

**SB**

**192**

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**7.**

# **Public Testimony**

# **PIONEER**

## **NATURAL RESOURCES**

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Pioneer Natural Resources Alaska, Inc.  
700 G Street, Suite 600  
Anchorage, Alaska 99501  
Tel: (907) 277-2700 Fax: (907) 343-2190

March 22, 2012

Senator Bert Stedman  
Co-chair, Senate Resources Committee  
State Capitol, Suite 516  
Juneau, AK 99801

Dear Senator Stedman,

Thank you for the invitation to provide comments on the Committee Substitute to Senate Bill 192, which represents the Senate's effort to address deficiencies in the progressivity feature of Alaska's production tax system among other items in this legislation. Please consider this letter the official comments of Pioneer Natural Resources to the Senate Finance Committee.

Alaska has been and continues to be an important part of Pioneer's overall portfolio. As you may recall, Pioneer entered the Alaska market in 2002 and became the first independent operator on the North Slope in 2008 when production commenced from the company's Oooguruk Development Project. The project has created hundreds of good-paying jobs, new infrastructure, new royalty revenue for the State and new oil through the Trans Alaska Pipeline System.

But times have changed since our entry into Alaska. Alaska has lost its competitive position compared to the low-risk, high-margin projects across the United States not burdened by many of the geographical, logistical, climate and financial challenges present in Alaska. In fact, the Senate Majority Coalition's consultants, PFC Energy, noted in their presentation to your Committee on March 15, 2012 the following: "Costs are significantly higher in Alaska than the Lower 48 – even compared to unconventional. Meanwhile, Alaska's Government Take has risen significantly over recent years, meaning new project economics can be very challenging." This statement rings especially true in Pioneer's case where any potential expansion of Oooguruk or development of challenging exploration projects must compete with our alternatives in the Permian Basin and Eagle Ford Shale.

Pioneer has supported significant and meaningful production tax reform since the adoption of Alaska's Clear and Equitable Share, or 'ACES' as it is commonly known. Our stance remains the same today. While some features of the current tax law are attractive, it's our opinion the progressivity feature is broken and has caused a chilling effect on the type of industry investment that ultimately produces more oil. Again we quote PFC Energy from the same presentation: "ACES inhibits the development of new projects and resources that might help stem or even reverse the decline." Pioneer does not believe the current proposed change to progressivity, as presented in the current Committee Substitute, is meaningful enough to change investment behavior. We do support bracketing progressivity as it has been proposed in HB 110 and conceptual amendments by Sen. McGuire. Bracketing has broad support by industry and Alaskans alike and we believe represents "meaningful change" to the severance tax.

We encourage the Alaska State Legislature to create a more competitive environment to attract new capital investment. Amendments to ACES should focus on incentivizing as broad an array of investors and projects as possible. Such a fiscal environment would cultivate the investment needed to increase North Slope production. Unfortunately, the current committee substitute does not achieve this goal. For example, according to PFC energy the impact of the proposed allowance for new oil, while an admirable concept, is "almost undetectable" even under aggressive scenarios. While Pioneer understands this concept is still in a working phase, we support Sen. Waggoner's approach as presented in the Senate Resources Committee.

The Senate Finance Committee recently heard public testimony from a wide array of Alaskans on SB 192. Of those that participated, more than 83 percent opposed this bill in its current form. Pioneer joins those Alaskans and does not support Committee Substitute for Senate Bill 192. The bill as drafted requires substantial changes in order to reach the best outcome for the state.

Pioneer appreciates all the work the Senate Finance Committee has done to date and we look forward to working with you further on this endeavor.

Sincerely,



Todd Abbott  
President  
Pioneer Natural Resources Alaska, Inc.



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THE FOLLOWING  
STEERING COMMITTEE  
MEMBERS ARE PROUD  
TO HELP MAKE  
ALASKA COMPETITIVE:

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Will Anderson, Koniag  
Rick Boyles, Teamsters Local 959  
Carl Brady, Brady Inc.  
Judy Brady  
Margie Brown, CIRI  
Bill Corbus,  
Alaska Energy and Resources  
Cynthia Henry, Hops Hallmark  
Jim Jansen, Lynden, Inc.  
Governor Tony Knowles  
Marc Langland, Northrim Bank  
Tom Maloney, CH2M Hill  
Harry McDonald, Carlisle  
Bill Moran, FirstBank  
Gail Phillips  
Norm Phillips, Jr.  
Ed Rasmuson  
Rex Rock, ASRC  
Marilyn Romano, Alaska Airlines  
Helvi Sandvik, NANA  
Governor Bill Sheffield  
Richard Wien, Florcraft, Inc.

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March 15, 2012

Senate Finance Committee  
State Capital Building  
Juneau, Alaska 99801

Dear Senate Finance Committee Members,

Today marks an important milestone for this legislative session and for the future of Alaska's economy. With just one month remaining to find a real solution to our oil tax challenges, your committee can achieve meaningful tax reform – but the time to act is now.

The more than one thousand members of the Make Alaska Competitive Coalition – businesses and constituents from around the state – urge you to use a key test when considering oil tax changes. The test is simple: Are the proposed changes fair and competitive with other oil producing regions, and do they result in meaningful increased investment and production? The current version of SB-192 does not pass the test.

Alaska's continuing oil decline is a production problem, not a supply problem. High oil prices and new technologies have transformed production in competing regions like Alberta, North Dakota and Texas. Our competitors seem to have struck the right balance between government take and the industry's ability to earn a fair return on investment. In Alaska, the total government take is so high that Alaska is now in a "harvest mode" that realizes short-term gain for the state at the expense of more oil production and revenue over the long run. Instead of planning for a season of growth, we are eating our seed potatoes.

It now time to both plant and harvest. To save tomorrow's economy, we must sow the seeds of investment today. That requires competing side-by-side with our competitors. If we can once again make Alaska's investment profile competitive, industry investments will return. If not, they'll go elsewhere like they are today, and Alaska will continue on its current course to an economic train wreck.

MAKE ALASKA #1 AGAIN.



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THE FOLLOWING  
STEERING COMMITTEE  
MEMBERS ARE PROUD  
TO HELP MAKE  
ALASKA COMPETITIVE:

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- Will Anderson, Koniag  
Rick Boyles, Teamsters Local 959  
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Cynthia Henry, Hops Hallmark  
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Rex Rock, ASRC  
Marilyn Romano, Alaska Airlines  
Helvi Sandvik, NANA  
Governor Bill Sheffield  
Richard Wien, Florcraft, Inc.

The Make Alaska Competitive Coalition is made up of everyday Alaskans and businesses all across our state and does not accept contributions from oil companies. We are united in the beliefs that:

1. Alaska is currently uncompetitive in attracting oil industry investment and we are lagging behind our competitors in new projects and new oil production.
2. Keeping TAPS and oil production healthy is critical to our economic future because oil revenue pays for essential state services and is the foundation of our economy.
3. New capital investment is the key to new oil production.
4. Alaska has to compete globally for industry investment. If our government take remains so high that we continue to deter investment, we are only harming ourselves by guaranteeing a continuing oil decline. The oil industry will simply invest in other places that offer a better return on investment.
5. If we act now we can avoid an economic disaster by turning oil production around.
6. Our options are limited if we continue to harvest without planting the seeds of investment for our future.

The members of the Make Alaska Competitive Coalition trust that you will make the necessary changes needed to give Alaska continued economic vitality. Let's take control of our future and continue producing for decades to come.

Sincerely,

A handwritten signature in black ink, appearing to read 'Jim Jansen', with a long, sweeping underline.

**Jim Jansen**  
Director/President  
Make Alaska Competitive Coalition

MAKE ALASKA #1 AGAIN.

# 70 & 148, LLC

• 1421 Blake Street • Denver, CO 80202 •  
Phone 303-623-1821 • Fax 303-623-3019

RECEIVED

MAR 12 2012

March 12, 2012

The Honorable Mike Chenault  
Speaker of the House  
The Honorable Gary Stevens  
President of the Senate  
Alaska State Legislature  
State Capitol  
Juneau, Alaska 99801-1182

Dear Speaker Chenault and President Stevens:

The vast majority of Alaska's tax revenues are derived from oil production associated with fields discovered on the North Slope several decades ago. As these legacy fields decline in their productivity, so does the future tax revenue base for the state. The least controversial and best long term solution for increasing Alaska's tax revenues is developing the state's smaller oil fields.

In most of the world's petroleum provinces the biggest and most profitable fields are generally found first. This happened on the North Slope with the discoveries of Prudhoe Bay and Kuparuk River Fields forty plus years ago. Outside of these giant fields are numerous smaller fields that are economically challenged. These fields, although individually small, in aggregate, can add up to substantial volumes of oil. This has been proven time and again in the great petroleum provinces of the world such as the North Sea, the Permian Basin of Texas, and by way of example, the Gulf of Mexico ("GOM"). In the 1970s, major oil companies were abandoning the GOM, believing that most of the big profitable oil and gas fields had been discovered. The Majors began leaving the region for more promising areas of the world - much the same way they are behaving today on the North Slope. For the most part, the GOM was left for smaller independent companies to develop the remaining reserves. This resulted in the discovery of hundreds of new deposits and billions of barrels of new oil located in smaller, more difficult to develop fields. This is the typical lifecycle of a petroleum province, and the North Slope is in this same position today.

Armstrong Oil & Gas, Inc. ("Armstrong") through its various subsidiaries has been at the forefront of the movement to find and develop these smaller fields. We were the generator of the last two successful developments on the North Slope of Alaska - Oooguruk Field and Nikaitchuq Field. We brought Pioneer Natural Resources USA, Inc. to the North Slope as a partner on Oooguruk, as well as ENI Petroleum Exploration Co. Inc. who developed Nikaitchuq. These two developments have brought and will continue to bring hundreds of high paying permanent jobs for Alaskans, produce tens of thousands of barrels of oil per day into TAPS, and provide increased revenues to the state from royalties and taxes. Both of these projects were sanctioned prior to the enactment of the ACES tax law and most likely would not have been approved for development had ACES been in place. Alaska with its current tax structure, is unintentionally preventing the smaller fields on the North Slope from being developed, thus an amendment to the ACES tax structure on non-productive lands is desperately needed.

On the heels of the geologic successes of the two fields mentioned above Armstrong doubled its efforts on the North Slope generating dozens of fresh ideas for potential fields. Armed with these new projects, we were able to recruit Repsol E&P USA Inc. ("Repsol") to join in our efforts. We feel very fortunate to have such an outstanding technically advanced, well funded, world class company as our partner. Repsol's recent successes and commitment to local hire, made them the perfect partner for us and the state of Alaska. Repsol had three of the ten largest discoveries in the world in 2008, and as recently as last month, they announced a new discovery in Brazil that could quite possibly be the largest discovery in the world for 2012. The single greatest risk to our partnership moving forward in the development of multiple new oil fields on the North Slope (and for that matter, the greatest deterrent to all other potential new entrants to the North Slope) is the legislature not passing tax reform on non-producing lands.

We estimate that with meaningful tax reform (similar to the provisions in HB 110 for non-producing lands) the Armstrong/Repsol activities alone could cause an expenditure of approximately nine billion dollars (\$9,000,000.00) which should result in an increase in revenues to the State of Alaska of approximately eighteen billion dollars and create a significant number of new jobs for Alaskans. As this modification will apply to all non-productive lands and be open to all, it will encourage new entrants as well as the existing producers to develop the North Slope outside of the legacy fields.

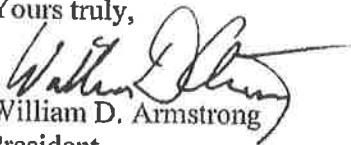
The companies that have provided the majority of the tax revenue for the state of Alaska, Exxon Mobil, ConocoPhillips, and BP, have done an outstanding job operating on the North Slope in a harsh, expensive, and challenging environment. However, for any petroleum province to thrive, it needs companies with fresh ideas that challenge existing conventions. Alaska needs a competitive environment that encourages players to come to the state and spend the billions of dollars needed on new field developments. This is the only way the North Slope can continue to grow and hope to compete on the world stage. In the absence of significant tax reform the state's resources will not be developed. This would require the state to place its economic future in the hands of only a few companies that appear to have lost confidence in the potential of state lands outside of the legacy fields. This is not healthy for the state, and it is too big of a burden to place on the backs of only a few companies.

We agree with the conclusions rendered by the state's oil and gas tax consultants Pedro Van Meurs and PFC Energy. Both of these groups point out a need for legislative action to encourage the type of investments needed to develop the state's resources. We believe that HB 110 and/or the recommendations provided for in the Van Meurs report as they relate to currently non-productive lands provide a workable version of the tax reform needed that will accomplish the following:

- 1) Provide numerous high paying skilled jobs for Alaskans,
- 2) Meaningfully extend the life of the TAPS pipeline,
- 3) Substantially increase revenues to the state,
- 4) Create a healthy investment environment for new companies to invest on the North Slope, and
- 5) Ensure that smaller fields on the North Slope do not remain undeveloped for another forty years

In conclusion, Armstrong requests the legislature pass meaningful tax reform for non-productive lands either in the form as proposed by Van Meurs or as set forth in that portion of HB 110 dealing with non-productive lands. Either of these will increase tax revenues to the state while providing high paying jobs for the people of the state of Alaska. Thank you for allowing me the time and venue to share my thoughts.

Yours truly,



William D. Armstrong

President

Armstrong Oil & Gas, Inc. / 70 & 148, LLC

cc: All Legislators



Douglas L. Smith  
3700 Centerpoint Drive Suite 1300  
Anchorage AK, 99503  
March 6, 2012

The Honorable Bert Stedman  
Alaska State Senate  
State Capitol, Room 516  
Juneau AK, 99801

Dear Senator Stedman:

I am writing on behalf of myself and the 90+ Alaskans we employ at Little Red Services. We are requesting your support of ACES tax reform that will result in substantial new investment in our primary oilfields that are declining in production at a very concerning rate.

Our company engages in work activities that are substantially subsurface, from the well head down, and are usually associated with production related activity. An issue that many legislators are struggling with is the employment statistics that demonstrate that employment is up on the North Slope after the implementation of ACES. This I believe is an undeniable fact and should be embraced as such. The concern is what are the jobs and do they result in new or increased production benefits. I cannot speak for all sectors of business conducted on the North Slope but I can provide a short view into a specific instance within our company that indicates a shift from production related effort to maintenance.

After the enactment of ACES the production based activity of ConocoPhillips slowed in Kuparuk and we had to remove a truck from service resulting in the layoff of 13 people in 2009. We eventually found work for the truck in Prudhoe Bay. Unfortunately for Alaska, this work was not our usual production related support. Instead the truck was put to use heating water from a lake on the West side of Prudhoe to support the washing of snow and ice from flow lines so they could be inspected for corrosion. This adaptation may help to maintain our revenue but it also clouds the employment view of the North Slope and masks the real issue of the significant number of jobs that are related to non-production activities.

Honorable Bert Stedman  
March 13, 2012  
Page 2

A recent jobs study conducted by the McDowell Group demonstrated the negative trend in the production and jobs relationship. The relationship between production and jobs on the North Slope has steadily decreased since peak oil production in 1988. In 1987 the barrels of oil produced per North Slope job was at 255,000 barrels per job (measured on an annual average basis). In the year 2000 North Slope oil production totaled approximately 108,000 barrels for every oil and gas industry job. By 2010 North Slope oil production had further declined to approximately 28,000 barrels for every oil and gas industry job on the North Slope.

While Alaska has maintained a reasonable level of employment, our production decline and current levels of investment is concerning and needs a response from our legislature to stimulate additional investment from the existing and potential new producers on the North Slope. The legislature and all Alaskans are aware of the significant activity and investment occurring in other competing oil and gas regions of Canada and the United States. It is our long term future and fiscal stability that is of concern. Now we look to our legislative leadership to find the correct balance of fiscal terms that can extend our oil production and bridge our fiscal needs to the possible development of gas, unconventional oil and OCS resources that will offset our declining legacy fields and Alaska's treasury.

There is no easy answer but dealing with progressivity and providing reasonable tax brackets and base rates are good steps in the right direction. We do not believe industry needs to be unfairly subsidized nor should treasury be upside down on oil and gas activities in our state. We do support measures that place us in a competitive posture with other areas of investment opportunity in North America like those contained in HB110. An effective fiscal structure can only be measured in the form of increased production that slows decline or actually increases levels of production for the next several years.

We applaud your commitment to the people of Alaska and dedication to public service. Please act wisely and swiftly during this session on our behalf and help us preserve a healthy oil and gas industry in Alaska for decades to come.

Sincerely,



Douglas Smith

Cc: Governor Sean Parnell

**Senate Finance Testimony  
March 19, 2012**

Good Morning. My name is Tom Maloney. I am the Alaska Area Manager for CH2M HILL and live and work in Anchorage. By way of professional background, I am a CPA, CMA, and CFP.

First of all, I very much appreciate the work that the Senate is continuing to put into this complex subject. The presentations in Senate Labor, Resources and now Finance demonstrate just how challenging taxes can be. This is particularly the case as Alaska is both the owner of the resource and the taxing and regulatory authority over the exploration, development and production of the resource.

In my opinion, Commonwealth North did an excellent job in preparing a March 2011 report entitled "*Alaska's Oil Investment Tax Structure, Establishing a Competitive Alaska*". The report was co-chaired by two great Alaskans: Joe Beedle and Cheryl Frasca. I agree with the three principal recommendations of the report which were as follows:

- 1) Alaska's current oil tax structure under Alaska's Clear and Equitable Share must be made more competitive in order to encourage oil profits to be reinvested in Alaska. The progressivity tax should be reduced and/or capped.
- 2) Alaska should continue to encourage exploration for new oil reserves through tax credits and incentive programs.
- 3) The Governor and the Legislature must make oil production a matter of highest priority. The Legislature must pass revisions to ACES this year...

Financial folks, myself included, always like to model the future. History shows that we frequently over estimate future income and underestimate expenses. On page 12 of the Commonwealth North report, it states "*The Department of Revenue's forecasts have been too high 100% of the time. We should expect that with no change in investment for actual production to be below the DOR forecast*".

As one example of forecasting, the State in 2005 predicted TAPS production would average 832,000 barrels per day in 2010. Actual production was 644,000 barrels, 22% less than forecasted. Alaskans, like me and my family, are not fine with accelerated production decline.

Tax policy must change in a way that reflects the important role production and drilling has in Alaska's economy. Investors take 100% of the risk to lease, explore, and develop a resource. At high prices, government can take more than 80% of the income stream of a barrel of oil. Would anyone with their own real estate, stock, or other

**Senate Finance Testimony  
March 19, 2012**

investments give the government almost all the upside while taking nearly all the downside?

We have a need to drill to pay the bill. I hope the legislature will take significant proactive steps this year to address the steep decline in oil production. Let's encourage more private investment, more jobs, and a brighter future for our kids and grandkids.

After all, I have a 19-year old son majoring in welding and non-destructive testing at UAA who is very concerned about future employment opportunities in Alaska.

Thanks again for all the hard work.

**Tom Maloney**  
3215 Legacy Drive  
Anchorage, AK 99516  
(907) 762-1505  
Tom.Maloney@ch2m.com

March 19, 2012 - Testimony before the Senate Finance Committee

Thank you for giving me this opportunity to provide testimony.

In 1975 my Navy husband received orders to Adak Island in the Aleutians. We fell in love with Alaska the moment we arrived and when he retired in 1980, we stayed, moved to Anchorage and he began working for Alyeska Pipeline Service Company. We raised our 2 children here and are the proud grandparents of 4 Alaskan-born grandchildren.

As members of the Senate Finance Committee, you have a very important matter before you — proposed oil tax changes. It's a difficult and complex subject and one that is filled with emotion and strong opinion. But from my point of view, it seems simple. Jobs and investment dollars that could be supporting Alaskans are going to other more viable sites, such as Alberta, North Dakota, Gulf of Mexico and other places across the globe. Alaska's Tax Policy is leaving Alaskan oil in the ground.

The oil industry has been the engine that has driven our state to financial stability and success. But, unless significant and meaningful changes are made to our tax regime, future investment dollars will not be spent in Alaska.

I urge you to support tax changes that will put more oil in Trans-Alaska Pipeline, increase investment in North Slope development, put more people to work, and open new long-term possibilities for the North Slope. The Governors Bill, HB110 passed the House last year, and provided the meaningful change needed to encourage greater investment.

SB 192 does not encourage new investment and new projects. It encourages a "harvest regime". Alaska has a lot of oil remaining in the ground, but that oil is worthless unless companies are willing to invest the capital that their investors have trusted them with.

We need to improve Alaska's competitiveness in the U.S. and global market.

Please consider the future of my grandchildren and their ability to stay and work in Alaska, and pass the changes to our tax regime that will ensure future growth and prosperity for all Alaskans.

Thank you.

Karen Cowart  
1088 Potlatch Circle  
Anchorage, AK  
907 743-9032

Senate Finance Testimony

03/19/2012

Good morning. My name is David Hopkinson. I'm the Vice President of Construction for CH2M HILL Alaska. I first began working in Alaska on the Trans-Alaska pipeline in Valdez in 1974. Since that time I've had the opportunity to work on the vast majority of the major North Slope projects. I have also worked in Sakhalin Russia for more than four years on major new oil field projects. These opportunities have given me 38 years of oil field construction experience.

CH2M HILL supports many aspects of oil development in Alaska. From engineering, to fabrication, to installation to operations & maintenance. To be successful, we train, develop and hire Alaskans.

However...the current outlook for new construction work in fabrication and field installation is the slowest that I have ever seen. A year ago, we had over 500 people working on new oil field projects, both in our Anchorage Fabrication Shop and on the North Slope. In Contrast: Today we have NO personnel working on new oil projects and there are no new production-developments in Alaska to deploy our long term employees. To fill this GAP we are redeploying personnel outside of Alaska to keep our talent pool working and to remain a viable Construction Company.

The oil industry is booming in many other North American locations. For example: My Construction Director is now working with our Alberta office to expand their fabrication facilities. In Contrast: Our fabrication shop in Anchorage is at an all time low for work. This facility has been utilized for more than 20 years, to fabricate hundreds of modules, sent to the North Slope. The fabrication facility has historically provided high paying, skilled labor positions for many Alaskan families. In addition to Alberta, we are actively pursuing major opportunities in North Dakota and other locations with our highly skilled Alaska personnel. North Dakota should overtake Alaska as the second-largest U.S. producer within months.

In my opinion, we can get some major short-term production increases by doing in-field drilling at Prudhoe Bay, Kuparuk and Alpine. Increased drilling will provide for additional fabrication and construction opportunities. In other words, increased drilling related to production will positively drive jobs for Alaskans. I love everything about building in Alaska and hiring talented Alaskans to keep generating energy for our state and our country.

Increased production will increase royalties, will increase the Permanent Fund, and be great for all Alaska residents. Let's stop the decline and get Alaskans working again. Oil Production IS our economic driver.

Thank you,

David Hopkinson  
949 E 36<sup>th</sup> Avenue  
Anchorage, AK 99508  
830-4649  
[Dave.Hopkinson@ch2m.com](mailto:Dave.Hopkinson@ch2m.com)

**8.**

**Response to  
Questions  
Department of  
Revenue  
March 20, 2012**

**State of Alaska**  
Department of Revenue

*Commissioner Bryan Butcher*



**SEAN PARNELL, GOVERNOR**  
333 Willoughby Avenue, 11<sup>th</sup> Floor  
P.O. Box 110400  
Juneau, Alaska 99811-0400  
Phone: (907) 465-2300  
Fax: (907) 465-2389

The Honorable Bert Stedman  
State Capitol Room 516  
Juneau AK, 99801

March 20, 2012

The Honorable Lyman Hoffman  
State Capitol Room 518  
Juneau AK, 99801

SUBJECT: Response to Questions from Senate Finance Meeting on March 14, 2012

Dear Senators Stedman and Hoffman:

Thank you for your questions and the opportunity to provide our follow-up responses from the Senate Finance Committee meeting on March 14, 2012. The questions and responses follow.

**1. Reproduce slide 5 using total lease expenditures for all companies.**

Please see slide 1 attached.

**2. Can you run another slide #5 that shows the production tax revenue in dollars on the Y axis and the ANS WC Oil price in \$ per barrel on the X axis but only from \$60 to \$140 instead of going all the way out to \$300.**

Please see slide 2 attached, with the X axis out to \$200 per barrel.

**3. Reproduce slides 21-23 using 25% and 20% federal CIT rates.**

Please see slides 3-8 attached.

**4. Reproduce slides 21-23 using total lease expenditures for all companies.**

Please see slides 9-11 attached.

**5. Reproduce slides 21-23 showing total dollars to state, federal, and producer.**

Please see slides 12-14 attached.

- 6. For slide 27, what gross tax rate would generate an equal amount of production tax at \$120 / barrel for each tax system?**

Using FY 2012 assumptions of \$8.72 in transport costs, opex of \$14.03 per taxable barrel, and capex of \$10.25 per taxable barrel, we calculated the following "equivalent" gross tax for ANS WC oil price of \$120 per barrel.

ACES Tax System: 35%  
HB 110 Brackets only: 24%

- 7. For slide 29, provide share of profit charts, both as percent and dollar value.**

Please see slides 15-20 attached.

- 8. Reproduce slide 24 using total lease expenditures for all companies.**

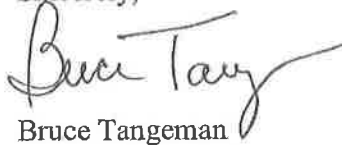
Please see slide 21 attached.

- 9. Provide administration's position regarding continuing separate tax treatment for gas produced in Cook Inlet and gas used in state.**

The administration has not proposed making any changes to the current gas tax structure during this legislative session. The Governor has stated that he wants to address oil taxes this session to make Alaska more competitive for company investment that would lead to additional oil production. The Governor has also stated that he wants to address gas taxes in a future legislative session, in the context of a more concrete proposal for major gas sales.

We hope our responses fully answer your questions.

