# Evaluation of ACES with HB 110 Proposal

Roger Marks
Logsdon & Associates
House Finance
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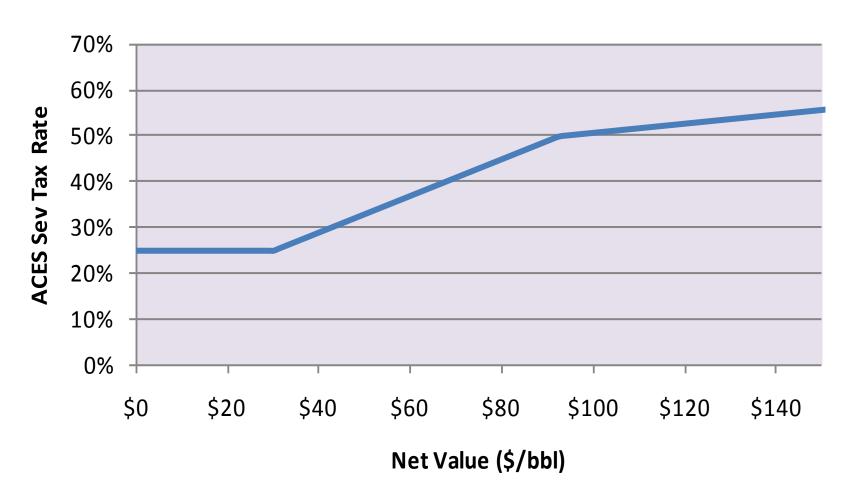
### Overview

- I. How ACES Operates / Problems it Creates
- II. International Competitiveness
- III. Current Evidence of Problems from ACES
- IV. Proposal to Fix ACES

### Tax Rate under ACES

- Base rate of 25% of net value (after deducting all costs)
- Progressivity element when net value per barrel exceeds \$30/bbl:
  - (Net value per barrel value \$30) X .004
- If oil market price is \$90/bbl:
  - Net value per barrel is \$58/bbl
  - Progressivity = (\$58 \$30) X .004 = 11.2%
  - Total tax rate = 25% + 11.2 = 36.2%
  - 36.2% X \$58 X 0.875 (non-royalty) = \$18.37/bbl
  - APPLIES TO ENTIRE NET VALUE

#### **ACES Severance Tax Rate**



### 2010 U.S. Tax Rate for Single Taxpayer

100/

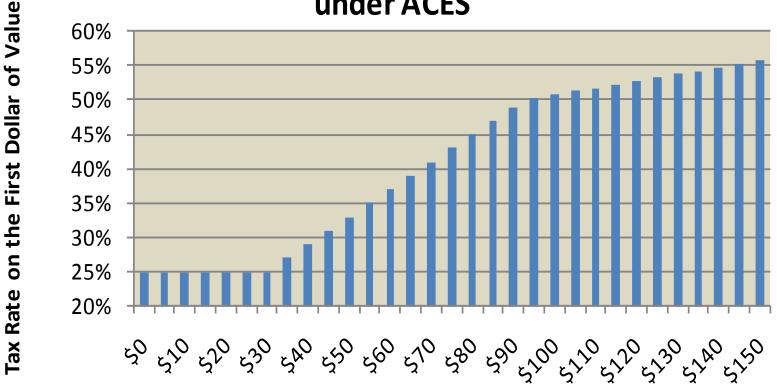
35%

• First \$8,375	10%
• Next \$25,625	15%
• Next \$48,400	25%
• Next \$89,450	28%
<ul> <li>Next \$201.800</li> </ul>	33%

