

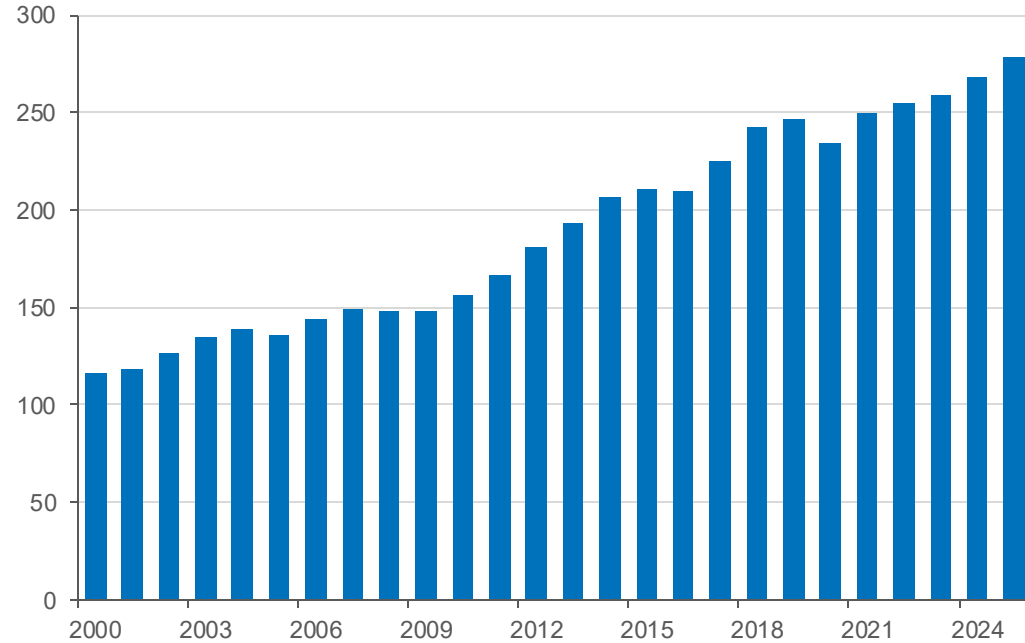


The Economics of Canadian Energy

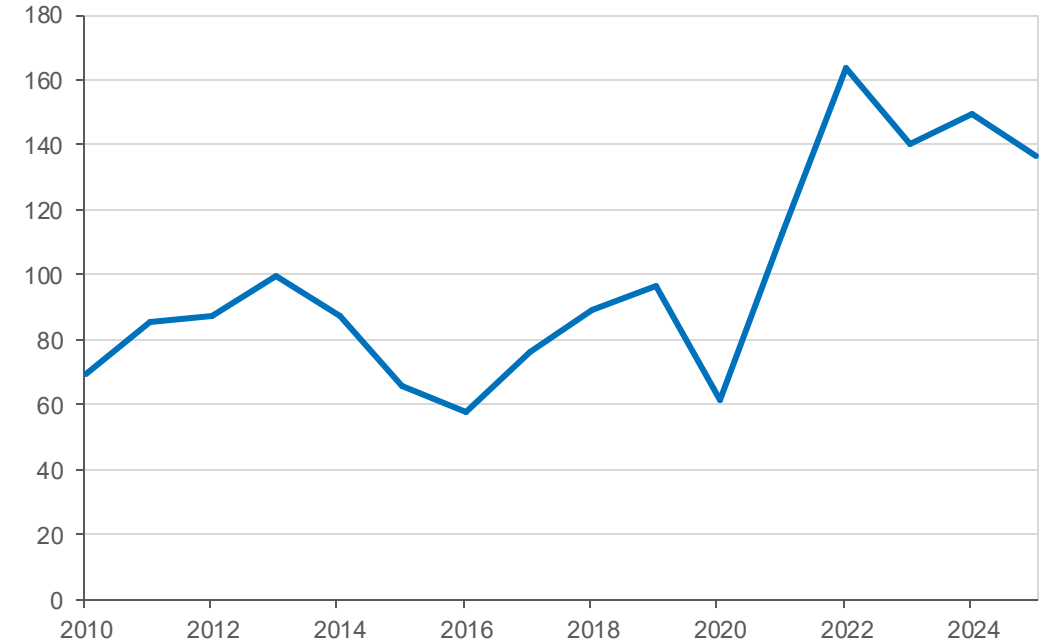
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Oil sector a tailwind to growth

Production volume (million m³)



Production value (C\$ bn)

