



# HB 110 Introduction

## Proposed Changes to the Oil & Gas Production Tax



*Presentation to the  
House Resources Committee  
February 7, 2011  
Alaska Department of Revenue*



## Outline for Presentation



- **Goals of HB 110**
- **Why should we change Alaska's oil tax regime?**
- **Components of HB 110**
- **How do Alaska's oil taxes work?**



# Goals of HB 110



- **Address Progressivity**
- **Promote Infield Drilling**
- **Promote Development of New Fields**



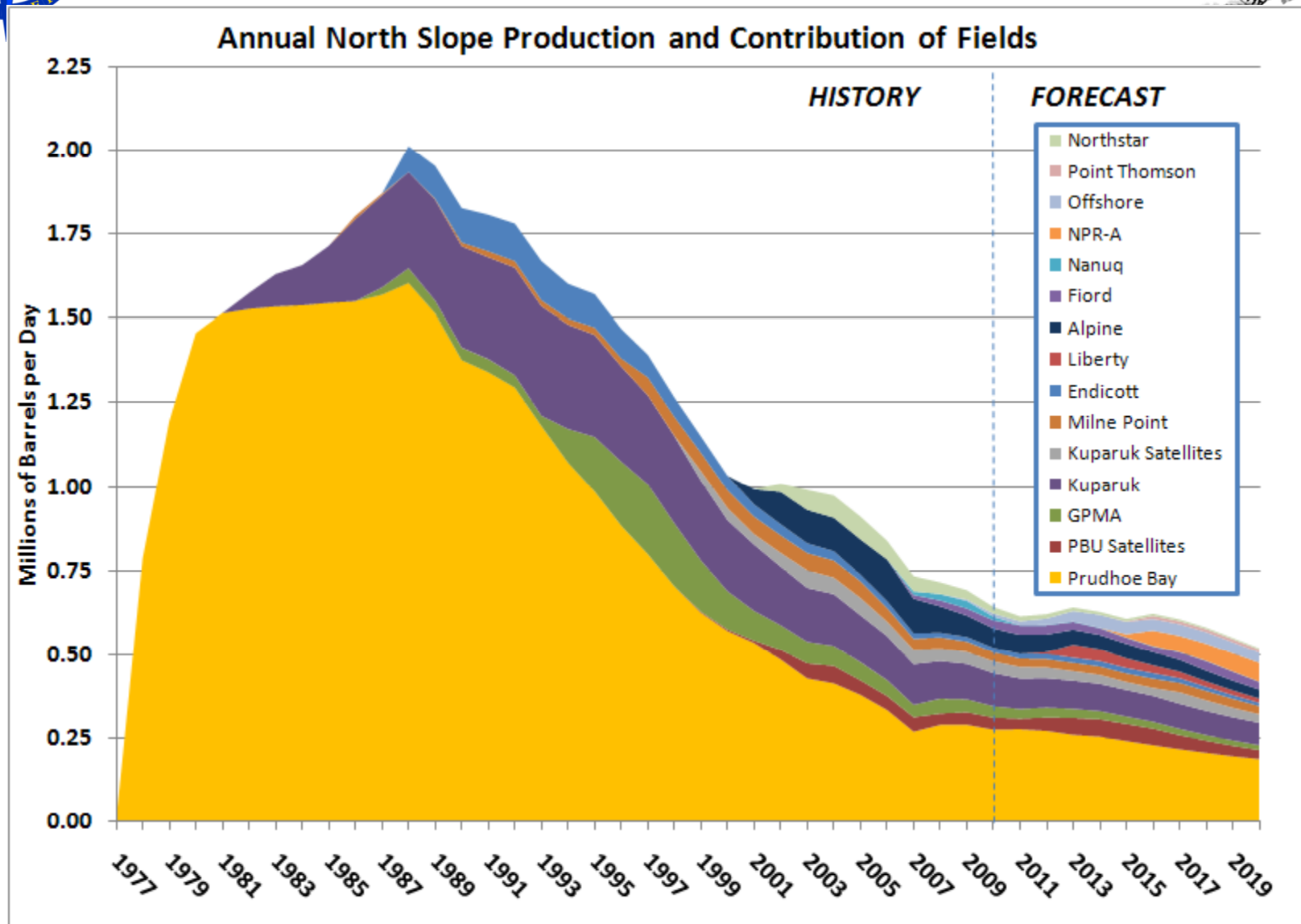
# Why should we change Alaska's oil tax regime?



- **To be more competitive**
- **To create more jobs for Alaskans**
- **To increase production**



