

# Wind Power: Major Investments Across Québec



**Great Lakes Commission**

Tuesday, October 7, 2008

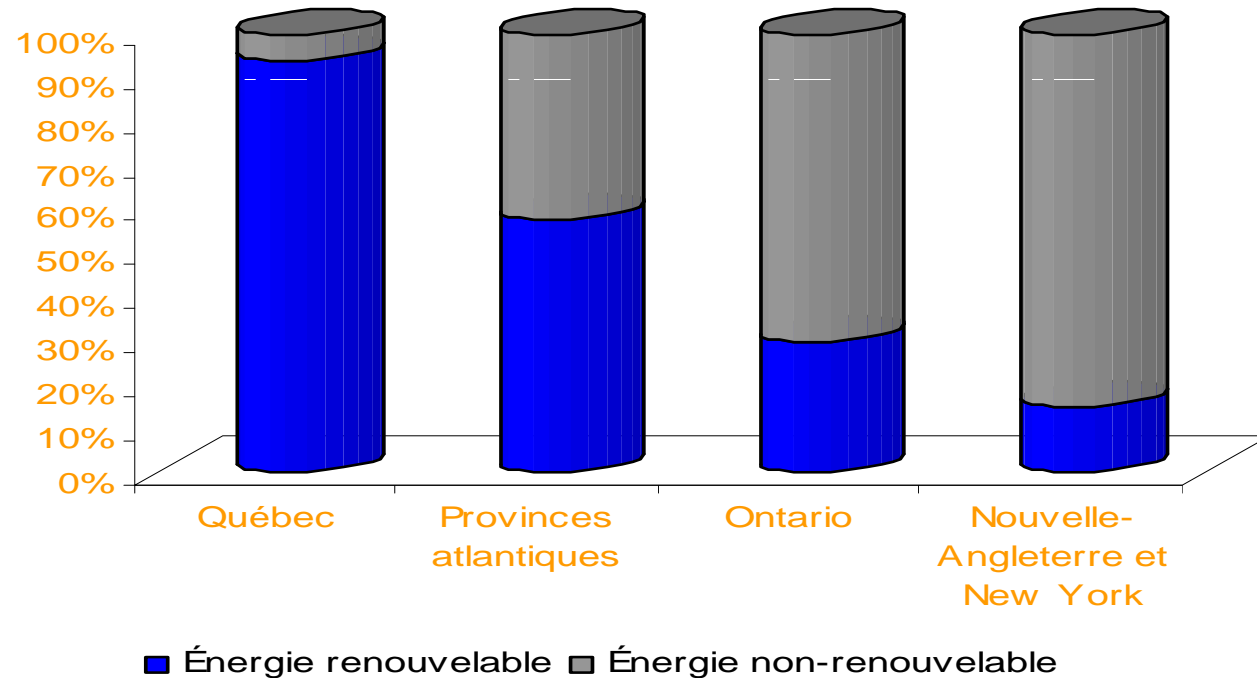
**René Paquette**  
Director General, Electricity,  
MRNF Québec



Québec 

# Québec and Renewable Energy Production

## Electricity Production Capacity by Source



# World Energy Situation

- Oil and gas prices have exploded
- Environmental issues are making headlines
- New sources of clean, renewable energy are becoming increasingly competitive

# Québec is Well Placed

- **Hydroelectric energy**
  - World-renowned hydroelectric industry
- **Wind energy**
  - Burgeoning wind industry
- **Research and innovation to promote other renewable energy sources**

# Going Even Further With the Québec Energy Strategy

- **Step up development of our hydroelectricity potential**
- **Continue to develop wind power beyond the current 4,000 MW limit**
- **Increase the role of solar energy**
- **Invest more in research and innovation**
- **Encourage energy efficiency**

# Québec's Energy Development Values

- **Priority to green energy**
  - Hydroelectricity, wind power, emerging energy
- **Respect for the environment**
- **Natural resources: a public good**
  - Sustainable, transparent development
  - Economic development lever for Québec and the regions
- **Respect for local communities**

