

CHAPTER 5 - ECONOMIC DEVELOPMENT

5.1 Introduction

This chapter will set out the objectives of the County Development Plan for the sustainable development of Wicklow's economy that are relevant to and implementable through a land-use plan. The land-use objectives of this plan aim to support the strategies of the Wicklow Local Economic and Community Plan and the Wicklow Local Enterprise Office, as well as the non-statutory 'Wicklow Economic Think Tank' strategy, all of which have a wider remit than the County Development Plan in the area of economic development.

Sustainable economic development requires balance in terms of location and diversity of economic activity, as well as the protection of the environment and people's quality of life. In this regard, it is intended that this chapter will clearly articulate where the Council will promote and support proposals for new or expanded employment generating developments, what type of development will be facilitated in various locations and what criteria will be used to evaluate such proposals. The Council's requirements with respect to the design, layout, servicing etc of new or expanded developments are set out in the Development & Design Standards in the appendix.

5.2 The Wicklow Local Economic and Community Plan (LECP)

The Local Government Reform Act 2014 provides a stronger and clearer role for local government in economic and community development. One of the main means of achieving this is set out in the 'Action Programme for Effective Local Government – Putting People First', which sets out a clear focus on the importance of local government:

"Local government will be the main vehicle of governance and public service at local level, leading economic, social and community development."

This process will be driven by the provision of **Local Economic and Community Plans (LECP)** which aims to set out, for a six-year period, the objectives and actions needed to promote and support the economic development and the local and community development of each local authority, both by itself directly and in partnership with other economic and community development stakeholders. The LECP guidelines for local authorities (DoECLG 2015) set out four broad phases for the delivery of the plan – 1) preparation, 2) public consultation, 3) the development of objectives and actions and 4) finalisation of the plan, with a fifth phase for monitoring and reviewing the implementation of the plan.

In spite of the absence of the yet to be commenced Regional Spatial and Economic Strategy¹ for the Dublin and Mid East region, the Wicklow Local Economic and Community Plan has been prepared. The plan includes objectives and actions promoting and supporting (a) economic development and (b) the local and community development of the County. The two elements are integrated for the socio-economic framework and for the actions to increase employment and quality of life opportunities in the County.

The economic element of the LECP was developed by the Economic SPC and the Enterprise Directorate of the Council. The vision for the LECP is as follows:

"Our vision is for a county which provides a high quality of life and well-being for all; values socially inclusive urban and rural communities; is driven by a dynamic and innovative economy; promotes and prioritises sustainable development and protects and enhances the County's unique and rich natural and cultural heritage."

¹ The Regional Planning Guidelines are to be replaced by new Regional Spatial and Economic Strategies.

In this regard the LECP sets out the following 10 overarching goals for economic and community development within County Wicklow:

- Goal 1** Develop community capacity in disadvantaged communities and engage in urban regeneration and rural development.
- Goal 2** Promote active citizenship and public participation to improve governance, transparency and enrich decision making.
- Goal 3** Develop high quality integrated services available to all communities, in particular, disadvantaged communities and vulnerable groups.
- Goal 4** Develop a vibrant and innovative Community and Social Enterprise Section
- Goal 5** Address access to education and training to increase life opportunities for all
- Goal 6** Develop infrastructure and measures that are positive and supportive to investment, enterprise, innovation and knowledge creation in strategic locations
- Goal 7** Sustain existing enterprise and develop quality employment and income opportunities for the wide range of employment needs in the County, with possibilities for reversing commuting patterns
- Goal 8** Capitalise on Wicklow's unique attributes and proximity to the Dublin market, excellent quality of life, human capital, tourism, landscape, marine, agricultural and forestry resources
- Goal 9** Support a shift towards low carbon and climate change resilient economic activity, reducing energy dependence, promoting the sustainable use of resources and leading in the Smart Green Economy
- Goal 10** Harness efficiently the full resources of the County and promote interagency collaboration

The strategies and objectives in this chapter are not intended to duplicate those of the LECP (which has a much wider remit in the area of economic development), but rather to provide the land-use framework that will support the achievements of these goals.

A key element of the LECP process has been the carrying out of detailed socio-economic analysis of the County which identified the following key findings with respect to the economy and employment characteristics of Wicklow²:

- A poor jobs ratio of 42% in 2011.
- A recent reduction in unemployment levels with the number of people on the Live Register dropping to 10,420 in March 2015. Construction and craft related workers remain the largest group of unemployed³.
- Construction and craft related workers remain the largest group of unemployed.
- 'Wholesale, Retail Trade, Transportation and Storage' forms the largest industrial group for those working in Wicklow (29%), followed by 'Information and Communication, Financial, Real Estate' (24%).

² Note that much of this data is from the 2011 Census, the 2016 Census figures not as yet being available for employment data.

³ **Post adoption update:** Positively, there has been a recent further reduction in unemployment levels with the number of people on the Live Register in Wicklow, dropping to 8,257 in October 2016 (compared to 9,620 in October 2015 and 10,802 in October 2014 and a peak of 13,513 in July 2011).

- The County exhibits a large level of out-commuting for work, particularly in the towns in the north east. The largest destination for out-commuting is Dún Laoghaire Rathdown, with similar numbers working in Dublin City.
- Of commuters travelling into the County, 29% are from Dún Laoghaire-Rathdown functional area and 26% are from County Wexford. The highest numbers of in-commuters from the Dún Laoghaire - Rathdown area are working in 'Wholesale, Retail Trade, Transportation and Storage' sectors and 'Education, Human Health and Social Work Activities'. 24% of all persons in-commuting into the County from County Wexford are employed in 'Education, Human Health and Social Work Activities'.
- Out-commuting to Dublin city is dominated by employment in the 'Communication, Financial, Real Estate' sector. By contrast, in-commuting to Bray is characterised by the 'Wholesale, Retail Trade, Transportation and Storage' class.
- Arklow employs a high proportion (42%) of its own residential labour force. Over half of these (804 persons) are employed in Wholesale, Retail Trade, Transportation and Storage sector.
- Greystones-Delgany and Blessington exhibit a high degree of out-commuting in excess of 80%, to a wide range of locations, particularly in Dublin.
- Within Greystones the 'Information and Communication, Financial, Real Estate' sector comprises a majority of those employed in Dublin 1, 2 and 4.
- The highest proportion of Blessington residents employed (30%) are working in Wholesale, Retail Trade, Transportation and Storage sector, while 19% are working within the sectors of 'Manufacturing, Mining and Quarrying, Electricity, Gas'.
- There are currently 19 IDA client companies located in County Wicklow across a range of sectors supporting 2,342 jobs. There are currently 171 Enterprise supported companies in the county.
- Twenty-six 'film, video and television production related companies', 132 'IT and Communications' businesses and 73 'Cultural, Arts, Sports and Entertainment' enterprises are located within the County.
- Retail trade is improving from a difficult period. However, significant leakage is still experienced from the county's retail centres.
- Wicklow received over 204,000 overseas visitors in 2013 providing revenue of €287m, dominated by British and Mainland European visitors.
- The pattern of farming shows a reduction in the number of young farmers and an increase in the average size of holdings between 1991 and 2010.

