
Comments on SB21

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Key Concerns Expressed by Industry and Legislators

➤ Industry

- **Tax Rate Higher Than ACES at “Low” Prices**
- **Loss of Capital Credits**
- **GRE Not Applicable to Legacy Fields**

➤ Legislators

- **System Not Progressive (or Progressive Enough)**
- **Overall Government Take May Be Too Low**
- **Elimination of Credits May Harm New and/or Smaller Companies**

Potential Changes to Tax Structure

➤ Changes

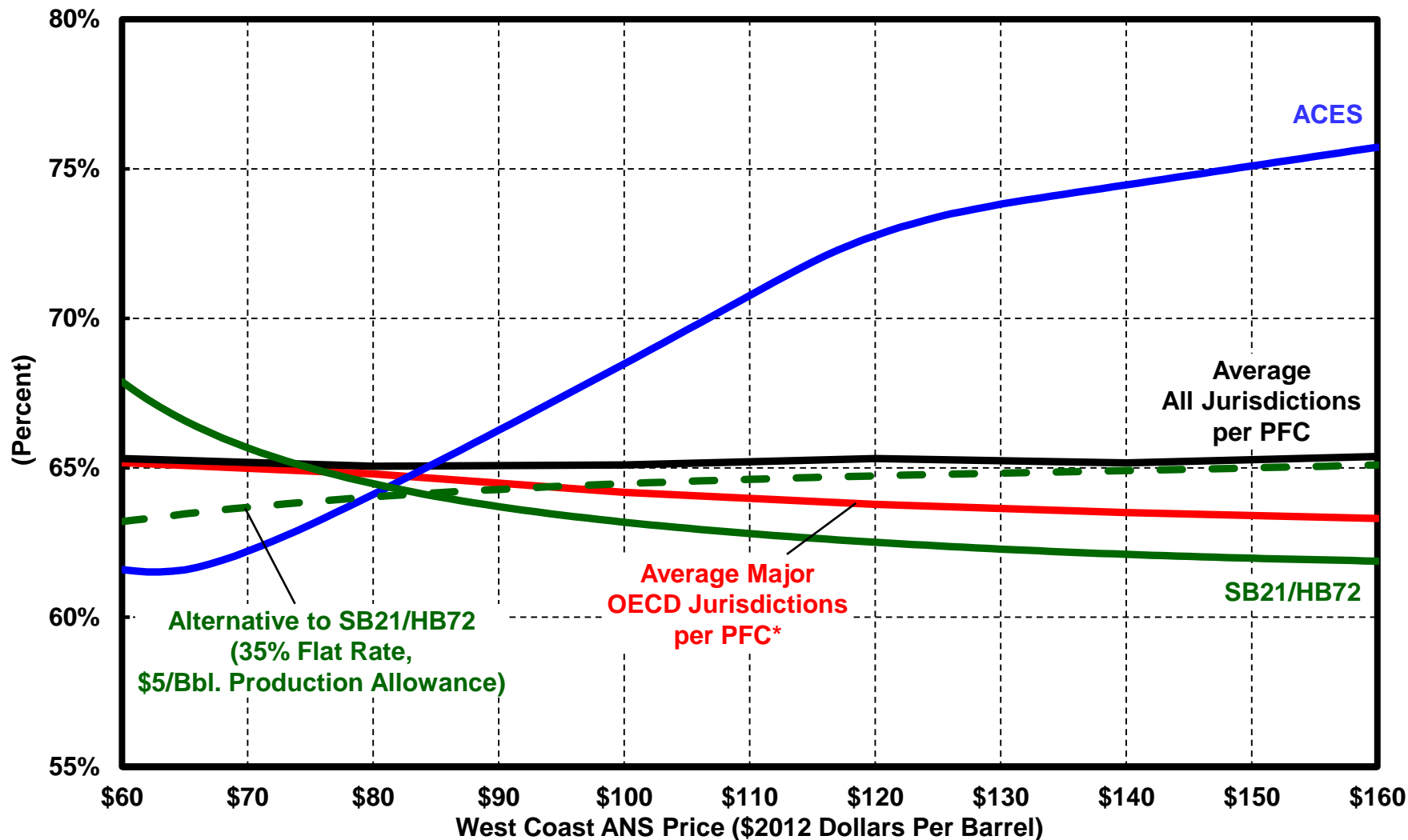
- **Increase Nominal Tax Rate**
- **Introduce Fixed Allowance for Every Barrel Produced**

➤ Impacts

- **Reduces Effective Tax Rate at Low Prices**
- **Provides Progressive Overall Government Take**
- **Efficient Mechanism to Implement Progressive System**

Average Government Take

ACES v. SB21/HB72 and Alternative to SB21/HB72 for All Existing Producers (FY2015-FY2019) and Other Jurisdictions



