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## Derrybrien Wind Farm Project

Gort Windfarms Ltd.

## Remedial Environmental Impact Assessment Report Chapter 4 -Population and Human Health Appendices

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Derrybrien Wind Farm Project  
Remedial Environmental Impact Assessment Report  
**Appendix 4.1- Tourism Information**

## Appendix 4. 1 Tourism Note

### Tourism

Tourism is frequently concentrated in areas which lack an intensive industry base and is generally focused on a particular theme or location, hence it is credited by Fáilte Ireland as having a significant regional distributive effect. It is particularly important to rural economies.

Although no specific reports relate to the Electoral Division areas tourist information relating to the West Region has been identified from specific CSO reports and from published Fáilte Ireland and earlier reports and is discussed here.

### Tourism during the baseline period (1998)

The CSO published a report on tourism and travel in Ireland in 1999 (published in 2000) which also references the baseline year, 1998. This indicated that there were 6,068,000 overseas visits to Ireland by non-residents in 1999, compared with 5,716,000 in 1998, an increase of 6.2%. Travel on transatlantic routes accounted for 19.9% of this increase. The report also indicated that the “number of overseas visitors to Ireland from North America in 1999 was 943,000 compared with 855,000 in 1998, an increase of 10.3% and that during 1999, the number of Overseas Visitors on Continental routes increased by 9.3% compared with 1998. The total expenditure by tourists in 1998 was 1,828 million pounds with Irish carriers earning an additional 470 million pounds ( a total tourism revenue of 2,297 million pounds). In 1999 earnings from tourism had increased to 1,942 million pounds with Irish carriers earning an additional 560 million pounds ( a total revenue of 2,502 million pounds). A breakdown to regional areas was not available but a significant portion of visitors would have been expected to have visited the West Region.

### Tourism during the construction period 2003 to 2006

Tourist numbers and expenditure in the West Region during the construction period has been drawn from available Fáilte Ireland annual Tourism Fact reports for the period 2004 to 2006 and is provided in 1. Tourist numbers and revenue include for all overseas, Northern Ireland and domestic tourists to the region. An estimate of the numbers employed nationally (both direct and indirect) by the industry sector is also provided. In general the data indicates an overall increase in tourist numbers in the period 2004 to 2006 of circa 6% with an increase in tourism revenue and a slight increase in employment in the sector (1.4% in 2006).

**Table 4-1: Tourist numbers and revenue in the West Region 2004 to 2006**

Year	West Region Numbers	% annual change in numbers	West Region Revenues (€ million)	% annual change in revenue	National numbers employed	% annual change in employment
2004	2,544		686.2		244,089	
2005	2527	-0.7	698.3	1.8	245,959	0.8
2006	2698	6.8	777.4	11.3	249,338	1.4

### Tourism during the operational period 2007 to mid 2020

Information on tourist numbers and revenue from tourism in the West Region as well as annual national employment in the sector has been obtained from Fáilte Ireland Tourism Fact reports

for the period 2007 to 2018 and is provided in Table 4-2. The period 2007 to 2011 proved challenging for tourism due to the significant downturn in the world and Irish economies which occurred at that time. In the period 2007 to 2010 tourist numbers and tourism revenue to the West Region decreased and a significant reduction in national employment in the sector also occurred. Despite an overall drop in expenditure by visitors to Ireland in 2010 of some 9% compared to 2009 tourist numbers and revenue in the West Region increased by some 7.6% and 18.5% respectively over the same period. However, significant decreases were recorded in 2011 and 2012. Tourist numbers and revenue to the West Region has increased steadily in the period 2012 to 2018 with increased national employment also in the sector.

