Pipelines – The Critical Enabler in Achieving Canada's Energy Potential

Northern Transportation Conference

November 10, 2005

CEPA
Canadian Energy Pipeline Association
Association canadienne de pipelines d'énergie

Presentation Outline

- **Who is CEPA?**
- **North American Demand & Supply**
- **Pipeline Infrastructure – The Critical Enabler**
- **Achieving Canada's Energy Potential**

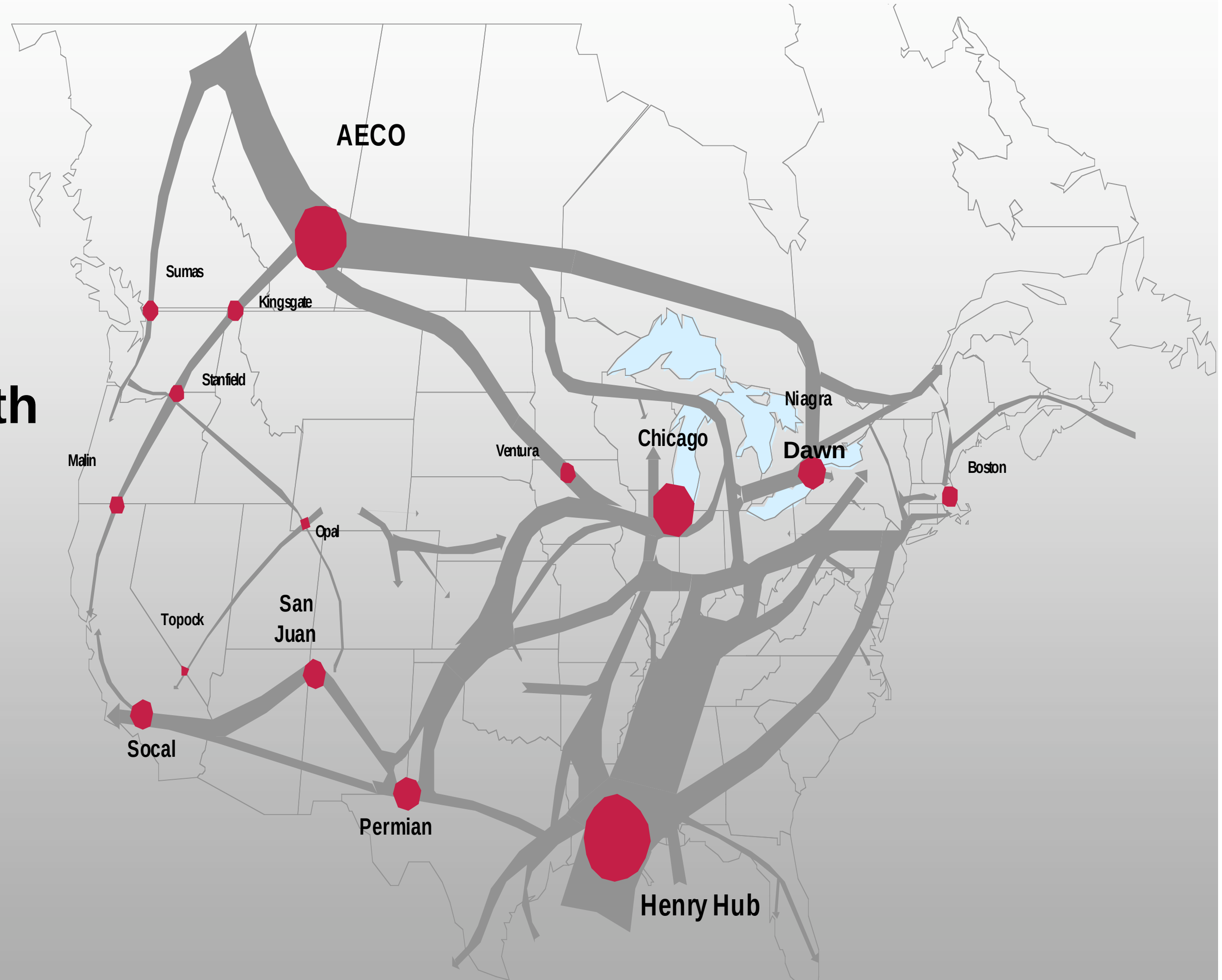
CEPA's Members

- 95% of the crude oil and natural gas produced in Canada is transported by our members
- In 2004, this represented 2.4 mm bbl/d of oil and 16.2 Bcf/d of gas
- Operate over 100,000 kilometres of pipeline in Canada and the United States
- Assets worth over CDN$20 billion
- Projected capital investment of CDN$20 billion over next 25 years

- TransCanada
- Enbridge
- Duke
- Alliance
- Terasen
- TransGas
- ATCO
- Trans-Northern
- Maritimes & Northeast
- BP Canada
- Foothills
- Trans Québec & Maritimes