Anything over \$373,650

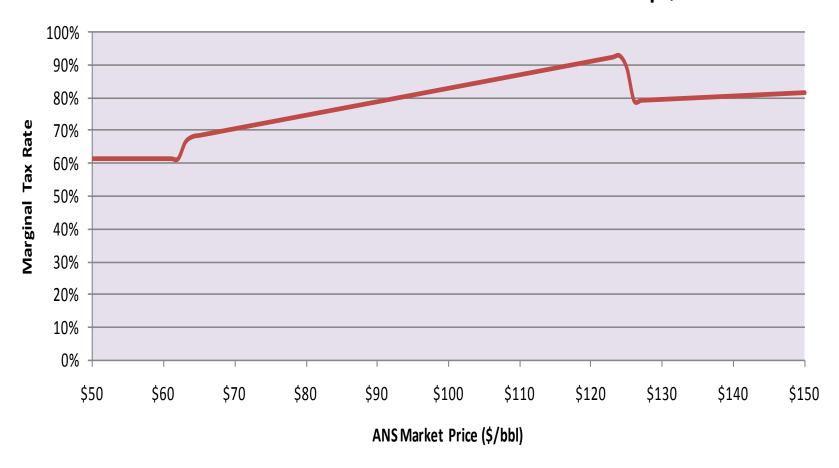
C:...+ CO 275

# What Happens to the First Dollar of Value under ACES

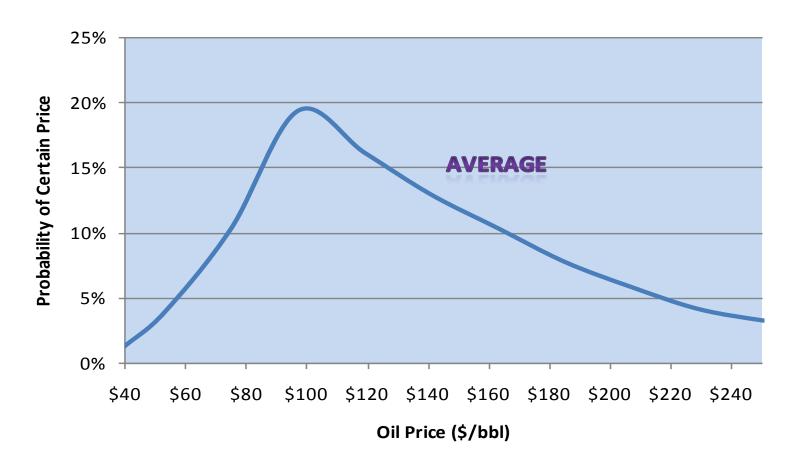


Net Value per Barrel (\$/bbl)

# Marginal Tax Rate under ACES (All State & Federal Taxes & Royalties) How Much Gov't Gets When Price Goes Up \$1

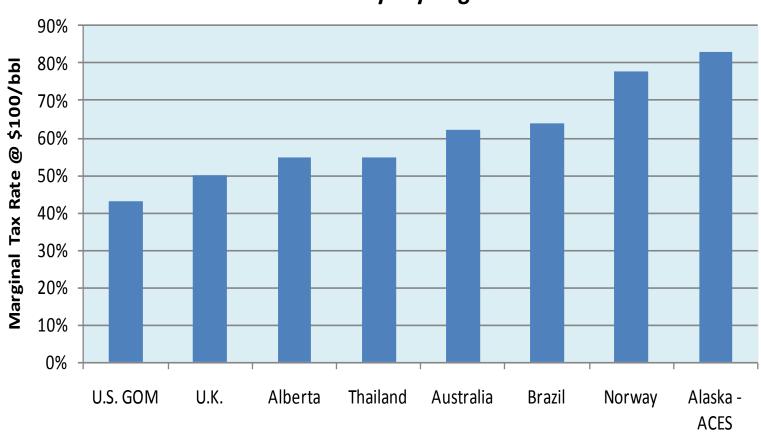


#### **Hypothetical Expected Price Outlook**



## **International Competitiveness**

## International Marginal Tax Rates @ \$100/bbl Market Price Tax & Royalty Regimes



#### Where \$100/bbl (\$25B) Went in 2008

#### **Producers**

\$20/bbl (\$5B)

#### **Costs**

\$24/bbl (\$6B)

#### <u>Government</u>

\$56/bbl (\$14B)

**State**: \$11B

Sev tax: \$7B

**Feds**: \$3B

# After-Tax Income that Would Have Been Earned in Alaska in 2008 With Rates from Other Tax & Royalty Regimes (\$billions)

Gulf of Mexico	\$10.3
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U.K. \$9.0

Alberta \$8.2

Thailand \$8.2

Australia \$6.9

Brazil \$6.6

Alaska \$5.0

Norway \$4.1

## ConocoPhillips Financial Performance: Alaska vs. Rest of World (\$millions) 2008 (\$100/bbl) vs. 2009 (\$60/bbl)

	<u>Alaska</u>	Rest of World
Additional pre-tax income 2009 over 2008	\$3,673	\$14,707
Additional taxes 2009 over 2008*	<u>\$2,898</u>	<u>\$7,163</u>
Additional after-tax income 2009 over 2008	\$775	\$7,544
Percentage of additional pre-tax income retained after-tax	21%	51%