**Table 4-2: Tourist numbers and revenue in the West Region 2007 to 2018**

Year	West Region Numbers (000)	% annual change in numbers	West Region Revenues (€ million)	% annual change in revenue	National numbers employed	% annual change in employment
2007	2819	4.5	817.7	5.2	322,000	29.1
2008	2754	-2.3	771.8	-5.6		
2009	2589	-6.0	672.6	-12.9	190,000	-41.0*
2010	2786	7.6	797.1	18.5	180,000	-5.3
2011	2586	-7.2	742.1	-6.9	180000	0.0
2012	2330	-9.9	603.7	-18.6	185,000	2.8
2013	2486	6.7	685.2	13.5	200000	8.1
2014	2832	13.9	746.3	8.9	205,000	2.5
2015	3218	13.6	943.4	26.4	220,000	7.3
2016	3430	6.6	929	-1.5	225,000	2.3
2017	3642	6.2	1090	17.3	240,000	6.7
2018	3720	2.1	1095	0.5	260,000	8.3

\*Based on the difference between 2007 and 2009 as data for 2008 could not be obtained

Recent years have seen significant changes to tourism in Ireland brought about by brand marketing, such as the Wild Atlantic Way, The Ancient East and Ireland's Hidden Heartlands initiatives and the real and perceived challenges from Brexit and Government policy changes.

This is reflected in Fáilte Ireland's (the National Tourism Development Authority) reports and publications on the tourism industry in Ireland. For example, the Fáilte Ireland report on Key Tourism Facts in 2018<sup>1</sup> published in September 2019 indicates the following:

- Overseas tourists to Ireland in 2018 grew by 6.5% to 9.6 million.
- Overseas tourists from Britain, which was still the largest individual market with 36.2% of overseas tourists, grew by 1%. British tourists account for 19.6% of overseas tourism spend in Ireland
- Mainland Europe recorded growth of 7.8% accounting for 36.5% of overseas tourists
- North America also performed very strongly, increasing by 14.5%, with 20.4% of tourists coming from this continent.

<sup>1</sup> Fáilte Ireland, Key Tourism Facts in 2018

- The long haul markets have also increased by 7.8% in 2018, with 6.8% of tourists coming from these markets.
- Revenue from Mainland Europe and North America equates to 35.4% and 33.5% of overseas tourism revenue respectively.

In 2018, the tourism industry was estimated by Fáilte Ireland to be a €9.4billion industry, with out-of-state (Overseas and Northern Ireland) tourist expenditure amounting to €5.6billion, a further €1.7billion spent by overseas visitors on fares to Irish carriers and domestic tourism expenditure amounted to €2billion. Foreign exchange earnings were estimated at €7.4billion.

An estimated 3.7 million tourists visited the West Region with circa 1 million of these originating domestically and with a total (overseas, Northern Ireland and domestic) estimated spend of €1,095 million in the region.

The CSO data indicates that the numbers employed in accommodation and food service sectors rose from 169,600 in Q1, 2018 to 175,000 in Q1 2019. Fáilte Ireland estimated that all jobs in the tourism and hospitality industry based on their past surveys indicates total employment in the sector at approximately 260,000. This estimate includes an additional category of tourism services and attractions which is not covered by the CSO.

A more recent Fáilte Ireland strategic research insight into tourism in 2019<sup>2</sup> indicated that business sentiment was down on balance following a number of good years. This was attributed to rising costs, the restoration of the VAT rate and low-priced competition as well as the uncertainty surrounding Brexit. However, there were some positive notes with Fáilte Ireland's regional experience brands continuing to drive tourism to the different regions of Ireland. For example, three in five (61%) businesses in the Wild Atlantic Way region state the brand as a positive factor affecting their business in 2019 with Ireland's Hidden Heartlands seen as a positive contributor to performance in up to half of businesses in the region.

The above highlights the importance of the tourist industry to Ireland although most tourists tend to visit the major attractions, regional experiences and the main cities.

The Derrybrien Wind Farm Project is in a remote location away from any major tourist area. There are however a number of local amenity and tourism attractions as discussed in Chapter 13-Material Assets.

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<sup>2</sup> Fáilte Ireland, Tourism Barometer 2019

## **Appendix 4.2- Human Health**

## Appendix 4.2 Health Data

This section sets out the baseline information on human health at National, West Region and at Electoral Division level based on self-perceived health in the population and also key causes of mortality. In general Ireland is seeing greater longevity in its population, which is also growing, with longevity being associated with better lifestyles, better health care provision and with earlier intervention in key diseases leading to better outcomes.

### Baseline Year 1998

Although no specific health data for the year 1998 was available, the Quarterly National Household Survey Health issue (Third Quarter 2001) provides general health data both nationally and on a regional basis which reflects the period before construction of the Project commenced.

