

**Province of Alberta**  
**Asia Investor Meetings**  
**October, 2016**

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**Treasury and Risk Management**

**and**

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**Capital Markets, Treasury Board and Finance**

# Canada

## Quick facts

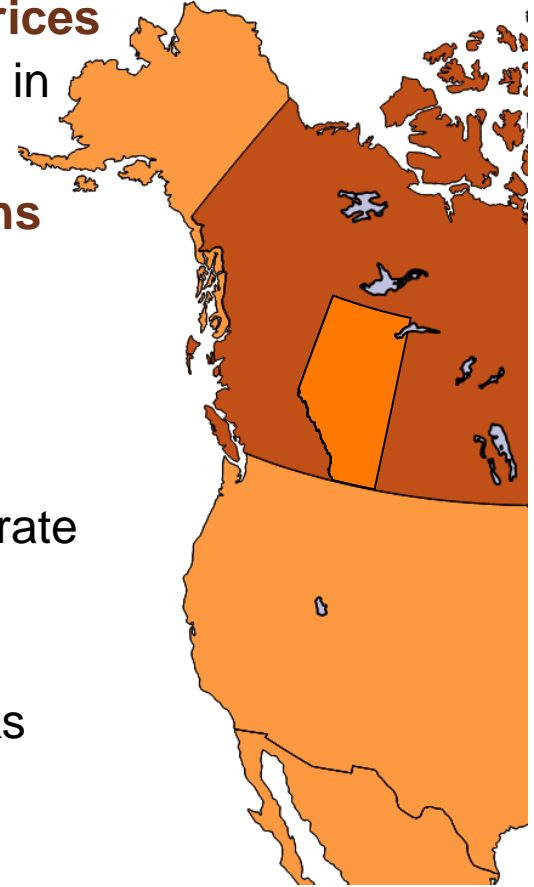
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- **10th largest economy and 7th least risky country in the world<sup>(1)</sup>**
- **Federal Government, 10 Provinces and 3 Territories**
  - Westminster parliamentary system
- **GDP of US\$1.6 trillion in 2015**
  - Major industries include natural resources and manufacturing
- **Population of 36M; highest growth rate in G8 during last decade**
  - Moderate unemployment rate at 6.9%
- **Provinces have significant autonomy**
  - Responsible for health care, primary and post-secondary education
  - Considerable taxing powers, including personal income, corporate income, value added/sales, fuel and payroll taxes
  - Provincial ownership of natural resources

(1) Euromoney Country Risk score

# Despite oil price drop, Alberta's economic strength & solid fundamentals remain

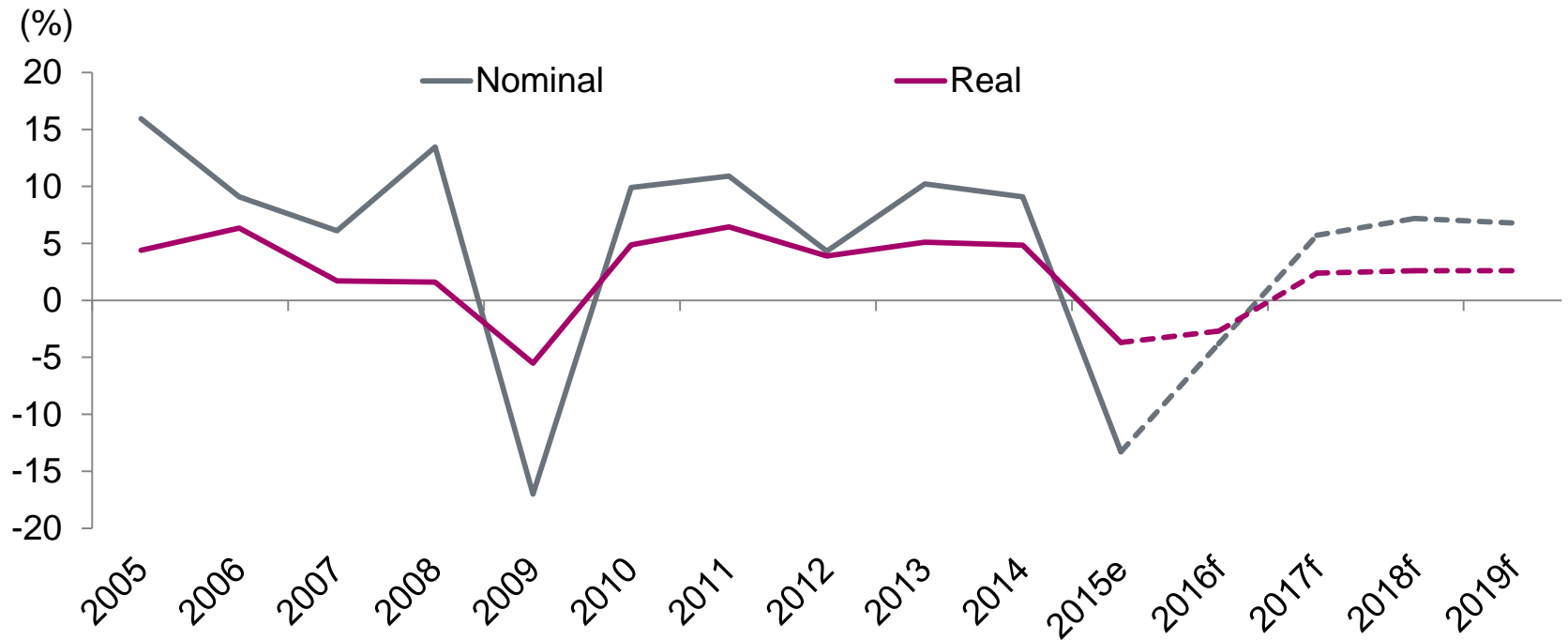
- **Alberta's (AB) economy hit hard by drop in oil prices**
  - Real GDP recovery starting in 2017, after declines in 2015 and 2016
- **Economy has softened, but core strength remains**
  - Broad-based economic growth
  - Economy is very capital intensive
  - Highest GDP per capita of any province
  - Unemployment rate at 20-yr high
    - However, AB still has the highest employment rate and average incomes of any province
- **Continue to have solid fundamentals.**
  - Demonstrated resiliency to commodity price shocks
  - Skilled workforce, with young population
  - Largest fiscal capacity among provinces



# Economic structure

## Low oil prices hit AB economy

### Alberta GDP growth



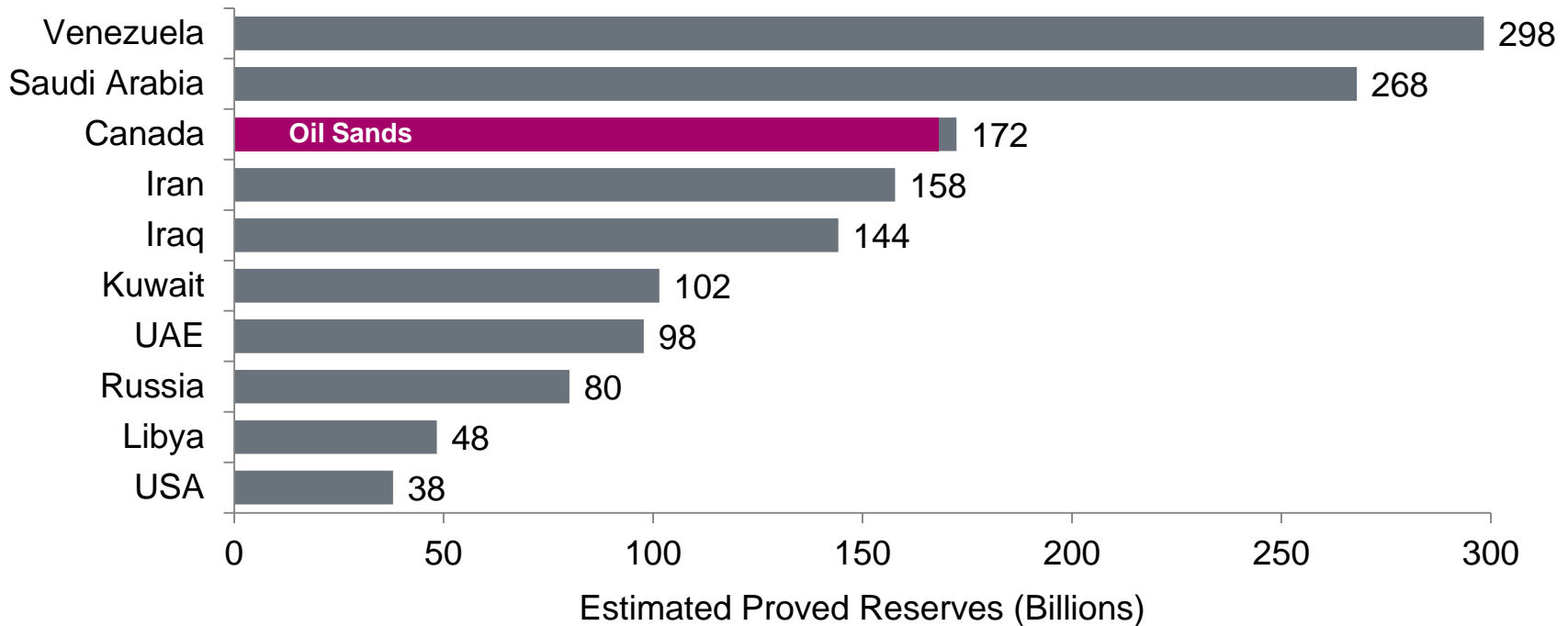
**Real GDP recovery starting in 2017, after declines in 2015 and 2016**

