



Canadian  
Electricity  
Association

Association  
canadienne  
de l'électricité

# The Future of Power Generation

Generation West Conference

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# The Canadian Electricity Association

- Founded in 1891, the Canadian Electricity Association is the national forum and authoritative voice of the evolving electricity business in Canada.
- Mission statement: A safe, secure, reliable, sustainable and competitively-priced supply of electricity is essential to Canada's prosperity.





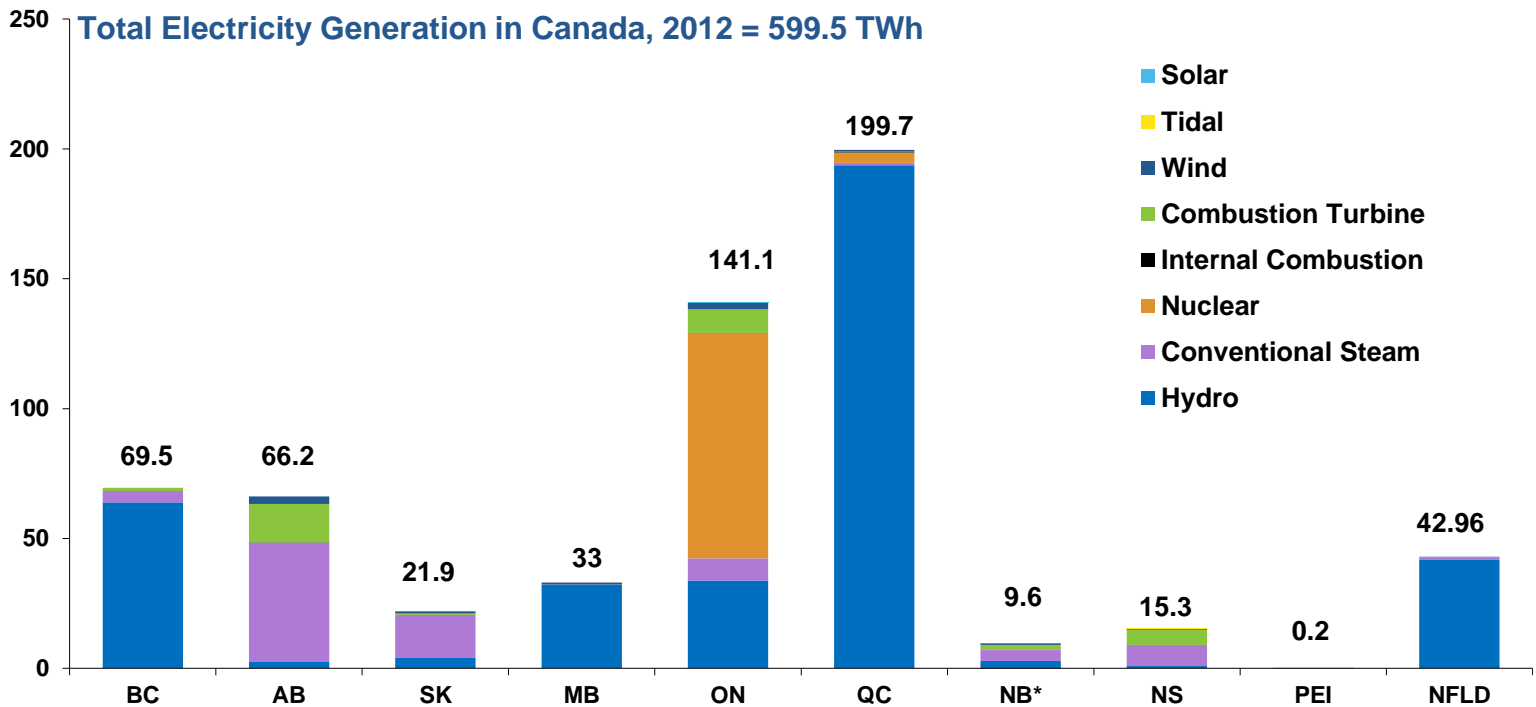
# CEA's Corporate Utility Members



# CEA's Corporate Partner Members



# Electricity Generation in Canada by Province and Fuel Type, 2012



\*With Point Lepreau nuclear generating station resuming power production on November 23, 2012, nuclear has been re-established as a major source (about 30%) of electricity in New Brunswick.



# Canada-U.S. Electricity Trade – 2012 (GWh)



# OUTLINE

- Key Challenges

1. Infrastructure
2. Climate change
3. Aging workforce

- Key Opportunities

1. Canadian energy strategy
2. Infrastructure
3. Climate change
4. Aging workforce





# KEY CHALLENGES

1. Infrastructure
2. Climate change
3. Aging workforce





# Infrastructure

- Our electricity system was mostly built in the past 30 to 60 years, and must now be renewed in order to maintain reliability and the capacity to support economic development.



## Infrastructure (cont'd)

### *The need for substantial renewal and significant investment*

- Last year, \$21.5 billion went towards replacing, renewing and building new generation, transmission, and distribution assets.
  - The Conference Board of Canada recently completed a study showing that as much as **\$350 billion** needs to be invested in the electricity sector by 2030 – more than \$15 billion per year.
  - With a policy and regulatory environment that looks to the *long-term* and supports the transformation of our electricity infrastructure, markets and technologies, we can more readily confront and leverage the new and emerging energy landscape.



