

Alberta

# Energy Efficiency and Sustainability

*Becoming the National Leader in Energy Efficiency*  
*Alberta Energy Efficiency Alliance*  
February 7, 2013

Presentation by Mike Ekelund contains forward looking information  
and may not reflect the future policies of the Government of Alberta

# Mandate

- **The Canadian Energy Strategy**
- **The Alberta Climate Change Strategy**
- **The Provincial Energy Strategy**

# EES Leadership Objectives

- Striving to be best in class:
  - Building upon best in class practices from other jurisdictions;
  - Benchmarking other jurisdictions to determine areas of potential improvement; and
  - Investing in technology advancement and expertise (e.g., our technologies and services are demanded around the world).
- Work collaboratively with other jurisdictions in a leadership role:
  - Coordination of programs;
  - Sharing best practices between jurisdictions;
  - Joint or complementary programs to reduce costs or improve effectiveness; and
  - Joint or coordinated communications.

# Approaches to this Initiative

- Improve **energy efficiency**, i.e. use less energy to provide the same product or level of service
  - And energy use reductions
- Increase use of **renewable and alternative energy sources**
  - Renewable - e.g. wind, solar, hydro, biomass
  - Alternative – lower emissions alternatives,
- Work with other governments
  - Energy and Mines Ministers Kananaskis initiative
  - Feed into Canadian Energy Strategy (2007 Framework and 2012 Communique)
    - Energy Efficiency
    - Alternatives and Renewable Sources
    - Lower Carbon Future



# Potential Roadmap I Envision

- Describe Alberta's energy system
  - Provide information on the current state of energy use and sources
- Describe the system outcomes
- Provide a vision for the long-term balancing of outcomes
  - Environmental, Economic and Social
- High level outcomes
  - Reductions in energy use to reduce environmental impact, replacement with lower environmental impact energy sources
  - Priority for most cost effective (economic and social impacts)
- Description of process for developing energy efficiency and alternatives and renewables recommendations
- Description of process for building “leadership”

# Potential Energy Efficiency Approaches (TBD)

- 24 Megatonne “wedge” in Climate Change Strategy
- Policy Framework
  - An overall direction for energy efficiency and conservation
  - Broad approaches to improving energy efficiency within Alberta’s economic sectors using a variety of methods
  - Relationship of energy efficiency and conservation policies with overall provincial strategies
- Action Plan
  - Detailed actions to be taken and timelines to meet goals for energy efficiency and conservation

# Build on Past Experience

- Residential Rebates
- Trucks of Tomorrow
- Light it Right
- Municipal Climate Change Action Centre
- Building Codes



# Potential Alternative and Renewable Energy Approaches

- 37 Megatonne “wedge” in Climate Change Strategy
- Policy Framework
  - Seek to identify A&R Energy opportunities, barriers and policy options
    - Renewables -Solar, Wind, Hydro, Geothermal, Bioenergy
    - Alternative sources - Cogeneration, Waste heat recovery, Alternative fuels
- Energy Framework/(Action Plan)?
  - Determine and analyze options for meeting CO<sub>2</sub>e reduction targets
  - For each option: barriers and opportunities, benefits and risks
    - Validate barriers and opportunities

# Build on Past Experience

- Renewable Fuels Standard Regulation
- Bioenergy Grant Programs (2006 - 2016)
- Alberta's Competitive Electricity Wholesale Market (since 1990's)
- Micro-Generation Regulation (since 2009)
- Agriculture Growing Forward Programs (since 2008)
- Alberta Forest Products Road Map (2012)
- Research and development
- Outreach

# Climate Change Policy: Process and Timing

- Analysis, modeling, information gathering - Current
- Public report of success to date under 2008 Strategy
- Stakeholder consultation plan has been drafted
- Renew climate change strategy and present optimal policy framework – Fall 2013/Spring 2014
- Regulation review and renewal – due September 2014
- Federal GHG regulations and equivalency timing – federal coal regulation comes into force July 2015

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**Questions?**