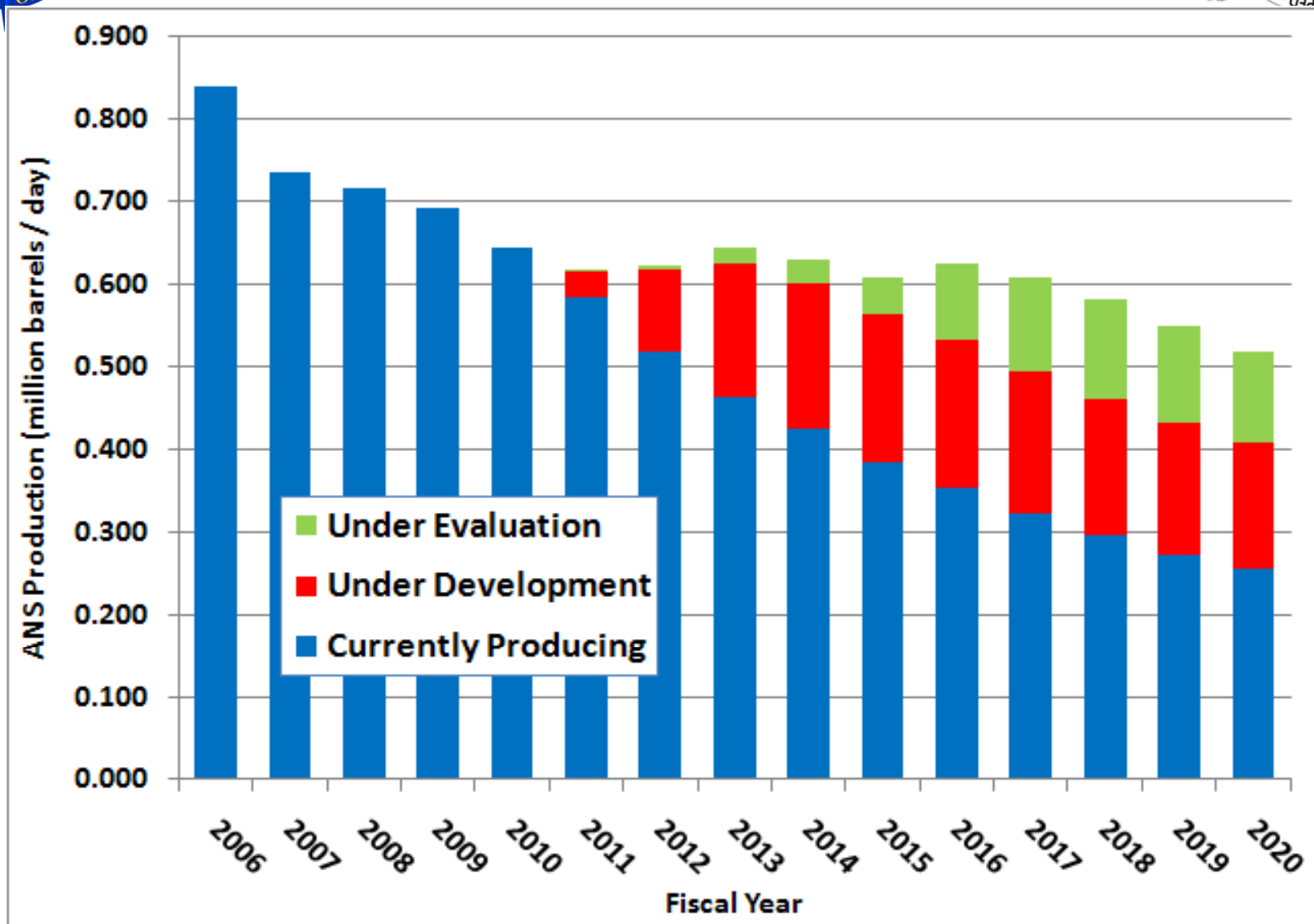
# Production is Declining



Source: Fall 2010 Revenue Sources Book



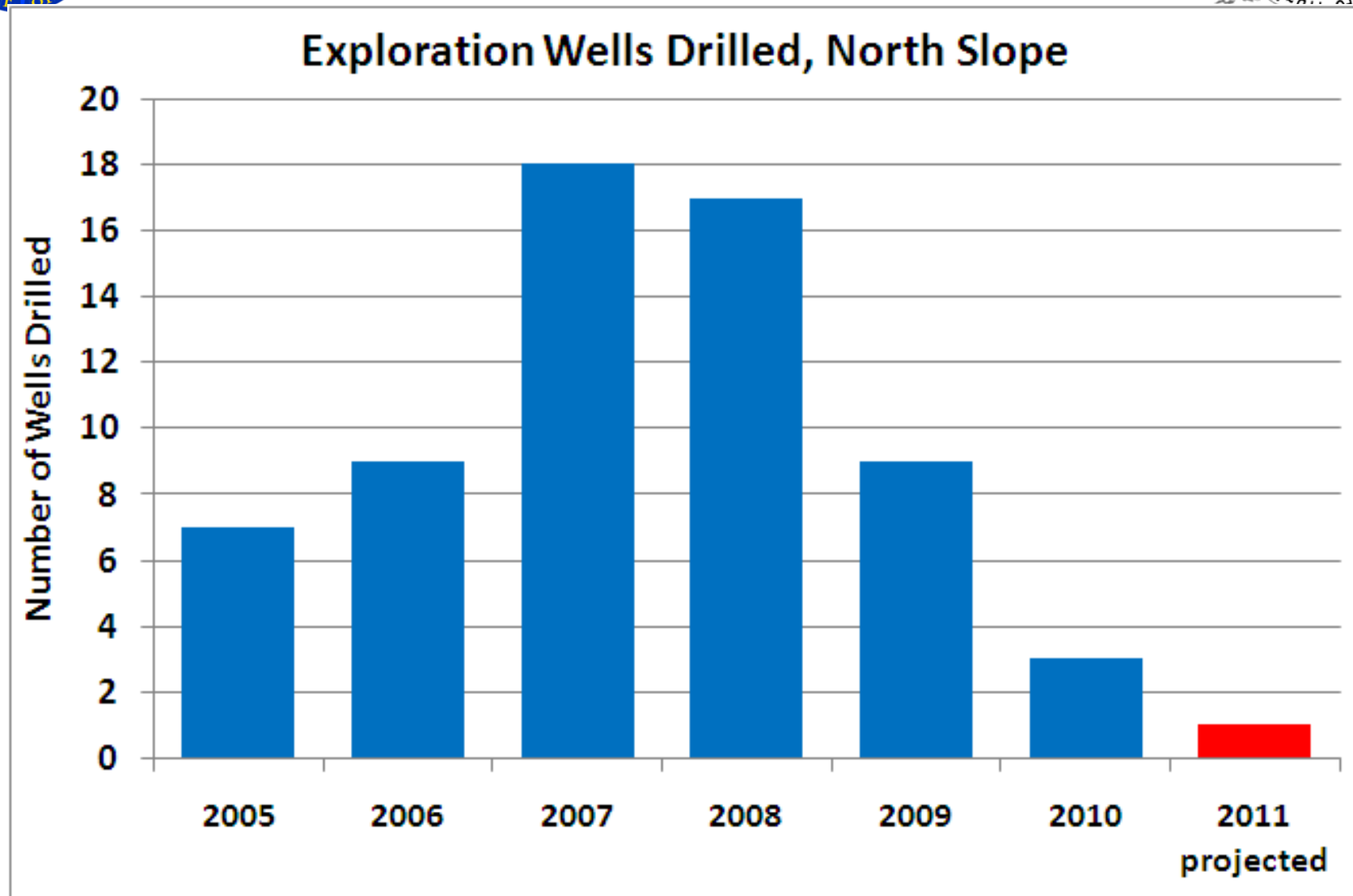
# Investment needed in new & old fields alike



Source: Fall 2010 Revenue Sources Book



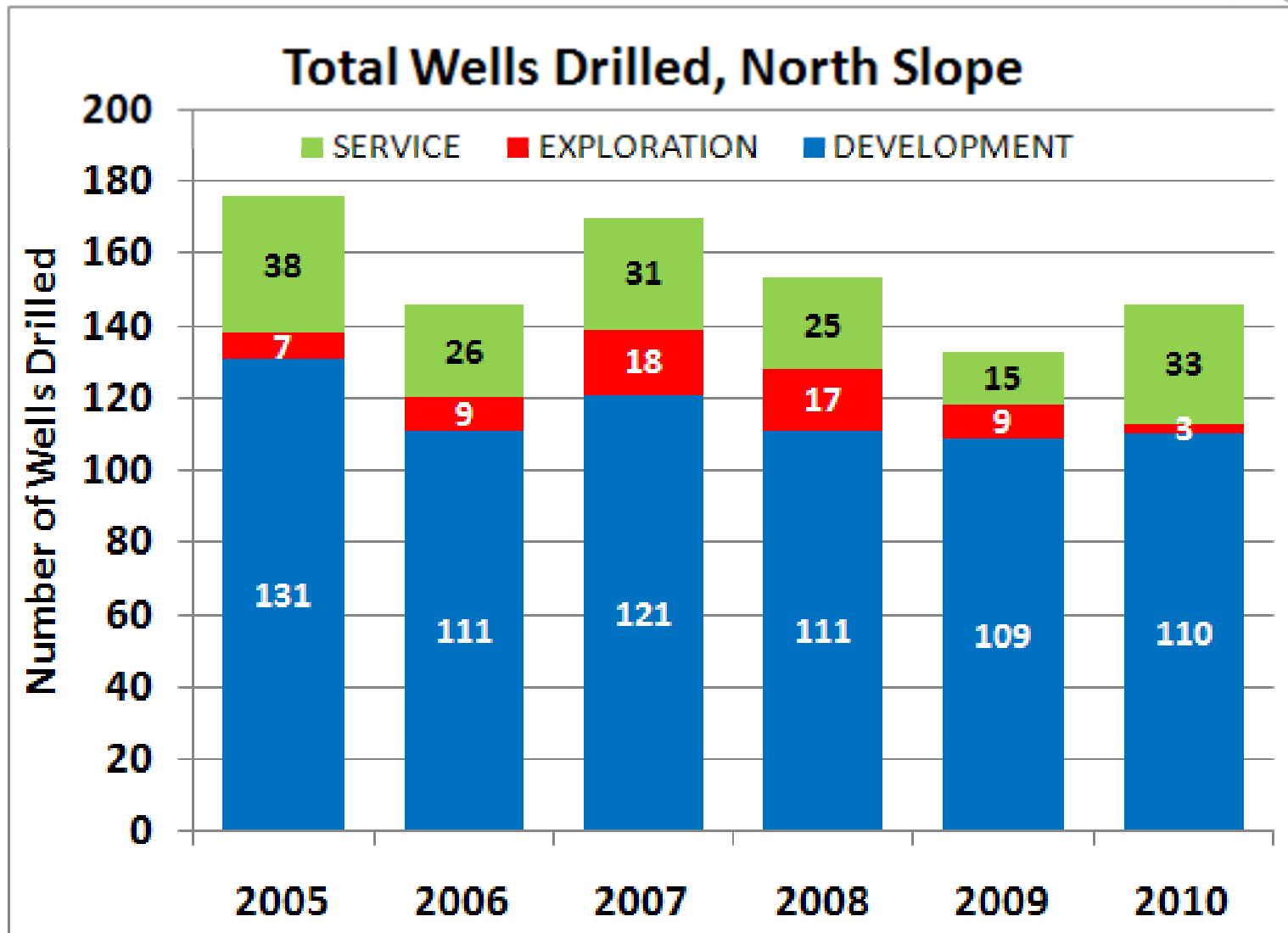
# Exploration is Declining



Source: Alaska Oil & Gas Conservation Commission and Alaska Department of Natural Resources



