



Historic Review: Alaska Oil and Gas Fiscal Policy

Presentation to Oil and Gas Working Group / Competitiveness Review Board



Ken Alper, Tax Division Director
Alaska Department of Revenue

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Background

Alaska has always been a Resource State

Since the first western contacts in 1740, Alaska's economy has been driven by eras of large scale resource development

- Furs 1740s (Aleutian/Pribilof)
 - Whaling 1840s (Gulf of AK, Arctic)
 - Salmon 1870s (Initially Southeast)
 - Gold 1880s (Juneau, Nome, Fairbanks)
 - Copper 1910s (Kennecott)
 - Timber 1940s (Southeast)
 - Cook Inlet Oil 1950s
 - North Slope Oil 1970's
- Alaska achieved statehood after the Cook Inlet oil discoveries, on the expectation we would be able to support ourselves on resource revenue
 - Development has always required and been driven by large scale Outside capital, with the inevitable conflict:
 - Needing to recruit that capital to Alaska with a reasonable expectation of a return on investment, while also
 - Sharing the resulting wealth with the state's permanent residents

Four Major Oil and Gas Revenue Sources

Royalty

Landowner's share, usually 12.5%. Most current North Slope production is on State land. At least $\frac{1}{4}$ of royalties go to the Permanent Fund

Property (ad valorem) Tax

Pipeline, Equipment, Facilities. About 80% of property tax collections are credited back to local governments

Production (severance) Tax

Based on net profits; most of the conflict in recent years is over this tax. North Slope tax is 35% less a variable "per-taxable-barrel" credit, with a gross minimum tax "floor." Additional tax ceilings apply outside the North Slope

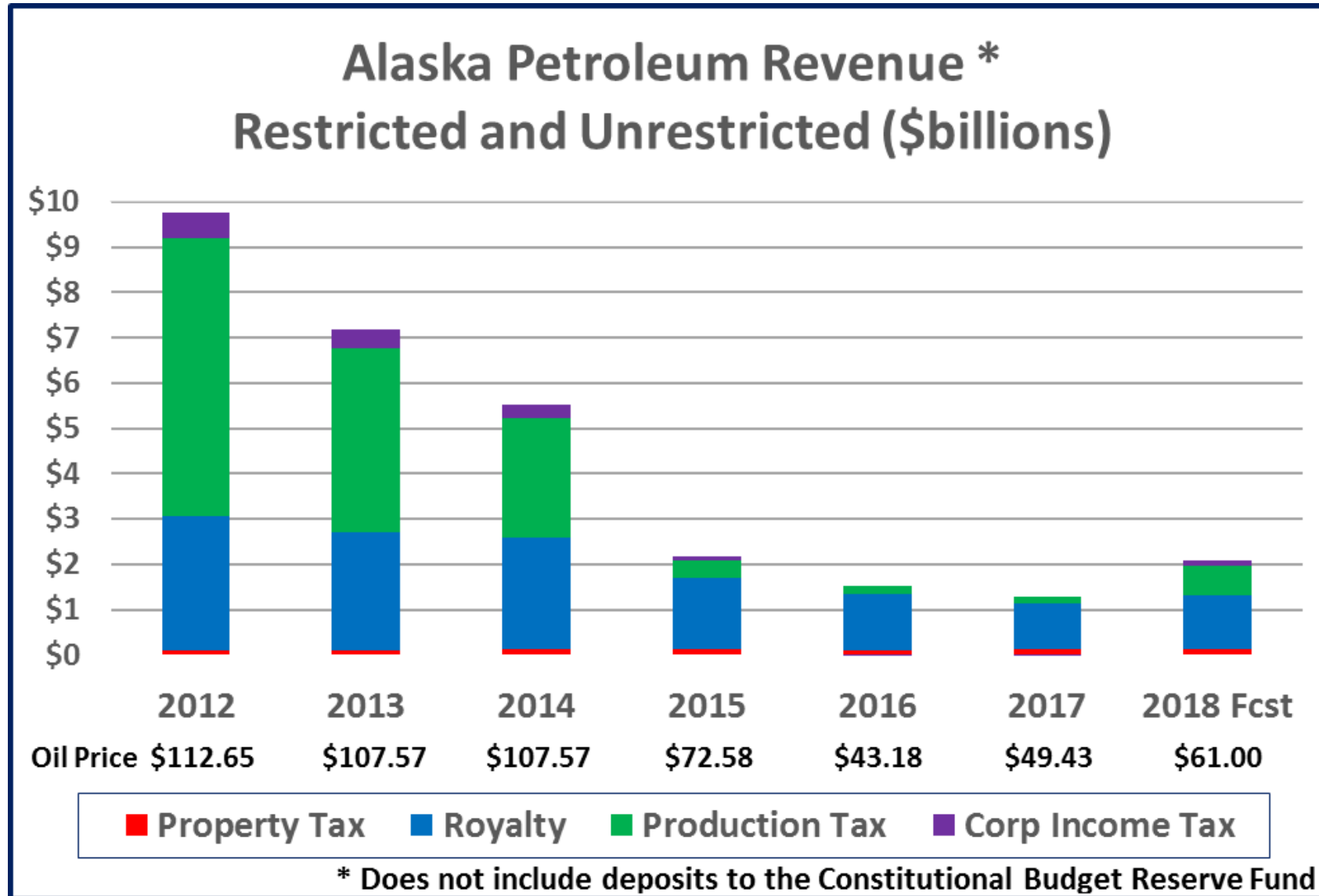
Corporate Income Tax

Taxes the remaining profit after production tax, based on global asset apportionment. Rate is 9.4%, but effectively closer to 7%.

