

4.0 HUMAN BEINGS

4.1 INTRODUCTION

This chapter examines the potential impacts that the proposed Yellow River Wind Farm may have on Human Beings, during the construction phase and during the operational phase. Where a negative impact can be foreseen it is reduced or removed by way of practical mitigation measures.

The effect of a development on Human Beings is also known as the Socio-Economic Impact and as such includes the following broad areas of investigation: -

- Population
- Employment
- Settlement Patterns
- Health and Safety
- Land Use
- Tourism

Other effects of the development on Human beings include: air quality; noise; shadow flicker; visibility and traffic. These effects are discussed in detail in the following respective Chapters 8; 9; 10; 11 and 12

4.2 EXISTING ENVIRONMENT

4.2.1 Population

Ireland has seen a rapid population growth in recent years with improved standard of living and infrastructure growth. The country has seen a population surge since 1951 from 2,960,593 to 4,588,252 (55 % increase) as per the national census 2011⁸.

County Population

The population of County Offaly represented approximately 1.7 % of the Irish population at the time of the 2011 Census at 76,687. This figure is a substantial increase of 8.2% on the 2006 figure of 70,868. The population was at its lowest in

⁸ <http://cso.ie/en/census/>

1936 when a population of 51,308 was recorded. The population trend from 1926 to 2011 in County Offaly is displayed on **Figure 4.1**.

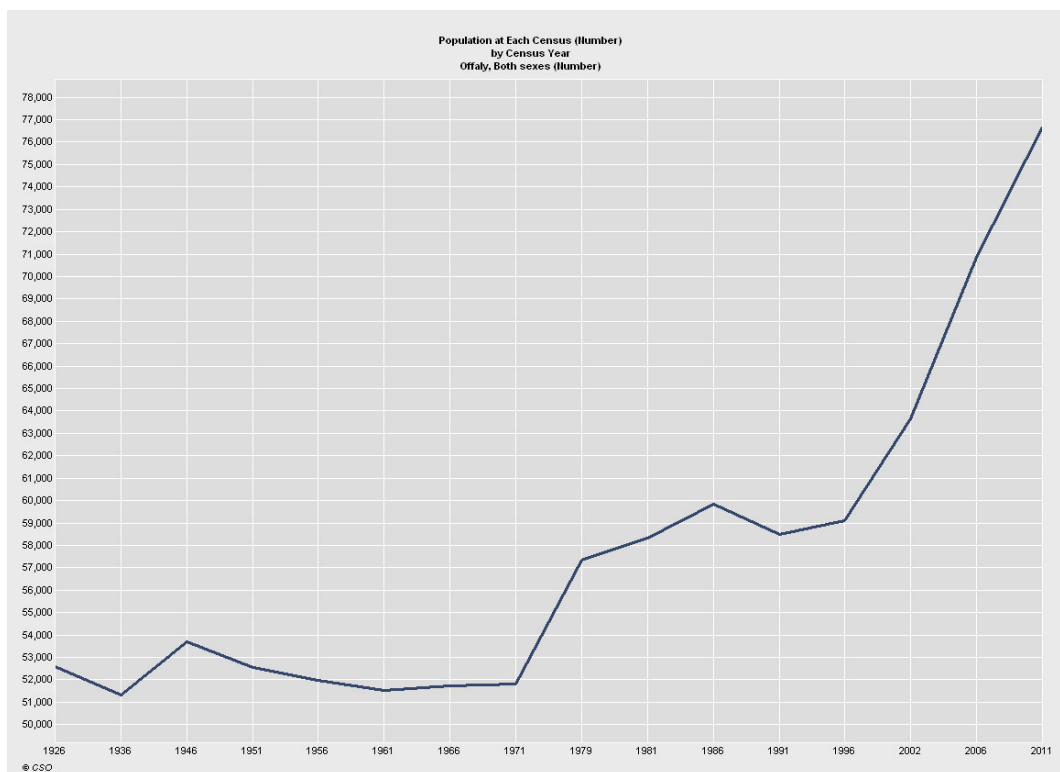


Figure 4.1 Population Trend in County Offaly 1926 – 2011 (CSO, 2011)

The population of County Meath represented approximately 4 % of the Irish population at the time of the 2011 Census at 184,135. This figure is a substantial increase of 13.1 % on the 2006 figure of 162,831. The population was at its lowest, since 1926, in 1936 at 61,405 but a reasonably steady increase can be observed thereafter. The population trend from 1926 to 2011 in County Meath is displayed on **Figure 4.2**.

The population of County Westmeath represented approximately 1.9 % of the Irish population at the time of the 2011 Census at 86,164. This figure is a substantial increase of 8.6% on the 2006 figure of 79,346. The population was at its lowest in 1961 at 52,861, however, a significant increase can be observed thereafter. The population trend from 1926 to 2011 in County Westmeath is displayed on **Figure 4.3**.

