



AOGA

Alaska Oil & Gas Association

Legislative Working Group

July 10, 2018

AOGA Membership



2016 Primary Industry Spending



- Employed 5,033 workers in Alaska
 - 4,275 AK residents earning \$749 million in wages
- Spent \$4.6 billion with ~1,000 Alaska vendors
 - \$1 million in spending for each Primary Company job
- Generated multiplier effect resulting in 41,300 jobs and \$2.4 billion in wages

Total: 45,575 jobs & \$3.1 billion in wages

2016 State & Local Government Impacts

- State agency operations: **19,500 jobs**
- State programs: **19,600 jobs**
- Capital spending: **10,400 jobs**
- PFD Distribution: **4,200 jobs**
- Local govt. operations & projects: **4,600 jobs**



Total: 58,300 jobs & \$2.9 billion in wages

2016 Industry & Government Impacts

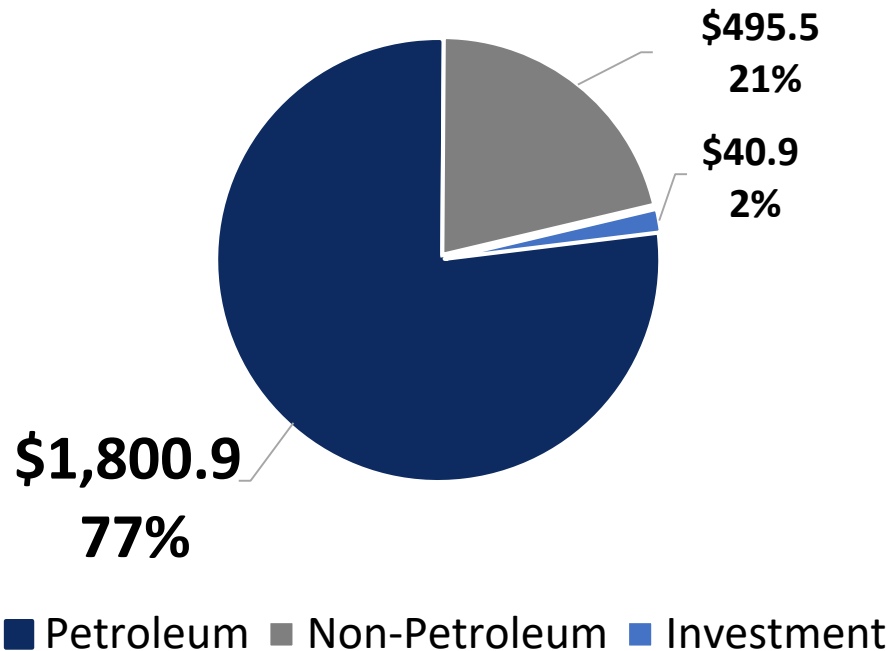


- **103,875 total jobs**
 - 32% of all jobs in Alaska
- **\$6.0 billion in wages**
 - 35% of all Alaska wages
- **Compared to...**
 - *Seafood* → 60,000 jobs/\$2.1 billion in wages
 - *Visitor Industry* → 40,000 jobs/\$1.4 billion in wages
 - *Mining* → 9,000 jobs/\$700 million in wages

Oil Dominates State Revenues

FY18 Unrestricted General Fund (UGF) Revenues

values in millions



FY17 local property taxes

\$443 million

FY18 restricted revenue

\$413 million

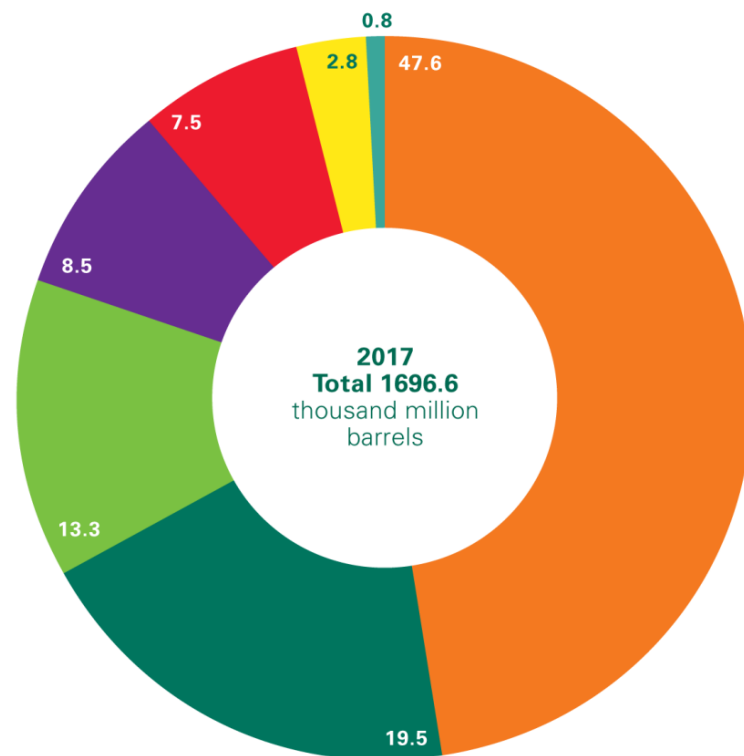
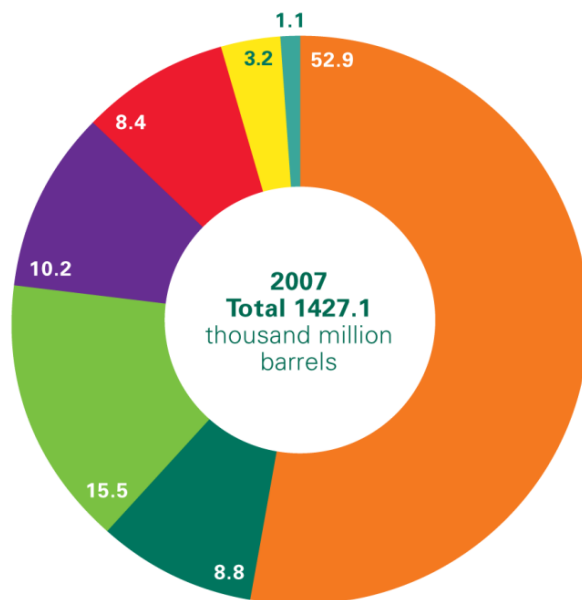
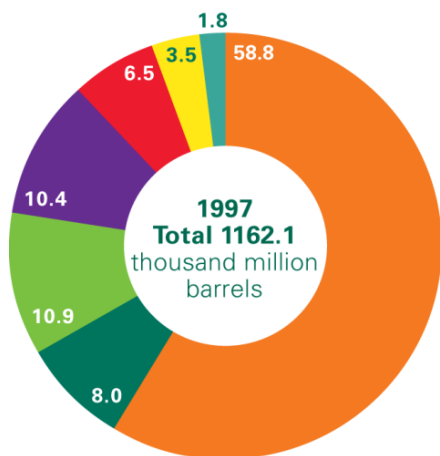
**\$2.7
BILLION**

FY18 Predicted State & Local
Oil Revenues

Source: Spring 2018 Revenue Sources Book, Department of Revenue

Distribution of Proved Reserves, 1997, 2007, 2017

- Middle East
- S. & Cent. America
- North America
- CIS
- Africa
- Asia Pacific
- Europe