Only traditional "C" corporations pay this tax

Since statehood, total state oil & gas revenue = \$145 billion

Oil and Gas Revenue, Fiscal Years 2012-2018



History of Oil and Gas Taxation In Alaska

History of Oil and Gas Taxation in Alaska

The Early Period (pre-1977 / TAPS first oil)

- Pre-1955 Oil was taxed under the mining license tax (3% to 7% of net income)
- 1949 Net Income Tax, 10% of federal liability (individuals and corporations)
- 1955 Early / Cook Inlet production taxed at 1% of gross value
- 1967-68 Temporary 1% disaster tax after Fairbanks flood
Base tax increased to 3% (gross)
- 1969 First lease auction after Prudhoe Bay discovery: \$900 million bonus bids
(State GF budget in FY1969 was \$112.4 million)
- 1970 Graduated rate from 3% to 8% introduced, based on per-well production
- 1972 Minimum tax added, based on cents per barrel tied to \$2.65 oil
North Slope Borough incorporated
- 1973 Petroleum Property Tax added
- 1974 Temporary oil "reserves tax" added to cover budget shortfalls after exhaustion of 1969 lease sale money. Credited after TAPS startup

History of Oil and Gas Taxation in Alaska

Early Post-TAPS Volatility (1977 – 1989)

- 1977 Economic Limit Factor (ELF) was a 12.25% gross tax (10% on gas) with a multiplier (0 to 1) to help challenged fields
- 1978 Corporate income tax switched to “separate accounting” for oil and gas
Revenue for this tax increases from \$233 million 1979 to \$860 million 1981
- 1975-80 General Fund Revenue increases from \$300 million to \$2.6 billion
- 1981 Separate accounting repealed in face of lawsuits; modified apportionment formula established for oil and gas companies. At the same time, Production tax increased to 15% with 12.25% for first five years and rounding rule (Multiplier >0.7 becomes 1.0 for first 10 years production)
- 1986 Oil price collapse combined with 10-year rounding sunset at Prudhoe Bay
Growing pressure to change ELF
- 1989 Exxon Valdez spill
ELF formula modified, adding exponent to increase the multiplier in Prudhoe Bay and Kuparuk and reduce it on smaller fields

History of Oil and Gas Taxation in Alaska

Period of Relative Stability (1989 - 2005)

- The ELF formula was a calculation based on per-well production for each field. The formula was structured so that, at the “economic limit” of 300 barrels per well per day, the tax for that field would drop to zero
- Rates tended to get lower over time as more wells were drilled and field production naturally declined
- By 2005 most fields including Kuparuk had a multiplier of less than 0.05 (and were therefore paying less than 1% tax)
- 2000-06 Various legislative efforts to reform oil taxes for “fair share”
- 2003 Passage of Exploration Tax Credit

History of Oil and Gas Taxation in Alaska

Recent Period of Frequent Changes (2005 - 2017)

1. 2005: Gov. Murkowski aggregates Prudhoe Bay satellite fields for ELF calculation
2. 2006: Petroleum Production Tax "PPT" changed from taxing gross revenue to net profits (needed for Gov. Murkowski's "stranded gas act" gasoline)
3. 2007: Alaska's Clear and Equitable Share "ACES" corrects revenue shortfalls due to bad cost estimates in PPT. Major tax increase
4. 2010: Cook Inlet Recovery Act "CIRA" provided additional credits outside the North Slope targeted at southcentral gas supply issues
5. 2013: SB21 was a tax cut primarily impacting higher prices and providing "new oil" benefits
6. 2016: HB247 began tax credit reform, phasing out Cook Inlet credits and limiting "new oil" benefits
7. 2017: HB111 eliminated cash credits, replaced with carry-forward losses

History of Oil and Gas Taxation in Alaska

Recent Period of Frequent Changes (2005 - 2017)

1. 2005: Gov. Murkowski aggregates Prudhoe Bay satellite fields for ELF calculation
 - Done by administrative order
 - Satellite fields were made part of the main Prudhoe calculation; increased the “multiplier” for these fields
 - Increased revenue by roughly \$150 million
 - Was only in effect for 15 months due to subsequent tax change
 - Appealed and then contested in court
 - Alaska Supreme Court decided in the state’s favor Dec. 16, 2016; if we lost we would have faced substantial tax + interest liability

