NEW SUSTAINABLE
ALASKA
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Pulling Together to Build Our Future

Oil and Gas Tax Credit Reform
CS SB130(RES)

Department of Revenue

Additional Information and Response to Questions

Presentation to the Senate Finance Committee

April 14, 2016

Responses to Committee Questions from 4/13 Hearing

Historic Credits compared to Revenue

FY 2007 thru 2015, $7.4 Billion in Credits

North Slope

- $4.3 billion credits against tax liability
  - Major producers; mostly 20% capital credit in ACES and per-taxable-barrel credit in SB21
- $2.1 billion refunded credits
  - New producers and explorers developing new fields

Non-North Slope (Cook Inlet & Middle Earth)

- $100 million credits against tax liability
  - Another $500 to $800 million Cook Inlet tax reductions (through 2013) due to the tax cap still tied to ELF
- $900 million refunded credits (most since 2013)

Historic Credits compared to Revenue

Total Petroleum Revenue FY 2007 thru 2015

North Slope

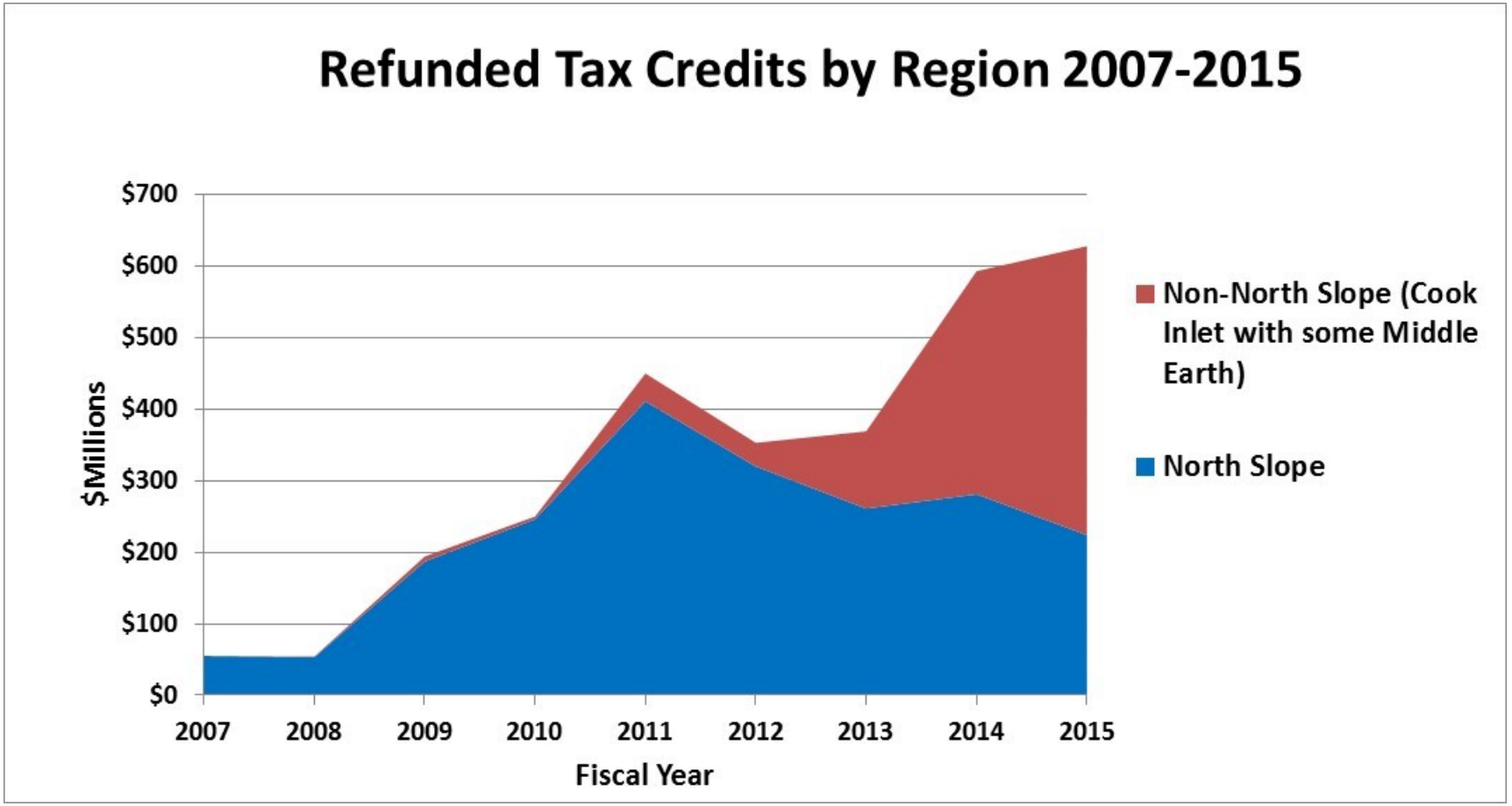
Production Tax	$32.8 billion
Royalties (unrestricted)	$15.0 billion
Other GF Revenue	$4.7 billion
Restricted Revenue	$8.7 billion
Total	**$61.1 billion**

Non-North Slope (Cook Inlet & Middle Earth)

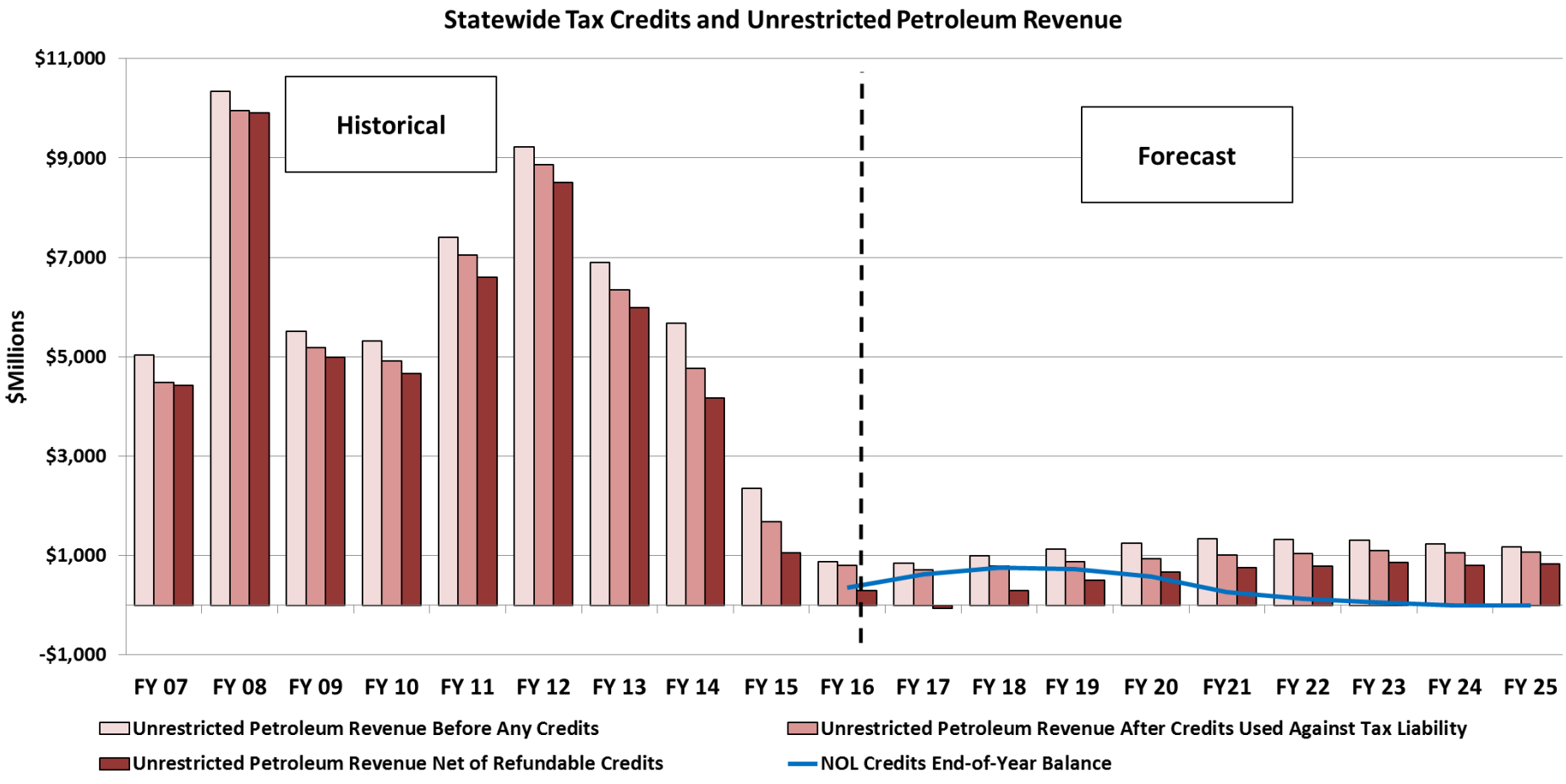
Production Tax	<$0.1 billion
Royalties (unrestricted)	$0.5 billion
Other GF Revenue	$0.3 billion
Restricted Revenue	$0.2 billion
Total	**$1.0 billion**

