

# Offshore Oil & Gas: Is Newfoundland and Labrador Getting Its “Fair Share”?

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# Outline

- Purpose – Why am I doing this?
- What is fair and how do we operationalize fairness?
- How significant is NL's offshore industry?
- How does the treasury benefit?
- What is the revenue split between government & industry & how does NL compare to other jurisdictions?
- Is there a royalty/industrial benefits trade-off?
- Leaving it in the ground vs the importance of continuity
- Fallow field legislation – fallacy or public policy need?
- Conclusion

# Purpose – Why am I doing this?

- First, I was asked by the Harris Centre
- Second, since there is not a lot of hard information on actual and potential benefits available to facilitate public discussion and this is a significant industry to NL, it is important to provide data and economic analysis to help inform public understanding of NL's offshore petroleum sector.

# What is a fair share?

- Fair to whom?
  - **To the people of NL**
    - current vs future generations
  - **To the treasury**
    - provincial & federal
  - **To local supply industry**
    - local businesses & labour
  - **To other Canadians**
    - think of Atlantic Accord & the role of CNLOPB in administering it
  - **To producers**
    - If they are not NL companies, why should we care?
      - Future investment & sustainability of industry
- Where you stand, depends on where you sit! It is a matter of perspective.

# How do we operationalize fairness concept (i.e., what is our objective or vision)?

## Possible Vision

Sustainable investment activity and lasting, widespread positive economic benefits, which includes:

- A viable, competitive service and supply community
- New academic centres of excellence & enhanced research capacity
- 'Fair share' of:
  - revenue
  - employment and training
  - influence in domestic industry
  - investments in the community

➤ Specifically, we typically want more, not less benefits

➤ How do we achieve this?

# How do we achieve this?

- **More Revenue** – let's see what others get, we should get at least that, right? That is fair, isn't it?
  - Geographic areas are never exactly alike & all projects are not identical
  - higher return required with higher risk or you get reduced attractiveness & lower future activity
  - Is this a long-term (life of field) or a short-term (received to date)?
    - Too much in short term may mean less in the long term

# How do we achieve this? (Cont'd)

**More employment & business activity** – what did other jurisdictions do to capture the share of benefits they have currently & do we want to emulate them?

- While it cannot be forced, you may want to strongly encourage “local preference” to grow an industry
- Is this inconsistent with revenue maximization?

**More influence in domestic industry** – to better meet our priorities in terms of pace, mode of development, use of local businesses and workers, etc.

- Pursue Equity Participation
  - at what stage & are we carried & if so, how far?
- More effective regulation
  - too onerous, no activity – regulation is already a concern!

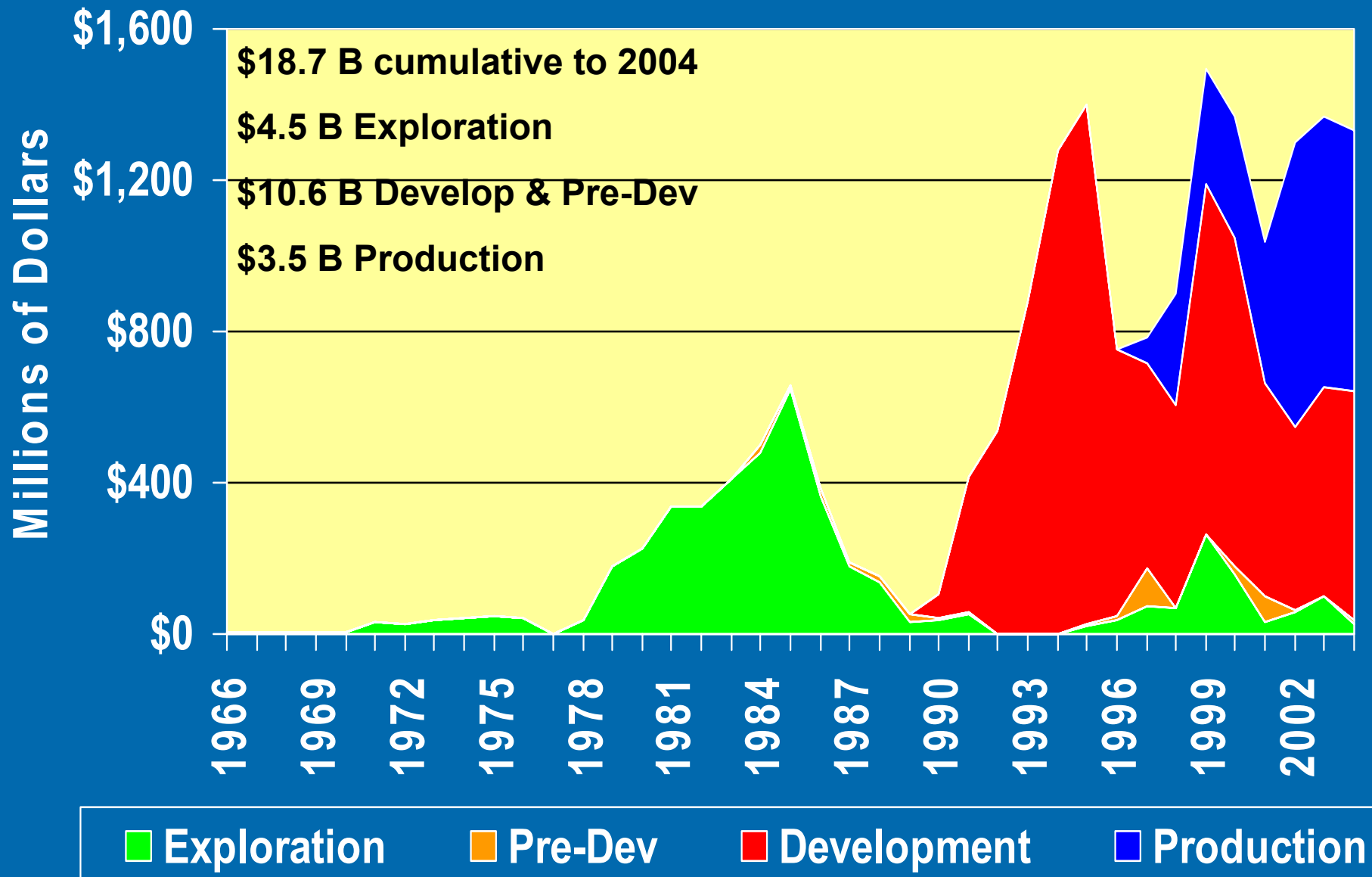
# How significant is NL's offshore oil in a world and local context?

## Metrics:

- Expenditures
- Exploration Drilling
- Recoverable Reserves
- Daily Production
- Local GDP & Employment impacts
- Government Revenue
- Volume of Oil per capita



