

NEW SUSTAINABLE
ALASKA
PLAN



Pulling Together to Build Our Future

Alaska's Oil and Gas Taxation – HB111\O

Lifecycle Scenario Analysis

Presentation to House Resources Committee

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What Will Be Presented Today

- Summary of HB111\O Impacts on Modeling
- Modeling Assumptions
- Scenario Analysis - economics of changes
 - Status Quo (HB247) Lifecycle analysis of two potential new North Slope fields (small and large).
 - Potential Impacts of HB111 changes on new North Slope fields.

What are the Major Tax Changes in HB111/O

| | Status Quo | HB111 |
|---|-----------------|-----------------|
| Net Operating Loss (NOL) Provisions | | |
| NOL Credit % | 35% | 15% |
| GVR can make NOL larger | no | no |
| Per Taxable Barrel Credit Provisions | | |
| Gross Value Reduction (GVR) 024i (fixed) | \$5 / bbl | \$5 / bbl |
| GVR limited to 3 yrs & \$70/bbl oil | yes | yes |
| non-GVR 024j (sliding scale) | \$0 - \$8 / bbl | \$0 - \$5 / bbl |
| Credit Repurchases | | |
| Max Production to qualify | 50,000/bpd | 15,000/bpd* |
| Maximum per year @ 100% | \$35M | eliminated |
| Maximum per year @ 75% | \$35M | eliminated |
| Minimum Tax Provisions | | |
| Min Tax % of Gross Value (GVPP) | 4% | 5% |
| NOL credits against Min Tax | yes | no |
| 024i credits against Min Tax | yes | no |

*This provision does not impact modeling since the only credit that a North Slope producer can earn post-1/1/18 is the NOL and the cash repurchase provision was eliminated for all producers.

Modeling Assumptions

- All Fields begin development 1/1/2018
- Does not include Exploration Costs
- Includes price and cost inflation (based on Callan 2.25% rate)
- For Status Quo modeling, after GVR ends the producer opts to use their sliding scale per-taxable barrel credits, which requires tax payments not go below the minimum tax.
- For Status Quo modeling, producer opts to only apply for \$35 million of repurchasable credits per year (and forgo the additional \$35 million with the 25% “haircut”).
- Modeling assumes North Slope tax treatment.

Field Lifecycle Modeling: Introduction

Lifecycle Modeling Assumptions

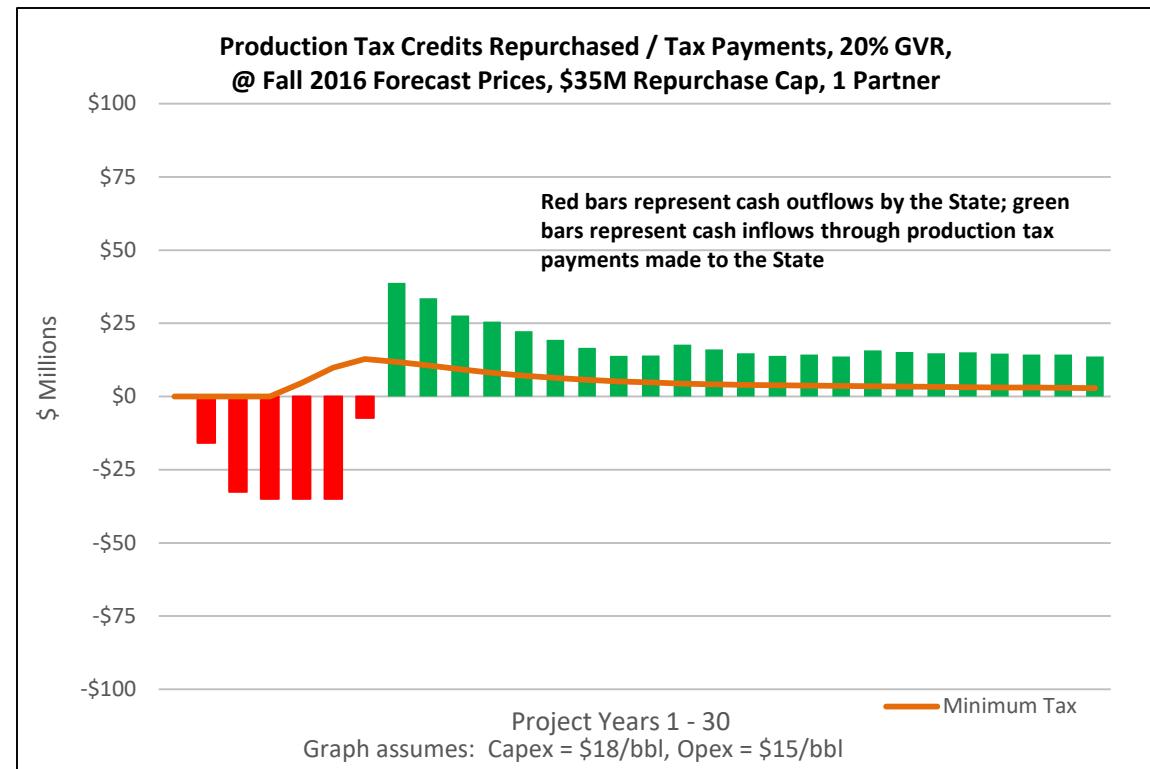
- Field Sizes Modeled:
 - 50 million barrels of oil (mmbo) field
 - 750 mmbo field
- Four Oil Prices Modeled:
 - \$40, \$60, and \$80 real (inflated)
 - Fall 2016 Forecast prices in real prices extending through life of field
- Tax Systems Modeled:
 - Status Quo
 - All Provisions
 - 1 and 4 Partner Scenarios (impacts total cash repurchase per year)
 - HB111

Lifecycle Modeling Outputs

- Each Scenario has a Dashboard with Four Quadrants
 1. Production Tax
 2. State Revenue
 3. Producer Revenue
 4. Summary Economics
 - a. Total Cash Flows
 - b. NPV Analysis
 - c. Split of Profits
 - d. Split of Gross

Dashboard – Net Production Tax

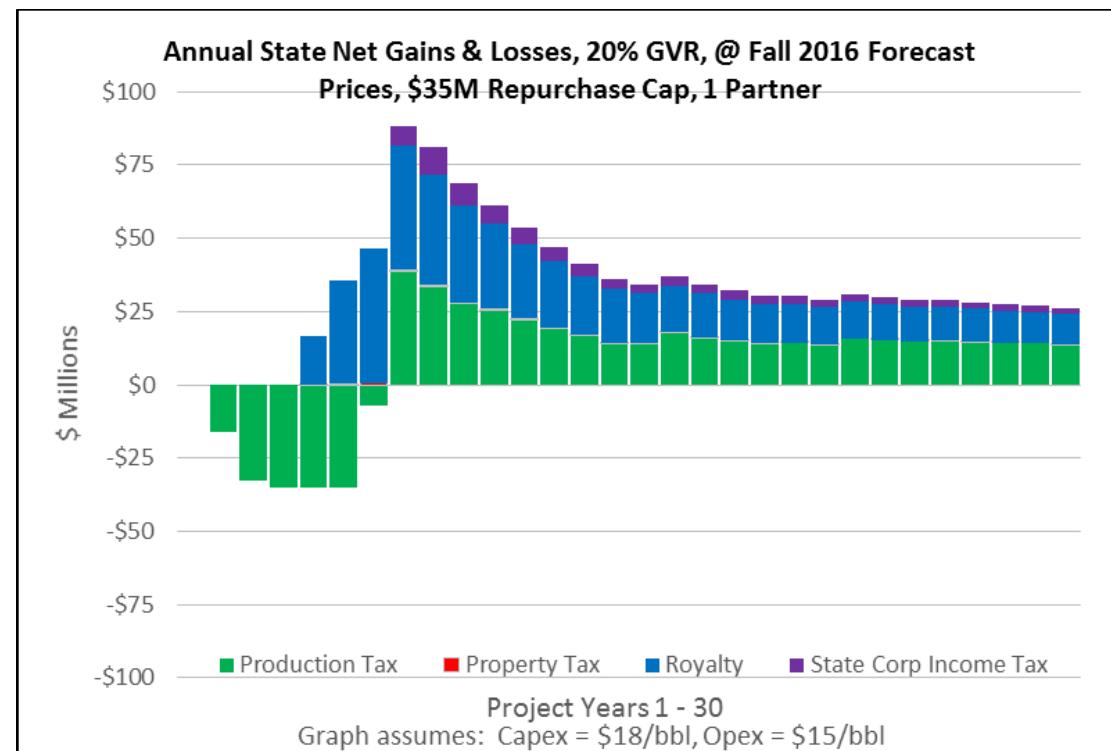
- Credits Repurchased by State
- Production Tax Paid
- Minimum Tax Calculation



Dashboard – State Gains & Losses

➤ State Revenue

- Production Tax (negative numbers are credits repurchased)
- Royalties
- State Share of Property Tax
- State Corp Income Tax



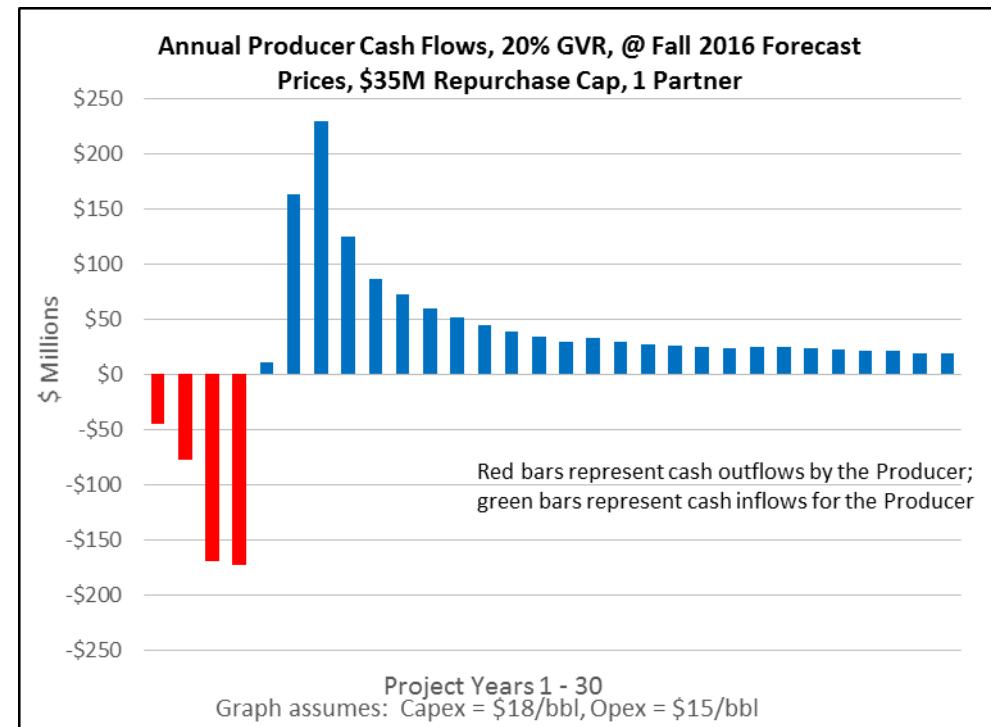
Dashboard – Producer(s) Cash Flows

➤ Producer(s) Cash Outflows

- Period when net cash is negative (typically when haven't started production and have huge cash outflows).