# Drilling has stagnated



Source: Alaska Oil & Gas Conservation Commission



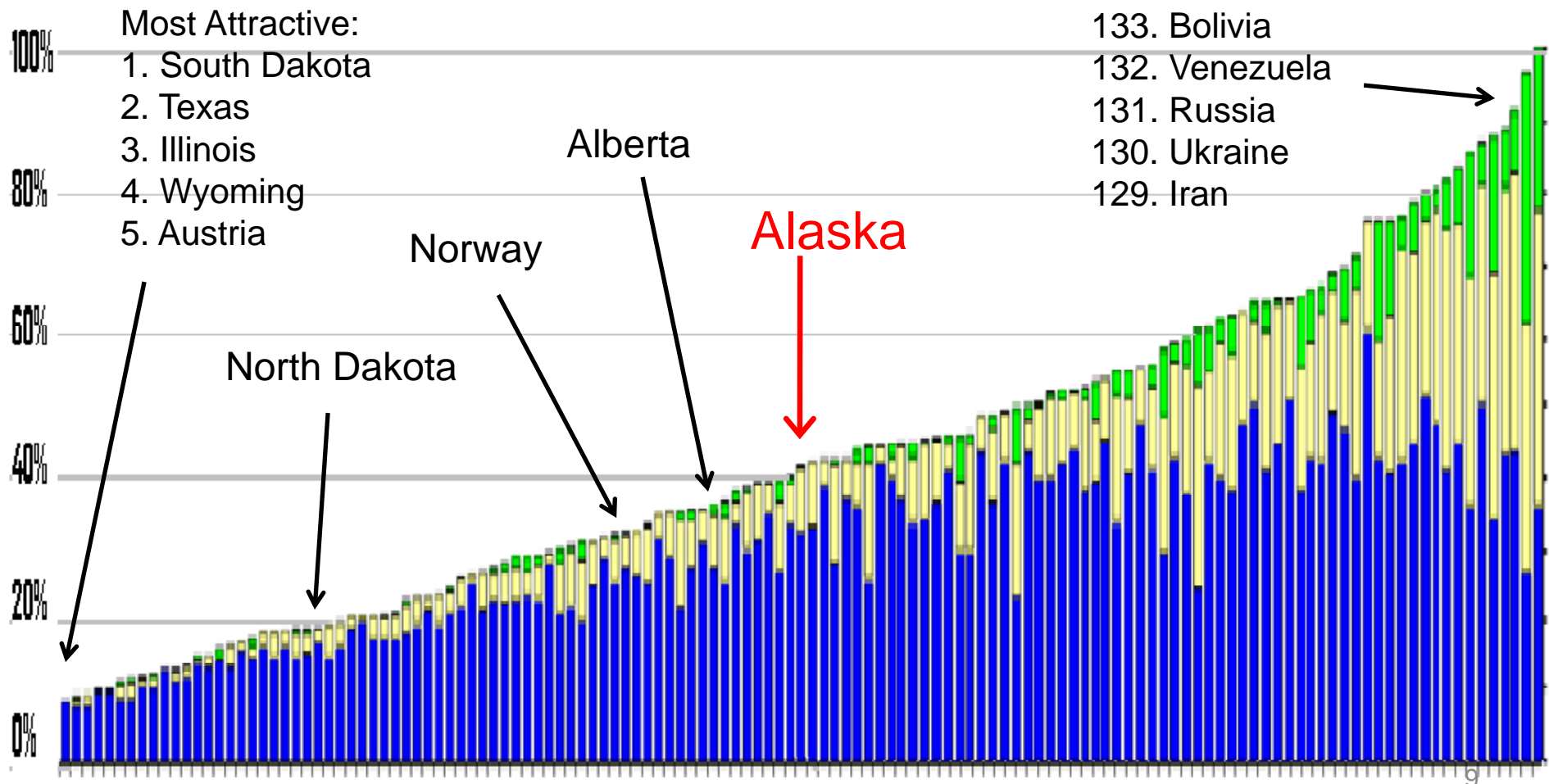


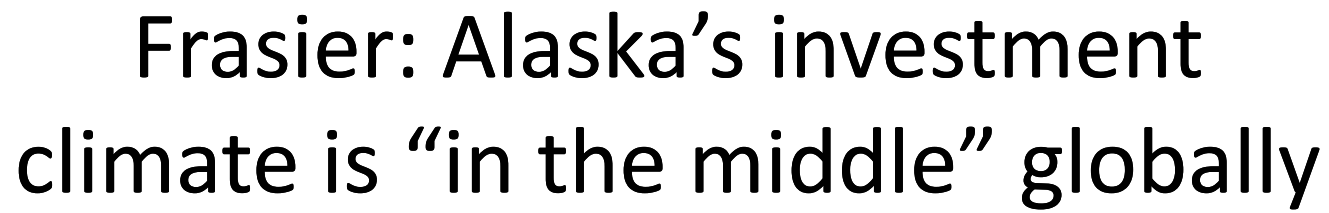
# Frasier: Alaska is #68 of 133 in terms of overall attractiveness



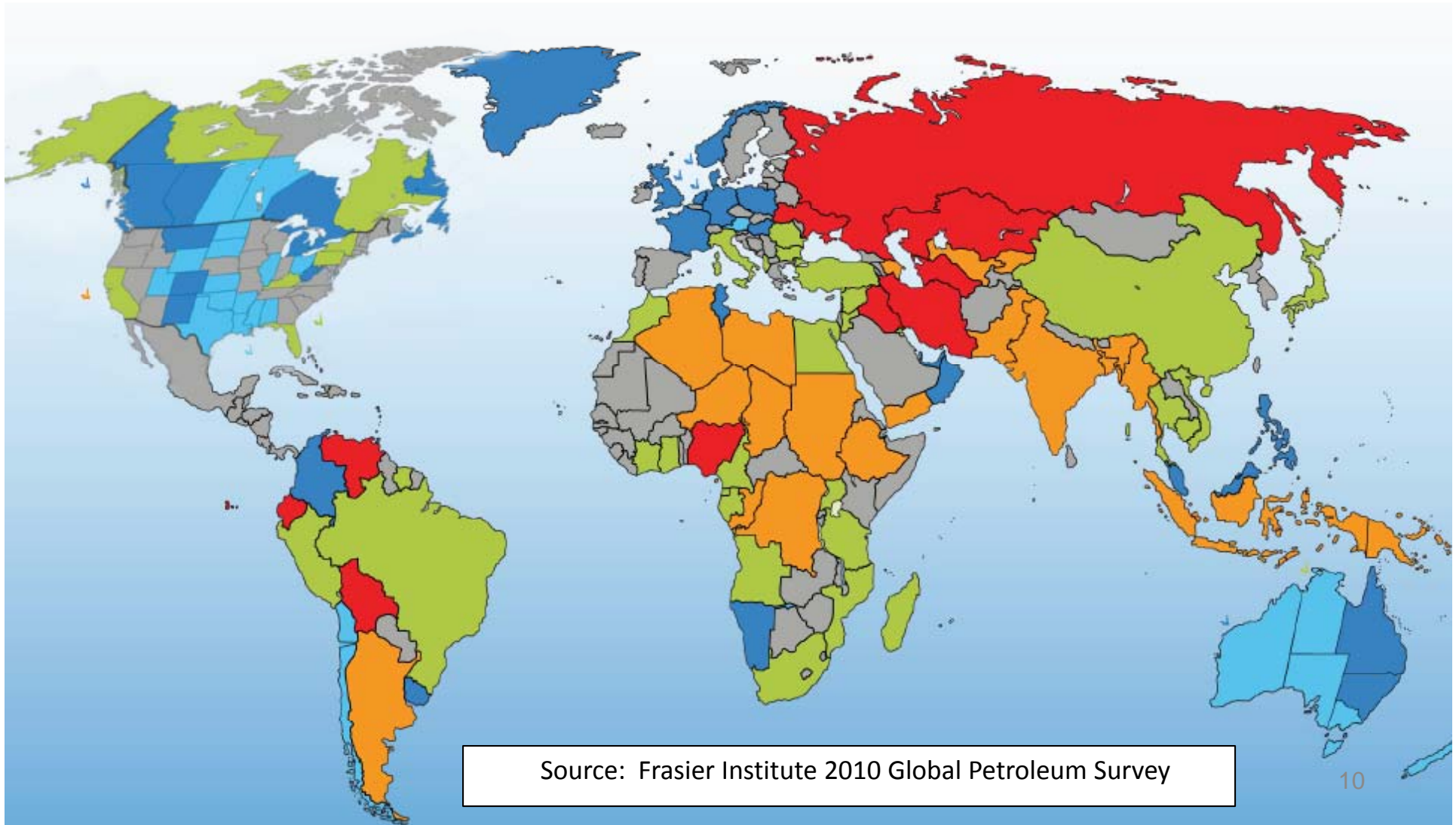
## Frasier All-Inclusive Composite Index for 133 jurisdictions