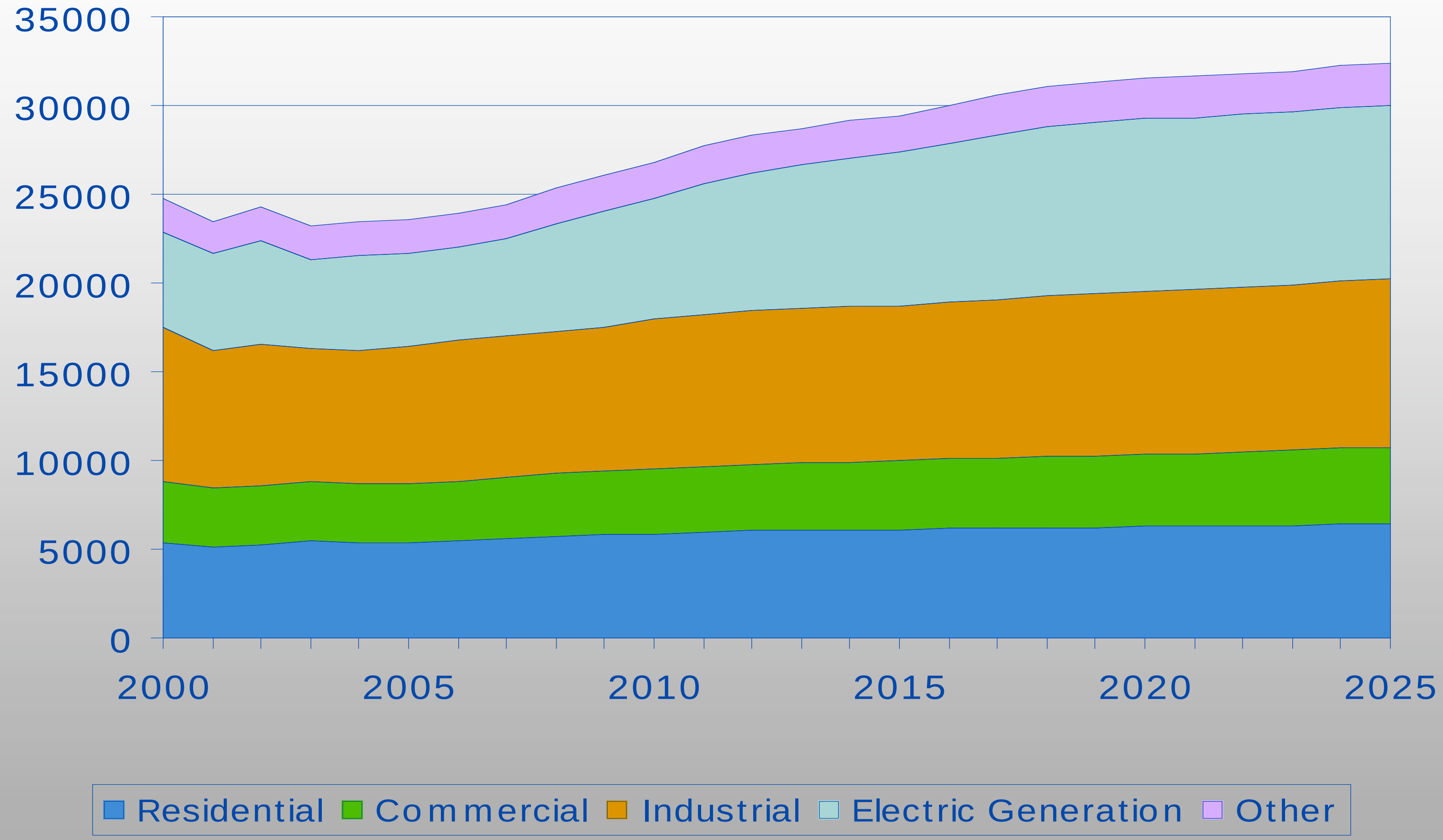
Pipelines – The Ties That Bind

- Continent-wide, transmission and distribution network
- Dense delivery network combined with storage capability handles peaks and disruptions
- Responsive, on demand deliverability



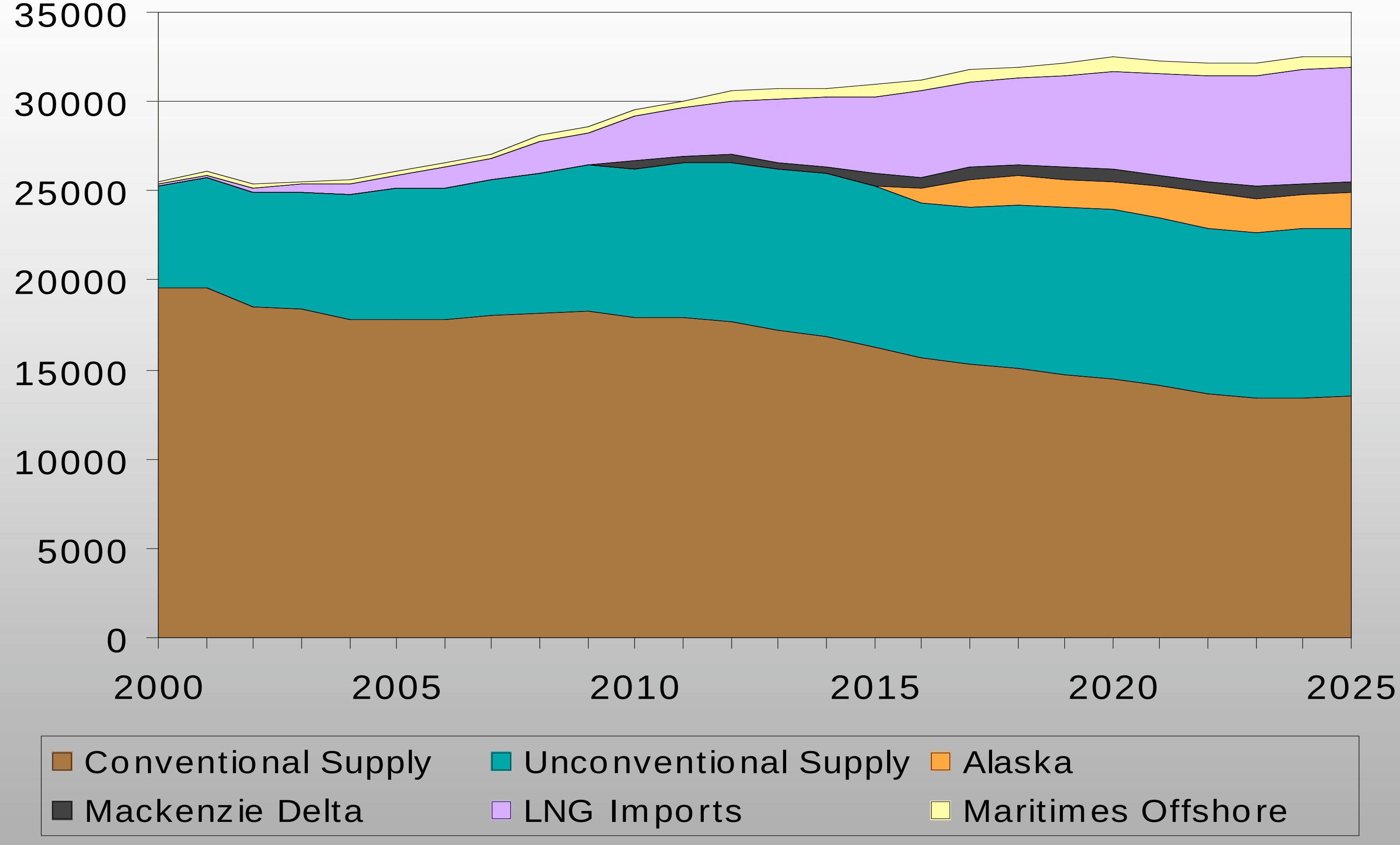
Source: EIA, ARC Financial

Consumer Demand is Growing…
North American Gas Demand (Bcf)