# Developing Wind Energy, an Industry of the Future

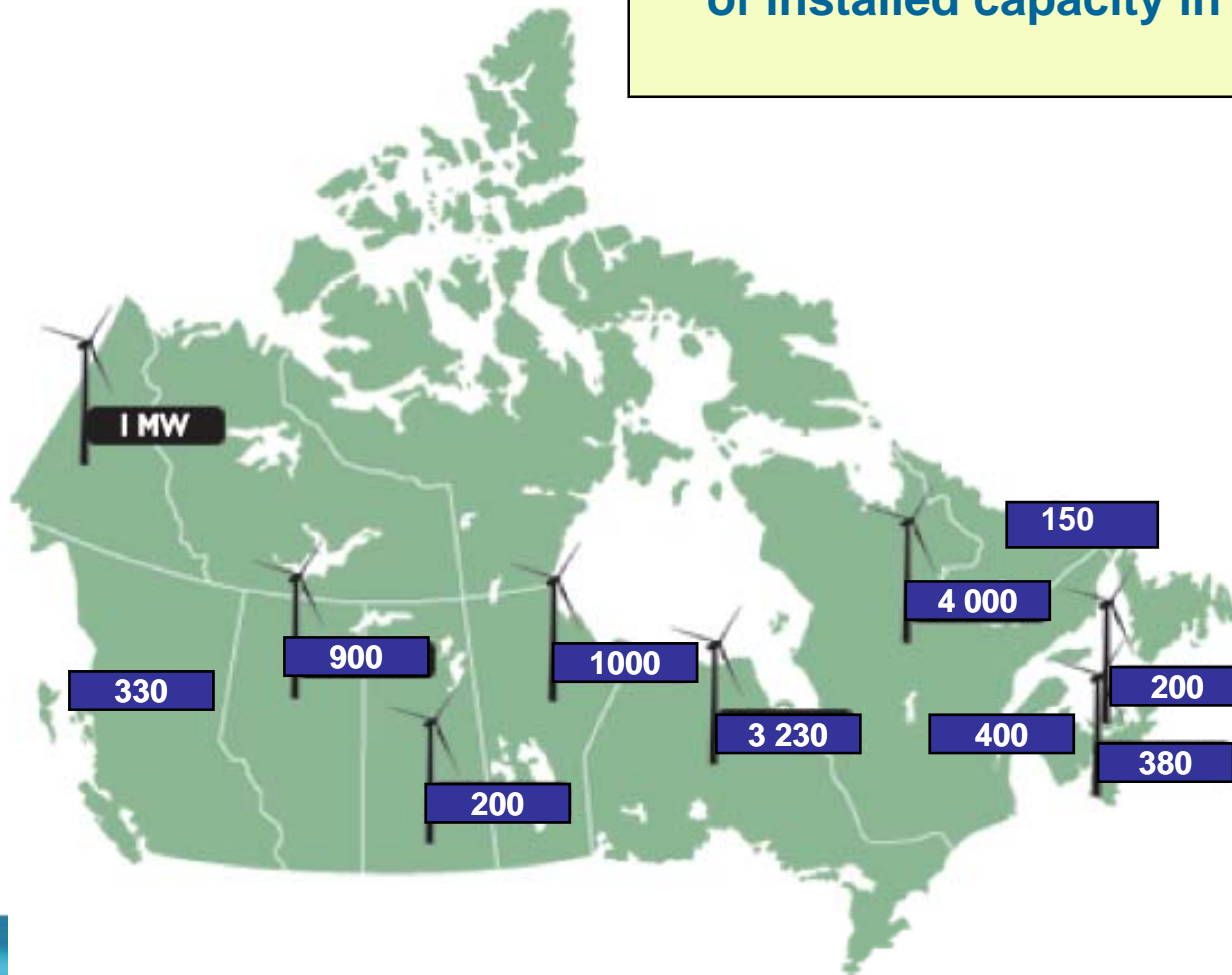
- **Wind energy is an industry of the future that**
  - Provides business opportunities for local and regional development
  - Is a natural complement to hydroelectricity
  - Can be developed throughout Québec

# Priorities for Developing 4,000 MW of Wind Energy

- Complete the two tenders
- Issue a 500 MW call for tender for the regions and First Nations alone
- Strengthen the complementary link between hydroelectricity and wind power
- Continue to invest in research and innovation

# Outlook for 2015: 11,000 MW in Canada 4,000 MW in Québec

Québec will have close to 40% of installed capacity in Canada.