Figure 4.2 Population Trend in County Meath 1926 – 2011 (CSO, 2011)

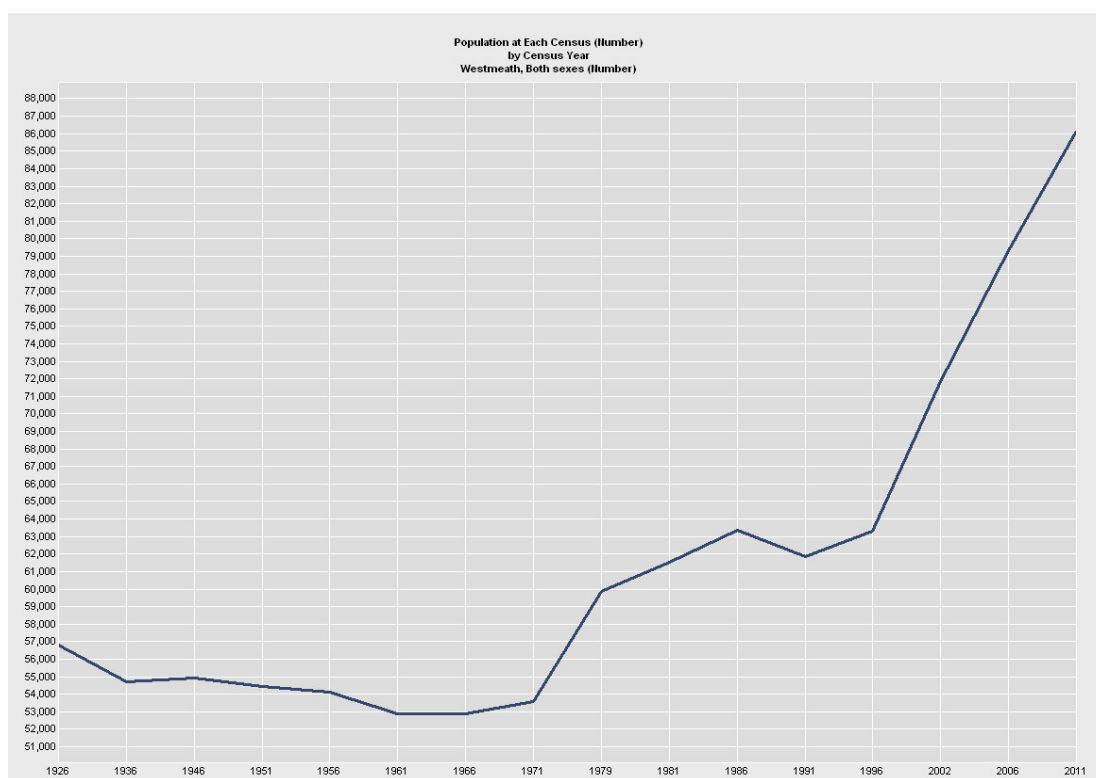


Figure 4.3 Population Trend in County Westmeath 1926 – 2011 (CSO, 2011)

4.2.2 *Regional Population*

Rhode is the closest population centre to the proposed Yellow River Wind Farm. The nearest turbine in the proposed Yellow River Wind Farm is located just north of the village of Rhode. The population of Rhode was 768 at the time of the 2011 census (CSO, 2011).

Edenderry is the closest legal town to the proposed development. The town grew in population size by approximately 10% to 6,490 (CSO, 2011) since the 2006 Census. Edenderry is located approximately 8.5km East of the proposed Yellow River Wind Farm.

Rochfortbridge is located approximately 4km North of the closest turbine. During the 2006- 2011 period, the population of Rochfortbridge experienced a small overall population increase from 1,473 to 1,494 individuals.

4.2.3 *Employment*

Employment figures for County Offaly categorised by industry were compiled by the Central Statistics Office (CSO) as part of the 2011 census. The total number of people employed in each industry is given in **Table 4.1**;

Persons at work by industry and sex		
Industry	Males	Females
Agriculture, forestry and fishing	1,991	276
Building and construction	1,438	103
Manufacturing industries	3,480	1,113
Commerce and trade	2,898	3,016
Transport and communications	1,014	311
Public administration	1,029	1,024
Professional services	1,414	4,464
Other	1,852	2,113
Total	15,116	12,420

Table 4.1 - Persons at Work by Industry in County Offaly (CSO, 2011)

Overall Professional Services and Commerce and Trade are responsible for most employment in Co. Offaly, with approximately 43% of the working population being employed in these sectors. Larger towns such as Tullamore, Birr and Edenderry host most of these professional services jobs. In the period between 2006 – 2011 census the total number of people receiving income from these occupations rose by 6.1%. This rise can be attributed to the creation of more jobs in this sector as well as a

general rise in unemployment throughout the county as a result of the economic recession. The largest drop in employment in one particular industry, between the 2006- 2011 period, was in Building and Construction where employment fell from 14.2% to 5.6%.

The total number of people employed in each industry in County Meath is given in **Table 4.2;**

Persons at work by industry and sex		
Industry	Males	Females
Agriculture, forestry and fishing	3,169	524
Building and construction	4,245	425
Manufacturing industries	6,449	2,333
Commerce and trade	9,655	9,689
Transport and communications	5,134	1,824
Public administration	2,623	2,365
Professional services	4,050	11,937
Other	4,777	5,143
Total	40,102	34,240

Table 4.2 - Persons at Work by Industry in County Meath (CSO, 2011)

Approximately 26% of the working population of county Meath are employed in the Commerce and Trade sector and this sector is the largest employment sector in the county. Although the numbers employed in Commerce and Trade have fallen, the percentage of the workforce working in this sector has remained static at 26%, over the 2006-2011 period. This can be put down to a smaller overall workforce as a result of the recession. Professional Services is another large employment sector in Meath. The percentage of the workforce working in this sector has risen from 14.5% to 21.5% over the 2006-2011 period.

