

MEATH COUNTY COUNCIL

SEA STATEMENT

ON THE

STRATEGIC ENVIRONMENTAL ASSESSMENT

OF

Amendment No. 1 to Dunboyne, Clonee & Pace Local Area Plan 2009-2015



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Contents Amendment Record

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1 INTRODUCTION

1.1 Purpose of SEA Statement

This document is the Strategic Environmental Assessment (SEA) Statement for Amendment No. 1 to the Dunboyne, Clonee & Pace Local Area Plan 2009-2015.

The main purpose of the SEA Statement is to provide information on the decision-making process and to document how environmental considerations, the views of statutory consultees and other submissions received during the consultation phases have been taken into account in the adopted amendment, together with the arrangements put in place for monitoring, thereby bringing more transparency to the decision-making process.

The SEA process thereby assists in and improves the quality of the plan making process by:

- Facilitating the identification and appraisal of alternative strategies;
- Raising awareness of the environmental impacts of the plan's implementation; and
- Encouraging the inclusion of measurable targets and indicators to aid monitoring.

This SEA Statement should be read in conjunction with the SEA Addendum Report and Non-Technical Summary.

1.2 Legislative Context

The Strategic Environmental Assessment process is a requirement of European Law. **Directive 2001/42/EC** of the European Parliament and of the Council of Ministers, of 27 June 2001, on the assessment of the effects of certain plans and programmes on the environment – and referred to hereafter as the 'SEA Directive' – introduced the requirement that SEA be carried out on plans and programmes which are prepared for a number of sectors, including land use planning.

Article 1 of the SEA Directive states:

The objective of this directive is to provide for a high level of protection of the environment and to contribute to the integration of environmental considerations into the preparation and adoption of plans and programmes with a view to promoting sustainable development, by ensuring that, in accordance with this Directive, an environmental assessment is carried out of certain plans and programmes which are likely to have significant effects on the environment.

The SEA Directive was transposed into Irish Law – and became operational on 21 July 2004 – through the introduction of national Regulations, specifically:

- **S.I. No. 435 of 2004** (European Communities (Environmental Assessment of Certain Plans and Programmes) Regulations 2004, as amended by **S.I. No. 200 of 2011** (European Communities (Environmental Assessment of Certain Plans and Programmes) (Amendment) Regulations 2011);

and

- **S.I. No. 436 of 2004** (Planning and Development (Strategic Environmental Assessment) Regulations 2004, as amended by **S.I. No. 201 of 2011** (Planning and Development (Strategic Environmental Assessment) (Amendment) Regulations 2011).

The following sources of guidance have also been used during the preparation of this SEA Statement for the proposed Amendments to the LAP:

- **Development of Strategic Environmental Assessment (SEA) Methodologies for Plans and Programmes in Ireland - Synthesis Report**; Environmental Protection Agency, 2003.
- **Implementation of SEA Directive (2001/42/EEC) Assessment of the Effects of Certain Plans and Programmes on the Environment, Guidelines to Regional Authorities and Planning Authorities on the implementation of the Directive**, The Department of the Environment, Heritage and Local Government; 2004.
- **SEA Pack**; Environmental Protection Agency, 2013
- **SEA Spatial Information Sources**; Environmental Protection Agency, 2014

1.3 Content of the SEA Statement

The SEA Directive and the instruments transposing it into Irish Law require that after the adoption of a plan or programme, the plan or programme making authority is required to make a Statement available to the public, the competent environmental authorities and, where relevant, neighbouring countries. This Statement is referred to as an SEA Statement. The SEA Statement includes information summarising:

- how environmental considerations have been integrated into the plan,
- how the following has been taken into account during the preparation of the plan:
 - the environmental report;
 - submissions and observations made on the Draft Plan and Environmental Report; and
 - consultations with other Member States (if any).
- the reasons for choosing the plan, as adopted, in the light of the other reasonable alternatives dealt with, and
- the measures decided upon to monitor the significant environmental effects of implementation of the plan.

1.4 Strategic Environmental Assessment Process

The SEA Directive (**Directive 2001/42/EEC** - *Assessment of the Effects of Certain Plans and Programmes on the Environment*) came into force in 2004 and was subsequently transposed into Irish law through **S.I. No. 435 of 2004** (*European Communities (Environmental Assessment of Certain Plans and Programmes) Regulations 2004*) and **S.I. No. 436 of 2004** (*Planning and Development (Strategic Environmental Assessment) Regulations 2004*) as amended by **S.I. No. 200 of 2011** (*European Communities (Environmental Assessment of Certain Plans and Programmes) (Amendment) Regulations 2011*) and **S.I. No. 201 of 2011** (*Planning and Development (Strategic Environmental Assessment) (Amendment) Regulations 2011*) respectively.

The Department of the Environment, Heritage and Local Government (as it was then) produced national guidelines on how the Strategic Environmental Assessment should be undertaken; *Implementation of SEA Directive 92001/42/EC: Assessment of the Effects of Certain Plans and Programmes on the Environment – Guidelines for Local Authorities and Planning Authorities* (DoEHLG, 2004). The guidelines inform the content of the Addendum Report. Furthermore, the EPA

has produced detailed guidelines for the SEA process and the topics for inclusion within the SEA; *Development of Strategic Environmental Assessment (SEA) Methodologies for Plans and Programmes in Ireland – Synthesis Report* (EPA, 2003) and the SEA Pack (2013).

2 HOW ENVIRONMENTAL CONSIDERATIONS WERE INTEGRATED INTO THE LAP VARIATION

2.1 Purpose of SEA Statement

Environmental considerations were integrated into the LAP amendment process at all stages.

This initially comprised updating the baseline situation so as to ensure that the strategy for the implementation of the LAP continued to be either diverted away from the most sensitive areas or that appropriate mitigation measures were integrated into the Plan as it was prepared.

Throughout the process, environmental considerations were directly considered at a number of stages in the SEA process as set out in Table 2.1.

Table 1: Key Stages in the SEA Process

Stage	Description	Action
Scoping	Scoping of proposed Amendments to the Local Area Plan was carried out in accordance with Article 5 (4) of the SEA Directive (2001/42/EC) and issued to the prescribed Environmental Authorities. The principal purpose of the Scoping stage is to decide upon the range of issues and level of detail to be included in the Environmental Report. An overview of the relevant environmental issues requiring further analysis are given and consideration in the Environmental Report and ultimately in the proposed Amendments to the Local Area Plan.	Completed 
Consultation with Environmental Authorities	A submission was received from the Environmental Protection Agency.	Completed 
Preparation of Draft Amendments to the Local Area Plan and Draft Environmental Report	The effects on the environment of implementing the objectives and policies as set out in the proposed amendments to LAP were assessed. The proposed amendments were also assessed against the environmental objectives for the plan area. Feedback was incorporated from the on-going amendment and assessment process. Mitigation measures discussed and selected and monitoring incorporated into existing methods.	Completed 
Consultation	Consultation on the Draft Amendments to the Local Area Plan and associated Environmental Report and Appropriate Assessments.	Completed 
Evaluation of submissions	Evaluation of submissions and observations made on the Draft Amendments, Environmental Report and Appropriate Assessment.	Completed 
Finalisation of Amendment to Local Area Plan	Completion of the amendment-making and environmental assessment process, including assessment of any proposed material alterations, as appropriate.	Completed 
SEA Statement	Preparation of an SEA Statement identifying how environmental considerations and consultation have been integrated into the amended Local Area Plan.	Completed 
Monitoring the Amended Local Area Plan	Monitoring significant environmental effects over the lifetime of the amended Local Area Plan	Current

2.2 Screening

During the initial phase of preparation of Amendment No. 1 to the Dunboyne, Clonee & Pace LAP a screening process was undertaken. The screening process assesses the requirement for a Strategic Environmental Assessment and the preparation of an Environmental Report of the impacts of a Plan on the environment.

Under Article 14B of the Planning and Development Regulations, as amended, the requirement for environmental assessment and the preparation is an Environmental Report for the making of a new Local Area Plan or the amending of an existing Local Area Plan applies where 'the population or the target population of the local area plan is 5,000 persons or more' (Article 14B(a)).

Therefore, as the Dunboyne, Clonee & Pace LAP area has a population of over 6,000 (CSO Census 2011) a Strategic Environmental Assessment and the preparation of an Environmental Report was a mandatory requirement for the amendment of the Dunboyne, Clonee & Pace LAP.

2.3 Scoping Report and Submissions

The principal purpose of the Scoping stage was to provide an overview of the relevant environmental issues requiring further analysis and consideration in the Environmental Report and ultimately in the making of the amendments to the Local Area Plan itself. By highlighting some of the significant issues at an early stage, it ensures that the issues are firmly to the forefront when considering each of the policies and objectives of the Plan and reduces the possibility of relevant issues not being addressed.

Furthermore, the scoping aspect involves consultation with the statutory consultees, providing an opportunity to comment on the highlighted issues and the proposed methodology. Under the Planning and Development (Strategic Environmental Assessment) (Amendment) Regulations 2011 the list of statutory consultees has been expanded to include:

- The Environmental Protection Agency;
- The Minister for Environment, Community and Local Government,
- The Minister for Arts, Heritage and Gaeltacht Affairs
- The Minister for Agriculture, Marine and Food,
- The Minister for Communications, Energy and Natural Resources
- Any adjoining planning authority whose area is contiguous to the area of a planning authority which prepared a draft plan, – in this case counties include Louth, Monaghan, Cavan, Westmeath, Offaly, Kildare and Fingal.

A scoping report was prepared in September 2014 and issued to the statutory consultees. With respect to the Scoping Report for the Dunboyne, Clonee & Pace LAP, written submission was received from the Environmental Protection Agency and their attachment of information on SEA guidance, data and sources of information is appreciated. There were no specific comments in relation to the content of the Scoping Report.

2.4 Plan Hierarchy

As set out in the amended LAP, the amendment of the Dunboyne, Clonee & Pace LAP is not formulated in isolation but instead is framed within a hierarchy of other plans and programmes, most particularly the Meath County Development Plan 2013-2019 and Variation 1 and Variation 2 to

same. A review of higher level plans/programmes, as well as key environmental legislation which informs the environmental protection policies contained within the plan, has been prepared.

2.5 Addendum Report

The Draft Environmental Report was prepared alongside the Draft Amendments process and investigates, describes and evaluates the effects on the receiving environment of implementing the amendments. The report also assessed and identified development alternatives for the plan area and identifies the environmentally preferred development strategy.

The preparation of the Environmental Report influenced the formulation of the amendment to the LAP in a number of distinct ways:

- It encourages the wide use of updated background environmental data and formally connects this data to the making of the amendment
- It determined updated Strategic Environmental Objectives (SEOs) against which the policies and objectives of the plan were assessed.
- The Strategic Environmental Objectives (SEOs) will form the basis for the future on-going monitoring of the amendment.
- It provides greater transparency to the public as to how environmental issues are incorporated and assessed in the plan-making process.

The Strategic Environmental Objectives (SEOs) are measures against which the environmental effects of the Amended LAP are tested in order to identify where significant adverse impacts are likely to occur. The Strategic Environmental Objectives are derived from EU and National Strategies and Plans relevant to the development of County Meath.

In accordance with the Directive and SEA Guidelines, the policies and objectives of the Draft Amendments were assessed against the SEOs for likely effects on the environment. The impacts were identified in terms of **quality** of impact, **significance** of impact and **duration** of impact.

The draft Environmental Report was finalised alongside the adopted Amendment No.1 into an Addendum Report to be read in conjunction with the Environmental Report for the Ashbourne Local Area Plan 2009-2015.

2.6 Mitigation

While every effort was taken to ensure that the impact of the amendment of the LAP is neutral to positive, certain unavoidable negative impacts may occur during the implementation of the LAP. Where appropriate the Addendum Report details mitigation measures to lessen or eliminate identifiable adverse impacts and show the linkages between potential significant effects and proposed mitigation measures.

Similarly, proposals to monitor various environmental receptors of the amended LAP are included. Environmental Indicators present a yardstick against which the plan's success can be monitored.

2.7 Consideration of Alternatives

Variation 2 of the Meath County Development Plan 2013-2019 previously introduced the land use zoning objectives and an order of priority for the release of lands (residential land evaluation) for the Dunboyne, Clonee & Pace LAP area into the County Development Plan. Variation 2 of the Meath County Development Plan 2013-2019 also underwent full Strategic Environmental Assessment. No changes to the land use zoning objectives could occur as part of this LAP amendment process.

It is noted that SEA Guidelines require that alternatives need to be 'realistic and capable of implementation' and should represent a range of different approaches within the statutory and operational requirements of the particular plan. Given that the land use zoning objectives cannot be changed, it is considered that within the scope of the proposed amendment there are no realistic alternatives that are capable of implementation.

2.8 Relationship with Appropriate Assessment

The Amendment No. 1 to the Dunboyne, Clonee & Pace LAP has also undergone Appropriate Assessment (AA) Screening as required by Article 6(3) of the EC Habitats Directive (92/43/EEC) as implemented in Ireland within the *Planning and Development (Amendment) Act 2010* and **S.I. 477 of 2011** (*European Communities (Birds and Natural Habitats) Regulations 2011*). An AA is an assessment of the implications of the plan, alone and in combination with other plans, programmes and projects, on the integrity of Natura 2000 site(s), in view of its(their) conservation objectives.

The findings of the AA are that the amendments will not give rise to likely significant impacts on the Natura 2000 network – refer to separate Appropriate Assessment Report.

3 SUBMISSIONS AND OBSERVATIONS

3.1 Introduction

Environmental considerations were integrated into the Amendment No.1 process at all stages.

This section sets out the significant issues that were raised during and after the preparation of the Amendment No. 1 to the Dunboyne, Clonee & Pace Local Area Plan 2009-2015. Formal submissions were made at the following stages:

- SEA Scoping Consultation: November 2014.
- Public Consultation / Display of Draft Plan and Environmental Report: Tuesday 4th November until Tuesday 16th December 2014

Each stage is now considered in turn as follows:

3.2 SEA Scoping Consultations: November 2014

The principal purpose of the Scoping stage was to provide an overview of the relevant environmental issues requiring further analysis and consideration in the Draft Environmental Report and ultimately in the making of the amendments to the Local Area Plan itself. By highlighting some of the significant issues at an early stage, it ensures that the issues are firmly to the forefront when considering each of the policies and objectives of the Plan and reduces the possibility of relevant issues not being addressed.

Furthermore, the scoping aspect involves consultation with the statutory consultees, providing an opportunity to comment on the highlighted issues and the proposed methodology. Under the Planning and Development (Strategic Environmental Assessment) (Amendment) Regulations 2013 the list of statutory consultees has been expanded to include:

- The Environmental Protection Agency;
- The Minister for Environment, Community and Local Government,
- The Minister for Arts, Heritage and Gaeltacht Affairs
- The Minister for Agriculture, Marine and Food,
- The Minister for Communications, Energy and Natural Resources
- Any adjoining planning authority whose area is contiguous to the area of a planning authority which prepared a draft plan, – in this case counties include Louth, Monaghan, Cavan, Westmeath, Offaly, Kildare and Fingal.

A scoping report was prepared in September 2014 and issued to the statutory consultees. With respect to the Scoping Report for the Dunboyne, Clonee & Pace LAP, written submission was received from the Environmental Protection Agency and their attachment of information on SEA guidance, data and sources of information is appreciated. There were no specific comments in relation to the content of the Scoping Report.

3.3 Public Consultation Draft Stage: 4th November to 16th December 2014

The Draft Amendment No. 1 to the Dunboyne, Clonee & Pace LAP 2009-2015, together with accompanying Environmental Report (Strategic Environmental Assessment (SEA)) and Natura Impact Screening (Appropriate Assessment (AA)) was put on public display from 4th November to 16th December 2014. Written submissions or observations with respect to the Draft Amendment and/or

Environmental Report and/or Appropriate Assessment were invited from members of the public and other interested parties.