➤ Producer(s) Cash Inflows

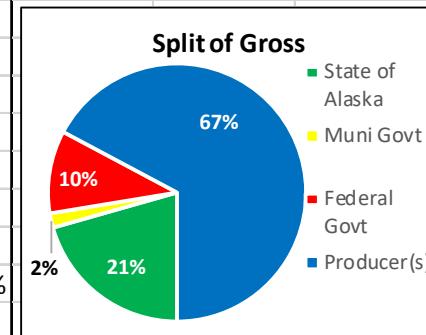
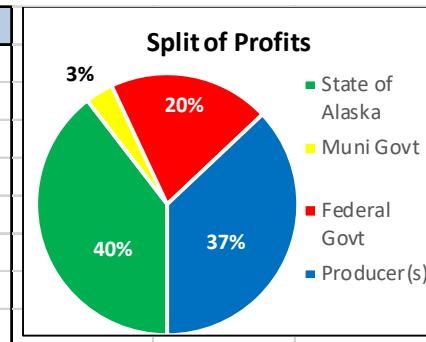
- Period when net cash is positive



Dashboard – Summary Economics

- Total Credits
- Total State and Producer Cash Flows
- Lifecycle Totals
 - Net Present Value (NPV) of discounted cash flows for State and Producer(s).
- Split of Profits
 - By entity
- Split of Gross (wellhead value)
 - By Entity

| Lifecycle Totals | |
|----------------------------------|-------|
| Tax Credits Repurchased = \$M | 161 |
| Production Tax Paid = \$M | 420 |
| Net Production Tax = \$M | 259 |
| Production Tax NPV @ 6.95% = \$M | 26 |
| | |
| Total Annual State Losses = \$M | 102 |
| Total Annual State Gains = \$M | 972 |
| Net State Gain (Loss) = \$M | 870 |
| State NPV @ 6.95% = \$M | 281 |
| | |
| Total Producer Cash Out = \$M | 465 |
| Total Producer Cash In = \$M | 1,280 |
| Net Producer Cash Flow = \$M | 815 |
| Producer Cash NPV @ 10.0% = \$M | 104 |
| Internal Rate of Return (IRR) | 15% |

