

HB 72

(FILE 1)

<TARGET><BILL>HB 72</BILL><SUBJECT>HB 72 (FILE
1)</SUBJECT><COMM>HRES28</COMM></TARGET>



THE STATE
of ALASKA
GOVERNOR SEAN PARNELL

Department of Revenue

COMMISSIONER'S OFFICE
Bryan Butcher, Commissioner

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January 17, 2013

The Honorable Eric Feige, Co-Chair
House Resources Committee
State Capitol Room 126
Juneau, Alaska 99801

The Honorable Dan Saddler, Co-Chair
House Resources Committee
State Capitol Room 104
Juneau, Alaska 99801

Dear Co-Chairs Feige and Saddler:

House Bill 72 was read across the floor on January 16, 2013 and referred to the House Resources Committee for consideration. I respectfully request a hearing to be scheduled at your earliest convenience for the proposed changes to Alaska's oil and gas production tax to be discussed.

Governor Parnell is committed to getting more oil into the pipeline and increasing job opportunities for Alaskans. The current oil and gas production tax system is one of the obstacles the Governor has identified to stemming the decline in TAPS throughput and increasing oil production in Alaska.

House Bill 72:

- Eliminates the progressive function in the current production tax and maintains the current 25% tax rate.
- Eliminates qualified capital expenditure credits for expenditures made after December 31, 2014 for expenditures made, north of 68 degrees north latitude (the North Slope) to explore for, and develop oil and gas.
- Establishes a 20% gross revenue exclusion for production from units formed after January 1, 2003 and new participating areas in units that were in existence prior to January 1, 2003.
- Reforms the current net loss carry forward to require that it be carried forward to offset a tax liability and limits the instances in which the credit may be transferred.
- Extends the current small producer tax credit.
- Changes the fund source for the Community Revenue Sharing Fund from the progressive function in the current production tax system to the Alaska Net Income tax.

Co-Chairs Feige and Saddler
January 17, 2013
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These changes are aimed at ensuring that the state continues to receive fair compensation for the sale of its resources while establishing a more competitive investment climate for job creation.

If the Committee requires any additional information, please contact me.

Sincerely,

A handwritten signature in cursive script that reads "Bryan Butcher". The signature is written in black ink and is positioned above the typed name.

Bryan Butcher
Commissioner

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Governor Sean Parnell
STATE OF ALASKA

January 15, 2013

The Honorable Mike Chenault
Speaker of the House
Alaska State Legislature
State Capitol, Room 208
Juneau, AK 99801-1182

Dear Speaker Chenault,

To create more economic opportunity for Alaskans, we must proactively choose a future of more oil production. Therefore, under the authority of Article III, Section 18 of the Alaska Constitution, I am transmitting a bill relating to oil production taxation.

Alaska's oil belongs to Alaskans, and increased oil production will mean increased private sector opportunity for Alaskans. Alaska engineers, contractors, and maintenance personnel earn their livelihoods from oil production; indirectly so do business owners, retailers, and working men and women of all trades. Oil production also provides revenue and drives public sector opportunities for schools, public safety, roads and ferries, energy infrastructure, and many other services for Alaskans.

Need for Legislation

Alaskans are well aware that oil production from legacy fields is declining. Not because we are running out of oil, but because we are running behind the competition. Alaska's North Slope has billions of proven barrels of oil, but we do not have a tax system designed to attract new investment for more production. At high oil prices, the current progressive tax rate structure creates highly variable tax rates and takes far more profit from investors than other competing jurisdictions. Investors take their money where they get a greater return, and they are investing new capital elsewhere. Legislation is necessary to drive new investment to create new Alaska production and new opportunities for Alaskans.

Under current law, the generous tax credits for capital expenditures support company spending now, but on spending not necessarily targeted for new production. Consequently, the State experiences the short-term risk of writing large checks from the treasury for those credits with no corresponding increase in production. Legislation is necessary to mitigate this risk, and focus company investment on long-term, new Alaska production.

Guiding Principles

Tax policy must be fair to Alaskans. Any changes to oil taxes should, when taken together, be geared to foster new production. Changes should result in a more simple tax system and restore balance to our fiscal system. And, tax policy must make Alaska competitive for the long-term. If these guiding principles are met, I believe we will more fully maximize the benefit of Alaskans' oil resources for Alaskans.

Legislation Summary

The bill maintains a 25 percent base tax rate with a 20 percent gross revenue exclusion for new oil. It eliminates the progressivity calculation, and eliminates the qualified capital expenditure credits for North Slope expenditures. The bill reforms the remaining credits so that they are taken when there is production.

Fair to Alaskans and Fosters New Production

The legislation provides more downside price protection for Alaskans in exchange for more upside price revenue to the companies. Under the current tax system, State revenues depend primarily on the price of oil, but the current qualified capital expenditure credits depend on the level of company spending. If prices fall, State revenues are reduced but the State retains the obligation to pay credits. Further, if additional development occurs, under the current system, the credit obligation could grow substantially. Given the State's other obligations like public safety and schools, this imbalance exposes the State to substantial financial risks. By reforming the credit system, this bill rebalances the current tax structure to ensure revenues to the State in low price environments.

The legislation targets new Alaska production rather than just company spending, thus unlocking more of Alaskans' oil for more Alaskan private sector and public sector opportunities. This goal is accomplished by eliminating the current 20 percent tax credit under AS 43.55.023(a) for qualified capital expenditures incurred after December 31, 2013, to explore for, develop, or produce oil and gas deposits located on the North Slope. The bill would amend the 25 percent tax credit issued under AS 43.55.023(b) for a carried-forward annual loss based on expenditures incurred after December 31, 2013, to explore for, develop, or produce oil and gas deposits located on the North Slope by limiting the transferability and monetization of the tax credit. The amendment to AS 43.55.023(b) will encourage investment aimed at production by requiring a producer or explorer to carry the credit forward to offset future tax liabilities. Additionally, the bill extends the small producer tax credit available under AS 43.55.024(c). The small producer tax credit is nontransferable.

The bill creates additional incentives for new production on the North Slope by providing for a 20 percent revenue exclusion based on the gross value at the point of production of oil and gas produced from a lease or property that was not, as of January 1, 2003, within a unit. It also proposes the same 20 percent revenue exclusion for oil and gas production from new participating areas in units that were formed before January 1, 2003. Similar to the new North Slope carried-forward annual loss tax credit and the extended tax credit for small producers, these incentives only would apply to a company when it has production.

More Simple, Restores Balance

The bill simplifies the oil and gas production tax by repealing the progressive tax rate structure in Alaska's current tax system by levying a flat rate tax of 25 percent on oil and gas production statewide, subject to current tax ceilings on certain oil and gas, for production beginning January 1, 2014. The repeal of the progressive tax rate structure in this bill encourages the type of long-term planning and investment needed to promote new investment in new production in Alaska.

Long-Term Competitiveness

By shifting the incentives away from spending and towards new production we assure these tax changes are for the long run. Producers get the benefit of tax changes later – after they produce new oil when they can offset earlier liabilities against new production. Additionally, by giving back more

The Honorable Mike Chenault

January 15, 2013

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of the high side at high oil prices (while better protecting Alaskans against the downside of lower oil prices), we assure companies will make their investments for the long haul because they are more likely to take short-term risk with capital if they are assured greater return over time at higher prices.

In summary, this bill provides a path to more Alaskan opportunity through more Alaskan oil production. I urge your prompt and favorable action on this measure.

Sincerely,

A handwritten signature in black ink that reads "Sean Parnell". The signature is written in a cursive, flowing style.

Sean Parnell
Governor

Enclosure



THE STATE
of **ALASKA**
GOVERNOR SEAN PARNELL

Department of Revenue

COMMISSIONER'S OFFICE
Bryan Butcher, Commissioner

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Sincerely,

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Bryan Butcher
Commissioner

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MEMORANDUM

February 4, 2013

SUBJECT: Sectional analysis of HB 72, the Governor's oil and gas production tax bill (Work Order No. 28-GH1647\A)

TO: Representative Eric Feige
Attn: Linda Hay

FROM: Donald M. Bullock Jr.
Legislative Counsel

In advance of our meeting, I am providing this summary for your information.

The following is an enhanced sectional summary of HB 72, relating to the oil and gas production tax and introduced at the request of the Governor by the Senate Rules Committee. This is intended only to be a guide and should be considered with any testimony offered by the administration relating to this bill.

The format is to start with a summary of the section in the form often used in bill summaries and add additional information. The explanation of the "effect of a section" and the comments are an effort to provide an introduction to the substance of the section and other information that may be helpful. There are several areas in the bill the administration should review because the phrasing used or the applicability of an effective date raise concerns.

* **Sec. 1.** Amends AS 29.60.850(b) to identify corporate income tax receipts as a source for making an appropriation to the community revenue sharing fund. **Effective January 1, 2014.**

Effect of amendment: Removes AS 43.55.011(g) as a source for an appropriation to the community revenue sharing fund because AS 43.55.011(g) is repealed January 1, 2014. AS 43.55.011(g) was the production tax imposed when the production tax value is more than \$30 a BTU equivalent barrel.

Comment: Refers to "money received by the state . . . under AS 43.20.030(c)," which is the subsection that tells a taxpayer when to pay the tax imposed in AS 43.20. Reference should be to money received under AS 43.20, or more specifically, money received under AS 43.20 that was due to be received and was received during the previous calendar year.

* **Sec. 2.** Amends AS 43.55.011(e) to remove the additional tax imposed under AS 43.55.011(g). **Effective January 1, 2014. Applicable to oil and gas produced after December 31, 2013.**

Effect of amendment: The amendment makes the tax levy equal to 25 percent of the production tax value of taxable oil and gas.

Comment: Together with the repeal of AS 43.55.011(g) by sec. 26 of the bill (eff. January 1, 2014), this amendment removes the additional tax imposed under AS 43.55.011(g) when the production tax value is greater than \$30 a BTU equivalent barrel.

* **Sec. 3.** Amends AS 43.55.011(o) to exclude gas subject to AS 43.55.011(p) from the limitation. **Effective immediately. Retroactive to January 1, 2013. Applicable to oil and gas produced after December 31, 2012.**

Effect of amendment: Gas subject to the limitation in AS 43.55.011(p) is not subject to the tax limit in AS 43.55.011(o).

Comment: Certain gas produced outside of Cook Inlet and south of 68 degrees North latitude is subject to a tax limit of four percent of the gross value at the point of production. Under current law, the limits in AS 43.55.011(o) and (p) could both be interpreted to apply to gas produced outside of Cook Inlet without a preference for one limit over another. The amendment resolves the issue of what limit applies by making the gas subject to the limit in (p) not subject to the limit in (o). The limit in AS 43.55.011(p) (eff. January 1, 2013), which applies to both oil and gas, does not have the same constitutional risk as AS 43.55.011(o), which is subject to challenge under the Commerce Clause of the United States Constitution.

* **Sec. 4.** Amends AS 43.55.020(a) by referring to AS 43.55.011 rather than the subsections within AS 43.55.011 that impose a production tax. AS 43.55.020(a)(1)(A) is amended by moving the exclusion of AS 43.55.011(o) or (p) to a place earlier in the paragraph. AS 43.55.020(a)(1)(A)(ii) is amended to refer to the lease expenditures as being deductible for the "**oil and gas**" rather than deductible for the "[LEASES OR PROPERTIES]". AS 43.55.020(a)(B)(ii) is amended to change a reference to leases and properties to "**the**" from "[ALL]". AS 43.55.020(a)(1)(B)(iii) is amended in a similar way as AS 43.55.020(a)(1)(ii) to refer to lease expenditures that are deductible for the oil and gas rather than for the leases or properties. AS 43.55.020(a)(1)(C) is amended to refer to oil *or* gas, rather than oil *and* gas, that is subject to tax limits in AS 43.55.011(j) (Cook Inlet gas), AS 43.55.011(k) (Cook Inlet oil), or AS 43.55.011(o) (gas produced in certain areas of the state and used in the state); and adds language to state that the determination is made "**for each lease or property.**" AS 43.55.020(a)(1) is amended by adding a new subparagraph -- (D) -- to describe the payment computation for oil and gas subject to AS 43.55.011(p). AS 43.55.020(a)(2) is amended to simply refer to "oil and" gas rather than, "oil or gas produced from a lease or property"; the paragraph is also amended to delete the calculation for oil and gas subject to the limit in AS 43.55.011(p), which is now calculated under AS 43.55.020(a)(1)(D). AS 43.55.020(a)(4) is amended to simply refer to the tax levied under "**AS 43.55.011**" rather than to the tax levied under AS 43.55.011(e) and (i) (production tax on oil and gas produced that constitutes a landowner's royalty interest). **Effective immediately.**

Effect of amendment: The primary substance of the amendment coincides with the amendment to AS 43.55.011(o) in sec. 3 of the bill, which removes the applicability of

the tax cap for gas used in the state in AS 43.55.011(o), to gas subject to the tax limit in AS 43.55.011(p).

Comment: The amendments are primarily conforming amendments to AS 43.55.011(o) in sec. 3 of the bill. However, lease expenditures are described as deductible for "oil and gas" rather than "those leases or properties." Under AS 43.55.011(e), the tax is levied "on the producer of oil or gas a tax for all oil and gas produced each calendar year from each lease or property in the state, less any oil and gas the ownership or right to which is exempt from taxation or constitutes a landowner's royalty interest." Since the tax is imposed on the oil and gas produced from each lease or property, it may be helpful to understand why the amended subsection describes lease expenditures that are deductible "for the oil and gas," rather than the existing language that describes the lease expenditures as being for "those leases or properties."

* **Sec. 5.** Amends AS 43.55.020(a) to conform to the deletion of the reference to AS 43.55.011(g) in sec. 2 of the bill and the repeal of AS 43.55.011(g) in sec. 26 of the bill. AS 43.55.020(a)(1)(B)(iii) is amended to provide for a reduction in the gross value at the point of production for oil and gas subject to AS 43.55.160(f). **Effective January 1, 2014. Applicable to oil and gas produced after December 31, 2013.**

Effect of amendment: The amended provision conforms to the repeal of the tax under AS 43.55.011(g) and new subsection -- AS 43.55.160(f) -- added by sec. 24 of the bill.

Comment: AS 43.55.011(e) in sec. 2 of the bill, new subsection AS 43.55.160(f) in sec. 24 of the bill, and the repeal of AS 43.55.011(g) in sec. 26 of the bill are all related to the repeal of the tax currently applicable when the production tax value is more than \$30.

* **Sec. 6.** Amends AS 43.55.020(d) to refer to the tax paid under "AS 43.55.011(e)," rather than the tax paid under AS 43.55.011(e) - (g). **Effective January 1, 2014. Applicable to oil and gas produced after December 31, 2013.**

Effect of amendment: The amendment to AS 43.55.020(d) conforms the subsection to the amendment to AS 43.55.011(e) in sec. 2 of the bill, the effective date of new subsection AS 43.55.160(f) in sec. 24 of the bill, and the repeal of AS 43.55.011(g) in sec. 26 of the bill.

Comment: Current law includes the tax imposed under AS 43.55.011(e) (25 percent base rate), AS 43.55.011(f) (minimum tax applicable to oil and gas produced on the North Slope), and AS 43.55.011(g) (tax applicable when production tax value is more than \$30 a BTU equivalent barrel). Although the tax in AS 43.55.011(g) is repealed in sec. 26 of the bill (with a conforming change to AS 43.55.011(e) in sec. 2 of the bill), the bill does not amend the minimum tax levied in AS 43.55.011(f).

* **Sec. 7.** Amends AS 43.55.023(a)(1) to authorize a producer or explorer to take a tax credit for a qualified capital expenditure to apply in a single calendar year. **Effective immediately. Retroactive to January 1, 2013. Applicable to expenditures incurred after December 31, 2012.**

Effect of amendment: The amendment removes the limitation that not more than one-half of the tax credit may be taken in a single calendar year.

Comment: The amendment moves the revenue impact from the credit earlier, rather than spreading the credit over a minimum of two years.

* **Sec. 8.** Amends AS 43.55.023(a), as amended in sec. 7, by adding a new paragraph to limit a credit for a qualified capital expenditure for qualified capital expenditures north of 68 degrees North latitude to those expenditures incurred before January 1, 2014. **Effective immediately.** Note, the governor may have intended to make the section effective January 1, 2014, however, this section is not listed in sec. 30 of the bill that lists the sections to take effect January 1, 2014.

Effect of amendment: The enactment of this section will bar a credit for an expenditure to explore for, develop, or produce oil or gas on the North Slope that is based on an expenditure incurred after December 31, 2013.

Comment: The amendment limits the area in the state in which a qualified capital expenditure may be made to qualify for the credit to that part of the state south of 68 degrees North latitude.

* **Sec. 9.** Amends AS 43.55.023(b) to make a credit for a carried-forward annual loss based on a lease expenditure incurred north of 68 degrees North latitude subject to AS 43.55.023(p) - (u), which are new subsections added in sec. 15 of the bill. **Effective January 1, 2014. Applicable to expenditures incurred after December 31, 2013.**

Effect of amendment: Makes the credit for a carried-forward annual loss based on expenditures incurred on the North Slope subject to additional requirements.

Comment: The amendment imposes additional requirements applicable only to expenditures on the North Slope if those expenditures are the basis for a carried-forward annual loss.

* **Sec. 10.** Amends AS 43.55.023(c) to make a credit authorized under AS 43.55.023 subject to AS 43.55.023(p) - (u), which are new subsections added in sec. 15 of the bill. **Effective January 1, 2014. Applicable to expenditures incurred after December 31, 2013.**

Effect of amendment: The amendment changes the authorization to take a credit in a later calendar year that is not used under AS 43.55.023(c), because taking the credit would reduce a person's tax liability below zero in the current year.

Comment: The amended subsection prevents a person from taking a tax credit that exceeds the tax liability in a calendar year. A credit not used because of the limitation may be applied in a later year. The amendment makes the taking in a later year subject to the limitations in AS 43.55.023(p) - (u).

* **Sec. 11.** Amends AS 43.55.023(d) to allow a person to receive one tax credit certificate instead of two, with each of the two limited to one-half of the amount of the tax credit, and deletes language related to the use of two certificates. **Effective immediately. Retroactive to January 1, 2013. Applicable to expenditures incurred after December 31, 2012.**

Effect of amendment: The amendment removes the limitation that only one-half of a tax credit may be taken immediately.

Comment: Tax credit certificates are transferable, or may be redeemed for a cash payment under AS 43.55.028. Issuing one certificate rather than two allows the credit to be taken immediately rather than spread over two years. The provisions in the subsection are subject to the exceptions in AS 43.55.023(i) that relate to a tax credit for transitional investment expenditures. Transitional investment expenditures are certain expenditures that were incurred after March 31, 2001 and before April 1, 2006. (April 1, 2006 was the retroactive effective date for the 2006 and 2007 changes to the oil and gas production tax.)

* **Sec. 12.** Amends AS 43.55.023(d) to make an exception for a tax credit based on lease expenditures incurred after December 31, 2013, to explore for, develop, or produce oil or gas deposits located north of 68 degrees North latitude. This section also deletes the applicability of the limitation in AS 43.55.023(i). **Effective January 1, 2014. Applicable to expenditures incurred after December 31, 2013.**

Effect of amendment: Credits based on lease expenditures to explore for, develop, or produce oil or gas deposits located north of 68 degrees North latitude are no longer subject to the subsection. The limitations related to transitional investment expenditures are no longer applicable.

Comment: Credits based on lease expenditures to explore for, develop, or produce oil or gas deposits located north of 68 degrees North latitude are addressed in new subsections AS 43.55.023(p) - (u) that are in sec. 15 of the bill. The reference to the limitation AS 43.55.023(i) is deleted because AS 43.55.023(i) is repealed in sec. 26 of the bill on the same effective date (January 1, 2014).

* **Sec. 13.** Amends AS 43.55.023(g) to refer to *former* AS 43.55.023(m). **Effective immediately. Retroactive to January 1, 2013. Applicable to expenditures incurred after December 31, 2012.**

Effect of amendment: The amendment reflects the repeal of AS 43.55.023(m) in sec. 25 of the bill on the same effective date.

Comment: AS 43.55.023(m) allowed for a single tax credit certificate rather than two for certain well lease expenditures incurred south of 68 degrees North latitude. AS 43.55.023(m) is no longer needed because only one tax credit certificate would be issued under AS 43.55.023(d) as amended in sec. 11 of the bill.

* **Sec. 14.** Amends AS 43.55.023(n) to delete a reference to AS 43.55.023(m). **Effective immediately. Retroactive to January 1, 2013. Applicable to expenditures incurred after December 31, 2012.**

Effect of amendment: The amendment reflects the repeal of AS 43.55.023(m) in sec. 25 of the bill on the same effective date.

Comment: The repeal of AS 43.55.023(m) removes the need for the reference to that subsection in AS 43.55.023(n).

* **Sec. 15.** Amends AS 43.55.023 by adding six new subsections: AS 43.55.023(p) - (u). The new subsections provide special rules for credits for carried-forward annual losses resulting from lease expenditures incurred after December 31, 2013, to explore for, develop, or produce oil or gas deposits located north of 68 degrees North latitude, the area generally referred to as the North Slope. The new subsections restrict the taking of certain carried-forward annual loss credits resulting from expenditures on the North Slope to North Slope leases and properties. **Effective January 1, 2014. Applicable to expenditures incurred after December 31, 2013.**

AS 43.55.023(p). Limits the number of years in which a carried-forward annual loss credit may be applied against a tax liability. The credit may not be applied against a tax liability incurred more than two years after the expenses were incurred, or, if certain requirements are met, no more than 10 years after the calendar year in which the lease expenditures were incurred. The longer period applies if the producer satisfies the filing requirements in AS 43.55.030(g), a new subsection added by sec. 20 of the bill.

Effect of amendment: The new subsection sets a time limit for taking a carried-forward annual loss credit authorized by AS 43.55.023(b) that is based on North Slope expenditures.

Comment: Current law does not limit the period in which a carried-forward annual loss credit may be applied. The new subsection is applicable only to carried-forward annual loss credits that result from North Slope lease expenditures. The phrases, "calendar year that is . . . two or more calendar years after the year during which the lease expenditures were incurred," and "more than 10 calendar years after the year during which the lease expenditures were incurred" probably mean that the carried-forward annual loss credit may be taken within two years, or within 10 years after the year of the expenditures that resulted in the loss. Perhaps the language could be simplified. The production tax is a calendar year tax (AS 43.55.011(e)) with monthly and annual payment requirements (AS 43.55.020). The longer period for using the credit is available to a producer that files the statement described in AS 43.55.030(g), a new section added by sec. 20 of the bill. The reporting requirement appears, on its face, to be minimal when weighed against the loss of a credit because the shorter eligibility period has ended.

AS 43.55.023(q). Prohibits a credit for a carried-forward annual loss based on lease expenditures incurred after 2014 from being applied against a tax liability until all loss carry forward credits for a previous year, after 2013, have been applied.

Effect of amendment: Requires carried-forward annual loss credits to be applied earlier rather than later. Earlier carried-forward annual loss credits earned after 2013 have to be applied before similar tax credits incurred after 2014.

Comment: This section seems to mean, that for carried-forward annual loss credits based on expenditures after December 31, 2013, earlier credits have to be used first. If this is the case, the subsection could be written more clearly. Testimony by the administration could be helpful to understand how this administration expects this subsection to be applied.

AS 43.55.023(r). Except as provided in AS 43.55.023(s), this subsection increases the carried-forward annual loss credit by 15 percent a year, starting in the second calendar year following the year in which the expenditures resulting in the loss were incurred. The credit stops increasing at the end of the year preceding the year in which the credit is applied. The increased tax credit has no value unless applied against the tax liability of the person holding the credit.

Effect of the amendment: Allows a carried-forward annual loss credit to increase if not used within a certain period of time.

Comment: The qualifiers, "unless that second calendar year is the calendar year against the person's tax liability for which the amount of the credit is applied" and "the calendar year immediately preceding the calendar year against the person's tax liability for which the amount of the credit is applied," need to be examined because the wording says a calendar year is applied against a person's tax liability. The words may need to be rearranged to refer to the calendar year in which the credit is applied. Administration testimony could be helpful to clarify what is intended.

Apparently the increase in the credit could not be applied against a tax liability until the third year following the year in which the expenditures were incurred and the loss generated. Interest starts in the second year, but stops on December 31 of the year preceding the year in which the credit is applied. In other words, the 15 percent increase does not apply in the year in which the credit is applied. Thus, a credit taken in the third year is increased during the second year by the 15 percent.

The AS 43.55.023(r) lead-in reads, "Except as provided under (s) of this section" AS 43.55.023(s), as discussed below, describes the situations in which the carried-forward annual loss credits are not increased.

AS 43.55.023(s). States that the 15 percent increase in AS 43.55.023(r) does not apply during any period during or after a calendar year in which the carried-forward annual loss credit could have been applied. Provides the order in which other credits may be taken before a loss carry forward from an expenditure after December 31, 2013, may be increased under AS 43.55.023(r).

Effect of amendment: A carried-forward annual loss credit that could be subject to the 15 percent increase in AS 43.55.023(r) is not subject to the increase during or after a year in which the credit could have been applied.

Comment: The subsection seems to address a situation where a person could have taken applied carried-forward annual loss credits but did not, choosing instead to allow the credit to increase at the 15 percent rate in AS 43.55.023(r). Without this subsection, a person could decline to apply the tax credit in an earlier year so that the amount eventually applied would be larger as a result of the 15 percent inflation factor.

The subsection establishes the priority for taking credits when determining the amount of the loss carry forward credit that could have been applied. The first credits deemed to apply are the educational credits in AS 43.55.019 and the small producer credit in AS 43.55.024(c). If there is a tax amount remaining after applying those credits, the carried-forward annual loss credits based on North Slope expenditures are deemed to have been applied to the extent of the tax liability remaining. The purpose of the subsection seems to be to require the early application of available carried-forward

annual loss credits, and avoid having the credits increase at the 15 percent rate. The administration should explain how AS 43.55.023(s)(2) and (3) work, because it looks like (2) and (3) are very similar -- after the application of the education and small producer tax credits, the carried-forward annual loss credits are deemed to have been applicable to the amount of tax that was left.

AS 43.55.023(t). Limits the transferability of a carried-forward annual loss credit from a person owning an operating right, interest, or other working interest in a lease or property on the North Slope to a transferee that receives an operating right, operating interest, or working interest from the transferor of the credit. Allows for the transferee to transfer the credit in conjunction with a similar transfer or interest in the lease or property. Requires a notice to the Department of Revenue of the transfer along with information about the transfer that may be required by the department. Makes a transferee's use of the credit subject to AS 43.55.023(u). Provides that the Department of Revenue may audit the eligibility for the credit notwithstanding any transfer of the credit.

Effect of amendment: Prohibits the transfer of carried-forward annual loss credit based on North Slope lease expenditures incurred after December 31, 2013, to anyone except to a person that receives an operating right, operating interest, or working interest from the transferor.

Comment: This subsection further restricts the transfer of carried-forward annual loss credits based on lease expenditures on the North Slope. The transfer of carried-forward annual loss credits based on lease expenditures elsewhere in the state does not require a similar transfer of an operating right, operating interest, or working interest. The effect of the limitation is to keep carried-forward annual loss credits from the North Slope on the North Slope, and to allow only the owner of an operating right, operating interest, or working interest on the North Slope to take the credit.

AS 43.55.023(u). Limits the amount of a producer's carried-forward annual loss credit that may be taken for each North Slope lease or property by a transferee, or other person acquiring a transferred carried-forward annual loss credit, to 20 percent of the product of the gross value at the point of production multiplied by the percentage of the operating right, operating interest, or working interest held in the lease or property that had been owned by the person that initially incurred the expenditures that resulted in a carried-forward annual loss credit.

Effect of amendment: The subsection limits the extent to which a transferred carried-forward annual loss credit may be used by a person that did not make the expenditures underlying a carried-forward annual loss credit.

Comment: The carried-forward annual loss credit limit is a percentage of gross value at the point of production for each lease or property. The percentage is 20 percent multiplied by the percentage of the interest described in the subsection. For example, the transferee of a carried-forward annual loss credit that has a 20 percent interest would be limited to a credit of four percent of the gross value at the point of production for the lease or property; four percent is the product of the 20 percent limit factor multiplied by the 20 percent interest. Gross value at the point of production is reduced by lease

expenditures and adjusted lease expenditures to arrive at the production tax value. Production tax value is the value to which the applicable tax rate in AS 43.55.011 applies.

* **Sec. 16.** Extends by six years the period in which a credit under AS 43.55.024(c) may be taken. **Effective immediately.**

Effect of amendment: Under the amendment, the period of time in which the credit may be taken is after the later of 2022 or, for a producer that did not have commercial oil or gas in the state before April 1, 2006, but first has commercial production before May 1, 2022, after the ninth year after the commencement of commercial production.

Comment: The credit in AS 43.55.024(c) is commonly referred to as the small producer tax credit. The amendment allows a producer that had commercial production before April 1, 2006, an additional six years to take the credit. The amendment also allows an additional six years for a producer that did not have production before April 1, 2006, to begin commercial production followed by a nine-year period in which the small producer credit may be taken. For a producer that first commences commercial production on April 30, 2022, the last day possible under the subsection, the producer may take the credit for the calendar years 2023 through 2031 (nine calendar years after the start of commercial production).

* **Sec. 17.** Amends AS 43.55.028(e) to refer to *former* AS 43.55.023(m). **Effective immediately. Retroactive to January 1, 2013.**

Effect of amendment: The amendment reflects the repeal of AS 43.55.023(m) in sec. 25 of the bill on the same effective date.

Comment: AS 43.55.028(e) authorizes the Department of Revenue to purchase tax credit certificates issued under AS 43.55.023(d). AS 43.55.023(m) allowed for a single tax credit certificate rather than two for certain well lease expenditures incurred south of 68 degrees North latitude. AS 43.55.023(m) is no longer needed because only one tax credit certificate would be issued under AS 43.55.023(d) as amended in sec. 11 of the bill.

* **Sec. 18.** Amends AS 43.55.028(g) to refer to *former* AS 43.55.023(m). **Effective immediately.**

Effect of amendment: The amendment reflects the repeal of AS 43.55.023(m) in sec. 25 of the bill on the same effective date.

Comment: AS 43.55.028(g) authorizes the Department of Revenue to adopt regulations to carry out the purposes of AS 43.55.028 and provides and prohibits distinguishing an application for certain credits, refund claims, and payments from other applications. AS 43.55.023(m) allowed for a single tax credit certificate rather than two for certain well lease expenditures incurred south of 68 degrees North latitude. AS 43.55.023(m) is no longer needed because only one tax credit certificate would be issued under AS 43.55.023(d) as amended in sec. 11 of the bill.

* **Sec. 19.** Amends AS 43.55.030(e)(1) to require an explorer's qualified capital expenditures, certain lease expenditures, and adjustments and other payments to be reported to the Department of Revenue. **Effective immediately.**

Effect of amendment: The amendment requires information related to certain expenditures, adjustments, and other payments of an explorer to be reported in addition to the current requirement that those of a producer must be reported.

Comment: AS 43.55.030 requires the filing of statements and reports with the Department of Revenue. AS 43.55.030(e) requires information from producers and explorers, but AS 43.55.030(e)(1) in current law only addresses producers. The amendment adds explorers and is consistent with the first sentence of the subsection as well as the second paragraph in the subsection.

* **Sec. 20.** Amends AS 43.55.030 by adding a new subsection relating to the report that may be filed by a producer under AS 43.55.023(p). **Effective January 1, 2014. Applicable to expenditures incurred after December 31, 2013.**

Effect of amendment: Adds requirements for a statement that may be filed that is related to the period in which carried-forward annual loss credits based on North Slope lease expenditures may be applied. The treatment of carried-forward annual loss credits based on certain North Slope lease expenditures are addressed in AS 43.55.023(p) - (u), which are added in sec. 15 of the bill.

Comment: AS 43.55.023(p) limits the period in which carried-forward annual loss credit based on North Slope lease expenditures after December 31, 2013, may be applied against a tax liability. There are two time-period options, with one period, the period in AS 43.55.023(p)(2), being eight years longer than the period in AS 43.55.023(p)(1). The shorter period applies unless the producer complies with the filing requirement in AS 43.55.030(g), which is added by this section.

* **Sec. 21.** Amends AS 43.55.160(a)(1)(B) by correcting the placement of the word "gas." Amends AS 43.55.160(a)(1)(C), (D), and (E) to refer to "each" lease or property, rather than to "a" lease or property. AS 43.55.160(a)(1)(E) is amended to exclude gas subject to AS 43.55.011(p). Amends AS 43.55.160(a)(1)(G) to refer to "leases or properties in the state," rather than to "a lease or property." **Effective immediately. Retroactive to January 1, 2013. Applicable to oil and gas produced after December 31, 2012.**

Effect of amendment: The amendment makes language edits and adds an exclusion for gas subject to AS 43.55.011(p), which applies to new gas production in the state outside of the Cook Inlet sedimentary basin and not on the North Slope.

Comment: Under AS 43.55.011(p), the tax on new oil or gas production in the state outside of Cook Inlet and not on the North Slope is limited to four percent of the gross value at the point of production for the first seven years of commercial production. The valuation of oil and gas subject to AS 43.55.011(p) is addressed in AS 43.55.160(a)(1)(F), and should not have been included in AS 43.55.160(a)(1)(E) in current law. The amendment corrects this error.

The administration could clarify whether the changes from referring to "a lease or property" to "each lease or property" in AS 43.55.160(a)(1)(C) - (E), and the change from "a lease or property" to "leases or properties in the state" are substantive or a change in style.

* **Sec. 22.** Repeals and reenacts AS 43.55.160(a), which was amended in sec. 21 of the bill to conform to the repeal of AS 43.55.011(g). Provides for the determination of production tax value during a calendar year before or during the last calendar year under AS 43.55.024(b) for which the producer could take a tax credit under AS 43.55.024(a). **Effective January 1, 2014. Applicable to oil and gas produced after December 31, 2013.**

Effect of amendment: Deletes provisions currently in AS 43.55.160(a)(2) that provide for the monthly determination of production tax value for purposes of AS 43.55.011(g). Other than the direction to determine production tax value during a calendar year before or during the last calendar year under AS 43.55.024(b) (for which the producer could take a tax credit under AS 43.55.024(a)), the changes from AS 43.55.160(a)(1) in current law to AS 43.55.160(a) as repealed and reenacted in this section of the bill seem to be stylistic.

Comment: AS 43.55.024(a) provides for a nontransferable tax credit of \$6,000,000 for a producer that produces oil and gas from a lease or property outside of the Cook Inlet sedimentary basin, no part of which is north of 68 degrees North latitude. The administration could testify as to whether the other changes from AS 43.55.160(a)(1) to AS 43.55.160(a) in this bill section are substantive or a matter of style.

* **Sec. 23.** Amends AS 43.55.160(e) to conform the references to provisions in AS 43.55.160(a) with the repeal and reenactment of AS 43.55.160(a) in sec. 22 of the bill. **Effective January 1, 2014. Applicable to oil and gas produced after December 31, 2013.**

Effect of amendment: Conforms references within AS 43.55.160.

Comment: The current version of AS 43.55.160(a) includes two paragraphs and a number of subparagraphs and sub-subparagraphs. The repeal and reenactment in sec. 22 of the bill eliminated AS 43.55.160(a)(2), and required renumbering within the subsection and the elimination of the need for numbering sub-subparagraphs. (AS sub-subparagraph is labeled with a lowercase roman numeral, e.g. (iv).)

* **Sec. 24.** Amends AS 43.55.160(f) by adding a new subsection that reduces the gross value at the point of production of oil or gas by 20 percent if produced from a property that does not contain land that was in a unit on January 1, 2003, or is in a participating area established after December 31, 2011, that is within a unit that existed before January 1, 2003, and had not previously been in a participating area established before January 1, 2012. Provides that the gross value at the point of production may not be reduced below zero. **Effective January 1, 2014. Applicable to oil and gas produced after December 31, 2013.**

Effect of amendment: The amendment provides a 20 percent reduction in the gross value at the point of production for certain oil and gas production.

Comment: The 20 percent reduction in gross value at the point of production is available to production from a lease or property that was not in a unit on January 1, 2003, or, if within a unit before January 1, 2003, is a participating area established after December 31, 2011, that does not contain a reservoir that had previously been in a participating area established before January 1, 2012. This section seems to benefit new oil production from a reservoir in a new or recently established participating area. The description is relatively narrow. The administration may provide information on the oil and gas that will benefit from the reduction in gross value at the point of production.

In general terms, gross value at the point of production is the value from which lease expenditures are deducted to arrive at production tax value. Production tax value is the value to which the tax rates in AS 43.55.011 apply.

*** Sec. 25.** Repeals AS 43.55.023(m). **Effective immediately. Retroactive to January 1, 2013. Applicable to expenditures incurred after December 31, 2012.**

Effect of amendment: Repeals a provision that allowed a single tax credit certificate for certain credits under AS 43.55.023 only for limited areas of the state.

Comment: The amendment to AS 43.55.023(d) in sec. 11 of the bill authorizes a single tax credit certificate for the credits allowed under AS 43.55.023.

*** Sec. 26.** Repeals AS 43.55.011(g), 43.55.023(i), and 43.55.160(c). **Effective January 1, 2014. Applicable to oil and gas produced after December 31, 2013.**

Effect of amendment: The repealed AS 43.55.011(g) was that part of the oil and gas production tax that applies when the average monthly production tax for a BTU equivalent barrel of taxable oil and gas is more than \$30. The repealed AS 43.55.023(i) prohibits a producer or explorer from taking a credit for a transitional investment expenditure for any calendar year after 2013. The repealed AS 43.55.160(c) applies to the calculation of the monthly production tax value of oil.

Comment: The repeal of AS 43.55.011(g) eliminates the so-called progressive part of the production tax. The tax in AS 43.55.011(e) is an annual tax and does not require a monthly calculation, making the AS 43.55.160(c) unnecessary. AS 43.55.023(i) has no application after calendar year 2013.

*** Sec. 27.** Adds an applicability section to uncodified law. **Effective immediately.**

Effect of section and comment: The applicability for sections of the bill are explained for each section above. Different sections of the bill are applicable to oil and gas produced and expenses incurred during different time periods.

*** Sec. 28.** Adds a retroactivity section to uncodified law. **Effective immediately.**

Effect of section and comment: The sections that are retroactive to January 1, 2013, are noted above.

*** Sec. 29.** Authorizes the Department of Revenue to adopt regulations to implement the Act.

Effect of section and comment: The Department of Revenue is authorized to adopt regulations on the effective date of the Act even though the regulations may not be

effective until January 1, 2014, for provisions in the Act that do not take effect until that date. This allows the department to prepare regulations as soon as practicable in advance of the date that will be applicable.

* **Sec. 30.** Provides a January 1, 2014, effective date for the listed sections of the Act.

Effect of section and comment: The effective dates are noted for each section above. Section 8 of the bill should be included in this list because of the subject of the section, the placement in the bill, and the relevance of the amendment to AS 43.55.023(a) to other sections in the bill that take effect on January 1, 2014.

* **Sec. 31.** Provides an immediate effective date for sections of the Act not listed in sec. 30.

Effect of section and comment: The effective dates are noted for each section above. Section 8 should not have an immediate effective date because doing so makes two different amendments to AS 43.55.023(a) in secs. 7 and 8 have the same effective date.

DMB:plm:med
13-020.med

House Bill 72
Oil and Gas Production Tax
SECTION ANALYSIS

Section 1: AS 29.60.850, relating to certain appropriations to the general fund is amended to allow the legislature to make appropriations based on taxes paid during the previous calendar year under the Alaska Net Income Tax Act, AS 43.20, to conform to the repeal of AS 43.55.011(g) in section 26 of the bill.

Section 2: AS 43.55.011(e), relating to the levy of the oil and gas production tax, is amended to eliminate the reference to AS 43.55.011(g), the monthly progressivity tax, which is repealed in section 26 of the bill. Beginning January 1, 2014, AS 43.55.011(e) would levy on producers of oil and gas produced each calendar year a flat rate tax of 25 percent of the production tax value of taxable oil and gas produced from each lease or property in the state. No change is made to current tax ceilings that apply to Cook Inlet oil and gas, gas produced outside the Cook Inlet basin and used in the state, and oil and gas produced from new fields outside the Cook Inlet basin and south of the North Slope.

Section 3: Amends AS 43.55.011(o), relating to gas used in the state, to clarify that the tax ceiling applicable to gas used in the state does not apply to gas subject to AS 43.55.011(p)(the seven year tax limitation of four percent of gross value at the point of production for oil and gas first produced commercially outside of the Cook Inlet basin and south of 68 degrees North latitude after December 31, 2012, and before January 1, 2022).

Section 4: Amends AS 43.55.020(a), monthly installment payments of estimated tax, to clarify payment provisions relating to the determination of tax due for oil and gas subject to AS 43.55.011(p) and makes other minor clarifying amendments.

Section 5: Amends AS 43.55.020(a), monthly installment payments of estimated tax, for oil and gas produced after January 1, 2014, to conform to the repeal of AS 43.55.011(g), and to amend the calculation of monthly payments based on North Slope oil and gas to conform with the gross revenue exclusion in new subsection (f), AS 43.55.160, in section 24 of the bill.

Section 6: AS 43.55.020(d), related to payment by a producer to a private royalty owner, is amended to refer to the tax levied by AS 43.55.011(e) instead of AS 43.55.011(e)-(g). This amendment does not change the substance or effect of AS 43.55.020(d) although to avoid confusion, the amendment is made effective the same date as the repeal of AS 43.55.011(g).

Section 7: Amends AS 43.55.023(a) to eliminate the current restrictions on use of a tax credit for qualified capital expenditures and allow the full amount of a tax credit to be applied in a single calendar year beginning January 1, 2013 for expenditures after December 31, 2012.

Section 8: Amends AS 43.55.023(a), effective immediately, to limit the 20 percent tax credit for qualified capital expenditures incurred north of 68 degrees North latitude (North Slope) to expenditures incurred before January 1, 2014. Tax credits under AS 43.55.023(a) based on expenditures to explore for, develop, or produce oil and gas deposits south of the North Slope are not affected.

Section 9: Amends AS 43.55.023(b) to provide that the 25 percent tax credit for a carried-forward annual loss based on expenditures incurred after December 31, 2013, to explore for, develop, or produce oil and gas deposits located on the North Slope are no longer redeemable for cash, nor are they transferable except as provided in new AS 43.55.023(t) in section 15 of the bill. Carried-forward annual loss tax credits based on expenditures incurred after December 31, 2013, to explore for, develop, or produce oil or gas deposits located south of the North Slope are not affected.

Section 10: Amends AS 43.55.023(c) to conform with new amendments to AS 43.55.023 in section 15 of the bill, related to the new rules that will apply to the tax credit for carried-forward losses incurred for expenditures related to North Slope activities.

Section 11: Amends AS 43.55.023(d), issuance of transferable and redeemable tax credit certificates for qualified capital expenditures, to conform to the amendments to AS 43.55.023(a) in section 7 of the bill authorizing the Department of Revenue to issue one tax credit certificate for the full amount of a transferable tax credit.

Section 12: Amends AS 43.55.023(d), issuance of transferable and redeemable tax credit certificates for qualified capital expenditures, so that tax credits certificates based on lease expenditures incurred after December 31, 2013 to explore for, develop, or produce oil and gas deposits on the North Slope are no longer redeemable for cash; nor are the tax credits transferable except in limited circumstances. The reference to AS 43.55.023(i), the transitional expenditure credit, is deleted to conform to the repeal of AS 43.55.023(i) in section 26 of the bill. Tax credits based on lease expenditures to explore for, develop, or produce oil and gas deposits south of the North Slope are still transferable and redeemable for cash from the oil and gas tax credit fund.

Section 13: Amends AS 43.55.023(g), issuance of tax credit certificates, to conform to the repeal of AS 43.55.023(m) in section 25 of the bill.

Section 14: Amends AS 43.55.023(n), issuance of tax credit certificates, to conform to the repeal of AS 43.55.023(m) in section 25 of the bill.

Section 15: Amends AS 43.55.023 by adding new subsections (p)–(u), effective January 1, 2014 relating to tax credits for carried-forward annual losses based on adjusted lease expenditures incurred to explore for, develop, or produce oil or gas deposits located on the North Slope.

Subsection (p) limits application of a North Slope carried-forward loss credit to tax liability two or more calendar years after the expenditures on which the credit is based were incurred, but the credit may not be applied later than 10 years after the expenditures were incurred.

Subsection (q) establishes a “first earned, first used” rule by requiring that available North Slope carried-forward loss tax credits must be applied in order of the year the expenditures were incurred, with the earliest year first, against tax liability under AS 43.55.011(e).