The Chief Executive prepared a report on the submissions received, listing the persons or bodies who made submissions, summarising the issues raised and providing a response and making recommendations in relation to the manner in which those issues should be addressed in the Draft Amendments.

Only one submission related to the SEA, this being from the EPA. General comments included:

- There would be merits to including a commitment to link the environmental/SEA related monitoring, to the Plan implementation and reporting procedure.
- Following adoption of the amendments, an SEA statement should be prepared and sent to any environmental authority consulted during the SEA Process.

With regards to the specifics of the Amendment No. 1 to the Dunboyne, Clonee & Pace LAP the EPA Submission commented regarding

- the inclusion of Tables 1.1 SEA Baseline Environment and Table 1.2 Proposed Environmental Monitoring are welcomed. Consideration should be given to the inclusion of similar tables for each Amendment.
- The Environmental Report referring to '*no realistic alternatives*' having been considered; however the amendments reference three alternative scenarios as having being assessed.

It is noted that the referenced table are from the original SEA undertaken for the preparation of the Local Area Plan rather than related to the amendment. The response in regard to consideration of alternatives is addressed in Section 4 of this statement.

The Manager's Report on submissions to the Draft Amendment No. 1 included SEA review and comments, where required.

4 CONSIDERATION OF ALTERNATIVES

The issue of alternatives is a critical function of the SEA process and is necessary to evaluate the likely environmental consequences of alternative development strategies for the plan area within the constraints imposed by environmental conditions.

Article 5 of the SEA Directive requires the consideration of reasonable alternatives taking into account the objectives and the geographical scope of the plan or programme and the significant environmental effects of the alternatives proposed.

Variation 2 of the Meath County Development Plan 2013-2019 previously introduced the land use zoning objectives and an order of priority for the release of lands (residential land evaluation) for the Dunboyne, Clonee & Pace LAP area into the County Development Plan Variation 2 of the Meath County Development Plan 2013-2019 also underwent full Strategic Environmental Assessment. No changes to the land use zoning objectives could occur as part of this LAP amendment process.

As part of Variation No. 2, all available and undeveloped lands identified with an A2 'New Residential' land use zoning objective were assessed and evaluated against a number of assessment criteria, one of which was environmental impact. In this way, it is considered that alternatives were considered as part of the variation process which was also subject to a separate Strategic Environmental Assessment (SEA) process.

It is noted that SEA Guidelines require that alternatives need to be 'realistic and capable of implementation' and should represent a range of different approaches within the statutory and operational requirements of the particular plan. Given that the land use zoning objectives (refer to Appendix 2 of this report) cannot be changed, it is considered that within the scope of the proposed amendment there are no realistic alternatives that are capable of implementation.

5 MONITORING OF THE LOCAL AREA PLAN

5.1 Introduction

Monitoring of the amended Dunboyne, Clonee & Pace Local Area Plan and its implications on the environment is paramount to ensure that the environment is not adversely affected through the implementation of the LAP. Under Article 10 of the SEA Directive monitoring, must be carried out of the significant environmental effects directly related to the implementation of the amended LAP *'in order to, inter alia, identify at an early stage unforeseen adverse effects and to be able to undertake appropriate remedial action.'* The Department of the Environment, Community and Local Government Guidelines on SEA recommends that monitoring does not require new research activity; existing sources of information can be used and the task of data collection can be shared.

While considerable environmental data is directly available to the Council such as water quality, recycling rates *etc.*, other sources of information will be accessed to provide a comprehensive view of the impact of the amended LAP. In this regard the Local Authority will work with other agencies with environmental mandates to gather data for the purposes of monitoring the implementation of the LAP. Therefore, while monitoring specific elements of the environment is not strictly the preserve of the Council, the Council will continue to liaise and work with the Environmental Protection Agency, The National Parks and Wildlife Service, The Fisheries Board, as well as others in the pursuit of environmental conservation and protection through existing environmental monitoring procedures.

5.2 Monitoring Indicators

It is proposed to base monitoring on a series of indicators which measure changes in the environment, especially changes which are critical in terms of environmental quality, for example water or air pollution levels. The indicators aim to simplify complex interrelationships and provide information about environmental issues which is easy to understand. A list of environmental indicators is provided in Table 2. The indicators are based on the Strategic Environmental Objectives and have been derived from knowledge of the existing environmental issues within the LAP area and also from legislation, guidelines and higher level Plans. It is acknowledged that some of these monitoring indicators will carry on beyond the lifetime of the current local area plan.

Environmental indicator assessment during monitoring can show positive/neutral impacts or negative impacts on the environment. Where an indicator value highlights a positive/neutral impact on the environment, it is likely that the policies and objectives of the amended LAP are well defined with regard to the environment. Conversely where the objectives of the amended LAP have a negative impact on the environment, it may be necessary to review the objectives of the amended LAP or to take some other form of intervention. For example, if an objective or policy is having a significant adverse impact, a variation may be considered during the lifetime of the amended LAP.

Table 2: Proposed Monitoring Indicators

Environmental Category	Targets	Selected indicators	Data Sources, Responsibility and Frequency (subject to available resources)
Biodiversity - Flora and Fauna	No loss of important and/or designated habitats	Number of sites.	Meath County Council / National Parks and Wildlife Service/Inland Fisheries (<i>depending on available information from relevant statutory authorities</i>)
	No deterioration in the quality of protected areas No loss of protected species	Number of sites containing rare or threatened species. Number of rare or threatened species.	Initial monitoring to commence within two years of adoption as part of the Chief Executive's Report on progress. (<i>subject to available resources</i>).
	No fish kills during the lifetime of the LAP All actions contained within the Biodiversity Plan to be achieved during the lifetime of the LAP.	Details of major fish kills Number of actions achieved.	
	No net loss of green linkages established under the Green Infrastructure Strategy. No spread of invasive species within the LAP	Net area of new green infrastructure established through the development management process. Numbers of new cases identified.	Establish baseline, location and extent of invasive species in LAP, to commence within two years of adoption as part of the Chief Executive's Report on progress. (<i>subject to available resources</i>)
	No adverse impacts on Natura 2000 sites	Numbers of planning applications accompanied by Stage 2 Appropriate Assessment	Meath County Council Planning Department
Population (Human Beings)	Decrease in journey times to work, education and recreation.	Distance and mode of transport to work	Meath County Council - Housing, Planning and Roads sections.
		Number and proportion of residential units permitted within 400m of centre of Settlement Gross Floor Area (GFA) and proportion of employment use permitted within 400m of public transport stop.	Meath County Council Planning Department Meath County Council Planning Department
	Applications for new developments in excess of fifteen residential units or over 0.2ha. to be	Number of design statements.	Initial monitoring to commence within two years of adoption as part of the Chief Executive's

Environmental Category	Targets	Selected indicators	Data Sources, Responsibility and Frequency (subject to available resources)
	<p>accompanied by Design Statement. Rural housing to accord with Rural Housing Design Guidelines</p> <p>Delivery of residential development in line with Meath County Settlement Strategy</p> <p>Consolidation of Town / Settlement Centre</p>	<p>Number of planning permissions granted in the countryside.</p> <p>Percentage of residential development within each level of the settlement hierarchy</p> <p>Percentage of the residential planning permission target achieved in each settlement</p> <p>Density of development within each residential planning permission</p> <p>Number of planning permissions granted within town / village centre zoned lands</p>	<p>Report on progress. <i>(subject to available resources)</i></p> <p>Meath County Council Planning Department</p> <p>Meath County Council Planning Department</p> <p>Meath County Council Planning Department</p> <p>Meath County Council Planning Department</p>
Soil	<p>No incidences of soil contamination</p> <p>Limited and controlled development of greenfield sites</p>	<p>Number/severity of recorded pollution incidences</p> <p>Area of land lost through greenfield development as per Development Plan process</p>	<p>Meath County Council & EPA</p> <p>Initial monitoring to commence within two years of adoption as part of the Chief Executive's Report on progress. <i>(subject to available resources)</i></p>
Water	<p>Implement fully the recommendations of the relevant River Basin Districts River Basin Management Plans.</p> <p>Achieve quality status of surface waters in line with WFD</p> <p>Comply and implement fully the most recent EPA guidelines on Septic Tank use and siting as well as other on-site treatment facilities.</p> <p>Maintain and upgrade where necessary all Local Authority operated WWT plants to comply with the relevant legislation.</p> <p>Improvement in bathing water quality</p>	<p>Number of recommendations achieved.</p> <p>Percentage increase in the overall quality of surface waters.</p> <p>Number of permissions granted complying with the guidelines.</p> <p>Compliance with discharge parameters.</p>	<p>Meath County Council - Planning Department, Water Services Department. Also the Environmental Protection Agency.</p> <p>Initial monitoring to commence within two years of adoption as part of the Chief Executive's Report on progress. <i>(subject to available resources)</i></p>

Environmental Category	Targets	Selected indicators	Data Sources, Responsibility and Frequency (subject to available resources)
	Reduction in development subject to Flood Risk	Number of residential planning applications / permission granted on sites identified as being in Flood Risk Zone A or B Gross Floor Area (GFA) of employment development located on sites identified as being in Flood Risk Zone A or B	Meath County Council Planning Department Meath County Council Planning Department
Air Quality	Improvement in the concentrations of measured parameters such as Particulate Matter, Sulphur Dioxide and nitrogen oxides.	Measurable reductions in concentrations.	EPA Initial monitoring to commence within two years of adoption as part of the Chief Executive's Report on progress. <i>(subject to available resources)</i>
Climate change	Increase in permissions granted for residential development within acceptable distance of public transport hubs.	Percentage of housing developments within specified distance to transport hubs.	Review of EPA standards and data to commence within two years of adoption as part of the Chief Executive's Report on progress. <i>(subject to available resources)</i>
Material Assets	Increase access to public transport from households.	Provision of walking and cycle infrastructure as proposed under LAP.	Meath County Council
	Increase re-use of brownfield sites for development in preference to greenfield sites.	Ratio of brownfield site development to greenfield sites.	Meath County Council Meath County Council/EPA
	Improved treatment at established wastewater treatment facilities.	Compliance with discharge limits.	Meath County Council/EPA
	Reduction in the tonnage of overall waste produced and an increase in the percentage of waste recycled.	Tonnage of waste produced and recycled.	
Cultural Heritage	No loss of features of architectural or archaeological Importance	Number of recorded features lost.	Meath County Council, The Archaeological Survey monitoring programme, Ireland; Buildings at Risk Register

Environmental Category	Targets	Selected indicators	Data Sources, Responsibility and Frequency (subject to available resources)
	No deterioration in the quality of Architectural baseline	Number of protected structures impacted by new development	- Heritage Council Ireland
	No protected structures to be lost through neglect or misuse.	Number of additions / deletions to the RPS.	Meath County Council
	No impact on the integrity or setting of monuments contained on the Record of Monuments by development granted planning permission.	Number of monuments impacted by new development.	Meath County Council
Built Heritage	Reduction in impacts on Built Heritage	Number of planning permission affecting Protected Structures, Structures on the Record of Monuments and Places, Architectural Conservation Areas or NIAH Designed Landscapes	Meath County Council – Planning
Landscape	No diminution in the quality of important landscapes.	Number of developments permitted within landscapes of exceptional value and high sensitivity as per the LCA.	Meath County Council
	Implement in full the recommendations of the Landscape Character Assessment for Co. Meath.	Number of recommendations implemented.	Meath County Council

Note on Frequency of Monitoring

It is recommended that data based on planning application data is monitored on an annual basis.

It is recommended that data related to environmental emissions, such as water, air, noise and soil quality are reviewed at two-yearly intervals.

MEATH COUNTY COUNCIL

Amendment No. 1 to
Dunboyne, Clonee & Pace
Local Area Plan 2009-2015

STRATEGIC ENVIRONMENTAL ASSESSMENT: ADDENDUM REPORT



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ACRONYMS AND ABBREVIATIONS

AA	Appropriate Assessment
CFRAM	Catchment Flood Risk Assessment and Management
DoAHG	Department of Arts, Heritage and the Gaeltacht
DoCENR	Department of Communications, Energy and Natural Resources
DoECLG	Department of Environment, Community and Local Government
EC	European Community
EEC	European Economic Community
EIA	Environment Impact Assessment
EIS	Environment Impact Statement
EPA	Environmental Protection Agency
ER	Environmental Report
EU	European Union
FRA	Flood Risk Assessment
GIS	Geographical Information Systems
IED	Industrial Emissions Directive
IPC	Integrated Pollution Control
IPPC	Integrated Pollution Prevention and Control
NHA/pNHA	Natural Heritage Area / proposed Natural Heritage Area
NIAH	National Inventory of Architectural Heritage
NIR	Natura Impact Report
NIS	Natura Impact Statement
NPWS	National Parks and Wildlife Service
OPW	Office of Public Works
P.E.	Population Equivalent
P/P	Plan or Programme
RBD	River Basin District
RBMP	River Basin Management Plan
RMP	Records of Monuments and Places
SAC/cSAC	Special Area of Conservation / candidate Special Area of Conservation
SEA	Strategic Environmental Assessment
S.I.	Statutory Instrument
SPA	Special Protection Area
WFD	Water Framework Directive
WWTP	Waste Water Treatment Plant

GLOSSARY

Appropriate Assessment (and/or Habitats Directive Assessment):	<p>An assessment undertaken in accordance with Article 6(3) and 6(4) of the Habitats Directive (Council Directive 92/43/EEC of 21 May 1992 on the conservation of natural habitats and of wild fauna and flora) of the implications of a plan, programme or project, either on its own or in combination with other plans or projects, on the integrity of a Natura 2000 site in view of the conservation objectives of that site.</p> <p>In Ireland the Natura 2000 network comprises:</p> <ul style="list-style-type: none"> • Special Protection Areas (SPAs) protected under the Birds Directive, • Special Areas of Conservation (SACs) / candidate Special Areas of Conservation (cSACs) protected under the Habitats Directive, and • Ramsar sites (wetlands, classified under the Ramsar Convention 1971).
Aquifers:	A water bearing rock which readily transmits water to wells and springs.
Baseline environment:	A description of the present state of the environment of the plan or programme area.
Biodiversity:	The variability among living organisms from all sources including, <i>inter alia</i> , terrestrial, marine and other aquatic ecosystems and the ecological complexes of which they are part. This includes diversity within species, between species and of ecosystems. Biological diversity covers all plant and animal species, as well as micro-organisms, genetic diversity within species and the ecosystems/habitats of which they are part.
Birds Directive:	Council Directive 79/409/EEC of 2 April 1979 on the conservation of wild birds. This Directive has been codified under EU Birds Directive 2009/147/EC of 30 November 2009.
Cumulative effects:	Effects on the environment that result from incremental changes caused by the strategic action together with other past, present, and reasonably foreseeable future actions. These effects can result from individually minor but collectively significant actions taking place over time or space.
Data:	Includes environmental information, proxy information, and any other relevant statistical information.
Designated authority:	An organisation that must be consulted in accordance with the SEA Regulations.
Ecology:	Relating to the study of living organisms, the relationships between organisms and the relationships between organisms and their environment.
Ecosystem:	A dynamic complex of plant, animal and micro-organism communities and their non-living environment interacting as a functional unit. (Article 2 of the Convention on Biological Diversity, 1992)
Environmental assessment: (<i>i.e.</i> for the purposes of SEA)	The preparation of an environmental report, the carrying out of consultations, the taking into account of the environmental report and the results of the consultations in decision-making and the provision of information on the decision (in accordance with Articles 4 to 9 of the SEA Directive).
Environmental characteristics:	Environmental resources, issues and trends in the area affected by the plan or programme.
Environmental indicator:	An environmental indicator is a measure of an environmental variable over

