



Biomass Initiative

Chris Young
Rob Lyng

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Renewable Energy Initiative: Biomass

Rationale

- ⊙ Dispatchable renewable energy
- ⊙ Net greenhouse gas reduction
- ⊙ Synergy with agriculture and forestry sectors
- ⊙ Makes use of existing plants – lower capital costs



Expectations

- ⊙ Not all 15 coal units will be converted – limited fuel supply
- ⊙ Atikokan GS will be the first converted: 2012. Others by 2014.
- ⊙ Renewable energy premium needed
- ⊙ Supply infrastructure will take time



Biomass Experience

Tests conducted at all four plants - Highlights

Atikokan GS

- Achieved full load on 100% wood pellets

Nanticoke GS

- “No-coal” wood pellet test complete
- Seasonal co-firing with wheat shorts
- 4 GWh of renewable production in 2008

Request for Expression of Interest- Biomass Fuel

- Solid wood or agri-fuels:
 - Meets the UNFCCC definition of renewable
 - Biomass fuel must not be defined as a waste
- <http://www.opg.com/power/fossil/biomass.asp>



Path Forward in the Forestry Sector

○ Forestry

- ✓ Clear policy consistent with renewable energy initiative
- ✓ Robust, sustainable forest management requirements
- ✓ Net Greenhouse Gas reduction
- ✓ Good response to RFEI
- ✓ Support in communities

Challenges for the Agriculture Sector

- Identify Ontario-based agricultural biomass fuel concepts that have broad public policy support from communities, regulators, suppliers and other stakeholders.
 - Net Greenhouse Gas reduction
 - Competition for resources
 - Biodiversity
 - Soil quality

 - Commercial scale & security of supply suitable for the electricity business
 - Satisfactory costs and economic returns

- Assist in communicating
 - Agricultural biomass concepts
 - perceptions