History of Oil and Gas Taxation in Alaska

Recent Period of Frequent Changes (2005 - 2017)

2. 2006: Petroleum Production Tax (PPT) - HB3001

- The big switch- from “gross” to “net”
- Introduced as a flat rate tax; legislature added “progressivity”
- Added tax credits for capital spending and operating losses
- Multiple special sessions- bill passed in August
- All fiscal notes were based on older studies that underestimated actual company spending
- Expected to be a small tax increase
- However, when first annual returns were filed revenue was \$800 million below estimates

History of Oil and Gas Taxation in Alaska

Recent Period of Frequent Changes (2005 - 2017)

3. 2007: Alaska's Clear and Equitable Share "ACES" – HB 2001
 - Gov. Palin called special session October – November
 - Debate on "progressivity" focused on encouraging reinvestment of profits
 - Final bill used PPT framework with higher / steeper rates
 - During this session oil prices were in the \$70's
Unexpected windfalls following price spike to the \$140's in summer 2008
 - Beginning of era of large structural budget surpluses, restoration of CBR and increasing other savings accounts from roughly \$3 billion to \$19 billion
 - Created tax credit repurchase "fund" with formula for annual appropriations
 - Passed House 27-13 and Senate 14-5 on bipartisan votes

History of Oil and Gas Taxation in Alaska

Recent Period of Frequent Changes (2005 - 2017)

4. 2010: Cook Inlet Recovery Act – HB 280

- Did not change North Slope (ACES) taxes
- Added tax credit for Cook Inlet gas storage
- Multiple other benefits to encourage drilling in Cook Inlet:
Well Lease Expenditure credit, broadened ability to use existing credits
- Encouraged dramatically increased investment in exploration and development
- By FY2014 more than half of repurchased credits were outside the North Slope

Other substantial oil and gas legislation also passed in 2010

- HB 309 (exploration credits, Cook Inlet jack-up rigs)
- HB 369 (created Alaska Gasline Development Corporation)
- SB 305 (decoupled oil from gas production tax- vetoed by Gov. Parnell)

History of Oil and Gas Taxation in Alaska

Recent Period of Frequent Changes (2005 - 2017)

5. 2013: SB21

- North Slope only tax change, replacing ACES
- Intended to increase investment in new production
- Eliminated “progressivity,” with greatest revenue impact at very high prices
 - Most modeling looked at impacts between \$80 and \$120
- Eliminated North Slope capital credit, introduced per-barrel production credit
- Introduced a tax break specifically targeted at new oil, called the “Gross Value Reduction” (GVR)
- Bill passed with oil over \$100; prices fell dramatically in late 2014
 - Revenue differences between SB21 and ACES relatively small at low prices
- Referendum vote August 2014 failed 47-53

History of Oil and Gas Taxation in Alaska

Recent Period of Frequent Changes (2005 - 2017)

6. 2016: HB247 began tax credit reform, phasing out Cook Inlet credits and limiting “new oil” benefits
 - Left fundamental North Slope (SB21) tax calculations intact (tax rate, per barrel credits, etc.)
 - Phased out credits in Cook Inlet; all will be gone by 2018
 - Extended current “tax caps” for Cook Inlet and Gas Used in State; added \$1 / bbl Cook Inlet oil tax
 - Added sunset / “graduation” provisions to GVR after 3 to 7 years
 - Annual caps on per-company credit cash
 - Limited “transparency” with annual report of who receives cash for credits
 - Technical cleanup