Sources: EIA Annual Energy Outlook 2005 (US data), NEB Supply Push Outlook (Canadian Data)

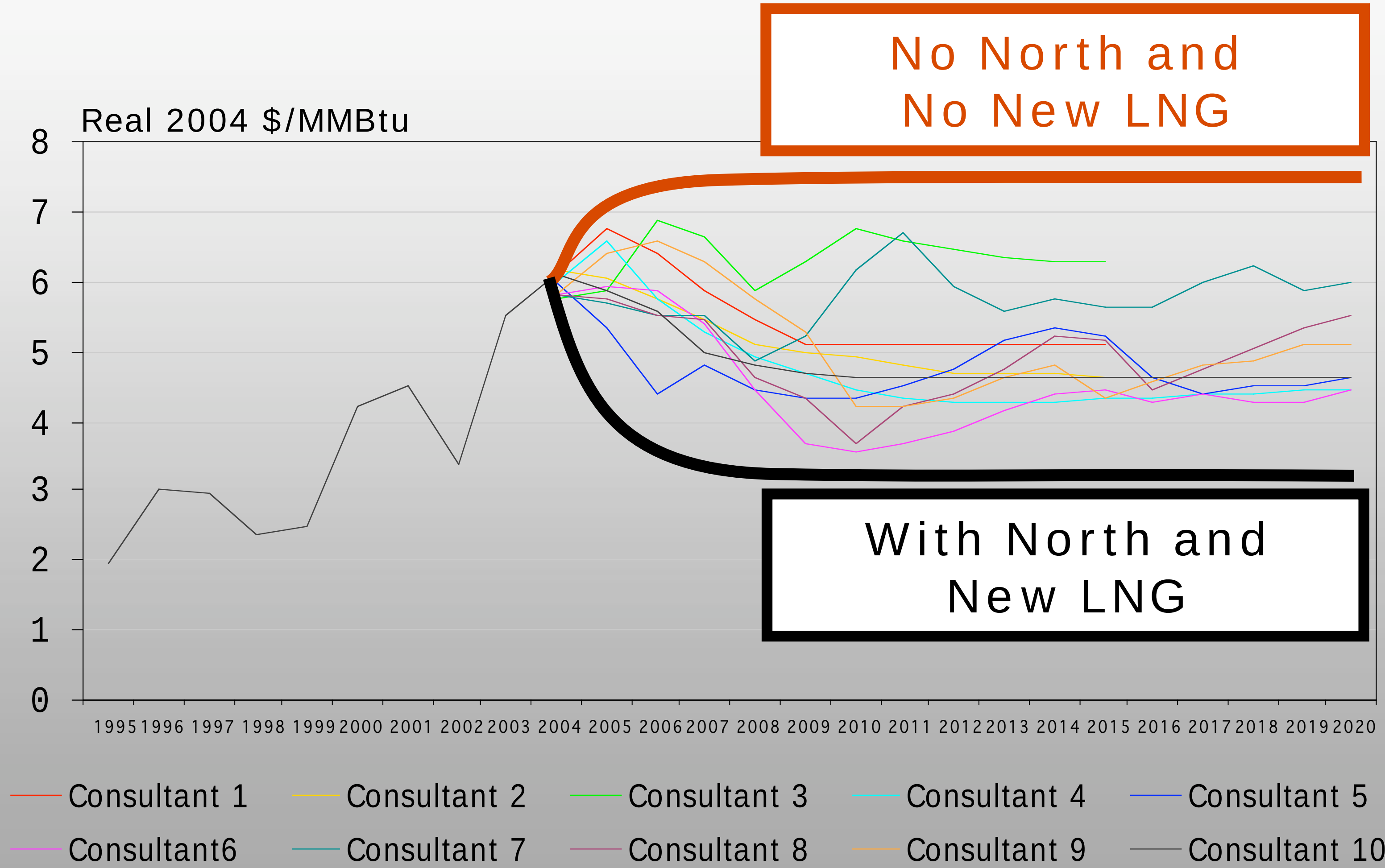
Supply Security Requires New Sources…
North American Gas Supply (Bcf)



Sources: EIA Annual Energy Outlook 2005 (US data), NEB Supply Push Outlook (Canadian Data)

