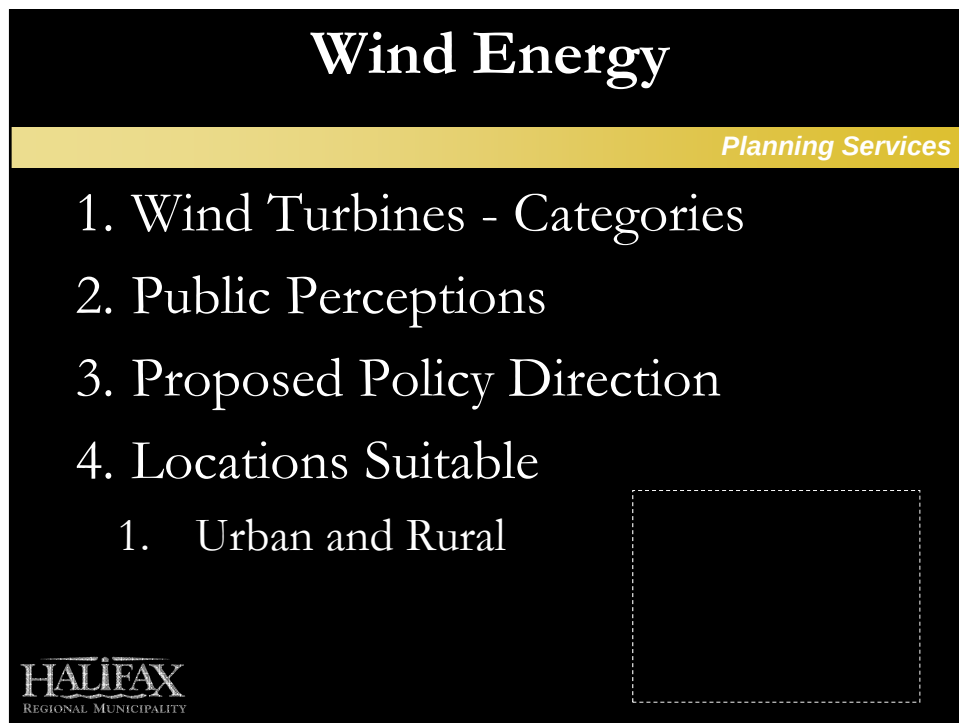
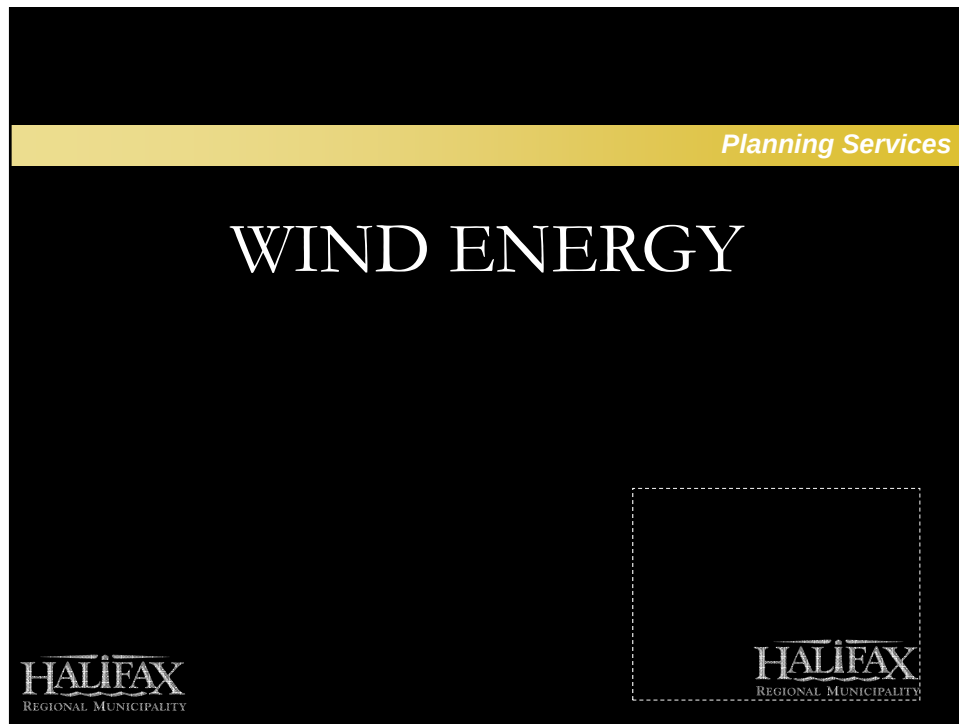