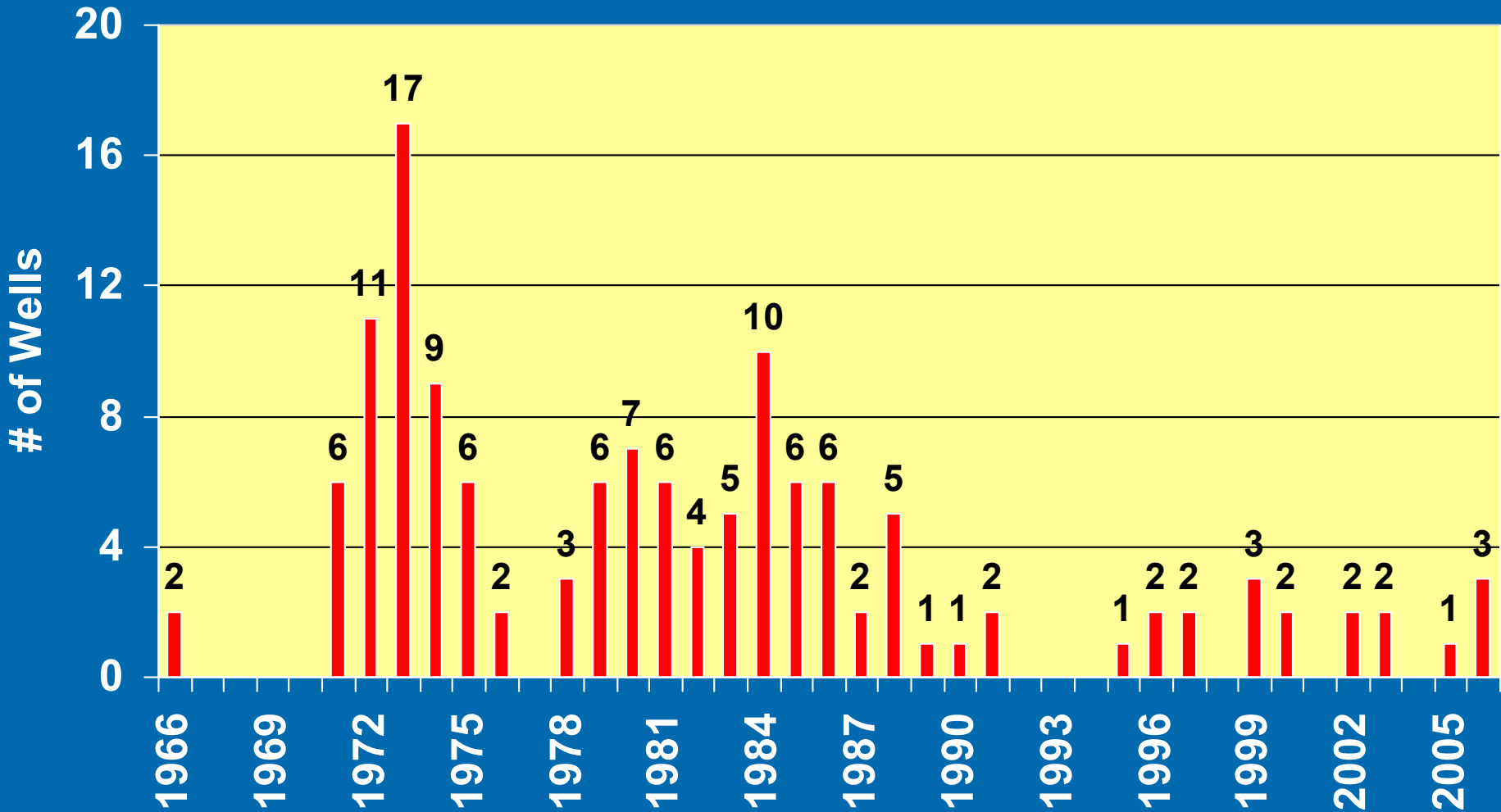
# Offshore Expenditure NL



Source: CNLOPB

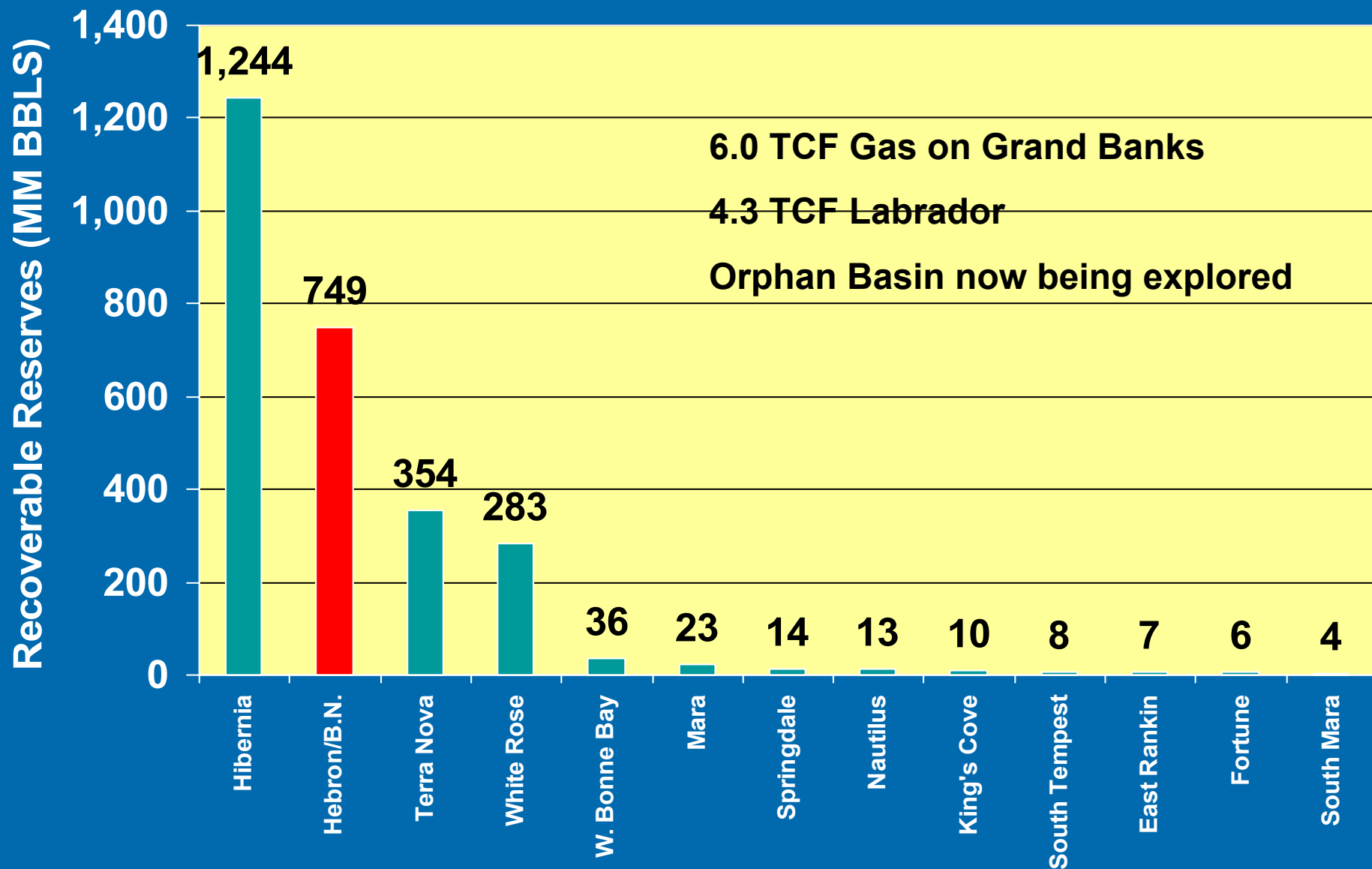
Significant investment in NL – big dollars & big impacts

# Exploration Wells Offshore NL



Low exploration drilling activity is a major concern.

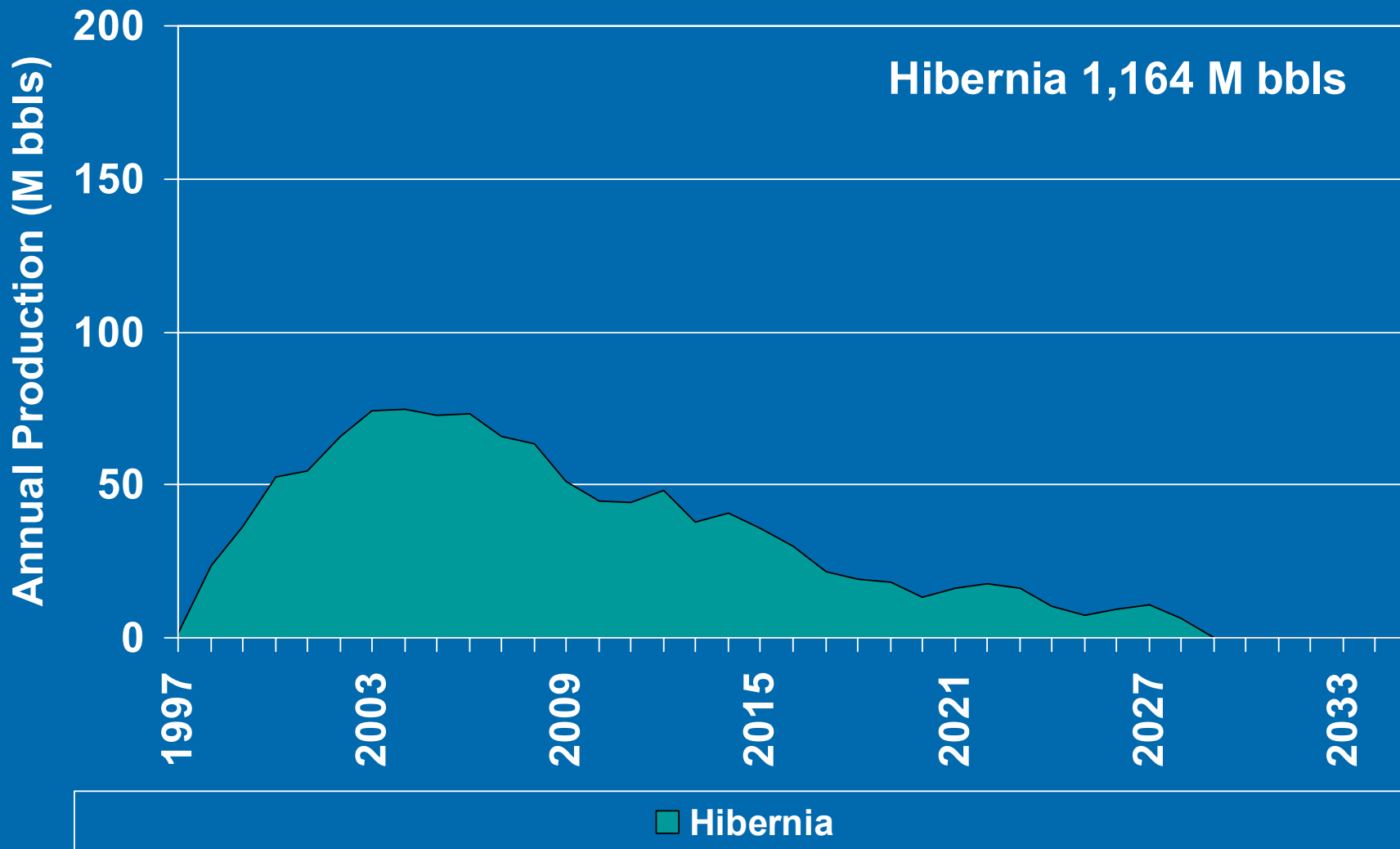
# Offshore Significant Discoveries - NL



Source: CNLOPB

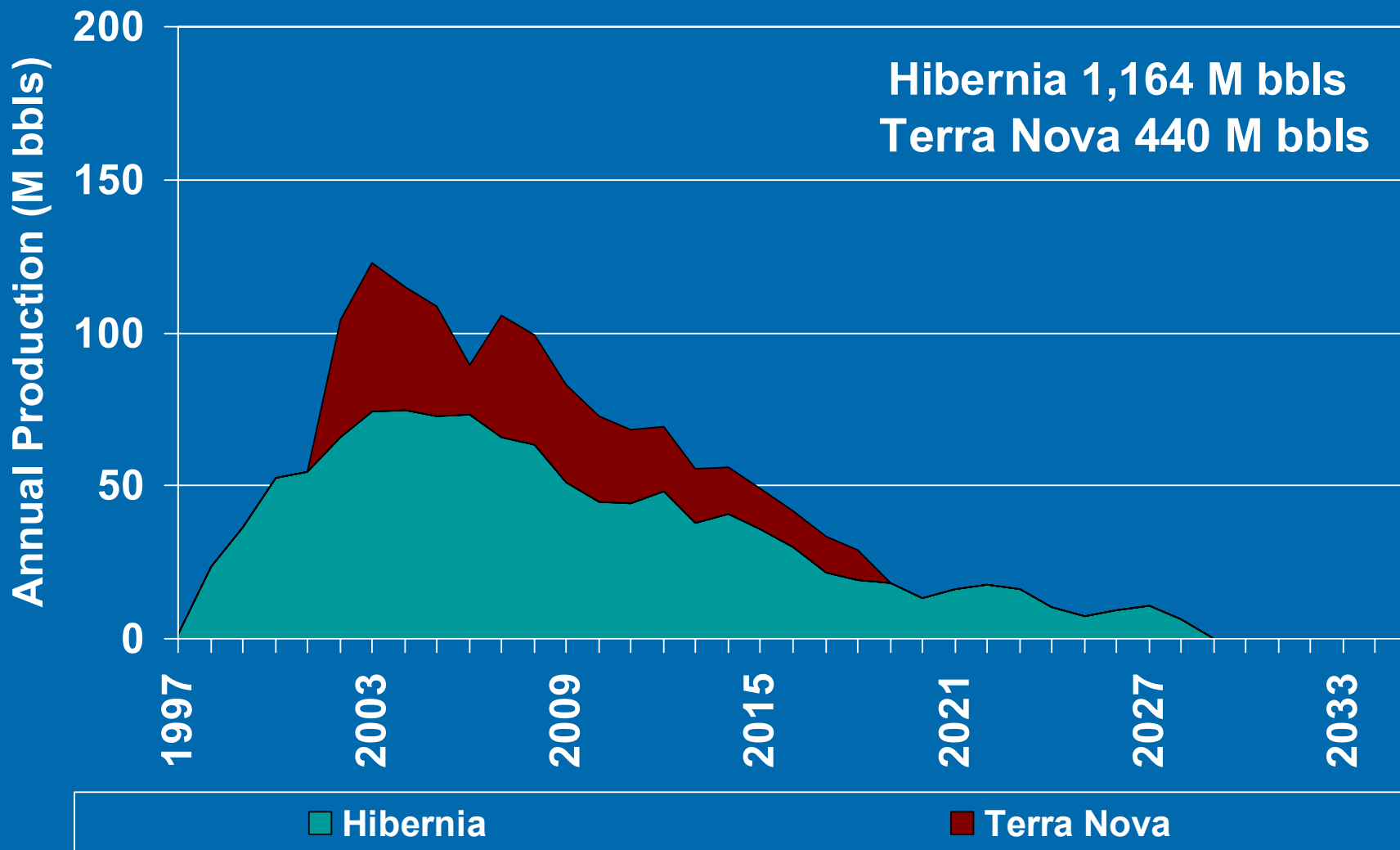
After Hebron, there is not a lot in the short to medium term.