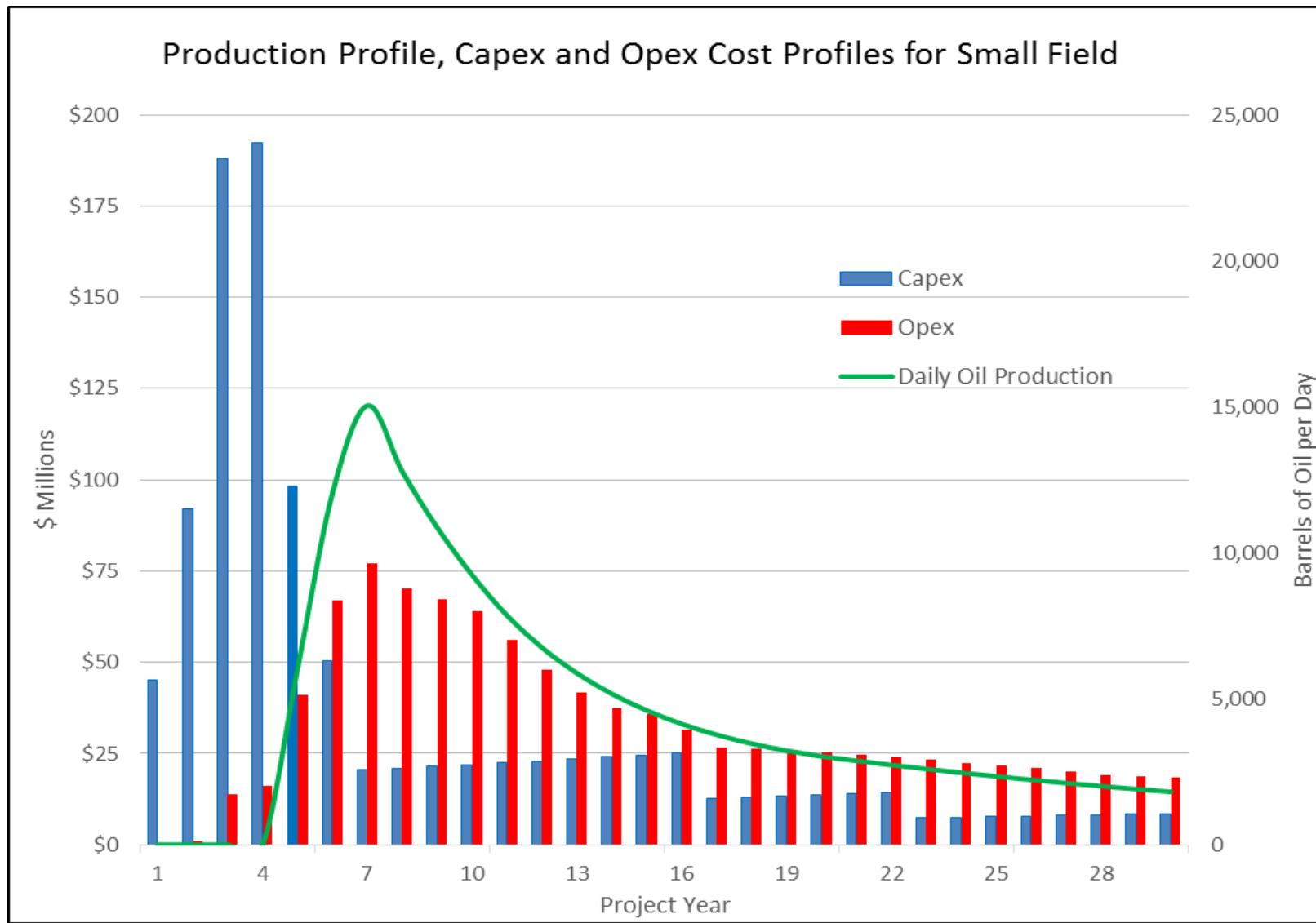


Field Lifecycle Modeling: North Slope Small Field

50 mmbo Field Assumptions

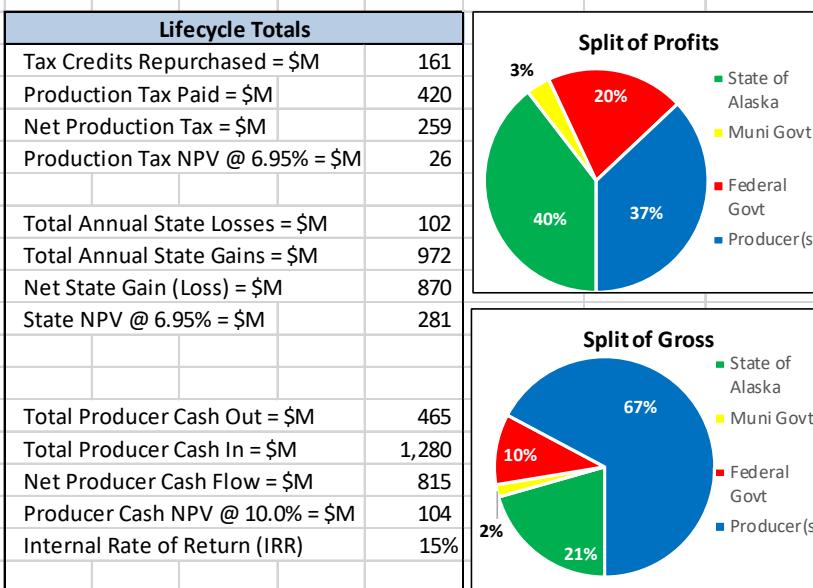
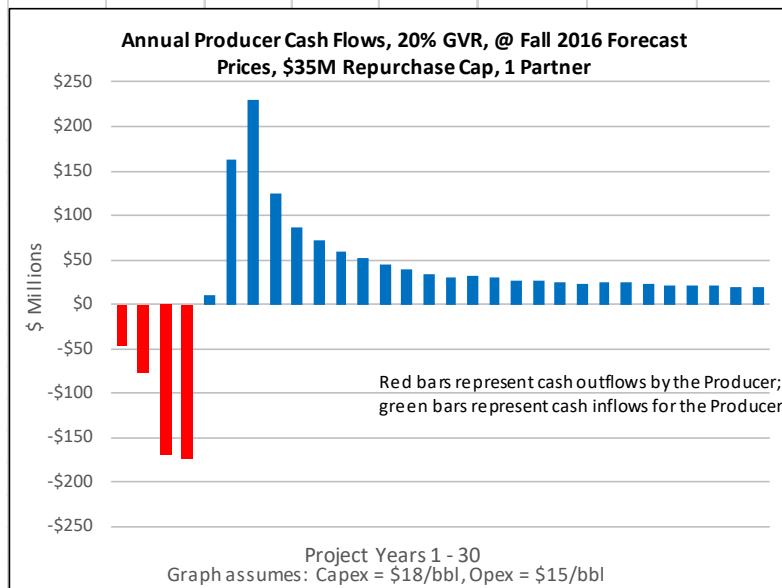
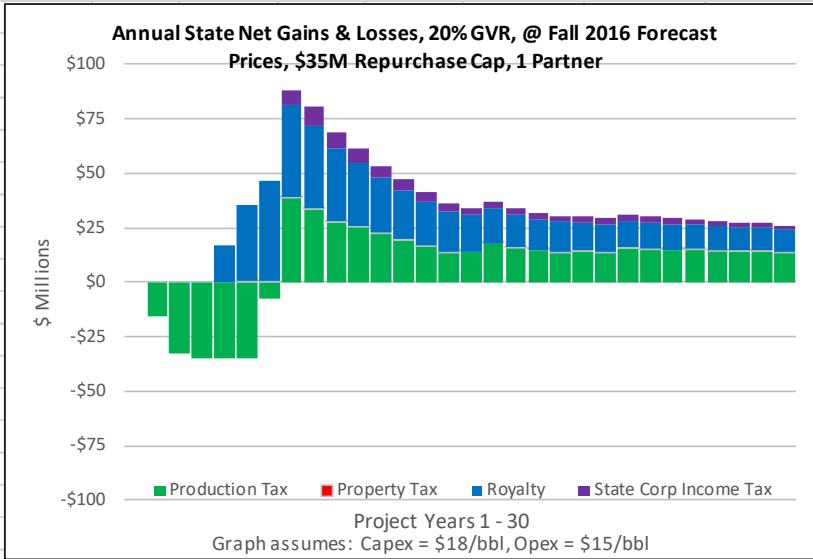
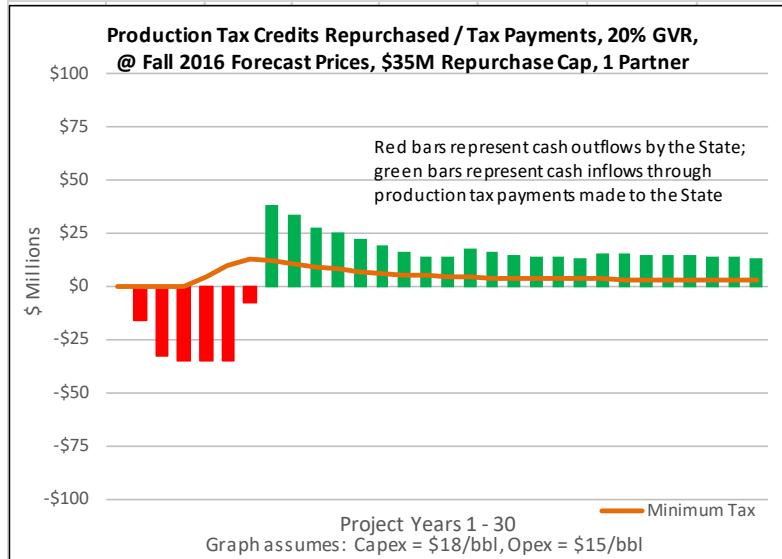
- Life of Field = 30 Years
- Peak Oil Production = ~15,000 bbls/day
- Transportation Cost = \$10 / bbl
- Royalty Rate = 12.5% (all State)
- Capex \$ = \$18 / bbl
- Opex \$ = \$15 / bbl
- Property Tax Rate = \$1.25 / bbl
- State Corp Income Tax Rate = 6.5% of remaining Production Tax Value (PTV) after Production Tax is paid
- Federal Corp Income Tax Rate = 35% of remaining PTV after State Corp Income Tax is paid

Profile Curves – Small Field



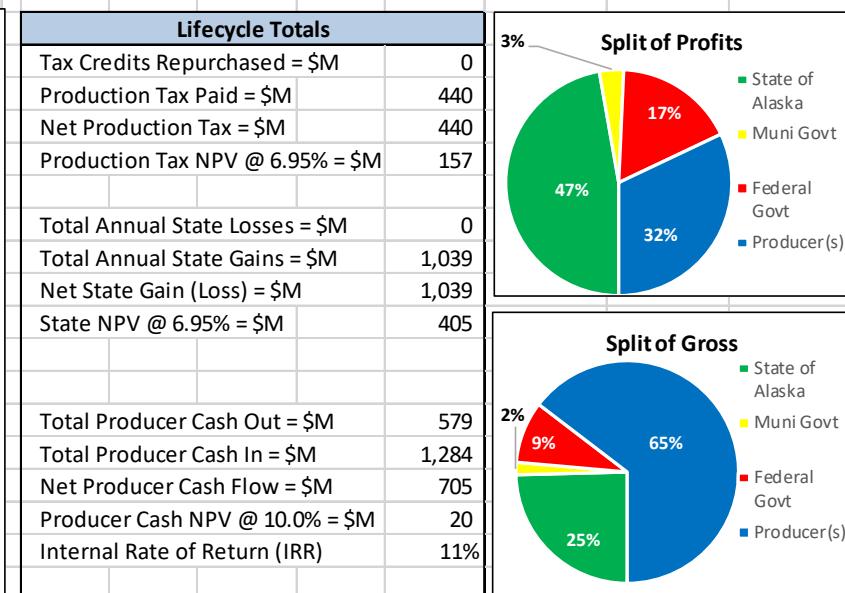
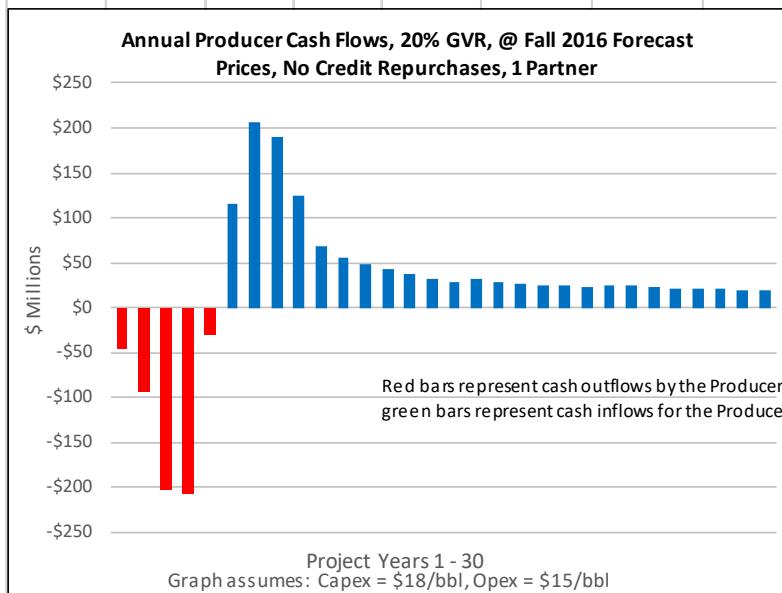
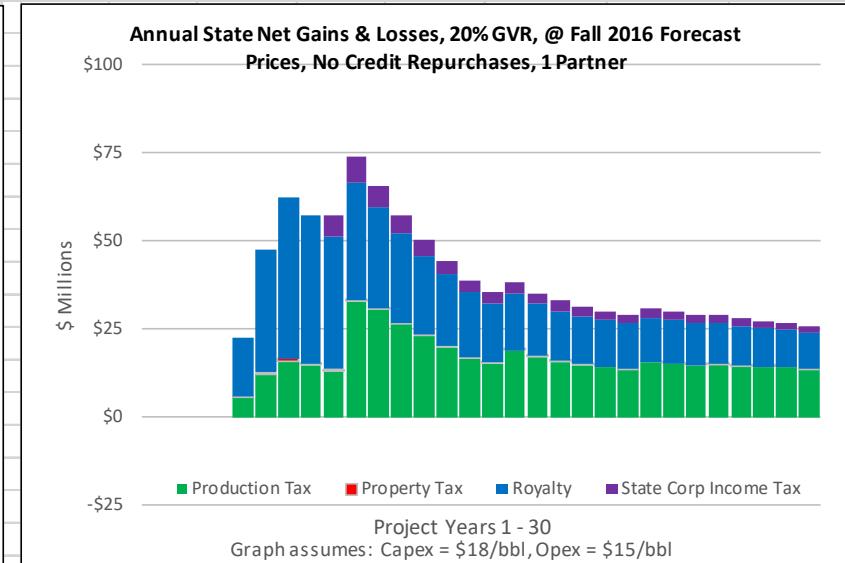
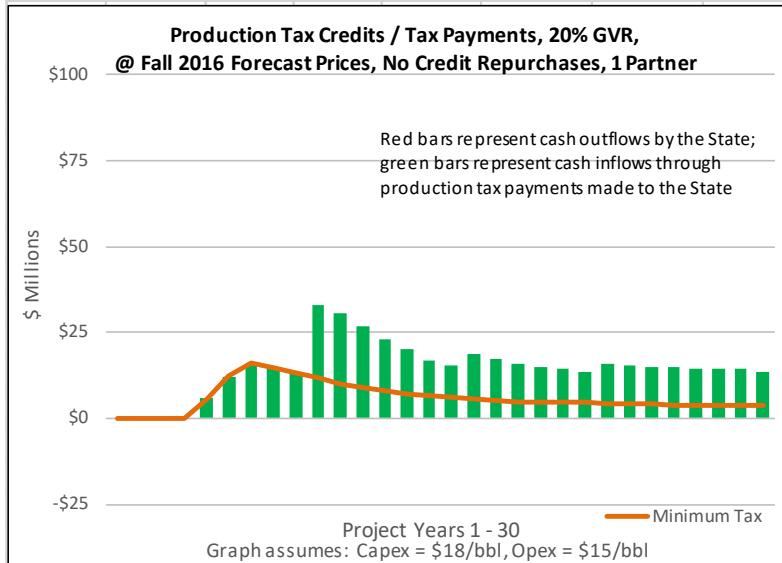
Lifecycle Modeling – Small Field