<sup>\*</sup> Alaska: 80% severance tax / 20% income tax; Rest of World: 10% severance tax / 90% income tax

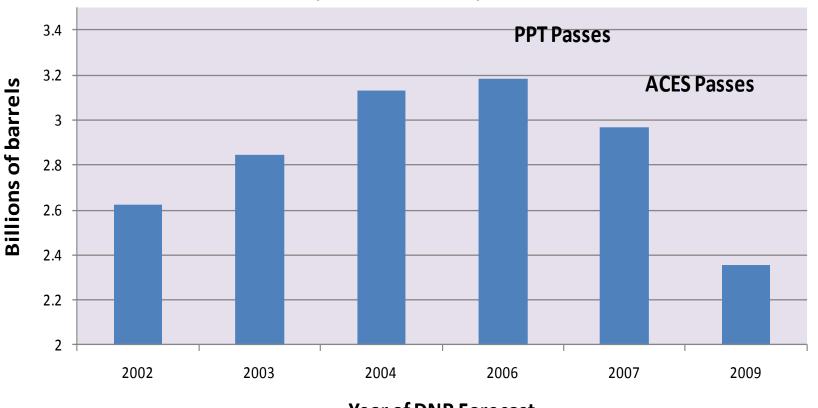
#### **OIL SEVERANCE TAX RATES BY STATE**

<u>State</u>	Rate (% of gross)	: <u>State</u>	Rate (% of gross)
		:	
lowa	NONE	: Illinois	5.00%
New York	NONE	: Colorado	5.00%
Pennsylvania	NONE	: West Virginia	5.00%
Ohio	10 cents/bbl	: Utah	5.00%
California	0.10%	: Mississippi	6.00%
Indiana	1.00%	: Wyoming	6.00%
Nebraska	3.00%	: Michigan	6.60%
New Mexico	3.75%	: Oklahoma	7.00%
Alabama	4.00%	: Florida	8.00%
Kansas	4.30%	: North Dakota	11.50%
Kentucky	4.50%	: Louisiana	12.50%
South Dakota	4.50%	: Montana	12.50%
Texas	4.60%	: ALASKA @ \$90	market (25 % of gross equivalent)
Arkansas	5.00%		

The State is Making Lots of Money Now: What is the Problem?

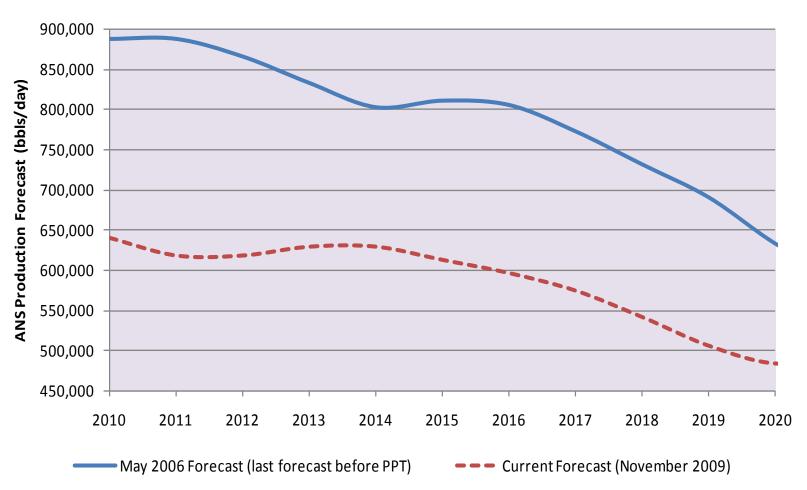
## A History of DNR Forecasts of Total Production between 2010 and 2020

(billions of barrels)