The total number of people employed in each industry in County Westmeath is given in **Table 4.3;**

Persons at work by industry and sex		
Industry	Males	Females
Agriculture, forestry and fishing	1,651	203
Building and construction	1,576	120
Manufacturing industries	3,149	1,155
Commerce and trade	3,585	3,823
Transport and communications	1,610	457
Public administration	1,424	1,055
Professional services	1,851	5,722
Other	2,435	2,503
Total	17,281	15,038

Table 4.3 - Persons at Work by Industry in County Westmeath (CSO, 2011)

Professional Services make up approximately 23.4% of the working population and is the largest provider of employment in Westmeath. In the period between 2006 – 2011 census the total number of people receiving income from these occupations rose by approximately 6.4%. Overall this industry is responsible for most employment in Co. Westmeath. Commerce and Trade also accounts for approximately 23% of the Westmeath workforce. This figure has remained relatively static at 23% since 2006; however there has been a decrease in the actual numbers of people working in the industry.

4.2.4 Unemployment

Information on Live Register figures for Offaly, are available from the CSO⁹. These figures are presented in **Figure 4.4**. Unemployment remained relatively steady between 2002 and 2007. However, a significant increase in the numbers of people drawing social welfare payments is evident in the period from 2007 to present. Recent figures show a worrying trend of increasing unemployment in the Offaly region. At the time of the 2011 census approximately 14.2% of Offaly people over 15 years old were unemployed or looking for their first regular job. In February 2013, the Central Statistics Office (CSO) published figures, which showed a total of 9,270 people signing on in County Offaly an increase of 6,432 people since February 2006. This dramatic increase is as a result of the current economic downturn. The figure has reduced from its peak of 9,870 in July 2011.

⁹ <http://www.statcentral.ie/viewStat.asp?id=164>

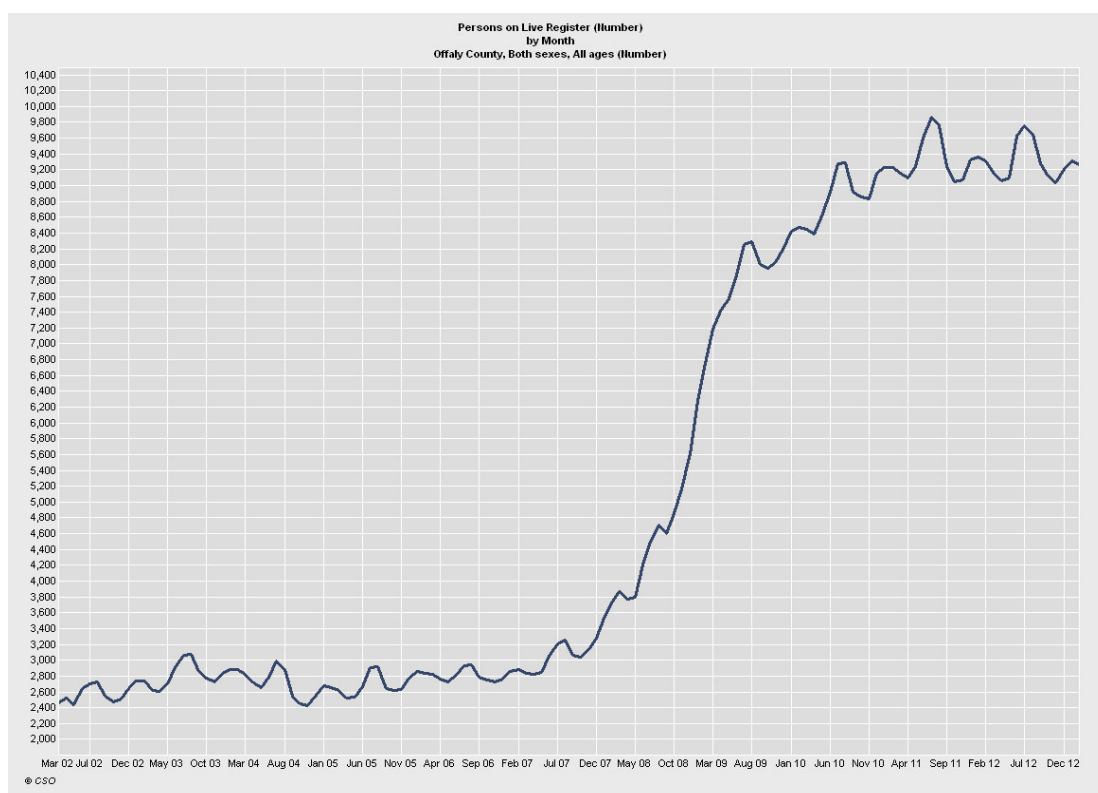


Figure 4.4 - Live Register trend in the Co. Offaly 2002 – 2012 (CSO, 2012)

Live register figures for County Meath are presented in **Figure 4.5**. The number of people qualifying for live register payments in Meath remained relatively steady until the end of 2007 and it was at this point that figures began to rise dramatically. At the time of the 2011 census, approximately 11.8% of Meath people over 15 years old were unemployed or looking for their first regular job. Live register figures peaked in July 2011 when there was 12,350 people receiving social welfare payments. Since then there has been a small decrease in live register figures. In February 2013, the live register figure was 10,830.

Live register figures for Westmeath are presented in **Figure 4.6**. Similarly to Meath, live register figures remained relatively steady until the end of 2007. After this there was a significant increase in people receiving live register payments. At the time of the 2011 census approximately 12.9% of Westmeath people over 15 years old were unemployed or looking for their first regular job. In February 2013 the CSO published statistics, which indicated that there were 10,302 signing on during this period. This figure is smaller than the peak figure of 11,043 in July 2007; however it is 7,415 more than the figure for the same period in 2006.

