections of buildings such as IT rooms by 2010.	B2.1 Expand energy monitoring programme based on lessons learnt from monitoring of buildings over 1000m ² . B2.2 Explore opportunity for Government Buildings with area greater than 1000m ² to have sub-metering installed particularly for areas of high energy use, such as IT rooms. Provide information to users on their energy consumption and associated carbon footprint. B2.3 Explore opportunity for working with landlords of multi-occupancy buildings part tenanted by Government Departments to provide sub-metering of energy use.	L	L							S
		A3.1 By 2010 all refurbishments and new builds to reduce energy use by 15% compared with typical levels for building type (energy consumption guide 19, UK Government Energy Efficiency Best Practice Programme)	B3.1 Specify high energy efficient appliances and fittings (lights, boilers, etc.) where possible. B3.2 Utilise BREEAM or OPW equivalent as a standard for building design across all OPW designed new builds and refurbishments.	L	L					S		
				L	L					S		

	OPW wide targets	Suggested Activities	Lead Business Unit																	
			AS	ES	FMS	GSA	HS	PMS	PMMain	PMAn	CS									
	A3.2 By 2010 all refurbishments and new builds to achieve BREEAM or OPW equivalent very good rating –OR– Require by end of 2008 that all new builds and refurbishments greater than € 1 million achieve BREEAM or OPW equivalent very good rating –OR– Develop by end of 2008 OPW standards for new builds and refurbishments (which may be BREEAM or OPW equivalent)	B3.3 Expand training of Architectural and Engineering staff in BREEAM or OPW equivalent skills. B3.4 Identify and implement easy “quick win” energy efficiency measures which can be undertaken across OPW occupied buildings, such as changing all light bulbs to energy efficient light bulbs, replacement of appliances when required to “A” rated, encourage staff to switch off unused appliances, etc.	L	L																
	A3.3 identify and implement easy “quick win” energy efficient changes to all OPW occupied buildings by 2010		S	L	S	S	S	S	S	S	S	S	S	S	S	S	S	S	S	L
	A4. Increase proportion of energy supplied to OPW buildings from renewable sources to 15% of total consumed by 2010.	B4.1 During the design of new build and refurbishments of OPW buildings include the provision of renewable energy supply systems (photovoltaics, solar water panels, geothermal systems, micro wind generator, etc) wherever possible within the design. B4.2 Examine opportunities to retrofit renewable energy supply systems to other OPW buildings where refurbishments are not anticipated. B4.3 Where renewable energy systems cannot be installed, supply 15% of electricity from renewable energy contract supplied via the National Grid. B5.1 Base-line current GHG emissions for OPW vehicle fleet B5.2 Review vehicle maintenance programme with a view to identifying opportunity to reduce vehicle emissions and other pollutants and improve fuel efficiency. B5.3 Examine opportunities to operate OPW vehicle fleet on more efficient fuel type. B5.4 At time for replacement, replace OPW vehicles with more fuel efficient models with options for using alternative fuels.	L	L					S	S	S	S	S	S	S	S	S	S	S	S
	A5. By 2010 reduce by 15% from 2007 levels, GHG emissions per vehicle kilometre from the OPW fleet			S			L													
				S																
				S																
				S																
				S																

4.2 Avoiding the generation of waste through life cycle thinking and reuse and recycling

Sustainability Outcome	OPW wide targets	Suggested Activities	Lead Business Unit													
			AS	ES	FMS	GSA	HS	PMS	PMaIn	PMaIn	CS					
Sustainability Outcome			Waste generation reduced across OPW together with improved reuse and recycling													
High sustainability performance targets			<p>35% waste reduction from 2007 levels across the OPW through improved resource and waste management and improved reuse and recycling by 2017</p> <p>25% waste reduction from 2007 levels across the OPW through improved resource and waste management and improved reuse and recycling by 2012</p>													
Achievable sustainability performance targets	<p>C1. Develop OPW wide policy by end of 2008 for the reduction of waste generation and improvement of reuse and recycling.</p> <p>C2. Reduce volumes of paper being procured and used across OPW by 15% by year 2010 and implement by end of 2008 paper recycling programme in 100% of OPW offices</p> <p>C3. Expand office recycling to include other office consumables such as printer cartridges, glass, aluminium, steel, electrical goods, etc by 2010</p>	<p>D1. OPW wide waste management policy to be developed by the Sustainability Task Force in consultation with OPW Business Units.</p> <p>D2.1 Base-line current paper usage across the OPW, including current levels of paper recycling.</p> <p>D2.2 Implement 2-sided printing across the OPW as default where printers have this function. Procure replacement printer with 2-sided printing and set to "draft use" for ink option where applicable.</p> <p>D2.3 Explore opportunity for all Government reports to be published electronically as default with only short accompanying print runs.</p> <p>D2.4 Explore opportunity for Payroll to be deposited electronically. Deposit monthly salaries into OPW staff bank accounts with information provided electronically to OPW staff, saving not only on paper but also administration costs, time etc.</p> <p>D2.5 Expanding the current recycling programme in all OPW offices.</p> <p>D3.1 Identify and base-line current consumables being recycled across the OPW</p> <p>D3.2 Identify opportunities to improve reuse and recycling of materials which are currently not recycled and can be or can be recycled to a greater extent (recyclables may include: glass, aluminium, steel, printer cartridges, computers, printers and associated components, other electrical goods (need be recycled in line with WEEE legislation), cardboard, furniture, etc.).</p> <p>D3.3 Develop and implement awareness raising campaign for waste reduction, reuse and recycling across the OPW.</p> <p>D3.4 Provide incentives to improve waste reduction, reuse and recycling across the various OPW offices, for example, competitions, etc.</p>	L	L	S	S	S	S	S	S	S	S	L			
																L
							L									S
																L
			S	S	S	S	S	S	S	S	S	S	S	S	S	L
																L
			S	S	S	S	S	S	S	S	S	S	S	S	S	L
			S	S	S	S	S	S	S	S	S	S	S	S	S	L

