

November 3, 2006
CSIS Energy Cooperation in
the Western Hemisphere

Claude Carrière
Deputy Head of Mission
Canadian Embassy

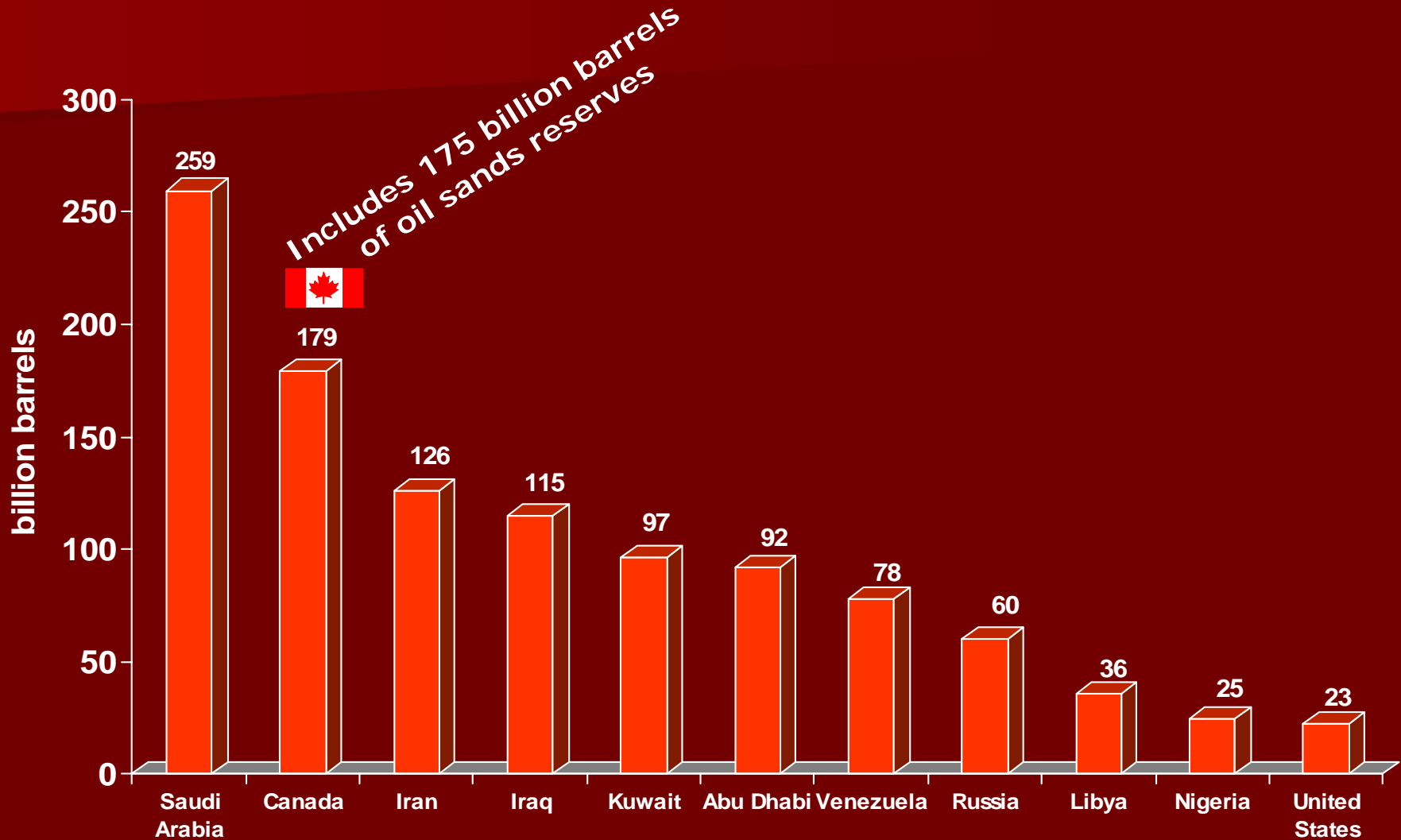
Canadian Energy Policy

- Market based
 - NAFTA Chapter 6 (energy)
 - oil and natural gas markets fully deregulated
- Increased sustainability
 - conservation, efficiency
 - R&D (traditional & alternative energies)
 - reduce environmental footprints
- Jurisdiction
 - federal: offshore, territories
 - provinces: onshore

