COMMENTS ON HCS CSSB 305 (FIN)

House Finance Committee

April 15, 2010

Alaska Department of Revenue

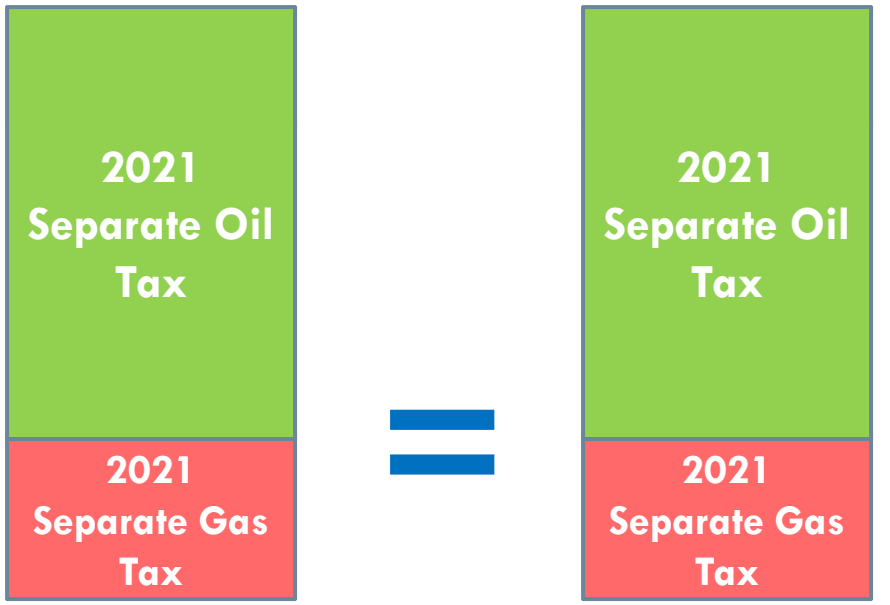
Concerns Regarding HCS CSSB 305(FIN)

- **Decoupling is not necessary at this time**
  - SB 305 could be passed at anytime in the next 10 years, and the result would be the same

- **SB 305 "locks-in" a lower gas production tax obligation**
  - Would reduce the state's negotiating flexibility in the coming years
    - We could always lower the gas tax after "lock-in", but we might not be able to raise it

- **SB305 is a significant overall tax increase**
  - It sends the Producers and the rest of the world the wrong message about Alaska's interest in promoting a gasline project

If SB 305 were enacted in 2020, the resulting state revenue would be the same as if it were enacted in 2010



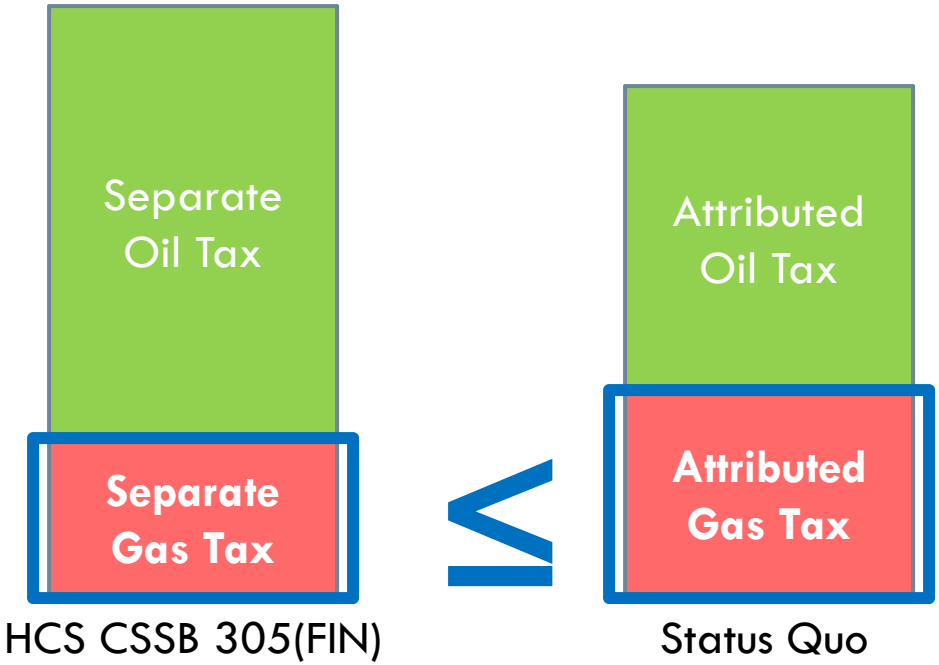
If SB 305 was enacted in 2010

If SB 305 was enacted in 2020

In All of the Modeling Cases Run:

The Gas Tax Obligation "Locked–in" by SB 305 is lower than Status Quo*

* It is equal only when the gas tax obligation in both instances is zero



Sample Cases

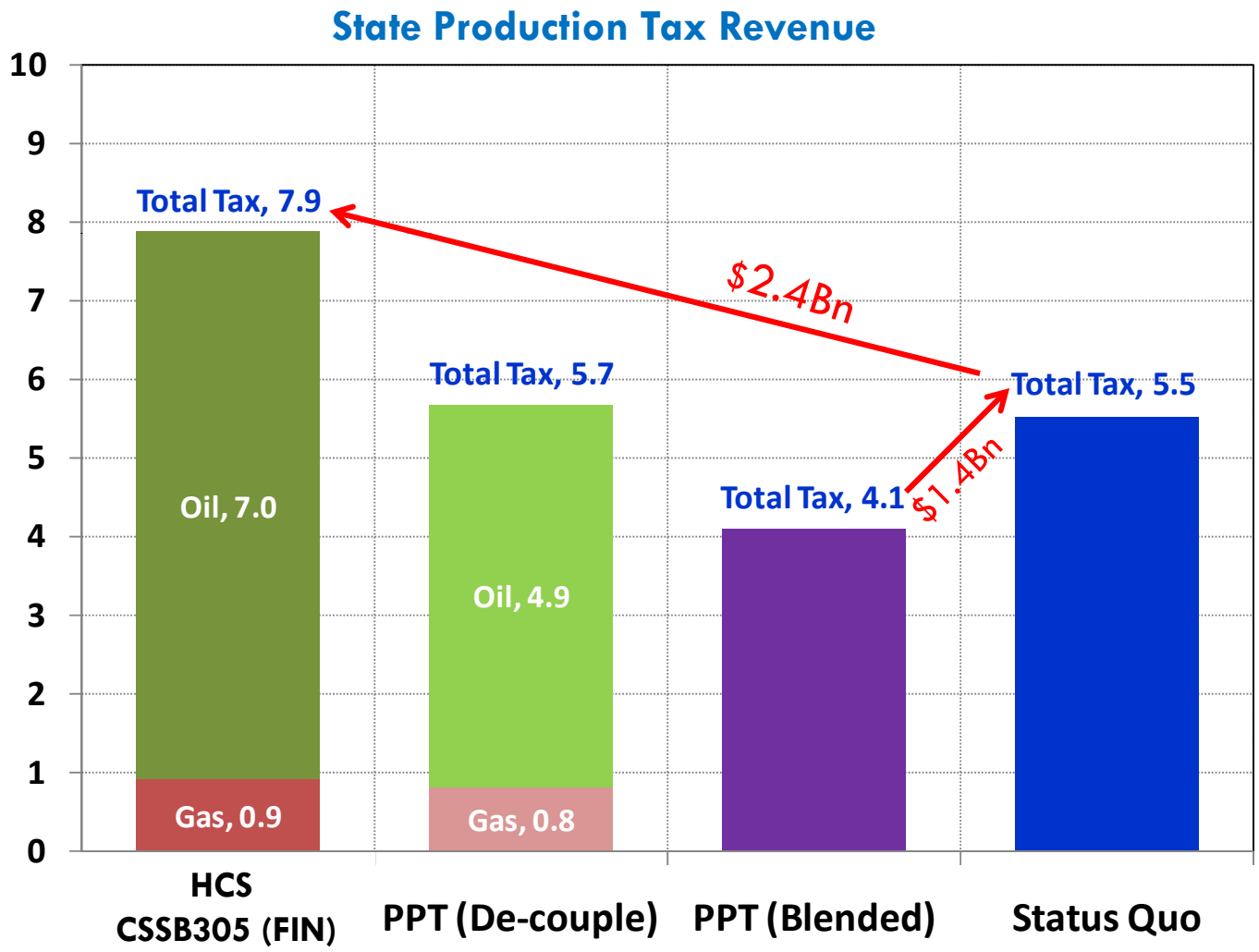
Comparing SB 305, PPT, and Status Quo

Assumptions

Oil: 500 Mbbl/d and Gas: 4.5 Bcf/d