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

Tax Calculation Under Proposed Modifications

35% Tax Rate; \$5/Bbl Production Allowance

Taxable Barrels (Bbls)	50,000,000	50,000,000	50,000,000	50,000,000	50,000,000	50,000,000
West Coast Price (\$/Bbl)	\$60.00	\$80.00	\$100.00	\$120.00	\$140.00	\$160.00
Transportation (\$/Bbl)	- 10.00	- 10.00	- 10.00	- 10.00	- 10.00	- 10.00
Gross Value (\$/Bbl)	= \$50.00	= \$70.00	= \$90.00	= \$110.00	= \$130.00	= \$150.00
Lease Expenditures (\$/Bbl)	- 30.00	- 30.00	- 30.00	- 30.00	- 30.00	- 30.00
Per-Barrel Taxable Value (\$/Bbl)	= \$20.00	= \$40.00	= \$60.00	= \$80.00	= \$100.00	= \$120.00
Total Production Tax Value (\$)	\$1,000,000,000	\$2,000,000,000	\$3,000,000,000	\$4,000,000,000	\$5,000,000,000	\$6,000,000,000
Production Tax Before Allowance @ 35%	\$350,000,000	\$700,000,000	\$1,050,000,000	\$1,400,000,000	\$1,750,000,000	\$2,100,000,000
Production Allowance @ \$5/Bbl	- 250,000,000	- 250,000,000	- 250,000,000	- 250,000,000	- 250,000,000	- 250,000,000
Production Tax After Allowance	= \$100,000,000	= \$450,000,000	= \$800,000,000	= \$1,150,000,000	= \$1,500,000,000	= \$1,850,000,000
Nominal Tax Rate	35.0%	35.0%	35.0%	35.0%	35.0%	35.0%
Reduction in Tax Rate From Allowance	25.0%	12.5%	8.3%	6.3%	5.0%	4.2%
Effective Tax Rate After Allowance	10.0%	22.5%	26.7%	28.8%	30.0%	30.8%
Allowance as % of Gross Value	10.0%	7.1%	5.6%	4.5%	3.8%	3.3%

Summary of Investment Measures for New Participant Alaska Development ACES v. SB21/HB72 and Alternative to SB21/HB72



West Coast ANS Price	\$16/Barrel Development Capex				\$25/Barrel Development Capex				
	ACES	SB21/HB72		SB21/HB72 Alt (35% Rate; \$5/Bbl. Allowance, 30% GRE)	ACES	SB21/HB72		SB21/HB72 Alt (35% Rate; \$5/Bbl. Allowance, 30% GRE)	
		With GRE	Without GRE			With GRE	Without GRE		
	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	
Producer NPV-12 / BOE (Dollars Per BOE)									
\$80	\$2.55	\$2.54	\$1.94	\$2.81	(\$0.35)	(\$2.18)	(\$2.28)	(\$2.11)	
\$100	\$3.85	\$6.18	\$5.34	\$6.57	\$0.97	\$2.04	\$1.21	\$2.12	
\$120	\$5.48	\$9.74	\$8.71	\$10.00	\$2.58	\$5.61	\$4.59	\$5.97	
Profitability Index-12									
\$80	1.19	1.19	1.15	1.21	0.98	0.89	0.89	0.90	
\$100	1.29	1.47	1.40	1.50	1.05	1.10	1.06	1.10	
\$120	1.41	1.74	1.66	1.75	1.12	1.27	1.22	1.29	
IRR (Percent)									
\$80	19.7%	17.1%	16.1%	17.5%	11.3%	9.0%	8.8%	9.1%	
\$100	23.4%	23.9%	22.6%	24.5%	14.0%	14.6%	13.6%	14.7%	
\$120	27.6%	30.0%	28.6%	30.4%	17.1%	19.1%	18.0%	19.4%	
5-Year (2017-2021) Cash Margins (Dollars Per BOE)									
\$80	\$25.84	\$36.94	\$34.44	\$36.94	\$28.03	\$39.10	\$39.10	\$39.10	
\$100	\$28.84	\$45.89	\$42.59	\$47.86	\$31.03	\$51.15	\$49.51	\$51.15	
\$120	\$33.13	\$54.69	\$50.89	\$55.77	\$35.32	\$61.54	\$56.95	\$63.19	
Government Take (Percent)									
\$80	70.8%	61.9%	66.0%	59.4%	71.6%	65.0%	66.7%	63.6%	
\$100	75.8%	61.1%	64.7%	59.6%	76.9%	60.7%	65.5%	60.0%	
\$120	77.2%	60.8%	64.0%	60.1%	78.1%	61.0%	64.7%	59.8%	
State/Municipal NPV-12/BOE (Dollars Per BOE)									
\$80	\$6.67	\$6.68	\$7.60	\$6.27	\$3.24	\$6.06	\$6.21	\$5.96	
\$100	\$13.32	\$9.72	\$11.02	\$9.13	\$9.86	\$8.21	\$9.49	\$8.08	
\$120	\$19.46	\$12.89	\$14.48	\$12.50	\$16.02	\$11.36	\$12.92	\$10.80	

