

**A Socio-Economic and Agricultural Profile of the
Grey County**

Flesherton Wind Farm Project

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June 2008

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1. INTRODUCTION

Flesherton Wind Energy Inc. is proposing the development of the Flesherton Wind Farm Project (the “Project”). The Project consists of 5 wind turbines located in Grey County in the vicinity of the Community of Flesherton.

As part of the Ontario Ministry of the Environment’s Environmental Screening Process for electricity projects (i.e., Ontario Regulation 116/01) and the Canadian Environmental Assessment Act (“CEAA”), Environmental Business Consultants (“EBC”) developed a profile of the socio-economic and agricultural conditions in Grey County. The profile provides a broad-level, statistical overview of these conditions.

2. METHODOLOGY

The methodology consisted of the review of published census data from Statistics Canada, specifically the Population Census of Canada and Agriculture Census of Canada, which are both conducted every five years. The most recent censuses were conducted in 2006. Where applicable, data from previous censuses have been incorporated to identify relevant trends. Other background materials pertaining to socio-economic and agricultural profiling were also reviewed and incorporated where appropriate. Specific documents that were used in developing the profile include:

- 2006 Profile of Census Divisions and Subdivisions. Catalogue No. 95-220-XPB vol. I. (Statistics Canada).
- 2006 Census of Agriculture. Catalogue No. 95F0304XCB. Farm data: full release (Statistics Canada).
- 1996 and 2001 Censuses of Canada, Agricultural Profile of Ontario (Statistics Canada).
- The Acreage of Soil Capability Classes for Agriculture in Ontario (Hoffman and Noble, 1975).

No field visits were undertaken during the profiling exercise. However, when data needs were not satisfied through census data, telephone interviews were conducted with municipal staff to determine services and facilities provided in Grey County.

3. SOCIO-ECONOMIC PROFILE

3.1 Population

3.1.1 Population and Population Change

Table 3.1. shows the population growth in Grey County and Ontario. The population of Grey County has grown slightly over the past two census periods. In 1996, 87, 621 people lived in Grey County. By 2001, the population grew by 1.7% to 89,073. This is significantly lower than in Ontario where the population has grown by 6.1 percent since 1996.

Table 3.1 Population

Population and Dwelling Counts	Grey County	Ontario
Population in 2001	89,073	11, 410, 046
Population in 1996	87, 621	10, 753, 573
1996 to 2001 Population Change	1.7	6.1

Source: Statistics Canada, 2001 Profile of Census Divisions and Subdivisions. Catalogue No. 95-220-XPB vol. I

3.1.2 Age and Gender Distribution

Table 3.2 shows the age and gender distribution in the Province of Ontario and Grey County. The population of Grey County is typically younger than that of the province with the greatest numbers of people falling in age categories of 5 – 14 years of age (school age) and 25 – 44 years of age. Many young families are located in the County.

Table 3.2: Population by age group and gender

Age	Ontario		Grey County	
	Males	Females	Males	Females
0-4	343,475	327,290	2290	2180
5-14	790,375	749,660	6040	5815
15-19	427,185	405,925	3370	3135
20-24	400,445	396,815	2360	2135
25-44	1,679,995	1,772,145	10555	11140
45-54	909,735	951,645	6680	6920
55-64	662,075	694,435	5135	5290
65-74	410,150	458,045	4375	4525
75-84	246,825	342,360	2225	3140
85 and older	60,555	131,260	540	1260

Age	Ontario		Grey County	
Total Pop	5,930,700	6,229,580	89 075	43 570

Source: Statistics Canada, 2001 Profile of Census Divisions and Subdivisions.

3.1.3 Visible Minorities

Table 3.3. shows the distribution of the fifteen most frequently reported ethnic groups identifying the population of Ontario and Grey County as of the 2001 census. It is important to note that individuals may report more than one ethnic origin. There are very few visible minorities in Grey County.

Table 3.3 Visible Minorities

Ethnic Group	Ontario	Grey County
Total visible minority population	2,153,045	1,110
Chinese	481,510	200
South Asian	554,870	150
Black	411,090	395
Filipino	156,515	45
Latin American	106,835	15
South East Asian	86,410	95
Arab	88,545	15
West Asian	67,100	0
Korean	53,955	30
Japanese	24,925	35
Visible minority, n.i.e.	78,915	100
Multiple visible minorities	42,375	20
All others	9,132,500	86,560

Source: Statistics Canada, 2001. Profile of Census Divisions and Subdivisions.