Capex: $2.2Bn and Opex: $2.2Bn
Cost Allocation: PoP

$120/$8
(15:1)

At these prices, SB 305 is a larger tax increase than going from PPT to ACES



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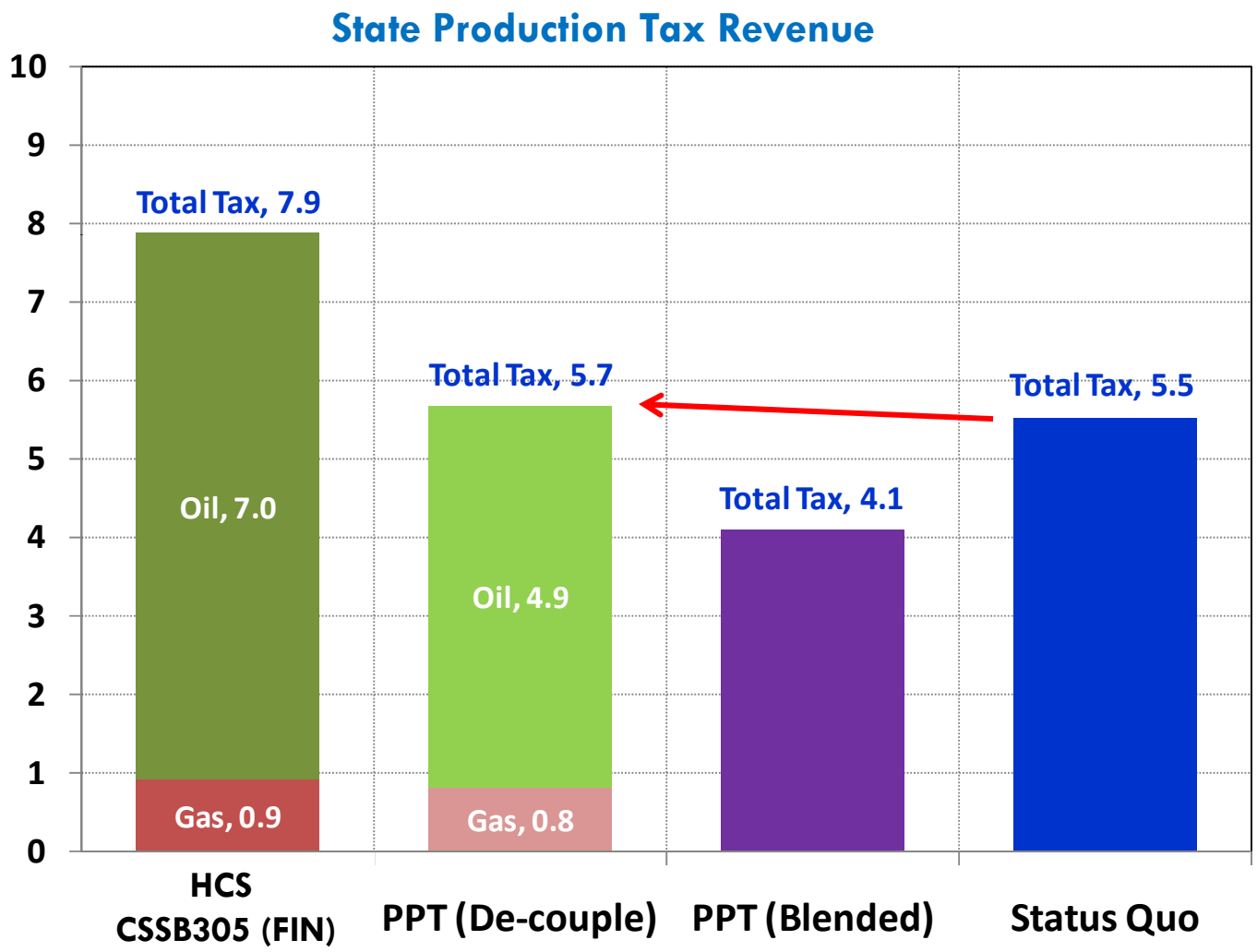
Cost Allocation: PoP