Subsection (r) provides an annual 15 percent increase in the amount of a North Slope carried-forward loss tax credit subject to compliance with subsections (p), (q) and (s). An amount of a tax credit subject to this subsection begins to increase on January 1 of the second calendar year immediately following the year the expenditures on which the credit is based were incurred, unless that second calendar year is the year for which the credit is applied. The credit stops increasing on December 31 of the year preceding the year against which the credit is applied against the person’s tax liability. The increase under this subsection has no value except as applied against a person’s tax liability, and the credit expires if not used within the 10 year period in AS 43.55.023(p) of this section.

Subsection (s) provides that a tax credit will not increase under section (r) if the credit could have been applied to a producer’s tax liability and provides the order in which credits must be applied and calculations for the determination of when a tax credit could be applied against a person’s tax liability.

Subsection (t) provides that a North Slope carried-forward loss tax credit is not transferable except to another person that acquires an interest in the lease or property owned by the transferee at the time the lease expenditures on which the credit is based were incurred. A transferee’s use of the credit is subject to the provisions of (u) of this section, and includes filing information on the transfer with the Department of Revenue. The transferee’s use of the credit against its tax liability is subject to audit by the Department of Revenue to the same extent as a tax credit that has not been transferred.

Subsection (u) sets out limitations for use of a North Slope carried-forward loss tax credit where a tax credit is used by a producer to whom a tax credit has been

transferred through acquisition of leases or properties, or by a producer that has acquired the person that holds the tax credit. The transferee or successor may use the amount of the tax credit specified in this subsection, but the amount of the credit that may be applied against the transferee's or successor's tax liability under AS 43.55.011(e) for a calendar year may not exceed 20 percent of the sum obtained by an equation based on the taxable gross value at the point of production from the lease or property in a calendar year multiplied by the percentage interest in the lease or property owned by the person that incurred the expenditures on which the tax credit is based.

Section 16: Amends AS 43.55.024(d) to extend for 6 years the time that a producer may take a tax credit under AS 43.55.024(c), the small producer credit. Qualifying producers would have until 2022 (instead of 2016) to take the nontransferable small producer tax credit. The extension also applies to producers that did not have commercial production in the state before April 1, 2006, but that first have commercial production before May 1, 2022. Those producers may take the tax credit for nine calendar years (the same period as in current law) after the start of commercial production.

Section 17: Amends AS 43.55.028(e) to conform to the repeal of AS 43.55.023(m) in section 25 of the bill.

Section 18: Amends AS 43.55.028(g) to conform to the repeal of AS 43.55.023(m) in section 25 of the bill.

Section 19: Amends AS 43.55.030(e) (1), annual statements of qualified capital expenditures, to clarify current practice that both explorers and producers must file statements reporting qualified capital expenditures and other information required under AS 43.55.030(e).

Section 20: Amends AS 43.55.030 by adding new subsection (g) which requires an explorer or producer claiming a tax credit subject to AS 43.55.023(p)–(u) (section 15 of the bill) to file an annual statement with the Department of Revenue reporting the nature and amount of the expenditures on which the North Slope carried-forward loss credit is based, the amount the person intends to carry forward, any increase in the amount of the credit, and other information required by the Department of Revenue.

Section 21: Amends AS 43.55.160(a), calculation of annual production tax values, to clarify and conform to the provisions of AS 43.55.011(p).

Section 22: AS 43.55.160(a), calculation of annual production tax values, is repealed and reenacted to conform to the repeal of the monthly progressivity tax in section 26 of the bill. For oil and gas produced after January 1, 2014, a producer of oil and gas will no longer need to calculate monthly production tax values for oil and for purposes of AS 43.55.011(g), the progressivity tax. Other clarifying amendments are made setting out

the categories for which a separate annual production tax value must be calculated, but the method of calculating annual production tax value is not affected.

Section 23: Amends AS 43.55.160(e) to conform to the amendments in section 22 of the bill.

Section 24: Amends AS 43.55.160 by adding new subsection (f) which provides that in calculating the annual production tax value for oil and gas produced north of 68 degrees North latitude the gross value at the point of production of the oil or gas meeting either or both of the following criteria is reduced by 20 percent if (1) produced from a lease or property that does not contain land that was within a unit on January 1, 2003; (2) produced from a participating area established after December 31, 2011, that is within a unit formed under AS 38.05.180(p) before January 1, 2003, if the participating area does not contain a reservoir that had previously been in a participating area established before January 1, 2012. The gross value at the point of production is not reduced if it is zero or less before any reduction.

Section 25: Repeals AS 43.55.023(m) relating to tax credit certificates.

Section 26: Repeals AS 43.55.011(g), 43.55.023(i) and 43.55.160(c).

Section 27: Applicability sections.

Section 28: Retroactivity provisions for sections 3, 7, 11, 13, 14, 17, 21 and 25.

Section 29: Transition provision providing the Department of Revenue authority to adopt regulations, to be effective not before the date of the effective date of the provisions of this bill.

Section 30: Sections 1, 2, 5, 6, 9, 10, 12, 15, 20, 22-24, and 26 take effect January 1, 2014.

Section 31: Except as provided in section 30, the remaining sections of the bill will take effect immediately under AS 01.10.070(c).

FISCAL NOTE

STATE OF ALASKA
2013 LEGISLATIVE SESSION

Bill Version LL0647
Fiscal Note Number _____
() Publish Date _____

Identifier (file name) LL0647-DNR-DOG-1-14-13 Dept. Affected Natural Resources
Title Production Tax on Oil and Gas Appropriation Oil & Gas
Allocation Oil & Gas
Sponsor Rules by Request of the Governor
Requester Governor OMB Component Number 439

Expenditures/Revenues (Thousands of Dollars)

Note: Amounts do not include inflation unless otherwise noted below.

	FY14 Appropriation Requested	Included in Governor's FY14 Request	Out-Year Cost Estimates				
			FY15	FY16	FY17	FY18	FY19
OPERATING EXPENDITURES							
Personal Services							
Travel							
Services							
Commodities							
Capital Outlay							
Grants, Benefits							
Miscellaneous							
TOTAL OPERATING	0.0	0.0	0.0	0.0	0.0	0.0	0.0

FUND SOURCE		(Thousands of Dollars)					
1002	Federal Receipts						
1003	GF Match						
1004	GF						
1005	GF/Prgm (DGF)						
1037	GF/MH (UGF)						
1178	temp code (UGF)						
TOTAL		0.0	0.0	0.0	0.0	0.0	0.0

POSITIONS							
Full-time							
Part-time							
Temporary							

CHANGE IN REVENUES	***		***	***	***	***	***
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Estimated **SUPPLEMENTAL (FY13) operating costs** _____ (separate supplemental appropriation required)
(discuss reasons and fund source(s) in analysis section)

Estimated **CAPITAL (FY14) costs** _____ (separate capital appropriation required)
(discuss reasons and fund source(s) in analysis section)

ASSOCIATED REGULATIONS

Does the bill direct, or will the bill result in, regulation changes adopted by your agency? No
If yes, by what date are the regulations to be adopted, amended, or repealed? N/A Discuss details in analysis section.

Why this fiscal note differs from previous version (if initial version, please note as such)

Initial Version.

Prepared by Bill Barron, Director
Division Division of Oil and Gas
Approved by Daniel S. Sullivan, Commissioner
Department of Natural Resources

Phone 269-8800
Date/Time 1/14/13 5:00 PM
Date 1/14/2013

FISCAL NOTE ANALYSIS

STATE OF ALASKA
2013 LEGISLATIVE SESSION

BILL NO. LL0647

Analysis

LL0647 reforms the oil and gas production tax system in Alaska. This bill will not result in any procedural changes in how the Division of Oil and Gas operates and therefore the Department of Natural Resources (DNR) does not anticipate any fiscal impact to the Department's operating budget.

This bill proposes to improve Alaska's competitiveness and encourage producers to invest more by simplifying the oil and gas production tax system. First, this bill repeals the progressive tax structure, which will help encourage the type of long-term planning and investment needed to promote new investment in new production in Alaska. Further, this bill shifts incentives away from spending and provides new incentives to reward new production. At forecasted price ranges, overall government take and marginal tax rates are reduced materially. To the extent that investments are made as a consequence of these changes to the tax regime, royalty revenue may rise.

The fiscal impact on royalty revenue is an indeterminate positive.

FISCAL NOTE ANALYSIS

STATE OF ALASKA
2013 LEGISLATIVE SESSION

BILL NO. LL0647

Analysis Continued

**Differences in Royalty Revenues from
New Production Scenarios in \$Millions***

*Note: These scenarios are based on Department of Revenue modeling.

At Forecasted Production							
	FY 2014	FY 2015	FY 2016	FY 2017	FY 2018	FY 2019	
\$	120	\$0	\$0	\$0	\$0	\$0	\$0
\$	100	\$0	\$0	\$0	\$0	\$0	\$0
\$	90	\$0	\$0	\$0	\$0	\$0	\$0

Additional Production Scenario A

Forecasted production plus 50 million barrel field developed by a New Entrant

Oil Price in \$/barrel	FY 2014	FY 2015	FY 2016	FY 2017	FY 2018	FY 2019
\$120	\$0	\$0	\$0	\$12	\$24	\$35
\$100	\$0	\$0	\$0	\$10	\$20	\$29
\$90	\$0	\$0	\$0	\$9	\$17	\$26

Assumes field outside of a current unit and subject to gross revenue exclusion, first oil in 2017 and peak production of 10,000 barrels per day in 2019. Total development cost of \$500 million.

Additional Production Scenario B

With addition of 4 oil rigs to legacy fields drilling from 2014-2019

	FY 2014	FY 2015	FY 2016	FY 2017	FY 2018	FY 2019
\$120	\$57	\$106	\$147	\$181	\$212	\$179
\$100	\$47	\$87	\$120	\$148	\$173	\$146
\$90	\$42	\$77	\$107	\$132	\$154	\$130

Assumes each oil rig drills 4 new production wells per year, with each well producing 1,000 barrels of oil per day and declining at a rate of 15% per year. Development costs for each well assumed to be \$20 million.

Additional Production Scenario C

With new well pad and 4 additional rigs in legacy fields, plus new 10,000 bopd field starting in 2017

	FY 2014	FY 2015	FY 2016	FY 2017	FY 2018	FY 2019
\$120	\$111	\$213	\$307	\$433	\$557	\$533
\$100	\$91	\$174	\$251	\$354	\$455	\$435
\$90	\$81	\$155	\$223	\$314	\$404	\$386

Assumes new well pad within major North Slope unit producing a total of 125 million barrels of new production over an 8-year period starting in 2015 at total development costs of \$5 billion. Also includes scenario B above with 4 oil rigs in legacy fields and scenario A above with the addition of a new 50-million barrel field.

FISCAL NOTE

STATE OF ALASKA
2013 LEGISLATIVE SESSION

Bill Version 647
 Fiscal Note Number 1
 () Publish Date _____

Identifier (file name) 0647-DOR-TAX-01-15-13 Dept. Affected Revenue
 Title Production Tax on Oil and Gas Appropriation Treasury and Taxation
 Allocation Tax Division
 Sponsor Rules by Request of the Governor
 Requester Governor OMB Component Number 2476

Expenditures/Revenues (Thousands of Dollars)

Note: Amounts do not include inflation unless otherwise noted below.

	FY14 Appropriation Requested	Included in Governor's FY14 Request	Out-Year Cost Estimates				
			FY15	FY16	FY17	FY18	FY19
OPERATING EXPENDITURES	FY14	FY14	FY15	FY16	FY17	FY18	FY19
Personal Services							
Travel							
Services							
Commodities							
Capital Outlay							
Grants, Benefits							
Miscellaneous							
TOTAL OPERATING	0.0	0.0	0.0	0.0	0.0	0.0	0.0

FUND SOURCE (Thousands of Dollars)

1002	Federal Receipts							
1003	GF Match							
1004	GF							
1005	GF/Prgm (DGF)							
1037	GF/MH (UGF)							
1178	temp code (UGF)							
TOTAL		0.0	0.0	0.0	0.0	0.0	0.0	0.0

POSITIONS

Full-time							
Part-time							
Temporary							

CHANGE IN REVENUES

	***	***	***	***	***	***	***
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Estimated **SUPPLEMENTAL (FY13) operating costs** _____ (separate supplemental appropriation required)
 (discuss reasons and fund source(s) in analysis section)

Estimated **CAPITAL (FY14) costs** _____ (separate capital appropriation required)
 (discuss reasons and fund source(s) in analysis section)

ASSOCIATED REGULATIONS

Does the bill direct, or will the bill result in, regulation changes adopted by your agency? yes
 If yes, by what date are the regulations to be adopted, amended, or repealed? 1/1/2014 Discuss details in analysis section.

Why this fiscal note differs from previous version (if initial version, please note as such)

Initial version.

Prepared by Cherie Nienhuis, Ed King and Michael Pawlowski
 Division Tax Division
 Approved by Bryan Butcher, Commissioner
 Department of Revenue

Phone 907-269-1019
 Date/Time 1/15/2013, 11:39 pm
 Date 1/15/2013

FISCAL NOTE ANALYSIS

STATE OF ALASKA
2013 LEGISLATIVE SESSION

BILL NO. 647

Analysis

This bill limits the provision that the State of Alaska purchase transferable tax credit certificates for credits earned from leases or properties that contain land that is north of 68 degrees North latitude to credits based on expenditures incurred before January 1, 2014. The operating portion of the long-term fiscal plan anticipates an average of \$400 million in refundable credits through 2023. It is anticipated that the limitation of this provision would reduce those future appropriations, beginning in FY 2015.

Regulations: The bill does not direct DOR to adopt new regulations to implement its provisions, but existing regulations may need to be amended to conform to changes in eligibility for redeemable tax credits, and to account for repeal of some sections. There may be additional regulations required, but not before January 1, 2014.

*****The revenue impact of this bill is an estimate based on Fall 2012 Forecast.**

This bill makes several changes to the oil and gas production tax system. Each of the major changes, along with its potential revenue impact, is discussed separately below. The effective date of each of the bill's provisions listed below is January 1, 2014, with the exception of provision 6 (bill section 7), which is effective for expenditures beginning January 1, 2013.

- 1. The progressive portion of the production tax at AS 43.55.011(g) is repealed, and the production tax at AS 43.55.011(e) is retained at a tax rate of 25% of production tax value.** Based on our Fall 2012 forecast, this change decreases production tax revenue over the forecast period analyzed. Please see detailed summary table on page 3 of this fiscal note.
- 2. Production tax credits under AS 43.55.023(a) for qualified capital expenditures are limited to expenditures incurred before January 1, 2014 on leases or properties that contain land north of 68 degrees North latitude.** Based on our Fall 2012 forecast, this change increases production tax revenue annually over the forecast period analyzed. Please see detailed summary table on page 3 of this fiscal note.
- 3. Companies that incur net losses from leases or properties that contain land north of 68 degrees North latitude will earn a credit of 25% of those losses to be carried forward for a maximum period of ten years. These net loss carry-forwards will increase at an annual rate of 15 percent beginning on January 1 of the second calendar year following the year of the loss.** The revenue impact of this provision is confidential under our forecast, however, the impact is expected to be minimal.
- 4. A gross revenue exclusion (GRE) is applicable to production from leases or properties containing land that is north of 68 degrees North latitude and meets one or both of two criteria: (1) is produced from a lease or property that does not contain land that was within a unit on January 1, 2003; or (2) is produced from a participating area established after December 31, 2011 for lease or properties in a unit formed before January 1, 2003.** This provision is intended to incentivize future production and the revenue impact of this provision based on the current production forecast is minimal.
- 5. The small producer credit at AS 43.55.024 is extended to the later of 2022 or the ninth calendar year after the calendar year that the producer first has commercial production.** This provision extends the small producer credit six years from the original sunset date of 2016. The revenue impact based on the current revenue forecast is minimal.
- 6. The provision requiring that credits be taken over two years is eliminated.** This provision would result in companies using credits earlier than they would without this change, and except for the time value of money impact, it is revenue neutral. This provision applies to expenditures after December 31, 2012.
- 7. The community revenue sharing fund is amended to allow the legislature to make appropriations from the tax revenue collected under AS 43.20, as opposed to revenue collected under AS 43.55.011(g).** The impact of this provision is indeterminate.

Analysis Continued

Provisions in the Bill and their Estimated Fiscal Impact as compared to Fall 2012 Forecast (\$millions)

Brief Description of Provision	FY 2014	FY 2015	FY 2016	FY 2017	FY 2018	FY 2019
1. Elimination of progressive portion of tax	-\$800	-\$1,500	-\$1,700	-\$1,800	-\$1,750	-\$1,650
2. Limitation of credits for qualified capital expenditures for North Slope	\$300	\$700	\$650	\$550	\$475	\$400
3. Net operating losses carried forward and increased at 15% per year	Less than -\$50 million per year under Fall 2012 forecast					
4. Gross revenue exclusion for certain areas						
5. Small producer credit extended to 2022	\$0	\$0	\$0	-\$25	-\$25	-\$50
6. Provision requiring credits be taken over 2 year eliminated*	-\$250					
7. Amendment to the community revenue sharing fund	Indeterminate					
Total Revenue Impact	-\$750	-\$800	-\$1,050	-\$1,275	-\$1,300	-\$1,300
Impact on Operating Budget	-\$150	\$250	\$250	\$250	\$250	\$250
Total Fiscal Impact	-\$900	-\$550	-\$800	-\$1,025	-\$1,050	-\$1,050

*Provision 6 above, which eliminates the requirement that credits be taken over 2 years is revenue neutral, and simply shifts the tax liability from future years to FY 2014. The total impact of that provision is \$400 million, with \$250 million taken against tax liability as a revenue impact and \$150 million impacting the operating budget. The total fiscal impact consists of both revenue impacts and operating budget impacts of the bill.

The impacts listed above are based on production and prices as forecasted in our Fall 2012 revenue forecast. The forecasted oil prices are between \$109.61 and \$118.29. All data here are estimates; all figures have been rounded to reflect the uncertainty in the estimates.

Analysis Continued

**Differences in General Fund Unrestricted Revenue under
Proposed Bill from Current Tax System in \$Millions***

*Note: These hypothetical examples of additional production assess the impacts from the change in tax rates and credits only and do not attempt to quantify impacts of other parts of the bill, such as the removal of the credit split or the impact on the long-range budget.

At Forecasted Production

Oil Price in \$/barrel	FY 2014	FY 2015	FY 2016	FY 2017	FY 2018	FY 2019
\$90	\$25	\$275	\$225	\$75	\$50	\$0
\$100	-\$200	-\$100	-\$175	-\$300	-\$350	-\$300
\$120	-\$900	-\$1,350	-\$1,425	-\$1,525	-\$1,475	-\$1,350

All additional production scenarios below compare additional production under the proposed bill to ACES without the additional production.

Additional Production Scenario A

Forecasted production plus 50 million barrel field developed by a New Entrant

Oil Price in \$/barrel	FY 2014	FY 2015	FY 2016	FY 2017	FY 2018	FY 2019
\$90	\$50	\$375	\$300	\$175	\$75	\$75
\$100	-\$200	-\$75	-\$150	-\$275	-\$350	-\$300
\$120	-\$900	-\$1,375	-\$1,400	-\$1,500	-\$1,475	-\$1,375

Assumes field outside of a current unit and subject to gross revenue exclusion, first oil in 2017 and peak production of 10,000 barrels per day in 2019. Total development cost of \$500 million.

Additional Production Scenario B

With addition of 4 oil rigs to legacy fields drilling from 2014-2019

	FY 2014	FY 2015	FY 2016	FY 2017	FY 2018	FY 2019
\$90	\$100	\$550	\$575	\$525	\$550	\$475
\$100	-\$125	\$125	\$175	\$150	\$225	\$150
\$120	-\$825	-\$1,100	-\$1,000	-\$975	-\$800	-\$800

Assumes each oil rig drills 4 new production wells per year, with each well producing 1,000 barrels of oil per day beginning in FY 2014, with a maximum production rate of 60,000 barrels per day for a total of 140 million barrels. Development costs for each well assumed to be \$20 million.

Additional Production Scenario C

With new well pad and 4 additional rigs in legacy fields, plus new 10,000 bopd field starting in 2017

	FY 2014	FY 2015	FY 2016	FY 2017	FY 2018	FY 2019
\$90	\$50	\$525	\$675	\$800	\$1,275	\$1,200
\$100	-\$175	\$150	\$325	\$500	\$1,025	\$975
\$120	-\$825	-\$1,000	-\$725	-\$475	\$225	\$225

Assumes new well pad within major North Slope unit producing a total of 125 million barrels of new production over an 8-year period starting in 2015 at total development costs of \$5 billion. Also includes scenario B above with 4 oil rigs in legacy fields and scenario A above with the addition of a new 50-million barrel field.

A DURABLE TAX SYSTEM THAT IS COMPETITIVE FOR THE LONG TERM

House Resources Committee

Monday, February 11, 2013

Juneau, Alaska

Dan Sullivan, Commissioner

Alaska Department of Natural Resources

Bryan Butcher, Commissioner

Alaska Department of Revenue



TAPS

- A CRITICAL STATE & NATIONAL ENERGY ASSET -

- The Trans Alaska Pipeline, 11 pump stations, several hundred miles of feeder pipelines, and the Valdez Marine Terminal constitute the Trans-Alaska Pipeline System (TAPS).
- At 800 miles long, the Trans Alaska Pipeline is one of the longest pipelines in the world; it crosses more than 500 rivers and streams and three mountain ranges as it carries Alaska's oil from Prudhoe Bay to Valdez.
- The U.S. Congress was instrumental in the approval and rapid development of TAPS. Congress approved construction of the pipeline with the Trans Alaska Pipeline Authorization Act of 1973.
- The principle focus of this Act is as relevant today as it was in 1973: *"the early development and delivery of oil and gas from Alaska's North Slope to domestic markets is in the national interest because of growing domestic shortages and increasing dependence upon insecure foreign sources."*



TAPS

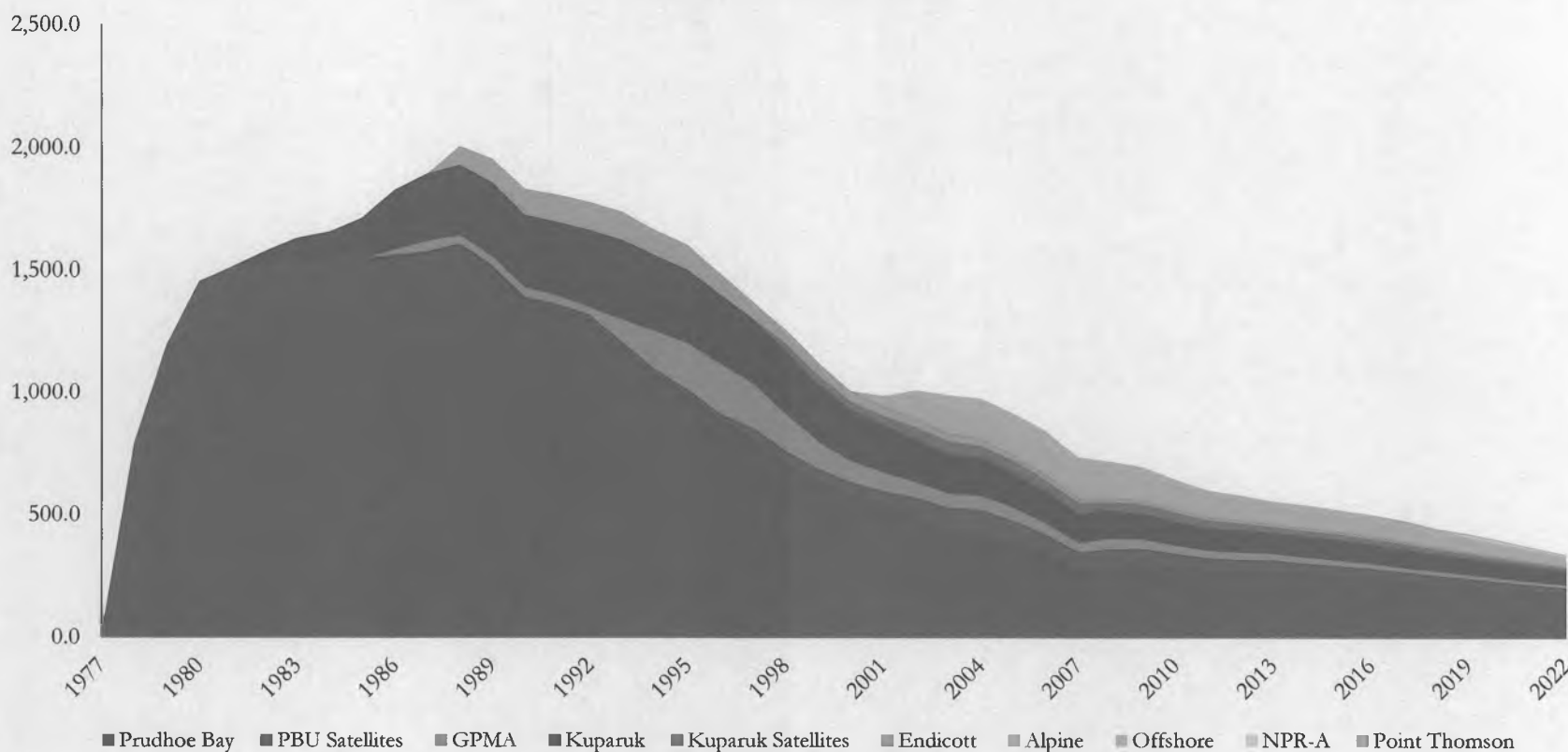
- A CRITICAL STATE & NATIONAL ENERGY ASSET -



- TAPS has transported over 16.3 billion barrels of oil and natural gas liquids since June of 1977. Production peaked at 2.2 million barrels per day in the late 1980s, representing 25% of U.S. domestic production
- Since its peak, however, throughput has steadily declined; today, TAPS is 2/3 empty and declining at an average of 6% per year
- TAPS throughput decline threatens economic disruption and the very existence of our pipeline
- We must encourage industry to invest in exploration and development of conventional and unconventional resources on state and federal land, onshore and offshore
- TAPS has plenty of capacity for increased throughput
- Most near-term critical economic issue facing the state
- Less oil in the pipeline year after year takes away revenue from future generations—the ultimate giveaway
- Reconfiguration, 1.2 million barrels/day

OIL TAX REFORM - PRODUCTION HISTORY -

ANS Production



Source: Alaska Department of Revenue Fall 2012 Revenue Sources Book: <http://www.tax.alaska.gov/programs/documentviewer/viewer.aspx?2682f>

TAPS

- THROUGHPUT DECLINE IS AN URGENT PROBLEM -

- TAPS throughput decline is the **MOST URGENT** issue facing the State's economic future
- January 2011 TAPS shutdown



Petroleum News, February 27, 2011:

“Jan. shutdown puts TAPS close to brink:

Alyeska executives describe efforts to prevent freezing in pipeline after pump station oil leak in era of low oil throughput”

WSJ, May 11, 2011:

“Shrinking Oil Supplies Put Alaskan Pipeline at Risk”

“Now, dwindling oil production along Alaska's northern edge means the pipeline carries less than one-third the volume it once did—and the crude takes five times as long to get to its destination.

That leisurely flow means the oil is above ground longer and more exposed to Alaska's frigid weather; the crude sometimes arrives chilled to 40 degrees. As the flow and temperature continue to drop, experts say the risks of a clog or corrosion increase, as do the odds of ruptures and spills.”

ALASKA'S NORTH SLOPE OIL & GAS POTENTIAL

- USGS estimates that Alaska's North Slope has more oil than any other Arctic nation
 - **OIL:** Est. 40 billion barrels of conventional oil (*USGS & BOEMRE*)
 - **GAS:** Est. over 200 trillion cubic feet of conventional natural gas (*USGS*)
- Alaska has world-class unconventional resources, including tens of billions of barrels of heavy oil, shale oil, and viscous oil, and hundreds of trillions of cubic feet of shale gas, tight gas, and gas hydrates
 - Positive methane hydrate test production



Compared to most hydrocarbon basins, Alaska is relatively underexplored, with 500 exploration wells on the North Slope, compared to Wyoming's 19,000.

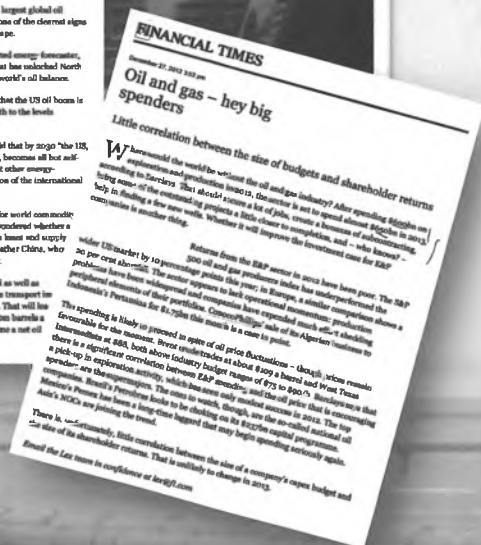
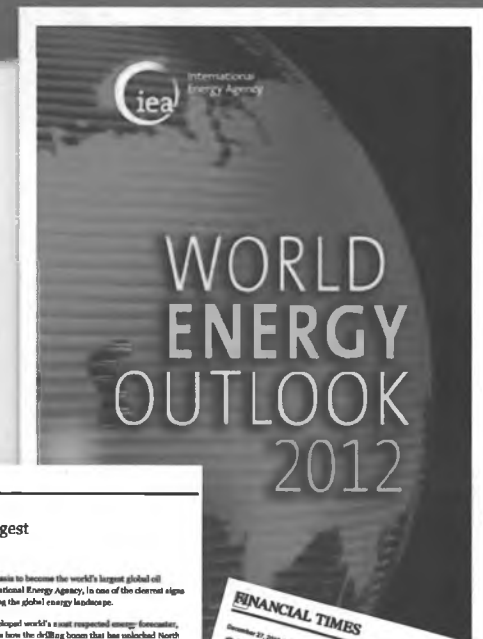


ALASKA'S NORTH SLOPE OIL & GAS POTENTIAL



U.S. ENERGY RENAISSANCE

- Global and U.S. hydrocarbon boom
- IEA World Energy Outlook 2012 – U.S. to overtake Saudi Arabia and Russia to become the world's largest global oil producer by the second half of this decade.
- Financial Times, November 12, 2012 – *“U.S. set to become biggest oil producer”*
- Financial Times, December 27, 2012 – *“Oil and gas – hey big spenders”*
 - 2012 - \$600 billion on exploration and production in oil and gas industry
 - 2013 projected - \$650 billion on exploration and production in oil and gas industry



OTHER BASINS HAVE TURNED DECLINE AROUND

THE  INDEPENDENT

North Sea set to create 50,000 new jobs as investment soars

Tom Bawden

Monday, 14 January 2013

North Sea employment is set to boom this year. Up to 50,000 new jobs are expected in Britain's oil and gas industry.

The jobs bonanza will support-services staff in the North Sea to nearly half a million.

"There's been a lot of investment at the moment," said a senior industry official. "It's behind the research. At the same time, we've made it easier for companies to invest."

Further down the line, 35,000 jobs in the next five years, according to the Institute of Directors.

The expansion has been set to be ploughed into the biggest creation of the North Sea for a decade. Shetland Isles, that will be the biggest.

The surge in investment in sea development, predicted by Energy and Climate Change.

Although North Sea production was 4.5m barrels a day, it is set to fall to 2m barrels. On the day, it is set to compete for employment more than twice the number of jobs.

"The expansion has been spurred by record-breaking levels of investment, with about £40bn set to be ploughed into North Sea production in the next three years..."

"The surge in investment comes after the government relaxed the tax regime around North Sea development, prompting a record-breaking licensing round when the Department of Energy and Climate Change awarded 167 new licenses on 330 blocks last October."

"Budget 2012: North Sea oil tax reforms 'to lead to £50bn investment': An extra £50bn could be pumped into the North Sea oil and gas industry thanks to a new package of tax reforms."

Budget 2012: North Sea oil tax reforms 'to lead to £50bn investment'

An extra £50bn could be pumped into the North Sea oil and gas industry thanks to a new package of tax reforms.

The Budget was a "turning point" for industry relations with the Treasury. Photo: Rex Features

By Emily Gosden

10:11PM GMT 21 Mar 2012

Industry body Oil & Gas UK said the Chancellor's promise of certainty on decommissioning tax relief and new tax breaks on small and deepwater fields would stimulate tens of billions of pounds of additional investment.

The Budget was a "turning point" for industry relations with the Treasury after outrage at the surprise tax rise in last year's Budget. Oil & Gas UK said. The measure means more than 2bn barrels of the UK's oil and gas reserves that would otherwise have been left in the ground will now eventually be recovered at no net cost to the Exchequer.

The Treasury estimates that the reforms could actually boost its coffers by £1bn over the next five years, due to tax on projects that would not otherwise have gone ahead.

The Chancellor confirmed that he would draw up a contract with the industry to permanently guarantee levels of tax relief on the £30bn bill for decommissioning old infrastructure, a move that Oil & Gas UK said could stimulate up to £40bn investment during the lifetime of the North Sea basin. Anxiety over whether rates might be cut has blocked some deals.

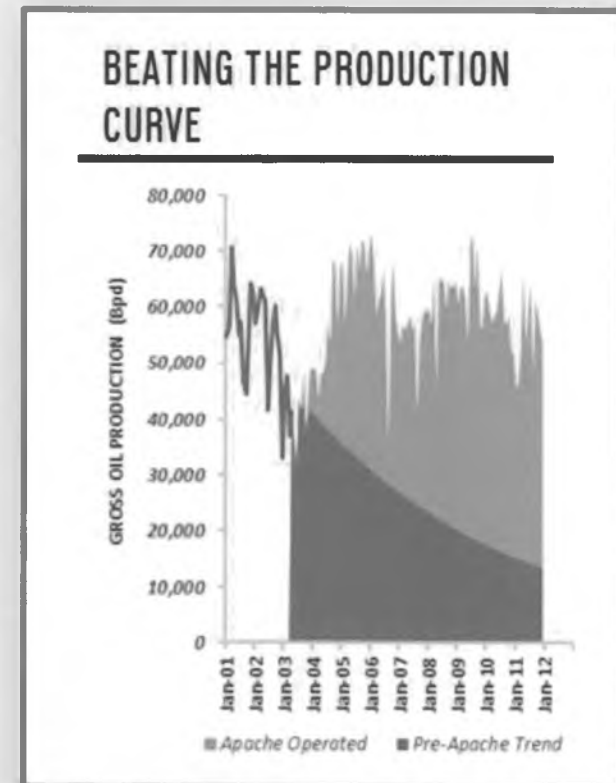
The Chancellor unveiled new 'field allowances', doubling tax breaks for developing smaller fields and introducing a £3bn allowance for some deepwater fields with significant reserves in the new exploration frontier West of Shetland. The allowances should see £10bn extra investment, the industry body said.

Malcolm Webb, Oil & Gas UK's chief executive, said the Budget was a "turning point for the UK's oil and gas industry" toward "a more stable future fostered by constructive collaboration between government and industry".

OTHER BASINS HAVE TURNED DECLINE AROUND

Apache Corporation: Forties Field Acquisition

- Field discovered in early 1970s by BP; purchased by Apache in 2003
- Contains estimated 4.2 to 5.0 billion barrels of oil in place
- Production peaked at over 500,000 Bpd, but by 2003, had declined to 40,000-45,000 Bpd
- Apache has “beaten the curve” by adding reserves, production, and value
- Have returned over 400% of their original 2003 investment



SECURE ALASKA'S FUTURE—OIL

- *Secure Alaska's Future—Oil* is the State's comprehensive strategy to increase TAPS throughput to one million barrels a day
 - I. Enhance Alaska's global competitiveness and investment climate
 - II. Ensure the permitting process is structured and efficient
 - III. Facilitate and incentivize the next phases of North Slope development
 - IV. Promote Alaska's resources and positive investment climate to world markets

- **Governor Parnell's 2013 State of the State:** *"Our problem is not below the ground. Our problem is above the ground."*
 - The missing piece is meaningful tax reform
 - "Our state's prosperity has always rested on natural resources. Tonight, that foundation is at risk, not because we are running out of oil, but because we are running behind the competition."

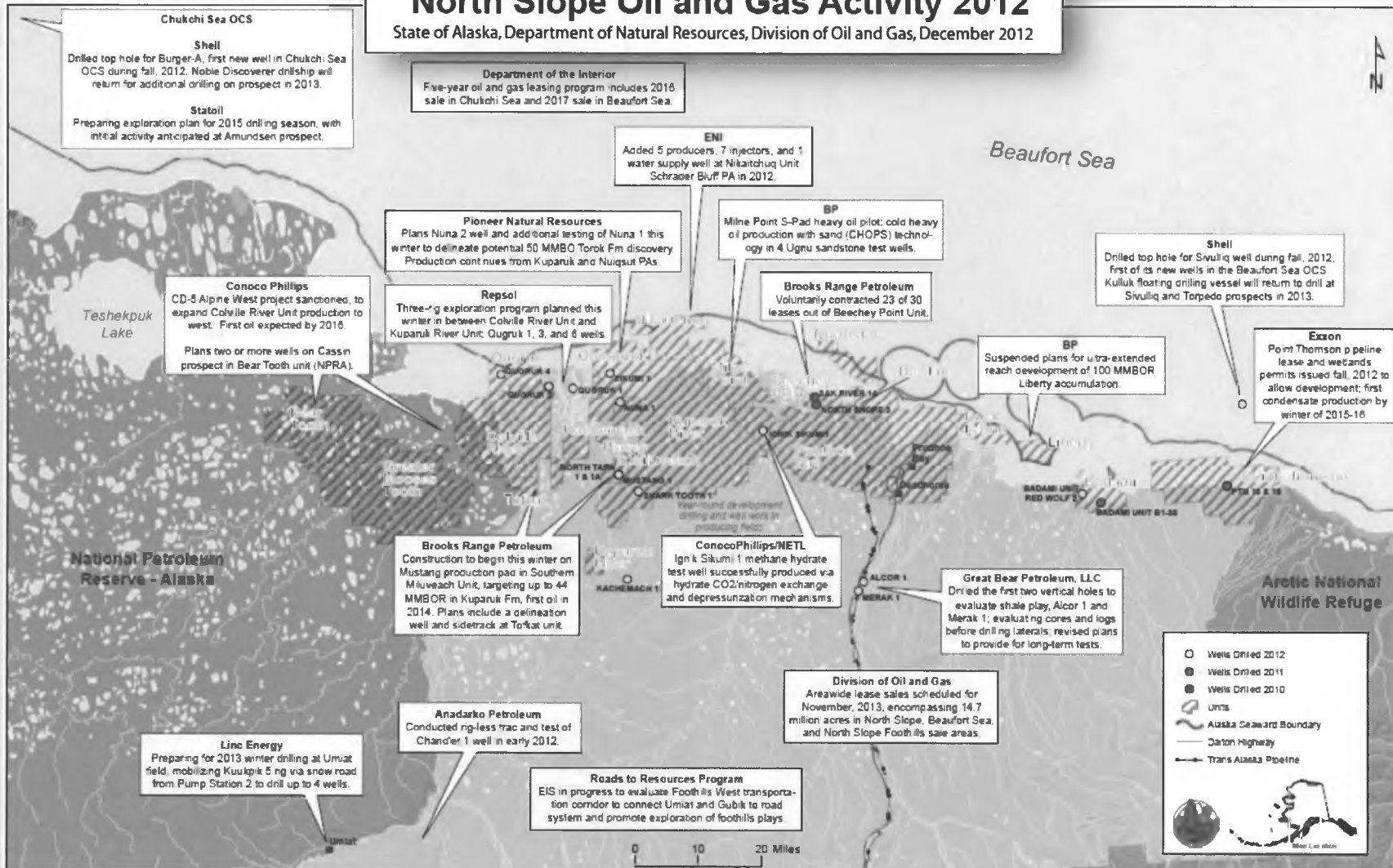


SECURE ALASKA'S FUTURE: OIL

- NORTH SLOPE RECENT & PROPOSED ACTIVITY FOR OIL & GAS -

North Slope Oil and Gas Activity 2012

State of Alaska, Department of Natural Resources, Division of Oil and Gas, December 2012



Chukchi Sea OCS
Shell
 Drilled top hole for Burger-A, first new well in Chukchi Sea OCS during fall, 2012. Noble Discoverer drillship will return for additional drilling on prospect in 2013.
Statoil
 Preparing exploration plan for 2015 drilling season, with initial activity anticipated at Amundsen prospect.

Department of the Interior
 Five-year oil and gas leasing program includes 2016 sale in Chukchi Sea and 2017 sale in Beaufort Sea.

ENI
 Added 5 producers, 7 injectors, and 1 water supply well at Nikaitchuq Unit Schraeder Bluff PA in 2012.

BP
 Milne Point S-Pad heavy oil pilot: cold heavy oil production with sand (CHOPS) technology in 4 Ugru sandstone test wells.

Shell
 Drilled top hole for Sivuliq well during fall, 2012. First of its new wells in the Beaufort Sea OCS. Kulluk floating drilling vessel will return to drill at Sivuliq and Torpedo prospects in 2013.

Conoco Phillips
 CD-5 Alpine West project sanctioned, to expand Colville River Unit production to west. First oil expected by 2016.
 Plans two or more wells on Cassin prospect in Bear Tooth unit (NPRA).

Pioneer Natural Resources
 Plans Nuna 2 well and additional testing of Nuna 1 this winter to delineate potential 50 MMBOR Torok Fm discovery. Production continues from Kuparuk and Nuiqsut PAs.

Brooks Range Petroleum
 Voluntarily contracted 23 of 30 leases out of Beechey Point Unit.

BP
 Suspended plans for ultra-extended reach development of 100 MMBOR Liberty accumulation.

Exxon
 Point Thomson pipeline lease and wetlands permits issued fall, 2012 to allow development; first condensate production by winter of 2015-16.

Repsol
 Three-rig exploration program planned this winter in between Colville River Unit and Kuparuk River Unit; Qugruk 1, 3, and 6 wells.

Brooks Range Petroleum
 Construction to begin this winter on Mustang production pad in Southern Miaveach Unit, targeting up to 44 MMBOR in Kuparuk Fm, first oil in 2014. Plans include a delineation well and sidetrack at Toftak unit.

ConocoPhillips/METL
 Ignik Sikumi 1 methane hydrate test well successfully produced via hydrate CO2/nitrogen exchange and depressurization mechanisms.

Great Bear Petroleum, LLC
 Drilled the first two vertical holes to evaluate shale play, Alcor 1 and Merak 1; evaluating cores and logs before drilling laterals; revised plans to provide for long-term tests.

Line Energy
 Preparing for 2013 winter drilling at Umiat field, mobilizing Kuupkik 5 rig via snow road from Pump Station 2 to drill up to 4 wells.

Anadarko Petroleum
 Conducted rig-less frac and test of Chandler 1 well in early 2012.

Division of Oil and Gas
 Area-wide lease sales scheduled for November, 2013, encompassing 14.7 million acres in North Slope, Beaufort Sea, and North Slope foothills sale areas.

Roads to Resources Program
 EIS in progress to evaluate Foothills West transportation corridor to connect Umiat and Gubik to road system and promote exploration of foothills plays.