# Actual & Assumed Production NL



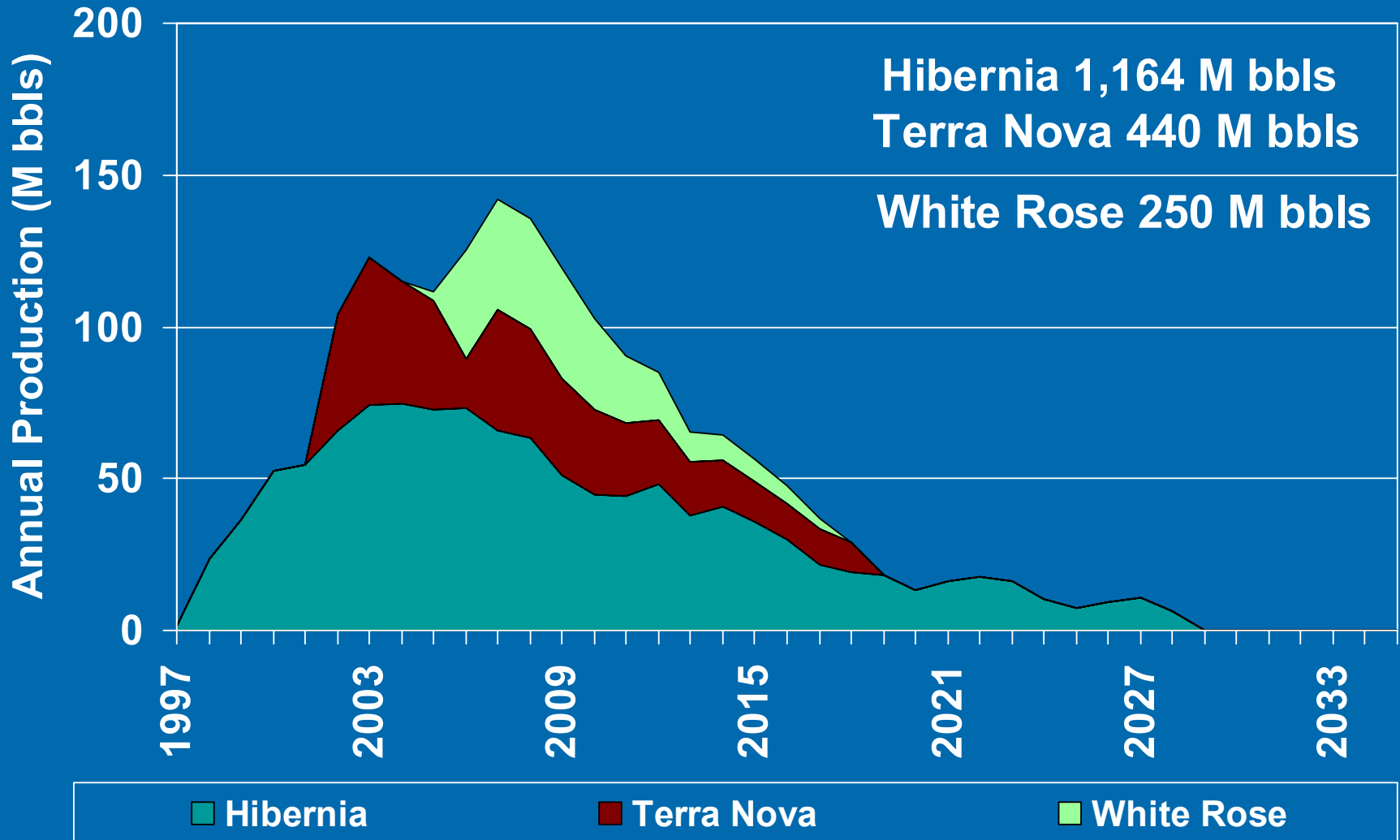
Source: Hibernia based on updated Dev. Plan (May 2006).

# Actual & Assumed Production NL



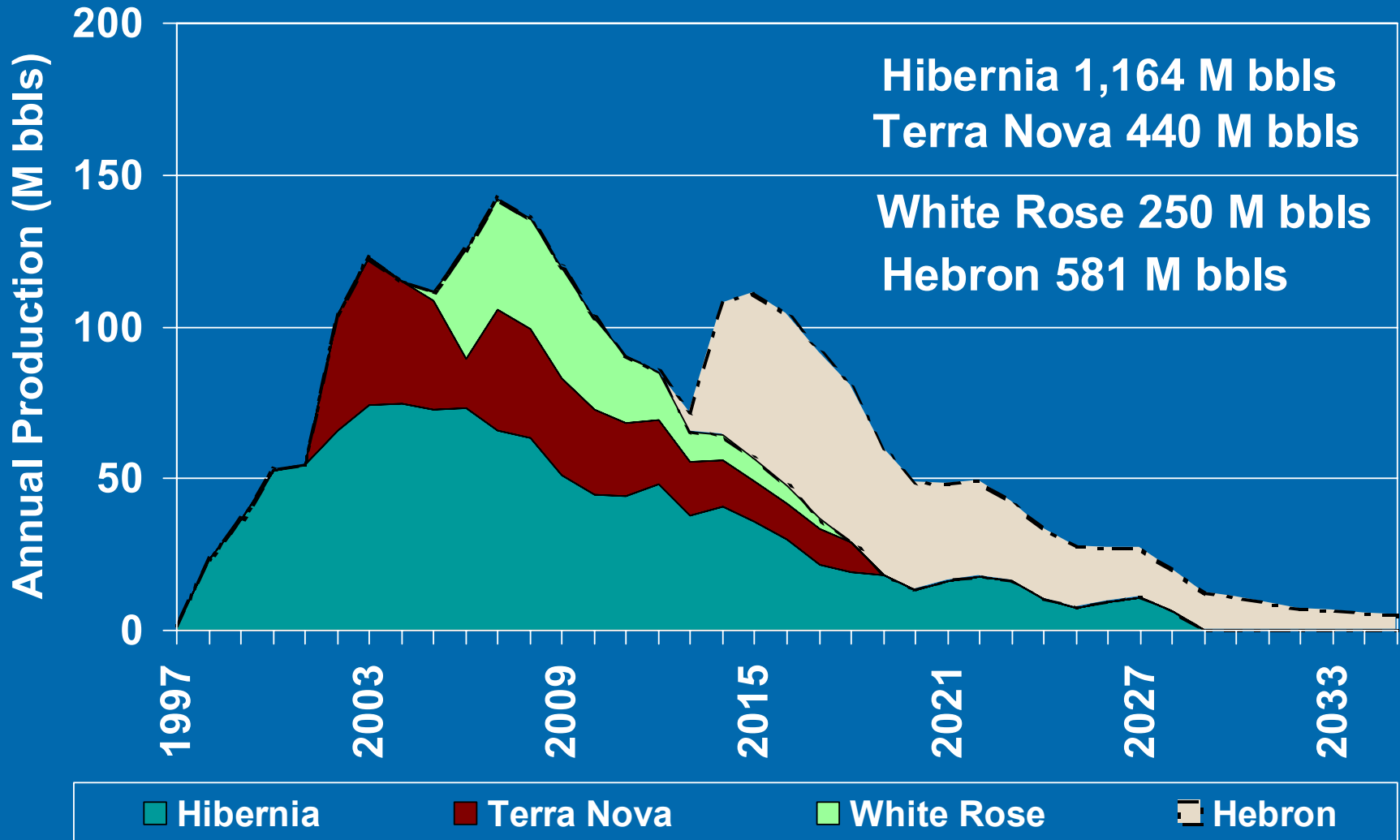
Source: Hibernia based on updated Dev. Plan (May 2006), Terra Nova based on Petro-Canada website.

# Actual & Assumed Production NL



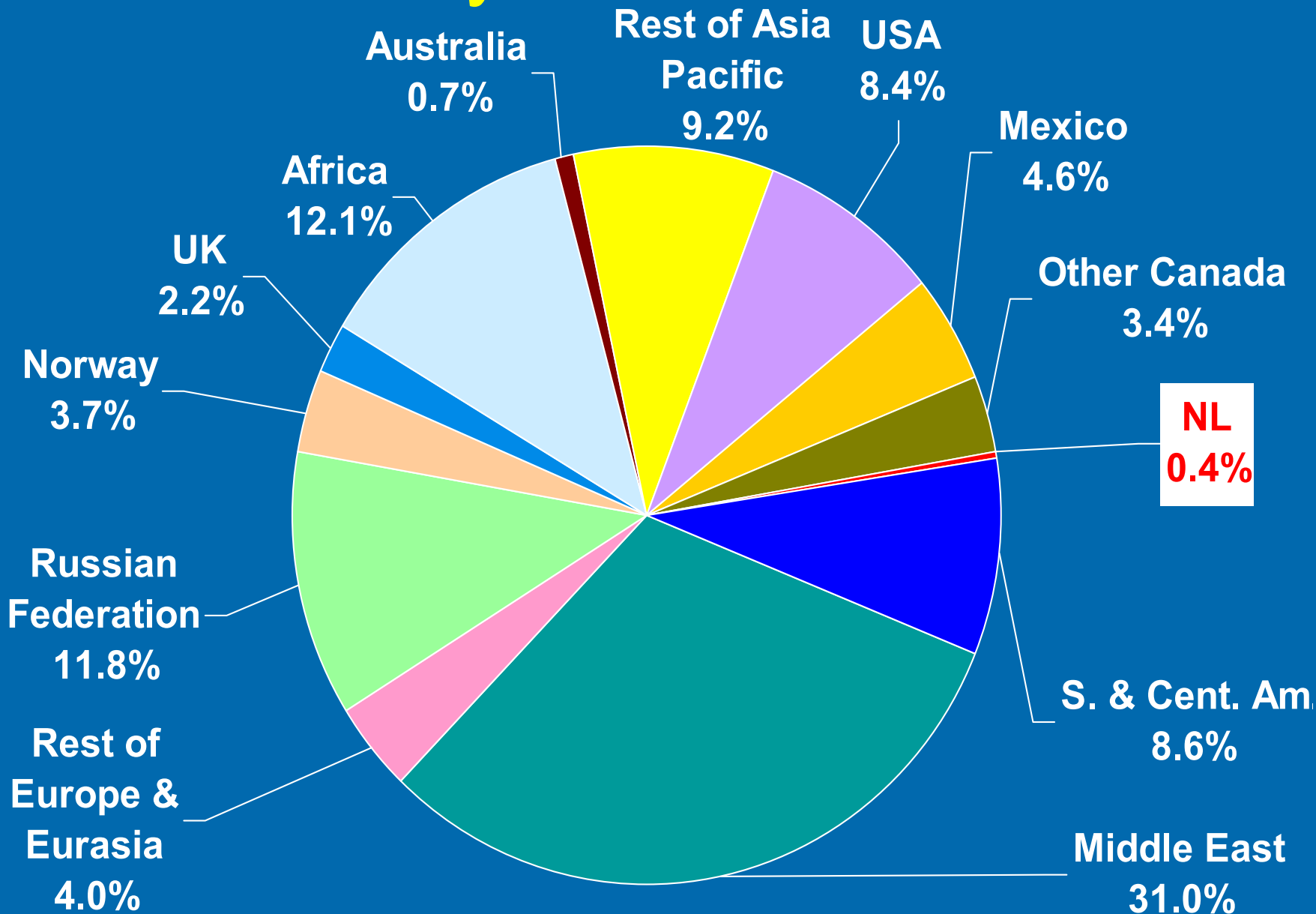
Source: Hibernia based on updated Dev. Plan (May 2006), White Rose & Terra Nova based on respective websites.

# Actual & Assumed Production NL



Source: Hibernia based on updated Dev. Plan (May 2006), Hebron are based on CNLOPB Resources and Reserve Estimates - Revised June 1, 2006. White Rose & Terra Nova based on respective websites.