5.3 Wicklow Economic Think Tank

In late 2013 the County Wicklow Economic Think Tank (CWETT) was established as a collaborative process of engagement between local businesses and local authorities in County Wicklow. The objective of this process was to develop a practical, non-statutory 'action plan' that would drive and maintain economic activity and increase employment in County Wicklow.

The plan developed by the CWETT and adopted by the County Council reflects the views of the business community in Wicklow, identifying where they collectively believe the strategic priorities lie in terms of economic development. The CWETT plan has two key elements:

1. A 'Big Idea' - This idea is intended to capture the imaginations and enthusiasm of businesses and the community across the County.
2. Six Strategic Objectives - Each of these objectives addresses a specific area of economic opportunity for the County; under each objective a series of specific actions have been identified, which if implemented, will enable the objective to be realised.

It is intended that in time, the key elements of the Think Tank action plan will be integrated into the LECP, where relevant, as this will allow for more effective and coordinated implementation.

The Big Idea

The 'big idea' is to rebrand Wicklow with a clear, consistent and comprehensive image – one that highlights where Wicklow excels and what differentiates it from other counties. It is intended that this 'new brand' will highlight what Wicklow has to offer to businesses, potential investors, tourists and residents of the County:

- A business environment that is built on quality, a wealth of tradition, sustainability and innovation. It would showcase the fact that Wicklow is open for business – supporting new businesses to start and grow and existing businesses to thrive.
- A place that provides the opportunity to experience a healthy, green lifestyle. It would raise awareness of the quality of life that Wicklow has to offer the employees of any company based here.
- The tradition, culture and heritage that is abundant in the County. The brand would be adopted by tourist destinations, accommodation providers, retailers, businesses etc. across the County as the way to represent a standard and a pride in being a part of what the County has to offer.

Table 5.1 County Wicklow Economic Think Tank Strategic Objectives

Objective	Actions would include
Ensure Wicklow is "Open for Business"	<ul style="list-style-type: none"> - Ensure the infrastructural requirements of businesses are in place. - Establish specific locations as 'gateway hubs' for development. - Ensure the county is attractive to both businesses and their employees. - Improve working relations between the local authorities and the business community. - Develop a high quality affordable and dependable broadband. - Develop a transport infrastructure that services commuters in, out and between all major towns in County Wicklow. - Aligned with "The Big Idea" - develop a marketing plan that communicates the full suite of characteristics that Wicklow has to offer to businesses (indigenous and international) when considering start up, expansion, relocation etc.
Facilitate maximum economic return from the retail sector, the largest employer in the County	<ul style="list-style-type: none"> - Develop a retail marketing plan for County Wicklow. - Put in place a consistent pay parking strategy. - Establish a consistent countywide strategy for tourist and business signage. - Reinvigorate town images.
Maximise the value of Wicklow's status as "The Garden County"	<ul style="list-style-type: none"> - Aligned with "The Big Idea" - develop a marketing plan that communicates the full suite of characteristics that Wicklow has to offer to tourists (indigenous and international). - Further develop the offering that Wicklow has in terms of outdoor activities. - Promote niche tourism opportunities to tour operators. - Promote and develop 'greenway' projects.
Capitalise on the immediate economic opportunity in the Film Industry	<ul style="list-style-type: none"> - Establish a Film Industry Business Development Group. - Promote a Film Industry Cluster: put in place practical supports to develop leading edge film studio capacity. - Further develop and market film tourism in Wicklow.
Sustain, and where possible grow, the traditional sectors in the County	<p>Food Sector</p> <ul style="list-style-type: none"> - Establish a SME Food Sector Forum. - Develop a Wicklow food brand. <p>The Maritime Sector</p> <ul style="list-style-type: none"> - A Business Development Group to be established to assess the opportunities to capitalise on the maritime infrastructure in County Wicklow. <p>Rural and Fishing economies</p> <ul style="list-style-type: none"> - Wicklow County Council to take a pro-active role to sustain and grow commercial activities.
Be alert to new economic opportunities	<ul style="list-style-type: none"> - Establish an Expert Group to evaluate the opportunity. - Establish a Wind Energy Task Force. - Designate off shore wind farm development as a 'strategic investment project'. - Pro-actively market the 'Wicklow Opportunity'.

5.4 The Role of Land Use Planning in Economic Development

The LECP and 'Think Tank' strategies and objectives will require to be implemented by a wide range of actions and agencies, with the County Development Plan's role limited to the land-use and development aspects of the strategies. The County Development Plan shall aim to avoid policies and objectives that unduly restrict the growth of existing enterprises or the development of new enterprises, subject to the development complying with normal planning criteria, such as appropriate location, health and safety, protection of the environment and quality design.

In this regard, it is considered that the County Development Plan has the following key functions in the achievement of the specific goals and objectives of the LECP/Think Tank and economic development generally:

(i) To set out a planning framework for economic development that is in line with the provisions of the Core Strategy.

The policies and objectives for economic development must sit within the overall planning framework / 'Core Strategy' set out in this plan. The employment hierarchy for the County within the 'Core Strategy' clearly sets out the function and type of economic activity appropriate for each level of settlement within the hierarchy, which is derived from the principles set out in the Regional Planning Guidelines for the Greater Dublin Area 2010-2022. Table 5.2 below sets out this hierarchy, detailing the function and type of economic activity that will be promoted and facilitated at each level.

The larger towns of the County clearly have the most potential to deliver larger scale and a wider range of employment developments and these locations should act as the key economic drivers within the County and the wider Greater Dublin Area, with smaller towns and villages focusing on the micro/local economy.

The RPGs place a further emphasis on the larger towns within the County by indentifying two core economic areas within the County.