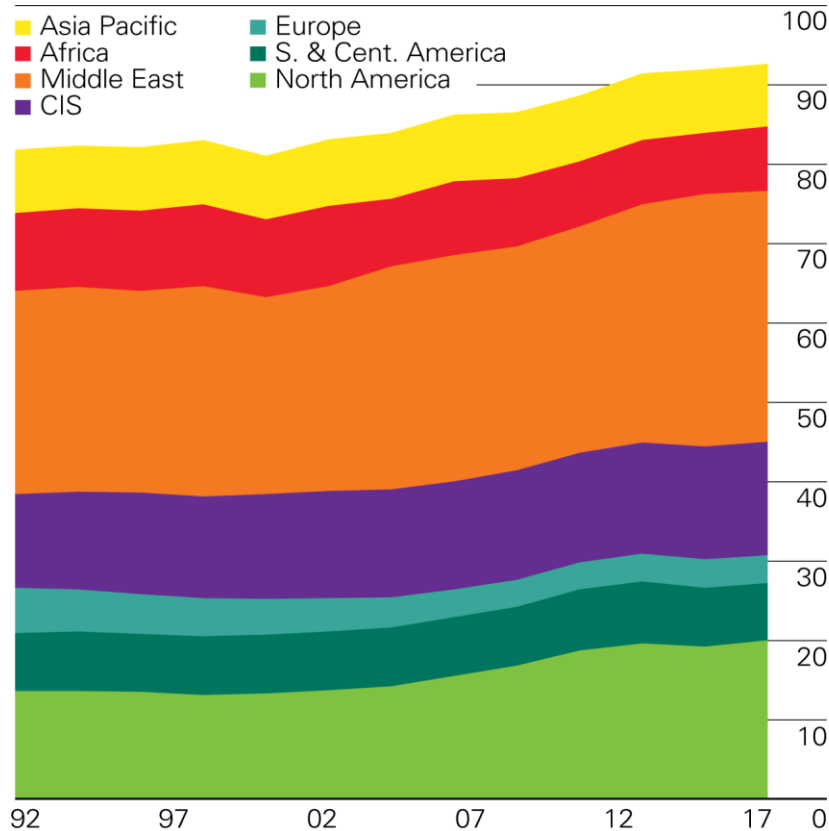


Source: BP Statistical Review of World Energy 2018
© BP p.l.c. 2018

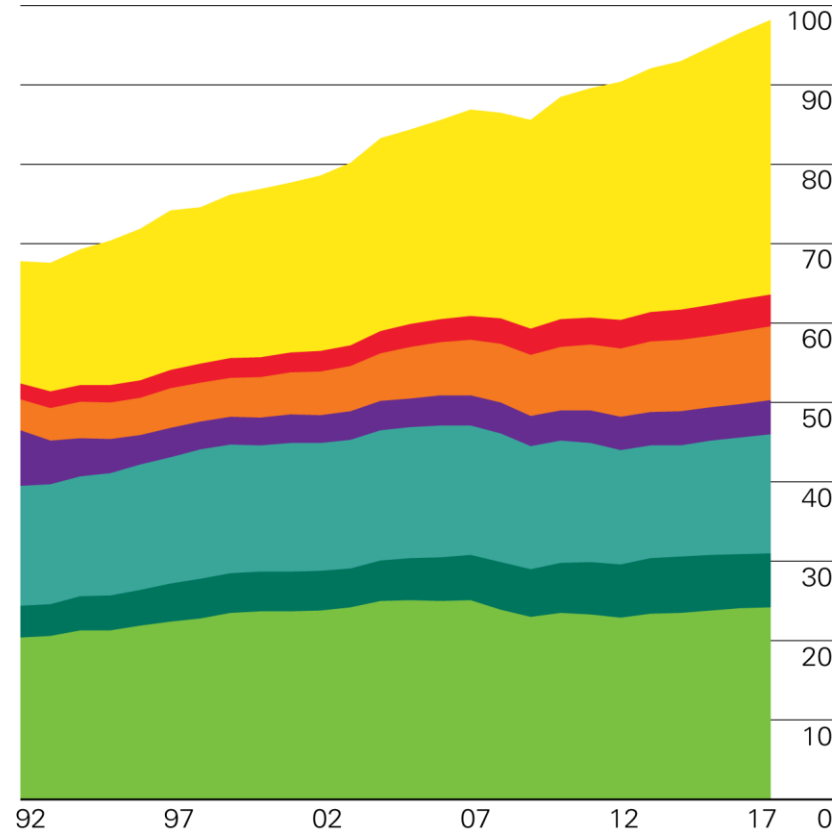
Oil production/consumption by region

Million barrels daily

Production by region



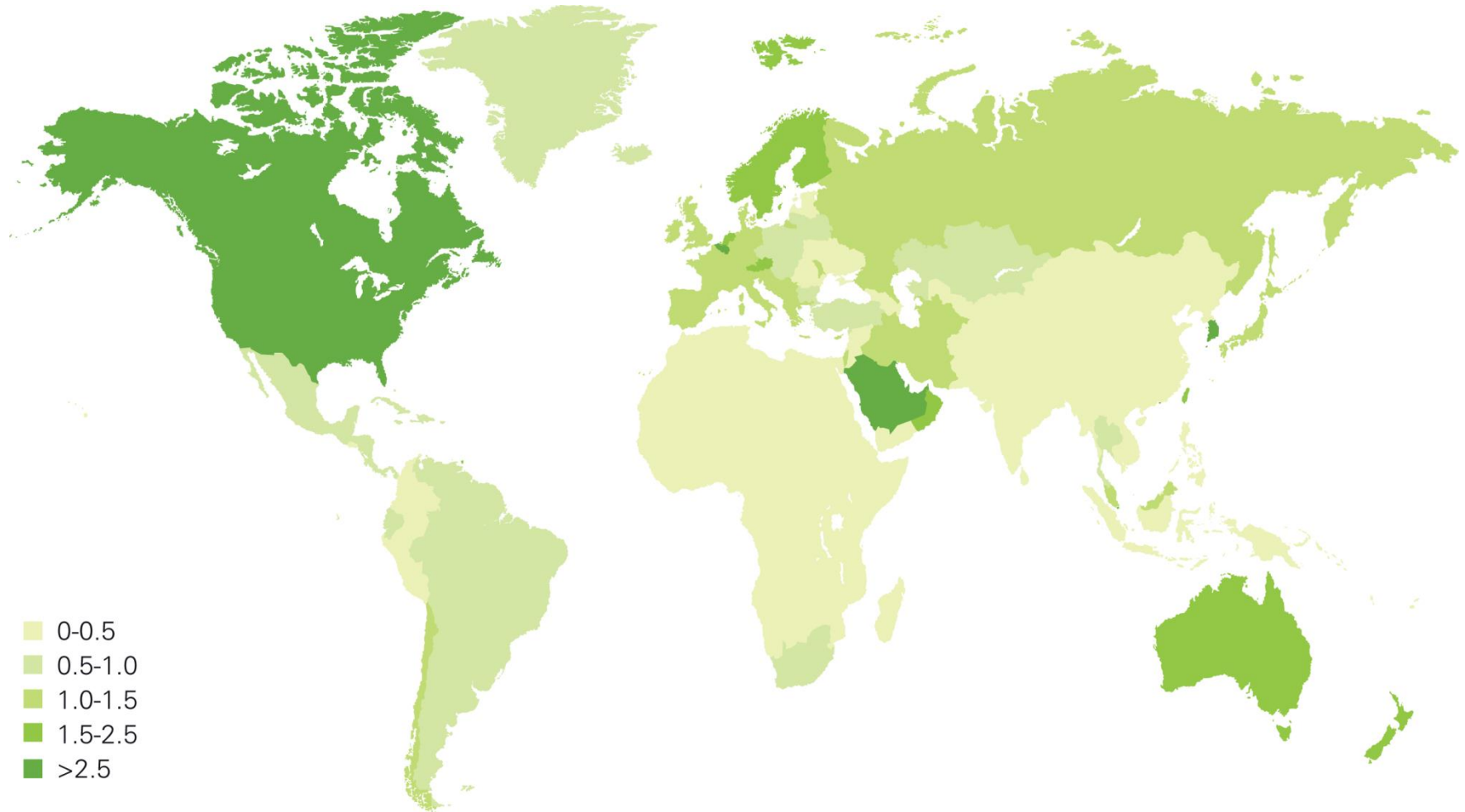
Consumption by region



Source: BP Statistical Review of World Energy 2018
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Oil consumption per capita 2017