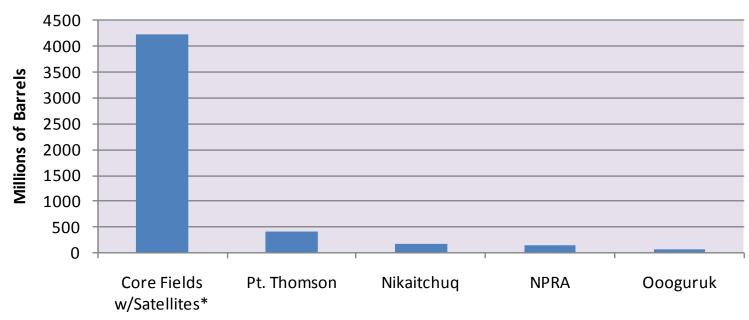


**Year of DNR Forecast** 

# Dept of Natural Resources ANS Production Forecast Before & After PPT (bbls/day)

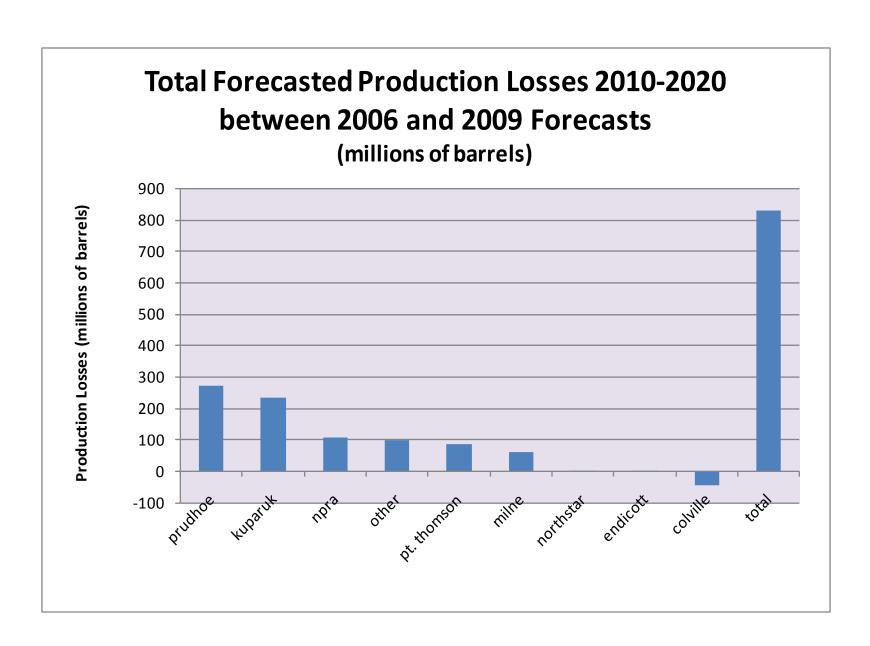






\*Core fields are Prudhoe, Kuparuk, Alpine, Endicott, Milne Pt., Northstar

Source: DNR Division of Oil & Gas 2009 Annual Report: p. 29



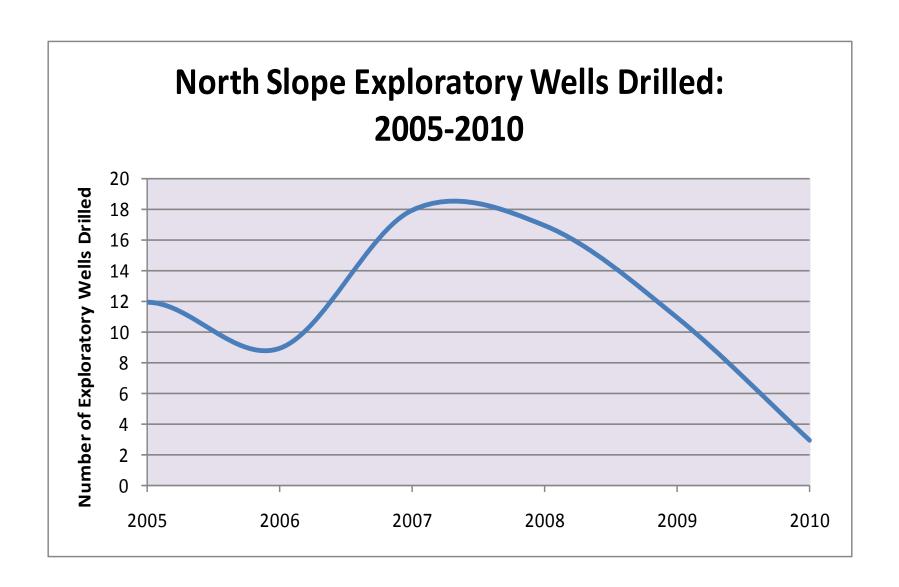
## Investment: The Big Picture

- Production requires capital investment
- At the corporate level Alaska competes for capital with other jurisdictions
  - Capital is finite
  - Capital is fluid
  - Capital will go to where it gets the best deal

### Resource Potential

- 2007 Department of Energy report: 10 billion barrels of additional economically recoverable oil on the North Slope <u>in current core producing</u> <u>area</u>.\*
- DNR's current production forecast is for 5 billion barrels between now and 2050.

