



Exhibition Place Wind Turbine Toronto

Toronto Hydro and Renewable Energy



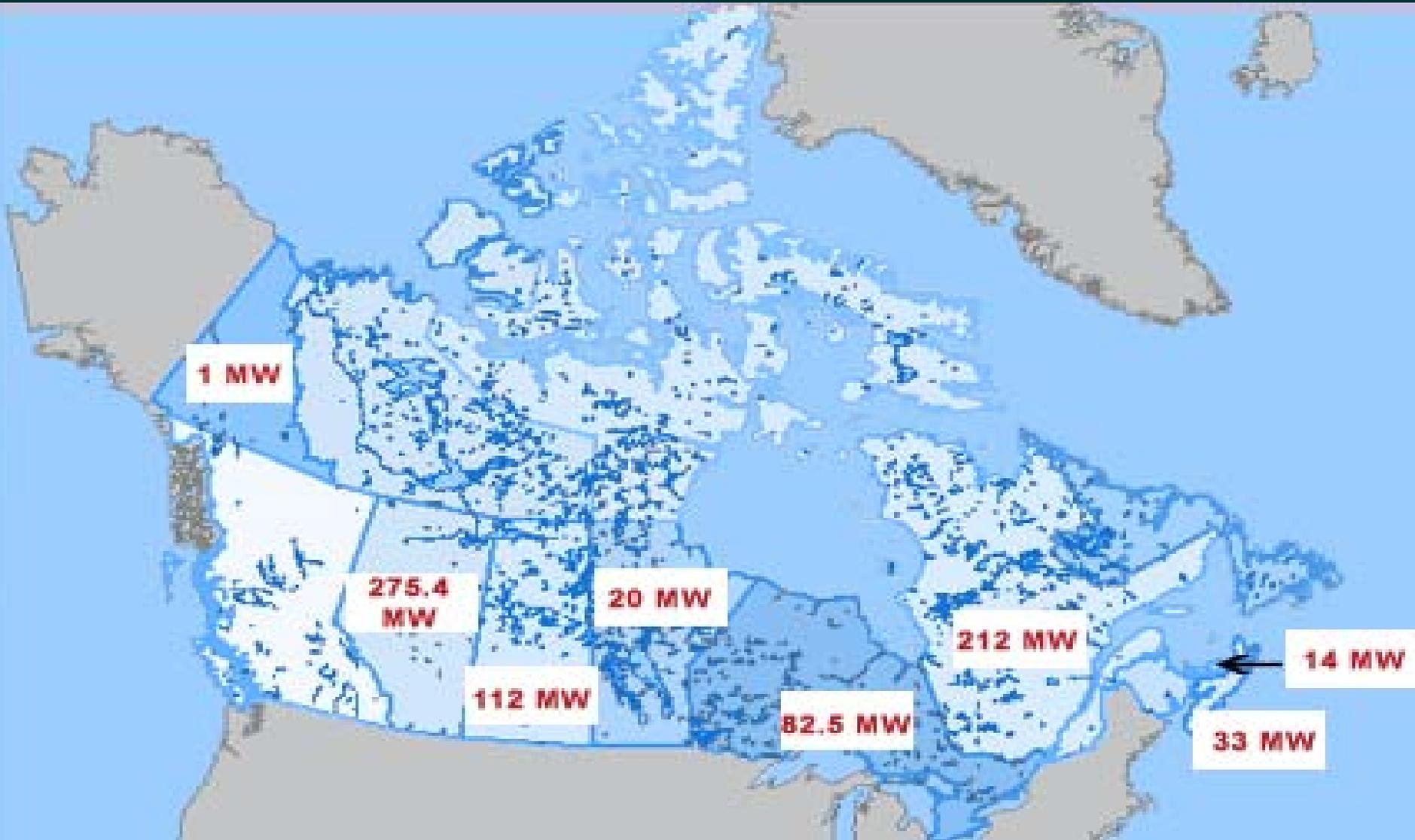
- Owned by the City of Toronto
- Air quality issues are critical
- Green power is alternative to traditional generation – less environmental impact, smaller scale, capital needs
- Strong proponent of conservation and efficiency programs
- Good relationships with environmental groups
- Positive consumer reaction
- Part owner of first North American urban turbine and largest industrial PV system

Wind - Fastest Growing Energy Source



- Global wind power increased by 11,700 MW in 2005, 43% more than in 2004.
- 2005 global installations – largest volume in a single year.
- Total wind generating capacity is now over 59,300 MW.
- Value of equipment installed in 2005 > \$14 billion US.
- At this point, over 30 countries actively installing wind power projects.

Current wind installations by province



Toronto's Waterfront Turbine



- Exhibition Place wind turbine owners
 - 50% - Toronto Hydro Energy Services
 - 50% - WindShare, a community based wind power co-operative with 427 residential and business members, an initiative of the Toronto Renewable Energy Co-operative (TREC)
 - 750 kW Lagerwey LW52 machine
 - land leased through the City of Toronto at Exhibition Place

Tranquil Toronto turbine



Do people like the turbine?