1. The **Wicklow/Arklow Core Economic Area**: The identification of this area recognises Wicklow as the primary centre serving a large hinterland, with Arklow acting as a secondary centre. The strengths of this area include its location along the strategic European designated transport corridor (EO1), with this road connecting port activities along the east coast such as Dublin, Wicklow Port and Rosslare, important entry points to the region and the rail service along the east coast of the County leading to Rosslare. The identification of this economic area focuses on the development of:
 - smart business which can collaborate and develop through relationships with other such centres in the GDA and adjoining regions;
 - a centre of excellence at Clermont College, Rathnew;
 - pharma and transnational corporation enterprises (TNC);
 - increased linkages between the ports and other ports in the GDA; and
 - tourism from existing man-made and natural assets.

2. The **Bray/Cherrywood/Greystones Core Economic Area**: The identification of this economic area places the primary focus on the growth of Bray and its environs and the availability and expansion of public transport connections to the areas of Cherrywood and Greystones. The identification of this economic area focuses on the development of:
 - Bray and its environs in a manner a capable of accommodating long term and large scale economic growth and further expansion of the public transport linkages within the area;
 - the Film and TV production sector; and
 - the pharmaceutical sector.

Table 5.2 County Wicklow Economic Development Hierarchy

Settlement Level	Settlement Type	Town	Economic Function	Investment Target
1	Metropolitan Consolidation Town	Bray	Main attractor for major investment	Foreign direct investment 'People' intensive, knowledge based industries
2	Large Growth Town Type 1	Wicklow / Rathnew	Main attractor for major investment	Foreign and local investment 'People' and 'product' intensive industries.
3	Large Growth Town Type 2	Arklow Greystones/Delgany	Subsidiary attractor for inward investment	
4	Moderate Growth Town	Blessington Newtownmountkennedy	Attractor for substantial investment	
5	Small Growth Towns	Ashford Aughrim Baltinglass Carnew Dunlavin Enniskerry Kilcoole Rathdrum Tinahely	Attractor for investment	Local investment 'Product intensive' industries, with some 'people' emphasis
6	Rural Towns	Avoca Donard Kilmacanogue Newcastle Roundwood Shillelagh		
7 & 8	Large & Small Villages		Small rural-based enterprises	Local investment Generally small scale non-intensive industry
9 & 10	Rural Clusters & Rural Areas i.e. any location outside the development boundary of any settlement in Level 1-8	Objectives set out in this chapter for rural employment and economic development		

In line with the provisions of the RPGs and this Economic Development Hierarchy, the growth centres of Bray, Wicklow-Rathnew, Arklow, Greystones-Delgany, Newtownmountkennedy and Blessington are the key focus for economic growth within the County. While these areas are all distinctly different there are a number of common characteristics within these settlements:

- A significant trend of out-commuting, with a higher percentage of residents with third level education or higher, working outside of these settlements than within them⁴;
- a high level of unemployment in those persons aged under 25 years, in particular within the Arklow and Wicklow areas;
- the pattern of people at work by SEG⁵ is very similar across all settlements with the highest proportion of people working within each settlement being employed in 'Non-manual' labour; and
- there is a strong dependency on the categories of wholesale, retail, trade, transportation, storage and the education sector for employment within each of the settlements.

The key trends within these settlements highlight the significant leakage of Wicklow's educated workforce predominantly into Dublin City and the south/south west Dublin areas, with Greystones-Delgany in particular demonstrating a significantly higher level of leakage with 56% of residents with a 3rd level education or higher working outside this area.

In this regard this plan must place an emphasis on creating the right environment within each of these settlements to ensure that they are capable of attracting potential employers to appropriately zoned lands and thus increase employment within the County.

The local plans crafted for these settlements shall address these challenges in a targeted manner.

While a significant focus should be placed on the further development of Wicklow's key growth towns, Wicklow's vast open countryside, mountainous areas and coastline offer further significant opportunities to enhance and expand Wicklow's rural economy in a sustainable manner. The key areas within Wicklow's rural economy that present these opportunities fall within the agriculture and forestry sectors and to a lesser extent within the maritime / fishing and extractive industry. These key areas, alongside the expansion of the tourism sector, are dealt with in more detail in sections (vii) and (viii) to follow.

(ii) Ensuring an adequate supply of zoned and serviced land for employment

(a) Determination of appropriate amount of zoned employment land.

As set out in the 'Core Strategy' it is the aim of Council to increase the 'Jobs Ratio'⁶ to c. 60% in 2028. The 'jobs ratio' target for each settlement will be calculated having regard to the existing jobs ratio and the position of the town in the settlement hierarchy. On the basis of that target, the target number of new jobs will be derived, having regard to the overall population target for that town / area.

In accordance with sustainable planning principles, the priority location for new jobs growth shall be the existing town centres and existing developed lands (such as brownfield lands). In circumstances where the total jobs growth cannot be met within the existing town centre / brownfield lands or where certain uses are not suitable to locate in existing built up areas, this growth will be targeted to occur in 'greenfield' locations.

The amount of undeveloped 'greenfield' land zoned for employment use in any settlement shall be determined on a case by case basis, having regard to the particular characteristics of the settlement and the strategy for job creation, and shall include an assessment of the likely employment type and density that would be suitable at each location.

⁴ Note Blessington in the north west of the County was the exception to this trend with a relatively even number of 3rd level of higher educated residents working within and outside the town.

⁵ Socio-economic grouping (SEG) classifies the entire population into one of ten categories based on the level of skill and educational attainment of their occupation (inc. those at work, unemployed or retired, with dependents classed on the basis of whom they are deemed to be dependent)

⁶ The 'jobs ratio' is the ratio between the number of jobs in the County to the number of people in the workforce resident in the County.

(b) Land use zoning principles

New employment development shall be required to locate on suitably zoned / designated land in settlements.

The priority for new employment development shall be in the designated 'town' and 'village' / 'neighbourhood centres' or 'primary zone' in settlements with development plans, or in the historic centre of large and small villages, through densification of the existing built up area, re-use of derelict or brownfield sites, infill and backland development. In doing so, particular cognisance must be taken on respecting the existing built fabric and residential amenities enjoyed by existing residents, and maintaining existing parks and other open areas within settlements.

In acknowledgement of the challenges presented by such sites, and taking in account that certain employment types, such as large scale manufacturing facilities, may require large sites and separation from residential areas, new employment development shall also be permitted on greenfield lands that are zoned / designated for employment.

