

SB 305:

The Separation of Oil from Gas for the Oil & Gas Production Tax

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Premise of the Bill

- Under current law oil and gas are taxed together
- Oil is worth much more than gas
- The combining mechanism materially reduces oil taxes even though oil operations are unaffected

Oil is Different than Gas

- Oil more geographically concentrated (fewer sellers: OPEC)
- Oil supplies more depleted
- Gas is more plentiful
- Oil has fewer substitutes
- Gas has more substitutes

BTU 10:1

West Coast ANS

- Market Price \$80/bbl
- Less:
 - Shipping \$2.07
 - TAPS \$4.18
- Gross Value \$73.75

North Slope Gas

- Market Price \$6/mmbtu
- Less:
 - Tariff AK to AB \$3.54
 - AB Hub \$0.24
 - Tariff AB to L48 \$0.85
- Gross Value \$1.37/mmbtu
- BOE Basis (X 5.5) = \$7.54
- On a straight BTU to BTU basis oil is worth nearly 10 X as much as gas

Some Things that have BTUs

- Oil
- Gas
- Coal
- Wood
- Asphalt
- Shoe Leather
- Rubber
- Coffee grounds
- Citrus rinds
- Corn cobs
- Dung

Mechanics of Current Tax

- 1) Oil gross value (market price less transport cost)
- 2) Gas gross value (market price less transport cost)
- 3) Oil + gas gross value gas = Combined gross value
- 4) Combined gross value – lease capital and operating costs = Combined oil & gas net value
- 5) Combined oil & gas net value / total oil & gas BOEs = p/BOE net value (see Slide #6)
- 6) Progressivity factor (based on per BOE net value) plus 25% base rate = tax rate
- 7) Single tax rate applied to combined oil & gas net value

Barrel of Oil Equivalents (BOEs): Putting Oil & Gas on an Apples / Apples Basis

- 4.5 billion cubic feet per day (bcf/d) of natural gas
- A cubic foot of North Slope gas will have about 1,100 BTUs
- Natural gas is measured in millions of BTUs (mmbtu)
- 4.5 billion cubic feet per day will have 4.95 million mmbtu's
($4.5 \times 1,100$)
- A barrel of oil has about 5,500 BTUs
- 4.5 billion cubic feet per day will have the BTU equivalence of
900,000 barrels of oil (BOEs) ($4,950,000 / 5.5$)
- If there are 500,000 barrels of oil, total BOEs will total
 $500,000 + 900,000 = 1,400,000$

Progressivity Mechanics

- “Trigger” = \$30 net / BOE value
- “Slope” = 0.4%*
- Progressivity surcharge = (Net per BOE value - \$30) X .004
- Example: if net value = \$50
 - Base tax rate = 25%
 - Progressivity = (\$50 – \$30) X .004 = 8%
 - Total tax of 33% on net value

* Slope changes to 0.1% after \$92.50 net per BOE value

HOW GAS IMPACTS OIL TAXES

	Oil	:		
	Alone	Gas	:	
	(p/bbl)	(p/mmbtu)	:	Combined Oil & Gas
			:	
Market Price	\$80.00	\$6.00	:	Oil
Transp cost	\$5.00	\$4.50	:	p/bbl net value \$55.00
Gross Value	\$75.00	\$1.50	:	Barrels (millions) 183
			:	Total oil net value (\$mm) \$10,038
Costs	\$20.00	\$0.50	:	Gas
			:	p/mmbtu net value \$1.00
Net (p/barrel or p/mmbtu)	\$55.00	\$1.00	:	mmbtu's (millions) 1,807
			:	Total gas net value (\$mm) \$1,807
Base rate	25.00%		:	
Progressivity	10.00%		:	Total oil & gas net value \$11,844
Total tax rate	35.00%		:	Total BOEs 511
			:	Net value / BOE \$23.18
Daily bbls (oil) or mmbtu (gas)	500,000	4,950,000	:	NO PROGRESSIVITY!
Daily BOEs	500,000	900,000	:	
Annual BOEs (millions)	183	329	:	

**DEPARTMENT OF REVENUE EXAMPLES
FROM FEBRUARY 24, 2010 PRESENTATION
TO SENATE FINANCE
"Progressivity Profitability Parity Gas"**

Oil Price	Gas Price	Oil Alone Progressivity Factor	Oil & Gas Combined Progressivity Factor	Reduction in Progressivity Factor	Oil Alone Tax (\$billions)	Gas Alone Tax (\$billions)	Total Tax if Taxed Separately (\$billions)	Combined Tax (\$billions)	Annual Tax Reduction from Combining (\$billions)
\$75	\$8.00	5.38%	0.00%	5.38%	\$1.7	\$1.1	\$2.8	\$2.5	\$0.3
\$100	\$8.00	15.38%	3.59%	11.79%	\$4.0	\$1.1	\$5.1	\$4.0	\$1.1
\$120	\$8.00	23.38%	6.79%	16.59%	\$6.4	\$1.1	\$7.5	\$5.5	\$2.0

How the Bill Works

- Under the current law there is a base tax rate of 25%
 - Plus progressivity based on the combined oil & gas net value / BOE
- The bill removes progressivity on gas
- Progressivity on oil continues to be calculated just on oil net value / barrel
- Exclusion of gas in the progressivity calculation does not reduce oil taxes