State of Alaska

Assessment of Recent Trends in Upstream Oil & Gas and the State of Alaska's Competitive Position

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Agenda

- The Oil and Gas Industry Today
- Alaska in the Global Context
- Considerations for Alaska’s Oil and Gas Taxation Policy

The Oil and Gas Industry Today

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Volatility and Disruption in the Oil & Gas Industry

- The oil & gas industry has been battered by deeply disruptive events in recent years, including the oil price collapse of 2014-2016, the COVID-19 pandemic, the emergence of alternative energy platforms, and a related shift in the long-term prospects of the industry.
- Oil and gas companies have performed poorly, while investors have demanded better financial performance <u>and</u> action on energy transition.
  - Divestments and restructurings have occurred and are ongoing, a renewed focus on capital discipline and investor returns has meant fewer projects are sanctioned, and there is a laser focus on strategy and core assets.
- Resource owners are finding it challenging to attract capital and good operators.
- For governments and states, lower prices and decelerating demand has meant reduced revenues and tax receipts and contraction of the tax base.

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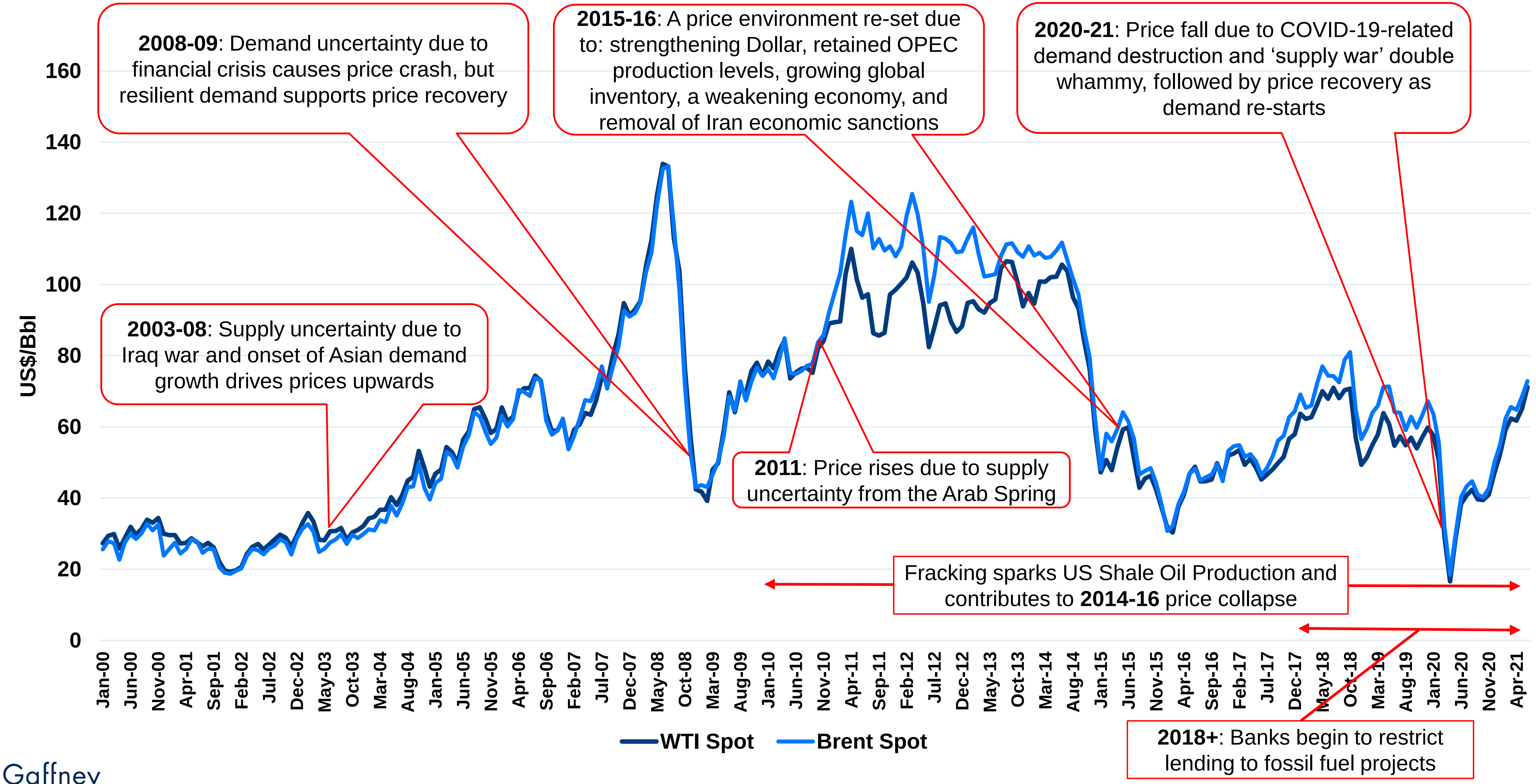
Crude Oil Price Volatility: 2000-2021 Key Events Timeline