OPW wide targets	Suggested Activities	Lead Business Unit														
		AS	ES	FMS	GSA	HS	PMS	PMMain	PMAn	CS						
	D3.5 Review progress after 12 months of implementation of office based recycling activities and report lessons learnt, problems encountered and how they were resolved and identify opportunity for improvement. Ensure outputs are disseminated across the OPW and more broadly across other Government Departments.	S	S	S	S	S	S	S	S	S	S	S	S	S	S	L
C4. Increase recycling of packaging waste generated through GSA procurement activities to 85% by 2010.	D4.1 Collection and subsequent recycling of all packaging by all GSA delivery suppliers to be undertaken. Contractual arrangements to be put in place to ensure packaging is collected (rather than using Repak opt out).				L											
C5. Reduce water wastage across OPW by 10% by 2010 based on current levels of use.	D5.1 Water conservation in new buildings, and refurbished buildings improved through selection of water efficient toilet area and kitchen equipment in line with BREEAM very good rating. D5.2 Across OPW buildings develop and implement leak monitoring programme.	L	L	L		S	L	L	S	L	L	S	S	S		
C6. Reduce waste generation in construction of new buildings and refurbishments designed and construction managed by OPW by 20% by 2010 compared with current 2007 levels.	D5.3 Raise awareness to water conservation measures and implement water saving opportunities, such as green roofs, use of dual flush toilets, retrofitted flow reducers on taps, etc. D6.1 Utilise BREEAM or OPW equivalent in design of new buildings and refurbishments to reduce waste generation in construction and during operation. Aim for BREEAM or OPW equivalent very good rating.	L	L	S		S	L	L	S	L	L	S	S	S		
	D6.2 Specification of materials utilised within new buildings or refurbishments that can be potentially recycled in the future (after demolition or decommissioning) or are made of recycled materials.	L	L													
	D6.3 Require contractors to provide a Site Waste Management Plan prior to commencing work on site, which will show how the contractor will reduce waste production and undertaking recycling where waste is generated on site.	S	S												L	

4.3 Green procurement

	OPW wide targets	Activities											Lead Business Unit								
		AS	ES	FMS	GSA	HS	PMS	PMMain	PMan	CS											
Sustainability Goal High sustainability performance	OPW products purchased are sustainable (selected with respect to their energy efficiency, waste generation, recycling use, biodegradability, social aspects of production, resource protection, etc.).	50% of products purchased by the OPW to follow OPW Green Procurement Guidelines by 2012																			
		85% of products purchased by the OPW to follow OPW Green Procurement Guidelines by 2017																			
		50% of products provided to other Government Departments have a "green" option by 2012																			
		100% of products provided to other Government Departments have a "green" option by 2017																			
Good achievable sustainability performance	E1. Develop and implement Green Procurement Guidelines across the OPW by 2010	S	S	S	L	S	S	S	S	S	S	S	S	S	S	S	S	S	S	S	S
	E2.1 Develop by end of 2008 evaluation criteria for non-toxic and environmentally preferable cleaning and janitorial products.		L	L																	S
	E2.2 85% of all cleaning and janitorial products procured by the OPW to be "green" or "eco" non-toxic and environmentally friendly by 2010.		L	L	S																L
	E3. 50% of OPW office supplies to be from "green" sources by 2010, e.g. recycled paper, printer cartridges, note pads, pens, pencils, etc.		L	L	S																L
	E4. Development of an OPW wide policy of procuring supplies and equipment that reduces energy consumption by end of 2008, and all new procured electrical supplies and equipment to have "A" energy rating where it is applicable by 2010.		S	S	L																S
	Procurement of energy efficient products from GSA catalogue increased by 50% from current levels		L	S	L																L

	OPW wide targets	Activities	Lead Business Unit																	
			AS	ES	FMS	GSA	HS	PMS	PM/In	PM/An	CS									
				S		L														
			F4.3 GSA to examine new opportunities to label and provide information on energy efficient products within their catalogues to encourage greater usage.				L													
	E5. "Eco" and "green" products to be actively promoted through clear labelling and provision of relevant useful data in the GSA catalogues by 2010.		F5.1 GSA to provide specific information regarding sustainability aspects of sustainable products. The EU eco-label (website, http://europa.eu.int/ecolabel) can assist in identifying sustainable products and suppliers.				L													
			F5.2 Aim to increase the proportion of "eco" and "green" products available within the GSA catalogue by 2% year on year from the beginning of 2008.				L													
			F5.3 GSA and other Business Units across OPW to raise awareness of the availability of "green" and "eco" products in the GSA catalogues across other Government Departments.	S	S	S	L	S	S	S	S	S	S	S	S	S	S	S	S	S
	E6. By 2010 develop and implement guidelines on minimum worker and environmental standards for GSA directly procured items with particular focus on those items manufactured in developing countries.		F6.1 Within the tendering process for procurement of items for the GSA catalogues provide a scoring mechanism for companies with an environmental management system implemented (ISO 14001 or other EMS certifications).				L													
			F6.2 GSA to develop further monitoring of overseas manufacturing facilities against internationally recognised labour and environmental standards relevant to the country in question (ILO guidelines, etc.)				L													
			F6.3 GSA to develop minimum procurement guidelines with due consideration for broader environmental aspects, such as biodiversity, loss of habitat, etc.																	
	E7. Increase procurement of sustainable construction services and materials by 10% by 2010 based on 2007 levels.		F7.1 Development of procedures within the tendering process to assess the sustainability of construction contractor's proposals.	S	S					L										
			F7.2 Carry out a pilot project using a sustainable life cycle assessment tool to assist with the selection of construction and building materials. Develop tool further based on feedback from pilot study.	L	L					S										
			F7.3 Develop standard sustainable specifications for the built environment, based upon experience with BREEAM and pilot sustainable life assessment tool project.	L	L					S										
			F7.4 Minimise the impact to biodiversity of all OPW construction activities through the proper implementation of the OPW Biodiversity Action Plan.	L	L					S										
			F7.5 Record and disseminate lessons learnt from specifying sustainable materials in construction and in requiring contractors and developers to take account of sustainability issues during construction.	L	L					L	S	S	S	S	S	S	S	S	S	S