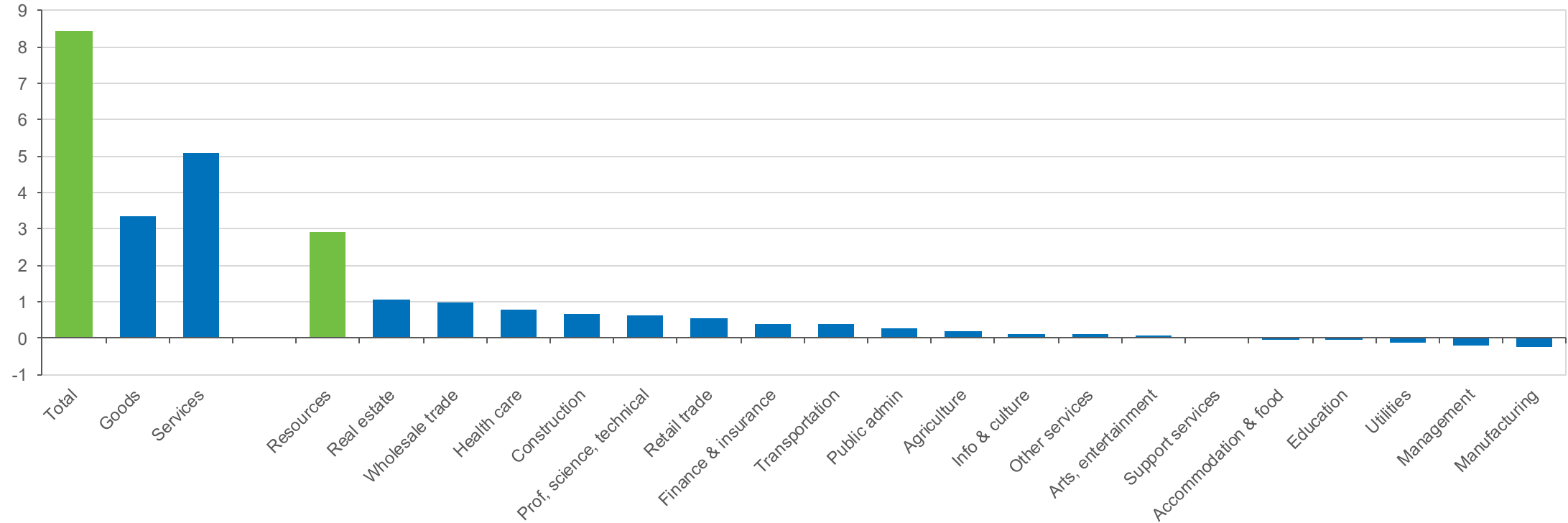


- Steady rise in oil production volume, reaching new record highs every year.
- Despite low oil prices, the value of the production is more than 40% above boom years.



Oil and gas is still the main source of growth in Alberta

Sum of contribution to growth since 2019

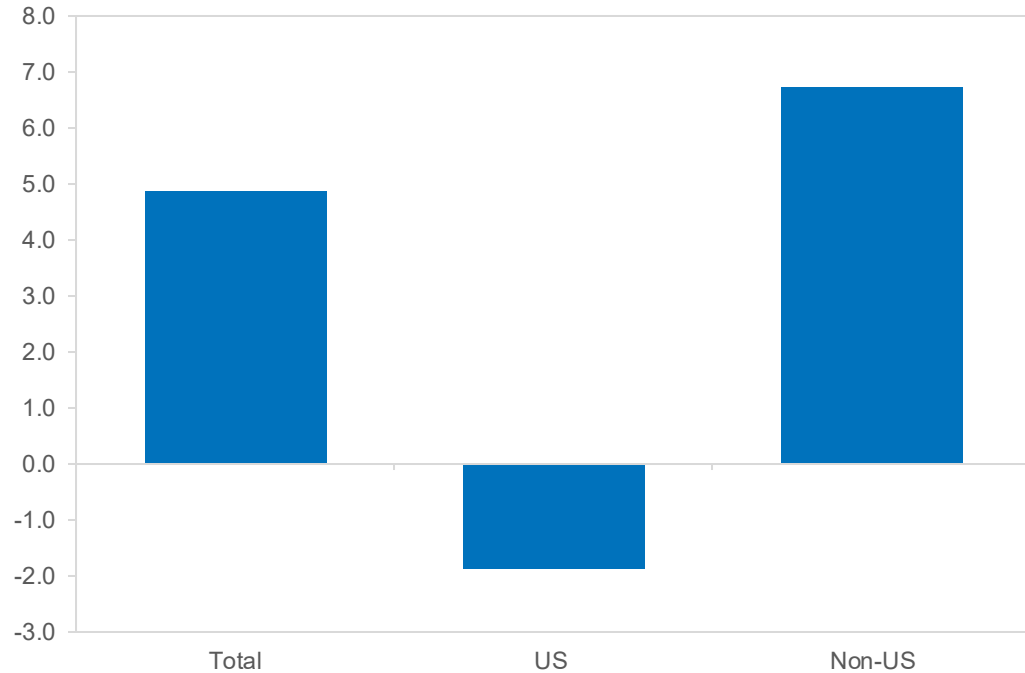


- More than a third of Alberta's growth since 2019 is due to the oil and gas extraction sector.
- Despite hopes of diversification, Alberta's growth remains heavily dependent on the energy sector.