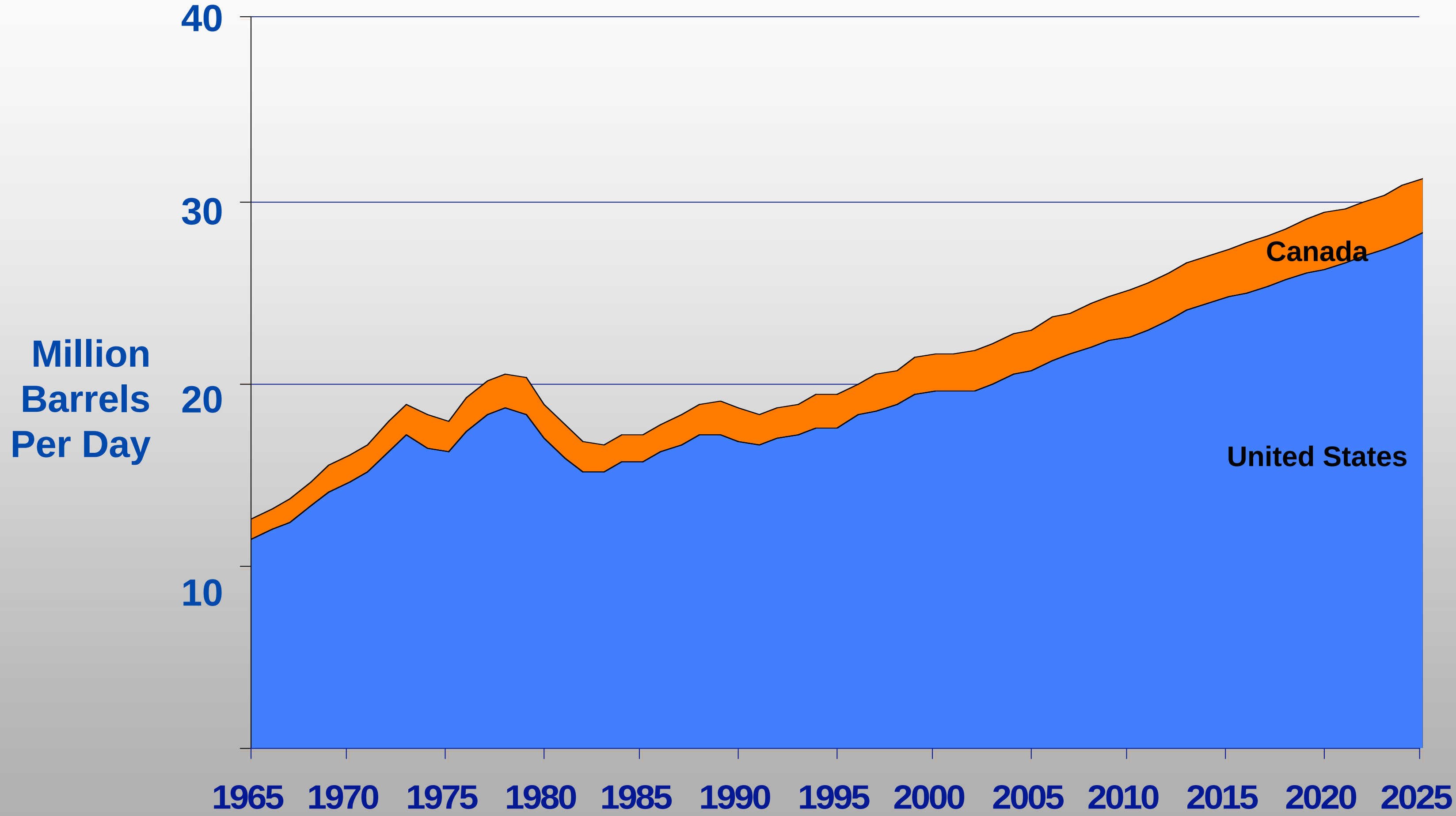
Price Demands New Infrastructure

Comparison of NYMEX Gas Price Forecasts



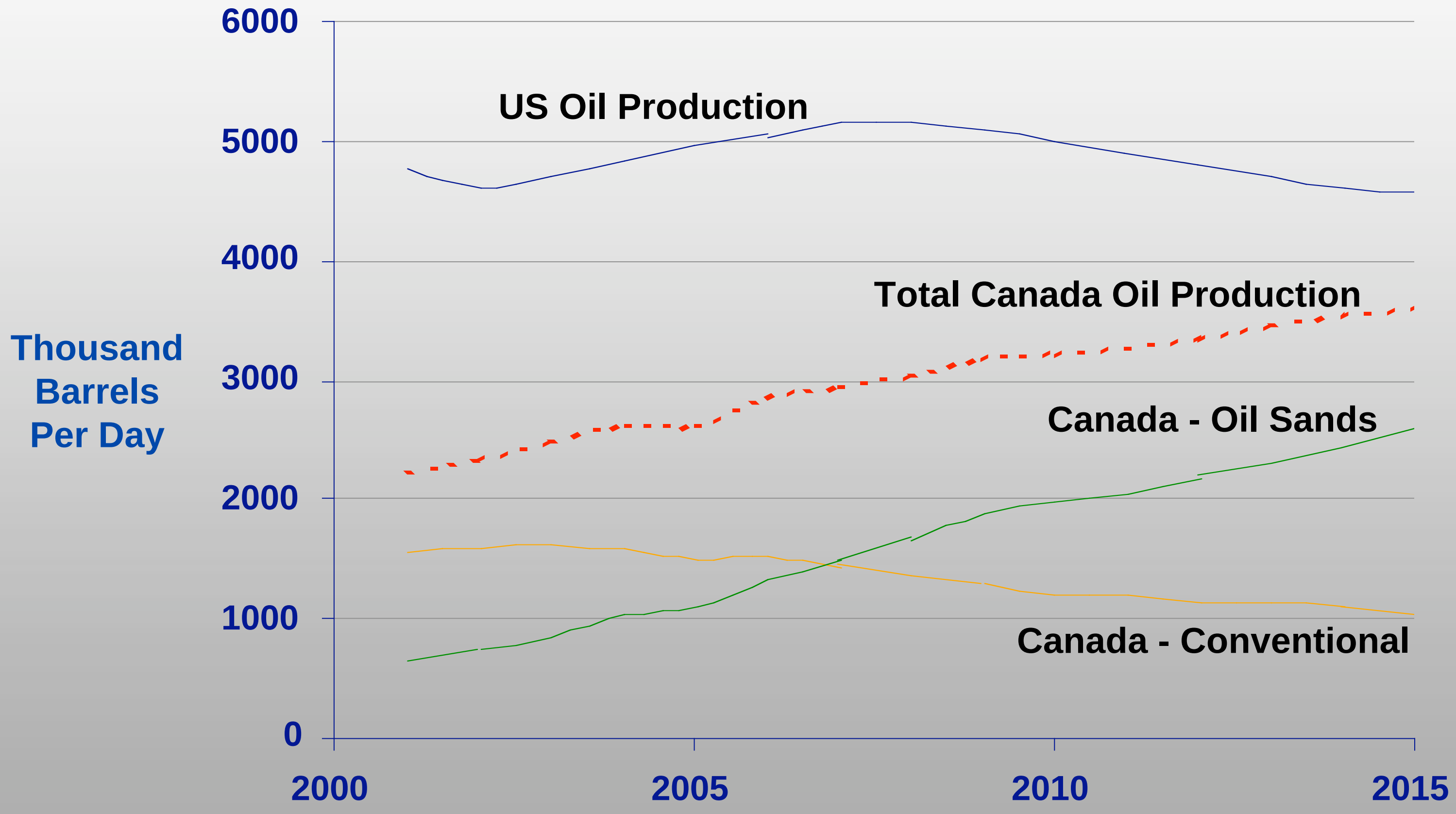
Source: TransCanada PipeLines

North American Oil Demand



Source: NEB, EIA, BP Statistical Review

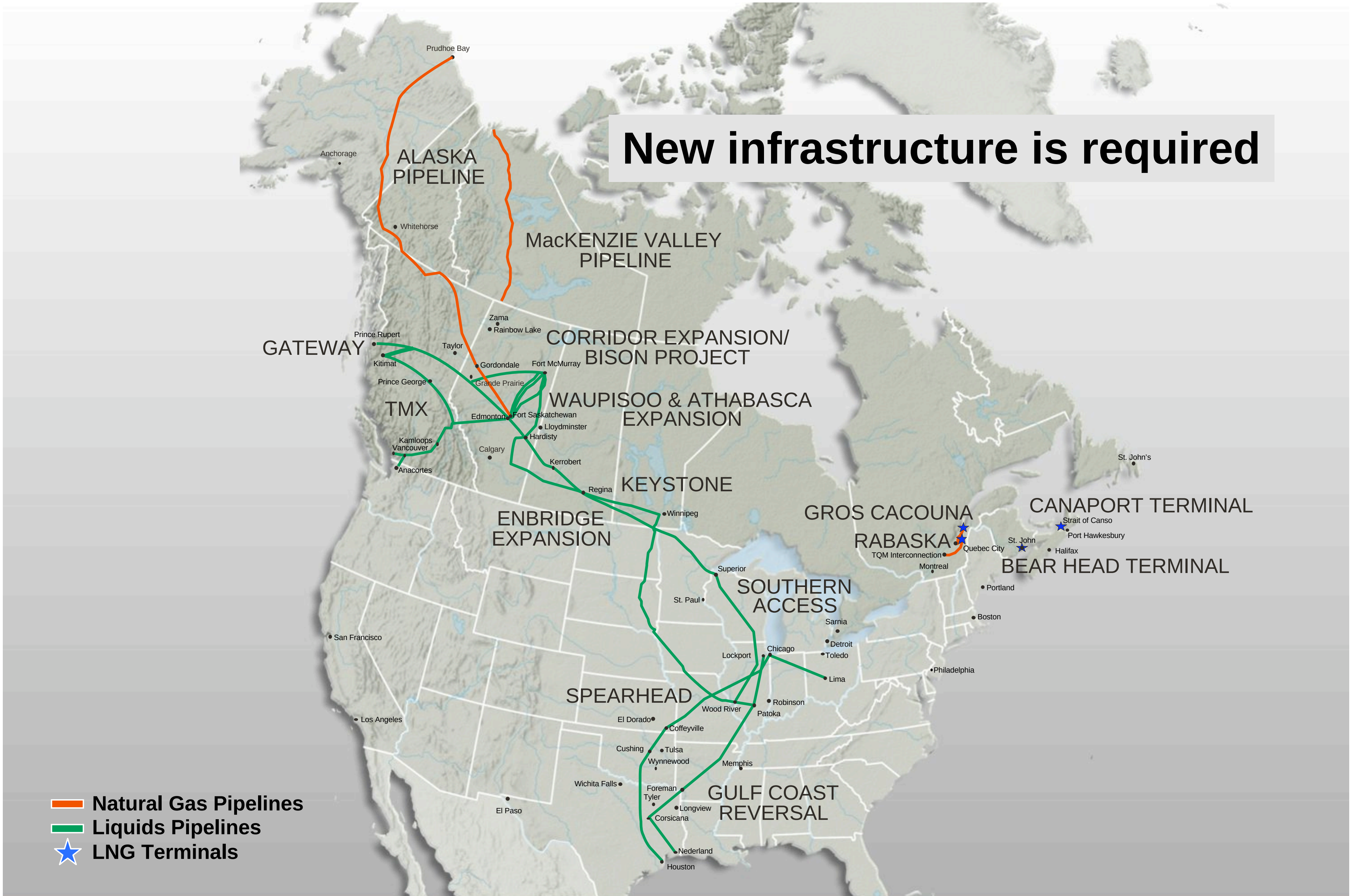
North American Oil Supply



Source: EIA, CAPP

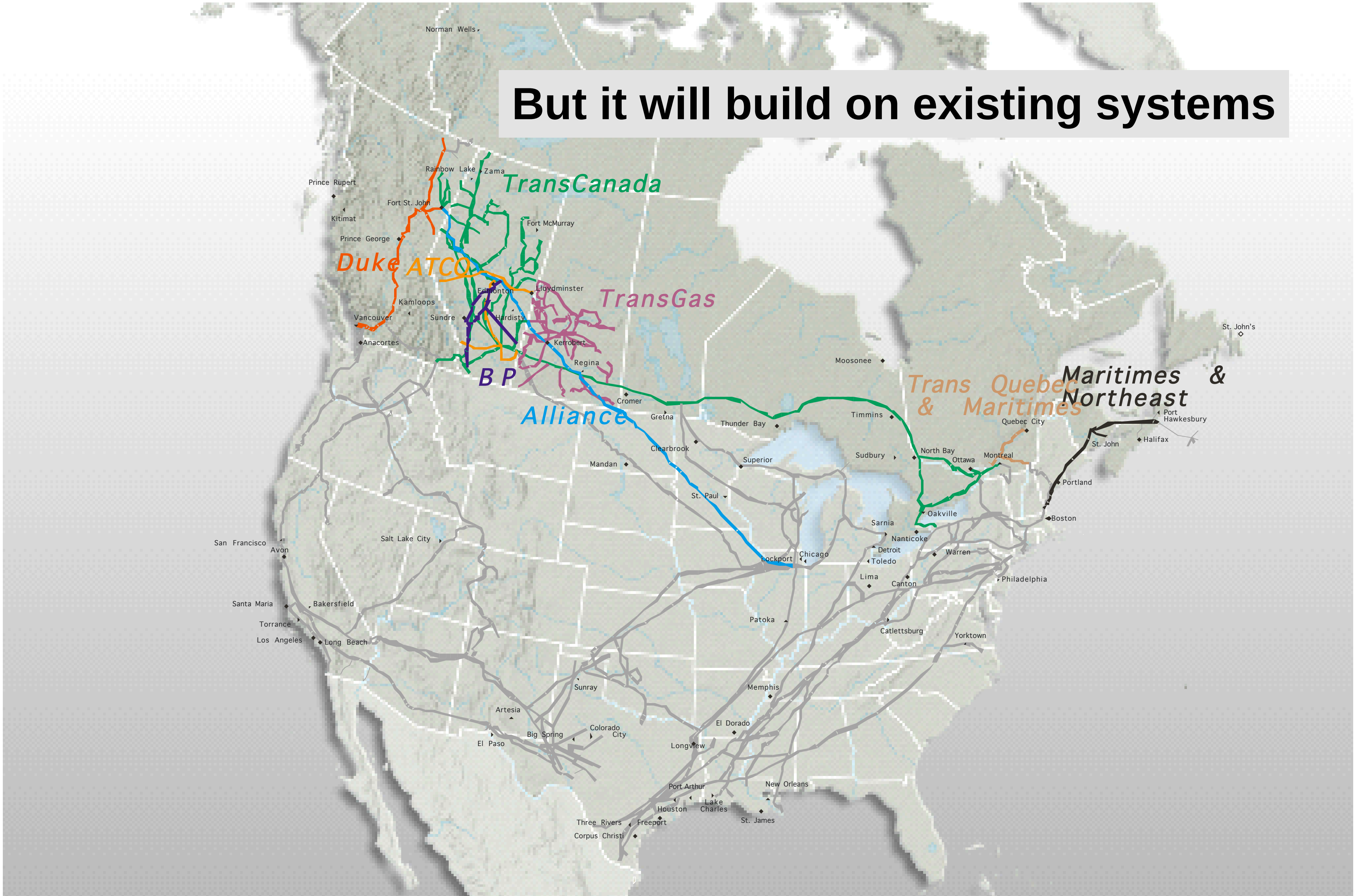
CEPA Canadian Energy Pipeline Association
Association canadienne de pipelines d'énergie

New infrastructure is required



Proposed Projects with Member Involvement

But it will build on existing systems



CEPA
Canadian Energy Pipeline Association
Association canadienne de pipelines d'énergie

Member Company
Natural Gas Pipelines

Canadian Energy Pipeline Association
Association canadienne de pipelines d'énergie

Member Company

Liquid Petroleum Pipelines

Costs of Delay and Benefits of Timely Energy Infrastructure Development

- **CEPA commissioned a study to:**
  - **define the cost to Canadian consumers of infrastructure delays; and**