History of Oil and Gas Taxation in Alaska

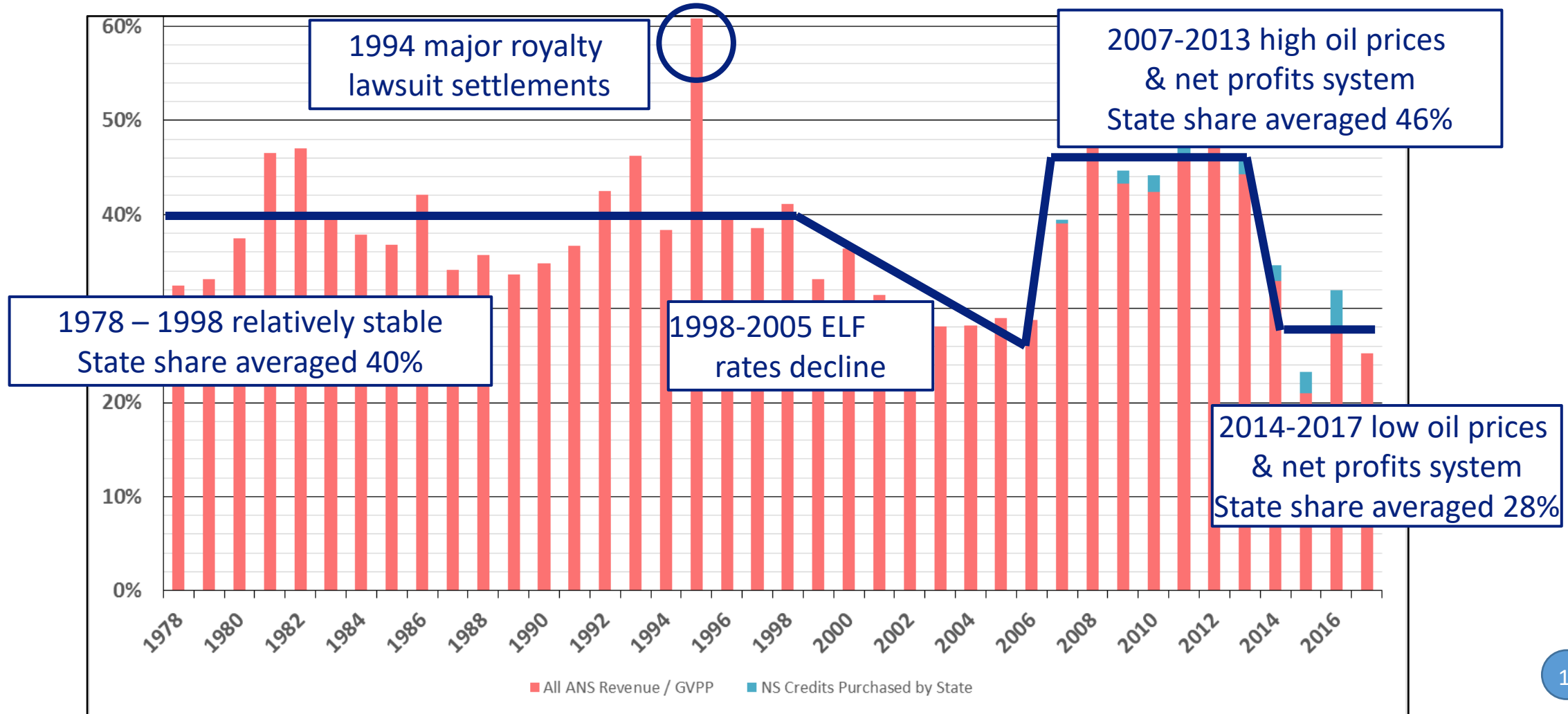
Recent Period of Frequent Changes (2005 - 2017)

7. 2017: HB111 completes tax credit reform, eliminating the program of offering and paying cashable credits for losses and other activities
 - Repealed Carry Forward Annual Loss (NOL) credit
 - Replaced with carry-forward losses that are used once a field comes into production
 - Cash eligibility ended 7/1/17. 2017 Loss credits are split, with only half eligible for purchase
 - "Ringfence" so losses can't migrate to offset other taxes before production starts
 - Limited "hardening" of gross minimum tax
 - Strengthened support for "secondary market" for credits
 - Unified interest for all delinquent taxes to a floating, compounding rate
 - Conditional exploration credits to enable access to payment queue

General Discussion of Overall Revenue

State Share of Gross Revenue, 1978-2017

Approximate ANS State Share of **GVPP Total Value**: (State Revenue from North Slope as a portion of wellhead value after subtracting transportation, offset by state repurchased credits from North Slope) 1978 - 2017



Petroleum Revenue in Total: “Government Take”

Fiscal systems are generally analyzed using “total government take”

- Broadly, this is the portion of value after expenses (i.e. “net”), that accrues to all entities other than the producer
 - In many countries / systems this is a singular number, often set by contract
 - In Alaska, it includes royalties, the state’s three taxes, plus the federal corporate income tax
 - Comparisons with other jurisdictions, to be fair, must include private royalties
 - Often, competitiveness is driven as much by the timing of revenue as by the overall taxation level: oil companies are generally more motivated than governments by the time value of money
- Before 2006, the state did not have sufficient information about company profitability to meaningfully analyze total take. Many Alaskans are accustomed to looking at taxation as a portion of the oil value itself: either the market price or the gross (wellhead) value