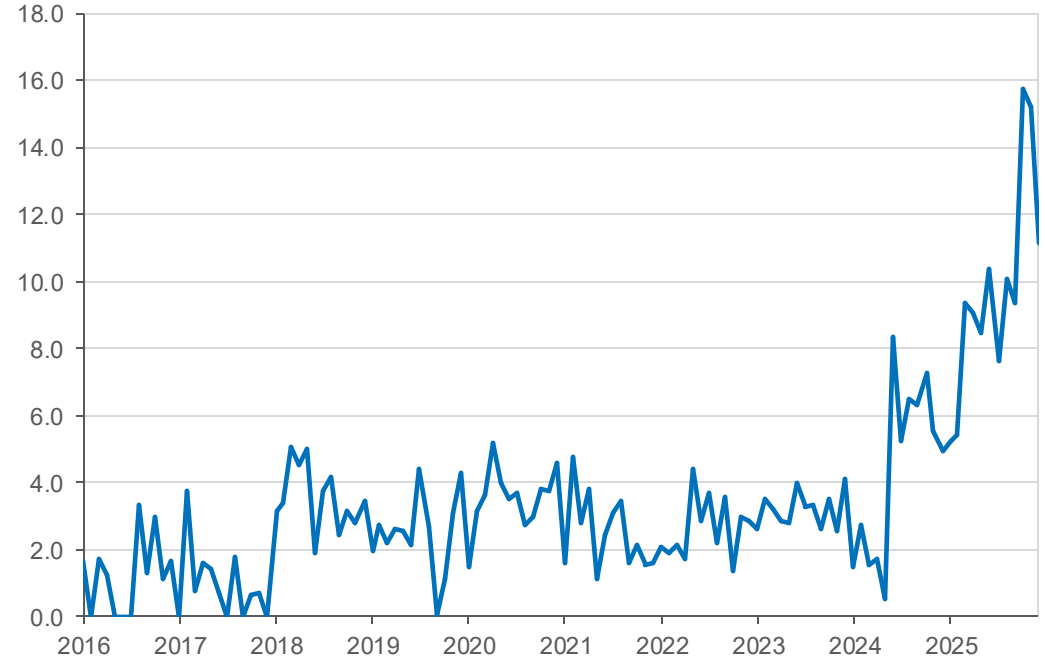


Increased market diversification thanks to TMX

Contribution to oil exports growth (%y-o-y)



Share of non-US oil exports (%)

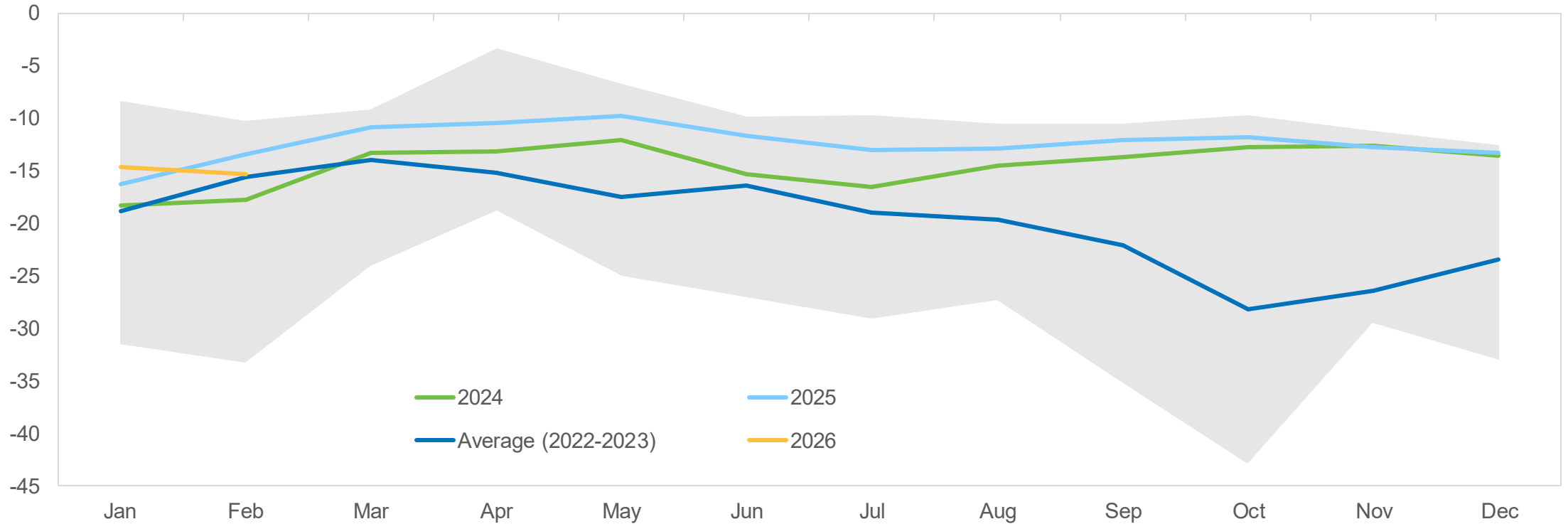


- Rising prices and production volumes are leading to high oil revenues, despite low prices.
- The opening of the expanded TMX is supporting this growth, allowing more oil to flow elsewhere than the US



Canadian oil no longer selling at a discount

US\$



- Since the opening of the expanded TMX, Canadian oil is selling close to its fair value relative to WTI.
- The narrower differential translates into an extra C\$26bn in revenue since start of activities, equivalent to almost an extra three months of production.

