

Economics of Newfoundland and Labrador's Offshore Oil Industry: Separating Fact from Myth

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Introduction

➤ Objective:

- Provide data and economic analysis to help inform public understanding and debate

➤ Approach:

- Pose four questions on NL's offshore oil sector
- Provide answers to questions, separating 'Fact from Myth'

Pop Quiz – Econ 101

Introduction to NL's Offshore Oil Industry

1. How significant is NL's offshore oil in a world and local context?
2. How does the NL government benefit financially from the oil industry?
3. Who is the primary beneficiary of NL's oil – Government or equity holders?
 - Does it change when oil prices change?
4. How are government royalties impacted by a change in project construction costs?
 - Is there a trade-off between local benefits and royalty income?

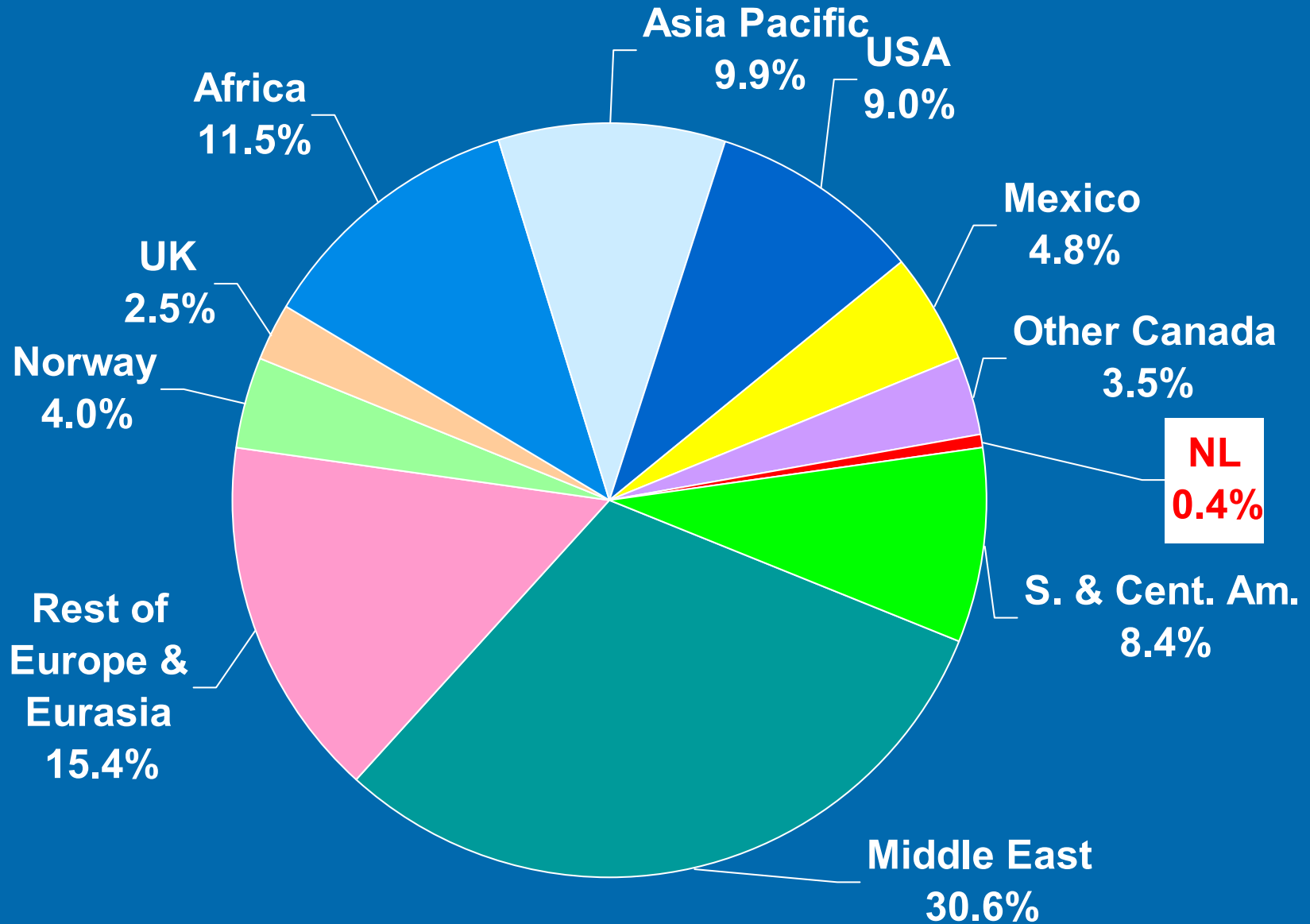
Question 1

1. How significant is NL's offshore oil in a world and local context?

Metrics:

- Daily Production
- Investment and Drilling Plans
- Local GDP & Employment impacts
- Government Revenue
- Volume of Oil per capita