Legend

- Wells Drilled 2012
- Wells Drilled 2011
- ◐ Wells Drilled 2010
- ▨ UNITS
- Alaska Seaward Boundary
- Dalton Highway
- Trans-Alaska Pipeline

OIL TAX REFORM

- PRINCIPLES -

- Governor reiterated his principles:
 - Tax reform must be fair to Alaskans
 - Encourage new production
 - Simple so that it restores balance to the system
 - Durable for the long-term
- Integrated team – DOR and DNR
- Consultants - EconOne



OIL TAX REFORM

- THE PROCESS -

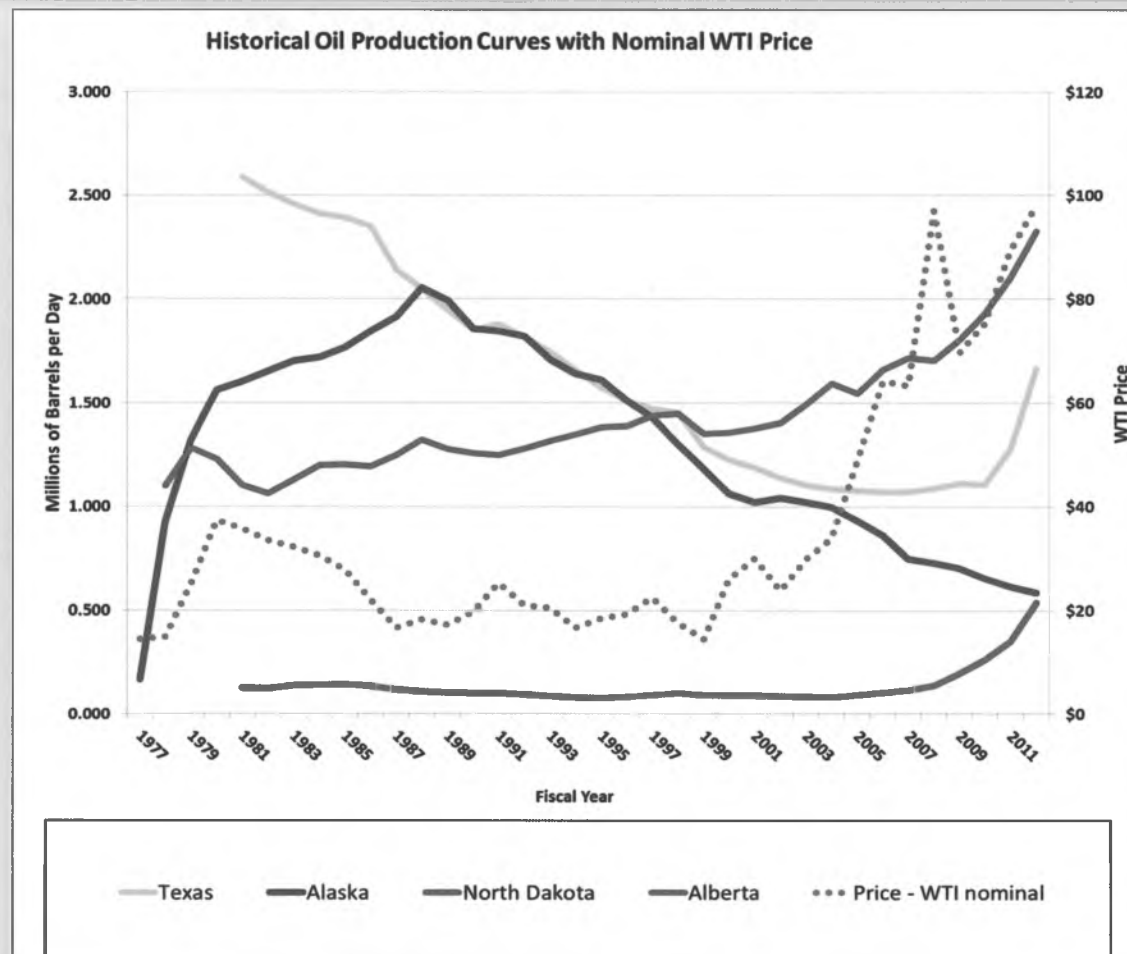
- The team reviewed previous work by both the Legislature and the Administration
- Identified problems with the current tax system
 - Declining Production
 - Competitive Environment
 - Progressivity
 - Tax Credits
- Coordinated effort to understand impacts of production decline on TAPS/Revenues



OTHER BASINS HAVE TURNED DECLINE AROUND

- HISTORICAL OIL PRODUCTION -

How Did Our Competition Fare When Prices Spiked?



COMPARING ALASKA

- Consultants have compared Alaska to other opportunities using detailed models and analyzing a variety of financial metrics.
- The following example is for a 50 million barrel development in Alaska and comparable developments in the Lower-48, Canada and United Kingdom North Sea.
 - Developed by a new entrant to the State.
 - Compares net present value (NPV) per barrel of oil equivalent discounted 12%

West Coast ANS Prices	NPV-12% ACES (Current)	NPV-12% Average L48 Unconventional	NPV-12% Norway	NPV-12% UK Post-1993 with Brownfield
\$80	\$2.73	\$2.14	\$.24	\$4.62
\$100	\$4.07	\$5.52	\$2.34	\$8.25
\$120	\$5.74	\$10.17	\$4.44	\$11.88

Example: at \$100 a barrel, a company would earn \$4.07 in Alaska but \$5.52 in the Lower 48 and \$8.25 in the U.K. North Sea.

OIL TAX REFORM

- PROGRESSIVITY -

- Progressivity is complicated and unpredictable, both for the state and investors
 - Tax rate increases by .4% for every \$1 per barrel that the production tax value (price minus transportation costs minus lease expenditures) exceeds \$30/barrel up to \$92.50 per barrel, then .1% until the total tax rate equals 75%
 - Calculated Monthly
- High marginal tax rates



Linda Hay

From: Linda Hay
To: Tuesday, February 12, 2013 2:57 PM
Subject: HRES Members & Staff
Attachments: resourceliaisons; resourceslaanotice
FW: Corrected credits slide from 2/11/12 Resources presentation
CorrectedCreditsSlide_ds_20130212.pdf

All - Attached is a corrected version of slide #18 - HB 72 presentation by Comm. Sullivan and Comm. Butcher. Please see explanation as offered by the Dept. of Revenue. Still awaiting the presentation for tomorrow by EconOne.

lh

P. S. Thank you to Joe Caissie in Rep. Tarr's office for catching the error!!!

Linda Hay
House Resources Committee Aide
Representative Eric Feige
House Resources Co-Chair
State Capitol Room 126
907-465-3715 - Direct
907-321-1249 - Cell
linda.hay@akleg.gov

Subject: Corrected credits slide from 2/11/12 Resources presentation

Good afternoon,

Attached please find a DOR slide showing production tax credits used and forecast by fiscal year. This is the equivalent to slide 18 of the DOR / DNR presentation in House and Senate Resources yesterday. On the slide presented yesterday, the numbers shown were correct but there was a scaling issue with the labeling of the y-axis. The attached has the correct y-axis and also clarifies on the slide that all amounts shown are in \$millions.

Thank you,

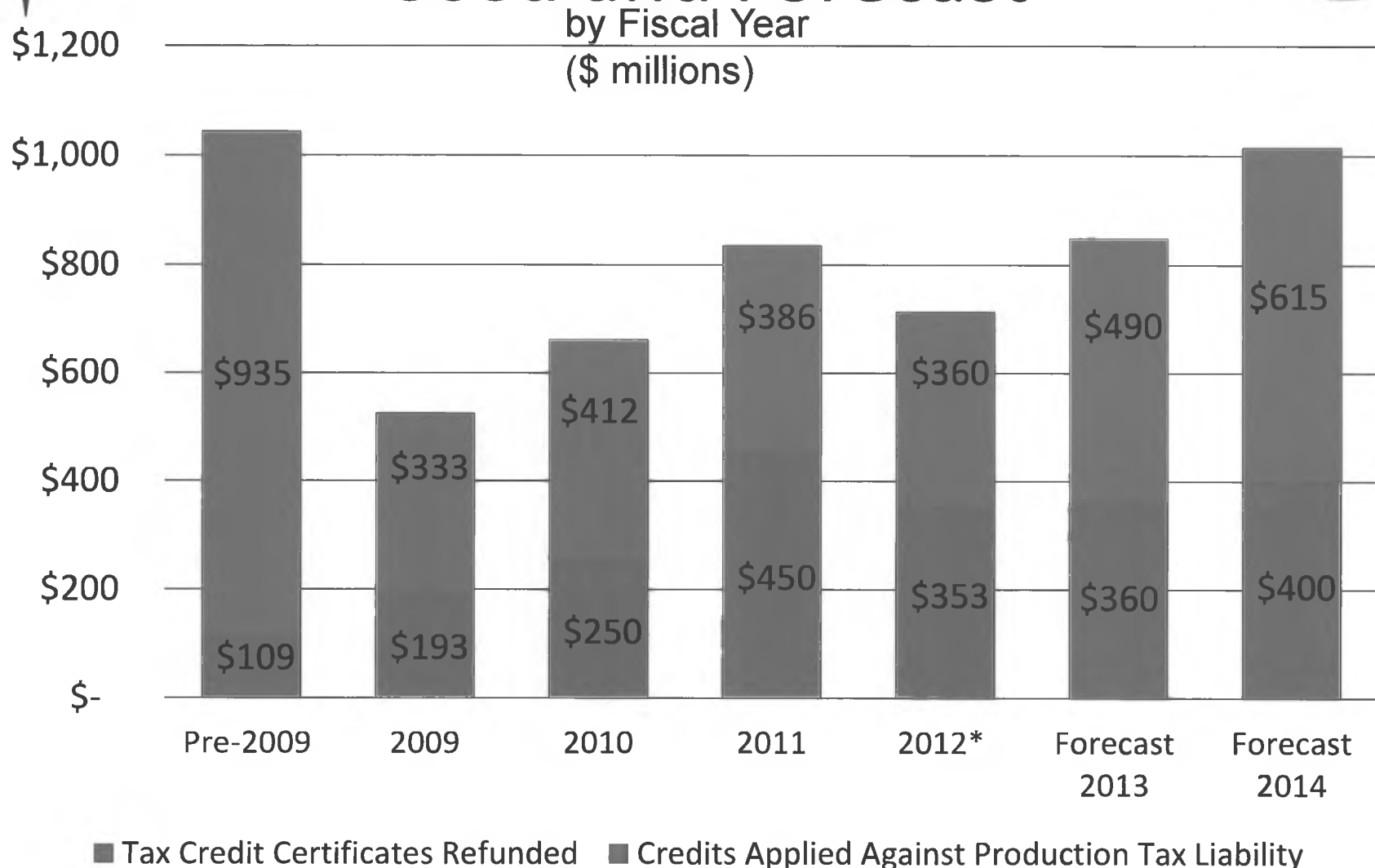
Dan Stickel
Assistant Chief Economist
Alaska Department of Revenue - Tax Division
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Email: dan.stickel@alaska.gov

SECURITY NOTICE: The state cannot guarantee the security of emails sent to or from a state employee outside the state email system. If you do not want to communicate with the Department of Revenue Tax Division via email, please contact the Tax Division in Anchorage at (907) 269-6620 or in Juneau at (907) 465-2320.

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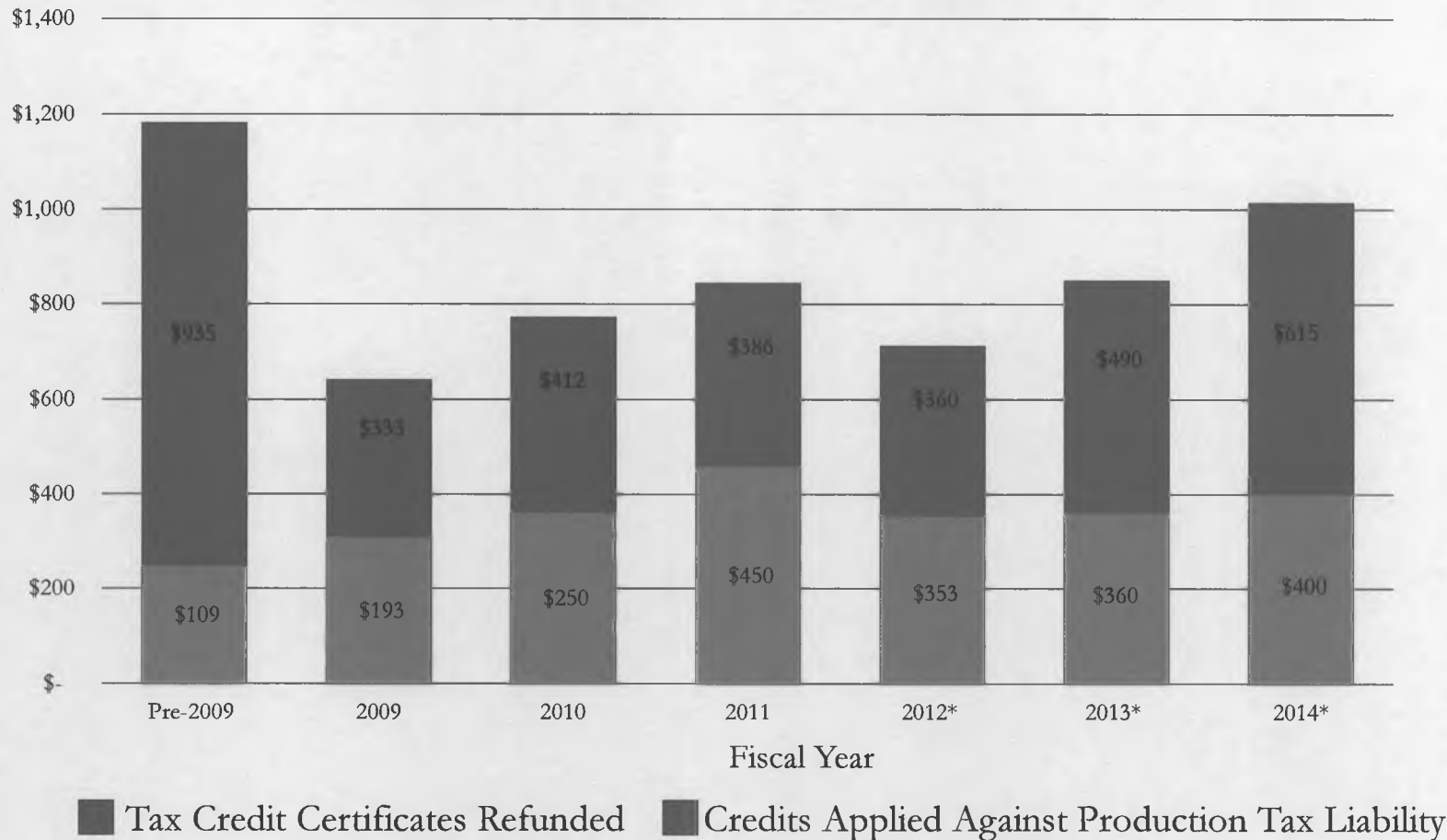


Production Tax Credits Used and Forecast



*Estimated pending final true-ups
Source: Alaska Department of Revenue

OIL TAX REFORM - PRODUCTION TAX CREDITS -



*Estimated pending final true-ups

** Fall 2012 Revenue Sources Forecast

Source: Alaska Department of Revenue

OIL TAX REFORM

- TAPS TARIFFS—WORK TO DATE-

- Identified growing concern in DOR and DNR that TAPS tariffs in our revenue modeling did not dynamically link throughput with tariff rates or capture any added capex or opex spending for low-throughput mitigation measures
- Current work **NOT** designed to find the optimal low-flow mitigation option or forecast specific operational outcomes and exact tariffs
- Preliminary Observations:
 - Low flow mitigation capital and operating expenditures could increase tariffs by as much as \$1 (18%) per barrel by 2019 and as much as \$2.50 (33%) per barrel in 2022
 - Assuming price, production and tariff provided in the Fall 2012 Revenue Sources Book, a \$1 increase in the TAPS tariff will decrease state oil and gas revenue by an average of \$110 million

OIL TAX REFORM

- THE PROPOSAL: HIGHLIGHTS -

1. Eliminate Progressivity and Credits Based on Capital Expenditures
2. Reform remaining credits to be carried forward to when there is production
3. Establish a “Gross Revenue Exclusion” for newer units and new participating areas in existing units (NEW OIL)
4. Hold Cook Inlet and Middle Earth Harmless

OIL TAX REFORM

- SIMPLE & BALANCES IS THE GOAL-

Current

- 25% Base Rate
- Progressivity – 0.4% for every \$ per barrel that PTV exceeds \$30, up to \$92.50, then 0.1% until 50% is reached
 - Approximately \$1.5 billion in FY14
- Tax Credits – Cash reimbursements + reduced tax revenue to state
 - Approximately \$1 billion in FY 14

Proposed

- 25% Base Rate
- Gross Revenue Exclusion (GRE) for New Oil

ALASKA PROGRESS & REGULATORY REFORM HIGHLIGHTS

Winter NAPE Business Conference

Wednesday, February 6, 2013
Houston, TX

Dan Sullivan, Commissioner
Alaska Department of Natural Resources



OUTLINE



PART I: Overview of Alaska

PART II: Recent Activity

PART III: Progress on Commercializing North Slope Gas

PART IV: Moving Forward in 2013

PART I



Overview of Alaska

3

STATE of ALASKA

- LAND BASE -



Land Base

- 586,412 square miles—more than twice the size of Texas
- Is larger than all but 18 sovereign nations
- Has more coastline than all other U.S. states combined
- Has more than 3 million lakes and half of the world's glaciers
- Has approximately 40% of the nation's freshwater supply
- Is the least densely populated U.S. state

Land Ownership

- *Federal Land*: more than 200 million acres
- *State Land*: Approx. 100 million acres of uplands, 60 million acres of tidelands, shore lands, and submerged lands, and 40,000 miles of coastline
- *Native Corporation Land*: 44 million acres



The Alaska Department of Natural Resources manages one of the largest portfolios of oil, gas, minerals, renewable resources, water, and land in the world.

4

STATE of ALASKA

- ALASKA AS A STOREHOUSE: OIL & GAS -

North Slope

- USGS estimates that Alaska's North Slope has more oil than any other Arctic nation
 - **OIL:** Est. 40 billion barrels of conventional oil (*USGS & BOEMRE*)
 - **GAS:** Est. over 200 trillion cubic feet of conventional natural gas (*USGS*)
- Alaska has world-class unconventional resources, including tens of billions of barrels of heavy oil, shale oil, and viscous oil, and hundreds of trillions of cubic feet of shale gas, tight gas, and gas hydrates
 - Positive methane hydrate test production

Cook Inlet

USGS estimates that significant undiscovered, technically recoverable oil and gas resources remain to be found in Cook Inlet:

- 19 trillion cubic feet of natural gas
- 600 million barrels of oil
- 46 million barrels of natural gas liquids



Compared to most hydrocarbon basins, Alaska is relatively underexplored, with 500 exploration wells on the North Slope, compared to Wyoming's 19,000.

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PART II



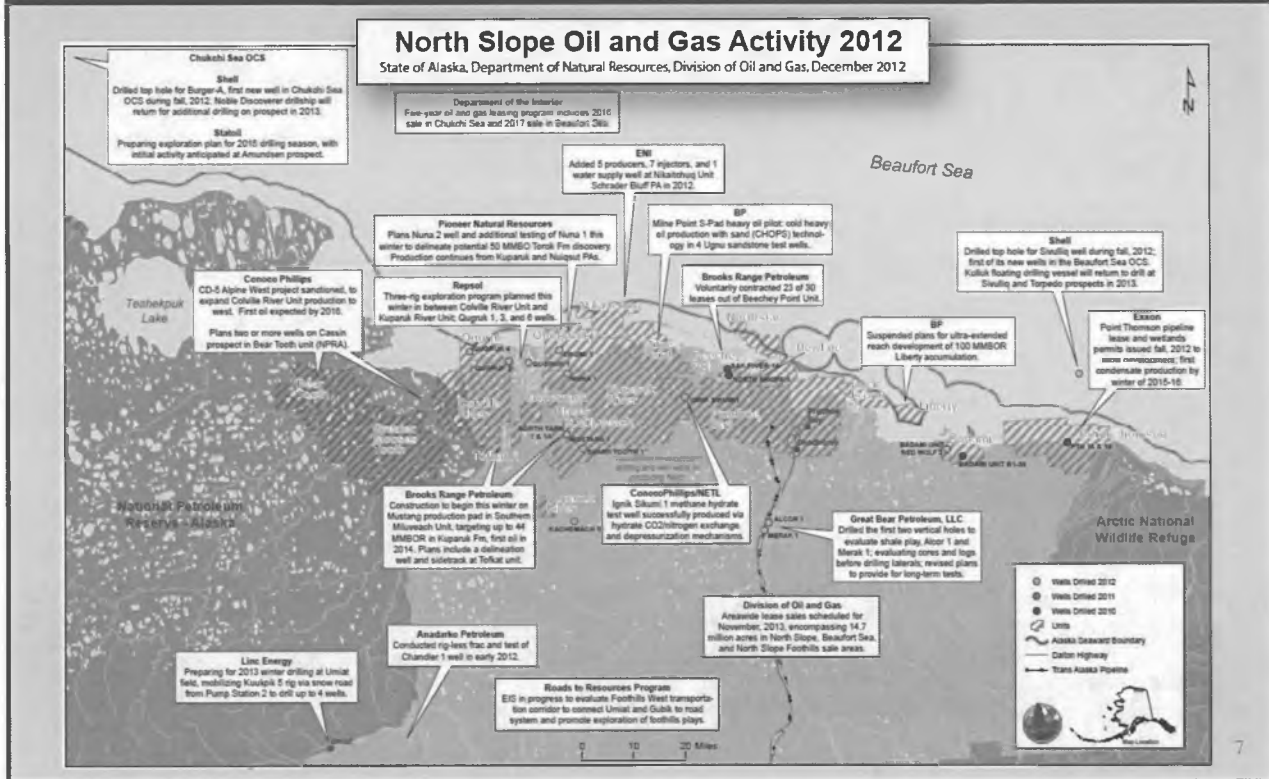
Recent Activity

- North Slope
- Cook Inlet

6

NORTH SLOPE OIL & GAS ACTIVITY

- RECENT & PROPOSED ACTIVITY -



NORTH SLOPE OIL & GAS ACTIVITY

- NEXT PHASES & NEW AREAS OF EXPLORATION -

- State is investing millions of dollars in infrastructure
- Strong diversity of players, operators and exploration on state and federal land: Shell, Repsol, Brooks Range, Great Bear, Armstrong, Linc, Anadarko, ENI, Pioneer, Savant, Conoco Phillips, Exxon Mobil, BP
- Shell began drilling exploration wells in the Beaufort and Chukchi seas in 2012
- Eastern North Slope open with Exxon's Point Thomson development
- Linc Energy drilling operations at Umiat are moving forward
- Conoco Phillips CD-5 expansion proceedings in NPR-A
- Great Bear, Royale, Haliburton - Shale oil exploration ramping up
- New operators are expanding production outside of existing units, e.g., Ooguruk (Pioneer) and Nikaitchuq (ENI)
- Private equity groups, such as Riverstone, are investing in Alaska
- These developments, while positive, are just scratching the surface of our overall potential



COOK INLET OIL & GAS ACTIVITY

- Combination of very competitive investment incentives and USGS resource report are attracting significant investment
- New players exploring and investing: Apache, Hilcorp, Armstrong, Linc, Buccaneer, Nordaq, Furie, Cook Inlet Energy, ConocoPhillips, CIRI
- Hundreds of millions invested in 2012
- Dramatic increase in number of drill rigs in inlet – either idle, available or stacked
 - November 2006, 9 rigs
 - November 2009, 12 rigs
 - November 2012, 17 rigs (includes 2 jack-up rigs)
- Companies shooting major 3-D seismic over large areas of the basin
 - Never previously done at this scale with this sophisticated technology
 - Presents huge opportunities for development

- New gas storage project on line; important for supply security and more steady year-round production and peak availability
- Attractive price for gas relative to Lower 48 markets
- State continues to focus on safe, responsible development and operations



COOK INLET OIL & GAS ACTIVITY



Petroleum News, January 13, 2013:

“Cook Inlet undoubtedly went through a renaissance in 2012.

“While dwindling supplies remain a concern, the year saw companies large and small making significant investments in the basin after years without exploration and only limited development. If the most ambitious companies were successful, the region would see increased oil and gas volumes some 55 years after production began.”



STRONG ALASKA LEASE SALES 2011 & 2012

Cook Inlet

- In June 2011, the state received the highest number of Cook Inlet lease sale bids in 28 years, totaling around \$11 million
 - Total tracts sold: 108
 - Total high bonus bids: \$10,986,826.20
- In May 2012, Cook Inlet lease sale bids totaled more than \$6.8 million
 - Total tracts sold: 44
 - Total high bonus bids: \$6,865,835

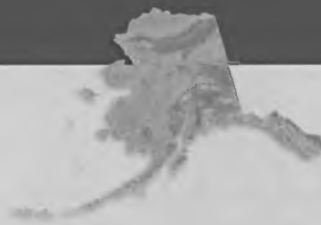


NS, NS Foothills & Beaufort Sea

- In December 2011, the Division of Oil and Gas received more than 300 bids from more than 15 bidders, totaling more than \$21 million, signifying one of the most successful sales in recent Alaska history
- In November 2012, bids for all areas totaled more than \$14 million with tracts sold in the Foothills area for the first time since 2009
 - Total tracts sold : 122
 - Total high bonus bids: \$14,240,333.73
- State needs billions of dollars in new investment to meet the Governor's one-million-barrels-a-day goal

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PART III



Progress on Commercializing North Slope Gas

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COMMERCIALIZING NORTH SLOPE GAS

- HUGE GAS RESOURCE BASE -

- The North Slope of Alaska is estimated to have over 200 trillion cubic feet of conventional gas
- Conventional gas is not controversial—unconventional gas in the Lower 48 U.S. states remains controversial
- 35 trillion cubic feet of known reserves
- Prudhoe Bay reinjects 8 billion cubic feet of gas per day, which is enough to meet Canada's daily gas needs
- These numbers do not include the trillions of cubic feet of shale gas, tight gas, and gas hydrates estimated for the North Slope
- This is an almost inexhaustible supply of gas with new technology
- North Slope gas is “wet” gas with a high energy content (BTU value)
- An Alaska LNG project has complete certainty of supply; not all other projects do



COMMERCIALIZING NORTH SLOPE GAS

- 2012 STATE OF THE STATE AND BENCHMARKS -

State of Alaska has made significant progress on commercializing North Slope Gas:

- Much of the upstream infrastructure is in place
- There is a renewed focus from key stakeholders on monetizing the massive reserves of North Slope gas
- Hundreds of millions of dollars have been spent on critical engineering and environmental regulatory and commercial work required for a gas project

Governor's Roadmap to Gasline

1. Resolve Point Thomson
2. Align during the first quarter of 2012
3. Two state-backed projects—under the Alaska Pipeline Project and Alaska Gasline Development Corporation—work to consolidate efforts by third quarter of 2012
4. Harden numbers on an Alaska LNG project by the third quarter of 2012, and identify a pipeline project and associated work schedule
5. If milestones are met, the 2013 Legislature takes up gas tax legislation designed to move the project forward



COMMERCIALIZING NORTH SLOPE GAS

- SIGNIFICANT PROGRESS -

Critical 2012 developments:

Producer alignment on an Alaska pipeline to tidewater

- ExxonMobil, ConocoPhillips, BP, and TransCanada are now formally aligned and are undertaking work together on the commercialization of North Slope gas with a specific focus on a large scale LNG project from southcentral Alaska
- Until just recently, these three companies pursued different directions on Alaska's gas
- The parties have signed formalized agreements to work together on evaluating the feasibility of LNG from southcentral Alaska

Development of Multi-Billion Dollar Point Thomson Field

- Pt. Thomson holds approximately 8 tcf of known gas reserves, plus hundreds of millions of barrels of liquid condensates and oil
- Winter construction season underway
- Significant hydrocarbon production online within three years

WSJ: Alaska, Gas Firms Clear Way For Pipeline

Point Thomson settlement "...paves the way for a pipeline project to ship natural gas from the North Slope, unleashing the state's massive gas reserves." - WSJ, 3/30/12

FT: Oil Groups Agree on \$40bn Alaska Gas Project

"ExxonMobil, BP and ConocoPhillips have reached agreement with the state of Alaska to take a significant step forward on a \$40bn-plus project to export liquefied natural gas to Asia, resolving a long-running lease dispute that had been holding up progress.

In a joint letter, the chief executives of the three companies said they were "aligned" on a plan to develop the huge gas reserves of Alaska's North Slope, which until now have been stranded without a route to market." - Financial Times, 3/30/12

COMMERCIALIZING NORTH SLOPE GAS

- SIGNIFICANT PROGRESS -

ExxonMobil

ConocoPhillips



March 30, 2012

Governor Sean Parnell
550 West 7th Avenue, Suite 1700
Anchorage, Alaska 99501

Dear Governor Parnell,

Our three corporations, collectively and individually, value our relationship with Alaska and believe that its citizens across the state, as well as our shareholders around the world, share a common interest in responsible resource development. We write today to inform you of our progress in working together on the next generation of North Slope resource development.

Alaska's vast North Slope holds over 35 trillion cubic feet of discovered natural gas. To date, this gas has been used to enhance North Slope oil production, adding several billion barrels to Prudhoe and Kuparuk recoveries. However, under the right business climate, the full commercial potential of this world-class resource can be unlocked. North Slope gas commercialization will bring new job opportunities, increased state revenues, reliable energy supplies and new exploration opportunities, which will benefit Alaska's economy and North Slope oil and gas. This will be key toward reaching your goal of producing 1 million barrels per day through the Trans-Alaska Pipeline System.

Serious discussions between our companies have taken place along with the Alaska Pipeline Project (APP) parties who are now formally aligned on a structured, stewardable and transparent approach to commercialize North Slope natural gas resources within an AGIA framework. As a result of the rapidly evolving global market, large-scale liquefied natural gas (LNG) exports from south-central Alaska will be assessed as an alternative to gas line exports through Alberta. In addition to broadening market access, a south-central Alaska LNG approach could more closely align with in-state energy demand and needs. We are now working together on the gas commercialization project concept selection, which would include an assessment of major project components including in-state energy demand and needs, and LNG tidewater site locations, among others.

Commercializing Alaska natural gas resources will not be easy. Issues that must be resolved, and we cannot do it alone. Unprecedented capital for gas development will require competitive and stable financing. An Alaska first established. Appropriately structured, stable financing will create new opportunities around the world, and will play a pivotal role in making Alaska competitive in the global market and unlocking the economic potential of North Slope resources.

Point Thomson is an excellent example of a challenged, world-class resource. With approximately 25% of known North Slope natural gas, Point Thomson development is an important element in consideration of North Slope gas commercialization. However, economic models must span decades into an uncertain future to estimate economic returns. Your Administration has taken the lead in forging a Point Thomson settlement that will bring long-term resources, revenues and jobs to help Alaska's economy. With settlement now finalized, our companies are moving forward, as participating co-venturers, with the initial development phase at Point Thomson with confidence that North Slope gas development will ultimately bring the Point Thomson resource to market.

We agree the next generation of North Slope resource development is achievable, working together with the APP parties, as well as with the State of Alaska. Thank you for your leadership and your confidence in us to take on these challenges. We join you in a vision of prosperity and promise. There is much work to do and opportunities yet to discover.

Sincerely,

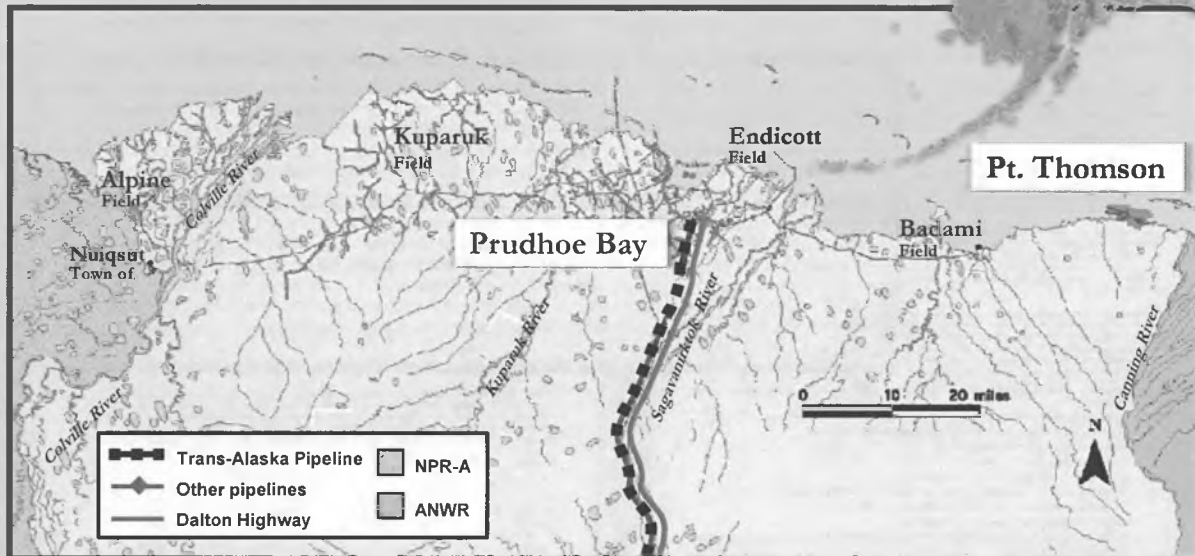
Rex Tifferson *Jim Mulva* *Bob Dudley*
Rex Tifferson Jim Mulva Bob Dudley

Serious discussions between our companies have taken place over the past several months, along with the Alaska Pipeline Project (APP) parties who are supporting the AGIA License. We have aligned on a structured, stewardable and transparent approach with the aim to commercialize North Slope natural gas resources within an AGIA framework. As a result of the rapidly evolving global market, large-scale liquefied natural gas (LNG) exports from south-central Alaska will be assessed as an alternative to gas line exports through Alberta. In addition to broadening market access, a south-central Alaska LNG approach could more closely align with in-state energy demand and needs. We are now working together on the gas commercialization project concept selection, which would include an associated timeline and an assessment of major project components including in-state pipeline routes and capacities, global LNG trends, and LNG tidewater site locations, among others.

COMMERCIALIZING NORTH SLOPE GAS

- POINT THOMSON -

Area of
Detail



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COMMERCIALIZING NORTH SLOPE GAS

- SIGNIFICANT PROGRESS -

- Point Thomson is a multi-billion dollar project
- Beginning construction now
- Producing Point Thomson liquid condensate into TAPS as part of Phase 1
- Big prize – gas commercialization for LNG
- Significant portion of infrastructure being built for Phase 1 is applicable to a gas line or LNG project
- Strategic investment for Alaska: opens eastern North Slope for oil and gas exploration to other companies; infrastructure in first phase is a pre-investment for gas commercialization; significant job creation—700-800, peaking at over 2,000

EXPLORATION & PRODUCTION

Point Thomson gets going

New field construction on Alaska's eastern North Slope cheers state officials

By WISLEY LOY
For Petroleum News

Work to establish a new oil field at Point Thomson on Alaska's North Slope is starting to roll.

ExxonMobil, operator of the Point Thomson unit, has a variety of activities under way to take advantage of the winter construction season.

"Work to establish a new oil field at Point Thomson on Alaska's North Slope is starting to roll."

ExxonMobil, operator of the Point Thomson unit, has a variety of activities under way to take advantage of the winter construction season."

Petroleum News, January 20, 2013-

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COMMERCIALIZING NORTH SLOPE GAS

- SIGNIFICANT PROGRESS -

ExxonMobil ConocoPhillips BP TransCanada

October 1, 2012

Governor Sean Parnell
550 West 7th Avenue, Suite 1790
Anchorage, Alaska 99501

Dear Governor Parnell:

On March 30, 2012, ExxonMobil, ConocoPhillips and BP working together on the next generation of North Slope gas, three producer companies and TransCanada, through its (APP), have maintained momentum and executed important potential project. We are writing to update you on the progress.

We established an integrated team, depicted on Attachment 1, efforts of over 200 professionals to date to progress this project. Our respective talents and experience to advance a collective liquefied natural gas (LNG) exports from Southcentral Alaska to refine and understand the opportunities and challenges development.

Our companies bring together specific expertise in Arctic and in LNG plant design and operation. Since our joint work upon more than \$700 million in past work by our collective Producer Pipeline Team effort in 2001-02, the Denali Project contribution through AGHA. As a result, our work on an LNG to a new level of understanding. Specifically, the focus of

- Developing a design basis for the pipeline, including areas of continuous and discontinuous permafrost
- Investigating multiple ways to remove and dispose of CO₂ and other contaminants
- Assessing use of existing and addition of new Prudhoe Bay field facilities
- Mapping multiple pipeline routing variations
- Assessing multiple pipeline sizes
- Providing for at least five in-state gas off-take points
- Completing preliminary geohazard and marine analysis of 22 LNG site locations
- Developing a design basis for the required LNG tanker fleet
- Evaluating multiple LNG process design alternatives
- Confirming a range of gas blends from the Prudhoe Bay and Point Thomson fields can generate a marketable LNG product

We have narrowed the broad range of alternative development concepts and assessed major project components, including the gas pipeline, gas treatment to remove CO₂ and other impurities, natural gas liquefaction, LNG storage, and marine terminal facilities as described on Attachment 2. Individually,

Governor Sean Parnell

- 2 -

October 1, 2012

each of these components would represent a world-class project. Combined, they result in a mega-project of unprecedented scale and challenge, up to 1.7 million tons of steel, a peak construction workforce of up to 15,000, a permanent workforce of over 1,000 in Alaska, and an estimated total cost in today's dollars of \$45 to \$65+ billion.

On March 30, 2012, ExxonMobil, ConocoPhillips and BP submitted a letter informing you of progress in working together on the next generation of North Slope resource development. Since that time, the three producer companies and TransCanada, through its participation in the Alaska Pipeline Project (APP), have maintained momentum and executed important early work to select leading concepts for a potential project. We are writing to update you on the progress that has been made to date.

We have narrowed the broad range of alternative development concepts and assessed major project components, including the gas pipeline, gas treatment to remove CO₂ and other impurities, natural gas liquefaction, LNG storage, and marine terminal facilities as described on Attachment 2. Individually, each of these components would represent a world-class project. Combined, they result in a mega-project of unprecedented scale and challenge; up to 1.7 million tons of steel, a peak construction workforce of up to 15,000, a permanent workforce of over 1,000 in Alaska, and an estimated total cost in today's dollars of \$45 to \$65+ billion.

Alaska's North Slope natural gas resources must compete in the global energy markets in order to deliver state revenues, in-state energy supplies, new job opportunities and other economic benefits to Alaskans. While North Slope gas commercialization is challenging, working together, we can maintain the momentum toward our shared vision for Alaska. We will continue to keep you advised of our progress and stand committed to work with the State to responsibly develop its considerable resources.

Sincerely,


Randy Broiles
ExxonMobil
Production Company


Trond-Erik Johansen
ConocoPhillips Alaska, Inc.


Jerry Mingli
BP Exploration Alaska


Tony Palmer
TransCanada

Attachments

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COMMERCIALIZING NORTH SLOPE GAS

- SIGNIFICANT PROGRESS -

Attachment 2

Alaska Southcentral LNG – Project Concept Description

Liquefaction Plant

- Capacity: 15 – 18 million tonnes per annum (MTA)
3 trains (5-6 MTA / train)
- Potential areas: 22 sites assessed in Cook Inlet, Prince William Sound and other Southcentral sites
- Footprint: 400 - 500 acres
- Peak Workforce: 3,500 - 5,000 people
- Required Steel: 100,000-150,000 tons



Storage / Loading

- LNG Storage Tanks, Terminal
- Dock; 1 - 2 Jetties
- Design based on 15 – 20 tankers
- Peak Workforce: 1,000-1,500 people



Gas Treating

- Located at North Slope or Southcentral LNG site
- Remove CO₂ and other gases and dispose / use
- Footprint: 160 - 250 acres
- Peak Workforce: 500 - 2,000 people
- Required Steel: 250,000 - 300,000 tons
- Among largest in world

Pipeline

- Large diameter: 42" - 48" operating at >2,000 psi
- Capacity: 3 - 3.6 billion cubic feet per day
- Length: ~800 miles (similar to TAPS)
- Peak Workforce: 3,500 - 5,000 people
- Required Steel: 800,000 - 1,200,000 tons
- State off-take: ~5 points, 300-350 million cubic feet per day, based on demand



Producing Fields

- ~35 TCF discovered North Slope resource
- Additional exploration potential
- Anchored by Prudhoe Bay and Pt. Thomson with ~20 years supply available
- Use of existing and new North Slope facilities
- Confirmed range of gas blends from PBU/PTU can generate marketable LNG product
- Peak Workforce: 500 - 1,500 people



Estimated Total Cost: \$45 – \$65+ Billion

Peak Construction Workforce: 9,000 – 15,000 jobs

Operations Workforce: ~1000 jobs in Alaska

Descriptions and costs are preliminary in nature and subject to change. Cost range excludes inflation.

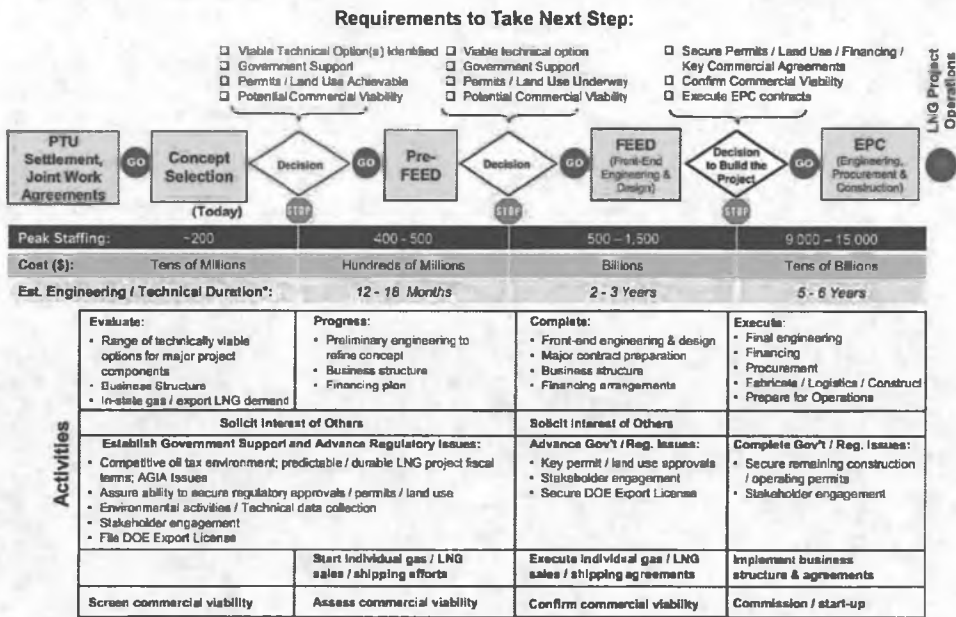
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COMMERCIALIZING NORTH SLOPE GAS

- SIGNIFICANT PROGRESS -

Attachment 3

Southcentral Alaska LNG – Work Plans / Key Decision Points



* NOTE: Duration of various phases may be extended by protracted resolution of fiscal terms, permitting and regulatory delays, legal challenges, changes in commodity market outlook, time to secure long-term LNG contracts, labor shortages, material & equipment availability, weather, etc.

COMMERCIALIZING NORTH SLOPE GAS

- SIGNIFICANT PROGRESS -

The companies' 3Q announcement attracted significant national and international press.

WSJ: Natural Gas Glut Pushes Export

"The long-awaited effort is expected to have a significant impact not just on Alaska and its economy, but also on U.S. construction and manufacturing companies that would supply steel and other materials for an 800-mile pipeline and the plant that would convert the gas into liquid for export on tankers." - WSJ, 10/4/12

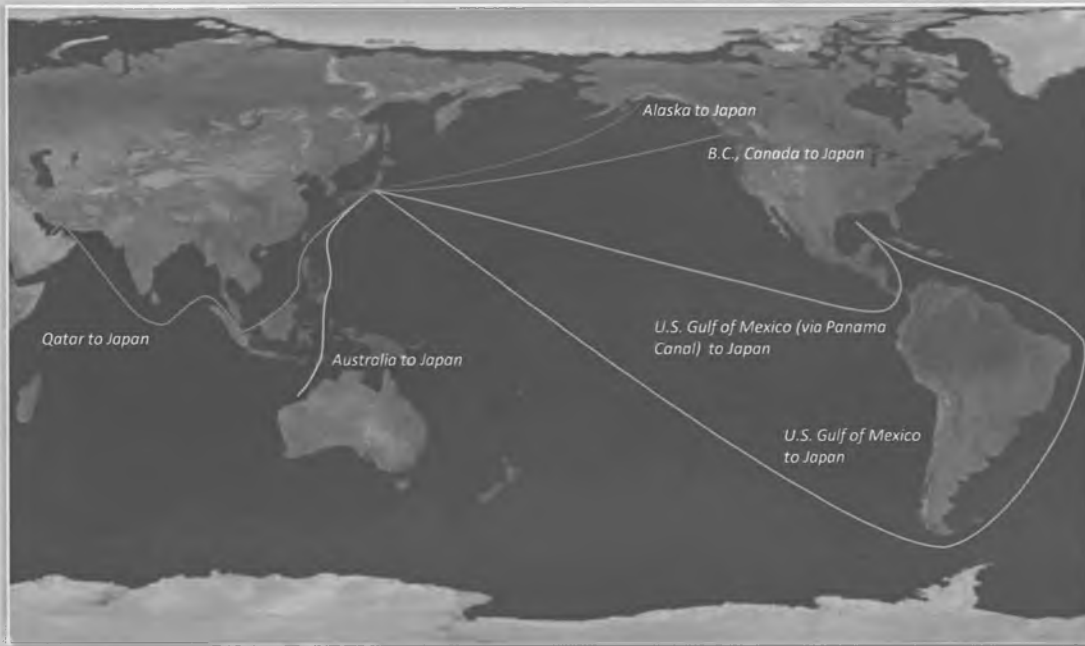
The Globe and Mail: Alaska plan intensifies gas race to Asia

"A massive new proposal to export natural gas from Alaska brings a major competitor into the race to carry North American gas to Asia, and adds pressure on Canadian export projects to build quickly or risk losing out..."