<sup>\*</sup> Department of Energy, National Energy Technology Laboratory, "Alaska North Slope Oil & Gas: A Promising Future or an Area of Decline?," August 2007, pp. 2 - 152-153.



## Context of Spending

- Core fields down\*
- Non-core fields up\* (Nikaitchuq and Pt. Thomson)
  - A small share of potential reserves
- No other new fields on the horizon
- Gold-plating

<sup>\*</sup> Department of Revenue "Oil and Gas Production Tax Status Report to the Legislature," January 18, 2011, p. 8.

#### **GOLD-PLATING**

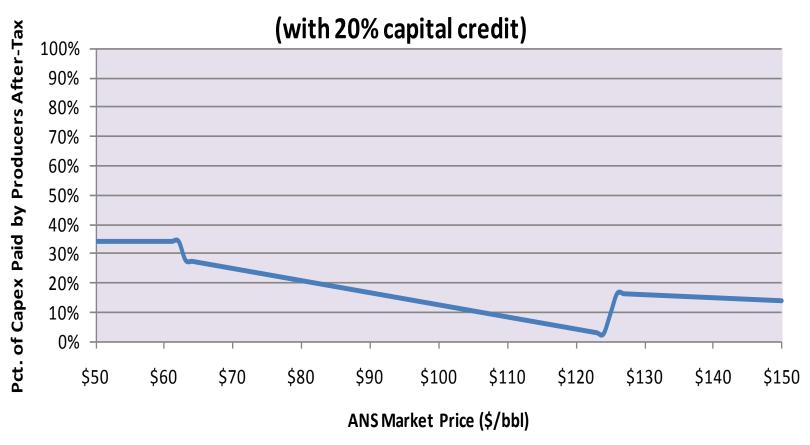
#### Spending more because someone else is picking up the tab

		Spend \$1
	<b>Before</b>	<u>in Capital</u>
ANS Market Price	\$90.00	\$90.00
Less:	42000	42000
Transportation Cost	\$6.00	\$6.00
Capital Cost	\$13.00	\$14.00
Operating Cost	\$13.00	\$13.00
Net value	<del>\$58.00</del> —	<b>→</b> \$57.00
Severance Tax		
Severance Tax Rate	36.20% —	<del>35.80%</del>
Credit	<b>\$2.60</b>	<b>&gt;&gt;</b> \$2.80
Severance Tax	\$15.77	\$15.06
Pre-income tax income	\$42.23	\$41.94
Combined state/federal income tax (41%)	\$17.31	<b>&gt;</b> \$17.20
After-income tax income	\$24.91	\$24.75
Reduction in income		\$0.17

#### **Bottom Line:**

Spent \$1 but reduced income by only 17 cents
The purchase only cost 17 cents after-tax
The other 83 cents picked up by the state/feds in reduced taxes

# Gold-Plating: Percentage of Capital Cost Paid by Producers After-Tax under ACES



## Implications of Gold-Plating

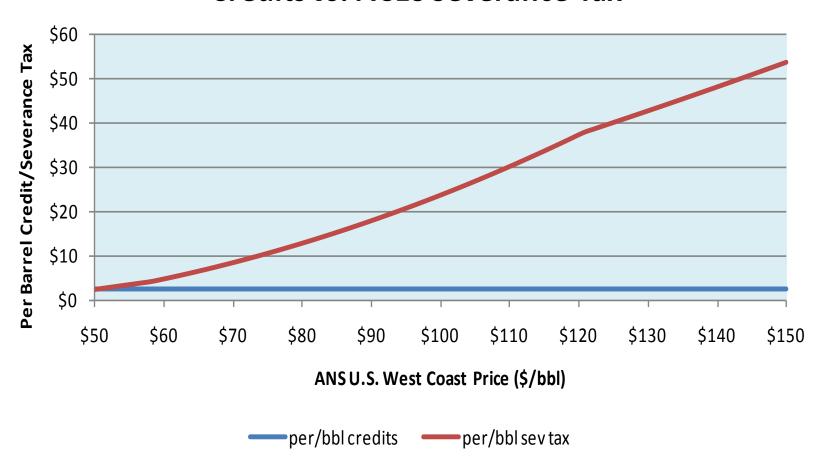
- Gold-plating is not efficient spending (spending to produce barrels)
- Gold-plating happens because of high marginal tax rates at high prices under ACES
- Gold-plating may explain a lot of spending without the commensurate increase in production