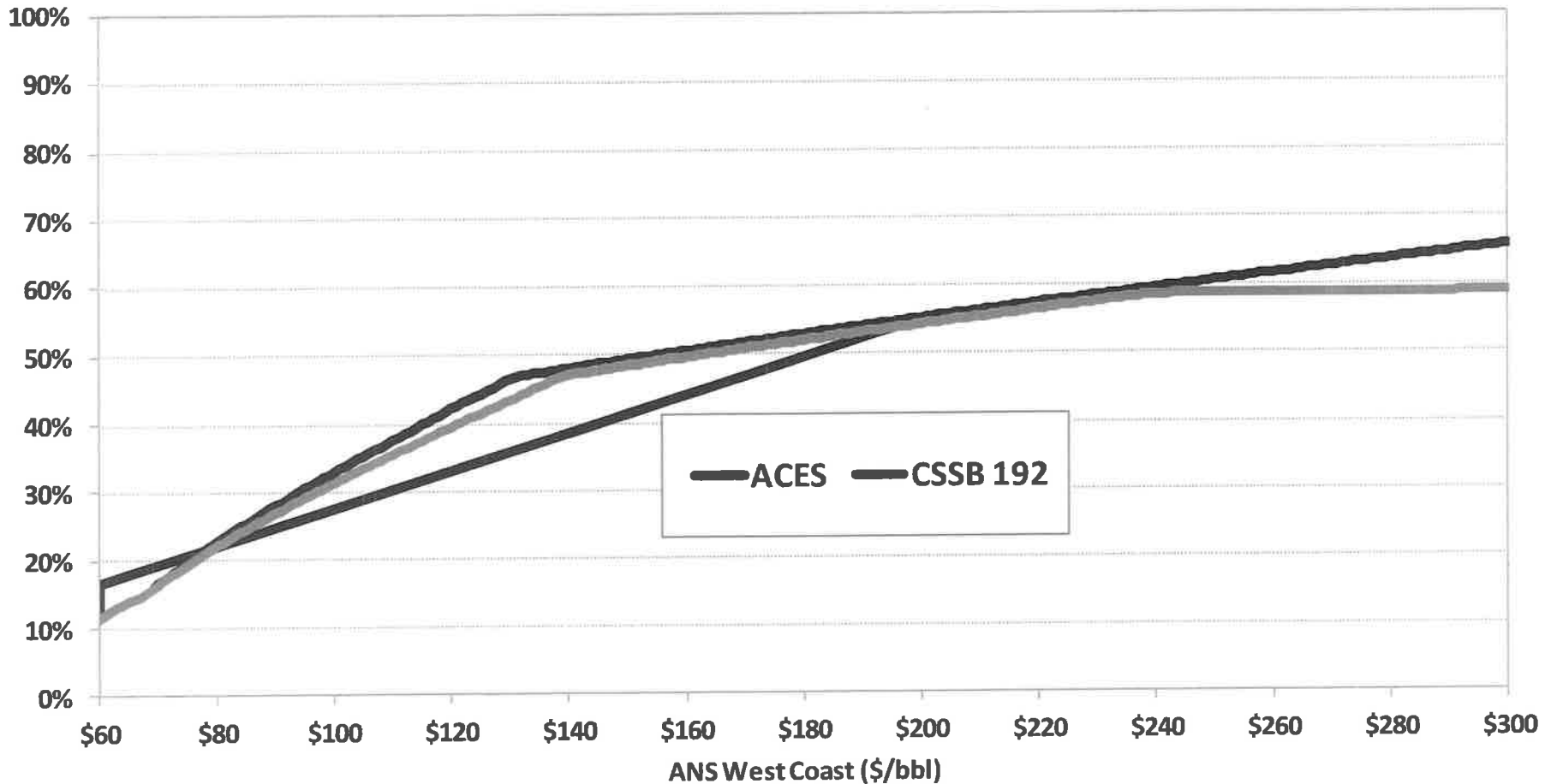
Sincerely,



Bruce Tangeman  
Deputy Commissioner



# Effective Production Tax Rates: ACES and CSSB 192 (progressivity only) using Total Lease Expenditures for all Companies



Assumes FY 2012 expenditures for all companies regardless of whether they have a tax liability: Transport costs of \$8.72/bbl, Opex of \$14.06 per taxable barrel, and Capex of \$14.95 per taxable barrel.

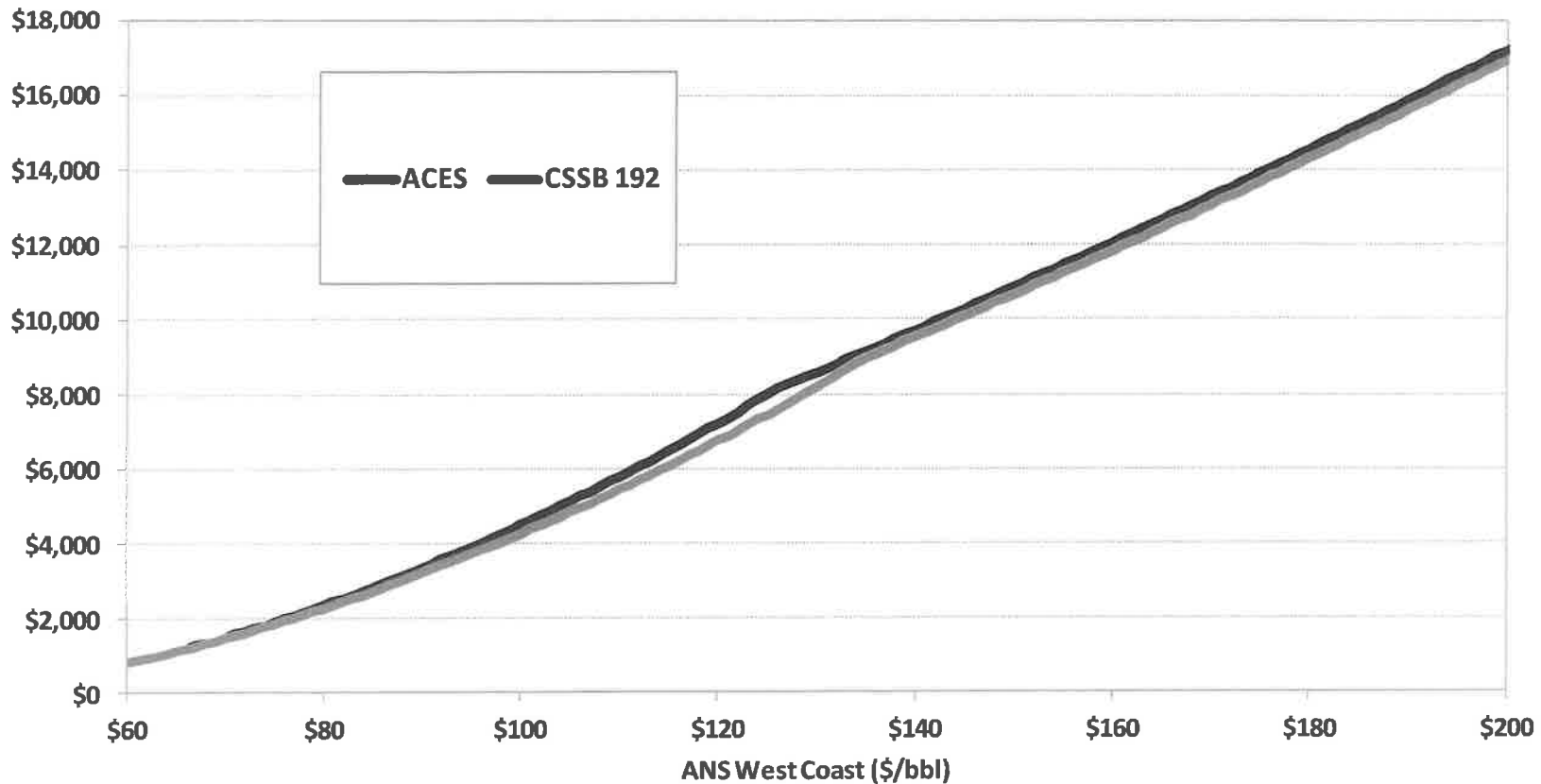
Alaska Department of Revenue



# Production Tax Revenue after credits: ACES and CSSB 192 (progressivity only)



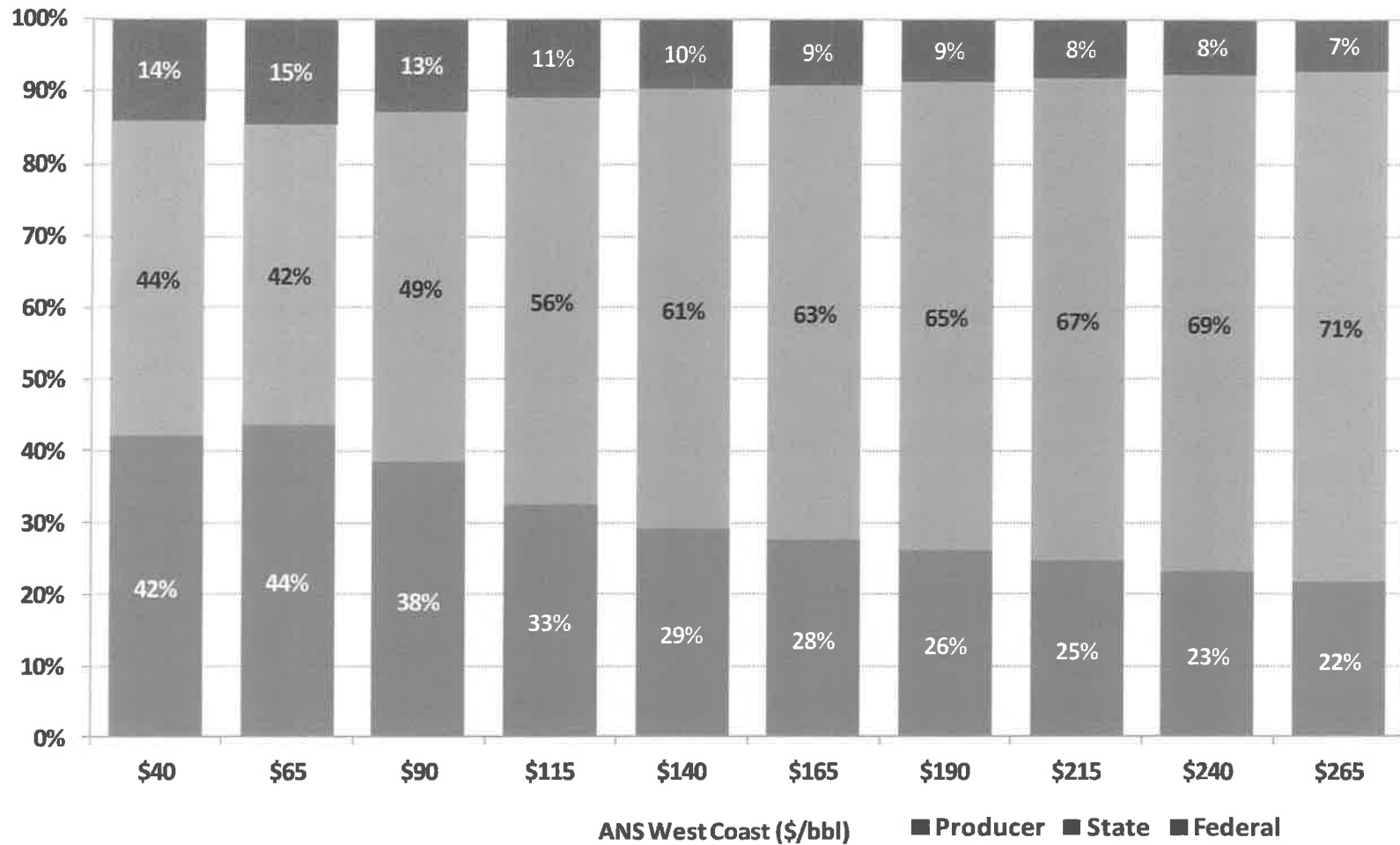
Production Tax Revenue (Post-Credits)



Assumes FY 2012 Transport costs of \$8.72/ bbl, Opex of \$14.03 per taxable barrel, and Capex of \$10.25 per taxable bbl.



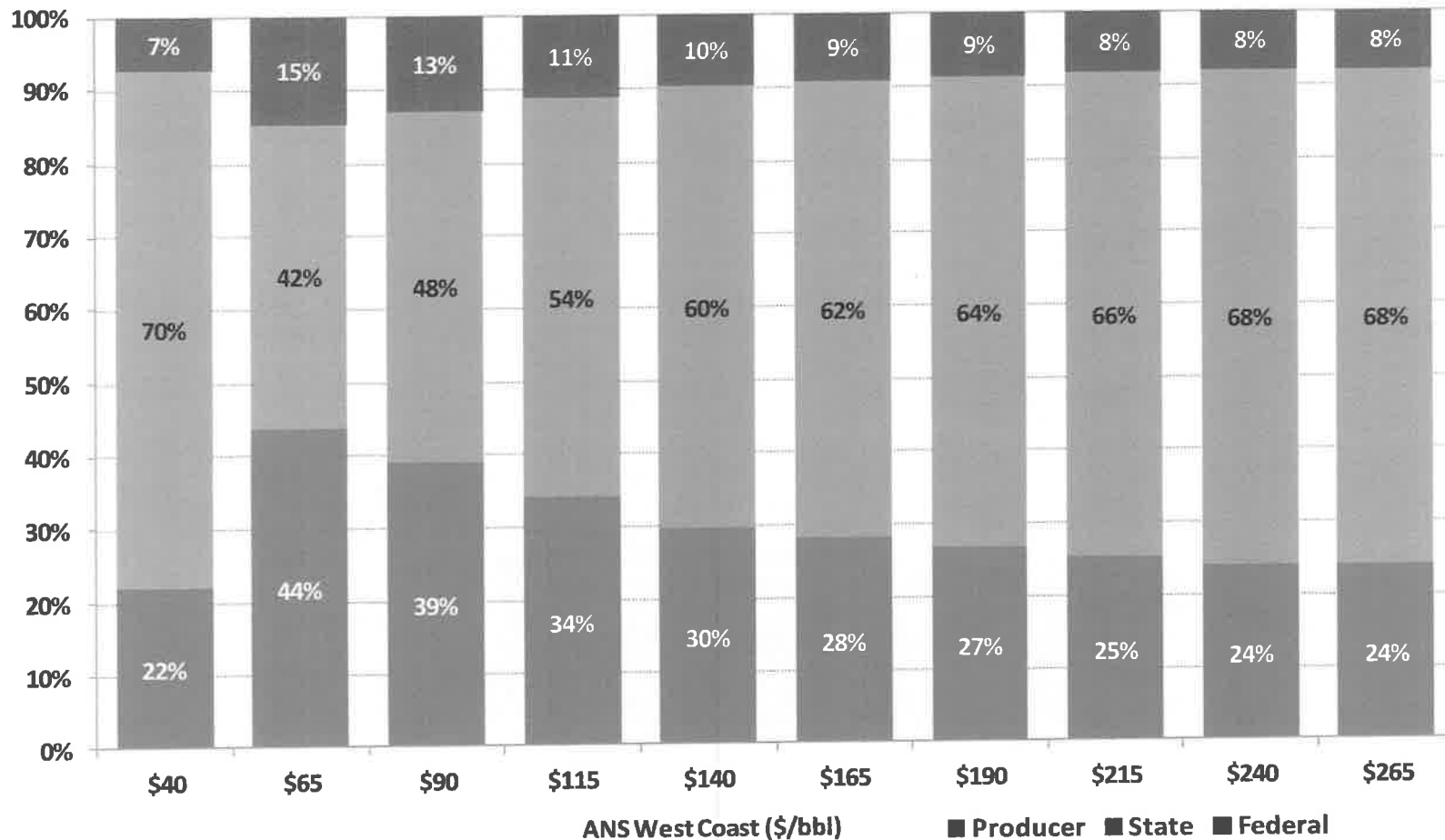
# Share of Profit under ACES with 25% federal CIT



Profit defined as total gross value of all oil produced, less transportation costs and lease expenditures.  
 Assumes FY 2012 Transport costs of \$8.72/ bbl, Opex of \$14.03 per taxable barrel, and Capex of \$10.25 per taxable bbl.  
 Alaska Department of Revenue



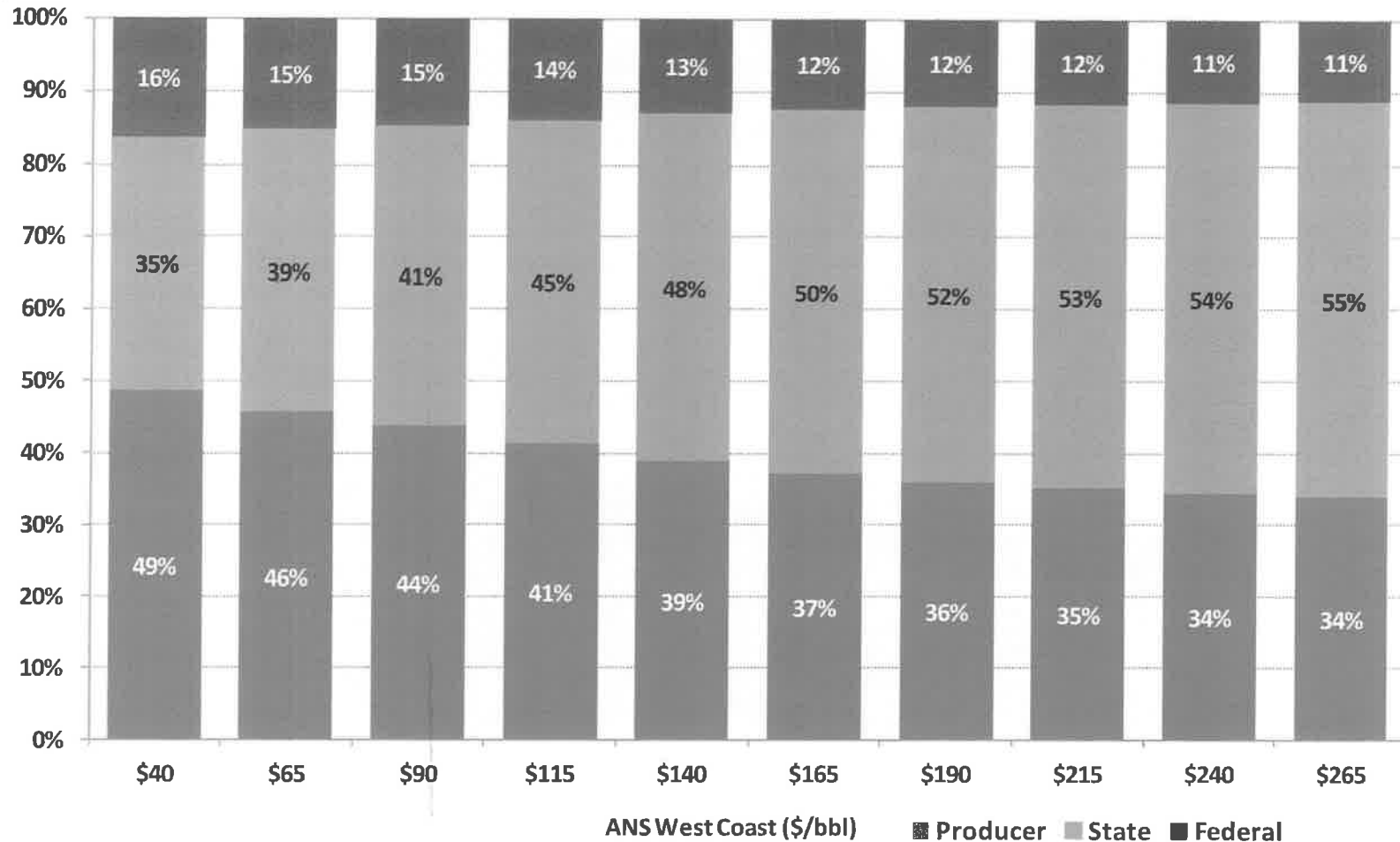
# Share of Profit under CSSB 192 with 25% federal CIT



Profit defined as total gross value of all oil produced, less transportation costs and lease expenditures.  
 Assumes FY 2012 Transport costs of \$8.72/ bbl, Opex of \$14.03 per taxable barrel, and Capex of \$10.25 per taxable bbl.  
 Assumes that 80% of production is impacted by 10% gross minimum tax with no credits allowed against gross tax.  
 Alaska Department of Revenue



# Share of Profit under CS HB 110 (FIN) with 25% federal CIT



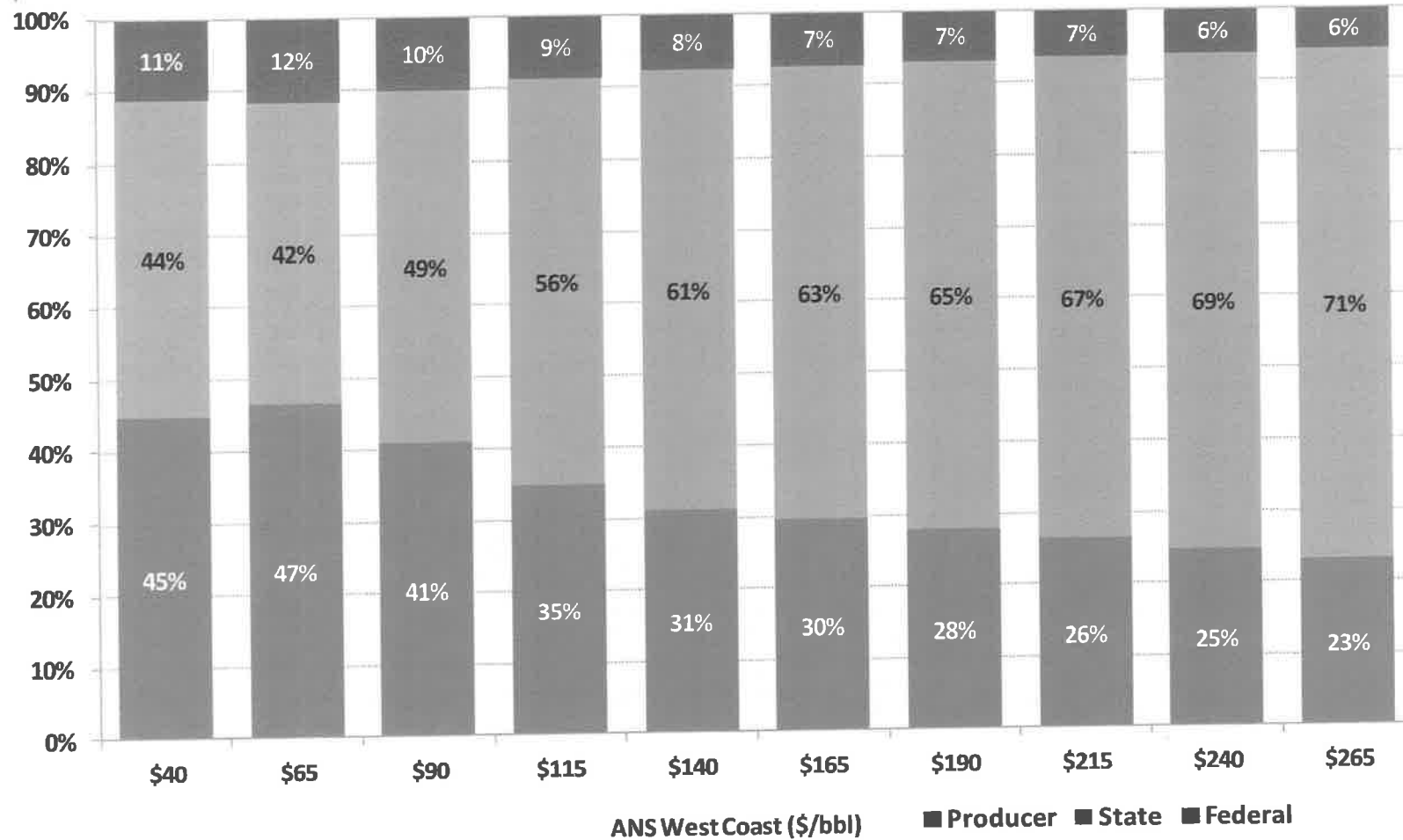
Profit defined as total gross value of all oil produced, less transportation costs and lease expenditures.

Assumes FY 2012 Transport costs of \$8.72/ bbl, Opex of \$14.03 per taxable barrel, and Capex of \$10.25 per taxable bbl.