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Energy Transition and Oil & Gas

- Many technologies essential to the transition to alternative energy platforms are still in development, and face significant hurdles in terms of addressing intermittency, energy storage and the sheer complexity and cost of implementation.
- While the transition period is uncertain (circa 20-to-40 years), the trends are clear:
  - Innovation and investment focus are leading to new applications and rapid cost reduction.
  - Renewables and other sources of clean power generation are growing rapidly, electric vehicles are established and on the cusp of rapid growth, and decarbonisation has been elevated to ‘core strategy’ for businesses from ExxonMobil to Blackrock.
  - The debate is no longer whether energy transition will happen but how quickly it will happen.
- For resource-rich governments and states, the question is how to address the knock-on impacts of energy transition and, in particular, how to optimize oil and gas resources in a responsible manner while transitioning to alternative energy platforms.

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Energy Transition is an Issue for the Capital Markets

- The Institute for Energy Economics and Financial Analysis maintains a tally of the number of financial institutions/companies who have decided to eliminate or significantly reduce their financial support for oil & gas and coal.
  - **Over 80** global financial institutions are restricting lending and **over 100** have announced their divestment from fossil fuels including coal, oil, LNG, gas, oil sands and arctic drilling.

Bank of America (Arctic Drilling)	Citigroup (Arctic Drilling)	Goldman Sachs (Arctic Drilling)	Inter-American Development Bank (Oil Sands and Arctic Drilling)	JPMorgan Chase & CO (Arctic Drilling)	MetLife (Oil Sands)	Morgan Stanley (Arctic Drilling)	The Hartford Financial Services Group (Oil Sands)	Wells Fargo (Arctic Drilling)	Zurich Insurance Group (Oil Sands)
Barclays (Arctic Drilling)	HSBC Holdings (Oil Sands & Arctic Drilling)	Lloyds Banking Group (Oil Sands & Arctic drilling)	NatWest Group (Oil Sands & Arctic Drilling)	Standard Chartered (Oil Sands & Arctic Drilling)	RSA Insurance Group (Oil Sands & Arctic Drilling)	Pension Insurance Corporation (Oil Sands & Arctic Drilling)	CDC Group (Oil Sands & Arctic Drilling)	Credit Suisse Group (Arctic Drilling)	UBS (Oil Sands & Arctic Drilling)
National Australia Bank (Oil Sands & Arctic Drilling)	Suncorp Group (Will stop financing overall oil and gas sector)	AXIS Capital (Oil Sands)	Royal Bank of Canada (Arctic Drilling)	Bank of Montreal (Arctic Drilling)	Scotiabank (Arctic Drilling)	TD Bank Group (Arctic Drilling)	Axa (Oil Sands)	BNP Paribas (Oil Sands & Arctic Drilling)	Crédit Agricole Group (Oil Sands & Arctic Drilling)
Société Générale (Oil Sands & Arctic Drilling)	Deutsche Bank (Oil Sands & Arctic Drilling)	Generali Group (Oil Sands)	UniCredit (Oil Sands & Arctic Drilling)	European Bank for Reconstruction and Development (Oil Sands & Arctic Drilling)	European Investment Bank (EIB) (Oil Sands & Arctic Drilling)	ABN AMRO (Oil Sands & Arctic Drilling)	Achmea Group (Oil Sands)	ING Group (Oil Sands & Arctic Drilling)	Rabobank (Oil Sands & Arctic Drilling)
Government Pension Fund Global (GPFG) General exclusion of all oil and gas exploration firms globally	Banco Santander, S.A. (Oil Sands & Arctic Drilling)	The World Bank (Oil Sands & Arctic Drilling)	African Development Bank Group (Banque Africaine de Développement) (Arctic Drilling)	Agence française de développement (AFD) (Oil Sands & Arctic Drilling)	Belfius Bank (Oil Sands & Arctic Drilling)	KBC Group (Oil Sands & Arctic Drilling)	Caisse des Dépôts et Consignations (CDC) (Oil Sands & Arctic Drilling)	Crédit Mutuel Asset Management (Oil Sands & Arctic Drilling)	Groupe des Assurances Mutuelles Agricoles (Groupama) (Oil Sands)