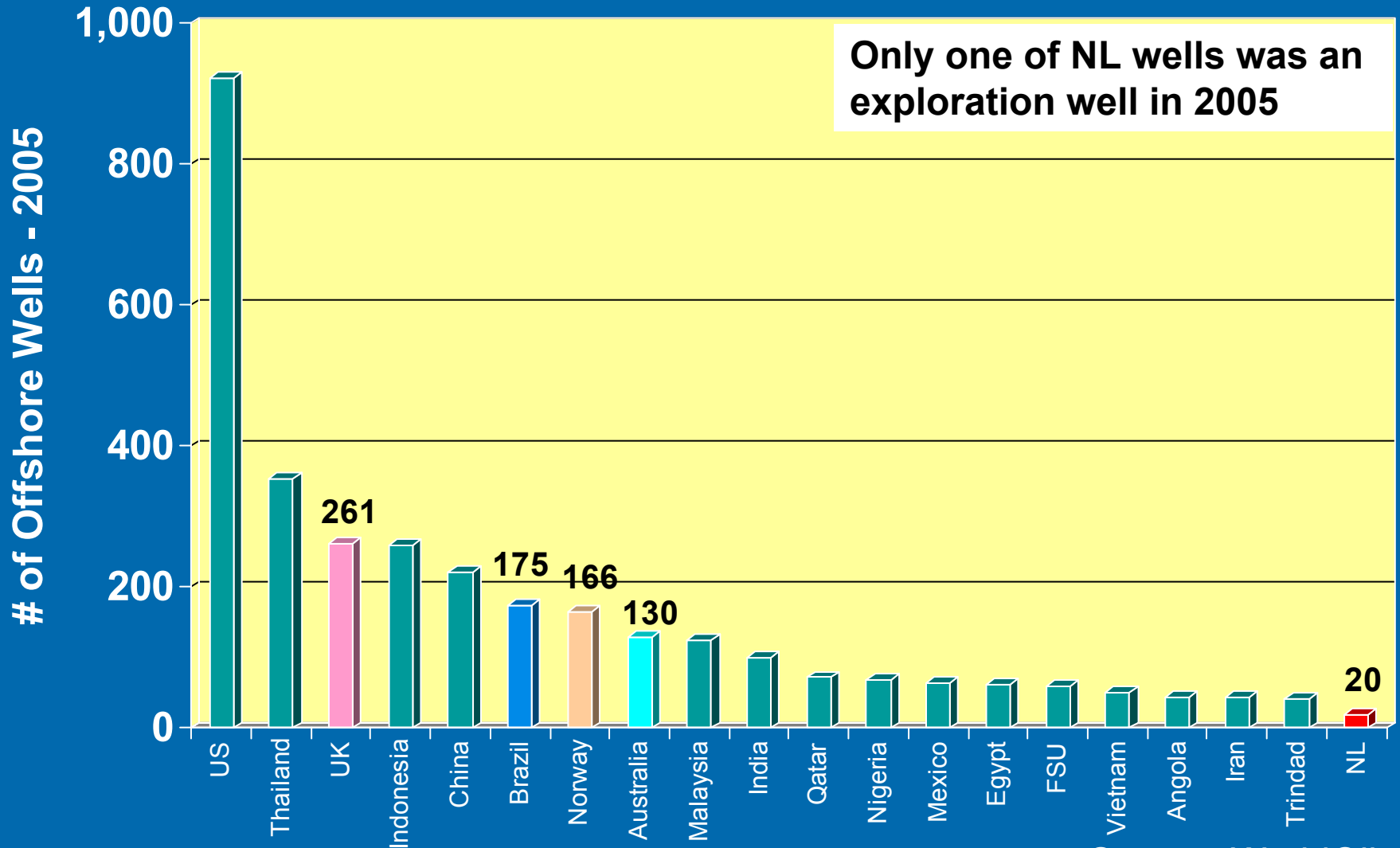
# World's Daily Oil Production -2005



**NL production not large, but it is significant.**



# Offshore Wells Drilled in 2005

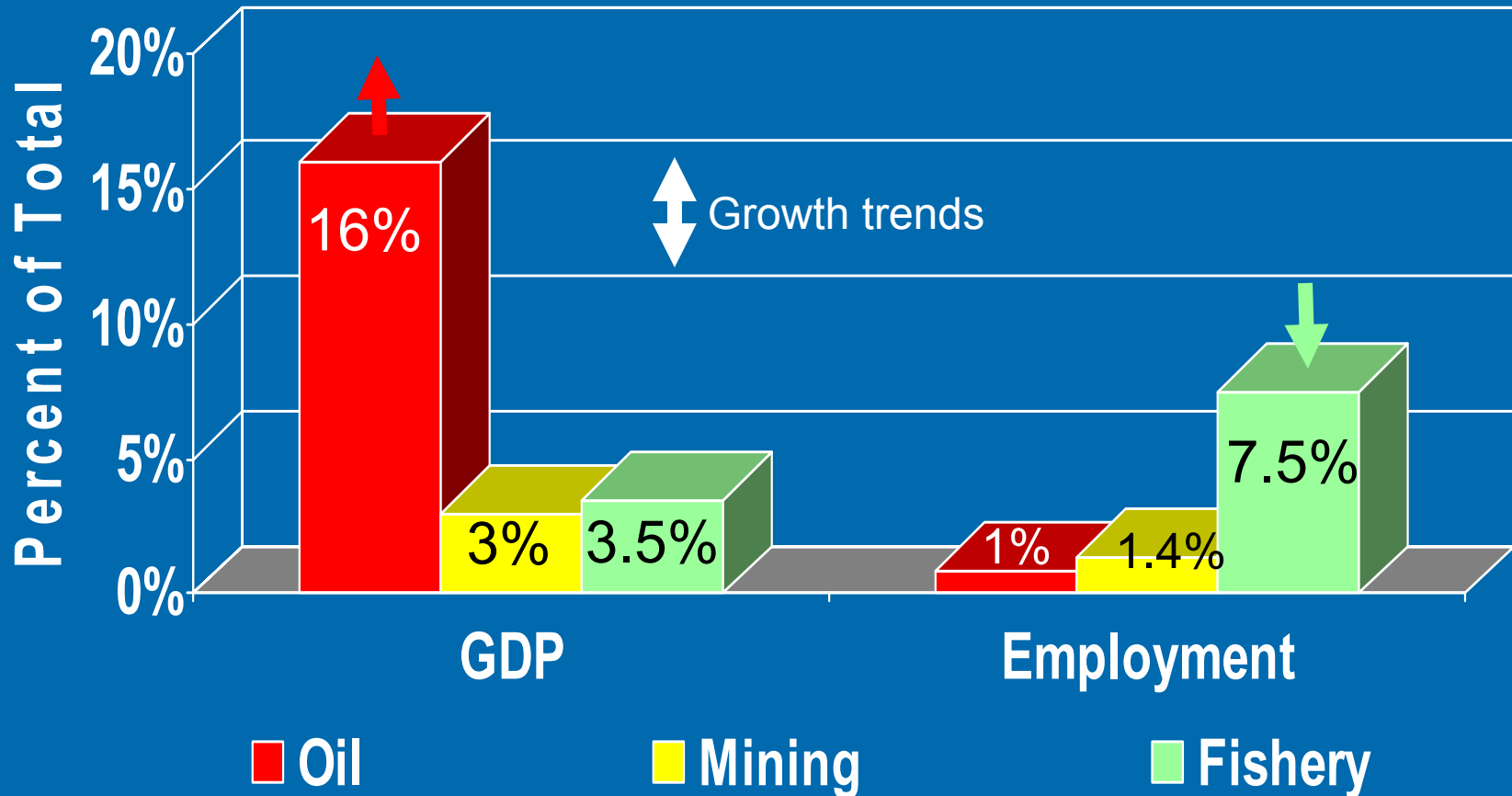


Source: WorldOil.com

Drilling indicates many other opportunities for investment.