It is notable for the stature of its backers—BP PLC, Exxon Mobil Corp., ConocoPhillips Co. and TransCanada Corp., which have now joined forces after dueling for years over separate gas pipeline projects—and for its scale." - Globe and Mail, 10/4/12



COMPARATIVE ADVANTAGES OF AK LNG



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COMPARATIVE ADVANTAGES OF AK LNG - COST COMPETITIVE: WOOD MACKENZIE STUDY & BROOKINGS INSTITUTION POLICY BRIEF -

Wood Mackenzie, the global research and consulting firm, recently completed a study for the State of Alaska to evaluate the economic competitiveness of Alaskan LNG exports relative to other projects.

- From an economic perspective Alaskan LNG exports would be competitive and could generate between \$220 and \$419 billion
- Alaskan LNG exports have a delivered cost structure *below* \$10/MMBtu
- Most competing Australian projects and proposed North American LNG exports yet to secure Final Investment Decision are expected to deliver LNG to Asia at a cost of \$10-\$12/MMBtu under current gas price assumptions
- ***Taking all into account—basis, shipping, capital requirements—Alaska LNG export facilities can deliver LNG to Asia less expensively than the U.S. Lower 48 or Canada and competitively vis-à-vis traditional Australian LNG sources.***

Alaskan LNG Exports Competitiveness Study, AGPA, Final Report, July 27, 2011

Brookings Institution, the public policy organization, recently published a policy brief that discussed the strong competitive position of a potential, large-scale Alaska LNG to Asia project.

- Alaskan exports may prove to be a source of strong competition at the margin for U.S. LNG in the Pacific Basin. An Alaska project may be one of the least costly alternatives for delivering LNG to Japan in 2020

Brookings Institution Policy Brief,
*"Liquid Markets: Assessing the Case for U.S.
Exports of Liquefied Natural Gas,"* May
2012

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COMPARATIVE ADVANTAGES OF AK LNG

- Existing oil and gas infrastructure can be utilized for a large-scale LNG project
- The route for a large-scale LNG project would be the same or similar to the existing TAPS route, which will save on costs and have a limited impact on the environment
- Exceptional reliability. Alaska has a longstanding tradition of reliably exporting LNG to Asia—40 years of LNG exports to Japan with accompanying DOE export licenses, totaling 2.5 trillion cubic feet of gas
 - Alaska has never missed a LNG cargo shipment to Asia
- Avoids strategic shipping choke points that other sources of LNG must traverse
- No looming conflicts in the region—stable investment and political climate
- Proximity/shipping costs are very low
- Cost competitive relative to other projects
- Seasonal peaking for LNG production synchronizes with market demand in Asia
- Cold weather also brings processing efficiency
- Not part of the Lower 48 export debate/controversy—no opposition to Alaska exports



LNG tanker at the Kenai, Alaska LNG marine export terminal. Photo from ConocoPhillips. "The Kenai LNG Plant celebrates 40 years."

COMPARATIVE ADVANTAGES OF AK LNG - SIGNIFICANT PROGRESS ON EXPORT LICENSE AND OTHER REGULATORY MATTERS -

Federal Register
Vol. 53, No. 10
Friday, January 12, 1988

Presidential Documents

Title 3—
The President

Presidential Finding of January 12, 1988

Presidential Finding Concerning Alaska Natural Gas

This Administration has been dedicated to encouraging free trade and to removing regulatory impediments that inhibit the development of our Nation's natural resources. Proven natural gas reserves in the Prudhoe Bay area of Alaska's North Slope represent approximately 25 percent of total U.S. gas reserves. In addition, undiscovered, recoverable supplies of natural gas in Alaska's North Slope may exceed 100 trillion cubic feet of natural gas. There is no doubt the development of Alaska's natural gas resources will be a major energy source for the United States.

It is the policy of this Administration to support the development of Alaska's natural gas resources in a manner that allows any private party to develop this resource and set up competition for this purpose. It is my belief that removal of this impediment to private sector development of Alaska's vast natural gas resources, using private sector resources with no government subsidy, will benefit our entire Nation.

Federal Register / Vol. 53, No. 10 / Friday, January 12, 1988 / Presidential Documents

This finding represents a determination that the effects of exports of Alaska natural gas on American consumers would comply with the market criteria of Section 12 in the context of current and projected future energy markets and that such exports would be consistent with our comprehensive energy policy. It does not assess the merits or feasibility of a particular project, but rather lets the marketplace undertake a realistic consideration of various options concerning Alaska natural gas. The operation of market forces is the best guarantee that Alaska natural gas will be developed efficiently and that there is no need for additional regulatory requirements.

I do not believe that the completion of the Alaska Natural Gas Act will create any barriers to the private sector's development of Alaska's natural resources. In this and other instances, I want to reaffirm our support of the "prohibitive" portion of the Act's guarantees.

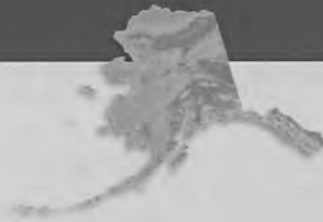
THE WHITE HOUSE
Washington, January 22, 1988

Ronald Reagan

Accordingly, I find that exports of Alaska natural gas in quantities in excess of 1,000 Mcf per day will not diminish the total quantity or quality nor increase the total price of energy available to the United States.

Presidential Finding of January 12, 1988, set a strong precedent that may still be applicable today.

PART IV



Moving Forward in 2013

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OIL TAX REFORM

- PRINCIPLES & HIGHLIGHTS -

PFC Energy, January 2013:

This tax reform makes Alaska highly competitive relative to Lower-48 basins and other OECD countries (PFC Energy)

Key Principles:

- Tax reform must be fair to Alaskans
- Encourage new production
- Simple so that it restores balance to the system
- Durable for the long-term

Highlights:

1. Eliminate Progressivity and Credits Based on Capital Expenditures
2. Reform remaining credits to be carried forward to when there is production
3. Establish a "Gross Revenue Exclusion" for newer units and new participating areas in existing units (NEW OIL)

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COOK INLET

- FINANCIAL & INVESTMENT INCENTIVES -

- State allows credits up to 40% of capital expenses related to wells and seismic activity
- State offers tax credits for exploration expenses of 100, 90, and 80 percent respectively for drilling the first, second, and third exploration wells by a jack-up drilling rig, up to \$25 million
- Natural gas storage tax credits are established for any natural gas storage facility—the credit equals \$1.50 per thousand cubic feet of “working gas” storage capacity, up to \$15 million
- No production tax on oil
- 18 cents/mcf
- Significant tax credits

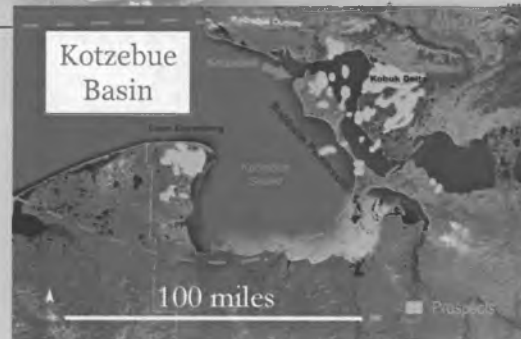


NEW FRONTIERS

- INTERIOR BASIN POTENTIAL -

- Six under-explored areas eligible for generous exploration credits, covering Alaska Peninsula, Kotzebue, Nenana, Yukon Flats, and other sedimentary basins
- Several of these basins have >20,000 feet of Tertiary and/or Cretaceous basin-fill
- Basins range in size – some larger than or comparable to the prolific Alaska Cook Inlet Basin (cumulative production >7.4 TCF), with analogous petroleum systems
- Dozens of prospects and leads
- State of Alaska and Alaska Native corporations are actively seeking investment to appraise millions of State and Fee acres:
 - Alaska Peninsula: **Booth 1358**
(Alaska Division of Oil and Gas)
 - Kotzebue Basin: **Booth 1411**
(NANA Corp./Moyes & Co.)
 - Nenana & Yukon Flats Basins: **Booth 4435**
(Doyon Corp.)

Sedimentary Basins – Frontier Tax Credits



PERMITTING REFORM

- EFFICIENT, TIMELY, CERTAIN -

State of Alaska is undertaking a comprehensive effort to improve the State's permitting processes to ensure projects are permitted in a timely, predictable and efficient manner while safeguarding the environment

- State of Alaska Currently Considering a Permitting Bill to:
 - Assume primacy from the federal government for administering permitting under the Clean Water Act for dredge and fill activities
 - Issue general permits for activities without being required to adjudicate each permit separately
 - Enable successive Temporary Water Use Authorizations to be applied for, adjudicated and issued for the same project beyond the initial five-year period of the project
 - Tightening standing requirements to appeal permitting decisions, particularly for groups that cannot demonstrate injury
- State is also working to improve coordination between the State and federal government— federal permitting issues have a strong influence on state projects

2012/2013 ARCTIC OCS SEASON

- State of Alaska very supportive of Shell operations
- State and North Slope Borough working together
 - Joint letter to DOI in regard to expedited review
- State working with the feds—good discussions with DOI panel conducting expedited review of 2012 operations
- State of Alaska has a record of standing up and defending the State's interest when the federal government overreaches their authority



CONCLUSION

- Alaska had significant investment and exploration activity in 2012
- Vast diversity of companies pursuing different plays
- One of the few places in North America where significant conventional oil plays exist alongside unconventional plays
- Tax and regulatory reform proposals demonstrate that Alaska is open for business



Overview of HB 72 Oil & Gas Production Tax

February 11, 2013
Alaska Department of Revenue



Principles



- Governor' Principles:
 - Tax reform must be fair to Alaskans.
 - Encourage new production.
 - Simple so that it restores balance to the system.
 - Durable for the long-term.



The Proposal (Highlights)



1. Eliminate Progressivity and Credits Based on Capital Expenditures.
2. Reform remaining credits to be carried forward to when there is production.
3. Establish a “Gross Revenue Exclusion” for newer units and new participating areas in existing units (NEW OIL).
4. Hold Cook Inlet and Middle Earth Harmless.



Eliminate Progressivity & Credits Based on Capital Expenditures



Progressivity

Main Sections: 1,2,26

Conforming Sections: 5,6,22,23

North Slope QCE Credits

Main Sections: 8

Conforming Sections: 7, 11, 12



Reform remaining credits to be carried forward to when there is production.



North Slope Net Operating Loss Credits

Main Sections: 9, 15

Conforming Sections: 10, 19, 20

Small Producer Tax Credits

Main Sections: 16



Establish a “Gross Revenue Exclusion” for newer units and new participating areas in existing units.



Gross Revenue Exclusion (The GRE)

Main Sections: 24

Conforming Sections: 5

Analysis of Alaska's Tax System, North Slope Investment and The Administration's Proposal HB72

**Barry Pulliam
Managing Director
Econ One Research, Inc.**

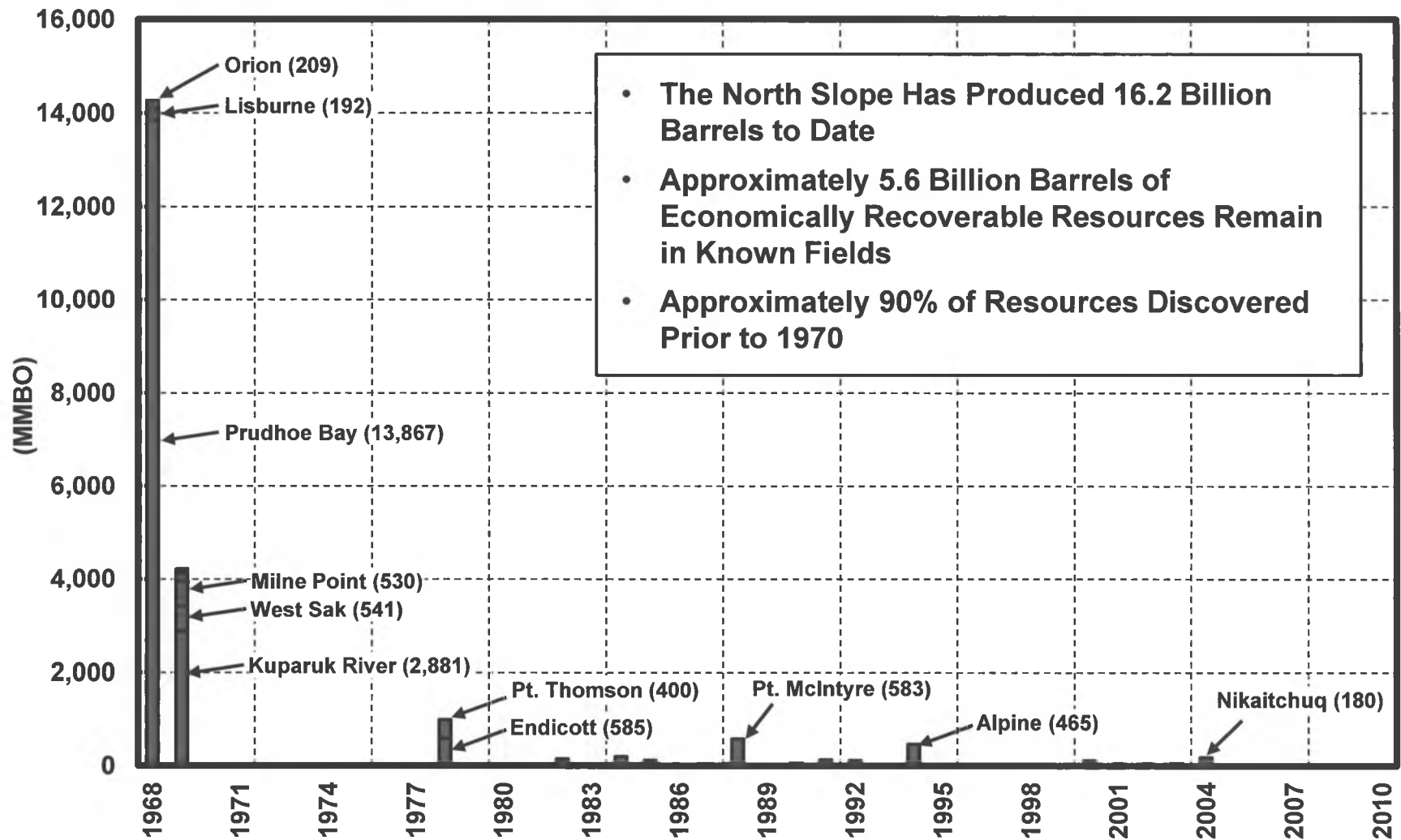
February 13, 2013

Econ One: Who We Are

- **Economic Research and Consulting Firm**
 - **Provides Economic Analysis In Energy and Other Industries**
- **Advised the State of Alaska on Petroleum Related Matters For Over Two Decades**
- **Worked With the Cowper, Hickel, Knowles, Murkowski, Palin, and Parnell Administrations**
- **Assisted the Legislature Between 2005 and 2008 on Tax and Gas Development Issues**
- **Energy-Related Work Outside Alaska**
 - **State Governments: Texas, Louisiana, New Mexico, Oklahoma, California**
 - **Federal Government Agencies: Department of Interior, Federal Trade Commission**
 - **Energy Companies: Producers, Refiners, Mid-Stream Services, Pipelines, Chemicals**

Background

Alaska North Slope Discovered Resources by Discovery Year (1969 – 2010)

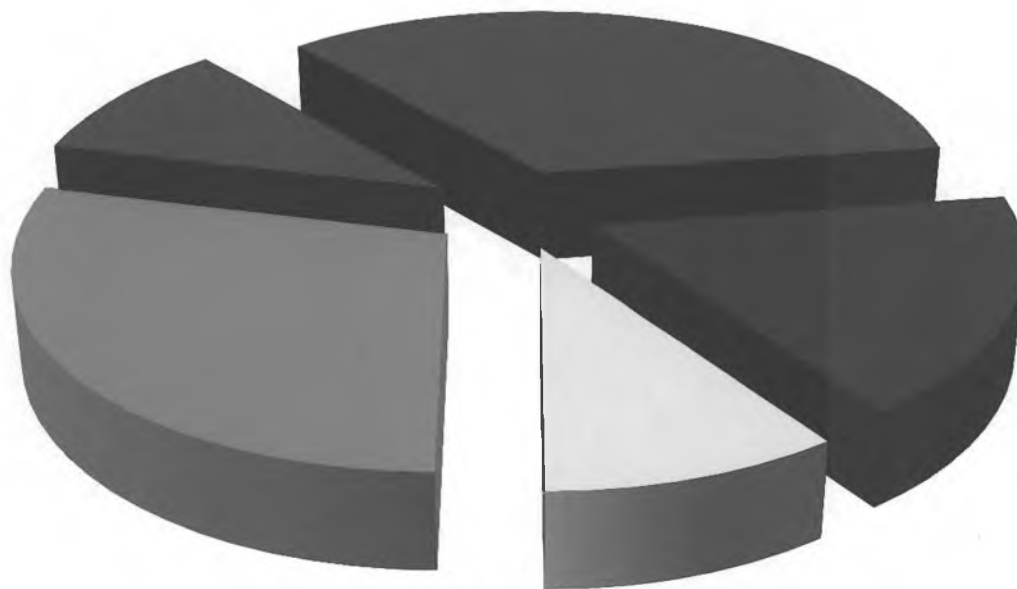


- The North Slope Has Produced 16.2 Billion Barrels to Date
- Approximately 5.6 Billion Barrels of Economically Recoverable Resources Remain in Known Fields
- Approximately 90% of Resources Discovered Prior to 1970

Source: DNR: The Historical Resource and Recovery Growth in Developed Fields, Arctic Slope of Alaska, 2004; DOE/NETL-2009/1385; AOGCC.

Alaska North Slope Production and Resources

- **Many North Slope Fields are Now at Mature Stages. However, Less Than Half of its Potential Economic Oil Resources Have Been Produced to Date**
- **In Total, the North Slope Contains Approximately 40 Billion Barrels of Additional Estimated Economic Recoverable Resources at Today's Prices**



- **Historical Production**
(16.2 BBO)
- **Conventional Resources - Discovered**
(5.6 BBO est.)
- **Conventional Resources - Undiscovered**
(19.2 BBO est.)
- **ANWR**
(9.9 BBO est.)
- **Unconventional Resources**
(5.5 BBO est.)

Estimated Undiscovered Conventional Oil Resources on Alaska North Slope

	Technically Recoverable Resources			Economically Recoverable	Expected Typical
	P95	Mean	P5	@ \$90/bbl	Field Size
	(1)	(2)	(3)	(4)	(5)
	(Million Barrels)				
Central North Slope	2,800	3,400	3,900	3,000	32 - 64
Beaufort Sea	400	8,200	23,200	5,800	-
Chukchi Sea	2,300	15,400	40,100	9,900	-
NPRA	400	900	1,700	500	32 - 64
ANWR	5,900	10,400	15,200	9,900	64 - 128
Total		38,300		29,100	

Source:

USGS Reports 2011-1103 and 2009-1112;

BOEM, Assessment of undiscovered technically recoverable oil and gas resources of the nation's outer continental shelf.

Estimated Undeveloped Unconventional Oil Resources on Alaska North Slope

Shale

~ 1 Billion Bbls

(Mean Estimated Technically Recoverable Barrels)

(USGS, 2012)

Viscous and Heavy Oil

(Includes All Schrader/West Sak and Ugnu Reservoirs in the Kuparuk River, Prudhoe Bay, Milne Point and Nikaitchuq Units, Not Just PAs or Areas Under Development)

Total In-Place Resource

24 - 27 Billion Bbls

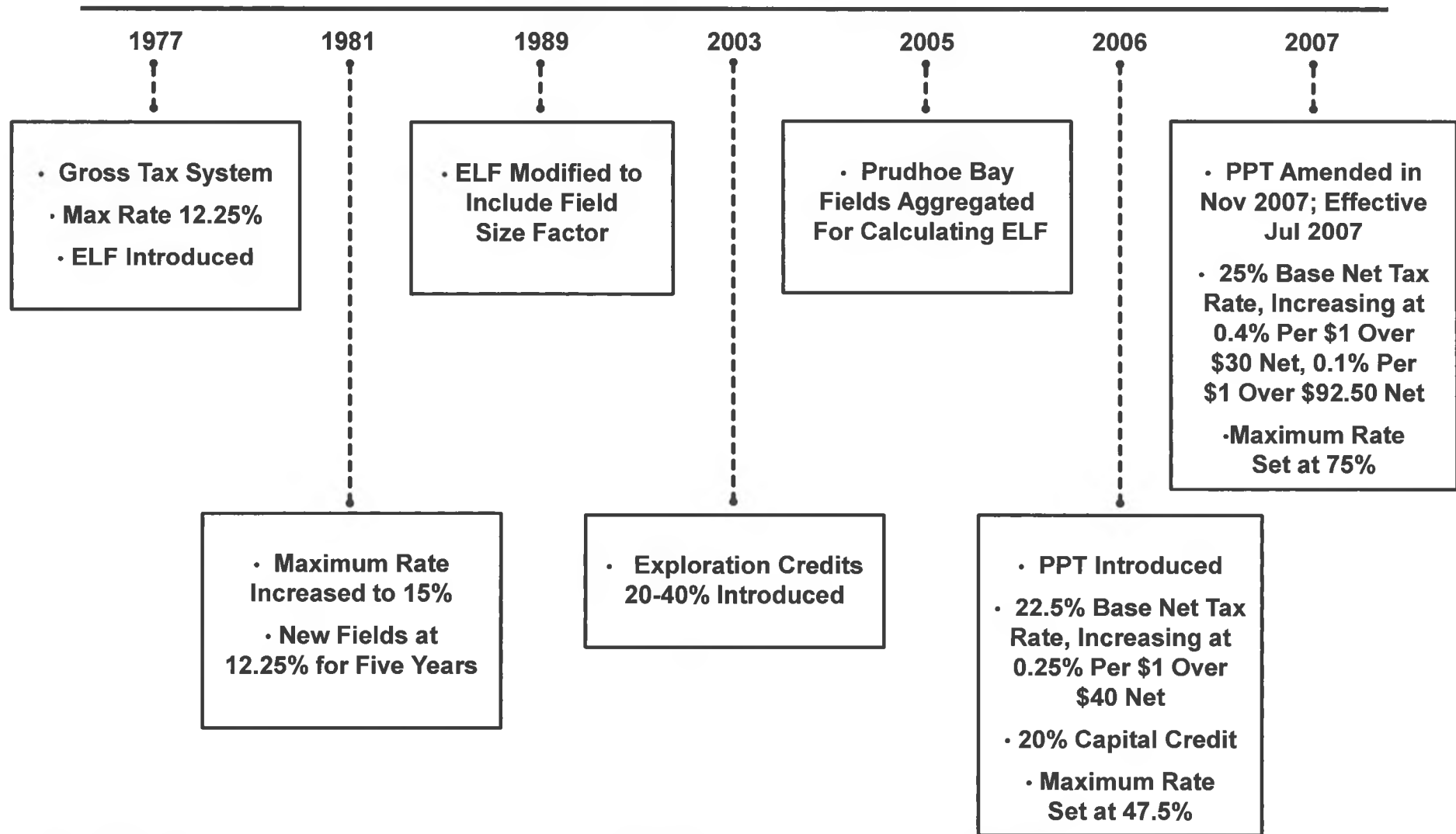
(Hartz, et al., 2007; AOGCC)

Economically Recoverable

3.6 - 5.6 Billion Bbls

(Assuming 15% Average Recovery)

A History of Alaska's Production Tax System: North Slope



Benchmarking North Slope Activity Over The Past Decade Against Other Areas

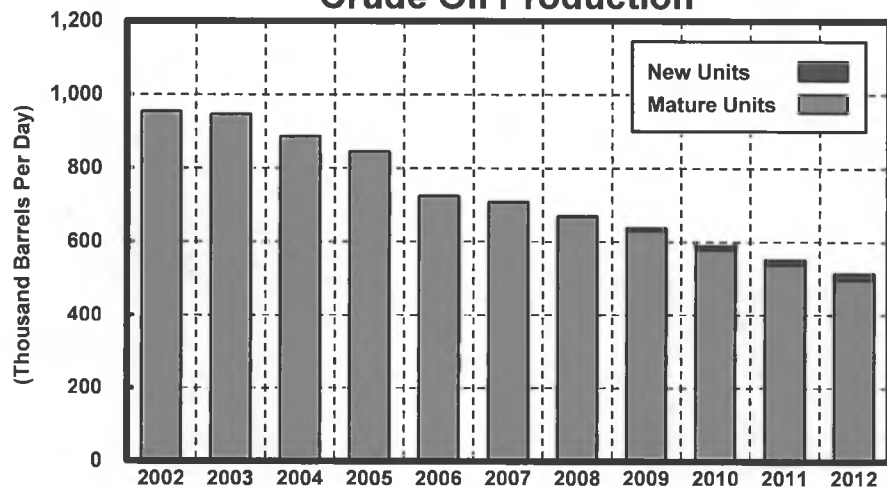
Benchmarking

- **Benchmarking Allows Us to Evaluate Activity in Alaska by Controlling for Significant Variables That are Common to All Oil Producing Properties**
 - **No Two Producing Areas are Exactly Alike. We Attempt to Choose Locations That Share a Number of Similar Characteristics, Allowing for the Most Meaningful Comparisons**
 - **We Benchmark the North Slope Against Significant Producing Areas in OECD Countries**
 - **The North Sea**
 - **The U.S. and Several Key Producing States / Areas**
 - **Canada and Producing Provinces**
 - **Australia**
 - **All of These OECD Areas Have Many Characteristics in Common With North Slope**
 - **Similar Political and Legal Structure / Risk**
 - **Significant Prospectivity**
 - **But, Much of the “Low-Hanging” Fruit Has Been Produced**
 - **Development of Remaining Resources are Largely High-Cost, Either Conventional or Unconventional**
 - **Resources are Developed in Large Part by the Private Sector**
-

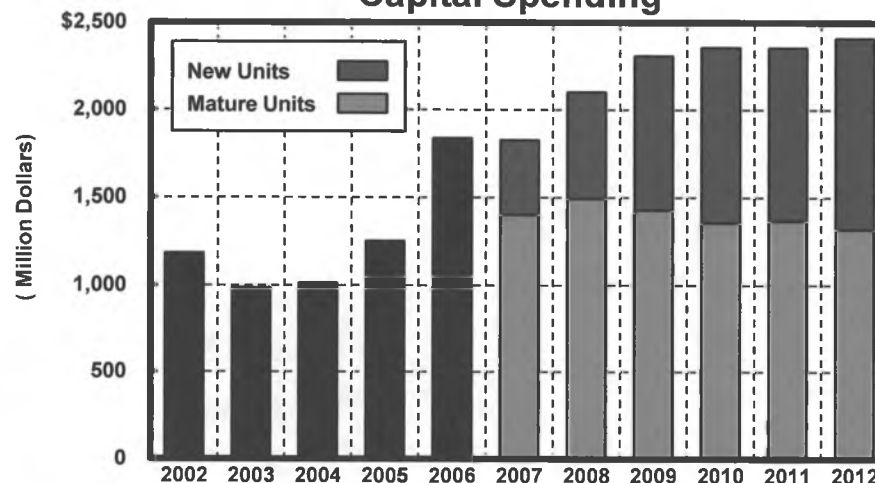
Country/Area Profile

Alaska North Slope

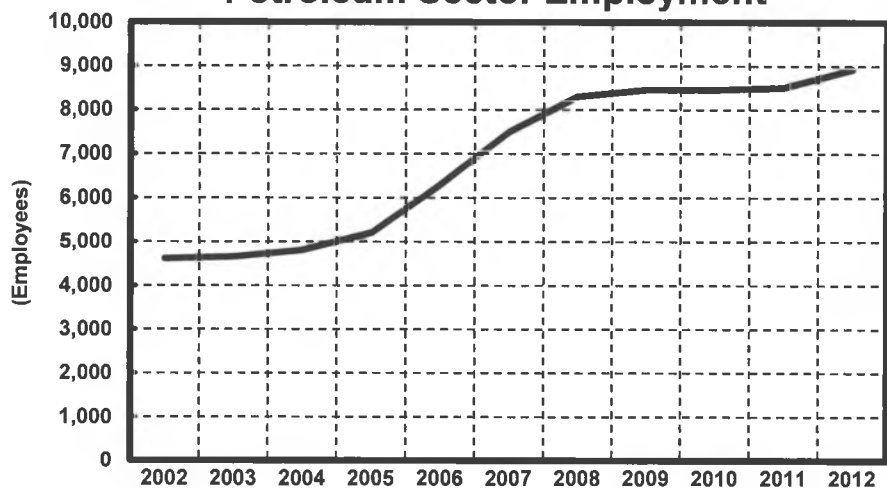
Crude Oil Production



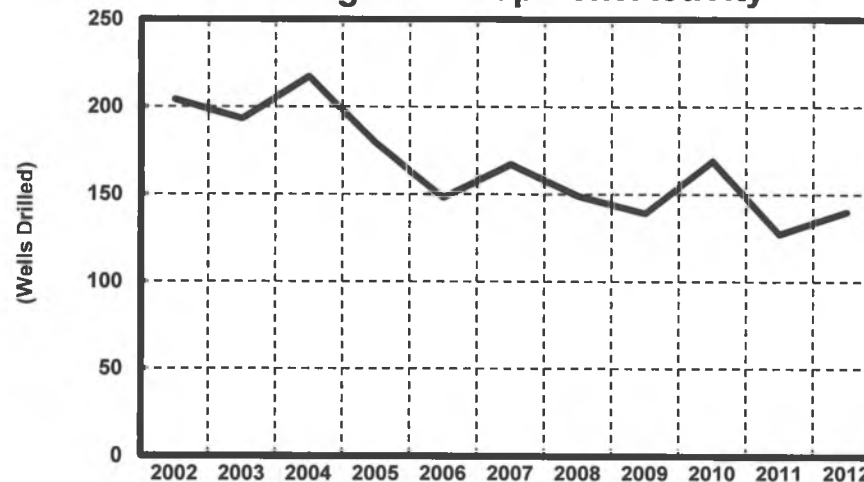
Capital Spending



Petroleum Sector Employment



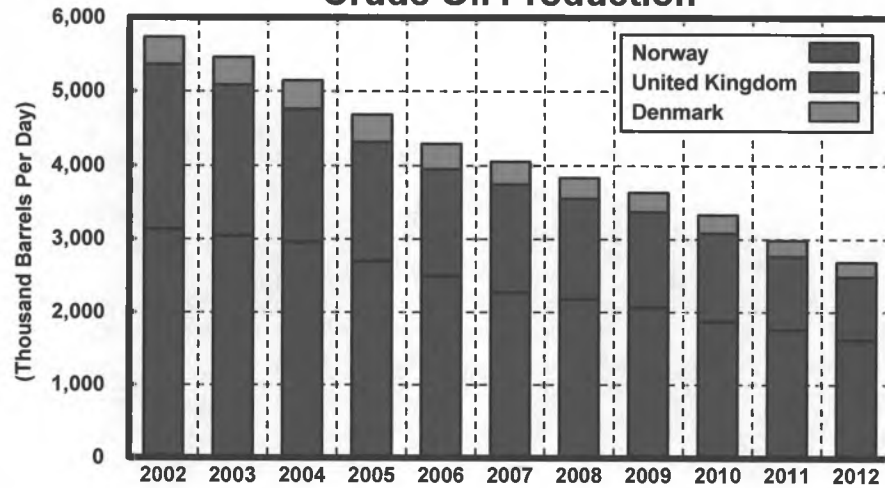
Drilling / Development Activity



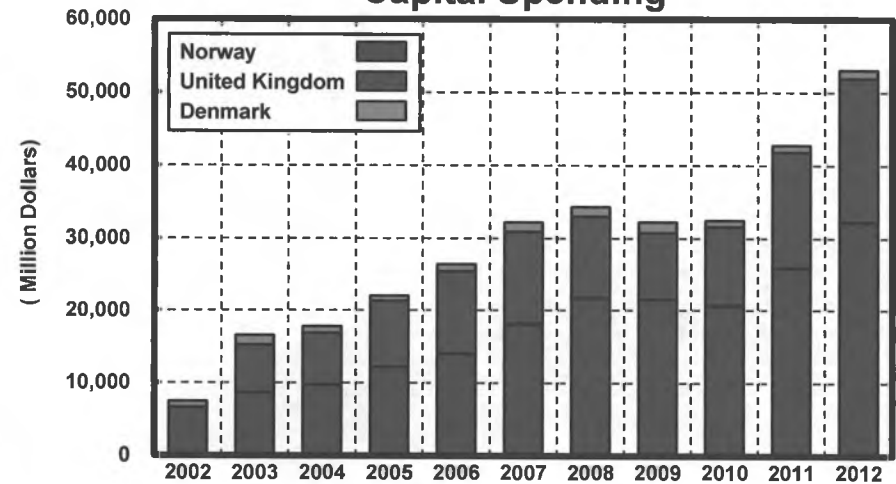
Country/Area Profile

Northwest Europe (North Sea)

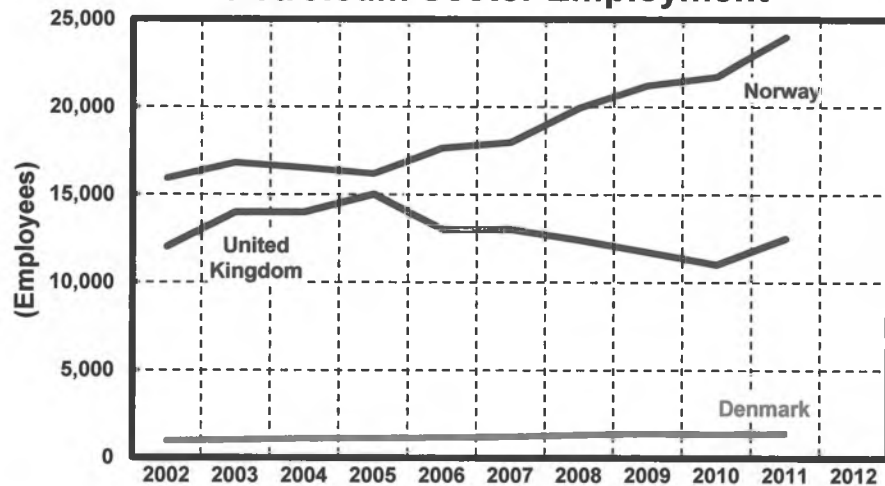
Crude Oil Production



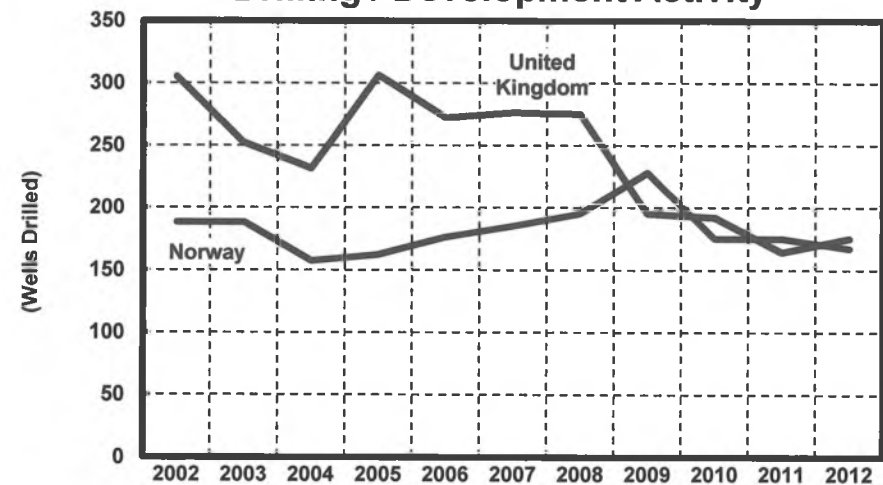
Capital Spending



Petroleum Sector Employment



Drilling / Development Activity

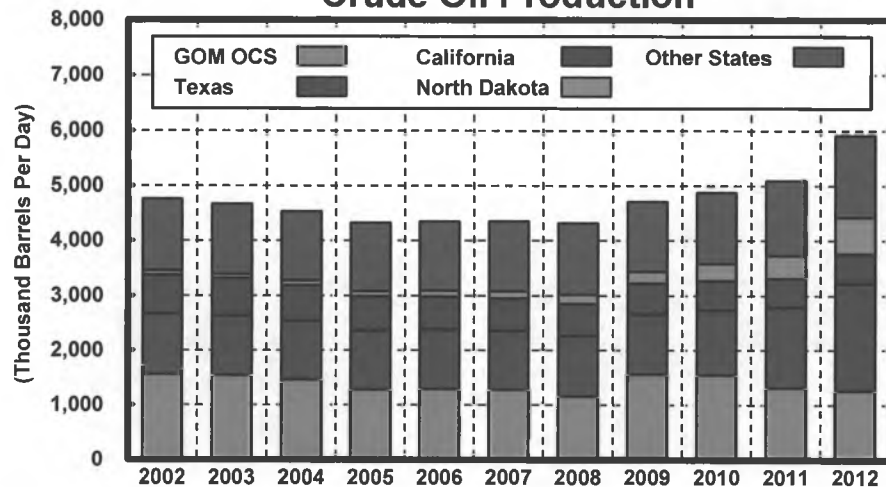


Note: 2012 figures are preliminary.

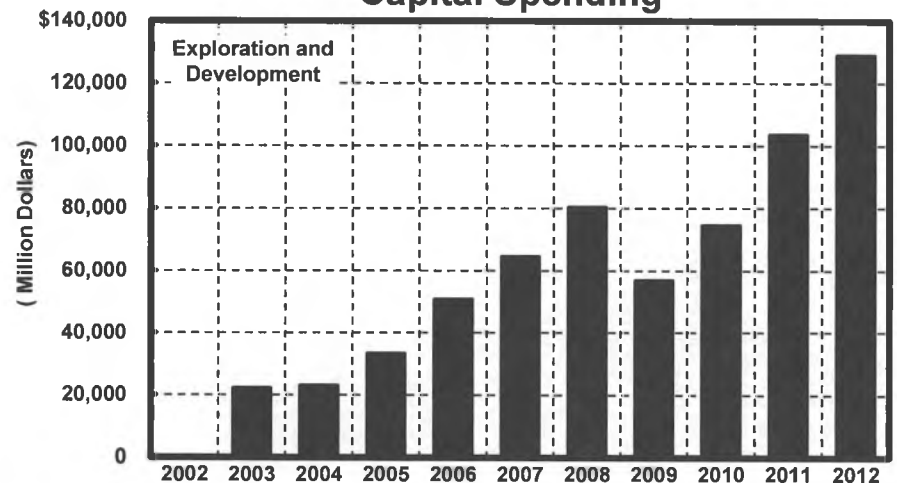
Country/Area Profile

United States Excluding Alaska North Slope

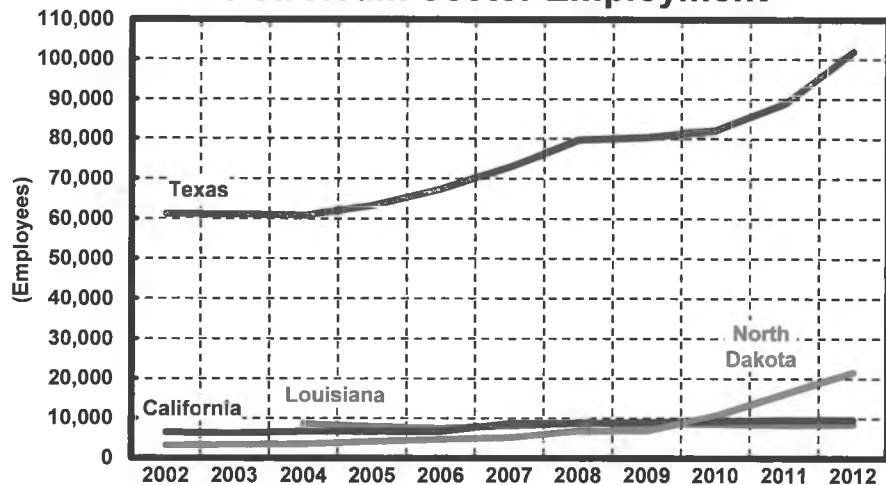
Crude Oil Production



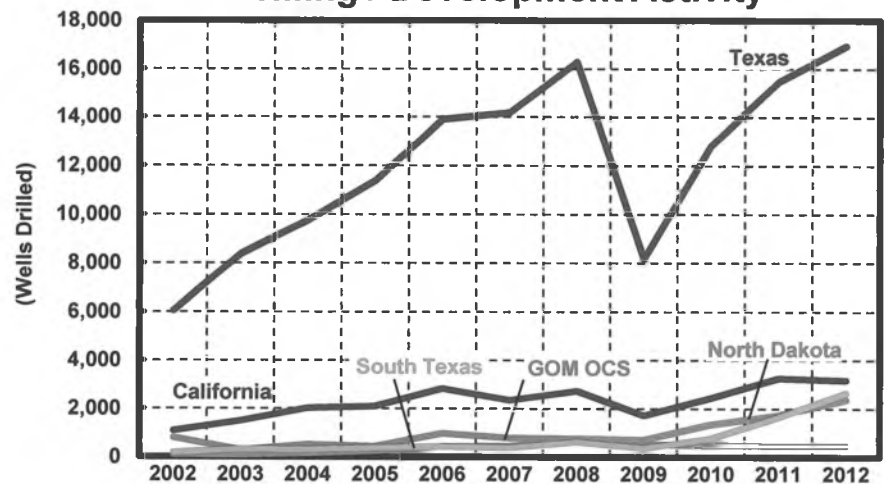
Capital Spending



Petroleum Sector Employment



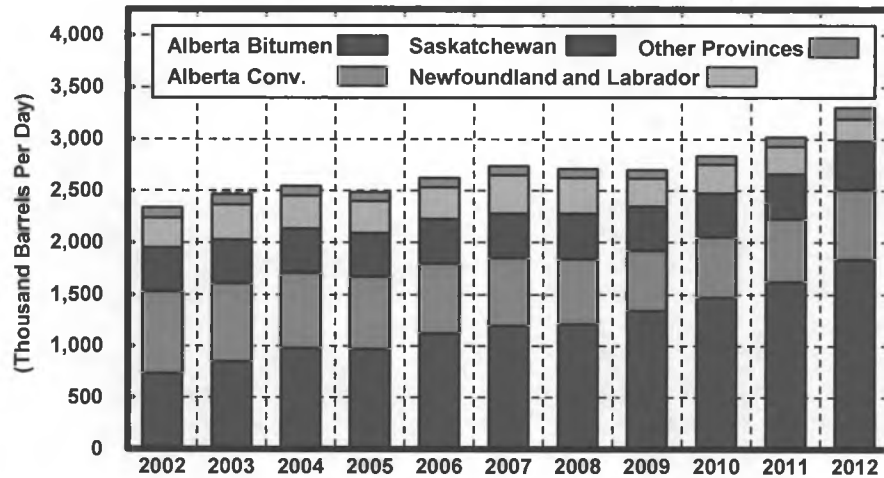
Drilling / Development Activity



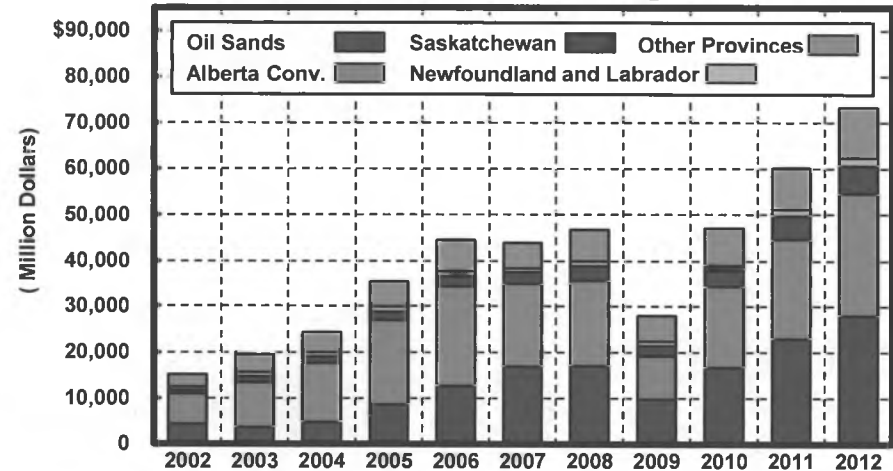
Note: 2012 figures are preliminary.