3.1.4. Religious Affiliations

Various forms of Christianity represent the dominant form of religion practiced in Grey County, with Protestantism forming the largest single group (Table 3.4). A high proportion of the population of Grey County claim to not have any religious affiliation. Within Grey County non-Christian groups are very small and are likely to be located in the large urban centres.

Table 3.4 Religious Affiliations

Religious Affiliation	Ontario	Grey County
Catholic	3,911,760	12,200

Protestant	3,935,750	55,190
Christian Orthodox	264,055	225
Christian	301,935	2,145
Muslim	352,253	50
Jewish	190,800	125
Buddhist	128,325	60
Hindu	217,555	50
Sikh	104,785	15
Eastern religions	17,785	50
Other religions	18,985	225
No religious affiliations	1,841,290	17340

Source: Statistics Canada, 2001 Profile of Census Divisions and Subdivisions. Catalogue No. 95-220-XPB

3.1.5 Education Levels

Table 3.5 shows the highest levels of education attained by residents of Ontario and Grey. More than half of the residents in Grey County have a high school education or less. College and trade certificates represent the most common form of post-secondary education in Grey County, likely due to the emphasis on agriculture, manufacturing and construction as crucial industries in the local economy (for which trades/college certificates may be more applicable) and the outflow of secondary-school graduates to universities located outside of the County.

Table 3.5. Highest Level of Schooling

Highest Level of Schooling	Ontario	Grey County
Total population aged 20-34	2,263,910	12,800
% of the population aged 20-34 with less than a high school graduation certificate	13.2	20.4
% of the population aged 20-34 with a high school graduation certificate and/or some postsecondary ⁽⁴⁶⁾	33.7	38.4
% of the population aged 20-34 with a trades certificate or diploma	7.9	9.5
% of the population aged 20-34 with a	19.5	20.9

Highest Level of Schooling	Ontario	Grey County
college certificate or diploma ⁽⁴⁷⁾		
% of the population aged 20-34 with a university certificate, diploma or degree	25.7	11.0
Total population aged 35-44	1,949,840	13,330
% of the population aged 35-44 with less than a high school graduation certificate	17.3	21.1
% of the population aged 35-44 with a high school graduation certificate and/or some postsecondary ⁽⁴⁶⁾	25.6	29.4
% of the population aged 35-44 with a trades certificate or diploma	11.5	15.2
% of the population aged 35-44 with a college certificate or diploma ⁽⁴⁷⁾	21.2	22.2
% of the population aged 35-44 with a university certificate, diploma or degree	24.3	12.1
Total population aged 45-64	2,684,705	23,880
% of the population aged 45-64 with less than a high school graduation certificate	27.5	28.0
% of the population aged 45-64 with a high school graduation certificate and/or some postsecondary ⁽⁴⁶⁾	22.9	24.1
% of the population aged 45-64 with a trades certificate or diploma	11.6	14.7
% of the population aged 45-64 with a	16.6	17.6

Highest Level of Schooling	Ontario	Grey County
college certificate or diploma ⁽⁴⁷⁾		
% of the population aged 45-64 with a university certificate, diploma or degree	21.5	15.6

Source: Statistics Canada, 2001 Profile of Census Divisions and Subdivisions. Catalogue No. 95-220-XPB

3.1.6 Family Income Distribution

Table 3.6 provides data on the level of household income in the Province of Ontario and Grey County. On average, families in Grey County have slightly lower incomes than families in Ontario. The median income (i.e. the dollar value where half of the families earn more and half of the families earn less) for Grey County is less than the Provincial average.

Table 3.6 Income in 2000

Income in 2000	Ontario	Grey County
Persons 15 years of age and over with income	8,598,560	68,820
Median total income of persons 15 years of age and over (\$)	24,816	20,741
Composition of total income (100%)	100.0	100.0
Earnings - % of income	78.7	69.3
Government transfers - % of income	9.8	14.5
Other money - % of income	11.5	16.2

Source: Statistics Canada, 2001 Profile of Census Divisions and Subdivisions.

3.2. Employment and Employment Change

The North American Industry Classification System (“NAICS”) was adopted by Statistics Canada in the 2001 census to replace the Standard Industrial Classification (“SIC”) system as the standard system to organize Canadian industries into easily distinguishable categories. Table 3.7. identifies the categories of classification.

