

## **PUBLIC MEETING**

November 18, 2008

### **Approved Minutes**

**DATE:** November 18, 2008  
**TIME:** 6:00 p.m. - 7:10 p.m.  
**PLACE:** Stratford Town Centre, 234 Shakespeare Drive

**COUNCIL:** Mayor Kevin Jenkins, Deputy Mayor Steve MacDonald, Councillor Diane Griffin, Councillor Patrick Ross

**STAFF:** Robert Hughes, C.A.O., Vahid Ghomoshchi, Director of Planning Kevin Reynolds, Development Officer, Adele Gillis, Recording Clerk

**RESIDENTS:** 13

**CALL TO ORDER:** Mayor Jenkins called the meeting to order at 6:00 p.m. and welcomed and thanked those in attendance for coming to the presentation on the Wind Energy Bylaw. The Mayor noted that the Town has spent a considerable amount of time over the last few years talking about a sustainable Stratford and this new wind generation bylaw may be a way we can get started to be a more sustainable Stratford. The Mayor also noted that we have had a couple of inquiries about wind turbine generation in the Town. The proposed bylaw will give the Town some guidance as to how we can treat, current and future applications for wind generation in the Town.

The Mayor then noted that Vahid Ghomoschi, Director of Planning and Kevin Reynolds, Development Officer will made a presentation on the proposed Wind Energy Policy and Bylaw. It was also noted that after the presentation there will be an opportunity for residents to ask questions.

The meeting was then turned over to the Director of Planning.

The Director of Planning noted that this is the first practice of our Collaborative Planning approach towards a Sustainable Stratford. In the past few months the Town has studied theory and practice regarding wind energy, developing key issues in planning board, a public meeting was also held on Wind Energy, where we received very valuable feed back from residents. A Focus Group was established, where a group of individuals met and developed a new draft Wind Energy Policy and Bylaw. This draft policy and bylaw was then reviewed by the Planning & Heritage Committee and at a Committee of the Whole meeting and after this Public Meeting the comments made this evening will be reviewed by the Planning & Heritage Committee. The Planning & Heritage Committee will then make their recommendation to Council. Council will make then make the final decision on the Wind Energy Policy and Bylaw.

The Director of Planning then gave a detailed power point presentation which outlined the following:

***Facts and Findings on Wind Energy.***

- *Climate change and global warming is an undeniable fact*
- *Greenhouse gas emitted by Electricity Generator plants is on the most significant causes of Climate Change and Global Warming*
- *In both Global and Local scales we have to develop other renewable sources of energy in the world.*
- *Wind energy has proven to be a clean, safe and completely renewable source of energy.*
- *Wind energy is amount the fastest growing renewable energy technologies in the world. It has approximately had 31% annual growth in the world, over the last five years.*
- *Wind Energy Turbine reduces a significant proportion of CO 2 emissions.*
- *Wind Energy is efficient and competitive*
- *Wind energy can play a significant role in the future of Electricity Generation. And finally,*
- *Wind power is a reality today and can plan an effective role in achieving our Sustainable Future.*

***Key Issues and Concerns***

- *Noise, visual impacts, safety, erosion, shadow flicker, killing of birds and bats, interfere with electromagnetic transmissions such as radio, television, or cell-phone signals, interfere with radar, impact with radar, impacts on tourism, people's negative attitudes and property devaluation.*

***PEI Provincial Policy***

- *Government must ensure that deployment of wind capacity proceeds in an orderly fashion to meet the province's energy, environmental and economic development goals.*
- *Because the wind is only PEI's energy resource, it is important that individual homeowners, farmers, small businesses and communities or cooperatives have the ability to produce their own electrical power for their needs, and to sell any excess production.*
- *Province mechanisms and opportunities to enable PEI residents to invest in local wind energy projects.*

***Conclusion***

*Issues*

- *Noise, Safety, Vision*

***Benefits***

*Environmental*

- *Reduce greenhouse gas emission, reduce air pollution, renewable source of energy and*

*reduce water and land occupation*

#### **Social**

- *Protect future generations' interests, good responding to emergency conditions, greater fuel diversity and less dependence on fossil fuel, decrease costs of living, local response to Provincial Energy Policy and leadership in acting effectively towards creating a sustainable future for Stratford*

#### **Economic**

- *Wind Energy is "inflation-proof," wind technology is steadily and quickly improving, wind plants can be built quickly, owner's source of income, government's source of revenue*

### **Wind Energy Policy and Bylaw**

#### **Definition**

*Two main wind energy systems:*

- *Wind Farm*
- *Small Wind Turbine*

*Wind Farm: A group of wind turbines in the same location used for producing electric power in a large capacity for resale purposes*

*Small Wind Turbine: A wind energy conversion system consisting of a wind turbine, a tower, and associated control or conversion electrics, which intends to provide electrical power; and*

- *not more 100 kw capacity; for on-site use only and the power produced is not for distribution and/or resale.*