The zoning / designation of greenfield land for new employment shall adhere to the following principles:

- Application of the 'sequential approach' whereby zoning extends outwards from centres, contiguous to the existing built up part of the settlement;
- promotion of a sustainable land use and transportation pattern, whereby 'people intensive' employment forms are located close to public transport routes (mostly relevant to larger towns such as Bray and Greystones), in centres and mixed use areas or within easy accessibility of residential areas, whereas 'goods based' employment types shall have good access to transport corridors;
- lands already or easily serviced by appropriate standard of roads, surface water sewerage and a gravity fed water supply and waste water collection system;
- cognisance will be taken of the need to provide upmost protection to the environment and heritage, particularly of designated sites, features and buildings; and
- the need to maintain the rural greenbelt between towns.

The development of zoned / designated land should generally be phased in accordance with the sequential approach:

- Development should extend outwards from centres with undeveloped land closest to the centres and public transport routes being given preference, i.e. 'leapfrogging' to peripheral areas shall be discouraged;
- a strong emphasis should be placed on encouraging infill opportunities and better use of under-utilised lands; and
- areas to be developed should be contiguous to existing developed areas.

Only in exceptional circumstances should the above principles be contravened, for example, where a barrier to development is involved. Any exceptions must be clearly justified by local circumstances and such justification must be set out in any planning application proposal.

(iii) Developing a strategy for retail

The retail strategy for County Wicklow is set out in Chapter 6 of this plan and sets out the overall strategy for the future development of retailing within the county for the plan period up to 2022 and beyond. The development and expansion of town centres/core areas within local area/town and settlement plans facilitates the achievement of a strong retail sector which in turn supports local employment.

Where feasible all local area/town or settlement plans will identify key opportunity sites capable of achieving the objectives of the retail strategy. The development and expansion of these areas will be supported wherever possible, as this is viewed as key to supporting local job growth within each designated settlements.

(iv) Promoting and facilitating an overall improvement in the quality of life in all parts of the County

Making a place attractive for both employers and employees as a place to live, work and do business is fundamental to attracting new employers to the County. Specific actions to improve quality of life include:

- Promoting and facilitating high quality residential development with supporting social and community facilities;
- Ensuring town centres are vibrant with a high quality public realms and good range of retail and retail services;
- creating an attractive urban and rural environment to facilitate residency and recreational needs of the projected labour force; and
- increasing and improving the range of quality recreational, amenity and cultural facilities.

Within the settlements situated within Levels 1-6 of the Employment Hierarchy (Table 5.2) Local Area, Town and Settlement Plans shall address the above actions in a targeted manner capable of maximising the individual assets and potential of each of these areas.

(v) Supporting education facilities and the knowledge economy

The promotion and facilitation of educational facilities, in particular third level and further educational facilities, is recognised as a key catalyst for future economic activity within the County. The presence of Wicklow County Campus at Clermont House, Rathnew offers significant opportunities for the development of a centre of excellence for higher education and research, capable of establishing partnerships with wider industry, creating jobs, addressing social challenges and driving economic growth within the County.

The objectives of this plan promote and facilitate the future development of further education throughout the County with a particular focus on the future development of the Wicklow County Campus.

(vi) Facilitating and promoting entrepreneurial activity

Wicklow has a higher proportion of 'employers and managers' (21%), 'professionals' (8%) than the State or Leinster average. The County also has a higher proportion of 'corporate managers and directors' and 'other managers and proprietors' in the resident population than the State or Leinster average. The number of persons educated to third level or higher in Wicklow is also slightly higher than the national average.

Therefore it would appear that Wicklow residents have the skills, abilities and education to run businesses, to establish new enterprises and to be innovators and entrepreneurs, but they are for the most part not doing so in the County. A key challenge will be to put in place an environment and a framework that encourages Wicklow residents to establish businesses in the county and in particular within the County's identified key urban centres.

Entrepreneurial activity will be supported and facilitated wherever possible, for example, by facilitating developments / applications engaged in training and education, and business start-up and incubator facilities. Supporting small scale, start-up developments in rural areas, town / village centres and in suitable residential areas, will be supported wherever possible, as this is seen as key stepping stone to the development of a larger enterprise.

(vii) Supporting employment growth around Wicklow's natural resources

The role the rural economy can play in fuelling the economic recovery is recognised and it is acknowledged that there are certain scenarios where it is practical and sustainable to facilitate the provision of rural orientated enterprises in the open countryside. In this regard the objectives for the rural economy set out in this plan are focused on addressing the challenges and facilitating new opportunities in this sector within Wicklow. The objectives will aim to support existing resource based industries, including agriculture, forestry, fishing, and the extractive industry, while also promoting the diversification of the rural economy.

In addition the natural and man-made assets of Wicklow create significant opportunities for the expansion of the tourist and recreational sectors. While these areas already make a significant contribution to the county's economy, further opportunities exist to increase this offering. The objectives set out in Chapter 7 of this plan aim to facilitate the expansion and further development of this sector over the lifetime of the plan in a sustainable manner.

(viii) Supporting key sectors for growth

Through the research and analysis undertaken for both the LECPC and the Think Tank, it is clear that certain sectors / industries have great potential in County Wicklow, above other locations. While this plan will support the development of all sectors/industries within the County subject to normal planning criteria, the following key sectors have been identified, with this plan setting out particular policy supports for the future growth of these areas.

The key sectors identified within the County include:

The film industry - Wicklow is an important centre for film making, based largely on the presence of Ardmore Studios in Bray and Ashford Studios located on the outskirts of the town of Ashford. The industry contributes significantly to direct and indirect employment and also contributes to the international image of the County. The 'Think Tank' action plan identifies the development of a film industry cluster in County Wicklow (a hub for film making and ancillary industries) as a real opportunity to drive investment and job creation in the County. It is envisaged that the development of the film industry cluster will enable the County to realise the potential value from film making directly, plus film tourism, accommodation services and other support services.

It is envisaged within the action plan that the effective management of this key employment sector could leverage up to €1bn in inward investment and up to 5,000 direct and indirect jobs within the County.

Food sector - Within Wicklow there is an established cluster of artisan / SME Food processing companies, estimated to be in excess of 35 companies, with potential for growth. In addition there is vibrant food service industry in the County, many being customers of the artisan segment. To date businesses across this sector largely operate independently with no forum for mutually beneficial collaborative projects. Collaboration between the food service sector and the local producers could lead to enhanced employment opportunities. Local cooperative processing may also be a solution to overcome the prohibitive cost of investment in food processing facilities for individual small companies acting alone.

