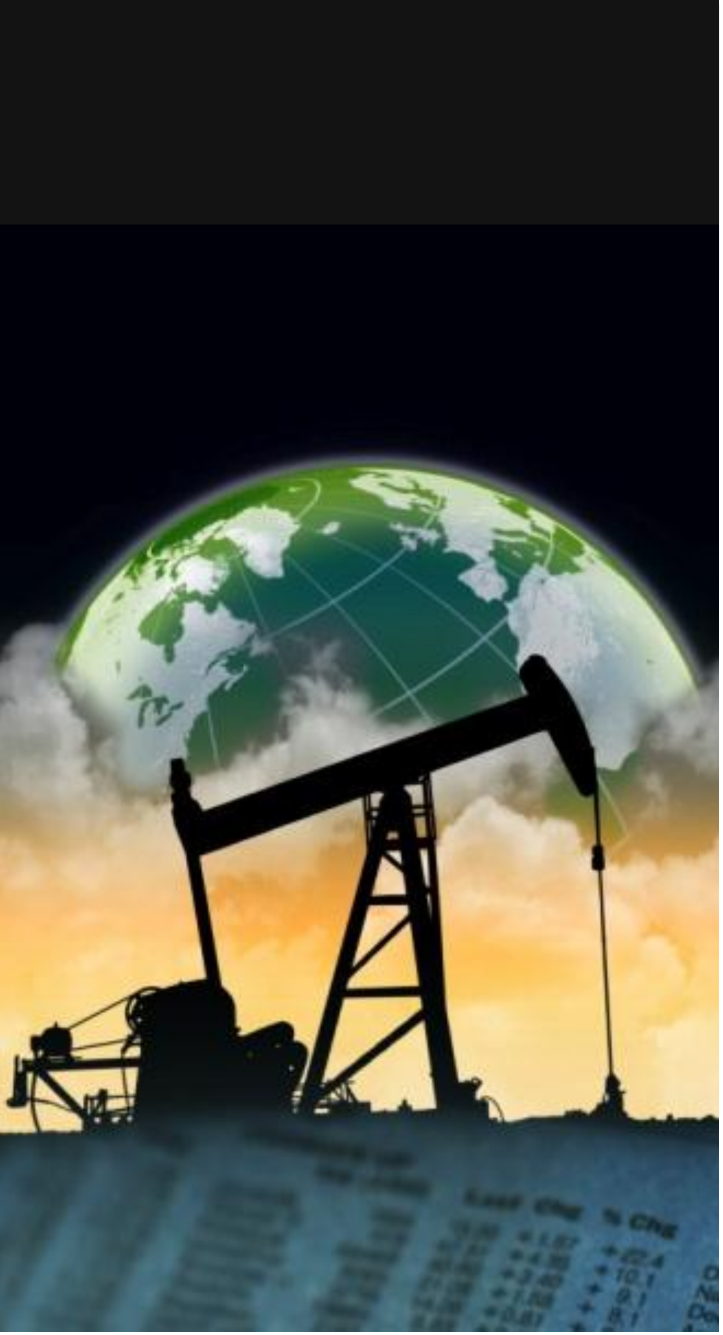

Discussion Slides: Alaska Senate Finance Committee

April 3, 2012

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PFC Energy

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Difficulties in Existing Fiscal Structure

- The incorporation of progressivity into the Profit-Based Production Tax (Net) in ACES creates three significant problems
  - Large-scale gas production at low gas prices could in the future significantly reduce production tax revenue from existing oil production
    - Resolving this problem within the framework of ACES requires significant complexity
    - Approach to decoupling in CSSB 192 requires ability to split costs between oil and gas production, creating high degree of administrative burden, and limiting capacity of state to effectively audit
  - Combination of high credits with high tax rates can produce excessive levels of support for certain spending, and weak incentives for cost control
    - Effective After-Tax rate of Government support for exploration can be over 100% at high price levels
  - Options for incentivizing new production are limited, and relatively complex
    - Proposed incentives within existing framework focus on either allowances to reduce Production Tax Value , or revenue exclusions (tax holiday)

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Summary of Progressive Severance Tax (Gross) Structure

- A Progressive Severance Tax (Gross) option would instead remove progressivity from the Profit-Based Production Tax (Net), instead levying this tax at the flat, base rate of 25%
- To retain an element of progressivity, a new Progressive Severance Tax (Gross) would then be added to the system. The tax would:
  - Be non-deductible for Profit-Based Production Tax purposes
  - Be levied on gross production (net of royalties)
  - Be levied solely on oil
  - The tax would use a progressivity structure not dissimilar to that under the current system, with progressivity coefficients that apply at different thresholds.
- The proposed Progressive Severance Tax would use the following parameters:
    - No severance tax below $65 Gross Value at Point of Production (GVPP)
    - Progressivity of .25% commencing at a threshold of $65 GVPP
    - At $125 GVPP, a tax rate of 15% is reached. At this point, progressivity is reduced to 0.05%
    - Progressivity is capped at 20%