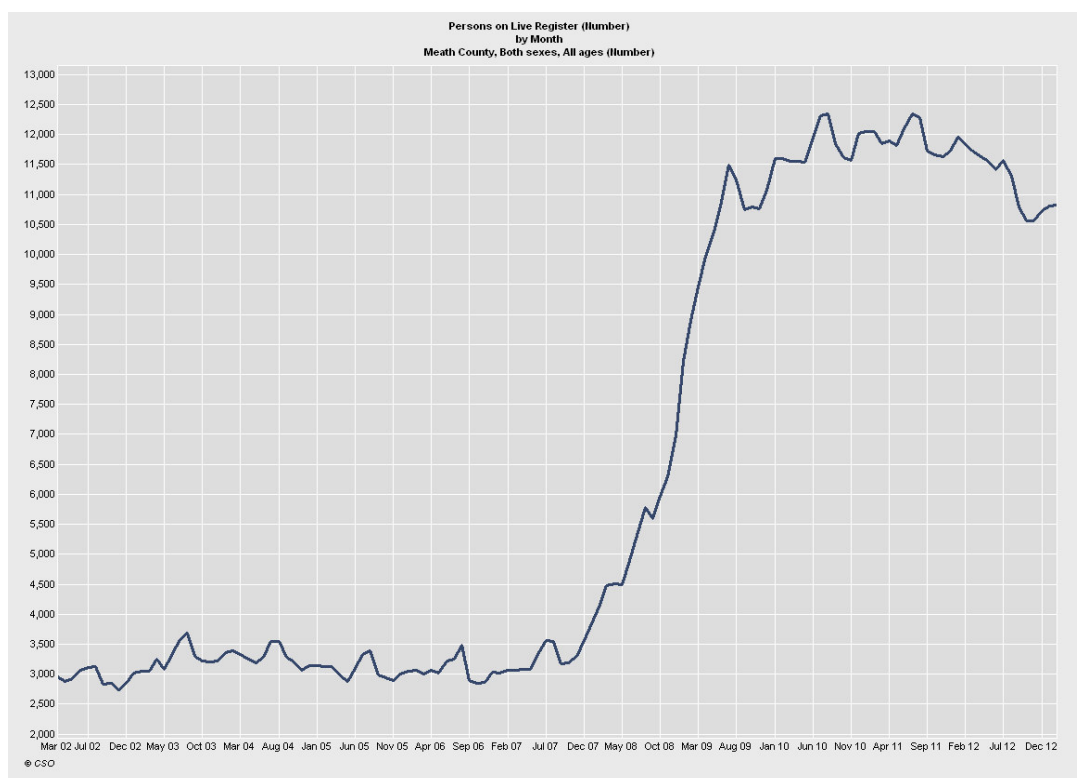


Figure 4.5 - Live Register trend in the Co. Meath 2002 – 2012 (CSO, 2012)

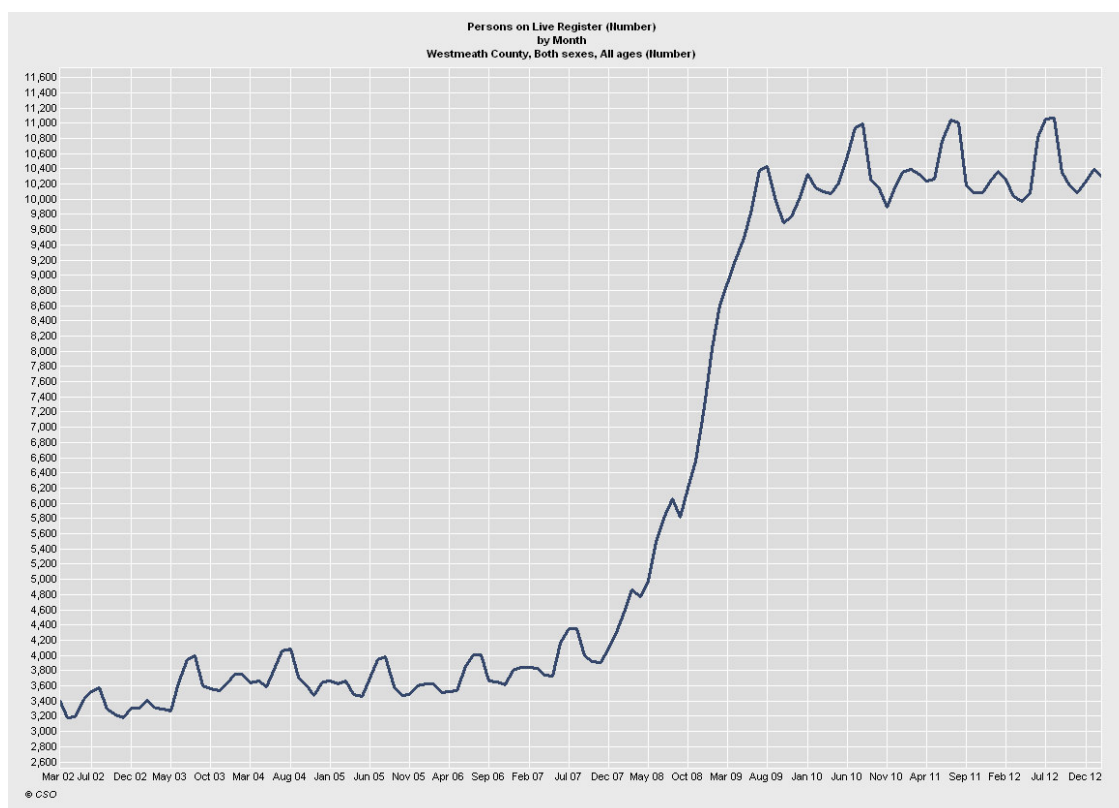


Figure 4.6 - Live Register trend in the Co. Westmeath 2002 – 2012 (CSO, 2012)

4.2.5 *Settlement Patterns*

Offaly has a mainly rural population, with only approximately 29% of the population living in “Legal Towns” within the county; i.e. Tullamore, Edenderry and Birr. Offaly also has a small urban base with Tullamore, the largest town, having a population of just 11,346. These factors make Offaly vulnerable to population decline, as major industries are reluctant to move to such areas.