50 mmbo, Status Quo, Fall 2016 Forecast Prices, 1 Partner

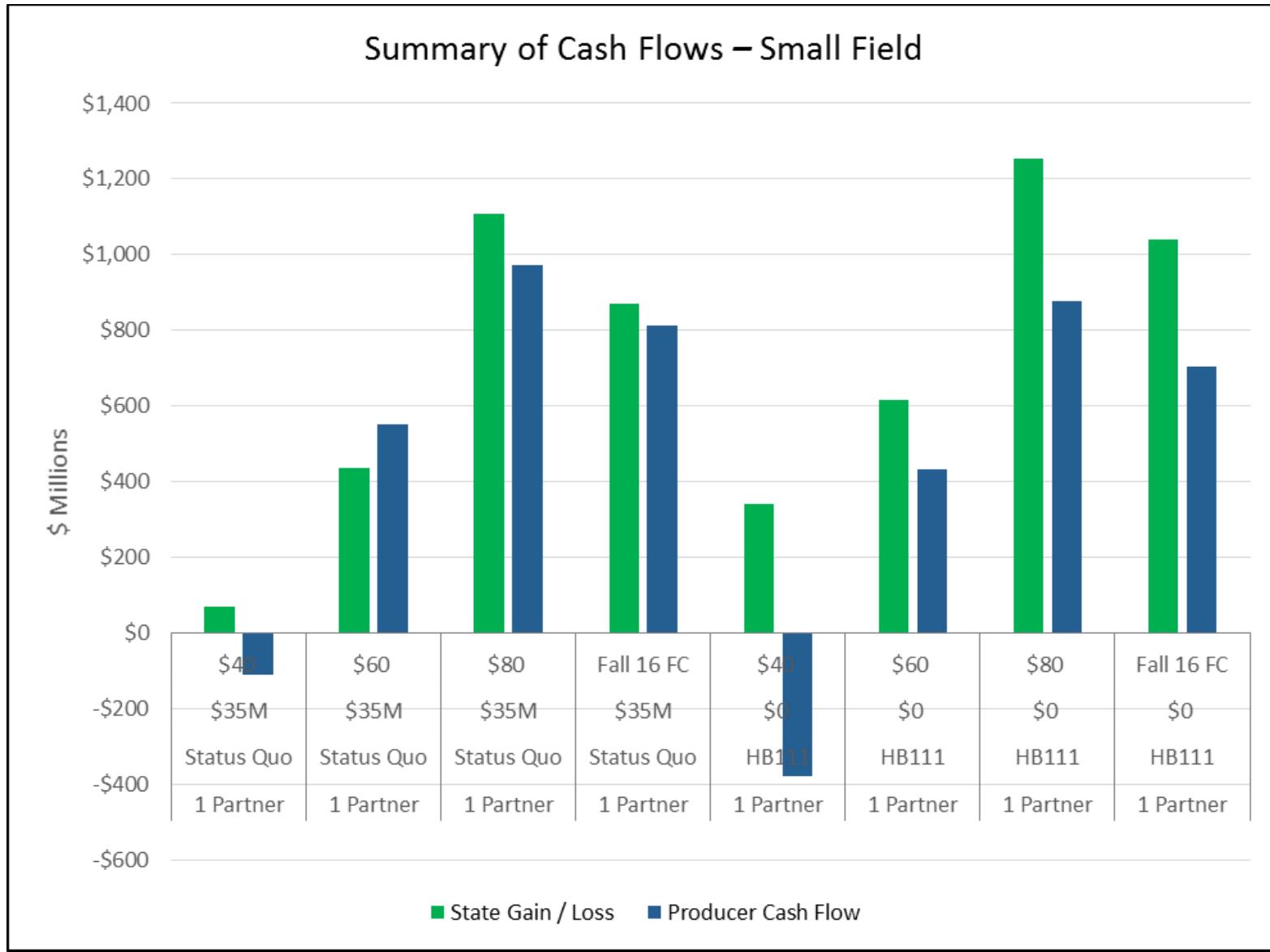


Lifecycle Modeling – Small Field

50 mmbo, HB111, Fall 2016 Forecast Prices, 1 Partner



Summary Table – Small Field



Summary Table – Small Field

| Field Size (million bbl) | # Partners | Tax Regime | Credit Repurchase Limit | Oil Price | Credits Repurchased (\$millions) | Net Production Tax Paid (\$millions) | Production Tax NPV 6.95% (\$millions) | Net State Gain (Loss) (\$millions) | State NPV 6.95% (\$millions) | Producer Cash Flow (\$millions) | Producer NPV 10.0% (\$millions) | Producer IRR (%) |
|--------------------------|------------|------------|-------------------------|------------|----------------------------------|--------------------------------------|---------------------------------------|------------------------------------|------------------------------|---------------------------------|---------------------------------|------------------|
| 50 | 1 | Status Quo | \$35M | \$40 | 219 | (183) | (145) | 71 | (36) | (109) | (217) | -3% |
| 50 | 1 | Status Quo | \$35M | \$60 | 185 | (41) | (89) | 437 | 113 | 550 | 23 | 11% |
| 50 | 1 | Status Quo | \$35M | \$80 | 153 | 420 | 99 | 1,108 | 390 | 972 | 170 | 18% |
| 50 | 1 | Status Quo | \$35M | Fall 16 FC | 161 | 259 | 26 | 870 | 281 | 815 | 104 | 15% |
| 50 | 1 | HB111 | 0 | \$40 | 0 | 87 | 37 | 341 | 147 | (378) | (374) | -7% |
| 50 | 1 | HB111 | 0 | \$60 | 0 | 152 | 63 | 618 | 257 | 433 | (78) | 7% |
| 50 | 1 | HB111 | 0 | \$80 | 0 | 575 | 213 | 1,253 | 499 | 878 | 96 | 14% |
| 50 | 1 | HB111 | 0 | Fall 16 FC | 0 | 440 | 157 | 1,039 | 405 | 705 | 20 | 11% |

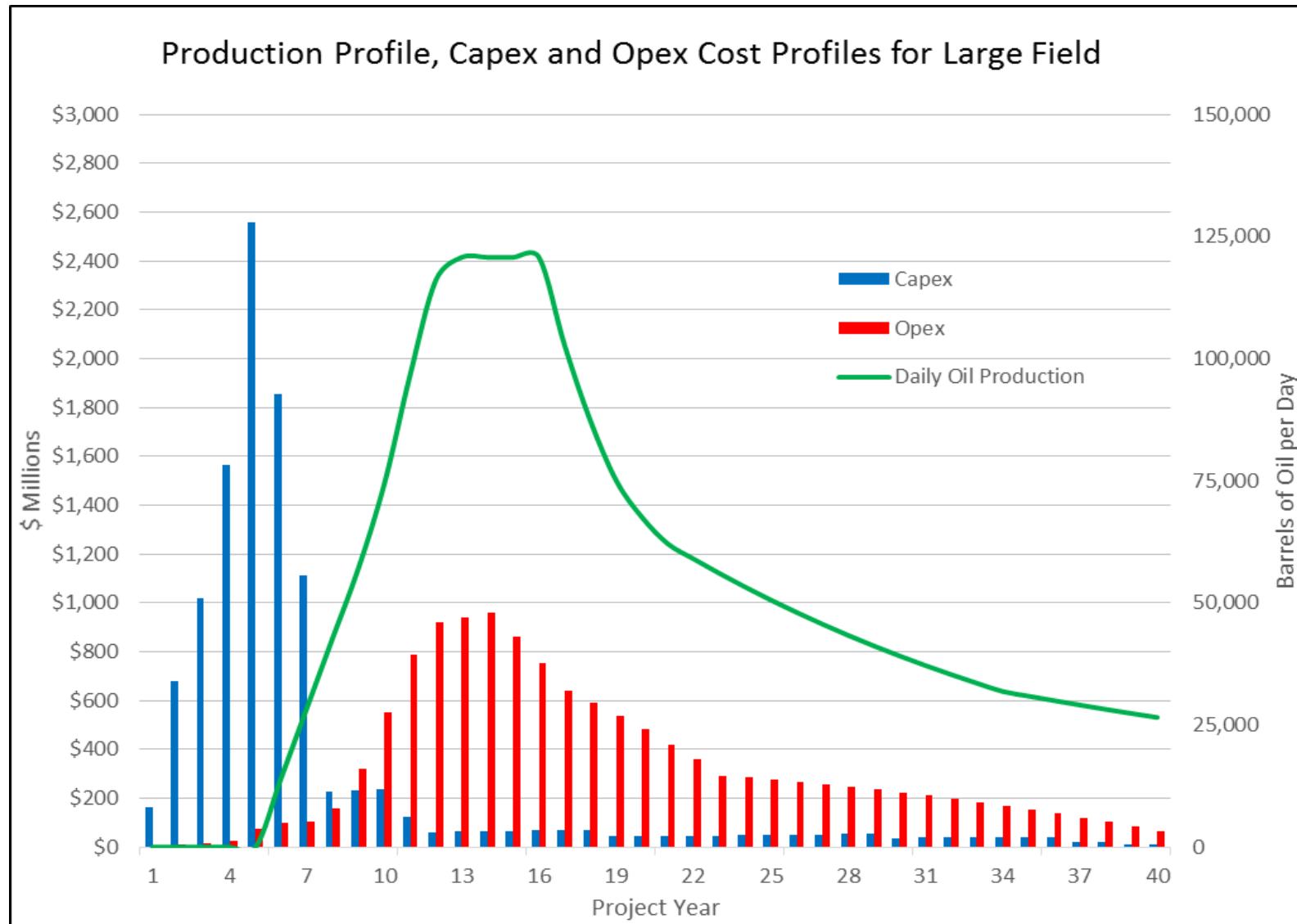
Field Lifecycle Modeling: North Slope Large Field