4.4 Protection against health threat

Sustainability Goal	OPW wide targets	Activities	Lead Business Unit																		
			AS	ES	FMS	GSA	HS	PMS	PMaIn	PMan	CS										
High sustainability performance	All OPW septic tanks/wastewater systems to be subject to a risk assessment and any identified as potentially causing health and environmental risk are repaired/reconstructed by 2012	To reduce risks to health and environment from OPW activities																			
Good achievable sustainability performance	<p>Risk assessments undertaken of all hazardous activities, materials and practices with actions identified and implemented to reduce identified risks by 2012</p> <p>G1. 75% of OPW septic tanks/wastewater systems identified as potentially causing any health and environmental risk are repaired/reconstructed by 2010. Focus on repairing most polluting systems first.</p> <p>G2. Reduce actual and near miss accidents in the workplace, on site and travelling to site by 10% year on year from 2008.</p> <p>G3. Reduce risk to health, both physical and psychological, from flooding through improved flood risk management and public awareness to flooding issues</p>	<p>H1.1 OPW Engineering Services to carry out an investigation and assessment of all wastewater systems for OPW occupied buildings, in particular septic tanks, baseline their current condition and prioritise those that need repair/reconstruction most urgently.</p> <p>H2. OPW to secure funding to enable relevant necessary repairs to wastewater/septic tank systems to be undertaken within given timescale.</p> <p>H3. OPW Engineering Services to set up a repair and rolling maintenance programme for wastewater and septic tank systems under their jurisdiction.</p> <p>H2.1 Review current H&S procedures for site work and identify any opportunity for improvement for both permanent and temporary staff, including travel to site for work purposes.</p> <p>H2.2 Ensure near-miss incidents are recorded and reviewed such that action can be taken to reduce the likelihood of an accident occurring.</p> <p>H2.3 Explore opportunity for those regularly driving to site to undertake advance driving assessment and training.</p> <p>H2.4 Carry out an assessment of hazardous activities, materials and practices across OPW and review procedures and identify and implement opportunities for improvement.</p> <p>H3.1 Improve and implement public awareness activities to facilitate the implementation of the National Flood Policy in line with the timelines set by the policy.</p> <p>H3.2 Minimise the impact to biodiversity of all OPW engineering flood risk reduction and drainage activities through the proper implementation of the OPW Biodiversity Action Plan</p>	L	L	L	L	L	L	L	L	L	L	L	L	L	L	L	L	L	L	L

4.5 Raising awareness of sustainability issues

		OPW wide targets	Activities	Lead Business Unit												
				AS	ES	FMS	GSA	HS	PMS	PMain	PMan	CS				
Sustainability Goal		All OPW staff have a good general awareness of sustainability, the key OPW sustainability priorities and how these relate to the way they work.														
High sustainability performance		100% of OPW staff to have attended sustainability training and to have incorporated sustainability practices into their day-to-day work activities and decision making processes by 2010.														
Good achievable sustainability performance	J1	85% of all OPW staff to have received sustainability introductory training by 2010.	K1.1 OPW to develop an introduction to sustainable development training module applicable for all staff at all levels. Also, consider developing specialised training courses in sustainable development for example for project managers, for those working in construction, procurement, etc.	S	S	S	S	S	S	S	S	S	S	S	S	
			K1.2 OPW to develop training modules, workshops, inter-Departmental for common and specific areas of sustainability such as energy conservation, waste reduction and recycling, biodiversity etc.	Sustainability Champion to Lead												
			K2.1 Identify sustainability champion within each business unit and within each office working environment to encourage and implement sustainability improvements against OPW wide targets.	S	S	S	S	S	S	S	S	S	S	S	S	S
		J2	60% of all OPW staff have improved their actions at work to be more sustainable, e.g. proactively recycle, turn off electrical equipment when not in use, etc.	L	L	L	L	L	L	L	L	L	L	L	L	L
				K2.2 Provide incentives for staff groups to improve their day-to-day routines to ones that are more sustainable. For example, run 6 monthly or annual competitions for the most sustainable workplace, competitions for the most sustainable project, undertake monitoring and monthly graphical tracking of progress against targets so all staff can see progress towards energy consumption targets, green procurement, etc.	Sustainability Champion to Lead											
	J3	Cross Departmental awareness raising of sustainability issues to be undertaken by OPW staff.	K3.1 Within the built environment and construction, related OPW staff to inform their client Government Departments of the benefits of a more sustainable approach to building design, construction and use (balance between environmental, social and economic aspects).	L	L	S	S	S	L	L	L	L	L	L	S	
			K3.2 GSA to consult with other Departmental procurement units on raising awareness to sustainable / "green" products available through GSA services/catalogues. Meet at least annually to gauge whether client Departments have other sustainable procurement needs.				L									
			K3.3 Develop case-study examples of how sustainable approaches have resulted in tangible benefits, e.g. energy awareness pilot project typically resulting in 25% reduction in energy use and associated bills.	Sustainability Champion to Lead												
				S	S	S	S	S	S	S	S	S	S	S	S	

5.0 Implementation

5.1 Next steps

- Raising awareness and providing mechanisms for knowledge transfer are key to the success of all the sustainability activities and targets, and should be seen as the starting point for taking forward the OPW's sustainability agenda.
- Immediate actions for raising awareness should be identified jointly by the OPW Sustainability Task Force and other interested parties. These could include:-
 1. set up a Green page/forum on the OPW intranet and encourage exchange of information on projects and products;
 2. developing case study examples of good sustainability practice currently being undertaken within the OPW, including within these, lessons learnt (good and bad) and opportunities for transfer to other OPW activities.
- Introductory workshops to sustainability should be developed for all OPW staff, together with specific training or awareness raising courses for particular target areas. This is already being developed in relation to energy awareness and conservation through a cross Government pilot project undertaken by the Mechanical and Electrical Services. Lessons learnt from this pilot project can be used to develop similar workshops and training in sustainability across the OPW.
- Other early activities might include carrying out staff surveys to gauge their thoughts and understanding of sustainability issues which could influence the sustainability introductory workshops or be part of the workshops themselves. This will provide an understanding of current knowledge, potential enthusiasm, etc. and can help in the development of future activities.
- It will be important to identify people within the OPW who can act as sustainability champions within the area in which they work, as well as giving consideration to an individual being charged with overall responsibility for driving the sustainability agenda. The earlier enthusiastic individuals are identified the quicker activities can be developed and initiated.
- Consideration should be given to including sustainability responsibilities within job descriptions or within staffs' annual performance requirements. Clearly this will be important to those individuals identified as sustainability champions to ensure they are able to prioritise sufficient time to undertake this role properly.
- In parallel to raising awareness to sustainability issues, the other achievable targets and activities will need to be prioritised. This prioritisation process should be undertaken in consultation and agreement with Business Units Directors so that there is top management commitment. Prioritisation should be separated into activities which can be tackled immediately (say within the next 6 months or so), those which can be undertaken in the year following and those which are more challenging and will be tackled once the understanding of sustainability issues is more embedded across the OPW. It will be important that in raising staff enthusiasm that this is quickly followed up with assigning people with achievable activities they can be involved with. Ideally these activities should also be ones that they have identified themselves as something they can influence and be involved with.
- Training for all relevant professional and technical staff on updated building regulations [particularly Part L] and BER and DEAP assessor training.
- All Business Units within the OPW need to incorporate sustainability priorities into their individual yearly Business Plans.

5.2 Monitoring and reporting

Monitoring and reporting progress will be important to ascertain whether there has been progress. It will also be important that feedback is provided across the whole of the OPW and that staff are involved in providing feedback on how they perceived progress to be developing. Reporting success stories will assist with motivating staff and support the drive towards more challenging sustainability activities and targets. However, lessons can also be learnt from activities which are less successful and it will be important to report and disseminate these too.