World's Daily Oil Production



NL's daily production is relatively small

Source: WorldOil.com

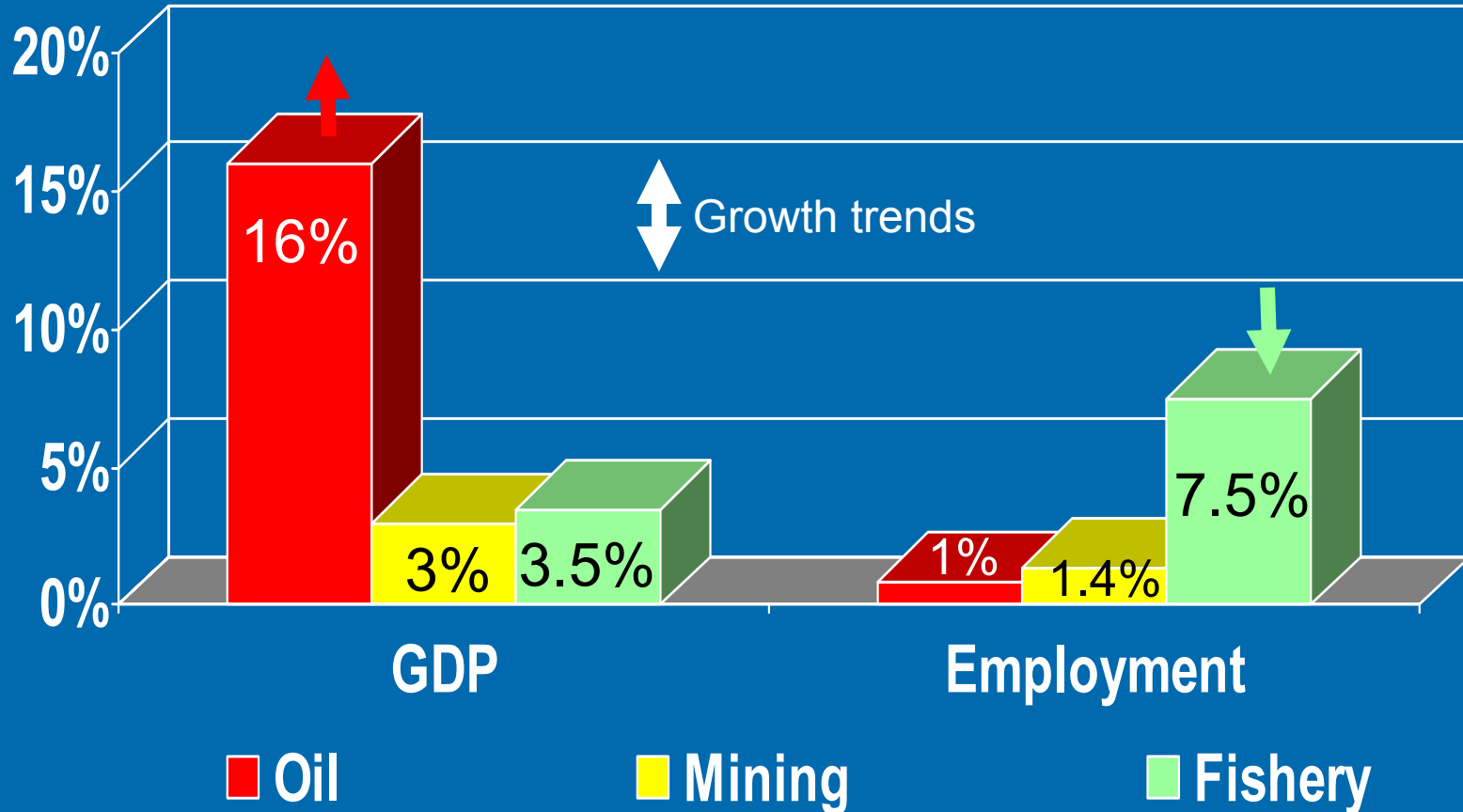
Reserves and Activity Levels

Relative to worldwide O&G estimates for 2006:

- < 1% of the proven reserves in offshore NL
- < 1% of expenditures will be spent in NL
- < 1% of offshore rigs will be operating in NL
- < 1% of offshore wells will be drilled in NL

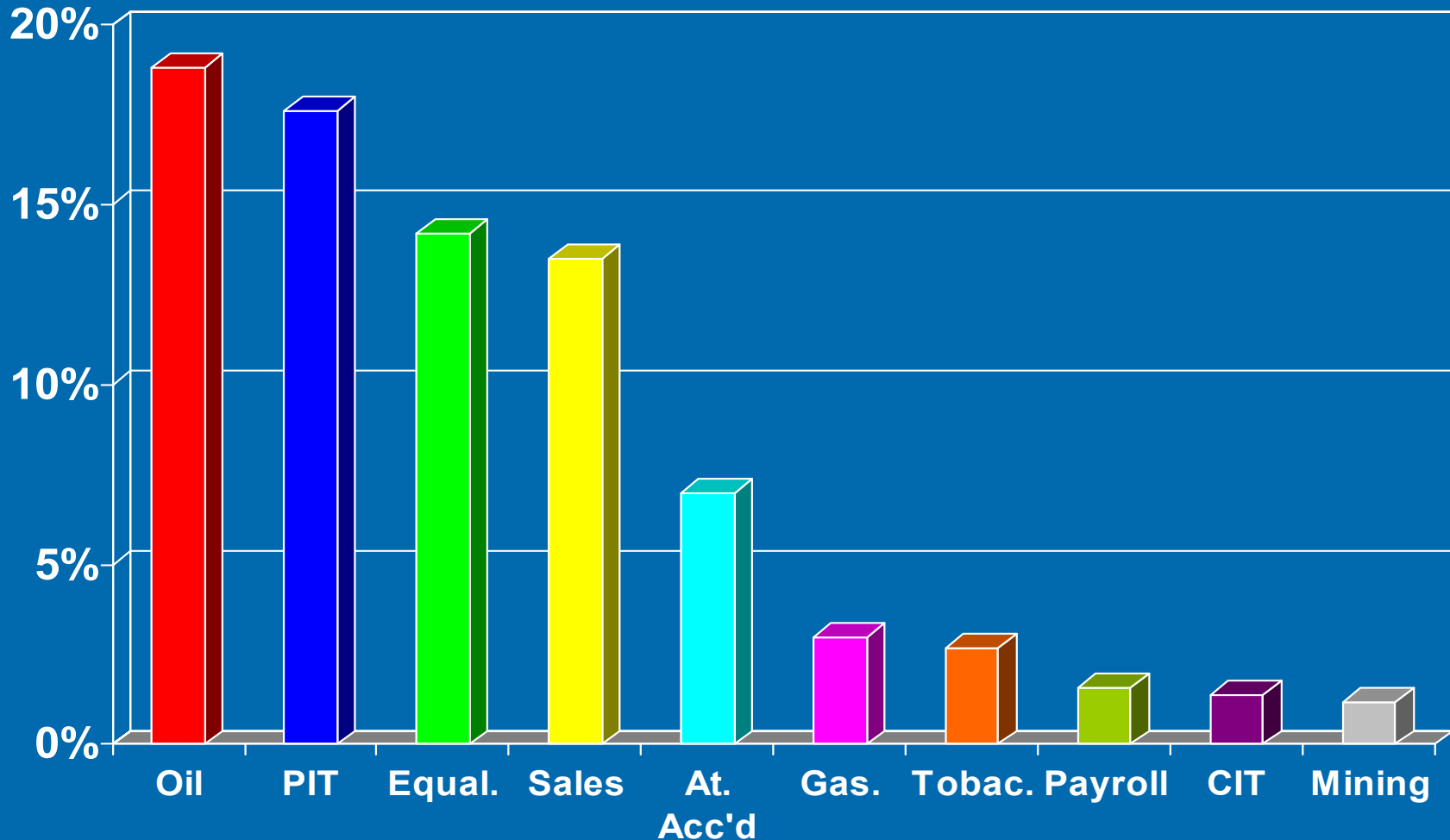
NL reserves and activity levels are relatively small