Alaska Department of Revenue



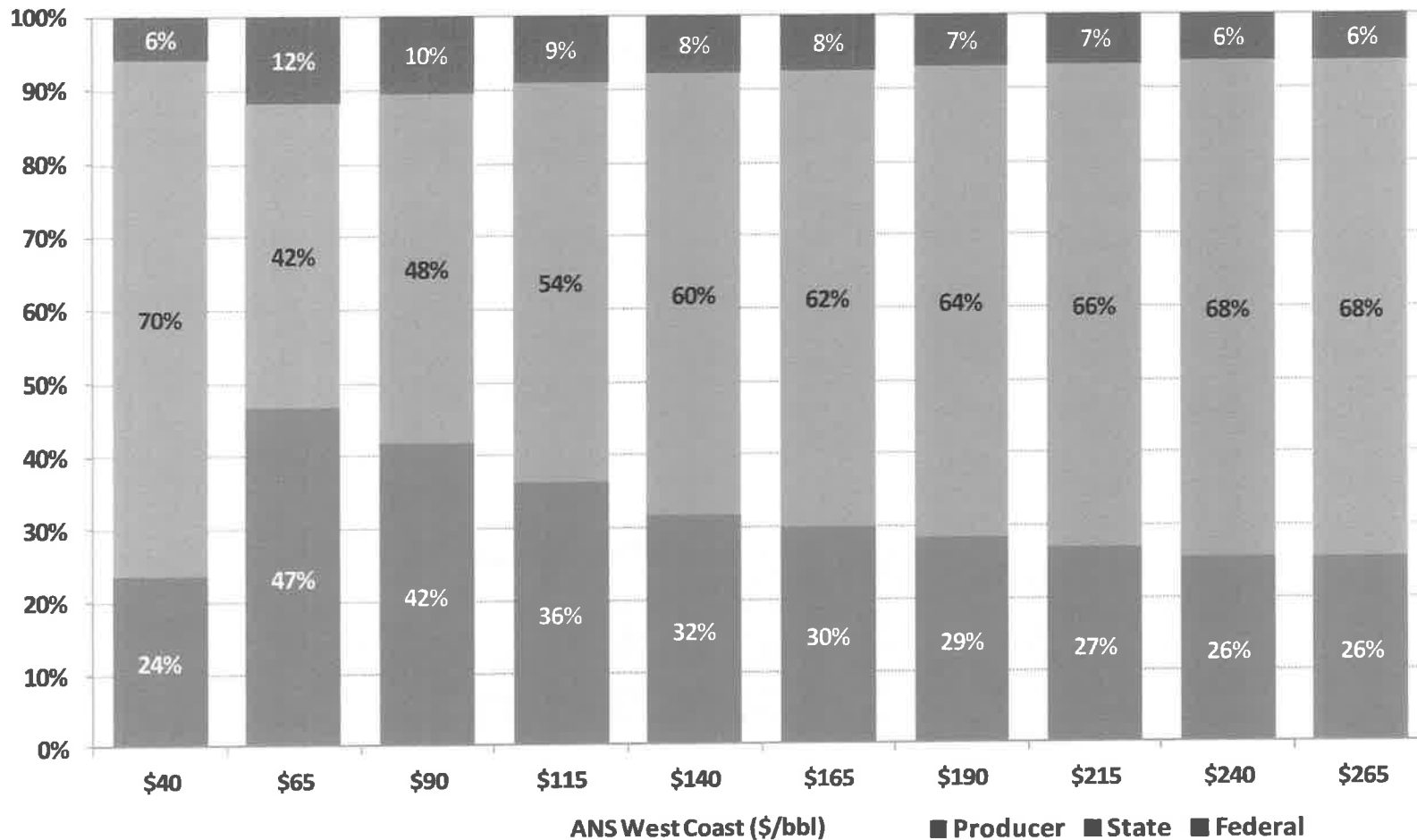
# Share of Profit under ACES with 20% federal CIT



Profit defined as total gross value of all oil produced, less transportation costs and lease expenditures.  
 Assumes FY 2012 Transport costs of \$8.72/ bbl, Opex of \$14.03 per taxable barrel, and Capex of \$10.25 per taxable bbl.  
 Alaska Department of Revenue



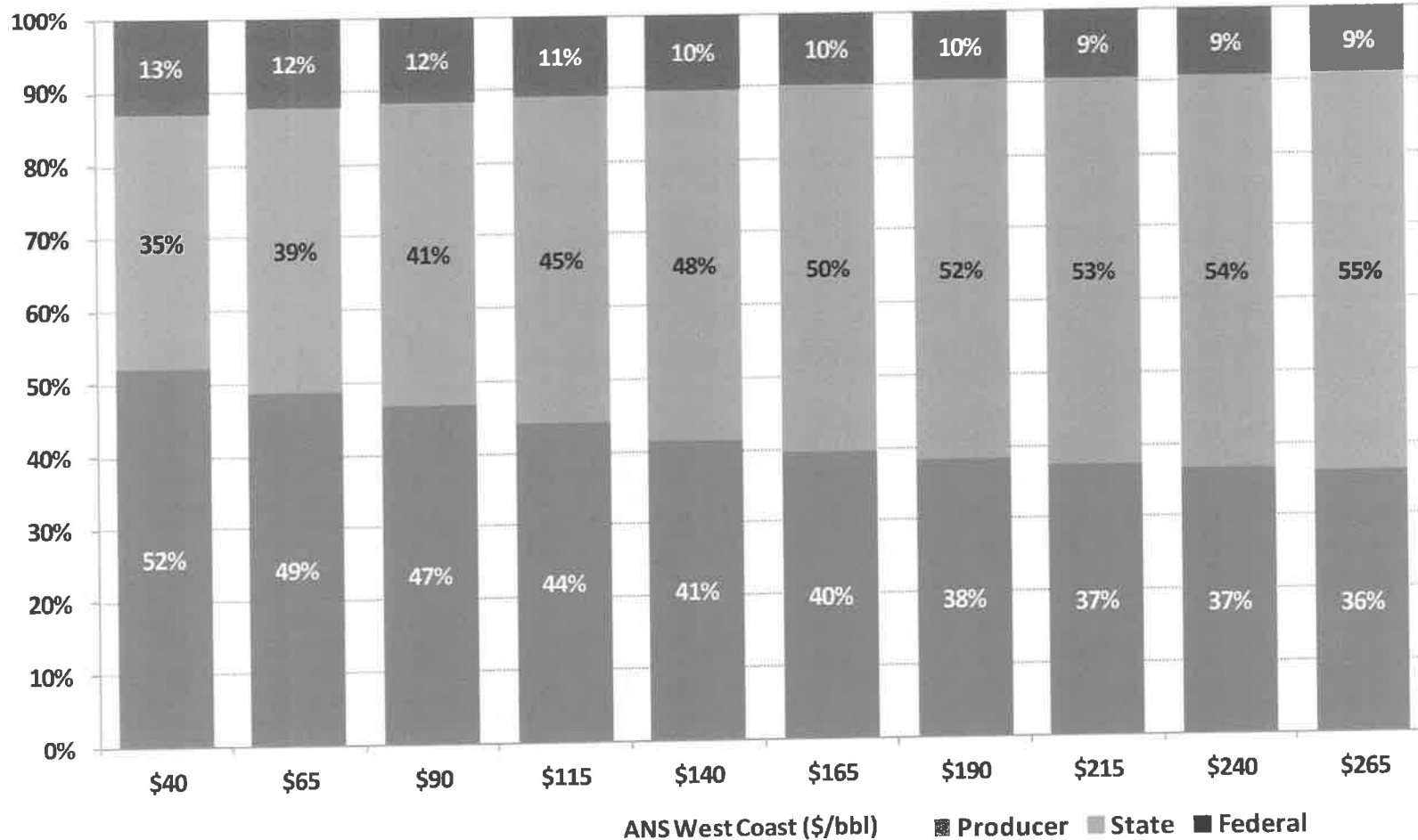
# Share of Profit under CSSB 192 with 20% federal CIT



Profit defined as total gross value of all oil produced, less transportation costs and lease expenditures.  
 Assumes FY 2012 Transport costs of \$8.72/ bbl, Opex of \$14.03 per taxable barrel, and Capex of \$10.25 per taxable bbl.  
 Assumes that 80% of production is impacted by 10% gross minimum tax with no credits allowed against gross tax.  
 Alaska Department of Revenue



# Share of Profit under CS HB 110 (FIN) with 20% federal CIT



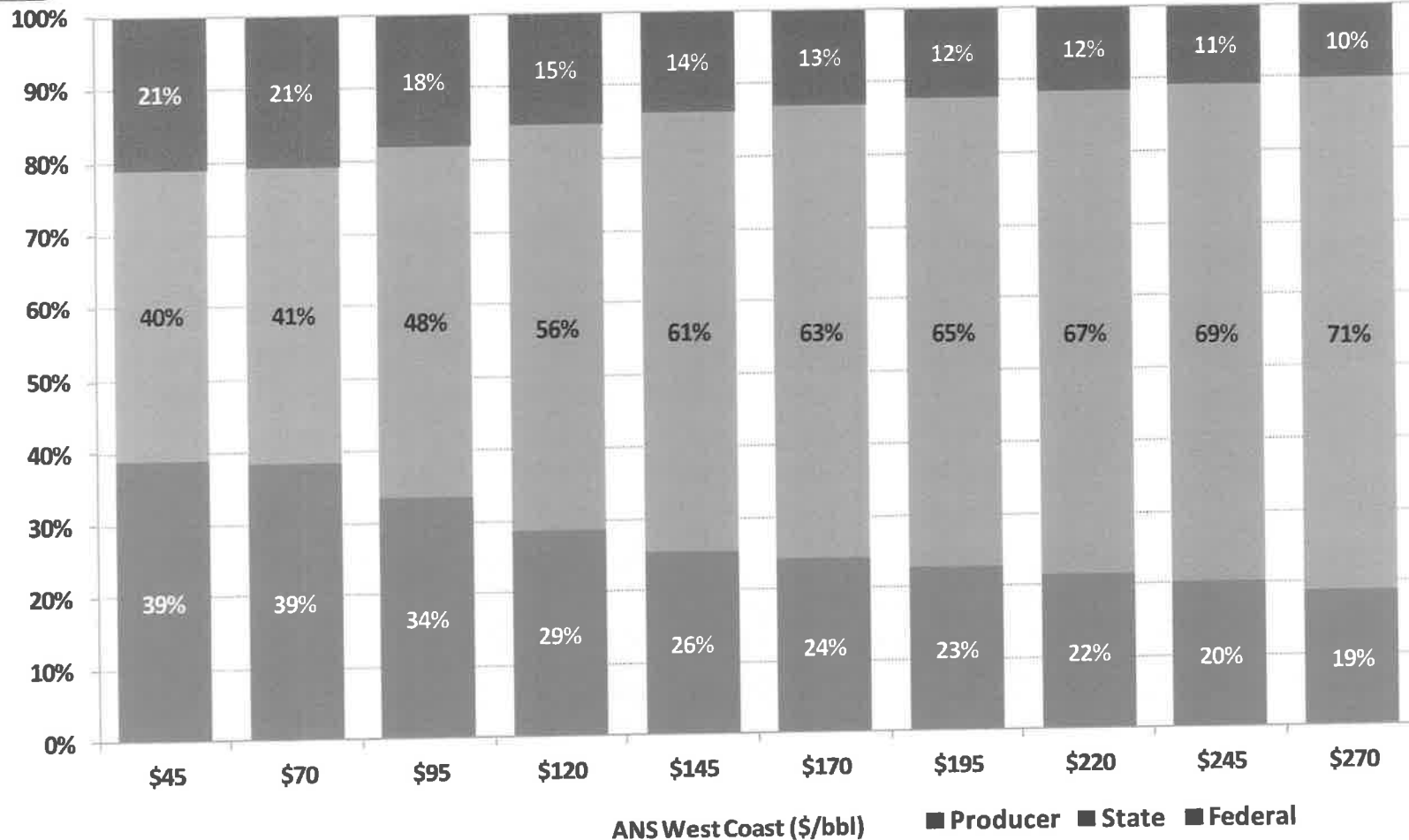
Profit defined as total gross value of all oil produced, less transportation costs and lease expenditures.  
Assumes FY 2012 Transport costs of \$8.72/ bbl, Opex of \$14.03 per taxable barrel, and Capex of \$10.25 per taxable bbl.

Alaska Department of Revenue



# Share of Profit under ACES

## Using total lease expenditures for all companies

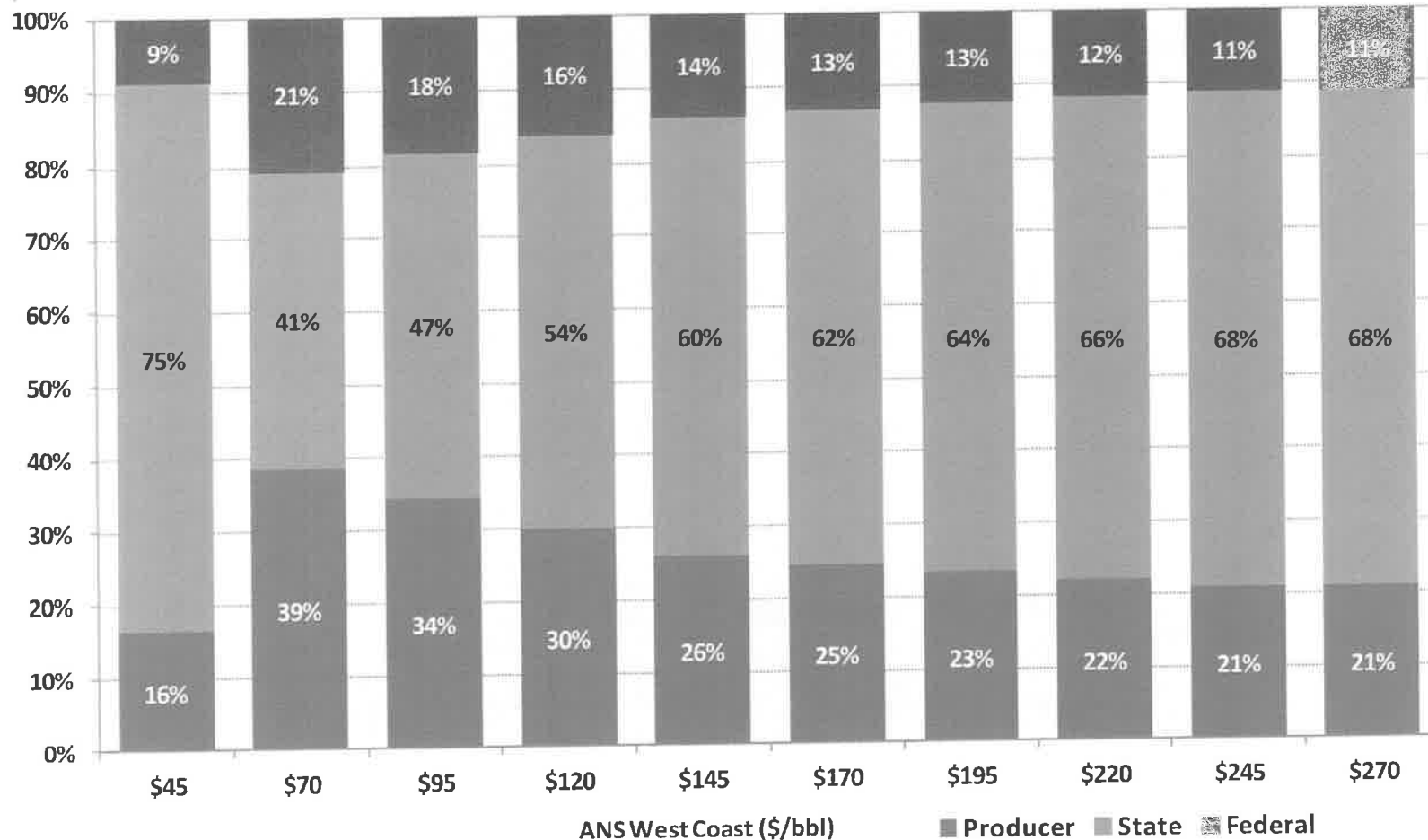


Profit defined as total gross value of all oil produced, less transportation costs and lease expenditures. Assumes FY 2012 expenditures for all companies regardless of whether they have a tax liability: Transport costs of \$8.72/ bbl, Opex of \$14.06 per taxable barrel, and Capex of \$14.95 per taxable barrel).



# Share of Profit under CSSB 192

Using total lease expenditures for all companies

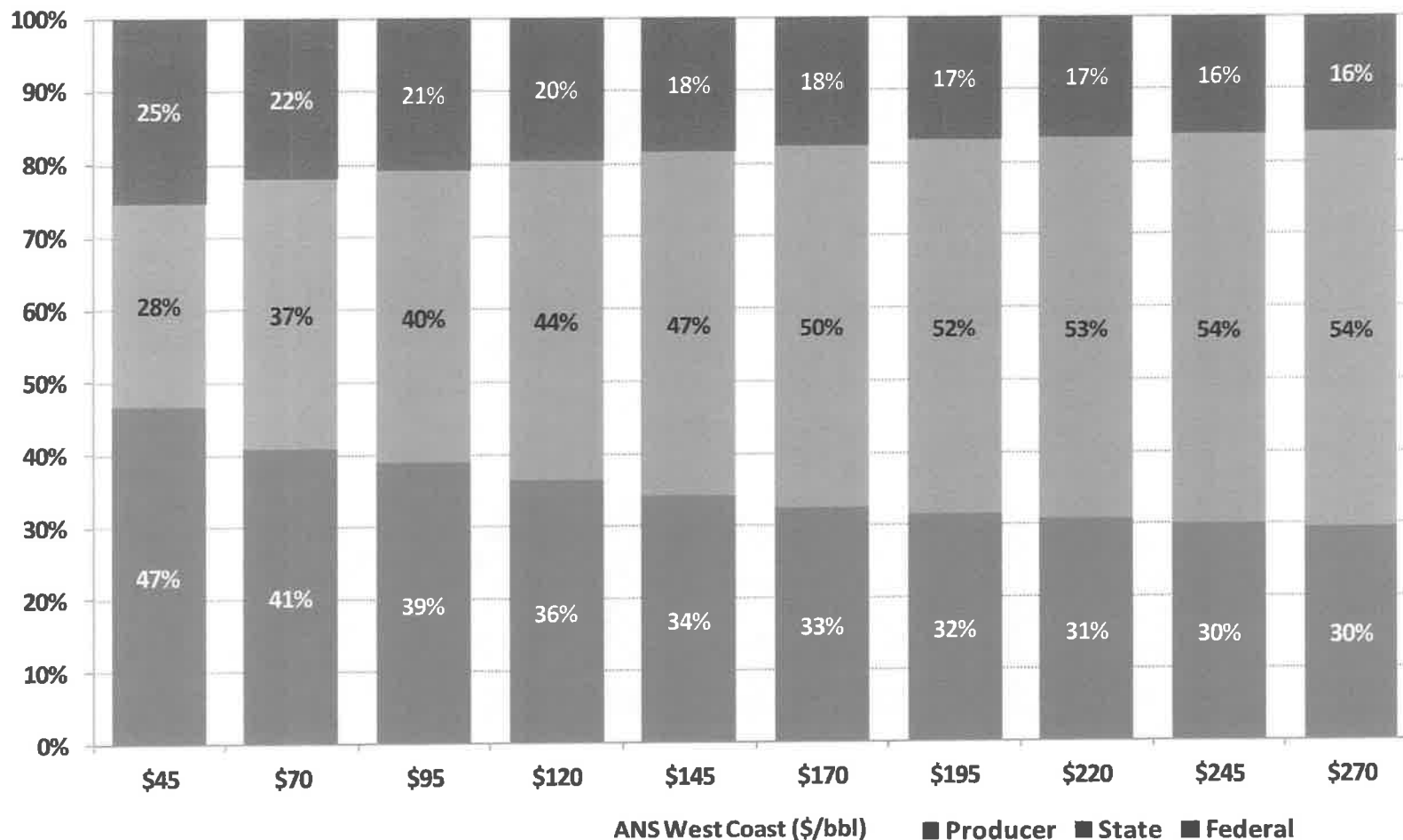


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# Share of Profit under CS HB 110 (FIN)

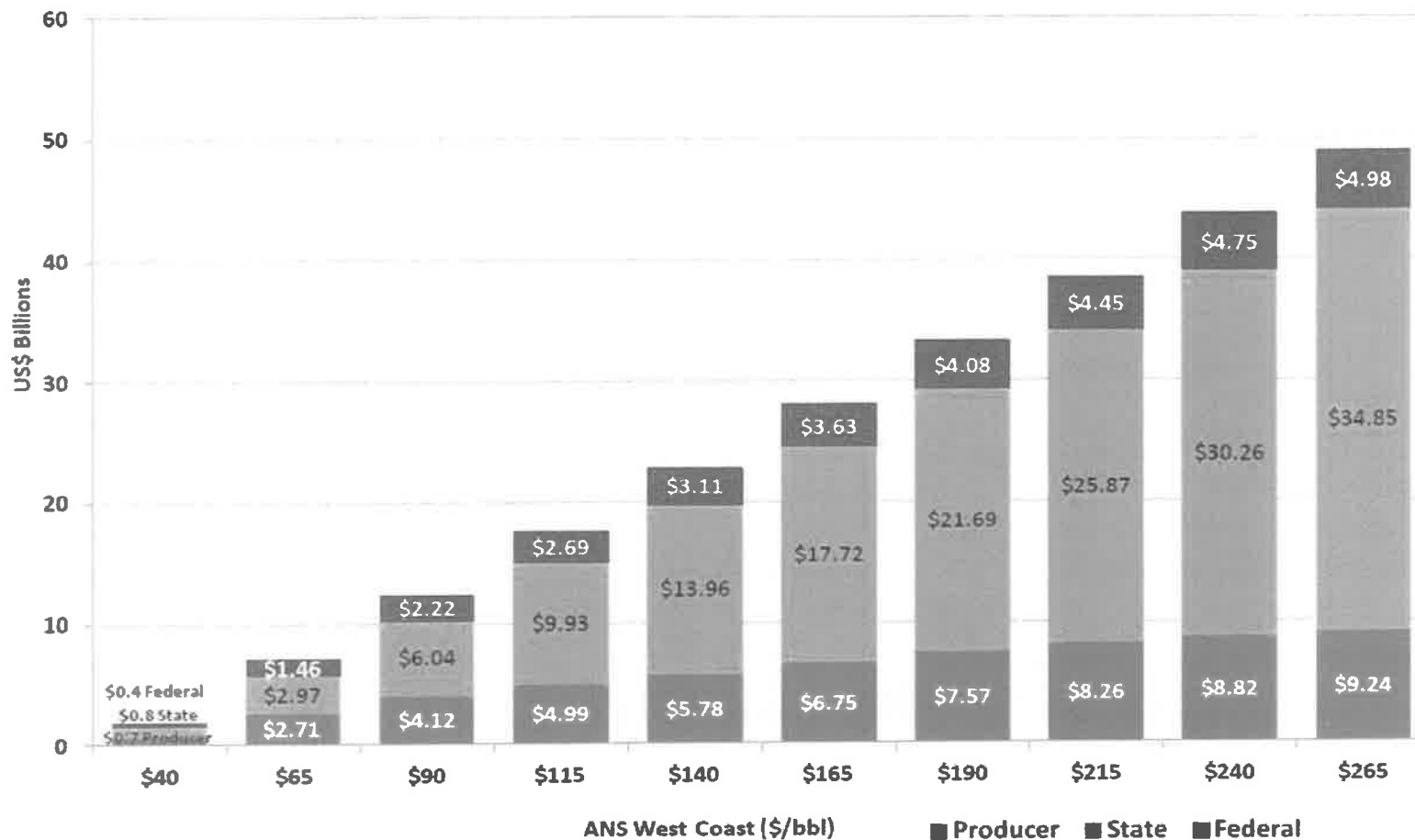
Using total lease expenditures for all companies



Profit defined as total gross value of all oil produced, less transportation costs and lease expenditures.  
 Assumes FY 2012 expenditures for all companies regardless of whether they have a tax liability: Transport costs of \$8.72/ bbl, Opex of \$2579 million (\$12.30 per total barrel), and Capex \$2743 million (\$13.08 per total barrel).



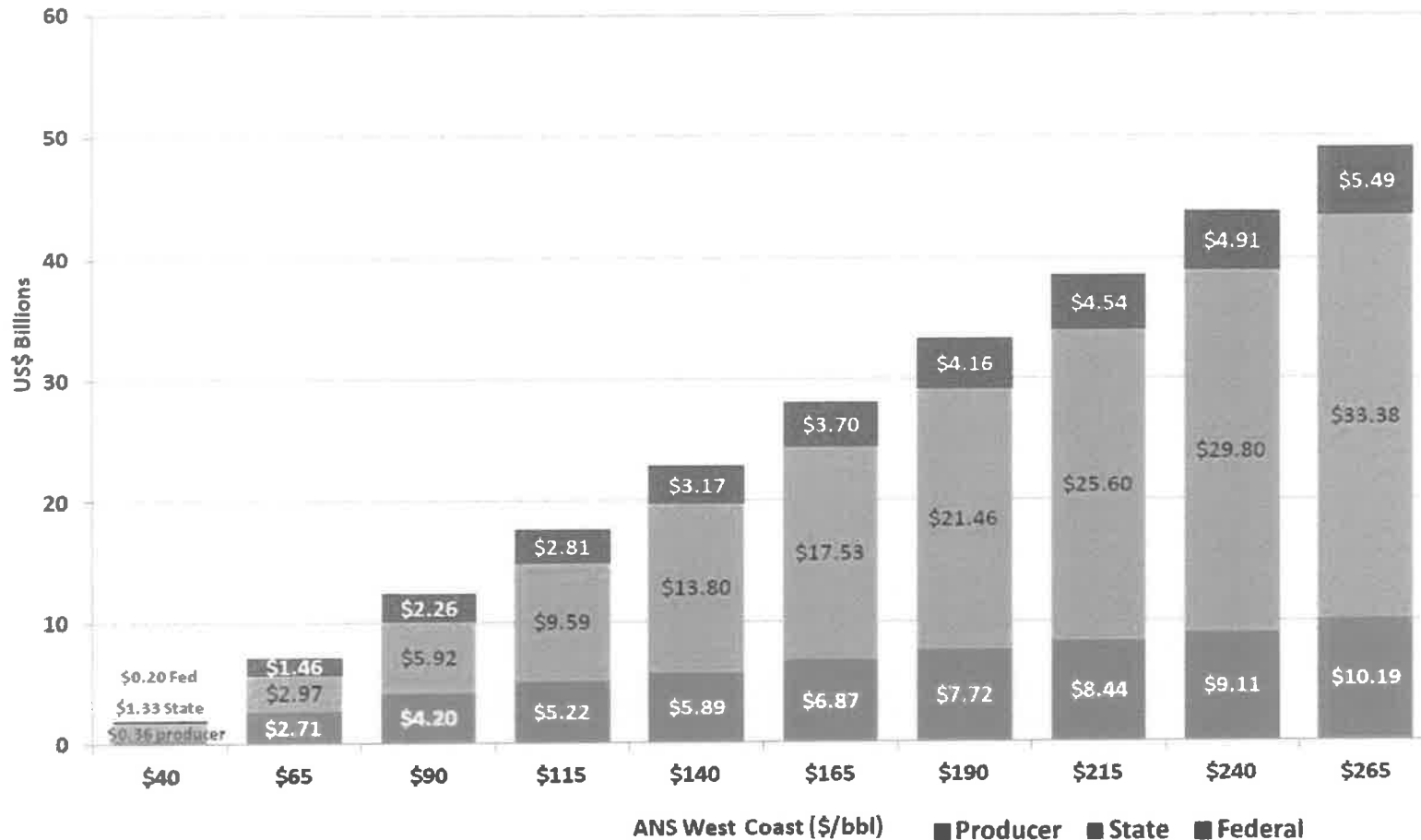
# Absolute Profit Split under ACES



Profit defined as total gross value of all oil produced, less transportation costs and lease expenditures.  
 Assumes FY 2012 production of .574 mmb/d, transport costs of \$8.72/bbl, opex of \$14.03 per taxable barrel, and capex of \$10.25 per taxable bbl.