Prior to initiating any monitoring exercise, base-lining should be undertaken wherever possible and this should be started during the early stages prior to when implementation really kicks off. Base-lining can include actual current measurements of something, such as actual volumes of unseparated waste removed from 51 St. Stephen's Green; or from well-judged approximations based on existing established information of similar activities, such as typical energy consumption of buildings/offices of a certain type¹. Base-lining will provide a basis from which success (or failure) can be measured. Undertaking the measurement of progress will need to be as straightforward as possible. In some cases, measuring success or failure may just be a case of answering the question "has something been done by a certain date" "yes" or "no". For example, has 2-sided printing been set as default for all printers with this setting across the OPW by date X – yes or no?

¹ "Energy Consumption Guide 19 – Energy Use in Offices" Energy Efficiency Best Practice Programme, UK

Using data which are already being measured and collected should always be a first choice option for monitoring. Wherever possible measurement and monitoring should utilise information which would need to be collected anyway, it may be just a case of reporting the information differently. For example, records will be kept of equipment and materials procured for 51 St. Stephen's Green and by tagging all "green" or "eco" products, procurement of these items as a proportion of the total can be relatively easily kept track of.

Agreements will need to be made on acceptable periods of monitoring. During the initial stages it will be important that monitoring and feedback is particularly regular, say once a month to start depending on how quickly things get up and running. Initial monitoring and reporting would include, numbers participating in introductory workshops, those assigned with specific sustainability tasks etc. To be able to monitor reasonable change periods of monitoring will probably need to be longer, say quarterly, 6 monthly or annually. Considerations should be given to producing an OPW sustainability news letter to provide updates on progress and lessons learnt on a quarterly or six-monthly basis. Good news stories and key lessons learnt should also be distributed more widely across Government, demonstrating the OPWs lead in sustainability.

6.0 Conclusions

- Through consultative process within the OPW, five key sustainability priority areas have been identified:
 - Energy consumption and reducing greenhouse gas emissions;
 - Less generation of waste through life-cycle thinking, reuse and recycling;
 - Green procurement;
 - Improving health and wellbeing; and
 - Raising awareness of sustainability throughout the OPW and beyond.
- Sustainability targets and activities have been identified..
- In meeting these targets it will be important that momentum is sustained and resources are appropriately allocated.
- Commitment from Senior Management will be vital, as well as the positive activities and enthusiasm of all OPW staff.
- Reporting progress against performance targets will be important in demonstrating progress and encouraging staff motivation.

Successful implementation of these strategic objectives will be achieved by embedding sustainability within the organisation as part of business strategy and ongoing management – rather than treating sustainability in a separate 'bubble'. Working across the whole of the OPW, the organisation can make a positive contribution to sustainable development in Ireland and can become a leader in sustainability in Government.

Part 2 - Supporting Information

7.0 International and National strategies, trends and practices

This section outlines the international, European and Irish national strategies to promote sustainable development, followed by an overview of the national sustainable development strategies from a selection of countries in Europe and North America.

7.1 International context

The first global effort to address the issue of sustainable development was the UN Brundtland Commission Report of 1987¹. This report defined sustainable development as –

“...development that meets the needs of the present without compromising the ability of future generations to meet their own needs.”

The next major global event relating to sustainability was the United Nations Conference on Environment and Development (UNCED) held at Rio de Janeiro, Brazil in 1992. This was attended by 30,000 people, including 178 governments and 2,400 representatives from non-Governmental organisations. The resulting Agenda 21, the Rio Declaration on Environment and Development, and the Statement of Principles for the Sustainable Management of Forests were adopted by more than 178 Governments. Agenda 21 is a comprehensive plan of action to be taken at all levels (globally, nationally and locally) by Governments and organisations of the United Nations system.

In 1997, the Special Session of the UN General Assembly met to review progress since the Rio Summit and set a target date of 2002 for introducing National Sustainable Development Strategies. The World Summit on Sustainable Development (WSSD) held in Johannesburg, South Africa in 2002 identified that inadequate progress had been made in the previous 10 years. Countries were urged to “take immediate steps to make progress in the formulation and elaboration of NSDS and to begin their implementation by 2005”. The Programme for Further Implementation of Agenda 21 was developed by setting Millennium Development Goals with specific targets and schedules². This included the integration of the principles of sustainable development into country policies and programmes. Current targets are to be met by 2015.

According to the UN Commission on Sustainable Development (UNCSD), much work remains to be done to reach the WSSD

1 Our Common Future (1987), United Nations World Commission on Environment and Development, Oxford: Oxford University Press. ISBN 0-19-282080-X

2 <http://www.un.org/millenniumgoals/>

target that all countries should be in the process of implementing their NSDS by 2005. According to an assessment of the status of national strategies in 2004, only 12% of a total of 191 countries had strategies which were being implemented (UN DESA, 2004)³. However, another 24% had strategies that were in the process of being developed.

7.2 European Union context

The Amsterdam Treaty made Sustainable Development a core task of the European Community. In December 1999 the European Union (EU) heads of State and Government asked the Commission to produce a Sustainable Development Strategy for the EU (EU SDS) and present it to the Göteborg Summit in June 2001. This Strategy was entitled "A Sustainable Europe for a Better World" and was launched by the Commission in 2004.

In June 2006 the EU heads of State and Government reviewed the 2001 Sustainable Development Strategy and adopted an ambitious and comprehensive renewed Sustainable Development Strategy for an enlarged European Union.

The strategy sets out a single, coherent plan on how the EU will more effectively live up to its long-standing commitment to meet the challenges of sustainable development. It reaffirms the need for global solidarity and recognises the importance of working with partners outside the EU, including those rapidly developing countries which will have a significant impact on global sustainable development.

The EU SDS identifies seven key challenges and corresponding targets, operational objectives and actions. These challenges relate to worsening environmental trends, the European Union's economic and social challenges as well as new competitive pressures and new international commitments. The seven challenges are:

- climate change and clean energy
- sustainable transport
- sustainable consumption and production
- conservation and management of natural resources
- public health
- social inclusion, demography and migration
- global poverty and global sustainable development challenges

The EU SDS requires Member States to report on progress meeting these challenges. It addresses the governance dimension, including policy coherence and complementarity with national strategies and a framework for reporting on national implementation. To keep track of the implementation process in Member States, the EU SDS introduced a biennial (two-year) reporting cycle.

The national progress reports and latest developments in key EU activities (i.e. strategies, action plans, legislation) will be utilised by the European Commission to issue bi-annual progress reports on how the EU SDS is implemented on the European level and in the Member States. The first Commission progress report on the EU SDS implementation is scheduled for September 2007. Based upon these bi-annual progress reports the European Council will review the progress made and provide further orientation on policies, strategies and instruments. In 2011 the European Council will decide whether a comprehensive review of the current EU SDS is needed.

