# State of Alaska

SB-114



## Scope of Analysis

- Perspective
- Context
- Likely effects
  - First order
  - Second + order



## Volatility and Disruption in the Oil & Gas Industry

- Up until the last 3 years the oil & gas industry had been battered by deeply disruptive events leading to volatility
  - Volatility impacts long term planning practices
- Investors have demanded better capital discipline, improved financial performance and action on climate change
  - Leading to IOC emphasis on capital discipline and core areas
- Governments that rely upon petroleum related tax revenues face challenges of maintaining tax base while encouraging investment



Sources: Public Domain Commentary, EIA Brent Price, Baker Hughes Rig Count



### **Fiscal Comparison**



Life Cycle Indicative Value per Barrel Breakdown at \$70/bbl

- 100% 70 Transport Costs 90% not just other producing areas! Capex 80% Movement 70% 60% 50% Jerce Jon-Income based taxes, social elevated risk to investors because of time of the social of the 40% 30% 20% 10% 0% AK Current Lower 48 Australia Norway Notes Government Take illustrates general indicative breakdown and could vary depending on specific assumptions and asset characteristics
  - Lower 48 can vary materially by State and Landowner Roya 2.

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- Chart illustrates generation and the cash breakdown and tax buch a for select jull pictions over an oil & gas Argelo Snant's |
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- Many other competing jurisdictions, particularly non-western, implement asset level contracts

  - Allows for fiscal terms specific to assets and reflecting current economic conditions

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Often contains various risk mitigations including fiscal stabilization

#### Financial Performance by Sector - 10 years





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#### Financial Performance by Sector - More recently

#### **Energy Sector – Last Year**



#### **Energy Sector – Last 3 Years**



**Energy Sector – The Best !** 



#### Alaska Development Scenarios

- There is strong potential for major new developments, as well as smaller incremental developments built around existing or new infrastructure hubs
- To understand the potential contribution of new investments to Alaska state revenues and to gauge the downside risk if new investments are curtailed, three indicative profiles have been developed representative of Alaska new investment opportunities:
  - A significant new development justifying a new infrastructure hub, similar to the Pikka development.
  - A large new development justifying a new infrastructure hub, similar to Willow.
  - A smaller incremental development tying into an existing infrastructure or infrastructure associated with a new development.
- The evaluation summarizes the estimated 'investor return' and generated 'state revenue' under the current and proposed tax changes as well as under a variety of sensitivities.



## Pikka Scale Development

- Table highlights indicative tax value and contractor return for a major new development
  - Example uses Pikka Ph1 as representative major new development (340MMBbls development)
  - Evaluated on Standalone basis and no further Phase 2 or tiebacks assumed
- New development generates material new State Revenue, US\$6-8 Billion for this evaluation in 20 years
  - State will also benefit from increased economic activity through value chain
- Assuming \$70/bbl, the project is expected to still be attractive under the proposed tax change
  - The tax change does impact the project economics but not believed to be to an extent that it would no longer be perceived as financially attractive
- However, there is still a risk that projects may be compromised due to the reduced economic return or perceptions of long term fiscal stability on top of inherent oil and gas development risks

	Current Tax System		Production Credit Change	
340 MMBbl Development \$70/bbl Flat assumption	Year Average at Peak Production	Project Life Total	Year Average at Peak Production	Project Life Total
Royalty	297	3,457	297	3,457
Property Tax	50	482	50	482
Prod. Tax	107	1,706	213	3,333
State Income Tax	67	728	57	575
Total State Take	520	6,373	616	7,847
Federal Income Tax	122	1,474	102	1,164
Total Contractor NPV10	1,392		1,027	
Total Contractor Rate of Return	20.0%		18.0%	



**Project Cash Flows** 



#### Willow Scale Development

- Based on COP Investor Statements
  - \$8 Bn of total investment and nearly \$6 Bn before production
  - 600MMbbls recovered over life
- Understood to be originally scoped as 80kbpd
  project but current planning anticipated 160kbpd
  - Capacity increase likely in order to enable additional near field future opportunities
- Over \$7.5Bn State revenue generated under current assumptions and tax law, over \$10.2Bn with changes
  - State total assumed 50% of Royalty

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- Largely due to investment prior to production, the rate of return estimated is lower than other examples
  - Understood to not include potential near field incremental developments
  - Does not consider potential impact on TAPS life and tariff

	Current Tax System		Production Credit Change	
600 MMBbls \$70/bbl Flat assumption	Year Average at Peak Production	Project Life Total	Year Average at Peak Production	Project Life Total
Royalty	360	4,542	360	4,542
Property Tax	92	970	92	970
Prod. Tax	65	3,027	65	5,852
State Income Tax	70	1,368	70	1,102
Total State Take	587	7,635	587	10,194
Federal Income Tax	74	2,768	74	2,231
Total Contractor NPV10	1,406		932	
Total Contractor Rate of Return	15.4%		13.9%	

**Project Cash Flows** 5,000 Transport 4.000 Cost Royalty 3,000 Tax Ded. 2,000 Costs NMŞSU 1,000 Taxes Contractor Take YEAR -1,000 Investment -2,000 Operating Cost -3.000