$120/$8
(15:1)

Yet, the Status Quo brings in nearly the same tax revenue as would have been generated if the PPT system had been decoupled



At nearly all cases less than14:1 parity, Status Quo (combined) brings in **more** revenue than PPT decoupled (as much as $7 billion more)

Assumptions

Oil: 500 Mbbl/d and Gas: 4.5 Bcf/d
Capex: $2.2Bn and Opex: $2.2Bn
Cost Allocation: PoP

Gas Price Parity

Oil Price ($/bbl)

	40	50	60	70	80	90	100	110	120	130	140	150	160	170	180	190	200
6	(0.1)	(0.2)	(0.3)	(0.9)	(1.5)	(2.2)	(3.0)	(3.9)	(5.0)	(5.2)	(5.1)	(4.8)	(4.5)	(4.7)	(5.0)	(5.9)	(7.0)
8	0.0	(0.1)	(0.2)	(0.2)	(0.5)	(1.0)	(1.6)	(2.2)	(2.8)	(3.5)	(4.4)	(4.7)	(4.5)	(4.8)	(5.2)	(5.5)	(5.8)
10	0.0	(0.1)	(0.2)	(0.2)	(0.1)	(0.3)	(0.6)	(1.0)	(1.5)	(2.1)	(2.6)	(3.2)	(3.9)	(4.2)	(4.6)	(5.0)	(5.5)
12	0.0	0.1	(0.1)	(0.2)	(0.0)	0.1	(0.1)	(0.3)	(0.6)	(1.0)	(1.4)	(1.9)	(2.3)	(3.1)	(3.9)	(4.4)	(4.8)
14	0.0	0.1	(0.0)	(0.2)	(0.0)	0.2	0.2	0.1	(0.0)	(0.2)	(0.5)	(0.8)	(1.2)	(1.8)	(2.9)	(3.7)	(4.1)
16	0.0	0.1	0.2	(0.1)	(0.1)	0.2	0.4	0.4	0.3	0.2	0.1	(0.1)	(0.3)	(0.7)	(1.7)	(2.7)	(3.6)
18	0.0	0.1	0.4	0.1	(0.1)	0.2	0.5	0.5	0.6	0.5	0.5	0.4	0.3	0.1	(0.7)	(1.6)	(2.7)
20	0.0	0.1	0.5	0.3	0.1	0.1	0.4	0.6	0.7	0.8	0.8	0.8	0.8	0.7	(0.0)	(0.8)	(1.7)
22	0.0	0.1	0.5	0.4	0.3	0.3	0.4	0.7	0.8	0.9	1.0	1.1	1.1	1.1	0.5	(0.2)	(1.0)
24	0.0	0.1	0.5	0.5	0.4	0.4	0.6	0.8	0.9	1.1	1.2	1.3	1.4	1.5	1.0	0.3	(0.4)
26	0.0	0.1	0.5	0.6	0.5	0.6	0.7	0.9	1.0	1.1	1.3	1.5	1.6	1.7	1.3	0.7	0.0

PPT (De-Coupled) > STATUS QUO PPT (De-Coupled) = STATUS QUO PPT (De-Coupled) < STATUS QUO

What is the "Problem" Being Solved by SB305?