## Fixing ACES

# Fair Share: Economic Aspect

- Maximizing benefit to people
  - Long-term benefit
  - Linked to maximizing long-term production
  - Production maximized by continual investment
- In designing a tax need to be mindful of how Alaska stacks up internationally
- What is "fair" is what you can get in a competitive environment

# Cash Flow Impact: Credits vs. ACES Severance Tax



# Proposal for Fix: Bracketed Tax Structure

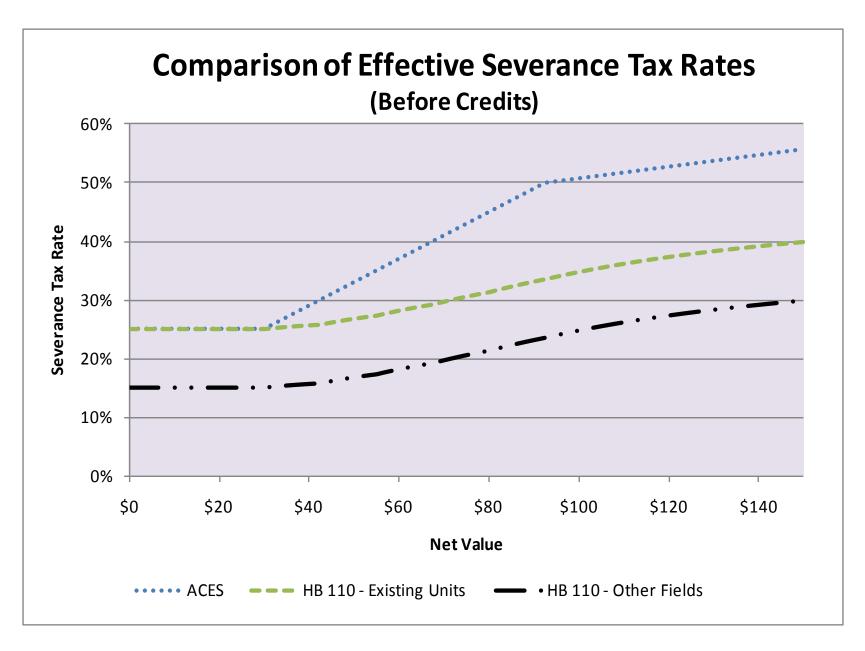
- The problem is not progressivity but the progressivity structure
- Changing the progressivity structure
  - HB 110:
  - Bracketed progressivity structure
- Values within structure

# Proposed Bracket Structure: HB 110 (Existing Units)\* Based on Net Value p/bbl\*\*

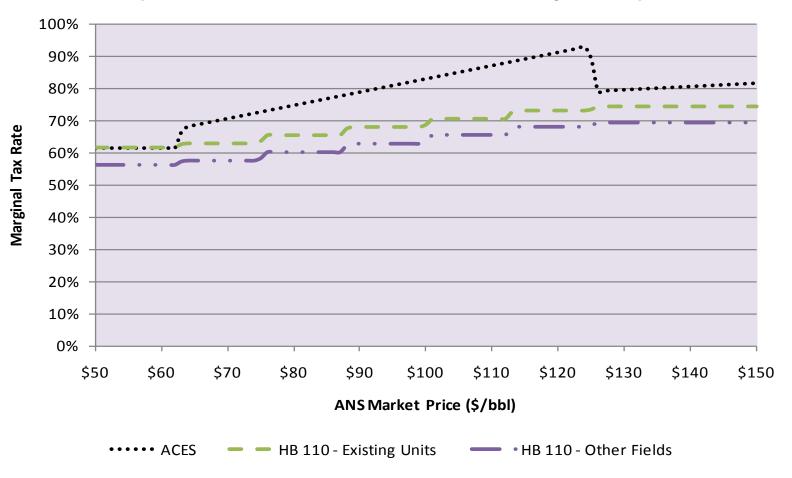
•	\$0/bbl - \$30.00/bbl	25.0%
•	Next \$12.50/bbl (\$30.00 - \$42.50/bbl)	27.5%
•	Next \$12.50/bbl (\$42.50 - \$55.00/bbl)	32.5%
•	Next \$12.50/bbl (\$55.00 - \$67.50/bbl)	37.5%
•	Next \$12.50/bbl (\$67.50 - \$80.00/bbl)	42.5%
•	Next \$12.50/bbl (\$80.00 - \$92.50/bbl)	47.5%
•	Anything over \$92.50/bbl	50.0%