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Benefits of Progressive Severance Tax (Gross) Structure

- By removing progressivity from the Profit-Based Production Tax (Net), and having the progressive element of the structure be a Progressive Severance Tax (Gross), two things become much easier to achieve
  - The issue of gas production reducing production tax revenue ceases to be a problem without progressivity in the Profit-Based Production Tax
    - Complex provisions to split costs between oil and gas production under CSSB 192 are thus no longer required
  - Much of the issue of excessive spending support ceases to be a problem
    - Even with 40% exploration credit, effective after-tax Government support for exploration flat at 65%
  - Significant incentives can be provided to new production, by eliminating or reducing the Progressive Severance Tax (Gross) for new production
- A wide range of levels of government take can be achieved using this structure, depending on the parameters applied

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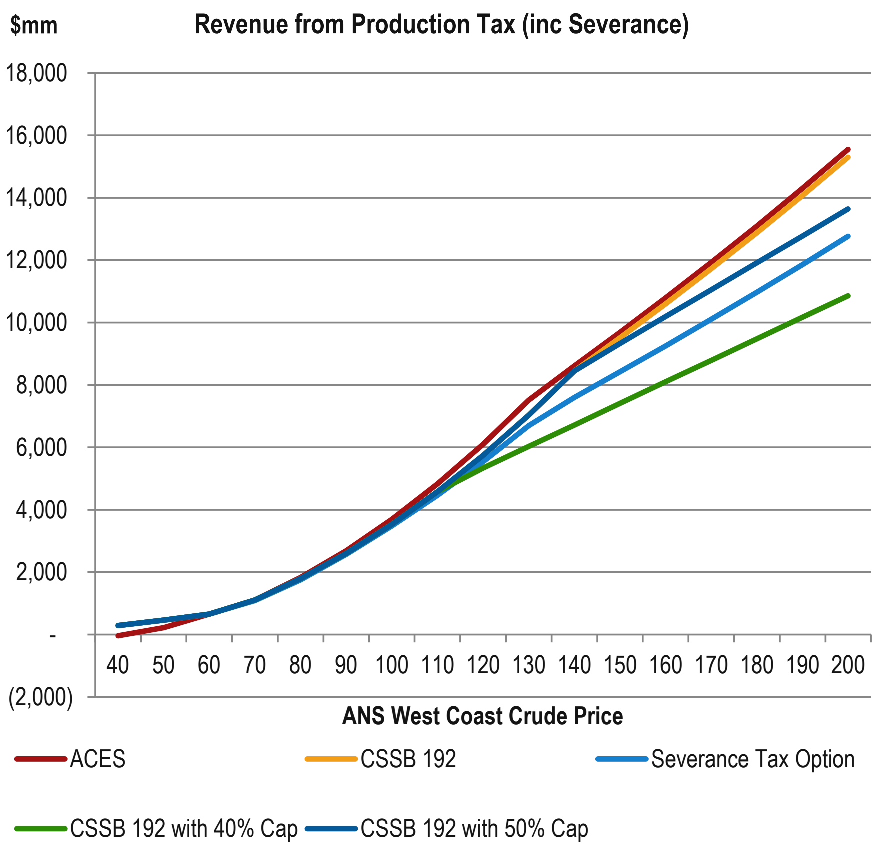
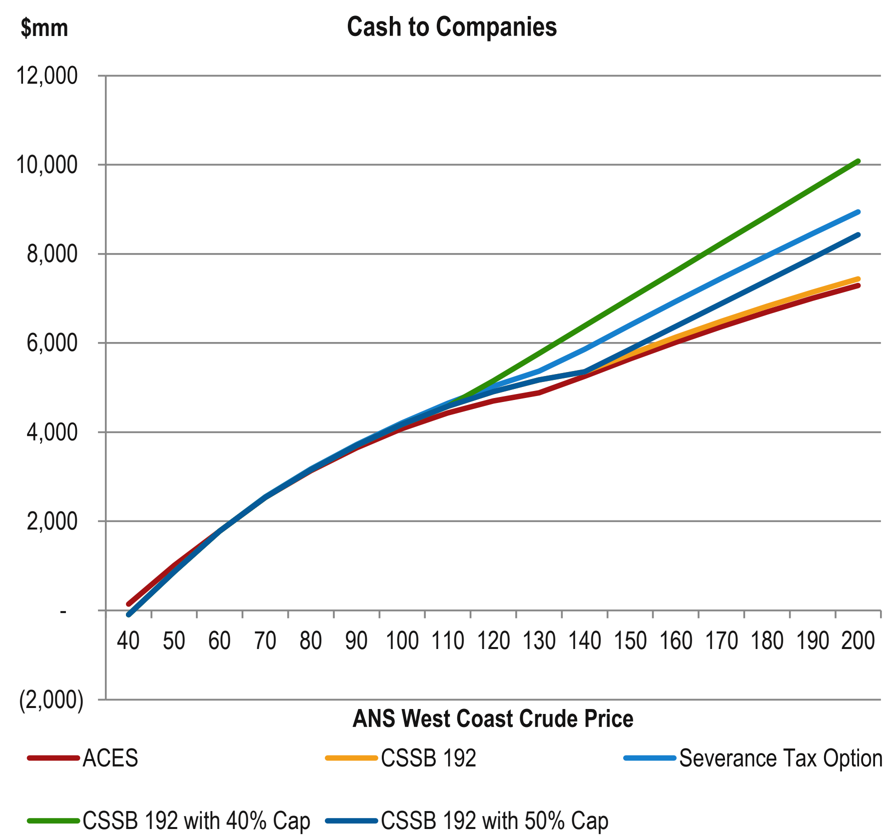
FY 2013 Revenue Comparison