The survey indicated that in the West Region (Galway, Mayo and Roscommon) some 87.1% of adults surveyed in 2001 reported their health as being good to excellent. With 10.3% stating it was “fair” and 2.4% stating it as “bad”. This was similar to the national picture, see Table 4-1 below.

**Table 4-1: Persons aged 18 and over, classified by how they perceive their own health**

	Excellent	Very Good	Good	Fair	Poor	Other
State	29.1	35.4	24.2	9	2.2	0.1
West	24.2	35.7	27.2	10.3	2.4	*

### Operational period 2006 to July 2020

A general overview of the self-perceived health status of people in the State and in the West Region is provided by the Quarterly National Household Survey (QNHS) module reports relating to health, produced in 2007 and 2010. Although designed primarily to produce quarterly labour force estimates the QNHS also periodically conducts special modules on different social topics each quarter including health. The QNHS is a large-scale, nationwide survey of households in Ireland. The health status reference quarters for survey results are:

Q1 - January to March, Q2 - April to June, Q3 - July to September and Q4 - October to December

Summary health status data extracted from the following QNHS reports is provided in Table 4-2 below:

- Quarterly National Household Survey, Health, Third Quarter 2001, 30<sup>th</sup> May 2002
- Health Status and Health Service Utilisation, Quarterly National Household Survey Quarter 3 2007, 30<sup>th</sup> October 2008
- Health Status and Health Service Utilisation, Quarterly National Household Survey, Quarter 3 2010, 31<sup>st</sup> August 2011

The QNHS Q 3 2007 Report indicated that nationally 87 % of adults perceived themselves to be in good health with 47% perceiving their health as very good and 40% stating that it was good, 11% indicated that it was fair and just 2% stated it was bad or very bad. By contrast in the West Region the percentage stating their health was very good to good was 83% a

decrease of some 4% on the 2001 survey with a higher percentage reporting their health as fair. The percentage reporting their health status as very bad or bad was less than that recorded in 2001 both nationally and for the West Region.

Hypertension, chronic back pain and high cholesterol were reported as the most common health conditions.

The 2007 report also provided the following summary:

- *Overall there were no significant differences between male and female self-perceptions of their own health status. However, some differences can be seen when looking at men and women by age group.*
- *Among those aged 18-24 and 25-34 a higher proportion of men than women reported their health status as very good as compared with women. For example 69% of 18 to 24 year old males reported very good health status compared with 59% of females in that age group.*
- *A similar proportion of people reported their health status to be fair or worse in each age group for both men and women. Overall 14% of women and 12% of men reported fair or worse health status.*
- *The percentage of those who reported their health status as either very good or good decreased with age. For those aged 70 and over, 69% rated their health to be either very good or good. This compares with 96% of 18-24 year olds.*
- *Almost 40% of adults (41% women, 36% men) reported at least one health condition, most commonly hypertension (10%), back pain (8%), and high cholesterol (8%). For most conditions, a higher prevalence of the condition was reported among older adults.*

The QNHS survey report of 2010 indicated that almost nine out of every ten adults surveyed perceived themselves to be in good or very good health. It indicated that nationally, 87% of all adults perceived their own health as good or better (45% as very good and 42% as good). A further 11% indicated that their health status was fair, with only 2% stating that their own health was bad or very bad. In the West Region 85% reported their status as very good or good with 13% indicating fair and again just 2% indicating very bad or bad. The report provided the following summary with respect to health:

- *The number of persons reporting that they were in good or very good health decreased with age. Those aged 70+ years, at 67%, were the only group where less than 78% of the adults reported that they were in good health or better, while among the younger age groups, 18-44 years, over 90% indicated that they were in good health or better.*
- *Over 84% of adults in each Region perceived their own health as being very good or good in 2010, with Dublin reporting the highest percentage, at 89%.*
- *A higher percentage of non-Irish nationals (93%) reported their own health as being very good or good compared with 87% of Irish nationals.*
- *Over half of the adults surveyed who reported having a disability perceived their own health as fair or bad/very bad*
- *The estimates for 2010 are broadly in line with those of 2007.*



- *In the age groups 18-44 and 65+, more men than women reported their health status as very good or good. Six percent of females aged 70+ reported their health status as bad or very bad, compared with 4% of men.*

Again, hypertension, chronic back pain and high cholesterol were the most common health conditions reported. The Report also stated that over forty percent of adults (42%) indicated that they have at some point been diagnosed by a doctor as having a health condition. Hypertension (11%) was the most prevalent condition reported by adults followed by chronic back conditions (10%) and high cholesterol (10%). Young adults (those aged 18-24 years), reported asthma (10%) as the most prevalent condition followed by chronic back pain (4%) and anxiety/depression (2%).