Tonnes

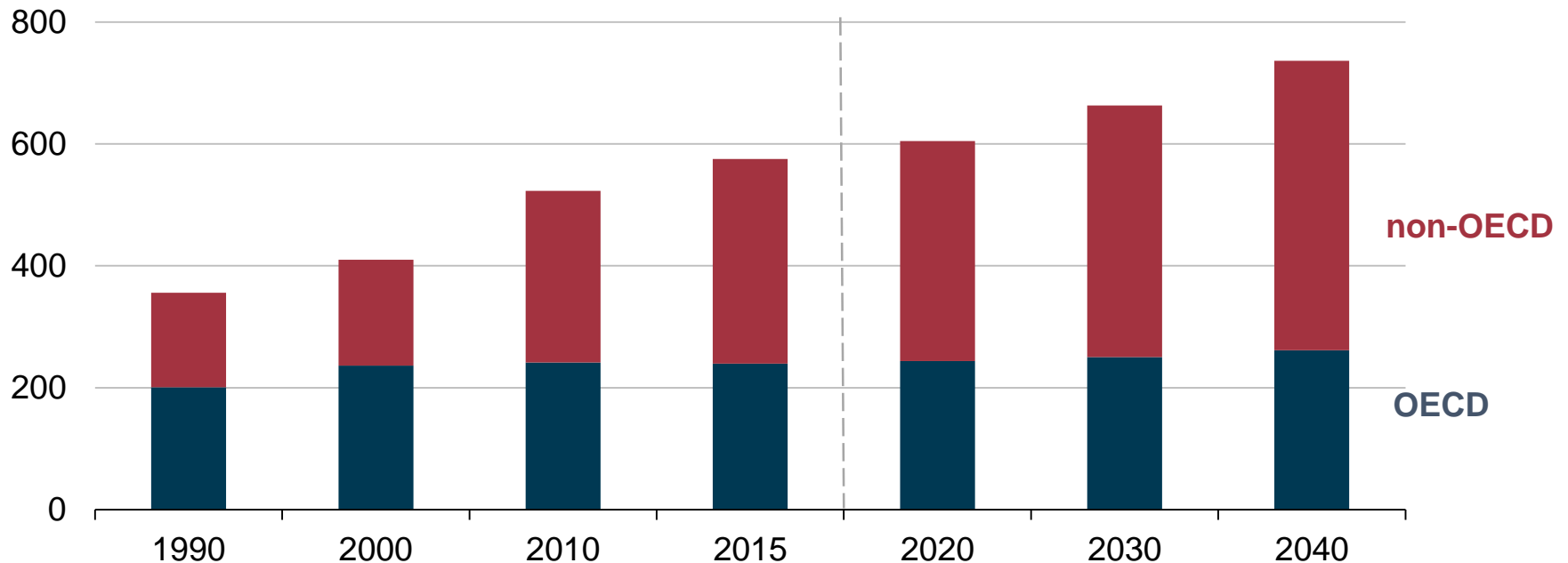


Source: BP Statistical Review of World Energy 2018
© BP p.l.c. 2018

World energy consumption rises 28% between 2015 and 2040 in EIA Reference Case

World energy consumption

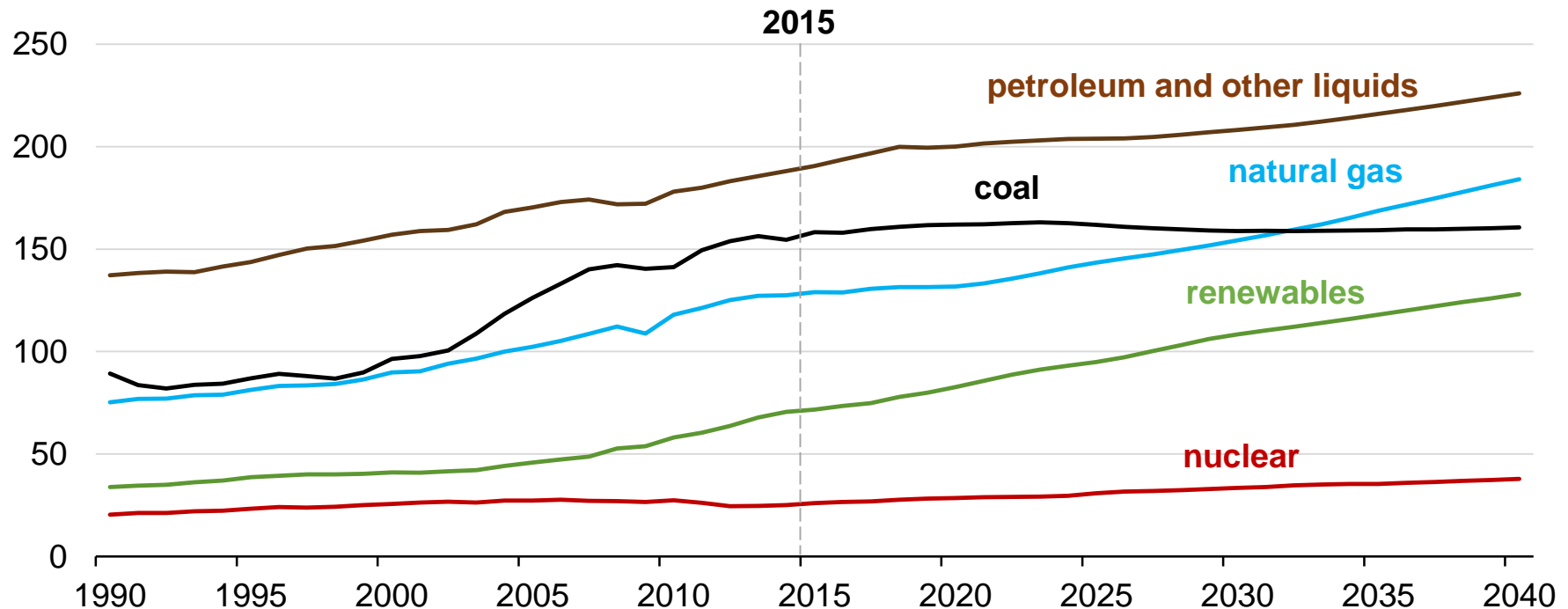
quadrillion Btu



Source: U.S. Energy Information Administration
#IEO2017 – www.eia.gov/ieo

Forecast for energy consumption to increase for all fuels other than coal

World energy consumption by energy source
quadrillion Btu

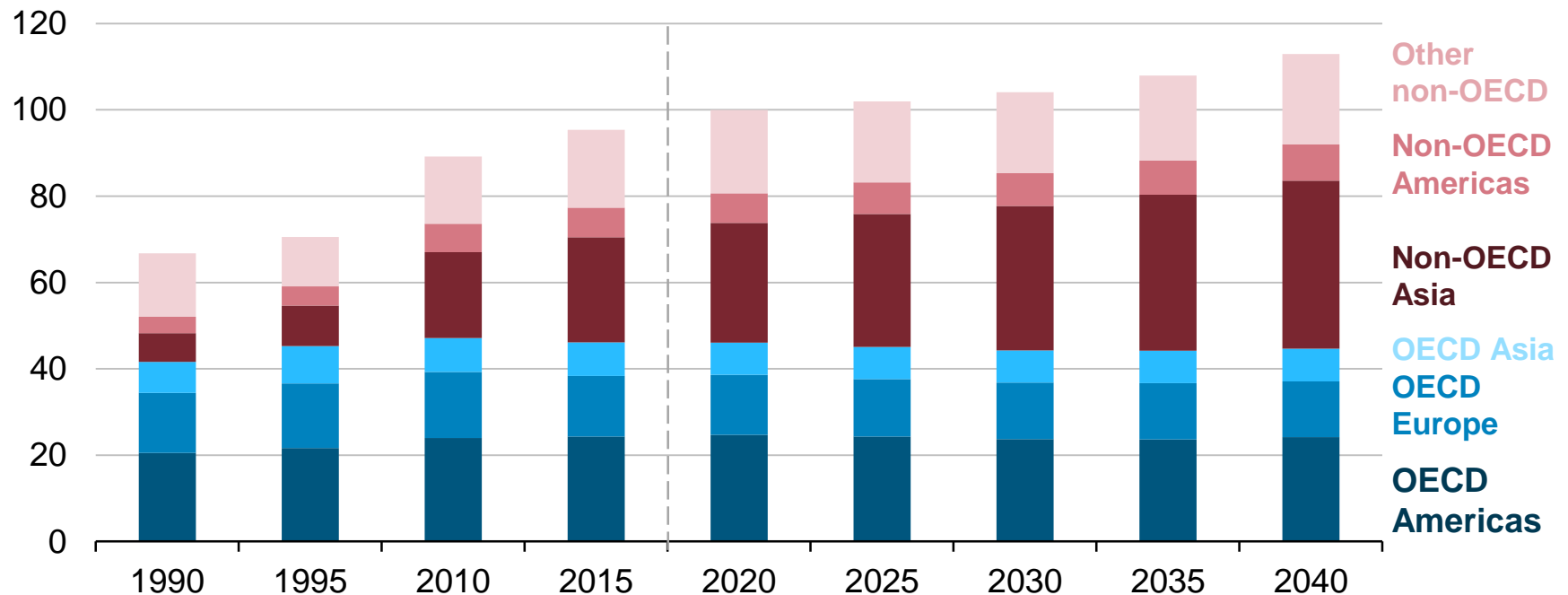


Source: U.S. Energy Information Administration
#IEO2017 – www.eia.gov/ieo

World petroleum and other liquid fuels consumption grows by 18% between 2015 and 2040

Petroleum and other liquids consumption

million barrels per day



Source: U.S. Energy Information Administration
#IEO2017 – www.eia.gov/ieo

Alaska's Mega Resources

RESOURCE POTENTIAL	
STATE LAND	FEDERAL LAND
Cook Inlet 599 mbo and 19 tcf gas	Offshore Arctic 27 bbo and 132 tcf gas
Onshore North Slope <u>Conventional</u> 5 bbo and 35 tcf gas <u>Heavy/Viscous</u> 24-33 bbo <u>Unconventional</u> 2 bbo and 12 tcf gas	NPR-A 8.8 bbo and 39.2 tcf gas ANWR 10 bbo and 3.5 tcf gas
mbo - million barrels of oil bbo - billion barrels of oil tcf - trillion cubic feet	

Source: USGS

Opportunity is on the Horizon...