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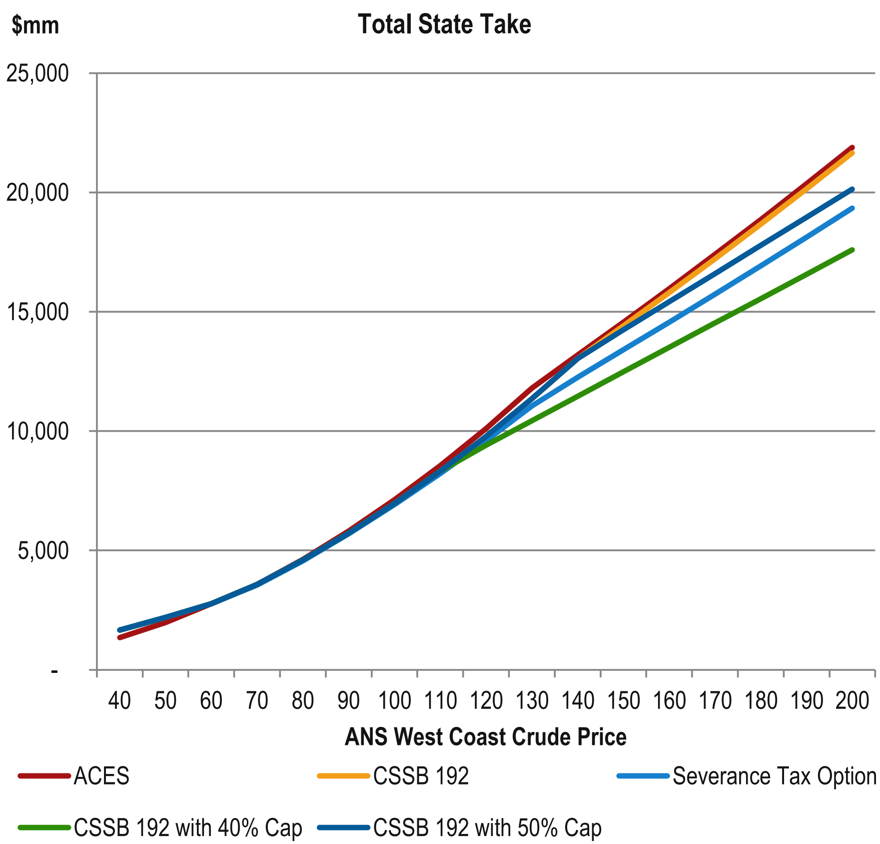
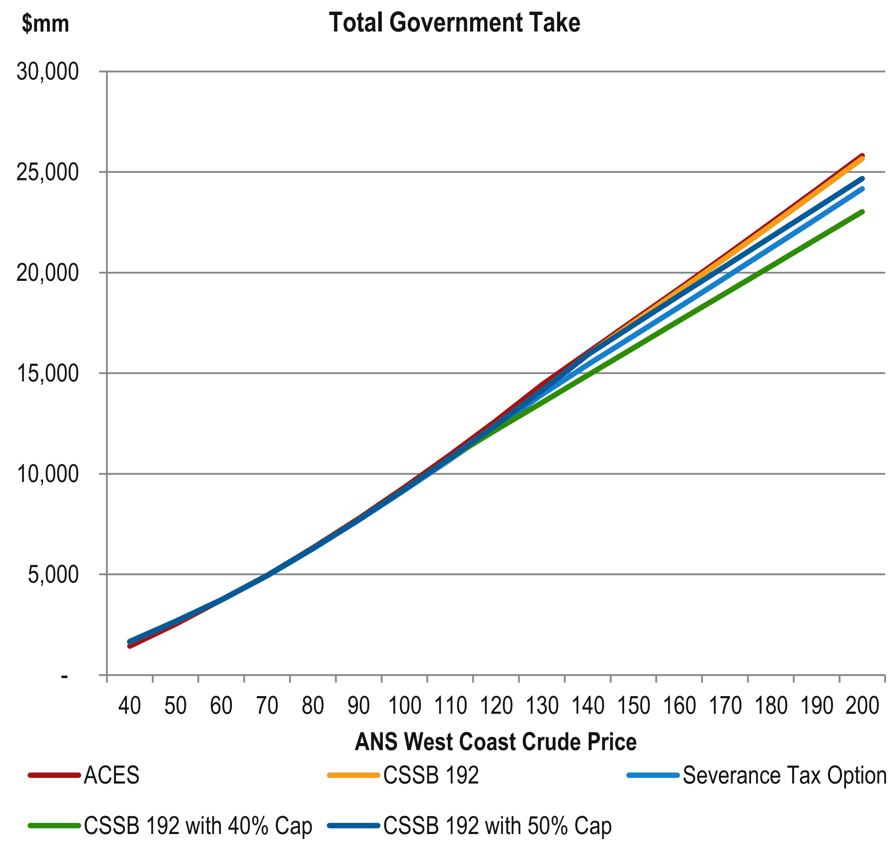
FY 2013 Revenue Comparison