Table 3.7. North American Industry Classification System (1997 NAICS)

Division	SIC Description	Division	SIC Description
11	Agriculture, forestry, fishing and hunting	53	Real estate and rental and leasing
21	Mining and oil and gas extraction	54	Professional, scientific and technical services
22	Utilities	55	Management of companies and enterprises
23	Construction	56	Administrative and support, waste management and remediation services
31-33	Manufacturing	61	Education services
41	Wholesale trade	62	Health care and social assistance
44-45	Retail trade	71	Arts, entertainment and recreation
48-49	Transportation and housing	72	Accommodation and food services
51	Information and cultural industries	81	Other services (except public administration)
52	Finance and insurance	91	Public administration

Source: Statistics Canada, 2001 Profile of Census Divisions and Subdivisions. Catalogue No. 95-220-XPB

Table 3.8. uses the NAICS to analyze employment of people fifteen years of age and older in Ontario in Grey County. Manufacturing industries employ the greatest percentage of the labour force in Grey County. Within Grey County, health & education, wholesale and retail trade, and agriculture are also important sectors.

Table 3.8. Employment by 1997 NAICS (population 15 years and over)

Industry	Ontario	Grey County
Total - labour force over 15 years of age	5,992,765	45,155
Agriculture and other resource-based industries	191,020	4,145
Manufacturing and	1,316,580	11,715

Industry	Ontario	Grey County
construction industries		
Wholesale and retail trade	950,730	6,890
Finance and real estate	401,445	1,650
Health and education	902,990	7,340
Business services	1,145,910	5,810
Other services	1,084,090	7,605

3.3. Social Services in Grey County

3.3.1 Employment Assistance

Grey County provides several services for employment assistance. The Ontario Works Program provides individuals in temporary financial needs with financial and employment assistance. In addition, the County of Grey has a staff of over 750 employees represented by eight employee groups. The Human Resources Department is responsible for offering support services to the many different departments throughout Grey County. Their responsibilities cover the areas of recruitment and selection, policy development, health and safety, training and development, payroll, benefit administration and labour relations. As the essence of people's performance is largely related to effective communication, it is also their responsibility to ensure progressive communication strategies throughout the County. The department is also responsible for researching, implementing and maintaining efficient and accurate communication practices between employees internally within the County and externally with County of Grey Clients.

3.3.2. Social Housing Programs

Grey County Housing is responsible for the direct management of 888 former Ontario Housing Corporation public housing units in Grey County. They are located at 32 sites located in 10 communities in Grey County;

- Chatsworth
- Grey Highlands (Flesherton and Markdale)
- Hanover
- Meaford
- Owen Sound
- Southgate (Dundalk and Holstein)

- The Blue Mountains (Thornbury)
- West Grey (Durham)

All units are subsidized, rent geared-to-income housing units. Approximately 80% of the units house senior citizens, couples or single residents, and 20% house families.

Grey County Housing is also responsible for the administration of the Non-Profit Housing Providers in Grey County. These providers own and manage their housing projects and the operations are subsidized to allow them to provide social housing. The administration and subsidy costs for 10 non-profit housing providers' projects, with a combined total of 467 units are the responsibility of Grey County. The providers range from municipalities, to churches, service groups and community groups. Three projects, totaling 66 units, also managed by two of the Non Profit Housing Providers noted above, are Federally funded projects. These social housing projects differ from public housing in that their rental groups are a mix of residents paying market rent and residents whose rent is geared-to-income.

All applications for housing are processed by Grey County Housing through the Co-ordinated Access System. Applicants complete one application and are placed on the waiting lists for each of the projects they have indicated, whether Grey County Housing or Non Profit Providers. Also, in 2005 the Federal and Provincial governments signed a new Canada-Ontario Affordable Housing Agreement that commits an investment of almost 3/4 of a billion dollars to help 20,000 Ontario households by 2010.

3.3.3 Childcare Services

Childcare fee subsidy is available for families who may not be able to pay the full child care cost. Subsidy is available for day care centers and home child care.

A licensed full day program has enrolled more than 5 children under the age of 12 for a continuous period not exceeding 24 hours. Each facility provides a healthy atmosphere which offers security, warmth and guidance to your children. All facilities are inspected yearly by a staff from the Ministry of Community, Family and Children's Services to ensure that licensed programs are in compliance with regulations from the Day Nurseries Act. Within Grey County there are many Nursery School programs which encourage children to socialize with their peers in an organized childcare program for approximately 2 1/2 hours per day.