1 Is It?: *That the "dilution" of oil taxes caused by gas production will be "locked-in" at the AGIA Open Season*

- Reality (Based on the Dept of Law analysis):
  - Only the **gas** production tax **obligation** (not the rate) is "locked-in" at the open season;
  - The legislature can change the oil tax system anytime before or after the open season;
  - The so-called "$2 billion loss" will only occur if three things happen:
    1. We are successful in achieving a large capacity gas pipeline;
    2. The price of oil and gas remain far apart (defying fundamental economic principles); AND
    3. **The next 5 Legislatures decide that it is appropriate to leave the current tax system as is.**

What is the "Problem" Being Solved by SB305?

2 Is It?: *That any "dilution" of oil taxes caused by mixing in a lower value hydrocarbon is an unacceptable "loss" of oil tax revenue?*

- Response:
  - Should the Legislature react similarly when a large volume heavy oil project is proposed?
    - It will have the same dynamic; highly profitable sweet crude will be diluted, thus reducing its profitability and its progressivity tax rate
    - State will "lose" oil tax revenue due to the introduction of heavy oil

What is the "Problem" Being Solved by SB305?

3

Is It?: That under the status quo, at high oil/gas price parity, the state is at risk of seeing a reduction of overall production tax revenue when they "flip the gas switch"?

- Response:
  - Legislature has 10 years to decide if it wants to take on that risk in exchange for a gasline;
  - If it is not an acceptable risk, then there are a number of alternative options (including decoupling) that could be carefully considered.

One Alternative Approach To Address the Revenue "Loss" when you "Flip the Gas Switch"

- Establish in the current tax system a **minimum tax** equal to a separate oil tax (i.e. The combined tax cannot be lower than what the separate oil tax would be).
  - Preserves the economic incentive nature of the current system, while protecting the state's downside risk in the case of high price parity;
  - Does not require significant structural changes to the current system, such as cost allocation.

Closing Observations

- Passing such a large tax increase just before our two upcoming open seasons sends a confusing message about the state's desire for a gasline

- SB 305 locks in a lower gas production tax obligation, thus reducing the state's negotiating flexibility

- SB305 could be passed after the open season without legal restriction or economic limitation

Technical Comments

- Pg. 4, Line 30: Missing a ")"
- Pg. 8, Ln. 6: change "of a lease or property" to "of the lease or property"
- Pg. 9, Lns. 3, 15, and 28: change "if that land, lease, or property" to "if that land or lease or property"
- Pg. 14, Ln. 9: delete the word "taxable"
- Pg. 14, Lns. 10, 12, 14, 16, 18, 20, and 22: insert "during that calendar year" following the word "produced" on each line
- Pg. 14, Lns. 21 and 23: insert "other than gas used in the state" at the end of each subsection
- Pg. 14, Ln. 24: Following (g), insert "For purposes of this section,"
- Pg. 14, Ln. 25: delete "or to leases or properties for the purposes of determining production tax value"
- Pg. 15, Ln. 10: delete "from each lease or property"

Technical Concern

- Pg. 14, Sec. 8:
  - This new section allocates the costs incurred within a lease or property prior to commencement of sustained production so that those costs get allocated to existing production.
  - These costs are allocated to production within one of the defined "segments" (NS oil, CI oil, CI gas, In-state gas, etc.)
  - However, it does not make it clear that the costs are allocated only within the "segment" in which they were incurred.

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Back-up Materials

Robust Economic Modeling of SB 305

- The "$2 billion loss" argument is based on a narrow window of possible oil to gas price relationships (i.e. 15:1);
  - To be prudent, you need to analyze a wide range of potential oil prices and oil to gas price relationships.