# Absolute Profit Split under CSSB 192



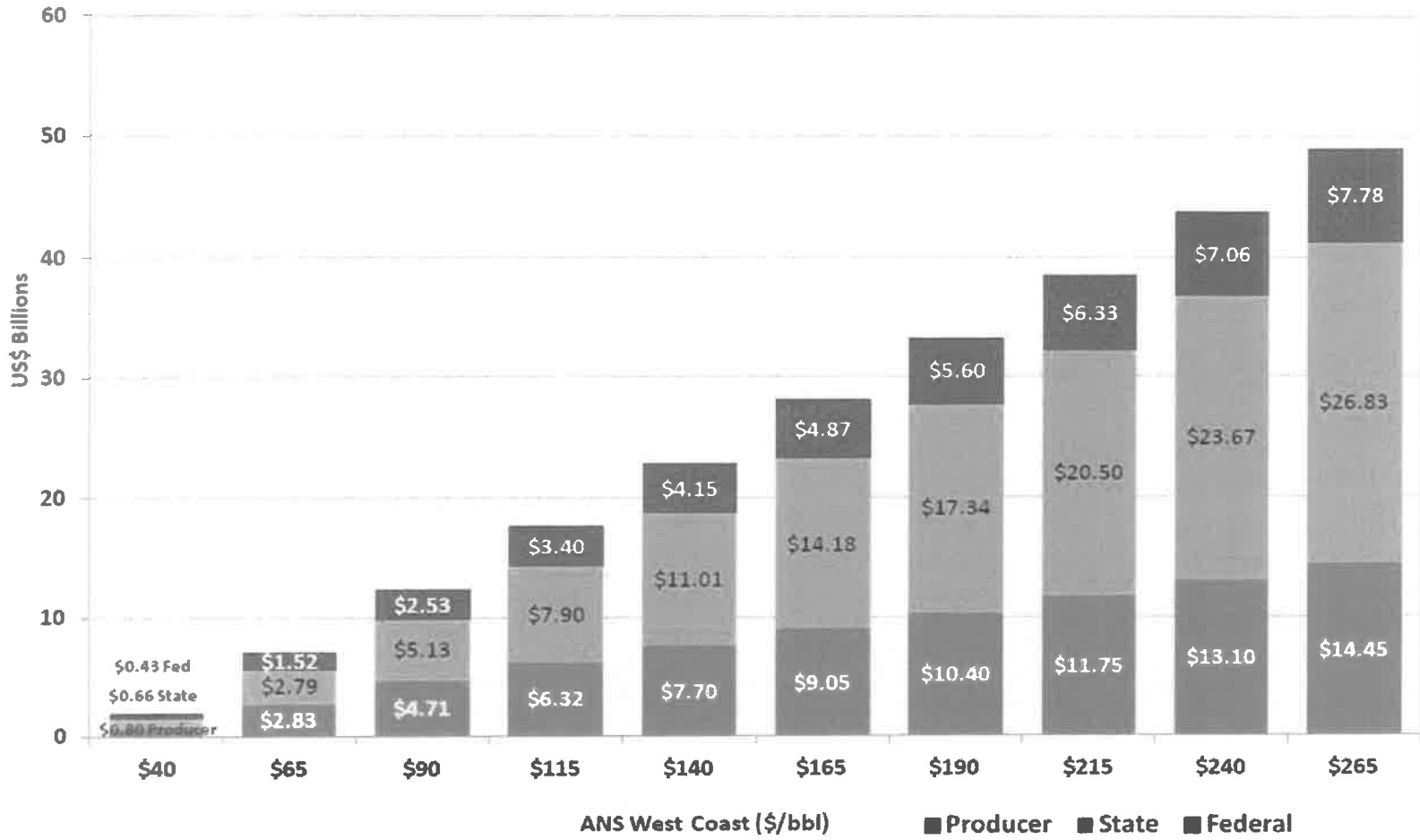
Profit defined as total gross value of all oil produced, less transportation costs and lease expenditures.

Assumes FY 2012 production of .574 mmb/d, transport costs of \$8.72/bbl, opex of \$14.03 per taxable barrel, and capex of \$10.25 per taxable bbl.

Alaska Department of Revenue



# Absolute Profit Split under CSHB 110(FIN)



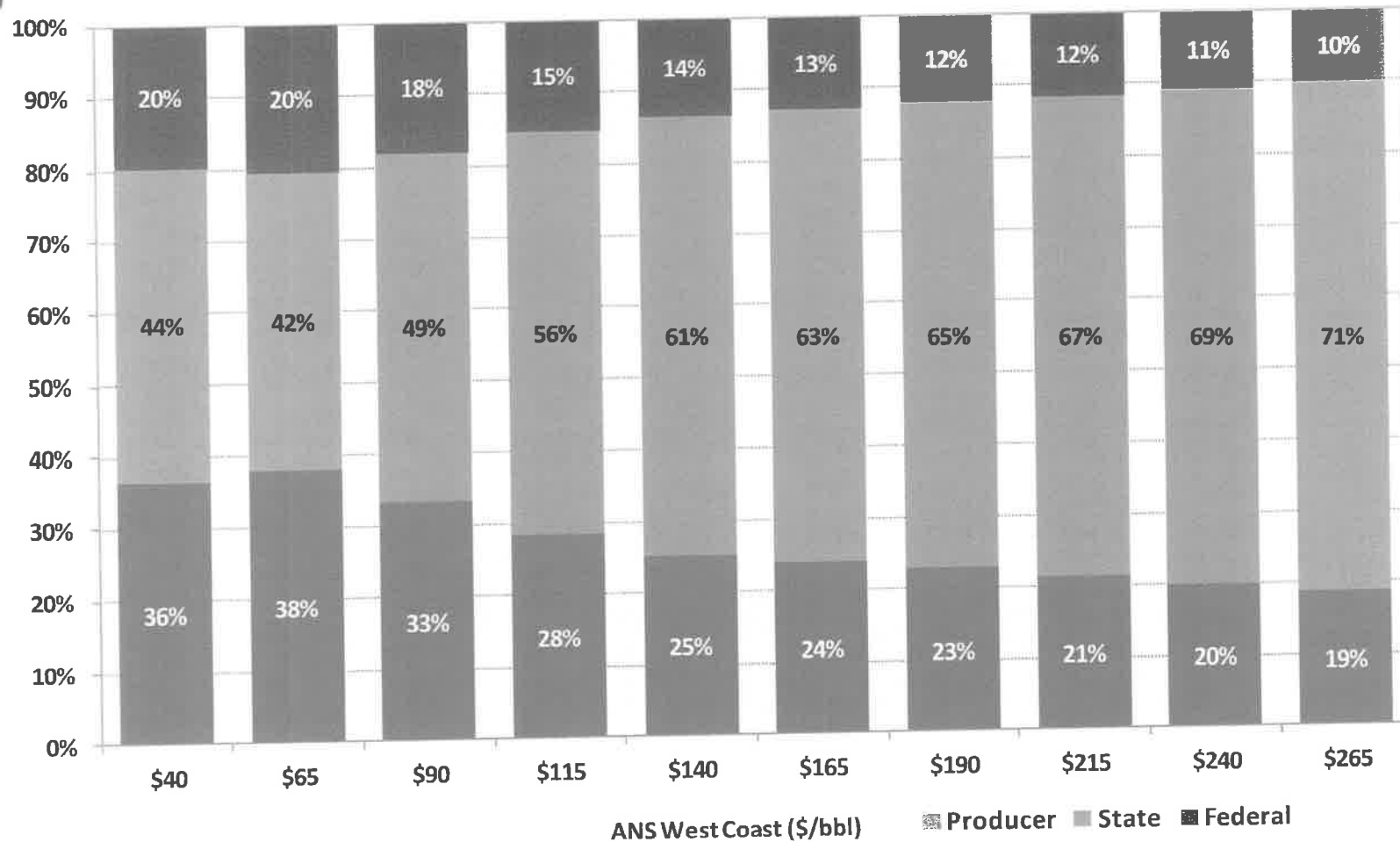
Profit defined as total gross value of all oil produced, less transportation costs and lease expenditures.

Assumes FY 2012 production of .574 mmb/d, transport costs of \$8.72/bbl, opex of \$14.03 per taxable barrel, and capex of \$10.25 per taxable bbl.

Alaska Department of Revenue



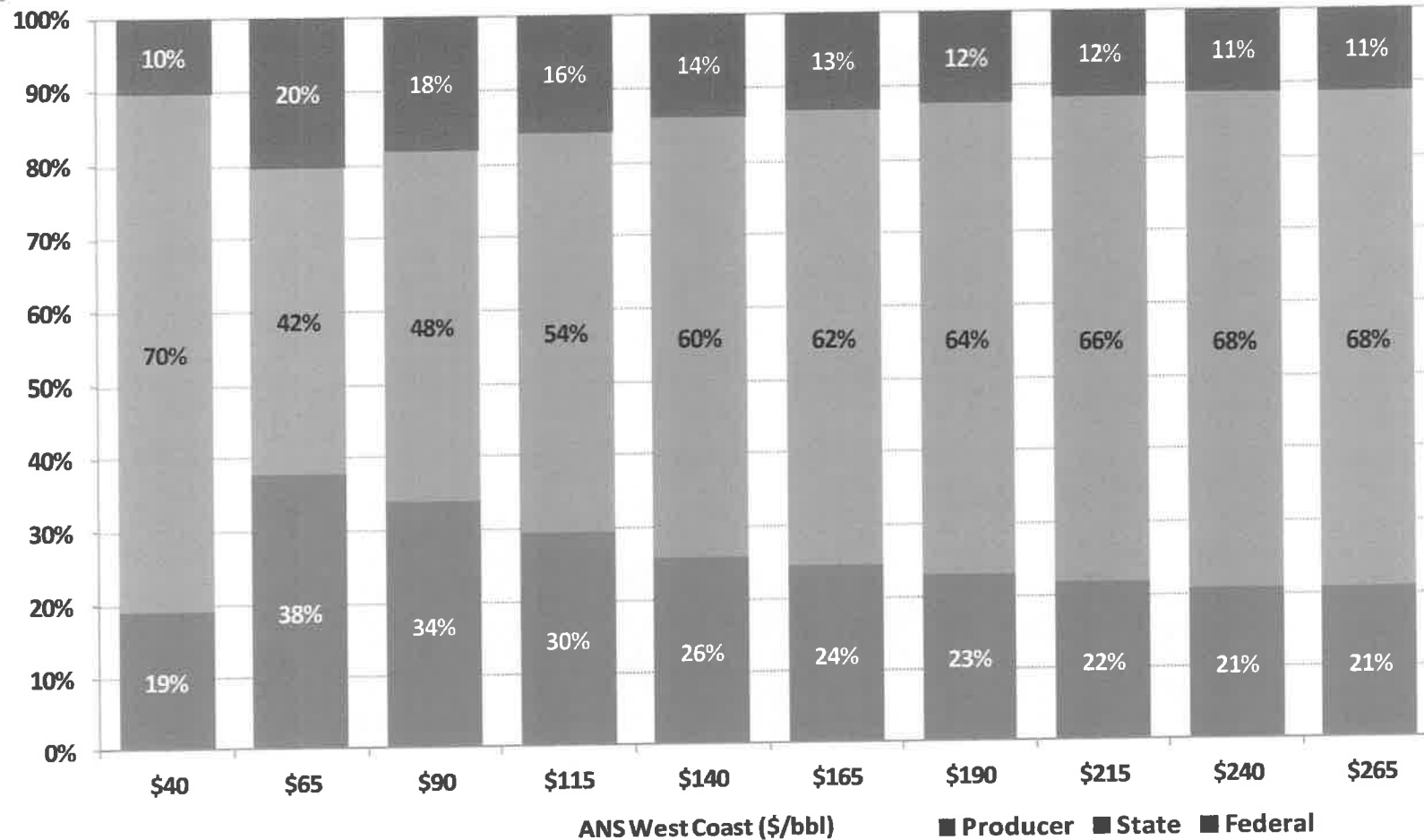
# Share of Profit under ACES



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 Alaska Department of Revenue



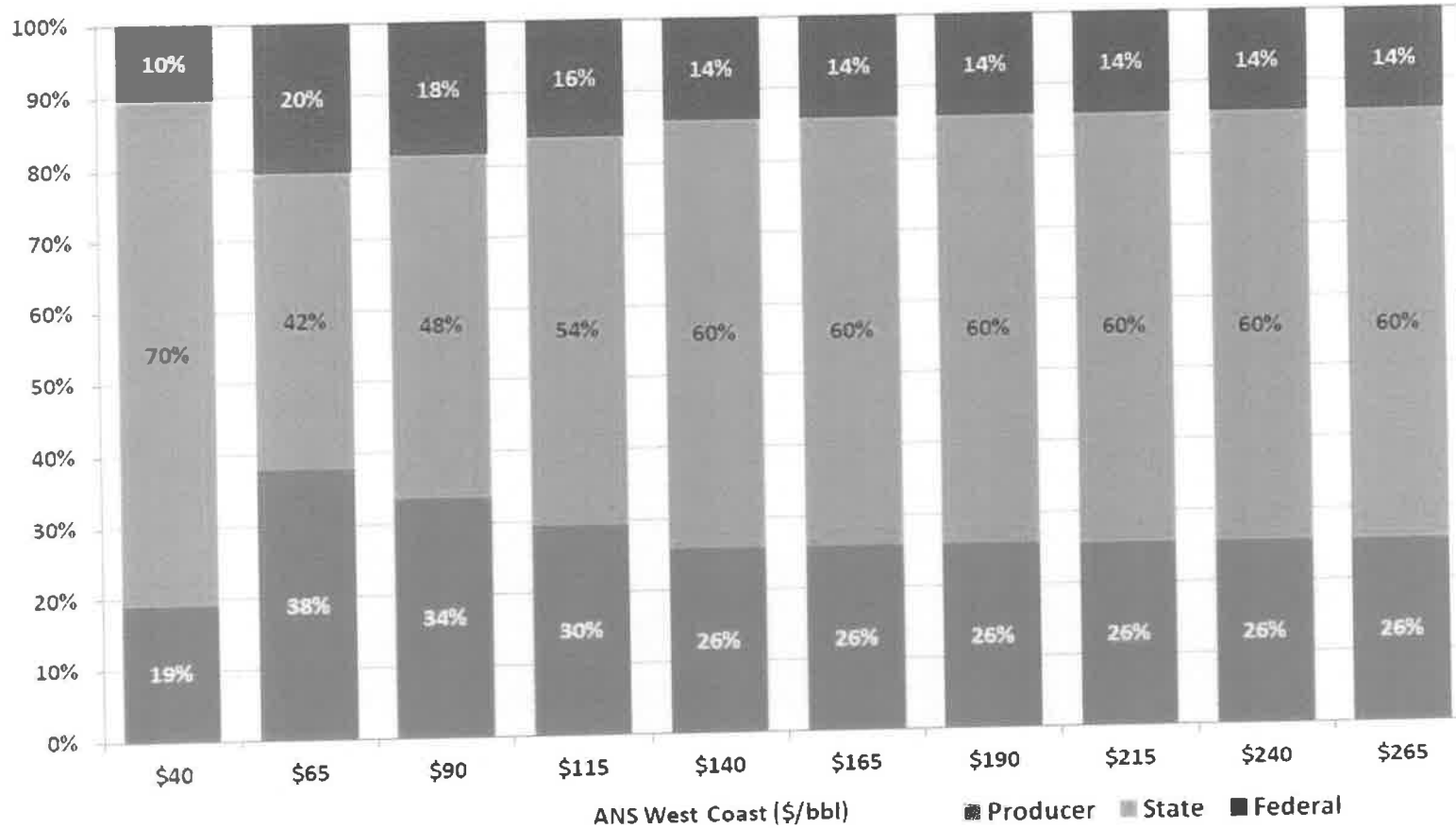
# Share of Profit under CSSB 192



Profit defined as total gross value of all oil produced, less transportation costs and lease expenditures. Assumes FY 2012 Transport costs of \$8.72/ bbl, Opex of \$14.03 per taxable barrel, and Capex of \$10.25 per taxable bbl. Assumes that 80% of production is impacted by 10% gross minimum tax with no credits allowed against gross tax.



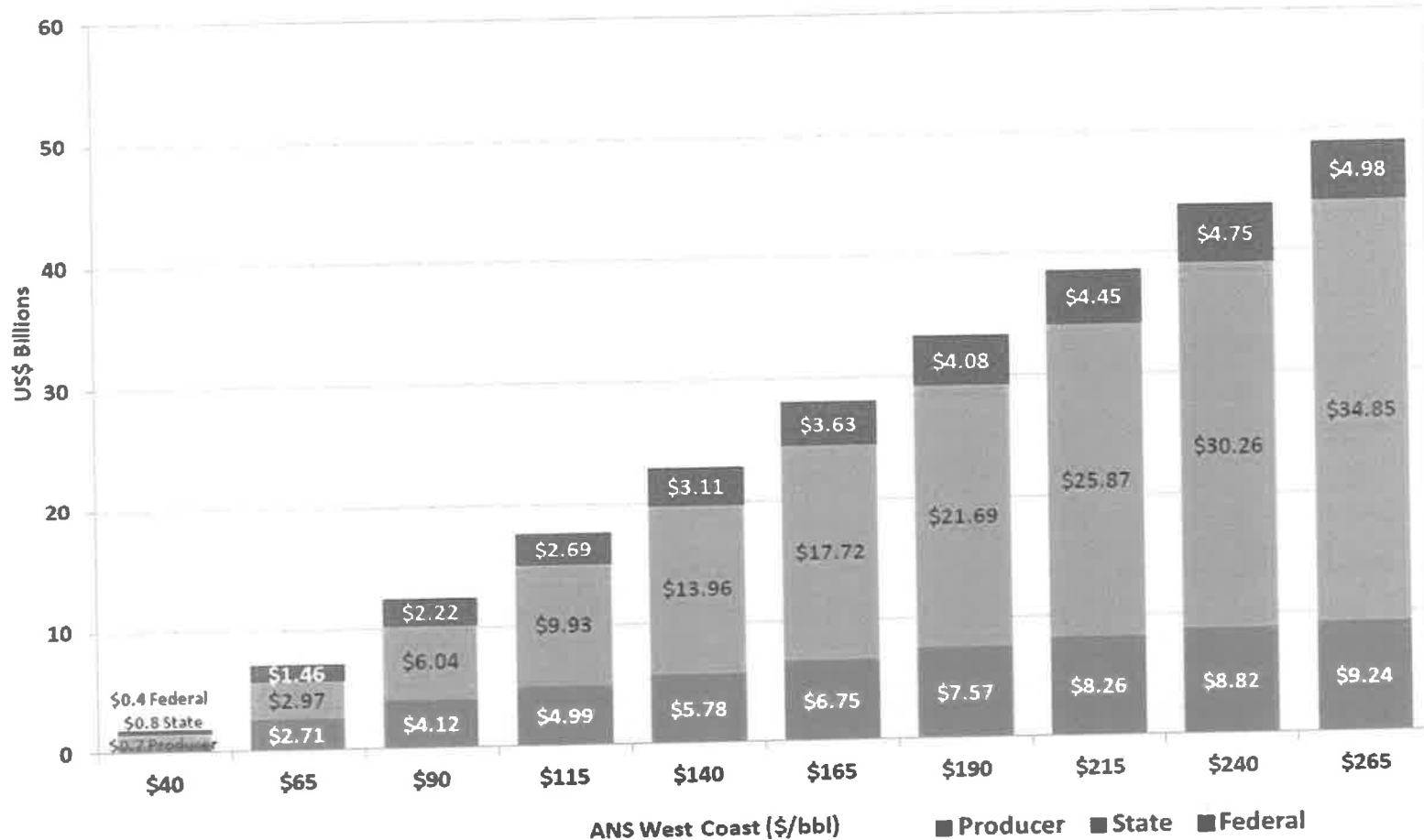
# Share of Profit under CSSB 192 with 50% Maximum Tax Rate



Profit defined as total gross value of all oil produced, less transportation costs and lease expenditures. Assumes FY 2012 Transport costs of \$8.72/ bbl, Opex of \$14.03 per taxable barrel, and Capex of \$10.25 per taxable bbl. Assumes that 80% of production is impacted by 10% gross minimum tax with no credits allowed against gross tax.