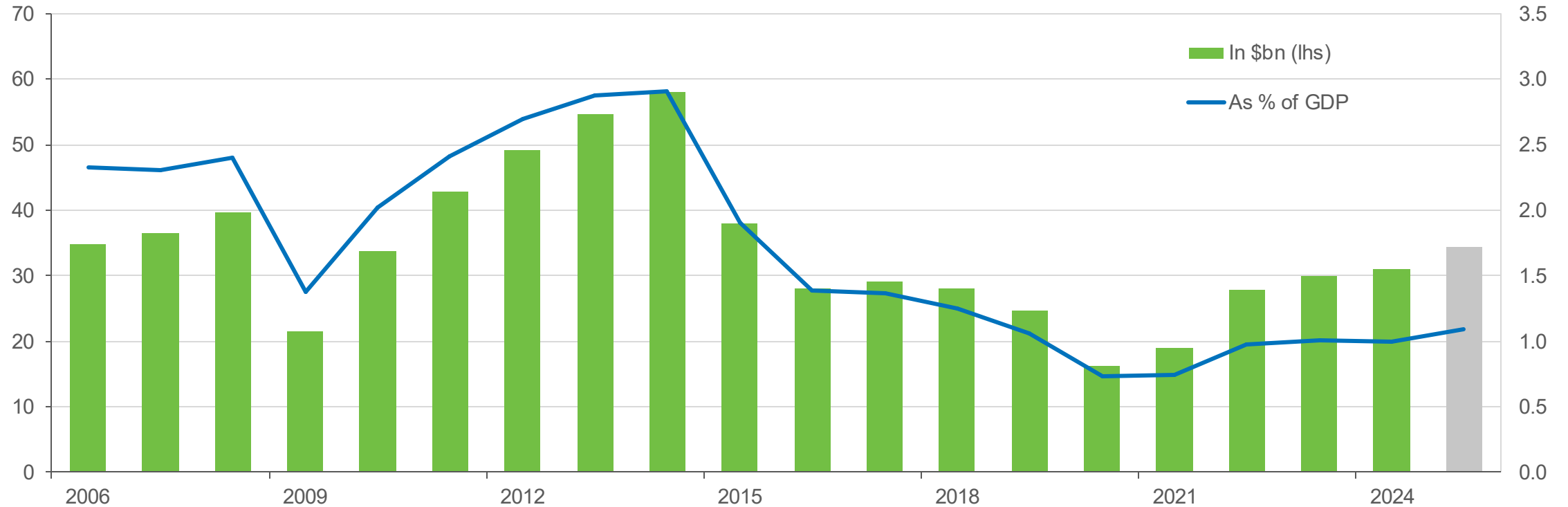


Source: Bloomberg, Servus Credit Union



Oil capex is growing but is a fraction of 2014 level

Investment by the oil and gas sector (\$bn)



- Oil and gas producers are increasing their amount of Capex, but the level of investment remains significantly below the peak in 2014 by almost 50%.
- Less revenues staying in Canada and small economic multiplier.



Economic of Canadian energy

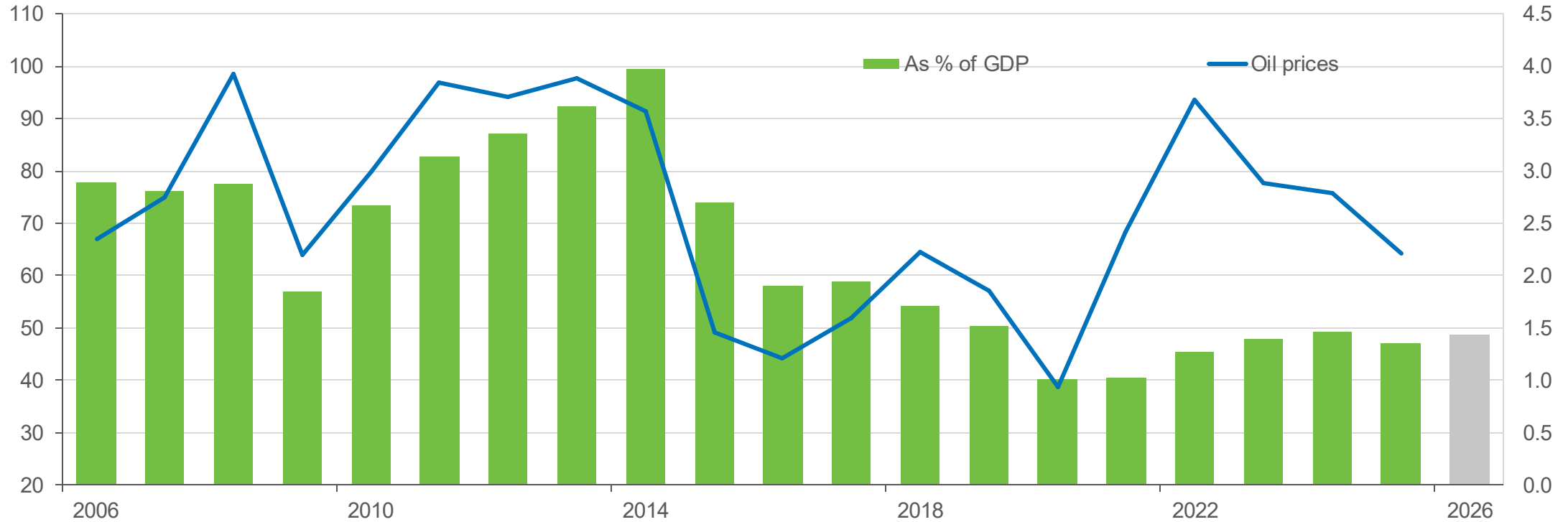
- The rapid build-out in the past decade was partly driven by the steep rise in oil prices and its direct impact on the LNG price. However, when crude prices crashed in 2014, gas prices followed and many LNG projects in the FID process were suspended and/or terminated. Canada certainly suffered this fate as the approximately 20 former projects on the books were reduced to the two B.C. projects that exist today, LNG Canada and Chevron/Woodside.