Lifecycle Modeling Assumptions – Large Field

750 mmbo Field Assumptions

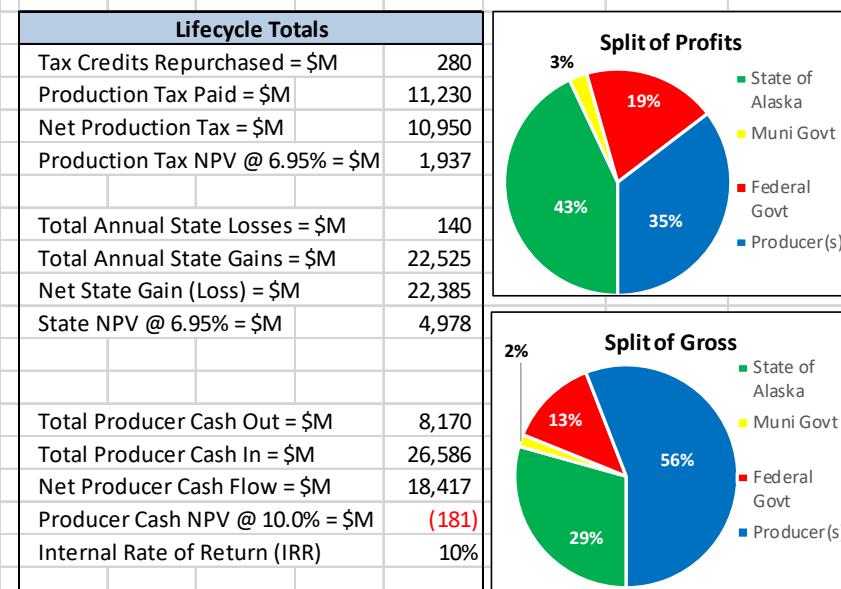
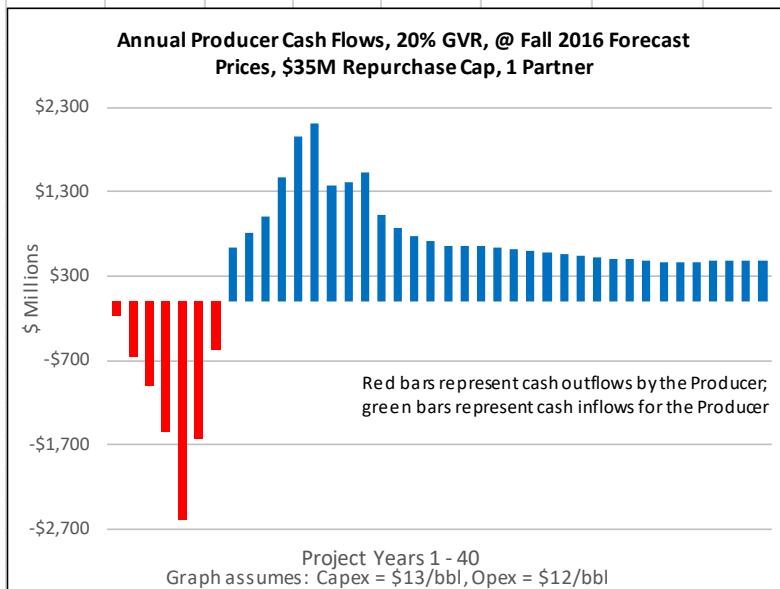
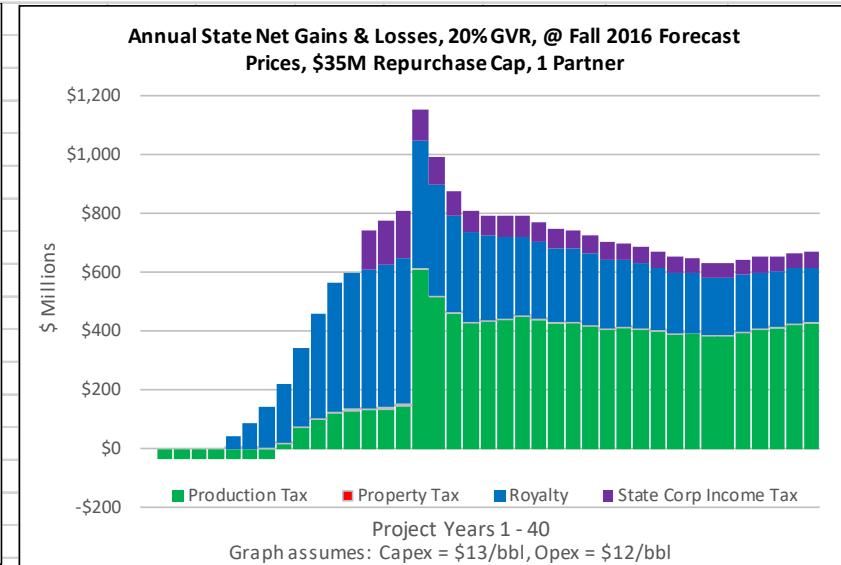
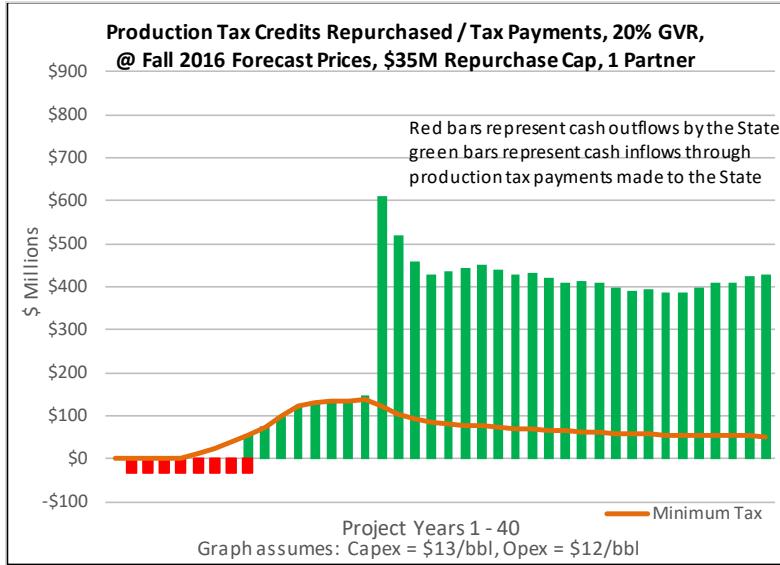
- Life of Field = 40 Years
- Peak Oil Production = ~120,000 bbls/day
- Transportation Cost = \$10 / bbl
- Royalty Rate = 12.5% (all State)
- Capex \$ = \$13 / bbl
- Opex \$ = \$12 / bbl
- Property Tax Rate = \$1.25 / bbl
- State Corp Income Tax Rate = 6.5% of remaining Production Tax Value (PTV) after Production Tax is paid
- Federal Corp Income Tax Rate = 35% of remaining PTV after State Corp Income Tax is paid

Profile Curves – Large Field



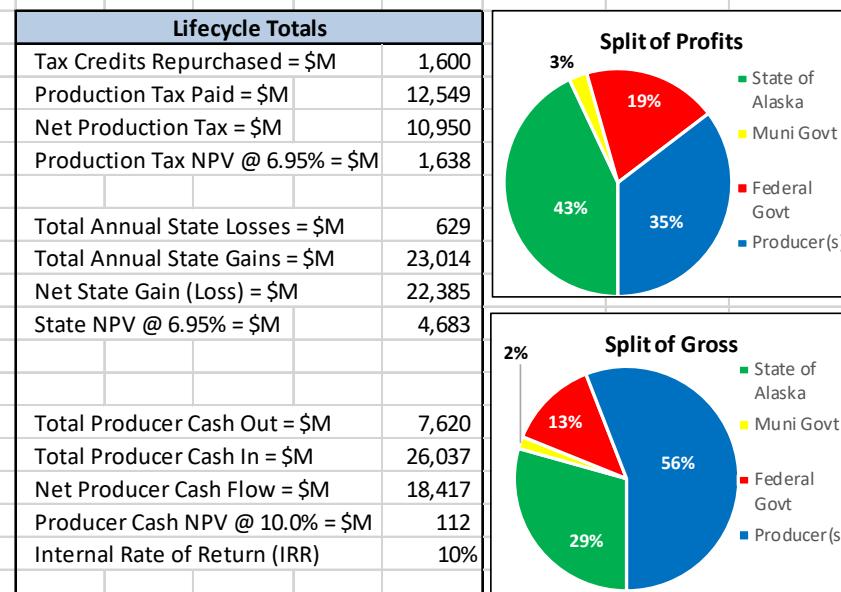
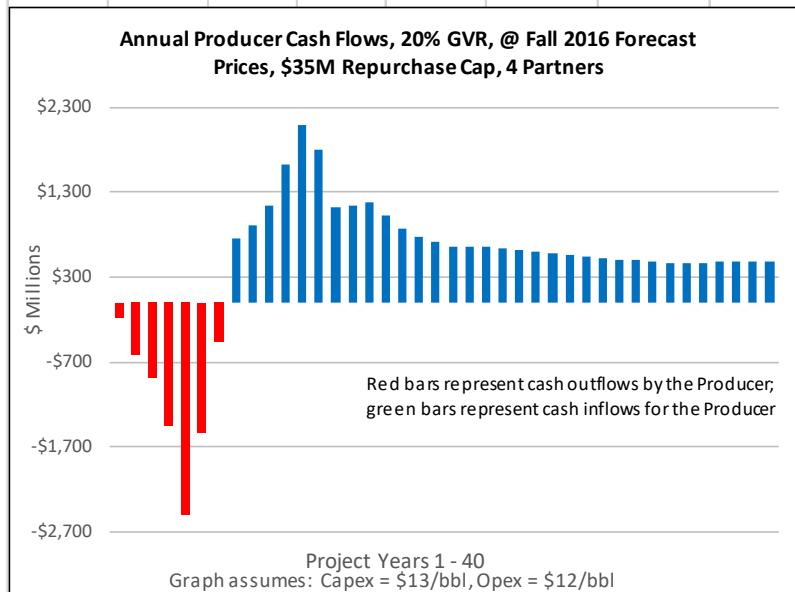
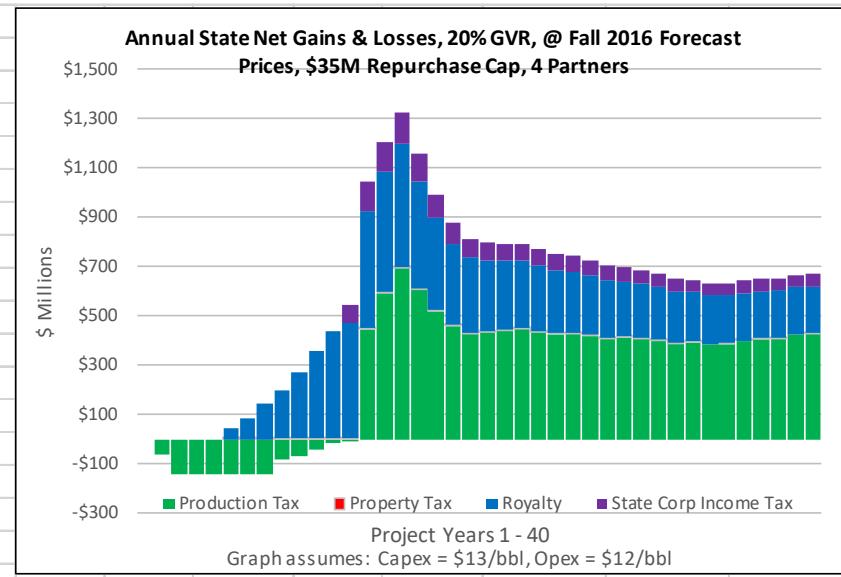
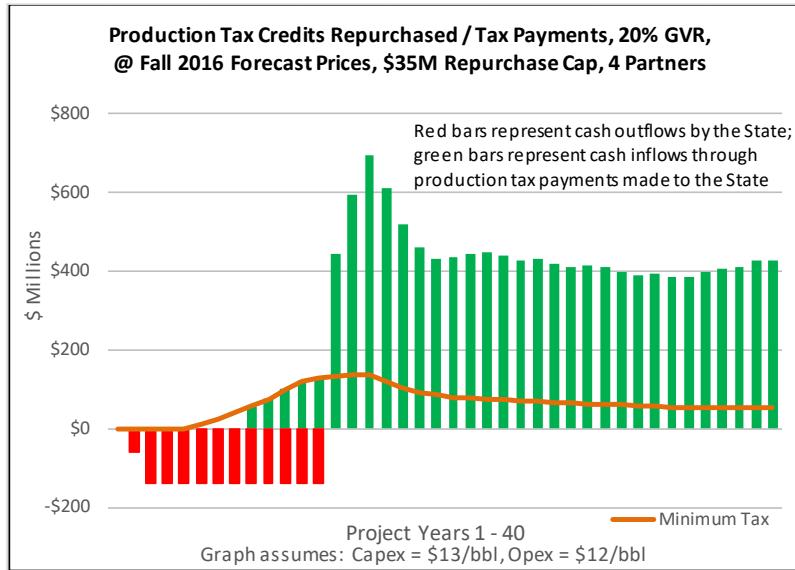
Lifecycle Modeling – Large Field