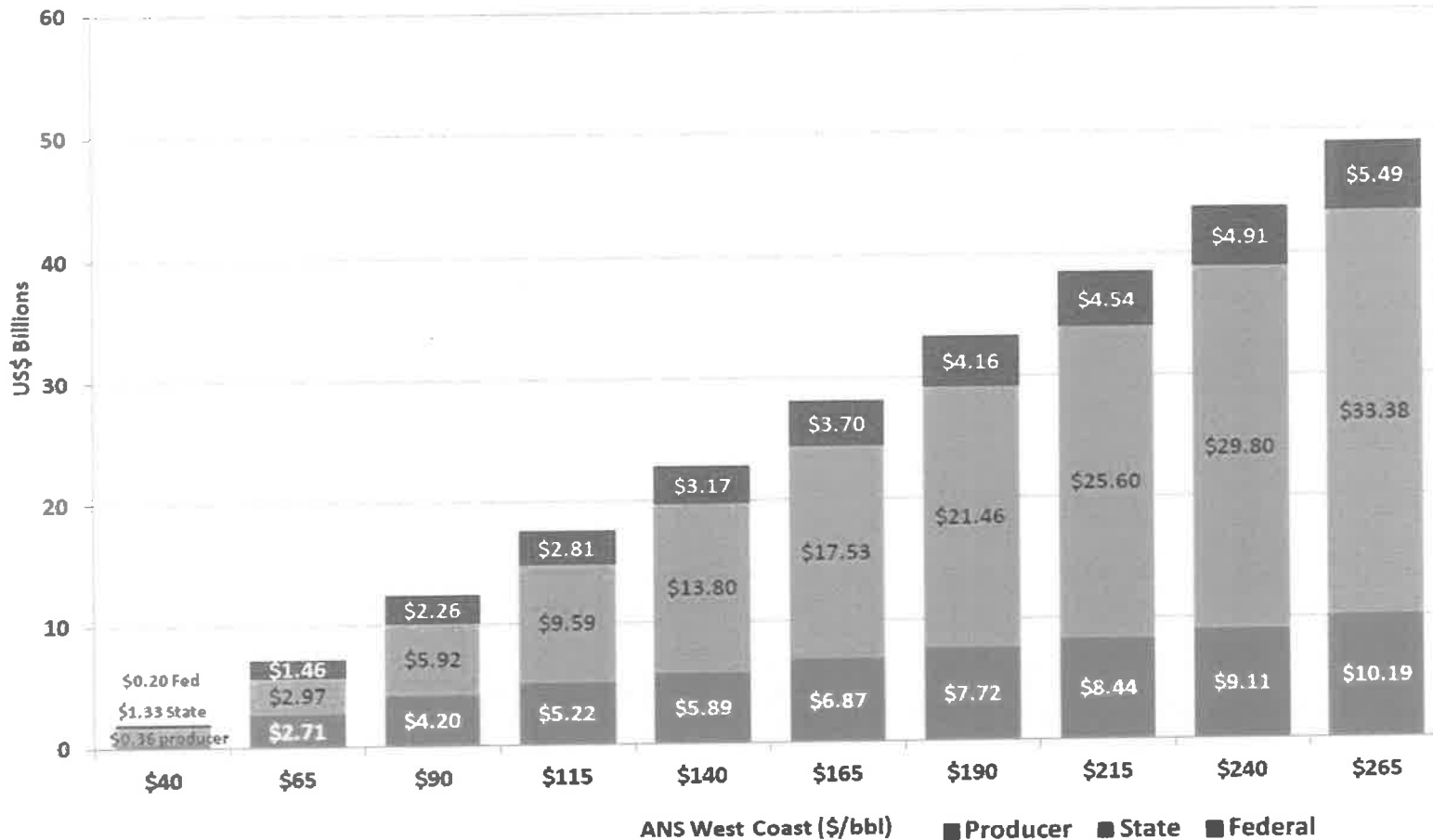
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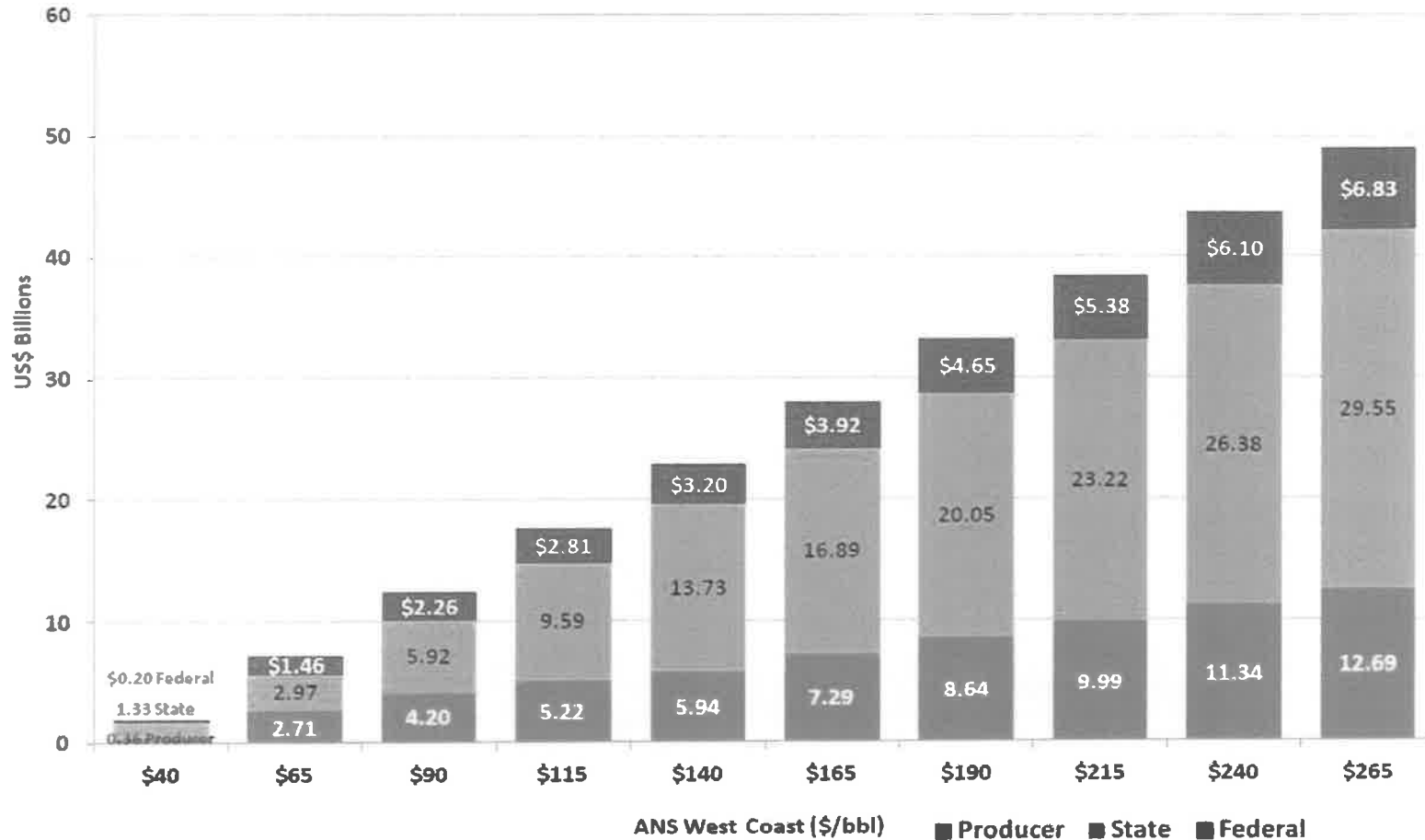
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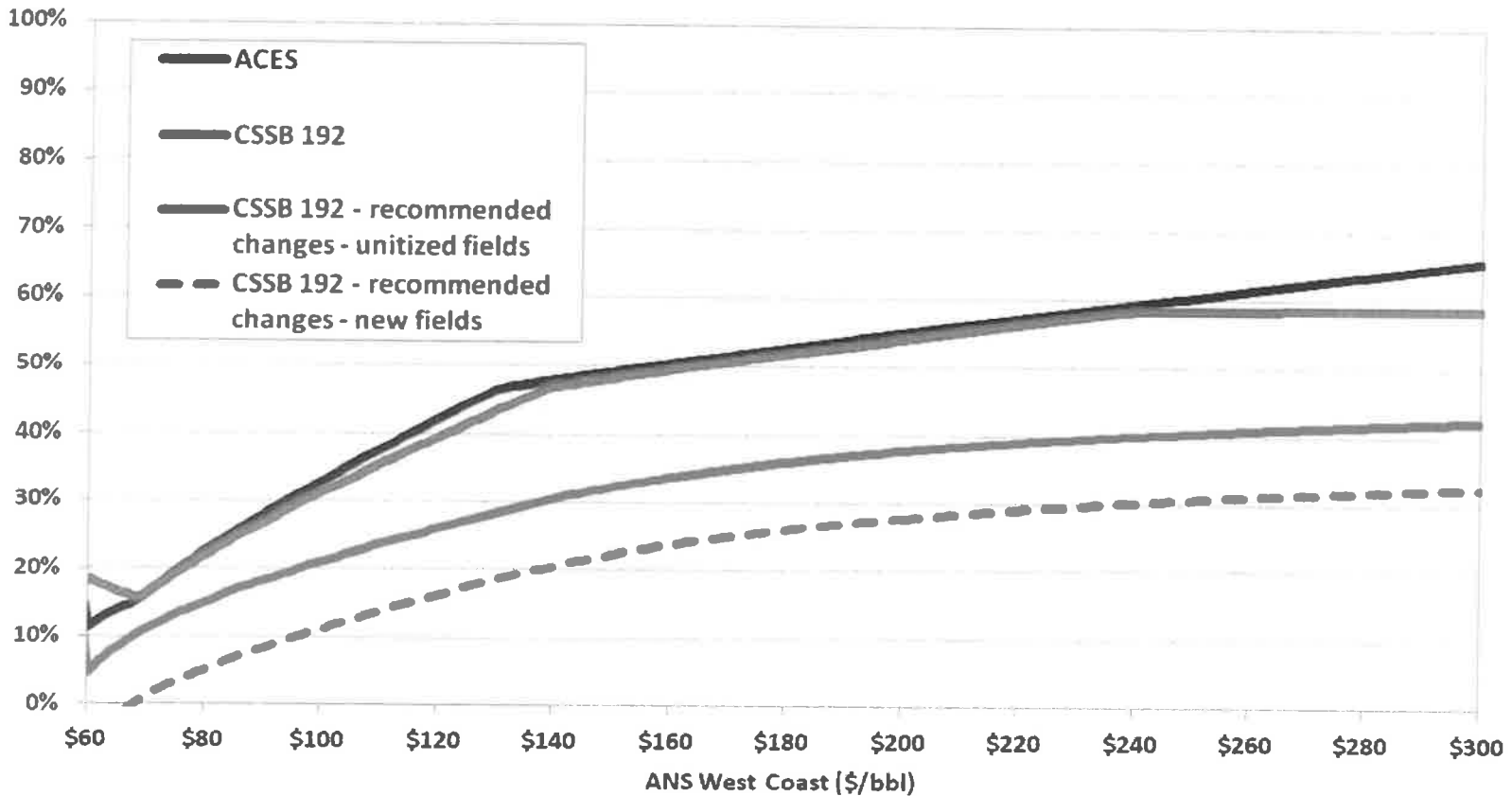
# Absolute Profit Split under CSSB 192 with 50% Maximum Tax Rate



Profit defined as total gross value of all oil produced, less transportation costs and lease expenditures. Assumes FY 2012 production of .574 mmb/d, transport costs of \$8.72/bbl, opex of \$14.03 per taxable barrel, and capex of \$10.25 per taxable bbl. Assumes that 80% of production is impacted by 10% gross minimum tax with no credits allowed against gross tax.



# Effective Production Tax Rate (Post-Credits) using Total Lease Expenditures for all companies



Assumes FY2012 expenditures for all companies, regardless of whether they have a tax liability: transport costs of \$8.72/bbl, Opex of \$14.06 per taxable barrel, and Capex of \$14.95 per taxable bbl.

9.

**Industry  
Testimony  
March 21, 2012**

# Senate Finance

## Discussion of CSSB192

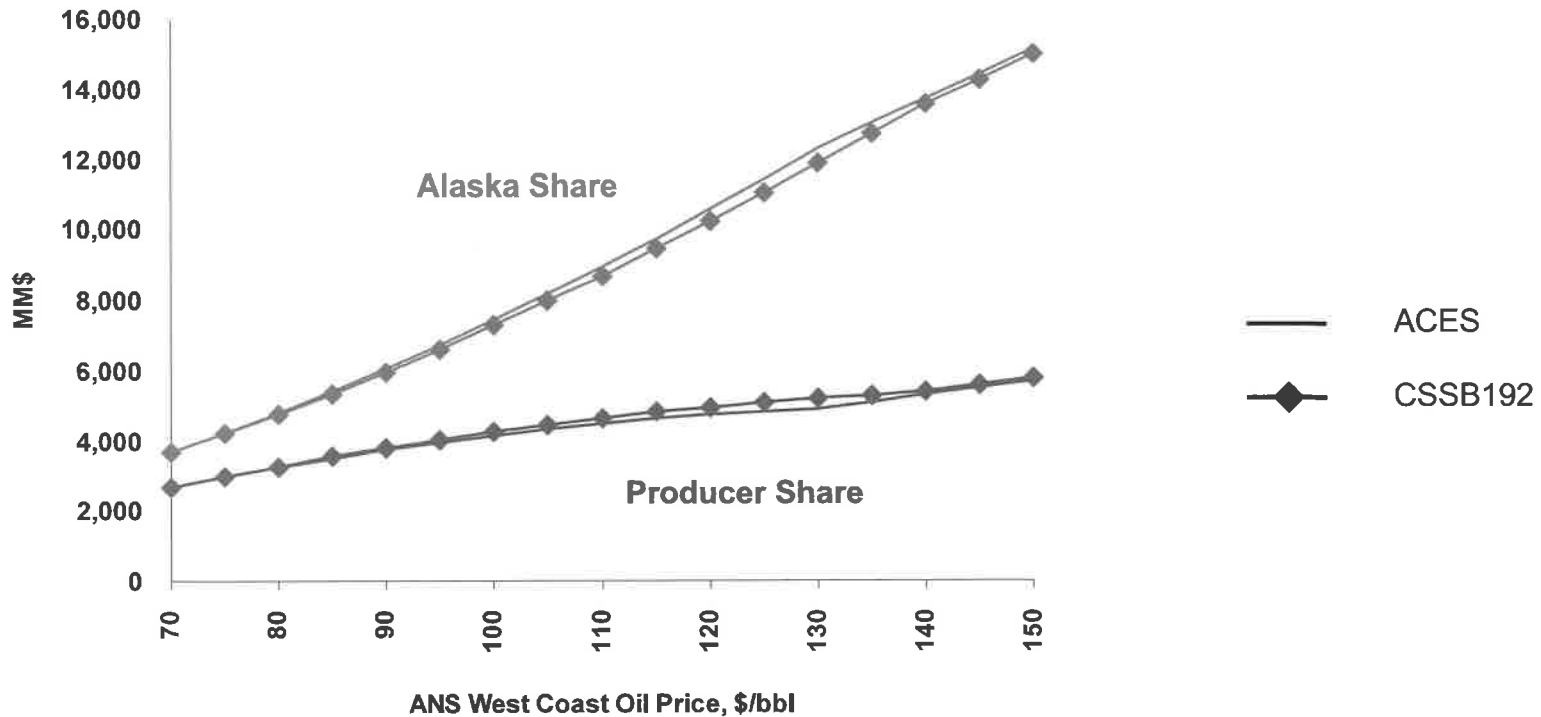
Bob Heinrich, VP Finance  
Scott Jepsen, VP External Affairs  
**ConocoPhillips Alaska**

March 21, 2012

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- CSSB192 provisions
  - Progressivity change
  - Discretionary production “incentive”
  - Increased gross minimum tax
  - Oil information system
  - Decoupling
- Framework for modifications

# Progressivity Change



- 0.05% decrease in progressivity provides only minimal impact, and only over narrow price range
- 60% tax cap has no impact below ~\$230/bbl
- PFC Energy: “The impact of the reduction in the progressivity ... is limited to around a single percentage point of government take at \$100 ANS crude”

0.05% progressivity reduction does not improve the investment climate

# Discretionary Production “Incentive”

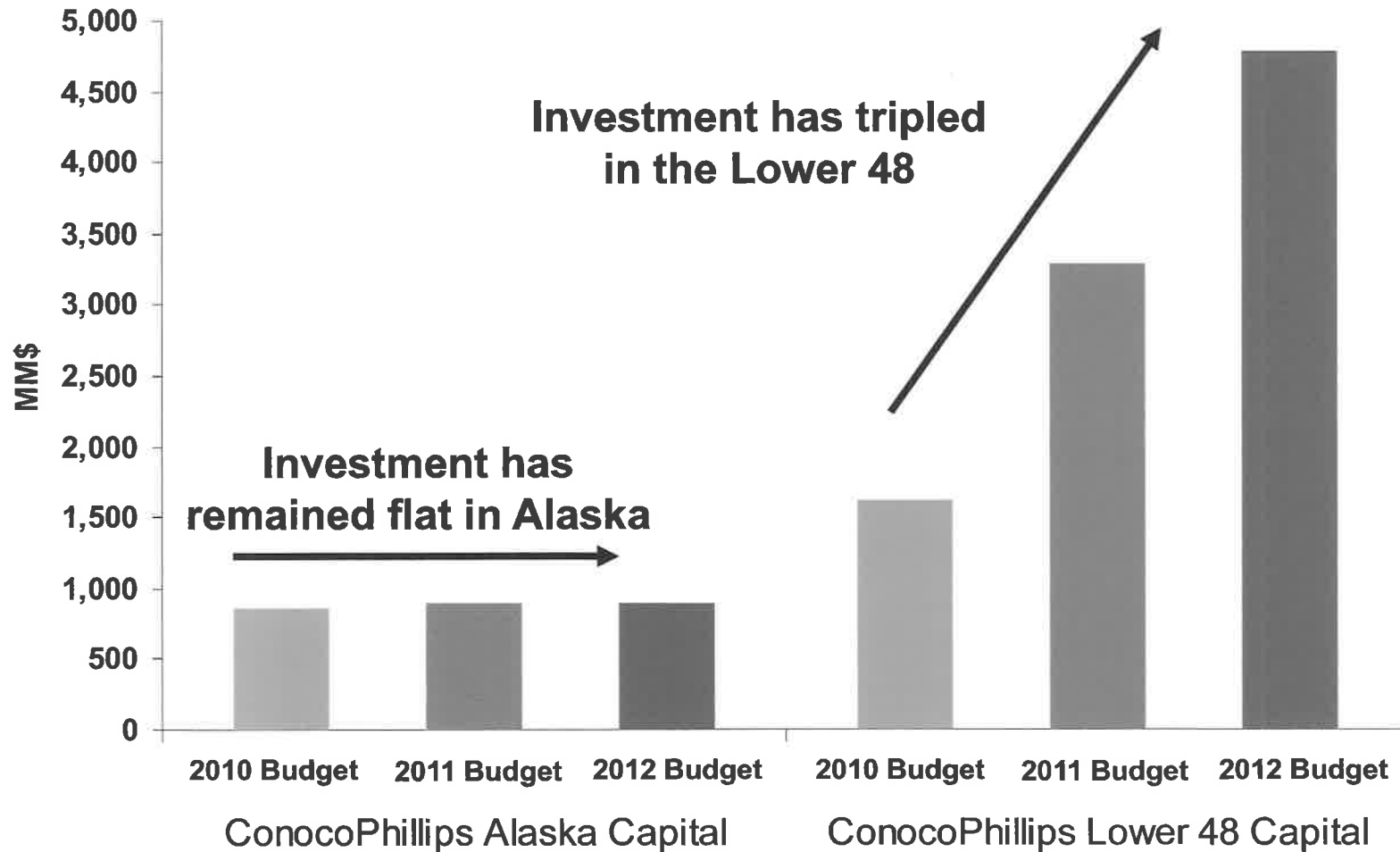
- Does not incentivize the significant investments required just to offset decline
- Production aggregated by producer - no benefit derived by new satellite if production offset by decline at other fields
- For the short lived benefit period, the PTV reduction impact is immaterial
- Discretionary – can’t plan for it
- PFC Energy: “the impact of the \$10 [PTV] allowance for “new oil” is almost undetectable”

Discretionary production “incentive” does not improve the investment climate

- Increased gross minimum tax
  - A minimum tax is already in place under ACES
  - Increased minimum tax triggers at higher price than under ACES
  - Impact is increased taxes at low to moderate oil prices
- Oil information system
  - Provides for a sweeping list of data to be warehoused
    - Burdensome and potentially duplicative
    - Includes data considered to be trade secrets
    - Confidentiality concerns
  - Creates unrealistic expectations about public access to specific data
- Decoupling
  - Administratively burdensome
  - Cost allocation mechanism unknown – left to discretion of DOR
  - Implementation should be tied to major gas sales

These provisions do not improve the current investment climate

# ConocoPhillips Capital Allocation



Investment flows where investor has upside

# Will Alaska Benefit From Reduced Oil Taxes?

ConocoPhillips  
Alaska

Last spring, ConocoPhillips made the following commitments to Alaska if the business environment is improved:

- We will pursue increased drilling activity on the North Slope
- We will aggressively pursue more satellite developments at Alpine and Kuparuk
- We will work with partners to develop major projects at Prudhoe Bay
- We will proactively pursue other projects that can move the needle on oil production

## An Open Letter to All Alaskans from ConocoPhillips

### Our Commitment to Moving Alaska Forward

Dear Alaskans:

The oil industry in Alaska is at a crossroads. The amount of oil in the Trans-Alaska Pipeline is declining at a faster rate than projected even a year ago. State and federal officials are, for the first time, talking openly about the challenges with TAPS low flow in light of the recent shut-down of TAPS.

No other state's production has declined more than Alaska in the past eight years. But it doesn't have to be that way. The oil industry and the state of Alaska must work together now to put more oil in the pipeline and bridge the more than 10-year gap between now and when oil from offshore and other sources can hopefully reach TAPS.

Governor Parnell has introduced a bill, HB 110/SB 49, to reduce oil taxes in an effort to restart development and create new jobs. However, some have questioned the oil industry's commitment to Alaska.

In Alaska this week, ConocoPhillips reinforced this commitment to the state. If the business environment is changed, we at ConocoPhillips will do more to help bring Alaska's challenged oil to the market.

We will increase our drilling activity on the North Slope.

We will proactively pursue more North Slope projects that can move the needle on oil production while employing Alaskans and creating new opportunities for Alaska businesses.

We will work with BP and ExxonMobil to advance significant projects like Gas Paria Processing (GPP) and IPAD at Prudhoe Bay.

We will aggressively pursue more satellite developments at both Kuparuk and Alpine.

Our company believes Governor Parnell's goal of producing 1 million barrels of oil per day is a goal around which we can all unite.

At ConocoPhillips, we believe in the potential that Alaska has to offer. We have demonstrated our commitment to the environment by continuing to operate in the cleanest and safest way we can. We have shown a long history of investment, both human and financial, to bring the resources of this great state to the market. We have stood with many Alaska companies, including Alaska Native corporations, to build an oil and gas industry that has provided many jobs to Alaskans.


If the Legislature provides for an effective date of 2012, ConocoPhillips will do our part to accelerate our activity on the North Slope.

Alaska has tremendous resource potential, and we at ConocoPhillips have over 50 years in Alaska in solving technical and environmental challenges associated with oil development. We support improving the investment climate and believe changing oil taxes will lead to a better future with more production and jobs for Alaska families than the current path we are on.

Sincerely,

  
Trond-Erik Johansen

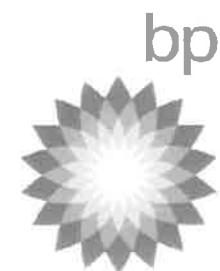
President  
ConocoPhillips Alaska Inc.

  
Jim Mulva

Chairman and Chief Executive Officer  
ConocoPhillips

  
Alaska's Oil & Gas Company

- CSSB192 as currently proposed does not improve the investment climate
- Focus the legislation on elements that will make the Alaska North Slope an attractive place for investment
  - Significantly reduce rate of progressivity or incorporate bracketing
  - If decoupling is included, make implementation contingent upon major gas sales
  - Meaningful change must include the legacy fields – this is where the largest potential production gains reside
- Changes on same order of magnitude as HB110 will lead to more investment and production



# **BP Testimony to Senate Finance**

**Damian Bilbao, Head of Finance, Developments and Resources**

**March 21, 2012**

# Alaska's Future

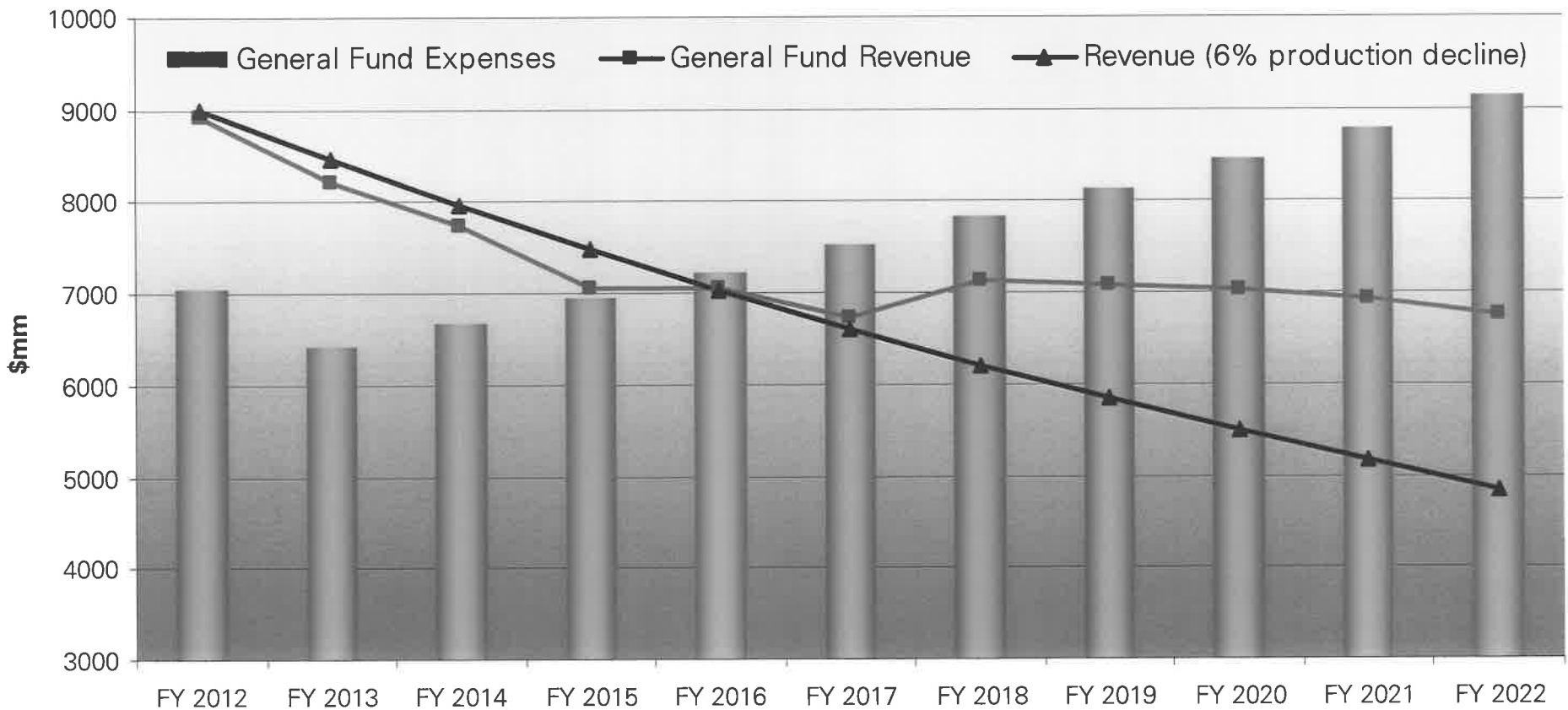


- ACES is not working
- More investment is needed to increase production
- Policy must focus on long-term solution

# Declining production is a crisis for the State



**GF Revenue versus Appropriations FY12 to FY 22**  
**Fall 2011 Revenue Forecast With 4% GF Growth beginning in FY2014**



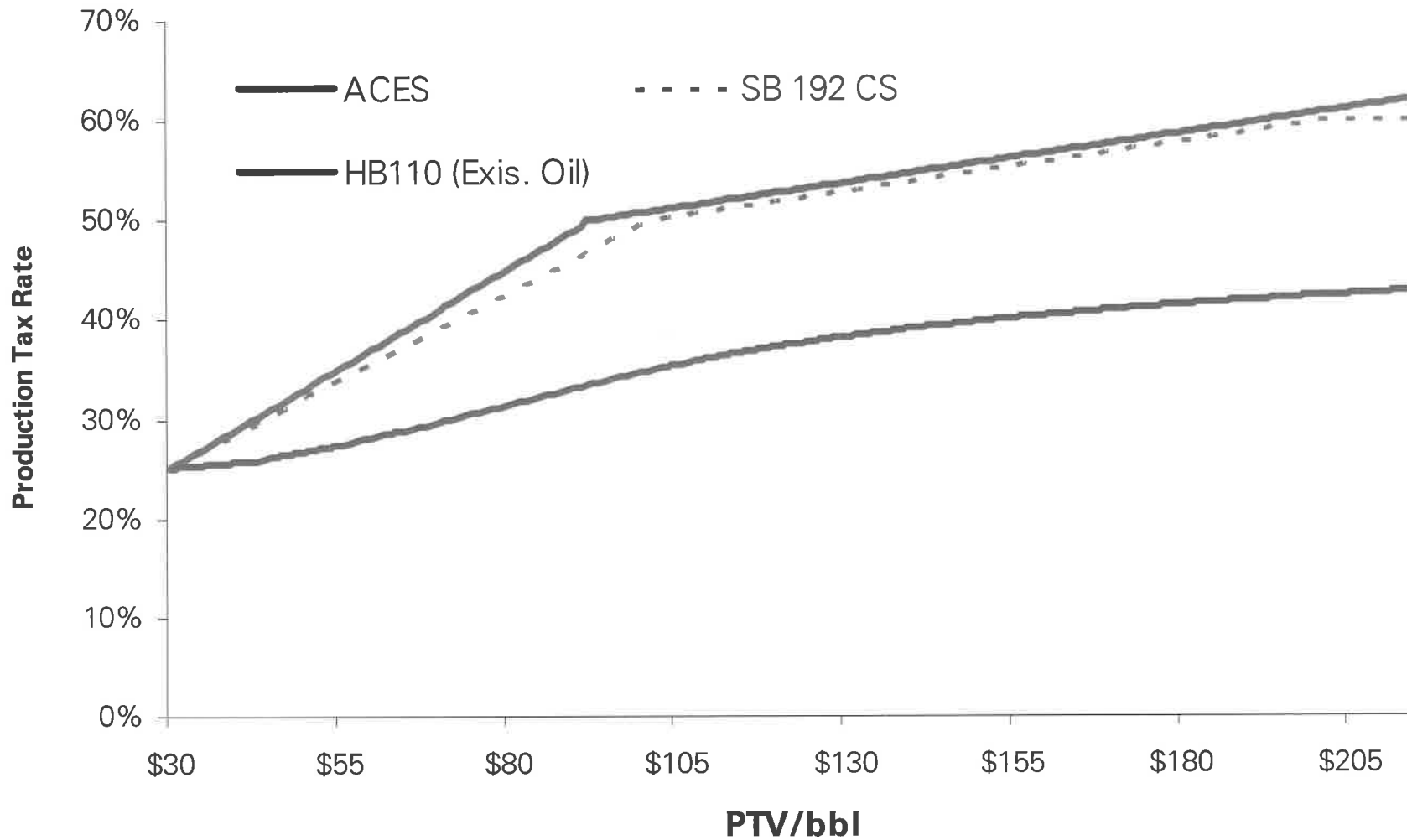
Source: Office of Management and Budget, Executive Summary FY2013 10-Year Plan