#### **Incremental Development Economics**

- Assumes 100MMBbls over 20 years
  - 30kbpd plateau
  - Could be representative of numerous existing discoveries
     GMT 2, Fiord West, Nuna, Narwhal, Harpoon, Horseshoe, Quokka, Alkaid, Umiat, Liberty
- Incremental Developments benefit from shorter development periods
  - Assumes reliance on existing infrastructure
- The returns of the assumed incremental development are attractive under current prices, however, many of the discoveries will depend on the infrastructure for larger developments that may not currently exist
  - Material further upside of consolidating tax implications
  - Likely to be less affected by the tax change, however potentially dependent upon timeframe of other infrastructure developed
- Each could add over \$150 MM+ per year in peak years and US\$1.5 Bn of total State Revenue
  - If GMT or other NPR opportunity assumed, half the royalty would be shared with Federal Government

	Current Tax System		Production Credit Change	
100 MMBbls \$70/bbl Flat assumption	Year Average at Peak Production	Project Life Total	Year Average at Peak Production	Project Life Total
Royalty	62	765	62	765
Property Tax	11	132	11	132
Prod. Tax	73	606	130	1,091
State Income Tax	21	243	16	197
Total State Take	167	1,745	219	2,185
Federal Income Tax	40	491	30	399
Total Contractor NPV10	477		352	
Total Contractor Rate of Return	19.6%		17.7%	



**Project Cash Flows** 

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#### Second Order Effects

- The impact on the perception of Alaska's Investment Environment cannot be measured
  - New major upstream development requires a view of 20 year time horizons.
  - Does increasing the tax burden in order to fund State initiatives suggest to investors that further increases may be likely when further funding is needed?
  - How does this impact investment decisions compared to other jurisdictions that have reduced oil and gas burdens in order to encourage investment?
- To put it in perspective under current assumptions:
  - The Production Credit decrease could potentially add **\$400MM/year** to state income immediately
  - The incremental State revenue of a single major new development is estimated to add in excess of \$500MM/year during peak production and >\$6 Billion over a 20 year life
    - Does not consider benefit of broader economic activity or potential for further incremental/satellite developments
- Increasing tax burden may put new developments at risk of delay and cancellation
  - Lower economic returns
  - Perceptions of elevated risk of further tax increases during production phase
  - Potential to discourage exploration activity



#### Tax Stability ?





## **Fiscal Comparison**

- Chart illustrates general \$/bbl cash breakdown and tax burden for select jurisdictions over an oil & gas development's life cycle
  - Assumes characteristics with new development in Alaska, including constant cost environment
    - In reality each jurisdiction will have numerous unique characteristics (development timeframe, cost environment, infrastructure/market proximity etc.)
- Alaska has relatively high government take compared to select jurisdictions
- Worth noting that some fiscal elements are considered more burdensome than others
  - Non-Income based taxes, such as royalty, carry elevated risk to investors because of timing and it is not responsive to development/operating costs
- Many other competing jurisdictions, particularly non-western, implement asset level contracts
  - Popular for oil and gas dependent governments
  - Allows for fiscal terms specific to assets and reflecting current economic conditions

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#### Life Cycle Indicative Value per Barrel Breakdown at \$70/bbl



#### Notes:

- Government Take illustrates general indicative breakdown and could vary depending on specific assumptions and asset characteristics
- 2. Lower 48 can vary materially by State and Landowner Royalty

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#### Norway - State involvement in sector

- Governance
  - Ministry of Petroleum and Energy
    - Norwegian Petroleum Directorate
- Ownership
  - Petoro
  - Equinor (formerly Statoil)
  - Gassco



#### Norway's Petroleum Fiscal System



- Historical Background
  - 1972 Statoil (then 100% State-owned) 50% full participating interest, later made flexible
  - 1985 State participation split into "State Direct Financial Interest" (SDFI) and Statoil
  - 2001 State sells 21.5% interest in SDFI 15% to Statoil (now "Equinor"), Petoro takes over management of SDFI
- Philosophy
  - The overall objective of Norway's petroleum policy to ensure that as large as possible share of the value creation accrues to the state
  - "Tax neutrality"
  - Criticality of sector to economy
  - State/NPD long-standing assertive presence in the sector (approvals, timing etc.)



## **Norway Fiscal Terms**

- All material government fiscal take is extracted through income based taxes
  - No Royalty

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- Income Based taxes comprised of basic Corporation tax plus upstream oil and gas specific Special Tax
  - Special tax adjusts based on changes to Corporation tax so that marginal income tax of both combined totals 78%
  - Special tax allowed an additional Capital uplift
    - Additional 12.4% of 2023 Capex deductible
- In 2020, temporary tax concession were made for the benefit of oil and gas companies to encourage continued investment
  - Capital expenditures immediately expensed for special tax
  - Tax refund of tax value of any losses



#### **Concluding Remarks**

- Alaska oil & gas faces many challenges going forward but it remains an attractive and competitive oil & gas province.
- Going forward tax revenues appear reliant upon new oil & gas developments.
- Proposed tax changes will likely not lead to material reduction of existing production.
- The purely financial impact of the proposed tax change is expected to have a limited impact on current opportunities/investments.
- There is a downside risk if the tax change discourages substantial new developments as the state revenue lost may be materially greater than the incremental tax generated from existing production.



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