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FY 2013 Revenue Comparison

ANS West Coast Oil Price	Production Tax					Total State Take					Total Government Take				
	ACES	CSSB 192	CSSB 192 with 40% Cap	CSSB 192 with 50% Cap	Severance Tax Option	ACES	CSSB 192	CSSB 192 with 40% Cap	CSSB 192 with 50% Cap	Severance Tax Option	ACES	CSSB 192	CSSB 192 with 40% Cap	CSSB 192 with 50% Cap	Severance Tax Option
40	(39)	289	289	289	289	1,352	1,660	1,660	1,660	1,660	1,427	1,660	1,660	1,660	1,660
50	222	461	461	461	461	1,983	2,202	2,202	2,202	2,202	2,527	2,669	2,669	2,669	2,669
60	653	653	653	653	653	2,769	2,769	2,769	2,769	2,769	3,728	3,728	3,728	3,728	3,728
70	1,109	1,106	1,106	1,106	1,084	3,577	3,575	3,575	3,575	3,555	4,943	4,941	4,941	4,941	4,929
80	1,831	1,792	1,792	1,792	1,754	4,631	4,595	4,595	4,595	4,560	6,318	6,294	6,294	6,294	6,272
90	2,692	2,599	2,599	2,599	2,571	5,811	5,725	5,725	5,725	5,699	7,775	7,719	7,719	7,719	7,703
100	3,691	3,527	3,527	3,527	3,474	7,117	6,966	6,966	6,966	6,918	9,314	9,216	9,216	9,216	9,184
110	4,827	4,575	4,575	4,575	4,463	8,549	8,318	8,318	8,318	8,215	10,935	10,785	10,785	10,785	10,718
120	6,102	5,744	5,340	5,744	5,538	10,108	9,781	9,410	9,781	9,592	12,638	12,425	12,184	12,425	12,302
130	7,515	7,035	6,030	7,035	6,700	11,794	11,354	10,433	11,354	11,047	14,424	14,138	13,539	14,138	13,939
140	8,614	8,445	6,720	8,445	7,598	13,192	13,037	11,457	13,037	12,261	16,023	15,922	14,895	15,922	15,417
150	9,684	9,512	7,410	9,327	8,417	14,563	14,406	12,480	14,236	13,402	17,604	17,502	16,250	17,391	16,849
160	10,787	10,601	8,100	10,189	9,253	15,965	15,794	13,503	15,417	14,559	19,205	19,094	17,605	18,849	18,291
170	11,925	11,723	8,790	11,052	10,106	17,399	17,214	14,527	16,599	15,732	20,827	20,707	18,960	20,307	19,744
180	13,098	12,880	9,480	11,914	10,977	18,864	18,665	15,550	17,780	16,921	22,470	22,340	20,315	21,765	21,207
190	14,305	14,072	10,170	12,777	11,864	20,361	20,148	16,573	18,961	18,126	24,133	23,994	21,671	23,223	22,680
200	15,546	15,298	10,860	13,639	12,769	21,890	21,662	17,597	20,143	19,346	25,816	25,668	23,026	24,681	24,163