Modeling SB 305

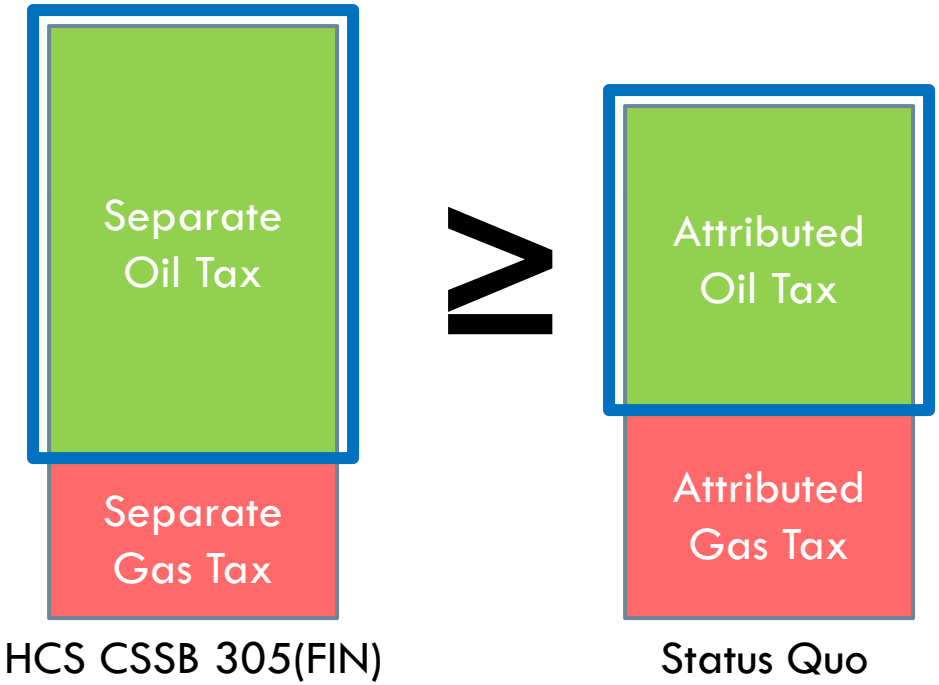
Oil Price Range 40 to 200 $/bbl

Gas Price Parity Range 6 to 26

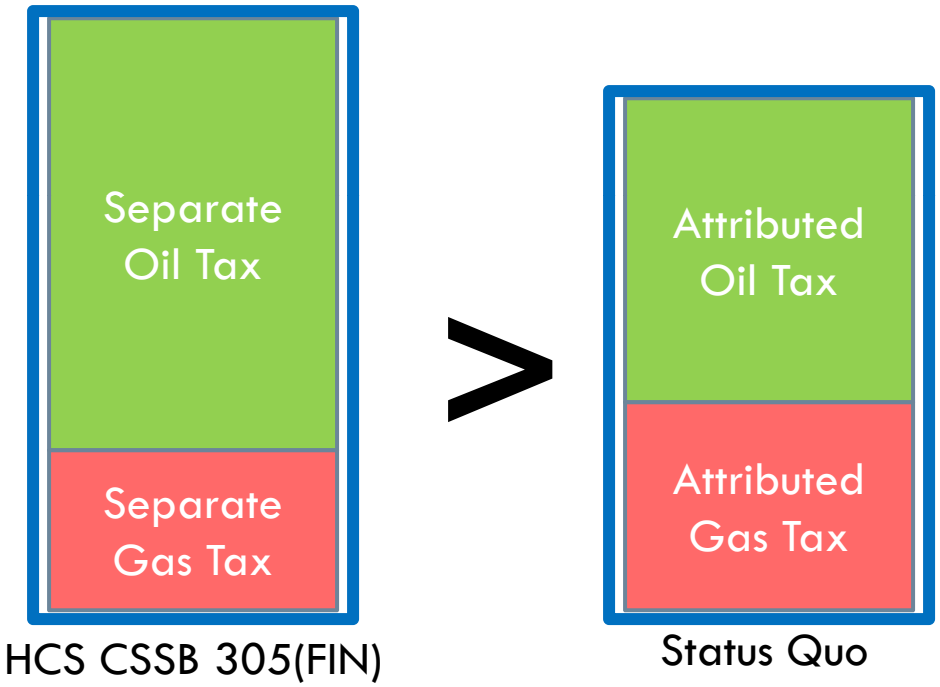
Oil Production	500 Mbbl/d
Gas Production	4.5 Bcf/d
Total OPEX	$ 2.2 Billions
Total CAPEX	$ 2.2 Billions

Costs allocated on the basis of the proportion of the gross value at the point of production (PoP basis).

