Session:

2050 by 2050
What are the energy scenarios?

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For more information: www.hydropower.org/congress
Electricity Generation

The World

- Coal: 39%
- Other Fossil Fuel: 17%
- Hydro: 28%
- Other Renewables: 5%
- Nuclear: 5%
- Other: 11%

United States

- Coal: 38%
- Other Fossil Fuel: 7%
- Hydro: 19%
- Other Renewables: 5%
- Nuclear: 4%

Canada

- Coal: 10%
- Other Fossil Fuel: 10%
- Hydro: 61%
- Other Renewables: 15%
- Nuclear: 4%
Canadian Capacity & Potential Megawatts

Canada Could Double its Current Hydropower Capacity

Sources: 1) Potential: EEM study conducted for the CHA in 2007; Executive Summary
Note: The potential is defined as the technical potential determined by EEM for the CHA in 2006-2007 minus the capacity added since 2006 and therefore no more available for future development.
Canadian Hydro in Context

• World’s 3rd largest hydro generator

• 360 Terawatt hours per year

• Approximately 40 Terawatt hours per year (net) sent to the United States

• Less than 1 percent of overall United States electricity consumption
Canadian Hydropower is Growing

- Canada’s Top 4 infrastructure projects are hydro
- Over 5 Gigawatts built over the past 10 years
- Over 5 Gigawatts approved or under construction
Future Jobs and Investments Under a Strong Canadian Hydro Growth Scenario

- 2012 to 2032 study period
- Statistics Canada input / output model
- 158 potential projects
- Approximately 29 Gigawatts (38%) increase in capacity
- Approximately 100 G$ in investment
- Up to 1 million construction jobs (Full Time Equivalents) over 20 years
Realizing Canada’s Potential

• Continued partnerships with aboriginal communities and businesses
• Price on carbon to increase competitiveness
• Continuously improve strong environmental practices and maintain social license
Realizing Canada’s Potential

• Further development of electricity exports assisting the United States in reducing its emissions

• Greater North American adoption of electric transportation powered by clean and renewable hydropower