  - **highlight the benefits of pipeline development to Canadians, regardless of where they live relative to construction**

- **The study estimates the cost of a two-year delay in the construction of natural gas pipelines, Liquefied Natural Gas (LNG) and natural gas storage infrastructure required to meet forecast demand between 2005-2025**

- **Using a hypothetical "Project X", the study also defines the benefits of pipeline development in terms of jobs created, GDP increase and additional taxes paid to governments**

Delays in Pipeline Construction Costly to Canadian Consumers

- **Net result of pipeline construction delays is higher natural gas costs**

- **$57.7 billion cost to Canadians between 2006-2025**
- **40.4% of Ontario impact falls on residential gas consumers**
- **73.7% of Alberta impact falls on industrial gas consumers**
- **53.2% of Quebec impact falls on industrial gas consumers**
- **Higher gas prices would also raise electricity and consumer goods prices**

Jurisdiction	Total Cost
Atlantic	**1,978.2**
Quebec	**4,470.5**
Ontario	**19,189.1**
Manitoba	**1,567.2**
Saskatchewan	**2,943.8**
Alberta	**20,218.7**
B.C.	**7,374.5**
Canada	**57,742.0**

Millions of Constant 2005 Dollars

Pipeline Construction Benefits – "Project X" Assumptions

- **"Project X" modeling assumptions:**
  - **1000 kilometer, 36-inch main line – half in Alberta and half in BC**
- **Selected pipeline proposals in comparison:**
  - **Alaska**
    - **3,440 Kilometer, 48-inch main line**
  - **Mackenzie**
    - **1,220 Kilometer, 30-inch main line**
  - **Gateway**
    - **1,200 Kilometer, 30-inch oil export main line and a 20-inch condensate import main line**
  - **TMX**
    - **1,200 – 2,100 Kilometer, 30-inch main line**

Pipeline Construction Benefits – GDP Increase from "Project X"

- $939.5 million increase in Canada's GDP
- 26.3% of indirect GDP increase outside BC and AB
- $42.5 million in indirect tax revenues to governments

	Direct	Indirect	Total
Atlantic	0.2	2.5	2.7
Quebec	4.0	24.3	28.3
Ontario	15.5	80.2	95.7
Mb/Sk	6.9	22.2	29.1
Alberta	202.6	212.0	414.6
B.C.	211.7	155.9	367.6
Other	0.1	1.4	1.5
Canada	441.0	498.5	939.5