Caelus' Nuna Project

Est. ~20-25,000 barrels per day at peak



Glacier Oil & Gas

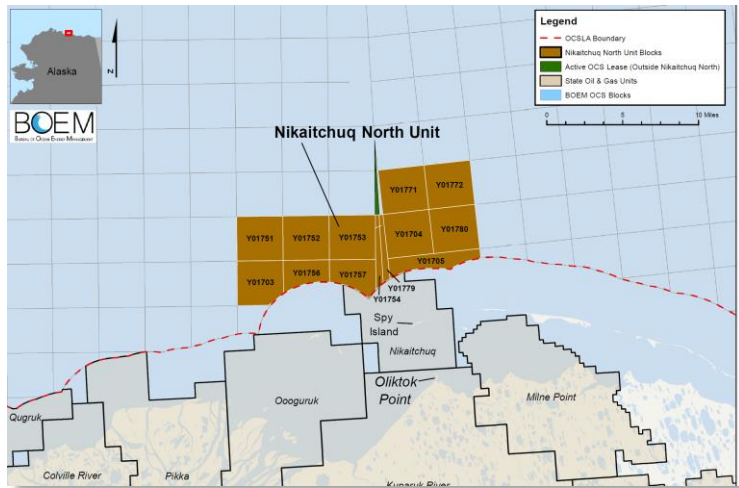
Future plans at Badami



Hilcorp's Liberty Project

Est. ~60,000 barrels per day at peak

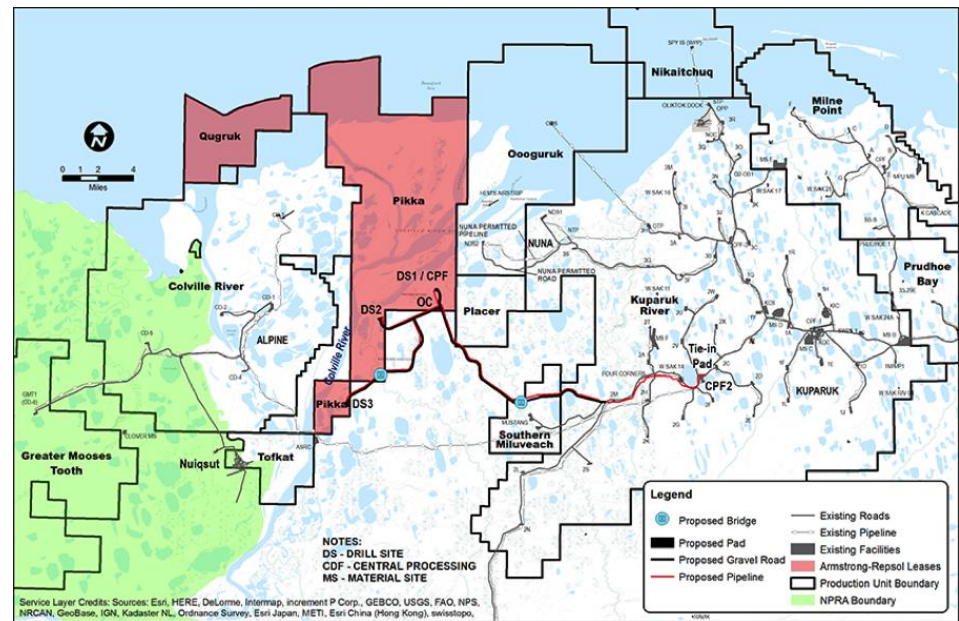
...And Alaska is Just Getting Started



eni

Four exploration wells approved
for 2017-2019

**Pikka Project by Armstrong,
Repsol, & Oil Search**
Est. ~120,000 barrels per day at peak



Federal Government Aligned with Alaska

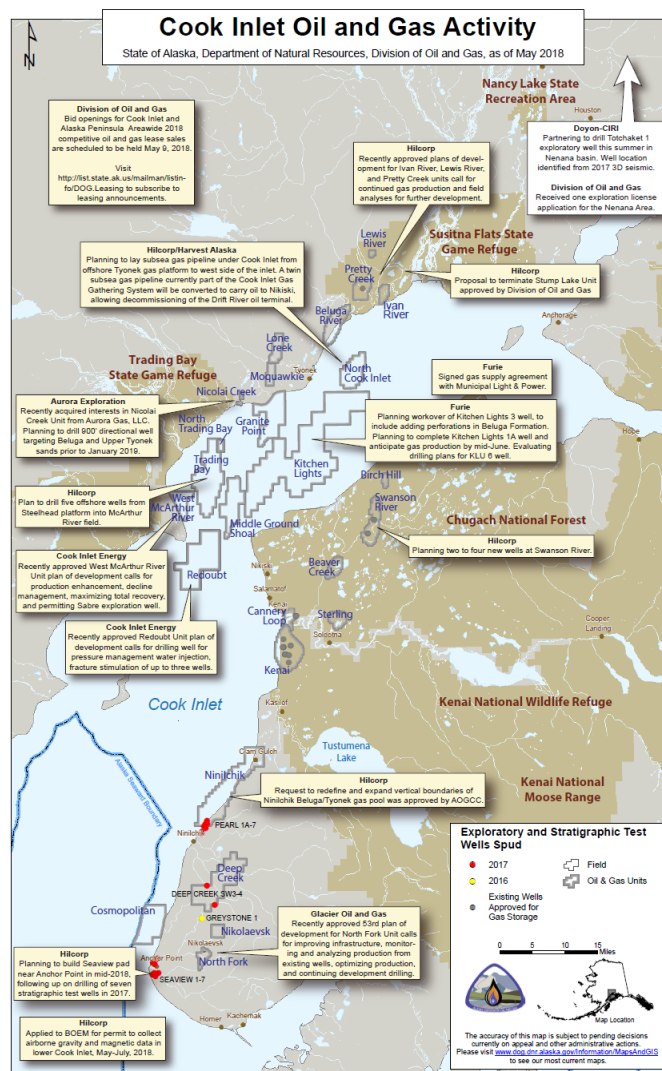
ANCHORAGE DAILY NEWS

December 20, 2017

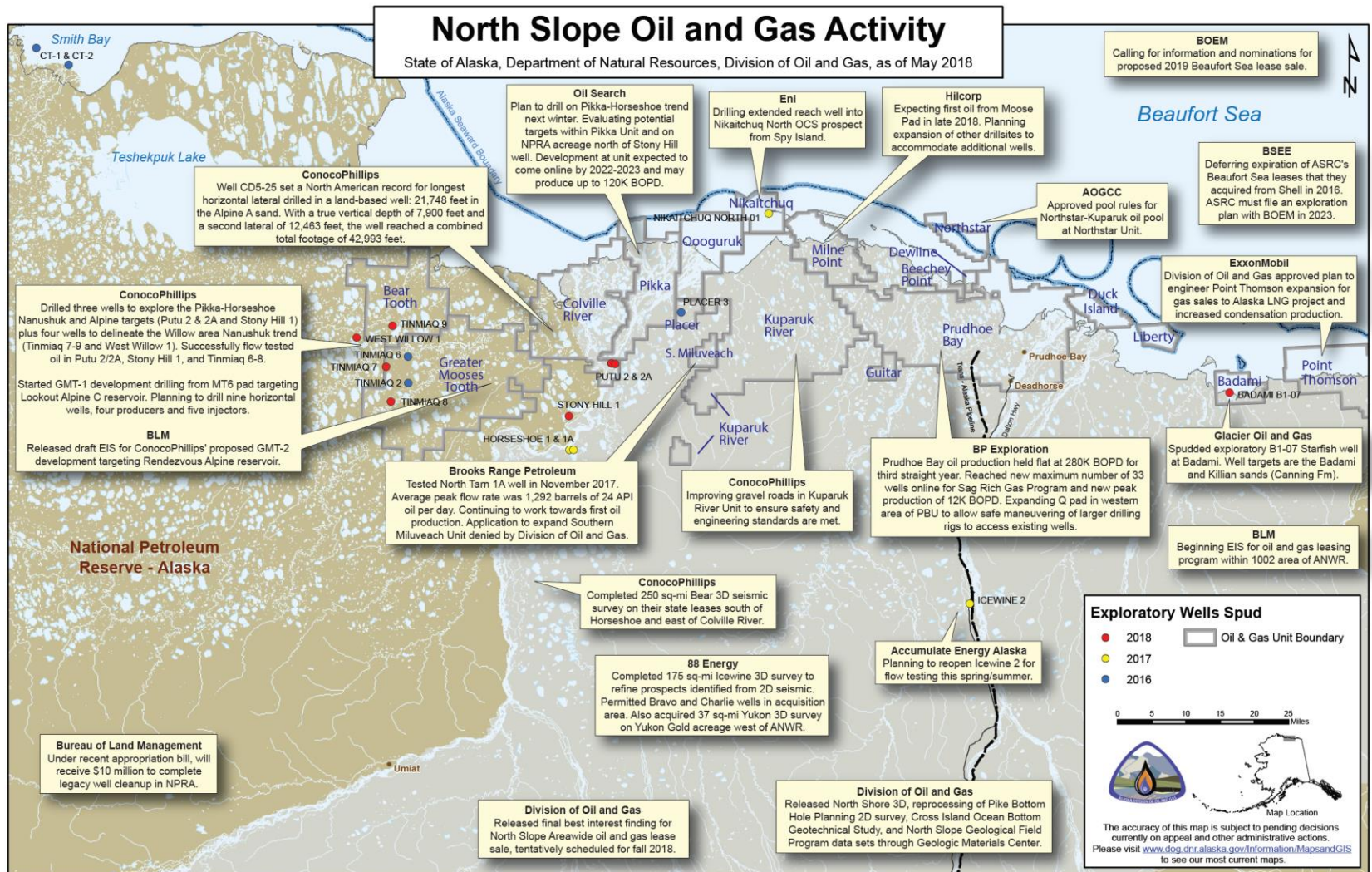
‘A historic moment’: How ANWR drilling was passed by Congress after decades of effort