Percentage of negative survey responses





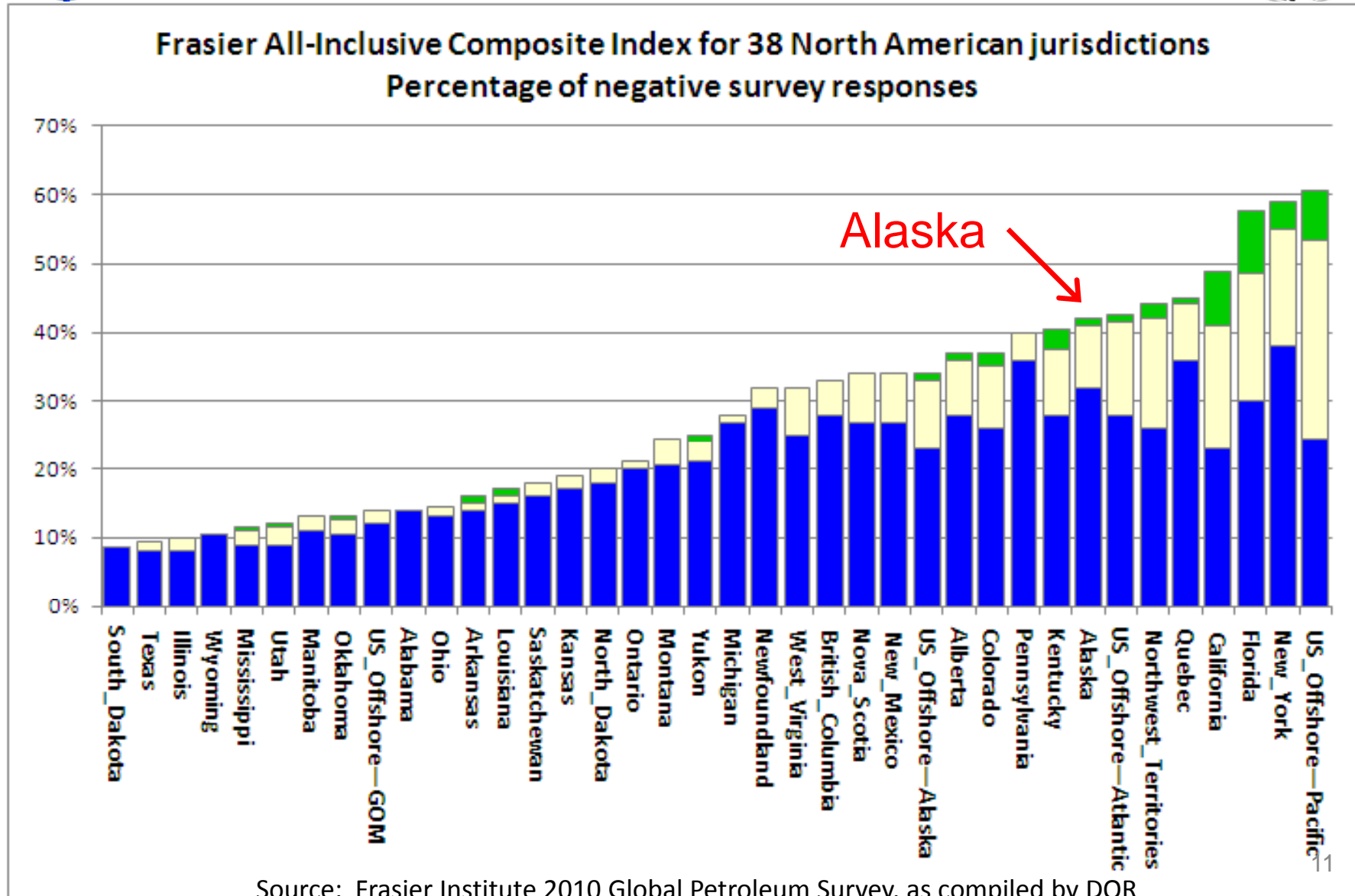
Unmeasured 



Source: Frasier Institute 2010 Global Petroleum Survey

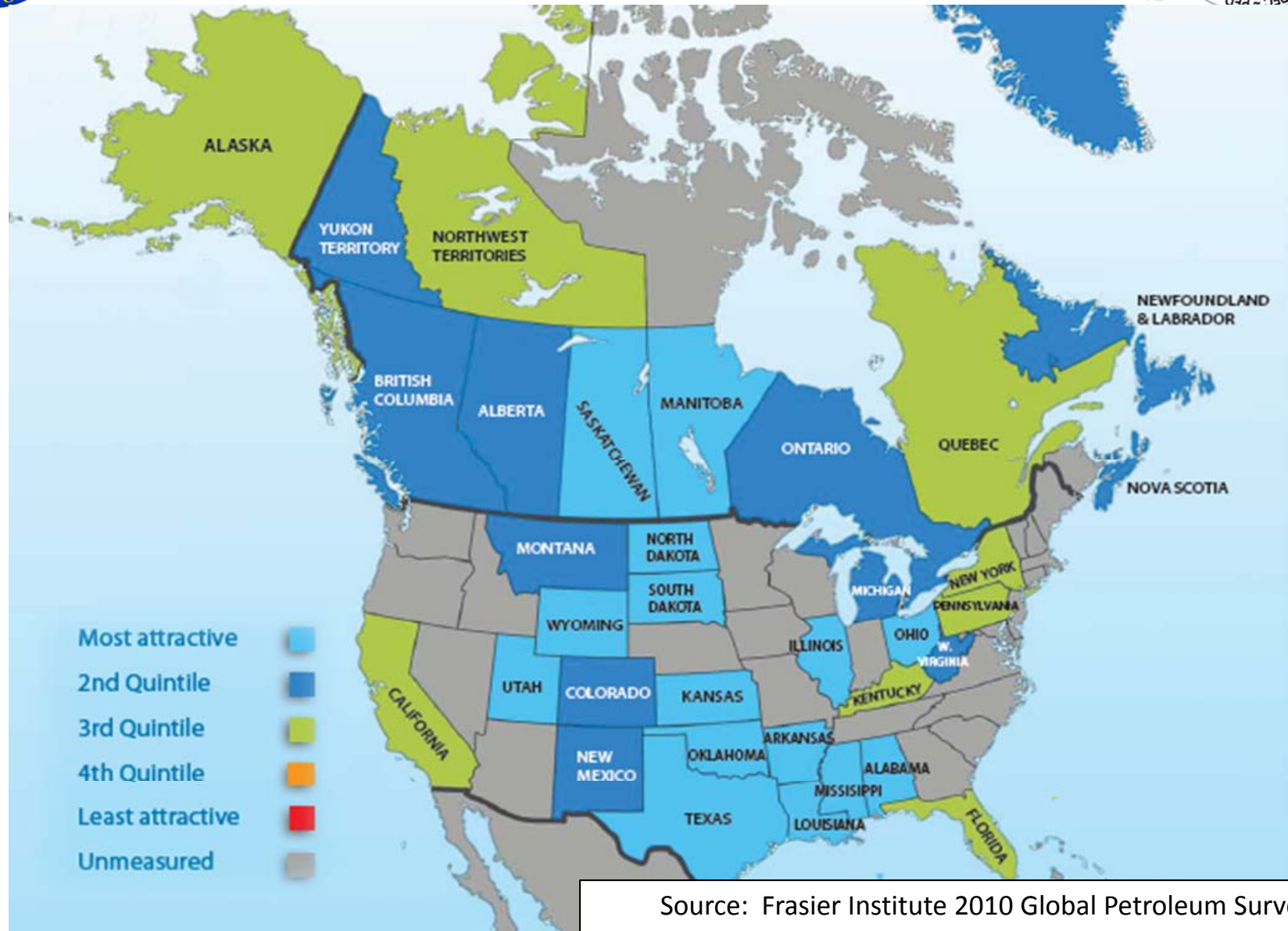


# Frasier: Alaska is #31 of 38 in North American attractiveness





# Frasier: Many North American jurisdictions rank ahead of Alaska



Source: Frasier Institute 2010 Global Petroleum Survey





# How Alaska is Rated for Specific Investment Factors



## Alaska's strengths:

- Geopolitical risk
- Trade barriers
- Labor regulations & employment agreements
- Geological database
- Security
- Legal system process

## Middle of the Pack:

- Overall attractiveness
- Commercial environment
- Regulatory climate
- Fiscal Terms (overall)
- Administration & enforcement of regulations
- Socio-economic agreements
- Quality of infrastructure
- Labor availability
- Political stability
- Regulatory duplication

## Alaska's weaknesses:

- Environmental regulations
- Cost of regulatory compliance
- Uncertainty concerning protected areas
- Disputed land claims
- Tax Regime