	time, used to measure achievements of environmental objectives and targets.
Environmental objective:	Environmental objectives are broad, overarching principles which should specify a desired direction of environmental change.
Environmental receptors:	Include biodiversity, population, human health, fauna, flora, soil, water, air, climatic factors, material assets, cultural heritage (including architectural and archaeological) and landscape as listed in the SEA Directive. This list is not exhaustive, and can include other receptors which may arise for a particular plan or programme.
Environmental Report (ER): (i.e. for the purposes of SEA)	A document required by the SEA Directive as part of a strategic environmental assessment which identifies, describes and evaluates the likely significant effects on the environment of implementing a plan or programme.
Environmental targets:	A target usually underpins an objective often having a time deadline that should be met and should be accompanied by limits or thresholds.
Groundwater:	All water which is below the surface of the ground in the saturation zone and in direct contact with the ground or subsoil. This zone is commonly referred to as an aquifer which is a subsurface layer or layers of rock or other geological strata of sufficient porosity and permeability to allow a significant flow of groundwater or the abstraction of significant quantities of groundwater.
Greenhouse Gas:	Gaseous constituents of the atmosphere that absorb/trap infrared (thermal) radiation which is mainly emitted by the earth's surface and thereby influence the earth's temperature.
Habitats Directive:	Council Directive 92/43/EEC of 21 May 1992 on the conservation of natural habitats and of wild flora and fauna
Hierarchy of plans:	Both higher and lower level plan or programme relevant to the plan or programme being assessed.
Industrial Emissions Directive (IED):	Council Directive 2010/75/EU of 24 November 2010 consolidates seven existing EU Directives, including the Integrated Pollution Prevention and Control (IPPC) Directive, the Solvents Directive, the Large Combustion Plants Directive, and the Waste Incineration Directive into a single legislative instrument. The IED seeks 'to achieve a high level of protection for the environment taken as a whole' from harmful effects of industrial activities.
Integrated Pollution Prevention and Control (IPPC) Directive:	Council Directive 2008/1/EC of 15 January 2008 (which replaced the Council Directive 1996/61/EC of 24 September 1996) requires industrial and agricultural activities with a high pollution potential to have a permit. This permit can only be issued if certain environmental conditions are met, so that the companies themselves bear responsibility for preventing and reducing any pollution they may cause. IPPC licencing came into effect in Ireland on the 12 th July 2004; however, the IPPC Directive, and licencing requirements, have now been consolidated under, and recast by, the Industrial Emissions Directive 2010/75/EU.
Interrelationships:	Associations or linkages, related to environmental impact of the proposed plan or programme usually on environmental receptors.
Key environmental issues:	Those significant environmental issues, which are of particular relevance and significance within a plan or programme area and/or the zone of influence of that plan or programme. These issues should be identified during SEA Scoping process.
Material assets:	Critical infrastructure essential for the functioning of society such as: electricity generation and distribution, water supply, wastewater treatment,

	transportation <i>etc.</i>
Mitigation measures:	Measures to avoid/prevent, minimise/reduce, or as fully as possible, offset/compensate for any significant adverse effects on the environment, as a result of implementing a plan or programme.
Monitoring:	A continuing assessment of environmental conditions at, and surrounding, the plan or programme. This determines if effects occur as predicted or if operations remain within acceptable limits, and if mitigation measures are as effective as predicted. The primary purpose of monitoring is to identify significant environmental effects which arise during the implementation stage against those predicted during the plan or programme preparation stage.
Natural Heritage Area / proposed Natural Heritage Area:	<p>An area which has been designated as such by way of a Natural Heritage Order under Section 18 of the Wildlife (Amendment) Act 2000, or that, pending a decision by the Minister under Section 17 or 18 of the Act, is subject of a notice under Section 16 of that Act.</p> <p>An area considered important under national legislation for the habitats present or which holds species of plants and animals whose habitat needs protection.</p>
Natura Impact Report	(NIR); the report prepared following Appropriate Assessment of potential impact on Natura 2000 sites as required under the Habitats Directive which presents information on the assessment and the process of collating data on a plan or programme and its potential significant impacts on Natura 2000 site(s).
Natura Impact Statement	(NIS); the statement prepared following Appropriate Assessment of potential impact on Natura 2000 sites as required under the Habitats Directive which presents information on the assessment and the process of collating data on a project and its potential significant impacts on Natura 2000 site(s).
Non-technical summary	A summary of the findings of the ER summarised under the headings listed in Annex 1 of the SEA Directive that can be readily understood by decision-makers and by the general public. It should accurately reflect the findings of the ER.
Plan or Programme:	<p>Including those co-financed by the European Community as well as any modifications to them that are:</p> <ul style="list-style-type: none"> • subject to preparation and/or adoption by an authority at national, regional or local level or which are prepared by an authority for adoption, through a legislative procedure by Parliament or Government, <p style="text-align: center;">and</p> <ul style="list-style-type: none"> • required by legislative, regulatory or administrative provisions.
Post-mitigation residual impact:	Environmental effect that remains after mitigation measures have been employed.
Reasonable alternatives:	Alternatives should take into account the objectives and geographical scope of the plan or programme. There can be different ways of fulfilling the plan or programme objectives, or of dealing with environmental problems. The alternatives should be realistic, capable of implementation and should fall within the legal and geographical competence of the authority concerned.
River Basin:	Means the area of land from which all surface water run-off flows, through a sequence of streams, rivers and lakes into the sea at a single river mouth,

	estuary or delta.
River Basin Districts:	Administrative areas for coordinated water management and are comprised of multiple river basins (or catchments), with cross-border basins (<i>i.e.</i> those covering the territory of more than one Member State) assigned to an international RBD.
Scoping:	The process of deciding the content and level of detail of an SEA, including the key environmental issues, likely significant environmental effects and alternatives which need to be considered, the assessment methods to be employed, and the structure and contents of the Environmental Report.
Screening:	The determination of whether implementation of a plan or programme would be likely to have significant environmental effects on the environment. The process of deciding whether a plan or programme requires a SEA.
SEA Directive:	Directive 2001/42/EC 'on the assessment of the effects of certain plans and programmes on the environment'.
SEA Statement:	A statement summarising: How environmental considerations have been integrated into the plan or programme How the ER, the opinions of the public, and designated authorities, and the results of transboundary consultations have been taken into account The reasons for choosing the plan or programme as adopted in the light of other reasonable alternatives.
Significant effects:	Effects on the environment, including on issues such as biodiversity, population, human health, fauna, flora, soil, water, air, climatic factors, material assets, cultural heritage including architectural and archaeological heritage, landscape and the interrelationship between the above factors.
Special Area of Conservation / candidate Special Area of Conservation:	Site designated according to the Habitats Directive 92/43/EEC.
Special Protection Area:	An area designated under the European Directive on the Conservation of Wild Birds.
Statutory Instrument:	('secondary legislation') An order, regulation, rule, scheme or bye-law made in exercise of a power conferred by statute and governed by the Statutory Instruments Act 1947.
Surface water:	Means inland waters, except groundwater, which are on the land surface (such as reservoirs, lakes, rivers, transitional waters, coastal waters and, under some circumstances, territorial waters) which occur within a river basin.
Water body:	A discrete and significant element of surface water such as a river, lake or reservoir, or a distinct volume of groundwater within an aquifer.
Water Framework Directive:	(WFD) Council Directive 2000/60/EC of 23 October 2000 establishes a framework for Community action in the field of water policy. Promotes a new approach to water management through river basin planning for inland surface waters, estuarine waters, coastal waters and groundwater.

NON TECHNICAL SUMMARY

1 Introduction

Meath County Council adopted the Draft Amendment No. 1 to the Dunboyne/Clonee/Pace Local Area Plan 2009-2015 on 2nd March 2015.

The Amendments have been subject to Strategic Environmental Assessment (SEA) and an Addendum Report on the likely impact of the amendments has been prepared. The purpose of the Addendum Report is to provide a clear understanding of the likely environmental consequences of the amendments. This report should be read in conjunction with the Dunboyne/Clonee/Pace Local Area Plan 2009-2015 incorporating Amendment No.1.


Strategic Environmental Assessment (SEA) is a systematic process for predicting, evaluating and mitigating, at the earliest appropriate stage, the environmental effects of a national, regional or local plan before it is adopted. Its purpose is to give the public and other interested parties an opportunity to comment on, and to be kept informed of, decisions about a specific plan and how they are made. It allows for the integration of environmental considerations into decision-making at an early stage.







The Strategic Environmental Assessment process is a requirement of European Law. **Directive 2001/42/EC** of the European Parliament and of the Council of Ministers, of 27 June 2001, on the assessment of the effects of certain plans and programmes on the environment – and referred to hereafter as the ‘SEA Directive’ – introduced the requirement that SEA be carried out on plans and programmes which are prepared for a number of sectors, including land use planning.

The SEA Directive was transposed into Irish Law – and became operational on 21 July 2004 – through the introduction of national Regulations, **S.I. No. 435 of 2004** (European Communities (Environmental Assessment of Certain Plans and Programmes) Regulations 2004, as amended by **S.I. No. 200 of 2011** (European Communities (Environmental Assessment of Certain Plans and Programmes) (Amendment) Regulations 2011); and **S.I. No. 436 of 2004** (Planning and Development (Strategic Environmental Assessment) Regulations 2004, as amended by **S.I. No. 201 of 2011** (Planning and Development (Strategic Environmental Assessment) (Amendment) Regulations 2011).

This section of the report outlines the key stages in the development of the assessment in accordance with the Directive and the aforementioned regulations.

Table NTS-1: Key Stages in the SEA Process

Stage	Description	Action
Scoping	<p>Scoping of proposed Amendments to the Local Area Plan was carried out in accordance with Article 5 (4) of the SEA Directive (2001/42/EC) and issued to the prescribed Environmental Authorities.</p> <p>The principal purpose of the Scoping stage is to decide upon the range of issues and level of detail to be included in the Environmental Report. An overview of the relevant environmental issues requiring further analysis are given and consideration in the Environmental Report and ultimately in the proposed Amendments to the Local Area Plan.</p>	<p>Completed</p> 
Consultation	A submission was received from the Environmental Protection	Completed

Stage	Description	Action
with Environmental Authorities	Agency.	
Preparation of Draft Amendments to the Local Area Plan and Draft Environmental Report	The effects on the environment of implementing the objectives and policies as set out in the proposed amendments to LAP were assessed. The proposed amendments were also assessed against the environmental objectives for the plan area. Feedback was incorporated from the on-going amendment and assessment process. Mitigation measures discussed and selected and monitoring incorporated into existing methods.	Completed 
Consultation	Consultation on the Draft Amendments to the Local Area Plan and associated Environmental Report and Appropriate Assessments.	Completed 
Evaluation of submissions	Evaluation of submissions and observations made on the Draft Amendments, Environmental Report and Appropriate Assessment.	Completed 
Finalisation of Amendment to Local Area Plan	Completion of the amendment-making and environmental assessment process, including assessment of any proposed material alterations, as appropriate.	Completed 
SEA Statement	Preparation of an SEA Statement identifying how environmental considerations and consultation have been integrated into the amended Local Area Plan.	Completed 
Monitoring the Amended Local Area Plan	Monitoring significant environmental effects over the lifetime of the amended Local Area Plan	<i>Current</i>

2 Scope of the Amendments to the Local Area Plan

The over-riding objective of the amendment process is to ensure that the Dunboyne, Clonee & Pace LAP is consistent with the County Development Plan as varied, and to incorporate the aspects of the LAP – as already included within Variation 2 to the County Development Plan (adopted May 2014) – into the Amended Local Area Plan. Therefore, Amendment No.1 to the Dunboyne, Clonee & Pace LAP, includes:

- the land use zoning objectives and an order of priority for the release of residential and employment lands, and associated policies and objectives

together with

- the land use zoning objectives map

The land use zoning objectives map for Dunboyne, Clonee & Pace as included in the amendments is directly replicated from Volume 5 of the Meath County Development Plan 2013 – 2019 introduced by Variation No. 2 as referred to above. No changes to the land use zoning objectives could occur as part of this LAP amendment process.

The Land Use Zoning Objectives and Map together with the Additional Policies & Objectives and Residential Land Evaluation for the Dunboyne, Clonee & Pace LAP area have already been subject to Strategic Environmental Assessment and Appropriate Assessment as part of the making of Variation 2 to the Meath County Development Plan, May 2014.

In conclusion, the scope of the amendments is to:

- *Update the narrative / commentary provided in each Local Area Plan to reflect the changes in policy direction contained in the 2013-2019 County Development Plan and 2010-2022 Regional Planning Guidelines (both of which have been adopted since the Local Area Plans were prepared and adopted in 2009), reflect the 2011 Census of Population results, and update school enrolment figures, etc.*
- *Amend the policy direction contained in each Local Area Plan to reflect the revisions to the land use zoning objectives and phasing (Order of Priority) now contained in the County Development Plan for each centre and any other amendment required to ensure consistency with the County Development Plan. This also relates to changes arising from the Strategic Flood Risk Assessment and Management Plan.*

Further to the above, the amendments to the LAP also include for minor corrections / updating to the naming / referencing of bodies and documents that have changed since the adoption of the LAP, e.g. to the current County Development Plan 2013-2109; to 2011 Census, to changes in name of Government Department (e.g. to Department of Arts, Heritage and the Gaeltacht instead of Department of Environment, Heritage and Local Government), etc.

3 The Plan Area

The current Local Area Plan (LAP) for Dunboyne, Clonee & Pace dates from 2009. Subject to limitations set out under Sub-section 2.3 Scope of the LAP Amendment Process (above), Meath County Council proposed to amend the LAP for Dunboyne, Clonee & Pace. The boundary for the amended Local Area Plan is as provided on the land use zoning map for Dunboyne, Clonee & Pace introduced to the County Development Plan via Variation No. 2 in May 2014.

The population of Dunboyne in 2011, as recorded in the CSO Census of Population 2011, was 6,959 persons, an increase of 22% on the 5,713 persons recorded in the 2006 Census of Population.

Dunboyne is designated as a Large Growth Town II in the Meath County Development Plan 2013-2019. It is envisaged that Large Growth Towns II *“are smaller in scale than Large Growth Towns I but remain strong active growth towns, economically vibrant with high quality transport links to larger towns/city. Although smaller in scale, they are nonetheless significant because of their connectivity within the GDA region. As a key Metropolitan Area settlement, Dunboyne will have a similar role in the settlement hierarchy to Navan and Drogheda. Like the Large Growth Towns I, it will be a key growth centre in the County and encompass regional economic activity and local service provision. However, growth should be planned for a population in the order of 15,000 – 30,000 persons and it is important that new services and facilities should be provided as the town expands.*

4 Plan Hierarchy

This Addendum Report includes a review of the hierarchy of international, national, regional and local plans, policies and programmes of relevance to the Amendments to the LAP. Principal amongst these is the relationship of the LAP to the Meath County Development Plan 2013-2019, as varied.

5 Alternatives

Variation 2 of the Meath County Development Plan 2013-2019 previously introduced the land use zoning objectives and an order of priority for the release of lands (residential land evaluation) for the Dunboyne, Clonee & Pace LAP area into the County Development Plan. No further changes to the land use zoning objectives could occur as part of this LAP amendment process.

Given that the land use zoning objectives cannot be changed, and that the over-riding objectives of the amendment process is to ensure consistency between the County Development Plan and the Local Area Plan, it is considered that within the scope of this amendment there are no realistic alternatives that are capable of implementation.