A Study of Liquefied Natural Gas Development in Australia and Requisite Learnings for Canada, by Kelly J. Ogle, CGAI President, November 2019



Oil capex is growing but is a fraction of 2014 level

Investment by the oil and gas sector (% of GDP)

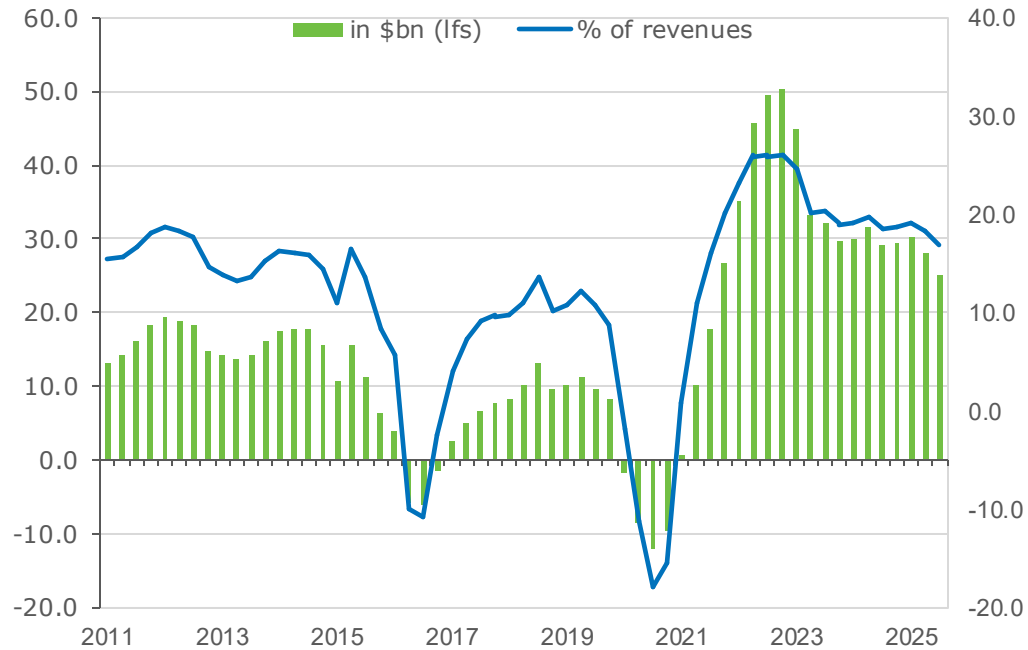


- The investment cycle in the industry is usually driven by oil prices, but the link seems to have broken in 2021-2022
- The fact that higher prices was supply-driven could explain the lack of reaction.

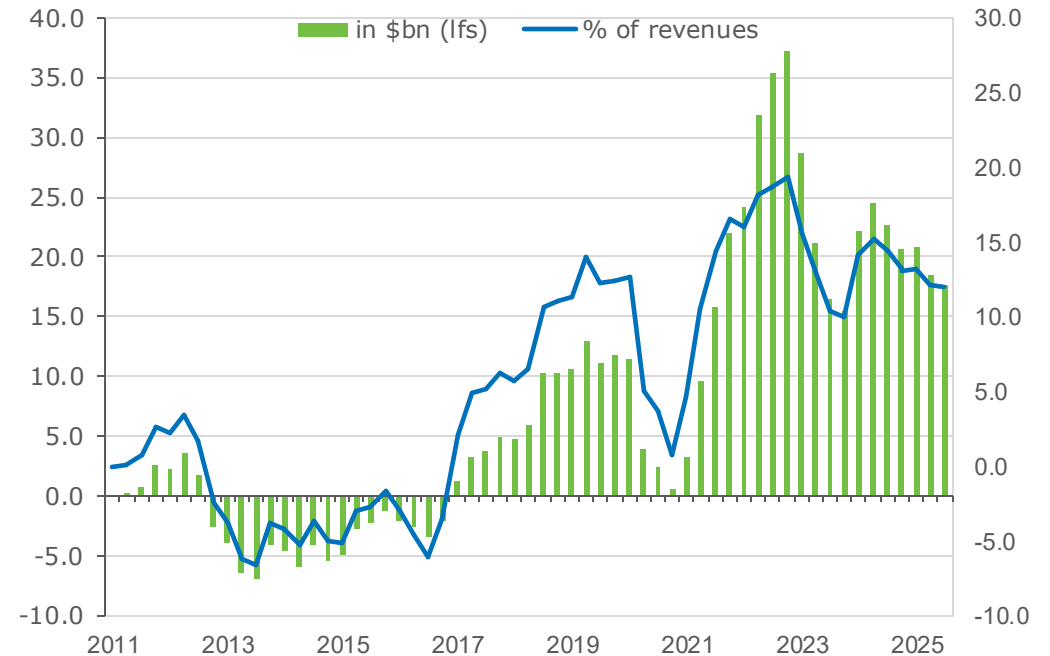


Canadian oil producers are very profitable

EBIT (4Q sum)



Free cash flows (4Q sum)