7.3 National context

Ireland's first comprehensive Sustainability Strategy, 'Sustainable Development - a Strategy for Ireland', was published in 1997. It framed the growth of the Irish economy, national consumption and lifestyle patterns towards a more sustainable course. The overall aim of the Strategy was –

"to ensure that economy and society in Ireland can develop to their full potential within a well protected environment, without compromising the quality of that environment, and with responsibility towards present and future generations and the wider international community".

³ UN Department of Economic & Social Affairs (UN DESA) 2004 Division for Sustainable Development. Assessment Report on National Sustainable Development Strategies. <http://www.un.org/esu/sustdev/natinfo/nsds/nsds.htm>

The Strategy particularly focused on areas of agriculture, forestry, marine resources, energy, industry, transport, tourism and trade. Trends were assessed and the Government committed itself to securing sustainable development and developing a series of related indicators for measuring progress.

Ireland's first Sustainable Development Strategy was reviewed in 2002 in the run-up to the World Summit on Sustainable Development in Johannesburg, South Africa. 'Making Ireland's Development Sustainable: Review, Assessment and Future Action - National Report for Ireland' sought to build upon the 1997 strategy by placing it more fully in the context of the environmental challenges associated with the stage of economic development which Ireland was experiencing. The report summarised changes in Ireland over the late 1990s and early part of the 21st century with focus on demographics, environment, economics and society. It also reviewed progress on the implementation of the National Sustainable Development Strategy for the period 1997-2002 and analysed environmental trends and implementation of these for integration between environmental and economic and sectoral policies. Priorities were set for sustainable development policy for the period to 2010.

Comhar⁴, the National Sustainable Development Partnership; the Environmental Network of Government Departments; and the National Preparatory Committee for the World Summit for Sustainable Development were consulted in the preparation of the 2002 review, which was approved by Government.

A range of Government strategies have more recently been developed and policies and actions are being implemented towards the achievement of sustainable development in Ireland, Europe and beyond. The social partnership agreement 'Towards 2016'⁵, the National Development Plan 2007-2013⁶, the National Spatial Strategy 2002-2020⁷, the National Action Plan for Social Inclusion 2007-2016⁸ together with the Climate Change Strategy 2007-2012⁹ are major implementation frameworks for keeping Ireland on the track towards economic, social and environmental sustainability.

For the first time the Irish Government and the social partners agreed in 2006 to take a longer term approach to their relationship, and to their approach to consensus-based policy evolution, when they concluded a ten year Framework Social Partnership Agreement 'Towards 2016' which also has as its overarching goal the achievement of a better quality of life in Ireland. The shared underlying vision for the agreement is an Ireland which has a dynamic, internationalised, and participatory society and economy, with a strong commitment to social justice, where economic development is environmentally sustainable, and internationally competitive. Environmental sustainability is specifically recognised in this agreement where it is acknowledged that 'the environmental challenges have profound implications for the future, including for economic performance'.

Under the terms of "Towards 2016", the current Social Partnership Agreement, the Government is committed to publishing a renewed National Sustainable Development Strategy in 2007. Sustainable Development Unit is co-ordinating the preparation of this Strategy. The renewed Strategy will replace our first National Sustainable Development Strategy (NSDS), "Sustainable Development – A Strategy for Ireland", published in 1997, and "Making Ireland's Development Sustainable", published in 2002. The National Development Plan 2007-2013 sets out the economic and social investment priorities needed to realise the vision of a better quality of life for all. This better quality of life will be achieved by supporting the continued development of a dynamic and internationalised economy and society with a high commitment to international competitiveness, social justice and environmental sustainability.

The National Spatial Strategy 2002-2020 is the national strategic planning framework to achieve a better balance of social, economic and physical development, across Ireland, supported by more effective planning. It recognises that regions of the country have different roles and seeks to organise and coordinate these roles in a complementary way making all regions more competitive according to their strengths. It seeks also to promote a high quality urban environment, as well as vibrant rural areas.

4 Comhar Sustainable Development Council, established by the Minister for the Environment, Heritage and Local Government in 1999 is the forum for national consultation and dialogue on all issues surrounding Ireland's pursuit of sustainable development. It plays an important part in the development and implementation of policy in this regard. Further information about Comhar is available from their website <http://www.comhar-nsdp.ie>

5 <http://www.taoiseach.gov.ie/index.asp?locID=181&docID=2755>

6 <http://www.ndp.ie/viewdoc.asp?fn=/documents/NDP2007-2013/NDP-2007-2013-English.pdf>

7 <http://www.irishspatialstrategy.ie/NSSDownloads.shtml>

8 http://www.socialinclusion.ie/publications/napincl_plan0305.pdf

9 <http://www.environ.ie/en/Environment/Atmosphere/ClimateChange/NationalClimateChangeStrategy/PublicationsDocuments/FileDownload,1861,en.pdf>

The National Action Plan for Social Inclusion 2007-2016 sets out a wide-ranging and comprehensive programme of action to assist those who continue to be socially excluded from the greatly improved living standards and opportunities that the majority of people living in Ireland enjoy.

The National Climate Change Strategy builds on the commitment to sustainable development set out in 'Towards 2016' and the National Development Plan and is one of a number of interrelated Government initiatives that address climate change and energy issues. These include the White Paper on Energy¹⁰, the Bio-Energy Action Plan¹¹ and the forthcoming Sustainable Travel and Transport Action Plan.

The new Irish NSDS will serve as a statement of national policy and a roadmap for future action. The NSDS should be consistent with the European Union Sustainable Development Strategy (EU SDS) but will be tailored to Ireland's specific national circumstances.

The Department of Environment, Heritage and Local Government (DEHLG) has set up a High Level Steering Group, made up of representatives from all Government Departments, to coordinate input to this renewed strategy from across the Government sector. Comhar is providing support and stakeholder input to the DEHLG review of the NSDS¹².

The revised Irish NSDS will in all probability focus on the same seven challenges identified in the EU SDS, all of which are relevant to Ireland, and this is the approach recommended by Comhar. Focusing on these seven challenges will ensure that the NSDS complements the EU SDS.

7.4 Trends and practices within other Government Departments in Ireland

Under the Public Services Management Act 1997 each Government Department must draw up a new Strategic Statement within six months of the appointment of a new Government. Guidelines on Government strategy statements, including the integration of sustainability, are provided by the Public Service Modernisation Division of the Department of the Taoiseach¹³. A review of the guidelines was published in July 2007 for the preparation of strategy statements 2008-2011

Some Government Departments had integrated sustainable development into previous strategy plans of 2005-2007 to varying degrees. Departments who have had a leading role in developing sustainability across Government had embedded sustainability into their core policy. For example, The Department of Communications, Marine and Natural Resources and the Department of Transport.