**Table 4-2: Summary Self-perceived health status 2001 to 2010 (%)**

	2001		2007		2010	
Health Status	State	West	State	West	State	West
Excellent	29.1	24.2				
Very Good	35.4	35.7	47	36	45	39
Good	24.2	27.2	40	47	42	46
Fair	9	10.3	11	14	11	13
Poor	2.2	2.4	2	2	2	2
Other	0.1	*		1		
Excellent/Very Good/Good	88.7	87.1	87	83	87	85

The main causes of mortality nationally in the period 2005 and 2007, which is during and immediately after the construction period of Derrybrien, are provided in Table 4-3.

**Table 4-3: Main cause of Mortality Nationally 2005 and 2007 (%)**

2005			2007	
Cancer	28.1		Cancer	28
Heart Disease	18.5			
Other Circulatory Disease	10.5			
Stroke	7.4	36.4*	Circulatory System Diseases	35
Other Respiratory Disease	7.4			
Pneumonia	7	14.4**	Respiratory System Diseases	13
Injury and Poisoning	5.3		Injury and poisoning	6
All Other Causes	15.8		All Other Causes	18

\* Sum of Circulatory System Diseases comprising sum of Heart disease, Other circulatory disease and stroke.

\*\* Sum of Respiratory Diseases comprising Pneumonia and Other respiratory Diseases

Note: Data for 2005 sourced from Health in Ireland, Key Trends 2007 and data for 2007 sourced from Health Status of the Population of Ireland, 2008.

The prevailing causes of death at that time were circulatory system diseases, which includes heart disease, stroke and other circulatory diseases, non-respiratory cancers, respiratory diseases (Pneumonia and others) death from injury, such as traffic accidents and poisoning and other causes. Causes of death were proportionally similar in 2005 and 2007.

Further information on the Irish health status between 2015 and 2019 is available in the Department of Health published Key Trend Reports on health in Ireland. Summary information from these reports, which is available at a National Level is presented here and in Table 4-4.

- Health in Ireland Key Trends,2007
- Health in Ireland Key Trends 2015
- Health in Ireland Key Trends 2017
- Health in Ireland Key Trends 2018
- Health in Ireland Key Trends 2019

**Table 4-4: Self-perceived National Health Status 2005 -2017 (%)**

	<b>2005</b>		<b>2013</b>		<b>2015</b>		<b>2016</b>		<b>2017</b>	
<b>Health Status</b>	<b>% Males</b>	<b>% Females</b>	<b>% Males</b>	<b>% Females</b>	<b>% Males</b>	<b>% Females</b>	<b>% Males</b>	<b>% Females</b>	<b>% Males</b>	<b>% Females</b>
Very Good	48.2	46.3	42.1	41.2	43.5	41.3	41.6	41.5	44.5	44.8
Good	35.5	35.9	40.9	39.6	39.5	40.4	41.1	41.3	38.4	38.1
Very Good /Good	83.7	82.2	83	80.9	83	82.7	82.7	82.8	82.9	82.9
Fair/Bad /Very bad	16.3	17.9	16.9	19.2	17.1	18.2	17.3	17.2	17.1	16.4

The 2007 Report Health in Ireland Key Trends 2007 indicated that Ireland had the highest levels of self-perceived health compared to surveys in Europe where similar surveys were conducted with over 80% of both men and women assessing their health to be either “good” or “very good”. The survey data also show very significant levels of chronic illness and limitations in activity strongly related to age.

