

POLICY GAPS IN WIND TURBINE DEVELOPMENT

Land Use Bylaw: 22-3
Planning & Development Department
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Background

An earlier report identified best practices for wind turbine regulations. Those best practices provide the foundation to identify deficiencies in current planning policy. This will in turn help develop new policies and regulations designed to remedy such policy gaps. The reader is advised to read the companion *Best Practices Fact Sheet* first as it provides the broader background.

Best practices by wind developers and governments to ensure responsible and appropriate wind projects can be divided into the following categories (the policy gaps follow the same outline):

- Effective stakeholder engagement at all stages
- Sharing the benefits of wind projects within the community
- Effective siting of wind projects
- Appropriate regulatory requirements
- Wind facility operations and maintenance
- Decommissioning and reclamation

Best practices for stakeholder and community engagement

- Start early and provide meaningful opportunity to impact the project.
- Understand the audience. Recognize the unique characteristics of the community and make concerted efforts to demonstrate your knowledge of, and respect for, the community in which you plan to develop a wind energy project.
- Encourage questions and answer in a direct and timely manner. Otherwise, initial interest may turn to negativity and opposition.
- Listen to concerns of the public and stakeholders. Then demonstrate you understand the concerns and have given them consideration in the design and development of wind energy project.
- Handle negativity and opposition respectfully. It is important that the perspectives of those expressing concerns be understood. It is essential to show respect at all times and to share information in a professional manner.
- Public engagement should not stop once permits are issued. Community and other stakeholder consultation should continue throughout the life of the wind farm until it is decommissioned.

Policy Gaps:

Community engagement is recommended by both the provincial EA process and Land Use Bylaw but not specifically required. Making engagement mandatory and establishing minimum requirements would set a benchmark and ensure at least a minimal level of engagement.

Best practices for sharing the economic benefits of wind projects

- Offer to sell shares in the project to the local community.
- Provide funding back to the local community. Treat the local community like a local landowner and ensure that they receive a tangible benefit from having turbines located in their community.
- A pooled lease system can lead to broader acceptance by sharing benefits with more people.

BEST PRACTICES FOR WIND TURBINE DEVELOPMENT

Policy Gaps:

Its difficult to mandate different leasing schemes or require a community benefit fund. Certainly, both can be encouraged with a policy statement that wind energy projects should benefit the local community. Additionally, the Municipality can independently dedicate a portion of tax revenue from turbines to support local community based programs.

Best practices for siting wind projects:

- Do your homework before investing in an area
- Be willing to accommodate.
- Consider cumulative impacts for larger projects
- Account for visual impact especially for larger projects
- Account for importance of landscape

Policy Gaps:

Cumulative impacts for larger projects appear to be somewhat of a weakness of the Provincial EA process. It may be worthwhile for the Municipality to lobby for an improved EA process and possibly a Class 2 Undertaking for projects over a particular threshold such as 25MW.

Likewise, the visual impact of turbines or more importantly, larger wind energy projects appears to need improvement. Ideally this would be incorporated in the provincial EA process otherwise it could be included in Municipal requirements as a policy direction.

Best practices for regulatory requirements

- Regulations that are current and up to date. Technological changes and industry growth mean that regulations created a decade or more ago may no longer be appropriate.
- Balanced: regulations should encourage responsible wind development while mitigating the environmental and socio-economic impacts.
- Predictable Due-Process. All stakeholders whether proponents, landowners or members of the community should know what to expect and have faith in the process.
- Targeted. Its impossible to regulate every aspect of developments. It is important then to ensure that the right requirements are in place and that the regulations are not unnecessarily arduous.
- Timely. Similarly, regulations and associated approval processes shouldn't be so long that the process creates unnecessary delays.
- Setback and noise requirements should be adequate without being prohibitive.
- Special zoning where the impacts of turbine has already been considered along with adequate public engagement can promote wind energy with fewer negative repercussions. Approval process in such areas can often be much shorter.

Policy Gaps:

Technological changes will make any regulations outdated. It is important ensure good processes and revisit regulations at least every ten years. Such a recommendation should be included in the Municipal Planning Strategy.

Municipalities can regulate wind turbine development but cannot prohibit it. Regulations need to support responsible wind turbine development in a safe way while minimizing negative impacts. Regulatory details such as setbacks and approval methods serve to mitigate risks and need to be carefully balanced.

Developing wind energy is an expensive and lengthy process. In balancing regulatory requirements it's important to ensure wind energy developers are not unduly burdened and that they have a predictable process.

Increasing setbacks to somewhere between 750 to 1000m or 4x turbine height (to blade tip) would align with best practices globally, however sound levels and shadow flicker appear to be adequately covered by the Provincial EA process.

Development of wind energy zones is worth examining over the longer period. This benefits both the local community and the wind energy sector by ensuring turbines are sited appropriately while creating a more streamlined and predictable approval process. This can be incorporated at a policy level with the work to develop such wind energy zones following at a later date.

Best practices for wind facility operations and maintenance

- Post construction monitoring. Provide continued monitoring of noise, shadow flicker, bird/bat kills and other environmental impacts.
- Documented Complaint Process. Residents living near turbines should have access to a complaint resolution program. Complaints and resulting actions should be documented and available to the public.
- Continued stakeholder communication and engagement. The developer should provide a community liaison program to provide regular updates to the community and stakeholders.
- Reporting. Approval authorities should receive a post-construction report along with regular reports on the status of the project and any issues.

Policy Gaps:

Broadly speaking, this is an area that appears to require improvement or at least more transparency at the local level. It would be useful to develop a better understanding of current reporting requirements in cooperation with the wind energy industry and to possibly develop a reporting, monitoring, and complaint system. Such system would give elected officials and the general public greater confidence.

At a minimum applicants should be required to provide the Municipality with their plans for reporting, monitoring, and complaint system and at least a post-construction compliance report within the first few years.

Best Practices for Decommissioning and Reclamation

- Developers should provide for future site decommissioning and reclamation. Decommissioning plans should outline the expected end of the project life, explain when and under what circumstances decommissioning and reclamation would occur, and include a proposed schedule for decommissioning.
- Plans should describe how the project will be decommissioned and outline the procedures for equipment dismantling and demolition, site restoration, and material recycling or disposal. This plan should include removal methods, procedures for disposal of the turbines, and measures necessary to prevent discharge of pollutants. The decommissioning plan should include site reclamation and a re-vegetation plan.

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- Decommissioning plans should contain the estimated decommissioning costs net of salvage value in current dollars, and how the plan will be secured (e.g., bonds, contract). To ensure adequate funds are available to cover costs when the time comes, the permitting agency may require a bond or financial assurances from the developer to ensure that decommissioning costs do not become the responsibility of the local community or landowners.

Policy Gaps:

Current requirements simply require a decommissioning plan at approval time. Although there are decommissioning requirements in place when a turbine has stopped producing power it would appear that these could be improved.

There should be a clear process for a turbine which has malfunctioned, but which is expected to be repaired or replaced. Understandably this can be a long process especially in the current environment where logistical problems have created supply-chain issues in most industries. Such a process may include safety and noise constraints, site securement, local notification, municipal approval, and recommissioning requirements.

Assurance that decommissioning is appropriately funded, that derelict turbines are removed, and site remediation occurs also appears inadequate in current regulations.

This is yet another area best done at the provincial level but as the province seems unwilling then it falls to the Municipality to regulate. It would seem reasonable to follow the Massachusetts model and require a bond/surety, or other guarantee for 125 percent of the cost of removal determined at the time of the granting of the permit by a qualified engineer, less salvage value.