The overall shift in population within the county is towards Tullamore. Tullamore town and Tullamore rural area account for nearly 49% of the population of Offaly. This significant population growth in the Tullamore region is due largely to the improved infrastructure and services in these areas.

	Persons 2006	Persons 2011	Percentage change 2006-2011
Birr Town	4,091	4,428	8.2
Tullamore Town	10,900	11,346	4.1
Birr rural area	15,975	16,560	3.7
Edenderry rural area	11,952	13,481	12.8
Roscrea rural area	4,673	4,837	3.5
Tullamore rural area	23,277	26,035	11.8
Offaly County	70,868	76,687	8.2

Table 4.4 Population of Towns and Rural Areas in Co. Offaly, 2006 and 2011 (CSO, 2011)

County Meath also has a mainly rural population. Navan is the largest town in the county with a population of 28,153 at the time of the 2011 census. Navan town and rural area accounted for approximately 24% of the population of Meath at the time of the 2011 census.

	Persons 2006	Persons 2011	Percentage change 2006-2011
Kells town	2,257	2,208	-2.2
Navan town	3,710	28,153	658.8
Trim town	1,375	1,441	4.8
Ardee rural area	3,017	3,105	2.9
Dunshaughlin rural area	41,909	48,351	15.4
Kells rural area	13,950	15,325	9.9
Meath rural area	27,939	32,720	17.1
Navan rural area	36,348	15,886	-56.3
Oldcastle rural area	4,279	4,633	8.3
Trim rural area	28,047	32,313	15.2
Meath County	162,831	184,135	13.1

Table 4.5 Population of Towns and Rural Areas in Co. Meath, 2006 and 2011 (CSO, 2011)

Westmeath has seen an overall 8.6% increase in population since the 2006 census. Athlone is the largest town with a population of 15,552 recorded at the time of the 2011 census. The majority of the Westmeath population live near the population centres of Athlone and Mullingar with approximately 85% of the population living within the Athlone town/ rural area and Mullingar rural area.

	Persons 2006	Persons 2011	Percentage change 2006-2011
Athlone town	14,347	15,552	8.4
Athlone rural area	10,152	11,162	9.9
Ballymore rural area	2,169	2,486	14.6
Coole rural area	1,901	1,897	-0.2
Delvin rural area	7,526	8,362	11.1
Mullingar rural area	43,251	46,705	8.0
Westmeath County	79,346	86,164	8.6

Table 4.6 Population of Towns and Rural Areas in Co. Westmeath, 2006 and 2011 (CSO, 2011)

4.2.6 Health and Safety

It is not possible to quantify the health and safety of the population of County Offaly or of the locality. Any development project, in its construction phase in particular, has the potential to affect health and safety of workers and the public. However, the construction practices and EIS processes outlined in this document will ensure that

impacts will be mitigated or eliminated. During its operational phase, the development will contribute to a reduced usage of fossil fuels and the resultant positive affect on climatic conditions will ultimately benefit human beings in the locality, the region and the country.

4.2.7 Land Use

The site is rural in nature with local people primarily engaged in agriculture. Land in the area is currently being used extensively for agricultural activity in grassland areas and there are also small areas of peat production. Two large quarries are in active production, one within the site boundary and the other immediately adjacent to the site boundary. There are also areas of forestry at a number of locations around the site.

The proposed thirty-two turbines and associated works will take up approximately 3% of the total area in control of the applicant.

4.2.8 Tourism

According to Failte Ireland Statistics, 760,000 overseas tourists visited the East and Midlands Region in 2011, with an overall of 2,128,000 tourists visiting the region (including Northern Ireland & domestic trips).¹⁰

County Offaly is a popular destination for foreign and Irish tourists alike. It is well known for its extensive boglands and unspoilt scenery. Tourism is an important component of Offaly's income sector. In 2011, a total of 49,000 overseas tourists visited Offaly; this generated approximately 17 million euro for the region, thus giving an average spend of €347¹¹. Offaly offers unspoilt scenery and a variety of outdoor activities. There are various amenities in the surrounding area, which would be of interest to tourists. It is famously home to a number of popular tourist destinations such as Clonmacnoise Monastic Settlement, Charleville Castle, Birr Castle and Lough Boora Parklands, which is set within the backdrop of the Sliabh Bloom Mountains. None of these tourist destinations will be impacted by the proposed development.

¹⁰

http://www.failteireland.ie/FailteIreland/media/WebsiteStructure/Documents/3_Research_Insights/3_General_SurveysReports/Tourism_Facts_2011_V3.pdf?ext=.pdf

¹¹

http://www.failteireland.ie/FailteIreland/media/WebsiteStructure/Documents/3_Research_Insights/2_Regional_SurveysReports/COUNTY_Numbers_Revenue_11P.pdf?ext=.pdf

Meath also attracts large numbers of tourists from Ireland and overseas. In 2011 an estimated 132,000 overseas tourists visited Meath, generating approximately 51 million euro for the county (an average spend of €386)⁴. Meath is known for the large number of historically important sites that located within the county. One of the most significant and most popular sites in the country is Newgrange, which is a passage tomb that was constructed over 5,000 years ago. It is part of a complex of monuments built along a bend of the River Boyne, known collectively as Bru na Boinne. Other popular tourist destinations in Meath include the Hill of Tara, Trim Castle, Slane Castle, Kells Monastic site and Loughcrew Megalithic Cairns. Two photomontages were taken from County Meath, one from the Hill of Tara, the other from Sliabh na Caillaghe (please refer to Chapter 11, Section 11.4.3 and the Visuals Booklet). The significance of the visual impact from both locations is deemed imperceptible. The proposed development will have no negative impact on tourism in County Meath.