Country/Area Profile Canada

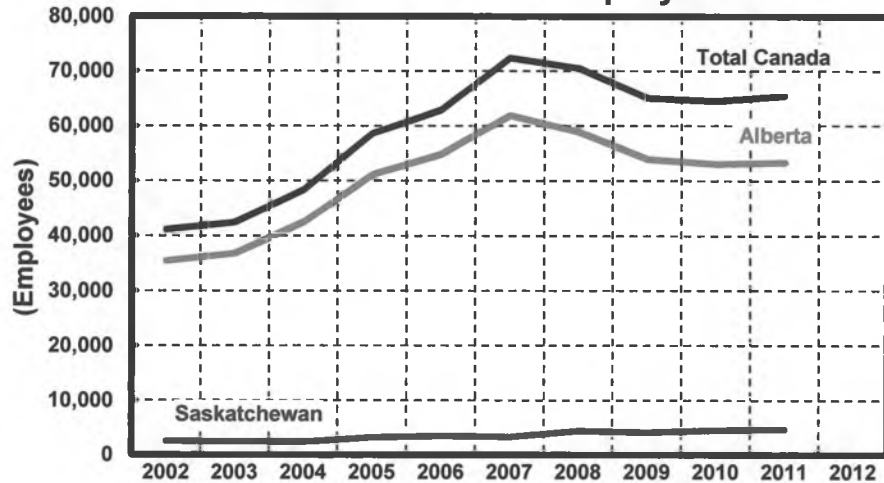
Crude Oil Production



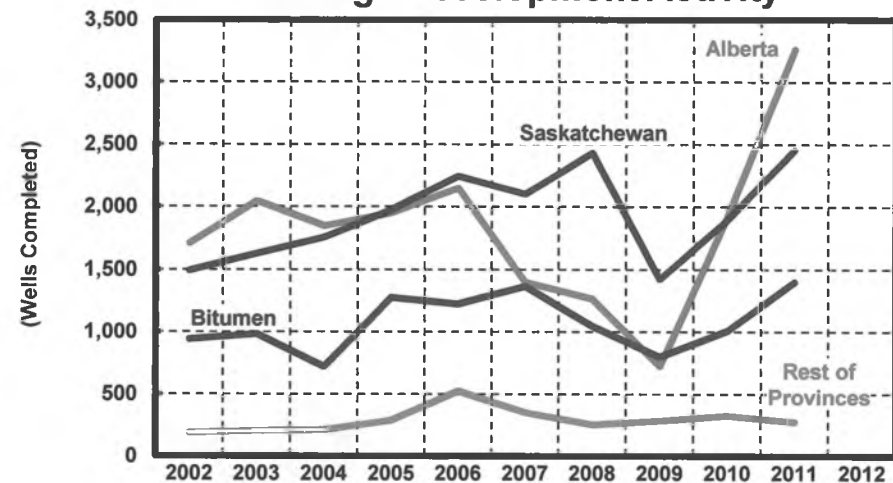
Capital Spending



Petroleum Sector Employment



Drilling / Development Activity

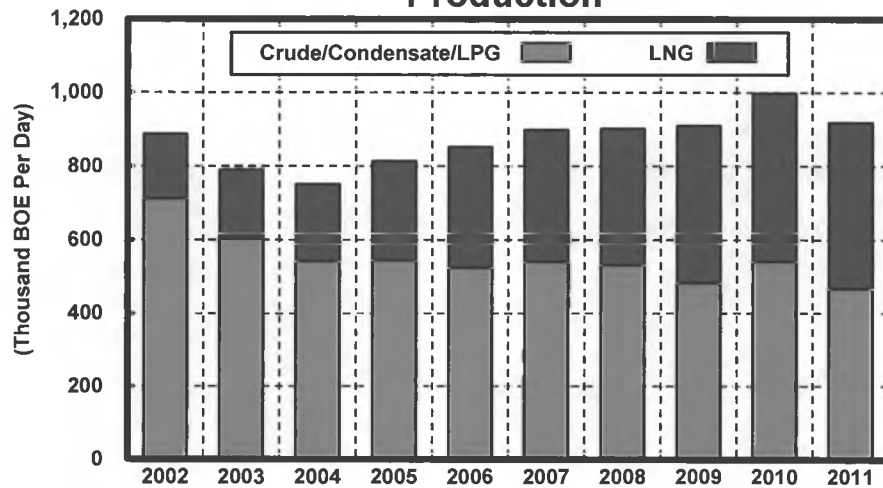


Note: 2012 figures are preliminary.

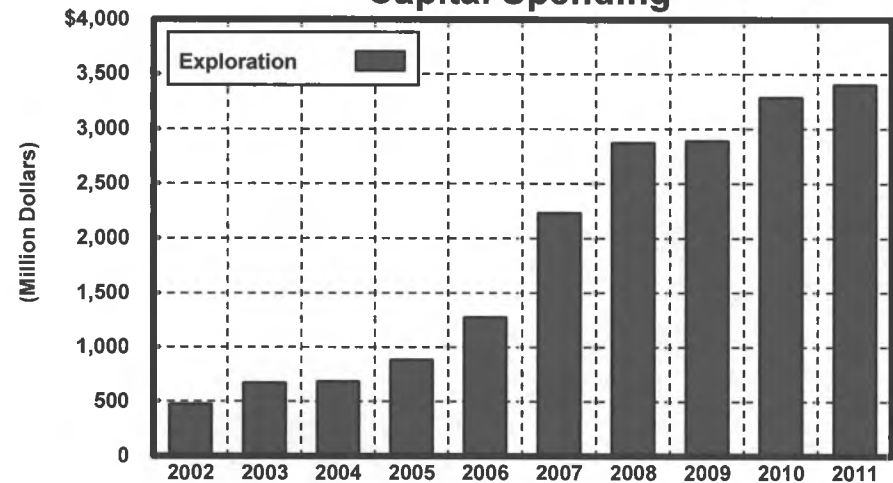
Country/Area Profile

Australia

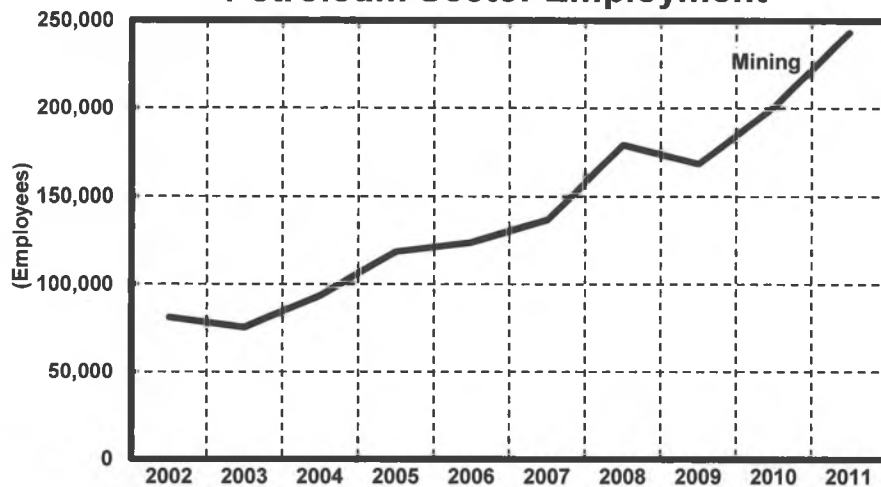
Production



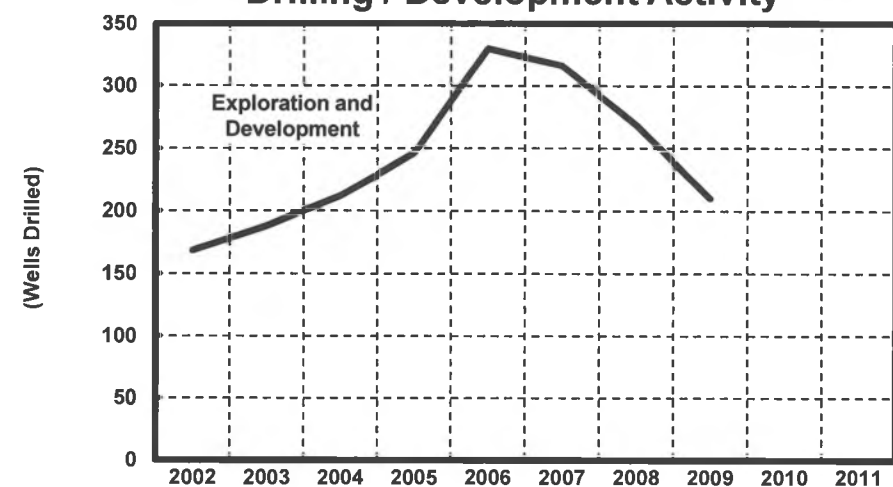
Capital Spending



Petroleum Sector Employment



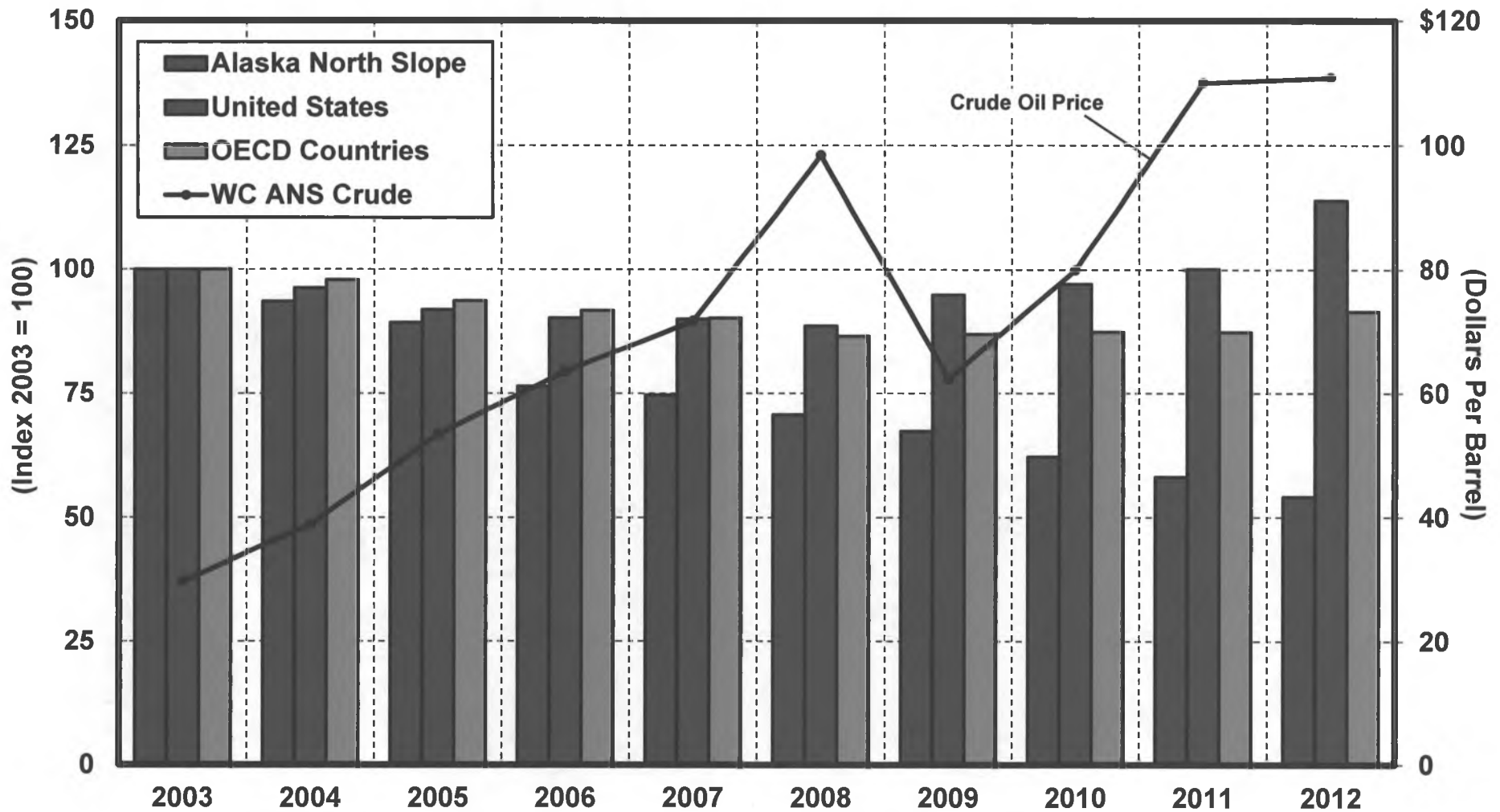
Drilling / Development Activity



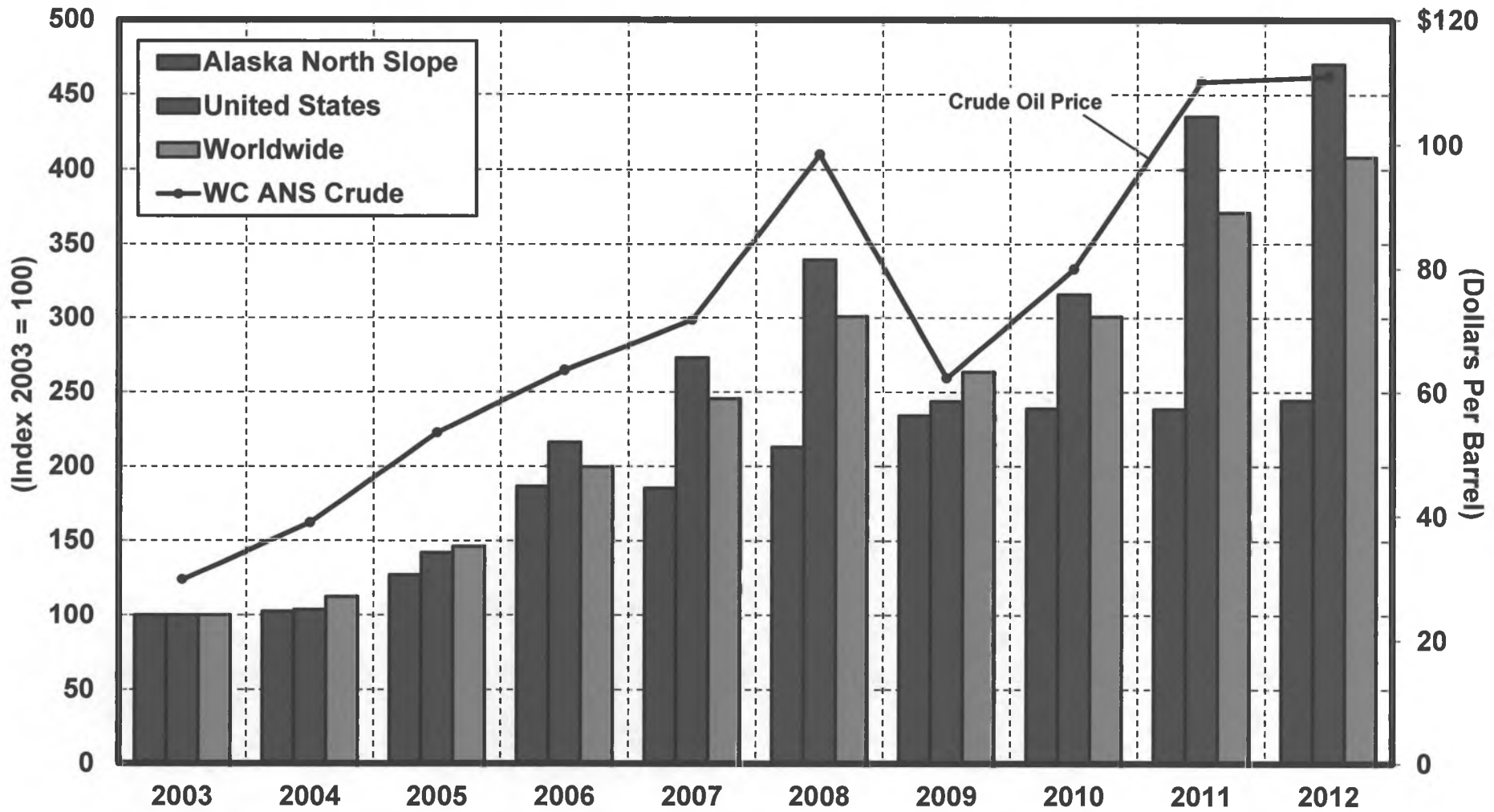
Crude Oil Production

Alaska North Slope vs. United States and OECD Countries

2003 - 2012



Estimated Capital Spending for Exploration and Development Alaska North Slope vs. United States and Worldwide Spending* 2003 - 2012



* North Slope based on tax return information; U.S. based on top 50 public companies; worldwide based on top 75 public companies

Fundamentals of ACES Calculation

How ACES Works

- Tax is Calculated on “Net Value” of Taxable Production
 - Taxable Production is Total Production Less Royalties
 - Net Value is Gross Wellhead Value Less Cost of Production
 - Costs of Production are Capital Expenses, Operating Expenses and Property Tax Payments
- Base Tax Rate of 25%
- Progressive Tax Rate of 0.4% Per \$1/Barrel (4% Per \$10/Barrel) Increase Over \$30/Barrel Net Value and 0.1% Per \$1/Barrel (1% Per \$10/Barrel) Over \$92.50, Capped at 50% Total
- Example: Taxable Value = \$100/Barrel “Production Tax Value”
 - Base Rate = 25%
 - Progressive Rate = $(\$92.50 - \$30) \times 0.4\% + (\$100 - \$92.50) \times 0.1\% = 25.75\%$
 - Total Rate = $25\% + 25.75\% = 50.75\%$
- Credit of 20% for Capital Expenditures (Taken Over 2 Years)
- Small Producer Credit of \$12 Million Per Year (Phased Out for Production over 50 MBD)
- State Purchases Credits and Net Operating Losses (NOLs) From Companies Without Tax Obligation
 - Equals 45% of Capital Expenditures and 25% of Operating Expenditures

Calculation of ACES Tax: Varying Prices

Annual Taxable Production (Bbls)	50,000,000	50,000,000	50,000,000
West Coast ANS Price (\$/Bbl)	\$80.00	\$100.00	\$120.00
Transportation Costs (\$/Bbl)	- 10.00	10.00	10.00
Wellhead Value (\$/Bbl)	= \$70.00	\$90.00	\$110.00
Operating Costs (\$/Bbl)	- \$15.00	\$15.00	\$15.00
Capital Expenditures (\$/Bbl)	- 15.00	15.00	15.00
Taxable Value (\$/Bbl)	= \$40.00	\$60.00	\$80.00
ACES Base Tax Rate (%)	25.0%	25.0%	25.0%
ACES Progressive Tax (%)	+ 4.0%	12.0%	20.0%
Total Tax Rate (%)	= 29.0%	37.0%	45.0%
Total Wellhead Value (\$)	\$3,500,000,000	\$4,500,000,000	\$5,500,000,000
Operating Expenditures (\$)	- 750,000,000	750,000,000	750,000,000
Capital Expenditures (\$)	- 750,000,000	750,000,000	750,000,000
Production Tax Value (\$)	= \$2,000,000,000	\$3,000,000,000	\$4,000,000,000
Production Tax Before Credits (PTV x Total Tax Rate) (\$)	\$580,000,000	\$1,110,000,000	\$1,800,000,000
Capital Credits (20% x Capital Expenditures) (\$)	- 150,000,000	150,000,000	150,000,000
Production Tax After Credits (\$)	= \$430,000,000	\$960,000,000	\$1,650,000,000
Effective Tax Rate After Credits (%)	21.5%	32.0%	41.3%

Calculation of ACES Tax: Varying Costs \$100 West Coast ANS Price

Annual Taxable Production (Bbls)		50,000,000	50,000,000	50,000,000
West Coast ANS Price (\$/Bbl)		\$100.00	\$100.00	\$100.00
Transportation Costs (\$/Bbl)	-	10.00	10.00	10.00
Wellhead Value (\$/Bbl)	=	\$90.00	\$90.00	\$90.00
Operating Costs (\$/Bbl)	-	\$10.00	\$20.00	\$30.00
Capital Expenditures (\$/Bbl)	-	10.00	15.00	20.00
Taxable Value (\$/Bbl)	=	\$70.00	\$55.00	\$40.00
ACES Base Tax Rate (%)		25.0%	25.0%	25.0%
ACES Progressive Tax (%)	+	16.0%	10.0%	4.0%
Total Tax Rate (%)	=	41.0%	35.0%	29.0%
Total Wellhead Value (\$)		\$4,500,000,000	\$4,500,000,000	\$4,500,000,000
Operating Expenditures (\$)	-	500,000,000	1,000,000,000	1,500,000,000
Capital Expenditures (\$)	-	500,000,000	750,000,000	1,000,000,000
Production Tax Value (\$)	=	\$3,500,000,000	\$2,750,000,000	\$2,000,000,000
Production Tax Before Credits (PTV x Total Tax Rate) (\$)		\$1,435,000,000	\$962,500,000	\$580,000,000
Capital Credits (20% x Capital Expenditures) (\$)	-	100,000,000	150,000,000	200,000,000
Production Tax After Credits (\$)	=	\$1,335,000,000	\$812,500,000	\$380,000,000
Effective Tax Rate After Credits (%)		38.1%	29.5%	19.0%

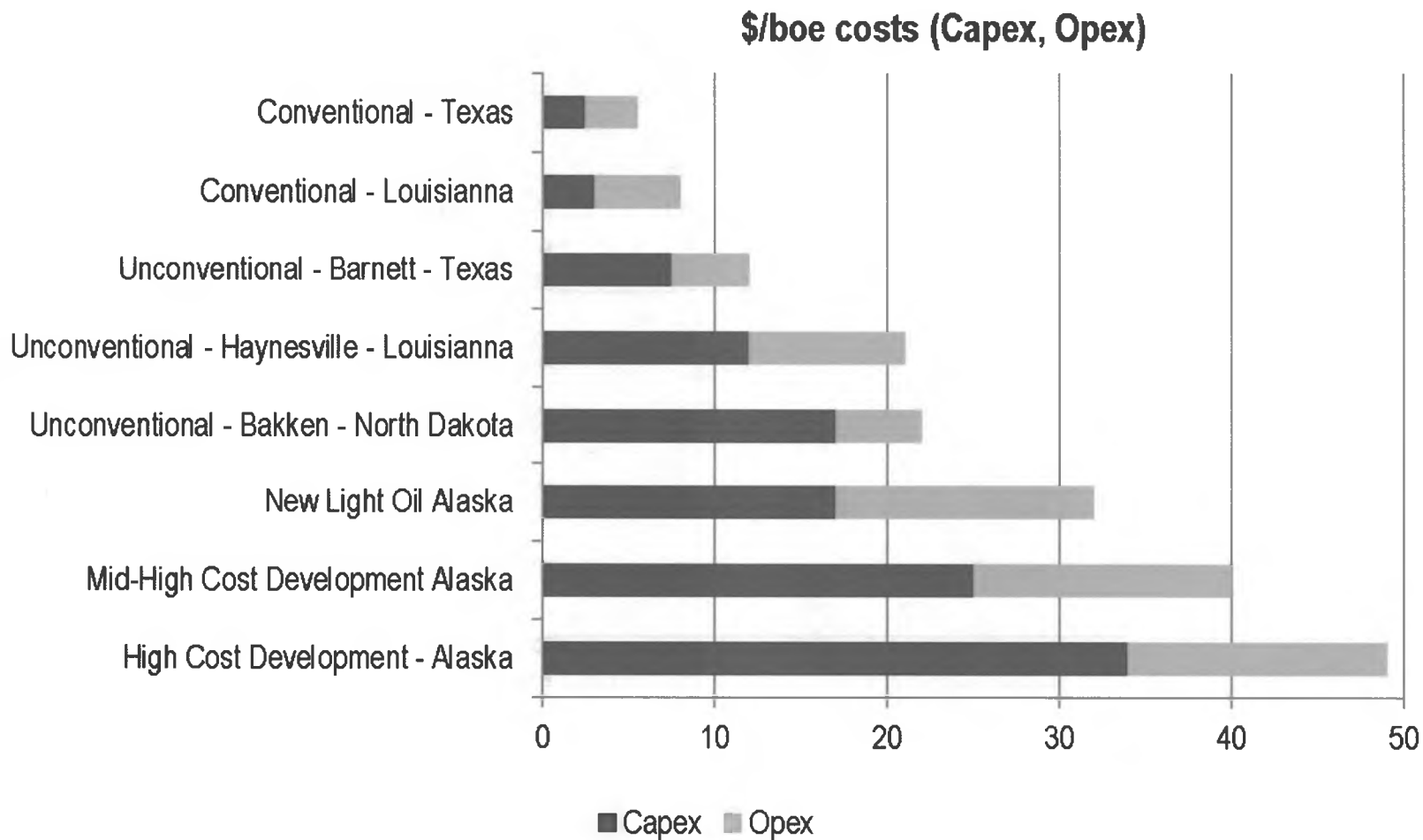
Calculation of ACES Tax: Varying Costs \$80 West Coast ANS Price

Annual Taxable Production (Bbls)		50,000,000	50,000,000	50,000,000
West Coast ANS Price (\$/Bbl)		\$80.00	\$80.00	\$80.00
Transportation Costs (\$/Bbl)	-	10.00	10.00	10.00
Wellhead Value (\$/Bbl)	=	\$70.00	\$70.00	\$70.00
Operating Costs (\$/Bbl)	-	\$10.00	\$20.00	\$30.00
Capital Expenditures (\$/Bbl)	-	10.00	15.00	20.00
Taxable Value (\$/Bbl)	=	\$50.00	\$35.00	\$20.00
ACES Base Tax Rate (%)		25.0%	25.0%	25.0%
ACES Progressive Tax (%)	+	8.0%	2.0%	0.0%
Total Tax Rate (%)	=	33.0%	27.0%	25.0%
Total Wellhead Value (\$)		\$3,500,000,000	\$3,500,000,000	\$3,500,000,000
Operating Expenditures (\$)	-	500,000,000	1,000,000,000	1,500,000,000
Capital Expenditures (\$)	-	500,000,000	750,000,000	1,000,000,000
Production Tax Value (\$)	=	\$2,500,000,000	\$1,750,000,000	\$1,000,000,000
Production Tax Before Credits (PTV x Total Tax Rate) (\$)		\$825,000,000	\$472,500,000	\$250,000,000
Capital Credits (20% x Capital Expenditures) (\$)	-	100,000,000	150,000,000	200,000,000
Production Tax After Credits (\$)	=	\$725,000,000	\$322,500,000	\$50,000,000
Effective Tax Rate After Credits (%)		29.0%	18.4%	5.0%

Calculation of ACES Tax: Additional Capital Spending

Annual Taxable Production (Bbls)		50,000,000	50,000,000	50,000,000
Initial Expenditure (\$)		\$1,500,000,000	\$1,500,000,000	\$1,500,000,000
Additional Expenditure (\$)	+	250,000,000	250,000,000	250,000,000
Total Lease Expenditure (\$)		\$1,750,000,000	\$1,750,000,000	\$1,750,000,000
WC ANS Price (\$/Bbl)		\$80.00	\$100.00	\$120.00
Tax Value Prior To Additional Expenditure (\$/Bbl)		\$40.00	\$60.00	\$80.00
Additional Capital Spending Per-Barrel of Existing Production (\$/Bbl)	-	5.00	5.00	5.00
Tax Value After Additional Expenditure (\$/Bbl)	=	\$35.00	\$55.00	\$75.00
Taxes Before Additional Expenditure				
Tax Rate (%)		29.0%	37.0%	45.0%
Production Tax Before Credits (\$)		\$580,000,000	\$1,110,000,000	\$1,800,000,000
Capital Credits (20% x Capital Expenditures) (\$)	-	300,000,000	300,000,000	300,000,000
Production Tax After Credits (\$)	=	\$280,000,000	\$810,000,000	\$1,500,000,000
Taxes After Additional Expenditure				
Tax Rate (%)		27.0%	35.0%	43.0%
Production Tax Before Credits (\$)		\$472,500,000	\$962,500,000	\$1,612,500,000
Capital Credits (20% x Capital Expenditures) (\$)	-	350,000,000	350,000,000	350,000,000
Production Tax After Credits (\$)	=	\$122,500,000	\$612,500,000	\$1,262,500,000
Reduction in Taxes From Additional Expenditure				
Before Credits		\$107,500,000	\$147,500,000	\$187,500,000
Additional Credits	+	50,000,000	50,000,000	50,000,000
Total Reduction in Taxes After Credits	=	\$157,500,000	\$197,500,000	\$237,500,000
Reduction in Tax as % of Expenditure		63%	79%	95%
Due to Change in Taxes (Buy Down Effect)		43%	59%	75%
Due to Additional Credits		20%	20%	20%

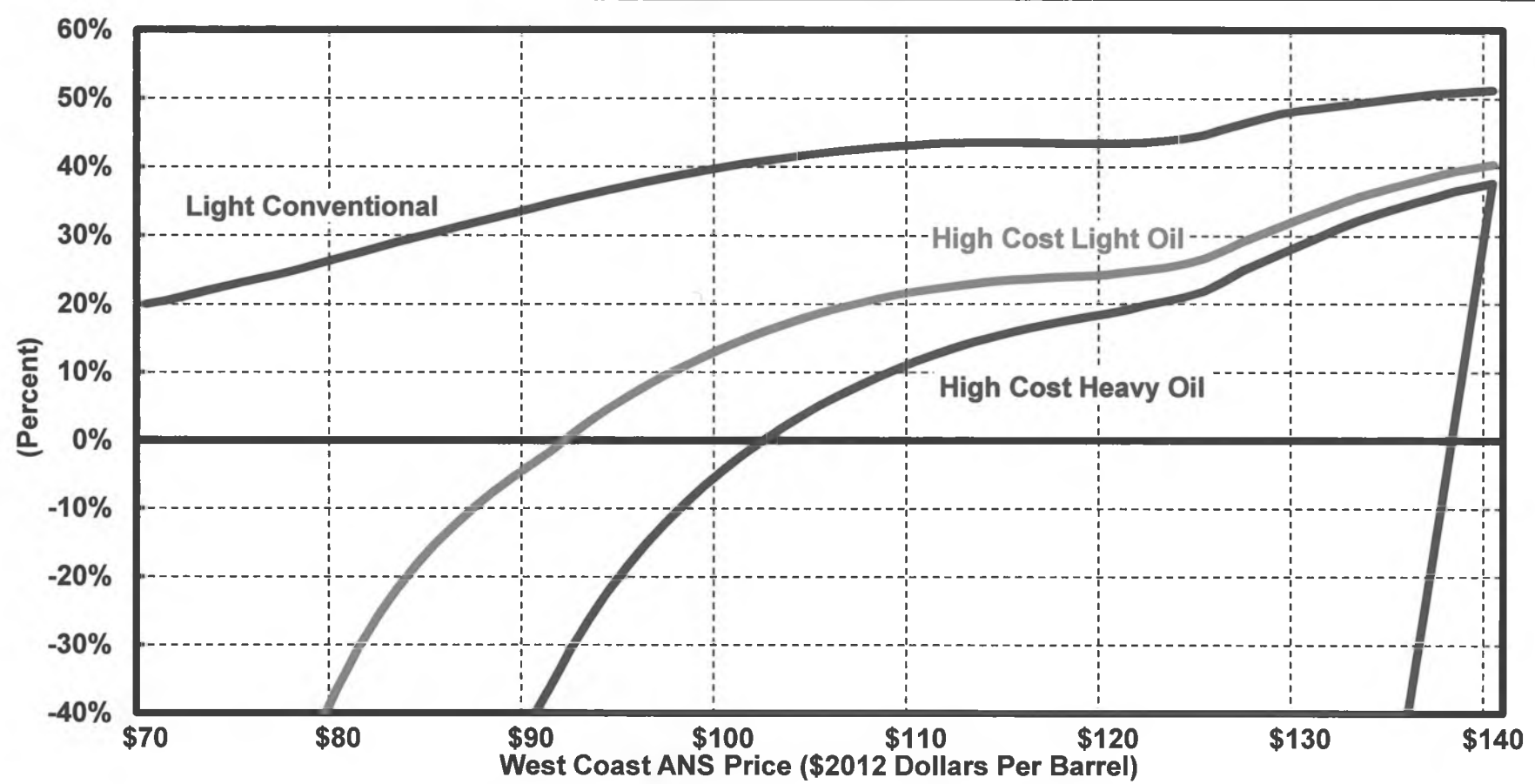
PFC Costs Various Projects



Source: Excerpted from January 31, 2013 PFC Presentation to Senate TAPS Throughput Committee.

Effective Tax Rates For New Development Under ACES

Additional Tax as % of Production Tax Value: Incumbent Producer



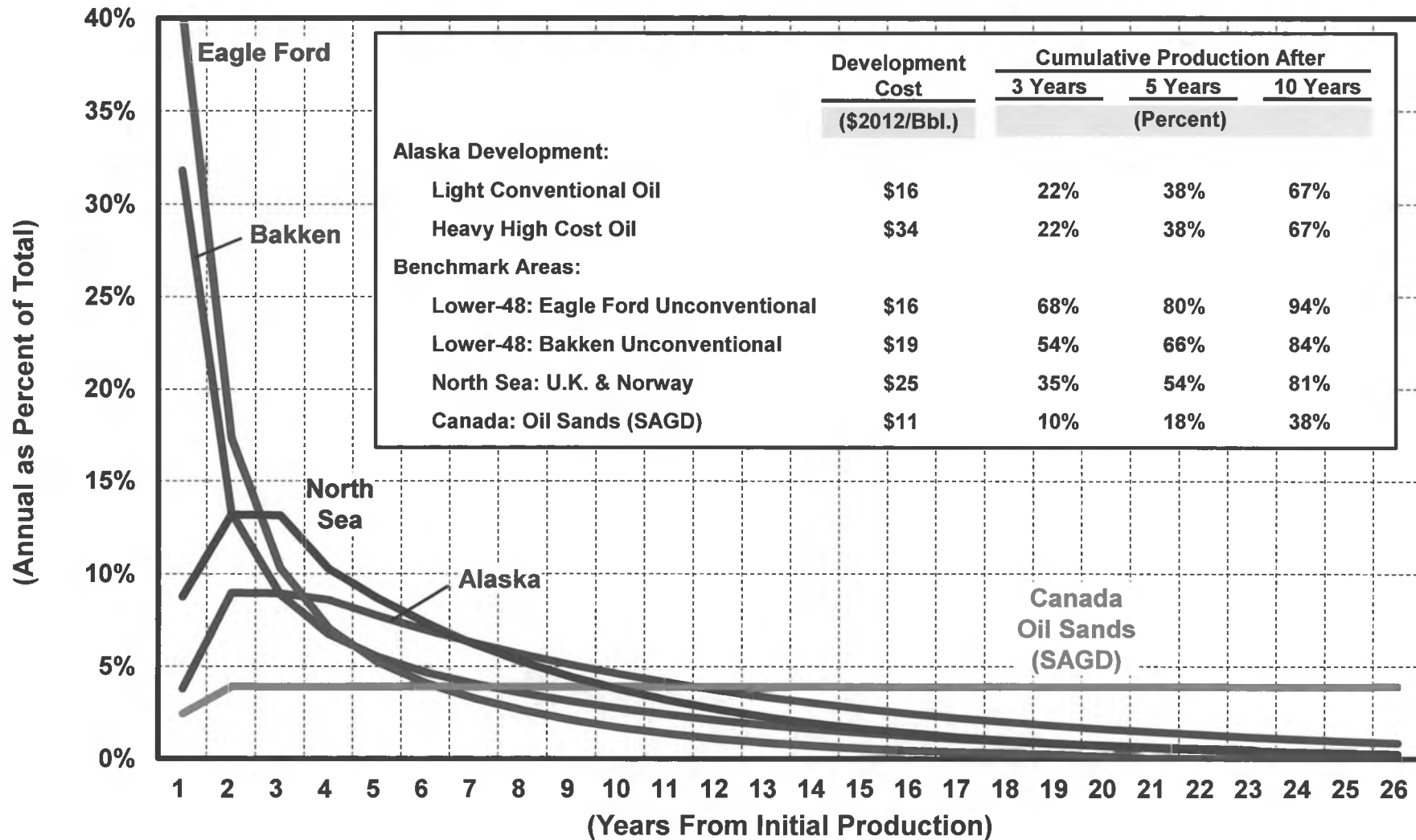
Light Conventional Oil: \$16 Per Barrel Development Capex; \$14 Per Barrel Opex; 16.67% Royalty Rate; 50 MMBO New Development by Existing Owner With Initial Ongoing Production of Approximately 100 MBD and Costs Consistent with Prudhoe Bay/Kuparuk River Units

High Cost Light Oil: \$34 Per Barrel Development Capex; \$19 Per Barrel Opex; 16.67% Royalty Rate; 50 MMBO New Development by Existing Owner With Initial Ongoing Production of Approximately 100 MBD and Costs Consistent with Prudhoe Bay/Kuparuk River Units

High Cost Heavy Oil: \$34 Per Barrel Development Capex; \$19 Per Barrel Opex; 12.5% Royalty Rate; \$10 Below Stream Price; 50 MMBO New Development by Existing Owner With Initial Ongoing Production of Approximately 100 MBD and Costs Consistent with Prudhoe Bay/Kuparuk River Units

Analysis of Potential Investments In Alaska Under ACES Versus Other Areas

Summary of Production Profiles Examined For Alaska and Benchmark Developments



Investment Measures Analyzed

- **Producer NPV-12 Per BOE**
- **Internal Rate of Return (IRR)**
- **5-Year Cash Margins**
- **Profitability Index-12**
- **Government Take**
- **State NPV-12 Per BOE**

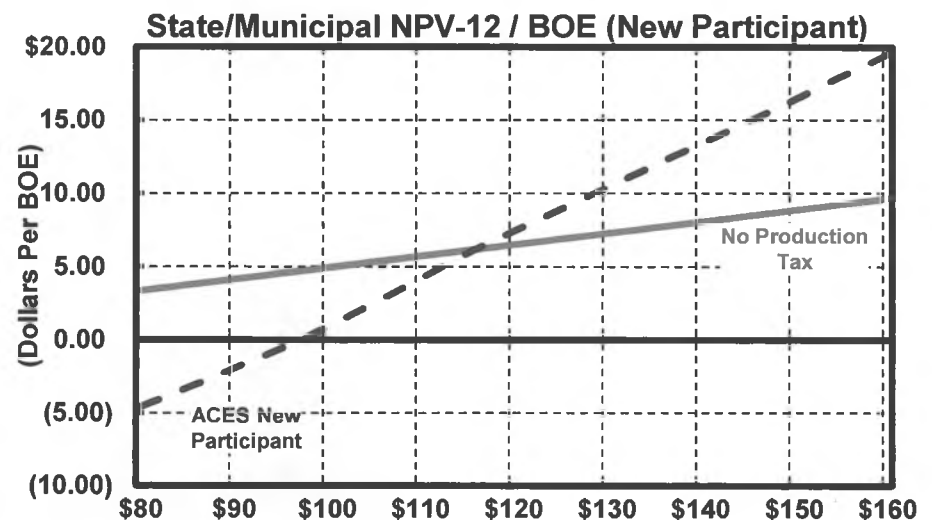
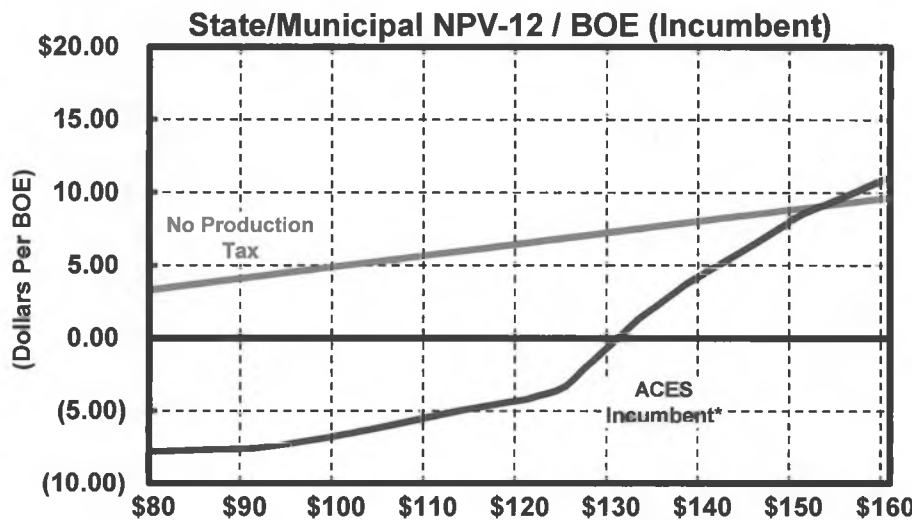
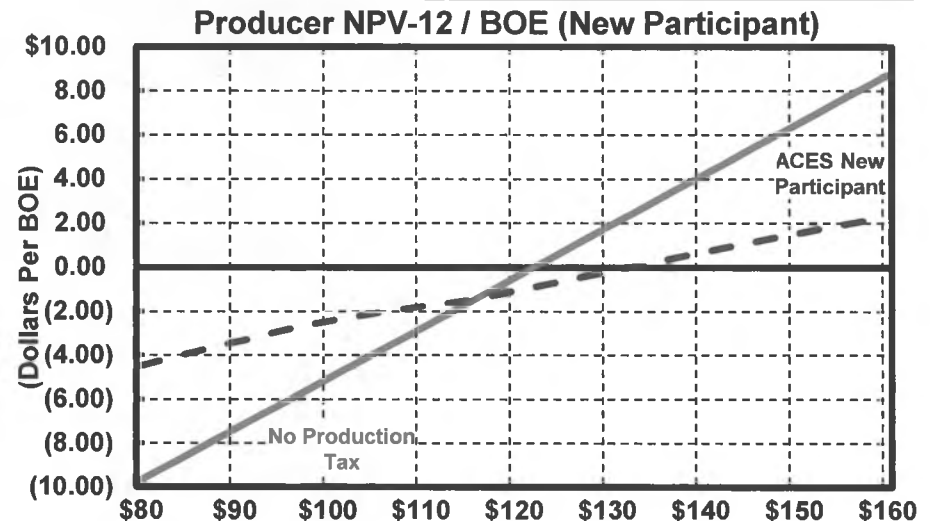
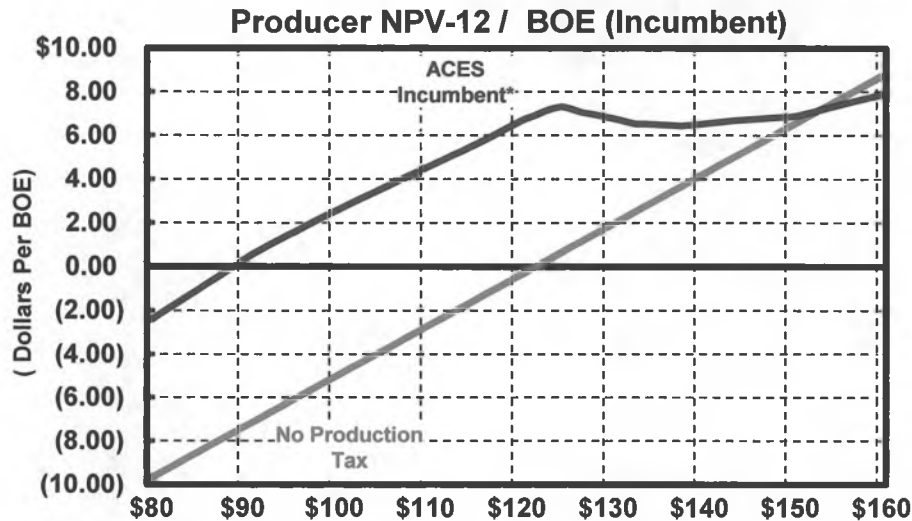
Summary of Investment Measures

West Coast ANS Price	Alaska 50 MMBO				U.K. Development & Fiscal System							
	Light Conventional Oil		Heavy High Cost Oil		Unconventional Lower-48		Canada Oil Sands	Norway	Pre-1993		Post-1993	
	New Participant	Incumbent Participant	New Participant	Incumbent Participant	Eagle Ford	Bakken	SAGD		Pre-1993	w/ Brownfield Allowance*	Post-1993	w/ Brownfield Allowance*
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)	
Producer NPV-12 / BOE (Dollars Per BOE)												
\$80	\$2.55	\$3.71	(\$4.51)	(\$2.43)	\$3.61	\$0.67	(\$0.93)	\$0.24	\$1.20	\$4.81	\$2.41	\$4.62
\$100	\$3.85	\$6.14	(\$2.45)	\$2.48	\$6.75	\$4.29	\$0.46	\$2.34	\$3.02	\$7.09	\$6.04	\$8.25
\$120	\$5.48	\$8.82	(\$1.09)	\$6.53	\$11.17	\$9.16	\$2.01	\$4.44	\$4.83	\$9.09	\$9.67	\$11.88
Profitability Index-12												
\$80	1.19	1.28	0.84	0.91	1.25	1.04	0.88	1.01	1.06	1.22	1.11	1.21
\$100	1.29	1.46	0.91	1.09	1.47	1.28	1.06	1.14	1.14	1.33	1.28	1.38
\$120	1.41	1.67	0.96	1.23	1.78	1.60	1.26	1.27	1.22	1.42	1.45	1.55
IRR (Percent)												
\$80	19.7%	26.2%	4.3%	7.1%	29.9%	13.6%	9.7%	12.4%	18.4%	34.5%	18.4%	24.7%
\$100	23.4%	41.1%	8.1%	18.2%	46.3%	22.7%	13.1%	16.0%	27.0%	45.2%	27.0%	32.9%
\$120	27.6%	65.3%	10.3%	33.6%	73.6%	37.0%	16.3%	19.3%	34.6%	53.5%	34.6%	40.2%
5-Year (2017-2021) Cash Margins (Dollars Per BOE)												
\$80	\$25.84	\$24.26	\$27.58	\$25.52	\$23.39	\$28.39	\$26.07	\$34.51	\$12.45	\$22.94	\$24.91	\$29.35
\$100	\$28.84	\$27.22	\$32.42	\$30.33	\$29.99	\$36.48	\$29.14	\$39.42	\$16.69	\$28.85	\$33.38	\$37.82
\$120	\$33.13	\$31.18	\$35.48	\$33.41	\$36.87	\$44.91	\$33.37	\$44.32	\$20.93	\$31.29	\$41.86	\$46.30
Government Take (Percent)												
\$80	70.8%	68.9%	61.5%	45.0%	71.7%	77.1%	63.4%	67.8%	81.0%	61.0%	62.0%	52.0%
\$100	75.8%	73.0%	71.6%	58.3%	67.9%	72.1%	63.5%	71.7%	81.0%	68.6%	62.0%	55.8%
\$120	77.2%	73.8%	76.8%	63.4%	65.1%	68.7%	63.0%	73.4%	81.0%	72.0%	62.0%	57.5%
State/Municipal NPV-12/BOE (Dollars Per BOE)												
\$80	\$6.67	\$4.88	(\$4.61)	(\$7.81)	-	-	-	-	-	-	-	-
\$100	\$13.32	\$9.79	\$0.86	(\$6.73)	-	-	-	-	-	-	-	-
\$120	\$19.46	\$14.31	\$7.41	(\$4.31)	-	-	-	-	-	-	-	-

* Brownfield Allowance applied to 100 MMBOE development.