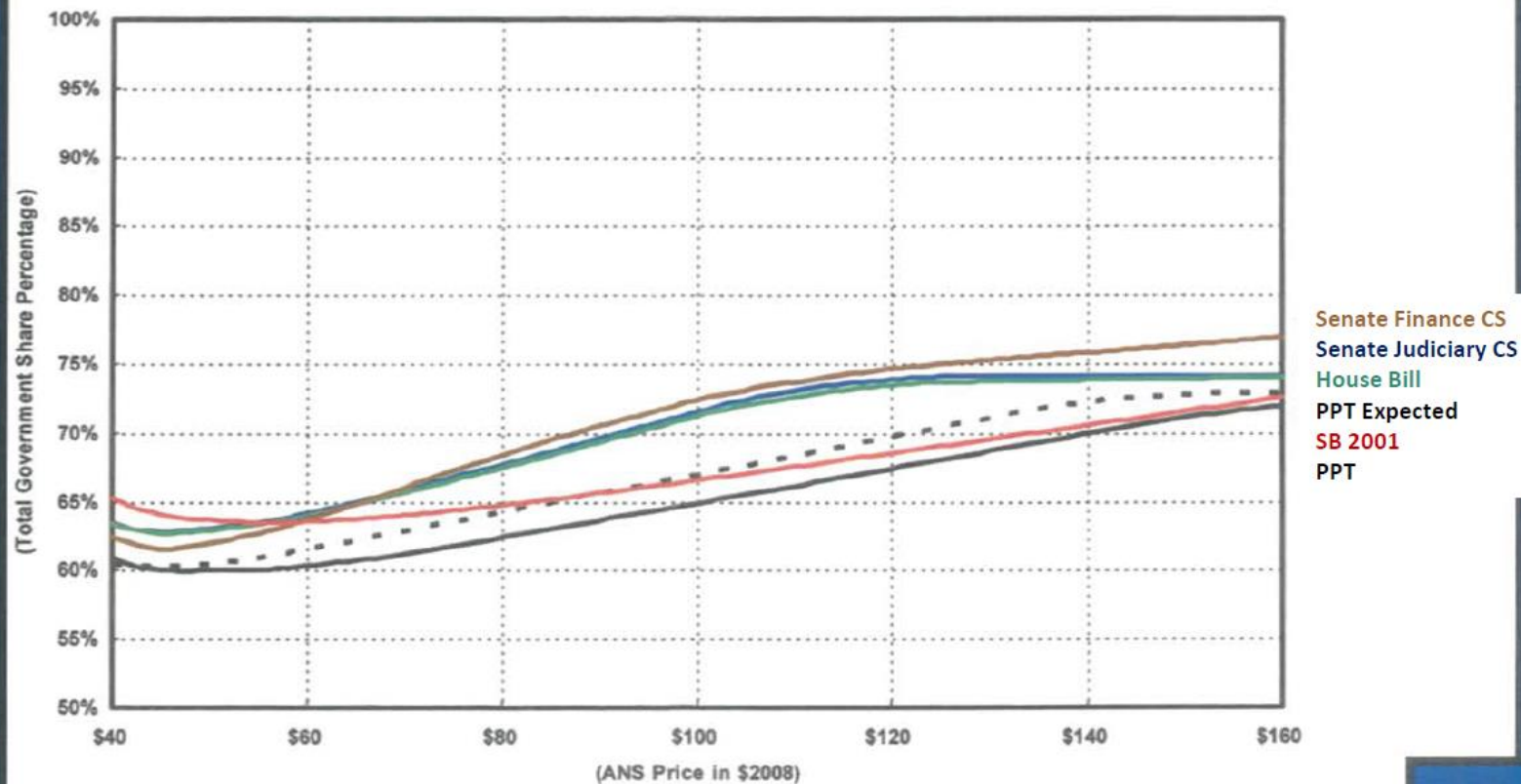
Government Take as function of federal taxation

Government Take analysis underpinned Gov. Hammond's famous "1/3 – 1/3 – 1/3" concept (company – state – feds each get 1/3 of value)

- Before 1987 (second Reagan tax cut) top federal corporate rate was 46%
 - If the state got 33% of profits, that meant that the feds got almost half of the remaining 67%. Something close to 33/33/33 was possible in theory
- Between 1987 and 2017 the top federal rate was only 35%
 - To reach a 67% "total government take", the state would need to take 49% (35% of the remaining 51% is 18%; 49+18=67)
- Beginning 2018, federal corporate rate was cut to 21%
 - A 67% government take would now require a state take of 58%
- Also, few companies actually pay the top rate. The average for large companies 2008-2012 was 14% (Gov't Accountability Office)
 - However, most modeling uses the top rate for comparison purposes

Past Tax legislation seemed targeted at about 65%

Estimated Total Government Share
at Various West Coast ANS Price Levels
(FY 2008-2014)