750 mmbo, Status Quo, Fall 2016 Forecast Prices, 1 Partner



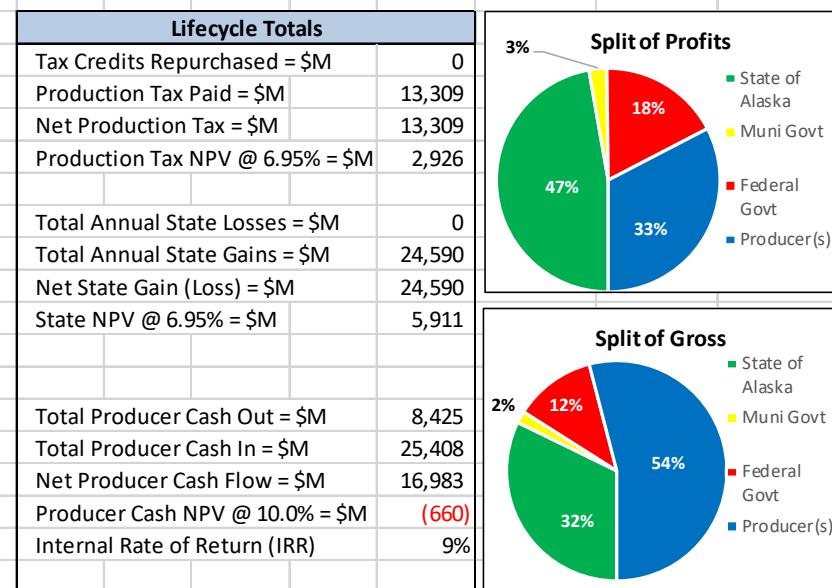
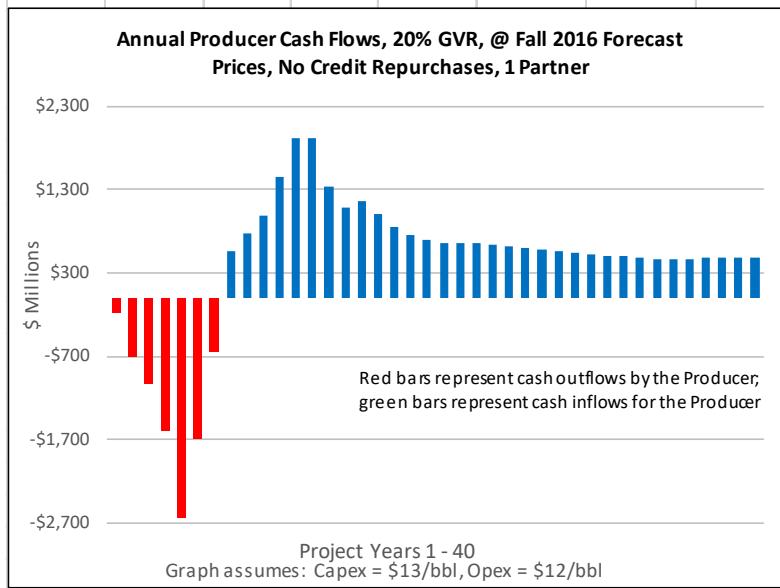
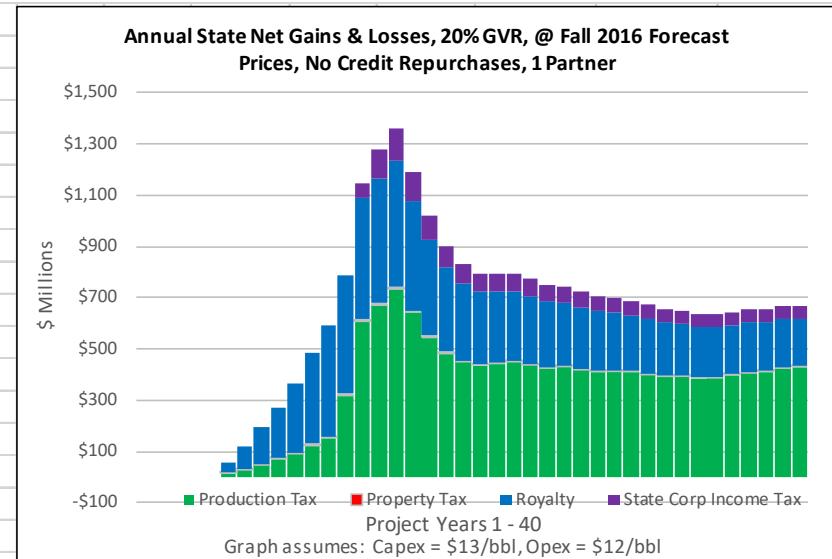
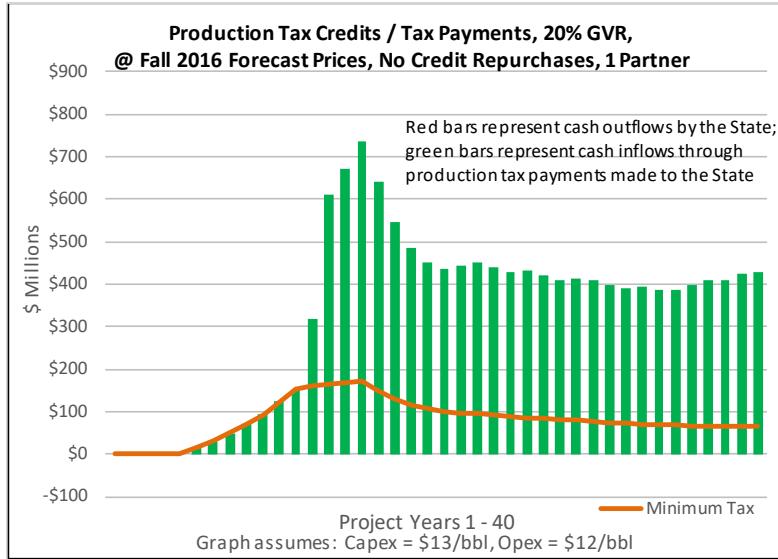
Lifecycle Modeling – Large Field