NL GDP and Employment Impact by Industry



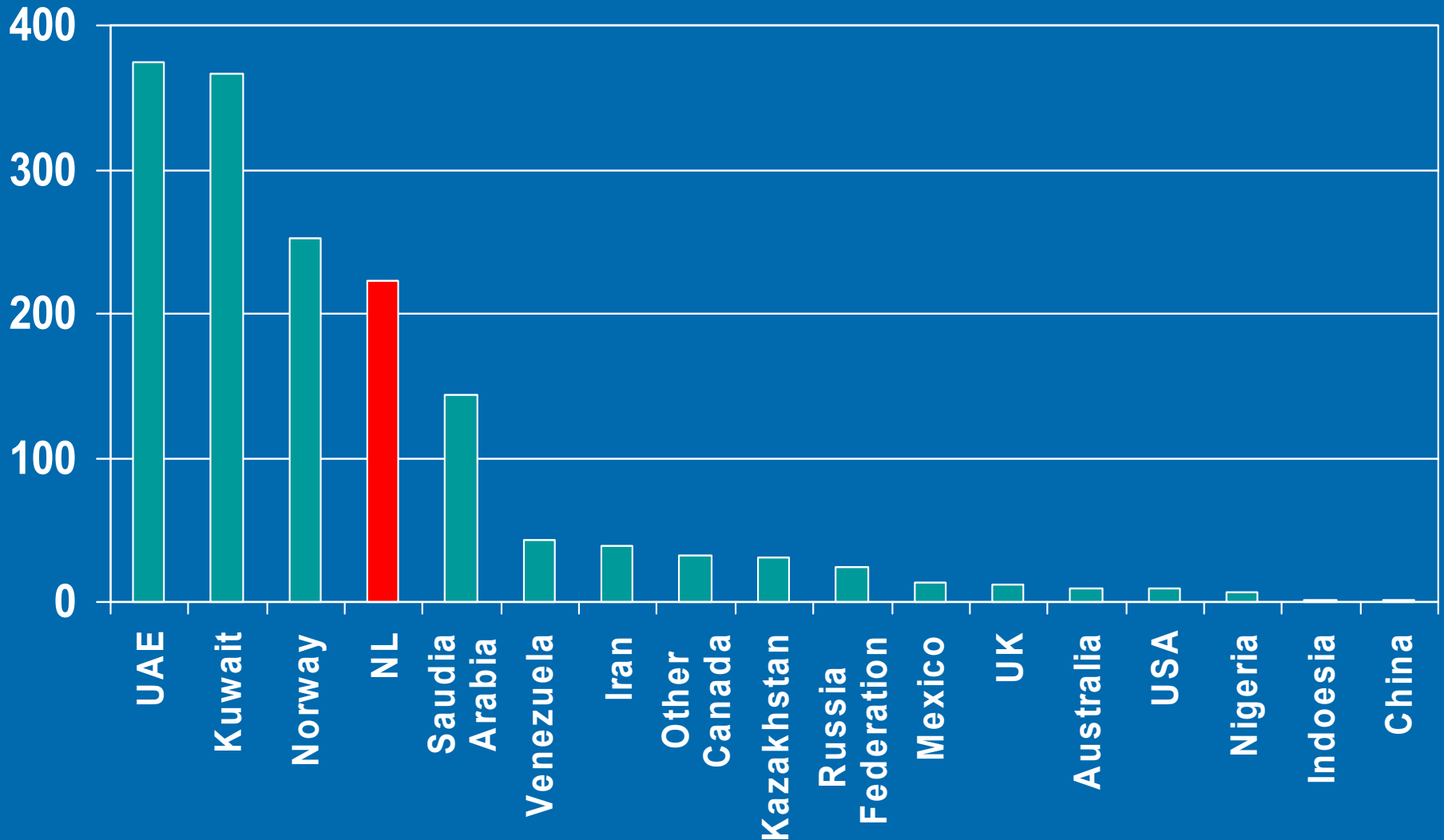
Oil is the largest single contributor to provincial economy

Provincial Revenue Shares by Source



Oil is the largest single contributor to provincial treasury

Barrels per year/1,000 people



On a per capita basis, NL oil production is significant

1. How significant is NL's offshore oil in a world and local context?

- NL production, reserves and activity levels are very small by world standards
- Revenues from production are large, growing and vital to NL economy and treasury
- NL production is large *relative to population*, even by world standards

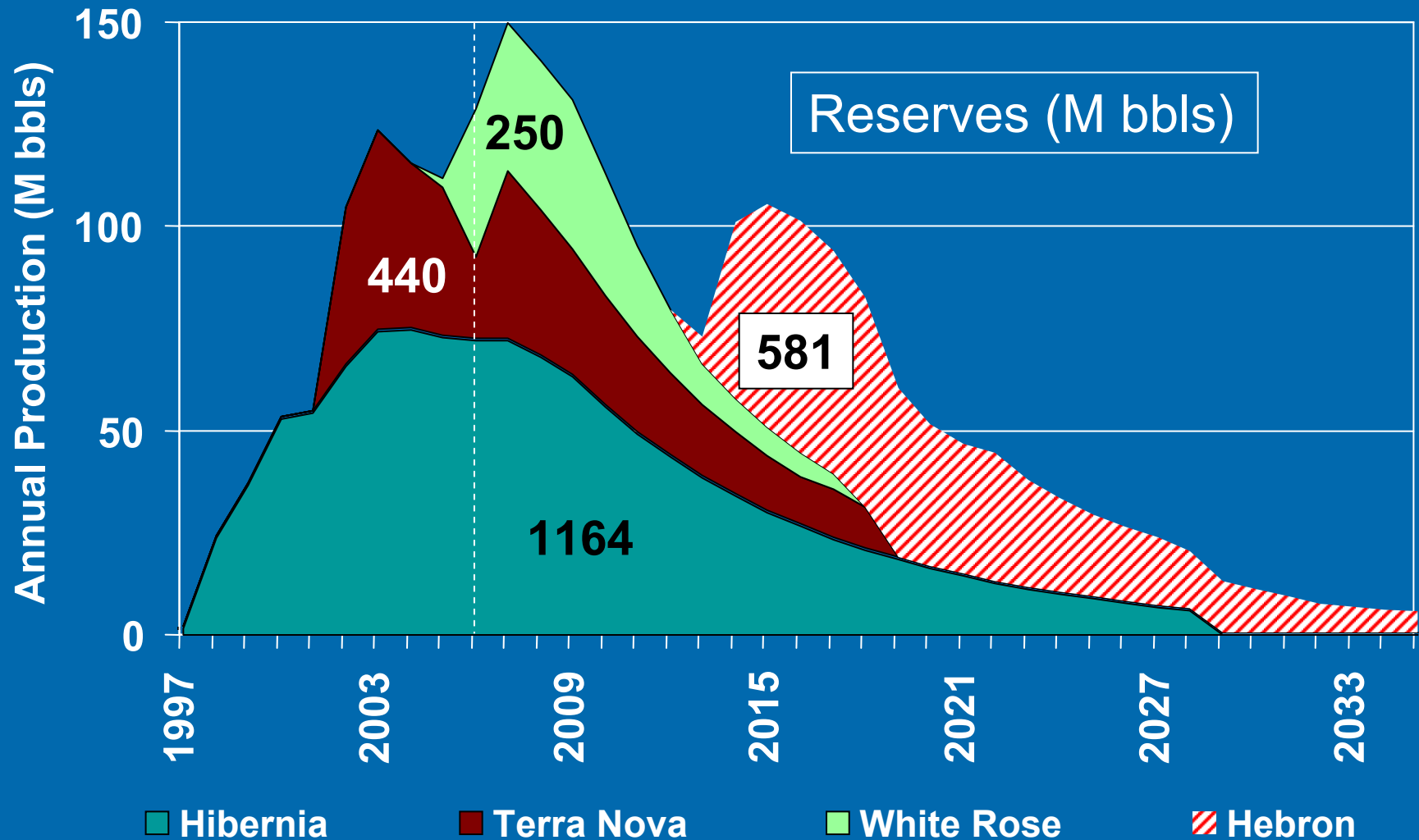
Question 2

2. How does the NL government benefit financially from the oil industry?

Metric:

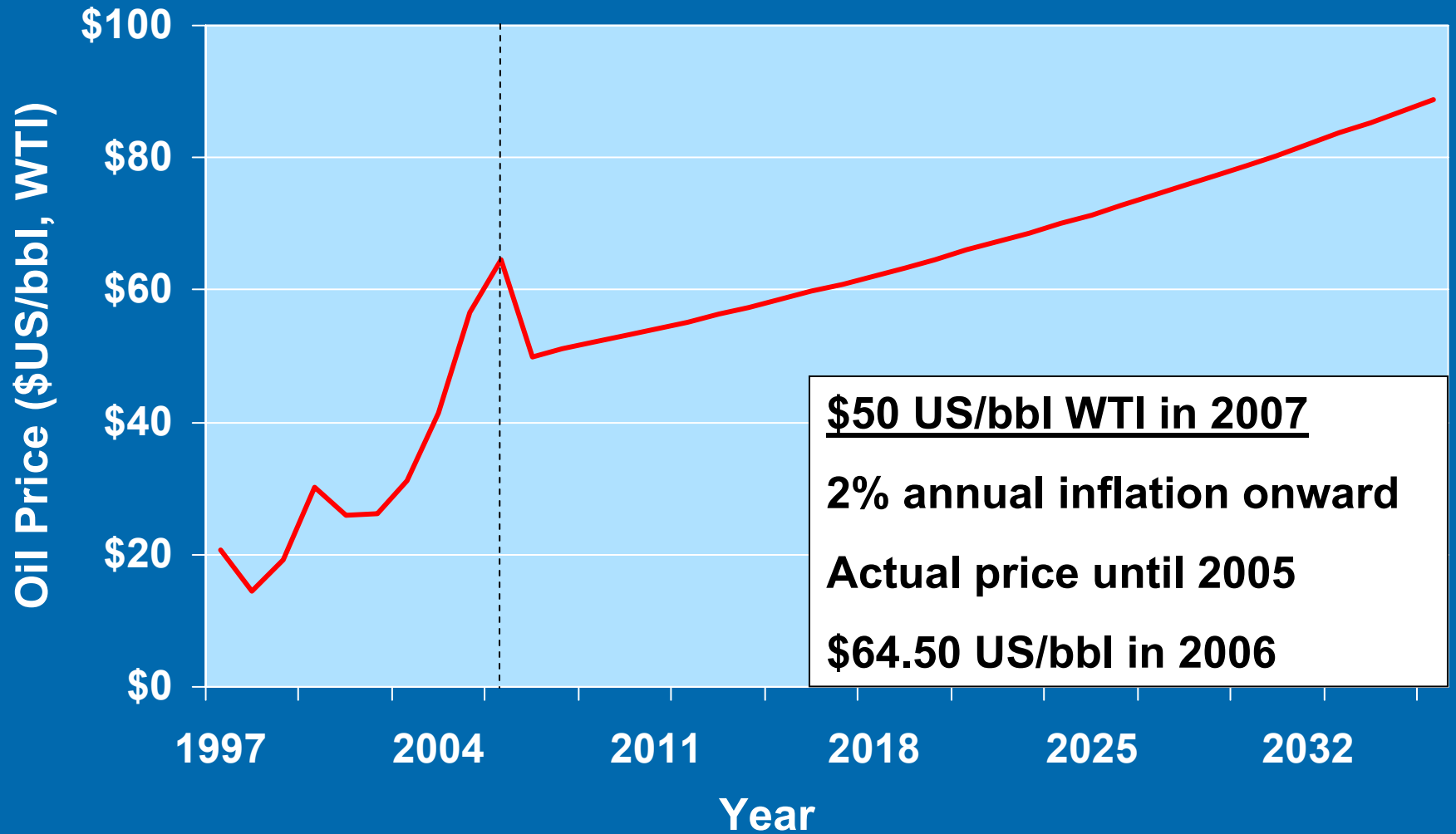
- Royalty and Corporate Income Tax (CIT)

