Showcasing Sustainable Hydropower Development The Bersimis Complex Case

Mr/Ms Chair,

Hydro-Québec is a government corporation whose mandate is to provide electricity to all Québec residents. With an installed capacity of over 36,000 MW of hydropower and a commitment to purchase some 3,500 MW of wind power, Hydro-Québec has become the largest per capita supplier of renewable energy in the world, while maintaining some of the lowest rates in North America.

1) PROJECT DESCRIPTION

The Bersimis hydroelectric complex comprises two jointly operated power houses, Bersimis-1, a power station of 1 125MW including a 42 km² reservoir and Bersimis-2, a 845 MW run-of-river power station which were built between 1953 and 1959. At the beginning of 2000, the project's electricity production has been substantially increased by 825 GWh, thanks to the partial diversion of three rivers.

2) SUSTAINABILITY

The Bersimis complex is an example of how the concept of sustainable development was successfully incorporated into the very culture of Hydro-Québec. Our company introduced measures and adapted its ways to constantly improve its practices in the areas of environmental protection and stakeholder involvement.

Today, the utility is certified ISO 14001 and has benefit sharing agreements with local communities. A corporate policy ensures that all our projects and activities are environmentally sound, well received by the communities and economically profitable. Moreover, the Bersimis complex meets internationally recognized sustainability standards such as the International Hydropower Association's Sustainability Guidelines and Assessment Protocols.

3) KEY FEATURES

According to these sustainability standards, the Bersimis complex highlights current good practices in several areas such as:

- Capitalizing on domestic energy supply, offering hence more independence from fluctuating oil and gas prices;
- Optimizing the utilisation of existing infrastructure
- Better integration of other renewables which are of intermittent nature
- Fostering regional development through partnerships with communities
- Local project acceptance through stakeholder involvement and ongoing dialogue
- Joint initiatives to protect highly valued resources
- Continuous collaboration with indigenous people

4 OBSTACLES

The main obstacles to a project like Bersimis are due to a current lack of a balanced level playing field among all energy options and concern

- the length of the approval process for hydropower projects which are much longer than that of other forms of energy generation,
- the need to maintain project costs within budget to ensure low electricity rates for domestic customers.

5) CONCLUSIONS

Hydro-Québec has demonstrated its commitment, and the one of the hydropower industry, to sustainable development through improvements in its practices so that the Bersimis complex can now be cited as a model of sustainable management.

The key to sustainable project management is a policy of transparency which allows for continuous communications and partnership development with local communities. This is essential to maintain links with and between all stakeholders, while ensuring local economic benefits.

More than 50 years of acquired knowledge enables us today to provide renewable energy by minimizing negative effects and by optimizing positive outcomes, since all our projects and activities must all be environmentally sound, well received by the local population and economically profitable.