Historic Credits compared to Revenue

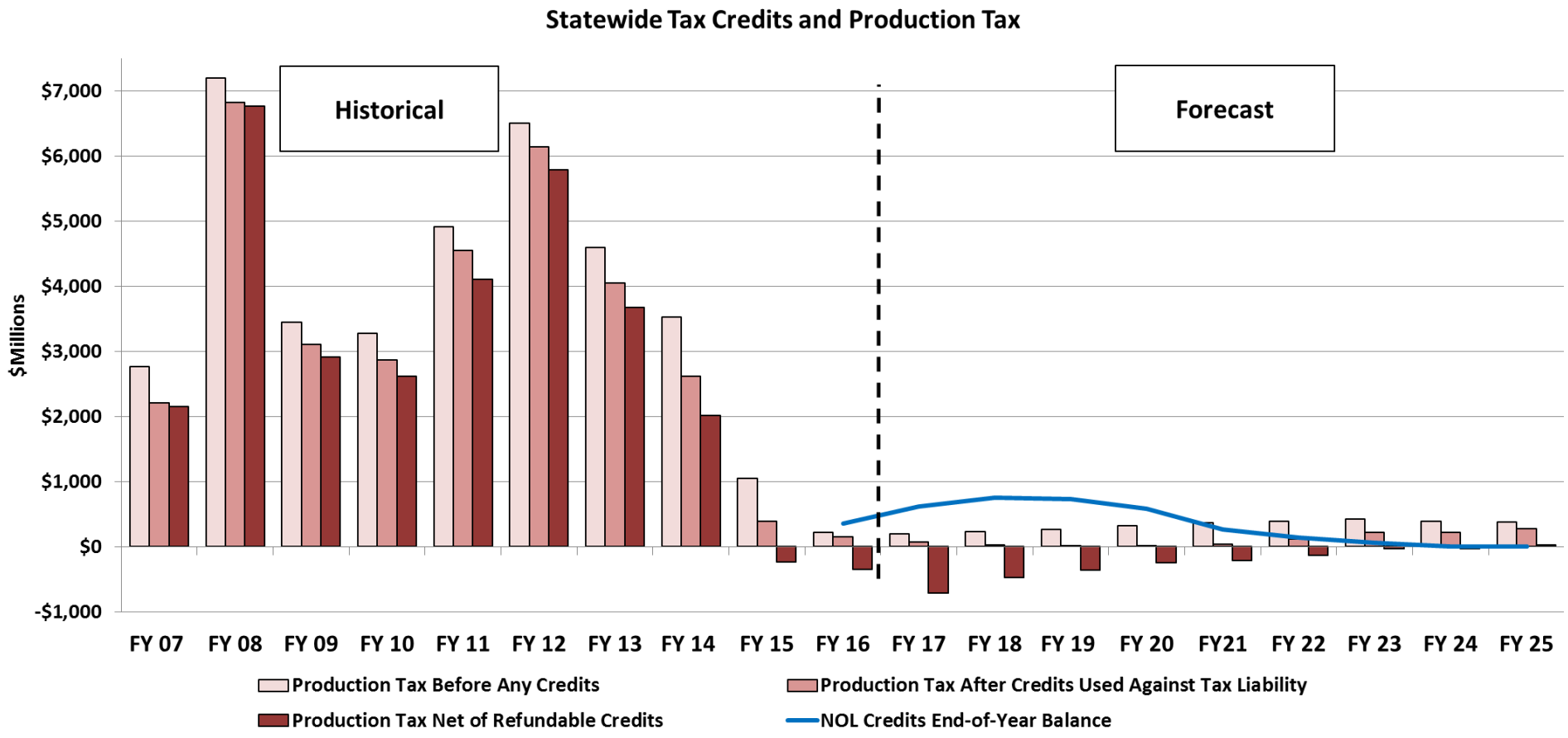
- Tremendous growth in non-North Slope (almost entirely Cook Inlet) refunded credits since FY10



Historic and Forecasted O&G Revenue and Tax Credits



Historic and Forecasted Production Tax and Credits



Status of Credit Fund Demand for FY16-17

- FY16 Appropriation Capped at **$500 million**
  - $473 million paid out to date
  - About $200 million North Slope, $273 million non-North Slope
  - $27 million left in fund with $4 million in-process claims
- Current DOR Work Pool **$675 million**
  - $10 million in older NOL credits
  - $22 million in older exploration credits
  - $552 million in 2015 NOL, QCE, WLE credits
  - $60 million in 2015 exploration credits
  - $31 million additional 2015 NOL, QCE, WLE expected via amended returns

Status of Credit Fund Demand for FY16-17

Detail on Current Tax Division Work Pool of Refundable Credit Applications

(All amounts in $millions)

Amount	Description	North Slope	CI / ME
$10	Older NOL Credits	$7	$3
$22	Older Exploration Credits	$0	$22
$552	2015 NOL, QCE, WLE	$335	$217
$60	2015 Exploration	$53	$7
$31	Additional 2015 Amended	$27	$4
$675		**$422**	**$253**

Status of Credit Fund Demand for FY16-17

Status of Credit Fund / Demand for FY16-17

- All the “in hand” applications, if eligible, result in a known demand for FY2017 of **$652 million**
- This is very current information, based on the CY15 tax “true-up” which was due on Thursday 3/31
- Expected credit applications during CY2016, which could also be paid in FY17:
  - Another $40 million in quarterly requests for QCE and WLE outside the North Slope
  - Another $60 million in “last minute” exploration claims
  - About $20 million in LNG storage and refinery claims
- Total, matching “final” Spring 2016 forecast, $775 million- slight reduction from $825 million “prelim”

Potential NOL Carry-Forward Liability

Growing Carried Forward NOL's: A New Problem

- Since the beginning (2007) all companies except the three major producers have been able to receive cash for their tax credits. Majors must "carry them forward"
  - Companies producing less than 50,000 bbl /day
  - Hilcorp crossed over this threshold in 2015
- One or more of the majors had an operating loss in 2015. That becomes an NOL credit that can be used against taxes starting this January (to reduce payments below the minimum tax, as far as zero)
  - This only partly offsets minimum tax payments this calendar year. We still have some positive production tax income.
- With the Spring Revenue Forecast, we now see all three majors with much larger losses in 2016, and possibly for years beyond

Potential NOL Carry-Forward Liability

Oil and Gas Tax Credit Fund: Budgeted vs. Actual vs. Statutory Tax Credit Fund Transfer Cap

(Beginning with the first budget cycle after the passage of ACES in November 2007)