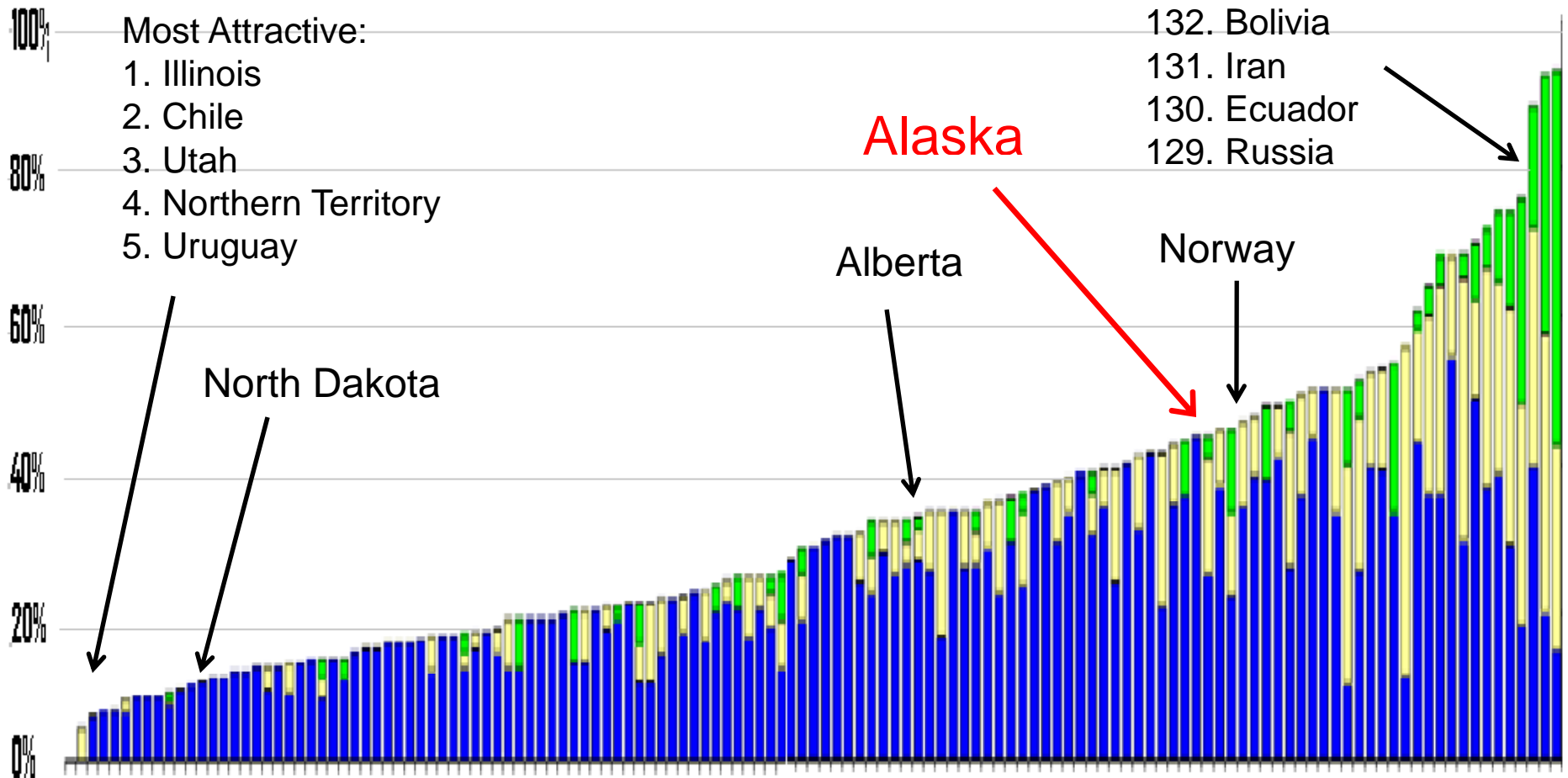
  
**We can do something about this!**



# 44% of respondents say Alaska tax regime deters investment



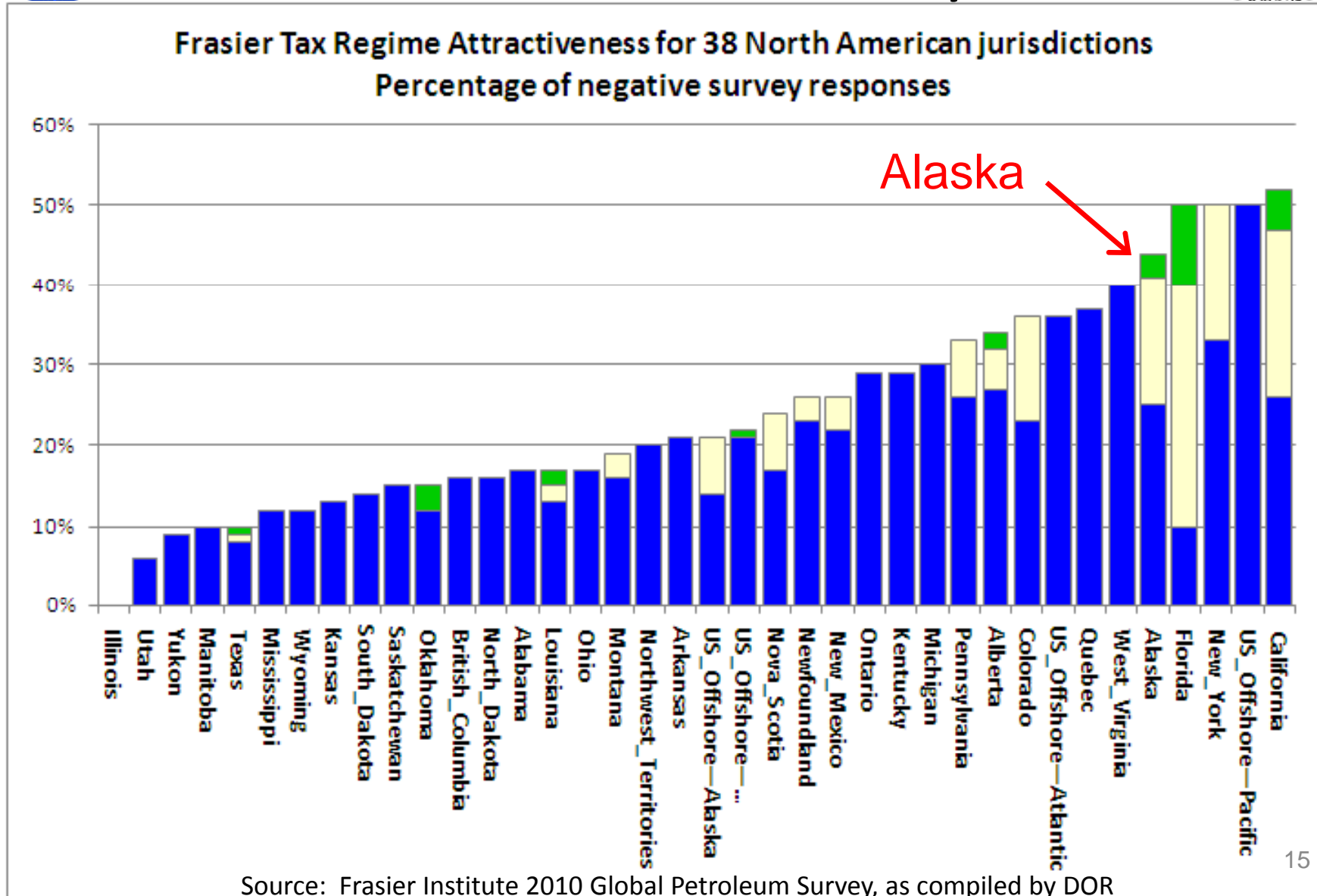
Frasier Tax Regime Attractiveness for 133 jurisdictions  
Percentage of Negative Survey Responses