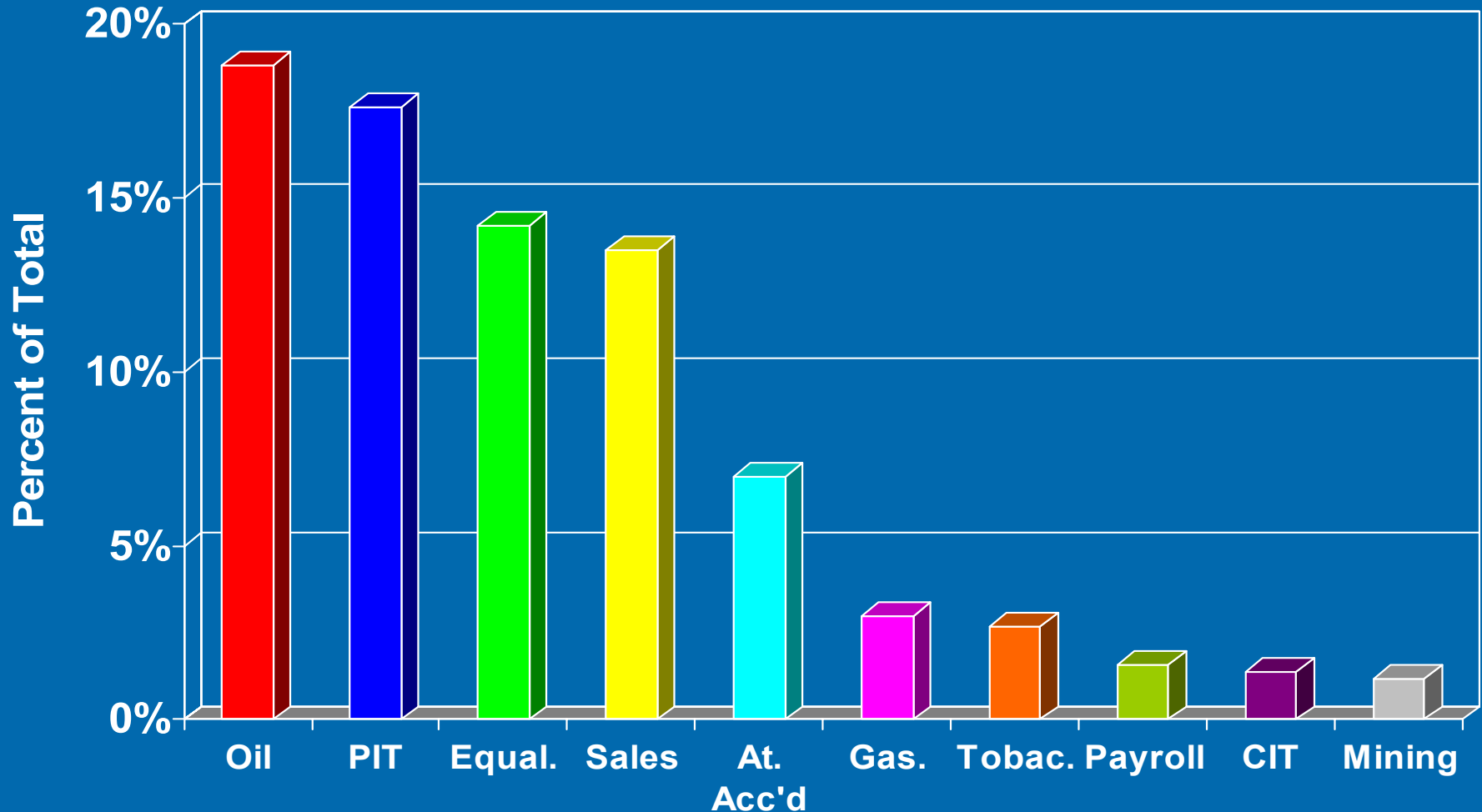
& CNLOPB

# NL GDP and Employment Impact by Industry (2006)



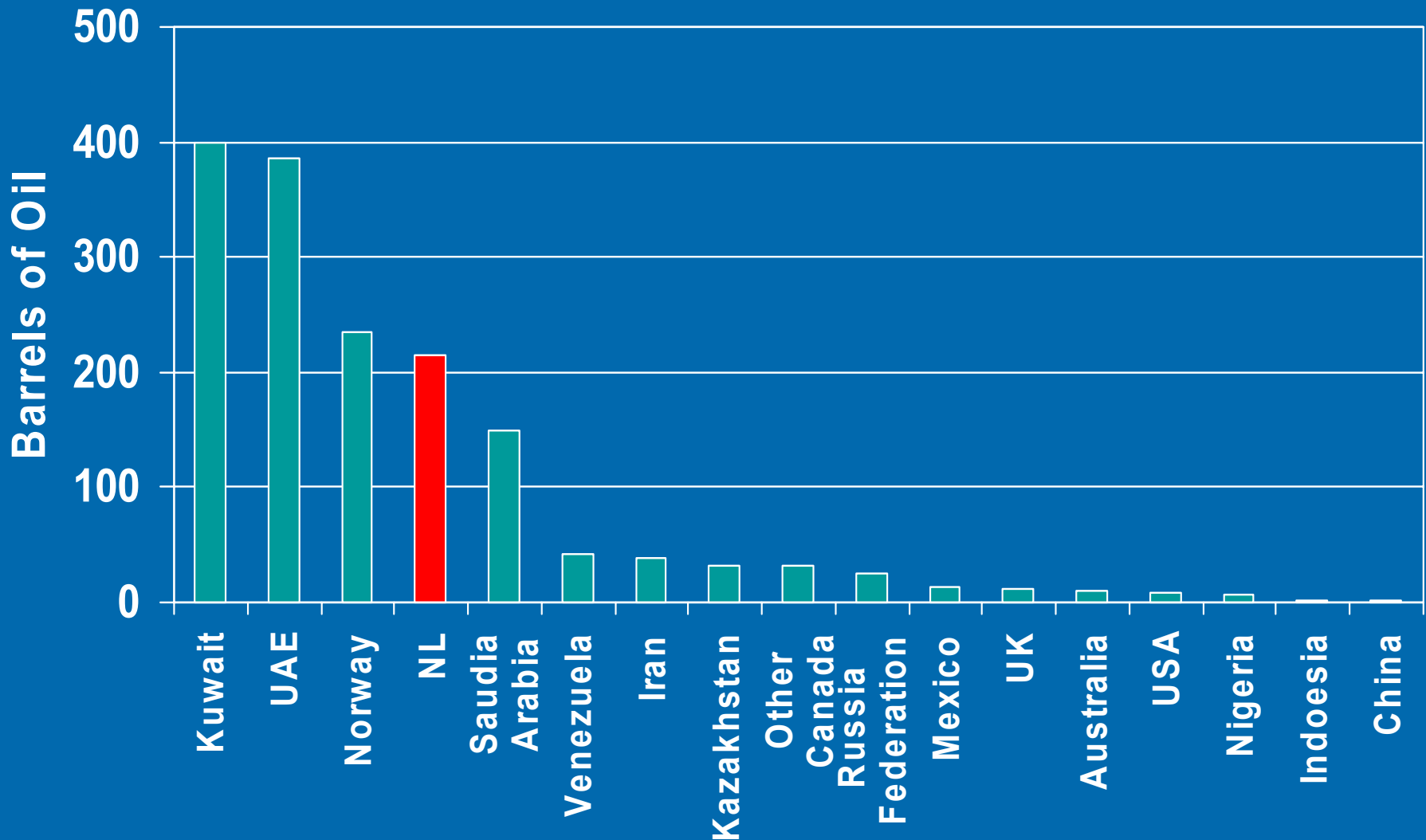
**Oil important contributor to NL economy**

# Provincial Revenue Shares by Source (2006)



**Oil is biggest revenue source of NL treasury & will get bigger.**

# Barrels per year/1,000 people - 2005



**Relative to size of population, oil very significant in NL**

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

- NL production, reserves and activity levels are 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

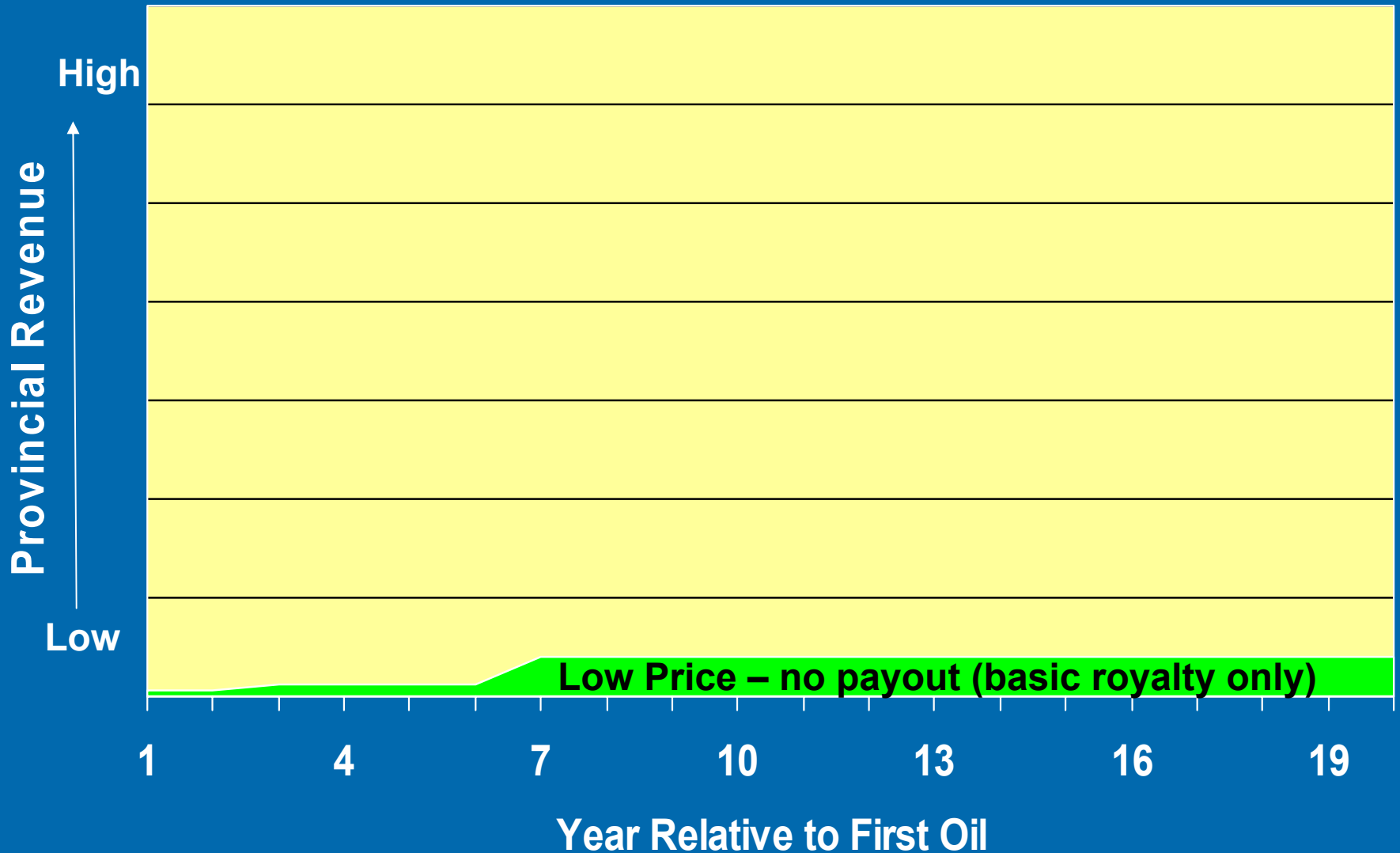
# How does the NL government benefit financially from the oil industry?

- Royalties & Corporation Income Tax
- Taxable income for corporation is determined on a national basis
  - Allocated based on the average of the share of salaries and wages and share of gross revenue in the province
- 25% share of taxable income generated in NL's offshore assumed to be allocated to NL

# Royalty Regime Comparison

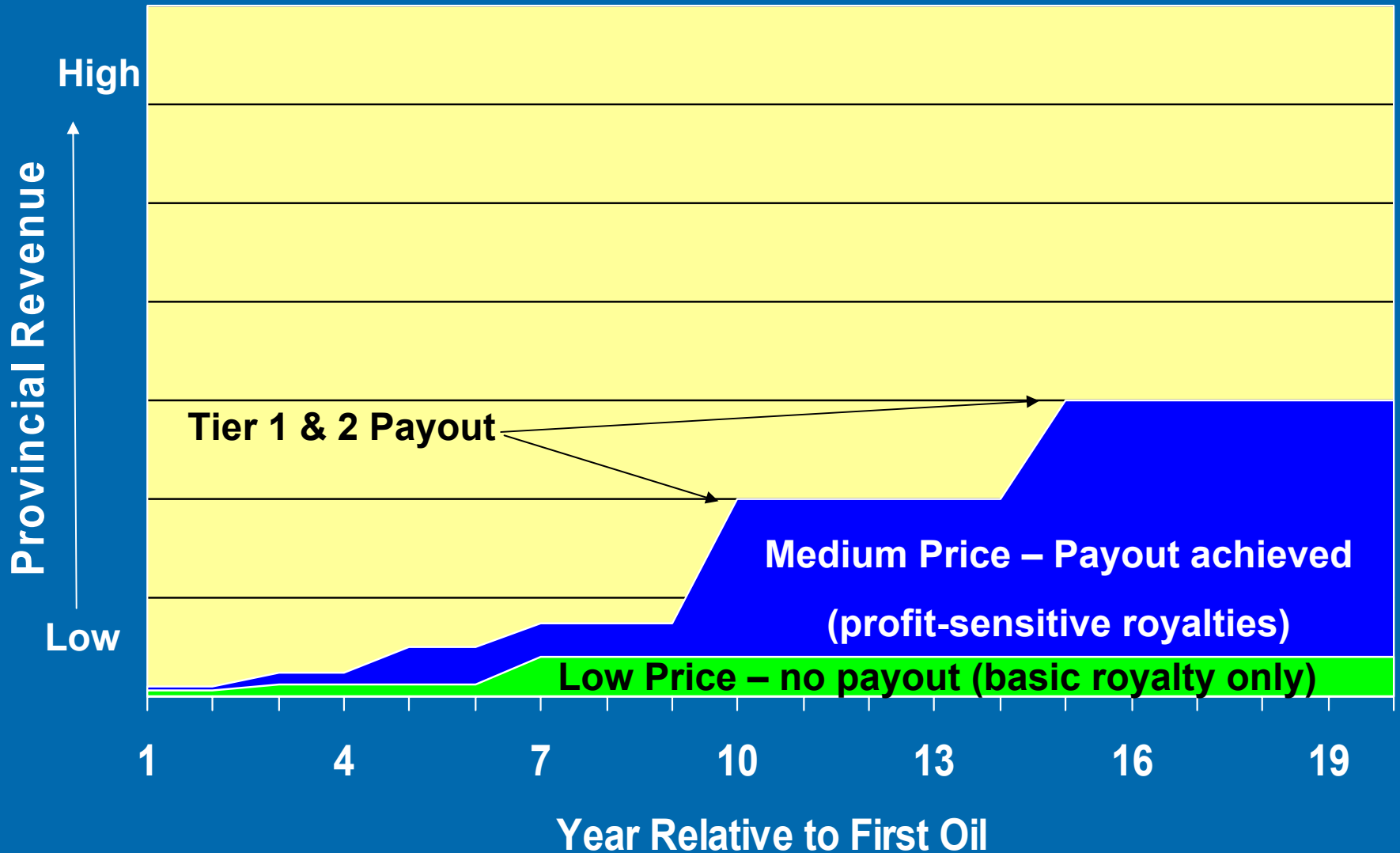
	Hibernia	Terra Nova	Generic Offshore
<b>Basic Rate</b>	<b>1 - 5%</b>	<b>1 – 10%</b>	<b>1 - 7.5%</b>
<b>Tier 1 Rate</b>	<b>30%</b>	<b>30%</b>	<b>20%</b>
<b>Tier 1 Allowance</b>	<b>15%</b>	<b>10% + CPI</b>	<b>5% + LTBR</b>
<b>Tier 2 Rate</b>	<b>12.5%</b>	<b>12.5%</b>	<b>10%</b>
<b>Tier 2 Allowance</b>	<b>18% + CPI</b>	<b>18% + CPI</b>	<b>15% + LTBR</b>
<b><u>Uplift on:</u></b>			
<b>Capex</b>	<b>1%</b>	<b>1%</b>	<b>1%</b>
<b>OPEX</b>	<b>10%</b>	<b>10%</b>	<b>10%</b>