Maritime - The maritime sector in Wicklow benefits from a host of assets and activities capable of expansion and development including: shore-side services, shipping services, repair and maintenance, fishing, tourism and leisure, servicing of the off-shore renewable energy industry, maritime financial services etc. Wicklow County Council supports the identification and realisation of the economic opportunities within this sector.

Wholesale, retail trade, transportation and storage – This sector forms the largest industrial group within the County. In regard to wholesale and retail sector significant opportunities to develop this area arise from

the identified expenditure outflows from the County in particular to Dublin. Measures specifically addressing this sector are set out in the County Retail Strategy contained in this plan.

From a transportation and storage sector perspective the locational strengths of Wicklow offer significant opportunities for the expansion of this sector. The County's positioning along the east coast 'strategic transportation corridor', made up of the N11 / M11 and the Dublin to Rosslare rail line creates excellent connectivity between ports within the County and between the County and the ports in Dublin and Rosslare. These connections ensure Wicklow's role as a key entry point to the Greater Dublin Region with the potential to facilitate the expansion of existing or create new spin off industries within this sector.

The promotion of the Leinster Outer Orbital Route connecting the N11 and the east of the County (Arklow town/port) to the west of the County and the major national primary routes within Kildare namely the M9 and M7 create further potential for the expansion of this sector with ease of accessibility to the north and south of the Greater Dublin Region.

Information and communications technology – The information and communications sector forms the second largest industrial group in Wicklow. With Ireland being a technology hub of choice for many when it comes to attracting the strategic business activities of ICT companies, significant opportunities exist to develop this sector with the County. The presence of Clermont College and its envisaged expansion as a third level centre of excellence alongside Wicklow's highly educated workforce further enhance the attractiveness of the County to prospective new companies within the ICT sector maximising the potential of the County.

Tourism and recreation – Tourism and recreation make a positive contribution to the economic and social wellbeing of County Wicklow. In 2013, income from tourists and visitors to Wicklow was in the region of €105m, with over 65% of this income coming from overseas visitors. The increase in income from domestic visitors rose by over 15% between 2010 and 2014, the highest rate of increase in the region.

The County's tourism and recreational attractions are important assets, which form the basis of the County's tourism industry and which are fundamental to the enjoyment of the County by both visitors and residents. Attractions range from areas of scenic beauty, which provide attractive natural bases for outdoor pursuits, such as the Wicklow Mountains, which comprise mountain peaks, valleys, rivers and lakes, the coastline with long stretches of sandy beaches and dunes and the numerous woodlands. The County has a rich heritage of archaeological and historical sites, manor homes and gardens, and attractive towns and villages. In addition, there are a number of golf and resort hotels, and adventure centres, which are within driving distance of Dublin that are attracting increasing numbers of visitors and business related events.

5.5 Objectives for Economic Development

General

EMP1 To support all forms of employment creation, especially where this can mitigate long distance commuting, subject to the proper planning and sustainable development of the area and compliance with all other objectives of this plan.

EMP2 To normally require new employment generating developments to locate on suitably zoned or identified land in settlements. Proposals in settlements with no zoning plan should be assessed on the basis of their individual merits, taking into consideration the objectives set out in this chapter of the plan and all other matters pertaining to the proper planning and sustainable development of the area, including ensuring that the proposal is appropriately sited in a location so that it enhances, complements, is ancillary to or neutral to the existing land uses in the area. All other proposals for

employment generating developments outside of settlements will be assessed on the 'Objectives for Wicklow's Rural Economy'.

- EMP3** To protect employment zoned land from inappropriate development that would undermine future economic activity or the sustainable development of such areas.
- EMP4** To permit proposals for employment generating development where it can be demonstrated that the development complies with the relevant development standards and is not detrimental to residential amenity or to environmental quality, and is acceptable with regard to its impact on the character and visual amenity of the area. Regard will be paid to ensuring that existing or planned infrastructure can acceptably accommodate a proposed development. Developments that result in an unacceptably high level of traffic generation, that are detrimental to residential amenity, the character or visual amenity of an area or the existing roads infrastructure will not be permitted.
- EMP5** To promote the development of employment generating uses at locations which comply with sustainable transportation objectives, i.e.
- promoting the development of 'product' intensive industries (typically manufacturing and logistics based uses) at locations that are accessible to strategic roads infrastructure;
 - promoting the development of 'people' intensive industries (typically office, services and start-up entrepreneur based uses) at locations that are accessible by public transport networks and substantial residential areas, served by cycle networks and walking routes;
 - promoting the intensification of existing employment land uses that are in proximity to good public transport facilities; and
 - where appropriate, promoting the integration of employment uses with other land uses, including residential, tourism and retail uses, in an effort to provide mixed use developments, which can reduce the need to travel.
- EMP6** To promote and facilitate the development of employment generating uses that maximise Wicklow's locational strengths along the east coast 'strategic transport corridor' and the potential of the 'Leinster Outer Orbital Route'
- EMP7** To encourage the redevelopment of brownfield sites for enterprise and employment creation throughout the County and to consider allowing 'relaxation' in normal development standards on such sites to promote their redevelopment, where it can be clearly demonstrated that a development of the highest quality, that does not create an adverse or unacceptable working environment or create unacceptable impacts on the built, natural or social environment, will be provided.
- EMP8** To facilitate the development of childcare facilities at places of employment, and in particular at 'people' intensive places of employment (see Chapter 8).
- EMP9** To promote and support the enhancement of the built, natural and social environment to attract and sustain employment creation initiatives.
- EMP10** To facilitate the provision of a mix of ancillary services such as a shop or food outlet, crèche etc on large sites zoned for employment at peripheral locations where a detailed justification/need for such facilities has been demonstrated and where it has been demonstrated that the provision of such facilities does not impact on existing facilities, in particular, town centre or local neighbourhood centre activities.
- EMP11** To require employment based developments to be of the highest standard of architectural design and layout and comply with the Development & Design Standards set out in this plan.

EMP 12 To provide for employment development at the following locations as shown on maps 5.01-5.07.