6 Strategic Environmental Objectives (SEOs) and Environmental Assessment

Strategic Environmental Objectives (SEOs) have been developed for the plan area and these are used to assess the potential environmental impact of the amendments to the LAP. The SEOs provide for assessment indicators for human beings, flora and fauna (biodiversity), air quality and climate, water, flooding, waste water, transport, landscape cultural heritage *etc.* The full listing of these SEOs is provided below:

Environmental Parameter	Ref:	Objective
Biodiversity	B1	Conserve and where possible enhance the diversity of designated and non-designated habitats and species avoiding irreversible losses
	B2	Promote measures to protect biodiversity by creating and improving habitats, where possible
	B3	Provide for protection of internationally and nationally designated sites, including Natura 2000 Sites (<i>i.e. Special Areas</i>)

Environmental Parameter	Ref:	Objective
		<i>of Conservation (SACs) & Special Protection Areas (SPAs)) and Natural Heritage Areas (NHAs) & proposed Natural Heritage Areas (pNHAs).</i>
	B4	Avoid damage by development to designated wildlife sites and protected species, and associated ecological corridors/ linkages
Population	P1	Improve people's quality of life based on high-quality residential, working and recreational environments and on sustainable travel patterns
	P2	Provide opportunities for sustainable public access to wildlife and wild places at appropriate locations
Human Health	H1	Minimise noise, vibration and emissions from traffic, industrial processes and extractive industry
Soil	S1	Maintain the quality of soils
	S2	Maximise the sustainable re-use of brownfield lands, and maximise and prioritise the use of the existing built environment rather than developing greenfield lands
	S3	Minimise the consumption of non-renewable sand, gravel and rock deposits
	S4	Minimise the amount of waste to landfill
Water	W1	Protect and enhance the status of aquatic ecosystems and, with regard to their water needs, terrestrial ecosystems and wetlands directly depending on the aquatic ecosystems
	W2	Promote sustainable water use based on a long-term protection of available water resources
	W3	Reduce progressively discharges of polluting substances to waters
	W4	Mitigate the effects of floods and droughts including vulnerability to climate change. (extreme weather, sea level rise, coastal erosion)
Air	A1	Reduce all forms of air pollution
	A2	Minimise emissions of greenhouse gases to contribute to a reduction and avoidance of human-induced global climate change
	A3	Reduce waste of energy, and maximise use of renewable energy sources
	A4	Assess, plan and manage adaptation to climate change impacts
	A5	Reduce the need to travel
Material Assets	MA1	Maximise use of the existing built environment
	MA2	Avoid flood risk and/or coastal erosion in selecting sites and zoning of lands for development

Environmental Parameter	Ref:	Objective
	MA3	Maintain water abstraction, run-off and recharge within carrying capacity (including future capacity) at environmentally sustainable levels.
	MA4	Maintain the quality of and access to assets such as aquifers, aggregates, ports, motorways, and all physical and social infrastructures.
Cultural Heritage	CH1	Promote the protection and conservation of the cultural, including architectural and archaeological, heritage
Landscape	L1	Conserve and enhance valued natural and historic landscapes and their character and features within them

Table NTS-2 Strategic Environmental Objectives (SEOs)

In the environmental assessment each policy and objective is individually assessed against the Strategic Environmental Objectives (SEOs) discussed above. The potential effects within the assessment exercise were categorized, as per the guidelines, into the following broad environmental impacts:

- Potential Positive impact:** A change which improves the quality of the environment.
Potential Neutral impact: A change which does not affect the quality of the environment.
Potential Negative impact: A change which reduces or lessens the quality of the environment.
Uncertain impact: The nature of any impact can not be ascertained at this stage.

7 Findings of the Environmental Assessment

The Amendment to the Dunboyne, Clonee & Pace LAP 2009-2015 includes for:

- the insertion of a number of new policies and objectives;
- the amendment of aspects / part of existing policies and objectives, and
- the deletion of a number of existing policies and objectives;
- in some instances for the minor amendment, updating of references, documents, *etc.* within existing policies and objectives

A full assessment of the amendment is set out in Tables 7.1, 7.2 and 7.3 of this Addendum Report. The overall finding of the assessments is that the amendments will have a primarily neutral or positive environmental effect on the environmental objectives and indicators of the LAP area. A potential residual transportation impact has been identified as a result of RET OBJ 1 at Pace.

In considering the impacts on the environment without the implementation of Amendment No.1 it is submitted that Variation 2 of the Meath County Development Plan 2013-2019 previously introduced the land use zoning objectives and an order of priority for the release of lands (residential land evaluation) for the Ashbourne LAP area into the County Development Plan. The over-riding objectives of the Amendment No.1 process were to ensure consistency between the County Development Plan and the Local Area Plan.

8 Mitigation and Monitoring

While every effort was taken to ensure that the impact of the amendment of the LAP is neutral to positive, certain unavoidable negative impacts may occur during the implementation of the LAP. Where appropriate, the Addendum Report details mitigation measures to lessen or eliminate identifiable adverse impacts and show the linkages between potential significant effects and proposed mitigation measures.

Similarly, proposals to monitor various environmental receptors of the amended LAP as it is implemented over the lifetime of the plan are also included.

1. INTRODUCTION

1.1 Background

Meath County Council adopted the Draft Amendment No. 1 to the Dunboyne/Clonee/Pace Local Area Plan 2009-2015 on 2nd March 2015.

The Amendments have been subject to Strategic Environmental Assessment (SEA) and an Addendum Report on the likely impact of the amendments has been prepared. The purpose of the Addendum Report is to provide a clear understanding of the likely environmental consequences of the amendments. This report should be read in conjunction with the Dunboyne/Clonee/Pace Local Area Plan 2009-2015 incorporating Amendment No.1 and the Environmental Report prepared for the Dunboyne/Clonee/Pace Local Area Plan 2009-2015.

This Addendum Report / Strategic Environmental Assessment (SEA) is carried out in order to comply with the requirements for SEA in Ireland as set out in national Regulations (refer to sub-section 1.3 Legislative Context below).

The Draft Environmental Report went on public display with the proposed Amendments to the Local Area Plan. Submissions were received during this consultation period and were reviewed and an assessment of the environmental impacts of any changes / further amendments was conducted and included in the final Addendum Report as prepared. This report is accompanied with a Non-technical Summary Report and an SEA Statement.

1.2 SEA Definition

Strategic Environmental Assessment is a systematic process for predicting, evaluating and mitigating, at the earliest appropriate stage, the environmental effects of a national, regional or local plan before it is adopted. Its purpose is to give the public and other interested parties an opportunity to comment on, and to be kept informed of, decisions about a specific plan and how they are made. It allows for the integration of environmental considerations into decision-making at an early stage.

While Environmental Impact Assessment (EIA) is generally used for describing the process of environmental assessment which is limited to individual projects, Strategic Environmental Assessment (SEA) is the term given to the environmental assessment of plans, programmes, and other strategic actions, which set the policy, as well as planning and development, context within which individual developments / projects occur. The objectives of the SEA process are to provide for a high level of protection of the environment and to promote sustainable development by contributing to the integration of environmental considerations into the preparation and adoption of specified Plans and Programmes¹.

1.3 Legislative Context

The Strategic Environmental Assessment process is a requirement of European Law. **Directive 2001/42/EC** of the European Parliament and of the Council of Ministers, of 27 June 2001, on the assessment of the effects of certain plans and programmes on the environment – and referred to hereafter as the ‘SEA Directive’ – introduced the requirement that SEA be carried out on plans and programmes which are prepared for a number of sectors, including land use planning.

¹ www.epa.ie

Article 1 of the SEA Directive states:

The objective of this directive is to provide for a high level of protection of the environment and to contribute to the integration of environmental considerations into the preparation and adoption of plans and programmes with a view to promoting sustainable development, by ensuring that, in accordance with this Directive, an environmental assessment is carried out of certain plans and programmes which are likely to have significant effects on the environment.

The SEA Directive was transposed into Irish Law – and became operational on 21 July 2004 – through the introduction of national Regulations, specifically:

- **S.I. No. 435 of 2004** (European Communities (Environmental Assessment of Certain Plans and Programmes) Regulations 2004, as amended by **S.I. No. 200 of 2011** (European Communities (Environmental Assessment of Certain Plans and Programmes) (Amendment) Regulations 2011);

and

- **S.I. No. 436 of 2004** (Planning and Development (Strategic Environmental Assessment) Regulations 2004, as amended by **S.I. No. 201 of 2011** (Planning and Development (Strategic Environmental Assessment) (Amendment) Regulations 2011).

The following sources of guidance have also been used during the preparation of this Addendum Report for the Amendments to the LAP:

- **Development of Strategic Environmental Assessment (SEA) Methodologies for Plans and Programmes in Ireland - Synthesis Report**; Environmental Protection Agency, 2003.
- **Implementation of SEA Directive (2001/42/EEC) Assessment of the Effects of Certain Plans and Programmes on the Environment, Guidelines to Regional Authorities and Planning Authorities on the implementation of the Directive**, The Department of the Environment, Heritage and Local Government; 2004.
- **SEA Pack**; Environmental Protection Agency, 2013
- **SEA Spatial Information Sources**; Environmental Protection Agency, 2014

1.4 SEA Process

The SEA process is broken down into a number of sequential steps. At each stage of the process the impacts of the proposed / amended plan or programme on the environment and the public is assessed. Where it was assessed that the proposed / amended plan or programme may conflict with the environmental objectives then mitigation measures are proposed.

The Strategic Environmental Assessment process for the amendments to the LAP is documented throughout this Addendum Report and the scope of the LAP and the methodology employed are discussed in Chapters 2 and 3 respectively.

The key stages in the SEA process are highlighted in Table 1.1, together with progress made to date in relation to the assessment of the Amendments to the LAP.

Table 1.1: Key Stages in the SEA Process

Stage	Description	Action
Scoping	<p>Scoping of proposed Amendments to the Local Area Plan was carried out in accordance with Article 5 (4) of the SEA Directive (2001/42/EC) and issued to the prescribed Environmental Authorities.</p> <p>The principal purpose of the Scoping stage is to decide upon the range of issues and level of detail to be included in the Environmental Report. An overview of the relevant environmental issues requiring further analysis are given and consideration in the Environmental Report and ultimately in the proposed Amendments to the Local Area Plan.</p>	<p>Completed</p> 
Consultation with Environmental Authorities	A submission was received from the Environmental Protection Agency.	<p>Completed</p> 
Preparation of Draft Amendments to the Local Area Plan and Draft Environmental Report	The effects on the environment of implementing the objectives and policies as set out in the proposed amendments to LAP were assessed. The proposed amendments were also assessed against the environmental objectives for the plan area. Feedback was incorporated from the on-going amendment and assessment process. Mitigation measures discussed and selected and monitoring incorporated into existing methods.	<p>Completed</p> 
Consultation	Consultation on the Draft Amendments to the Local Area Plan and associated Environmental Report and Appropriate Assessments.	<p>Completed</p> 
Evaluation of submissions	Evaluation of submissions and observations made on the Draft Amendments, Environmental Report and Appropriate Assessment.	<p>Completed</p> 
Finalisation of Amendment of Local Area Plan	Completion of the amendment-making and environmental assessment process, including assessment of any proposed material alterations, as appropriate.	<p>Completed</p> 
SEA Statement	Preparation of an SEA Statement identifying how environmental considerations and consultation have been integrated into the amended Local Area Plan.	<p>Completed</p> 
Monitoring the Amended Local Area Plan	Monitoring significant environmental effects over the lifetime of the amended Local Area Plan	<p>Current Stage</p>

2. SCOPE OF AMENDMENTS TO LOCAL AREA PLAN

2.1 Introduction

Meath County Council has amended the 5 Local Area Plans for Ashbourne, Drogheda Southern Environs, Dunboyne/Clonee/Pace, Dunshaughlin and Ratoath.

The over-riding objective of the amendment process is to ensure that the 5 LAPs are consistent with the County Development Plan as varied, and to incorporate aspects of the LAPs – as previously included within Variation 2 to the County Development Plan – into the respective amended Local Area Plan.

2.2 Background

The Dunboyne, Clonee & Pace Local Area Plan 2009-2015 was adopted on the 22nd September 2009. The making of the LAP was subject to full Strategic Environmental Assessment.

Meath County Council adopted the **Meath County Development Plan 2013 – 2019** on 17th December 2012 and it took effect from 22nd January 2013. The County Development Plan sets out a vision and an overall strategy for the proper planning and sustainable development of the County for a six-year period. It also sets out guiding policies and objectives for the development of the County in terms of physical growth and renewal, economic, social and cultural activity, and most critically for SEA, for protecting and enhancing local assets by preserving the quality of the landscape, open space, natural, architectural, archaeological and cultural heritage and material assets. The County Development Plan takes account of various national and regional strategies and guidelines and also reflects consultation with statutory bodies, the general public and other interested bodies.

Objective **CS OBJ 2** of the County Development Plan required the Planning Authority:

To publish a variation to the Meath County Development Plan 2013 – 2019 within one year of the adoption of the Development Plan to introduce land use zoning objectives and an order of priority for the release of lands for Ashbourne, Drogheda Environs, Dunboyne/Clonee/Pace, Dunshaughlin and Ratoath. Following the making of this variation, the Planning Authority shall publish amendments to the Local Area Plans of Ashbourne, Drogheda Environs, Dunboyne/ Clonee/Pace, Dunshaughlin and Ratoath to ensure that they are consistent with the Development Plan, as varied, and particularly the settlement strategy, core strategy and household allocations outlined in Table 2.4.

To give effect to the requirements of CS OBJ 2 outlined above, **Variation No. 2** to the Meath County Development Plan was made on 19th May 2014. The Variation collectively forms Volume 5 of the Meath County Development Plan 2013 – 2019 and is entitled '*Written Statement & Development Objectives for Urban Centres*'.

Therefore, Variation 2 introduced land use zoning objectives and an order of priority for the release of lands (residential land evaluation) in the 5 LAP areas, including within the Dunboyne, Clonee & Pace area. As noted above the introduction of the land use zoning objectives was required pursuant to the Core Strategy of the adopted County Development Plan. Variation No. 2 also included the introduction of policies and objectives for each of 5 urban centres following the undertaking of a Strategic Flood Risk Assessment and Management Plan to inform same. The additional policies and objectives for the LAP area are set out in Variation 2 to the County Development These policies and

objectives (*with some changes to policy and objective referencing*) are included in Amendment No.1 to the Dunboyne, Clonee & Pace LAP 2009-2015.

Under Variation 2, the land use zoning objectives map also identified the lands in the Dunboyne, Clonee & Pace LAP area required to accommodate the household allocation as provided for under the Core Strategy. The land evaluation that took place for the LAP area under Variation 2 was based on a sequential approach to urban expansion, which ensures that development will be directed in the first instance to lands closest to the town centre and adjacent to the built up area of the town. In this context, the requirement for any further release of residential zoned land in the LAP area will be assessed following the making of the next County Development Plan in line with the population projections contained therein. A similar land evaluation process was prepared for lands identified for employment generating uses and a sequential approach taken to the delivery of such lands.

Variation 2, including the introduction of land use zoning objectives map and an order of priority for the release of lands (residential land evaluation) for the Dunboyne, Clonee & Pace LAP area was subject to full Strategic Environmental Assessment.

2.3 Scope of the LAP Amendment Process

The over-riding objective of the amendment process is to ensure that the Dunboyne, Clonee & Pace LAP (as well as the other 4 LAPs for the urban centres) is consistent with the County Development Plan as varied, and to incorporate the aspects of the LAP – as already included within Variation 2 to the County Development Plan – into the Amended Local Area Plan. Therefore, the Amendment No.1 to the Dunboyne, Clonee & Pace LAP, includes:

- the land use zoning objectives and an order of priority for the release of residential and employment lands, and associated policies and objectives
- together with
- the land use zoning objectives map

The land use zoning objectives map for Dunboyne, Clonee & Pace as included in the amendments (is directly replicated from Volume 5 of the Meath County Development Plan 2013 – 2019 introduced by Variation No. 2 as referred to above. No changes to the land use zoning objectives could occur as part of this LAP amendment process.

The Land Use Zoning Objectives and Map together with the Additional Policies & Objectives and Residential Land Evaluation for the Dunboyne, Clonee & Pace LAP area have already been subject to Strategic Environmental Assessment and Appropriate Assessment as part of the making of Variation 2 to the Meath County Development Plan, May 2014.