# Conceptual Illustration of Provincial Royalties Under Generic Regime

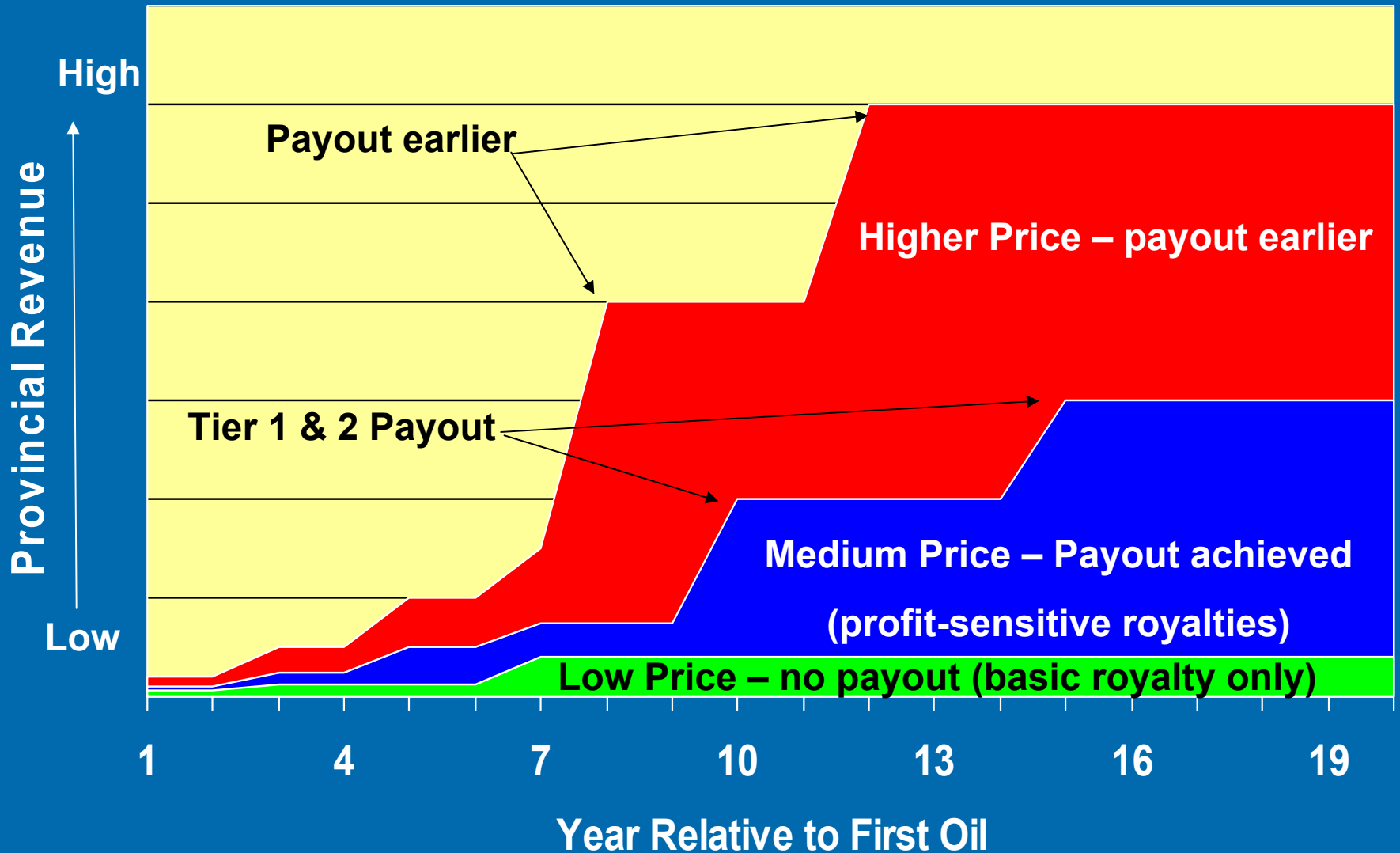




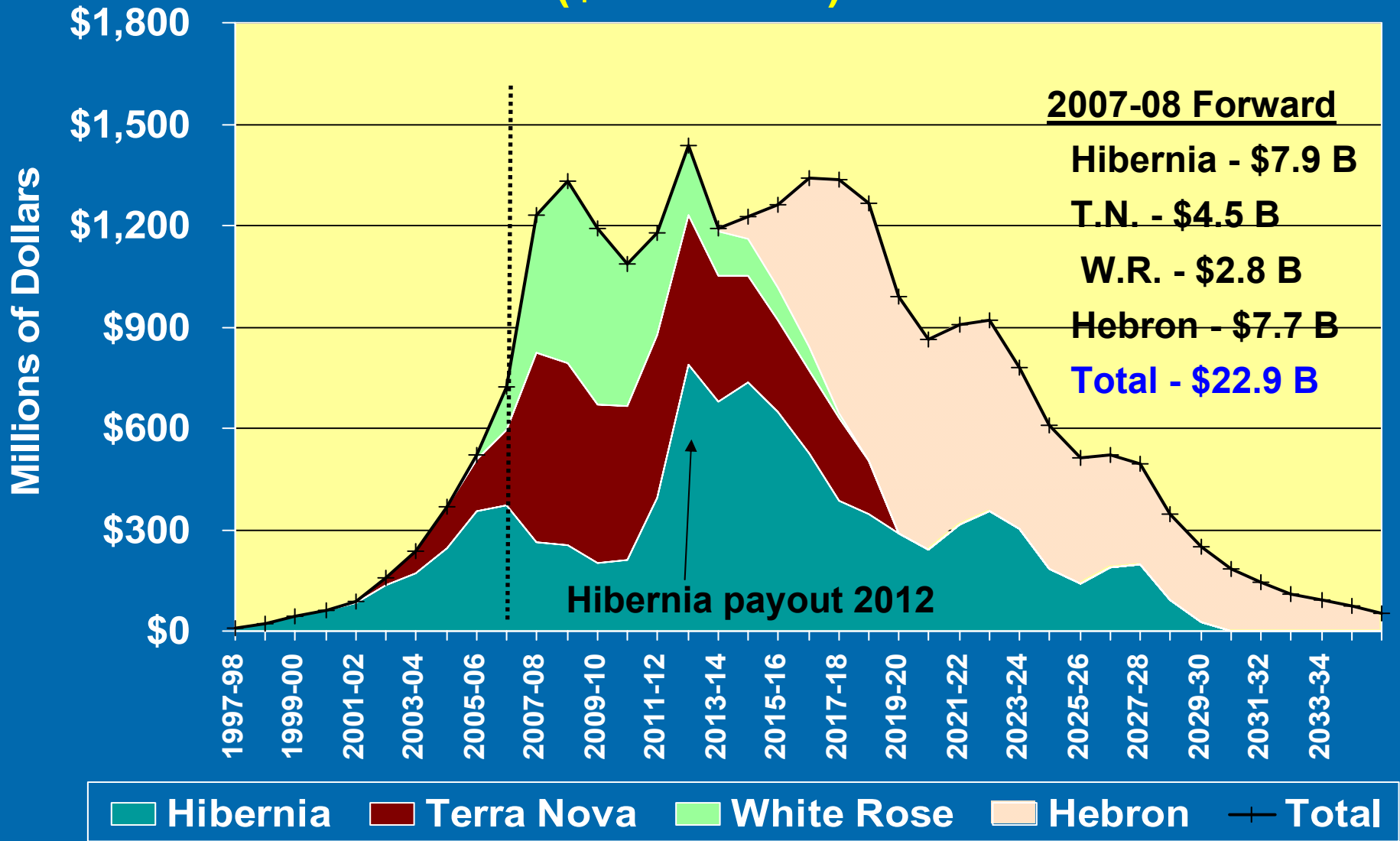
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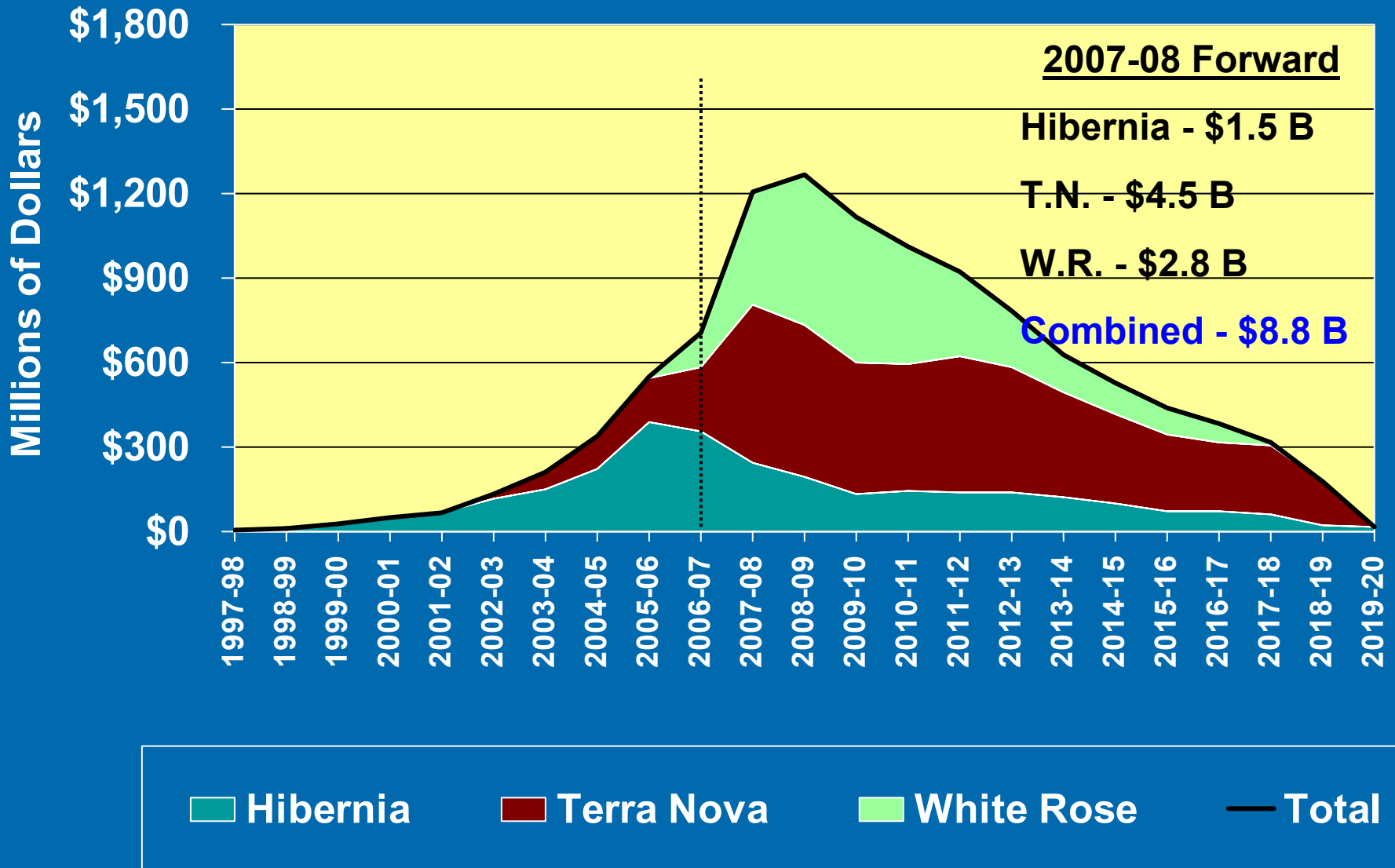