County Westmeath attracted approximately 95,000 overseas visitors in 2011. This resulted in an additional 37 million euro being generated in the county, thus giving an average spend of €389⁴. Tourism is integral to the Westmeath economy and the county is known for its unspoilt countryside, which is dotted with sparkling lakes and rolling hills. As well as this there are a number of visitor sites and family friendly recreational areas within the county. Some of these include Belvedere House and Gardens, Fore Abbey and Locke's Distillery Museum. The proposed development will not impact on any of the sites above and will have no negative impact on tourism in general.

4.3 POTENTIAL IMPACT OF DEVELOPMENT

4.3.1 Population

This project will positively impact on the population in a number of ways. Employees who are not based in the region will temporarily relocate for the duration of the construction period. The project will improve the standard of living in the region by virtue of providing a sustainable power supply platform on which to develop industrial sectors. The quality of life will be improved in the hinterland of the project by means of financial inputs to the local economy; including employment opportunities, Local Authority Rates, Land Rents, increased demand for local support services (i.e. construction, operation & maintenance, legal & accounting), social contribution and increased local spending. This will result in the financial equivalent of 25 – 30 industrial jobs for the duration of the project, i.e. 30 years.

Green Wind Energy proposes to establish a Community Fund once the Yellow River Wind Farm is operational. The objective of the Community Fund will be to provide long-term financial support to local community groups, activities and projects.

4.3.2 *Employment*

The hinterland in which the proposed wind farm is to be located is rural in nature, however, this area has a strong industrial heritage of energy production since the 1950's. The strongest employment sectors in the area currently are agriculture, manufacturing industries, professional services and commerce/trade. With rising unemployment figures throughout the area, the investment in this wind farm project has the potential to generate a range of economic benefits for the hinterland, most notably employment opportunities, Local Authority Rates, Land Rents, increased demand for local support services (i.e. construction, operation & maintenance, legal & accounting), social contribution and increased local spending.

Opportunities for local contractors include construction works, the supply and delivery of construction materials, haulage/crane hire and mechanical/ electrical services. Specialist contract workers drafted in will reside in local accommodation during the construction period which will result in a temporary, positive benefit to the local economy by providing increased revenue for local accommodation providers and other local services.

The proactive and strategic development of wind energy has a clear role to play in Ireland's road to economic recovery and in stimulating employment growth. Approximately 75 temporary jobs are projected to be created during the construction phase of the project, providing employment at local level as well as at national and international level. Following construction, it is anticipated that four full time jobs will be created for the operation and maintenance phase of the wind farm over the lifetime of the project. This investment represents a long-term, positive commitment to the area and will be a major contribution to the local economy.

Employment will also be created and maintained on a regional, national and international level. A report entitled *Jobs and Investment in Irish Wind Energy* was commissioned by the IWEA and prepared by Deloitte in 2009¹². This report states at

12

http://www.iwea.com/contentFiles/Documents%20for%20Download/Publications/IWEA%20Policy%20Documents/2009_06_Deloitte_IWEA_Employment_in_Wind_Energy_Report.pdf?uid=1245768156894

least 25 per cent of capital investment in renewable energy is retained in the regional economy. The investment in this project has the potential to generate economic opportunities for businesses in the region, most notably employment opportunities and local spending. This report also estimates that each MW of wind energy installed results in 1.5 long term jobs in support and associated industries in Ireland, assuming that there is steady growth in the wind energy industry to 2020. Therefore, the investment of Yellow River wind farm, with an installed capacity of approximately 96MW, would result in the creation of 144 jobs.

The employment provided by this development in the construction and operational phases is likely therefore to be in the order of 75 to 150 jobs and is also likely to have a significant positive impact on the locality and a slight positive impact on the region. The developer is anxious that there would be the maximum use of local trades people / plant operatives during the construction phase of the project.

As an example of the economic impact of a recently constructed wind farm, the 28 MW wind farm at Slieve Kirk in Derry involved some 120,000 working hours in construction, equivalent to the creation of 42.6 full-time local construction jobs. At its construction peak, more than 150 people were employed on site, drawn from over 20 locally based suppliers in the engineering, construction and services sectors. As the power capacity of the proposed wind farm at Yellow River is a multiple of that at Slieve Kirk, it can be assumed that its local economic impact will be significantly higher.

4.3.3 Settlement Patterns

As this development contains no housing element, the predicted effect on the immediate settlement patterns is slight to non-existent. There is however the possible benefit which would accrue to the region in terms of the ability to provide electricity to industry and business in a high quality supply. This will lead to the region becoming more attractive to business and industry with the subsequent benefit of increased employment opportunities in the region. Offaly County Council will also benefit from business rates paid to them, which will contribute to the general upkeep of the region and fund local services.

While this is not likely to result in a marked increase in settlement in the area, it will, to a degree, reduce the population drain towards large urban areas such as Dublin.

This is dependent on national and global economic conditions as well as the types of industry, which may locate in the region.