Location	Map No.	Size (ha)	Zoning Objective
Mountkennedy Demesne, Kilpedder	5.01	34.7	To provide for a data centre facility ⁷ and associated related industries set in open parkland with extensive landscaping, a high architectural standard of layout and building design with low site coverage. Employment types other than those strictly related to data storage shall show a clear process related requirement to locate in proximity to a data centre.
Rath East / Knockloe	5.02	4.4	To provide for a light industrial development
Scratenagh crossroads	5.03	8.09	To provide for light industrial uses / business park uses with extensive landscaping and a high architectural standard of layout and building design.
Kilpedder Interchange	5.04	27.7	To provide for employment uses including industrial, transport, distribution or warehouse developments of good architectural design, layout and landscaping including substantial screening from N11. The provision of transport facilities will not be at the expense of facilities in existing settlements. Any redevelopment of the (former) Dan Morrissey / SM Morris sites shall include significant proposals to address the unsightly appearance of these sites. In addition, any development on these lands shall connect the footpath from Greystones towards the pedestrian bridge at Kilpedder.
Inchanappa South and Ballyhenry, Ashford	5.05	60	To provide for the development of and expansion of the existing film studios in Ashford on the lands shown on Map 5.05 in accordance with the following requirements: <ul style="list-style-type: none"> (i) the development of these lands shall be strictly limited to facilities for the production of film, TV, animation etc including any directly associated spin offs such as visitor facilities; however, residential development or other non film related commercial activities are not to be permitted; (ii) the location and design (density, height, building format etc) of any development on these lands shall take into account the prevailing landscape pattern, the rural nature and character of the area and shall ensure that impacts on visual, residential and rural amenities are minimised and ameliorated to the greatest extent possible; (iii) the agreement of a master plan for the entire area which shall include: <ul style="list-style-type: none"> (a) a detailed phasing plan which shall be linked to the conclusions and recommendations of a Traffic and Transport Assessment, which shall clearly set out the traffic generation model for the entire development and its constituent phases, and a detailed evaluation of the capacity of all roads serving the site, including all N11 junctions and the N11 itself and their abilities to accommodate the development without impacting on the carrying capacity of the national road for strategic inter-County traffic; (b) sequence of development, that shall be generally from south to north; (c) the infrastructure plans for the servicing of the site; (iv) this zoning shall be for the lifetime of this plan only.
Killadreenan, Newtownmountkennedy	5.06	1.3	To provide for light industrial and warehousing use.
Timore, Newcastle	5.07	0.68	To provide for light industrial and employment use.

⁷ A data centre is a facility used to house computer systems and associated components, such as telecommunications and storage systems. It generally includes redundant or backup power supplies, redundant data communications connections, environmental controls (e.g. air conditioning, fire suppression) and security devices.

Specific Objectives for Employment Types

EMP 13 Seveso Sites

The Seveso Directive 96/82/EC as amended by Directive 2003/105/EC and more recently by Directive 2012/18/EU is concerned with the prevention of major accidents that involve dangerous substances and the limitation of their consequences for humans and the environment. It applies to establishments where dangerous substances are produced, used, handled or stored. This EU directive seeks to ensure the safety of people and the environment in relation to major industrial accidents involving dangerous substances.

The European Communities (Control of Major Accident Hazards Involving Dangerous Substances) (the "COMAH Regulations", (S.I. No. 209 of 2015) implement the Seveso III Directive (2012/18/EU) and are the main regulations that give effect to this Directive in Irish law. The National Authority for Occupational Safety Health (i.e. the Health and Safety Authority – HSA) has been designated as the central competent authority for enforcement of these regulations.

There are two Seveso sites in County Wicklow (as of Sept 2015), located at Schering-Plough, Rathdrum and Sigma Aldrich Fine Chemicals, Arklow.

In relation to the Prevention of Major Accidents (Control of Major Accident Hazards Involving Dangerous Substances) legislation, it is the objective of the Council to:

- comply with the Seveso III Directive in reducing the risk and limiting the potential consequences of major industrial accidents;
- where proposals are being considered for the following: (i) new establishments at risk of causing major accidents, (ii) the expansion of existing establishments designated under the Directive, and (iii) other developments proposed near to existing establishments; the Council will require that applicants must demonstrate that the following considerations are taken into account: (i) prevention of major accidents involving dangerous substances, (ii) public health and safeguarding of public health, and (iii) protection of the environment;
- ensure that land use objectives must take account of the need to maintain appropriate distances between future major accident hazard establishments and residential areas, areas of substantial public use and areas of particular natural sensitivity or interest; and
- have regard to the advice of the Health and Safety Authority when dealing with proposals relating to Seveso sites and land use plans in the vicinity of such sites.

EMP 14 Large-Scale Employment Generating Developments

It is the objective of the Council to promote and facilitate the development of large-scale employment generating developments, including industrial, knowledge, high-technology, office and service based and science space developments, at appropriate locations.

EMP 15 Knowledge, High-Technology and Service Based Industries

To encourage and facilitate the development of knowledge, high-technology and service⁸ based specialist industries at appropriate locations, in accordance with the relevant development and environmental

⁸ Service Based Industry includes software development, data processing and electronic commerce, technical and consulting service, commercial laboratory services, administrative centres, co-ordination and headquarters services, research and development services, media, multimedia and recording services, entertainment and leisure services, training services, publishing services, international financial services, healthcare services, construction related services, environmental services, logistics management services.

standards, and to support and strengthen the capability and quality of research and development functions in the County. The Council will promote the clustering of these type industries and other inter-related industries.

EMP 16 Office Developments and Small-Scale Service Industries

To encourage and facilitate the provision of office developments and small-scale service industries at appropriate locations. The most suitable location for local or small-scale office developments and small-scale service industries is generally in above-ground floor commercial premises at appropriate locations in town / village centres and neighbourhood centres⁹. The development of these types of uses in neighbourhood centres can reinforce the existing service function of these centres, as well as create new opportunities for local employment in locations that are accessible to residential areas.

The Council will permit office development in appropriate employment zoned locations that are deemed suitable with regard to sustainable traffic and land use considerations.

EMP 17 Green Industry

To encourage and facilitate the development of 'green' industries, including industries relating to renewable energy and energy-efficient technologies, waste recycling and conservation.

EMP 18 Small and Medium Enterprises¹⁰

To encourage and facilitate the development of small to medium scale indigenous industries and services at appropriate locations within all Level 1-8 settlements. The Council will require the provision of incubator/starter units in all major planning applications on employment zoned land.

The Council acknowledges that the development of small scale projects with long term employment potential are important in sustaining both urban and rural settlements in County Wicklow and as such, the Council will adopt a proactive and flexible approach in dealing with applications on a case-by-case basis.