Wind Energy

Planning Services

1. Wind Turbines - Categories

2. Public Perceptions
3. Proposed Policy Direction
4. Locations Suitable
 1. Urban and Rural

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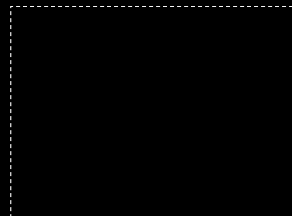


Categories of Wind Turbine

Planning Services

1. Micro
2. Small
3. Medium
4. Large

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Micro Turbines

Planning Services

Height
0 – 23 metres

Power
Output
0 - 10 KW

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Micro Turbines

Planning Services



Height
0 – 23 metres

Power Output
0 - 10 KW

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10 kW

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Small Turbines

Planning Services



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Height
23 – 35 metres

Power Output
10 - 50 KW

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Medium Turbine

Planning Services



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100 Kilowatts

Height Range
35 – 60 m.

Power Output
50 – 300 KW

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Medium Turbine

50m Height
100 KW



Large Turbine

Planning Services

Height
60 metres+

Power Output
Greater than 300 kW
(EA process required)



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2 megawatts

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Wind Energy

Planning Services

1. Wind Turbines—Categories
- 2. Public Perceptions**
3. Proposed Policy



Public Values Expressed

Planning Services

- Want to Benefit
- Public Supports Use
- Do Not Want Impacts



Wind Energy

Planning Services

1. Wind Turbines—Categories
2. Public Perceptions
- 3. Proposed Policy**
 - 1. Wind Turbines As of Right**
 1. Urban
 2. Rural
 - 2. Provincial EA and Large Wind Turbines**

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Planning Services

Proposed Wind Energy Policy



Proposed Policy

Planning Services

1. Wind Turbines As of Right

1. Discretionary Approvals

2. Urban HRM
 1. Locations suitable
 2. Setbacks
3. Rural HRM
 1. Locations suitable
 2. Setbacks
4. Provincial EA

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Proposed Policy

Planning Services

- As of Right Process
 - Discretionary Approvals

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Discretionary Approvals

Planning Services

Development Agreements, Site Plan:

- Mass, Scale and Location of Buildings,
- Hours of operation, landscaping, screening,
- Site function, parking, traffic issues, etc.