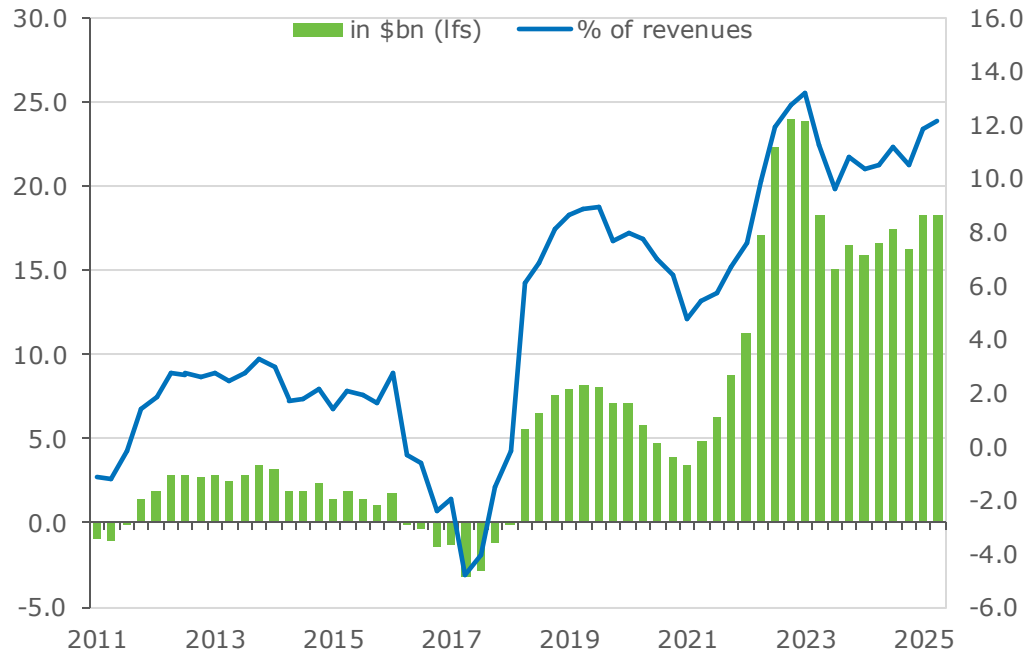


- Earnings before interest and tax remain elevated, both in level and as a share of revenues.
- This can also be seen in elevated levels of free cash flows. Hence, oil producers have a lot of financial resources at their disposition.

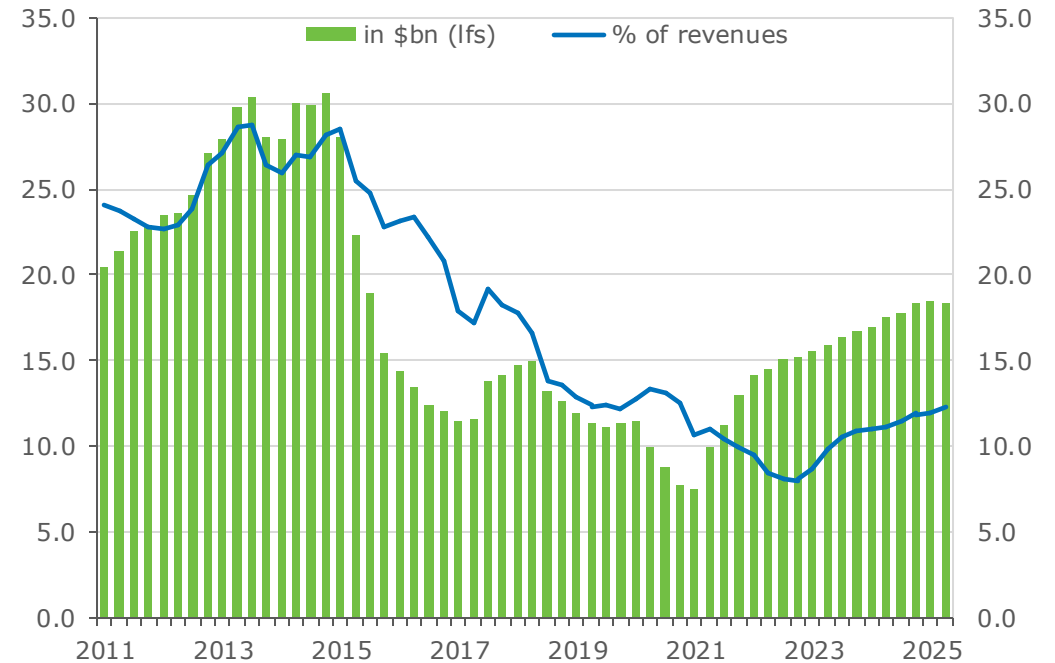


Less oil revenues staying in Canada and Alberta

Revenues returned to shareholders (4Q sum)



CAPEX (4Q sum)