# Provincial Oil Revenue - Fiscal Year Estimates (\$50 US/bbl)



**NL should be a “have” province within 5 years & Atlantic Accord may not be extended. The implications of the latter needs to be analyzed.**

# Provincial Oil Revenue - Fiscal Year Estimates (W/O Additional Hibernia Production & Hebron)



**Extra production at Hibernia & Hebron crucial to financial contribution**

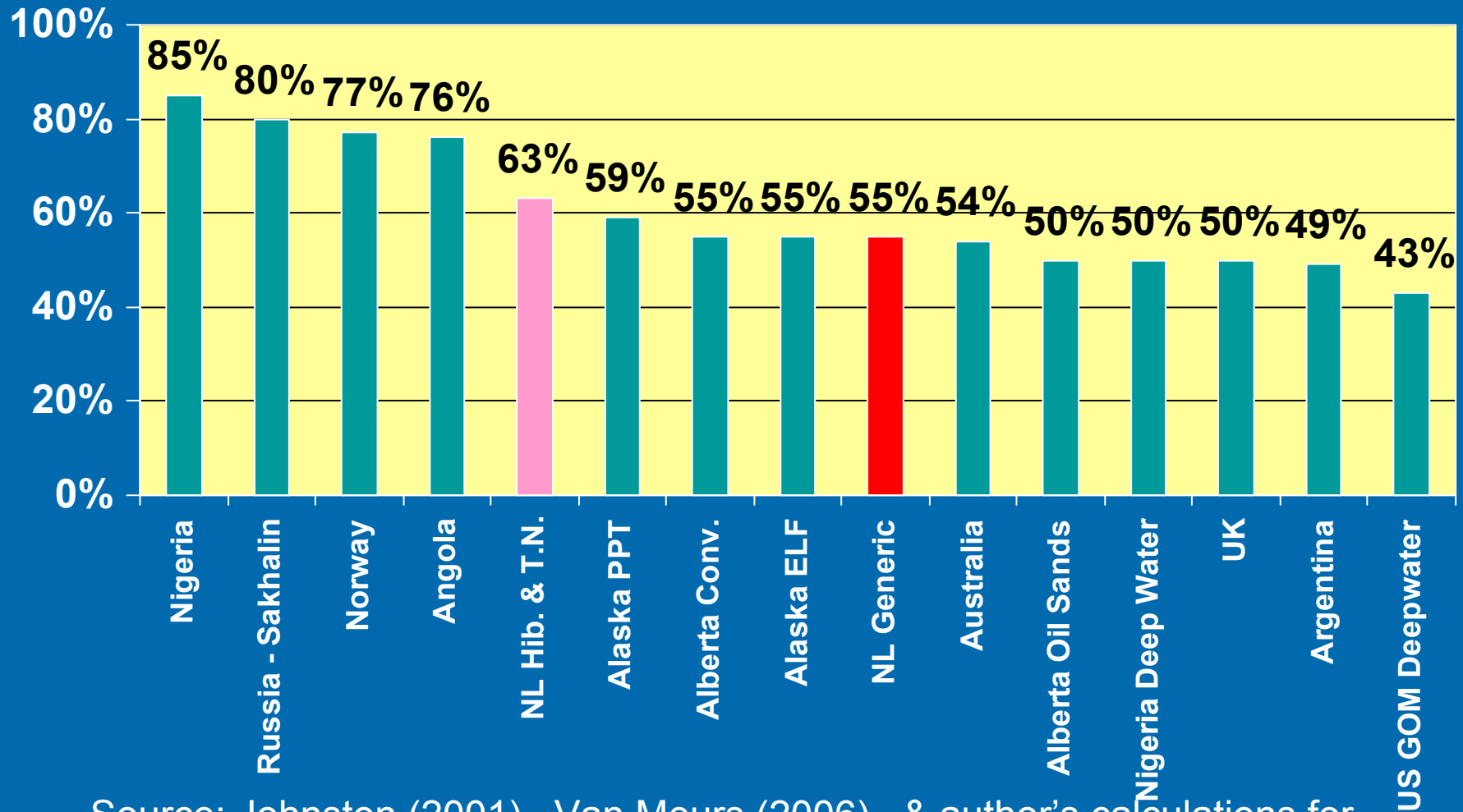
# How does the NL government benefit financially from the oil industry?

- \$15.2 B to Treasury on go-forward basis from 3 existing fields
- Government revenue from existing fields peaks at \$1.4 B in 2012-13, then starts to decline steeply
- Hebron could add another \$7.7 B and stem the decline
- Potential to have in excess of \$1 B for 12 years and in excess of \$0.5 B for 20 years
- Without Hebron & extra Hibernia production, government revenues, on go-forward basis, drop from \$23 B to \$9 B

# Who is the primary beneficiary of NL's oil?

- How does Government-Take in NL compare to other jurisdictions?
  - $\text{Government-Take} = \frac{\text{Gov. Rev. (all sources)}}{\text{Pre-Tax Net Cash Flow}}$
- Does Government-take change when oil prices change?
  - That is, is the system progressive?

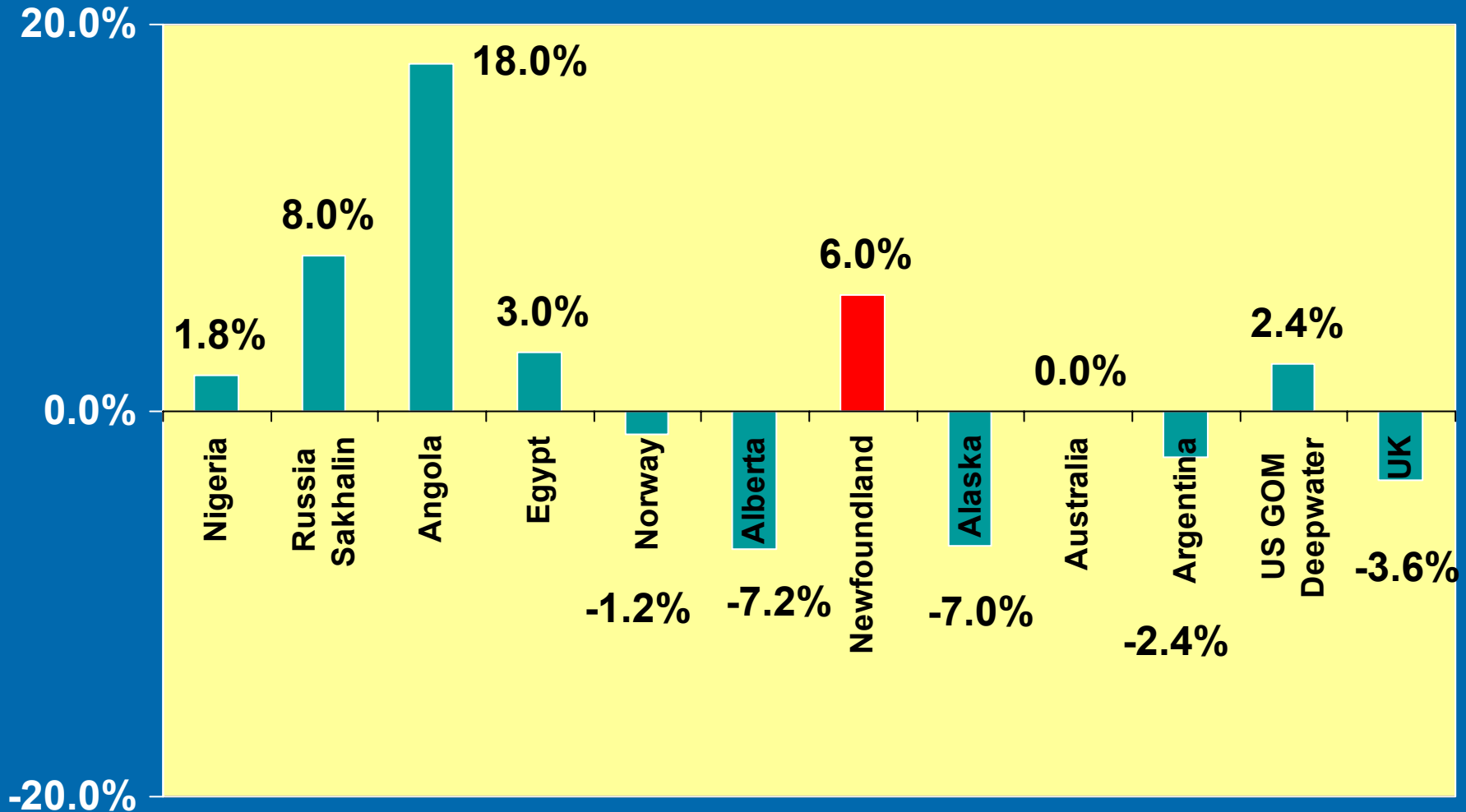
# Government-Take Comparison



Source: Johnston (2001), Van Meurs (2006), & author's calculations for NL.

**NL Government-take in the middle, but this not synonymous with having a competitive fiscal regime.**

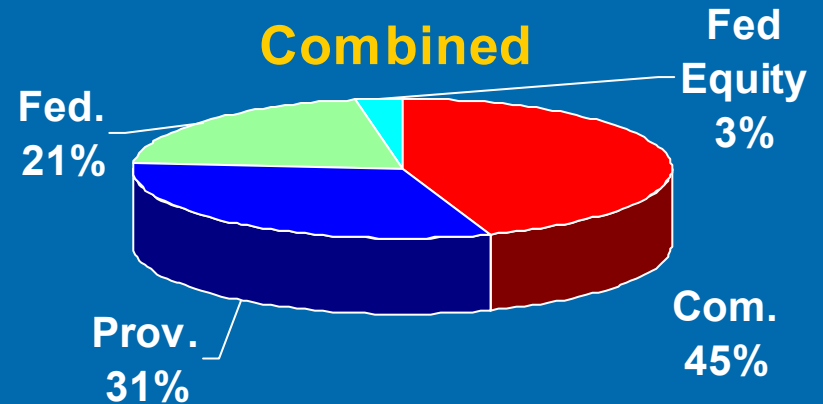
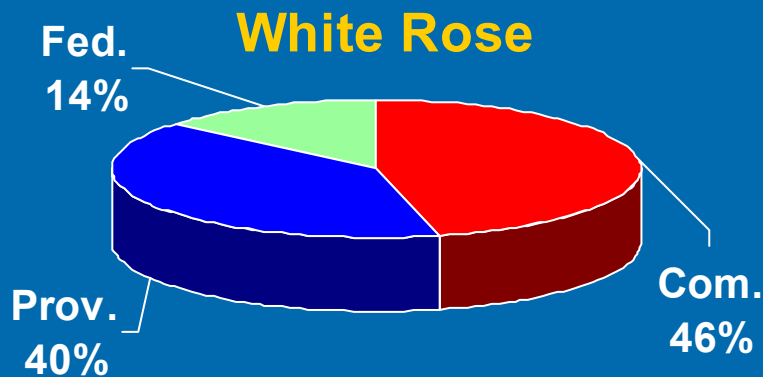
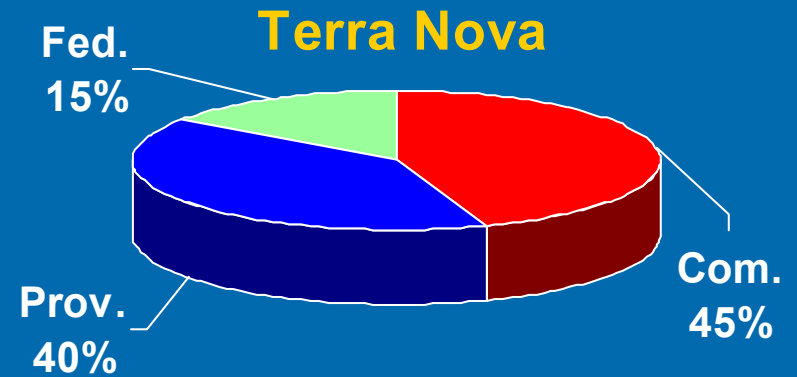
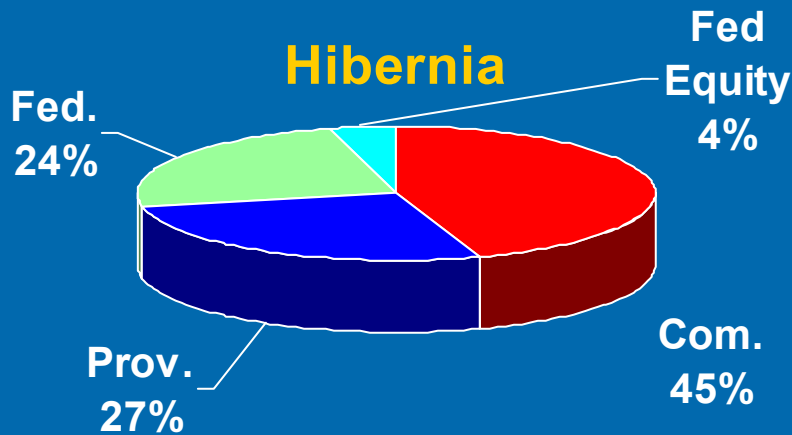
# Change in Government-Take as Price Increases from \$25 to \$75 US/bbl



NL's regime progressive.