In conclusion, the scope of the amendments was to:

- *Update the narrative / commentary provided in each Local Area Plan to reflect the changes in policy direction contained in the 2013-2019 County Development Plan and 2010-2022 Regional Planning Guidelines (both of which have been adopted since the Local Area Plans were prepared and adopted in 2009), reflect the 2011 Census of Population results, and update school enrolment figures, etc.*

- *Amend the policy direction contained in each Local Area Plan to reflect the revisions to the land use zoning objectives and phasing (Order of Priority) now contained in the County Development Plan for each centre and any other amendment required to ensure consistency with the County Development Plan. This also relates to changes arising from the Strategic Flood Risk Assessment and Management Plan.*

Further to the above, the amendments to the LAP also include for minor corrections / updating to the naming / referencing of bodies and documents that have changed since the adoption of the LAP, e.g. to the current County Development Plan 2013-2109; to 2011 Census, to changes in name of Government Department (e.g. to Department of Arts, Heritage and the Gaeltacht instead of Department of Environment, Heritage and Local Government), etc.

2.4 The Plan Area

The current Local Area Plan (LAP) for Dunboyne, Clonee & Pace, which was subject to Strategic Environmental Assessment, dates from 2009. Subject to limitations set out under Sub-section 2.3 Scope of the LAP Amendment Process (above), Meath County Council proposed to amend the LAP for Dunboyne, Clonee & Pace. The boundary for the amended Local Area Plan is as provided on the land use zoning map for Dunboyne, Clonee & Pace introduced to the County Development Plan via Variation No. 2 in May 2014. Additional Policies & Objectives and the Residential Land Evaluation used for establishing the land use zoning objectives for Dunboyne, Clonee & Pace – as already included within Variation 2 to the County Development Plan 2013-2019. These policies and objectives (*with some changes to policy and objective referencing*) are included in the Draft Amendment No.1 to the Dunboyne, Clonee & Pace LAP 2009-2015.

The population of Dunboyne, Clonee & Pace in 2011, as recorded in the CSO Census of Population 2011, was 11,338 persons, an increase of 33% on the 8,528 persons recorded in the 2006 Census of Population.

Dunboyne is designated as a Large Growth Town II in the Meath County Development Plan 2013-2019. It is envisaged that Large Growth Towns II “*are smaller in scale than Large Growth Towns I but remain strong active growth towns, economically vibrant with high quality transport links to larger towns/city. Although smaller in scale, they are nonetheless significant because of their connectivity within the GDA region. As a key Metropolitan Area settlement, Dunboyne will have a similar role in the settlement hierarchy to Navan and Drogheda. Like the Large Growth Towns I, it will be a key growth centre in the County and encompass regional economic activity and local service provision. However, growth should be planned for a population in the order of 15,000 – 30,000 persons and it is important that new services and facilities should be provided as the town expands.*

Dunboyne also has a strong economic function, albeit different to Navan and Drogheda. Dunboyne has been identified as a secondary economic growth town in the Development Plan economic strategy (linked with Ashbourne)”. (CPD, page 62).

The County Development Plan includes the following specific objective in relation to Large Growth Town II (CDP, page 63):

SS OBJ 9	To ensure that Dunboyne develops as a key settlement centre in the Metropolitan Area of the Greater Dublin Area and to ensure that the settlement grows in a manner that is balanced, self sufficient and supports a compact urban form and the integration of land use and transport.
SS OBJ 10	To ensure that development of the Maynooth Environs contributes to the sustainable development of the town, in a manner that is balanced, self sufficient and supports a compact urban form and the integration of land use and transport.

3. STRATEGIC ENVIRONMENTAL ASSESSMENT METHODOLOGY

3.1 Strategic Environmental Assessment Process

The SEA Directive (**Directive 2001/42/EEC** - *Assessment of the Effects of Certain Plans and Programmes on the Environment*) came into force in 2004 and was subsequently transposed into Irish law through **S.I. No. 435 of 2004** (*European Communities (Environmental Assessment of Certain Plans and Programmes) Regulations 2004*) and **S.I. No. 436 of 2004** (*Planning and Development (Strategic Environmental Assessment) Regulations 2004*) as amended by **S.I. No. 200 of 2011** (*European Communities (Environmental Assessment of Certain Plans and Programmes) (Amendment) Regulations 2011*) and **S.I. No. 201 of 2011** (*Planning and Development (Strategic Environmental Assessment) (Amendment) Regulations 2011*) respectively.

The Department of the Environment, Heritage and Local Government (as it was then) produced national guidelines on how the Strategic Environmental Assessment should be undertaken; *Implementation of SEA Directive 92001/42/EC: Assessment of the Effects of Certain Plans and Programmes on the Environment – Guidelines for Local Authorities and Planning Authorities* (DoEHLG, 2004). The guidelines inform the content of this Addendum Report. Furthermore, the EPA has produced detailed guidelines for the SEA process and the topics for inclusion within the SEA; *Development of Strategic Environmental Assessment (SEA) Methodologies for Plans and Programmes in Ireland – Synthesis Report* (EPA, 2003) and the SEA Pack (2013).

3.2 Screening

During the initial phase of preparation of Amendment No. 1 to the Dunboyne, Clonee & Pace LAP a screening process was undertaken. The screening process assesses the requirement for a Strategic Environmental Assessment and the preparation of an Environmental Report of the impacts of a Plan on the environment.

Under Article 14B of the Planning and Development Regulations, as amended, the requirement for environmental assessment and the preparation of an Environmental Report for the making of a new Local Area Plan or the amending of an existing Local Area Plan applies where ‘the population or the target population of the local area plan is 5,000 persons or more’ (Article 14B(a)).

Therefore, as the Dunboyne in itself has a population of 6,959 (CSO Census 2011) a Strategic Environmental Assessment and the preparation of an Environmental Report was a mandatory requirement for the amendment of the Dunboyne, Clonee & Pace LAP.

3.3 Scoping Report and Submissions

The principal purpose of the Scoping stage is to provide an overview of the relevant environmental issues requiring further analysis and consideration in the Draft Environmental Report and ultimately in the making of the amendments to the Local Area Plan itself. By highlighting some of the significant issues at an early stage, it ensures that the issues are firmly to the forefront when considering each of the policies and objectives of the Plan and reduces the possibility of relevant issues not being addressed.

Furthermore, the scoping aspect involves consultation with the statutory consultees, providing an opportunity to comment on the highlighted issues and the proposed methodology. Under the Planning and Development (Strategic Environmental Assessment) (Amendment) Regulations 2011 the list of statutory consultees has been expanded to include:

- The Environmental Protection Agency;
- The Minister for Environment, Community and Local Government,
- The Minister for Arts, Heritage and Gaeltacht Affairs
- The Minister for Agriculture, Marine and Food,
- The Minister for Communications, Energy and Natural Resources
- Any adjoining planning authority whose area is contiguous to the area of a planning authority which prepared a draft plan, – in this case counties include Louth, Monaghan, Cavan, Westmeath, Offaly, Kildare and Fingal.

A scoping report was prepared in September 2014 and issued to the statutory consultees. With respect to the Scoping Report for the Dunboyne, Clonee & Pace LAP, written submission was received from the Environmental Protection Agency and their attachment of information on SEA guidance, data and sources of information is appreciated. There were no specific comments in relation to the content of the Scoping Report.

3.4 Draft Environmental Report and Submissions

The Amendment No.1 was assessed for likely impacts on the environment as a result of implementation of the amended plan and a draft Environmental Report was prepared. This draft Environmental Report was put on public consultation alongside the proposed Amendments to the Local Area Plan. Submissions received during this period were considered and recommendations made were contained within the Chief Executives Report.

3.5 SEA Addendum Report

Following adoption of Amendment No.1 to the Local Area Plan by the Council, this SEA Addendum Report was prepared to outline the SEA process undertaken and how the SEA process has influenced the Amendment No.1. In addition proposed mitigation and monitoring indicators are outlined to ensure the continued protection of the environment during the implementation of the amended Plan.

3.6 Relationship with Appropriate Assessment

The Amendment No. 1 to the Dunboyne, Clonee & Pace LAP has also undergone Appropriate Assessment (AA) Screening as required by Article 6(3) of the EC Habitats Directive (92/43/EEC) as implemented in Ireland within the *Planning and Development (Amendment) Act 2010* and **S.I. 477 of 2011** (*European Communities (Birds and Natural Habitats) Regulations 2011*). An AA is an assessment of the implications of the plan, alone and in combination with other plans, programmes and projects, on the integrity of Natura 2000 site(s), in view of its(their) conservation objectives.

The findings of the AA Stage 1 Screening are that the amendments will not give rise to likely significant impacts on the Natura 2000 network – refer to separate Appropriate Assessment: Stage 1 Screening Report.

3.7 Plan Hierarchy

As set out at sections 1.2 and 1.3 above, the Amendment No. 1 of the Dunboyne, Clonee & Pace LAP is not formulated in isolation but instead is framed within a hierarchy of other plans and programmes, most particularly the Meath County Development Plan 2013-2019 and Variation 1 and Variation 2 to same. A review of higher level plans/programmes, as well as key environmental

legislation which informs the environmental protection policies contained within the plan, has been prepared.

3.8 Strategic Environmental Objectives (SEOs)

Variation 2 of the Meath County Development Plan 2013-2019, which introduced the land use zoning objectives and an order of priority for the release of residential and employment lands in the Dunboyne, Clonee & Pace LAP area underwent full Strategic Environmental Assessment. The policies and objectives contained within the amendment to the Dunboyne, Clonee & Pace LAP was assessed against the Strategic Environmental Objectives (SEOs) contained within the adopted Environmental Report of Variation 2 of the Meath County Development Plan 2013-2019.

3.9 Consideration of Alternatives

As set out at Section 2 of this report, it is noted that Variation 2 of the Meath County Development Plan 2013-2019 previously introduced the land use zoning objectives and an order of priority for the release of lands (residential land evaluation) for the Dunboyne, Clonee & Pace LAP area into the County Development Plan. Variation 2 of the Meath County Development Plan 2013-2019 also underwent full Strategic Environmental Assessment. No changes to the land use zoning objectives could occur as part of this LAP amendment process.

It is noted that SEA Guidelines require that alternatives need to be ‘realistic and capable of implementation’ and should represent a range of different approaches within the statutory and operational requirements of the particular plan. Given that the land use zoning objectives cannot be changed, it is considered that within the scope of this amendment there are no realistic alternatives that are capable of implementation.

3.10 Environmental Assessment of Amendments

The principal component of the SEA involves a broad environmental assessment of the policies and objectives of the Plan, where appropriate. The methodology utilizes the concept of matrices both to assess the environmental impact and to present the conclusions. Each policy and objective will be individually assessed against the Strategic Environmental Objectives (SEOs) discussed above.

The potential effects within the assessment exercise were categorized, as per the guidelines, into the following broad environmental impacts:

Potential Positive impact:	A change which improves the quality of the environment.
Potential Neutral impact:	A change which does not affect the quality of the environment.
Potential Negative impact:	A change which reduces or lessens the quality of the environment.
Uncertain impact:	The nature of any impact can not be ascertained at this stage.

Finally a discussion is provided on the objectives and policies and on the significance (profound, moderate, imperceptible) of the identified impact; the duration (temporary, short-term, medium-term, long-term or permanent) of the identified impact; the type (cumulative, irreversible, synergistic) of the identified direct or indirect impact, in accordance with EPA guidelines.

3.11 Mitigation and Monitoring

While every effort was taken to ensure that the impact of the amendment of the LAP is neutral to positive, certain unavoidable negative impacts may occur during the implementation of the LAP.

Where appropriate the Addendum Report details mitigation measures to lessen or eliminate identifiable adverse impacts and show the linkages between potential significant effects and proposed mitigation measures.

Similarly, proposals to monitor various environmental receptors of the amended LAP are included. Environmental Indicators present a yardstick against which the plan's success can be monitored.

3.12 Difficulties Encountered

A sizeable volume of information was available given the data collected in the recent review of the County Development Plan and in the making of Variation 2 to the County Development Plan. No particular difficulties were encountered in the strategic environmental assessment process or in the preparation of this Addendum Report.

4. REVIEW OF RELEVANT PLANS POLICIES AND PROGRAMMES

4.1 Introduction

The Amendment No.1 to the Dunboyne, Clonee & Pace LAP 2009-2015 is framed within a hierarchy of spatial plans which range from the international down to site specific level. These plans are informed by International, National and Regional level policy guidelines. This hierarchy of plans, programmes, policies, strategies, *etc.* sets the legislative and policy framework by which the LAP must be formulated. The National, Regional and County strategies and policies play a central role in establishing higher level agendas and the county level plan objectives. The Dunboyne, Clonee & Pace LAP is required to conform to and translate the objectives of these higher levels plans, in particular the Meath County Development Plan 2013-2019, to a town level basis.

4.2 Relevant Plans, Policies and Programmes

The following plans, programmes, policies, strategies and guidelines are relevant to the making of the amendment to the LAP.

4.2.1 Planning and Development

National Development Plan (NDP) Transforming Ireland: A Better Quality of Life for All 2007-2013

The objective of this investment development plan is to deliver a better quality of life for all within a strong and vibrant economy that maintains International competitiveness and promotes regional development, social justice and environmental sustainability

National Spatial Strategy 2002-2020

The NSS is intended to provide an upper-tier of strategic guidance that feeds into general government policymaking and into the regional and local development planning framework. In order to further these aims, the NSS sets down a series of policies in relation to: employment, housing, rural development, access to services, and quality of life / environmental quality. The strategy identifies a limited number of Regional Gateways and Hubs. Meath is located within the Dublin and Mid East Region as designated by the NSS.

It is noted that in Feb 2013 the Department announced the Government's intention to abandon the National Spatial Strategy and replace it with a revised strategy.

Regional Planning Guidelines for the Greater Dublin Area (2010-2022)

The Regional Planning Guidelines for the Greater Dublin Area 2010-2022 give effect, at a Regional level, to the national planning framework put forward in the National Spatial Strategy (NSS) and National Development Plan (NDP). They provide a Regional framework for the formulation of policies and strategy in the County Development Plan and seek to ensure the proper balance between the different settlements in the region with regard to development, population and services. The Guidelines present an updated Regional settlement strategy. They also set out 'Population Targets' for the region and for each County, including County Meath, which have been formulated having regard to the January 2009 'population targets' issued by the Department of Environment, Heritage and Local Government (DoEHLG) and supplementary guidance of August and October 2009.

Draft Transport Strategy for the Greater Dublin Area - National Transport Authority, (2011-2030)

The draft strategy document constitutes a strategic transport plan for the GDA for the next 20 years. A number of fundamental tenets underlie the draft strategy objectives. These include the adoption of a hierarchy of transport users with pedestrians, cyclists and public transport users at the top of

the hierarchy and consequently these users should have their safety and convenience needs considered first. A second key principle is the requirement that land use planning and transport planning need to be considered together in the overall development of the GDA region.

Meath County Development Plan 2013-2019, as varied

To ensure that development is co-ordinated with the provision of necessary public infrastructure and implementation of strategic planning policies such as the Regional Planning Guidelines for the Greater Dublin Area, the LAP must comply with the Core Strategy which is contained within the Meath CDP 2013-2019.

Reflecting the development themes of the Meath CDP 2013-2019 and Variation No.1, the purpose of the Core Strategy is to provide a medium to longer term quantitatively based strategy for the spatial development of the towns and villages within the County.

The Meath County Development Plan, as varied and its relevance to the Amendment to the LAP are discussed in greater detail under Chapter 2 Scope of Amendments to Local Area Plan above.

Guidelines for Planning Authorities on Sustainable Residential Development in Urban Areas (Cities, Towns & Villages) (2009)

The aim of these guidelines is to set out the key planning principles which should be reflected in development plans and local area plans, and which should guide the preparation and assessment of planning applications for residential development in urban areas. The guidelines highlight the importance of energy efficiency in building and development and sets out a series of high level aims for successful and sustainable residential development in urban areas

Sustainable Rural Housing – Guidelines for Planning Authorities 2005

The Rural Housing Guidelines seek to ensure that sustainable housing development patterns are supported in rural areas.