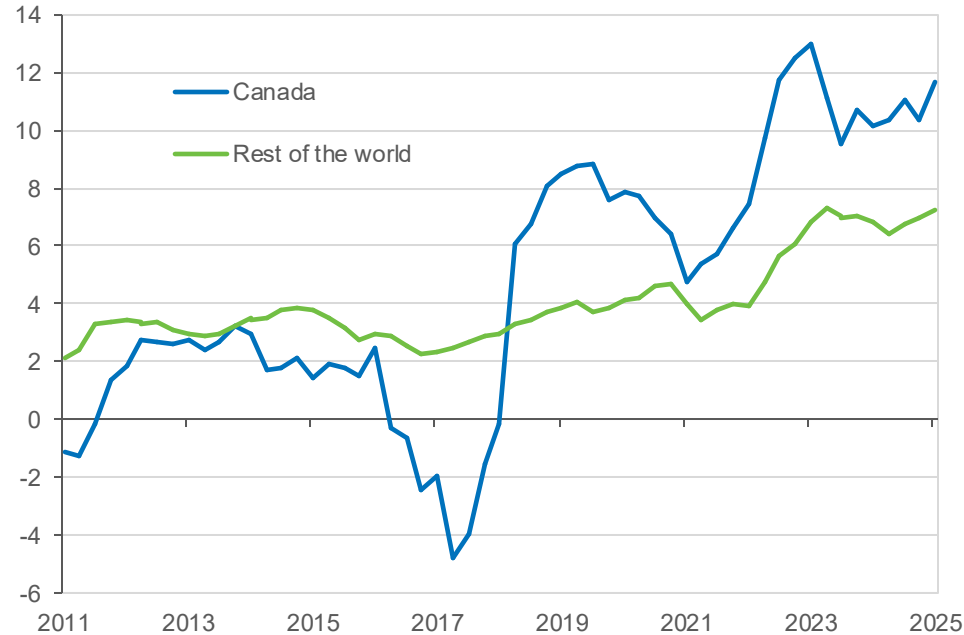


- A greater share of revenues is being returned to shareholders, 80% of whom are not Canadians.
- A smaller share of revenues is being reinvested in current operations.
- This explains why the Canadian dollar is less sensitive to oil price fluctuations.

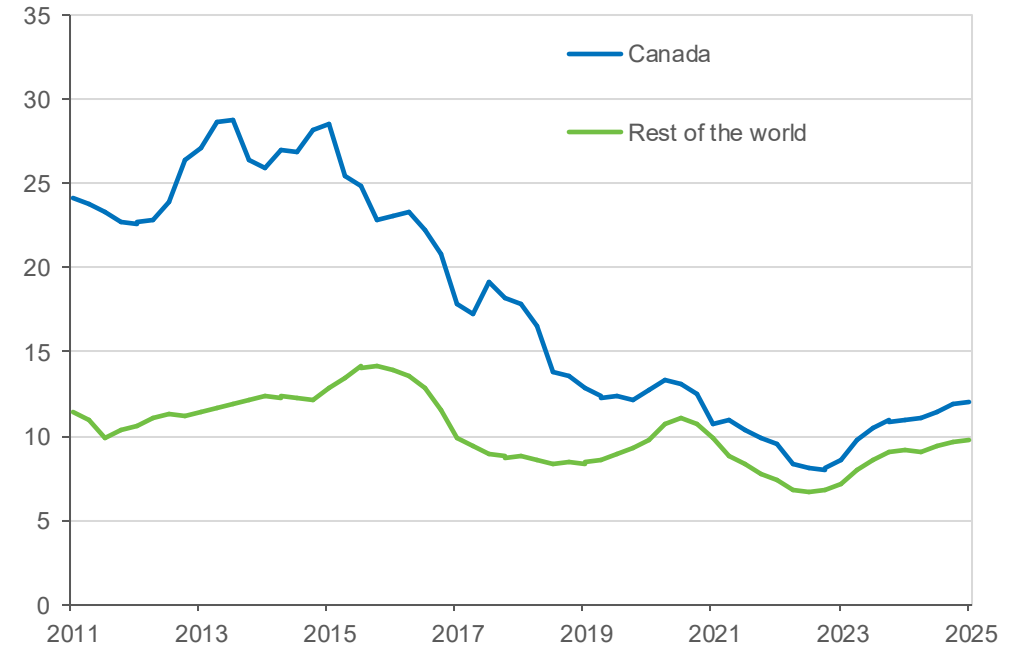


Low reinvestment in oil & gas is a global phenomena

Revenues returned to shareholders (% of revenues)



CAPEX (% of revenues)



- The same pattern is seen with non-Canadian oil producers, suggesting that global factors, not just Canadian regulations, explain the weak investment.
- Canadian oil companies return more to their shareholders because they have more free cash-flows.



Changing type of investment: new vs efficiency

• New projects

- Requires huge amount of investment \$ upfront
- Lots of hiring
- Lots of spillover to other sectors (manufacturing and construction, engineering)

Efficiency gains

- More capital intensive, require less workers
- Less spillover to the broader economy