Cook Inlet Activity Map – May 2018



North Slope Activity Map – May 2018

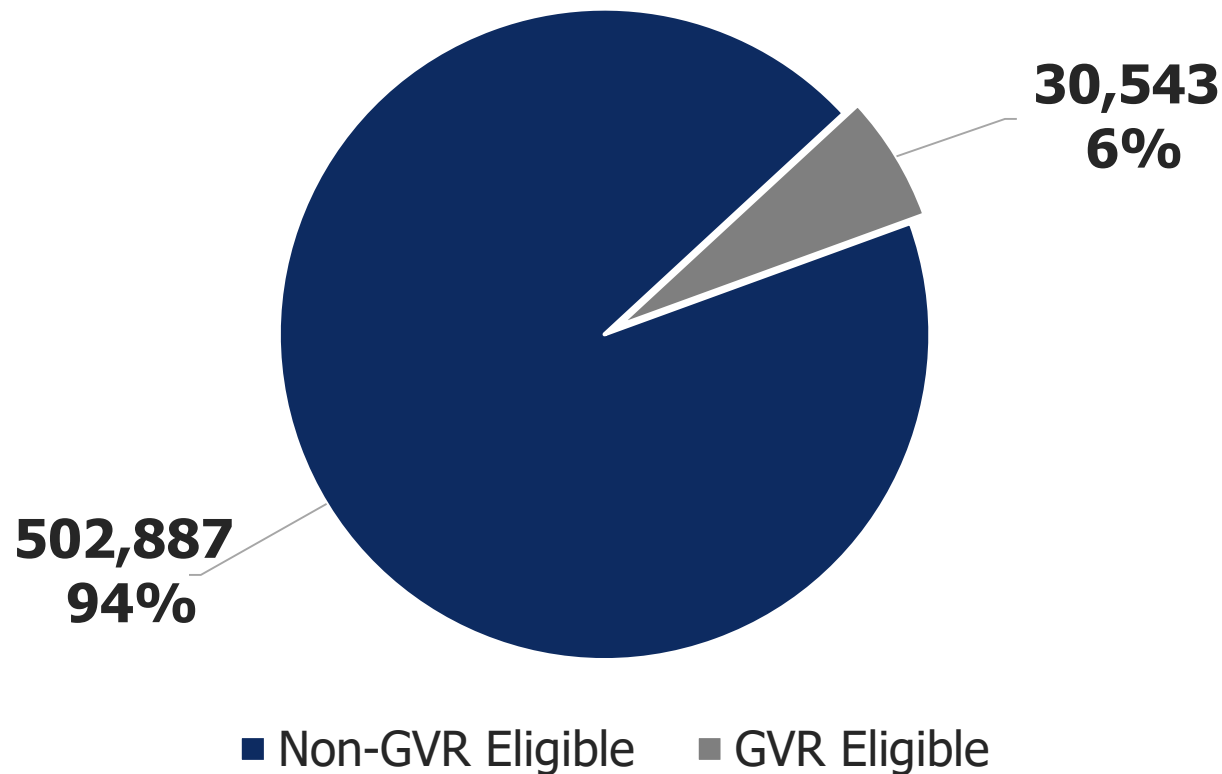


What Portion of Current Production is New Oil?