Fiscal Year	Original Appropriation ($million)	Actual Claimed Credits ($million)	Actual Production Tax ($million)	Plus Credits Against Liab ($million)	AS 43.55.011 Revenue ($million)	Oil Price Per Spring 16 Forecast	Credit Cap per AS 43.55.028(c)	End Year Fund Balance	Non-Cashable Carried-Forward Liability	Total Credit Oblig
Actual										
FY09	not to exceed $175	$193	$3,101	$334	$3,435	$85.73	$343	$150	$0.0	n/a
FY10	unspec **	$250	$2,861	$412	$3,273	$65.70	$327	$228	$0.0	n/a
FY11	est. $180	$450	$4,543	$361	$4,904	$73.32	$490	$268	$0.0	n/a
FY12	est. $400	$353	$6,137	$363	$6,500	$94.70	$650	$565	$0.0	n/a
FY13	est. $400	$369	$4,043	$550	$4,593	$110.44	$459	$655	$0.0	n/a
FY14	est. $400	$593	$2,589	$919	$3,508	$109.61	$351	$413	$0.0	n/a
FY15	est. $450	$628	$363	$664	$1,027	$95.24	$103	($112)	$0.0	($112)
FY16	est. $700	$500	$133	$70	$203	$39.52	$30	($582)	($357)	($939)
Forecasted										
FY16	est. $700	$500	$134	$70	$204	$39.99	$500	$0	($357)	($357)
FY17	$73.4 (tent)	$775	$59	$135	$194	$38.89	$29	($746)	($618)	($1,364)
FY18	n/a	$500	$16	$205	$221	$43.79	$33	($1,213)	($751)	($1,964)
FY19	n/a	$375	$11	$250	$261	$48.89	$39	($1,549)	($732)	($2,281)
FY20	n/a	$270	$13	$305	$318	$54.48	$48	($1,771)	($585)	($2,356)
FY21	n/a	$250	$33	$325	$358	$60.29	$36	($1,985)	($265)	($2,250)
FY22	n/a	$250	$110	$275	$385	$61.64	$39	($2,197)	($136)	($2,333)
FY23	n/a	$250	$217	$205	$422	$63.05	$42	($2,404)	($59)	($2,463)
FY24	n/a	$250	$212	$170	$382	$64.45	$38	($2,616)	$0	($2,616)
FY25	n/a	$250	$275	$95	$370	$65.90	$37	($2,829)	$0	($2,829)

Potential Revenue Loss from Reduced Credits

- CSSB130 (RES) does impact project economics
  - As part of a broader structural reform to Alaska's finances, the state will be in a better position to meet the credit obligations it does have and provide a more stable fiscal climate overall.
  - DOR cannot predict specific projects that may be accelerated or deferred as a result of CSSB 130 (RES) or other fiscal reforms
- Testimony by others has compared the impact of SB 130 to total royalty revenue received by the state
  - The following table shows how those two amounts compare under the Spring 2016 revenue forecast
  - By the final year of the fiscal note, the midpoint impact of CSSB 130(RES) represents approximately 14% of anticipated petroleum revenue

Potential Revenue Loss from Reduced Credits

Production would have to drop by an additional 9% for the cost to the state from lost royalties to exceed the benefit of the bill. In 2022, this would mean about 35k bbl / day

- This assumes that the "lost" production would pay taxes and royalties at the same rate as average production; more likely the marginal projects would pay less
- Also, much of the fiscal impact of CSSB130 is specific to Cook Inlet, where revenue per barrel is substantially less

CSSB130(RES) Estimated Fiscal Impact vs Spring 2016 Total Petroleum Revenue Forecast

	FY 2017	FY 2018	FY 2019	FY 2020	FY 2021	FY 2022
Midpoint Fiscal Impact ($millions)	$5	$55	$75	$70	$118	$123
Total Petroleum Revenue ($millions)	$1,027	$1,135	$1,258	$1,344	$1,414	$1,427
Ratio	**0%**	**5%**	**6%**	**5%**	**8%**	**9%**

Fiscal impact is midpoint of range per DOR fiscal note dated 4-12-16. Total petroleum revenue is per Spring 2016 forecast and includes restricted revenue such as Permanent Fund / School fund royalties.

Credit Cost in Perspective

Credit Cost in Perspective

Of the $3 billion in state-refunded credits through the end of FY15:

- $1.45 billion went to six North Slope projects that now have production
- $650 million went to 13 North Slope projects that do not have any production. Some of these are abandoned, and some are in process
- $450 million went to six non-North Slope projects that have production
- $450 million went to eight non-North Slope projects that do not have any production

Credit Cost in Perspective

North Slope Refundable Credits

Of the $1.45 billion that was spent between FY07-FY15 supporting six producing projects:

- Total production through end of FY15 is 38.5 million barrels
- Total credits = **$37.30** / barrel
  - This number will decrease over time due to additional production from these fields
- Lease expenditures for these projects, through FY15, were $4.94 billion
  - Credit support was **29%** of lease expenditures

Credit Cost in Perspective

Cook Inlet Refundable Credits

Of the $450 million that was spent between FY07-FY15 supporting six producing projects:

- Total production through end of FY15 is 55.9 million BOE (much of this was gas)
- Total credits = **$7.80** / BOE or about **$1.30** / mcf
  - This number will decrease over time due to additional production from these fields
- Lease expenditures for these projects, through FY15, were $1.09 billion
  - Credit support was **40%** of lease expenditures

Cook Inlet Tax Caps

- Estimated value to industry $550-$850 over the years 2007-2013
- Total Production Estimate
  - Gas: ~ 250 million cubic feet / day for seven years = 640 BCF of gas or 106 million BOE
  - Oil: ~ 10,000 barrels / day for seven years = 26 million BOE
  - Total Production = 132 million BOE
- Using midpoint $700 million estimate, value of caps = **$5.30** / barrel or **$0.88** / mcf
- **Sum of Credits + Tax Caps: $2.18 / mcf**

Key Bill Provisions / Decision Points

Key Bill Provisions and Decision Points

Preventing certain credits from being used against the minimum tax, or "floor"

This is really three different issues / policy questions
All of these only pertain to the North Slope:

1) **Net Operating Loss for producers not eligible for refundable credits**
   (should major producers be able to go below the floor?)

2) **Per-Barrel Credits for GVR "New" Oil**
   (should the tax on production from new fields be allowed to go to zero? Relation to GVR "graduation?")

3) **Small Producer / Exploration Credits**
   (should everyone, not just major producers, pay a minimum tax?)

Repurchase Limits

Historic Notes on large annual credits:

Over the 2007-2016 history of the tax credit program:

- There has only been **one** instance of a company who ever received **> $200** million in a single year
- **Five** times ever when one company received between **$100 - $200** million in one year
- **11** times ever when one company received between **$50 - $100** million in one year

Key Bill Provisions and Decision Points

To-date cost of Sunsetting Credits

Exploration Credits (various) 2007-sunset

- North Slope Refunded: $270 million
- North Slope Against Liability: $190 million
- Non-North Slope Refunded: $160 million
- Non-North Slope Against Liability: $0

Small Producer Credits 2007-2016

- North Slope Against Liability: $340 million
- Non-North Slope Against Liability: $60 million
- (these cannot be refunded)

Total: slightly over $1 billion

Overview of Tax and Credit Calculations

Overview of Tax and Credit Calculations

How the Production Tax Works at $100 oil

Tax on a single barrel of taxable North Slope oil.