# Developing the Wind Industry

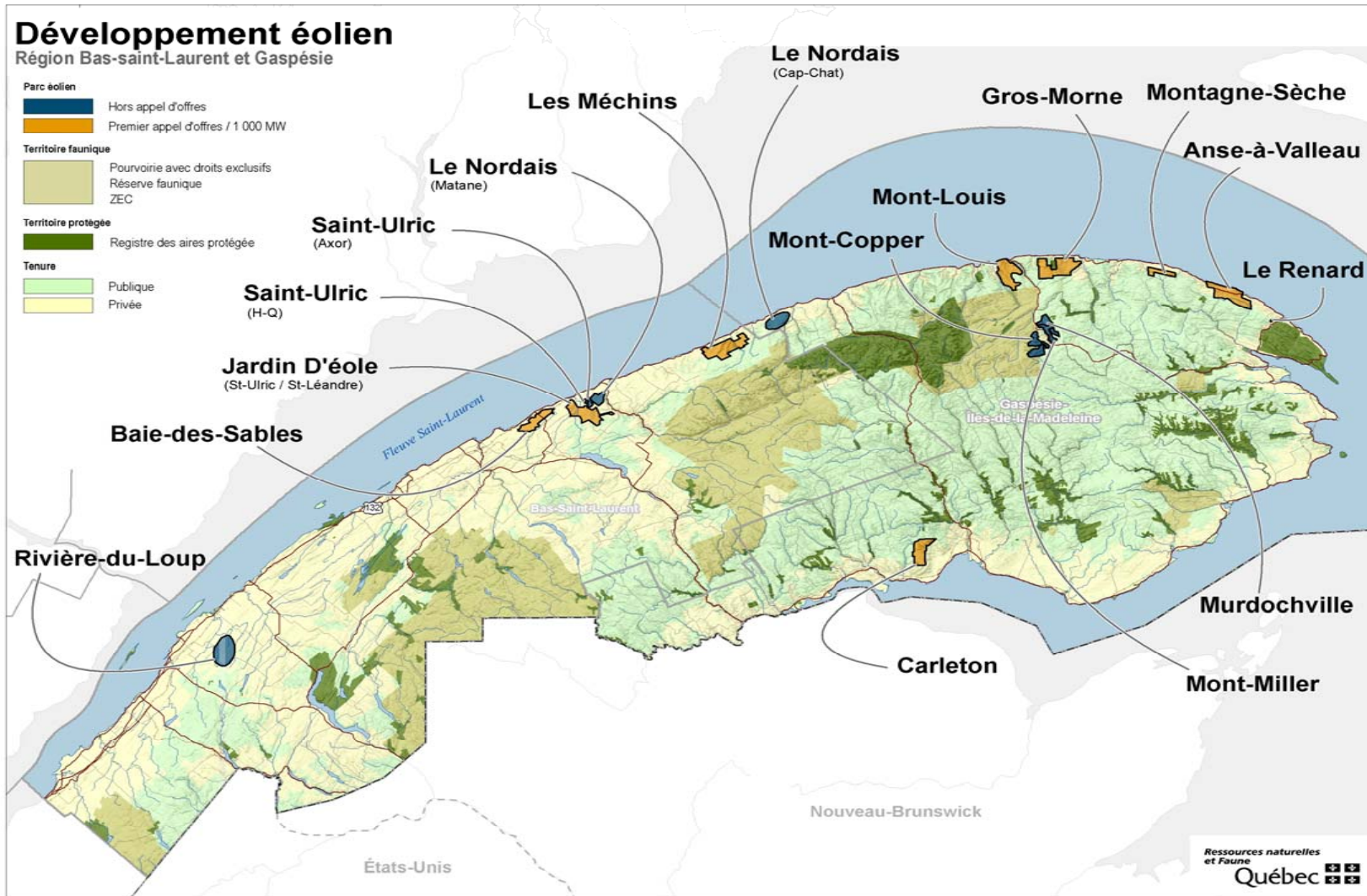
## Chosen Business Model:

- Private producers
- Purchase by Hydro-Québec Distribution via tender
- Maximized economic spinoffs for Québec and the regions

# 1,000 MW Call for Tender

- Total \$2.4 billion investment
- 8 wind farms totaling 990 MW
- 3 manufacturing plants for wind turbine components
- 500+ permanent jobs in the three plants
- In total, close to 1,000 jobs in the summer

# Wind Power Projects – 1,000 MW Call for Tenders



# 2,000 MW Call for Tenders

## ■ Results

- 15 projects (2,004.5 MW) 2011–2015
- 8 Québec regions

## ■ Anticipated Economic Spinoffs

- \$5.5 billion investment
- Consolidation of the industry in Québec

## ■ Next Steps

- Approval from Régie de l'énergie
- Environmental and municipal authorizations

# Selected Projects from the 2,000 MW Tender



# Calls for Tender for the Regions and the First Nations

- Issue two further calls for tender for a total of 500 MW
  - One 250 MW block set aside for the regions
  - One 250 MW block set aside for the First Nations
  - Each project limited to 25 MW
  - \$1 billion investment

# Fitting in with Local Communities and First Nations

- **Two discussion tables:**
  - Municipal, agricultural, and cooperative (regions)
  - First Nations communities
- **Result:**
  - Concerns expressed by the regions and First Nations communities were worked into the proposed agreements

# Developing Wind Energy, an Industry of the Future

- **Surpass 4,000 MW of wind power**
  - 100 MW for every 1,000 MW of hydroelectric power
- **Continue to invest in research and innovation**

# Québec: a Renewable Energy Leader

- **Currently**
  - 40,000 MW of hydroelectricity
  - 400 MW of wind power
  
- **On the horizon for 2015**
  - 4,500 MW from new hydroelectricity projects
  - 4,000 MW from wind power
  - More emerging energy
    - Solar, geothermal, biomass

# THANK YOU FOR YOUR ATTENTION

<http://www.mrnf.gouv.qc.ca/english/energy/wind>