Canada is a Net Energy Exporter

- ✓ 3rd largest natural gas producer
- ✓ 8th largest crude oil producer, and growing
- ✓ Largest uranium producer
- ✓ Self sufficient in coal
- ✓ Self sufficient in electricity
- ✓ PM: Canada is an emerging energy superpower

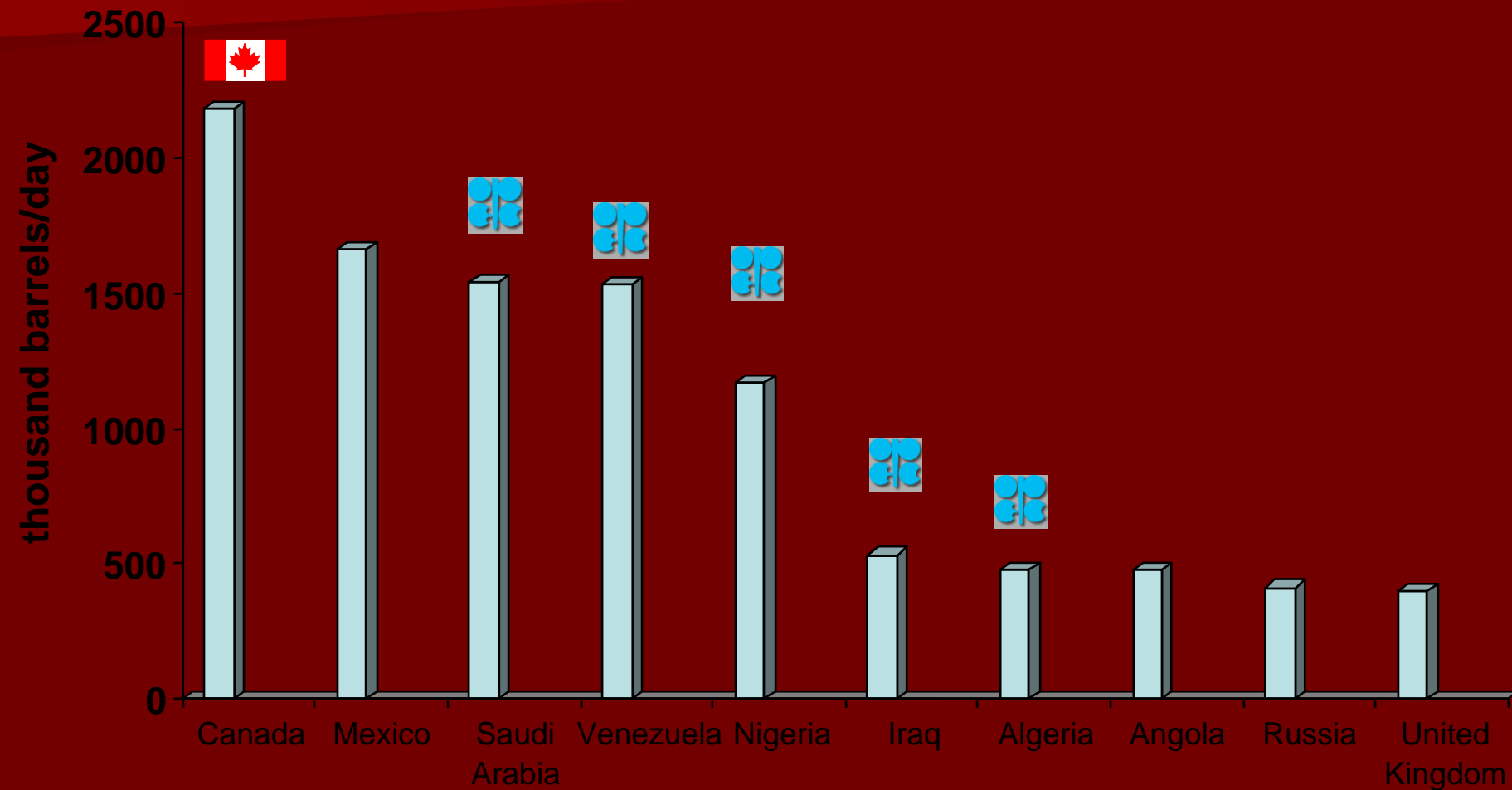
Crude Oil Proved Reserves



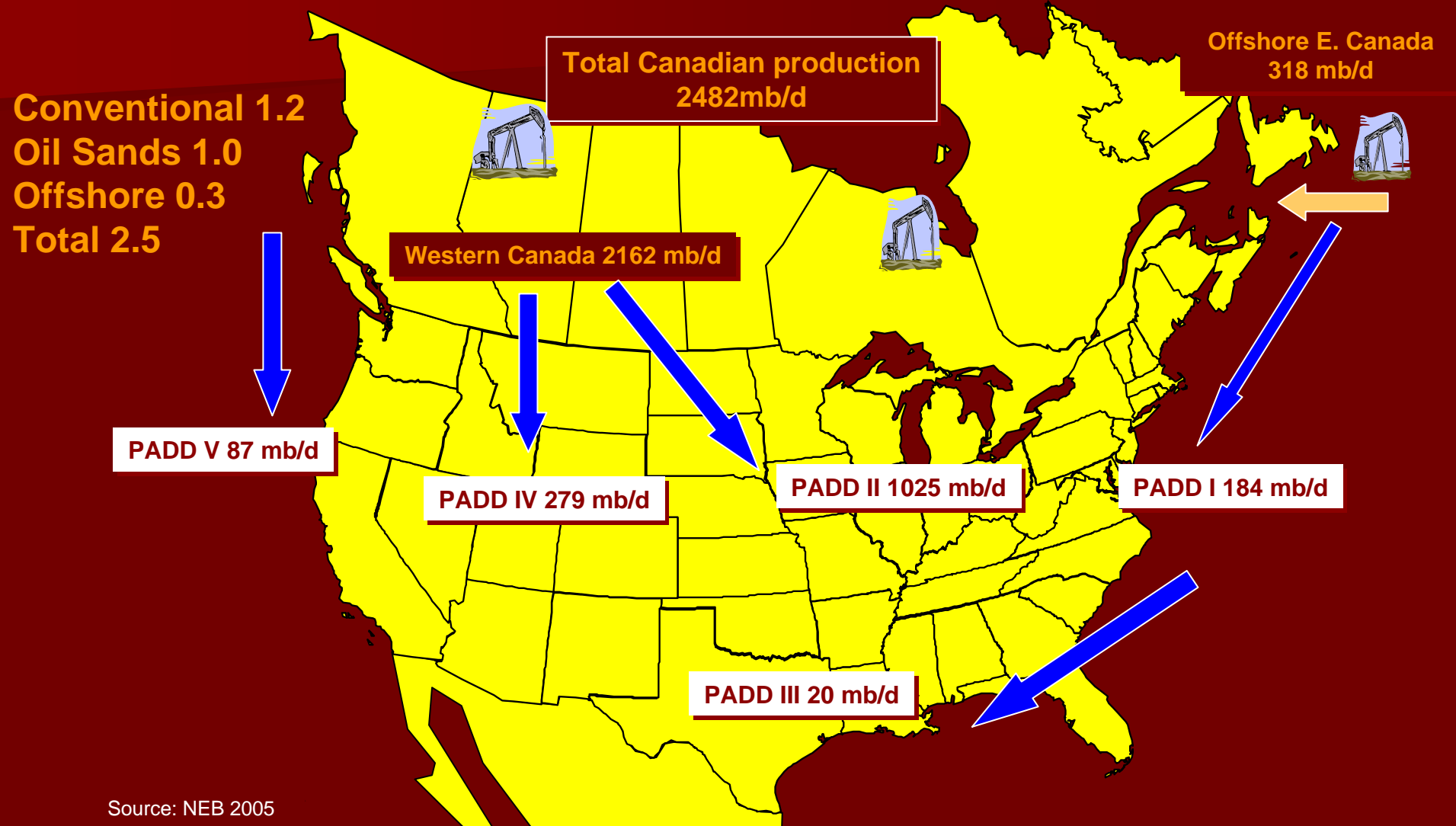
Canada is the Largest Supplier of Energy to the U.S.