We currently have about 160 million taxable barrels / year

Market Price	$100
Transport Cost	$10
Gross Value	$90
Lease Expenditures	$35
Production Tax Value	$55
Tax @ 35%	$19.25
Per-Barrel Credit	$6.00
Net Payment	$13.25
Minimum Tax Gross x 4%	$3.60
Higher Of (Actual Tax)	$13.25
Approx. Annual Revenue	$2.1 billion

Overview of Tax and Credit Calculations

At $70 Oil, the "minimum tax" takes over

Market Price	$70
Transport Cost	$10
Gross Value	$60
Lease Expenditures	$35
Production Tax Value	$25
Tax @ 35%	$8.75
Per-Barrel Credit	$8.00
Net Payment	$0.75
Minimum Tax Gross x 4%	$2.40
Higher Of (Actual Tax)	$2.40
Approx. Annual Revenue	$380 million

Overview of Tax and Credit Calculations

At $40 Oil, producers have operating losses

Market Price	$40
Transport Cost	$10
Gross Value	$30
Lease Expenditures	$35
Production Tax Value	($5)
Approx. Operating Loss	*$800 million*
Tax @ 35%	($1.75)
Per-Barrel Credit	$8.00
Net Payment	($9.75)
Minimum Tax Gross x 4%	$1.20
Higher Of (Actual Tax)	$1.20
Approx. Annual Revenue	$190 million
Carried Forward Loss Credit 35%	*$280 million*

Overview of Tax and Credit Calculations

$40 for second year means Operating Loss credits can be used to reduce payments below the minimum tax

	Year 1	Year 2
Market Price	$40	$40
Transport Cost	$10	$10
Gross Value	$30	$30
Lease Expenditures	$35	$35
Production Tax Value	($5)	($5)
Approx. Operating Loss	*$800 million*	*$800 million*
Tax @ 35%	($1.75)	($1.75)
Per-Barrel Credit	$8.00	$8.00
Net Payment	($9.75)	($9.75)
Minimum Tax Gross x 4%	$1.20	$1.20
Higher Of (Actual Tax)	$1.20	$1.20
Approx. Annual Revenue	$190 million	$190 million
Less Carried-Forward Loss Credit		($190 million)
Actual Tax Payment	$190 million	$0
Carried-Forward Loss Credit 35%	*$280 million*	*$370 million*

Intro, Samples, and Summary of Scenario Analysis Model

Introduction to Scenario Analysis

- The Tax Division has developed a new model, looking at project life cycles
- Cash flow over the 30-40 year life of a project, for the state's production tax and credits, all state revenue, the producer's cash flow, and discounted (NPV)
- Scenarios Analyzed at $40, $60, $80, and Fall Forecast oil price
- Status quo modeled vs. Governor's original bill
- Full modeling runs can be provided as a separate document

Introduction to Scenario Analysis

Fields Analyzed:

North Slope Oil Scenarios

- 50 million barrel
- 750 million barrel (12.5% Royalty / 20% GVR)
- 750 million barrel (16.67% Royalty / 30% GVR)
- 750 million barrel (50% Private Royalty)

Cook Inlet Oil Scenarios

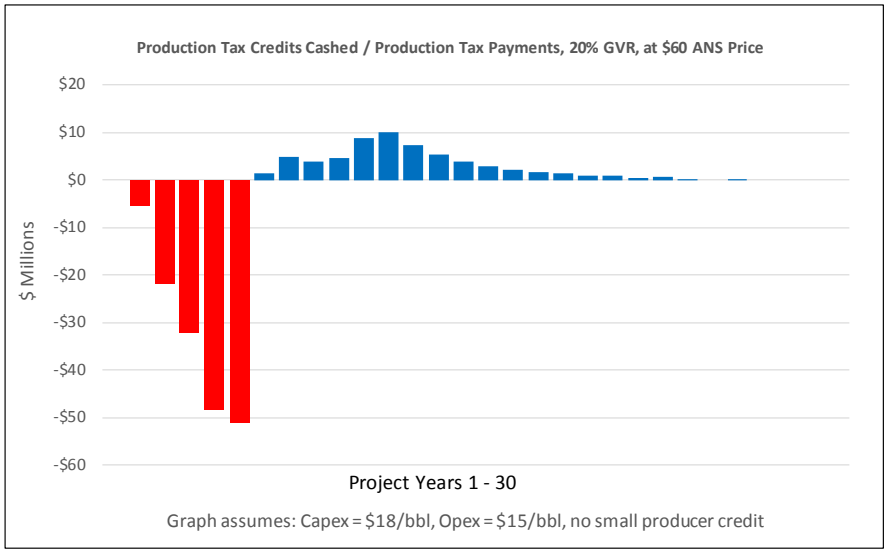
- 50 million barrel (tax caps sunset)
- 50 million barrel (tax caps extended)

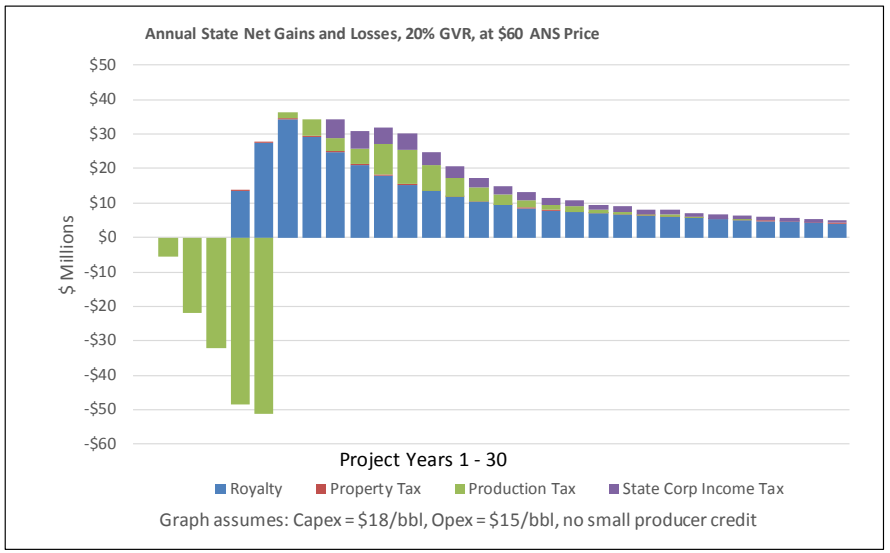
Gas Scenarios

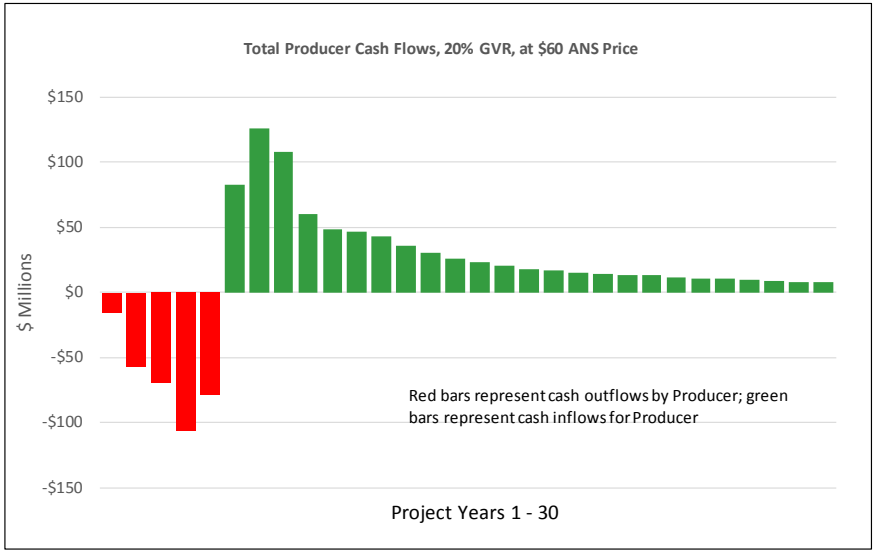
- 670 bcf Cook Inlet Gas (tax cap sunset and extended)
- 670 bcf Middle Earth Gas

Sample of Scenario Analysis

North Slope- 50 mmbo Status Quo, $60/bbl (revised)