Sources: Statistics Canada and Alberta Treasury Board and Finance

# Economic structure

## AB's oil reserves ranked 3<sup>rd</sup> in the world

### 2015 Global Oil Reserves



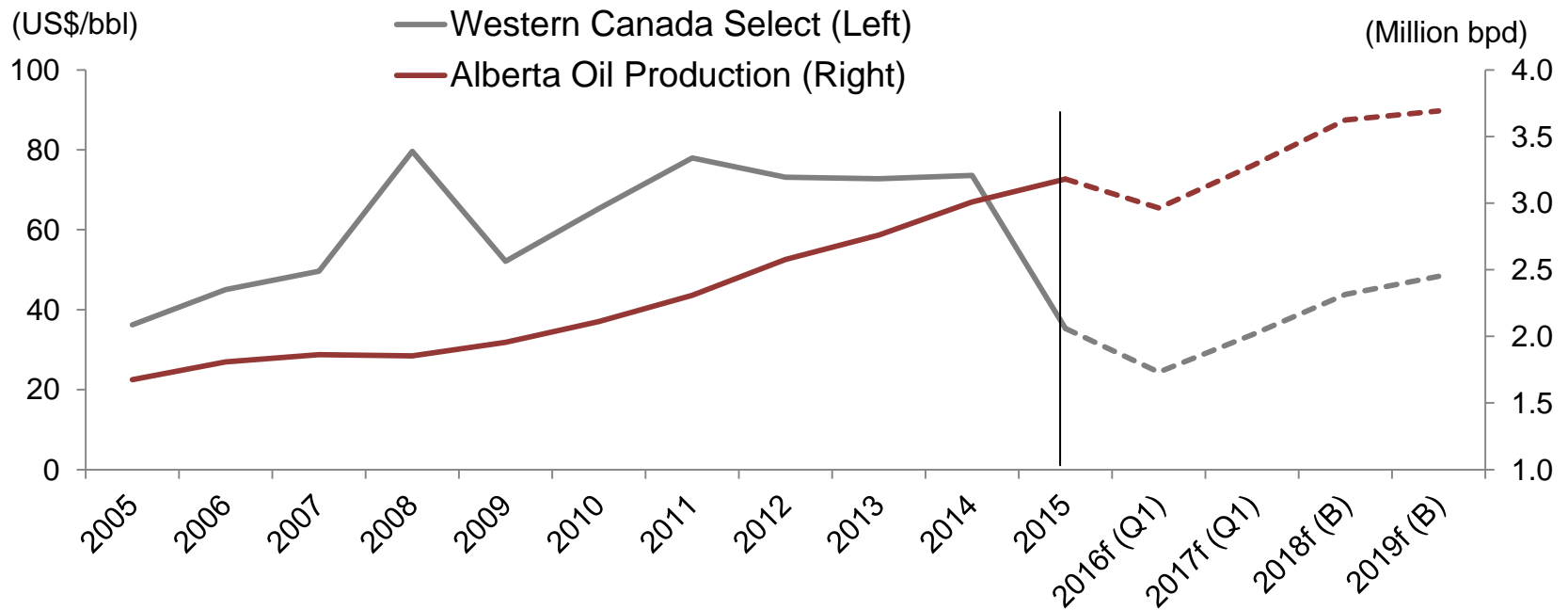
### AB's reserves are massive and open to private investment

Source: Alberta Energy, International Energy Agency, Alberta Energy Regulator, OGJ

# Economic structure

## Oil production growing despite price drop

### AB Oil Production and Western Canadian Select Heavy Oil Benchmark Price



**Despite price declines, production continues to rise**

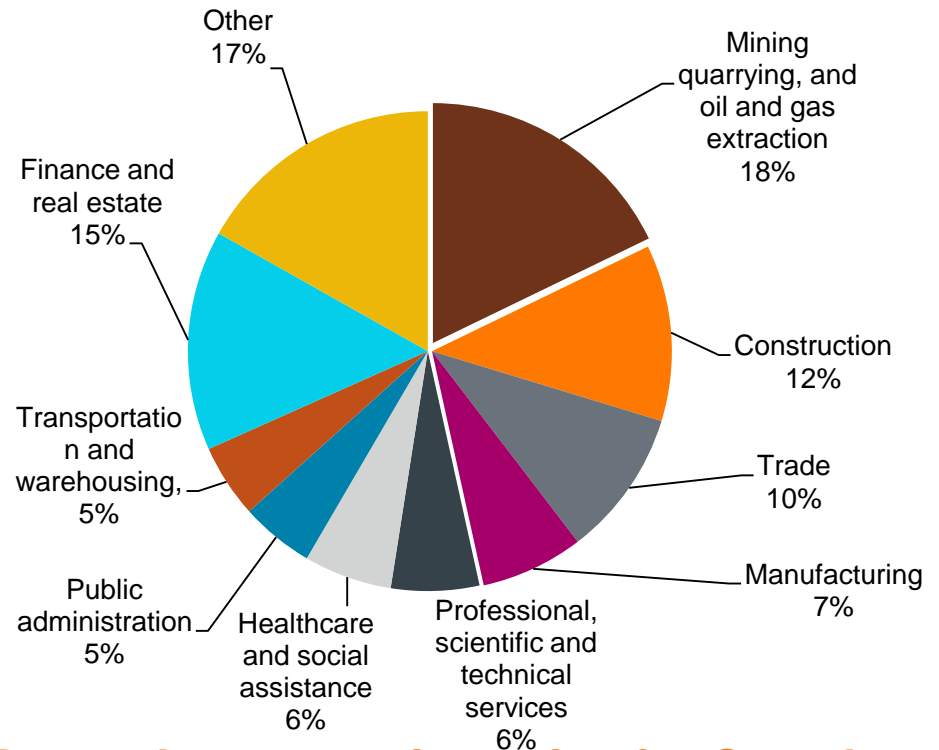
Sources: Alberta Energy and Statistics Canada, f-forecast, Q1-first quarter update, B-2016 Budget

# Economic structure

## AB's economy at a glance

- Between 2000 and 2014, the province experienced broad-based industry growth that outpaced the rest of Canada
- In 2014, AB contributed almost 20% to national GDP and 25% to exports
- AB's share of the national population is about 12%
- Young, skilled population with highest employment rate (around 66%) in Canada, despite significant layoffs in 2015 and 2016

Share of nominal GDP by industry, 2015



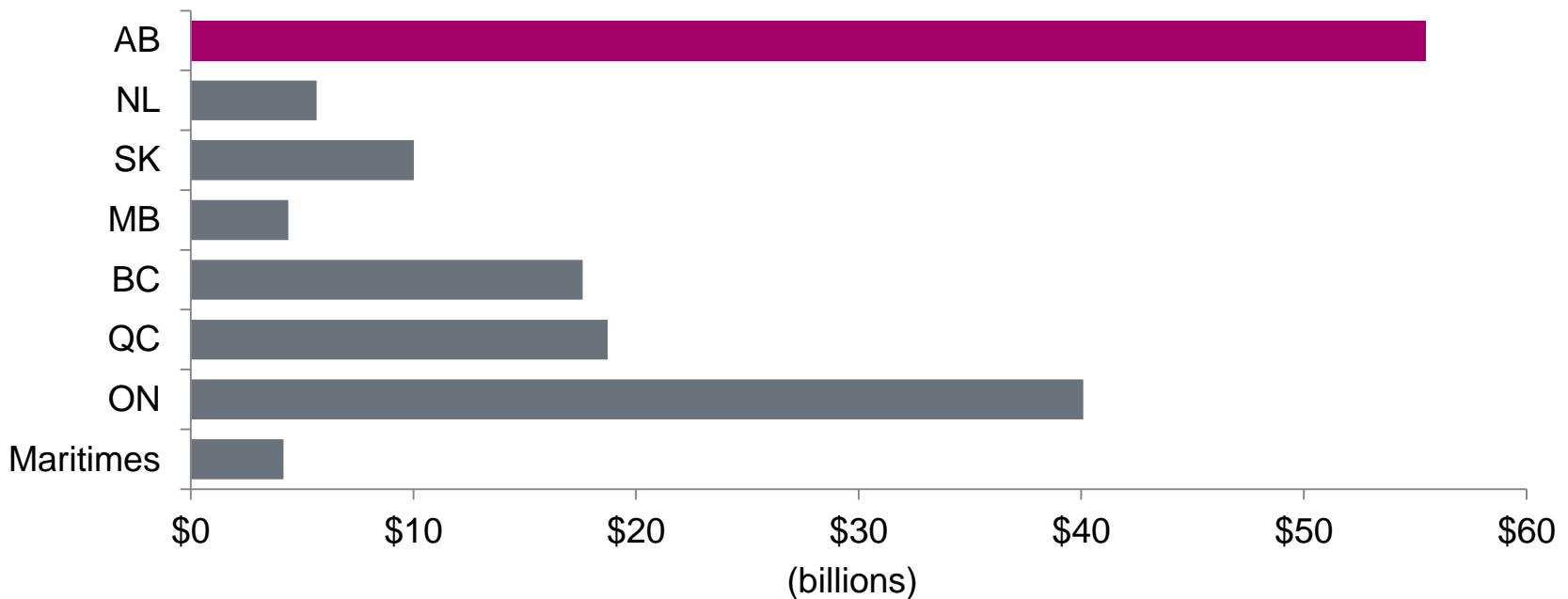
**Growing by ~60% from 2000-14, AB was the economic engine for Canada**