Energy	C/US Imports	C/US Consumption
Oil	17%	10%
Natural Gas	85%	17%
Uranium	33%	28%
Electricity	98%	2%

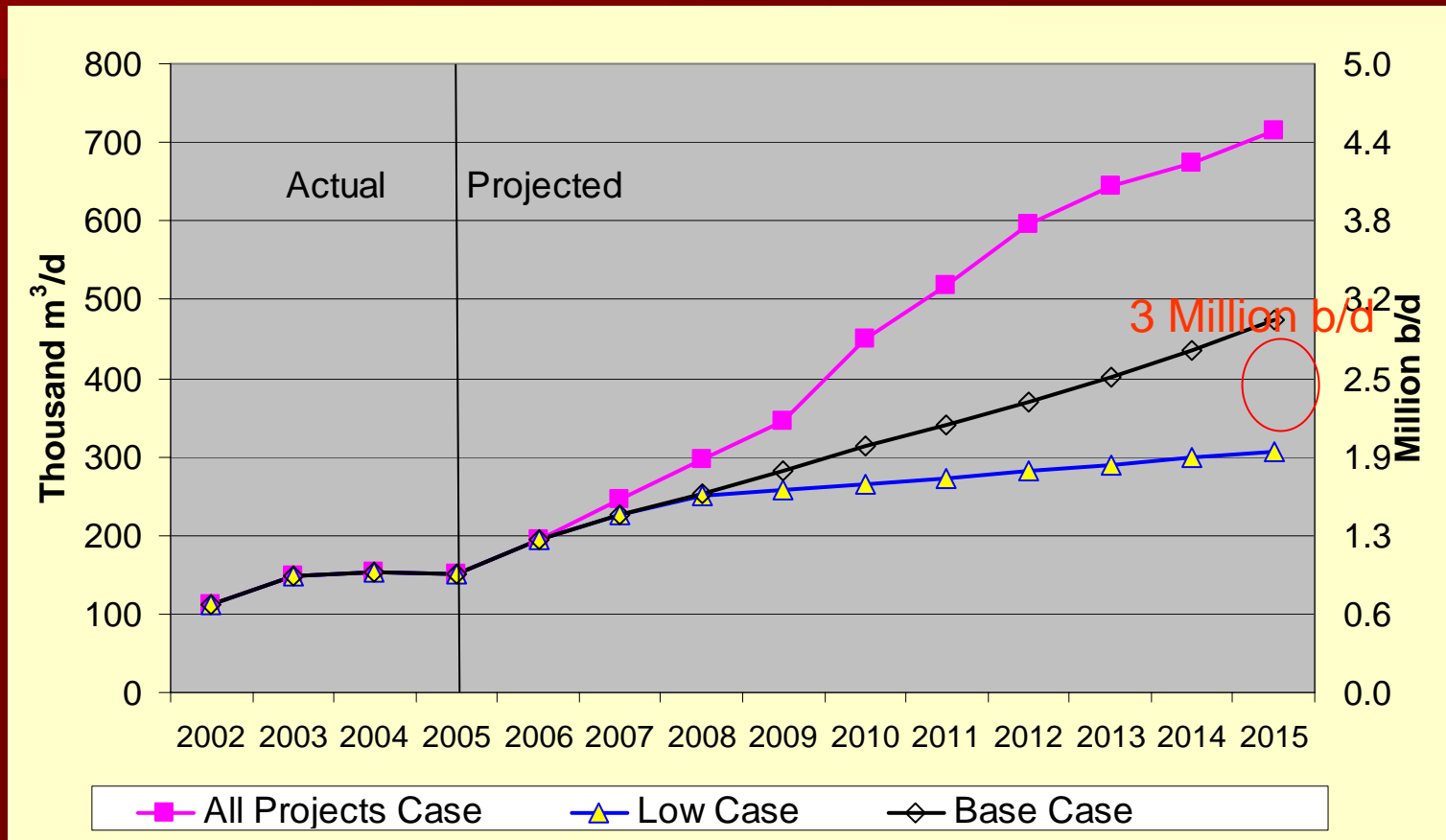
2005 U.S. Imports of Crude Oil and Petroleum Products