Actual & Assumed Production

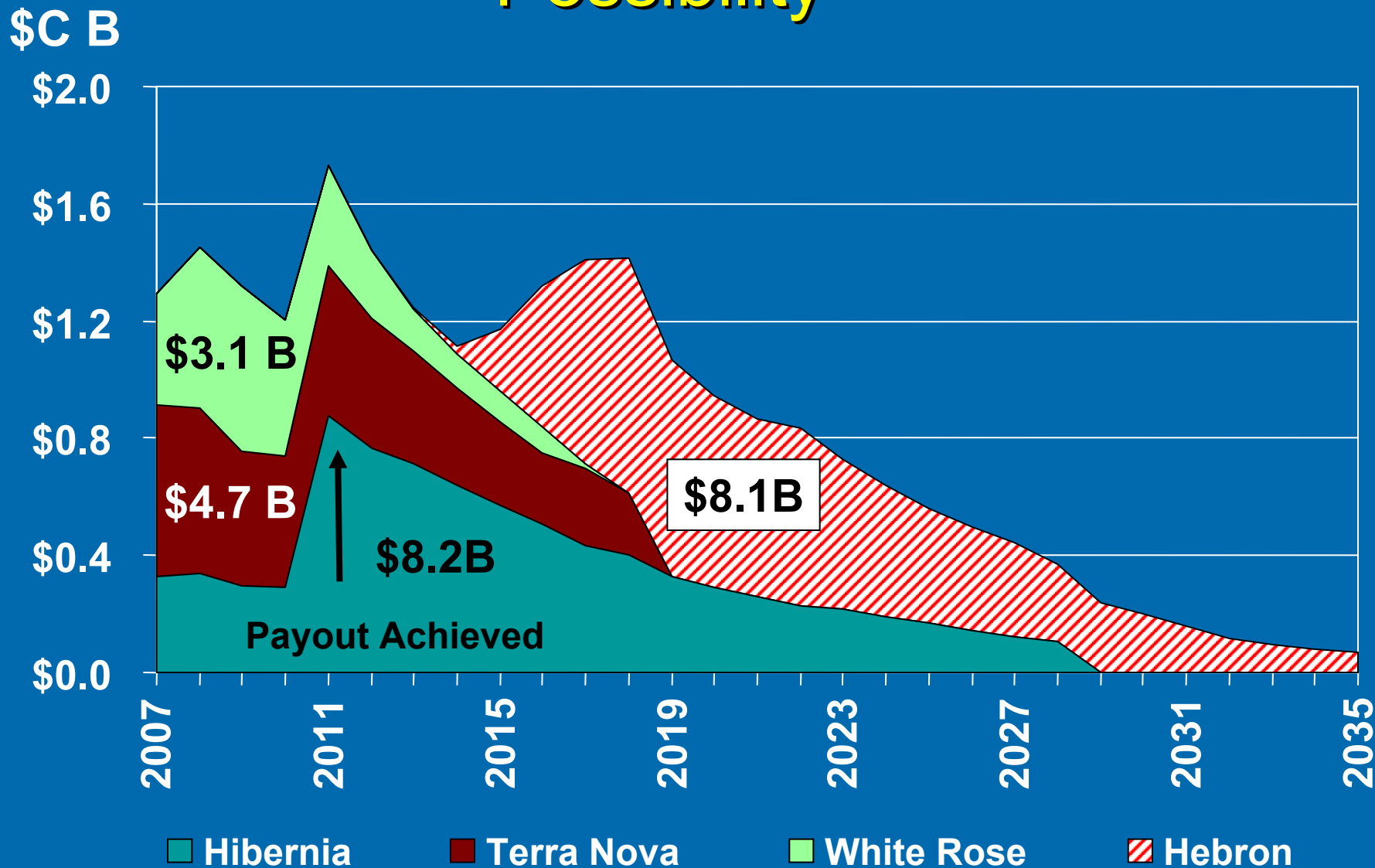


- Hibernia & Hebron based on new C-NLOPB resources and reserve estimates
- White Rose & Terra Nova based on operator websites

'\$50' Oil Price Scenario



Royalties & NL CIT - 2007 Onward: Possibility



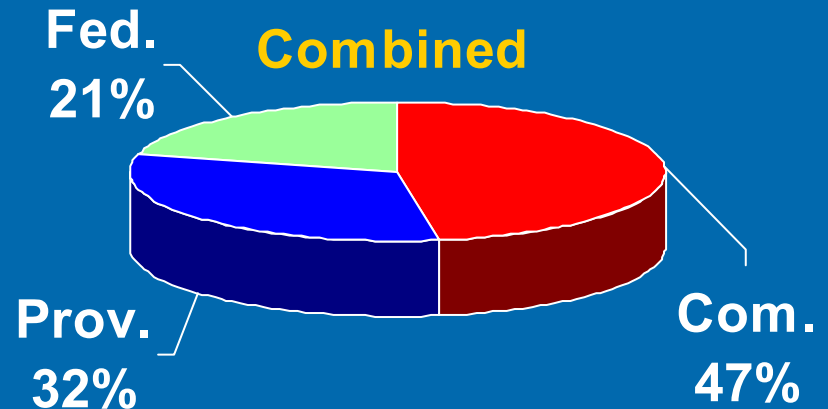
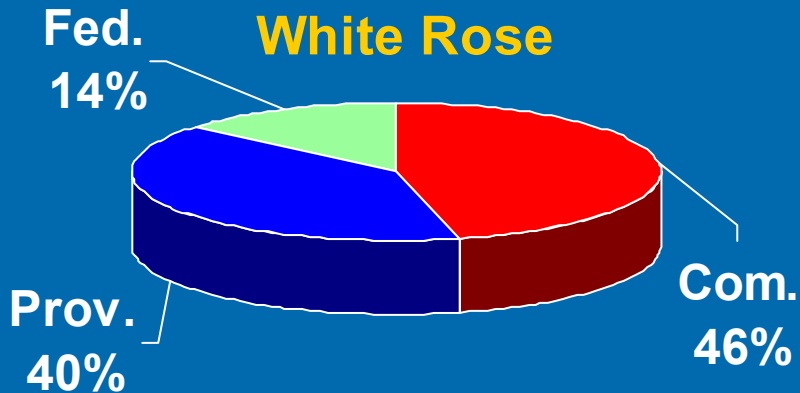
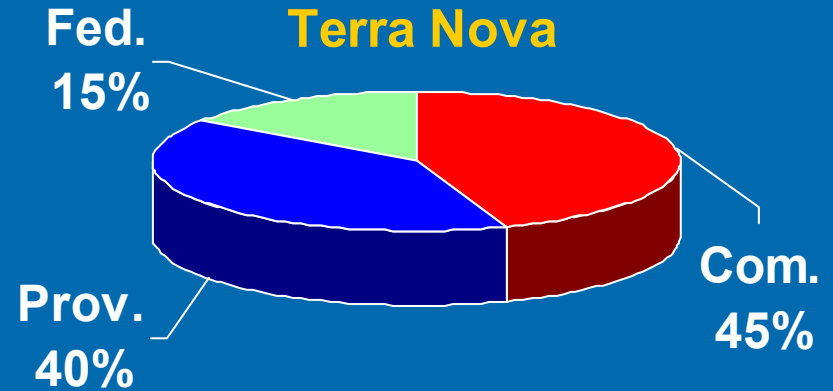
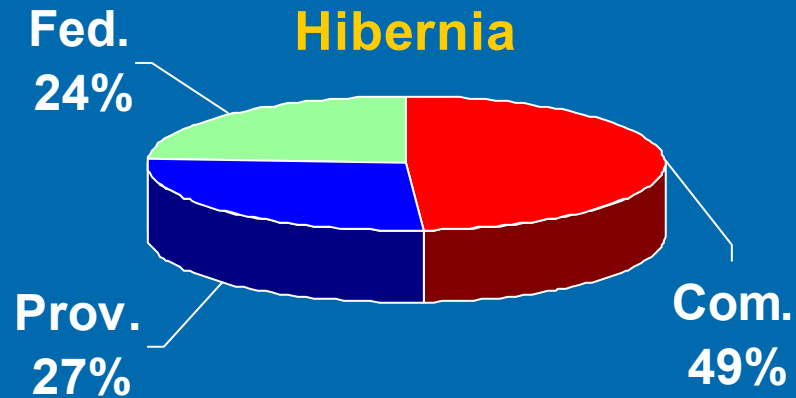
2. How does the NL government benefit financially from the oil industry?