Source: Frasier Institute 2010 Global Petroleum Survey

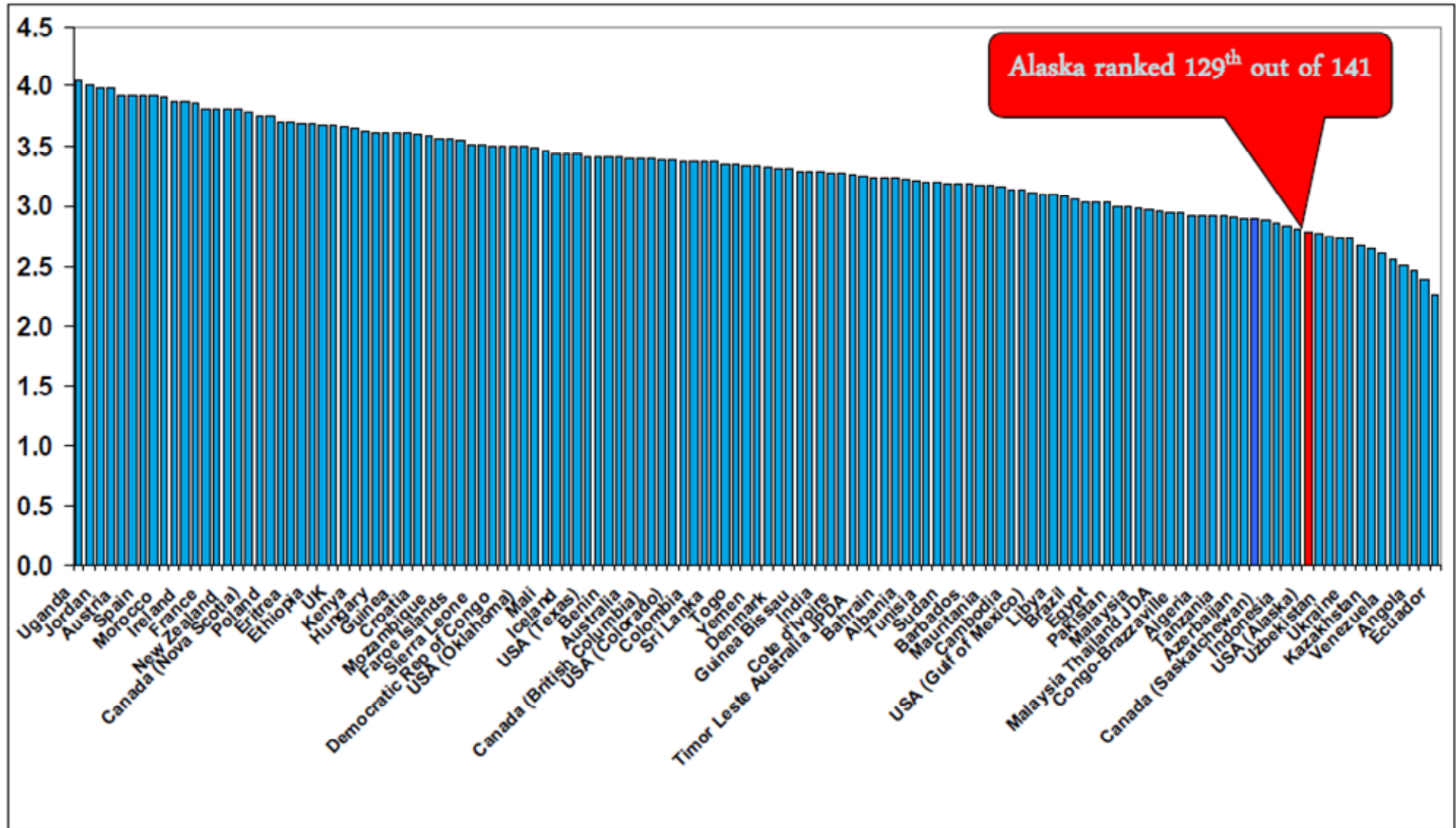


# Alaska is ranked #34 of 38 in North America for tax system





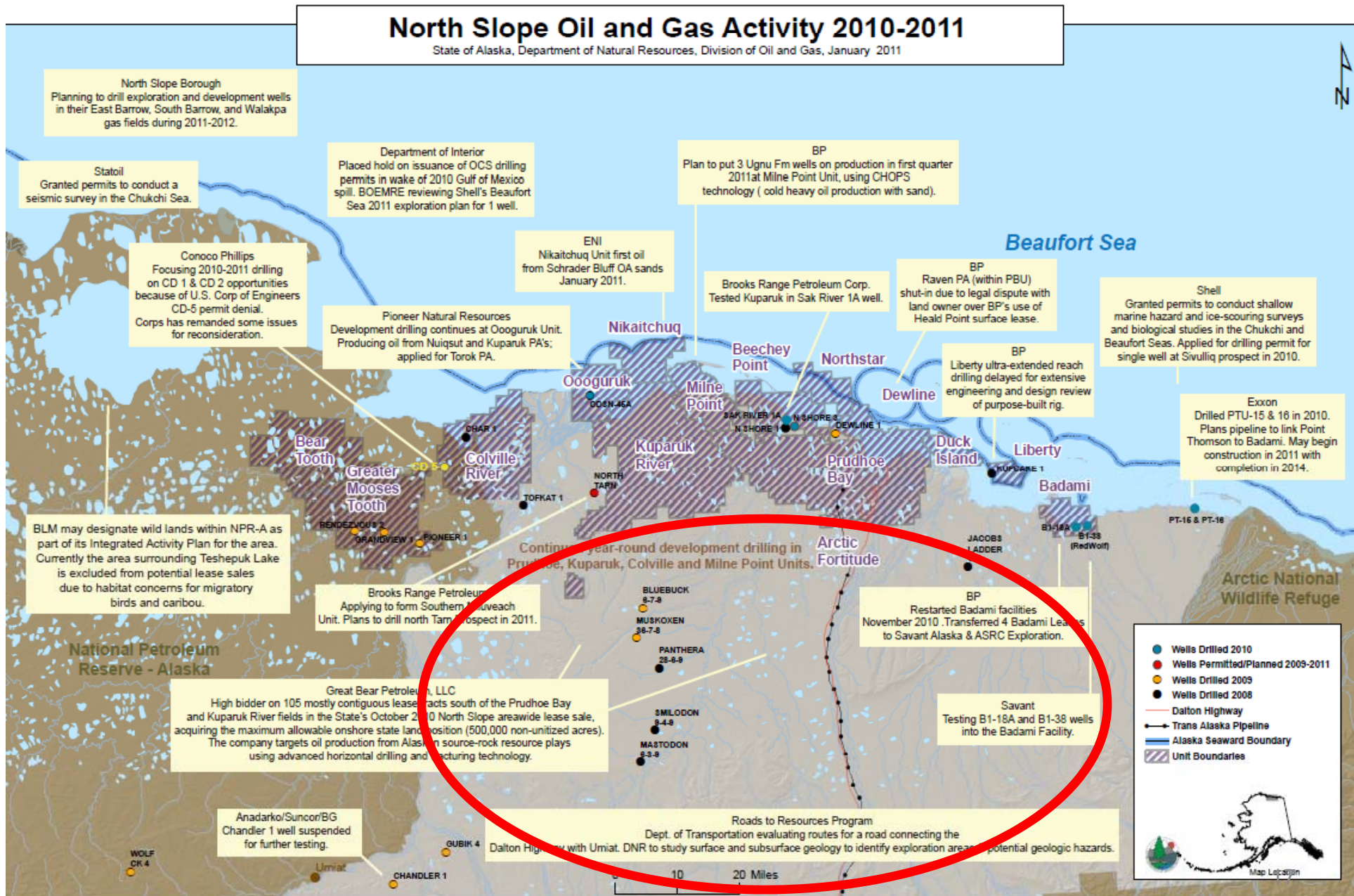
# Wood Mackenzie: Alaska's fiscal terms rank #129 of 141



Source: Wood Mackenzie Petroleum Fiscal Systems, January 2010, as presented by AOGA, January 2011<sup>16</sup>



# Areas of North Slope are Underdeveloped





## There's lots of oil left in Alaska...



- Cumulative production through 2010 has been over 16 billion barrels
- Remaining North Slope reserves exceed 5 billion barrels
- Geology-based estimates of total oil volumes are much higher. For instance, we do not include any of the approximately 20 billion barrels in the giant Ugnu deposit, or offshore volumes from the Chukchi or Beaufort Seas, in our forecast



# How do Alaska's oil taxes work?



# ACES Overview



- ACES Overview
  - Tax Structure
  - Incentivizing New Investment



# ACES Overview



- **Production Tax Value (PTV)** is the market price less transportation costs and allowable lease expenditures
- **Base tax rate** of 25% on PTV
- **Progressive Surcharge Rate**
- **Credits**



# ACES Overview



## How the Tax is Calculated

$$\begin{array}{rcl} \text{Production Tax Value (PTV) X Base Tax Rate} & = & \text{Base Tax} \\ & & + \\ \text{PTV X Progressive Surcharge Rate} & = & \text{Progressive Surcharge} \end{array}$$