EMP 19 Home Based Economic Activity

To encourage, where appropriate, home-based economic activity¹¹ including the provision of small-scale individual enterprises. Proposals which involve the change of use and/or new development for purposes of home-based employment will generally be considered favourably where it can be clearly demonstrated that:

- the nature of the proposed process or activity to be carried out shall be appropriate to and compatible with the character and amenity of the adjoining area;
- the proposed development is of an appropriate scale for its location;
- there is no adverse environmental, health and safety impacts; and
- the development is not detrimental to residential amenity.

In dealing with applications for such developments, the planning authority will have regard to the following:

- the nature and extent of the work;
- the effects on the amenities of adjoining properties particularly as regards hours of operation, noise and general disturbance;
- the anticipated level of traffic generation; and
- the generation, storage and collection of waste.

⁹ This objective does not relate to the use as an office, as set out in Class 2 of 'Part 4, Exempted Development-Classes of Use' of the 2001 Planning and Development Regulations.

¹⁰ The term small enterprise refers to an individual business/enterprise, which employs less than 10 persons, and the term medium enterprise refers to those, which employ up to 50 persons.

¹¹ Home based economic activity is defined as small scale commercial activity carried out by residents of a house which is subordinate or ancillary to the use of the dwelling as a place of residence.

Permissions for change of use shall be temporary for a period of five years, to enable the Planning Authority to monitor the impact of the development. Permission will not normally be granted for such changes of uses in apartments.

The Planning Authority will determine the appropriate number of employees that will be permitted at a development. In certain cases, it may be appropriate that a development is restricted to owner-operator use only, and no other employees will be permitted. In any case, no more than three people, including the owner-operator will be permitted to be employed at such a development.

EMP 20 Wicklow County Campus, Clermont House

It is the objective of the Council to further develop Wicklow County Campus, Clermont House in conjunction with the Carlow Institute of Technology and other stakeholders as a third level education facility and as a centre of excellence for enterprise development, education, training, research and development.

EMP21 Film Industry

To facilitate and support the film industry in the County, including the development of production facilities at appropriate locations and the use of the County for film locations, including the erection of temporary structures and services.

EMP22 Port Activities

To support and facilitate existing and future commercial port activities within the County and to resist developments that would undermine the commercial potential of these areas.

5.6 Objectives for Wicklow's Rural Economy

The objectives in this section are focused on the forms of rural development that are employment and wealth generating (other than tourism, which is addressed separately in Chapter 7 of this plan). Improving the rural economy is only one strand that needs to be addressed in order to result in a strong rural community that is socially, economically and environmentally sustainable. The issues of social wealth and environmental protection are addressed in Chapters 8 and 10 of this plan, and therefore these objectives should be considered dually with the objectives set out in this chapter.

Economic Development in a Rural Area

The objectives set out in this section shall be applied to all forms of economic development proposals that are located in the rural area, and where relevant, shall be considered jointly with the objectives set out below that specifically relate to agriculture, forestry, fishing and the extractive industry, with the following exceptions:

- applications pertaining to proposals for commercial waste facilities shall be assessed on the basis of objectives set out in 'Section 9.3: Waste & Environmental Emissions'; and
- applications pertaining to proposals for commercial tourist related developments shall be assessed on the basis of objectives set out in 'Chapter 7: Tourism & Recreation'.

Strategic Objective To preserve the amenity, character and scenic value of rural areas, and to generally require employment-generating development to locate on zoned / designated land within existing settlements. Notwithstanding this, it is the objective of the Council to support the diversification of the rural economy through the development of appropriate rural based enterprises, which are not detrimental to the character, amenity, scenic value, heritage value and environmental quality of a rural area.

Rural Employment Objectives

RUR1 To permit the development of employment generating developments in rural areas, where it is proven that the proposed development requires to be located in a rural area (e.g. dependent on an existing local resource) and will have a positive impact on the location.

RUR2 To permit the development of small-scale commercial / industrial developments in rural areas that are not dependent on an existing local resource, subject to compliance with all of the following criteria:

- The proposed development shall be a small-scale industrial / commercial scheme or service and the number employed shall be appropriate in scale to the location and its characteristics, including proximity to the workforce and customers;
- the proposed development shall be located on the site of a redundant farm building / yard or similar agricultural brownfield site; and
- the nature and scale of the proposed development and the proposed process or activity to be carried out, shall be appropriate to and compatible with, the character of the rural environment of the site at which the development is proposed, and shall not be detrimental to the rural amenity of the surrounding area. In the assessment of planning applications, cognisance shall be taken of the location of the site vis-à-vis the proximity of the site to the national and regional road network.

RUR3 To encourage, where appropriate, home-based economic activity¹² in rural areas including the provision of small-scale individual enterprises. Proposals which involve the change of use and/or new development for purposes of home-based employment will generally be considered favourably where it can be demonstrated that the nature and scale of the proposed development and the proposed process or activity to be carried out, shall be appropriate to and compatible with the character of the rural environment.

Agriculture

Strategic Objective To encourage the continued operation of farming and its associated uses where it already exists, and to facilitate the diversification of the agricultural economy through the support of appropriate alternative farm enterprise sources.

AGR1 To facilitate the development of environmentally sustainable agricultural activities, whereby watercourses, wildlife habitats, areas of ecological importance and other environmental assets are protected from the threat of pollution, and where development does not impinge on the visual amenity of the countryside. Developments shall not be detrimental to archaeological and heritage features of importance.

¹² Home based economic activity is defined as small scale commercial/industrial activity carried out by the residents of a house which is subordinate or ancillary to the use of the dwelling as a place of residence.

- AGR2** To encourage and facilitate agricultural diversification into suitable agri-businesses. Subject to all other objectives being complied with, the Council will support the alternative use of agricultural land for the following alternative farm enterprises:
- Specialist farming practices, e.g. organic farming, horticulture, specialised animal breeding, deer and goat farming, poultry, flower growing, forestry, equine facilities, allotments, bio-energy production of crops and forestry, organic and speciality foods; and
 - suitable rural enterprises.
- AGR3** To protect agricultural or agri-business uses from incompatible uses, which are more suited to being located within an urban settlement.
- AGR4** To ensure that agricultural developments do not cause increased pollution to watercourses. Developments will be required to adhere to the Nitrates Directive (91/676/EC), and the EC (Good Agricultural Practice for Protection of Waters) Regulations 2009, with regard to storage facilities, concerning the protection of waters against pollution caused or induced by nitrates from agricultural sources. Developments will be required to comply with relevant measures, which operate to protect water quality from pollution by agricultural sources. The disposal and storage of agricultural waste shall comply with the standards required by Council.
- AGR5** To permit the development of new, appropriately located and designed agricultural buildings, which are necessary for the efficient and environmentally sound use of the agricultural practice. New buildings will generally only be permitted in cases where there are no suitable redundant buildings on the farm holding which would accommodate the development and where the Council is satisfied that the proposal is necessary for the efficient operation of the farm. Developments shall be compatible with the protection of rural amenities, and should not create a visual intrusion in the landscape or be the cause of an environmental nuisance.
- AGR6** To encourage proposals for farm shops¹³ where it can be clearly demonstrated that:
- the products to be sold are primarily produce grown on the farm holding;
 - the scale and scope of the retailing proposed will not harm the viability or retail facilities in any nearby town or village; and
 - the proposed shop is operated by the owner of the farm and is ancillary to the main use of the property for agricultural activities.