The report is available at <https://www.drugsandalcohol.ie/6356/1/3839-4090.pdf>

The 2015 Report Health in Ireland, Key Trends 2015 indicates that in recent decades, Ireland has consistently recorded high rates of self-evaluated good health and continues to compare favourably in the areas of self-reported chronic illness and limitations in activities with the EU average. The extent of chronic conditions rises very steeply with age and that women have somewhat higher prevalence of chronic conditions than men. The report is available at ([https://www.drugsandalcohol.ie/24955/1/Health\\_in\\_Ireland\\_KeyTrends2015.pdf](https://www.drugsandalcohol.ie/24955/1/Health_in_Ireland_KeyTrends2015.pdf)).

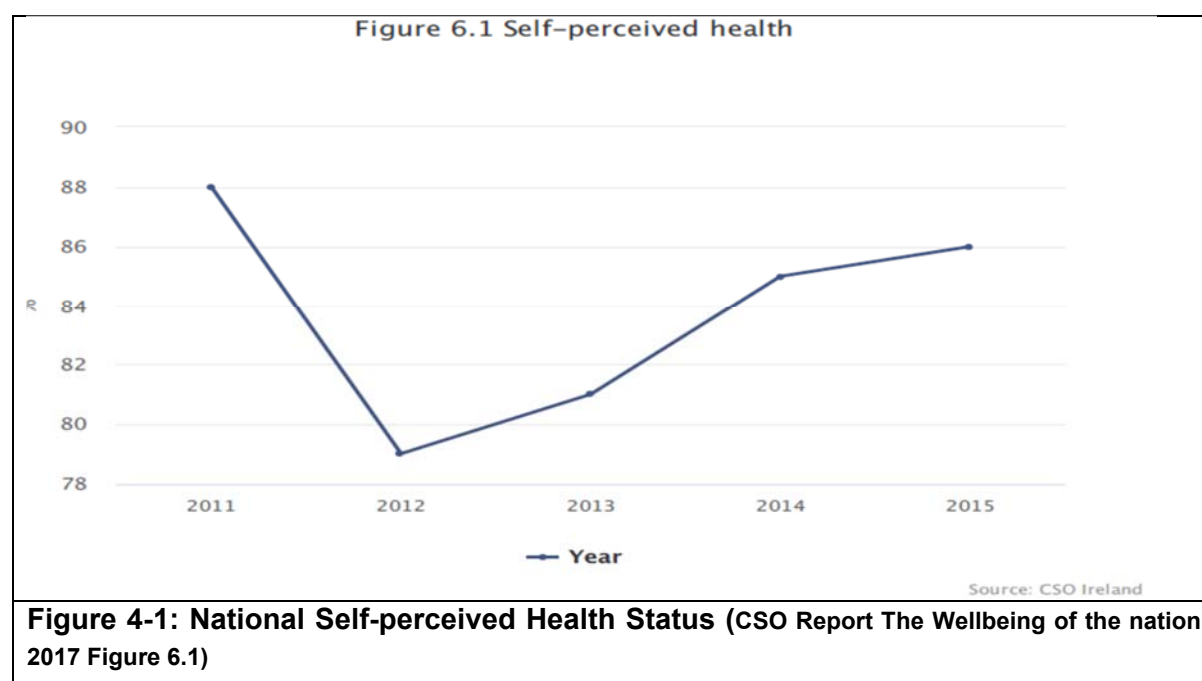
The HSE Health in Ireland, Key Trends 2017 Report provides data for the year 2016 states that Ireland had high rates of self-perceived good or very-good health compared to its EU counterparts and indicates the following:

*“Population health at the national level presents a picture of decreasing mortality rates and a rise in life expectancy over the past ten years. Morality rates from diseases of the circulatory system fell by 28.4% between 2007 and 2016 and cancer mortality rates decreased by 9.9% over the same period. When cancer of the trachea, bronchus and lung are included, respiratory diseases accounted for 19% of all registered deaths in 2016”*

The Report can be found at:

(<https://assets.gov.ie/12787/b8fc41b90a5641bbb16238f77a025187.pdf>)]

In a further publication in 2017, the CSO on line statistical report “The Wellbeing of the Nation 2017”, the section on health (<https://www.cso.ie/en/releasesandpublications/ep/p-wbn/thewellbeingofthenation2017/hlt/>) indicates that 86% of the population reported their general health to be either good or very good in 2016, a decrease from the 2011 figure of 88%. The percentage of those aged 16 and over that rate their health as good or very good, has increased each year. Figure 6.1 of the report has been reproduced here, see Figure 4-1 and shows the trend in self-perceived good or very good health status over the period 2011 to 2015. A significant dip occurred in 2012, down to circa 79% with subsequent years showing a rise in the percentage figure.