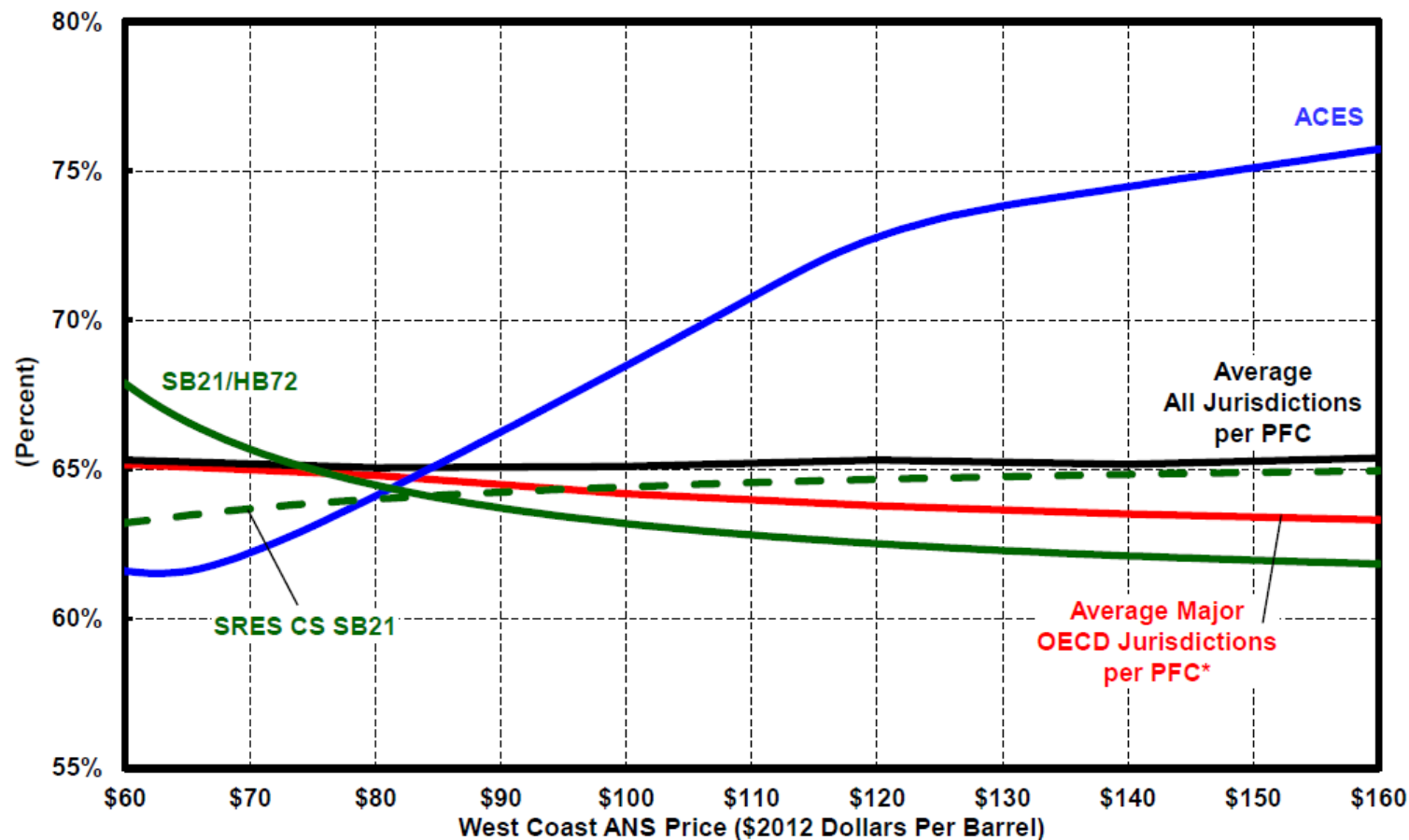
Note: Volumes per current Fall 2007 DOR Forecasts.

Senate Finance: SB2001 using 22.5% base rate, progressivity of 0.5% \$30-\$50, 0.5% \$50-\$75, 0.35% \$75-\$90, 0.1% above \$90, 75% overall cap, TIE credit 2006-2007 for new producers.
PPT Expected: Current Law using costs per fiscal note to HB3001.
Senate Judiciary: SB2001 using 0.4% progressivity rate, 50% overall cap, TIE credit 2006-2007 for new producers, does not include TAPS adjustment.
House Bill: SB2001 using 0.4% progressivity rate, 50% overall cap, TIE credit 2006-2007 for new producers, Opex indexed to 2006 figures, does not include TAPS adjustment.

From ACES special
session, 2007

Past Tax legislation seemed targeted at about 65%

Average Government Take
ACES v. SB21/HB72 and SRES CS SB21 for All Existing Producers
(FY2015-FY2019) and Other Jurisdictions