	Cash to Companies					FY 2013 % Government Take				
	ACES	CSSB 192	CSSB 192 with 40% Cap	CSSB 192 with 50% Cap	Severance Tax Option	ACES	CSSB 192	CSSB 192 with 40% Cap	CSSB 192 with 50% Cap	Severance Tax Option
40	139	(95)	(95)	(95)	(95)	91%	106%	106%	106%	106%
50	1,010	868	868	868	868	71%	75%	75%	75%	75%
60	1,780	1,780	1,780	1,780	1,780	68%	68%	68%	68%	68%
70	2,536	2,538	2,538	2,538	2,551	66%	66%	66%	66%	66%
80	3,133	3,157	3,157	3,157	3,179	67%	67%	67%	67%	66%
90	3,648	3,703	3,703	3,703	3,720	68%	68%	68%	68%	67%
100	4,080	4,178	4,178	4,178	4,209	70%	69%	69%	69%	69%
110	4,430	4,581	4,581	4,581	4,647	71%	70%	70%	70%	70%
120	4,698	4,911	5,152	4,911	5,034	73%	72%	70%	72%	71%
130	4,884	5,170	5,769	5,170	5,370	75%	73%	70%	73%	72%
140	5,257	5,357	6,385	5,357	5,862	75%	75%	70%	75%	72%
150	5,647	5,749	7,001	5,860	6,402	76%	75%	70%	75%	72%
160	6,017	6,128	7,617	6,373	6,931	76%	76%	70%	75%	73%
170	6,367	6,487	8,234	6,887	7,450	77%	76%	70%	75%	73%
180	6,696	6,825	8,850	7,400	7,959	77%	77%	70%	75%	73%
190	7,004	7,143	9,466	7,914	8,457	78%	77%	70%	75%	73%
200	7,292	7,440	10,082	8,428	8,945	78%	78%	70%	75%	73%

Note: Consistent with DOR methodology, these revenue numbers do not include payments for tax credits which are not claimed against current production, as these are accounted for separately in the budget. In 2013, DOR forecasts a potential liability of $400mm for these credits.

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FY 2013 Revenue Comparison – Adjusted for Credits Not Claimed Against Current Production

ANS West Coast Oil Price	Production Tax					Total State Take				
	ACES	CSSB 192	CSSB 192 with 40% Cap	CSSB 192 with 50% Cap	Severance Tax Option	ACES	CSSB 192	CSSB 192 with 40% Cap	CSSB 192 with 50% Cap	Severance Tax Option
40	(439)	(111)	(111)	(111)	(111)	952	1,260	1,260	1,260	1,260
50	(178)	61	61	61	61	1,583	1,802	1,802	1,802	1,802
60	253	253	253	253	253	2,369	2,369	2,369	2,369	2,369
70	709	706	706	706	684	3,177	3,175	3,175	3,175	3,155
80	1,431	1,392	1,392	1,392	1,354	4,231	4,195	4,195	4,195	4,160
90	2,292	2,199	2,199	2,199	2,171	5,411	5,325	5,325	5,325	5,299
100	3,291	3,127	3,127	3,127	3,074	6,717	6,566	6,566	6,566	6,518
110	4,427	4,175	4,175	4,175	4,063	8,149	7,918	7,918	7,918	7,815
120	5,702	5,344	4,940	5,344	5,138	9,708	9,381	9,010	9,381	9,192
130	7,115	6,635	5,630	6,635	6,300	11,394	10,954	10,033	10,954	10,647
140	8,214	8,045	6,320	8,045	7,198	12,792	12,637	11,057	12,637	11,861
150	9,284	9,112	7,010	8,927	8,017	14,163	14,006	12,080	13,836	13,002
160	10,387	10,201	7,700	9,789	8,853	15,565	15,394	13,103	15,017	14,159
170	11,525	11,323	8,390	10,652	9,706	16,999	16,814	14,127	16,199	15,332
180	12,698	12,480	9,080	11,514	10,577	18,464	18,265	15,150	17,380	16,521
190	13,905	13,672	9,770	12,377	11,464	19,961	19,748	16,173	18,561	17,726
200	15,146	14,898	10,460	13,239	12,369	21,490	21,262	17,197	19,743	18,946