Source: Statistics Canada

# Economic structure

## AB's economy is very capital intensive

### 2016 Private Sector Capital Investment Intentions<sup>(1)</sup>



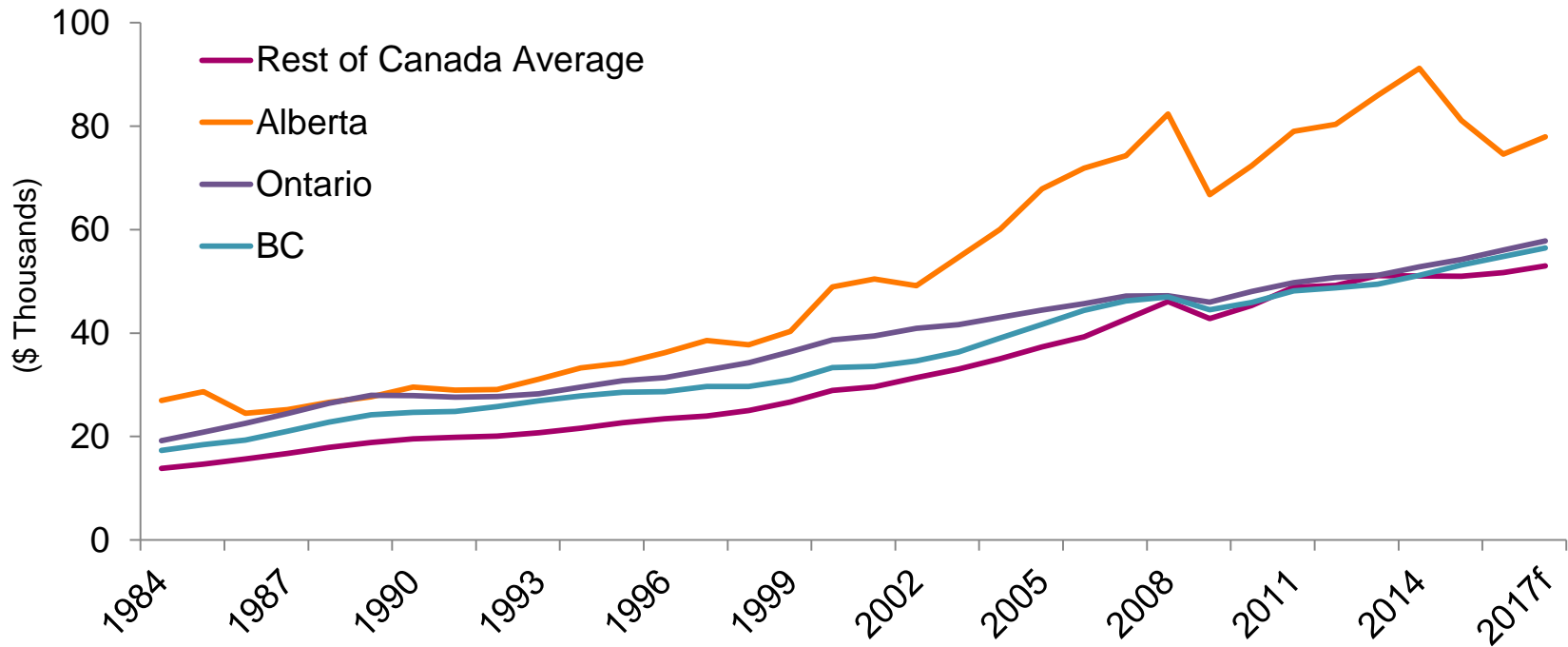
(1) Spending on non-residential construction and machinery and equipment. Source: Statistics Canada, Capital and Repair Expenditures Survey.



# Economic structure

## Long-standing economic prosperity

### Nominal GDP per capita



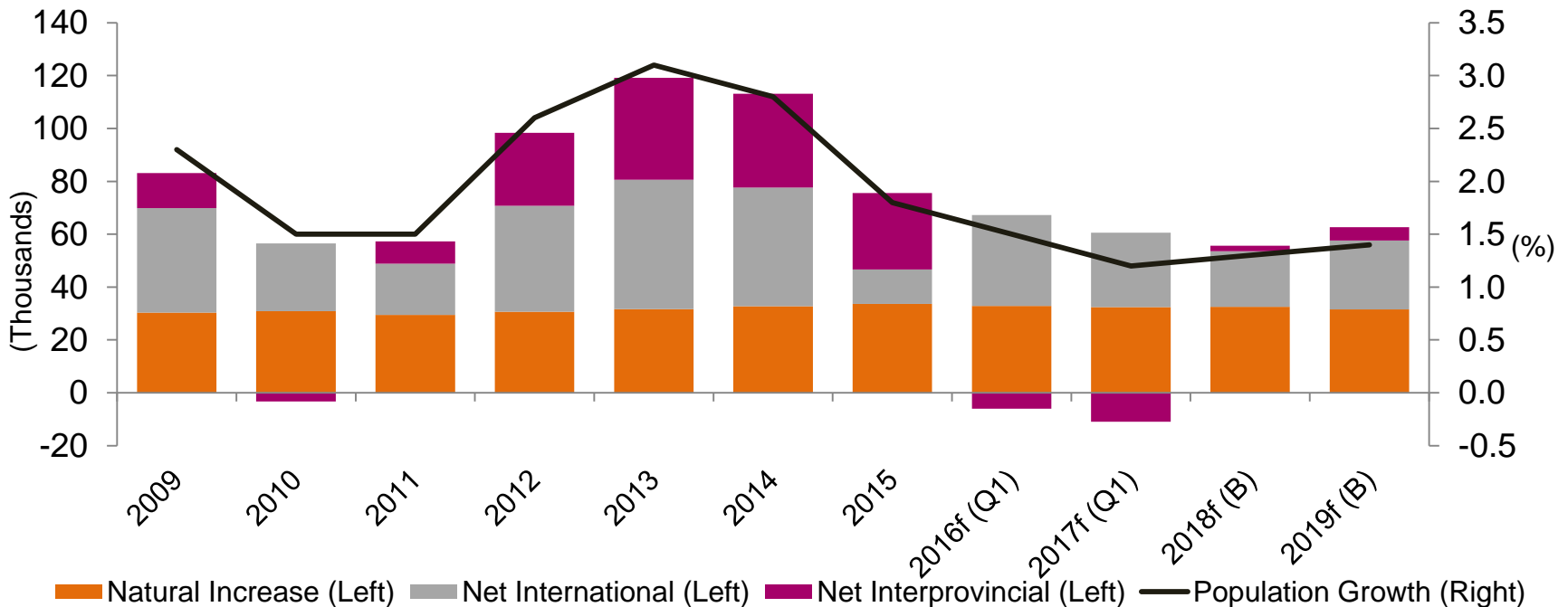
**AB has proven to be resilient in the face of tough economic times**

Sources: Statistics Canada, Alberta Treasury Board and Finance and TD Economics (July 6, 2016)

# Economic structure

## AB's population expected to grow

### Change in the Alberta population by component

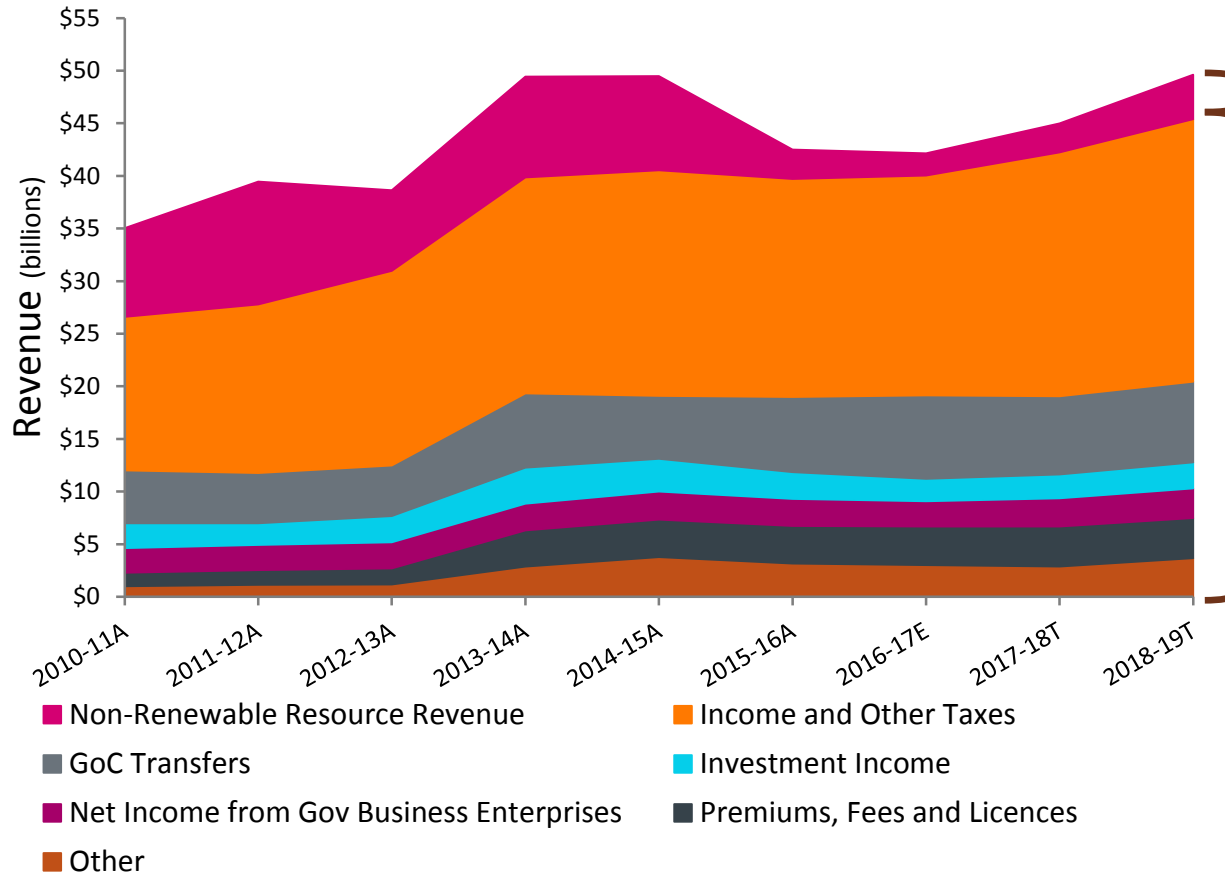


### Population gains driven by natural increases and immigration

Sources: Statistics Canada and Alberta Treasury Board and Finance, f-forecast, Q1-first quarter update, B-2016 Budget