There is also the option of home child care. The Licensed Home Child Care Program provides daily care to not more than 5 children from infancy to 12 years in an approved (licensed) residence. Home visitors in each area help to assess

and match appropriate caregivers with children to meet individual needs. Flexible hours and financial assistance is available upon assessment.

Ontario Early Years Centre – Bruce/Grey/Owen Sound-Hanover site is an accessible resource for parents with young children 0 – 6 years of age. This centre provides core early years services and help parents link with organizations that provide other early years services such as child care services, health services and recreation programs. Lastly, if a resident is in receipt of Ontario Works with mandatory or voluntary participation activities, and has children under the age of 12 years, Ontario Works can assist with child care expenses. There are two types of child care:

- **Formal** - is provided by a child care facility or a home child care provider licensed under the Day Nurseries Act. There is no maximum cost which may be provided.
- **Informal** - is provided by a person who is not licensed (ie. A relative, neighbour, etc). The maximum amount of the childcare deduction is the actual amount paid up to \$600.00 per month for each dependent child.

3.3.4. Services for Seniors

The County operates three Long Term Care Facilities; Rockwood Terrace in Durham, a facility with 100 beds, Grey Gables in Markdale which has 66 beds, and Lee Manor in Owen Sound which has 150 beds. The County Homes provide nursing care, dietary services, activities, therapy, socialization and assistance to its residents. The other resources that exist for seniors in the area include: Canadian Senior Years, Community Network Support Team, Day Away Program, Grey Bruce Senior Services, Grey County Housing and Long Term Care, Home and Community Support Services of Grey Bruce – Owen Sounds, Markdale Senior Citizens, Salvation Army Golden Agers and Senior's Advocacy Awareness Network.

3.3.5 Emergency Services

The Transportation and Public Safety Department manages Grey County EMS (Emergency Medical Services) Service. Grey County EMS is dedicated to continually improving not only reaction and response times within the County of Grey, but also the patient care that is rendered to the citizens, friends, neighbours and families within Grey County.

Upon assumption of the ambulance service in 2001, Grey County has implemented 24 hour staffing at five stations and has operational ambulances in Craighleith and Dundalk. During the day there are twelve (12) ambulances on-site, while during the night time hours, there are a total of five (5) ambulances available to respond to emergency calls.

A civic numbering addressing system has been developed and is now in place in the County as part of the 911 emergency response system.

3.3.6. Health Services

The following health care facilities are found in Grey County: Chesley - South Bruce Grey Health Centre, Community Care Access Centre, Durham - South Bruce Grey Health Centre, Hanover and District Hospital, Health Services in South West Ontario, Health Care Professions, Health Care Facilities, HIV Clinic Services - The Masai Centre , Kincardine - South Bruce Grey Health Centre, Lion's Head Hospital - Grey Bruce Health Services, The Masai Centre, Markdale Hospital - Grey Bruce Health Services, Meaford Hospital - Grey Bruce Health Services, Owen, Sound Hospital - Grey Bruce Health Services , Southampton Hospital - Grey Bruce Health Services, Walkerton - South Bruce Grey Health Centre, Wiarton Hospital - Grey Bruce Health Services.

These services are based outside of Grey County, but provide service to the area.

- Alexandra Marine and General Hospital
- London Health Sciences Centre
- London Health Sciences Centre - Children's Hospital of Western Ontario
- London Health Sciences Centre - South Street Hospital
- London Health Sciences Centre - University Hospital
- St Joseph's Health Care, London
- St Joseph's Health Care, London - Parkwood Hospital
- St Joseph's Health Care, London - St Joseph's Hospital
- St Mary's General Hospital, Kitchener

4. AGRICULTURAL PROFILE OF GREY COUNTY

4.1 Area of Farmland

Table 4.1 shows the distribution of farmland throughout Grey County and Ontario from the 2006 census.

Table 4.1. Area of Farmland (in acres and hectares)

Total Farm Area	Grey County	Ontario
Acres	567,212	13,310,216
Hectares	229,543	5,386,453

Source: Statistics Canada, 2006 Census of Agriculture.