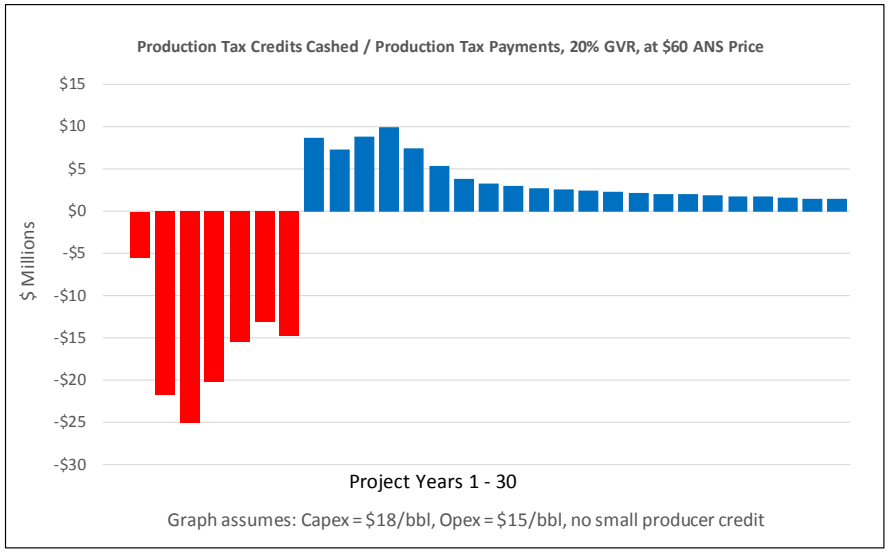


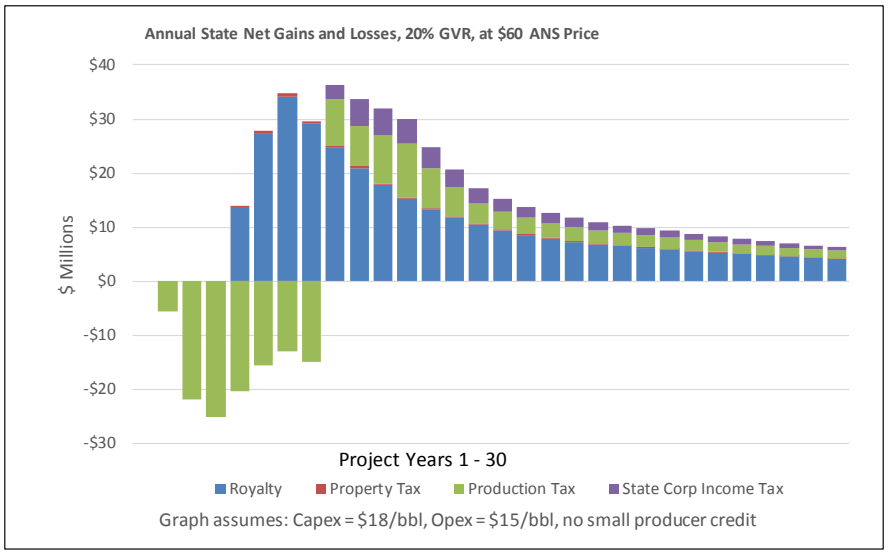


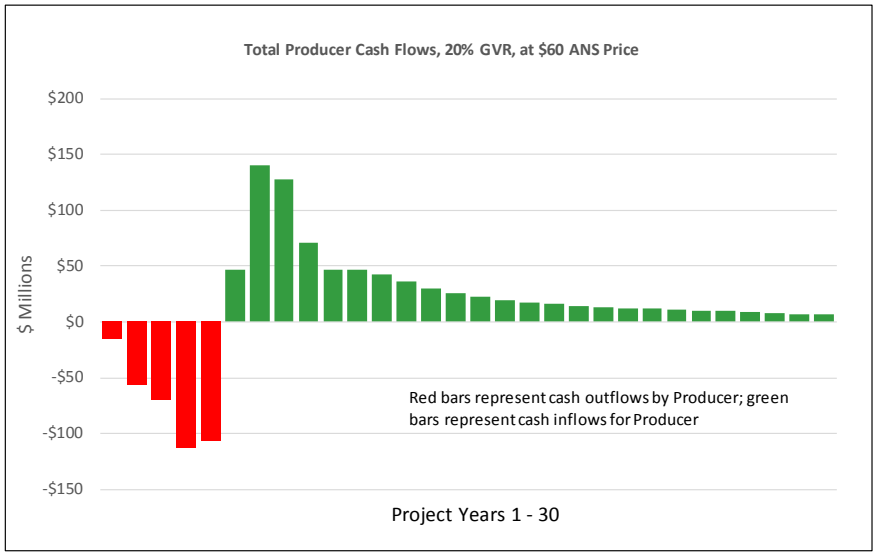
Life Cycle Totals	$Millions
Production Tax Credits Cashed	159
Production Tax Paid	61
Net Production Tax	-97
Production Tax NPV 6.15%	-91
Total Annual State Losses	117
Total Annual State Gains	387
Net State Gain (Loss)	270
State NPV 6.15%	87
Total Producer Cash Out	327
Total Producer Cash In	808
Net Producer Cash Flow	481
Producer Cash NPV 6.15%	146

Sample of Scenario Analysis

North Slope- 50 mmbo SB130, $60 / bbl (revised)