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Pre-Credit Tax Bill

Total Taxes Before Credits

Credits

Credits Applied Against Taxes

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Final Tax Bill

Total Production Taxes Owed



# FY 12 Production Tax Projected



	Per Barrel	Barrels	Value (\$ million)
Avg ANS Oil Price (\$/bbl) & Daily Production (bbls)	\$82.67	622,182	\$51.4 / day
Annual Production (bbl)			
<b>Total Annual Production/Value</b>		<b>227,096,430</b>	<b>\$18,774.1</b>
Royalty and Federal barrels		(34,669,890)	(\$2,866.2)
<b>Taxable barrels</b>		<b>192,426,540</b>	<b>\$15,907.9</b>
Downstream (Transportation) Costs (\$/bbl)			
ANS Marine Transportation	(\$2.05)		
TAPS Tariff	(\$4.67)		
Other	\$0.33		
<b>Total Transportation Costs</b>	<b>(\$6.39)</b>	<b>192,426,540</b>	<b>(\$1,229.6)</b>
Lease Expenditures			
Deductible Operating Expenditures	(\$12.86)		(\$2,474.1)
Deductible Capital Expenditures	(\$13.14)		(\$2,528.3)
<b>Total Lease Expenditures</b>	<b>(\$26.00)</b>	<b>192,426,540</b>	<b>(\$5,002.4)</b>
<b>Production Tax Value (PTV)</b>	<b>\$50.28</b>	<b>192,426,540</b>	<b>\$9,675.9</b>
Production Tax			
Base Tax (25%*PTV)			\$2,419.0
Progressive Tax Rate = (\$50.28-\$30) * 0.4% = 8.1%			
Progressive Tax = (8.1% * PTV)			\$785.0
<b>Total Tax Due before credits</b>			<b>\$3,204.0</b>
Credits Applied Against Taxes			(\$450.0)
<b>Total Tax after credits</b>			<b>\$2,754.0</b>

Source: Department of Revenue Fall 2010 Revenue Sources Book, Appendix D

This simple model assumes constant production, price, and expenditures for the entire year; results will differ from our larger model and forecast.  
The per-barrel expenditures shown are per taxable barrel and do not reflect expenditures per all barrels produced.





# ACES Overview (cont)



## TAX CREDITS

- **Qualified Capital Expenditure Credit** – 20% credit for qualified capital expenditures (40% for well lease expenditures outside North Slope).
- **Carried-Forward Annual Loss Credit** – 25% credit for carried-forward annual loss.
- **Small Producer / New Area Development Credit** – Up to \$12 million / year for small producers and up to \$6 million / year for production outside North Slope and Cook Inlet.
- **Alternative Credit for Exploration** – 30% or 40% of eligible exploration expenditures if certain criteria are met.
- **Cook Inlet Jack-Up Rig Credit** – 80% to 100% credit for first three exploration wells drilled using jack-up rig in Cook Inlet.





# Example 1: New Entrant



- A new entrant with no current production pursues an exploration project requiring \$200 million in investment
- Company receives a 20% - 40% investment credit (depending on location), worth \$40 - \$80 million
- Company also receives an additional 25% credit for its “tax loss”, worth up to \$50 million



## Example 1: New Entrant (*cont.*)



- The total credits of \$90 - \$130 million, can be:
  - Directly recouped (cash) from the state
  - Transferred to a person that does pays tax, so that the Transferee pays \$90 - \$130 million less in tax
- Either way, State pays \$90 - \$130 million for the exploration; company pays \$70 - \$110 million.
- If the exploration effort fails, the state never recoups this money.

***The state bears the risk for failure as does the new entrant***



## Example 2: Incumbent Producer



- Incumbent with current production pursues a development requiring \$200 million investment
- Company receives a 20% capital investment credit, worth \$40 million
- By reducing their PTV, the company reduces their taxes due by the total capital expense multiplied by the tax rate:

\$200 million x 25%, worth \$50 million; plus

\$200 million x progressivity surcharge rate (which is reduced due to the drop in PTV)



## Example 2: Incumbent Producer (*cont.*)



- Deductions and credits total more than 45% of the \$200 million, greater than \$90 million
- State pays more than \$90 million of the new development's capital cost; true investment cost for the incumbent is less than \$110 million
- If the development fails, the state never recoups this money

***The state bears the risk for failure as does the incumbent investor***



# Key Points



- For credits, the state can cut a check (new entrant) or reduce tax revenue (incumbent)
- In both cases the state is an investor: real money leaves the treasury, **sharing the risk borne by the active investor**
- ACES aims to incentivize investment **because state bears risk and reduces explorers/producers costs**
- ***Tax credits, along with the net-based structure, make the state a large investor in exploration and new development activities***



# Components of HB 110



- **Progressivity Rates**
- **Tax Cap**
- **Tax Calculation**
- **Tax Credits**
- **Base Tax Rate**



# Main proposed changes



<b>Progressivity Rates</b>	Progressivity defined as <u>discrete brackets</u> , rather than as a continuous function, and <u>applied only to incremental revenue</u> .	<b>2013</b>
<b>Tax Cap</b>	Production tax <u>highest bracket limited to 50% for legacy fields and 40% for new fields</u> .	<b>2013</b>
<b>Tax Calculation</b>	<u>Yearly tax calculation</u> based on average prices and costs, instead of monthly tax calculation impacted by short term price and cost peaks.	<b>2013</b>
<b>Tax Credits</b>	Tax credits can be claimed in a <u>single year instead of two years</u> . Extension of <u>40% well lease expenditure tax credits</u> to the North Slope.	<b>2012</b>
<b>Base Tax Rate</b>	Base tax rate reduction from <u>25% to 15%</u> for oil and gas coming from leases or properties neither unitized nor producing as of 12/31/2010.	<b>2013</b>

**2012** Effective 1/1/2012 for expenditures made before 12/31/2011.

**2013** Effective 1/1/2013, applies to production after 12/31/2012.



# Tax Rates, Current and Proposed



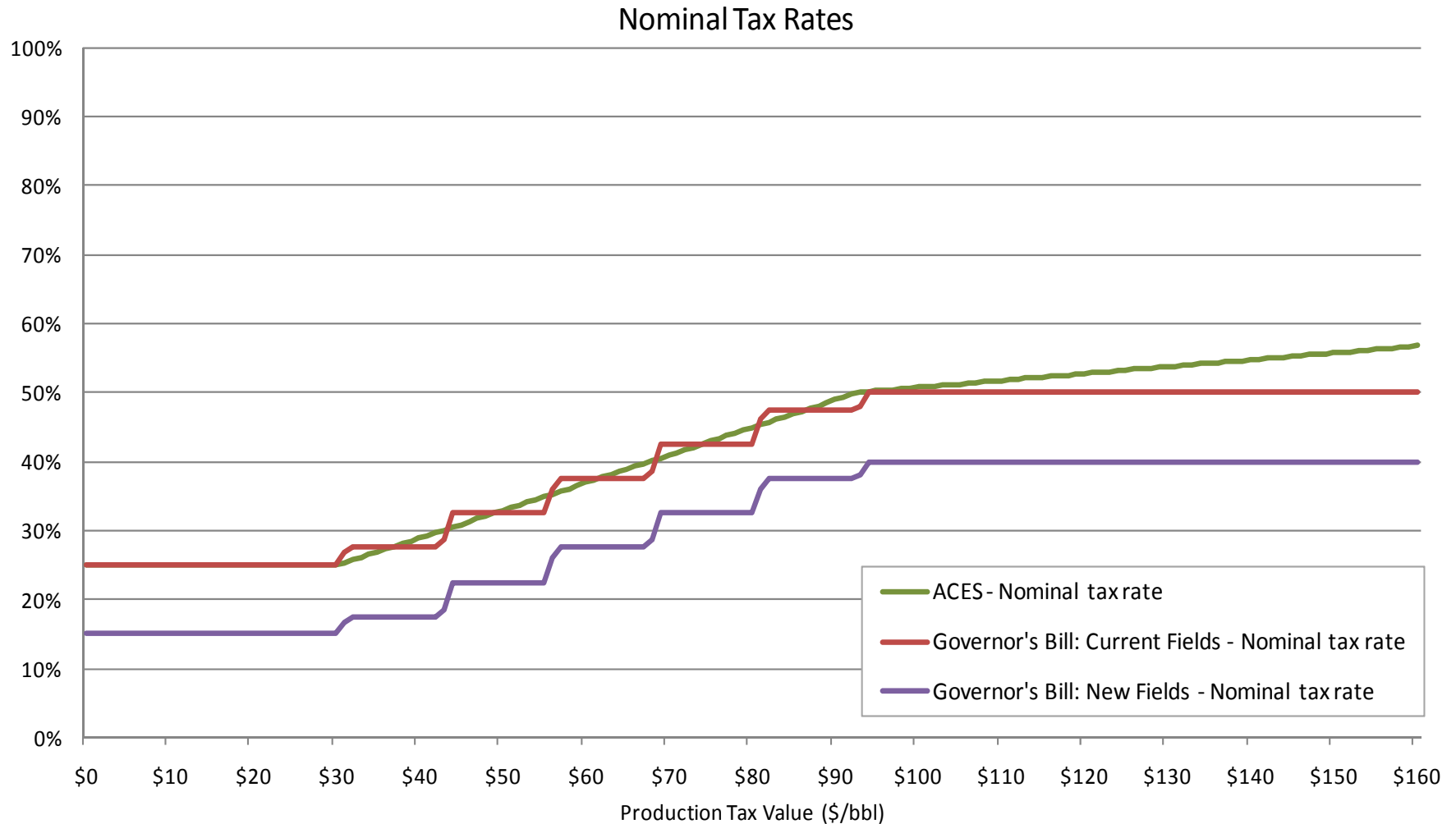
- **Effective Tax Rate**
- **Nominal Tax Rate**
- **Marginal Tax Rate**





