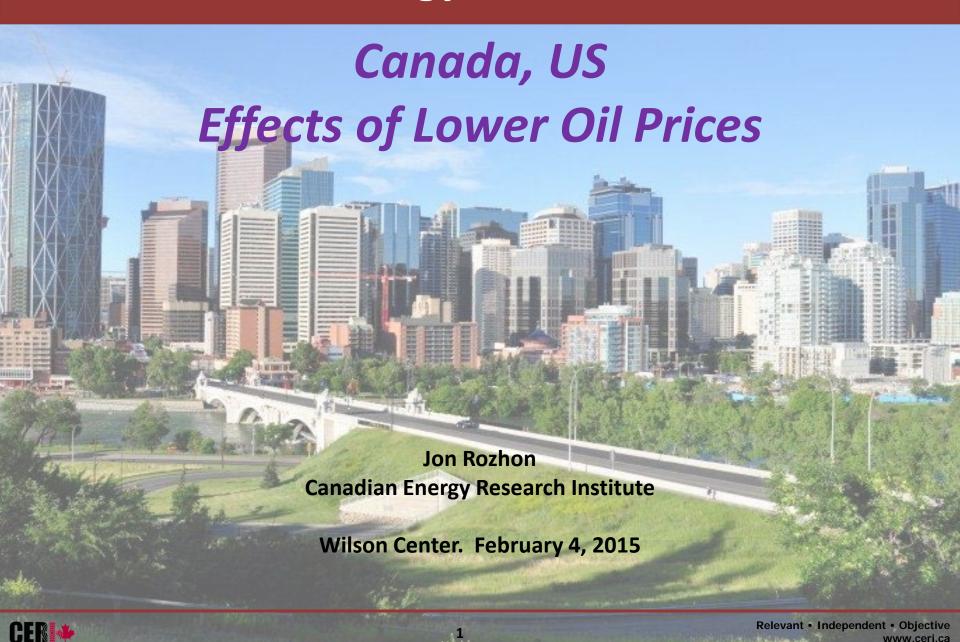
Canadian Energy Research Institute



Canadian Energy Research Institute (CERI) Overview

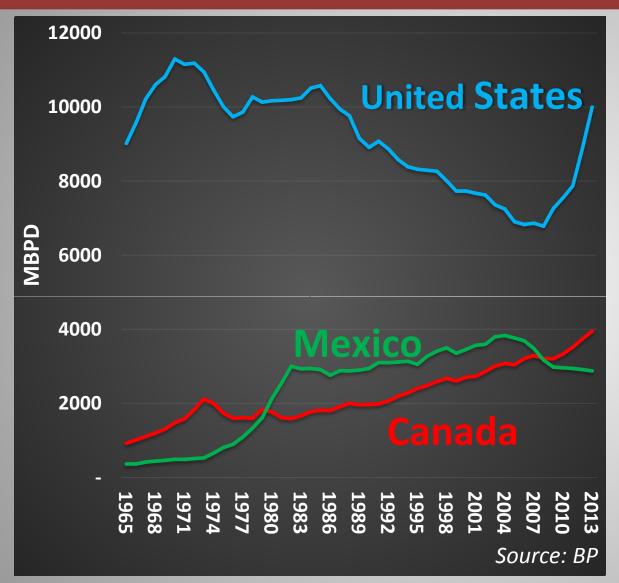
- Celebrating our 40th year in 2015
- Not-for-profit
- Relevant, independent, objective economic research in energy & the environment
- Inform policy, business, media, public
- Main Sponsors: Government of Canada, Government of Alberta,
 Canadian Association of Petroleum Producers (CAPP)

All CERI research is publically available at

www·ceri·ca



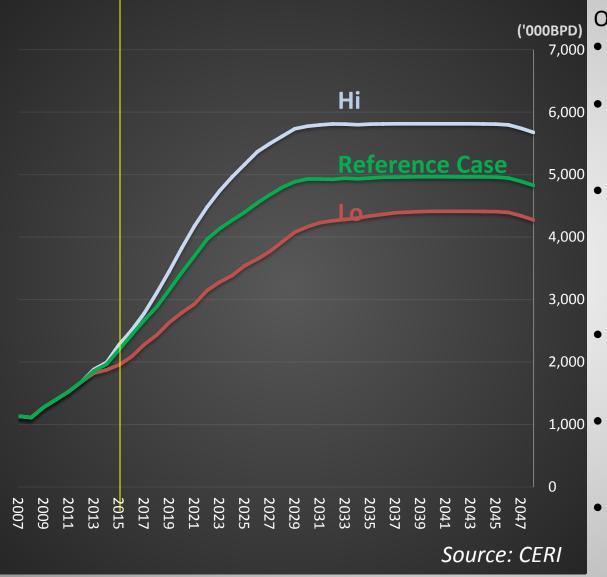
Domestic Oil Production



- US production climbing at pace unheard of in recent times -technologically driven growth
- Canada production growing steadily – as conventional production drops, oil sands pick up
- Mexico production in decline
 For a decade, so constitutional change to attract foreign companies