- \$16 billion to Provincial Treasury on go-forward basis from 3 existing fields
- Peak at \$1.7 billion in 2011, then starts to decline steeply
- Hebron could add another \$8.1 billion and stem decline
- Indirect benefits multiply impact significantly

Question 3

3. Who is the primary beneficiary of NL's oil
 - Government or equity holders?
 - Does it change when oil prices change?

Relative Shares of Net Cash Flow Life of Field

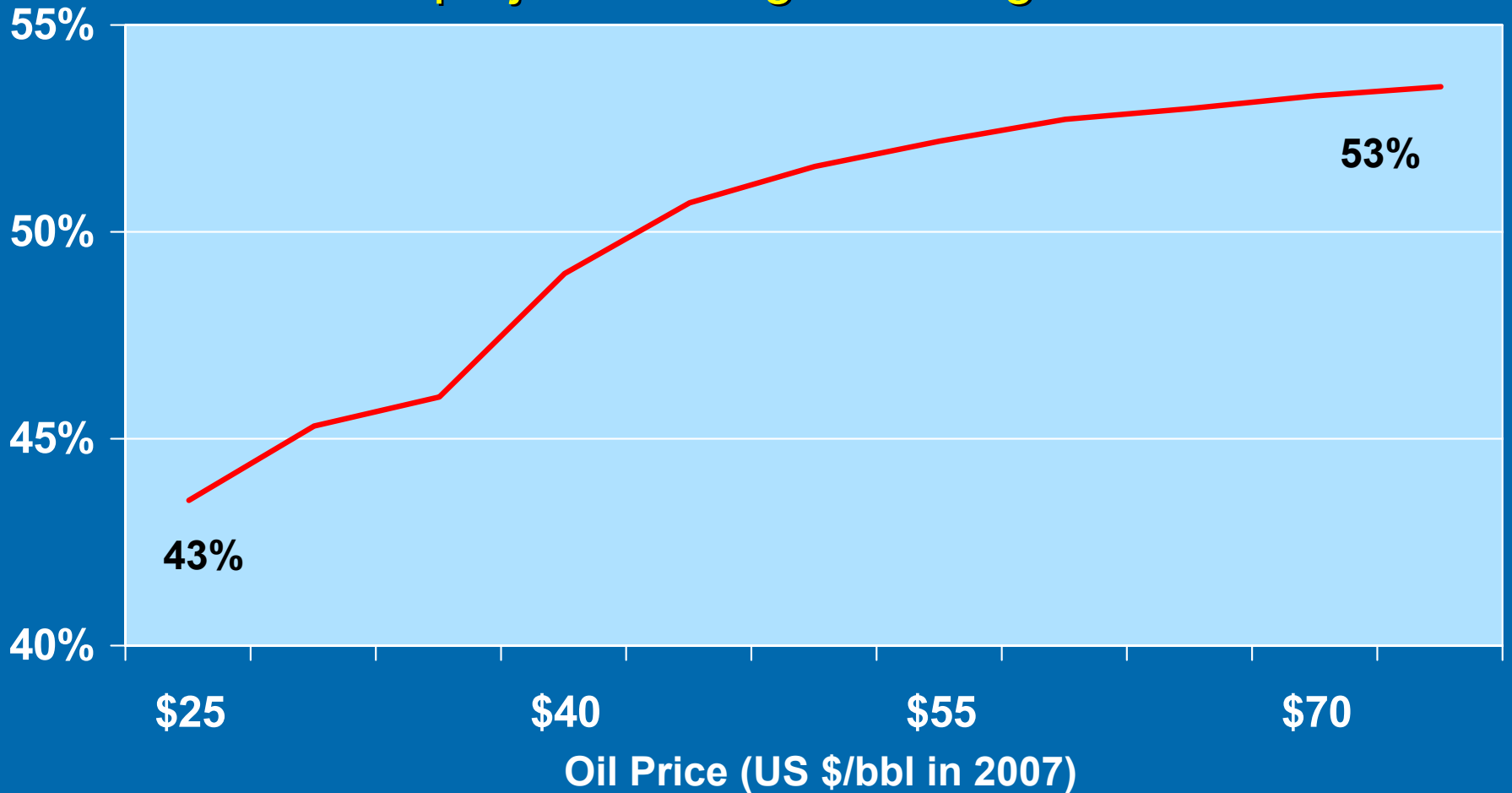