The 2018 key Trends Report provided health information for 2016, states that Ireland has the highest self-perceived health status in the EU, with 83% of people rating their health as good or very good at the National level. The number of people reporting a chronic illness or health problem is also better than the EU average, at around 27% of the population. It also reflected the decreasing mortality rates in the State and indicated Ireland as being among the top performers for life expectancy, self-perceived health status and stroke mortality rates in the EU but is below the average for respiratory and acute myocardial infarction (AMI) mortality rates. The Report is available at

<https://assets.gov.ie/9441/e5c5417ee4c544b384c262f99da77122.pdf>).

The 2019 Report, provided general health information for 2017 again stated that Ireland had the highest self-perceived health status in the EU, with 82.9% of people rating their health as good or very good. The number of people reporting a chronic illness or health problem was also better than the EU average, at around 27.7% of the population. Trends in Ireland with respect to mortality and illness remained similar to 2017.

The Report is available at (<https://www.gov.ie/en/publication/f1bb64-health-in-ireland-key-trends-2019/>).

The main causes of mortality, for the period 2014 to 2018 has been sourced from the health in Ireland Key Trends Reports and is provided in Table 4-5. Although proportionately, causes of death remain similar over the period significant differences in causes of mortality occurs with age profile with increased levels of circulatory system and respiratory diseases in the over 64 age group. The prevalence of death by injury or a poisoning is significantly less in this age group also.

**Table 4-5: Principle causes of death in Ireland 2014 to 2018**

Year	2014		2016		2017		2018	
Mortality by principle causes	0 to 64 year s of age	65 plus year s of age	0 to 64 year s of age	65 plus year s of age	0 to 64 year s of age	65 plus year s of age	0 to 64 year s of age	65 plus year s of age
Diseases of the circulatory system	18.4	33.6	19.2	30.8	19.5	31.4	19.1	30.8
Non respiratory cancers	31.2	22.3	30.6	20.6	32.9	21.8	32.5	21.6
Respiratory Diseases	11.7	19.7	12.6	20.1	12	21.2	14.6	21.2
Injury or poisoning	18.5	2.1	15.7	1.7	16	1.8	15.7	1.9
Other causes	20.1	22.3	22.2	27.9	19.7	23.9	18	24.7

Note: 2014 data sourced from Key Trend Report 2015, 2016 data sourced from Key Trends Report 2017, 2018 data sourced from Key Trends Report 2018 and 2018 data sourced from the Key Trends Report 2019.

A more recent survey of Irish health at a National level is available in the Healthy Ireland Summary Report 2019 based on an IPSOS MRBI Poll conducted in 2019. The Healthy Ireland Survey is an annual interviewer-administered survey commissioned by the Department of Health. The summary of the 2019 survey indicated the following with respect to self-perceived health status:

- 84% perceive their health to be very good or good. 3% perceive it to be bad or very bad. This is broadly unchanged since 2015.
- The gap in self-reported good health between men and women changes as age increases. Among those aged 75 and over, 64% of women report their health as good or very good compared to 60% of men. In the 15-24 age group, 92% of women report their health as good or very good compared to 94% of men.
- Self-reported good health is higher among those currently in employment compared to those currently unemployed (92% and 83% respectively). It is also higher among those in more affluent areas compared to those in more deprived areas (88% and 80% respectively).

- Respondents who have never smoked are more likely to consider themselves as having good health overall. 78% of respondents who smoke tobacco products daily report good health compared to 89% of those who had never smoked.

Respondents indicated that the most commonly reported conditions they had endured, in the 12 month period prior to the survey, were high blood pressure (13%), high cholesterol (10%), arthritis (10%), asthma (7%) and emotional, nervous or psychiatric problems such as depression or anxiety (6%).

The 2019 Healthy Ireland 2019 survey summary report can be found at <https://assets.gov.ie/41141/e5d6fea3a59a4720b081893e11fe299e.pdf>.