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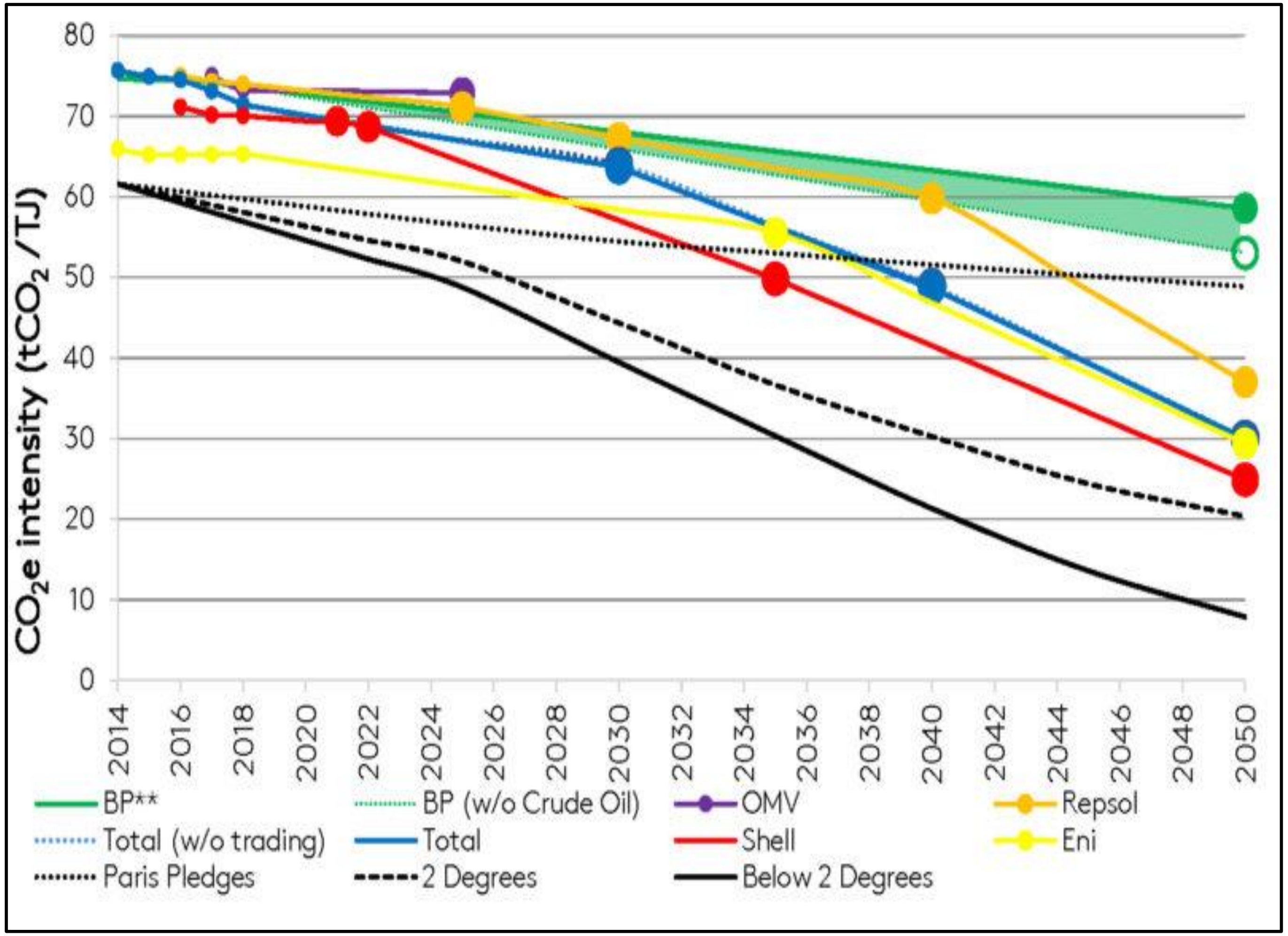
*https://reenergizexom.com/materials/letter-to-the-board-of-directors/