4.2. Land Area Classified by Use

Table 4.2 shows the area, classified by use, for farmland throughout Grey County and Ontario. Cropland is the predominant use of farmland in County encompassing over 300,000 acres. Christmas tree farms, take up the second-largest area of farmland in the County, followed by areas of tame or seeded pasture and natural land for pasture. Very small areas of farmland are left in summer fallow.

Table 4.2. Land Area Classified by Use (in acres)

Area	Land in crops (excluding Xmas trees area)	Summer fallow land	Tame or seeded Pasture	Natural Land for Pasture	Xmas Tree/Woodlands/Wetlands	Other
Grey County	308,671	1,117	74,701	50,692	104,594	27,437
Ontario	9,046,383	29,394	749,719	1,112,668	1,854,167	517,885

Source: Statistics Canada, 2006 Census of Agriculture.

4.3. Number of Farms

Statistics Canada defines a census farm as an agricultural operation that produces at least one of the following products intended for sale: crops (e.g. field crops, tree fruit or nuts, berries or grapes, vegetables or seed); livestock (e.g. cattle, pigs, sheep, horses, exotic animals, etc.); poultry (e.g. hens, chickens, turkeys, exotic birds, etc.); animal products (e.g. milk or cream, eggs, wool, fur or meat); or other agricultural products (e.g.

greenhouse or nursery products, Christmas trees, mushrooms, sod, honey or maple syrup products).

The definition of a census farm was expanded for the 1996 Census of Agriculture to include commercial poultry hatcheries and operations that produced only Christmas trees. This expanded definition resulted in the inclusion of 138 commercial poultry hatcheries and 1,593 operations across Canada that produced only Christmas trees.

Table 4.3 shows the number of farms in Grey County and the Province of Ontario as of the 2006 census. In 2006, the total number of farms in Grey County it was 2,687.

Table 4.3. Number of Farms

Area	Number of Farms
Grey County	2,687
Ontario	57,211

Source: Statistics Canada, 2006 Census of Agriculture.

4.4. Farm Sizes

The average size of Ontario’s farms has increased; smaller farms are sold and consolidated, resulting in fewer, but bigger farms. This has been the case throughout most of Ontario for a number of decades and it is a trend that continues today (HCA, 2000).

Table 4.4 shows the total area of farm in hectares throughout Grey County and Ontario.

Table 4.4 Average Farm Size, 2006

Area	Total Area of Farm (hectares)
Grey County	229,543
Ontario	5,386,453

Source: Statistics Canada, 2006 Census of Agriculture.

4.5 Farm Operation Arrangements

Table 4.6 describes farm operation arrangements in Grey County and Ontario according to four categories.

Sole Proprietor farms are one-person farming operations. Partnership includes farms operating with and without written agreements between the partners. Corporation includes family and non-family farms. Other farms include institution farms, community pastures and other types of farming operations that are not otherwise categorized.

Most of the farms in Grey County are partnerships and a good majority of the remainder

are sole proprietorships.

Table 4.5. Farm Operation Arrangements

Area	Sole Proprietor	Partnership	Corporations	Other
Grey County	1,647	2,363	191	3
Ontario	31,755	45,708	8,271	54

Source: Statistics Canada, 2006 Census of Agriculture.

4.6. Soil Conservation Practices

A variety of soil conservation practices are implemented in Grey County (Table 4.7). Among these, crop rotation is the most commonly practiced, although it is most often combined with other practices at the individual farm level depending on soil conditions, crop types, the presence of water courses and topography.

Table 4.6. Social Conservation Practices (# of farms)

Area	Crop Rotation	Winter Cover Crops	Plowing Down Green Crops	Rotational Grazing	Windbreaks/Shelter Belts	Buffer Zones around Water Bodies
Grey County	1,724	205	531	1,285	907	660
Ontario	38,398	8,585	11,559	15,034	19,044	14,272

Source: Statistics Canada, 2006 Census of Agriculture.

5. SUMMARY

Grey County is primarily a community focused on manufacturing as its major industry. It is comprised of mainly young families with the population being typically younger than that of the Province and the County.

In Grey County the greatest number of people fall within the age categories of 5-14 years of age (school age) and 25-44 years of age. Residents of Grey County are primarily of European descent.

Manufacturing is the largest industry in Grey County. Family incomes in Grey County are slightly less than the provincial average, although they are more evenly distributed.

The emphasis on manufacturing and agriculture in the County coupled with relatively young families with incomes lower than the provincial average makes Grey County an ideal location for new sources of income, including renewable energy projects.

6. REFERENCES

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