Summary of Investment Measures for Incumbent Alaska Development ACES v. SB21/HB72 and Alternative to SB21/HB72



West Coast ANS Price	\$16/Barrel Development Capex				\$25/Barrel Development Capex			
	ACES	SB21/HB72		SB21/HB72 Alt (35% Rate; \$5/Bbl. Allowance, 30% GRE)	ACES	SB21/HB72		SB21/HB72 Alt (35% Rate; \$5/Bbl. Allowance, 30% GRE)
		With GRE	Without GRE			With GRE	Without GRE	
	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)
Producer NPV-12 / BOE (Dollars Per BOE)								
\$80	\$3.71	\$2.71	\$2.02	\$4.00	\$1.34	(\$1.08)	(\$1.77)	\$0.66
\$100	\$6.14	\$6.20	\$5.30	\$7.27	\$4.68	\$2.41	\$1.51	\$3.94
\$120	\$8.82	\$9.69	\$8.58	\$10.55	\$8.10	\$5.90	\$4.80	\$7.21
Profitability Index-12								
\$80	1.28	1.20	1.15	1.30	1.06	0.95	0.91	1.03
\$100	1.46	1.47	1.40	1.55	1.23	1.12	1.07	1.19
\$120	1.67	1.73	1.65	1.80	1.39	1.28	1.23	1.35
IRR (Percent)								
\$80	26.2%	18.5%	16.9%	22.3%	15.4%	10.2%	9.0%	13.2%
\$100	41.1%	25.8%	24.1%	29.5%	27.2%	15.7%	14.4%	18.6%
\$120	65.3%	32.5%	30.6%	36.1%	46.0%	20.7%	19.2%	23.5%
5-Year (2017-2021) Cash Margins (Dollars Per BOE)								
\$80	\$24.26	\$30.63	\$28.57	\$32.07	\$26.45	\$32.79	\$30.73	\$34.23
\$100	\$27.22	\$40.27	\$37.61	\$41.17	\$29.41	\$42.42	\$39.77	\$43.33
\$120	\$31.18	\$49.90	\$46.65	\$50.27	\$33.37	\$52.06	\$48.80	\$52.42
Government Take (Percent)								
\$80	68.9%	64.1%	68.1%	59.3%	67.8%	66.1%	71.0%	59.1%
\$100	73.0%	62.6%	66.1%	60.2%	71.2%	63.7%	67.7%	60.1%
\$120	73.8%	61.9%	65.1%	60.6%	71.6%	62.6%	66.2%	60.6%
State/Municipal NPV-12/BOE (Dollars Per BOE)								
\$80	\$4.88	\$6.42	\$7.49	\$4.44	\$0.64	\$4.36	\$5.43	\$1.69
\$100	\$9.79	\$9.70	\$11.08	\$8.05	\$4.15	\$7.64	\$9.02	\$5.29
\$120	\$14.31	\$12.98	\$14.67	\$11.66	\$7.53	\$10.92	\$12.61	\$8.90

Note: Analysis of incumbent production includes "buy-down" impact for reduced taxes on existing production.

Potential Solutions for New Participants

- **Expand State's Ability to Assist Producers Through AIDEA or Alternative Agency**
- **Potential Vehicles Include**
 - **Loans**
 - **Acquiring Overriding Royalty Interest**
 - **Acquiring a Working Interest**
- **Royalty Relief**
 - **Successful in Moving Recent Projects Forward**
- **Relax Requirements For Exploration Credits**

Potential Solutions to Target New Oil in Legacy Fields

- **Expand DNR's Ability to Grant Royalty Relief**
 - **Can Only be Granted on Leases Not in Commercial Production**
 - **Allow Producers to Petition DNR for Royalty Relief for Approved Projects That Target "New Oil"**
 - **New PA / Unit or Expansion**
 - **Targeted Development in Existing PAs / Units**
 - **DNR Would Grant Royalty Relief on Case-Specific Basis**

- **Allow Producers to Apply for GRE on Projects in Existing PAs**
 - **Allow DOR/DNR to Grant GRE for Expansions or Targeted Developments**
 - **Producers Must Apply for GRE Allowance**
 - **Producers Must Provide Sufficient Evidence to DOR/DNR to Establish Proposed Development is New Production**

Summary of Benefits

- **Change in Tax Rate Along with Production Allowance Provides Moderately Progressive System**
- **Changes Maintain Competitive Government Take**
- **Allowances or “Credits” Tied Directly to Production**
- **Value of Allowance Varies Inversely With Price**
 - **Higher Value at Lower Prices (Where Needed)**
 - **Lower Value at Higher Prices (Where Not Needed)**
- **Avoids Problems Associated with High and/or Changing Marginal Rates**
- **Expansion of AIDEA Access Would Provide Capital to Viable Projects If Needed Without Taxing State Treasury**
- **Granting DNR Royalty Relief Authority Allows Flexibility in Responding to Challenged Development Projects**
- **Granting of GRE to Targeted Projects in Existing Units Allows DOR/DNR to Aid Development**