Government receives greater than 50% share

Government share of NCF as function of oil price

1 project under generic regime

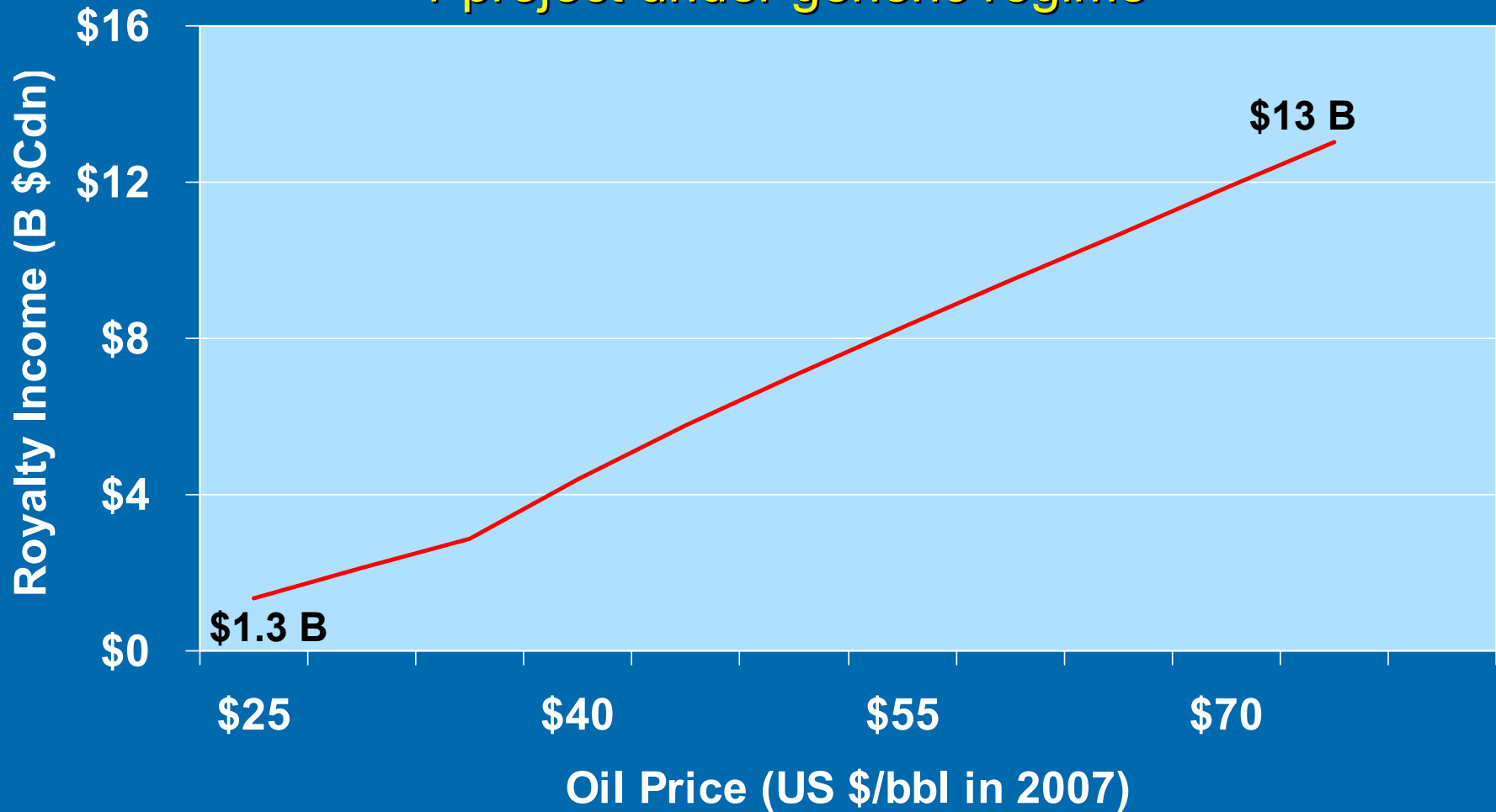
Gov't share



Higher oil prices yield higher share to Government

NL Royalties as function of oil price

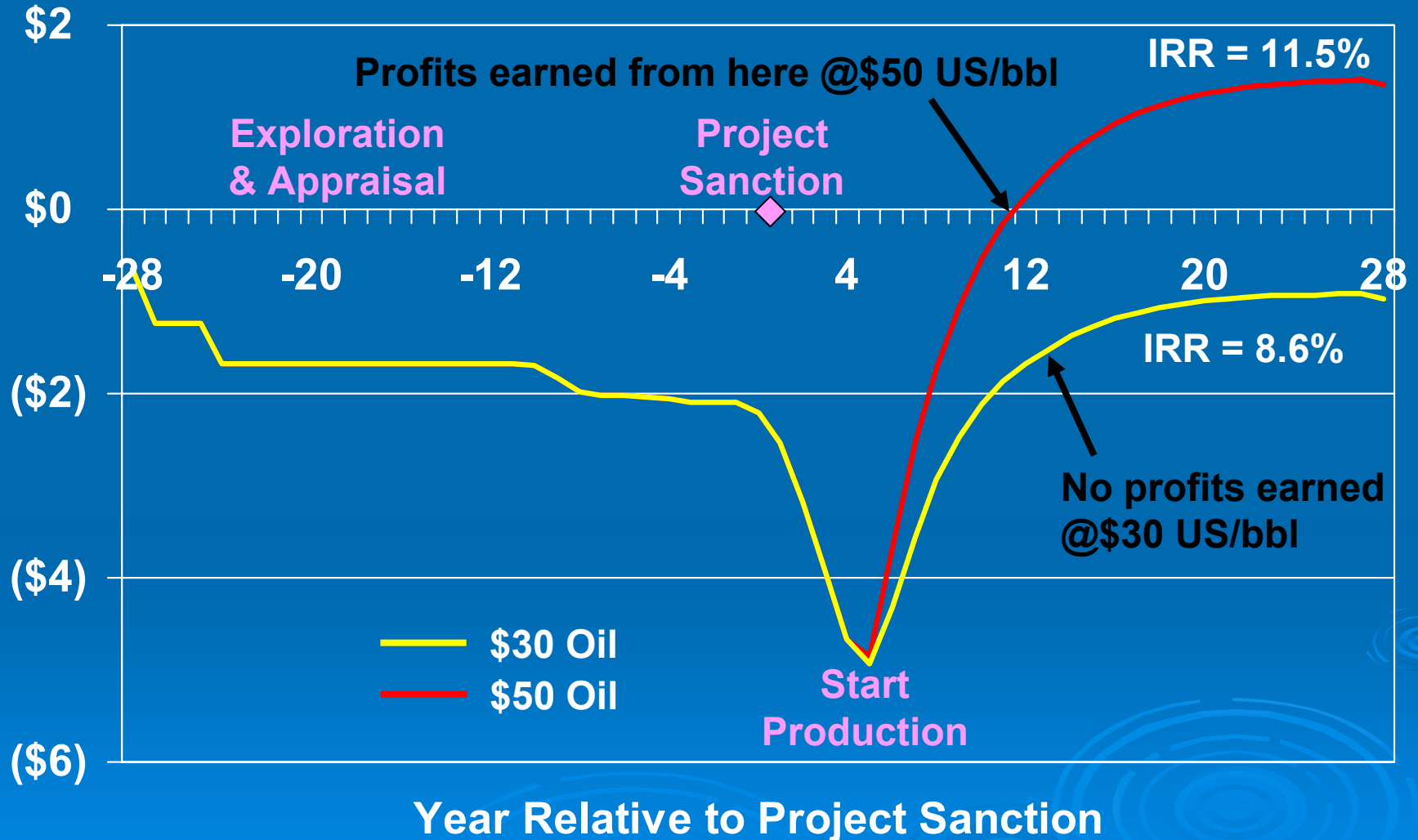
1 project under generic regime



Higher oil prices generate increased royalties

Illustration of Full-Life Cycle Profitability

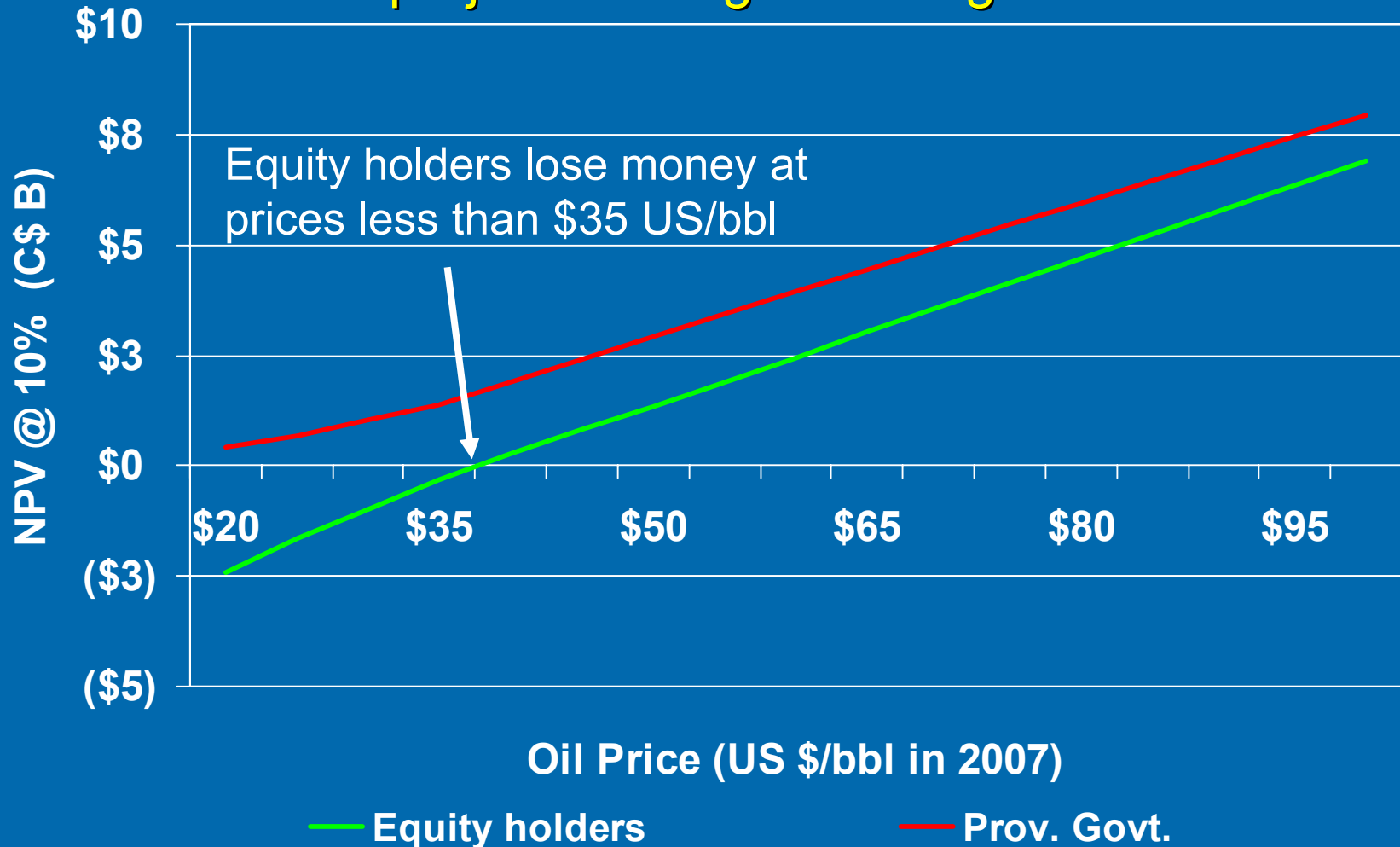
\$C B, Cum. Disc. Cash Flow (@10%)