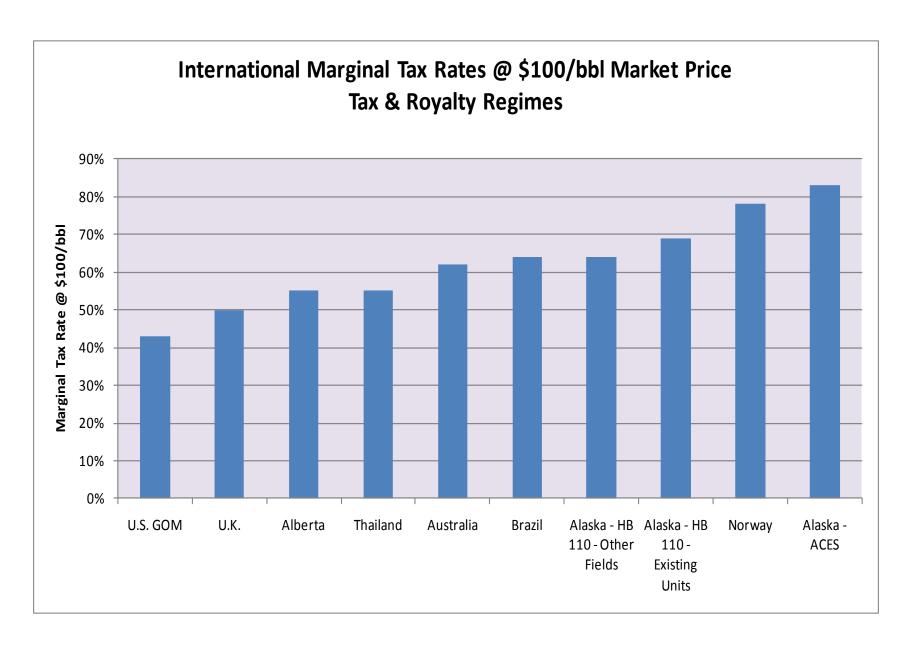
<sup>\*</sup> For other fields outside existing units the tax rates are 10 percentage points less

<sup>\*\*</sup> These net values are approximately \$30 less than market values (the ANS West Coast price).



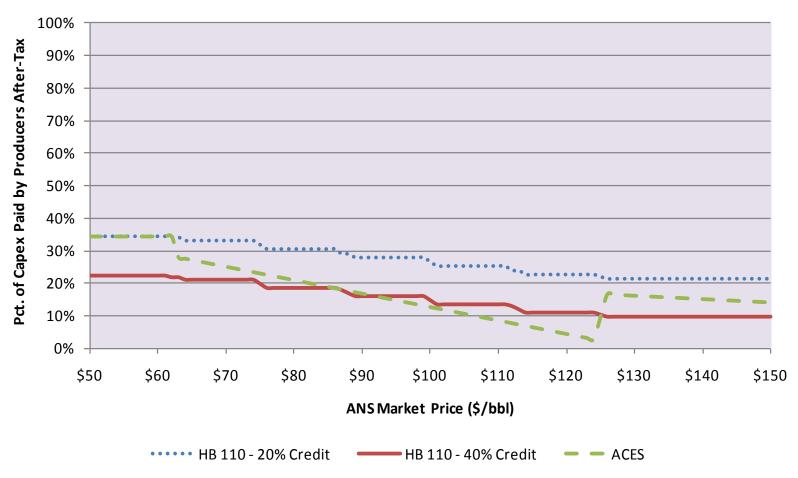
## Marginal Tax Rates (All state & federal taxes and royalties)





### Gold-Plating: HB 110 (Existing Units) vs. ACES

(Pct. of Capex Paid by Producers After-Tax)



## Revenue Losses from Proposal?

- Initial revenue losses likely
- DOR's production forecast does not consider availability of capital
  - Very plausible that status quo production forecast is too high
- Very plausible that with lower taxes there will be greater investment and production
  - Very plausible that production forecast under HB 110 is too low
- Cannot compare revenues between taxes using the same number of barrels