Although there has been concern that wind farms can affect the value of neighbouring property, there is currently no statistical evidence of a drop in property prices nor do they support the case that proximity to wind farms results in a decline in property values (IWEA). A 2009 study commissioned by the US Office of Energy Efficiency and Renewable Energy¹³, and prepared by the Ernest Orlando Lawrence Berkeley National Laboratory, found no evidence of negative impact on property values in the communities near wind farms. The study recorded the sale price of 7,500 homes in nine states and then devised mathematical models to reveal how, all other things being equal, proximity to a wind farm affected their value. It found that homes less than 1.5 kilometres from a wind farm sold for no less, on average, than homes 8 kilometres away. Similarly, home values tended to remain stable long after wind farms sprung up.

4.3.4 Health and Safety

The development will contribute to a net national reduction in the emissions of greenhouse and other gases resulting from the combustion of fossil fuels. The approximate emissions savings that can be achieved each year through the use of a wind farm equivalent in size to the proposed 96 MW Yellow River Wind Farm, instead of the equivalent output from the current mix of generating fuel in Ireland are as follows:

- 144,000 tonnes of Carbon Dioxide (CO₂)
- 2,613 tonnes of Sulphur Dioxide (SO₂)
- 288 tonnes of Nitrous Oxide (NO_x)
- 2,180 tonnes of ash

The global warming potential of 1 tonne of NO_x is equivalent to 310 tonnes of CO₂. As such this proposed wind farm will achieve the removal of approximately 234,806 tonnes of CO₂ equivalent¹⁴. The relative reductions in greenhouse gas emissions in the energy sector will serve to reduce the effects of climate change on a national and global level, albeit at a small scale.

¹³ <http://eetd.lbl.gov/ea/ems/reports/lbnl-2829e.pdf>

¹⁴ http://www.sei.ie/Renewables/Wind_Energy/Wind_Farms_and_the_Environment

Physical health and safety concerns are twofold: -

- Construction workers and members of the public during construction
- Members of the public and employees of the developer during operation

There is the risk on all construction sites of accidents resulting in serious injury and death. Members of the public and employees of the contractors and developer on site may be exposed to potentially dangerous situations. With the establishment of a Health and Safety Plan for the construction phase, potential accidents can be avoided and mitigated against. Off site, construction related traffic might also pose a danger to the public on narrow roads in poor weather conditions. The adherence to the rules of the road and general good driving practice will reduce the severity of this impact. In general there are no specific safety considerations in relation to the operation of wind turbines. The area surrounding the turbine bases will still be available for use as normal.

4.3.5 Land Use

In terms of site area covered by the development, some 3% of the land will be available for a variety of uses during the operational phase. This future land use could include those practices currently being undertaken such as agriculture and peat harvesting.

The relevant landowners will benefit from an annual payment over the life of the project. This rental income will have a local benefit in sustaining local communities as it is reinvested in farm activity. In addition, the guaranteed income provided by this rental income can be used to support applications for loans from the bank, which can also be reinvested into the land. This will be a welcome addition to local family farm income which can vary from year to year and which is very much influenced by a number of factors. For instance, according to Teagasc, farm income for 2012 is estimated to be some 12 per cent lower than the 2011 level (27 per cent lower in the case of dairy farmers) brought about by the poor weather during the year and increased input costs¹⁵.

¹⁵ <http://www.teagasc.ie/news/2012/201212-10.asp>

4.3.6 *Tourism*

The proposed wind farm is not expected to impact significantly on tourism or landscape in the area. There are no major tourist attractions within the village of Rhode itself or the surrounding area. The Yellow River Wind Farm has the potential to boost tourism, all year round, by attracting visitors who are interested in seeing a wind farm in operation. The proposed wind farm development will provide an opportunity to attract visitors to the locality offering the opportunity to view a wind farm up close. This can benefit the local region itself through visitor spend on food, accommodation and gifts. The operation of the wind farm also represents an educational opportunity for schools, local community groups and the public. It would assist in raising awareness of wind energy generation, energy conservation issues and generational sustainability.

The surrounding countryside does not have any particular scenic quality and has been identified as a Low Sensitivity Landscape and an Area Suitable for Wind Energy Development according to the County Offaly Wind Strategy 2009-2015.

There are no designated scenic routes or protected views in the immediate vicinity of the wind farm. The closest designated view [V21] is approximately 4.5km North of the closest turbine within the proposed wind farm. View 21 [View to the South over Co. Offaly from Garrane Hill on the Regional Route R-446 between Tyrrellspass and Rochfortbridge.] is designated as a *View to be Preserved or Improved* by Westmeath County Development Plan 2008- 2014. Some turbines may be visible on a reduced scale at this location. A walking route known as the Grand Canal Way runs East/ West approximately 3.5km South of the proposed site. The proposed wind farm will be visible along sections of this route. This trail has not been marked as scenic according to Offaly County Development Plan.

Please refer to **Chapter 11** for further discussion on the visual impacts of the development.

The impact of the development on tourism in the area is related to public perception on wind energy development. A number of studies have been carried out which provide insight into the views and attitudes of the general public on wind energy development.

Failte Ireland and the Northern Ireland Tourist Board commissioned a study on *Visitor Attitudes on the Environment – Wind Farms*¹⁶. The survey was undertaken by Lansdowne Market Research and involved face-to-face interviews with 1,300 tourists, both domestic (25%) and overseas (75%) (1,000 in the Republic, 300 in Northern Ireland). Almost half the tourists interviewed in this survey had seen at least one wind farm during their holiday with most feeling that their presence did not negatively affect the quality of sightseeing. The largest proportion of those interviewed (45%) said that the presence of wind farms had a positive impact on sightseeing with only 15% saying they had a negative effect. According to this research, the landscape onto which a wind farm is to be sited can also have a significant impact on attitudes. Results showed a greater sensitivity to wind farms sited in perceived more beautiful landscapes, such as coastal landscapes. The Yellow River wind farm site is located on farmland/ bogland landscape, which is among the lesser valued landscapes and has been identified as a *Low Sensitivity Landscape* by Offaly County Development Plan 2009-2015. Approximately 27% of people expressed negativity about potential wind farms on farmland and 18% expressed negativity on wind farms on bogland.