FY19 North Slope Production

GVR vs Non-GVR

barrels of oil per day

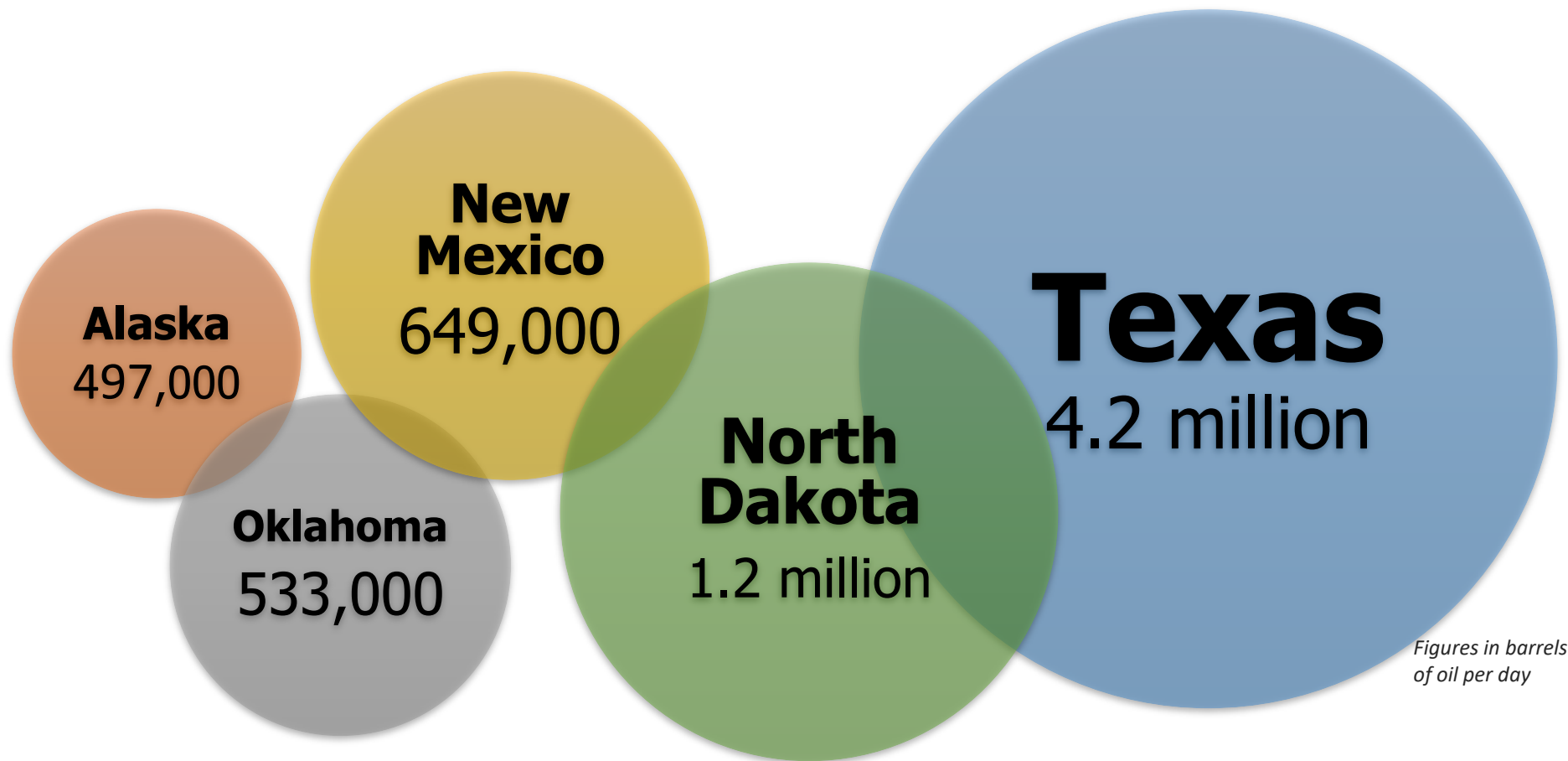


Source: Fall 2017 Revenue Sources Book, Department of Revenue

GVR: Gross Value Reduction, i.e. new oil

Alaska is Falling Behind

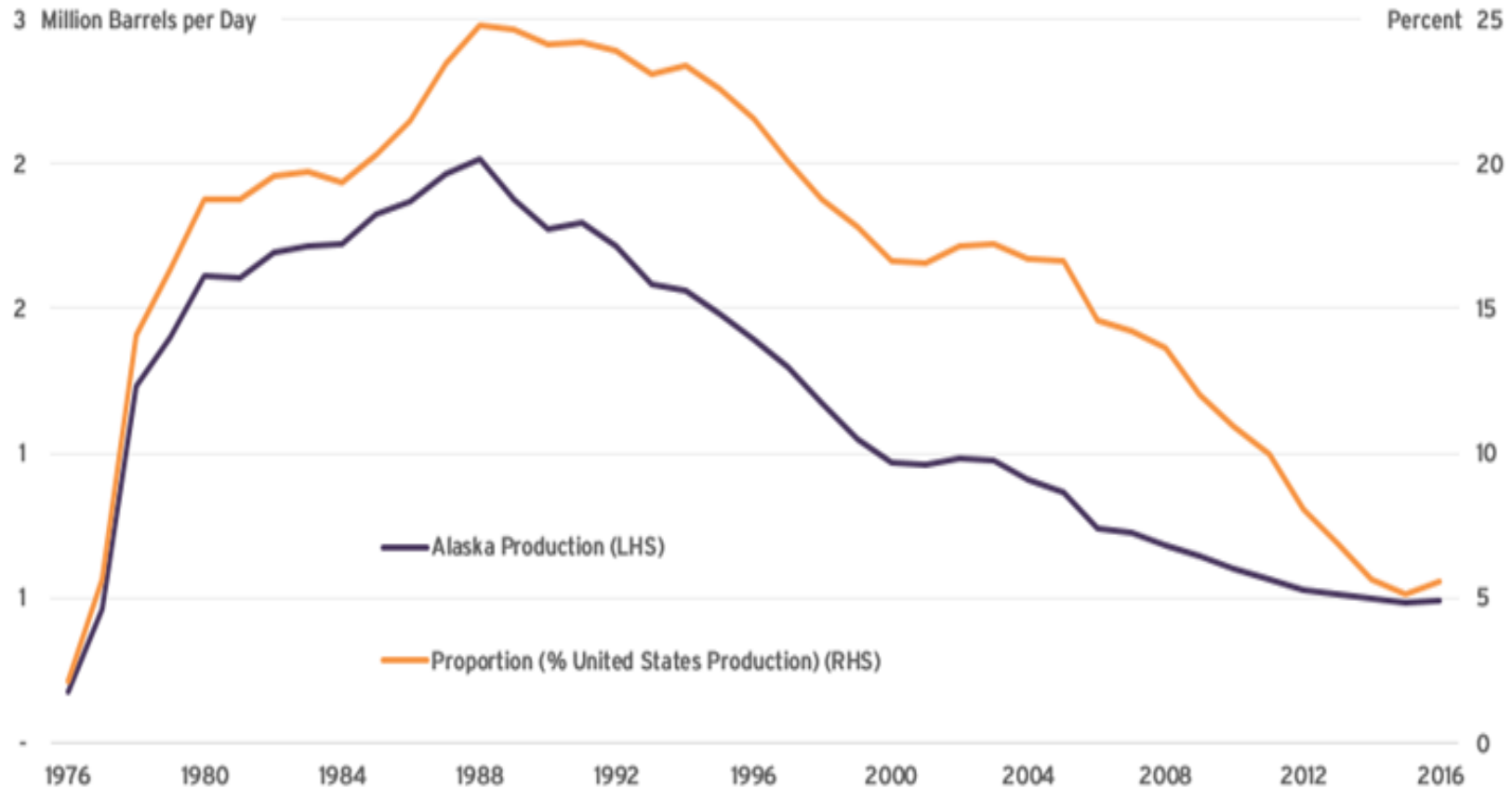
Source: U.S. Energy Information Agency – April 2018 Oil Production



Alaska now ranks 5th among U.S. oil producing States

Alaska production is only 5% of total US Production

Alaskan Production Declines and So Does Its Share of Total U.S. Supply

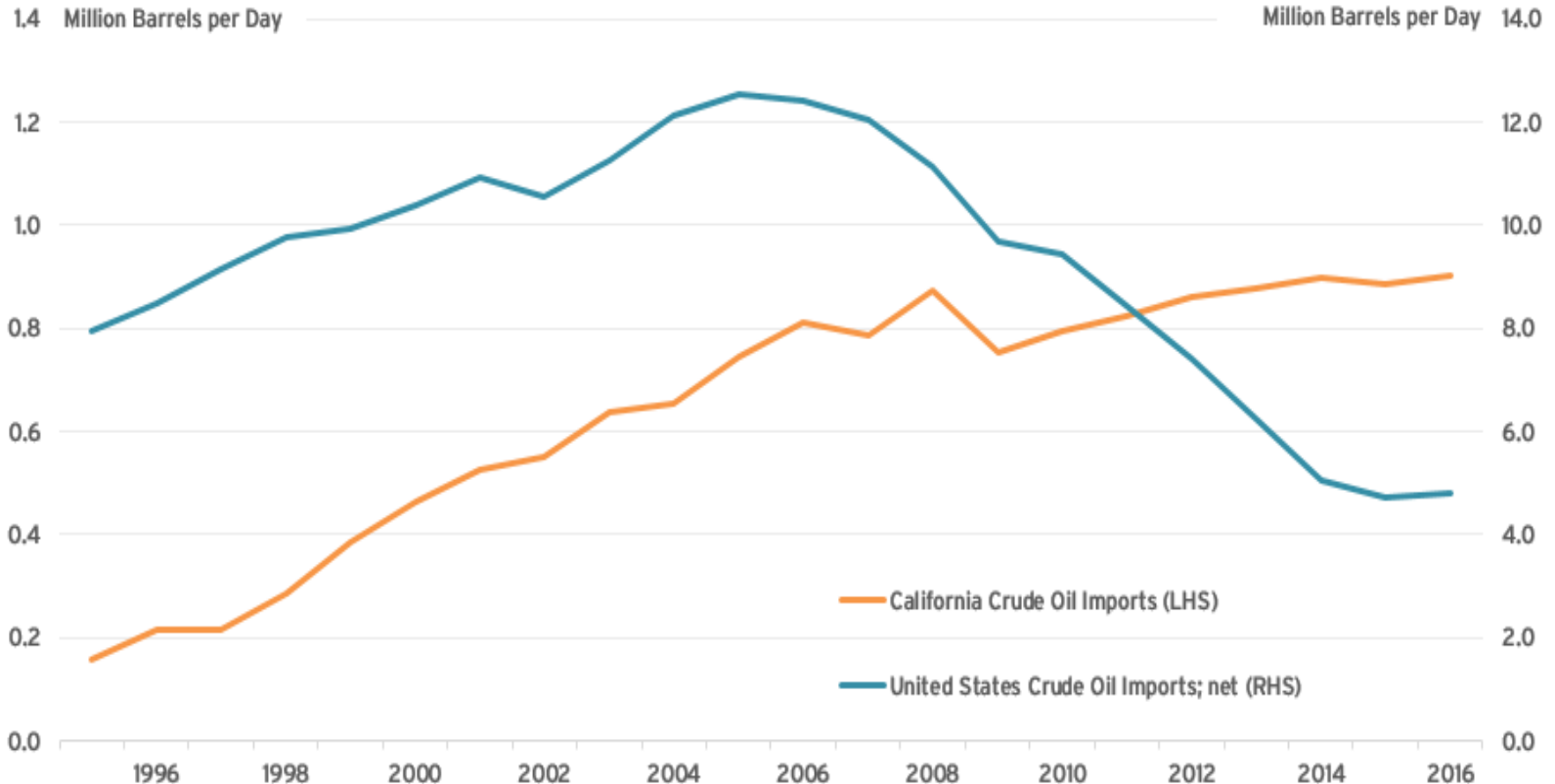


Source: SAFE analysis based on data from EIA.

Source: Testimony in U.S. Senate Energy & Natural Resources Committee, Nov. 1, 2017

As Alaska production declined, California imports increased

California Imports Rise, While U.S. Imports Fall



Source: SAFE analysis based on data from EIA and the California Energy Commission.

Source: Testimony in U.S. Senate Energy & Natural Resources Committee, Nov. 1, 2017

Alaska Needs Investment

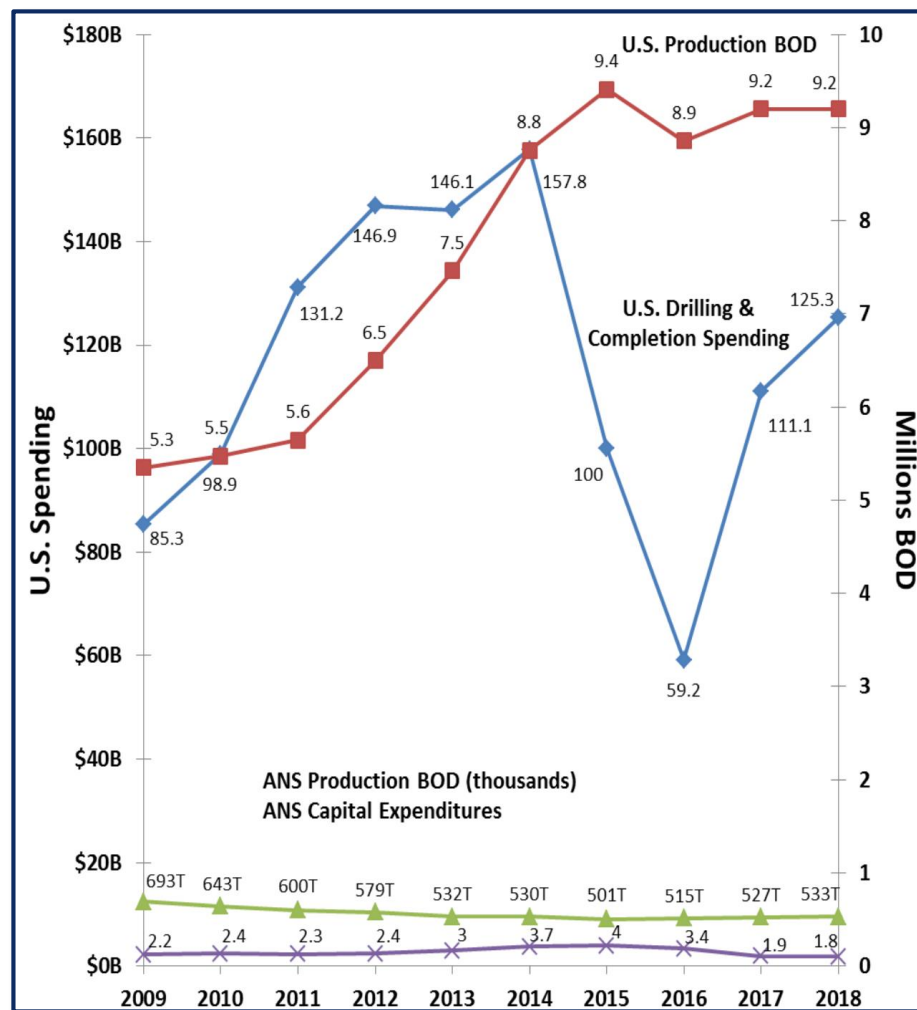
Today, Alaska is only capturing 1.7% of total U.S. investment, or ~\$1.9 billion in capital.