Crude Oil Supply 2005



OIL SANDS SUPPLY PROJECTIONS



Base Case Supply is up by 700,000 b/d compared to 2004 report

Challenges

- Requires US\$30 barrel
- Natural gas use in production
- More pipelines, more refineries
- Environmental impacts
- Infrastructure expansion

Natural Gas

US Reserves 2004: 192.5 tcf (1951: 192.7 tcf)

2004 US Production & Consumption

	Annual	Daily
Domestic Production	18.6 tcf	51 bcf
Canadian Imports	3.6 tcf	10 bcf
LNG Imports	0.7 tcf	2 bcf
TOTAL	22.9 tcf	63 bcf

Natural Gas

Canadian Reserves: 56 tcf (2004)

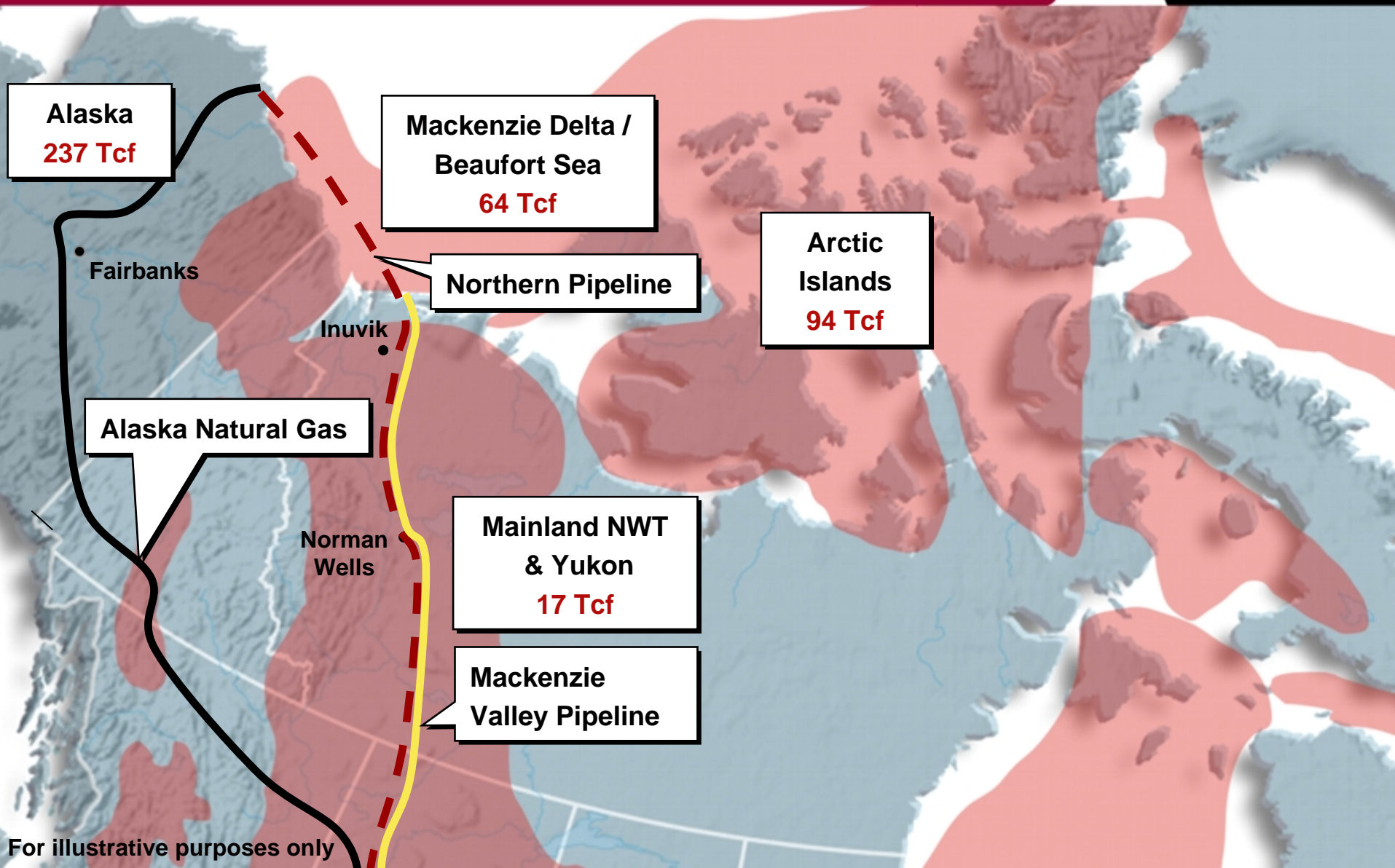
2005 Production/Consumption

	Annual	Daily
Domestic Consumption	2.6 tcf	7 bcf
Exports to US	3.6 tcf	10 bcf
Production	6.2 tcf	17 bcf

Canadian Natural Gas Outlook

- Conventional production maturing
(flat; medium term moderate to sharp decline)
- Atlantic Offshore (flat)
- Coal bed methane; growing from small base
- Arctic basins / pipelines
- Offshore LNG

Northern Natural Gas: Ultimate Potential and Proposed Gas Routes



Uranium

- Canada has the second largest and best quality uranium reserves in the world
- Canada is the world's largest uranium producer, at one-third of global mining production
- All production comes from the province of Saskatchewan
- Uranium imports have large variances from year to year. On average, Canada provides about a third of the uranium used in US reactors or roughly six percent of the electricity generated

Electricity

- Canada and the US have an integrated electricity grid as the 2003 East Coast blackout demonstrated.
- Our integrated grid takes advantage of time-of-day and seasonal differences in consumption
- Canada and the US supply each other with effectively all of our electricity imports
- The US generates 98% of its electricity; 2% Canada
- From BC through Manitoba to Quebec and Labrador, Canada has the capacity to develop an estimated 34,000 Megawatts of additional hydroelectricity, enough to supply another six percent of the US market.

Trilateral Energy Cooperation

- North American Energy Working Group
- Security and Prosperity Partnership:
develop the North American Energy
Security Initiative.

Conclusions

Canada has successfully developed its energy resources through a market based model.

Increasing environmental sustainability is a critical component.

Canada's contribution to hemispheric energy is through its oil, natural gas and electricity exports to the US.

- Oil: exports will increase (oil sands, Atlantic offshore)
- Natural gas: building Arctic pipelines is a priority.
- Electricity: more hydro can be developed for the US.

Canada is increasing its energy dialogue with its NAFTA partners on all aspects of energy policy.