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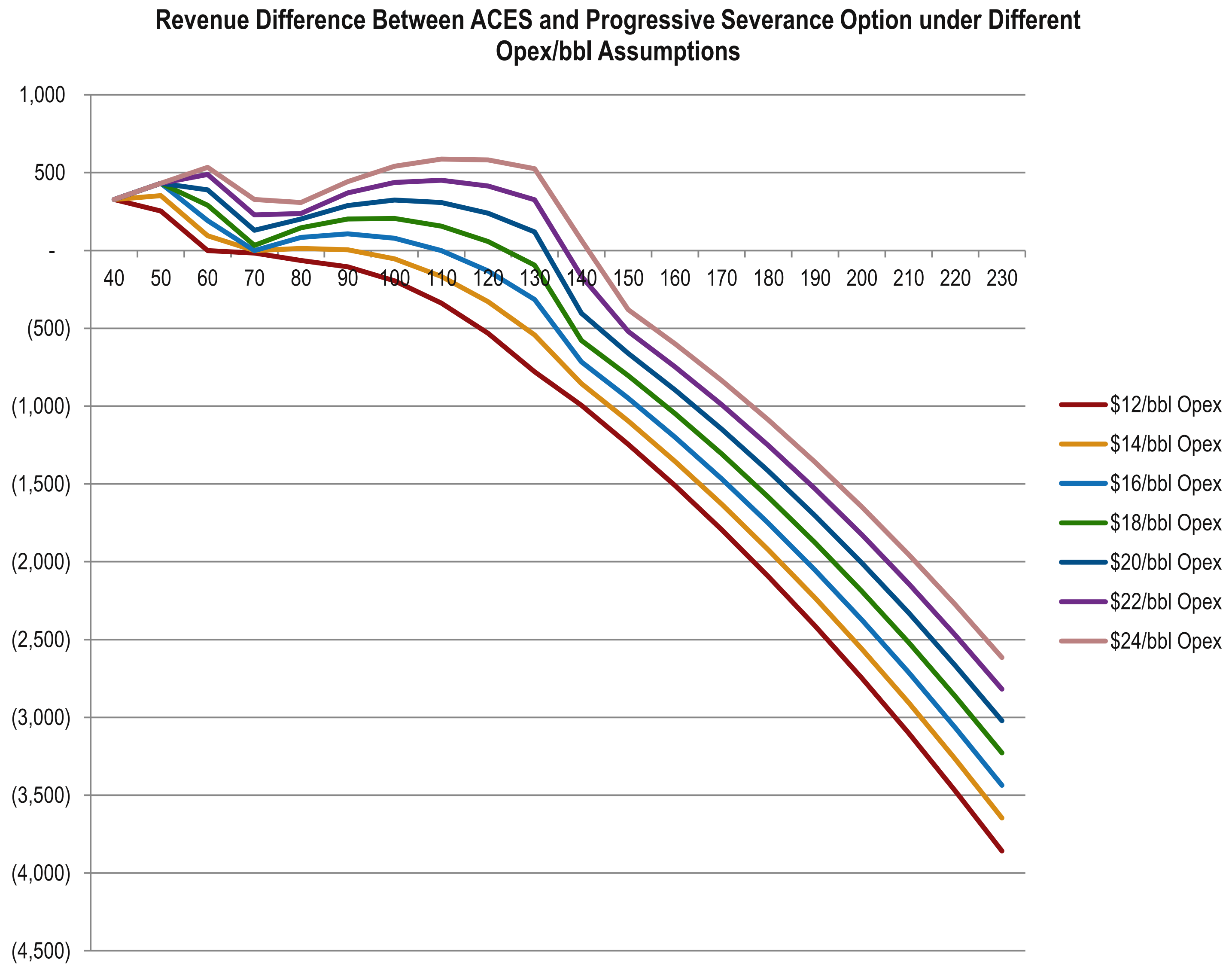
Impact of Rising Operating Costs