*Small Wind Energy System three main categories:*

- *Micro wind turbines with output from 300 watts up to 5kW.*
- *Small wind turbines (above 5kW and up to 30 kW, and*
- *Medium wind turbines (above 30kW, up to 100kW)*

#### **Stratford's Wind Energy Policy**

- *Erecting an Onsite Small Wind Turbine would be permitted in all Stratford's land zones subject to meeting all requirements of the related bylaw and regulations;*
- *The Town of Stratford encourages establishing community wind energy systems for residential subdivisions, multi unit residential buildings, institutional and organizational buildings, parks and open spaces;*
- *The Town of Stratford shall make representation to the province requesting appropriate rules*

*and regulations to facilitate establishing community wind energy systems within the Town's boundary;*

- *Wind energy shall be constructed and operated in a manner that minimizes and adverse visual, safety and environmental impacts.*

*Small Wind Turbine System*  
*Development Bylaw (Key Issues)*

- *Wind Turbine Definition and Classification, land use, height, set-back, sound, vision, safety, approved wind turbines, compliance with international building code, compliance with air traffic safety regulations, compliance with existing electric codes and Utility notification.*

*Stratford's Wind Energy Bylaw (Draft)*

*Listed below is a list of heading from the Wind Energy Bylaw (Draft).*

- *Intent and Purposes*
- *Key Issues in the Bylaw*
- *Permitted Use (Section 3)*
- *Turbine Height (Section 3.4)*
- *Turbine Height, Setback and Lot Size (table provided)*
- *Existing Stratford's lots frontage categories and setback requirement (table provided)*
- *Typical Noise Levels*
- *Indoor and Outdoor Sound Levels*
- *Noise (Section 3.5)*
- *Safety (Sections 3.6, 3.11, 3.12, 3.13)*

**Resident Question:**

Has the Town had any applications for wind turbines?

**Response by the Director of Planning**

The Town has received a few request, one from a business owner and a couple of residential inquiries.

**Resident Question:**

Wind Energy is a wonderful source of energy but I have one concern and that's regarding the health issues. It's been noted on T.V. where people do have problems associated with the noise of the turbines. I know that the sound level is very low but it is a consistent noise. I don't remember the issues that those people had but they were serious and long term.

**Response by the Director of Planning:**

The health issue is one of the most important issues for all of us. This issue was considered in all of our studies from the beginning.

Experience shows all around the world, if we have a good setback from the turbine, and we measure the noise which is produced from the turbine in our homes and it's an acceptable level, then it wouldn't be a significant issue. Most of the complaints are about big wind farms which produce a lot of noise. Technology is developing very fast and now we have very good systems which produce very low noise levels that are in an acceptable range. We are trying to keep the wind noise level at 45 decibels at the exterior door. When you come inside you would have less noise like a quiet urban evening. Generally speaking it is like any other sounds in the Town

**Resident Question:**

How do you establish background sound? Background sound is variable at any given time. You have established a level of 45 decibels at wind speed of 10 metres per second. How do you get the wind to cooperate?

**Response by the Director of Planning:**

New technology allows the turbine to maintain their maximum speed in higher wind speed.

**Also responded to by Carmen MacIntyre, Entegri Wind Systems Inc.**

The majority of wind turbines reach their rated wind speed around 10 meters per second, they do not produce any more sound, they are going as fast as they can go even if the wind is faster. No matter how much faster the wind blows the machine is not going to produce any more sound

**Resident Question:**

Other places have had their property devalued. What happens then?

**Response by the Director of Planning:**

Study and research from other communities show that there is no reason for devaluation. This is a result of people's attitudes and perceptions. Some people believe say that having a wind turbine would be an asset to your property to reduce the electricity costs.

**Resident Question:**

Why would you not be able to sell the electricity produced by the wind turbine?

**Response by the Director of Planning:**

The main purpose of this bylaw is for on-site electricity use only. You will get credit by Maritime

Electric when producing electricity, but at the present time you are unable to sell your electricity produced.

**Carmen MacIntyre, Entegrity Wind Systems Inc.:**

Under current provincial regulations you are not allowed to sell electricity you can use the electricity but the unused credits are still owned by Maritime Electric.

**Resident Question:**

It states in the bylaw that you are require to submit a structural engineering analysis for a Wall or Roof-Mounted System. The analysis will have to be provided and certified by a licensed professional engineer. This could be a major cost and in some cases may cost as much as the Wind Energy System.

Why do we need professional engineers to decide whether or not the system has been mounted correctly? Would there be other options for dealing with this issue?

**Response by the Development Officer :**

It was not intentionally put in the bylaw to add costs to the systems. It was put in to ensure that there is a level of safety. Maybe it could be reviewed, that certain devices, certain mounting type attachments would be approved, but at some point in time the Town should have some information, in house, on an approved method of attaching the structure to your house.

Mayor Jenkins thanked everyone to their comments and noted that Council Members and staff will be available to answer questions following the meeting.

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**Mayor Kevin Jenkins**