## State's experts – ACES is not working



- Pedro Van Meurs – ACES makes AK non-competitive internationally. “No large and attractive projects available in Alaska under current fiscal terms for major oil companies. Attractive opportunities outside Alaska.” PVM, February 13, 2012, pg 22
- ACES encourages harvest, not growth. “ACES – Effective as a Harvest Area Fiscal Regime” PFC, March 15, 2012, pg 28
- AOGCC - development drilling is down

# CSSB 192 (Senate Resources) is not the answer



# CSSB 192 is not the solution



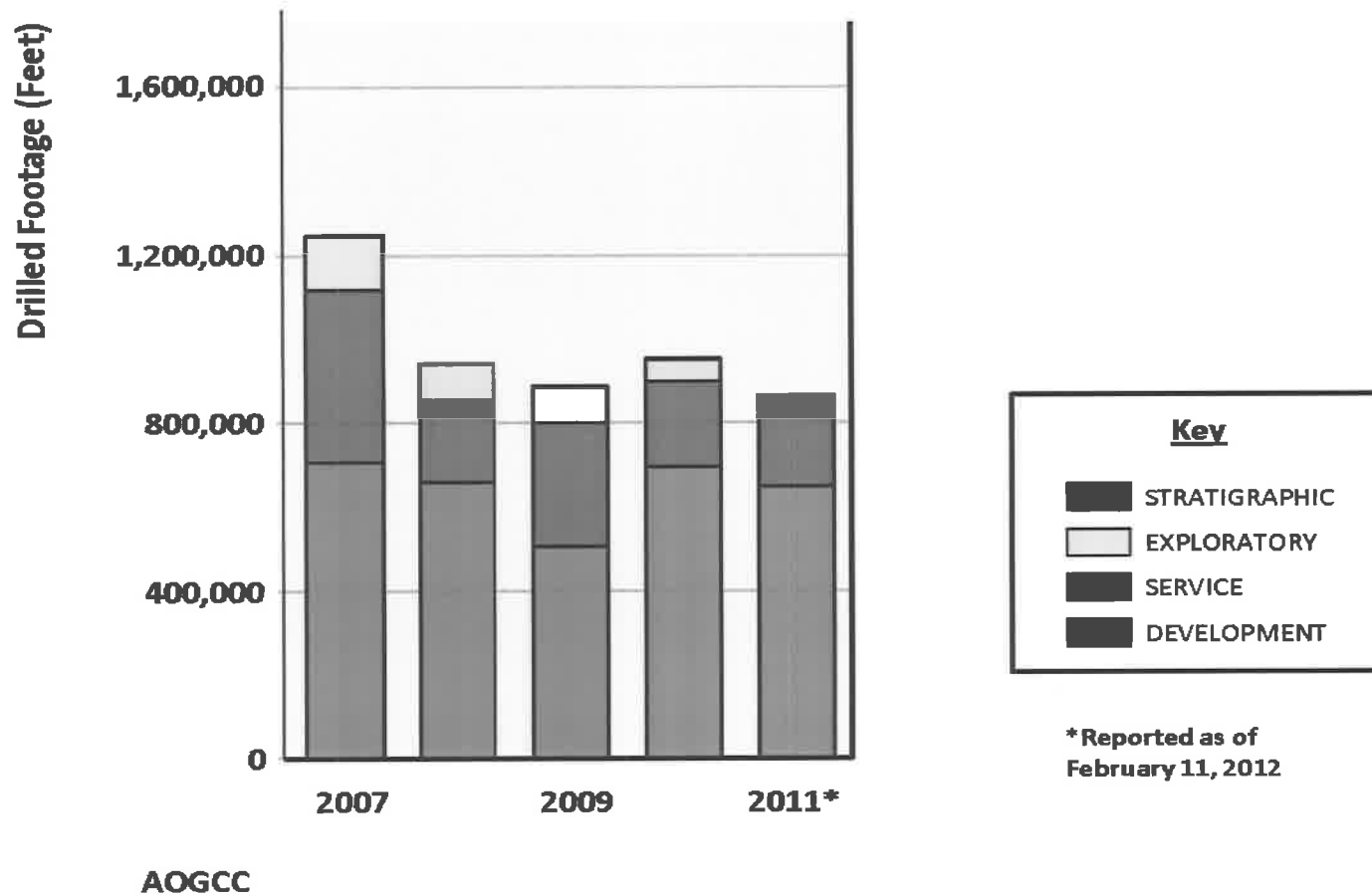
Component	Description	Meaningful	Explanation
Progressivity	Changes progressivity from 0.4% to 0.35%, maximum of 60%	NO	The impact of the reduction in the progressivity is limited to around a single percentage point of government take at \$100 ANS crude (PFC to Senate Finance, March 15, 2012, page 51)
<b>New Production</b>	<b>\$10 off PTV for exceeding production target</b>	<b>NO</b>	<b>The impact of the \$10 allowance for "new oil" is almost undetectable. (PFC to Senate Finance, March 15, 2012, page 52)</b>
Minimum Tax	Higher of 10% GVPP or ACES	NO	A tax increase will not increase investment. Huge tax increase at lower prices (DOR to Senate Finance, March 14, 2012, pg12)
<b>Decoupling</b>	<b>De-links oil and gas for purposes of allocating expenses</b>	<b>NO</b>	<b>The focus now must be on the light oil business that is the foundation for all else</b>
Petroleum Information Management System	Data collection for information reported to DOR, DNR, DL&WFD	NO	Many administrative and confidentiality challenges, due process

# Alaska's Future



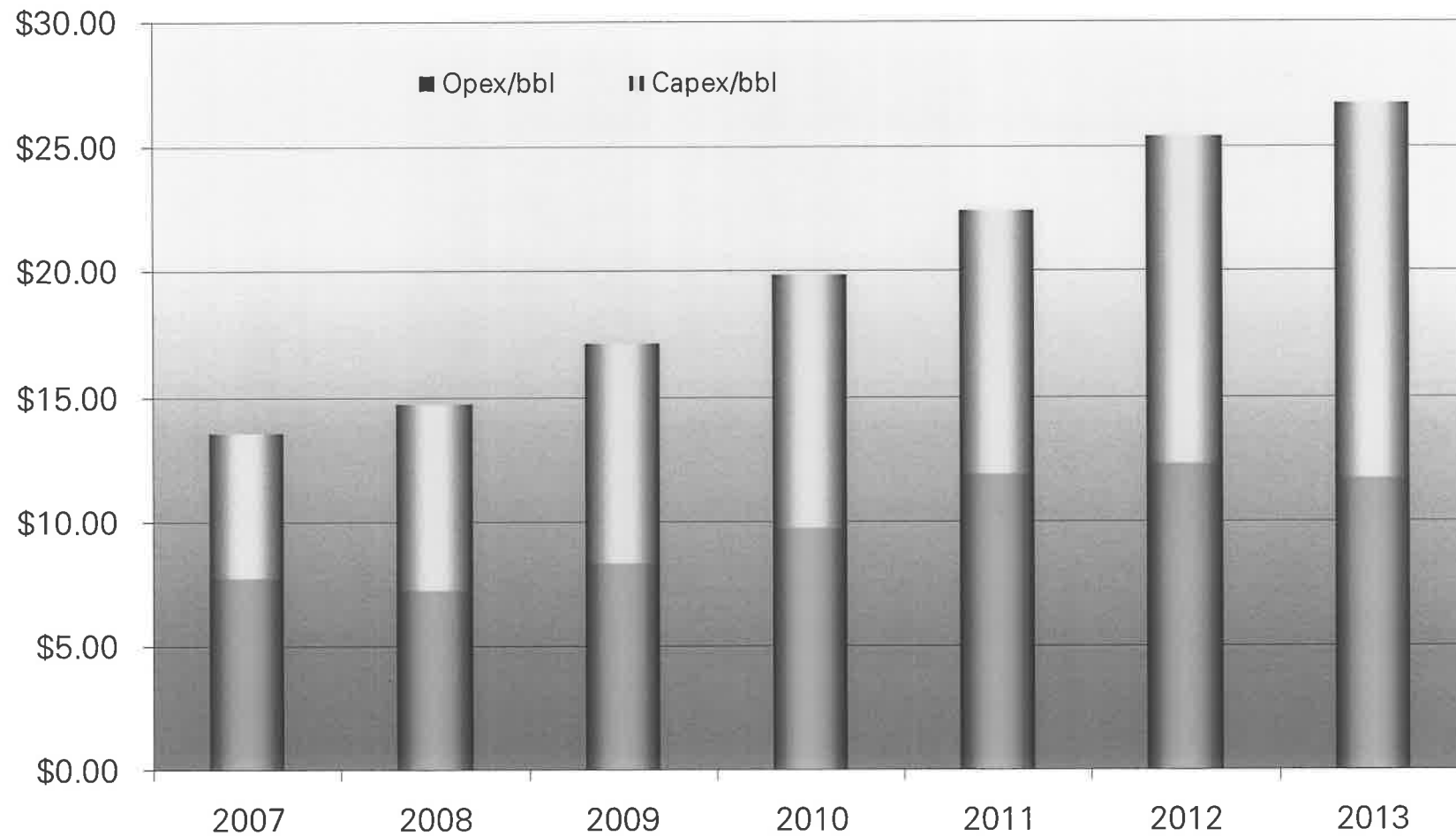
- ACES is not working
- More investment is needed to increase production
- Policy must focus on long-term solution

# Drilling activity is challenged by ACES



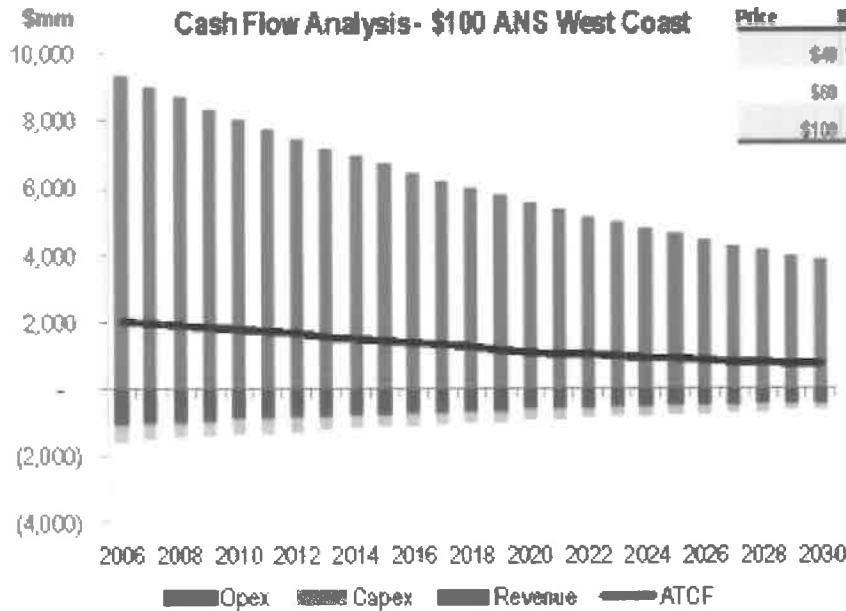
Source: AOGCC testimony to Senate Resources 2/14/2012

# Costs continue to rise



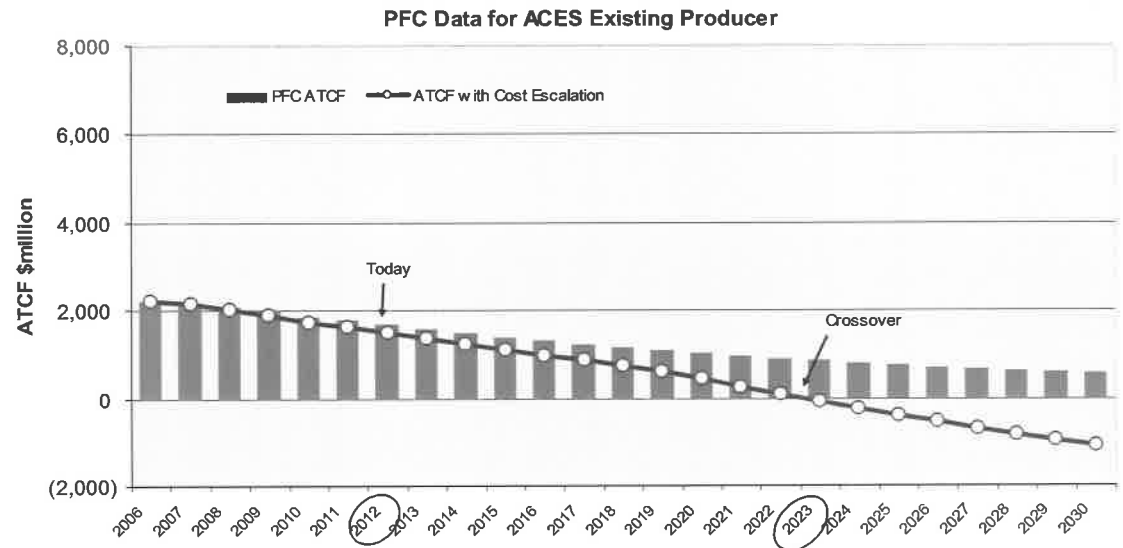
Source: DOR Revenue Source Book - Fall Forecasts

# Base business is challenged

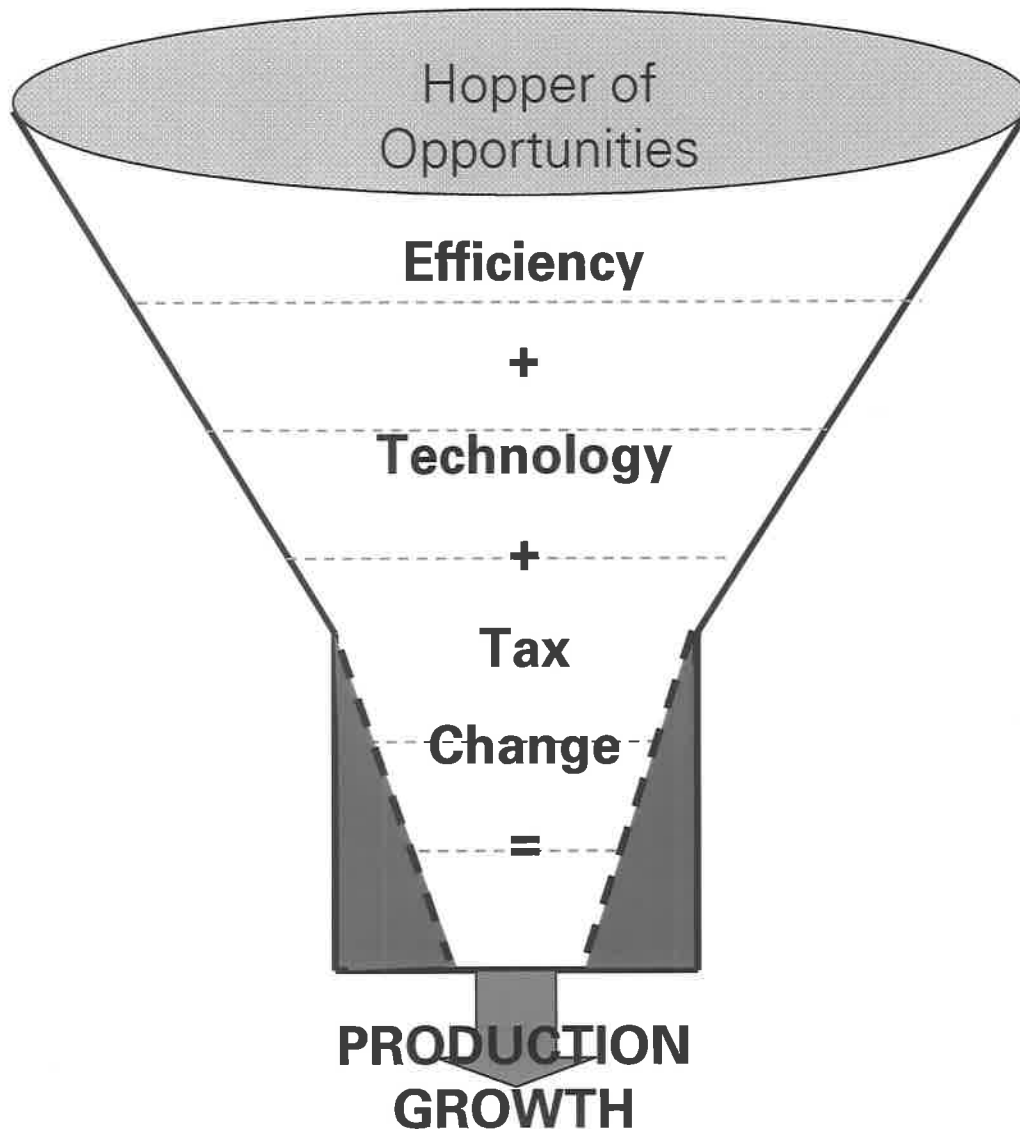


- PFC assumed at flat unit lifting costs (\$12/bbl)
- Actual lifting costs more than double PFC assumption

Source: PFC Energy, Slide 17, Senate Finance, March 15, 2012



# We have good rocks, but.....



- Healthy base business
- Brightwater, Multi-lateral drilling, Lo Sal, etc.
- \$5 billion in new investment
  - Prudhoe I Pad
  - Kuparuk Eastern NEWS
  - Prudhoe Sag @ scale
  - Add'l drilling in legacy fields

# Alaska's Future



- ACES is not working
- More investment is needed to increase production
- Policy must focus on long-term solution

## The solution is a long-term policy

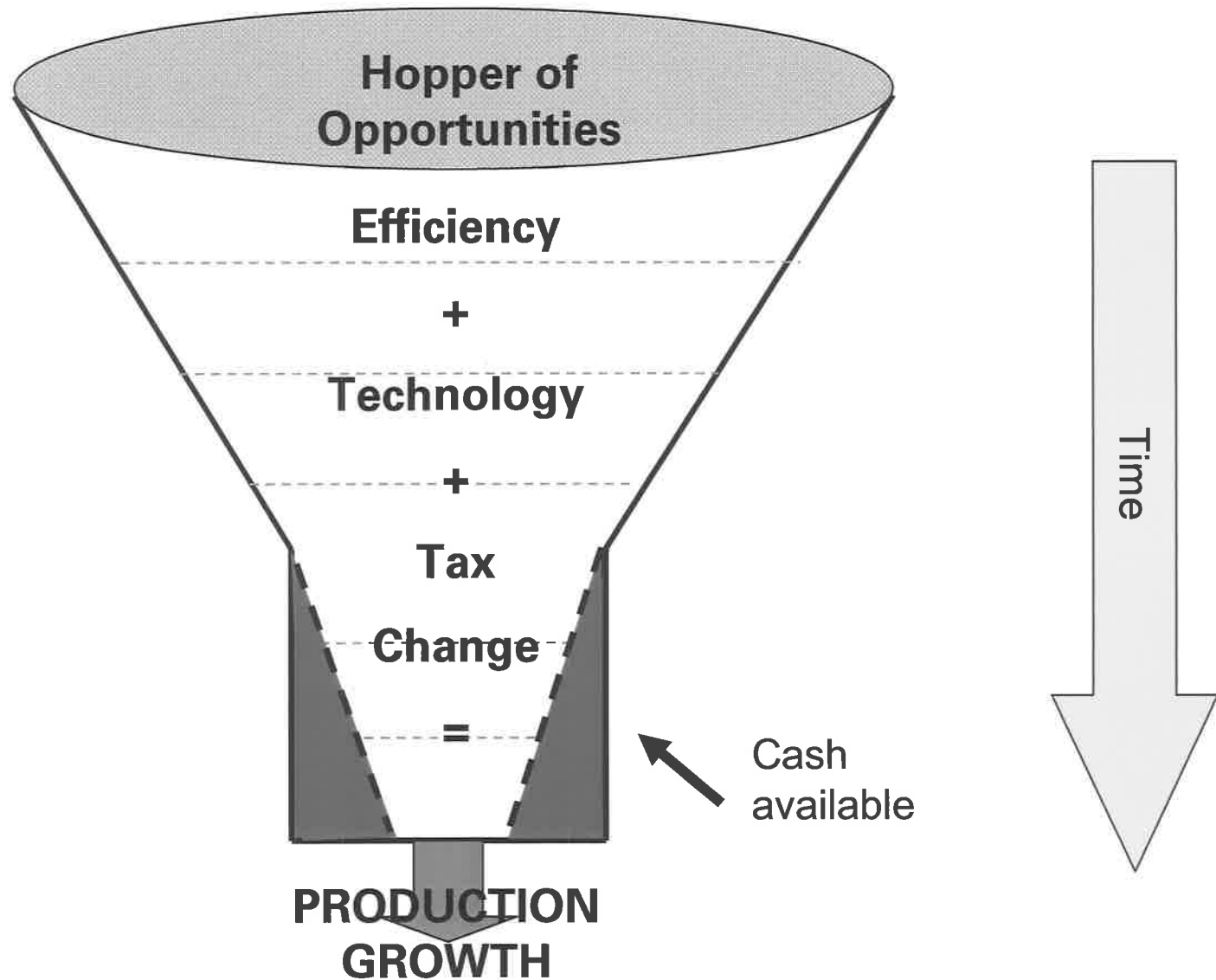


“The health of all the fields on the North Slope depend, to a certain degree, on **the health of Prudhoe Bay**. Prudhoe Bay is the central nervous system and the circulatory system (of the North Slope).” Commissioner Cathy Foerster, AOGCC, before the Senate Resources, February 14, 2012

“Companies evaluate exploration and development prospects in terms of the value (to shareholders) a prospect can generate. Government take, in the form of taxes, royalties, or other production-sharing or profit-sharing requirements, adds to upstream costs, and thus **the level of government take is an important component of the investment decision.**”

CERA – White Paper Industry Context, September 1999, pg 21

# Meaningful Tax Change Creates A New Future



## Conclusions



- ACES is not working
  - Production adding activity remains flat
- More investment is needed
  - Base business in legacy fields is the foundation for the future
- Focus on long-term, now
  - Only the legislature can correct a failed fiscal policy

10.

