

## Fact File

### Interested in a career in the wind energy industry? *Here's what some companies are looking for*

Huron Wind receives many inquiries regarding career opportunities in the wind energy industry and with the recent Government announcement on incentives in the wind energy industry, the possibility of a career in this field has crossed the minds of many people.

As a remote wind farm, Huron Wind does not have any direct employees. Maintenance on the turbines is provided by Vestas, the company that manufactured and installed the wind turbines. However, the wind energy industry is one of the fastest growing industries in the world and is a vital and competitive part in the world energy mix. It employs both professional and skilled workers in a number of different capacities and will continue to do so for many years.

The following information has been gathered from related wind energy companies and corporations listed below.

#### **Wind Turbine Manufacturing and Engineering**

Mechanical, electrical, aeronautical, environmental, and water resource engineers touch upon only a few of the many job titles and positions available within this diverse field of wind plant engineering. Research and development groups employ engineers and experienced technicians to improve the design and efficiency of wind turbines as well as operations and maintenance.

**The ideal candidate should have:** a bachelor of science or bachelor of engineering degree in a related engineering field, such as civil or mechanical; a masters degree is highly recommended in most areas. In addition, proficient engineering-based computer software skills, along with strong interpersonal, creative solution and problem solving skills are necessary. Between three to five years of experience is required.

#### **Service Technicians**

Turbine monitoring is carried out by a team of experienced service technicians. Responsibilities include diagnosing, troubleshooting and repairing system problems. Technicians may also be involved in the construction of new wind farms, evaluating their readiness for operational commissions, and working to resolve early stage electrical and mechanical faults.

**The ideal candidate should have:** the equivalent of an Associates degree in an electrical or mechanical discipline, such as general electrical, aircraft maintenance, hydraulics, or heavy mechanical. Candidates must also have hands-on hydraulic, electrical, or mechanical experience. Composite/Fibreglass experience would be an asset. In addition to displaying these technical skills, candidates should have the ability to use a computer for data collection and reporting. As well, good communication skills and a strong attention to detail are key qualities to have. Also, candidates must have the ability to work without close supervision, climb ladders to heights of 60 to 100 metres and work in confined spaces and in diverse environmental conditions. Finally, candidates must have a valid driver's licence.

#### **Wind Farm Development**

Wind farm developers lead exciting and fast-paced careers in the realm of wind energy. They are responsible for overseeing the planning process, finance and legal fees, turbine installation, access roads, tower, electrical grid connection, construction, etc., which make up the majority of the total wind farm costs.

**The ideal candidate should have:** a bachelor's degree in civil or structural engineering, or bachelor of engineering and management; a bachelor's degree in environmental studies, geography or business may be accepted. A minimum of three to five years of experience in some form of project management, such as real estate, development, field testing, project engineering or community relations is required. Excellent computer, communication, analytical and writing skills are required. Candidates should possess good negotiation and foreign language skills and should remain up-to-date on related national and international issues. A full driver's licence is mandatory.

## **Business Consultants**

The services of wind energy consultants - those in charge of the selling and buying of the wind energy output - are much in demand.

**The ideal candidate should have:** a bachelor's degree in a business related discipline, such as administration, management, or economics; while a master's business degree or computer science degree is recommended. Candidates should possess five to six years of related experience and remain up-to-date on national and international issues regarding wind energy and new technologies. The ability to think logically and analytically, to pay close attention to detail, to work independently, in teams and as group facilitators, and the ability to express ideas and solutions in clear, understandable language are all advantageous skills.

## **Communications and Administration**

The development of wind farms also requires expertise from services such as legal, financial, planning, public relations and human resources, in addition to people with knowledge about wind and other renewable energies.

**The ideal candidate should have:** a bachelor's degree, preferably in communications or English. A diploma in public relations or journalism may be required. It is necessary to have a creative, motivated and energetic attitude, along with excellent communication skills and the ability to work well with others. Candidates must have strong computer skills and must be proficient in Microsoft Office Suite. Excellent knowledge of energy efficiency and government related issues are mandatory. Two to three years of related experience is required. *For financial only:* a bachelor's degree in a related area of business, such as administration, accounting or marketing, plus three to five years of experience. *For legal only:* a bachelor of arts or bachelor of applied science in law, government policy, or legal studies, plus three to five years experience.

## **Research and Analysis**

This sector comprises knowledgeable individuals who conduct research, prepare reports, provide advice and consultation and administer programs in a variety of areas related to wind energy. These include the environment, wind energy resources, land use, recycling and other natural and applied sciences. A specific example of a chosen career in this field would be a meteorologist, whose purpose is to help engineers identify appropriate sites with suitable wind conditions for erecting wind turbines.

**The ideal candidate should have:** a bachelor of science or bachelor of science and management. A PhD or master's degree is highly recommended. Candidates will need a vast knowledge of wind energy and related issues, the ability to work well with others, plus five to seven years of related experience.

## **Contact Information**

This information has been gathered from the following wind energy related organizations and companies. For more information pertaining to careers in wind energy, search these web destinations.

AMEC  
<http://www.amec.com>  
GE Energy  
<http://www.gepower.com>  
Siemens Power Generation  
<http://www.powergeneration.siemens.com>  
The British Wind Energy Association  
<http://www.bwea.com>  
The Delft University of Technology Wind Energy Research  
<http://www.duwind.tudelft.nl/>

Energy Ideas  
<http://www.energyideas.org/>  
Ontario Power Generation  
<http://www.opg.com>  
The American Wind Energy Association  
<http://www.awea.org>  
The Canadian Centre for Energy  
<http://www.centreforenergy.com>  
The U.S. Department of Energy  
<http://www.energy.gov>