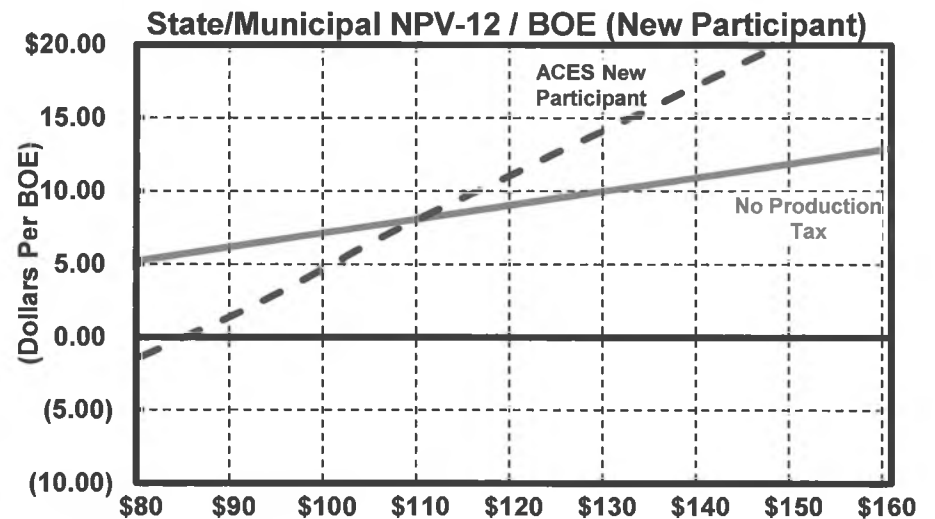
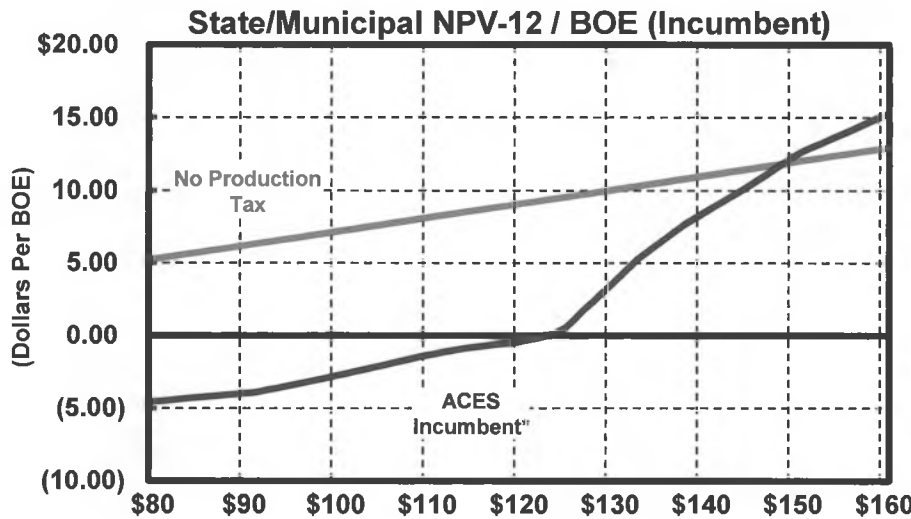
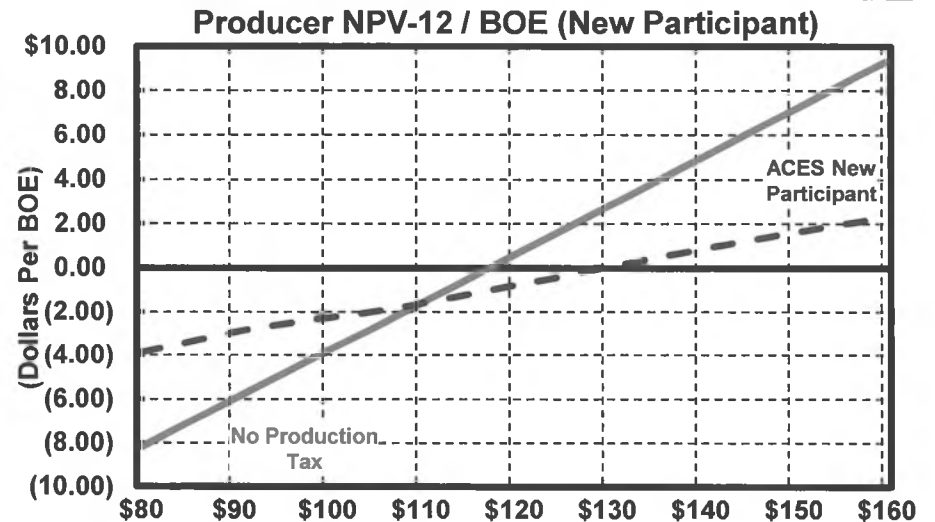
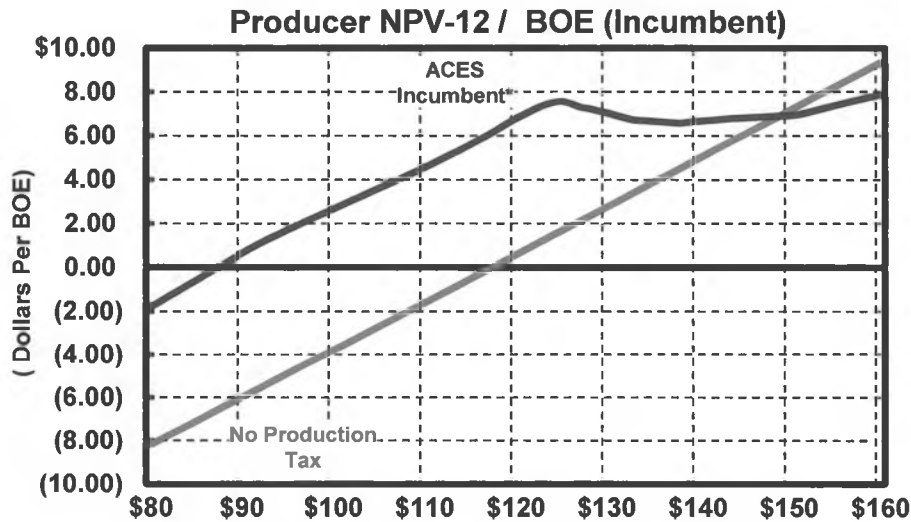
Note: Analysis of incumbent production includes "buy-down" impact for reduced taxes on existing production.

The Economics of High Cost Heavy Oil Development



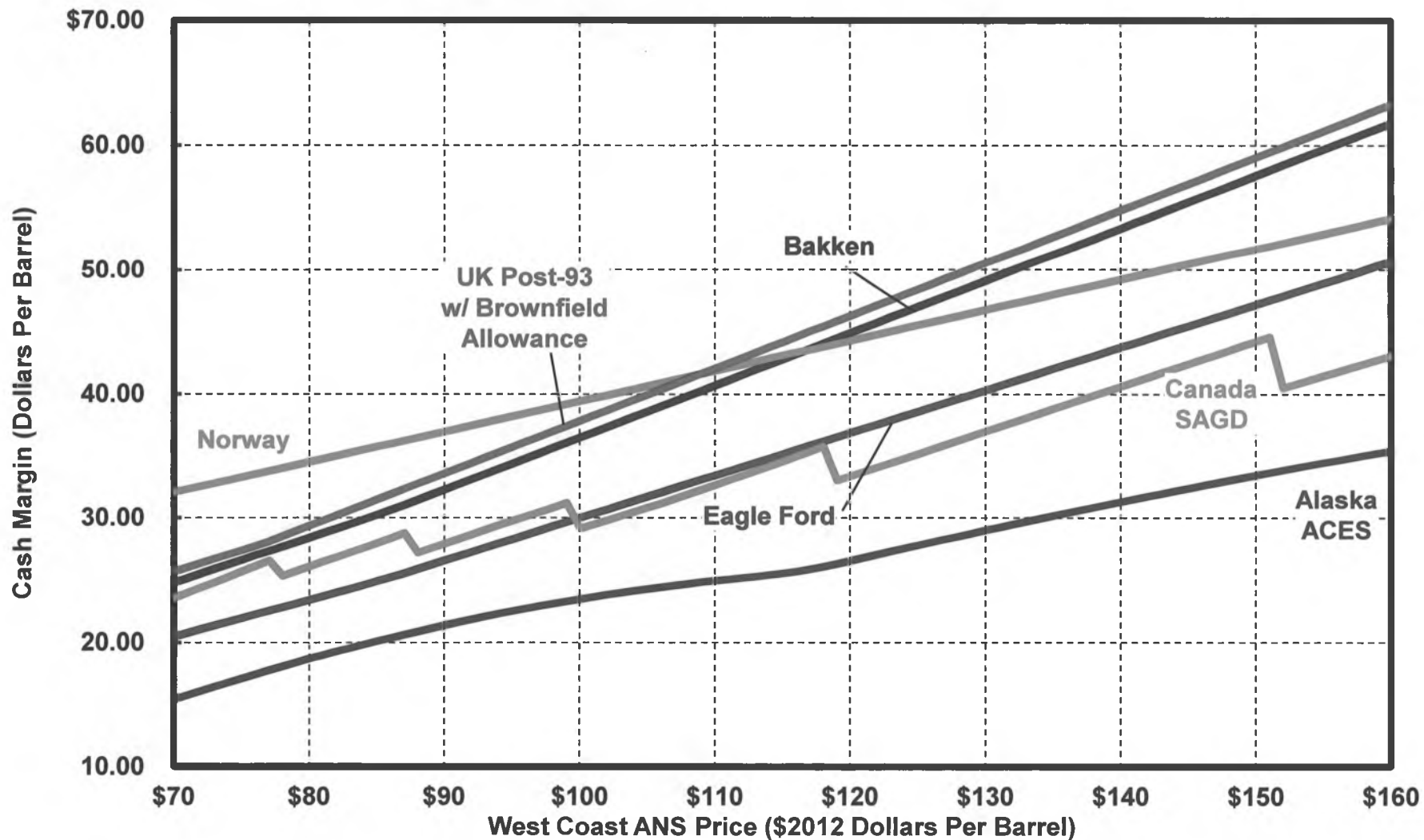
* Analysis of incumbent production includes "buy-down" impact for reduced taxes on existing production.

The Economics of High Cost Light Oil Development



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

Projected Cash Generation From Ongoing North Slope Production (2017-2021) Under ACES and Other Jurisdictions



IHS CERA 2011 Report to the U.S. Department of Interior

22. UNITED STATES—ALASKA: STATE LANDS

Table II-LVI: Alaska State Lands Assumed Terms

FISCAL SYSTEM	Alaska—State Lands Concessionary Terms
BONUSES	Fixed or biddable signature bonus; US\$0.5 million assumed
OTHER PAYMENTS	Production rental: US\$1–\$3 per acre
STATE PARTICIPATION	None
ROYALTY	12.5 percent of gross revenue
PROFIT TAX	ACES production tax: profit based tax levied between 25 to 75 percent.
PROPERTY TAX	2 percent of accumulated capital expenditure less accumulated depreciation
INCOME TAX	State Income Tax levied on gross revenue less deductions and depreciation. The state income tax rate is in the range 1.0 to 9.4 percent Federal income tax levied on gross revenue less deductions and depreciation. The federal income tax rate is 35 percent
OTHER TAXES	Property tax: 2 percent of accumulated capital expenditure less accumulated depreciation State conservation surcharges: US\$0.005 per barrel on crude oil and US\$0.0083 per Mcf on natural gas

BONUSES AND OTHER PAYMENTS

The cash bonus may be fixed in advance or subject to bidding. In the latter case, the minimum cash bonus that will be accepted in any lease sale is prescribed. US\$5 to US\$10 per acre is typical, although higher minimums may apply to highly prospective blocks. A signature bonus of US\$0.5 million has been assumed.

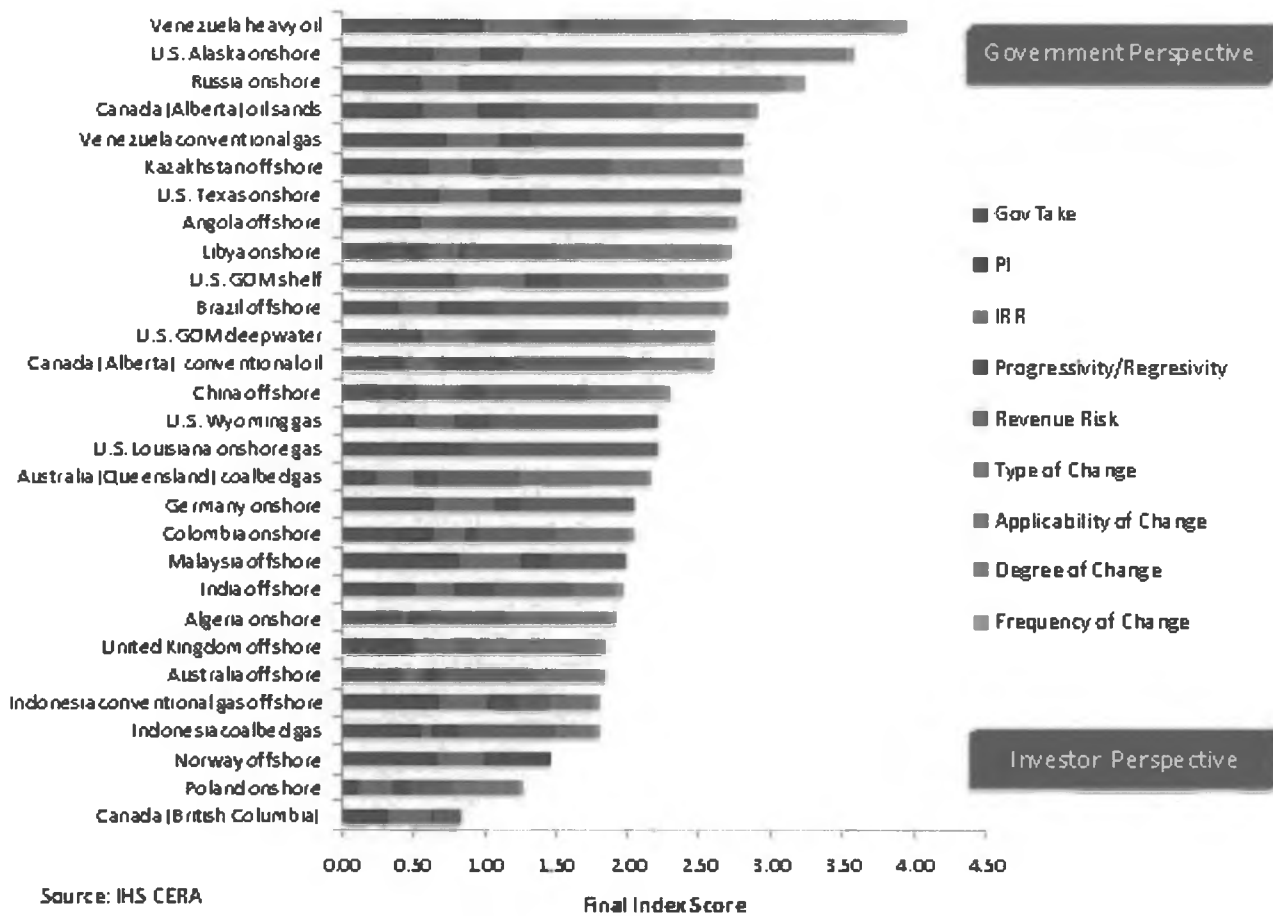
Rental

Rentals range between US\$1 and US\$3 per acre as follows:

Source: Excerpted from page 225 of IHS CERA Report.

IHS CERA 2011 Report to the U.S. Department of Interior (cont'd)

Figure 15: Composite Index—Global Rating and Ranking



Source: IHS CERA

Source: Excerpted from page 24 of IHS CERA Report.

The Administration's Proposed Changes SB21/HB72

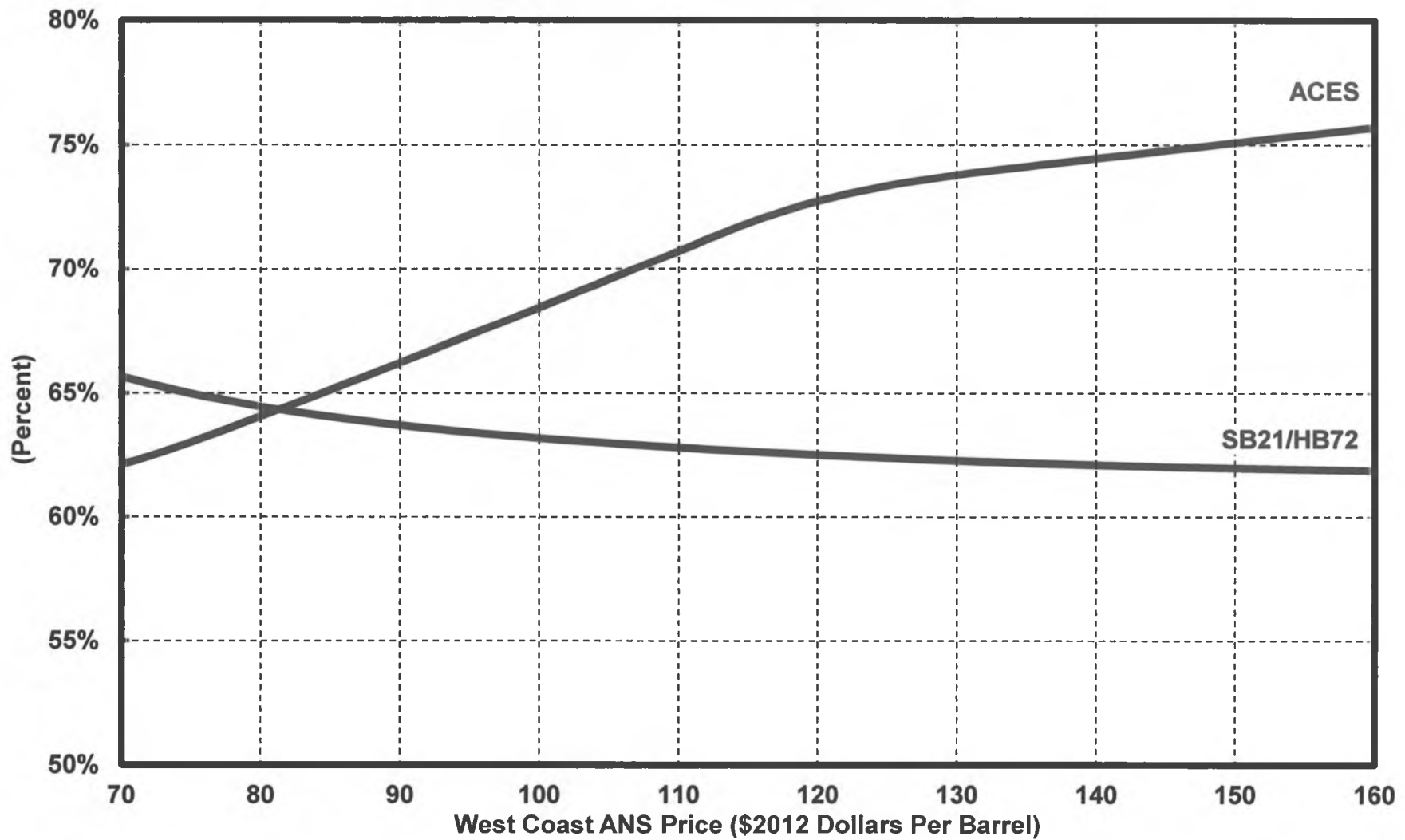
Key Aspects of Administration's Proposal

- **Establishes 25% Flat Net Tax Rate; No Progressivity**
- **Eliminates Capital Credit and State Purchase of Losses**
- **Establishes 20% Gross Revenue Exclusion (GRE) to Incent Production of New Oil**
- **Losses May be Carried Forward and Applied Against Tax Obligation When Production Occurs**
- **Extends New Entrant Credits Through 2022**
- **No Change Outside of North Slope**

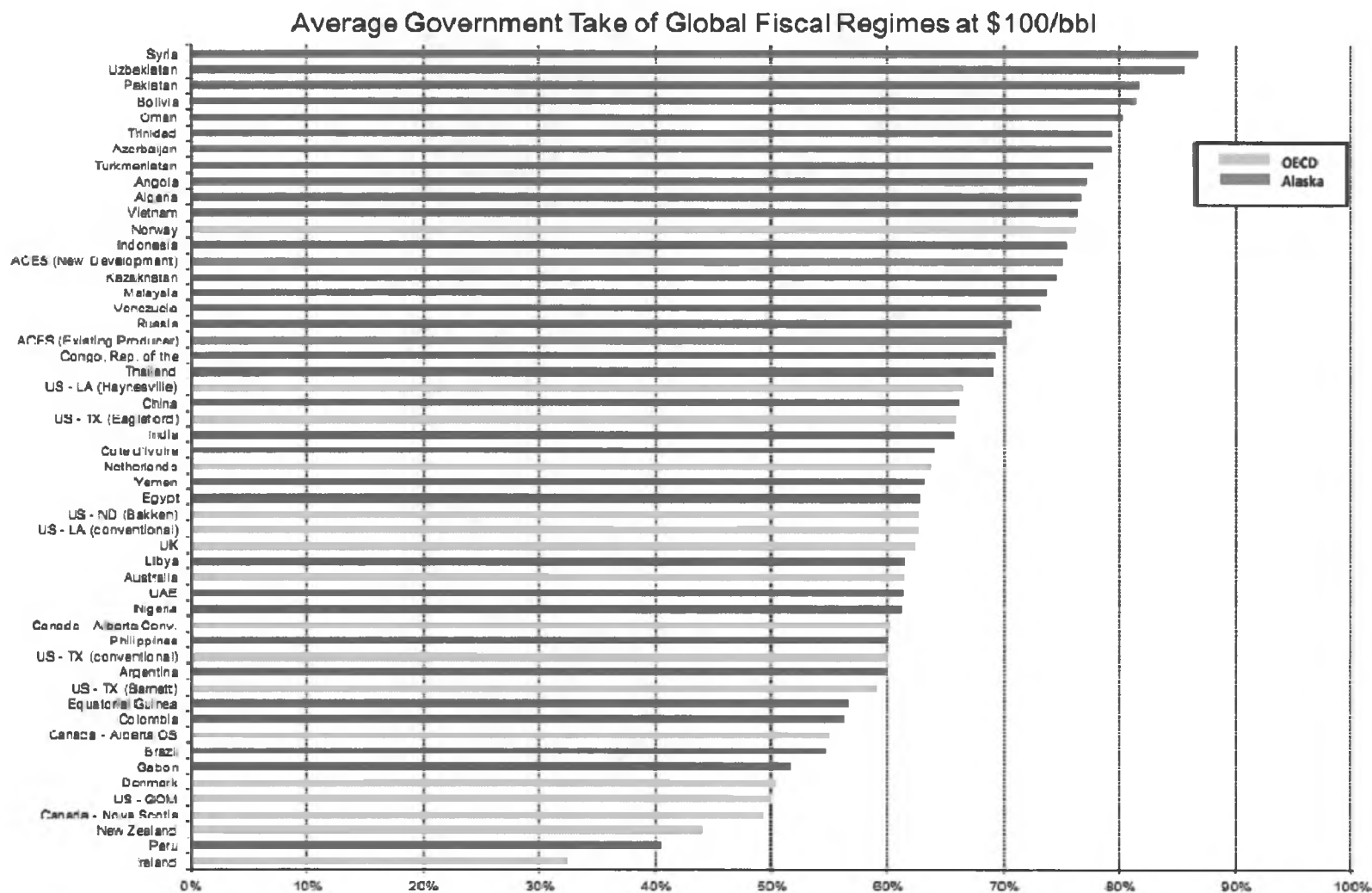
Key Aspects of Administration's Proposal (cont'd)

- **Provides Balance Between State and Producers**
 - Reduction of Tax Rates at High Prices, Balanced with Elimination of Credits
 - State Continues to Receive Largest Percentage of Oil Production Revenues at Any Price
 - Provides Tax Relief and Higher Margins in Sustainable Price Ranges
 - **Simplifies Tax System and Provides Clarity for Planning**
 - Eliminates Question of Marginal Tax Rate / Take for Investment Planning
 - Eliminates Incentives for "Gold Plating" Caused by High Marginal Rates
 - **Maintains Alignment Between State and Producer Incentives**
 - Net Tax Allows for Deduction of Costs Against Tax
 - **Provides Incentive for Development of New Resources Without Taxing State Treasury**
 - GRE Provides Lower Effective Tax Rate for New Development
 - New Developers can Recover Costs of Development Once Production Begins
 - Does Not Require State to Fund Development Costs Through Potentially Expensive Credit Purchases
 - **Extremely Positive Message to Potential Investors**
 - Will Encourage Broader Participation in Development of Alaska's North Slope
 - Economics of New Participants Closer to Incumbents'
-

Average Government Take ACES v. SB21/HB72 for All Existing Producers (FY2015-FY2019)

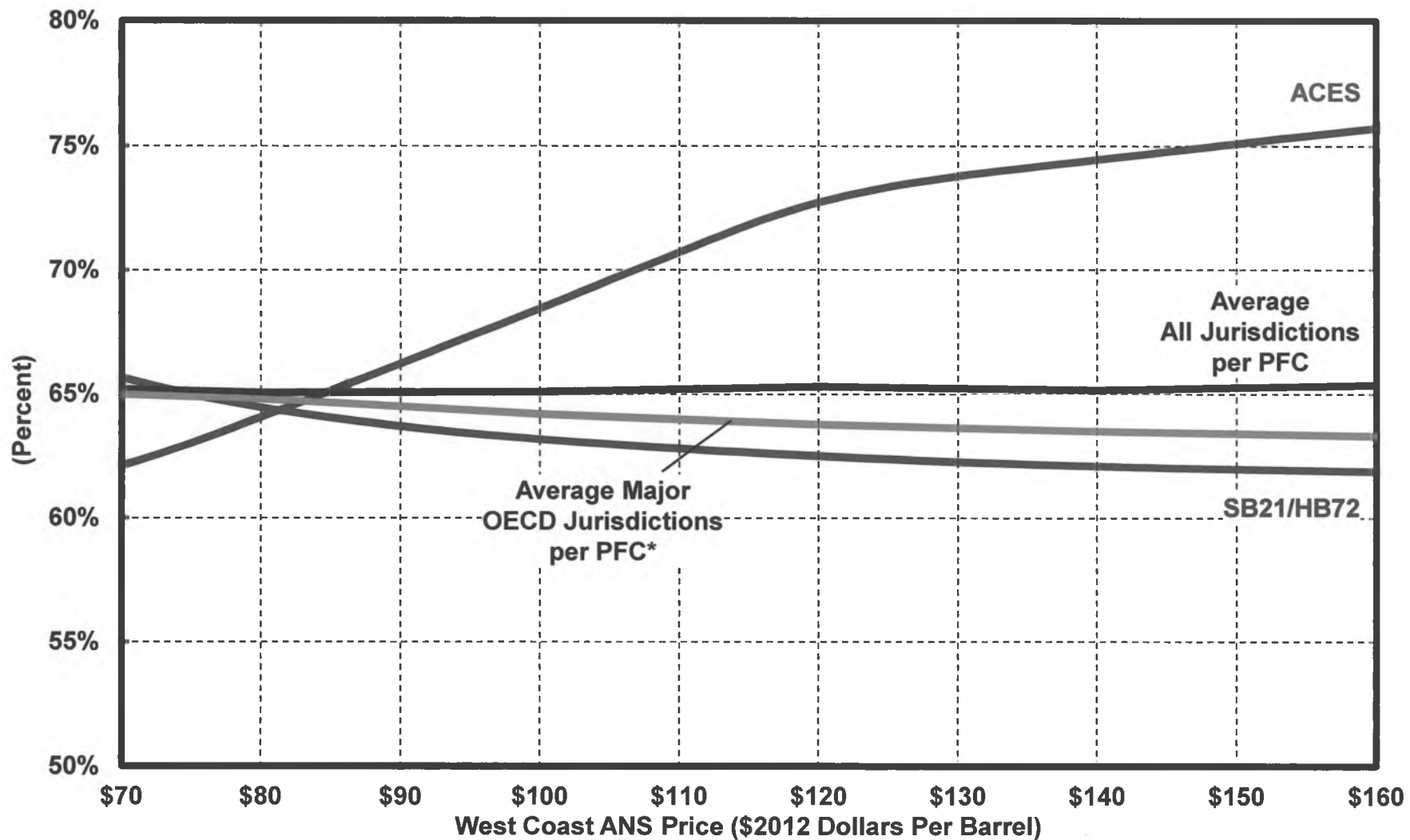


Average Government Take at \$100 Per Barrel Other Jurisdictions



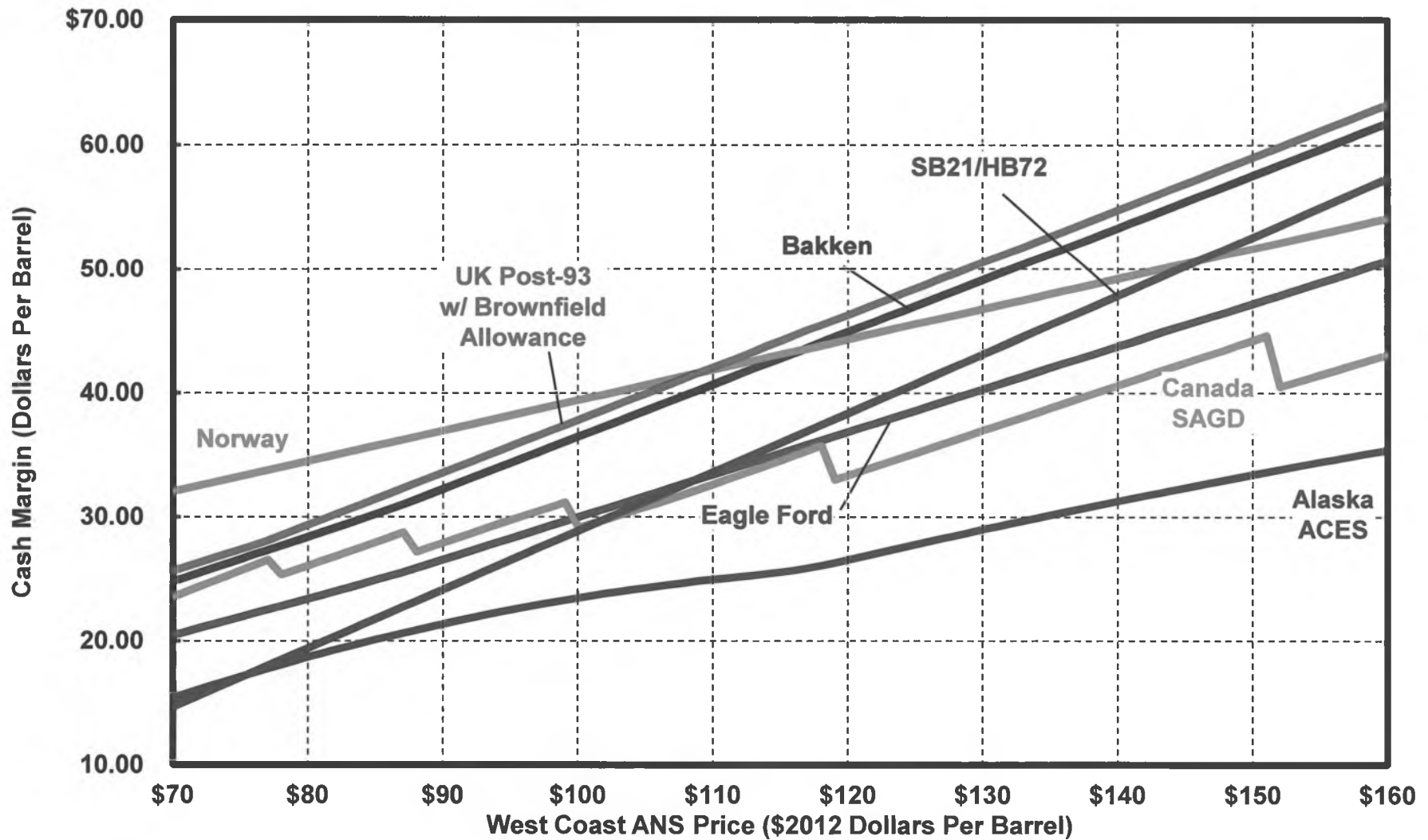
Source: PFC Energy.

Average Government Take ACES v. SB21/HB72 for All Existing Producers (FY2015-FY2019) and Other Jurisdictions

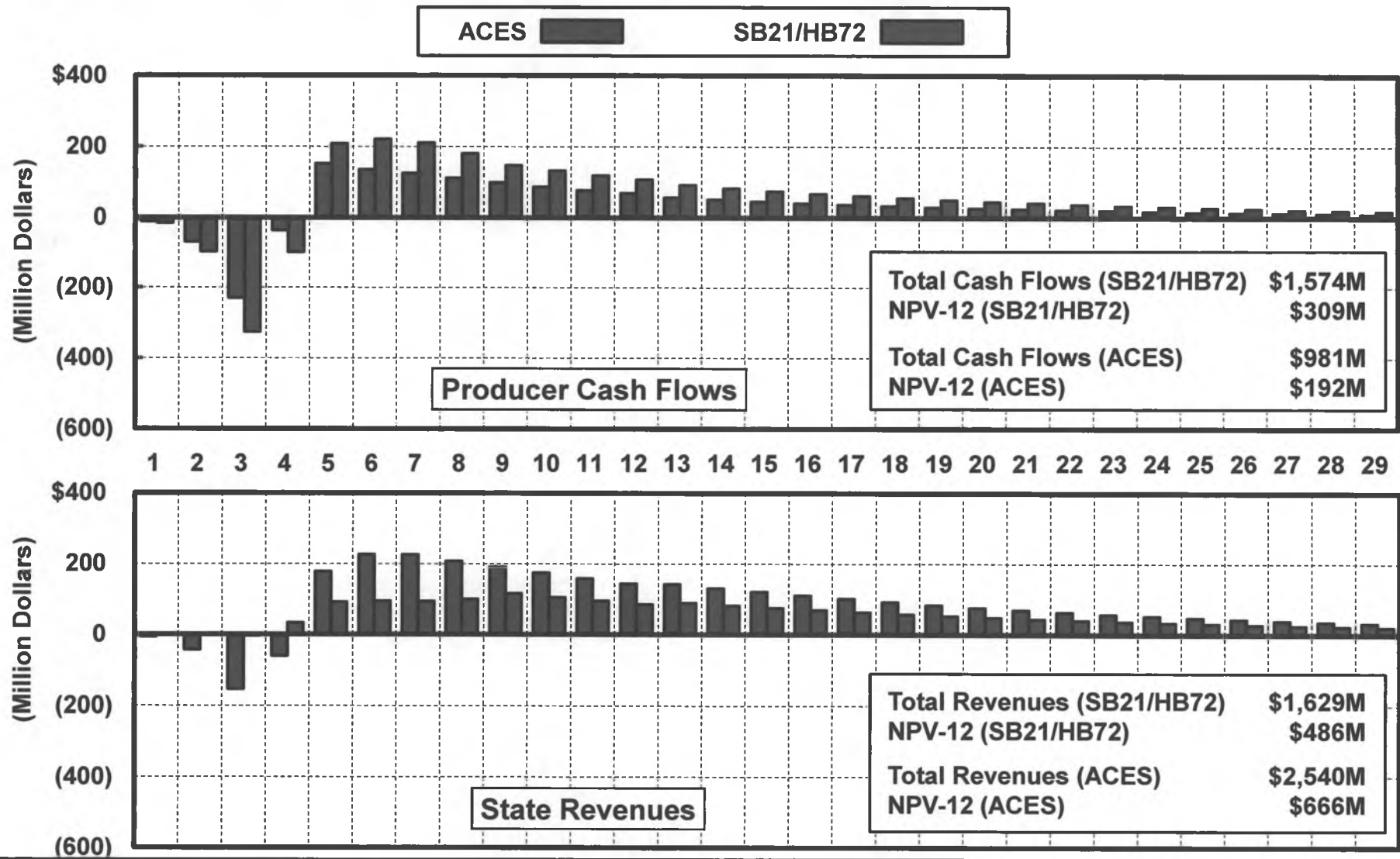


* Australia, Canada (Alberta Conventional), Norway, United Kingdom and United States.

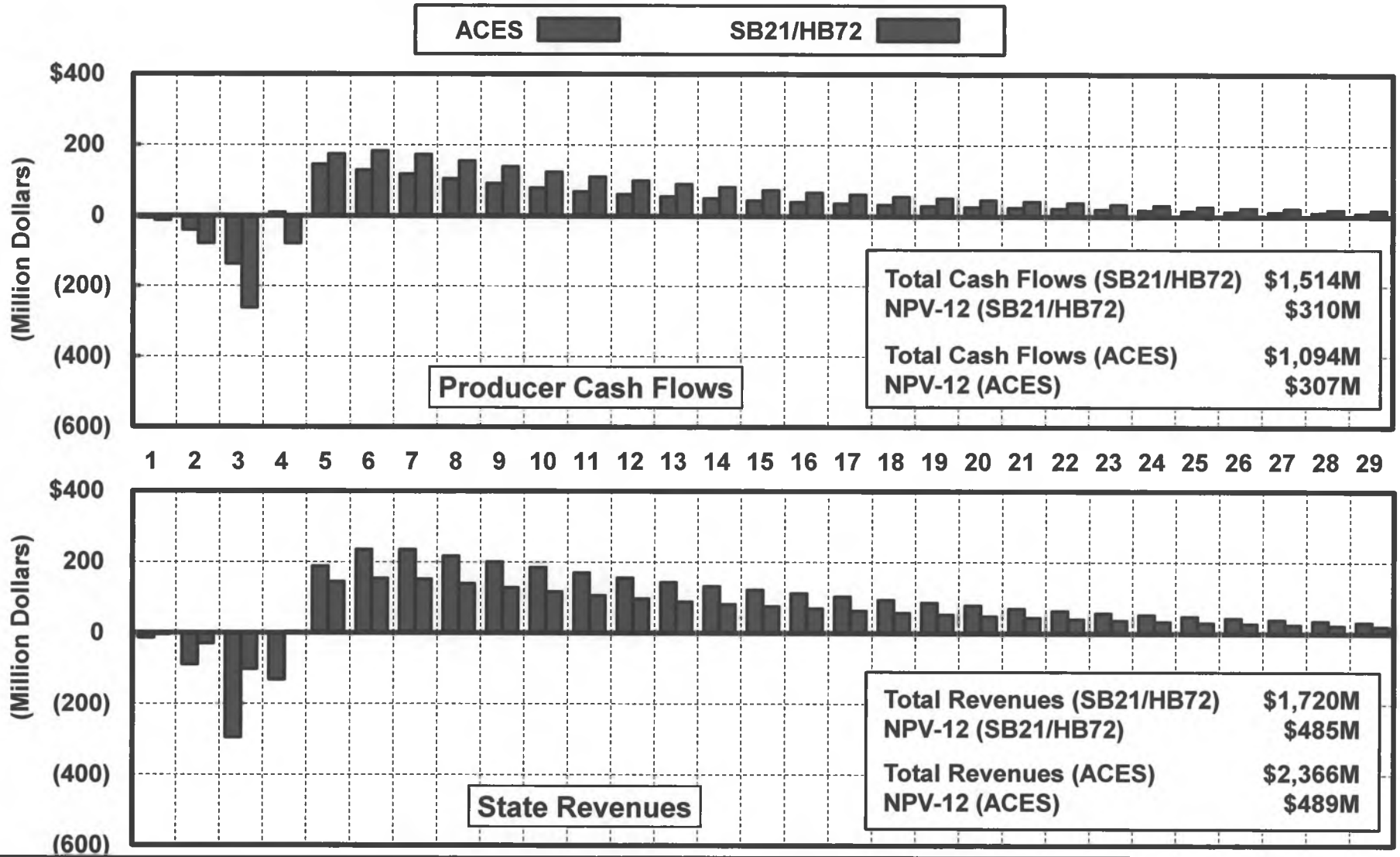
Projected Cash Generation From Ongoing North Slope Production (2017-2021) Under ACES v. SB21/HB72 and Other Jurisdictions



Annual State Revenues and Producer Cash Flows at \$100 West Coast ANS Light Conventional Oil Alaska Development New Participant in Alaska



Annual State Revenues and Producer Cash Flows at \$100 West Coast ANS Light Conventional Oil Alaska Development Incumbent Participant in Alaska



Summary of Investment Measures for New Participant Light Conventional Oil Alaska Development ACES and SB21/HB72 v. Benchmark Areas

West Coast ANS Price	SB21/HB72			Unconventional Lower-48		Canada Oil Sands	Norway	U.K. Development & Fiscal System			
	ACES	With GRE	Without GRE	Eagle Ford	Bakken	SAGD		Pre-1993	Pre-1993 w/ Brownfield Allowance*	Post-1993	Post-1993 w/ Brownfield Allowance*
	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)
Producer NPV-12 / BOE (Dollars Per BOE)											
\$80	\$2.55	\$2.54	\$1.94	\$3.61	\$0.67	(\$0.93)	\$0.24	\$1.20	\$4.81	\$2.41	\$4.62
\$100	\$3.85	\$6.18	\$5.34	\$6.75	\$4.29	\$0.46	\$2.34	\$3.02	\$7.09	\$6.04	\$8.25
\$120	\$5.48	\$9.74	\$8.71	\$11.17	\$9.16	\$2.01	\$4.44	\$4.83	\$9.09	\$9.67	\$11.88
Profitability Index-12											
\$80	1.19	1.19	1.15	1.25	1.04	0.88	1.01	1.06	1.22	1.11	1.21
\$100	1.29	1.47	1.40	1.47	1.28	1.06	1.14	1.14	1.33	1.28	1.38
\$120	1.41	1.74	1.66	1.78	1.60	1.26	1.27	1.22	1.42	1.45	1.55
IRR (Percent)											
\$80	19.7%	17.1%	16.1%	29.9%	13.6%	9.7%	12.4%	18.4%	34.5%	18.4%	24.7%
\$100	23.4%	23.9%	22.6%	46.3%	22.7%	13.1%	16.0%	27.0%	45.2%	27.0%	32.9%
\$120	27.6%	30.0%	28.6%	73.6%	37.0%	16.3%	19.3%	34.6%	53.5%	34.6%	40.2%
5-Year (2017-2021) Cash Margins (Dollars Per BOE)											
\$80	\$25.84	\$36.94	\$34.44	\$23.39	\$28.39	\$26.07	\$34.51	\$12.45	\$22.94	\$24.91	\$29.35
\$100	\$28.84	\$45.89	\$42.59	\$29.99	\$36.48	\$29.14	\$39.42	\$16.69	\$28.85	\$33.38	\$37.82
\$120	\$33.13	\$54.69	\$50.89	\$36.87	\$44.91	\$33.37	\$44.32	\$20.93	\$31.29	\$41.86	\$46.30
Government Take (Percent)											
\$80	70.8%	61.9%	66.0%	71.7%	77.1%	63.4%	67.8%	81.0%	61.0%	62.0%	52.0%
\$100	75.8%	61.1%	64.7%	67.9%	72.1%	63.5%	71.7%	81.0%	68.6%	62.0%	55.8%
\$120	77.2%	60.8%	64.0%	65.1%	68.7%	63.0%	73.4%	81.0%	72.0%	62.0%	57.5%
State/Municipal NPV-12/BOE (Dollars Per BOE)											
\$80	\$6.67	\$6.68	\$7.60	-	-	-	-	-	-	-	-
\$100	\$13.32	\$9.72	\$11.02	-	-	-	-	-	-	-	-
\$120	\$19.46	\$12.89	\$14.48	-	-	-	-	-	-	-	-

* Brownfield Allowance applied to 100 MMBOE development.