Proposed Policy

Planning Services

1. Wind Turbines As of Right
 1. Discretionary Approvals

2. Urban HRM

1. Locations suitable

2. Setbacks

3. Rural HRM

1. Locations suitable
2. Setbacks

4. Provincial EA

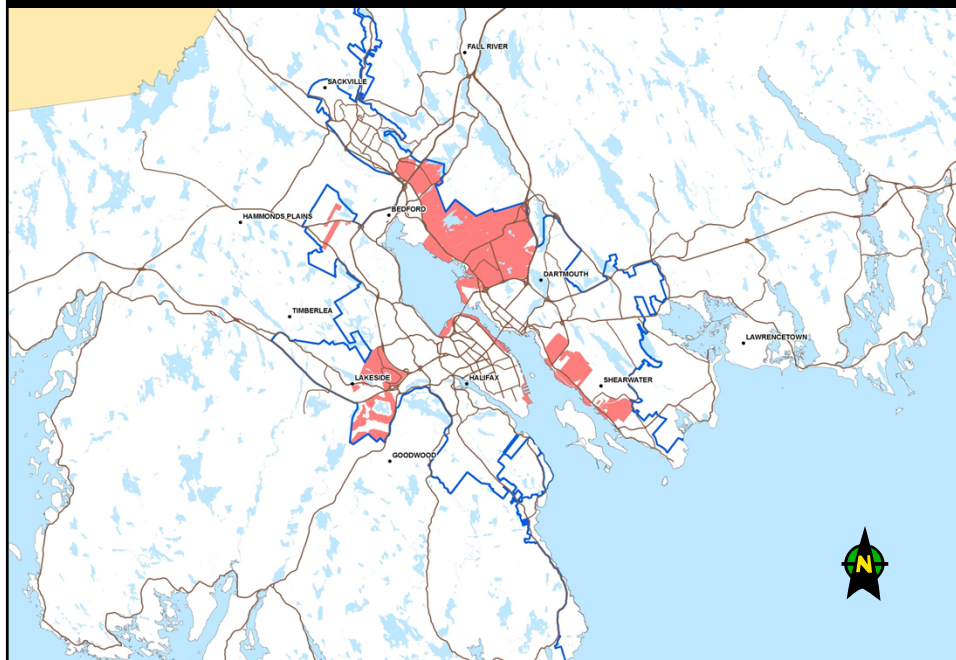


Urban HRM

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Recommended Locations for Urban Wind Turbines



Setback and Separation Regulations

Planning Services

1. *Setback to property boundary*
2. *Separation to adjacent buildings*

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Setbacks from Turbine -- Urban Zone

Selected Areas Only include Commercial campus', business parks, some marine industrial locations. ** No Turbines in Residential Neighbourhoods*

Planning Services

Turbine Type (max. height)	Prop. lines	Adj. Non – Sensitive	Adj. Sensitive Buildings
Micro (23m)	1.0 x ht	1.5 x ht	3.0 x ht.
Small (35m)	1.0 x ht	1.5 x ht	180 m
Medium (60m)	1.0 x ht	1.5 x ht	250 m
Large 60m+	Not Permitted		

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Proposed Policy

Planning Services

1. Wind Turbines As of Right
 1. Discretionary Approvals

2. Urban HRM

1. Locations suitable
 2. Setbacks

3. Rural HRM

1. Locations suitable

2. Setbacks

4. Provincial EA

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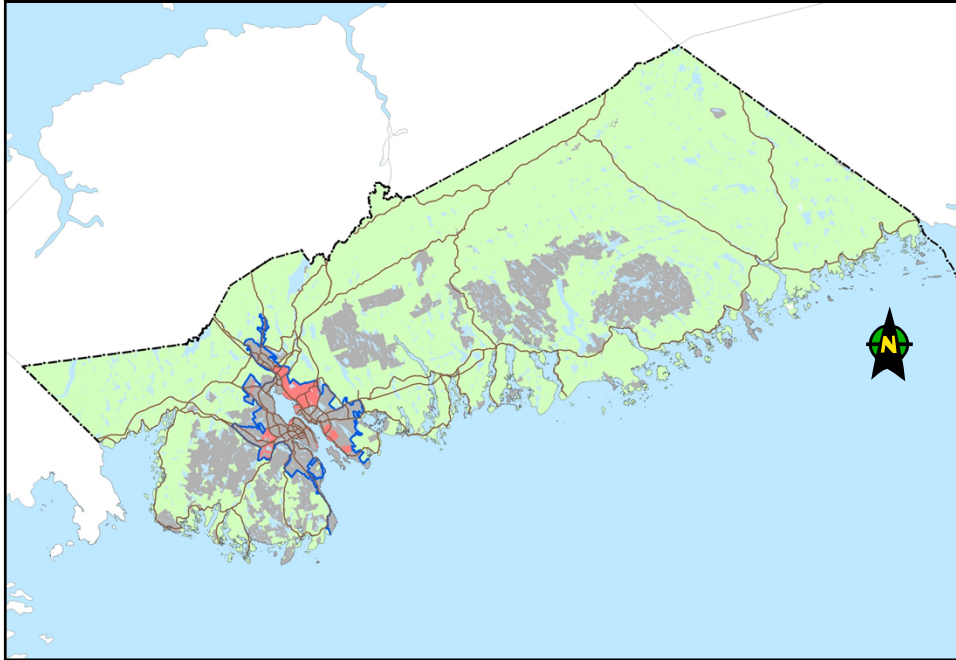


Planning Services

Rural HRM



Rural Context for Wind Turbines



Areas of Restriction -- Wind Turbines

Planning Services

- Regional Parks
- Protected Areas
- Conservation Areas
- Western Commons

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Setbacks from Turbine-- Rural Energy Zone

(Restricted- Reg. Parks, Protected Areas, Conservation Areas, West Comm.)