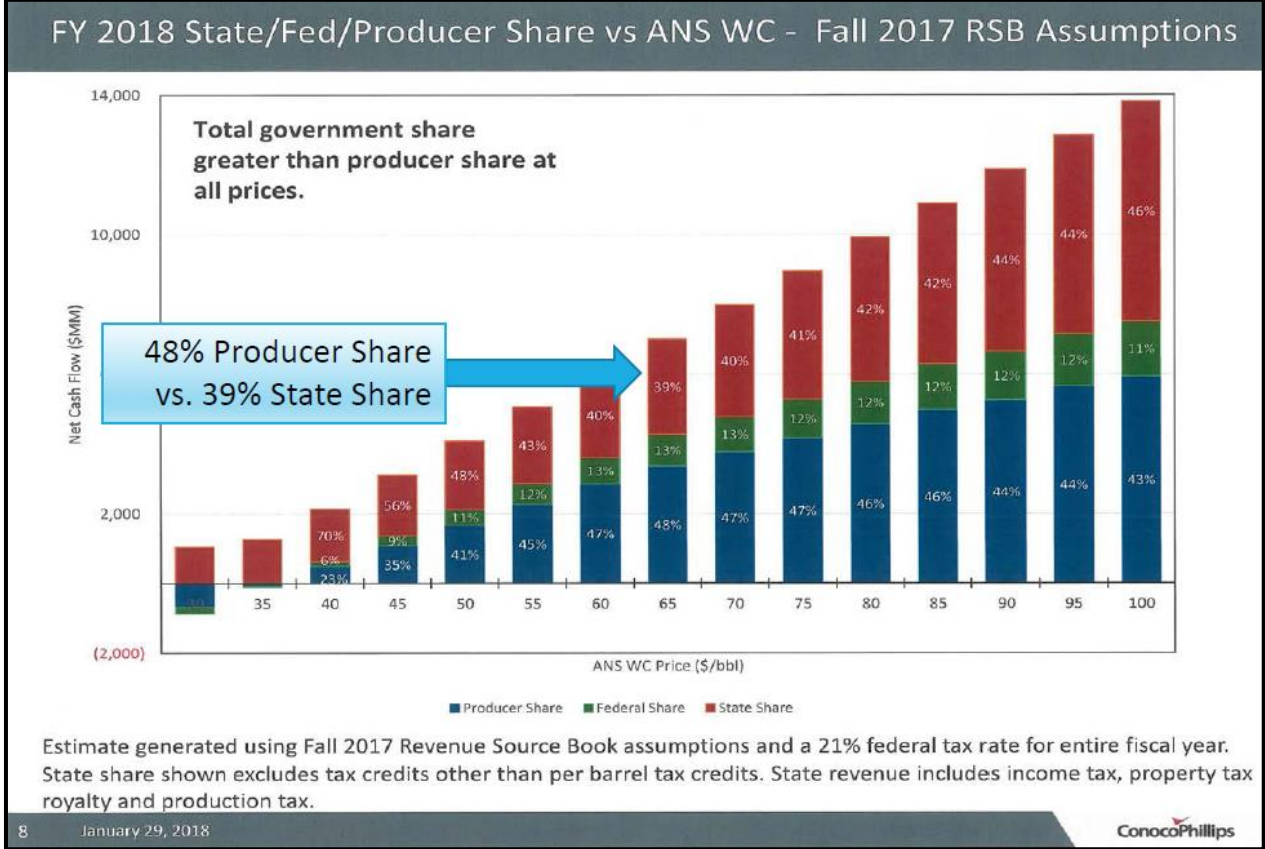
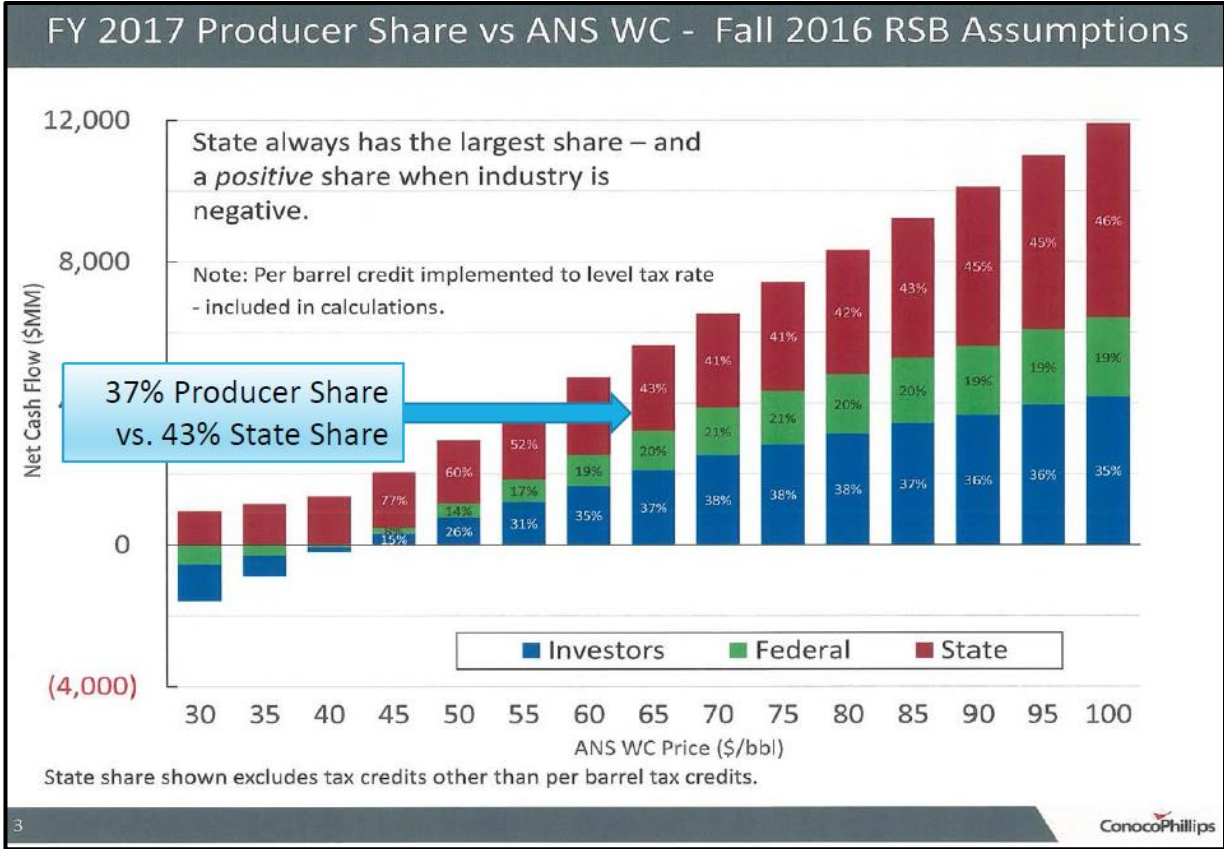