Oil & Gas Portfolio Restructuring due to Energy Transition

- Oil and Gas companies are now restructuring their portfolios to respond to growing climate change pressures.
- But is Big Oil simply shifting carbon to ‘Little Oil’ and claiming credit?
- In any event, restructuring will occur over an extended period, along with the energy transition process.



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Source: LSE Grantham Research Institute on Climate Change and the Environment

Decelerating Demand and the Competition for Investment Dollars

- The trends relevant to Alaska and other oil producers are increasingly clear:
  - The lowest cost producers (Saudi Arabia and Gulf countries) will have an increasing advantage in a lower demand environment, with strong drivers to maximize production to meet budgetary requirements, and a goal to extract as much value as possible from their oil and gas resources while they can.
  - Shale oil will remain a potent force with its ability to react quickly to demand/price spikes, which will restrain upward price pressure.
  - Decelerating demand and a muted price environment will likely mean less upstream investment and activity through 2050, especially for ‘big ticket’ long lead time investments.
- For oil and gas producers such as Alaska, the competition for oil and gas investment dollars is fierce and getting fiercer.
  - Oil and gas companies will impose high profitability / return hurdles for upstream investment.
  - Oil and gas companies are making decisions today that will determine the extent to which Alaska is able to monetize its oil and gas resources in the future.

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Government Actions to Promote Investment and Production

- Governments compete on the global stage for exploration and development capital, which provide the long-term basis for tax revenues.
- In response to such changes in market conditions, it is common for proactive governments to reassess existing fiscal terms and to consider incentives to ensure continued exploration and development in the domestic energy sector.
- There have been substantial changes made to upstream oil and gas terms stemming from the change in market conditions in 2014 as well as some responses to the price decrease observed in 2020.
- It should be noted that due to the time required to review and approve fiscal changes, particularly at a national legislative level, there is often a delay in their implementation and a time lag after implementation before they have effect.

Alaska in the Global Context

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Alaska's Oil and Gas Sector is Maturing and Facing Headwinds

- Alaska has been a destination of choice for many leading oil and gas companies with its attractive resources, access to market, skilled workforce and service company base.
- In recent years, however, Alaska's oil and gas sector has faced challenges:
  - Key assets like Prudhoe Bay are maturing and producing far less oil.
  - Bringing new assets on stream to replace declining production from maturing fields has not been straightforward (consider Willow as an example).
  - Alaska is a difficult and high-cost operating environment, with only a short window of time each year for key activities when ice roads are available.
  - At the same time, Alaska has faced the same headwinds as others globally.
- SB 21 (MAPA) introduced the Per Barrel Tax Credit to reverse investment and revenue declines.
  - Since MAPA became law, the production decline trend appears to have stabilized.
  - Fiscal changes typically take time to take effect and can be overwhelmed by events.