# Fiscal policy

## Revenue sources<sup>(1)</sup>



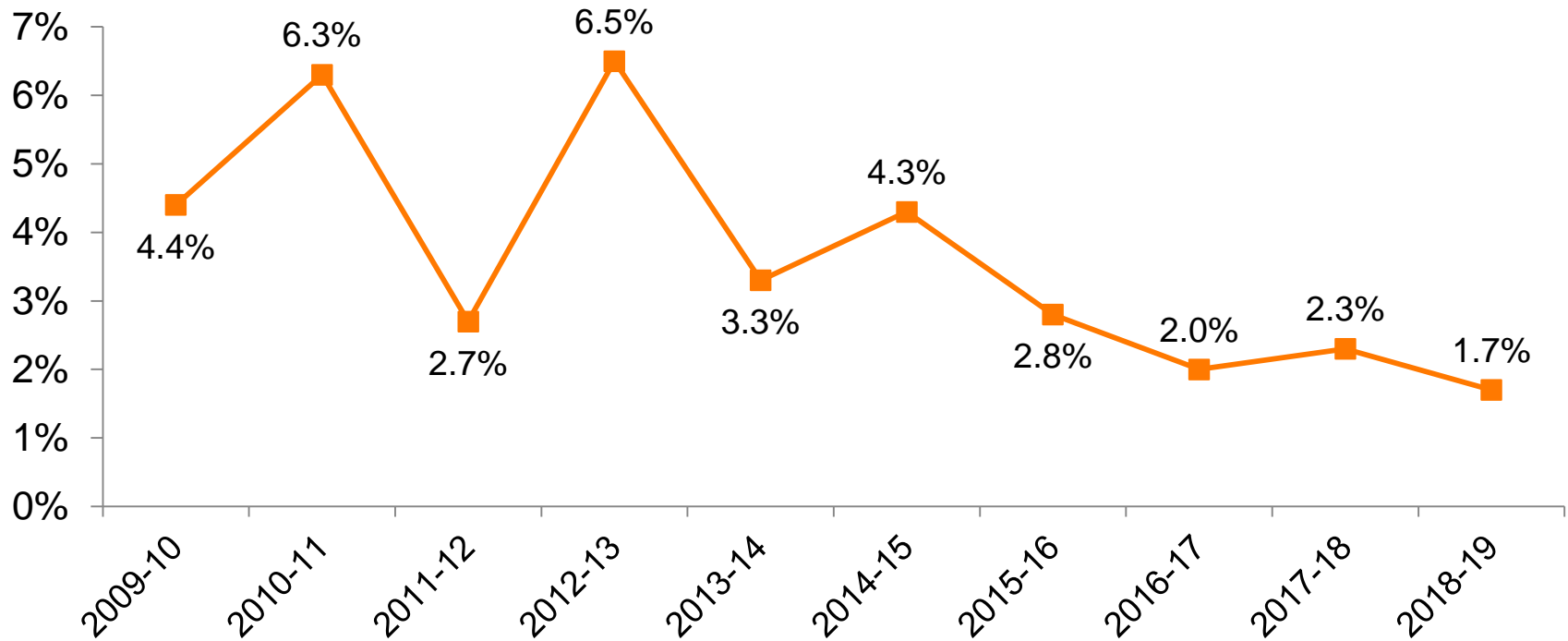
- Non-Renewable Resource Revenue can be large, but variable
- Combined other sources provide stability and support growth

(1) A=Actual, E= Estimate, T=Target.

# Fiscal policy

## Managing Expenses

### Operating Expense Increases



Source: Alberta Treasury Board and Finance, Budget 2016

# Fiscal policy - Q1 update

## Key metrics

### Fiscal policy

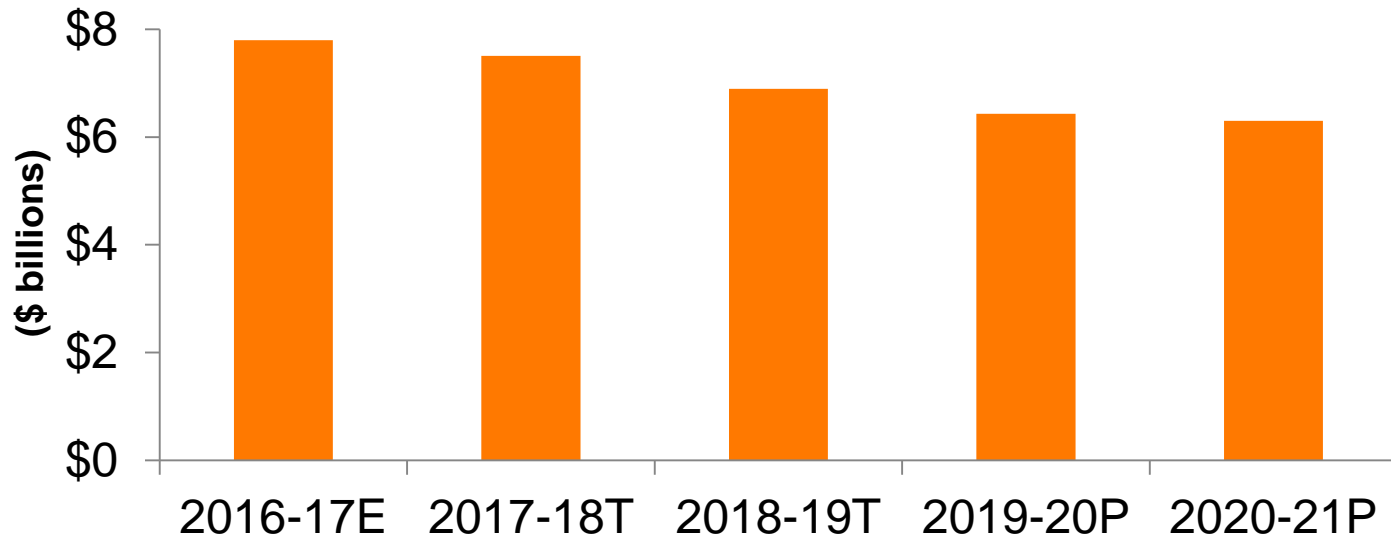
- **Contain rate of growth of government operating expense to the rate of population growth plus inflation**
- **Manage province's fiscal position with a long-term view**
  - Maintain government services, instead of making drastic cuts

	Actuals		Budget	Q1 Forecast	Budget Targets	
	2014-15	2015-16	2016-17	2016-17	2017-18	2018-19
Consolidated Revenue	49.5	42.5	41.4	42.1	45.0	49.6
Consolidated Expense	48.4	48.9	51.1	52.3	53.6	56.0
<b>Surplus / (Deficit)</b>	<b>1.1</b>	<b>(6.4)</b>	<b>(9.7)</b>	<b>(10.2)</b>	<b>(8.6)</b>	<b>(6.4)</b>
Risk Adjustment	-	-	(0.7)	(0.7)	(1.5)	(2.0)
<b>Surplus / (Deficit) After Risk Adjustment</b>	<b>1.1</b>	<b>(6.4)</b>	<b>(10.4)</b>	<b>(10.9)</b>	<b>(10.1)</b>	<b>(8.4)</b>

# Fiscal policy

## Capital Plan

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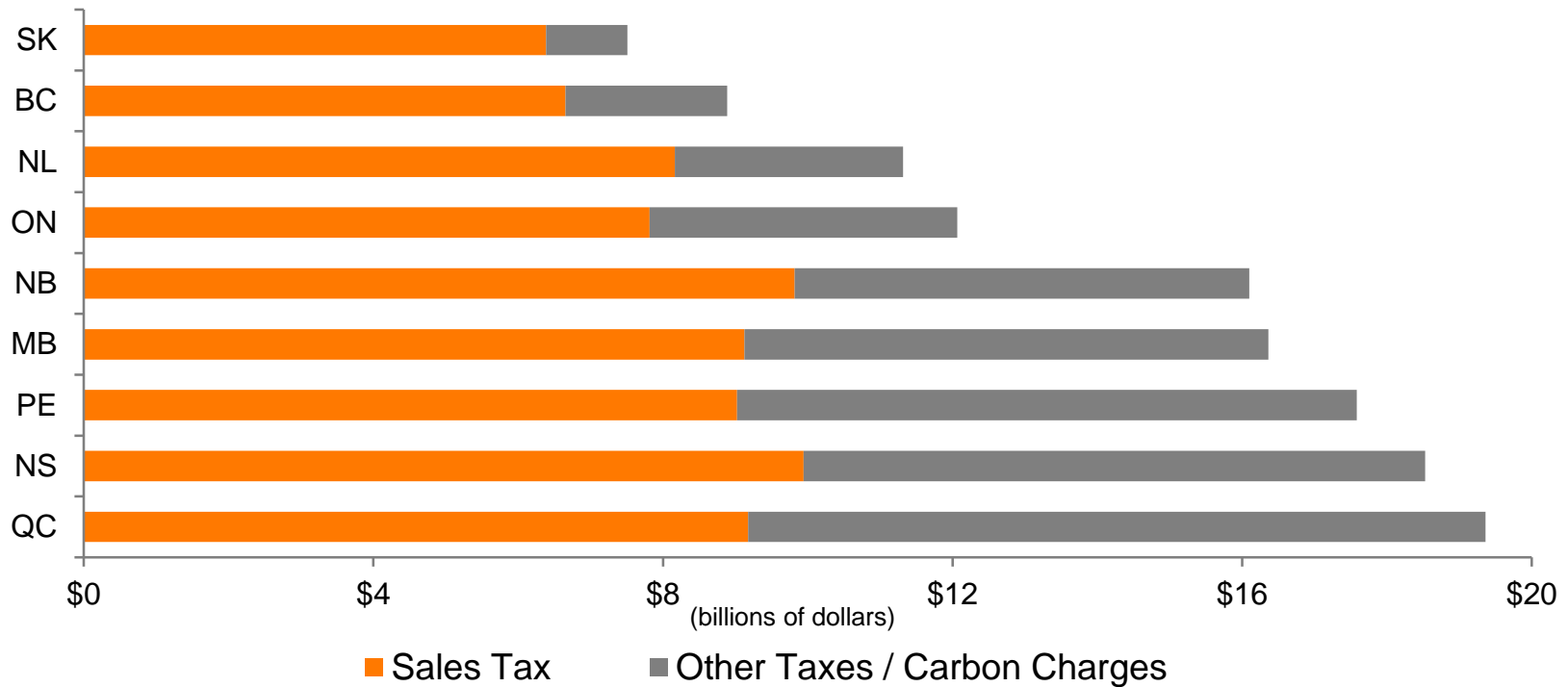
- **\$34.8B over 5 yrs**
- **Additional \$4.4B will be self-financed by Alberta Health Services, post secondary institutions and school boards over 5 yrs**

(1) E= Estimate, T=Target, P= Projected.