Summary of Investment Measures for Incumbent Light Conventional Oil Alaska Development ACES and SB21/HB72 v. Benchmark Areas



West Coast ANS Price	SB21/HB72			Unconventional Lower-48		Canada Oil Sands	Norway	U.K. Development & Fiscal System			
	ACES	With GRE	Without GRE	Eagle Ford	Bakken	SAGD		Pre-1993	Pre-1993 w/ Brownfield Allowance*	Post-1993	Post-1993 w/ Brownfield Allowance*
	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)
Producer NPV-12 / BOE (Dollars Per BOE)											
\$80	\$3.71	\$2.71	\$2.02	\$3.61	\$0.67	(\$0.93)	\$0.24	\$1.20	\$4.81	\$2.41	\$4.62
\$100	\$6.14	\$6.20	\$5.30	\$6.75	\$4.29	\$0.46	\$2.34	\$3.02	\$7.09	\$6.04	\$8.25
\$120	\$8.82	\$9.69	\$8.58	\$11.17	\$9.16	\$2.01	\$4.44	\$4.83	\$9.09	\$9.67	\$11.88
Profitability Index-12											
\$80	1.28	1.20	1.15	1.25	1.04	0.88	1.01	1.06	1.22	1.11	1.21
\$100	1.46	1.47	1.40	1.47	1.28	1.06	1.14	1.14	1.33	1.28	1.38
\$120	1.67	1.73	1.65	1.78	1.60	1.26	1.27	1.22	1.42	1.45	1.55
IRR (Percent)											
\$80	26.2%	18.5%	16.9%	29.9%	13.6%	9.7%	12.4%	18.4%	34.5%	18.4%	24.7%
\$100	41.1%	25.8%	24.1%	46.3%	22.7%	13.1%	16.0%	27.0%	45.2%	27.0%	32.9%
\$120	65.3%	32.5%	30.6%	73.6%	37.0%	16.3%	19.3%	34.6%	53.5%	34.6%	40.2%
5-Year (2017-2021) Cash Margins (Dollars Per BOE)											
\$80	\$24.26	\$30.63	\$28.57	\$23.39	\$28.39	\$26.07	\$34.51	\$12.45	\$22.94	\$24.91	\$29.35
\$100	\$27.22	\$40.27	\$37.61	\$29.99	\$36.48	\$29.14	\$39.42	\$16.69	\$28.85	\$33.38	\$37.82
\$120	\$31.18	\$49.90	\$46.65	\$36.87	\$44.91	\$33.37	\$44.32	\$20.93	\$31.29	\$41.86	\$46.30
Government Take (Percent)											
\$80	68.9%	64.1%	68.1%	71.7%	77.1%	63.4%	67.8%	81.0%	61.0%	62.0%	52.0%
\$100	73.0%	62.6%	66.1%	67.9%	72.1%	63.5%	71.7%	81.0%	68.6%	62.0%	55.8%
\$120	73.8%	61.9%	65.1%	65.1%	68.7%	63.0%	73.4%	81.0%	72.0%	62.0%	57.5%
State/Municipal NPV-12/BOE (Dollars Per BOE)											
\$80	\$4.88	\$6.42	\$7.49	-	-	-	-	-	-	-	-
\$100	\$9.79	\$9.70	\$11.08	-	-	-	-	-	-	-	-
\$120	\$14.31	\$12.98	\$14.67	-	-	-	-	-	-	-	-

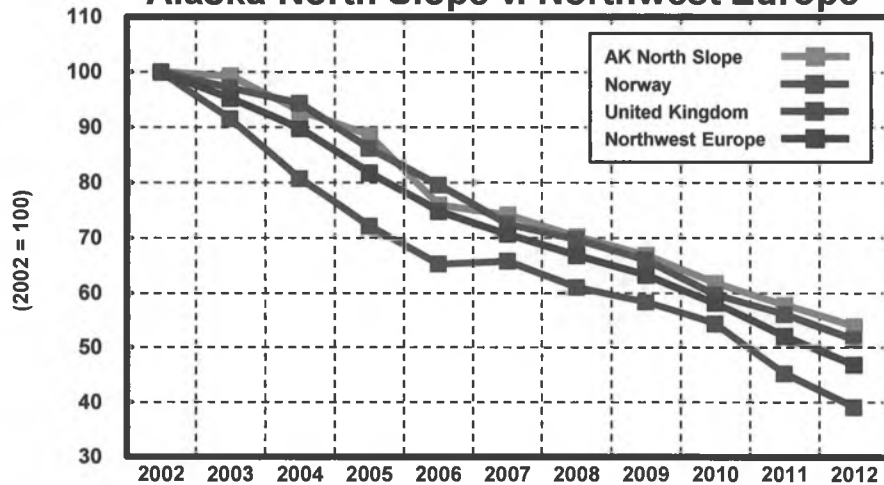
* Brownfield Allowance applied to 100 MMBOE development.

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

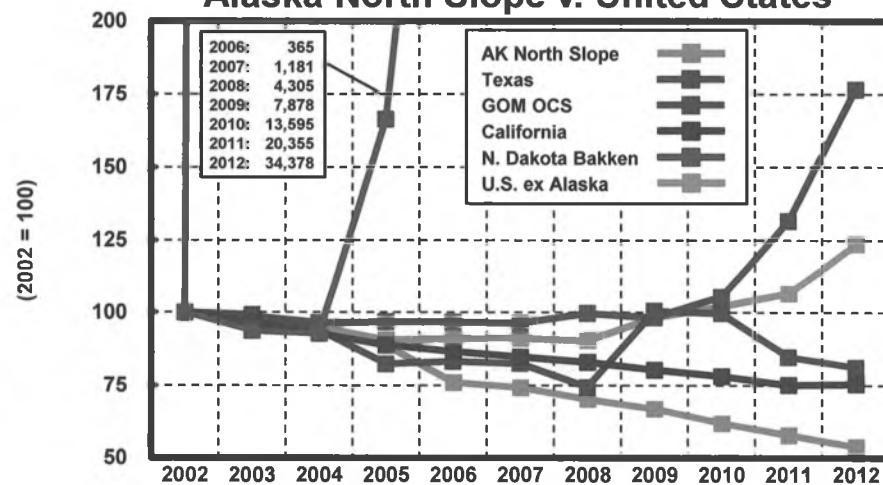
Appendix

Crude Oil Production Comparisons to Alaska

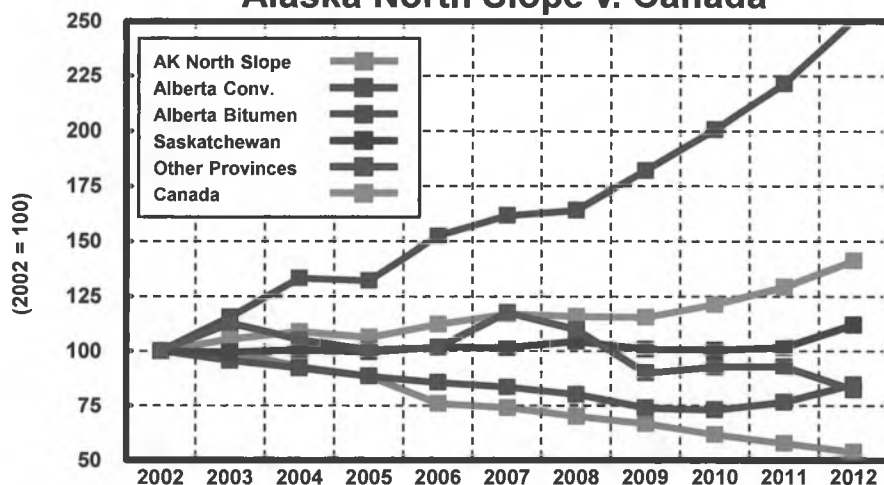
Alaska North Slope v. Northwest Europe



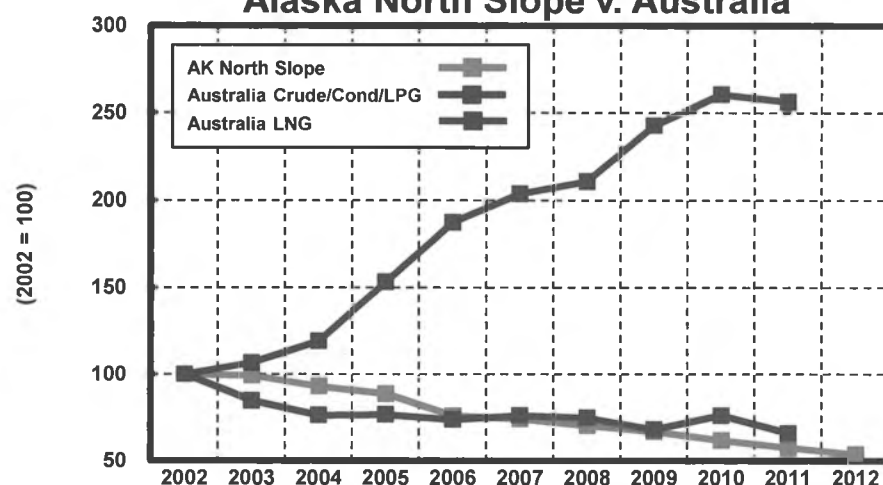
Alaska North Slope v. United States



Alaska North Slope v. Canada

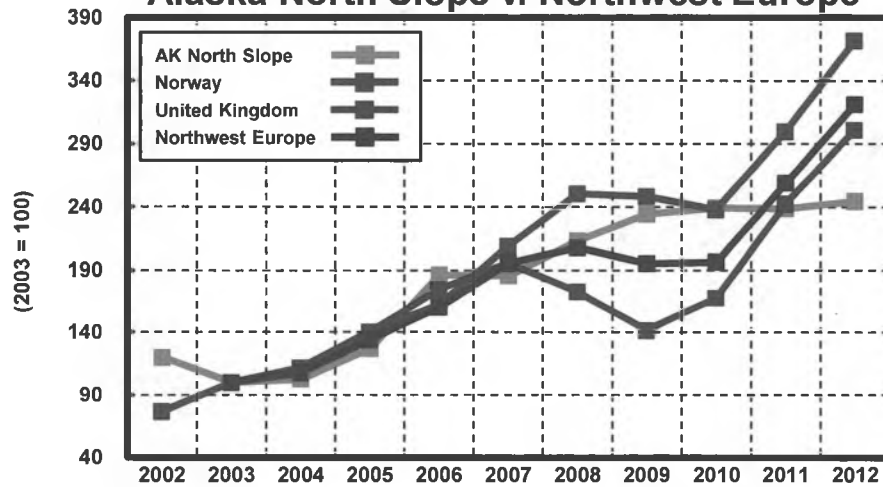


Alaska North Slope v. Australia

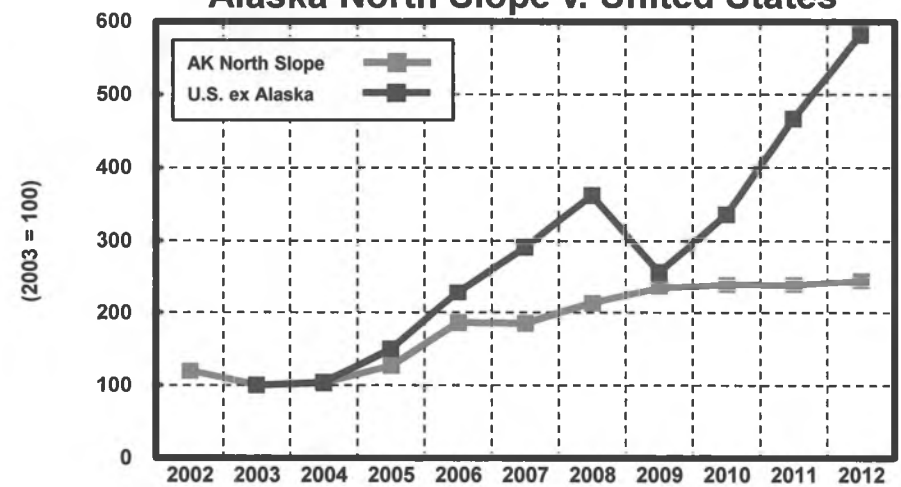


Capital Spending Comparisons to Alaska

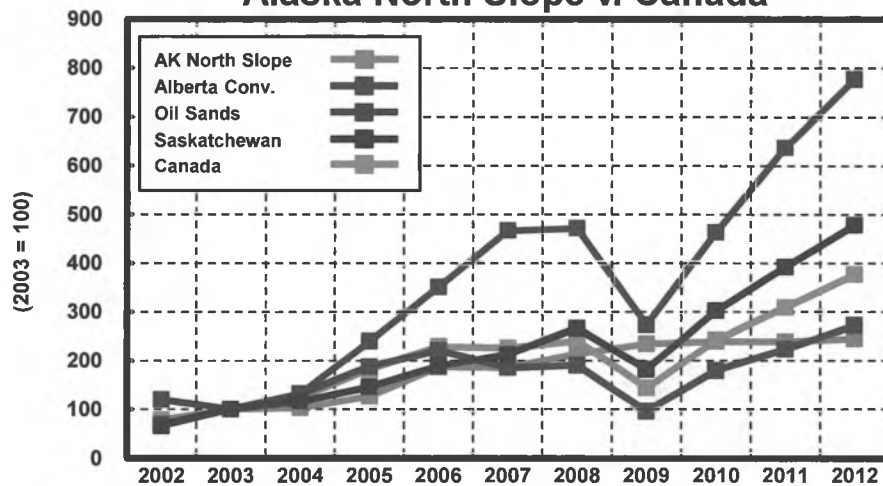
Alaska North Slope v. Northwest Europe



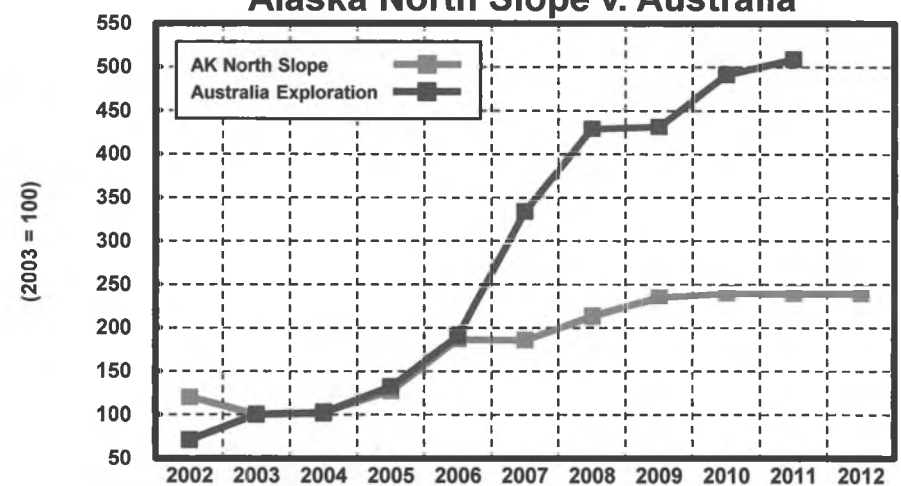
Alaska North Slope v. United States



Alaska North Slope v. Canada

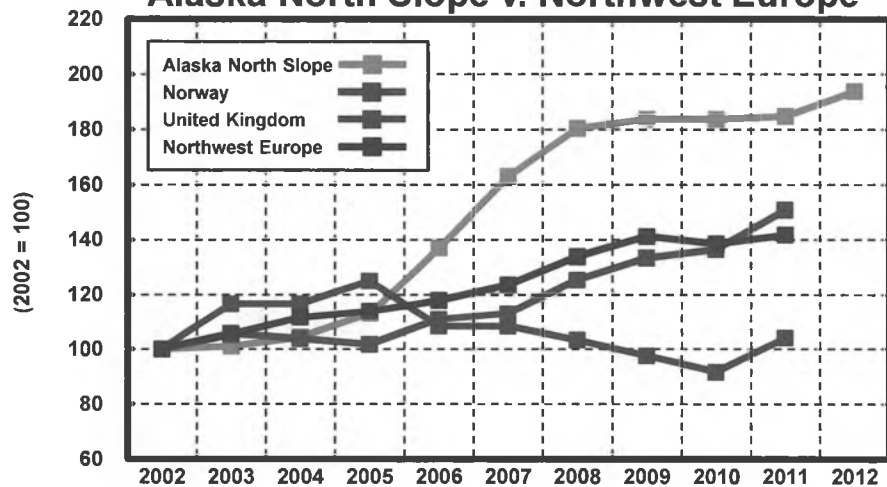


Alaska North Slope v. Australia

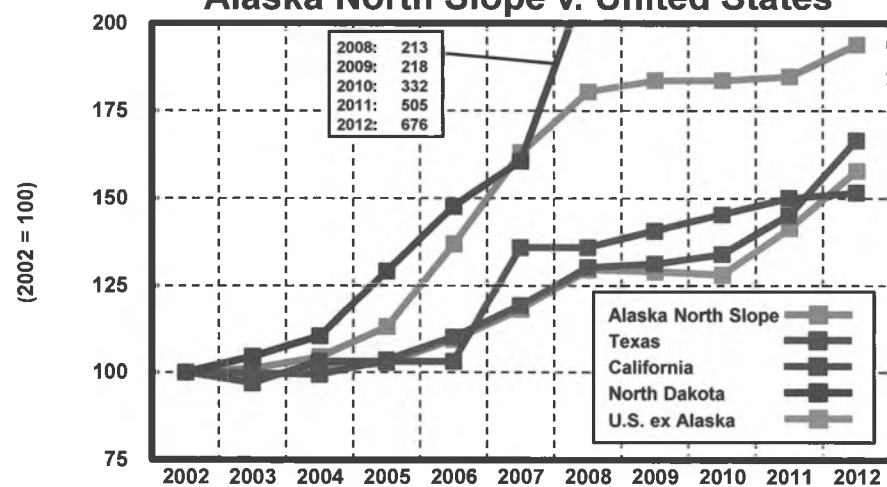


Employment Comparisons to Alaska

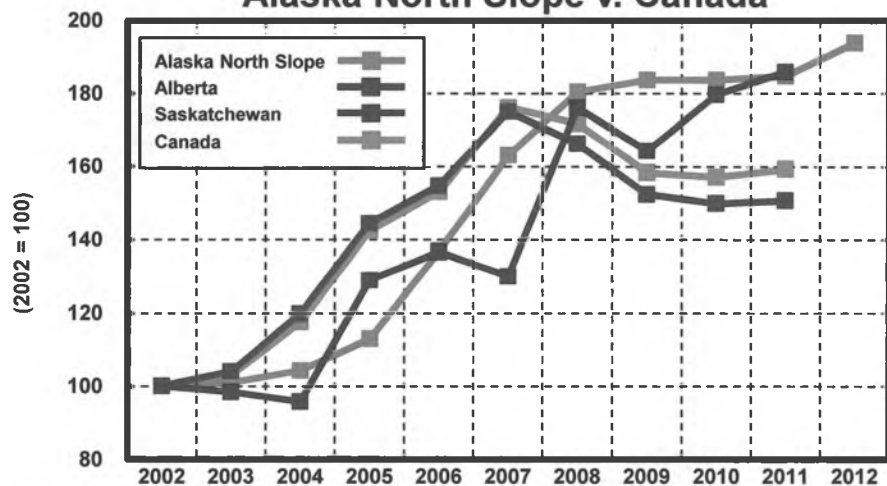
Alaska North Slope v. Northwest Europe



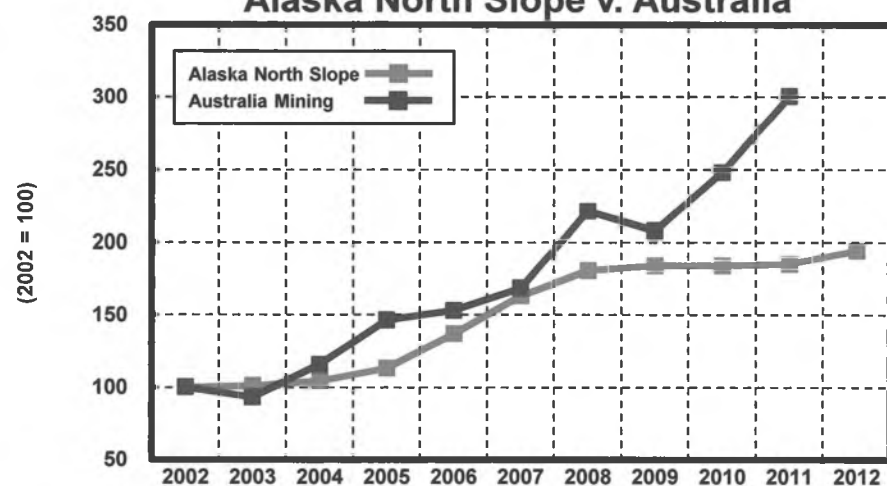
Alaska North Slope v. United States



Alaska North Slope v. Canada

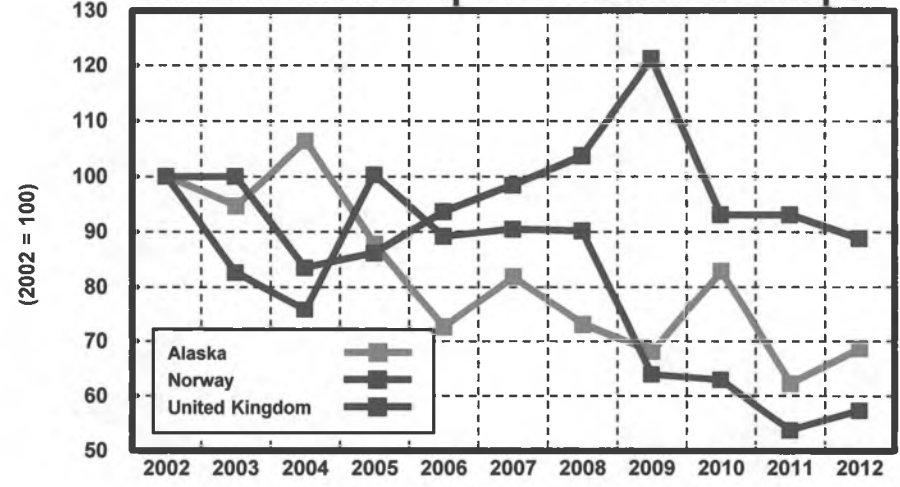


Alaska North Slope v. Australia

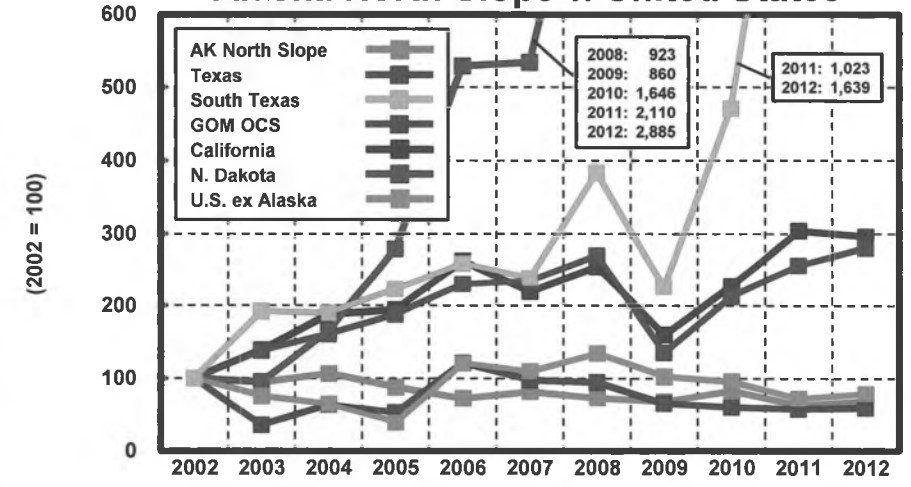


Drilling / Development Activity Comparisons to Alaska

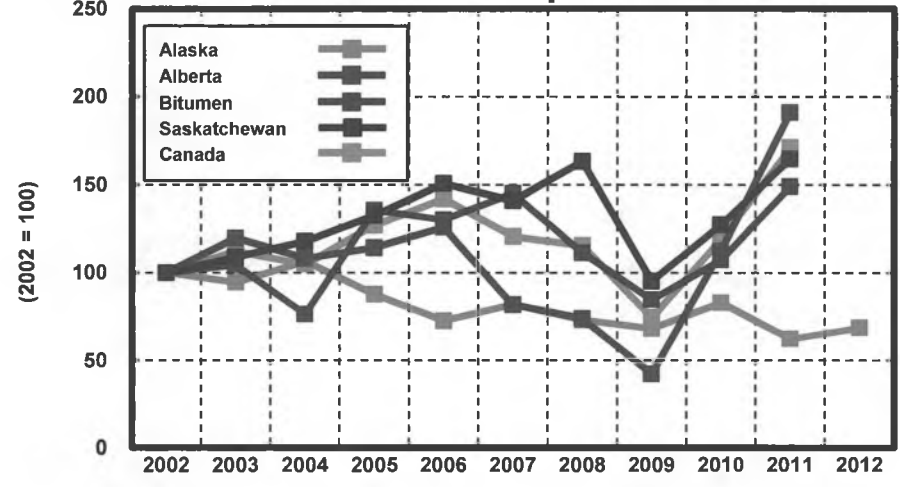
Alaska North Slope v. Northwest Europe



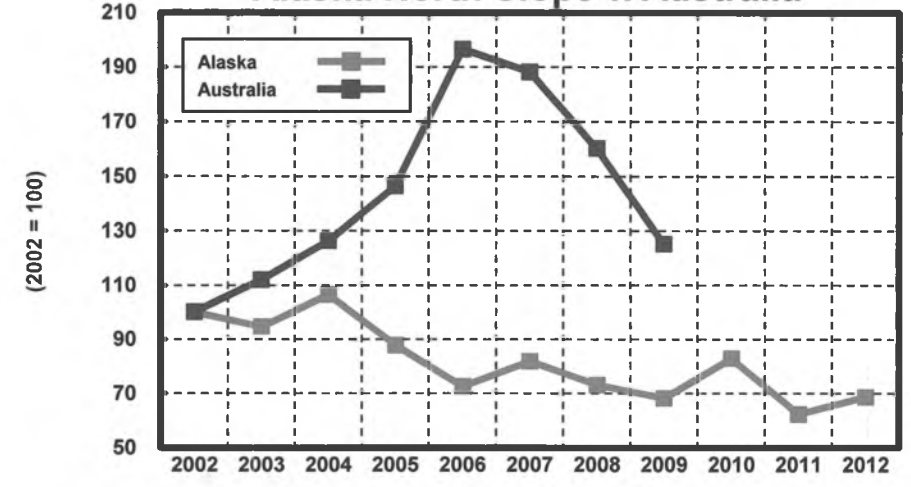
Alaska North Slope v. United States



Alaska North Slope v. Canada



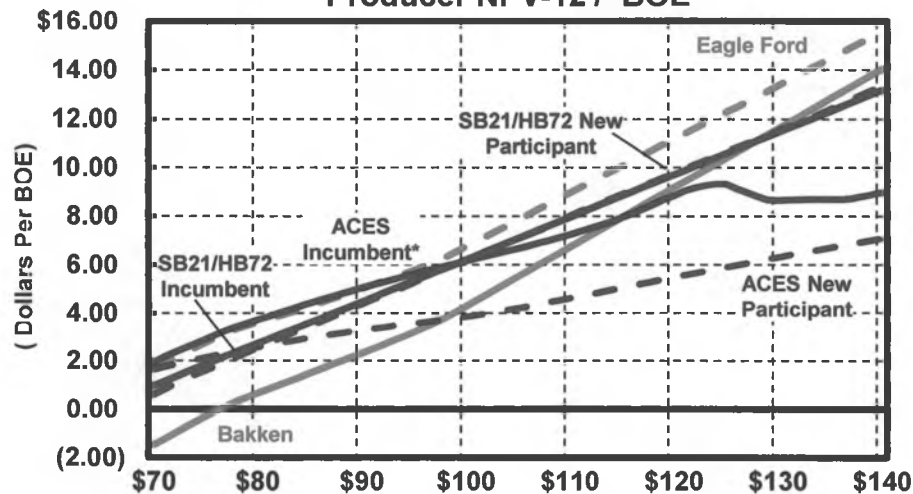
Alaska North Slope v. Australia



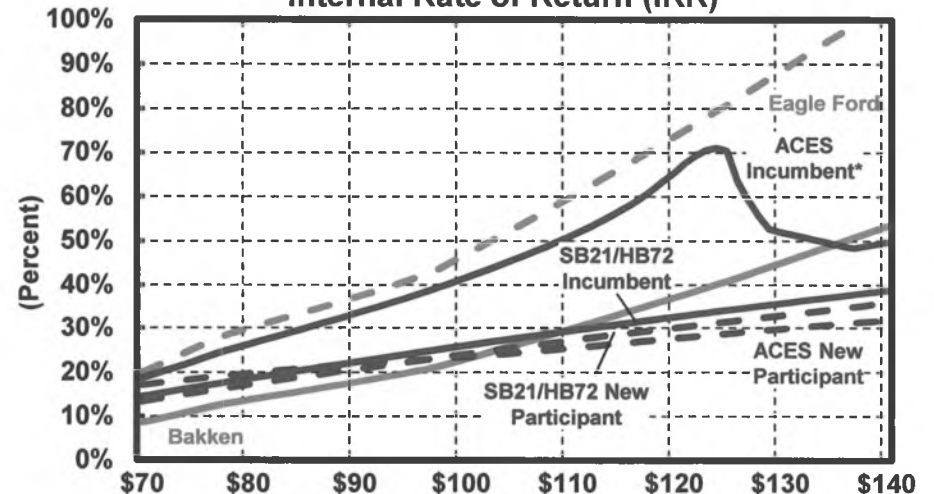
Investment Measures

Light Conventional Oil Alaska Development v. Unconventional Lower-48

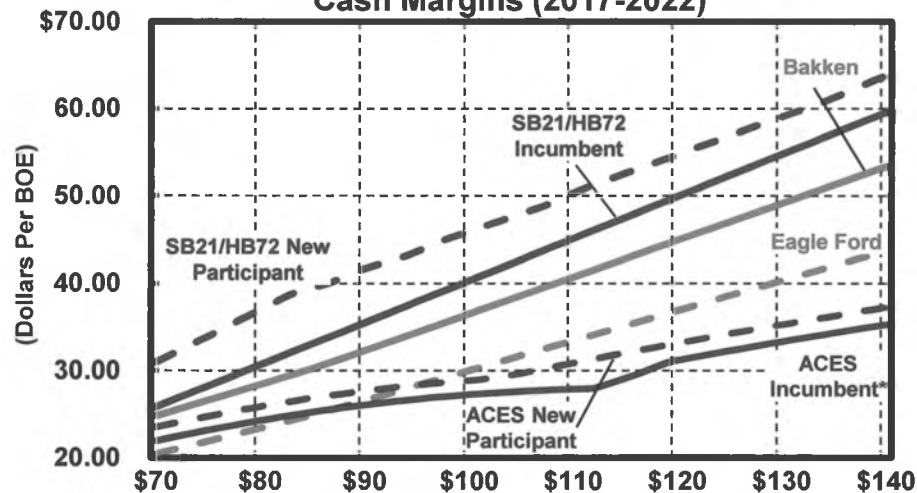
Producer NPV-12/ BOE



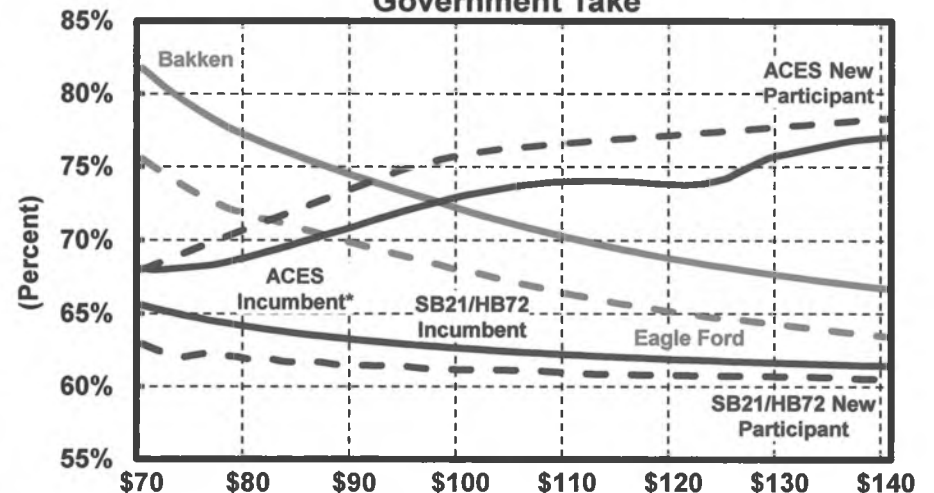
Internal Rate of Return (IRR)



Cash Margins (2017-2022)



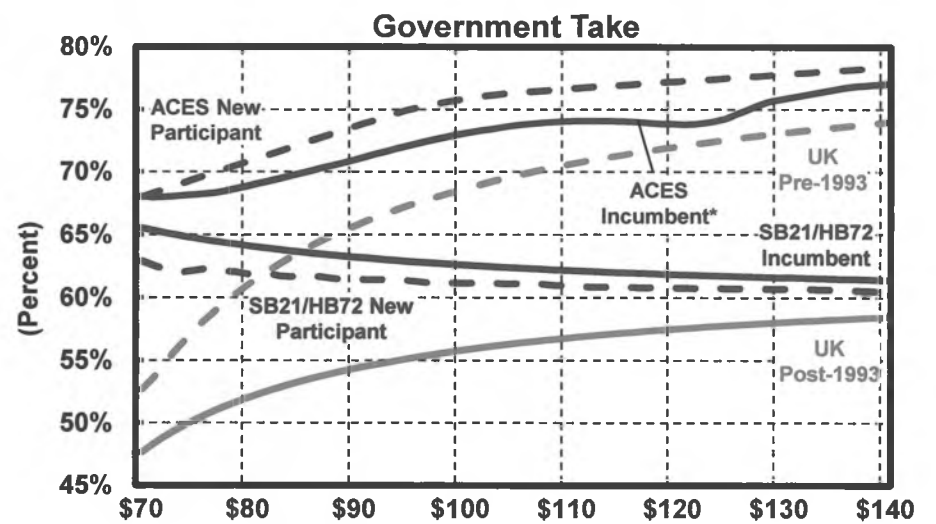
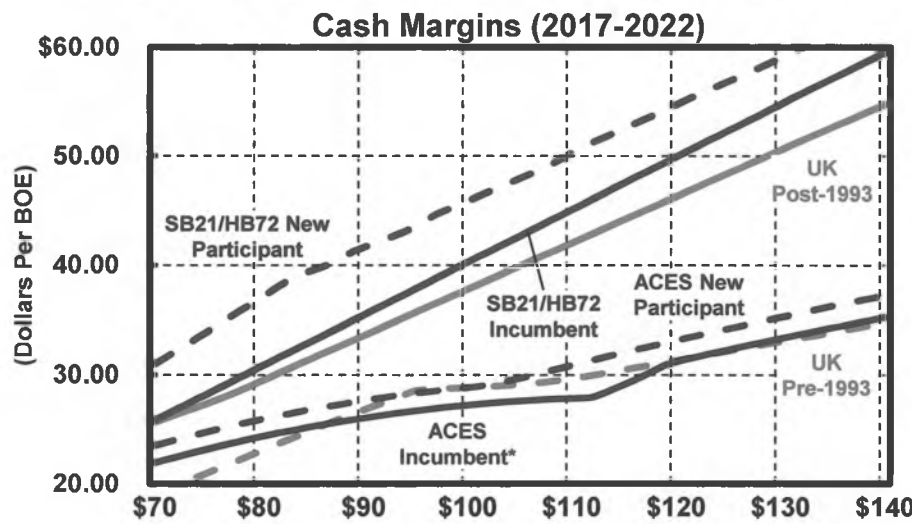
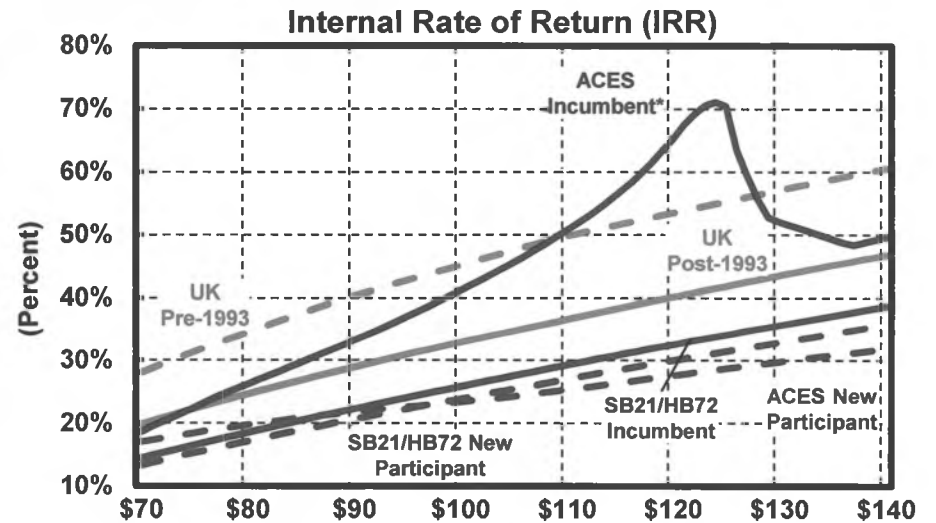
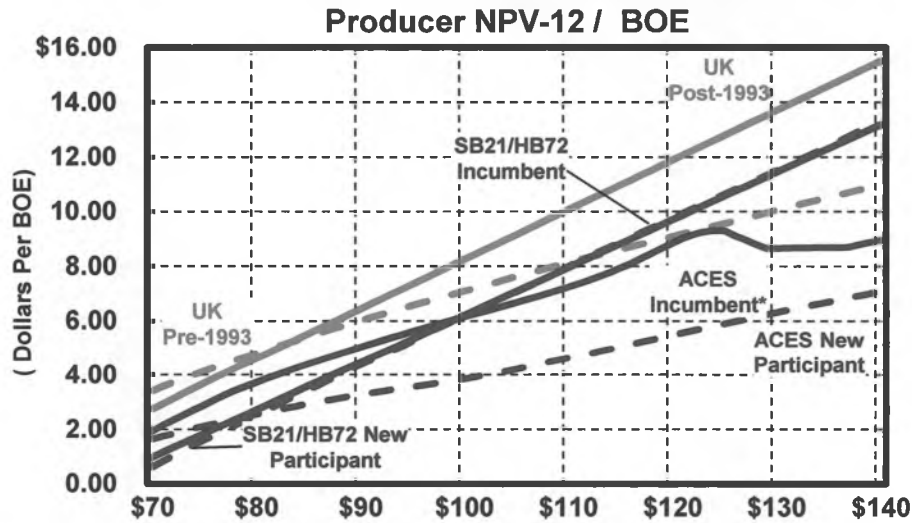
Government Take



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

Investment Metrics

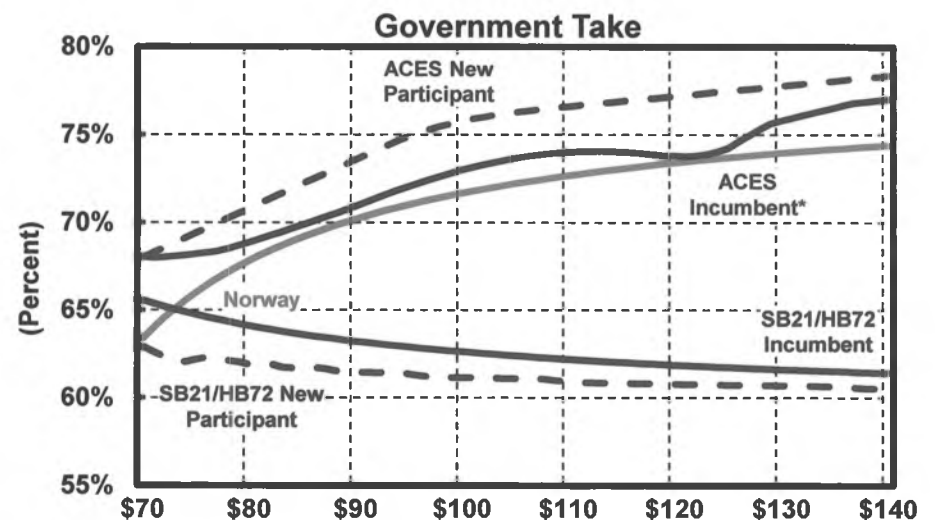
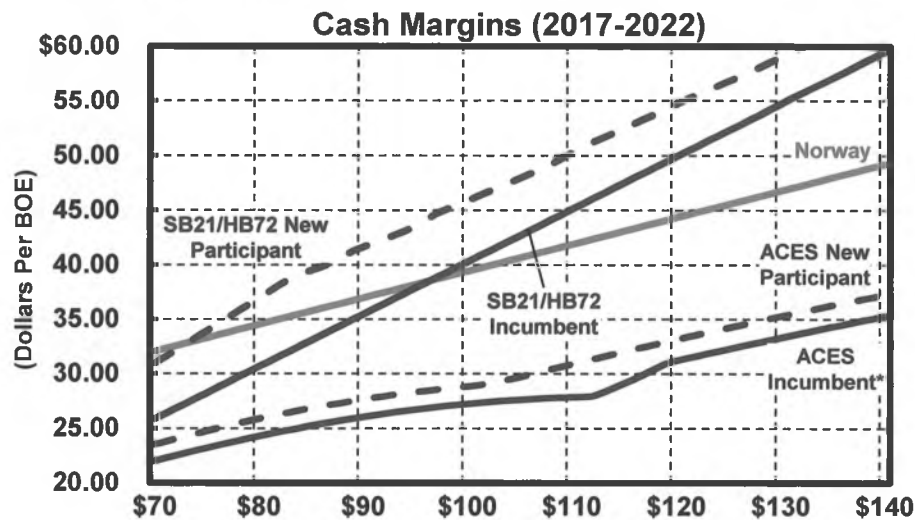
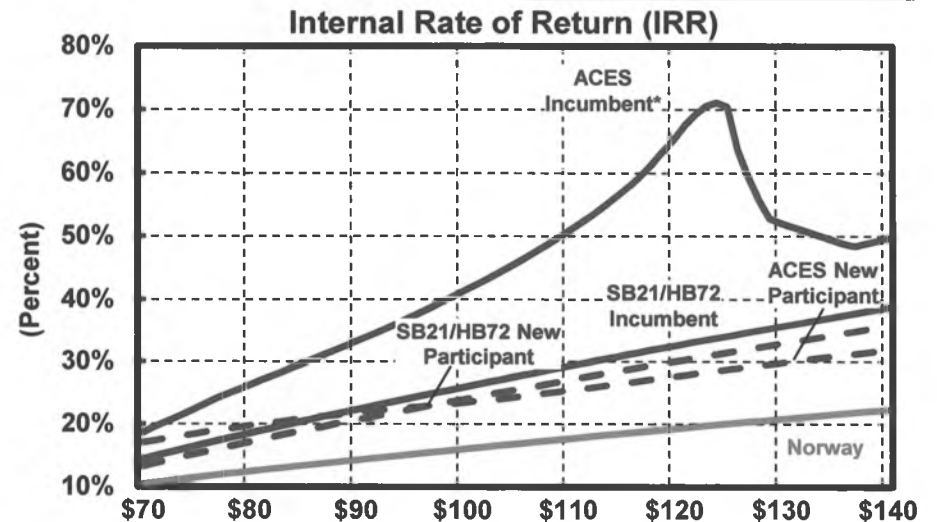
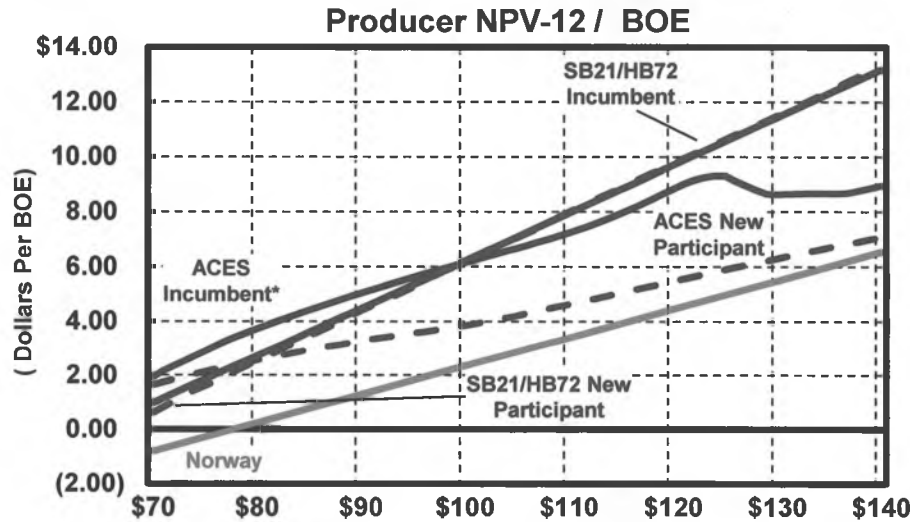
Light Conventional Oil Alaska Development v. North Sea (United Kingdom with Brownfield Allowance)