- Strong consumer support
 - 69% (Environics, Feb 2003) - a positive addition to Toronto's skyline
 - Increased to 77% (Environics, Oct 2005)
 - 88% strongly or somewhat support more wind turbines in GTA, 87% strongly or somewhat support them in Lake Ontario (Environics, Oct 2005)
 - Unsolicited funds have arrived at WindShare and TREC offices for membership in future co-op ventures.
 - This Joint Venture helped spawn the Ontario Sustainable Energy Association and its member groups.

Ontario and wind energy



- **Ontario**

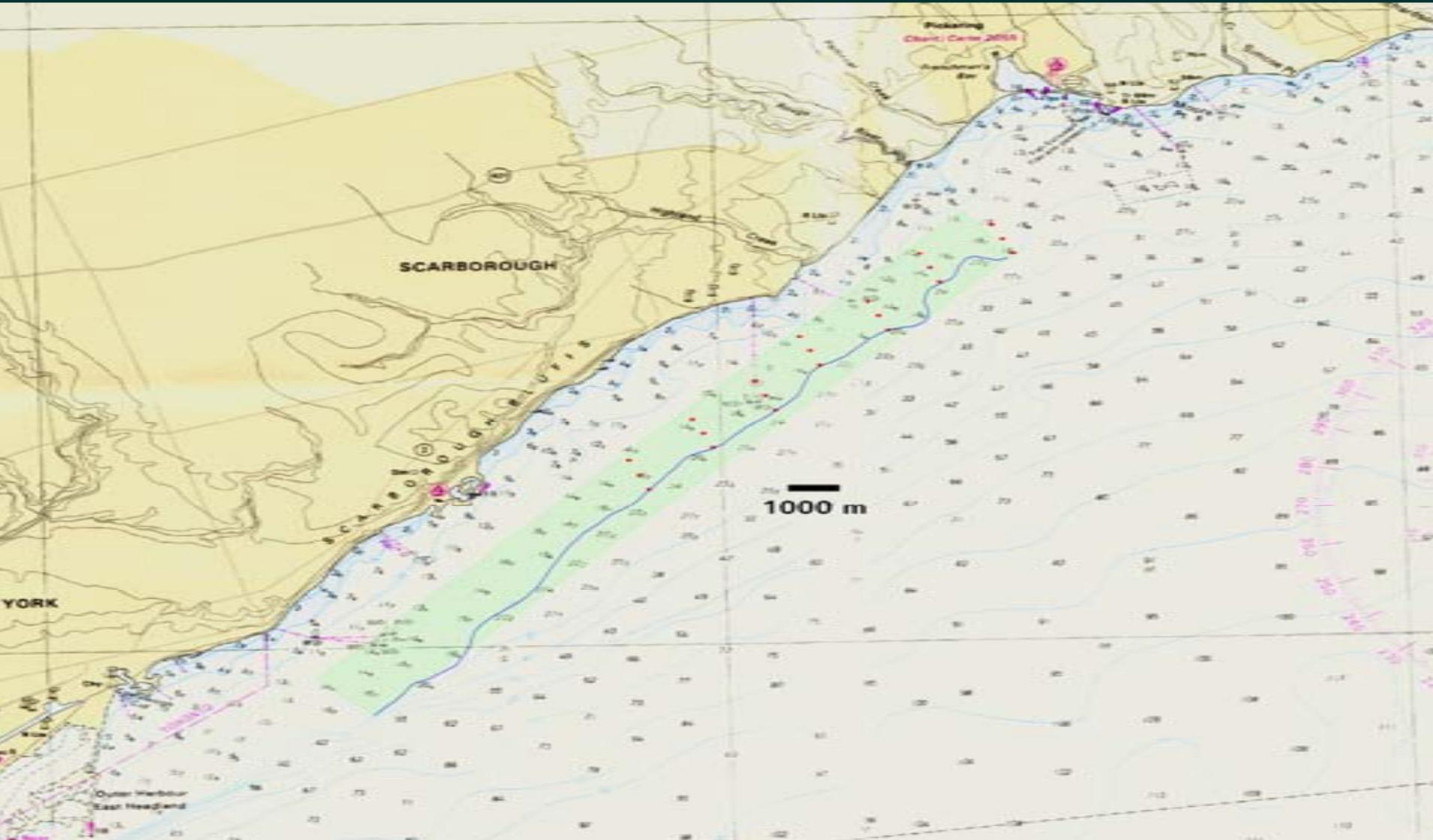
- Renewable Portfolio Standard - 5% by 2007; 10% by 2010 – upwards to 2000 MW or three quarters wind
- The Ontario Power Authority in its Future Supply report calls for 5,000 MW of wind energy by 2025
- CanWEA is calling for 6000 MW by 2013
- 350 MW of wind energy contracts awarded in 2004
- 955 MW of wind energy contracts awarded in 2005
- request for proposals for 200 additional MW of renewable energy has been issued
- 82.5 MW installed

Ontario and wind energy



- Ministry of Natural Resources Crown land policy in place
- Allows Great Lakes offshore wind developments
- Toronto Hydro has approval to site within a 44 grid cell configuration
- Environmental assessment process about to begin on anemometer
- Installation in summer

Location of proposed Toronto offshore project



Looking east to downtown