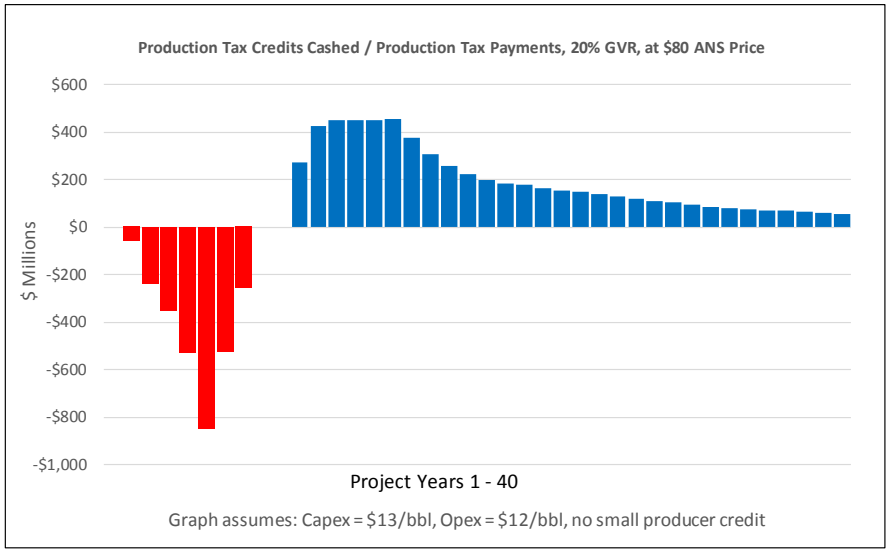


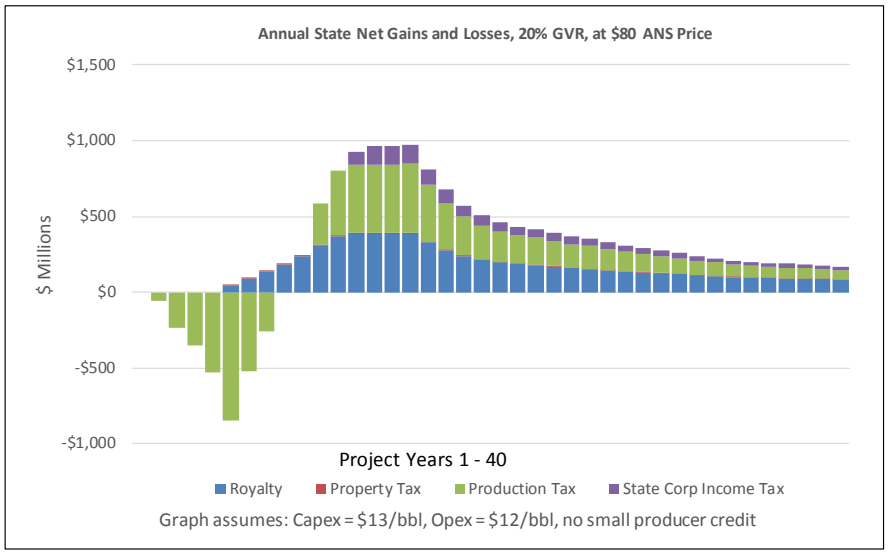


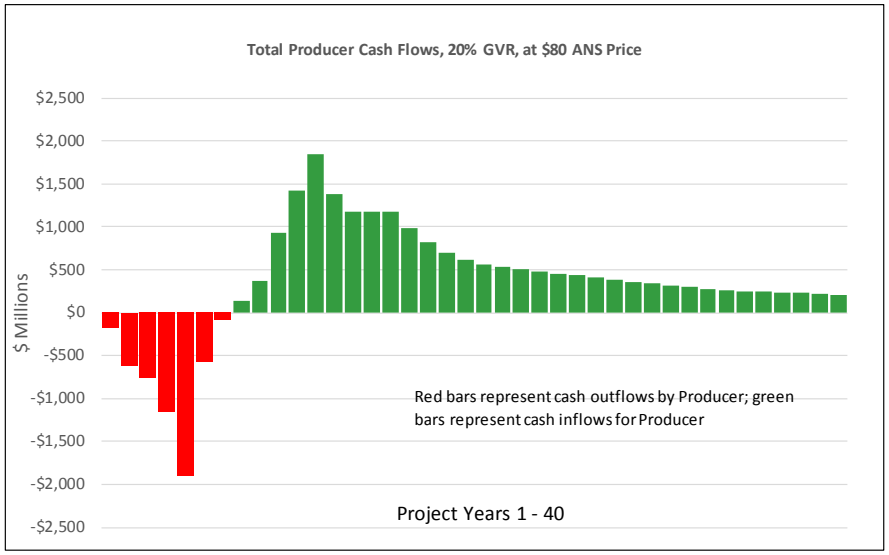
Life Cycle Totals	$Millions
Production Tax Credits Cashed	116
Production Tax Paid	84
Net Production Tax	-32
Production Tax NPV 6.15%	-51
Total Annual State Losses	59
Total Annual State Gains	390
Net State Gain (Loss)	332
State NPV 6.15%	124
Total Producer Cash Out	362
Total Producer Cash In	803
Net Producer Cash Flow	441
Producer Cash NPV 6.15%	119

Sample of Scenario Analysis

North Slope- 750 mmbo Status Quo, $80/bbl (revised)



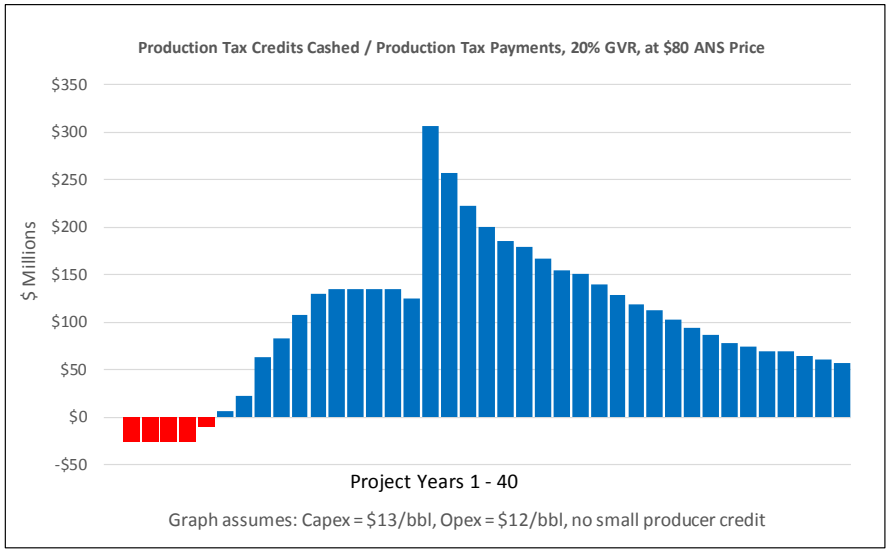


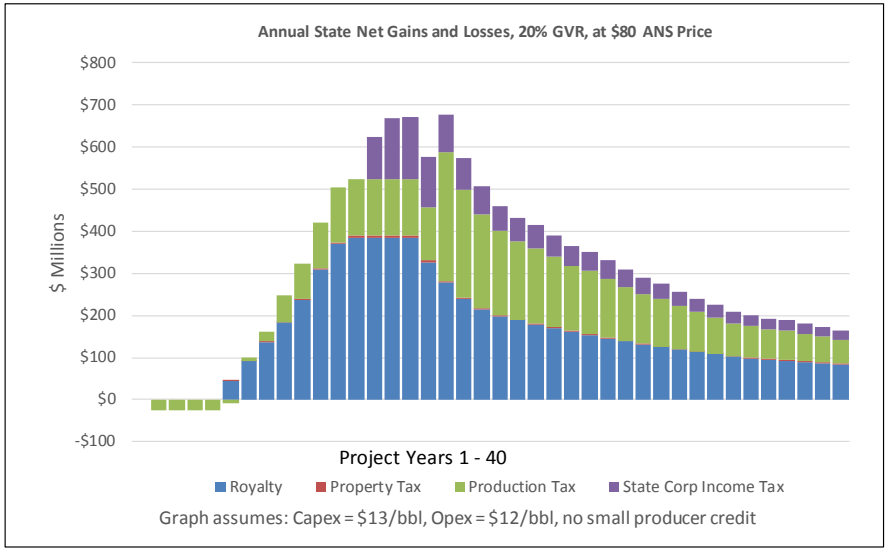


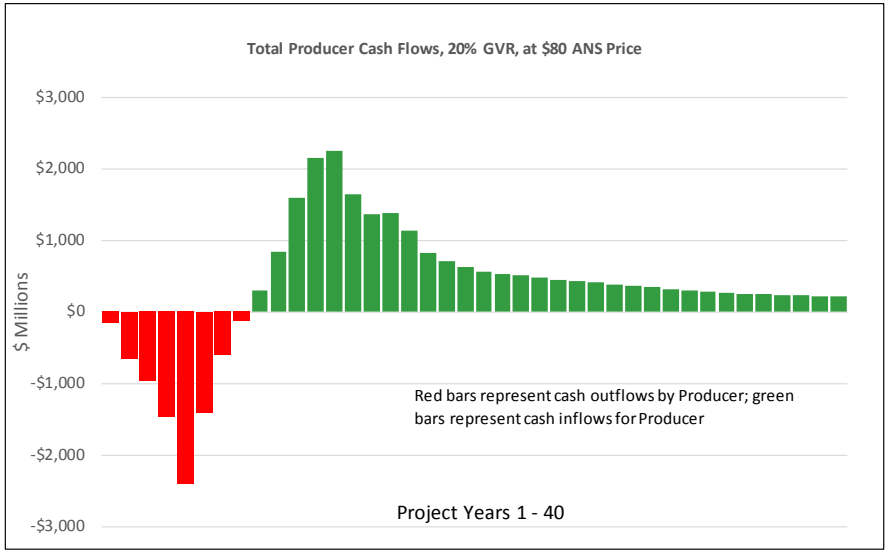
Life Cycle Totals	$Millions
Production Tax Credits Cashed	2,797
Production Tax Paid	5,972
Net Production Tax	3,176
Production Tax NPV 6.15%	-58
Total Annual State Losses	2,520
Total Annual State Gains	13,868
Net State Gain (Loss)	11,348
State NPV 6.15%	2,660
Total Producer Cash Out	5,258
Total Producer Cash In	19,772
Net Producer Cash Flow	14,514
Producer Cash NPV 6.15%	2,803

Sample of Scenario Analysis

North Slope- 750 mmbo SB130, $80 / bbl (revised)