From SB 21
session, 2013

* Australia, Canada (Alberta Conventional), Norway, United Kingdom and United States.

Current revenues appear below that number

ConocoPhillips 2017 and 2018 presentation documents, showing impact of federal tax rate change
(slides used by sponsors of HB411 in House Finance this session)



Impact of Incremental Changes

What does “percent of value” translate to?

- 185 million NS barrels produced in a year
 - If oil is \$65 / bbl, that's \$12 billion
1% of total value is about \$120 million
 - At \$65 oil, wellhead value is about \$55; that's \$10 billion
1% of wellhead value is about \$100 million
- 160 million NS “taxable” (non royalty) barrels
 - **\$1/ bbl in added tax (or reduced credit) is \$160 million**
 - At \$60 oil, **1% increase to a “gross tax” is about \$80 million**
 - Current “crossover” between gross and net tax is about \$65 /bbl

Industry Profitability

Oil profitability estimates are up dramatically since 18 months ago, whereas production tax forecasted revenues are not

Fall 2016 forecast for FY2019

- \$60 oil price with 442,100 bbl / day ANS production
- PTV (profit on taxable barrels) forecast \$1.8 billion*
- Production tax forecast \$248 million (13.9%)

Spring 2018 forecast for FY2019

- \$63 oil price with 526,600 bbl / day ANS production
- PTV (profit on taxable barrels) forecast \$4.7 billion
- Production tax forecast \$410 million (8.7%, +\$162 million)

Much of the reason for this has to do with producer spending cuts, which enable the full use of “per barrel” credits

* PTV calculation is after paying royalty and property tax, but before production tax, and state and federal income taxes

Recent Activity and Issues for Consideration

Oil and Gas – Recent Legislation

HB331 (2018) creates a program to pay down remaining cashable tax credits

- Governor's bill authorizes bond sales to purchase outstanding credits at a discount
 - Based on assumed timing of state purchase under statutory formula
 - The value gained from the discount would pay interest on the bonds
- State made uncapped credit purchases from 2007-2015: \$3.5 billion
- Outstanding credits due to limited state funding 2016-2018: \$800 million in 2016-17 credits with another ~\$150 million pending before programs end
- Bond sales initially planned for fall 2018
- Lawsuit has been filed challenging the constitutionality of program; bonds may not be marketable until this suit is resolved

Oil and Gas – Ongoing Activity

- Long term planning, forecasting, and modeling development
- Increasing work related to AKLNG project
- Ongoing work with Legislative Budget and Audit consultants
- Preparation for large remote developments including ANWR
- **Legislative Working Group was set up by HB111, with mission to look at continuing issues with tax system**
- Competitiveness Review Board designated as “advisory panel” to the Working Group
- Tax Division responds to multiple requests throughout the year regarding potential production tax changes, custom modeling, and analysis of proposed legislation
- In 2018, the administration discouraged oil and gas tax legislation pending the work and conclusions of this group

Oil and Gas – Current Issues

Some legislators hope to revisit current and imminent tax issues:

- Ongoing debate on “fair share” at different price points
- Misalignment between 35% offset for spending and losses and a much lower effective tax rate on profits
- Large future obligations (tax offsets) due to carry-forwards if major recent discoveries are developed
- Dependence on minimum tax over wide price range and during new field cost recovery
- Limited “upside” to the state during price spikes
- Equity between major producers and new explorers as cash credits phased out
- Federal royalty sharing rules for growing NPRA development
- Capped Cook Inlet rates without sunset
- Transparency issues
- Increasing number of type “S” corporations operating in Alaska, exempt from the corporate income tax
- High volatility and complex administration of a net profits tax system
- Other issues related to gas tax and oil / gas interplay with AKLNG project

THANK YOU

Please find my contact information below:

Ken Alper
Tax Division Director
Department of Revenue
Ken.Alper@Alaska.gov
(907) 465-8221



dor.alaska.gov