# Relative Shares of Net Cash Flow Life of Field



**Government receives more than 50% of pre-tax NCF.**

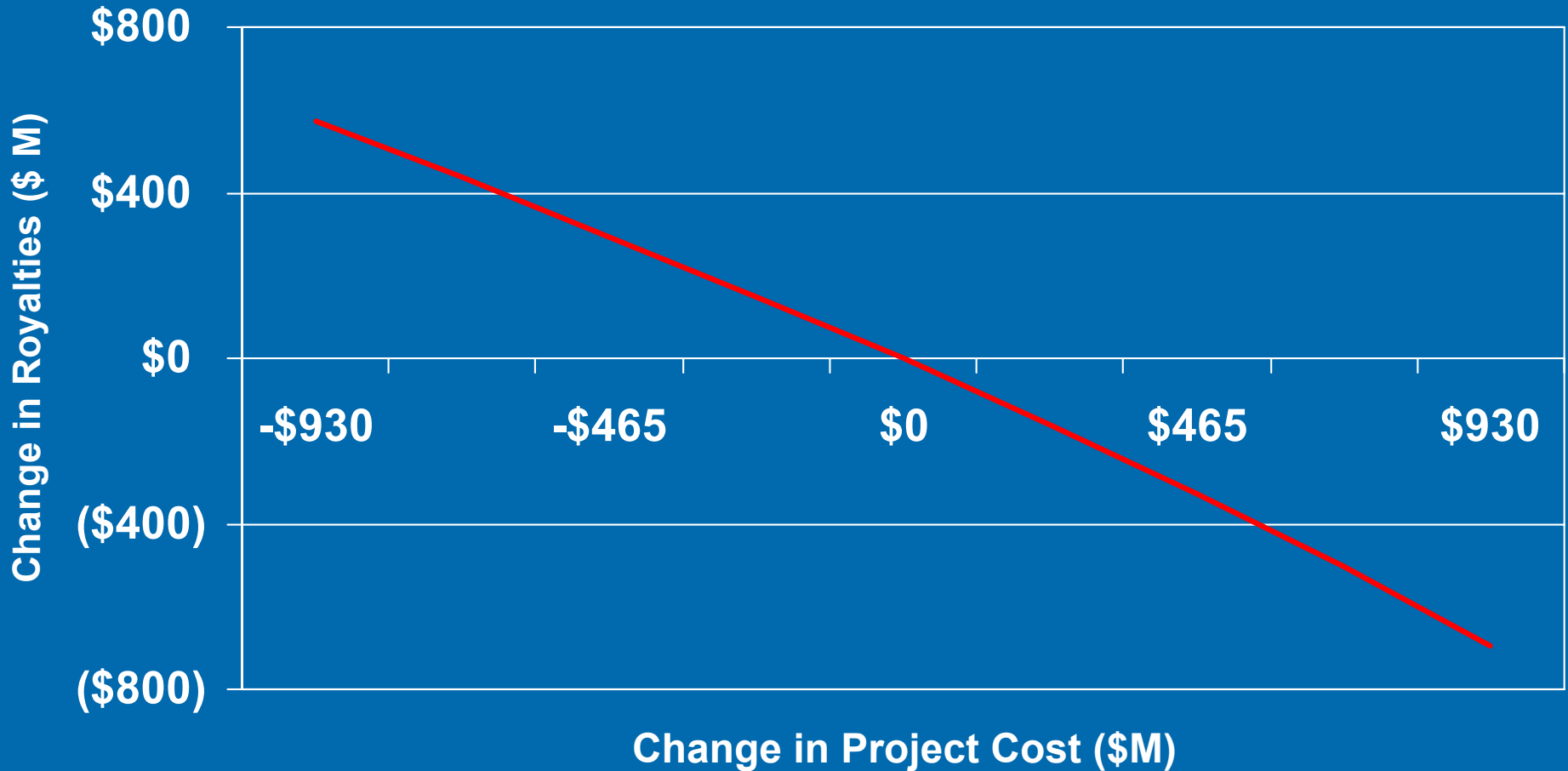
# Who is the primary beneficiary of NL's oil?

- 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

# 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



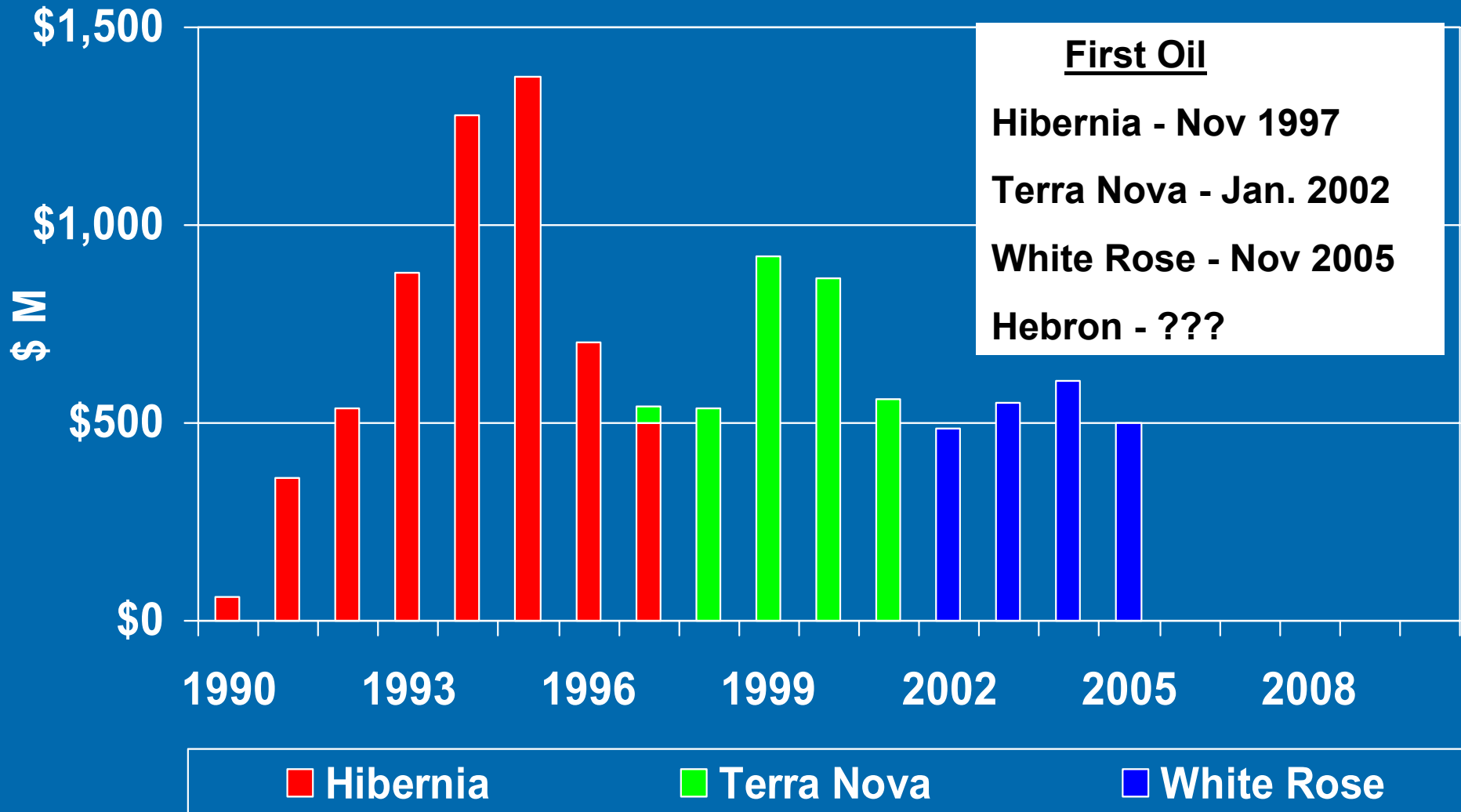
**Higher project cost leads to lower royalties**

# Is there a royalty/industrial benefits tradeoff?

- 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
- This does not necessarily mean that we should not accept this trade-off
  - Might want to grow an industry, but we should understand the size of the trade-off

# Continuity Illustration

## Development Expenditures by Project



# Continuity Discussion

- There is a belief that there is no consequence to leaving it in the ground until we can get a better deal. However, it may result in the
  - Loss of technology transfer & reduced productivity
  - Loss of up-to-date experience, which will become obsolete over time
  - Continued out-migration of skilled workers

# Fallow field – fallacy or public policy need

- No obvious reason why a well-constructed, appropriately executed & administered system could not or should not be implemented
- Other jurisdictions utilize it
- Provides “right” incentives for industry
  - “use it or lose”
  - develop, evaluate or get out of the way
  - this may cause
    - developments to happen more quickly
    - assets trades to happen
    - more timely development of small fields



# Fallow field – fallacy or public policy need

- Is this a real problem in NL?
  - It is not clear that it is, especially given the accelerating SDL rental system recently introduced by the CNLOPB & other powers the Board has currently
- What is the risk?
  - Negotiations may be distorted & political risk increased
  - E.g., “I will wait you out, unless you do what I want?”
- Maturity of area
  - UK and Norway have many fields & NL has 3. As such, tie-back options for small fields may not be available

# Conclusion

- NL offshore oil sector is vitally important to all aspects of the NL economy. There are tremendous benefits provided to all stakeholders and to the economy as a whole
- NL will become a “have” province within five years because of oil
- NL government will have sufficient resources to meet their economic, financial and social priorities for medium to longer term

# Conclusion (cont'd)

- Does NL have a fair share? That is not a question an economist can answer. It would simply be an opinion.
- However, there are constraints on how far NL can increase its share & there are consequences to our actions. At the end of the day, it is a societal decision of what to strive for and an industry decision of how to react to our demands.
- We need to be careful that we optimize the long term benefits of this tremendous opportunity – **let's not kill the golden goose!**

THE  
LESLIE  
HARRIS  
CENTRE  
OF REGIONAL  
POLICY AND  
DEVELOPMENT

**Thank you for allowing  
me to present my ideas**