Planning Services

Turbine Type (max. height)	Prop. Lines	Adj. Habitable Buildings
Micro (23m)	2.0 x ht.	3.0 x ht.
Small (35m)	2.0 x ht.	180 m
Medium (60m)	1.5 x ht.	250 m

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Setbacks from Turbine-- Rural Energy Zone

(Restricted- Reg. Parks, Protected Areas, Conservation areas)

Planning Services

Turbine Type (max. height)	Prop. Lines	Adj. Habitable Buildings
Large (60m+)	1.5 x ht.	550 m

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Proposed Policy

Planning Services

Provincial Environmental Assessment

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Provincial Environmental Assessment

Planning Services

Criteria set out in Guidelines for Large
Wind Turbine Projects:

1. Human Safety
2. Environmental Protections
3. Site Requirements
4. Nuisance Impacts

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Provincial EA -- Large Turbines

Planning Services

2MW
EA required



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0.6MW
No EA
required

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Provincial EA -- Large Turbines

Planning Services



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80m Height (Goodwood)

x 4 = EA

.6MW

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Large Wind Turbines

Large Turbine Siting Criteria

- As-of Right
- Rural Areas Only
- 550m Separation to Habitable Buildings
- No Height Limit
- Not Permitted in Urban Area



Large Wind Turbines

Planning Services

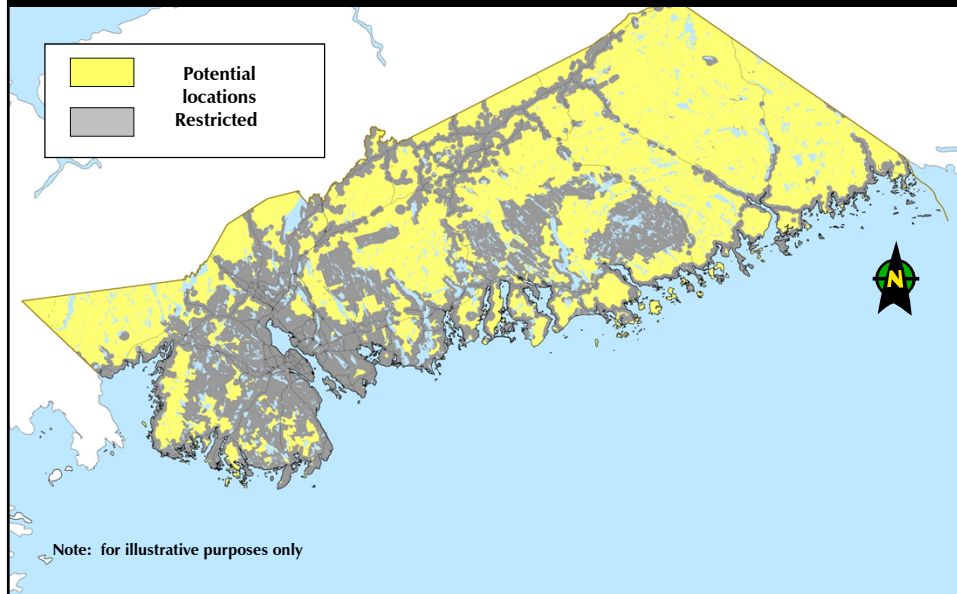
Areas of Restriction

- Regional Parks
- Protected Areas
- Conservation Areas
- Western Commons
- Urban Centre

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Approximate Potential Locations for Large Scale Wind Turbines



Wind Turbines Permitted

Planning Services

Turbine Type	Micro 23m	Small 35m	Medium 60m	Large 60m+
Urban	Yes	Yes	Yes	No
Rural	Yes	Yes	Yes	Yes

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Wind Energy

Planning Services

1. Wind Turbines—Categories
2. Public Perceptions
3. Proposed Policy
- 4. Conclusion**

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