The Government Department strategies are available on the Better Government website¹⁴. Summaries of examples of where sustainability has been included in previous Departmental strategies are given below:

The Department of Communications, Marine and Natural Resources

Sustainable economic growth has been one of the main drivers for the Department of Communications, Marine and Natural Resources incorporated across a diverse range of sectors which included the exploitation and use of the countries resources such as energy, fishing and mining. The Statement of Strategy 2005-2007 for the Department identified a number of goals, strategies and performance indicators relating sustainable development for each sector within its remit. The sectors include Communications, Broadcasting, Energy, Maritime Safety and Environment, Maritime Transport, Marine Resources, Inland Fisheries, Coastal Zone Management, Infrastructure and Engineering, Marine Leisure and Research, Earth and Hydrocarbon Resources.

10 <http://www.dcmnr.gov.ie/NR/rdonlyres/54C78A1E-4E96-4E28-A77A-3226220DF2FC/27356/EnergyWhitePaper12March2007.pdf>

11 <http://www.dcmnr.gov.ie/NR/rdonlyres/6D4AF07E-874D-4DB5-A2C5-63E10F9753EB/27345/BioenergyActionPlan.pdf>

12 "Comhar SDC Draft position paper – Recommendations on the review of the National Sustainable Development Strategy" Comhar Sustainable Development Council, April 2007. http://www.comhar-nsdp.ie/ComharDocs/SDS_Draft_Discussion_Document_18apr07.doc

13 <http://www.taoiseach.gov.ie/>

14 <http://www.bettergov.ie>

Sustainability initiatives listed for some of the sectors included;

- Energy – to give support to Sustainable Energy Ireland (SEI) and assistance to SEI in carrying out its mandate. The Department also aims to promote increased production of electricity from renewable resources and to ensure the implementation of the energy measures in the NDP.
- Maritime Safety and Environment -to establish and promote maritime safety,
- Maritime Transport – to integrate maritime transport into the overall transport system of Ireland and the EU,
- Marine Resources and Inland Fisheries - to develop marine resources and inland fisheries with due regard to the environmental and social issues and to conserve fish stocks through fisheries management systems
- Coastal Zone Management – to develop a National Coastal Protection Strategy in relation to coastal erosion and coastal flooding,
- Earth and Hydrocarbon Resources - to develop sustainable exploration of minerals, oil and gas

Although the Geological Survey of Ireland (GSI) is part of this Department, because of the specialist nature of its services, it has drawn up a separate Statement of Strategy. The GSI has contributed to sustainable development and environmental protection by providing decision-makers and stakeholders with best available geological information from comprehensive and up-to-date national geological databases. The GSI achieved this by

- providing easily accessible and accurate geological information,
- supporting sustainable development, environmental protection and the National Development Plan,
- mapping Ireland's earth resources, and
- promoting public understanding of the role of GSI and geology in Irish society.

The Department of Transport

The work of the Department covers air, public and road transport and one of its main roles is to develop an integrated transport system across these sectors. The Department has worked to integrate the transport policy with other Government policies especially sustainable development and landuse/spatial policies. Sustainability was identified as one of the key objectives of the Department and a number of initiatives have been listed in relation to this;

- Integration of the transport policy- promote the integration of sustainable development considerations into transport and by aiming to reduce the environmental impact of transport.
- Spatial and land-use policy – ensure implementation of the NSS i.e. integrated land use and transport policies
- Road Transport – review the Road Safety Strategy 2004-2006
- Public Transport
 - improve public transport with the aim of increasing its use
 - improve accessibility to public transport for people with disabilities, people in rural areas and other socially excluded people
 - improve integration, provide park and ride integrated ticketing and integrated information provision across the public transport network
- Railway Transport – improve safety management systems
- Objectives in relation to air transport concentrated on the integration of air transport into the overall transport system, safety and security and air traffic management.

It should be noted that not all Government Departments incorporated sustainable development into their Department's role and internal operations. The development of sustainability targets and performance measures for priority areas of the Departments' operations was lacking in most of the previous strategy statements.

7.5 Comparison of progress in other countries

To provide some comparison with other countries, the following provides a brief overview of sustainability progress in a number of other comparable countries.

There is no single method, specific entry point or ideal co-ordinating mechanism for the National Sustainable Development Strategies (NSDS), which will reflect the economic, social, environmental and cultural specificities of countries. However, as time passes and information is shared between countries, examples of best practice can be identified.

7.5.1 Within the European Union

Progress in relation to NSDS among EU member States varies and a selection of countries have been chosen to illustrate the different stages of progress in developing and implementing NSDS.

Below is an overview of a selection of EU countries who are at different stages of developing and implementing sustainable development strategies. Hungary is currently in the very early stages of drafting a NSDS, while Northern Ireland have developed a NSDS and are in the implementation phase. The UK and the Netherlands were amongst a group of countries that have developed, implemented and reviewed their NSDS.

There is no single method, specific entry point or ideal co-ordinating mechanism for the NSDS, which will reflect the economic, social, environmental and cultural specificities of countries. However, as time passes and information is shared between countries, some best practices and areas for improvement have been identified in relation to the integration of sustainability policy, the assessment of strategies, setting of targets and the monitoring and evaluating strategies. For example, the UK have gained a lot of experience in relation to the assessment and monitoring of their strategy and this experience has been shared with other countries.

Hungary

In Hungary the NSDS is in draft. After two rounds of inter-ministerial negotiations and stakeholder consultations, the Hungarian Government was expected to approve the first Hungarian SD strategy in early 2007, followed by a discussion of the strategy in parliament in autumn 2007. Its publication is scheduled for late 2007 or early 2008. In parallel to the parliamentary approval process, the first bi-annual SD Action Plan is scheduled to be approved by the Government in early 2008.

Although a NSDS is not available as yet, a discussion paper on the NSDS was published in 2004¹⁵. This document outlines the then current situation and tendencies in Hungary with regard to sustainable development from which priorities could be identified. These include recent changes in economic, environmental and social factors due to Hungary's accession to the EU, changes in Government to a democratic institutional system, transition to a market economy, economic growth and associated resource (including natural resources) management.