# Fiscal policy

## AB's fiscal capacity

AB's Tax Advantage estimated at \$7.5B<sup>(1)</sup>

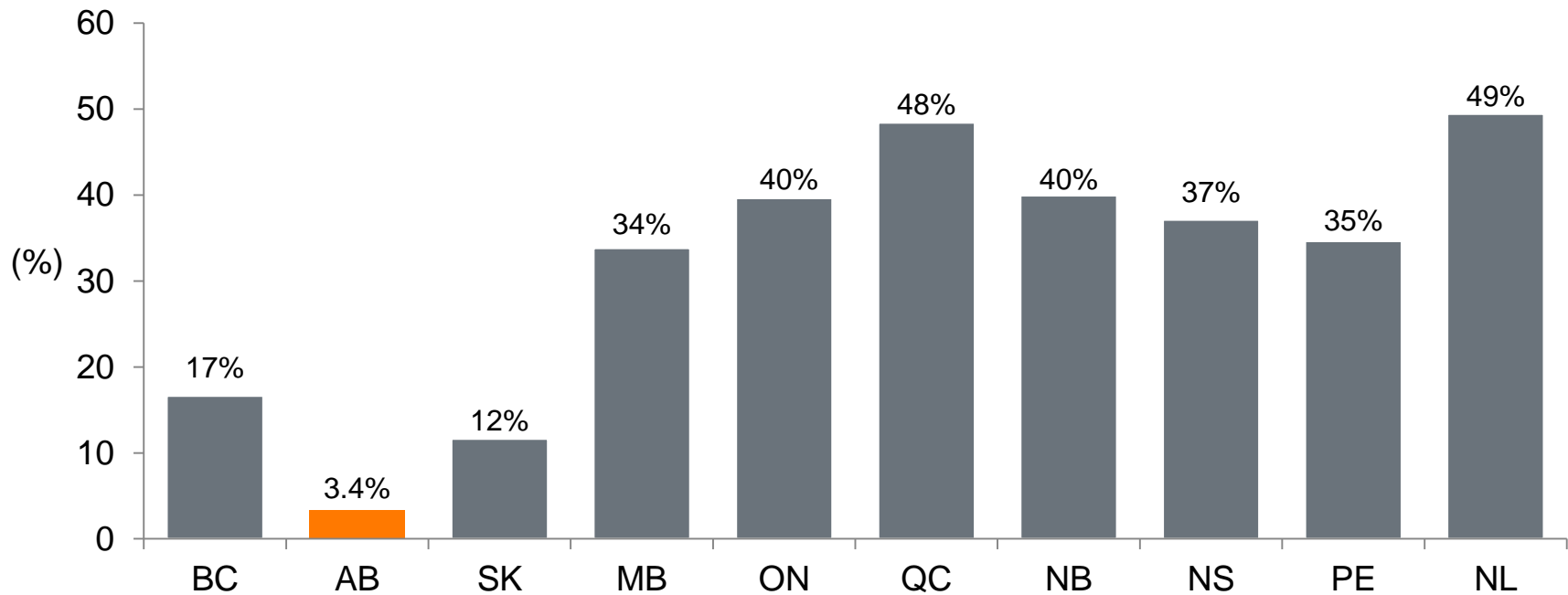


(1) Reflects total additional provincial tax and carbon charges that individuals and businesses would pay if Alberta had the same tax system and carbon charges as other provinces (Mar 24/16). Includes personal income, corporate income, sales, fuel, tobacco, payroll, liquor, land transfer and other minor taxes, as well as health premiums, liquor markups and full implementation of announced provincial carbon charge.

# Fiscal policy

## Low debt burden

### 2016-17 Projected Net Debt to GDP<sup>(1)</sup>



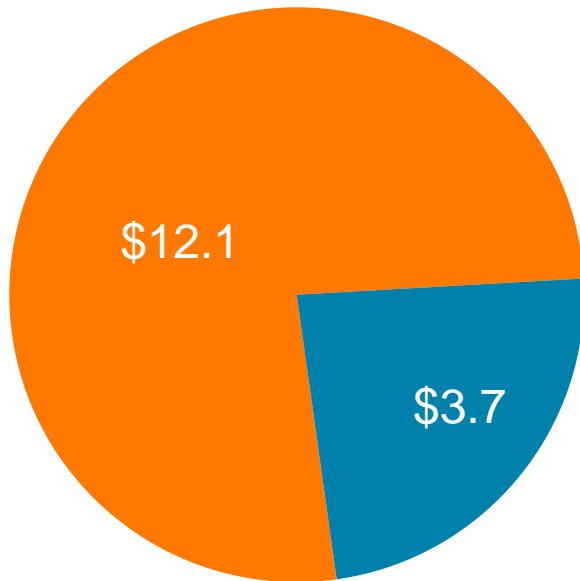
(1) RBC: Public accounts basis. Numbers are based on reports from individual governments and, due to accounting differences, are not strictly comparable between provinces. Sources include: Fiscal reference tables (Department of Finance Canada), various provincial budgets, budget updates and public accounts. As of Aug 23, 2016



# Financial management

## Borrowing program

### 2016-17 Borrowing



- Direct Borrowing
- Provincial Corporations

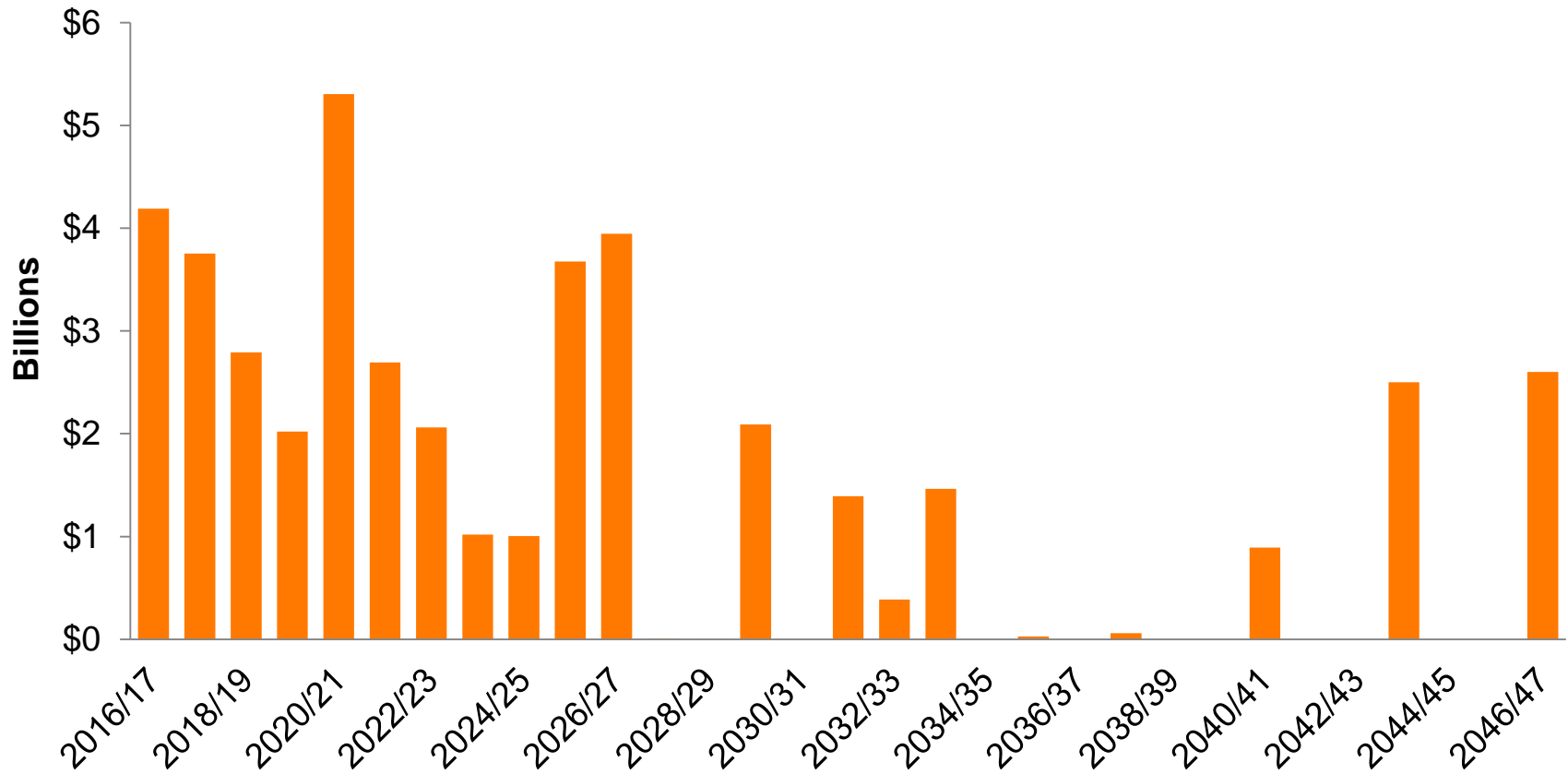
### Borrowing Requirements

(\$ billions per Q1 Update)	New	Total <sup>(1)</sup>
2016-17 Estimate	\$13.2	\$15.8
2017-18 Target	\$16.2	\$19.8
2018-19 Target	\$13.8	\$16.6

(1) Includes new and re-financing of maturing term debt.