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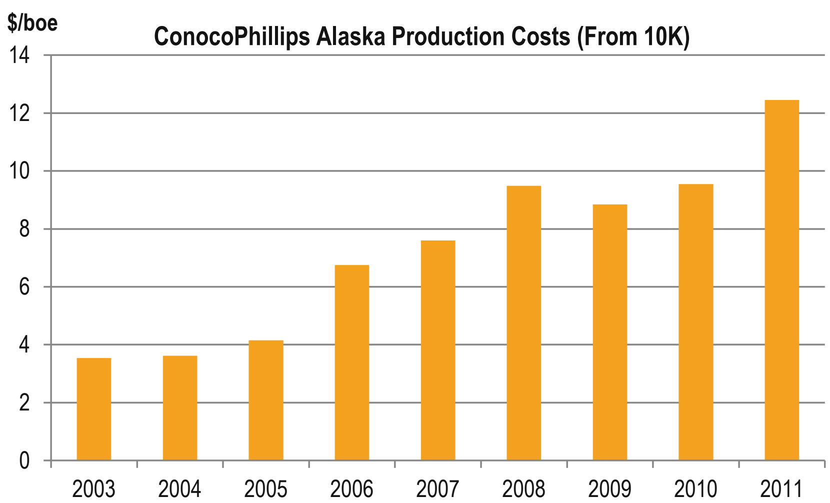
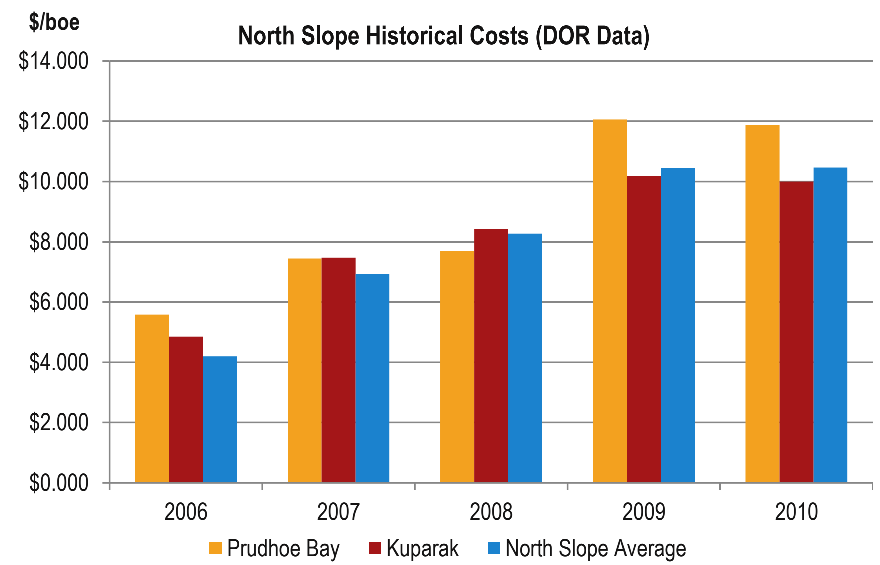
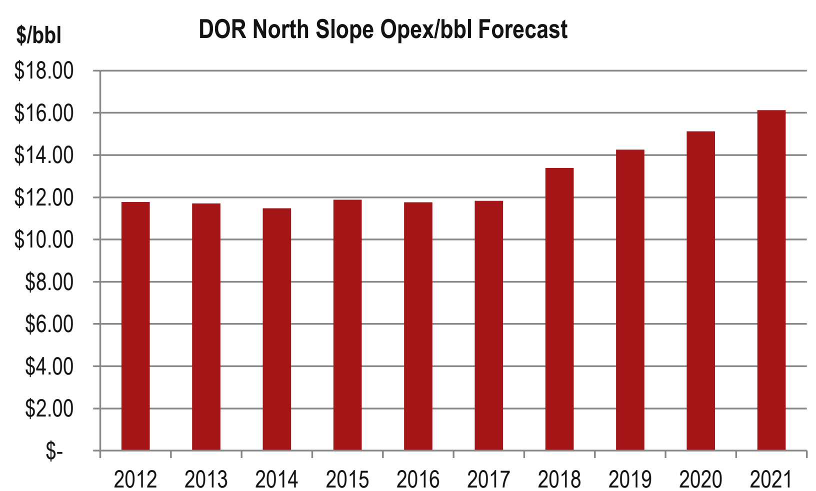
Data on Operating Costs







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Impact of Inflation

- Under ACES, thresholds and coefficients for progressivity are specified in nominal terms, without indexation
  - As a result, when economics over the long-term rather than just 2013 are examined, we see the effects of ‘bracket creep’ or ‘stealth tax’
  - In real terms, as prices increase, thresholds for progressivity decrease, and the higher take that comes with progressivity occurs at lower and lower price levels
- Similarly, unless progressive severance thresholds are indexed to inflation, progressive severance will apply at steadily lower thresholds over time
  - Indexing thresholds will also go some way to addressing the cost sensitivity issue