750 mmbo, Status Quo, Fall 2016 Forecast Prices, 4 Partners

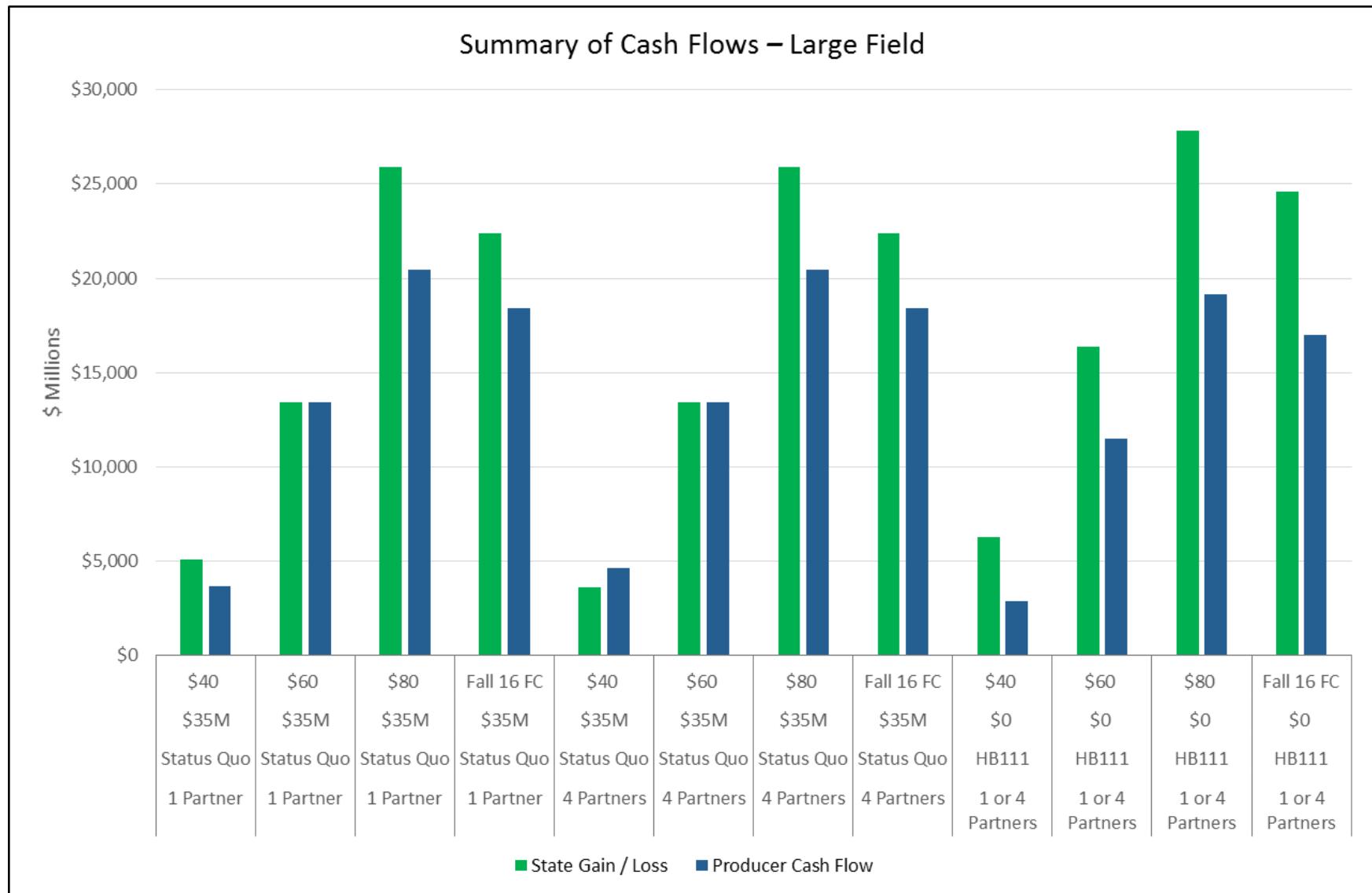


Lifecycle Modeling – Large Field

750 mmbo, HB111, Fall 2016 Forecast Prices, 1 or 4 Partners



Summary Table – Large Field



Summary Table – Large Field

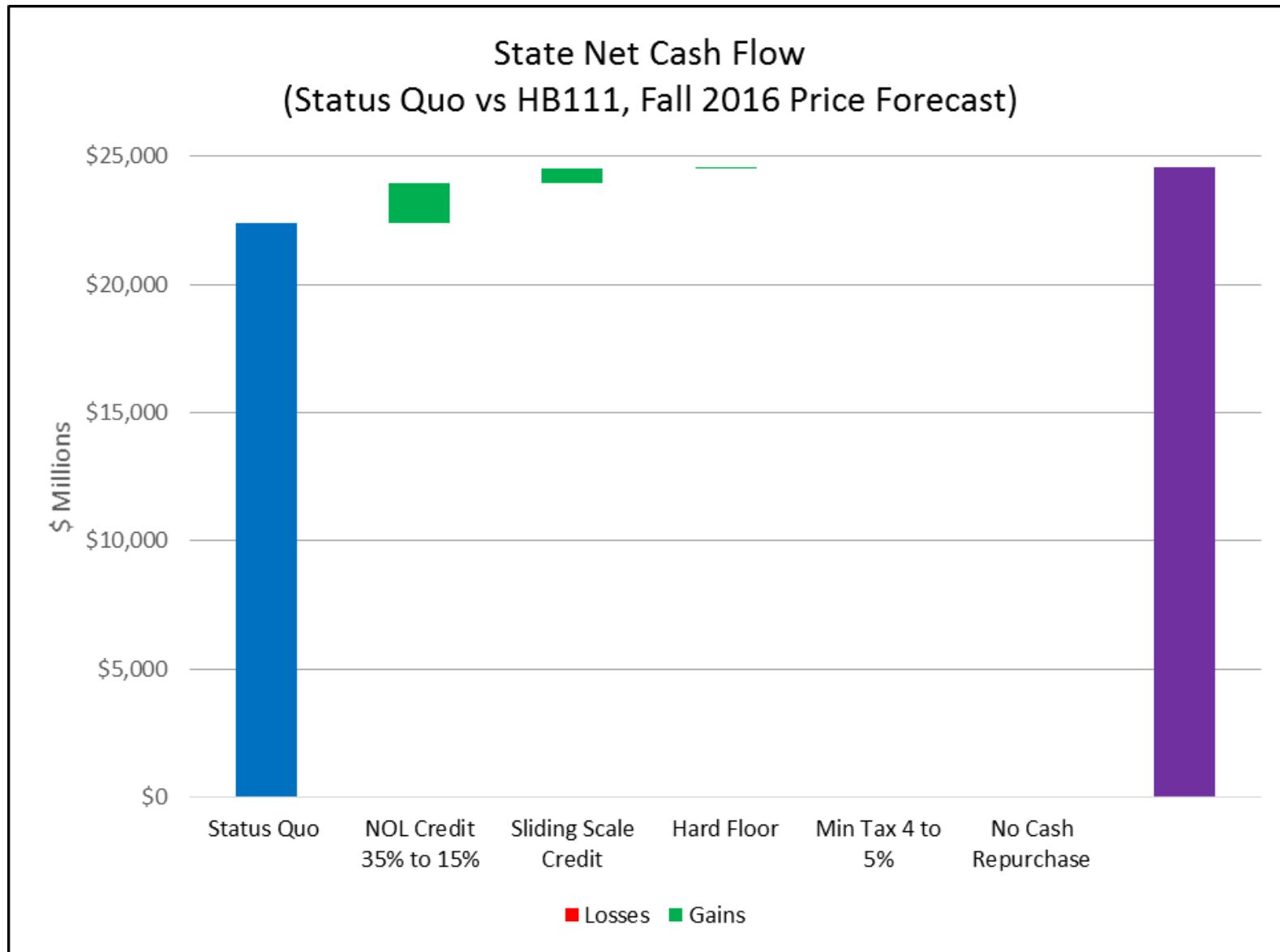
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|--------------------------|------------|------------|-------------------------|------------|----------------------------------|--------------------------------------|---------------------------------------|------------------------------------|------------------------------|---------------------------------|---------------------------------|------------------|
| 750 | 1 | Status Quo | \$35M | \$40 | 770 | 250 | (15) | 5,116 | 1,260 | 3,679 | (3,787) | 2% |
| 750 | 1 | Status Quo | \$35M | \$60 | 280 | 4,596 | 596 | 13,412 | 2,917 | 13,414 | (1,360) | 7% |
| 750 | 1 | Status Quo | \$35M | \$80 | 280 | 13,415 | 2,546 | 25,891 | 5,883 | 20,430 | 296 | 11% |
| 750 | 1 | Status Quo | \$35M | Fall 16 FC | 280 | 10,950 | 1,937 | 22,385 | 4,978 | 18,417 | (181) | 10% |
| 750 | 4 | Status Quo | \$35M | \$40 | 3,065 | (1,351) | (1,094) | 3,620 | 208 | 4,652 | (3,034) | 3% |
| 750 | 4 | Status Quo | \$35M | \$60 | 2,020 | 4,596 | 73 | 13,412 | 2,409 | 13,414 | (926) | 8% |
| 750 | 4 | Status Quo | \$35M | \$80 | 1,460 | 13,415 | 2,287 | 25,891 | 5,626 | 20,430 | 564 | 11% |
| 750 | 4 | Status Quo | \$35M | Fall 16 FC | 1,600 | 10,950 | 1,638 | 22,385 | 4,683 | 18,417 | 112 | 10% |
| 750 | 1 or 4 | HB111 | 0 | \$40 | 0 | 1,527 | 421 | 6,310 | 1,686 | 2,903 | (4,082) | 2% |
| 750 | 1 or 4 | HB111 | 0 | \$60 | 0 | 7,776 | 1,580 | 16,386 | 3,848 | 11,481 | (1,814) | 6% |
| 750 | 1 or 4 | HB111 | 0 | \$80 | 0 | 15,515 | 3,487 | 27,854 | 6,770 | 19,153 | (168) | 10% |
| 750 | 1 or 4 | HB111 | 0 | Fall 16 FC | 0 | 13,309 | 2,926 | 24,590 | 5,911 | 16,983 | (660) | 9% |

Further Analysis – Large Field

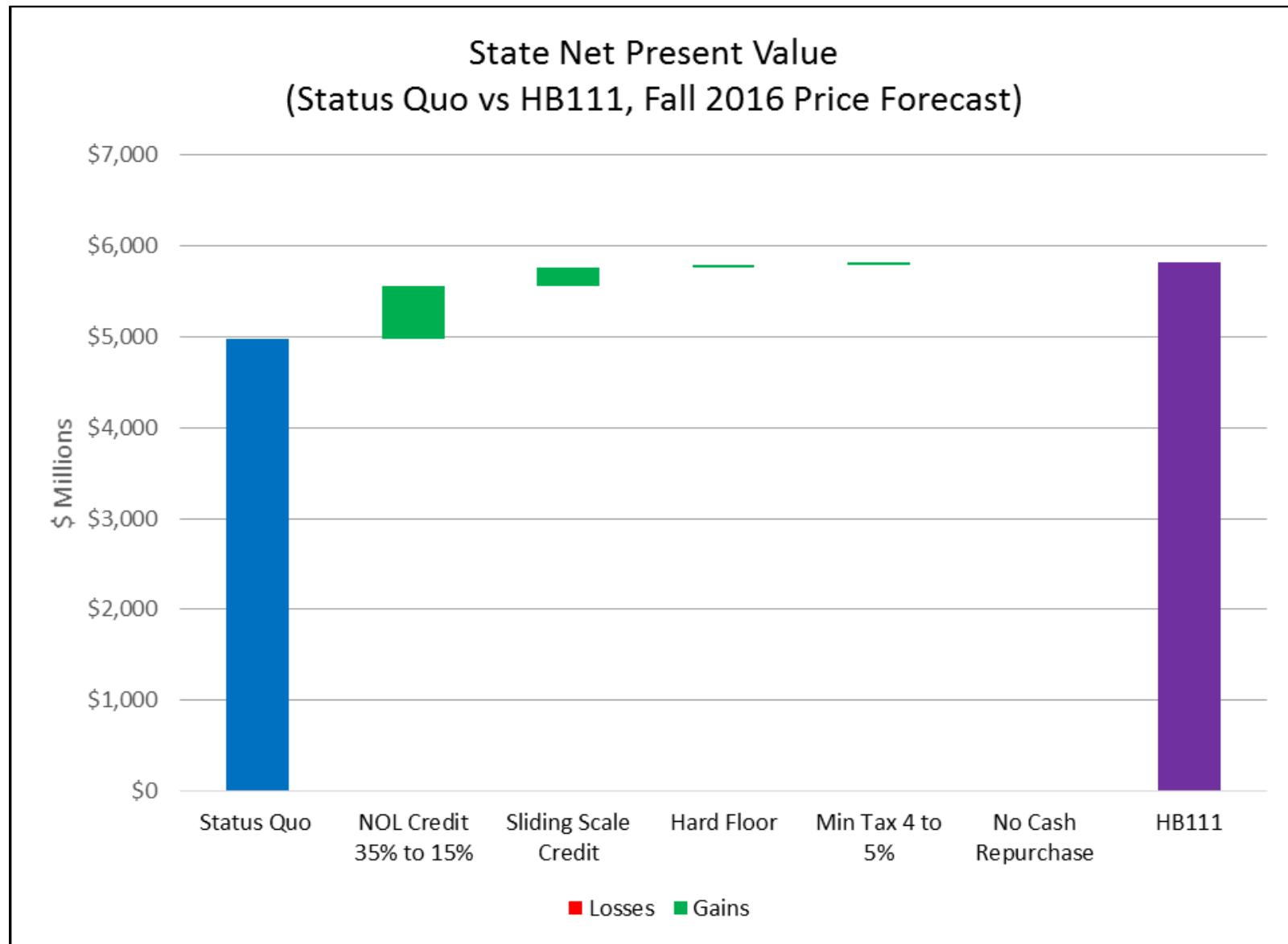
➤ What's Driving the Changes from Status Quo by Tax Component Change