The situation in Canada's Oil Sands



Oil Sands

- Production ↓ ~ 10% in 2020
 from earlier forecasts
- Suncor \$1 billion CAPEX cut, 1000 jobs cut; 2 projects delayed
- CNRL \$2.4 billion CAPEX cut;
 SAGD reduced; Horizon mine intact
- But 425,000 bpd capacity increase in 2015, ~200 to 350 kbpd over next 3 to 4 years
- 3 million bpd oil sands production in 2020, up from
 2 million bpd in 2015.
- Earlier forecasts were for production in excess of 3.4 million bpd in 2020



Canadian Economic outlook

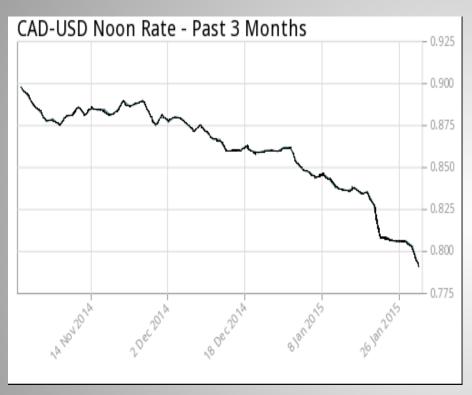


Image Source: Bank of Canada

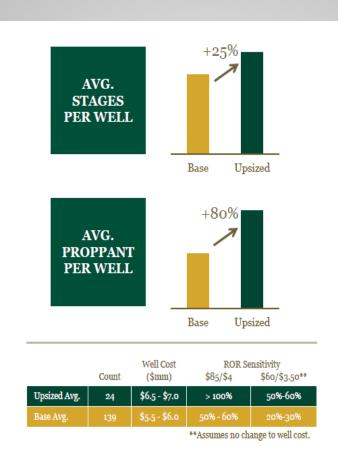
- Weak dollar, low oil price good news for Canadian manufacturers
- Plunge in oil price caused Finance
 Minister to postpone 2015 budget to
 April
- Low oil price to reduce federal revenues by more than \$8 billion
- Balancing the budget still possible in 2015 with a sustained \$48 oil price, says PBO

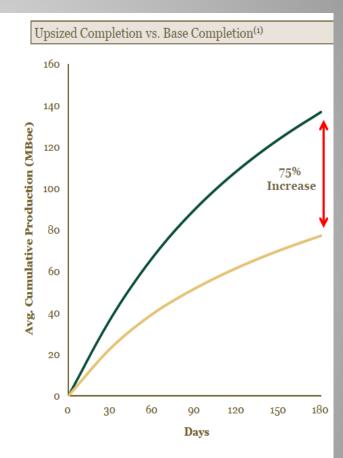


The situation in the US

- Oil production 180% since 2008
- Technology has helped feed "addiction to oil"
- Technology made 80% of US oil economic at \$70
- Technology made 50% of US oil economic at \$60
- Technology will make ...% of US oil economic at \$50?

Innovation & cost reductions keeping US oil in the game





(1) Production data normalized for a 4,300° lateral. Rate of return based on \$85/Bbl of oil and \$4/Mcf of gas and \$60/Bbl of oil and \$3.50/Mcf of gas. \$60/\$3.50 price scenario assumes no change to well cost.

Source: Concho Resources



After Oil Bottoms out, then what? \$100 oil?

Saudi Prince Al Waleed Bin Talal – "We'll never see the price of oil again at \$100."

Daniel Yergin – "Never say never" Oil went to \$115 with the emergence of ISIS

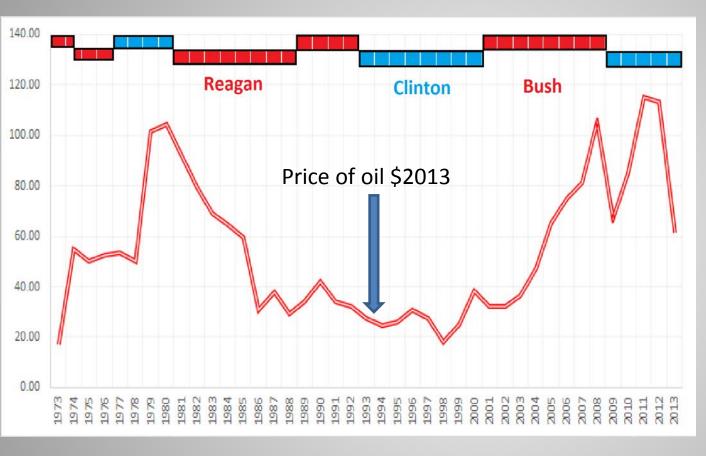
T. Boone Pickens – Bin Talal "doesn't know what he's talking about." When the US shuts down rigs the price will rise.







Another explanation for low oil prices



- The theory inverse relationship between price of oil and US\$
- Reagan, Clinton strong US dollar presidents
- Bush Jr., Obama weak US dollar presidents
- Forget geopolitics,
 Forget supply/demand,
 according to this
 theory...



The Long Haul

- low oil prices <u>cyclical</u> not structural
- Prices came down because of
 - 1. Supply glut
 - 2. Efficiencies
 - 3. less geopolitical uncertainty
- CAPEX will slow at first; investors cautious with committing funds to large projects
- But global demand has been growing and will continue to grow.
- The oil plunge of 2014-16 will be a distant memory as oil prices rise in future.