# Financial management

## Maturity profile & liquidity<sup>(1)</sup>



(1) As of Aug 26, 2016

# Financial management

## Borrowing platform

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**Maintain strength of borrowing platform in domestic market and build on strength in international markets**

### **Domestic market**

- **Ensure liquidity**
  - Maintain larger domestic benchmark sized issues (\$3-\$4B)
  - Infrequent domestic MTN issuance
  - Monitor secondary market liquidity
- **Control domestic supply**
  - Target issuance of 30%-40% or more to international markets
  - More frequent large US\$ benchmarks
  - Opportunistic multi-currency issues

# Financial management

## Borrowing platform continued

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### Foreign currency borrowing

- **US\$ Global Issues in 3, 5, 7, and 10 years**
  - Expect more frequent issuance as SEC Registered program comes online in late 2016.
  - US\$ CP program online with SEC Registration
- **Continued Euro placements in longer terms with potential for larger benchmark issues**
- **MTN and structured issues in other currencies, including under the new AUD program as opportunities arise**

**International issuances support growth in expanded international borrowing program**

# Summary

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- **Strong economic base**
- **Demonstrated resiliency to past commodity price shocks**
- **Continued high level of fiscal capacity**
- **Strong bond ratings**
- **Multi-currency, multi-market borrowing platforms**
- **Strong secondary liquidity**

# Information and contact

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## Websites

Province of Alberta  
Alberta Treasury Board and Finance  
Budget 2016  
Economy and Statistics  
Debt Information

[alberta.ca](http://alberta.ca)  
[finance.alberta.ca](http://finance.alberta.ca)  
[budget.alberta.ca](http://budget.alberta.ca)  
[finance.alberta.ca/aboutalberta](http://finance.alberta.ca/aboutalberta)  
[finance.alberta.ca/business/borrowing](http://finance.alberta.ca/business/borrowing)

## Contact

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# Appendix

# Q1 Update Assumptions<sup>(1)</sup>

## Appendix

	Actual	Budget	Q1 Forecast	Budget 2016 Targets	
Fiscal Year (Apr- Mar 31)	2015-16	2016-17	2016-17	2017-18	2018-19
<b>WTI Oil (US\$/bbl)</b>	45.00	42.00	45.00	54.00	64.00
<b>Light-Heavy Differential (US\$/bbl)</b>	13.40	15.20	14.10	17.50	18.50
<b>Natural Gas (CDN\$/GJ)</b>	2.21	2.40	1.90	2.80	3.00
<b>Exchange Rate (US cents/CDN\$)</b>	76.3	73.5	77.0	75.5	77.5
Calendar year	2015E	2016B	2016F	2017T	2018T
<b>Real GDP Growth (%)</b>	-3.7	-1.4	-2.7	1.9	2.8
<b>Employment Growth (%)</b>	1.2	-1.7	-1.7	0.9	2.1
<b>Unemployment Rate (%)</b>	6.0	8.0	8.0	7.5	6.5
<b>Population Growth (%)</b>	1.8	1.2	1.5	1.0	1.3

(1) A=Actual, B=Budget, T=Target, F= Q1 Forecast. Source: Statistics Canada, Alberta Energy, Alberta Treasury Board and Finance



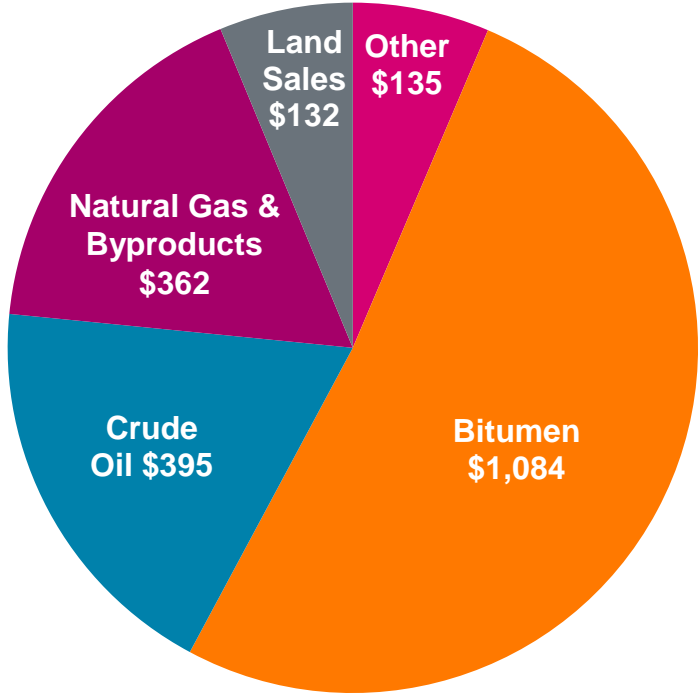
## Wood Buffalo Regional Fire

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- **More than 88,000 residents evacuated, 1,500 residential and commercial structures destroyed, and hundreds more damaged**
  - Evacuation lasted May 3 to June 1st, but many services did not return until later in the month
- **Insurable losses estimated by the IBC<sup>(1)</sup> to be \$3.6B, exceeding both the 2013 AB Floods and 1998 Ontario/Quebec ice storm**
- **Estimated 0.6% net impact on GDP in 2016**
- **2016-17 forecast includes a net \$500M fiscal impact of the wildfire**
  - Disaster Recovery Program expense of \$647M, partially offset by federal assistance of \$452M
  - \$300M in lower non-renewable resource, corporate and personal income tax revenues
  - Likely at least 40M barrels of oil sands production deferred over 2 months

(1) Insurance Bureau of Canada

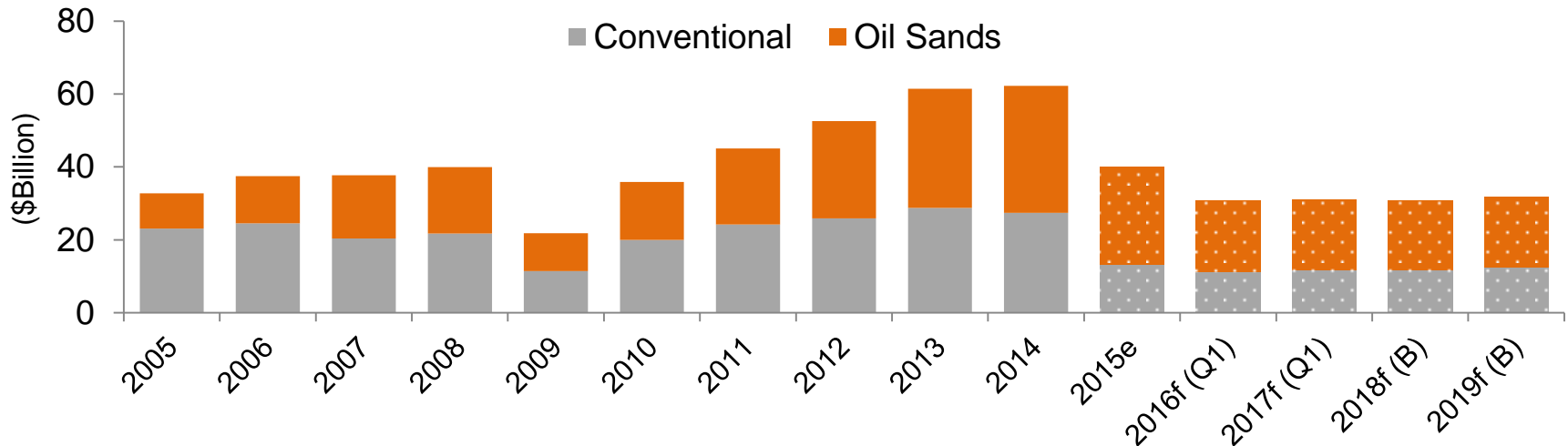
## Budget 2016 sensitivities 2016-17<sup>(1)</sup>

	Change	Net Impact (2016-17)	2016/17 Non-Renewable Resource Revenue \$2.1F
Oil Price (WTI US\$/bbl)	-\$1.00	-\$130M	
Light/Heavy Oil Price Differential	+\$1.00	-\$70M	
Natural Gas Price (Cdn\$/GJ)	-10 Cents	-\$25M	
Exchange Rate (US¢/Cdn\$)	+1 Cent	-\$85M	
Interest Rates	+1%	-\$230M	
Primary Household Income	-1%	-\$170M	

(1) Based on current price and rate assumptions, show effect for a full 12-month period and can vary significantly at different price and rate levels. Energy price sensitivities do not include potential impact of price changes on revenue from land sales. F=Q1 Forecast