Northern Ireland

The title of the Northern Ireland Strategy for Sustainable Development, "First Steps Towards Sustainability" published in 2006,¹⁶ indicates that they are at the beginning of a process. This is due to changes in Government structure in recent years and the development of a separate (from Britain) governing body for Northern Ireland. The implementation plan published in 2006 sets out targets which the Government hopes to achieve by 2008. There are three main themes of the implementation plan, these are sustainable communities, energy and procurement. The importance of the first theme reflects the search for lasting political settlement and the development of sustainable communities which is fundamental to the future development of Northern Ireland. As energy has attracted a lot of publicity recently the Environment and Renewable fund will be used to research new technologies and address fuel poverty. The Stormont Estate (centre of Government) will be powered by a biomass plant and solar energy systems will be integrated into other Government buildings. The Government can have a direct influence in relation to green procurement and intends to use the procurement budget to lead and galvanise change in other sectors and influence markets.

Netherlands

The EU Sustainability Development Strategy (2006) proposes that EU States undertake voluntary peer reviews of their NSDS.

¹⁵ <http://www.rec.hu/sdconference/doc/V4SDHudraftsdstrategy2.doc>

¹⁶ www.ofmdfmi.gov.uk/sustain-develop.pdf

In 2007 a peer review of the Netherlands NSDS was undertaken by twelve experts from three countries (Finland, Germany and South Africa). The peers were asked to review the existing Dutch NSDS and to make recommendations on how best to develop a new NSDS based on their own and other international experiences. The report was published in June 2007 and provides some useful lessons in developing sustainability strategies.

The peer group considered that the current Action Programme on Sustainable Development 'Sustainable Action' (2003) did not encompass all aspects of a sustainable development strategy (SDS). This was largely attributed to the following;

- The focus of the SDS was mainly environmental – the social dimension and economic sustainability were missing.
- It provided a set of actions without a framing vision, set of guiding principles or quantitative headline indicators.
- As a result, activities led by different actors (Government, business, civil, society) were not linked.
- It was a Government plan and there was a lack of ownership in society or the business sector.
- Integration, synergies and trade-offs between policies and goals were lacking.
- Effective cooperation between Government Departments and levels was missing.

An urgent need for a sustainable development framework/strategy was identified. To undertake this would require leadership from all stake holder groups and within Government.

Recommendations included:

- That the strategy should be developed as a process supported by a strong focus on communication rather than as a stand alone document;
- The Netherlands should establish a set of linked structures to manage and coordinate the development and implementation of a new NSDS, for example, the establishment of a coordinating body for both Government and civil society representatives;
- A Secretariat should be established to provide day-to-day management and coordination in Government;
- Consideration should be given to incorporating sustainable development into the Dutch Constitution.

The United Kingdom

In the UK, the fifth annual report on Sustainable Development in Government was published in 2006¹⁷ by the Sustainable Development Commission (SDC) – Government's independent advisory body and watchdog for sustainable development. This report assesses the performances of central Government operations for 2005-2006 against targets of the Framework for Sustainable Development on the Government Estate.

Every Government Department has its own sustainable development action plan. There is a nationwide sustainable procurement action plan and a new set of targets for central Government called sustainable operations on the Government estate (SOGE). The carbon neutral estate target is set for 2012 and a zero carbon housing target by 2016.

The results of the fifth annual report indicate that the UK Government Departments are failing to reach carbon, waste and water targets. The main findings show that:

- Departments have only partially met the Government's sustainable operations targets for its own estate;
- Government is not on track to meet the target to reduce carbon emissions from energy use by 2010;
- Departments, on average, generated more waste in 2005/06 when compared to previous years;
- Most Departments are using energy less efficiently compared to previous years;
- Only 18% of the total sites within the Government estate have implemented Environmental Management Systems (1823 sites); and
- The varying levels of data quality presented a major challenge in creating an accurate assessment.

On a positive note, there is evidence that;

- Government is buying 3% more of its energy from renewable energy suppliers compared to last year;
- The overall recycling rate has risen by 8% since 2004/05;
- There has been a significant drop in carbon dioxide (CO₂) emissions from road transport activities since 2002/03; and
- Most Departments are incorporating sustainable design features into new builds and major refurbishment projects.

¹⁷ Sustainable Development Commission 2006 Sustainable Development in Government – Annual Report 2006

The report recommends that the Government must;

- Include sustainability targets in Permanent Secretaries performance objectives;
- Include all Departments in a carbon allocation and trading system;
- Provide Departments and agencies with stronger support;
- Focus on Departments with the biggest sustainable development impacts;
- Extend targets to cover the entire public sector.

7.5.2 North America

The United States and Canada are among the minority of developed countries without a NSDS. Nevertheless, various programs and initiatives at the local, regional and Government Departmental levels provide useful examples on the practical implementation of sustainable development.

United States

At the United States federal level, much of the domestic effort has focused on encouraging voluntary actions through public-private partnerships (e.g., voluntary environmental reporting and greenhouse-gas reduction programmes) as well as supporting research on sustainable technologies and approaches. The U.S. Environmental Protection Agency and the U.S. Department of Energy are key federal agencies in implementing these partnership and research programmes. It should be noted that internationally, the U.S. Government focuses on achieving the U.N. Millennium Development Goals through its aid and assistance programmes.

Sustainable development plans have also been developed by a number of state and local Governments. Most have focused on reducing climate change and environmental impacts through energy efficiency, alternative energy, green buildings, green procurement, better waste management, and sustainable transportation. For example:

- **California**
Through its Green California initiative,¹⁸ the state have set in 2004 a target for State-owned public buildings to be 20% more energy efficient by 2015. All new constructions and renovations are mandated to meet the U.S. green building standards and electrical equipment must meet the U.S. energy efficiency standards whenever possible. Furthermore, the initiative also requires all state procurement activities to follow the state's Environmentally Preferable Purchasing guidelines.
- **Washington**
The State of Washington have established a set of long-term sustainability goals¹⁹ and require every State agency to develop its specific 30-year sustainability plan. Starting in 2005, the State Department of General Administration²⁰ — responsible for managing the state's real properties, fleet, procurement, and various administrative services — requires green building accreditation for major constructions and renovations of State buildings. It has also set targets for reducing energy and water use by 30% in 30 years as well as other 30-year targets on vehicle fuel economy, clean energy, recycling, green procurement and employee participation in the Department's sustainability programmes. Various short-term targets have also been set.
- **New York City**
New York City has established in 2007 ten sustainability goals²¹ to be achieved by 2030, focusing on land use, air quality, water resources, energy, transportation and climate change. The goals include a 30% greenhouse-gas reduction target as well as other long-term targets on housing, emission reduction, water quality, and so on. Tasks are also assigned for various lead agencies, with 2009 and 2015 milestones established, to support the implementation of the city's sustainability plan.