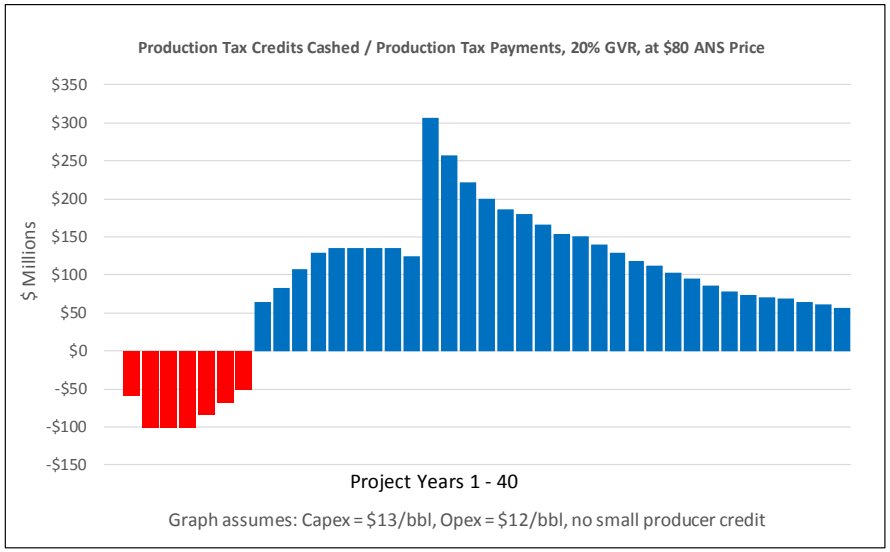


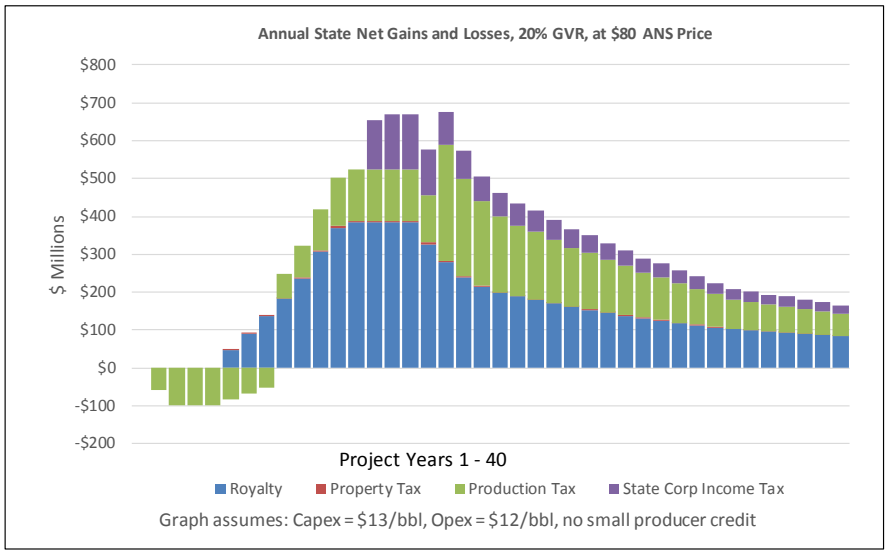


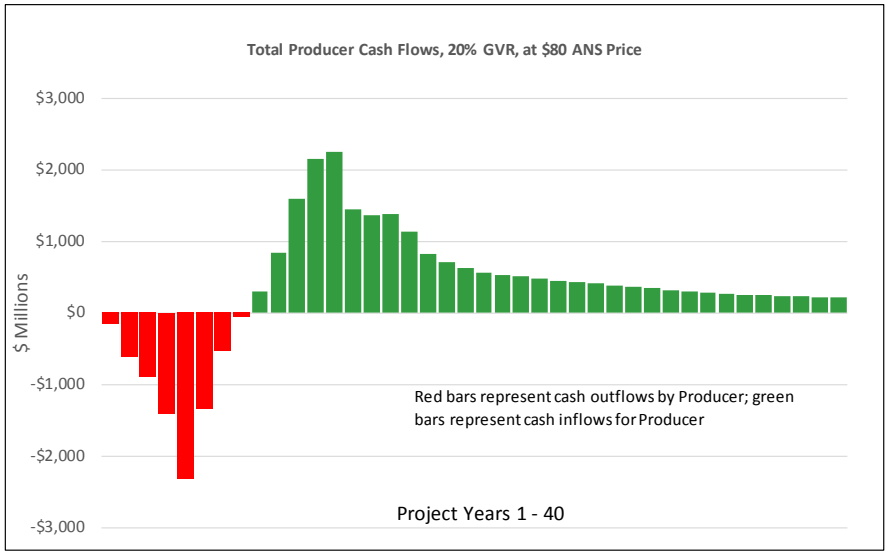
Life Cycle Totals	$Millions
Production Tax Credits Cashed	109
Production Tax Paid	4,163
Net Production Tax	4,054
Production Tax NPV 6.15%	1,108
Total Annual State Losses	100
Total Annual State Gains	12,269
Net State Gain (Loss)	12,169
State NPV 6.15%	3,797
Total Producer Cash Out	7,832
Total Producer Cash In	21,811
Net Producer Cash Flow	13,980
Producer Cash NPV 6.15%	1,816