Delivering Homes, Sustaining Communities, (2007)

This 2007 policy statement provides for an integrated approach to housing and planning in Ireland. The policy recognises that continued strong demand for housing presents major challenges in respect of the planning of new housing and associated services.

Quality Housing for Sustainable Communities, (2007)

Design guidelines intended to assist in the implementation of the policies set out in *Delivering Homes Sustaining Communities* (above). The aim of these Guidelines is to identify principles and criteria that are important in the design of housing and to highlight specific design features, requirements and standards that have been found to be particularly relevant.

Sustainable Urban Housing: Design Standards for New Apartments. Guidelines for Planning Authorities (2007)

The primary aim of these guidelines is to promote sustainable urban housing, by ensuring that the design and layout of new apartments will provide satisfactory accommodation for a variety of household types and sizes – including families with children - over the medium to long term.

Smarter Travel: A Sustainable Transport Future, A New Transport Policy for Ireland 2009-2020

This document represents the transport policy for Ireland for the period 2009-2020. The key goals are to reduce overall travel demand, to maximise the efficiency of the transport network, to reduce reliance on fossil fuels, to reduce transport emissions and to improve the accessibility of transport. The policy sets out 49 Key Actions for achieving sustainable transport.

4.2.2 Environmental Plans and Policies

Water Framework Directive (2000/60/EC) as amended

The Water Framework Directive (WFD) (2000/60/EC) seeks to improve or maintain the ecological and physico-chemical quality of all waterbodies – rivers, lochs, groundwater, transitional waters (estuaries) and coastal waters. Its ultimate objective is to achieve “good ecological and chemical status” for all Community waters by 2015.

Floods Directive (2007/60/EC)

The Directive aims to establish a common framework for assessing and reducing the risk that floods within the European Union pose to human health, the environment, property and economic activity. This Directive requires Member States to assess if all water courses and coast lines are at risk from flooding, to map the flood extent and assets and humans at risk in these areas and to take adequate and coordinated measures to reduce this flood risk.

The Groundwater Directive, (2006/118/EC) 2006

This directive establishes a regime which sets underground water quality standards and introduces measures to prevent or limit inputs of pollutants into groundwater. The directive establishes quality criteria that takes account local characteristics and allows for further improvements to be made based on monitoring data and new scientific knowledge. The groundwater directive complements the Water Framework Directive.

EC Bathing Water Quality Directive, (2006/7/EC) 2006

This Directive strengthens the rules guaranteeing bathing water quality. It supplements the Water Framework Directive on water protection and management.

Shellfish Directive, (2006/113/EC), 2006

The Directive concerns the quality of shellfish waters, i.e. the waters suitable for the development of shellfish (bivalve and gastropod molluscs). It applies to those coastal and brackish waters which need protection or improvement in order to allow shellfish to develop and to contribute to the high quality of shellfish products intended for human consumption.

EU Directive on the Conservation of Wild Birds, (2009/147/EC) 1979

This Directive ensures far-reaching protection for all of Europe's wild birds, identifying 194 species and sub-species among them as particularly threatened and in need of special conservation measures.

Member States are required to designate Special Protection Areas (SPAs) for 194 particularly threatened species and all migratory bird species. SPAs are scientifically identified areas critical for the survival of the targeted species, such as wetlands. They are part of the Natura 2000 ecological network set up under the Habitats Directive 92/43/EEC.

EU Directive on the Conservation of Natural Habitats and of Wild Flora and Fauna, (92/43/EEC), 1992

In conjunction with the Birds Directive, the Habitats Directive forms the backbone of EU nature protection legislation. The main goal of the Habitats Directive is to promote the maintenance of biodiversity by requiring Member States to take measures to maintain, protect or restore natural habitats, animal and plant species to a favourable conservation status, introducing robust protection for those habitats and species of European importance. In Ireland, these habitats include raised bogs, active blanket bogs, turloughs, sand dunes, machair (flat sandy plains on the north and west coasts), heaths, lakes, rivers, woodlands, estuaries and sea inlets.

The Directive provides for a network of protected sites known as The Natura 2000 network, which limits the extent and nature of development which may have a detrimental effect on the flora or fauna identified therein. Special Areas of Conservation (SACs) are part of the Natura 2000 Network and as such Ireland is required to propose relevant areas for designation as SACs to ensure the natural habitats and species habitats are maintained and restored if necessary to a favourable conservation status. Animals and plant species that are in need of strict protection are listed in Annexes to the Directive.

European Communities (Birds and Natural Habitats) Regulations 2011

These regulations consolidate the European Communities (Natural Habitats) Regulations 1997 to 2005 and the European Communities (Birds and Natural Habitats)(Control of Recreational Activities) Regulations 2010, as well as addressing transposition failures identified in the CJEU judgements.

SEA Directive - Assessment of the effects of certain plans and programmes on the Environment, (2001/42/EC) 2001

This Directive requires plan-makers to carry out an assessment of the likely significant environmental effects of implementing a plan or programme before the plan or programme is adopted. There are two statutory instruments which transposed the SEA Directive into Irish Law. See Chapter 3 of this report for further detail.

Environmental Impact Assessment Directive (85/337/EEC) (97/11/EC),

Under the Directive Member States are required to carry out Environmental Impact Assessments (EIA) of certain public and private projects, before they are authorised, where it is believed that the projects are likely to have a significant impact on the environment. The Directive of 1985 and its amendments have been codified by Directive 2011/92/EU of 13 December 2011.

European Landscape Convention 2000

The 2000 European Landscape Convention, adopted in Florence (and was ratified by Ireland in 2002), requires a commitment to introduce policies on landscape protection and management.

Eastern River Basin District River Basin Management Plan (2009 – 2015)

The Eastern River Basin District (ERBD) covers the majority of county Meath and is one of eight river districts within the island of Ireland formed to aid the implementation of the requirements of the EU Water Framework Directive 2000/60/EC. The Directive requires the preparation of management plans for each district.

The ERBD River Basin Management Plan (RBMP) sets out the objectives for the water bodies within the plan area and outlines actions necessary to achieve these objectives. In compliance with the WFD these are to establish a framework for the protection of inland surface waters, transitional waters, coastal waters and groundwaters.

Fingal East Meath Flood Risk Assessment and Management Study 2012 (FEM FRAMS)

Fingal County Council along with project partners Meath County Council and the Office of Public Works (OPW) commissioned the Fingal East Meath Flood Risk Assessment and Management Study (FEM FRAMS) in 2008 to investigate the high levels of existing flood risk in the Fingal East Meath area. The study included detailed hydraulic modelling of 23 rivers and streams, 3 estuaries and the Fingal and Meath coastline. The watercourses are defined as High Priority Watercourses (HPW) or Medium Priority Watercourses (MPW) and modelled in according detail.

The Planning System and Flood Risk Management Guidelines (and Technical Appendices) for Planning Authorities (DoEHLG, OPW), 2009

These guidelines require the planning system at national, regional and local levels to:

- Avoid development in areas at risk of flooding, particularly floodplains, unless there are proven wider sustainability grounds that justify appropriate development and where the flood risk can be reduced or managed to an acceptable level without increasing flood risk elsewhere;
- Adopt a sequential approach to flood risk management when assessing the location for new development based on avoidance, reduction and mitigation of flood risk; and
- Incorporate flood risk assessment into the process of making decisions on planning applications and planning appeals.

In relation to planning the guidelines require planning authorities to:

- Introduce flood risk assessment as an integral and leading element of their forward planning functions at the earliest practicable opportunity.
- Align strategic flood risk assessment (SFRA) with the SEA process.
- Establish flood risk assessment requirements as part of the preparation of statutory land use plans.
- Assess planning applications against the guidance set out in the Guidelines.
- Ensure development is not permitted in areas of flood risk except where there are no suitable alternative sites.

National Renewable Energy Action Plan, (NREAP) 2010

Submitted under Article 4 of Directive 2009/28/EC this plan sets out Ireland's renewable energy targets to be achieved by 2020. Ireland's overall target is to achieve 16% of energy from renewable sources by 2020.

Appropriate Assessment of Plans and Projects in Ireland. Guidelines for Planning Authorities, 2009

Formulated to assist with compliance with Article 6 of the Habitats Directive Article 6(3) states that:

Any plan or project not directly connected with or necessary to the management of a Natura 2000 site but likely to have a significant effect thereon, either individually or in combination with other plans or projects, shall be subject to appropriate assessment of its implications for the site in view of the site's conservation objectives.

Appropriate Assessment is a focused and detailed impact assessment of the implications of the plan or project, alone and in combination with other plans and projects, on the integrity of a Natura 2000 site in view of its conservation objectives.

Wildlife (Amendment) Act 2000, as amended

The Wildlife Act is Ireland's primary national legislation for the protection of wildlife. It covers a broad range of issues, from the designation of nature reserves, the protection of species, regulation of hunting and controls in wildlife trading. The Act provides strict protection for nearly all birds, 22 other animal species, and 86 plant species. These species are protected from injury, or from disturbance / damage to their breeding or resting place wherever these occur.

Architectural Heritage Protection - Guidelines for Planning Authorities (2011)

The 2004 guidelines were reissued in 2011 following the transfer of architectural heritage protection functions to the Department of Arts, Heritage and the Gaeltacht. Part IV of the Planning and Development Acts 2000 – 2011 sets out the legislative provisions for the protection and conservation of our architectural heritage.

National Climate Change Strategy (2007-2012)

The National Climate Change Strategy 2007 - 2012 sets out a range of measures, building on those already in place under the first National Climate Change Strategy (2000) to ensure Ireland reaches its target under the Kyoto Protocol. The Strategy provides a framework for action to reduce Ireland's greenhouse gas emissions.

Draft National Landscape Strategy for Ireland 2014-2024

The Department of Arts, Heritage and the Gaeltacht has published a Draft National Landscape Strategy for Ireland. This strategy is being prepared in compliance with the European Landscape Convention. The main objective of the Strategy will be to set out a framework which seeks the right balance between management, planning and protection of the landscape.

North East Regional Waste Management Plan (2005-2010)

Meath is located in the North East region of the country in terms of waste management planning. The Waste Management Plan sets out the proposed policy for integrated waste management within the region and places an emphasis on waste prevention and minimisation through source reduction, producer responsibility and public awareness and the management of recovery/recycling/disposal of regional waste.

Following the amalgamation of three waste regions, Dublin, North East and Midlands, Dublin City Council is the lead authority progressing the preparation of a new waste management plan. The public consultation phase for this plan has commenced.

County Meath Heritage Plan (2007-2011)

The first County Meath Heritage Plan sets out 77 actions to be carried out over the five year Plan period to protect, manage and conserve the heritage of the county. The Heritage Plan seeks to complement the statutory land use plans *e.g.* through the collection of relevant data, and by undertaking actions to ensure that heritage policy is effectively implemented.

County Meath Biodiversity Action Plan (2008-2012)

The County Meath Biodiversity Action Plan was adopted in April 2010 and provides a framework for the conservation of biodiversity and natural heritage throughout the county. The Biodiversity Action Plan sets out a range of actions in terms of the biodiversity of County Meath.

County Meath Wetlands and Coastal Habitats Survey

This survey was carried out to determine and map the type, extent and condition of wetlands and coastal habitats in the county. The study focuses on sites which lie outside of designated areas and as such do not currently receive protection from either the Wildlife (Amendment) Act 2000 or under the European Communities (Natural Habitats) Regulations, 1997. This project is an action of the County Meath Heritage Plan 2007-2011.

5. ENVIRONMENTAL BASELINE OF THE PLAN AREA

5.1 Introduction

A full description of the environmental baseline was provided in the Environmental Assessment for the drafting of the Dunboyne, Clonee & Pace LAP in 2009. In the following a summary of the baseline environment is provided with updates provided as appropriate.

5.2 Human Beings

Dunboyne, Clonee & Pace area is designated as a Large Growth Town II in the settlement hierarchy of the Meath County Development Plan 2013-2019. The population of Dunboyne in 2011 was 6,959 persons, an increase of almost 22% on the 5,713 persons recorded in the 2006 Census of Population. The population of the Dunboyne Electoral District was 11,009 persons in 2011.

Settlement Strategy Objective SS OBJ 9 of the Meath County Development Plan 2013- 2019 seeks, 'To ensure that Large Growth Town II develop in a self-sufficient manner with population growth occurring in tandem with physical and social infrastructure and economic development. Development should support a compact urban form and the integration of land use and transport'.

At the time of the preparation of the 2013-2019 County Development Plan, the Dunboyne, Clonee & Pace LAP, as adopted in 2009, contained approximately 66.5 hectares of available and uncommitted residentially zoned land. In addition, there were further extant planning permissions. On the basis of the amount of residentially zoned lands required to accommodate the household allocation for Dunboyne, Clonee & Pace of 1,578 units as contained in the Core Strategy of the County Development Plan (Table 2.4 refers), there remained a surplus of 31.4 hectares.

Therefore, as Dunboyne, Clonee & Pace will continue to grow, Variation 2 to the County Development Plan (May 2014) identified the lands needed to accommodate the household allocation set out in the provision for residential units under the Core Strategy of the County Development Plan. Variation 2 introduced land use zoning objectives and an order of priority for the release of lands (residential land evaluation) in the Dunboyne, Clonee & Pace LAP area. This identification was based on a sequential approach to urban expansion, which ensures that development will be directed in the first instance to lands closest to the town centre and adjacent to the existing built up area of the town. A similar land evaluation process was undertaken for employment land uses.

Human Health is a consideration under the SEA Directive however the availability of data is limited. It is proposed to assess this aspect of the environment in terms of the interaction between humans and the relevant environmental issues such as drinking water quality, air quality, *etc.*

5.3 Flora and Fauna (Biodiversity)

The Biodiversity of the area is not only valuable in terms of its intrinsic worth to the inhabitants of the area, it also plays a role in the provision of clean air and water, healthy soils, food, building materials and medicines. The principal habitat types within the LAP area include, but are not limited to, agricultural grassland and cultivated land, open spaces, river valley, trees and hedgerows. The Tolka River which flows through Dunboyne and Clonee and its associated valley are an important natural heritage asset to the LAP area.

It is noteworthy that the LAP lands - or any lands within 4km of the LAP lands - do not include any areas designated as Natura 2000 sites (*i.e.* Candidate Special Areas of Conservation (cSAC) or Special Protection Area (SPA)). Likewise there are no Natural Heritage Areas (NHA) or proposed Natural Heritage Areas (pNHA) within or close to the near the study lands. The nearest such designation is the Rye Water Valley (cSAC & pNHA) at Carton, which is circa 4km south between Maynooth and Leixlip.

5.4 Soil and Geology

Like most of County Meath, the Dunboyne, Clonee & Pace area is underlain by Carboniferous limestone. While the carboniferous limestone often consists of impure argillaceous limestone of shale (Calp), the limestone is purer in some areas, including in the Ashbourne / Dunshaughlin / Dunboyne region. The limestone is overlain with a complicated pattern of glacial tills and fluvio-glacial gravels and sands, with shale enriched compact till of Irish Sea provenance common across all of east Meath.

Topography is generally flat to gently undulating and the Local Area Plan area lies on grey brown podzolics. The lighter texture grey brown podzolics are good all-purpose soils, while the heavier textured members are highly suited to pasture production.

5.5 Air Quality & Climatic Factors

The Environmental Protection Agency is involved in air quality monitoring and has installed a number of air quality monitoring stations throughout Ireland. There is no detailed information available for the plan area with the one monitoring station, for Co. Meath, being located in Navan. The County of Meath is primarily located within Zone D (primarily smaller settlements and rural areas outside of cities and major centres).