Recent history shows Alaska needs at least \$3.6 billion of investment capital to grow production.



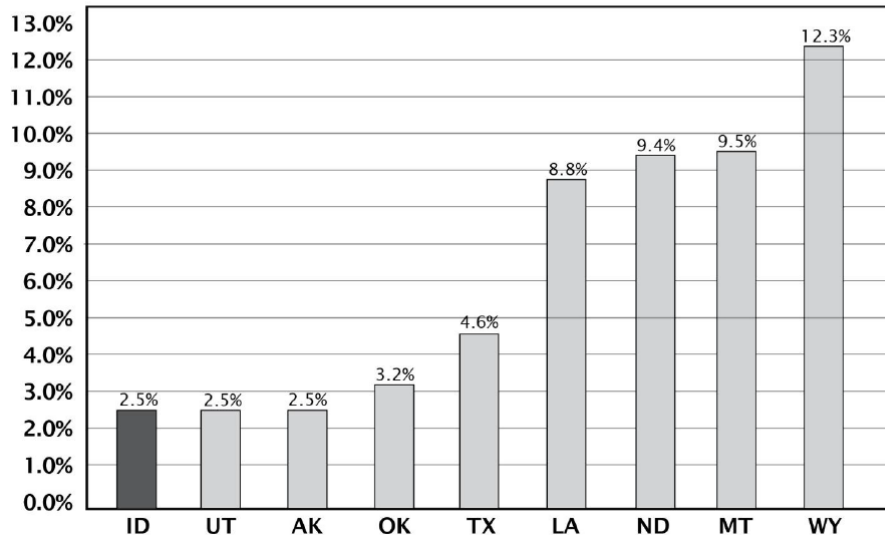
How does Alaska compete for the investment capital necessary to grow production beyond 2018?



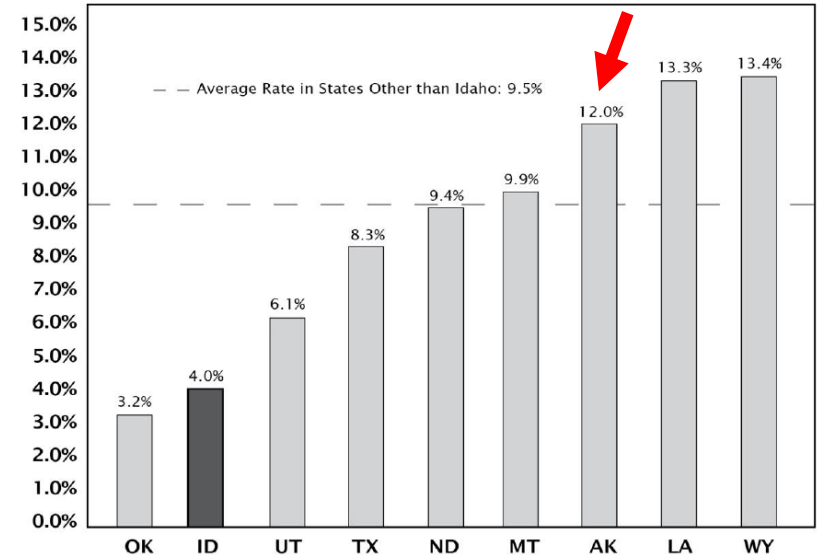
Source: U.S. Energy Admin, Spears & Associates; Alaska Revenue Sources Book

Fact: Alaska's tax rate exceeds U.S. average

**EFFECTIVE TAX RATES
SEVERANCE AND PRODUCTION TAXES**
Fiscal Year ended 6-30-16



**EFFECTIVE TAX RATES
INCLUDING AD VALOREM TAXES**
Fiscal Year ended 6-30-16

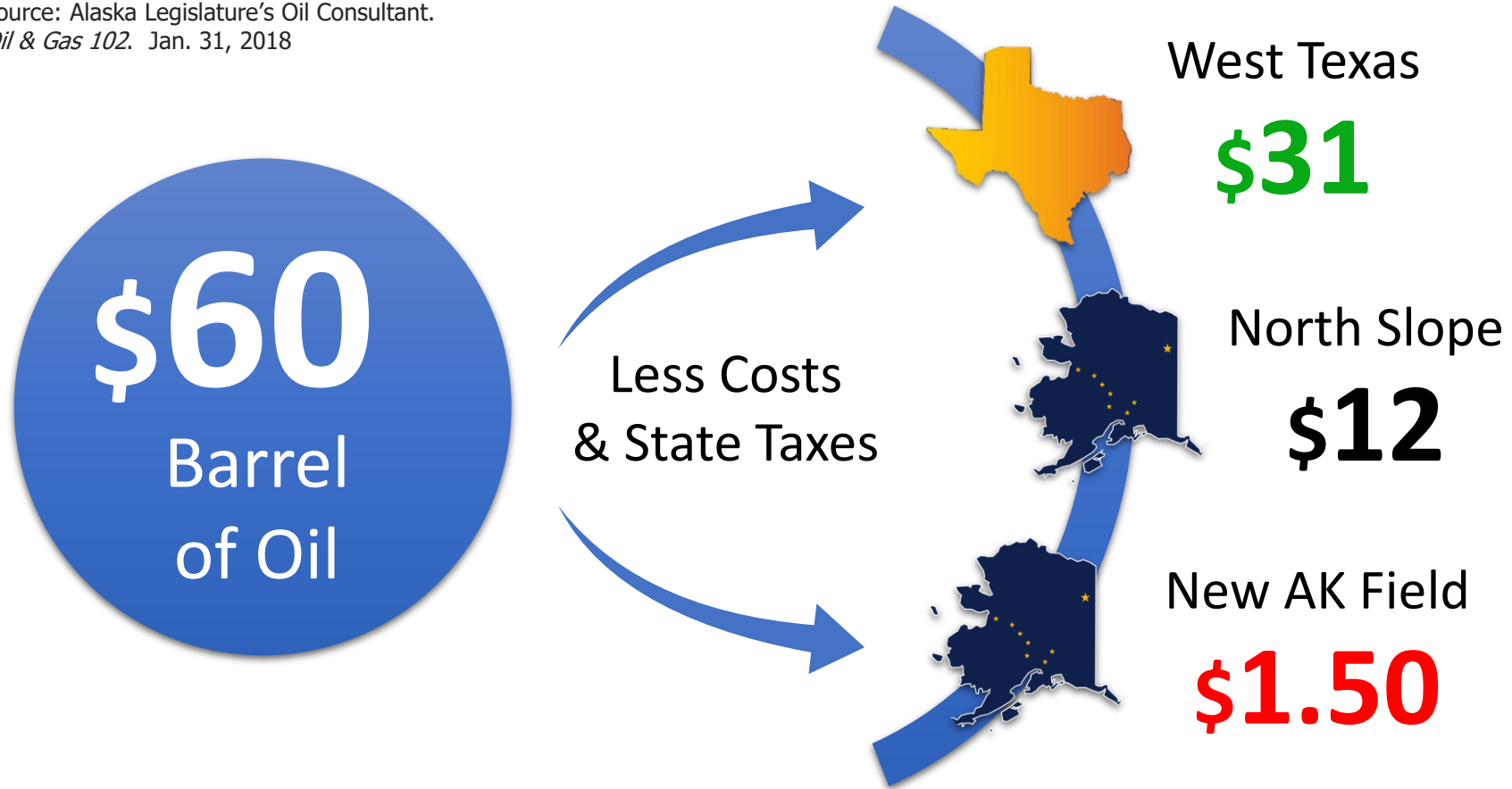


Source: Idaho Department of Lands. (2017). 2016 Oil and Gas Taxation Comparison.

***Investment decisions are based
on ALL tax rates.***

How much do producers earn?

Source: Alaska Legislature's Oil Consultant.
Oil & Gas 102. Jan. 31, 2018



Where would you invest?

Stable Tax Regime Essential for Economic Growth

Northern Opportunity

*Alaska's Economic
Development Strategy*

ALASKA
NORTH TO OPPORTUNITY

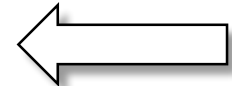
Objective: Strengthen existing resource extraction industries, including the Oil and Gas and the Mining Sectors

Objective Partners: Alaska Oil and Gas Association, Alaska Miners Association, Resource Development Council Alaska, Council of Alaska Producers, Alaska Support Industry Alliance, DED, Alaska Minerals Commission, Alaska Native Corporations, Alaska Gasline Development Corporation, AIDEA.