Economic multiplier from oil and gas capex is smaller

Canadian dollar no longer a petrocurrency

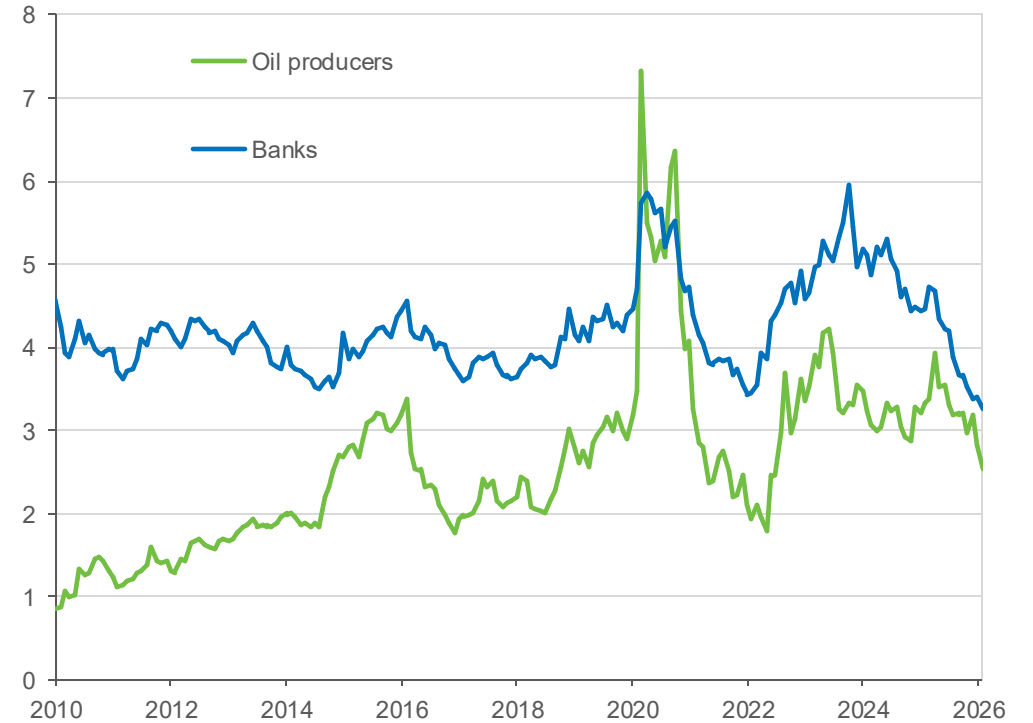


From startup to mature industry

The industry has entered a new phase of development

- Pre-2015: startup phase:** Massive investments
Little considerations for ST profitability
Growth is the strategy
- Current phase: Maturity:** Modest investments
Efficiency is key
Profitability is a priority
Act like a utility company

Dividend yields (%)



Economic of Canadian oil

Legacy projects

- Capital has already been spent
- Not profit maximization, but loss minimization
- Profits = Revenue – production cost
- ROI doesn't need to be positive, just higher than doing nothing

Result: low breakeven price

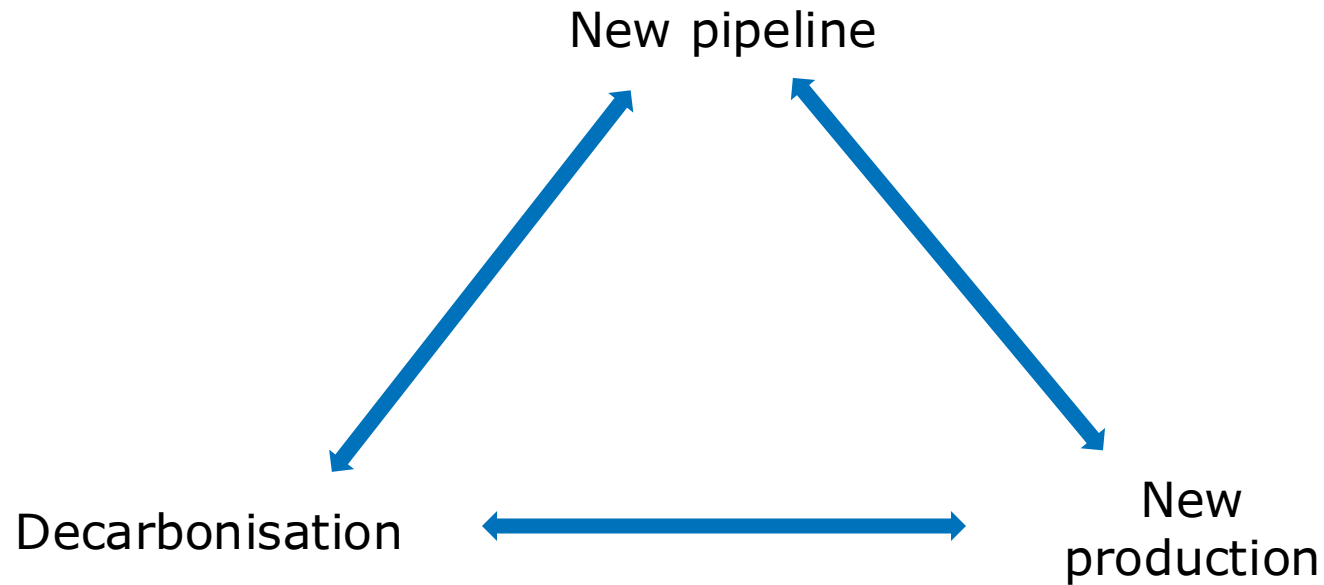
New projects

- Capital needs to be committed
- Profit maximization
- Profits = Revenue – (production cost + capital repayment)
- ROI needs to be positive and above risk-free rate

Result: high breakeven price required and long timeline to recoup initial capital



The 3-legged stool of the MOU



Lots of capital will need to be committed to prevent the stool from tipping over



Economic of Canadian oil

- Are shareholders willing to risk capital?
- Does the current disruptions (Iran and Ukraine) accelerate the energy transition?
- Is the price justifying the investment?
- How much derisking will be required?



Q&A

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