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

Investment Metrics

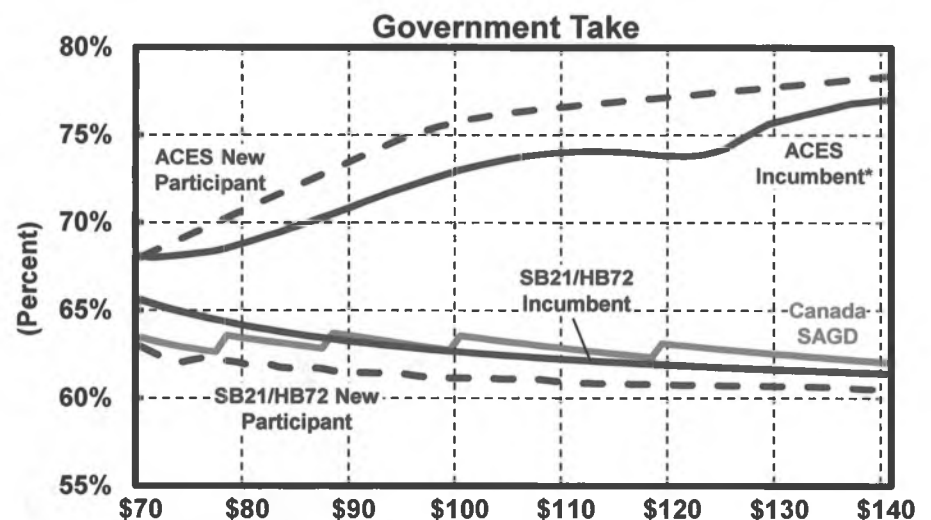
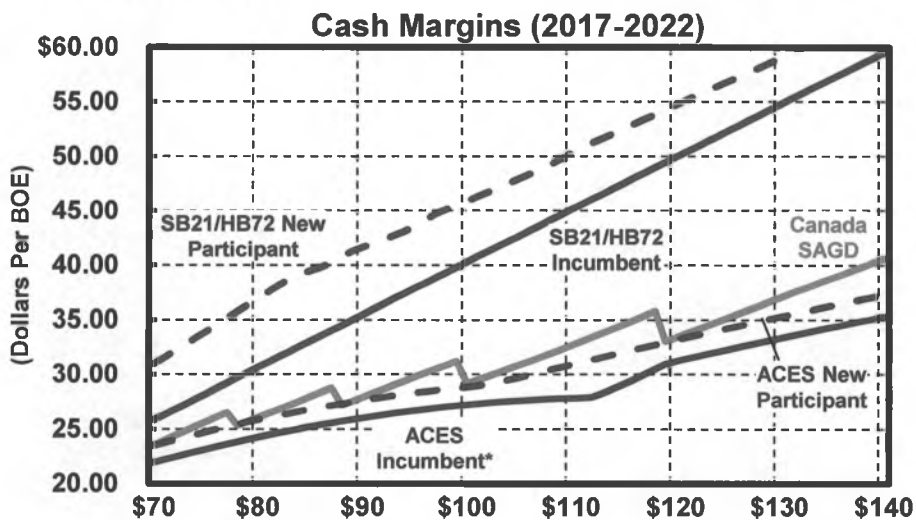
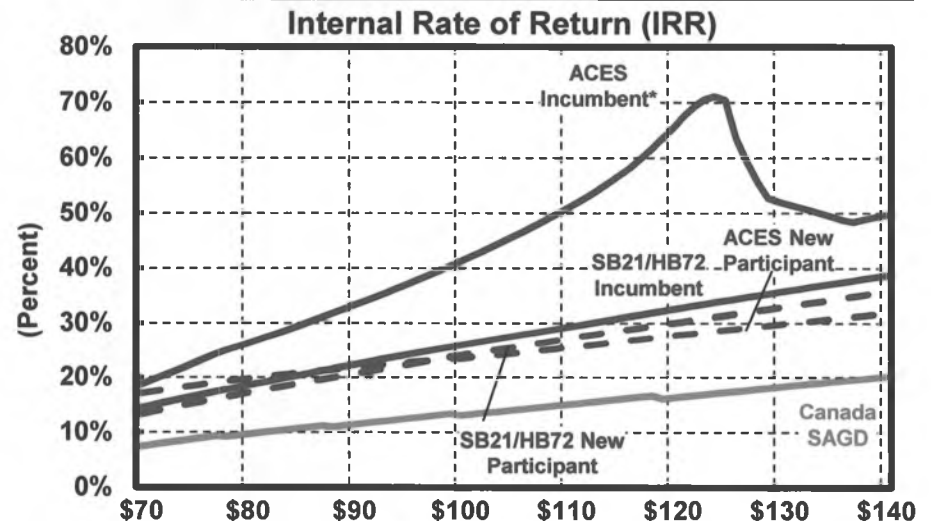
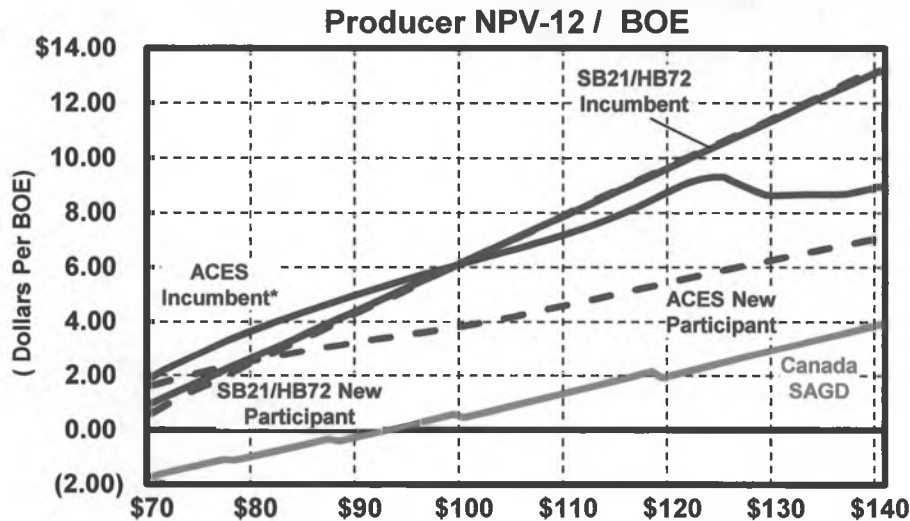
Light Conventional Oil Alaska Development v. North Sea (Norway)



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

Investment Metrics

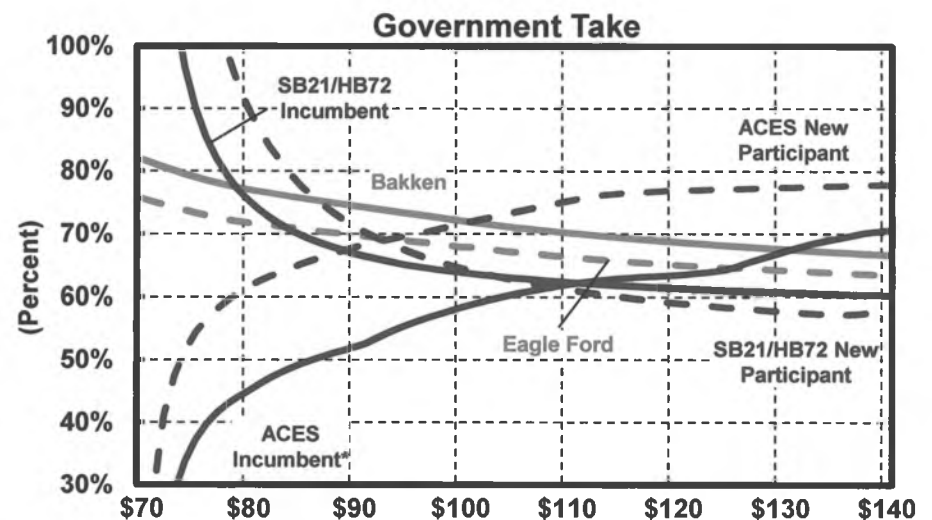
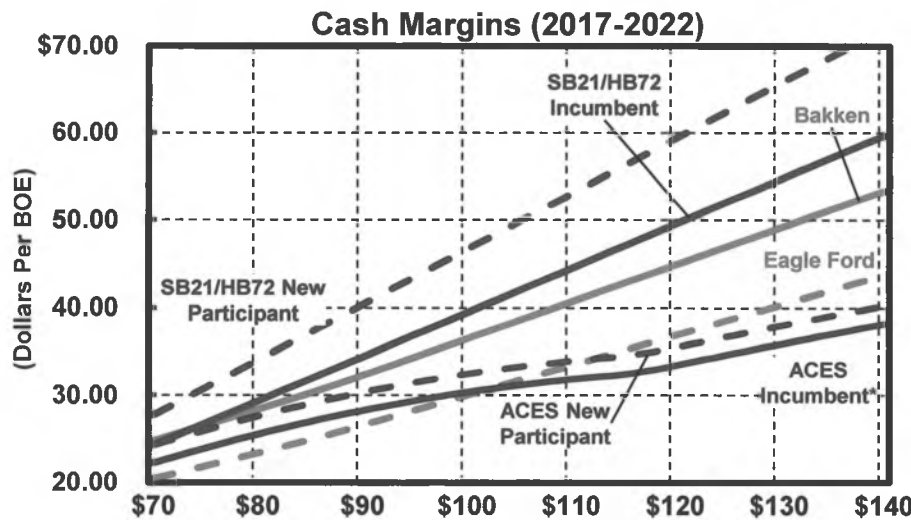
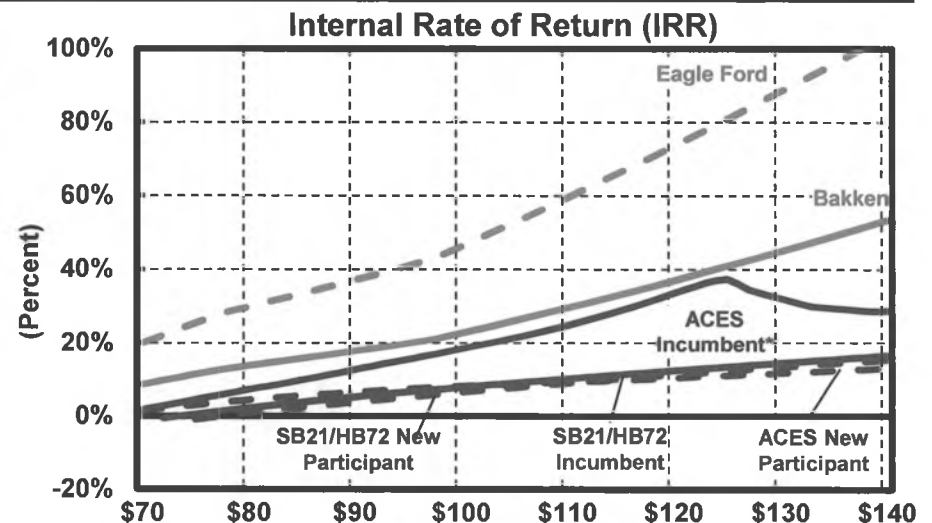
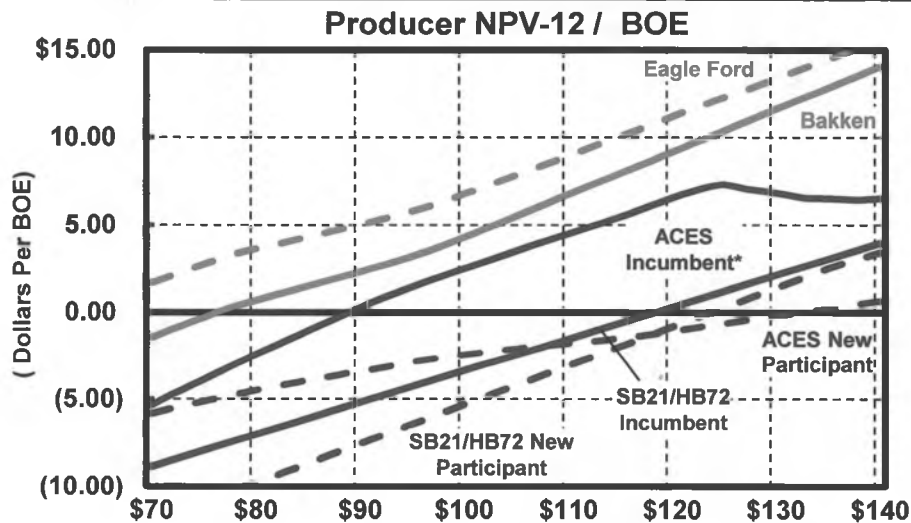
Light Conventional Oil Alaska Development v. Canada Oil Sands (SAGD)



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

Investment Measures

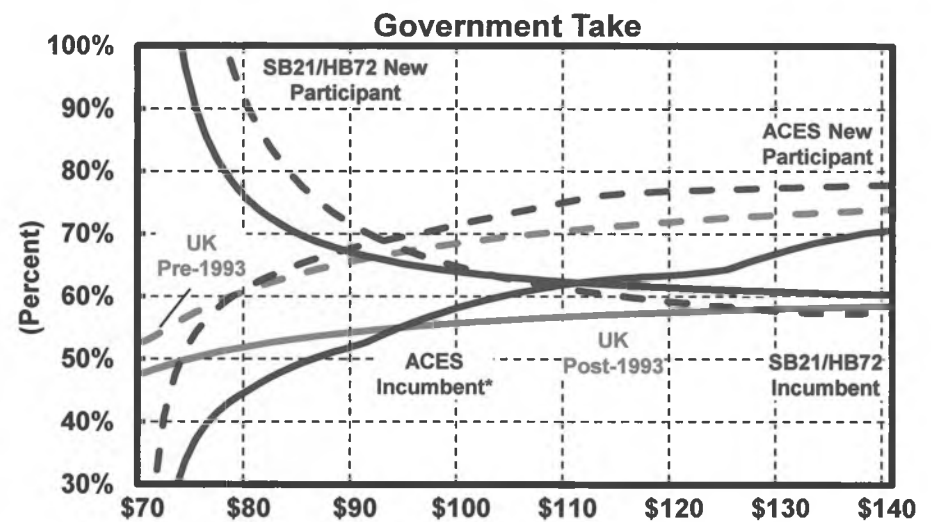
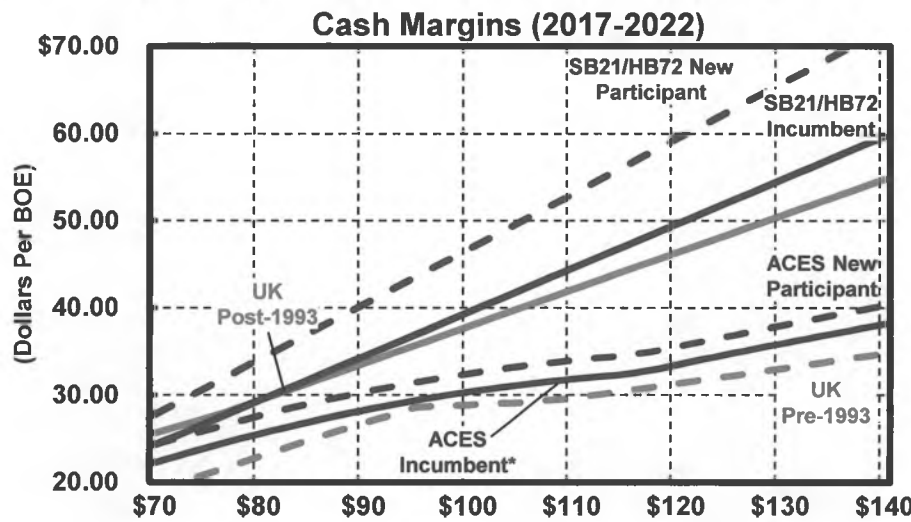
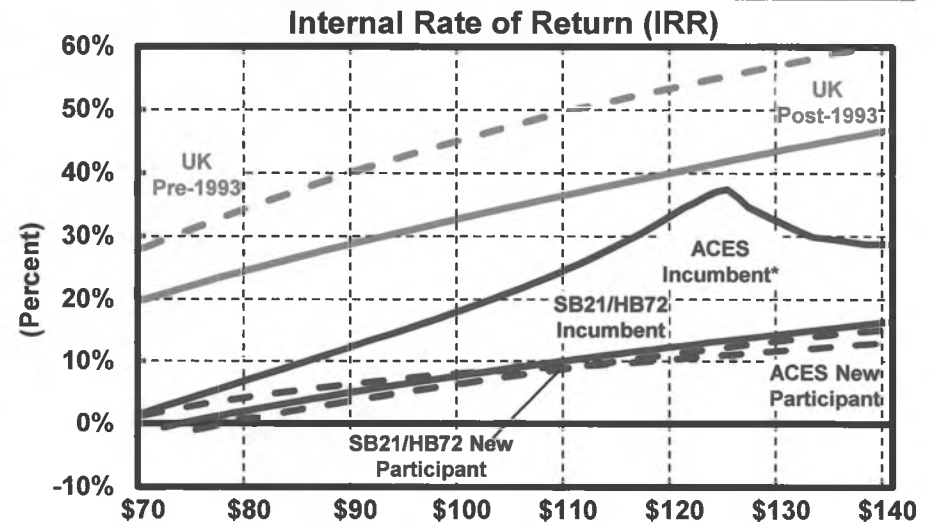
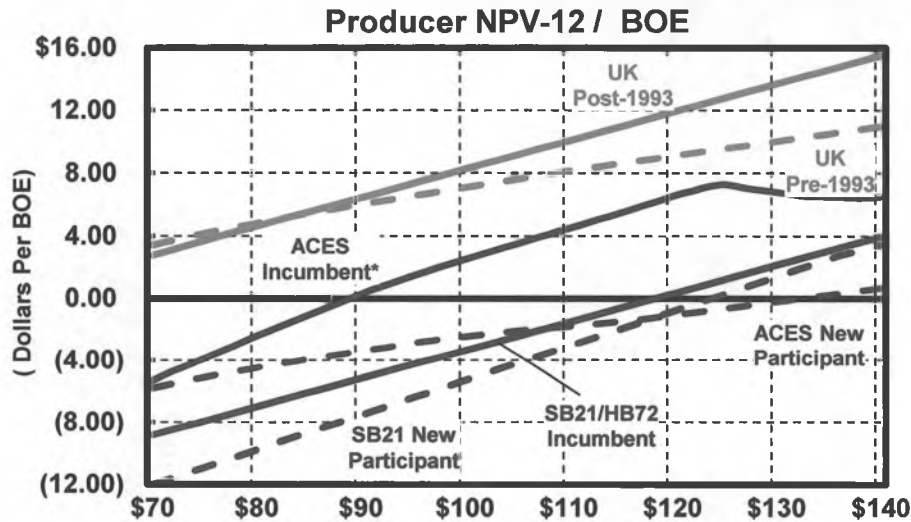
Heavy High Cost Oil Alaska Development v. Unconventional Lower-48



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

Investment Metrics

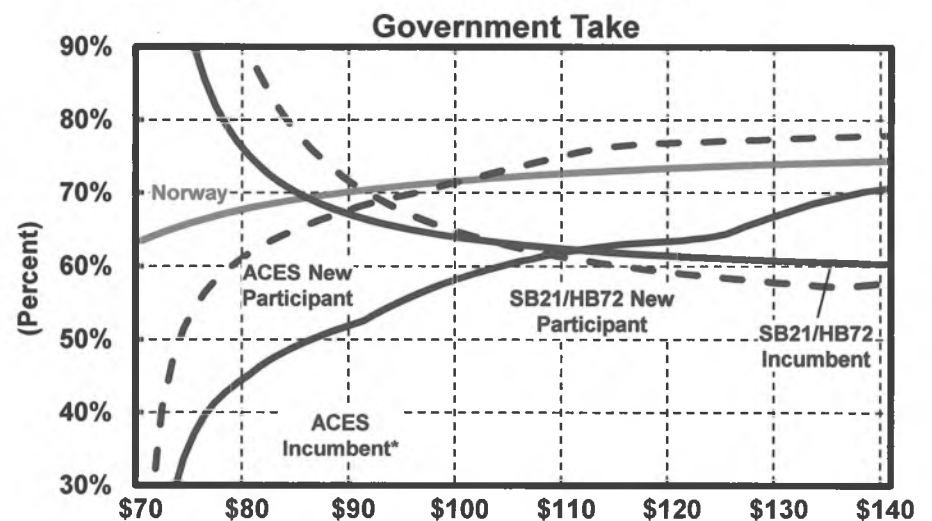
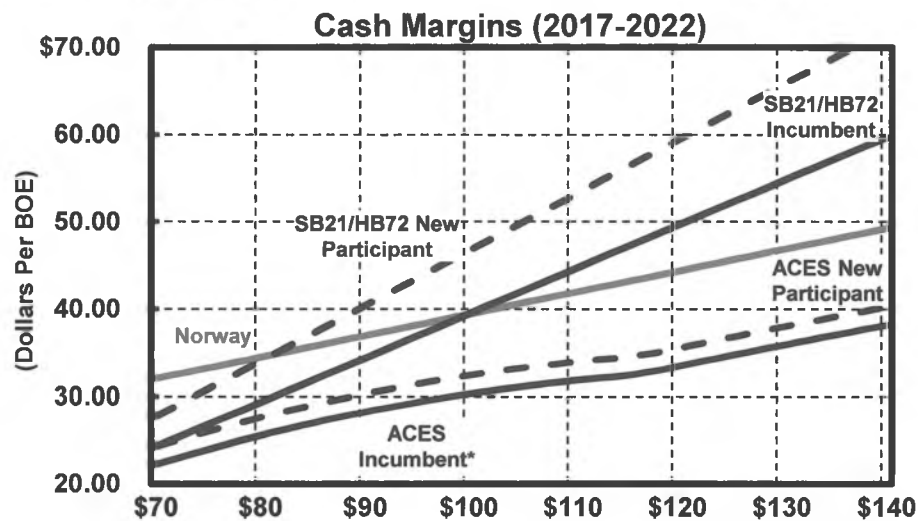
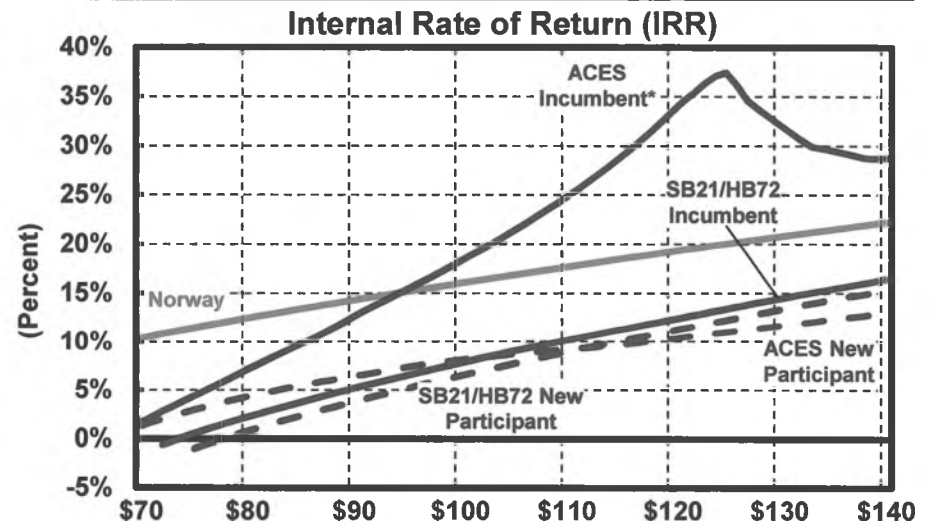
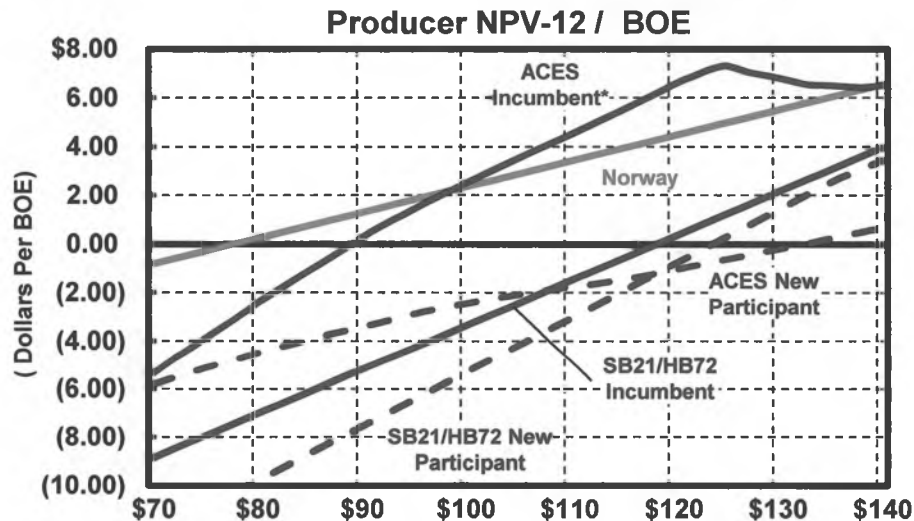
Heavy High Cost Oil Alaska Development v. North Sea (United Kingdom with Brownfield Allowance)



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

Investment Metrics

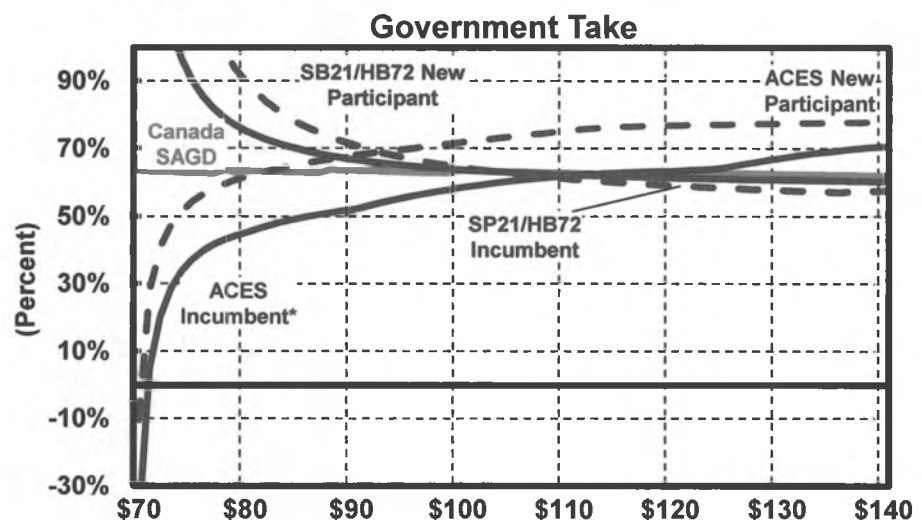
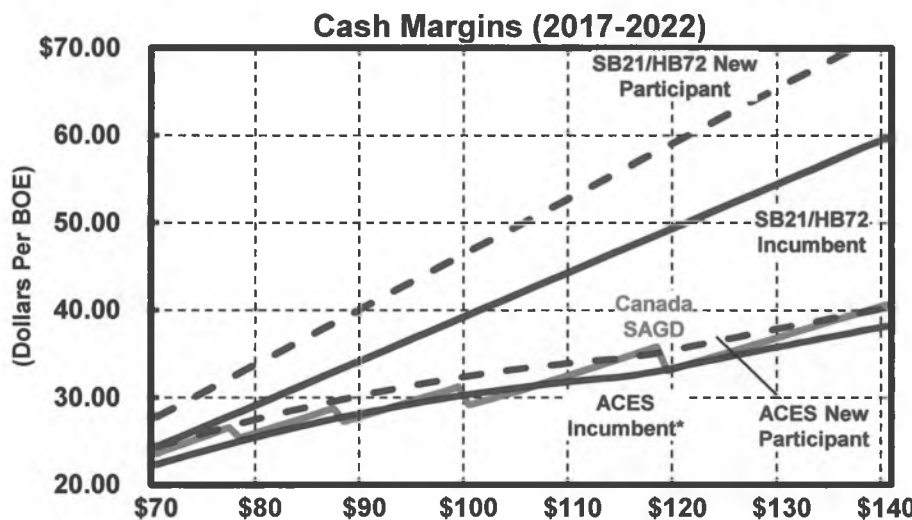
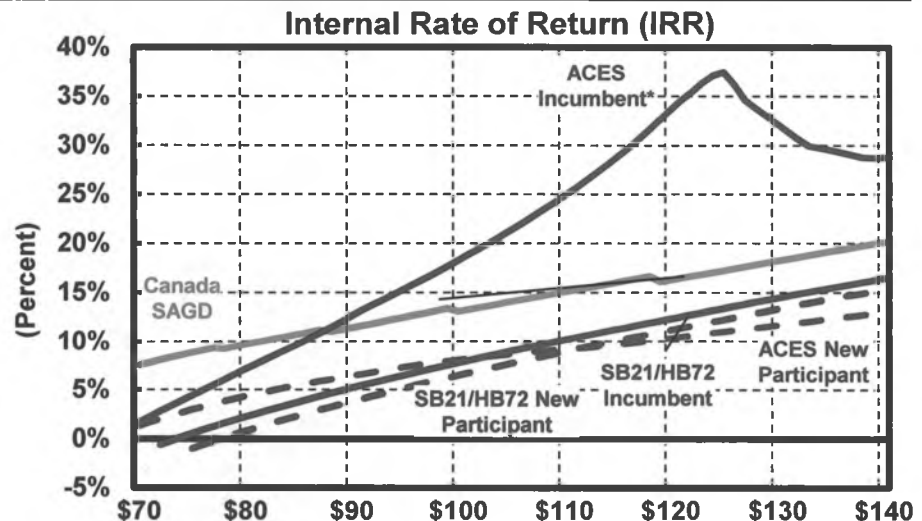
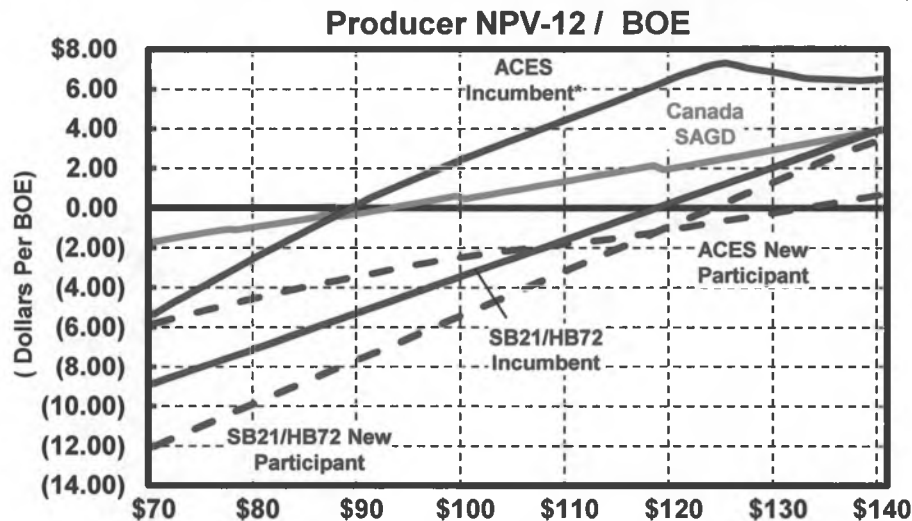
Heavy High Cost Oil Alaska Development v. North Sea (Norway)



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

Investment Metrics

Heavy High Cost Oil Alaska Development v. Canada Oil Sands (SAGD)



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

Summary of Investment Measures for New Participant Heavy High Cost Oil Alaska Development ACES and SB21/HB72 v. Benchmark Areas



West Coast ANS Price	SB21/HB72			Unconventional Lower-48		Canada Oil Sands SAGD	Norway	U.K. Development & Fiscal System			
	ACES	With GRE	Without GRE	Eagle Ford	Bakken			Pre-1993	Pre-1993 w/ Brownfield Allowance*	Post-1993	Post-1993 w/ Brownfield Allowance*
	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)
Producer NPV-12 / BOE (Dollars Per BOE)											
\$80	(\$4.51)	(\$9.80)	(\$9.89)	\$3.61	\$0.67	(\$0.93)	\$0.24	\$1.20	\$4.81	\$2.41	\$4.62
\$100	(\$2.45)	(\$5.33)	(\$5.45)	\$6.75	\$4.29	\$0.46	\$2.34	\$3.02	\$7.09	\$6.04	\$8.25
\$120	(\$1.09)	(\$0.85)	(\$1.29)	\$11.17	\$9.16	\$2.01	\$4.44	\$4.83	\$9.09	\$9.67	\$11.88
Profitability Index-12											
\$80	0.84	0.65	0.65	1.25	1.04	0.88	1.01	1.06	1.22	1.11	1.21
\$100	0.91	0.81	0.81	1.47	1.28	1.06	1.14	1.14	1.33	1.28	1.38
\$120	0.96	0.97	0.95	1.78	1.60	1.26	1.27	1.22	1.42	1.45	1.55
IRR (Percent)											
\$80	4.3%	0.8%	0.4%	29.9%	13.6%	9.7%	12.4%	18.4%	34.5%	18.4%	24.7%
\$100	8.1%	6.5%	6.2%	46.3%	22.7%	13.1%	16.0%	27.0%	45.2%	27.0%	32.9%
\$120	10.3%	11.2%	10.7%	73.6%	37.0%	16.3%	19.3%	34.6%	53.5%	34.6%	40.2%
5-Year (2017-2021) Cash Margins (Dollars Per BOE)											
\$80	\$27.58	\$34.02	\$34.02	\$23.39	\$28.39	\$26.07	\$34.51	\$12.45	\$22.94	\$24.91	\$29.35
\$100	\$32.42	\$46.67	\$46.67	\$29.99	\$36.48	\$29.14	\$39.42	\$16.69	\$28.85	\$33.38	\$37.82
\$120	\$35.48	\$59.32	\$59.32	\$36.87	\$44.91	\$33.37	\$44.32	\$20.93	\$31.29	\$41.86	\$46.30
Government Take (Percent)											
\$80	61.5%	89.9%	94.6%	71.7%	77.1%	63.4%	67.8%	81.0%	61.0%	62.0%	52.0%
\$100	71.6%	64.5%	66.8%	67.9%	72.1%	63.5%	71.7%	81.0%	68.6%	62.0%	55.8%
\$120	76.8%	59.1%	62.6%	65.1%	68.7%	63.0%	73.4%	81.0%	72.0%	62.0%	57.5%
State/Municipal NPV-12/BOE (Dollars Per BOE)											
\$80	(\$4.61)	\$3.53	\$3.66	-	-	-	-	-	-	-	-
\$100	\$0.86	\$5.29	\$5.47	-	-	-	-	-	-	-	-
\$120	\$7.41	\$7.05	\$7.72	-	-	-	-	-	-	-	-

* Brownfield Allowance applied to 100 MMBOE development.

Summary of Investment Measures for Incumbent Heavy High Cost Oil Alaska Development ACES and SB21/HB72 v. Benchmark Areas

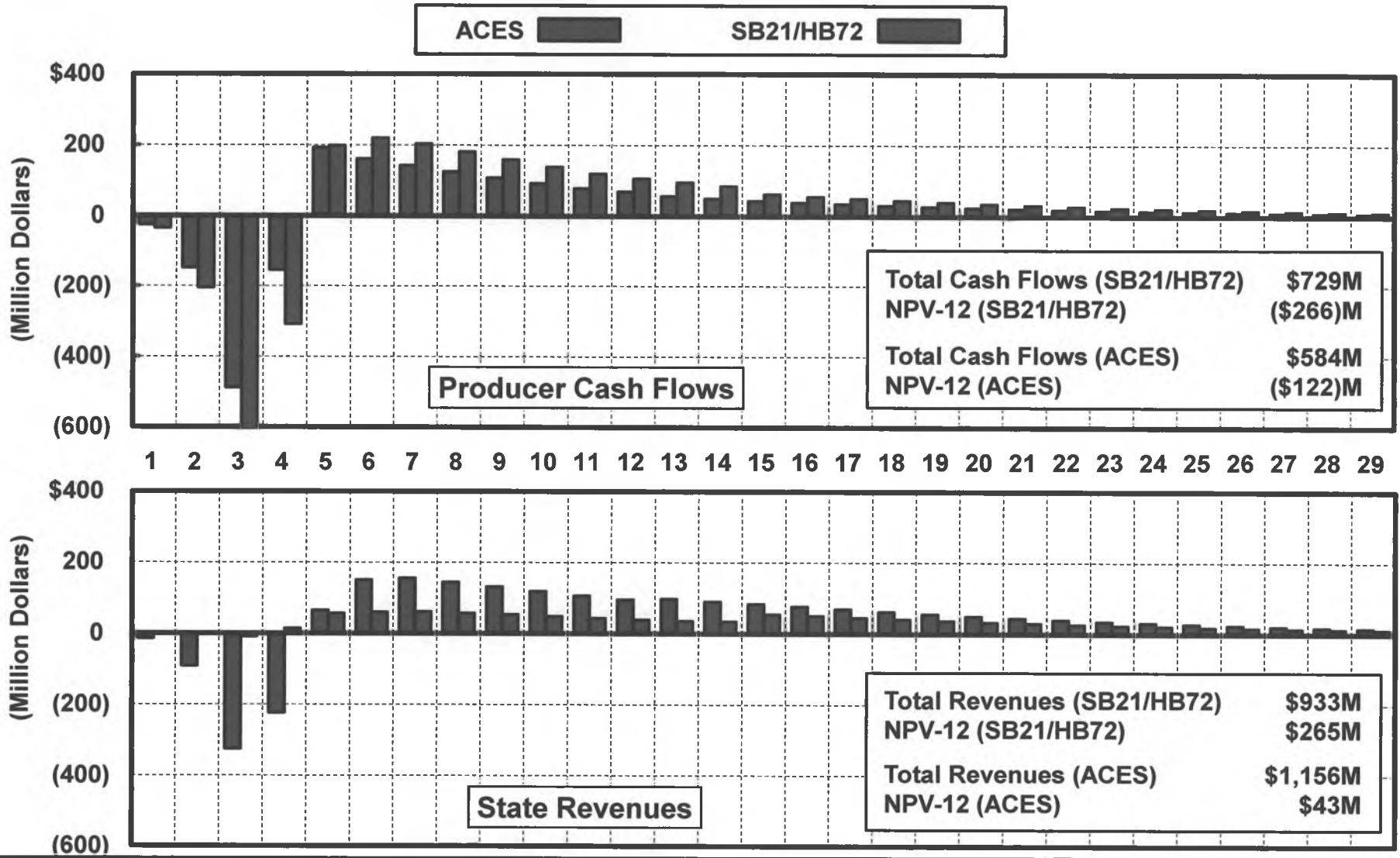


West Coast ANS Price	SB21/HB72			Unconventional Lower-48		Canada Oil Sands	Norway	U.K. Development & Fiscal System			
	ACES	With GRE	Without GRE	Eagle Ford	Bakken	SAGD		Pre-1993	Pre-1993 w/ Brownfield Allowance*	Post-1993	Post-1993 w/ Brownfield Allowance*
	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)
Producer NPV-12 / BOE (Dollars Per BOE)											
\$80	(\$2.43)	(\$7.04)	(\$7.66)	\$3.61	\$0.67	(\$0.93)	\$0.24	\$1.20	\$4.81	\$2.41	\$4.62
\$100	\$2.48	(\$3.37)	(\$4.21)	\$6.75	\$4.29	\$0.46	\$2.34	\$3.02	\$7.09	\$6.04	\$8.25
\$120	\$6.53	\$0.29	(\$0.77)	\$11.17	\$9.16	\$2.01	\$4.44	\$4.83	\$9.09	\$9.67	\$11.88
Profitability Index-12											
\$80	0.91	0.75	0.73	1.25	1.04	0.88	1.01	1.06	1.22	1.11	1.21
\$100	1.09	0.88	0.85	1.47	1.28	1.06	1.14	1.14	1.33	1.28	1.38
\$120	1.23	1.01	0.97	1.78	1.60	1.26	1.27	1.22	1.42	1.45	1.55
IRR (Percent)											
\$80	7.1%	2.2%	1.1%	29.9%	13.6%	9.7%	12.4%	18.4%	34.5%	18.4%	24.7%
\$100	18.2%	7.8%	6.6%	46.3%	22.7%	13.1%	16.0%	27.0%	45.2%	27.0%	32.9%
\$120	33.6%	12.3%	11.1%	73.6%	37.0%	16.3%	19.3%	34.6%	53.5%	34.6%	40.2%
5-Year (2017-2021) Cash Margins (Dollars Per BOE)											
\$80	\$25.52	\$29.32	\$27.46	\$23.39	\$28.39	\$26.07	\$34.51	\$12.45	\$22.94	\$24.91	\$29.35
\$100	\$30.33	\$39.44	\$36.95	\$29.99	\$36.48	\$29.14	\$39.42	\$16.69	\$28.85	\$33.38	\$37.82
\$120	\$33.41	\$49.56	\$46.44	\$36.87	\$44.91	\$33.37	\$44.32	\$20.93	\$31.29	\$41.86	\$46.30
Government Take (Percent)											
\$80	45.0%	75.3%	88.7%	71.7%	77.1%	63.4%	67.8%	81.0%	61.0%	62.0%	52.0%
\$100	58.3%	63.8%	70.3%	67.9%	72.1%	63.5%	71.7%	81.0%	68.6%	62.0%	55.8%
\$120	63.4%	61.4%	66.3%	65.1%	68.7%	63.0%	73.4%	81.0%	72.0%	62.0%	57.5%
State/Municipal NPV-12/BOE (Dollars Per BOE)											
\$80	(\$7.81)	(\$0.73)	\$0.23	-	-	-	-	-	-	-	-
\$100	(\$6.73)	\$2.28	\$3.57	-	-	-	-	-	-	-	-
\$120	(\$4.31)	\$5.29	\$6.91	-	-	-	-	-	-	-	-

* Brownfield Allowance applied to 100 MMBOE development.

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

Annual State Revenues and Producer Cash Flows at \$100 West Coast ANS Heavy High Cost Oil Alaska Development New Participant in Alaska



Annual State Revenues and Producer Cash Flows at \$100 West Coast ANS Heavy High Cost Oil Alaska Development Incumbent Participant in Alaska