In All of the Cases Run:
Oil Taxes after SB 305 are greater than or equal to the Status Quo



In over 90% of the Cases Run:
Overall Oil and Gas Taxes after SB 305 are greater than the Status Quo



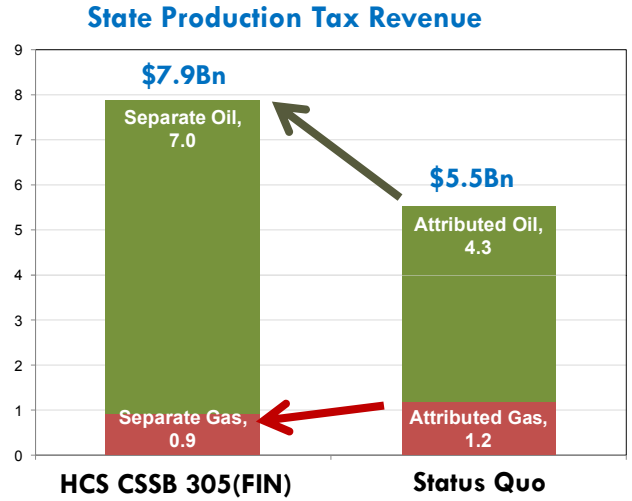
Sample Cases

Comparing SB305 and Status Quo
Total Tax Revenue, and Gas Tax Obligations

Assumptions

Oil: 500 Mbbl/d and Gas: 4.5 Bcf/d
Capex: $2.2Bn and Opex: $2.2Bn
Cost Allocation: PoP

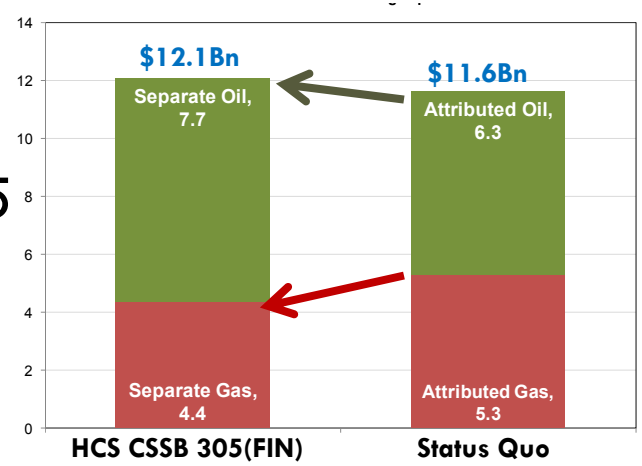
$120/$8 (15:1)



Overall Tax and Oil Tax Increase

Gas Tax Decrease

$120/$15 (8:1)



Overall Tax and Oil Tax Increase

Gas Tax Decrease

Gas Tax

HCS CSSB305 (FIN) less Status Quo*

Assumptions

Oil: 500 Mbbl/d and Gas: 4.5 Bcf/d
Capex: $2.2Bn and Opex: $2.2Bn
Cost Allocation: PoP

Gas Price Parity ↓

Oil Price ($/bbl) →

	40	50	60	70	80	90	100	110	120	130	140	150	160	170	180	190	200
6	0.0	0.0	(0.0)	(0.2)	(0.3)	(0.4)	(0.4)	(0.5)	(0.6)	(0.2)	(0.2)	(0.2)	(0.2)	(0.2)	(0.3)	(0.3)	(0.3)
8	0.0	0.0	0.0	0.0	(0.2)	(0.4)	(0.6)	(0.7)	(0.9)	(1.1)	(1.3)	(1.2)	(0.9)	(0.6)	(0.6)	(0.6)	(0.7)
10	0.0	0.0	0.0	0.0	(0.0)	(0.2)	(0.4)	(0.7)	(0.8)	(1.1)	(1.3)	(1.5)	(1.8)	(1.7)	(1.6)	(1.4)	(1.2)
12	0.0	0.0	0.0	0.0	0.0	(0.0)	(0.2)	(0.4)	(0.6)	(0.9)	(1.1)	(1.3)	(1.6)	(1.9)	(2.0)	(2.0)	(1.9)
14	0.0	0.0	0.0	0.0	0.0	0.0	(0.1)	(0.2)	(0.4)	(0.6)	(0.9)	(1.1)	(1.4)	(1.6)	(1.9)	(2.1)	(2.1)
16	0.0	0.0	0.0	0.0	0.0	0.0	(0.0)	(0.1)	(0.2)	(0.4)	(0.6)	(0.8)	(1.1)	(1.4)	(1.6)	(1.9)	(2.1)
18	0.0	0.0	0.0	0.0	0.0	0.0	(0.0)	(0.0)	(0.1)	(0.2)	(0.4)	(0.6)	(0.8)	(1.0)	(1.3)	(1.6)	(1.9)
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22	0.0	0.0	0.0	0.0	0.0	0.0	0.0	(0.0)	(0.0)	(0.1)	(0.2)	(0.3)	(0.4)	(0.6)	(0.8)	(1.0)	(1.2)
24	0.0	0.0	0.0	0.0	0.0	0.0	0.0	(0.0)	(0.0)	(0.0)	(0.1)	(0.2)	(0.3)	(0.4)	(0.6)	(0.8)	(1.0)
26	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	(0.0)	(0.0)	(0.1)	(0.1)	(0.2)	(0.3)	(0.4)	(0.6)	(0.8)