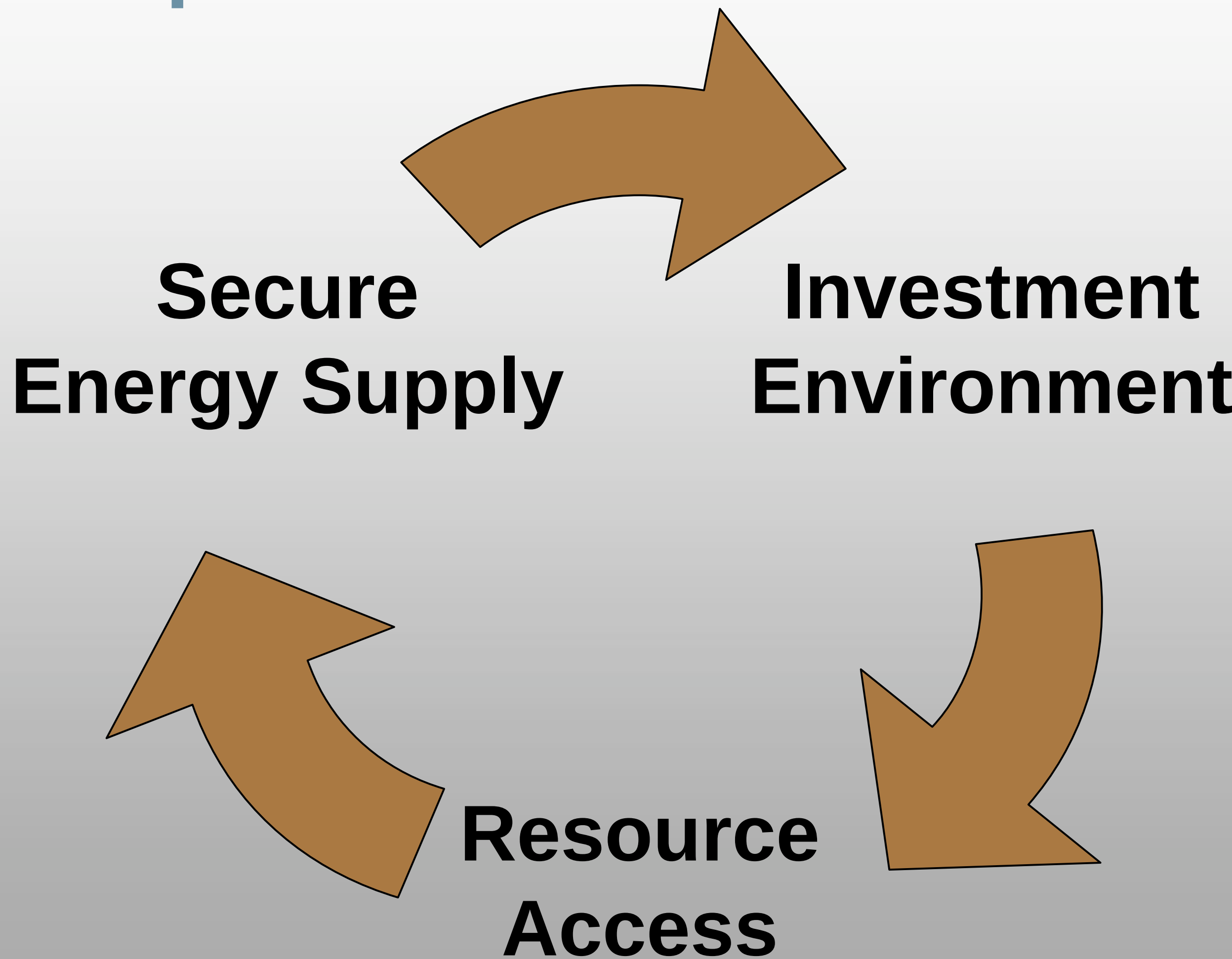
Millions of Constant 2005 Dollars

Pipeline Construction Benefits – Jobs Created by "Project X"

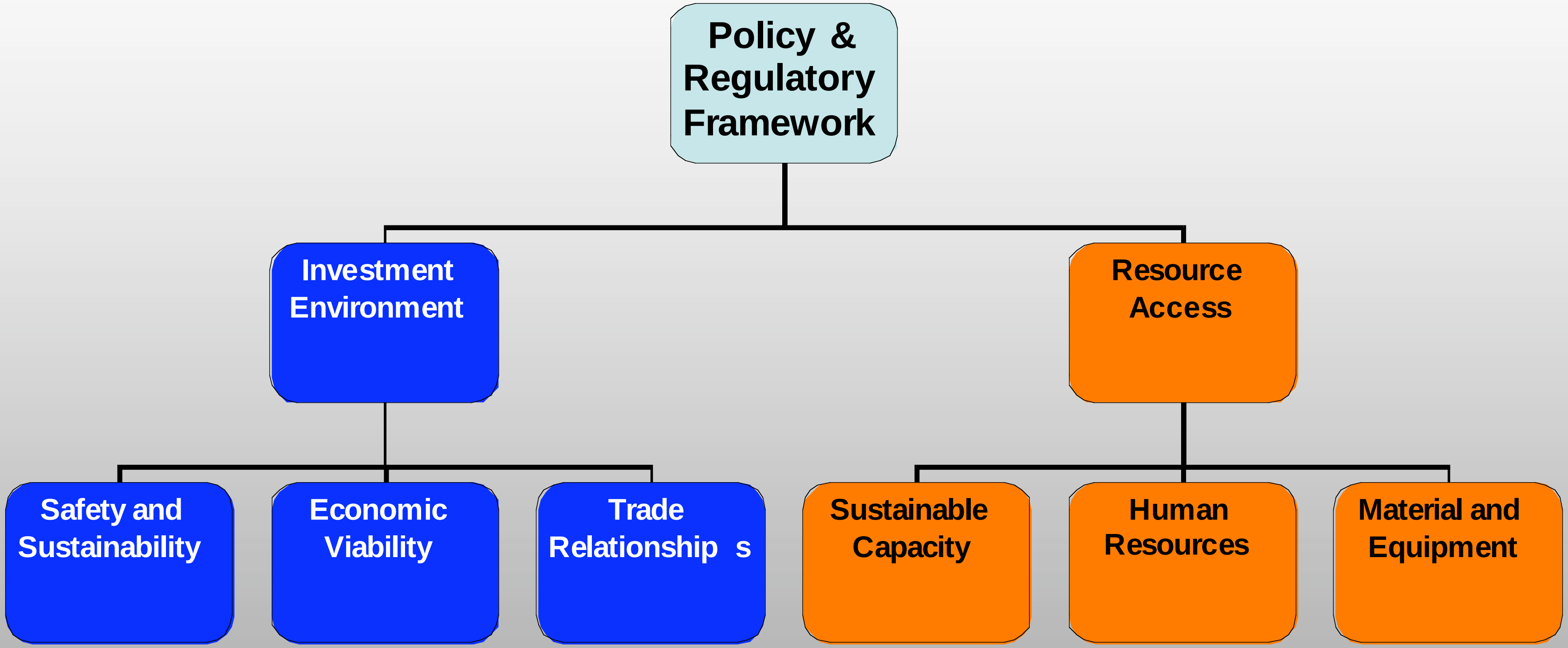
- 12,683 new jobs created in Canada
- 26.6% of indirect employment increase outside BC and AB
- $680.1 million increase in national labour income
- $103.8 million outside BC and AB