## Oil and gas investment to remain lower

### AB oil and gas investment has shifted towards sustaining capital



### Approximate breakeven

#### Conventional oil projects

- ~\$25-\$55 USD/barrel
- Enhanced ~\$50-\$60 USD/barrel

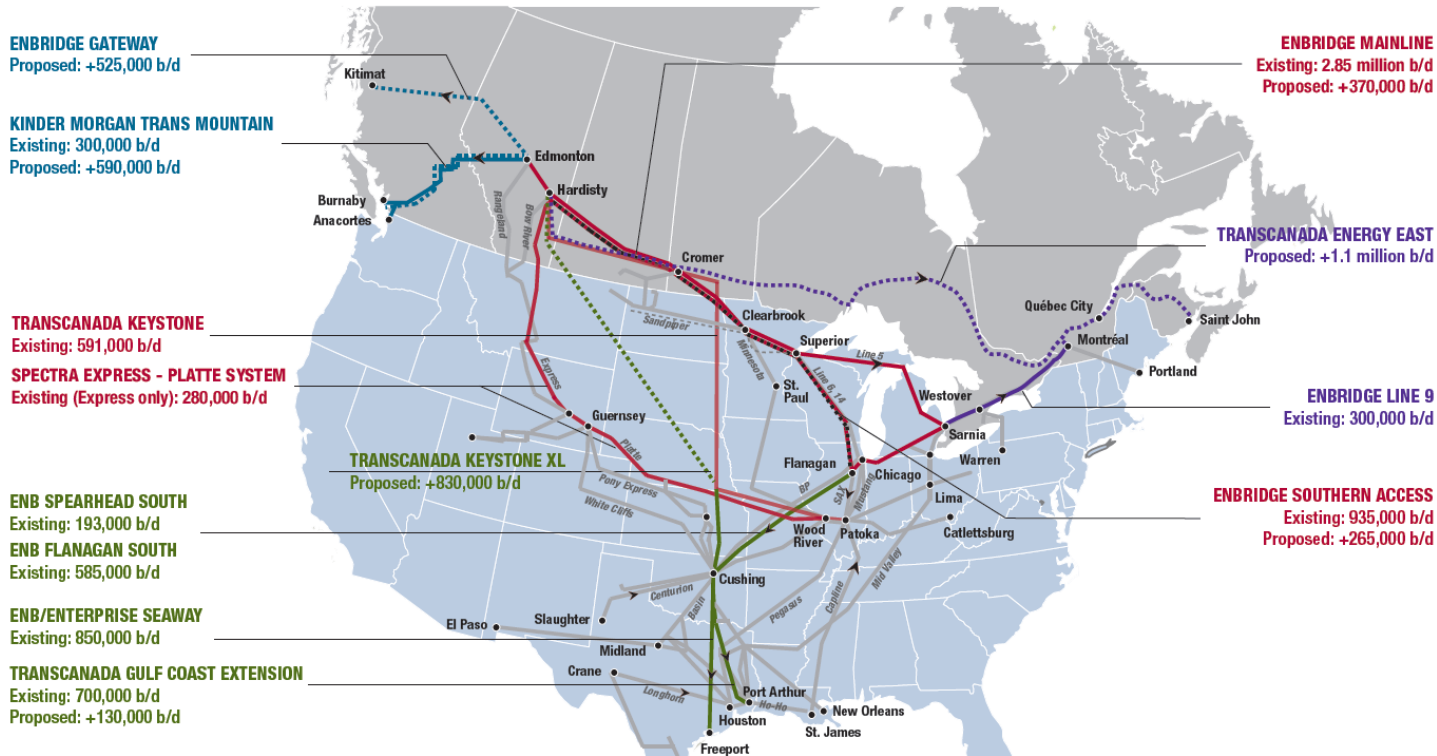
#### Oil sands projects

- Surface mine ~\$80 - \$85 full cycle
- SAGD \$45-\$65 USD/barrel full cycle

Source: Statistics Canada, e-estimate, f-forecast, Q1-first quarter update, B-2016 Budget

## Market access remains key

### Canadian & U.S. Crude Oil Pipelines and Proposals



## Continue to work to improve market access

Source: Canadian Association of Petroleum Producers

## Climate Leadership Plan (CLP)

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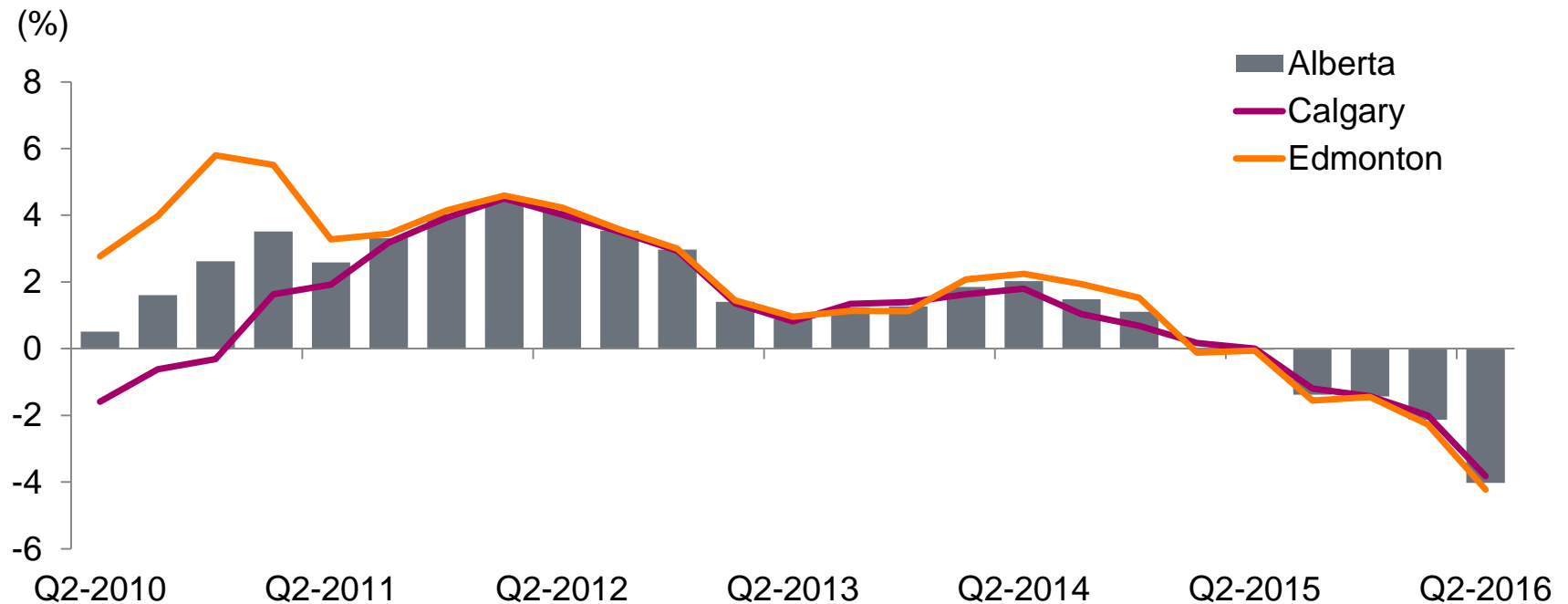
- **A provincial carbon levy to encourage reduced carbon emissions and to reinvest to diversify the energy industry**
- **\$9.6B in gross revenues over 5 years**
  - \$6.2B to be invested in renewable energy, green infrastructure (such as public transit) and energy efficiency initiatives
  - \$3.4B Climate Leadership Adjustment Rebate in the forms of consumer rebates, small business tax reduction, energy transition funding
- **Legislated limit on oil sands emissions**
- **Phase out of coal-fired emissions by 2030**

# Economic structure

## Costs are coming down

# Appendix

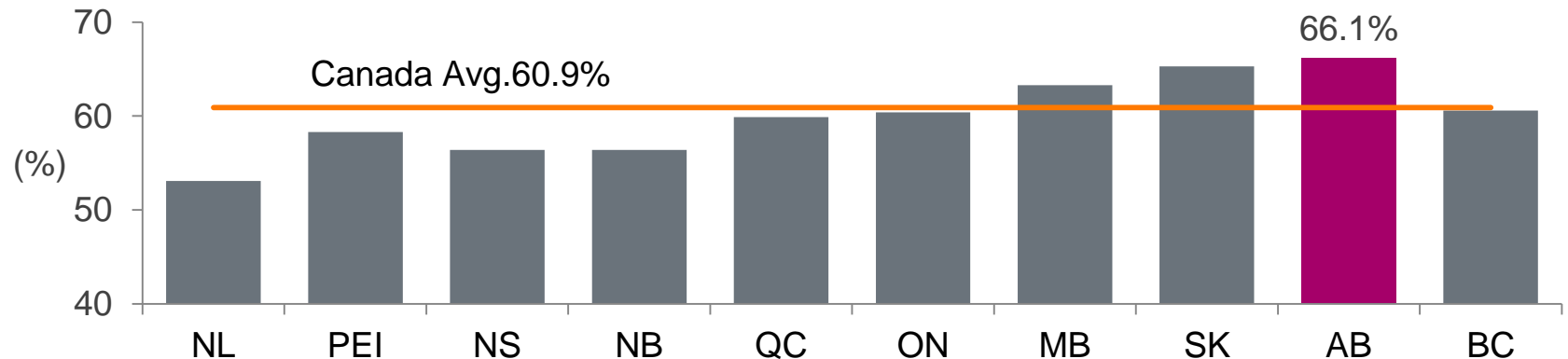
### Year-over-Year change in non-residential construction price index