18 <http://www.green.ca.gov/>

19 <http://www.ofm.wa.gov/sustainability/>

20 State of Washington Department of General Administration Annual Sustainability Progress Report 2005. Available at <http://www.ofm.wa.gov/sustainability/progress05/ga.pdf>.

21 PLANYC: A Greener, Greater New York. Available at http://www.nyc.gov/html/planyc2030/downloads/pdf/full_report.pdf.

Canada

While Canada does not have a formal National Sustainable Development Strategy, each federal ministry and agency is required to publish its own SDS, updated at least once every three years, starting in 1997. Since then, efforts have been made to coordinate the various Departmental SDSs. A guidance document for sustainable development plans in all Government Departments was published in 2000, containing recommended best practices and sample targets and performance measures for procurement, waste management, water conservation, energy efficiency, vehicle fleet management, land use management and human resources management.²²

The federal Department of Public Works and Government Services Canada (PWGSC), along with Environment Canada and Natural Resources Canada, is one of the lead agencies in coordinating the Canadian Government SDSs. The Department is responsible for managing the real properties owned by the Federal Government and offer internal Government services including information technology and procurement. Its latest Departmental SDS, for the 2007-2009 timeframe, focuses on green procurement and the greening of the Government real estate operations through energy and resource saving. Numerous 3-year targets were established, including energy and greenhouse-gas reduction targets for various types of operations and implementation of policies and standards related to green buildings, green procurement, and waste management.²³

While 3-year sustainable development targets, accompanied with detailed action plans, adopted by PWGSC would be effective in furthering the Department's short-term sustainability performance, its current SDS lacks strategic long-term targets. The Canadian Commissioner of the Environment and Sustainable Development, in its 2003 critique of Canadian Departmental SDSs, recommended that the Departmental SDSs should contain a smaller number of goals that focus on significant and essential long-term outcome

²² Government of Canada (2000). *Sustainable Development in Government Operations: A Coordinated Approach*. Available at: <http://www.pwgsc.gc.ca/greening/text/publications/toc-e.html>.

²³ Public Works and Government Services Canada (2006). *Sustainable Development Strategy 2007-2009*. Available at www.pwgsc.gc.ca/sd-env/text/home-e.html.

Appendices

Appendix A

Overview of the elements and structure of Guidelines on the Preparation of Strategy Statements for Ministers and Secretaries General/Heads of Offices (July 2007)

Secretaries General and Heads of Scheduled Offices are obliged under Section 4 (1) (b) of the Public Service Management Act 1997 to submit Strategy Statements to Ministers within six months of the appointment of a new Minister having charge of the Department or Scheduled Office and at the expiration of a three year period since the last Strategy Statement was produced. Accordingly, Departments and relevant Offices are required to prepare a revised Strategy Statement for the three year period 2008-2010.

In accordance with Section 5 (1) of the Act, Strategy Statements shall be submitted to and approved by the relevant Minister. It is considered appropriate under these guidelines that draft Strategy Statements should be first submitted to the Taoiseach and finalised Statements should be submitted to the Government.

Section 5 (2) provides that, following approval of the Strategy Statements, they shall be laid before both Houses of the Oireachtas not later than 60 days after approval. Under these guidelines, it is considered appropriate that copies should also be given to appropriate Committees of the Oireachtas. Engagement by Departments/Offices in the strategic planning process will allow for a renewed vision and integrated approach across the whole of Government. It is an opportunity to ensure that Departmental strategies are fully aligned with the Programme for Government.

While the Public Service Management Act, 1997, permits the issue of formal directions by the Government in relation to the drafting of Statements of Strategy, it is considered that broad guidelines, as contained in this document, are more appropriate given the complexity and diversity of the Civil Service.

The document is a guide to best practice in the preparation of Statements of Strategy rather than a prescriptive template, and aims to provide a framework for consideration by Departments and Offices as they develop their own unique plans. The guidelines are complementary to those being issued to Ministers in relation to the Act and to Strategy Statements in particular.

The document provide guidance on the following:

- Process of producing a Strategy Statement
- Elements in a Strategy Statement
- Consultation process
- Environmental analysis - strengths, weaknesses, opportunities and threats
- Identification of goals, objectives and strategies including resource implications
- Development of performance indicators and monitoring arrangements
- Reporting on progress

Appendix B

European Union Sustainable Development Strategy Themes and translated sub-themes

EU SDS seven sustainability challenges and translated sub-themes

CLIMATE CHANGE	SUSTAINABLE TRANSPORT	SUSTAINABLE CONSUMPTION & PRODUCTION	CONSERVATION & MANAGEMENT OF NATURAL RESOURCES	PUBLIC HEALTH	SOCIAL INCLUSION, DEMOGRAPHY & MIGRATION	GLOBAL POVERTY & SUSTAINABLE DEVELOPMENT STRATEGY
<ul style="list-style-type: none"> Reducing Green House Gas (GHG) emissions Security of energy supply Energy consumption Use of renewable energy sources, incl. biomass Transport fuels incl. biofuels 	<ul style="list-style-type: none"> Reducing environmental impact Energy use & GHG emissions Pollutant emissions Environmentally friendly transport, e.g. cycling, walking, etc Transport noise Public passenger transport CO₂ emissions for light duty vehicles & car fleet Road transport deaths 	<ul style="list-style-type: none"> Social & environmental performance of products & processes Green procurement Environmental technologies & eco-innovations 	<ul style="list-style-type: none"> Use of non-renewable natural resources Resource efficiency & use of eco-innovations Non over exploitation of renewable natural resources: <ul style="list-style-type: none"> Fisheries Biodiversity Water Air Soil Atmosphere Loss of biodiversity Forests Avoid generation of waste: <ul style="list-style-type: none"> Life cycle thinking Reuse & recycle 	<ul style="list-style-type: none"> Protection against health threats Food labelling High animal health & welfare standards Life style related & chronic disease particularly socio-econ disadvantaged groups & areas Health inequalities – health promotion & disease prevention Production & use of chemicals & pesticides that do not pose risk to human health & environment Information on environmental pollution & adverse health impacts Mental health & suicide risks 	<ul style="list-style-type: none"> People at risk of poverty & social exclusion Social cohesion Cultural diversity Labour market participation of women & older workers Integration of migrants & their families Effects of globalisation on workers & their families 	<ul style="list-style-type: none"> International environmental governance (volume of international aid) International trade

27. Government of Canada (2000). Sustainable Development in Government Operations: A Coordinated Approach. Available at: <http://www.pwgsc.gc.ca/greening/text/publications/to-c-e.html>.

28. Public Works and Government Services Canada (2006). Sustainable Development Strategy 2007-2009. Available at www.pwgsc.gc.ca/sd-env/text/home-e.html.



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