**Discussion Slides:**

**Janak Mayer**

**Manager, Upstream &**

**Gas, PFC Energy**

**March 22, 2012**

**and**

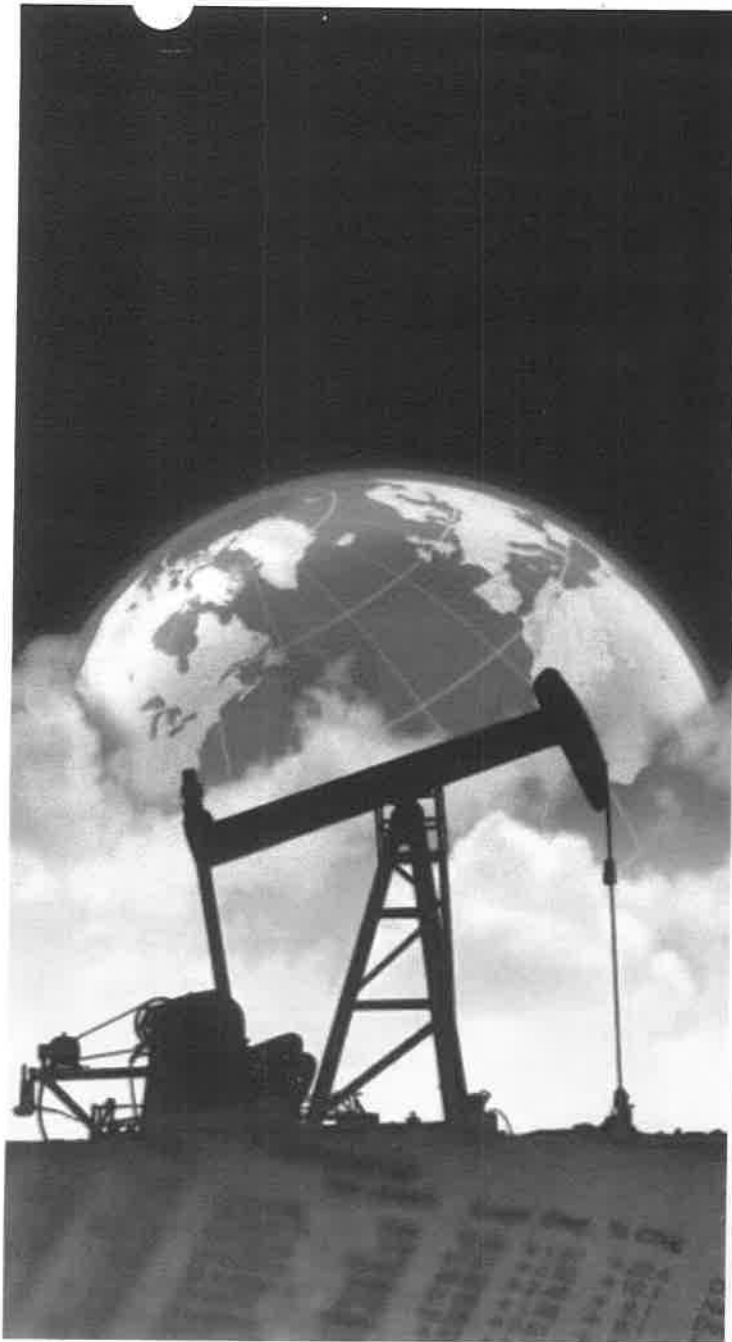
**Palin/Parnell ACES**

**Presentation**

**October 21, 2007**

# Discussion Slides: Alaska Senate Finance Committee

March 22, 2012  
Janak Mayer  
Manager, Upstream & Gas  
PFC Energy



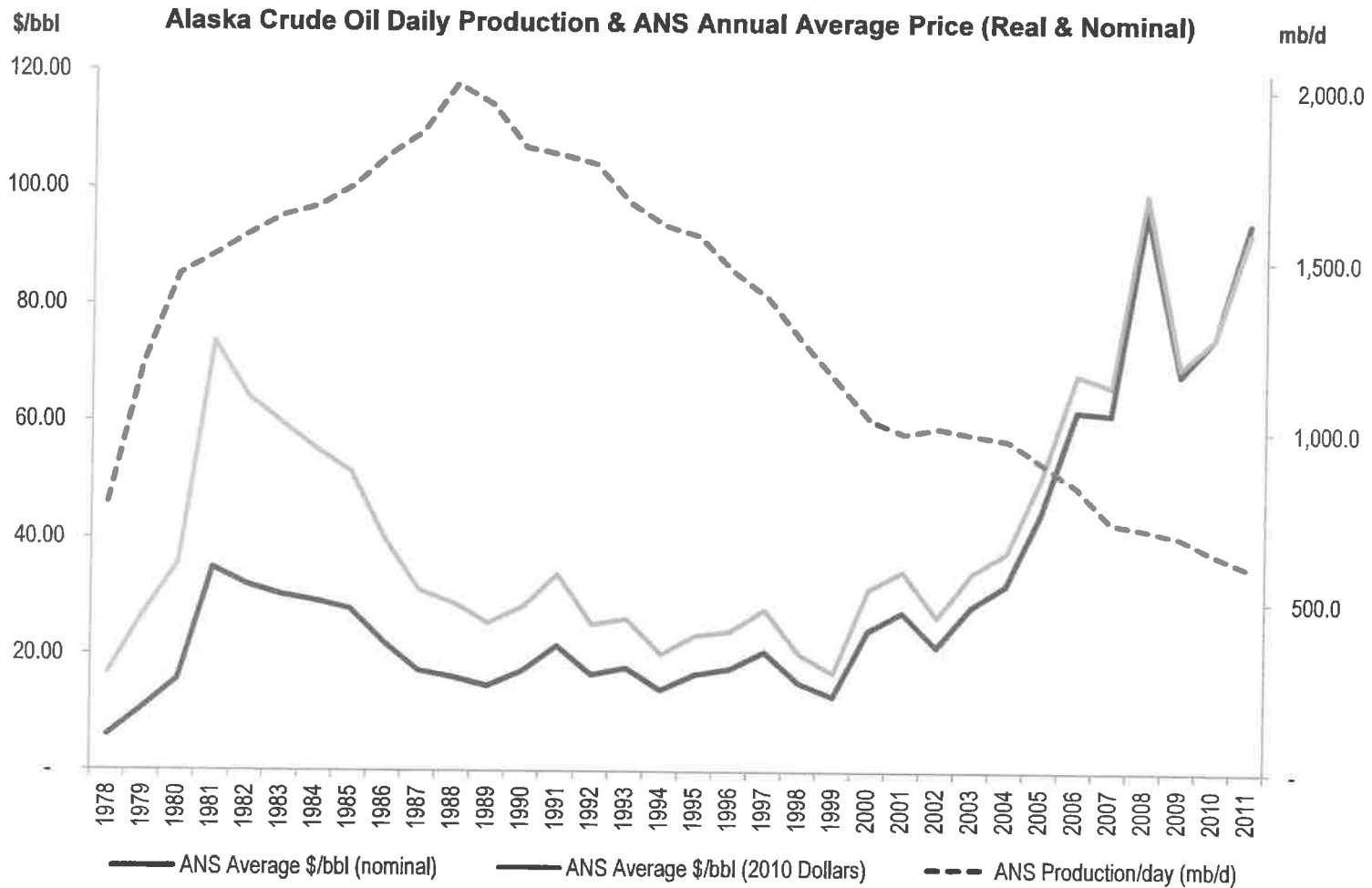
# Contents

1. Historical Data Analysis: Value of Alaskan Production Over Time
2. Re-Examining Previous Analysis of ACES
3. Impact of CSSB 192 Revised Production Tax Floor
4. Options for Incentivizing New Production

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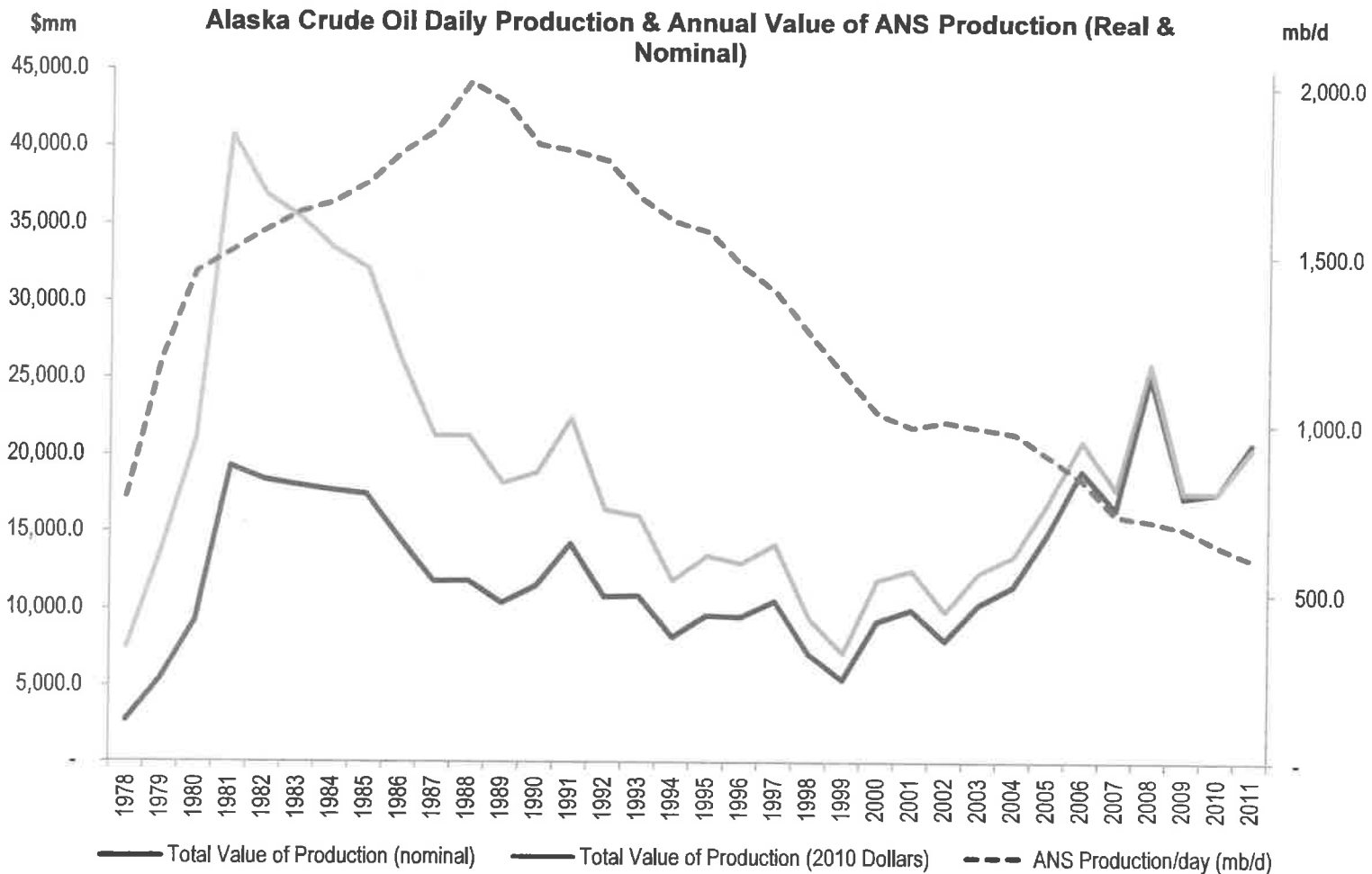
# **Historical Data Analysis: Value of Alaskan Production over Time**

# ANS West Coast Crude Historical Average Price (Real vs Nominal)



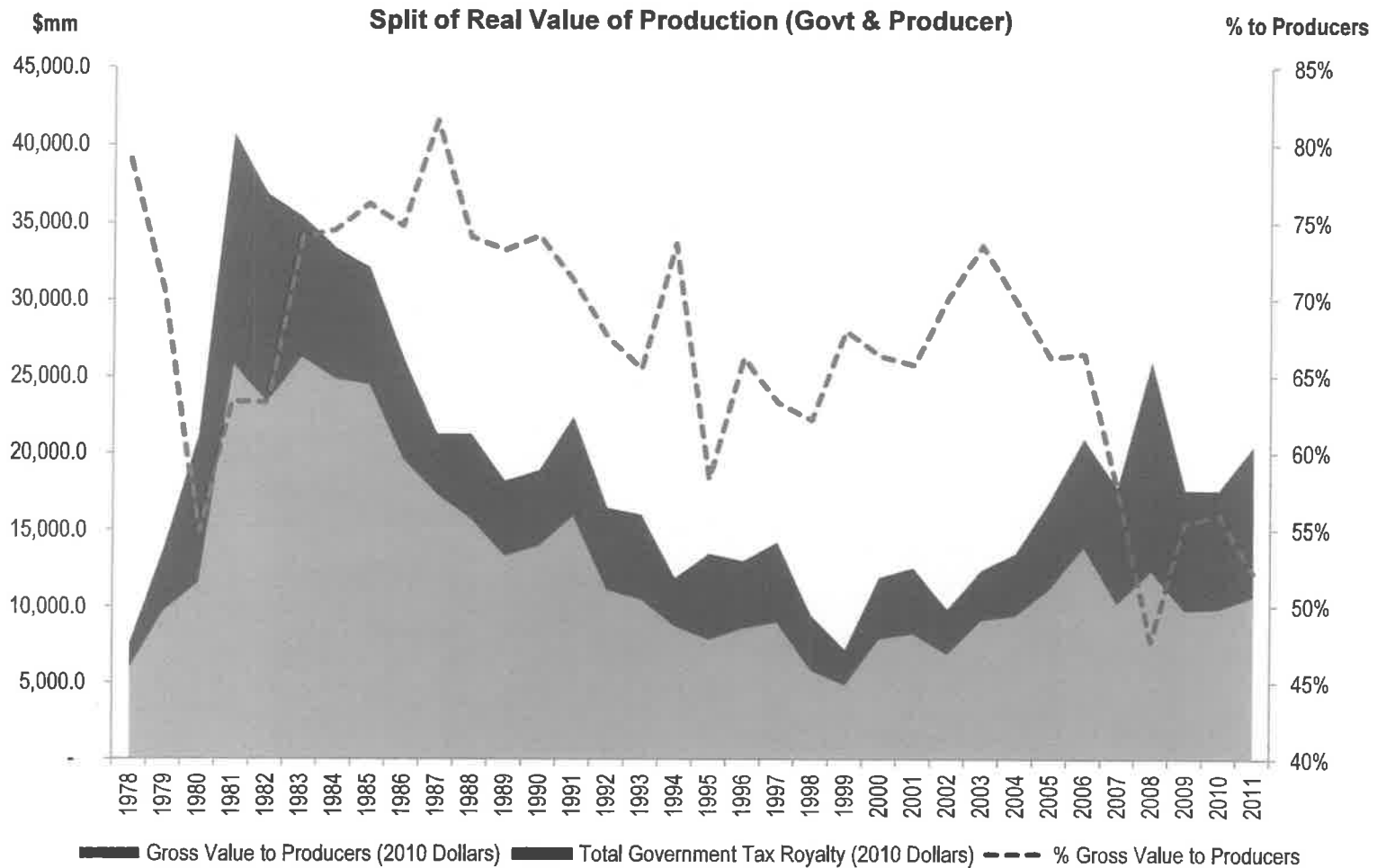
ANS Price of \$35/bbl in 1981 equates to \$75/bbl in 2010 dollars

# ANS West Coast Crude Historical Average Price (Real vs Nominal)

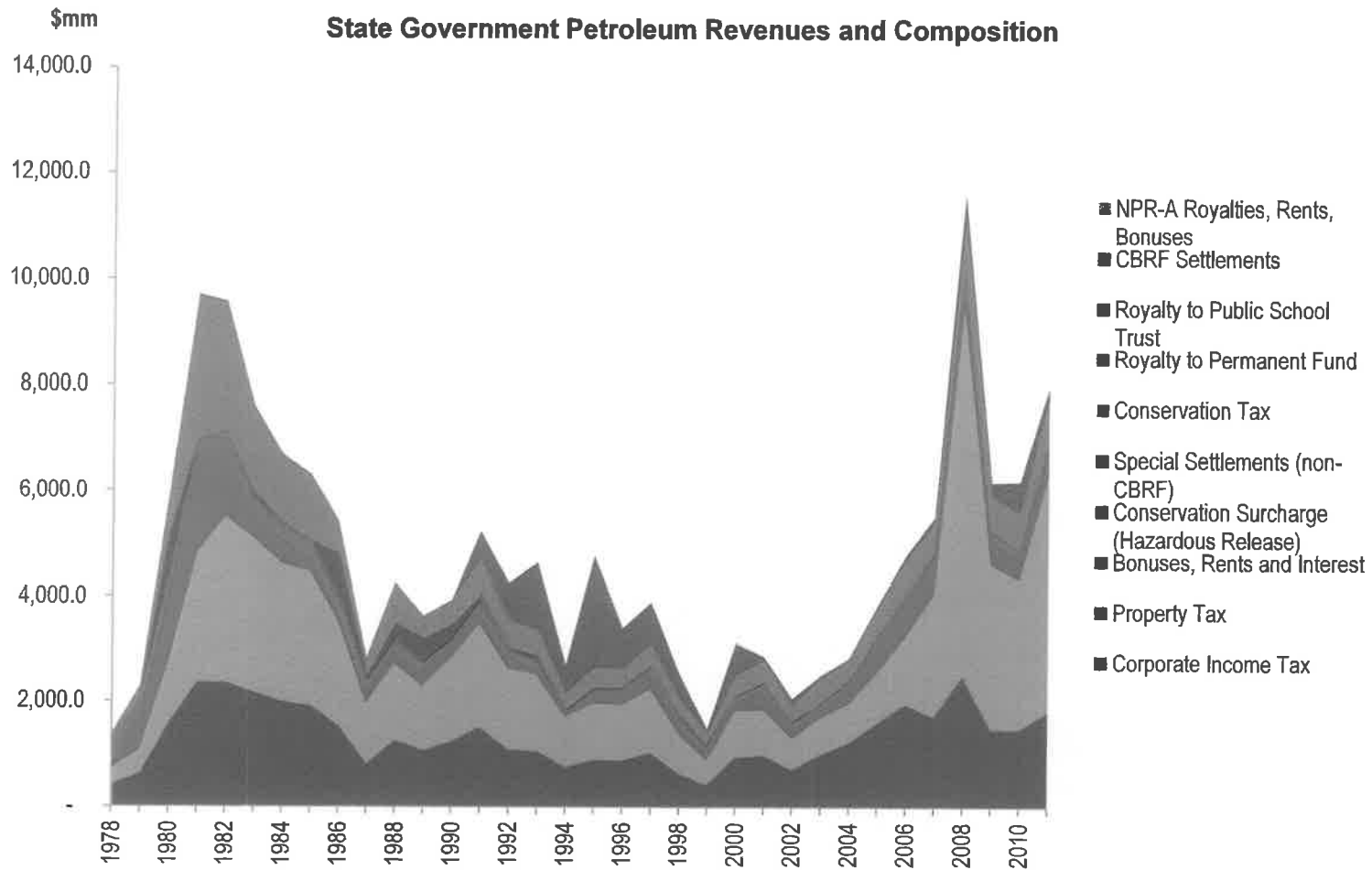


Earliest years of production were high value years – and recent years have marked a new, high-value period

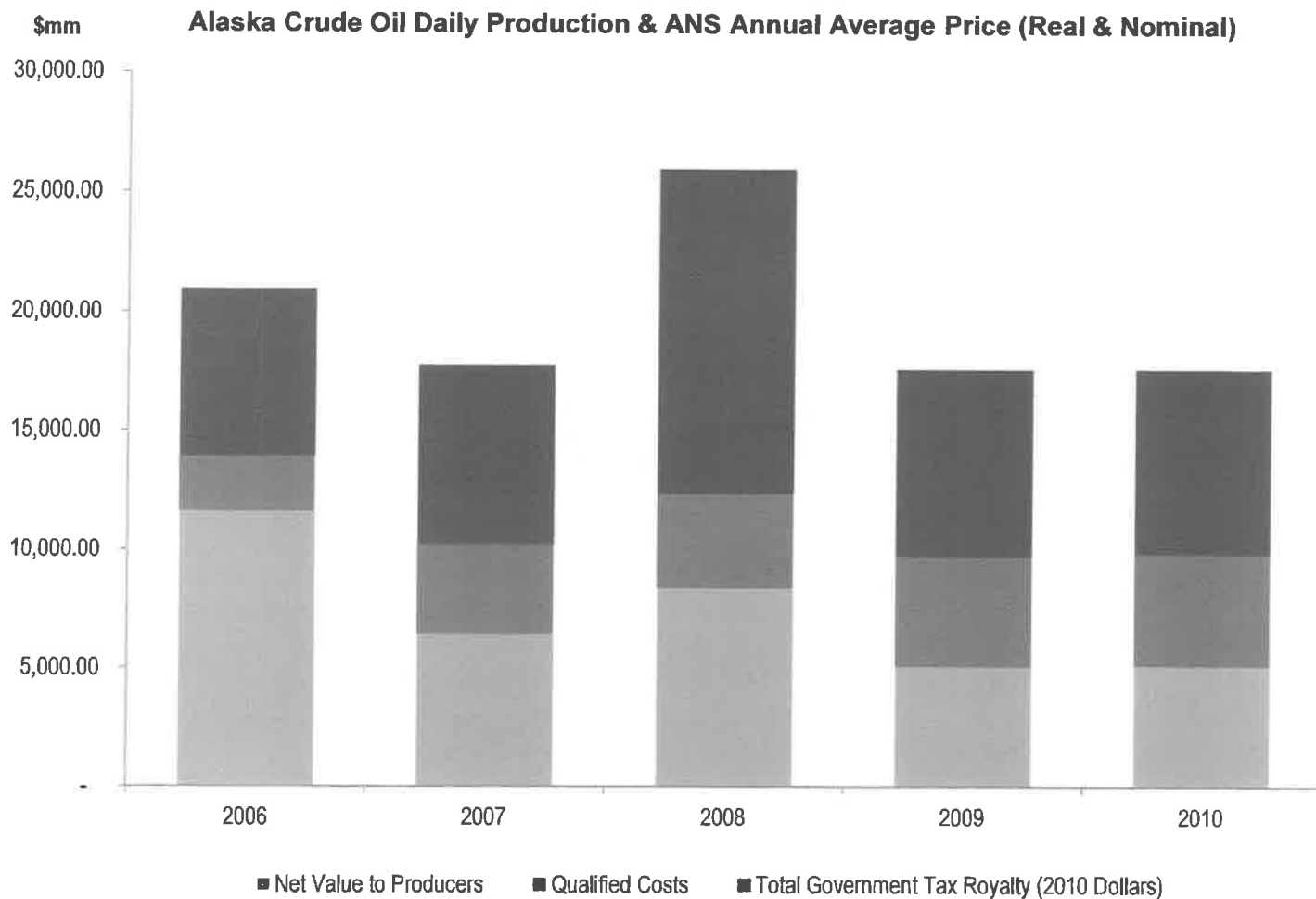
# ANS West Coast Crude Historical Average Price (Real vs Nominal)



# ANS West Coast Crude Historical Average Price (Real vs Nominal)



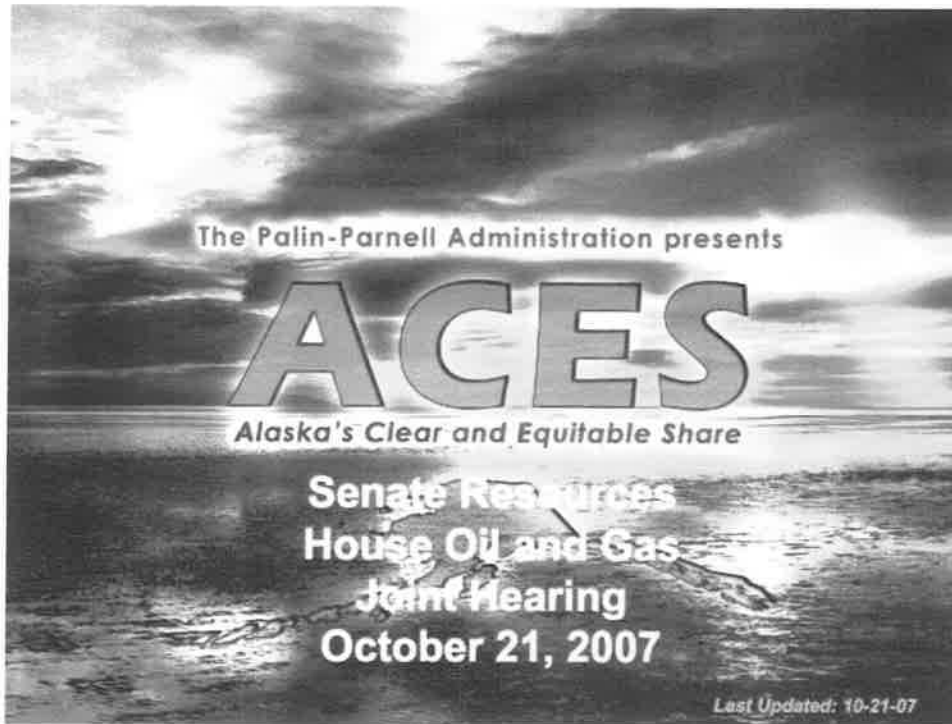
# ANS West Coast Crude Historical Average Price (Real vs Nominal)



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# **Re-examining Previous Analysis of ACES**

# “ACES Preserves Investment Climate”: What has changed since 2007?



## ACES Preserves Investment Climate

An Economic Evaluation

Anthony Finizza, Ph. D.