CSSB305 (FIN) > STATUS QUO CSSB305 (FIN) = STATUS QUO CSSB305 (FIN) < STATUS QUO

*Gas Tax under the Status Quo equals Attributed Gas Tax

Oil Tax

HCS CSSB305 (FIN) less Status Quo*

Assumptions

Oil: 500 Mbbl/d and Gas: 4.5 Bcf/d
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8	0.0	0.0	0.1	0.5	0.7	0.9	1.1	1.4	1.4	1.1	0.8	0.6	0.7	0.8	0.9	1.0	1.1
10	0.0	0.0	0.0	0.4	0.8	1.1	1.4	1.8	2.0	1.8	1.6	1.4	1.0	1.1	1.3	1.4	1.6
12	0.0	0.1	0.0	0.3	0.7	1.2	1.6	2.0	2.3	2.3	2.2	2.0	1.8	1.5	1.5	1.7	1.8
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CSSB305 (FIN) > STATUS QUO CSSB305 (FIN) = STATUS QUO CSSB305 (FIN) < STATUS QUO

*Oil Tax under the Status Quo equals Total Tax less attributed gas tax

Total Tax

HCS CSSB305 (FIN) less Status Quo

Assumptions

Oil: 500 Mbbl/d and Gas: 4.5 Bcf/d
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Cost Allocation: PoP

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8	0.0	0.0	0.1	0.5	0.5	0.5	0.6	0.6	0.5	(0.0)	(0.6)	(0.6)	(0.2)	0.3	0.3	0.4	0.4
10	0.0	0.0	0.0	0.4	0.8	0.9	1.0	1.1	1.1	0.8	0.4	(0.1)	(0.7)	(0.6)	(0.3)	(0.0)	0.4
12	0.0	0.1	0.0	0.3	0.7	1.1	1.4	1.6	1.7	1.4	1.1	0.7	0.2	(0.3)	(0.5)	(0.3)	(0.1)
14	0.0	0.2	0.1	0.2	0.6	1.2	1.6	1.9	2.2	2.0	1.7	1.4	1.0	0.6	0.0	(0.3)	(0.1)
16	0.0	0.2	0.3	0.2	0.5	1.1	1.6	2.1	2.5	2.4	2.3	2.0	1.6	1.3	0.8	0.3	0.1
18	0.0	0.2	0.5	0.4	0.5	1.0	1.7	2.1	2.6	2.7	2.7	2.5	2.3	1.9	1.5	1.1	0.6
20	0.0	0.2	0.6	0.5	0.7	0.9	1.6	2.2	2.7	2.9	2.9	2.9	2.7	2.5	2.1	1.8	1.3
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24	0.0	0.2	0.6	0.8	0.9	1.2	1.7	2.2	2.8	3.2	3.3	3.3	3.3	3.2	3.0	2.8	2.5
26	0.0	0.2	0.6	0.9	1.1	1.4	1.8	2.3	2.8	3.3	3.4	3.5	3.5	3.4	3.3	3.1	2.9

CSSB305 (FIN) > STATUS QUO

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