	Direct	Indirect	Total
Atlantic	2	33	35
Quebec	50	398	448
Ontario	194	1,129	1,323
Mb/Sk	62	314	376
Alberta	2,508	2,694	5,202
B.C.	2,715	2,564	5,279
Other	0	20	20
Canada	5,531	7,152	12,683

Achieving Our Energy Potential – Competitiveness Continuum



Achieving Our Energy Potential – Efficient & Effective Policy and Regulation



Competitive Investment Environment – Policy and Regulatory Framework

- Principles
  - **Respect jurisdictional responsibilities**
  - **Provide clarity, certainty and predictability**

- Outcomes and Performance Measures
  - **Create an “Energy Policy and Regulation Competitiveness Index” that:**
    - sets performance indices for assessing regulatory efficiency efforts;
    - reports on how the Government of Canada is collectively dealing with issues that impede energy investment
  - **Improve collection, analysis and dissemination of energy information and data through partnerships with organizations such as the Centre for Energy Information**
  - **Provide for delegation of environmental assessments and substitution of panel reviews to the National Energy Board**
    - One project, one assessment

Competitive Investment Environment – Safety and Sustainability

- Ensure that policy and regulatory regimes provide clarity, certainty and predictability while providing for the safe and environmentally sound operation of pipelines

  – **Establish national standards for pipeline maintenance and construction**
    - Maintain world-leading record on safety and environmental performance while improving regulatory efficiency

  – **Develop and implement a national “One Call” program**
    - Give Canadians a more effective accident prevention tool

Competitive Investment Environment – Economic Viability

- Make Canadian companies and projects a preferred destination for foreign and domestic capital investment
  - **Reduce personal and corporate tax rates**
    - Canadians should choose how their tax dollars are spent
  - **Continue with pipeline CCA rate improvements**
    - Make depreciation rates competitive with U.S.
  - **Eliminate the federal capital tax**
    - Implement prior to the announced phase-out date
  - **Provide certainty on climate change related risks**
    - Maintain commitment to limit compliance liability to a maximum of 12% reduction from business as usual at a cost of no more than $15 per tonne of $CO2_e$
    - Do not list carbon dioxide and methane (the primary component of natural gas) as toxic substances under the Canadian Environmental Protection Act

Competitive Investment Environment – Trade Relationships

- Make Canada an exemplar of free trade and market principles
  - **Promote open and free markets and respect for trade agreements**
    - Negotiation, not retaliation
  - **Observe market principles in order to encourage investment in Canada and job creation for Canadians**
    - Adhere to NAFTA
    - Don’t link trade issues
  - **Communicate with Canadians about the role of markets and prices in determining investor and consumer behaviour**
    - Improve understanding of the need for new energy supply and infrastructure investments and assist Canadians to make sense of our energy challenges

Timely Resource Access – Sustainable Capacity

- Ensure timely, cost-effective resource access by creating efficient, sufficiently resourced processes
  - **Develop effective and efficient Aboriginal consultation guidelines**
    - Enhance process timelines and improve access certainty
  - **Provide adequate resources to Aboriginal peoples to improve capacity on development matters affecting their communities**
    - Eliminate project leveraging by Aboriginal peoples as they further define their rights
  - **Improve Land Use Planning Guidelines**
    - Promote F/P/T dialogue and public understanding
  - **Ensure regulatory agencies are properly resourced**
    - Decouple the National Energy Board (NEB) from Treasury Board salary guidelines
    - Improve timeliness and efficiency of applications processing

Timely Resource Access – Human Resources

- Ensure access to skilled human resources to facilitate timely and efficient project implementation

  - **Implement Foreign Credential Recognition**
    - Increase staffing flexibility for employers and allow new Canadians to fully and effectively contribute

  - **Increase investments in HRSD's Sectoral Partnerships Initiative**
    - Use increased funding to promote careers in, and awareness of, the industry and to improve labour market supply and demand forecasting

  - **Improve funding for innovative partnership opportunities with Aboriginal peoples**
    - Enable the development of Aboriginal-owned SME's, as well as job creation

Timely Resource Access – Material and Equipment

- Ensure an adequate supply of material and equipment to permit cost-effective project implementation
  - **Support Canadian supplier, manufacturing and contractor sectors in gearing-up for project demand**
  - **Eliminate barriers to the free movement of material and equipment**
    - Develop complimentary rules and regulations on issues such as vehicle weights between jurisdictions

For more information, please contact:

David MacInnis
President

Canadian Energy Pipeline Association
Suite 1860, 205 - 5th Avenue S.W.
Bow Valley Square II
Calgary, Alberta T2P 2V7
Tel: (403) 221-8778 Fax: (403) 221-8760
dmacinnis@cepa.com

www.cepa.com