Sustainable Energy Ireland produced a report in 2003, called “*Attitudes towards The development of Wind Farms in Ireland*”.¹⁷ This study was the first independent study of its kind and discovered that 80 % of people are favourable to having a wind farm built in their area, while just 1 in 4 felt that wind farms superimposed on highly scenic landscapes and impacted negatively upon the view presented. Overall the opinions of the perceived beauty of wind farms in bog land received high levels of endorsement for their scenic beauty.

Irish Wind Energy Association (IWEA) published a report in March 2013 entitled *Good Neighbour, IWEA Best Practice Principles in Community Engagement & Community Commitment*, which outlines the economic benefits, both locally and nationally, from the development of Wind Energy over the past 20 years. Effective Community Engagement is a key factor in achieving social acceptance over the lifetime of a wind energy project. The dialogue undertaken by stakeholders during the development of such projects should be inclusive, transparent, accessible and accountable.

¹⁶ http://www.failteireland.ie/FailteIreland/media/WebsiteStructure/Documents/3_Research_Insights/4_Visitor_Insights/Visitor-Attitudes-on-the-Environment.pdf?ext=.pdf

¹⁷ <http://www.seai.ie/uploadedfiles/RenewableEnergy/Attitudestowardswind.pdf>

A report for the Scottish Government in 2008 entitled “*The Economic Impacts of Wind Farms on Scottish Tourism*”¹⁸ found that three quarters of people felt that wind farms had a positive or neutral impact on the landscape. It also found that respondents who had seen a wind farm were less hostile than those who had not. As well as this overseas visitors were generally more positive about wind turbines than domestic tourists.

According to a poll carried out by MORI Scotland, (commissioned by the British Wind Energy Association (BWEA) and the Scottish Renewables Forum (SRF) 2002)¹⁹, the vast majority (91%) of tourists visiting Argyll in Scotland say the presence of wind farms made no difference to the enjoyment of their holiday, and only 8 per cent of the tourists who had seen a wind farm during their visit returned with a negative impression. Therefore based on this study there is no evidence that wind farms significantly detract from the tourist experience of an area.

These studies convey that most people are in favour of the generation of renewable energy from wind turbines and there is no evidence to suggest that wind farms have any detrimental effect on tourism in an area.

The proposed layout complies with the design goals for wind farms outlined in the *Wind Farm Planning Guidelines* published by the DoEHLG in 2006. Chapter 6 of the Guidelines lists a series of recommendations for sites that fit into the “Flat Peatland” designation. The Guidelines states that, “*the preferred approach here is one of large scale response*”. The Offaly Wind Energy Strategy 2009-2015 also states that site of the Yellow River Wind Farm is “*Suitable for Large Scale Wind Farms.*”

4.3.7 Cumulative Impacts

The consented Mount Lucas Wind Farm is located approximately 10km south of the proposed Yellow River Wind Farm. Mount Lucas will be operational during the construction and operation phase of the Yellow River wind farm. No cumulative impacts are predicted.

¹⁸ <http://www.scotland.gov.uk/Resource/Doc/214910/0057316.pdf>

¹⁹ <http://www.cne-siar.gov.uk/energy/2%20pg%20briefing.PDF>

4.4 MITIGATION MEASURES

Although no negative impact of significance has been established there are a number of measures, which may be implemented to protect the safety of workers and the public: -

- A code of construction practice will be established with the Local Authority and will have regard to Health and Safety on site and off site.
- Off site Health and Safety shall include adherence to the rules of the road at all times and proper signage when wide or long vehicles are in use. The use of a lead vehicle with warning lights at periods when large, wide or long vehicles are in use shall be established.
- Members of the public shall not be allowed onto the site during construction without the permission of the developer.

4.5 CONCLUSION

Ireland's current wind capacity of 1,763MW accounted for payment of approximately €11.5 million in Local Authority Rates in 2012 alone. With local economy benefits including employment opportunities, the certainty of land rents over the lifetime of wind farm projects for associated landowners and a more stable, indigenous energy source reducing Ireland's reliance on imported fossil fuels, the wind energy industry plays an important role in Ireland's economic renewal.

Overall, this development can be said to have a positive impact in terms of employment generation and benefits to the local economy, and a minor negative impact in terms of land take.

4.6 REFERENCES

1. Central Statistics Office (CSO) Census 2011 www.cso.ie
2. Central Statistics Office (CSO) 2013 Live Register www.cso.ie
3. Failte Ireland *Tourism Facts 2011*
4. Failte Ireland (2011) *Overseas Visitors to Counties in Ireland- Associated Revenue- Preliminary Estimates*

-
5. IWEA (2009) *Jobs and Investment in Irish Wind Energy Study, 2009*
 6. US Office of Energy Efficiency and Renewable Energy (2009) *The Impact of Wind Power Projects on Residential Property Values in the United States*
 7. SEI *Wind Farms and the Environment*
 8. Teagasc 2012 www.teagasc.ie
 9. Failte Ireland 2008 *Visitor Attitudes on the Environment – Wind Farms*
 10. SEI 2003 *Attitudes Towards the Development of Wind Farms in Ireland*
 11. *The Economic Impacts of Wind Farms on Scottish Tourism 2008*
- British Wind Energy Association 2002 *Tourist Attitudes towards Wind Farms*