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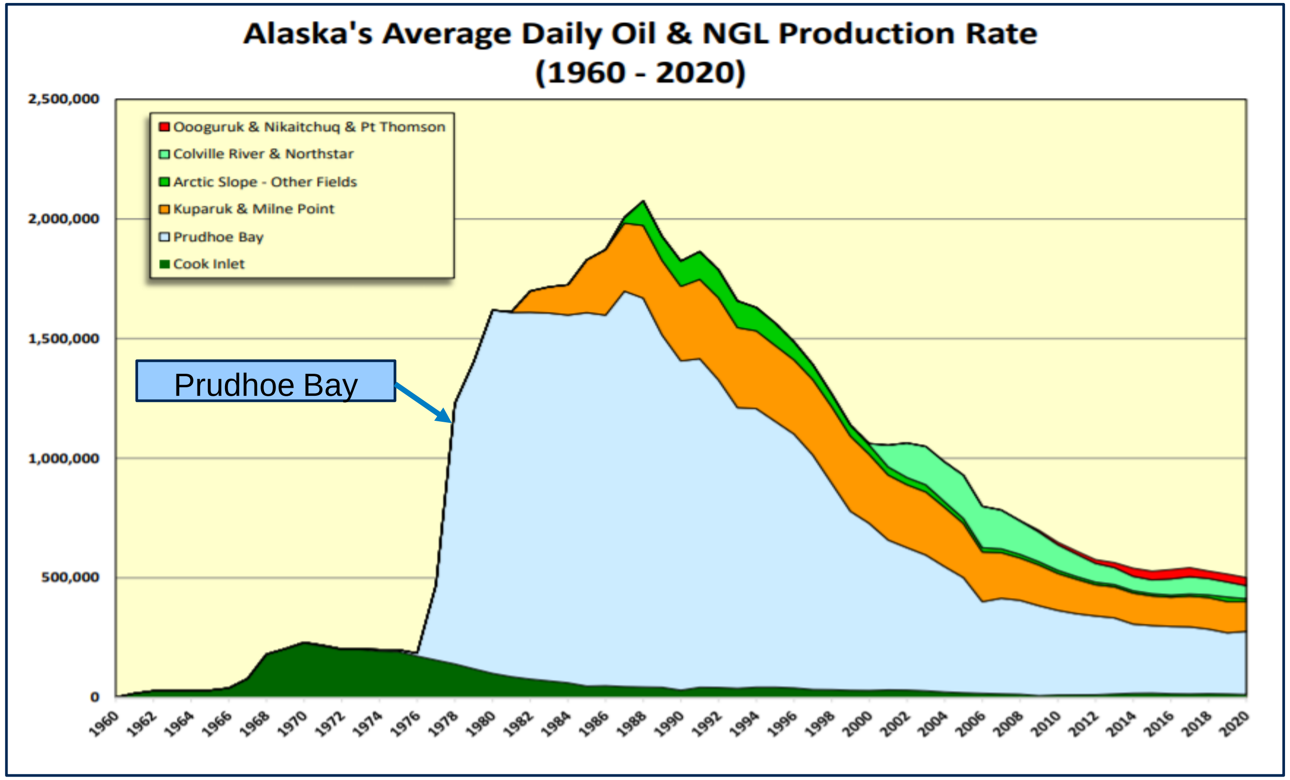
Maturing Assets lead to Oil Production Decline from 1980s' Highs

- Alaskan crude oil production averaged 448 MBPD in 2020, equivalent to 4% of US oil production.
  - 75% less than peak production of more than 2 MMBPD in 1988.
- Exemplified by Prudhoe Bay, where production of circa 1.5 MMBPD during the 1980s has declined steadily, reaching 215 MBPD in 2020.
- Other assets are also maturing with production in decline, save for Oooguruk + Nikaitchuq + Point Thomson.
  - Production from this grouping commenced in 2008, reaching circa 34 MBPD in 2020.
- Alaska's newest fields, Point Thomson and Greater Moose's Tooth Unit began regular production in April 2016 and May 2018, respectively.