- Compared Two Scenarios
 - 2016 Fall Forecast Prices
 - 1 Partner Scenario vs HB111
- Five Components to Tax Change
 - NOLs reduced from 35% to 15%
 - Sliding Scale Credits reduced from maximum of \$8/bbl to \$5/bbl
 - Hardened the Floor
 - Minimum Tax increased from 4% to 5%
 - Cash Repurchases Eliminated for North Slope

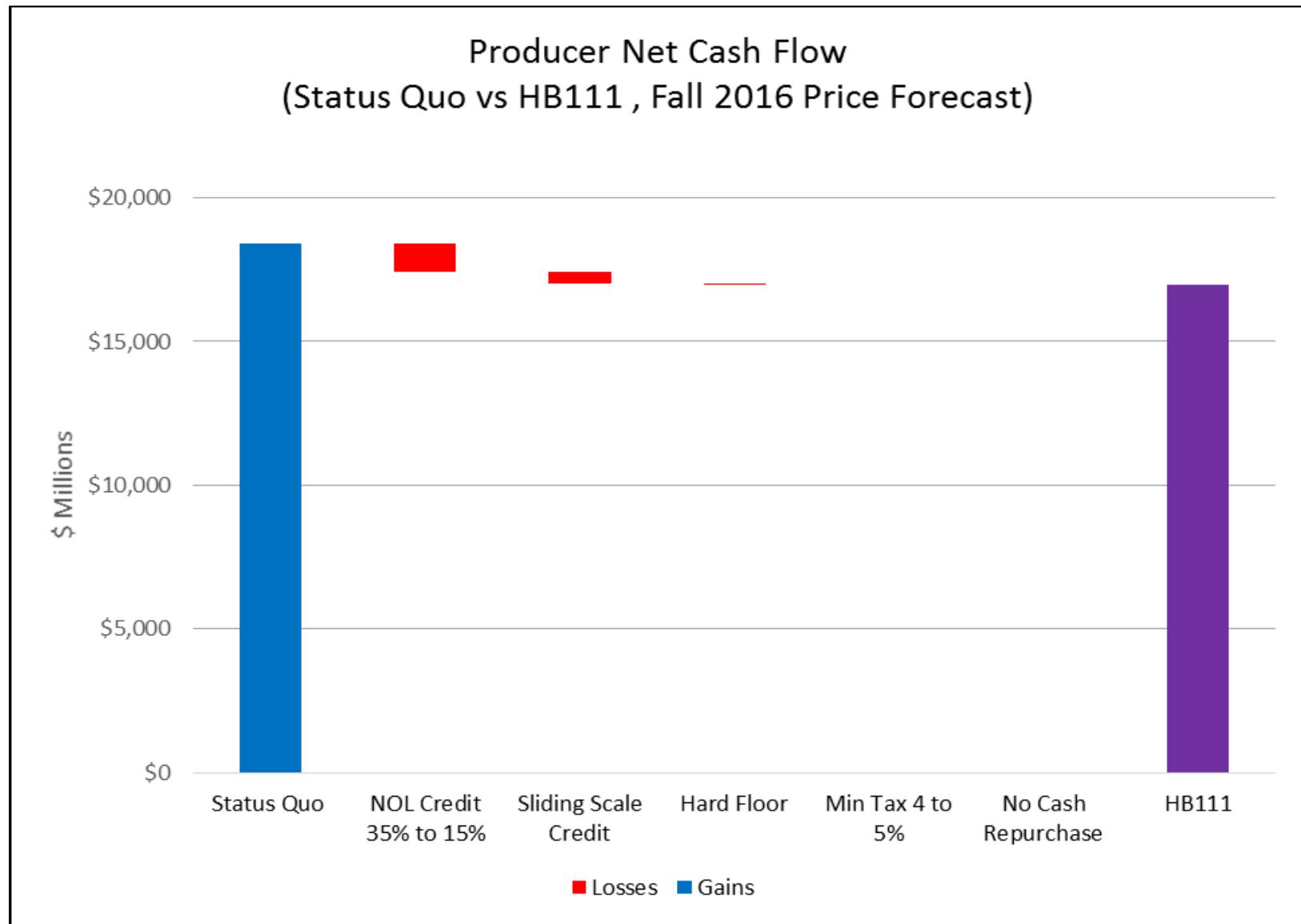
Status Quo vs HB111 – State Net Cash Flows



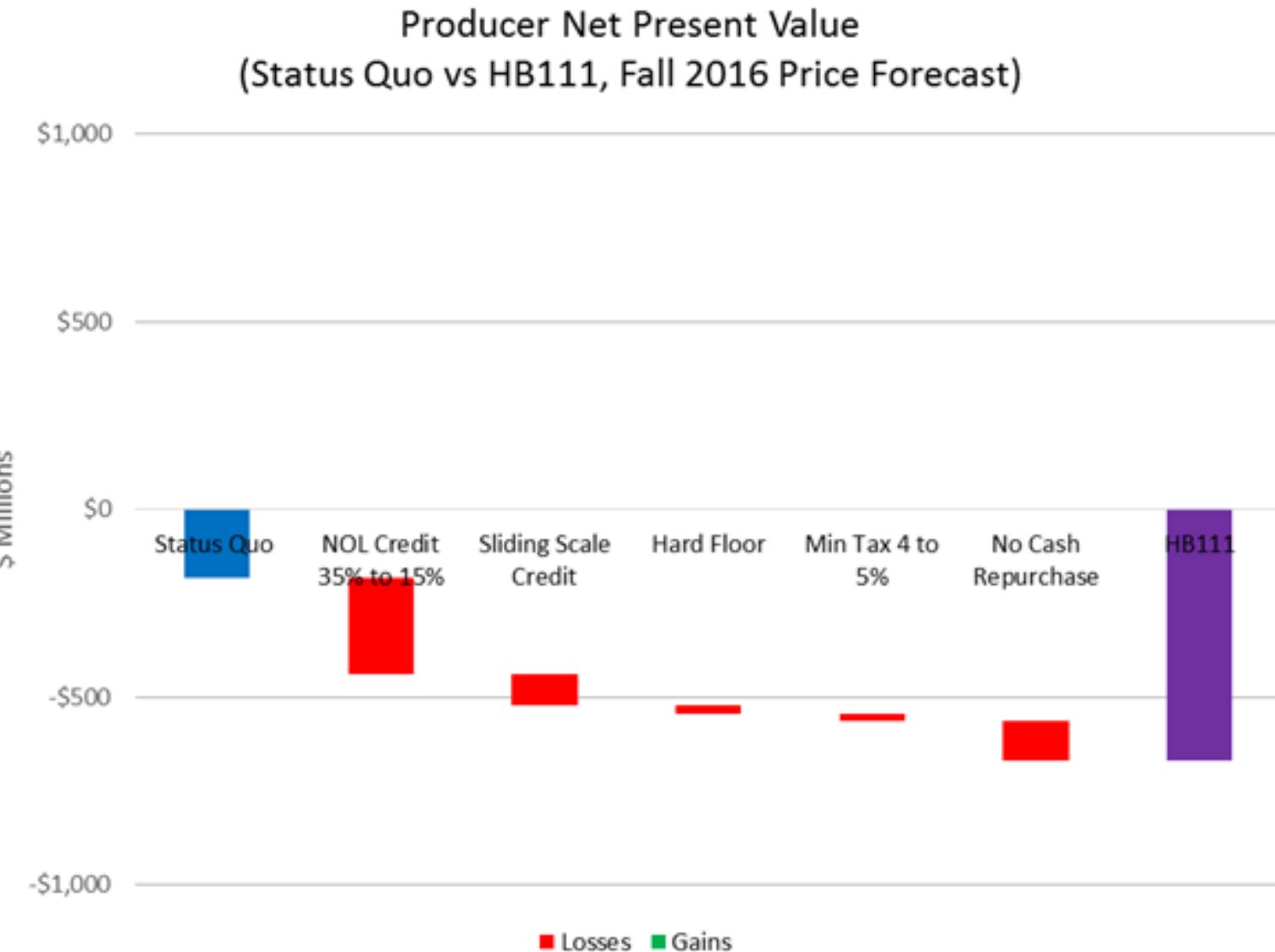
Status Quo vs HB111 – State Net Present Value



Status Quo vs HB111 – Producer Net Cash Flows



Status Quo vs HB111 – Producer Net Present Value





Thank You!

Contact Information

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