Road traffic has now become the greatest source of air pollution generally. In urban areas, concern has clearly shifted to a range of pollutants associated with this source which may be considered relatively new in the context of air quality control. The most important of these pollutants are NO₂, particulate matter less than 10 microns in diameter (PM₁₀), carbon monoxide (CO) and a wide variety of Volatile Organic Compounds (VOC), including carcinogens such as benzene. Advances in engine technology and fuel development will, it is predicted, offset any rise in tail pipe emissions from increased car usage due to an increased population. The context to the plan area is rural in nature where travel is an essential part of daily life. Therefore it is important that a good quality road infrastructure is provided and indeed alternatives to the private car are encouraged where possible.

The Climate Change Strategy and Energy Management Action Plan 2011-2012 prepared by the Meath Local Authorities sets out the strategy for County Meath in mitigating and adapting to climate change. It aims to clearly identify the solutions to the challenge of reducing energy related emissions. It also outlines the actions to be taken to meet the requirements as set out in the National Climate Change Strategy. In this context land use changes can and will have far-reaching implications for climate change that could include changes to commuter patterns with the building of further housing developments and the resultant increase in GHGs, SO₂, NO_x, VOC and other pollutant emissions.

5.6 Groundwater, Water Quality and Surface Water

Since 2000, Water Management in the EU has been directed by the Water Framework Directive (WFD). The Water Framework Directive establishes a framework to protect all waters through

integrated management and assessment of the interactions between different water types. One of the conditions of this Directive is that Member States keep a Register of all the water bodies that must have extra controls on their quality by virtue of how the water is used by people and by wildlife. It is therefore necessary to protect the rivers, loughs and coastal waters within the Plan area for the purpose and use of drinking, fishing, nature conservation, bathing and other water-related activities. Surface run-off from a variety of activities can adversely impact upon local water bodies and resources.

Water quality is a significant issue for a host of reasons, including human health, wildlife conservation, amenity and recreational use *etc.* and is therefore a central focus in striving for sustainable development. Wastewater disposal can be a significant constraint to development due to the deleterious effect it may have on the quality of water bodies within the Plan area.

The groundwater vulnerability for the Local Area Plan area shows that the area overlies an aquifer classed as predominantly low vulnerability with an area of moderate/high vulnerability to the north and south of Dunboyne. The aquifer of Local Importance is classified as being generally moderately productive. The ecological status of groundwater in the Local Area Plan area was found to be of 'Good' status.

The ecological status of surface waters in the Local Area Plan area was found to be 'Moderate' or 'Bad', while groundwater in the Local Area Plan area was found to be of 'Good' status.

5.7 Water Supply

Dunboyne, Clonee and Kilcloon are supplied with water imported from Fingal. This water originates at their Leixlip Water Treatment Plant. The current capacity of this imported supply is c.3,000 m³/day while current demand is c. 2,000 m³/day and hence, the spare capacity is up to 1,000 m³/day.

The Council has plans to lay a new watermain between Fingal and Dunboyne/Clonee and to construct a new reservoir to provide storage. This infrastructure will allow Meath County Council to increase the capacity of the import supply from Fingal up to 5,400 m³/day. The additional water necessary will be available once the expansion of the Leixlip Water Treatment Plant is completed in late 2014. If included in the next Water Services Investment Programme (2014-2015), these proposed works could be realised by 2016.

Irish Water is taking over water services operations from Local Authorities on a phased basis which is to be completed by the end of 2017.

5.8 Waste water

Wastewater from Ashbourne, Ratoath, Kilbride, Dunboyne and Clonee is discharged into the Dublin network where it is treated at Ringsend. In general there is limited capacity in most of the waste water schemes in the County for significant further development, when existing demands together with permitted developments have been connected.

5.9 Flooding

The Tolka River flows through Dunboyne from the west on towards Clonee and into Fingal County. A significant portion of the central area of the Local Area Plan area comprises the flood plain of the river. While river flows can be relatively low during dry weather periods, flooding of both settlements and the surrounding area has arisen during extreme rainfall events.

As part of Variation 2 to the County Development Plan a Strategic Flood Risk Assessment has been carried out for Dunboyne, Clonee & Pace which identifies areas affected by flooding within the development boundary. Land use zoning objectives / development zonings have had regard to the findings of the Flood Risk Assessment and have already been amended accordingly.

5.10 Material Assets

5.10.1 Transportation

The National Transport Authority (NTA) is the principal agent for the delivery of transport policy and development in the Greater Dublin Area. Meath County Council is committed to working with the NTA on the delivery of strategic transportation projects and infrastructural improvements.

Delivery of the planned Pace to Navan railway extension is a key part of future transport infrastructure and planning.

5.10.2 Waste

The Local Authorities of Meath, Louth, Cavan and Monaghan form the North East region with respect to Waste Management Planning. The current Waste Management Plan for the region is the replacement North East Regional Waste Management Plan 2005 – 2010. The objective of the Waste Management Plan is to develop a sustainable approach to managing resources, by minimising the waste that is generated in a safe and environmentally sound manner and disposing of wastes in accordance with current National and EU waste legislation and policies.

There are no licensed waste facilities within the plan area however there are a number within the county in Gormanston and Duleek. In addition, a recovery and disposal facility for inert Construction & Demolition waste is under development at Gormanston in County Meath. A Waste to Energy facility at Carranstown has also been developed in line with the North East Regional Waste Management Plan.

5.11 Landscape

The Landscape Character Assessment of County Meath places a value on each landscape character area, ranging from 'Exceptional' to 'Low'. Lowland Landscapes in the Dunboyne area range in classification from low to very high.

Dunboyne, Clonee & Pace has a natural diversity of landscape coupled with cultural features such as the archaeological monuments, stone walls, hedgerows, woodlands, wetlands, field patterns, settlements and buildings, which has given the area and the county its distinctive character. As 3 distinct development areas, development must respect local distinctiveness, avoid merging and provide for appropriate connection via landscape, open space and green routes.

5.12 Cultural and Architectural Heritage

Both Dunboyne and Clonee have distinct characters of their own. There are number of structures within the Local Area Plan area on the Record of Protected Structures as well as other buildings of architectural, artistic, cultural or historic interest within the Local Area Plan area. These include several terraced houses in Dunboyne, thatched houses, country houses such as Dunboyne Castle and Summerseat near Clonee, both the Roman Catholic and Church of Ireland churches in Dunboyne, structures such as the bridge and water pump in Clonee, among others.

Likewise there are a number of archaeological sites in the Local Area Plan area; however, many of these have little in the way of extant remains. An architectural conservation area applies to Dunboyne Town Centre.

6. STRATEGIC ENVIRONMENTAL OBJECTIVES, TARGETS AND INDICATORS

6.1 Introduction

Article 5 of the SEA Directive requires the identification of environmental protection objectives. These Strategic Environmental Objectives (SEOs) assist in the prediction, description and monitoring of impacts on the environment as a result of the Local Area Plan.

The Strategic Environmental Objectives (SEOs) provide a basis for the assessment of the environmental effects of the Amendment to the amended LAP. The SEOs are distinct from the objectives and policies contained within the LAP; they are framed in such a way as to enable the amendments to be fully assessed in environmental terms. The SEOs are set out in Table 6.1.

Environmental Parameter	Ref:	Objective
Biodiversity	B1	Conserve and where possible enhance the diversity of designated and non-designated habitats and species avoiding irreversible losses
	B2	Promote measures to protect biodiversity by creating and improving habitats, where possible
	B3	Provide for protection of internationally and nationally designated sites, including Natura 2000 Sites (<i>i.e. Special Areas of Conservation (SACs) & Special Protection Areas (SPAs)</i>) and Natural Heritage Areas (<i>NHAs</i>) & proposed Natural Heritage Areas (<i>pNHAs</i>).
	B4	Avoid damage by development to designated wildlife sites and protected species, and associated ecological corridors/ linkages
Population	P1	Improve people's quality of life based on high-quality residential, working and recreational environments and on sustainable travel patterns
	P2	Provide opportunities for sustainable public access to wildlife and wild places at appropriate locations
Human Health	H1	Minimise noise, vibration and emissions from traffic, industrial processes and extractive industry
Soil	S1	Maintain the quality of soils
	S2	Maximise the sustainable re-use of brownfield lands, and maximise and prioritise the use of the existing built environment rather than developing greenfield lands
	S3	Minimise the consumption of non-renewable sand, gravel and rock deposits
	S4	Minimise the amount of waste to landfill
Water	W1	Protect and enhance the status of aquatic ecosystems and, with regard to their water needs, terrestrial ecosystems and wetlands directly depending on the aquatic ecosystems

Environmental Parameter	Ref:	Objective
	W2	Promote sustainable water use based on a long-term protection of available water resources
	W3	Reduce progressively discharges of polluting substances to waters
	W4	Mitigate the effects of floods and droughts including vulnerability to climate change. (extreme weather, sea level rise, coastal erosion)
Air	A1	Reduce all forms of air pollution
	A2	Minimise emissions of greenhouse gases to contribute to a reduction and avoidance of human-induced global climate change
	A3	Reduce waste of energy, and maximise use of renewable energy sources
	A4	Assess, plan and manage adaptation to climate change impacts
	A5	Reduce the need to travel
Material Assets	MA1	Maximise use of the existing built environment
	MA2	Avoid flood risk and/or coastal erosion in selecting sites and zoning of lands for development
	MA3	Maintain water abstraction, run-off and recharge within carrying capacity (including future capacity) at environmentally sustainable levels.
	MA4	Maintain the quality of and access to assets such as aquifers, aggregates, ports, motorways, and all physical and social infrastructures.
Cultural Heritage	CH1	Promote the protection and conservation of the cultural, including architectural and archaeological, heritage
Landscape	L1	Conserve and enhance valued natural and historic landscapes and their character and features within them

Table 6.1 Strategic Environmental Objectives (SEOs)

7. STRATEGIC ENVIRONMENTAL ASSESSMENT OF AMENDEMENT TO LOCAL AREA PLAN

7.1 Introduction

The purpose of this section of the Addendum Report is to highlight the potential conflicts, if they are present, between the stated policies and objectives contained in the amended Plan with the Strategic Environmental Objectives. Furthermore the assessment examines the potential impact arising from the Plan's implementation of its policies and objectives on sensitive environmental receptors.

In some instances there is little or no relationship between the various policies / objectives of the LAP and the respective environmental receptor. Where this occurs no further discussion is deemed necessary. This has been determined through an initial screening of the Local Area Plan policies and objectives which ascertains if policies are likely to have a positive, negative or neutral impact on the environment. This process allows the assessment to focus more efficiently on the pertinent issues.

Assessment tables are provided indicating where the screening process has in the first instance identified an impact which may potentially arise due to the implementation of policy / objective contained within the LAP. Similarly where a conflict exists between a Strategic Environmental Objective and a Policy/Objective this is noted and discussed.

7.2 Environmental Assessment

The Amendment to the Dunboyne, Clonee & Pace LAP 2009-2015 includes for:

- the insertion of a number of new policies and objectives;
- the amendment of aspects / part of existing policies and objectives, and
- the deletion of a number of existing policies and objectives;
- in some instances for the minor amendment, updating of references, documents, *etc.* within existing policies and objectives

An environmental assessment of the likely impact of inserting new policies and objectives, together with amending aspects / parts of existing policies and the likely impact of deleting existing policies and objectives is provided in the Assessment Table 7.1.

An overall environmental assessment of the likely impact of minor amendments, updating of references, documents, *etc.* is provided in the Assessment of Minor Amendments / Updates Table 7.2. The environment impacts of all of these amendments are neutral, neutral/positive or positive.

7.3 Environmental Assessment of Draft Plan Policies & Objectives

This phase of this assessment identified the potential impact on the environment as a result of the policies and objectives of the Local Area Plan.

Table 7.1: Environmental Assessment of Deletion of Policy / Objective

Policy / Objective Ref.	Summary Description of Policy / Objective	Environmental Assessment
Retail Policies and Objectives		
RET POL 5	Retail Policy / Framework Level 2 Centre	Neutral. Superseded by RET OBJ 1
Employment Policies and Objectives		
EMP OBJ 3	...development of the lands at 'Piercetown' on the land use zoning objectives map marked 'L' at MAP 1 and outlined in black will be subject to specific servicing arrangements...	Neutral.
EMP OBJ 4	...lands to the north of Clonee (EMP OBJ 7 refers) is implemented as a usable linear park...	Neutral.
EMP OBJ 8	To provide for strategic employment use, predominantly for high end office development, on lands adjacent to lands identified as the emerging preferred location for future Level 2 Centre at Pace on a phased basis within the life of the County Development Plan Local Area Plan period identified on Map 1 the land use zoning objectives map.	Neutral.
Education Policies and Objectives		
EDU OBJ 8	Framework Plan	Neutral. Superseded.
Burial Grounds Policies and Objectives		
BGR OBJ 1	Additional Burial Space at Rooske Road	Neutral / Positive Unsuitable ground. Additional burial space will be provided via a sub-county approach.
Movement Policies and Objectives		
MOV POL 8	M3 Motorway and Dunboyne Western Distributor Road	Neutral Completed.
MOV POL 12	Upgrade R156 between Dunboyne and Clonee	Neutral Completed.
Flooding Policies and Objectives		
FP POL 3	Flood Risk Assessment	Neutral Superseded.

Table 7.2: Environmental Assessment of Minor Amendments / Updates (deleted text shown as ~~strikethrough text~~. Inserted text shown as **red text**)

Policy / Objective Ref.	Summary Description of Policy / Objective	Environmental Assessment
Retail Policies and Objectives		
RET POL 5	Retail Policy / Framework Level 2 Centre	Neutral. Superseded by RET OBJ 1
Employment Policies and Objectives		
EMP OBJ 3	...development of the lands at 'Piercetown' on the land use zoning objectives map marked 'L' at MAP 1 and outlined in black will be subject to specific servicing arrangements...	Neutral.
EMP OBJ 4	...lands to the north of Clonee (EMP OBJ 7 refers) is implemented as a usable linear park...	Neutral.
EMP OBJ 8	To provide for strategic employment use, predominantly for high end office	Neutral.

Policy / Objective Ref.	Summary Description of Policy / Objective	Environmental Assessment
	development, on lands adjacent to lands identified as the emerging preferred location for future Level 2 Centre at Pace on a phased basis within the life of the County Development Plan Local Area Plan period-identified on Map 1 the land use zoning objectives map.	
Education Policies and Objectives		
EDU OBJ 1, EDU OBJ2, EDU OBJ 4, EDU OBJ 5	...Department of Education and Skills Science...	Neutral.
EDU OBJ 3	...facilities in the vicinity of Clonee and Dunboyne to allow for population growth as required as set out in MAP 2 & MAP 3.	Neutral.
EDU OBJ 6	...in conjunction with the College and Meath-VEC Louth and Meath Education and Training Board.	Neutral.
Childcare Policies and Objectives		
CCF OBJ 1	...Department of Environment, Community and Local Government Education & Science standards.	Neutral.
Burial Grounds Policies and Objectives		
BGR OBJ 1	...Department of Environment, Community and Local Government Education & Science standards.	Neutral.
Public Transport Policies and Objectives		
MOV POL 4	...in conjunction with Irish Rail - Iarnród Éireann / NTA CIE. To protect the Pace-Navan extension of the railway corridor from will be referred to Irish Rail - Iarnród Éireann / NTA CIE for comment	Neutral.
MOV POL 8 9	...development of the A2 (New Residential) zoned A4 lands	Neutral
MOV POL 9 10	...development of the E2 ('General Enterprise & Employment' 'E1' lands...	Neutral
MOV POL 15 17	...This will be prepared in conjunction with the Framework Plan for this are as set out on Map 2.	Neutral
MOV OBJ 4	...Planning and Development Acts 2000-2014	Neutral
Open Space Strategy Policies and Objectives		
REC POL 5	To provide children's playground in Clonee as illustrated on Map 2.	Neutral.
Structural Planting Policies and Objectives		
LAN POL 4	Eastern River Basin District Draft River Basin Management Plan 2009-2015 of December-2008.	Neutral.
Archaeology and Built Heritage Policies and Objectives		
HER POL 1	...Department of Arts, Heritage and the Gaeltacht and the appropriate prescribed authorities as set out in the Planning and Development Regulations 2001-2013 the Environment, Heritage and Local Government,...	Neutral.
Telecommunications Policies and Objectives		

Policy / Objective Ref.	Summary Description of Policy / Objective	Environmental Assessment
TEL POL 1	<p>...</p> <ul style="list-style-type: none"> Circular Letter PL 07/12 issued by the Department of the Environment, Community and Local Government, the Department of the Environment and Local Government “Telecommunications Antennae and Support Structures, Guidelines for Planning Authorities” (July 1996) and any subsequent revisions or expanded guidelines in this area. 	Neutral / Positive

7.4 Environmental Assessment of Amendments to the Draft Plan Policies & Objectives

Following on from public consultation of the draft amendments to the LAP, and consideration of submissions received, a number of minor amendments were proposed. These were further assessment for potential impacts in the context of the implementation of the LAP.