- Despite declining production, oil and gas continues to provide substantial revenue.
- During 2014-16, petroleum revenues decreased from US$4.8 billion to under US$0.9 billion); circa 11,700 jobs were lost*.

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* 2018 McDowell Group report on the Role of the Oil and Gas Industry in Alaska's economy. Production graphic & data source: Alaska Oil and Gas Conservation Commission.

Sustaining Petroleum Revenues for Alaska

- To reverse or offset crude oil production declines, not only must existing projects be nurtured and sustained for as long as economically feasible, new projects must be sanctioned and brought online to 'fill the gap.'
  - The economy and many high paying jobs for Alaskan families are reliant upon continued oil revenues.
  - Alaska is focused on alternative energy platforms to drive the economy in the future, but oil revenues are critical to subsidize the decades-long transition to alternative energy platforms.
- ConocoPhillips' Willow project is key.
  - An US$8 billion development expected to create more than 2,000 construction and 300 permanent jobs if sanctioned, and become the largest project on the North Slope since Alpine in the late 1990s.
  - Resources estimated at circa 600 MMBOE are envisaged to produce over 160 MBOED at peak from a new stand-alone processing facility tied into TAPS.
  - In August 2021, a federal court vacated the Bureau of Land Administration's 2020 approval.
- Aside from Willow, other projects include Oil Search/Repsol's Pikka project, which envisions production of 80 MBPD from Phase 1, at a US$3 billion development cost, and up to 120 MBPD when fully built-out at a cost of ~US$6 billion.

Protecting the Petroleum Tax Base and the Economy

- Petroleum-related revenues are a significant contributor to Alaska and have been and will continue to be under pressure as the industry changes with a move toward alternative energy systems, increasing asset maturity, and other factors.
- To sustain those revenues and the high paying jobs provided by the industry, Alaska needs the participation of as many companies as possible, from the very large to the small, to explore, develop and produce its diverse resource base and sustain and build the tax base.
  - Large projects like Willow and Pikka are essential and require significant investment, application of human and technical resources, and an appetite for risk - which typically requires large companies making long-term strategic commitments.
  - Mature assets are essential too, and the participation of smaller, nimble companies is key to optimizing these assets and tax revenues from them.
- Attracting oil and gas investment and participation is a ‘competitive activity’, with major producers in the US and globally competing for the same participants and investment dollars – considerations around tax burden and overall costs are critical in that competition.

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Considerations for Alaska's Oil and Gas Taxation Policy

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Tax Policy Considerations

- Alaska's strategy to extract more revenues from the oil & gas sector will need to consider not only near-term revenue capture objectives, but also medium- and long-term impacts on oil and gas development and production and the tax base.
  - Ensure that companies are not discouraged from taking on big investment, step-change developments that will replace declining revenues from existing fields; and
  - Ensure that existing companies and new entrants continue to invest in mature fields, and so extend the productive life of existing assets.
- Global experience suggests that if the taxes are too high:
  - Companies will seek to exit and/or go into 'harvest mode', and
  - Invest in other more tax friendly jurisdictions.
  - All of which will contribute to reduced investment and activity in the oil and gas sector and to production declines.
- Tax policy must be crafted and sufficiently nuanced to support effective revenue capture while maintaining healthy participation across the different asset types.

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The Existing Tax Credit and Alaska's Competitive Position

- For Alaska, the key has always been striking the right balance between tax revenue capture and maintaining a healthy and vibrant oil and gas sector that is competitive with other major oil and gas producers around the world.
- Is Alaska competitive with its current tax structure in today's global supply and demand market?
- This is a complex question but the indications suggest that Alaska has a competitive fiscal system at this time.
  - Stabilization of production levels from the steady decline pre-MAPA is positive.
  - New entrants taking over large mature assets and the willingness of companies to invest in big projects like Willow and Pikka are positive.
- Important to note that Alaska's competitiveness is not a given or static – the competitive landscape changes constantly and continuing assessment is necessary to ensure that Alaska's fiscal terms capture robust revenues for the state, while at the same time promoting exploration, development and production of vital oil and gas resources.

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