At low oil price, offshore projects may be unprofitable

Net Present Value for Stakeholders

1 project under generic regime



Equity holders have greater risk and lower net present value

3. Who is the primary beneficiary of NL's oil – Government or equity holders?

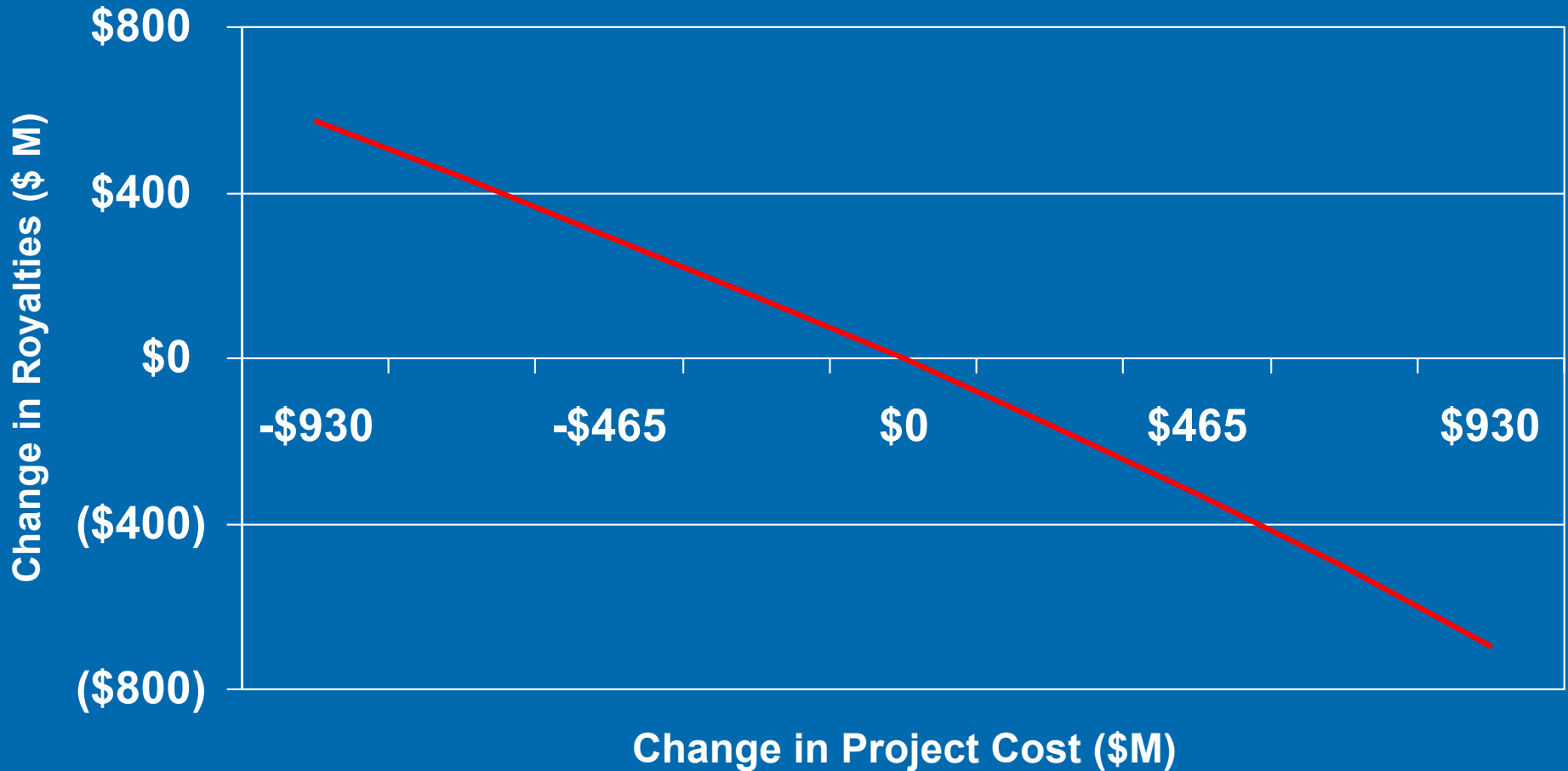
➤ Does it change when oil prices change?

- Gov't receives more than 50% of net cash flow from offshore oil
- Gov't share of net cash flow increases with oil price
- NL royalties are profit-sensitive and increase dramatically with oil price
- Equity holders incur more risk and receive lower net present value compared to royalty/tax collectors

Question 4

4. How are government royalties impacted by a change in project construction costs?
 - Is there a trade-off between local benefits and royalty income?

Relationship between project cost and royalty payments



An increase in project costs leads to significant royalty losses

4. How are government royalties impacted by a change in project construction costs?

➤ Is there a trade-off between local benefits and royalty income?

- Significant royalty losses occur with increased project costs (and vice versa)
- If an increase in local benefits leads to increased project cost, there will be a trade-off between local benefits and royalty income
- The new Atlantic Accord allows the Province to keep all royalties, increasing the sensitivity to this trade-off

Who got 100%?

Conclusion

- NL offshore oil sector is vitally important to all aspects of the NL economy
- Need informed debate on public policy issues that impact NL's offshore oil industry
- Need to be careful that we optimize the long term benefits of this tremendous opportunity

Thank you!