Objective Resources: Alaska's congressional delegation, Alaska's abundant natural resources, AIDEA's infrastructure funding.

Action Items:

- Promote a consistent business environment that includes a stable tax regime, a development and exploration mentality at regulatory agencies, and encouragement of responsible oil, gas, and mining exploration and production.



Source: Alaska Department of Commerce. Northern Opportunity: Alaska's Economic Development Strategy, Pg 17. 2018.

Unstable Tax Policy

Dates	Tax Policy Change	Increase/ Decrease?	AOGA Position
Feb. 2005 - March 2006	Aggregated ELF - Administrative decision altering gross production tax	Tax Increase	Opposed
April 2006 - July 2007	Petroleum Production Tax (PPT)	Tax Increase	Opposed Final Version
July 2007 - 2013	Alaska's Clear and Equitable Share (ACES)	Tax Increase	Opposed
2010	Cook Inlet Recovery Act	Incentives for Industry	Supported
2014	SB 21	Both	Supported, with concerns
2016	HB 247 - Gov. Walker's oil tax reform	Tax Increase	Opposed
2017	HB 111	Tax Increase	Opposed
2018	Several Tax Increases Proposed but not passed	Tax Increase	Opposed

7 changes in 13 years

Salmon Initiative is a Threat to Alaska

- Cannot understate the consequences of this initiative
- Virtually impossible to permit large projects:
 - Parks, Seward, or Denali Highways
 - Prudhoe Bay
 - Chena River Flood Control Project
 - Trans-Alaska Pipeline System
 - Red Dog Mine
 - Potential LNG Pipeline
- Projects that interfere with anadromous fish habitat cannot be permitted – including state & local government projects



Salmon Initiative Deal Breaker for Alaska LNG



The Alaska LNG project ***“would be virtually impossible to permit.”***

- AGDC President Keith Meyer

Salmon Initiative Impacts Existing Projects

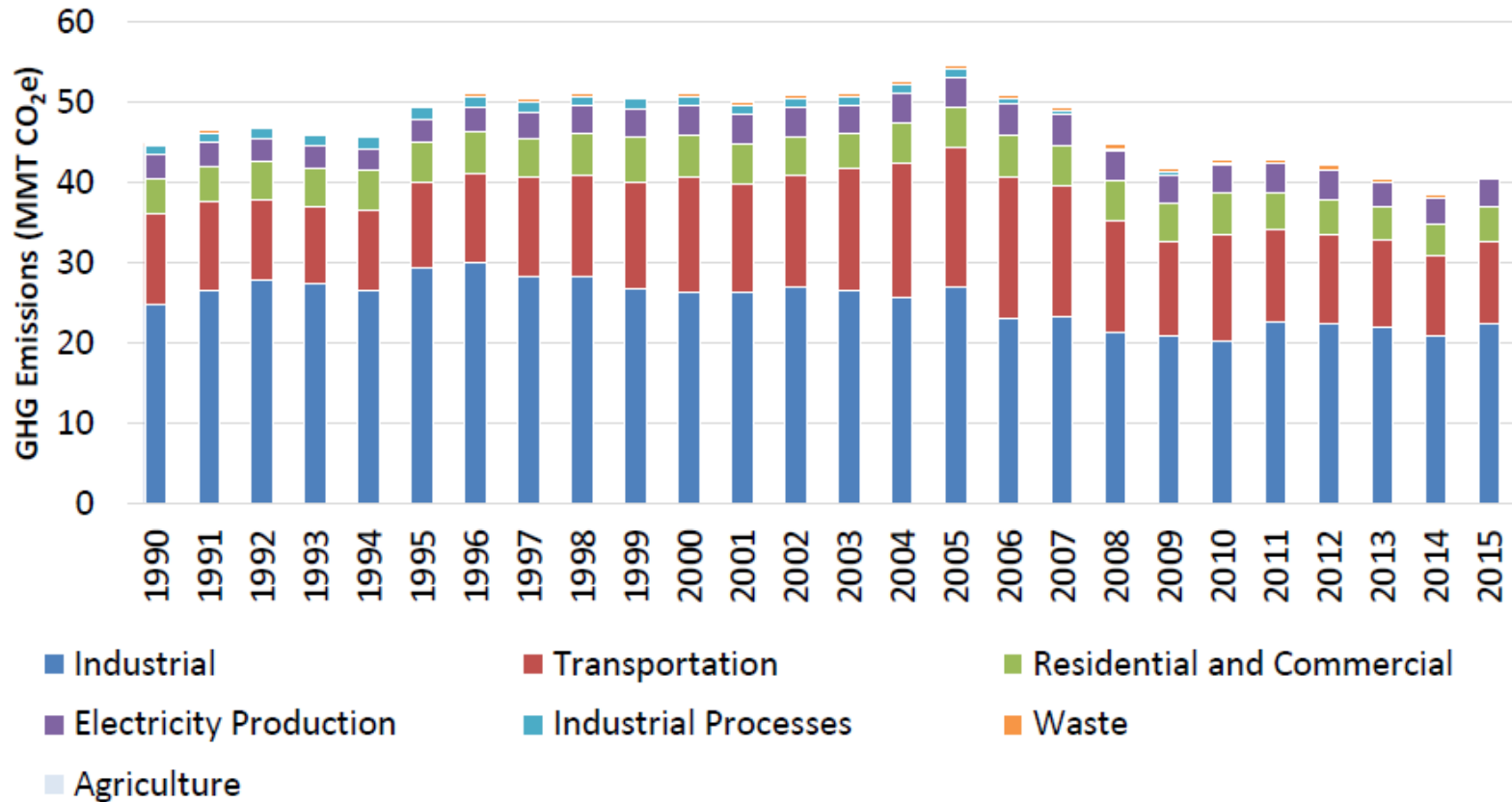


“If the fish habitat initiative were to become law, it would be all but impossible for TAPS to renew several permits and authorizations that are crucial to its continues function. The operational viability of TAPS would be placed at risk.”

- Alyeska Pipeline Service Company President
Tom Barrett

Alaska's Emissions have Decreased

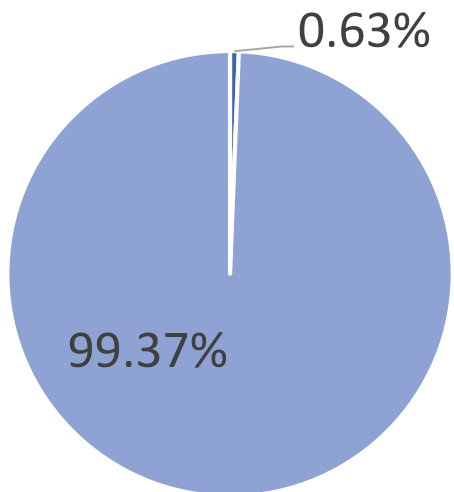
Exhibit A: 1990 - 2015 Alaska Gross Annual Greenhouse Gas Emissions



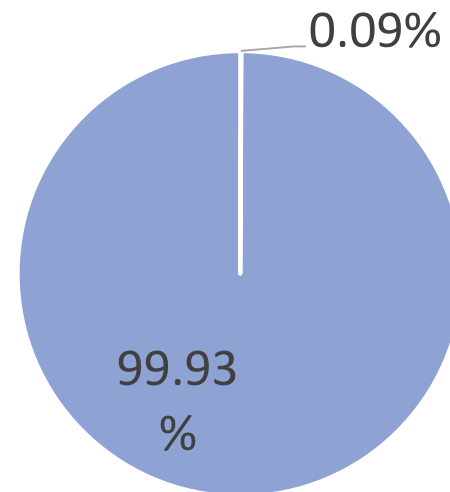
Source: <http://dec.alaska.gov/air/anpms/projects-reports/docs/ghg-inventory-report-overview-013018.pdf>

Alaska's Emissions Less than 1%

Alaska's portion of total United States GHG Emissions



Alaska's portion of total Global GHG Emissions



Source: <http://dec.alaska.gov/air/anpms/projects-reports/docs/ghg-inventory-report-overview-013018.pdf>

Current Alaska Draft Climate Policy Could Impact Investment

Portions of June 11, 2018 Draft Climate Action Plan:

- **Maximize carbon neutral growth in Alaska through a rapid transition to renewable energy, electrification and energy efficiency.**
 - Reduce oil, gas and mining industry greenhouse gas emissions in Alaska by 50% (over 2005 levels) by 2030.
 - Increase building efficiency (over 2005 levels) in both residential and non-residential sectors by 50% by 2030.
 - Increase the percentage of all electricity generated from renewable resources (over 2005 levels) to 50% by 2030 and improve the energy efficiency of electric generation through economic dispatch.
- **Develop pathways for carbon revenue generation and a carbon pricing mechanism.**



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