Forestry

Strategic Objective To promote state and private afforestation, to a scale and in a manner which maximises its contribution to the County's economic and social well being on a sustainable basis and which is compatible with the protection of the environment.

FTY1 To facilitate afforestation in appropriate locations, in accordance with the 'Wicklow Indicative Forestry Strategy' (Wicklow County Council, 2002), and in co-operation with forestry operators and the Forest Service.

The Wicklow Indicative Forestry Strategy was produced by the Council in 2002, in consultation with the Forest Service. The strategy is intended to be a tool of assistance to planners in dealing with proposals for forestry applications. The strategy includes a list of areas that are preferred for afforestation and a list of areas where afforestation would be inappropriate by virtue of landscape, soil type, settlement or environmental grounds. The strategy also includes a series of objectives which are intended to guide planning decisions. The Council will have particular regard to developments that are

¹³ Farm shops refer to premises primarily for the sale of produce originating from the farm holding or the local area.

located in the areas included in 'Table 3: Areas Sensitive to Afforestation', and as per the Strategy, should be consulted on all forestry grant applications in these areas.

- FTY2** To promote afforestation in co-operation with relevant agencies, including the Forest Service (Department of Agriculture, Food and the Marine) and forestry operators and to ensure that afforestation is undertaken in a manner that is consistent with the principle of 'sustainable forest management'. The Council will only permit development that complies with the following:
- The development is compatible with the protection of the environment, and does not cause pollution or degradation of wildlife habitats, natural waters or areas of ecological importance;
 - the development does not have a negative visual impact on the scenic quality of the countryside, and is of an appropriate nature and scale to the surrounding area;
 - the development is not detrimental to archaeological or other historic/heritage features; and
 - the Council will permit forestry development where it is considered that the roads infrastructure (in terms of design, width, surfacing etc.), which is to serve the development, can accommodate the proposed development. No development will be permitted that will result in damage to roads infrastructure or undue nuisance to other road users. The Council may apply a special financial levy to certain developments for works that are required to be undertaken to the road network.
- FTY3** To promote the use of forests for appropriate recreation purposes and to facilitate the development of appropriate recreation facilities at suitable locations. The recreational use of forests will only be permitted where it can be demonstrated that the recreational use is compatible with the other forest objectives, functions and values of the forest, such as timber production, sensitive habitats and important archaeology. Developments will only be permitted that are acceptable in terms of other planning considerations, including the provision of acceptable infrastructure such as roads, car parking, water and sewerage infrastructure.
- FTY4** To promote County Wicklow as a 'centre of excellence' in the forestry research and management field. The Council will facilitate the development of forestry research / interpretative centres, at appropriate locations.
- FTY5** To promote the use of native hardwood species using seed of native provenance where possible in afforestation schemes. The use of native species or a broadleaf / conifer mixture and age class diversity can enhance the visual impact and biodiversity of forests.
- FTY6** To encourage the development of farm forestry as a means of promoting rural diversity and strengthening the rural economy.
- FTY7** To encourage the development of forestry for timber biomass which can be used as a renewable energy source.

Fishing

- Strategic Objective** To promote the development of the County's sea and river fishing industry, to a scale and in a manner, which maximises its contribution to the County's economic and social well-being on a sustainable basis and which is compatible with the protection of the environment.
- FSH1** To support the sustainable development of the fisheries and aquaculture industry in co-operation with the Department of Agriculture, Food and the Marine and the Inland Fisheries Ireland. The Council will not permit development that has a detrimental impact on the environment. In particular, development that has a detrimental impact on the environmental/ ecological/ water quality of seas, rivers and streams, will not be permitted.

FSH2 To facilitate the provision of infrastructure, which is necessary for the development of the fishing and aquaculture industry. Infrastructure and buildings in coastal or riverbank locations should be located in proximity to existing landing facilities and shall be of a design that is compatible with the area. Any development, which by reason of its nature or scale is detrimental to the character or amenity of an area, will not be permitted. Any development in the coastal zone shall comply with the objectives of this plan, as set out in Chapter 11.

Extractive Industry

Strategic Objective To support and facilitate the exploitation of County Wicklow's natural aggregate resources in a manner, which does not unduly impinge on the environmental quality, and the visual and residential amenity of an area.

EX1 To facilitate and encourage the exploration and exploitation of minerals in the County in a manner, which is consistent with the principle of sustainability and protection of residential, environmental and tourism amenities.

EX2 To encourage the use, development and diversification of the County's indigenous natural dimensional rock industry, particularly where it can be shown to benefit processing, craft or other related industries.

EX3 To support and facilitate the development of related and spin-off industries of the extractive industry such as craft and monumental stone industries and the development of the mining and industrial tourism heritage. Consideration will be given to the development of such related industries within or in association with existing operations of worked out mines or quarries, at locations such as the disused granite quarries at Ballyknockan, where this does not conflict with other objectives and objectives of the plan.

EX4 To have regard to the following guidance documents (as may be amended, replaced or supplemented) in the assessment of planning applications for quarries and ancillary facilities:

- 'Quarries and Ancillary Activities: Guidelines for Planning Authorities' (2004, DoEHLG);
- 'Environmental Management Guidelines – Environmental Management in the Extractive Industry (Non Scheduled Minerals)', EPA 2006;
- 'Archaeological Code of Practice between the DoEHLG and the Irish Concrete Federation' 2009;
- 'Geological Heritage Guidelines for the Extractive Industry', 2008; and
- 'Wildlife, Habitats and the Extractive Industry – Guidelines for the protection of biodiversity within the extractive industry', NPWS 2009.