Incentives for New Production

- Significant incentives can be provided to new production, by eliminating or reducing the Progressive Severance Tax (Gross) on any combination of:
  - Production from new areas
  - Production from new plans of development (determined through the regulatory process to be for "new production")
  - Production above a fixed decline rate
- One possibility for a reduced rate of Progressive Severance Tax is:
  - No severance tax below $65 Gross Value at Point of Production (GVPP)
  - Progressivity of .05% commencing at a threshold of $65 GVPP
  - Progressivity capped at 5%

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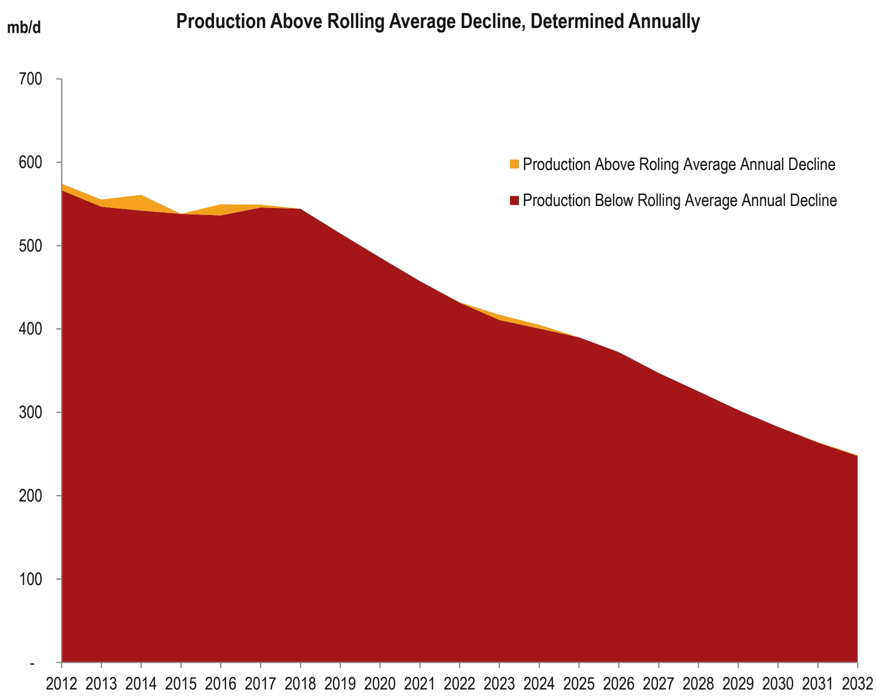
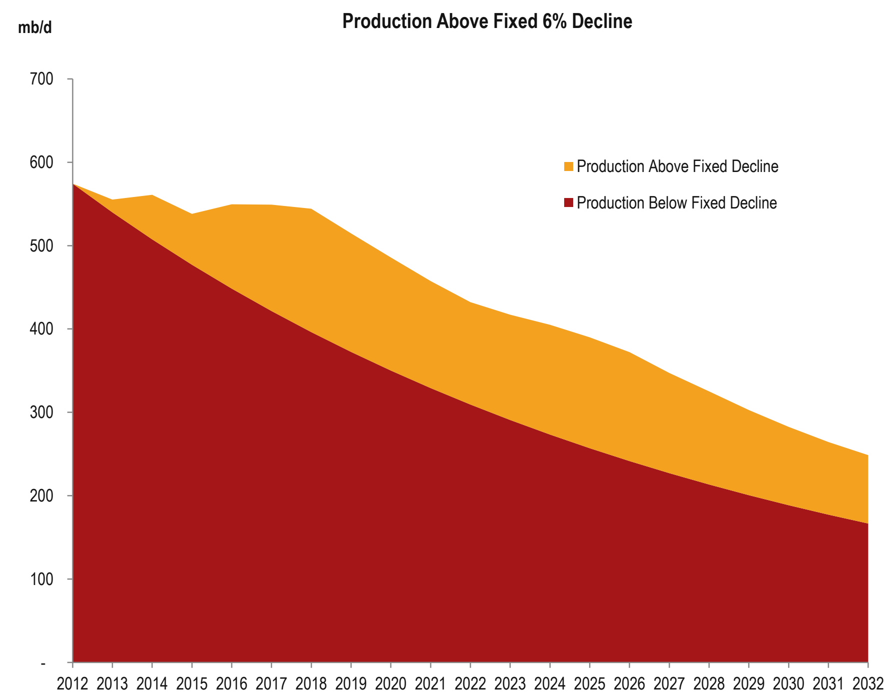
Production Above a Decline – Fixed v Annual Calculation





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