# Nominal Tax Rates

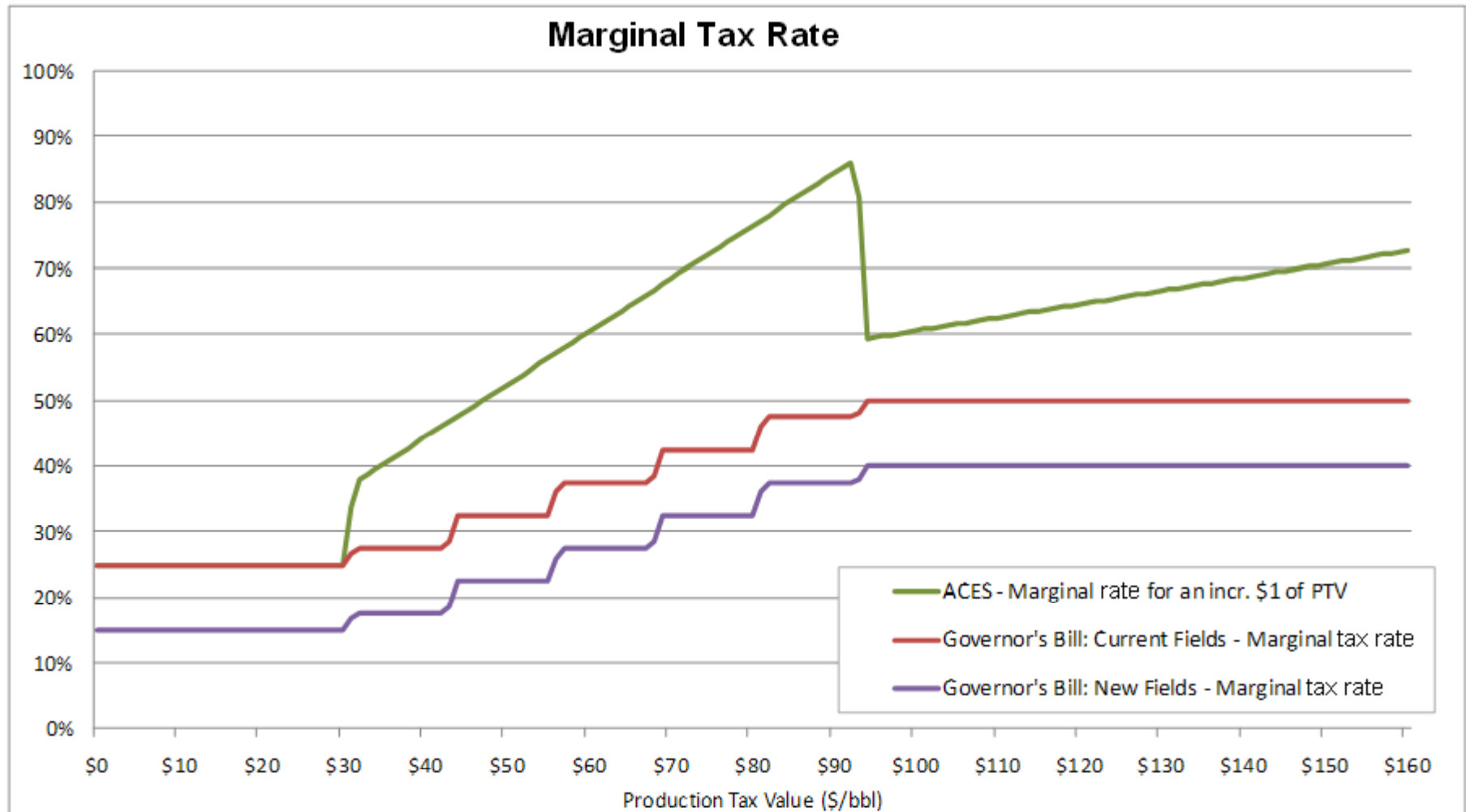
## Current law and HB 110





# Marginal Tax Rates

## Current law and HB 110

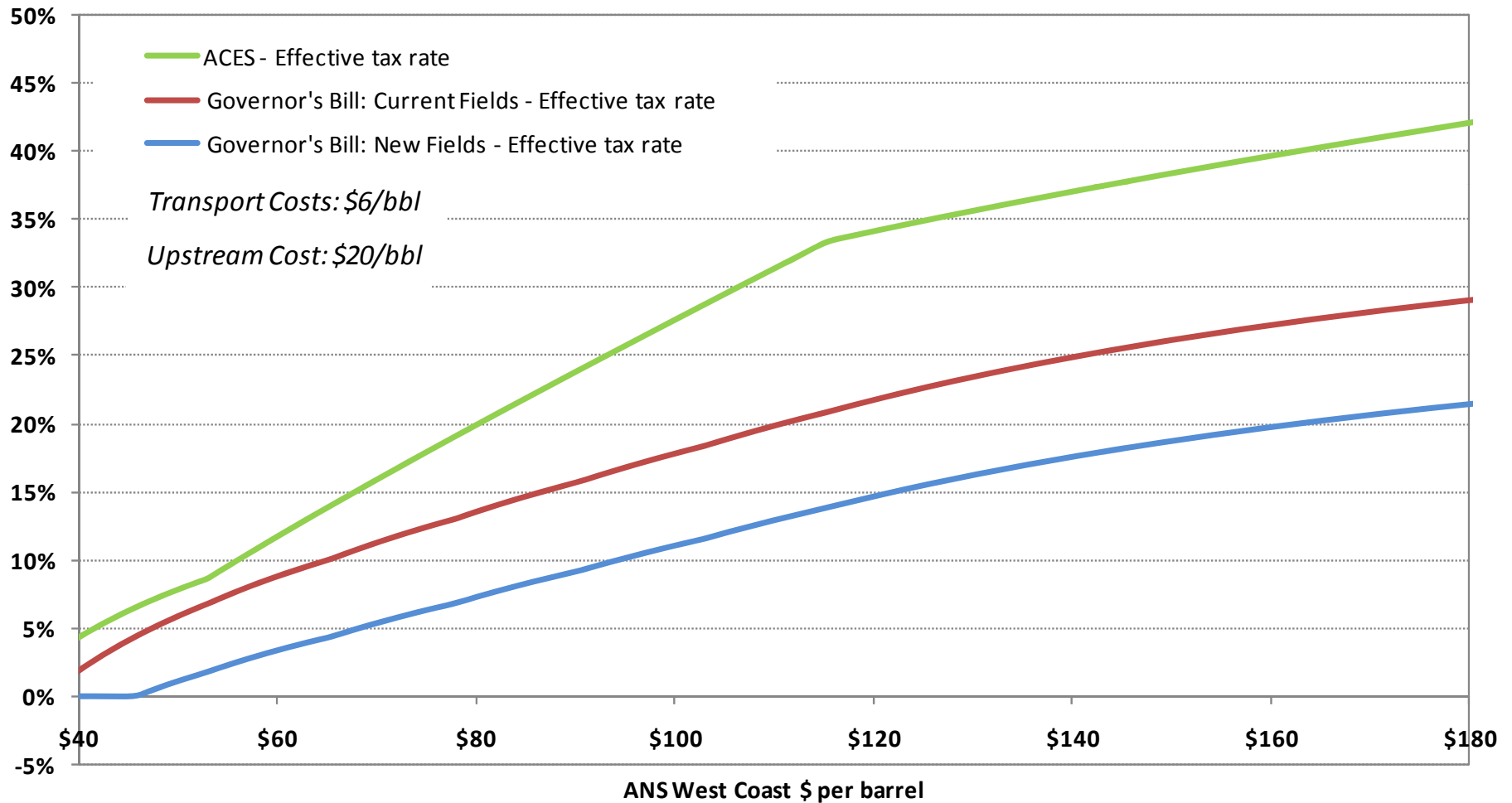




# Effective Tax Rates on Gross Current law and HB 110



Effective Tax Rate based on Gross Value (After Credits)





# Proposed Credits under HB 110



- **Well Lease Expenditure Credit**
  - Credit of 40% for capital expenditures directly related to an exploration well, a stratigraphic test well, a producing well, or an injection well
  - Intangible drilling and development costs
  - Expands existing credit from areas other than North Slope to include North Slope