Sample of Scenario Analysis

North Slope- 750 mmbo SB 130 with $100M credit cap, $80 / bbl



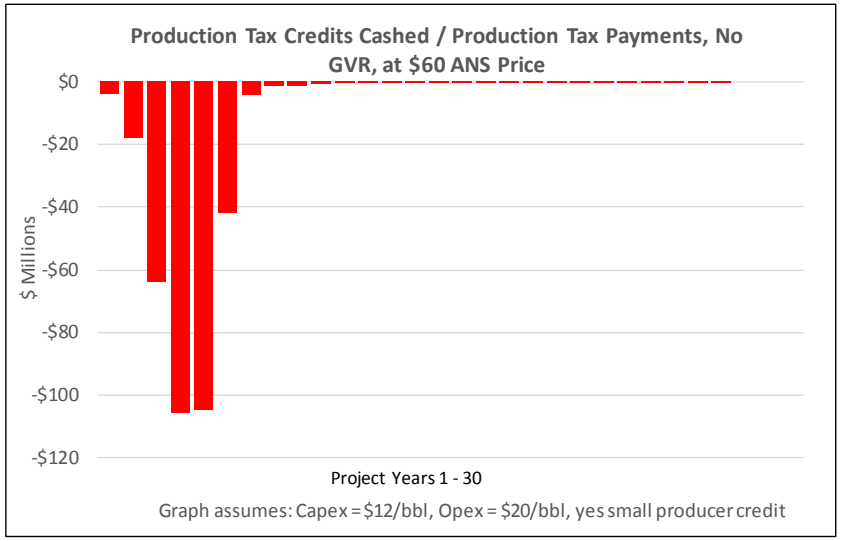


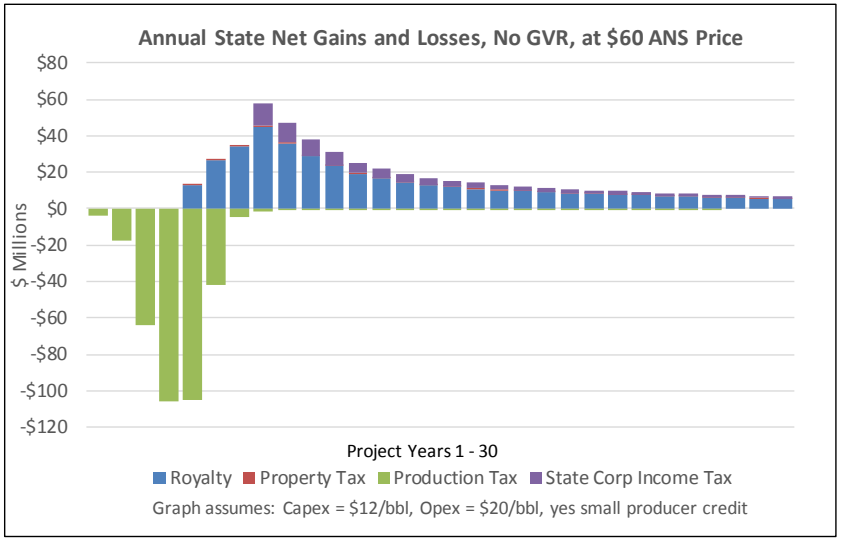


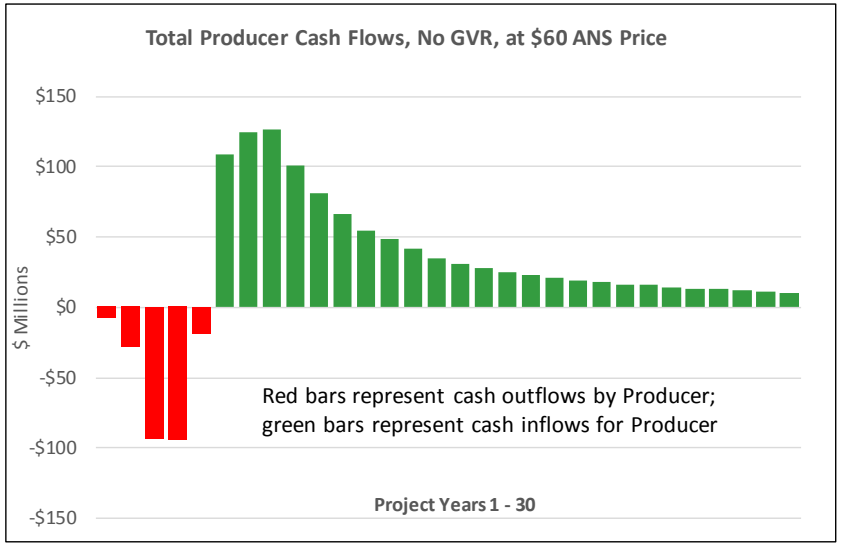
Life Cycle Totals	$Millions
Production Tax Credits Cashed	564
Production Tax Paid	4,134
Net Production Tax	3,570
Production Tax NPV 6.15%	752
Total Annual State Losses	397
Total Annual State Gains	12,114
Net State Gain (Loss)	11,716
State NPV 6.15%	3,454
Total Producer Cash Out	7,347
Total Producer Cash In	21,621
Net Producer Cash Flow	14,274
Producer Cash NPV 6.15%	2,090

Sample of Scenario Analysis

Cook Inlet- 50 mmbo Status Quo, Tax Caps extended, $60/bbl



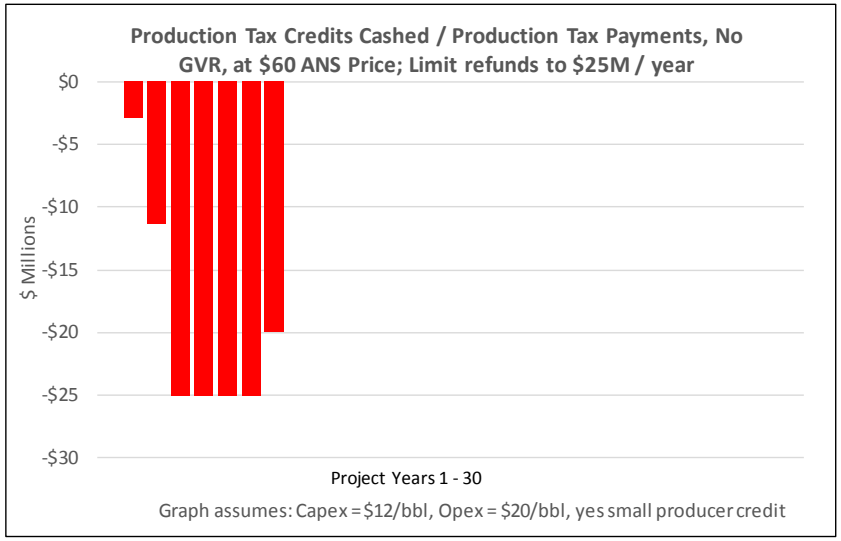


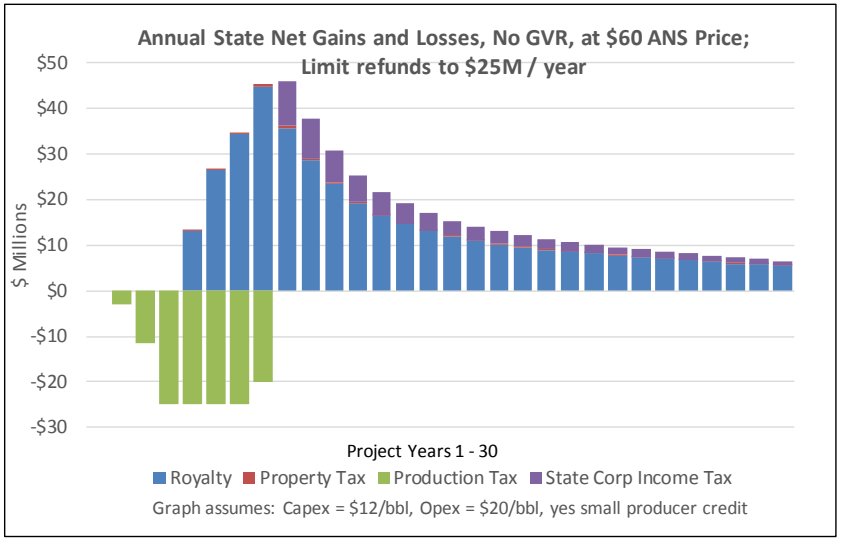


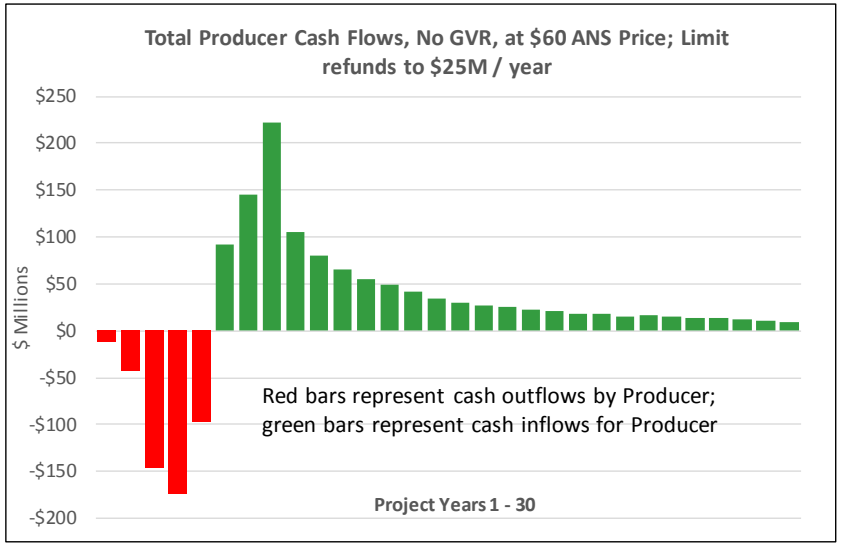
Life Cycle Totals	$Millions
Production Tax Credits Cashed	349
Production Tax Paid	0
Net Production Tax	-349
Production Tax NPV 6.15%	-269
Total Annual State Losses	297
Total Annual State Gains	431
Net State Gain (Loss)	134
State NPV 6.15%	-37
Total Producer Cash Out	241
Total Producer Cash In	1,058
Net Producer Cash Flow	817
Producer Cash NPV 6.15%	335

Sample of Scenario Analysis

Cook Inlet- 50 mmbo SB130, Tax Caps extended, $60/bbl







Life Cycle Totals	$Millions
Production Tax Credits Cashed	134
Production Tax Paid	0
Net Production Tax	-134
Production Tax NPV 6.15%	-97
Total Annual State Losses	51
Total Annual State Gains	385
Net State Gain (Loss)	335
State NPV 6.15%	126
Total Producer Cash Out	473
Total Producer Cash In	1,159
Net Producer Cash Flow	686
Producer Cash NPV 6.15%	214

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Thank You!

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