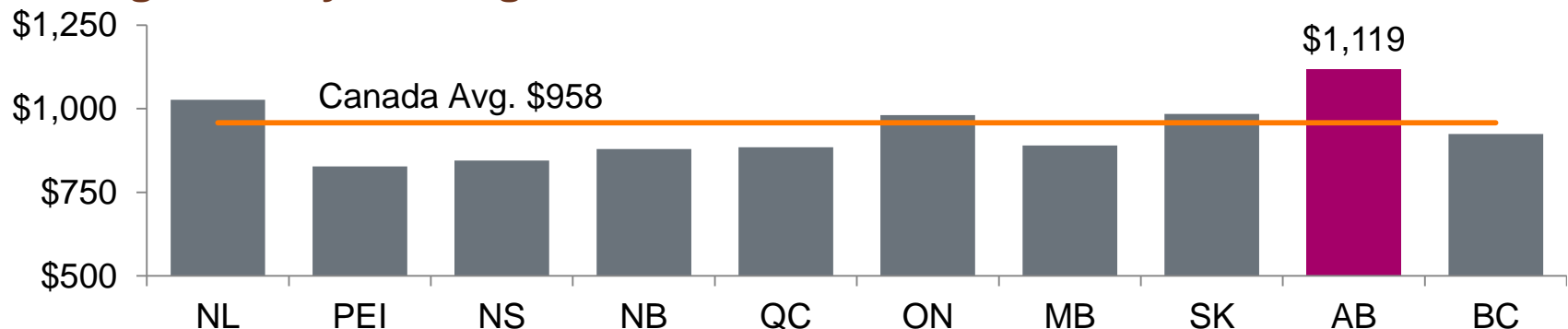
Source: Statistics Canada

## Highest employment rate and incomes

### Employment Rate<sup>(1)</sup>



### Average Weekly Earnings<sup>(2)</sup>

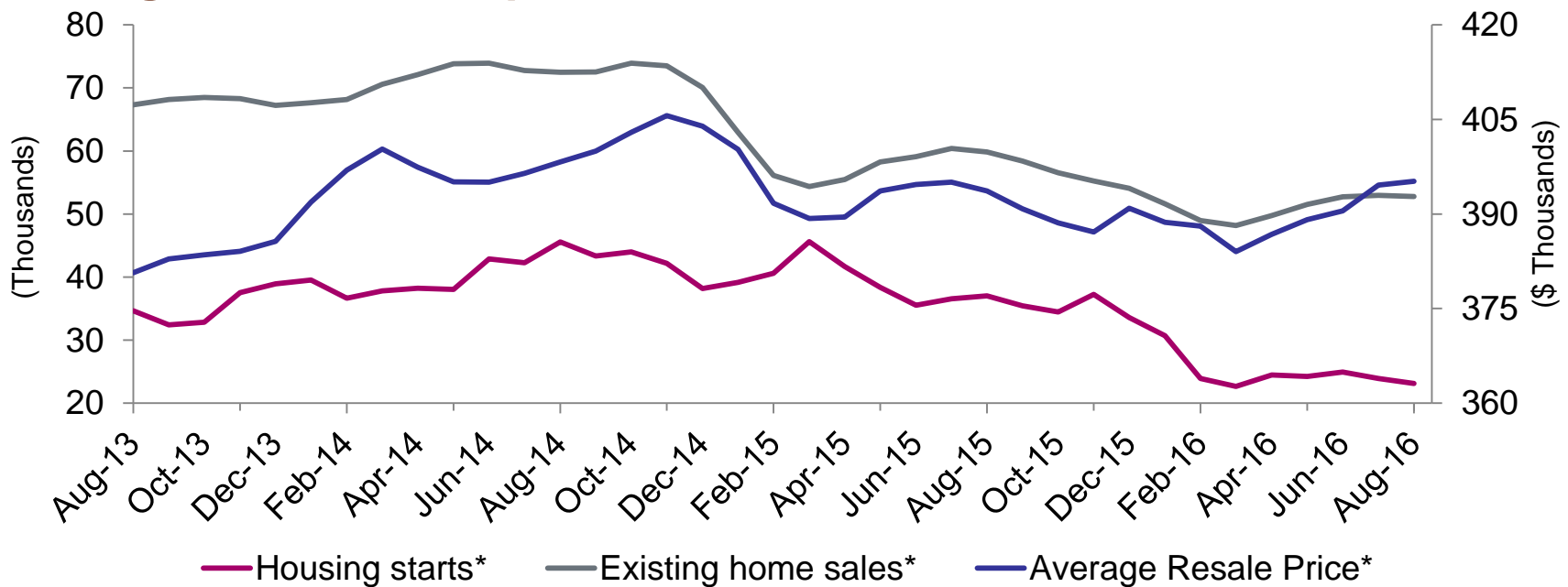


(1) Share of adults (15+) employed as of August 2016. Source: Statistics Canada

(2) Including overtime as of June 2016. Source: Statistics Canada

## Housing activity remains sluggish

Annualized AB housing starts, existing home sales and the average resale home price



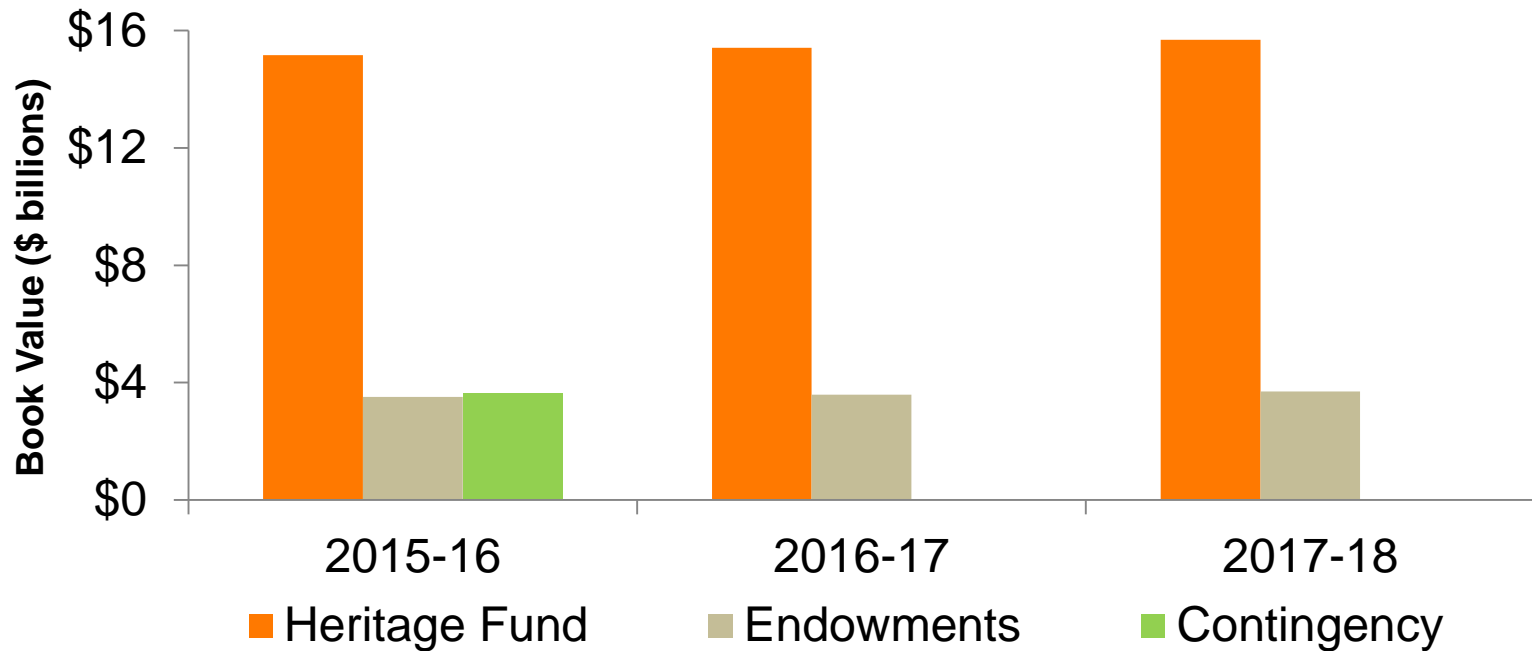
Home prices have held up despite the decline in activity

Sources: Canadian Real Estate Association, Canada Mortgage and Housing Corporation \*3-month moving average



# Financial management Heritage Fund & Endowments

## Appendix



- **Heritage Fund assets remain untouched**
- **Contingency Account exhausted in late 2016-17**

# Financial management

## Credit ratings

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# Appendix

	Long Term	Short Term
S&P	AA	A-1+
Moody's	Aa1	P-1
DBRS	AA (high)	R-1 (high)

## ATB Financial<sup>(1)</sup>

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- **Professionally managed at arms-length basis from government**
  - Credit policies and other risk management not unlike those of any other financial institution
  - Subject to regulatory oversight by provincial and national regulatory bodies
- **An agent of the crown, assets and liabilities belong to the crown**
  - Potential economic loss relatively small in relation to AB's balance sheet, budget and borrowing requirement
  - Less susceptible to the risk of a run due to provincial guarantee of deposits
    - ATB increased deposits during 2008/09 liquidity crisis
  - Capital requirements set by the Minister of Finance
- **Total Assets \$47.7B, Total Liabilities \$44.6B and Equity \$3.1B**
  - Liabilities include: Loans from province \$4.3B, Collateralized Borrowings \$6.0B, as well as Deposits and Other totaling \$34.3B

(1) As of June 30, 2016

## Well funded public sector pensions

### Public Sector Pensions

Fiscal Year Ending Mar 31	2012	2013	2014	2015	2016
Net Pension Assets (billions)	\$38.5	\$44.4	\$52.2	\$60.1	\$67.1
Aggregate Funded Status	78.4%	81.5%	87.1%	93.8%	99.4%
Liability for Province's employer share (billions)	\$1.5	\$1.8	\$1.8	\$1.7	\$1.5
Total Government Unfunded Pension Liabilities (billions)	\$10.6	\$10.9	\$11.6	\$11.2	\$10.6

- **\$8.1B of total unfunded liability from a settlement with teachers to deal with an issue stemming from 1992 pension reform**

**Unfunded Pension Liability's absolute value has remained fairly static, but Aggregate Funded Status has greatly improved**