Table 7.3: Environmental Assessment of Minor Amendments / Updates of Amendments to Draft Plan (deleted text shown as ~~strikethrough text~~. Inserted text shown as red text)

Policy / Objective Ref.	Description	Environmental Assessment
RES OBJ 5(iii)	<p>In accordance with the provisions of CS OBJ 6 (c) of the Meath County Development Plan 2013-2019, as varied, no extension of duration permitted for multiple unit residential developments pursuant to Section 42 of the Planning & Development Act 2000 – 2014 shall extend the life of a planning permission beyond the 6 year period of the Meath County is Development Plan 2013-2019.</p>	Neutral
RES OBJ 6	<p>To facilitate the completion of the 3 no. phases of the registered ‘Unfinished Estate’ residential development at Williamstown Stud as originally permitted under Meath County Council planning register reference DA/40501. The 99 no. residential units at Williamstown Stud was included in the Committed Unbuilt Units – Rural Houses in both Table 2.4 and Table 2.5 of the Core Strategy of the Meath County Development Plan 2013-2019, as varied. No extension of duration of any planning permission shall extend beyond the lifetime of the existing County Development Plan, that being 16th December 2018.</p>	Neutral/Positive
WRS POL 5	<p>The Planning Authority, in collaboration with Irish Water, shall ensure that development is linked to the availability of adequate and appropriate drinking supply.</p>	Neutral
WWT POL 1	<p>To ensure that all new developments have and are provided with separate foul and surface satisfactory drainage systems in the interest of public health and to avoid the pollution of ground and surface waters.</p>	Neutral
WWT POL 2	<p>The Planning Authority, in collaboration with Irish</p>	Neutral

Policy / Objective Ref.	Description	Environmental Assessment
	Water , shall ensure that development is linked to the availability of adequate and appropriate waste water treatment.	
FP POL 6	To implement the requirements of “The Planning System and Flood Risk Management – Guidelines for Planning Authorities” (DoECLG/OPW, 2009), or their replacement, in the carrying out of development management functions and in the preparation of any Framework Plans required during the period of this Plan.	Neutral
RET POL 5	To provide a local / neighbourhood centre of appropriate scale to serve the local retail catchment.	Neutral
RSS POL 2	Support the provision of sports, cultural, and recreational and educational facilities accessible to the entire community at the ‘Cowpark’ lands at Station Road in conjunction with the Dunboyne Sports Trust. Any proposal to develop educational facilities or any other structure on these lands shall be accompanied by a site specific Strategic Flood Risk Assessment to include appropriate flood mitigation measures being put in place and meeting the Development Management Justification Test.	Neutral/Positive
MOV POL 9	To facilitate the provision of a road linkage from the Dunshaughlin Road (R583) (R157) to the Dunboyne Western Distributor Road in conjunction with or separate from the development of the E2 (General Employment and Enterprise) ‘E1’ lands at this location.”	Neutral/Positive

In general the potential impacts of the amendments is mainly positive or neutral for all environmental factors as the amendments are consistent with higher level plans – especially the County Development Plan – provide for consolidation of the town; clarity and order on the release of residential and employment lands, and incorporate flood risk assessments in land use objectives.

Potential residual transportation impacts have been identified as a result of RET OBJ 1 – see Section 8.2 below for further discussion.

8. MITIGATION MEASURES

8.1 Introduction

Article 5 of the SEA Directive requires that mitigation measures be proposed for all significant adverse effects on the environment as a result of the implementation of the Local Area Plan. The SEA is an iterative process prepared in tandem with the formulation of the policies and objectives of the Amendment to the Local Area Plan. While not always possible to achieve, it is the aim of the process to ensure that sensitive environmental receptors are given adequate and appropriate consideration throughout.

8.2 How the SEA has Influenced the amendments to the Local Area Plan

As environmental considerations have informed all stages of the preparation of the Ashbourne Local Area Plan, the amendments to the policies and objectives of the Plan have been framed to ensure that potential adverse impacts are avoided, eliminated or lessened to an acceptable level. As a result of this informed iterative process, it is the finding of the assessment of the amendment to the Local Area Plan as presented in Chapter 7 of this Addendum Report, that for the most part the implementation of the Plan, will have a neutral to positive impact on the environment as a whole.

Integration between SEA and the preparation of the amendments to the Plan was achieved through reviews of the emerging amendments and through workshop meetings at the key stages with relevant SEA and Plan team members. This process allowed for an iterative and proactive approach to the preparation of the amendments with preliminary and on-going assessment and review of the emerging and the final adopted amendments.

8.3 Mitigation Measures

In all instances potential uncertainties or negative impacts have been mitigated against by the protective policies already contained within the Plan, the SEA and the County Development Plan. Appropriate mitigation measures are set out, where required, under the Environmental Assessment Matrix provided at Table 7.1 above. The assessment found that with the exception of RET OBJ 1 (see Section 8.2 below) there would be no residual adverse environmental impacts as a result of implementing Draft Amendment No. 1 to the Dunboyne, Clonee & Pace LAP 2009-2015.

8.4 Pace

The primary issue in relation to Pace relates to the potential transportation impacts from the land use framework at this location with particular reference to the Level 2 Retail Centre and the development of high end office development. Given the scale of the development and the likely intensity of use, it is considered that significant levels of car movements could be generated by the objectives RET OBJ 1.

The supporting development objectives in the Meath County Development Plan 2013-2019 require the preparation of an integrated land use and transportation study under Economic Development Objective ED OBJ 2. In addition, the requirement for the completion of the Integrated Framework Plan for Land Use and Transportation are specified as a requirement of RET OBJ 1 in respect of the Level 2 Retail Centre.

In the absence of this integrated land use and transportation study, the likely mix, scale and intensity of development at Pace cannot be fully anticipated or assessed. Therefore, potential for negative transportation impacts cannot be fully assessed or mitigated at this stage.

It is the recommendation of the environmental assessment that the objectives for a Level 2 Retail Centre and high-end office employment should be considered in the context of the integrated land use and transportation study for the area that identifies an appropriate scale and mix of potential uses. It is considered that the potential effects on the environment and on Natura 2000 sites should be fully taken into account in establishing the classes, extent and location of development in the area under the IFPLUT. The recommendation that Strategic Environmental Assessment and Appropriate Assessment of the IFPLUT be carried out has been included in the wording of the final objective. It is further recommended that specific on-going environmental monitoring is carried out so as to ensure that no significant environmental impact occurs as a result of these zoning objectives.

9. MONITORING OF THE LOCAL AREA PLAN

9.1 Introduction

Monitoring of the Dunboyne, Clonee & Pace Local Area Plan and its implications on the environment is paramount to ensure that the environment is not adversely affected through the implementation of the LAP. Under Article 10 of the SEA Directive monitoring, must be carried out of the significant environmental effects directly related to the implementation of the LAP *'in order to, inter alia, identify at an early stage unforeseen adverse effects and to be able to undertake appropriate remedial action.'* The Department of the Environment, Community and Local Government Guidelines on SEA recommends that monitoring does not require new research activity; existing sources of information can be used and the task of data collection can be shared.

While considerable environmental data is directly available to the Council such as water quality, recycling rates *etc.*, other sources of information will be accessed to provide a comprehensive view of the impact of the LAP. In this regard the Local Authority will work with other agencies with environmental mandates to gather data for the purposes of monitoring the implementation of the LAP. Therefore, while monitoring specific elements of the environment is not strictly the preserve of the Council, the Council will continue to liaise and work with the Environmental Protection Agency, The National Parks and Wildlife Service, The Fisheries Board, as well as others in the pursuit of environmental conservation and protection through existing environmental monitoring procedures.

9.2 Monitoring Indicators

It is proposed to base monitoring on a series of indicators which measure changes in the environment, especially changes which are critical in terms of environmental quality, for example water or air pollution levels. The indicators aim to simplify complex interrelationships and provide information about environmental issues which is easy to understand. A list of environmental indicators is provided in Table 9.1. The indicators are based on the Strategic Environmental Objectives presented in Chapter 6 and have been derived from knowledge of the existing environmental issues within the LAP area and also from legislation, guidelines and higher level Plans. It is acknowledged that some of these monitoring indicators will carry on beyond the lifetime of the current local area plan.

Environmental indicator assessment during monitoring can show positive/neutral impacts or negative impacts on the environment. Where an indicator value highlights a positive/neutral impact on the environment, it is likely that the policies and objectives of the LAP are well defined with regard to the environment. Conversely where the objectives of the LAP have a negative impact on the environment, it may be necessary to review the objectives of the LAP or to take some other form of intervention. For example, if an objective or policy is having a significant adverse impact, a variation may be considered during the lifetime of the LAP.

Table 9.1: Proposed Monitoring Indicators

Environmental Category	Targets	Selected indicators	Data Sources, Responsibility and Frequency (subject to available resources)
Biodiversity - Flora and Fauna	No loss of important and/or designated habitats	Number of sites.	Meath County Council / National Parks and Wildlife Service/Inland Fisheries (<i>depending on available information from relevant statutory authorities</i>)
	No deterioration in the quality of protected areas	Number of sites containing rare or threatened species.	Initial monitoring to commence within two years of adoption as part of the Chief Executive's Report on progress. (<i>subject to available resources</i>).
	No loss of protected species	Number of rare or threatened species.	
	No fish kills during the lifetime of the LAP	Details of major fish kills	
	All actions contained within the Biodiversity Plan to be achieved during the lifetime of the LAP.	Number of actions achieved.	
	No net loss of green linkages established under the Green Infrastructure Strategy.	Net area of new green infrastructure established through the development management process.	
No spread of invasive species within the LAP	Numbers of new cases identified.	Establish baseline, location and extent of invasive species in LAP, to commence within two years of adoption as part of the Chief Executive's Report on progress. (<i>subject to available resources</i>)	
	No adverse impacts on Natura 2000 sites	Numbers of planning applications accompanied by Stage 2 Appropriate Assessment	Meath County Council Planning Department
Population (Human Beings)	Decrease in journey times to work, education and recreation.	Distance and mode of transport to work	Meath County Council - Housing, Planning and Roads sections.
		Number and proportion of residential units permitted within 400m of centre of Settlement	Meath County Council Planning Department
	Gross Floor Area (GFA) and proportion of employment use permitted within 400m of public transport stop.	Meath County Council Planning Department	
	Applications for new developments in excess of fifteen residential units or over 0.2ha. to be accompanied by Design Statement.	Number of design statements.	Initial monitoring to commence within two years of adoption as part of the Chief Executive's Report on progress. (<i>subject to</i>

Environmental Category	Targets	Selected indicators	Data Sources, Responsibility and Frequency (subject to available resources)
	Rural housing to accord with Rural Housing Design Guidelines	Number of planning permissions granted in the countryside.	<i>available resources</i>)
	Delivery of residential development in line with Meath County Settlement Strategy	Percentage of residential development within each level of the settlement hierarchy Percentage of the residential planning permission target achieved in each settlement	Meath County Council Planning Department Meath County Council Planning Department
	Consolidation of Town / Settlement Centre	Density of development within each residential planning permission Number of planning permissions granted within town / village centre zoned lands	Meath County Council Planning Department Meath County Council Planning Department
Soil	No incidences of soil contamination	Number/severity of recorded pollution incidences	Meath County Council & EPA
	Limited and controlled development of greenfield sites	Area of land lost through greenfield development as per Development Plan process	Initial monitoring to commence within two years of adoption as part of the Chief Executive's Report on progress. (<i>subject to available resources</i>)
Water	Implement fully the recommendations of the relevant River Basin Districts River Basin Management Plans.	Number of recommendations achieved.	Meath County Council - Planning Department, Water Services Department. Also the Environmental Protection Agency.
	Achieve quality status of surface waters in line with WFD	Percentage increase in the overall quality of surface waters.	Initial monitoring to commence within two years of adoption as part of the Chief Executive's Report on progress. (<i>subject to available resources</i>)
	Comply and implement fully the most recent EPA guidelines on Septic Tank use and siting as well as other on-site treatment facilities.	Number of permissions granted complying with the guidelines.	
	Maintain and upgrade where necessary all Local Authority operated WWT plants to comply with the relevant legislation.	Compliance with discharge parameters.	
	Improvement in bathing water quality		
	Reduction in development subject to Flood Risk	Number of residential planning applications / permission granted on sites identified as being	Meath County Council Planning Department

Environmental Category	Targets	Selected indicators	Data Sources, Responsibility and Frequency (subject to available resources)
Air Quality	Improvement in the concentrations of measured parameters such as Particulate Matter, Sulphur Dioxide and nitrogen oxides.	in Flood Risk Zone A or B Gross Floor Area (GFA) of employment development located on sites identified as being in Flood Risk Zone A or B Measurable reductions in concentrations.	Meath County Council Planning Department EPA Initial monitoring to commence within two years of adoption as part of the Chief Executive's Report on progress. <i>(subject to available resources)</i>
Climate change	Increase in permissions granted for residential development within acceptable distance of public transport hubs.	Percentage of housing developments within specified distance to transport hubs.	Review of EPA standards and data to commence within two years of adoption as part of the Chief Executive's Report on progress. <i>(subject to available resources)</i>
Material Assets	Increase access to public transport from households.	Provision of walking and cycle infrastructure as proposed under LAP.	Meath County Council
	Increase re-use of brownfield sites for development in preference to greenfield sites.	Ratio of brownfield site development to greenfield sites.	Meath County Council
	Improved treatment at established wastewater treatment facilities.	Compliance with discharge limits.	Meath County Council/EPA
	Reduction in the tonnage of overall waste produced and an increase in the percentage of waste recycled.	Tonnage of waste produced and recycled.	Meath County Council/EPA
Cultural Heritage	No loss of features of architectural or archaeological importance	Number of recorded features lost.	Meath County Council, The Archaeological Survey monitoring programme, Ireland; Buildings at Risk Register - Heritage Council Ireland

Environmental Category	Targets	Selected indicators	Data Sources, Responsibility and Frequency (subject to available resources)
	No deterioration in the quality of Architectural baseline	Number of protected structures impacted by new development	Meath County Council
	No protected structures to be lost through neglect or misuse.	Number of additions / deletions to the RPS.	Meath County Council
	No impact on the integrity or setting of monuments contained on the Record of Monuments by development granted planning permission.	Number of monuments impacted by new development.	Meath County Council
Built Heritage	Reduction in impacts on Built Heritage	Number of planning permission affecting Protected Structures, Structures on the Record of Monuments and Places, Architectural Conservation Areas or NIAH Designed Landscapes	Meath County Council – Planning
Landscape	No diminution in the quality of important landscapes.	Number of developments permitted within landscapes of exceptional value and high sensitivity as per the LCA.	Meath County Council
	Implement in full the recommendations of the Landscape Character Assessment for Co. Meath.	Number of recommendations implemented.	Meath County Council

Note on Frequency of Monitoring

It is recommended that data based on planning application data is monitored on an annual basis.

It is recommended that data related to environmental emissions, such as water, air, noise and soil quality are reviewed at two-yearly intervals.