October 21, 2007

# Revisiting the Previous Modeling Work

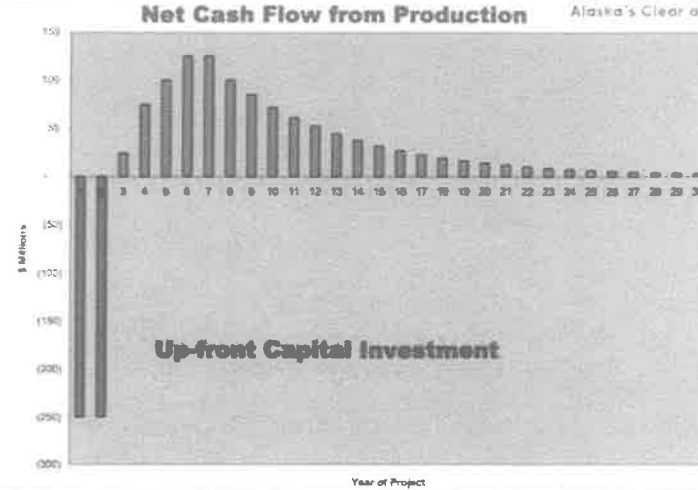


## Characteristics of the Seven Fields

	Field A	Field B	Field C	Field D	Field E	Field F	Field G
Legacy Field	●						
Satellite	●	●	●		●		
Stand Alone				●		●	●
Heavy Oil	●				●		
Reserves (MMB)	80	60	40	200	100	120	320
Ownership	Existing	New	Existing	New	Existing	New	Existing
Capital (\$ / B)	\$11	\$10	\$11	\$13	\$16	\$8	\$5
Expense (\$ / B)	\$7	\$9	\$8	\$12	\$8	\$5	\$6

15

## Stylized Project Cash Flow



7

## New Field Tax Analysis - NPV Impact

### NET PRODUCTION TAX SCENARIOS

Scenario	Rate		Progressivity		Capital	Industry NPV @ 10% at \$40/bbl real ANS WC (mm\$)						
	Mature Fields	Other Fields	Trigger	Rate	Investment Credit	Field A	Field B	Field C	Field D	Field E	Field F	Field G
ACES - 10% Floor	25.0%	25.0%	\$30	0.0020	20%	10	60	40	40	(500)	210	1,000
ACES - NO Floor	25.0%	25.0%	\$30	0.0020	20%	120	60	40	40	(300)	210	1,000
PPT Status Quo	22.5%	22.5%	\$40	0.0025	20%	180	50	60	10	(200)	220	1,100
High Net Tax	35.0%	22.5%	\$30	0.0030	20%	150	50	50	0	(200)	140	1,100

## Key Assumptions to Consider

- Regime modeled is ACES as proposed, not as enacted:
  - 0.02% progressivity above the \$30 level, not 0.04%
  - 50% maximum production tax rate, not 75%
- Cost assumptions are much lower than recent experience suggests:
  - \$10/bbl capex and \$9/bbl opex, vs
  - \$17/ bbl capex and opex
- Analysis performed from \$20 to \$100 crude oil price, with focus on \$40 “stress-test” price, and \$60 “base case”
- Assumed production profile is one that will maximize economic returns for a given field size
  - High peak production rate with high decline rate means most production value occurs within 10 years

# Benchmarking Government Take – at \$60/bbl

**"Cradle to Grave" Government Share of Pre-Tax Income  
Discounted at 10% @ \$60 (Applicable to New Fields)**



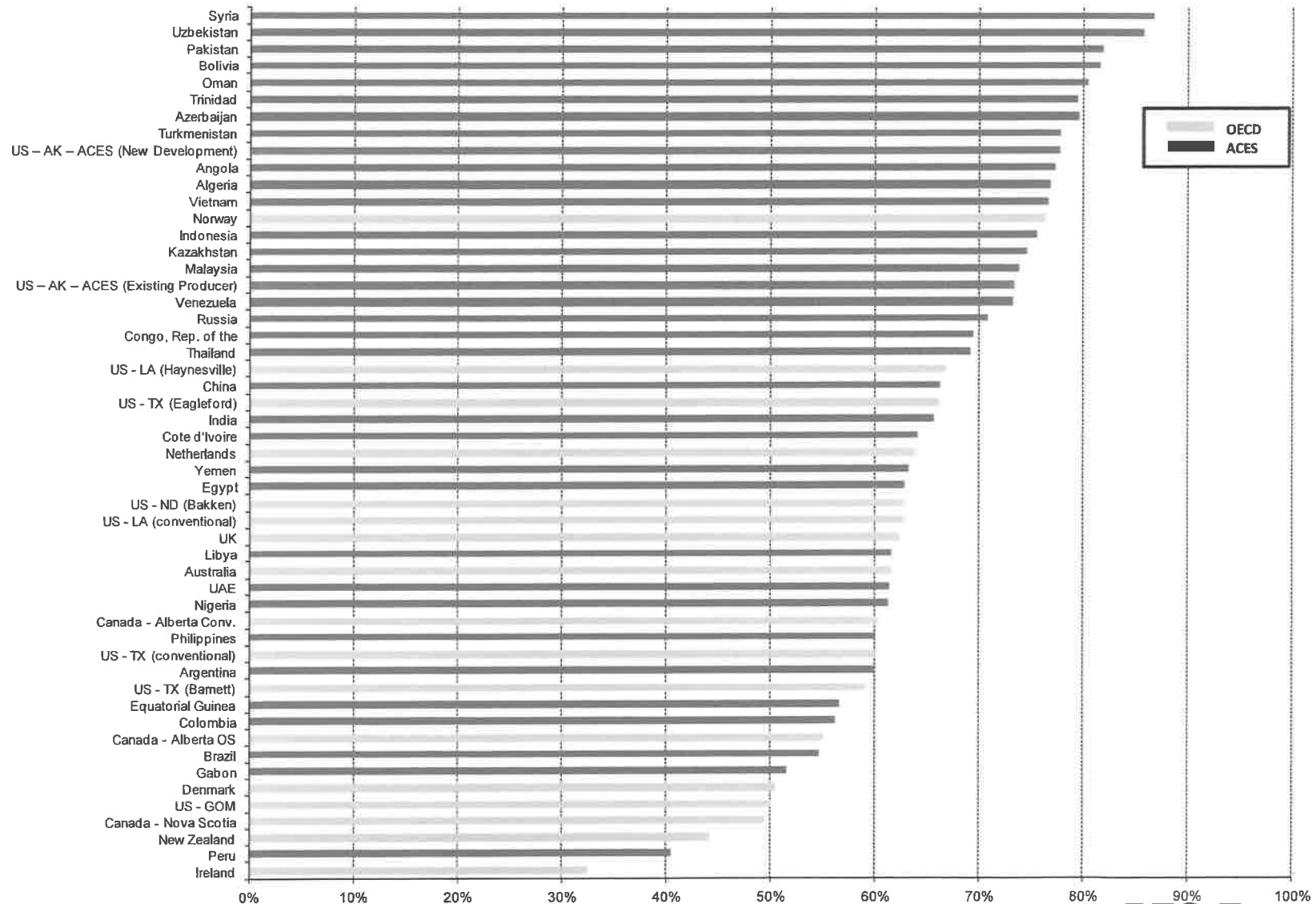
<b>Median Government Take By Tax Structures</b>	
	<b>Median (Mid-Point)</b>
All Governments	48%
Profit Sharing Governments	76%
Tax Royalty Governments	50%
Norway	81%
<b>Alaska - ACES Six Potential New Fields</b>	<b>68% to 74% (Median 70%)</b>
Alaska - PPT Six Potential New Fields	65% to 72% (Median 68%)
UK	51%
Gulf of Mexico	48%

Source: PFC Study September 2007, Alaska data by DOR

20

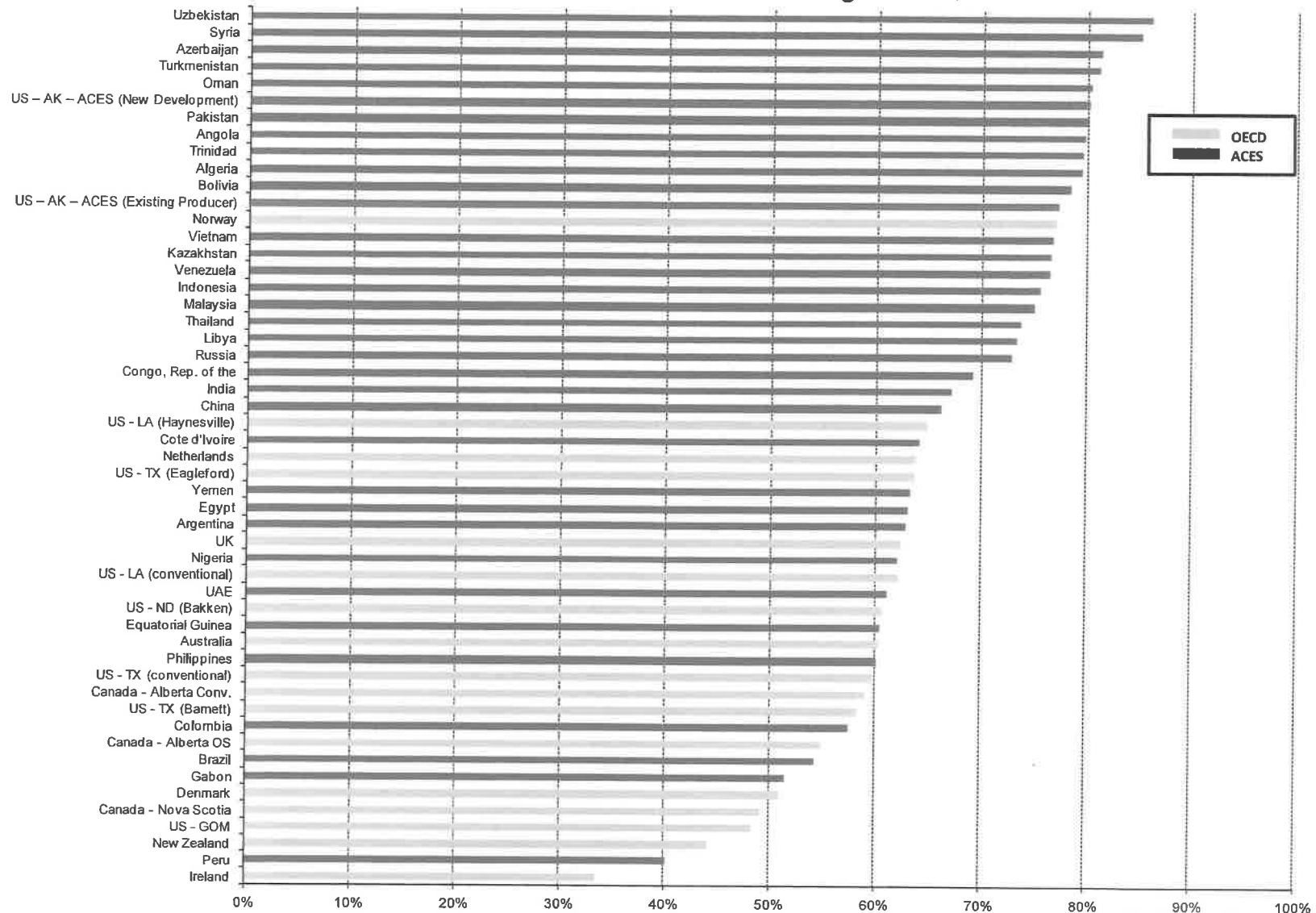
# Regime Competitiveness: Average Government Take

Average Government Take of Global Fiscal Regimes at \$100/bbl

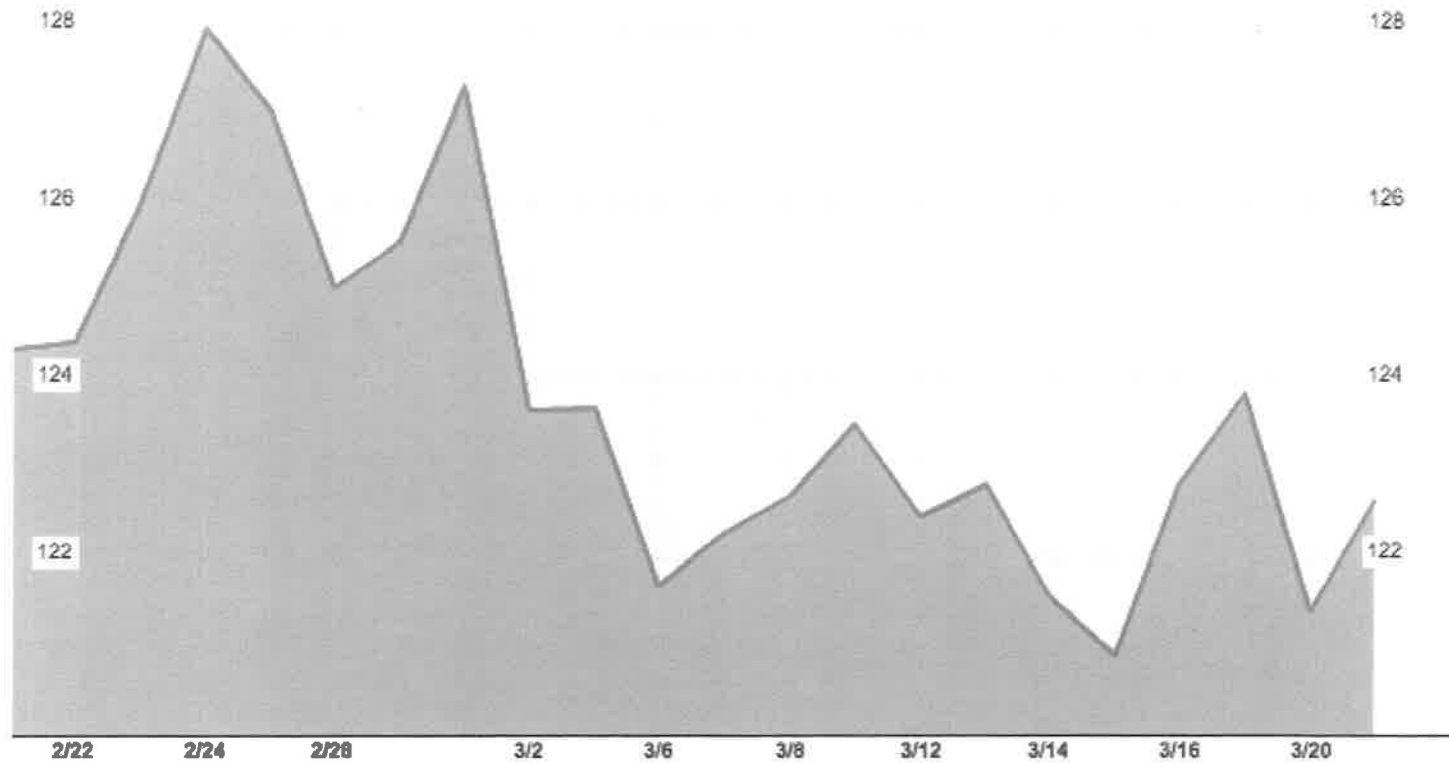


# Regime Competitiveness: Average Government Take

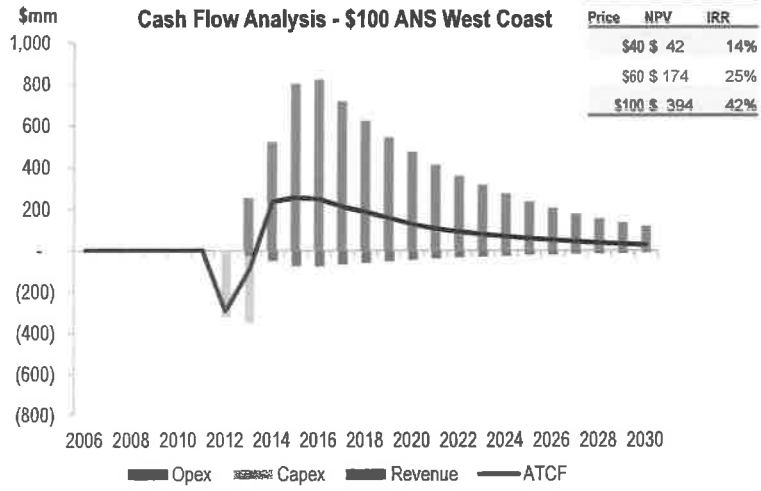
Average Government Take of Global Fiscal Regimes at \$140/bbl



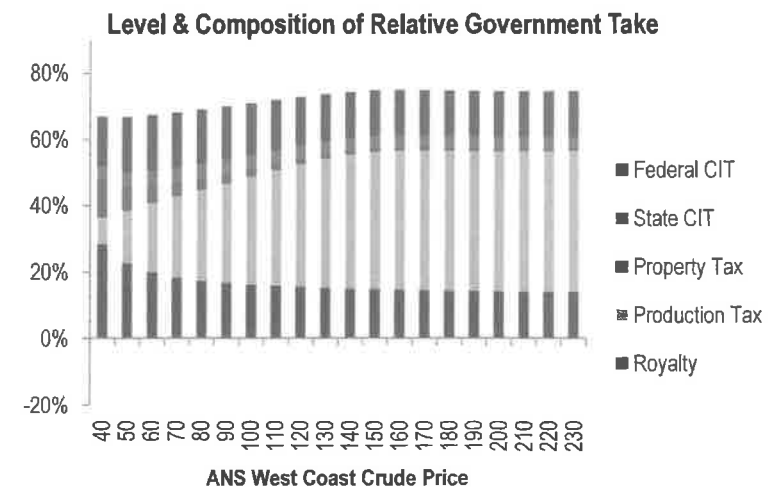
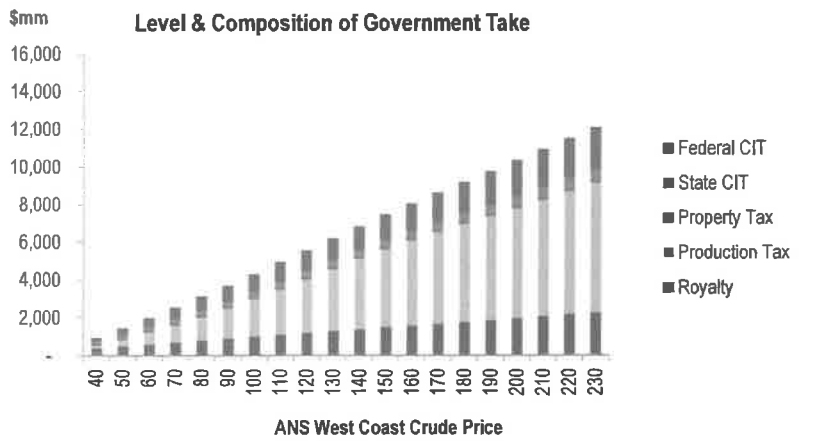
# ANS West Coast Crude Spot Price – Last 30 Days



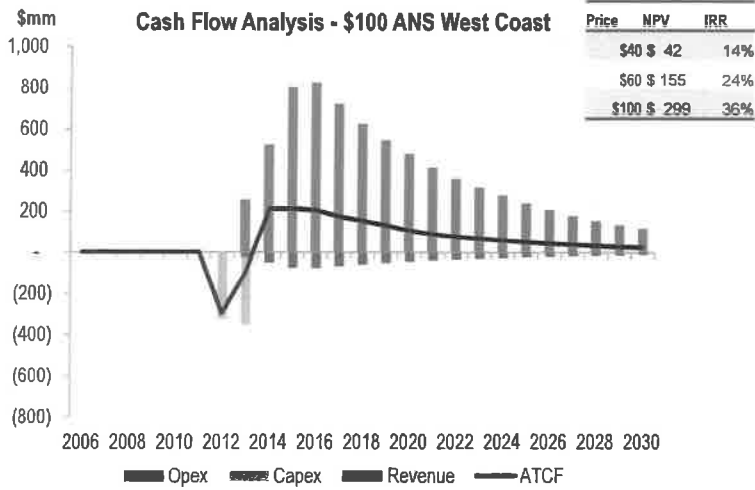
# “Field B” in our model, under ACES as proposed



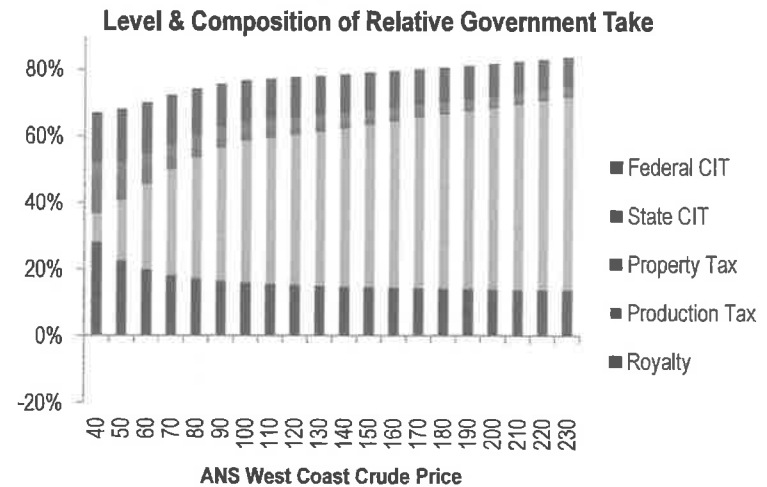
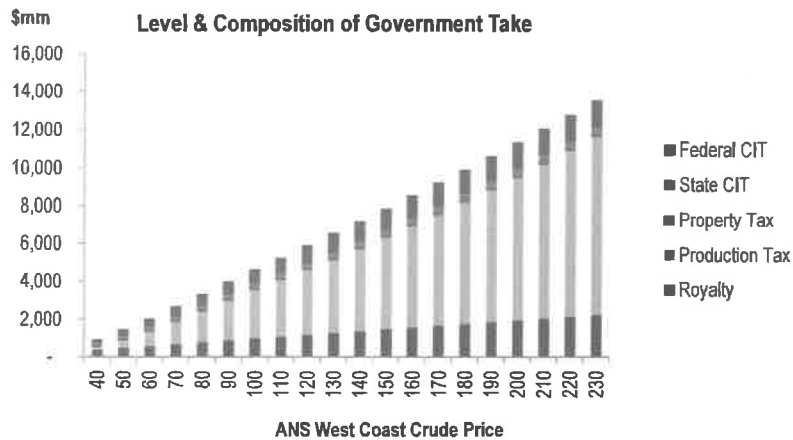
Price	Royalty	Production Tax	Property Tax	State CIT	Total State Take	Federal CIT	Total GT
40	28%	8%	12%	4%	52%	15%	67%
50	23%	16%	7%	4%	50%	17%	67%
60	20%	21%	5%	4%	51%	17%	67%
70	18%	24%	4%	4%	52%	17%	68%
80	17%	27%	4%	4%	53%	17%	68%
90	17%	30%	3%	4%	54%	16%	70%
100	16%	33%	3%	4%	55%	16%	71%
110	16%	35%	2%	4%	57%	15%	72%
120	15%	37%	2%	4%	58%	15%	73%
130	15%	39%	2%	4%	60%	14%	74%
140	15%	40%	2%	4%	61%	14%	74%
150	15%	41%	2%	4%	61%	14%	75%
160	15%	42%	2%	4%	61%	13%	75%
170	14%	42%	1%	4%	61%	14%	75%
180	14%	42%	1%	4%	61%	14%	75%
190	14%	42%	1%	4%	61%	14%	75%
200	14%	42%	1%	4%	61%	14%	75%
210	14%	42%	1%	4%	61%	14%	75%
220	14%	42%	1%	4%	61%	14%	75%
230	14%	42%	1%	4%	61%	14%	75%



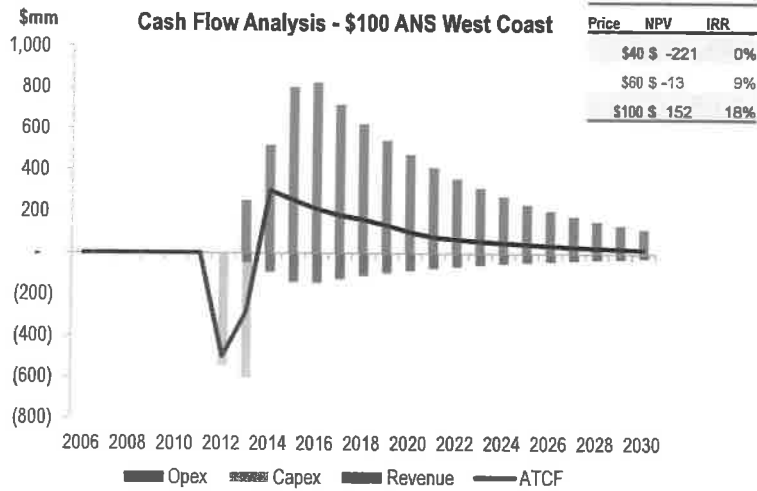
# “Field B”, under ACES as enacted



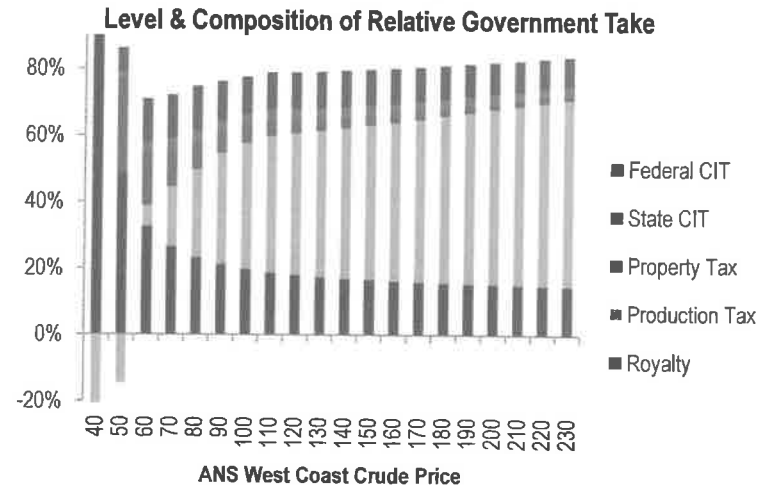
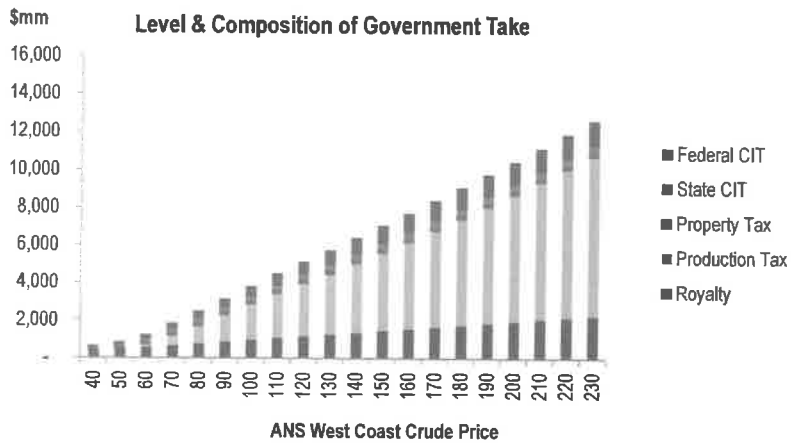
Price	Royalty	Production Tax	Property Tax	State CIT	Total State Take	Federal CIT	Total GT
40	28%	8%	12%	4%	52%	15%	67%
50	23%	18%	7%	4%	52%	16%	68%
60	20%	26%	5%	4%	55%	15%	70%
70	18%	31%	4%	4%	58%	15%	72%
80	17%	36%	4%	4%	61%	14%	74%
90	17%	40%	3%	3%	63%	13%	76%
100	16%	42%	3%	3%	64%	12%	77%
110	16%	44%	2%	3%	65%	12%	77%
120	15%	45%	2%	3%	66%	12%	78%
130	15%	46%	2%	3%	66%	12%	78%
140	15%	47%	2%	3%	67%	11%	79%
150	15%	49%	2%	3%	68%	11%	79%
160	15%	50%	2%	3%	69%	11%	80%
170	14%	51%	1%	3%	70%	11%	80%
180	14%	52%	1%	3%	70%	10%	81%
190	14%	53%	1%	3%	71%	10%	81%
200	14%	54%	1%	3%	72%	10%	82%
210	14%	56%	1%	2%	73%	9%	82%
220	14%	57%	1%	2%	74%	9%	83%
230	14%	58%	1%	2%	75%	9%	84%



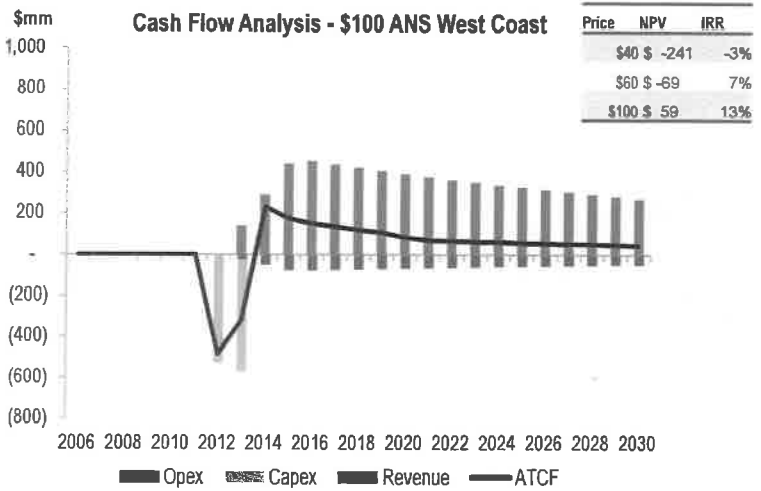
# “Field B”, under ACES as enacted, with \$17/bl costs



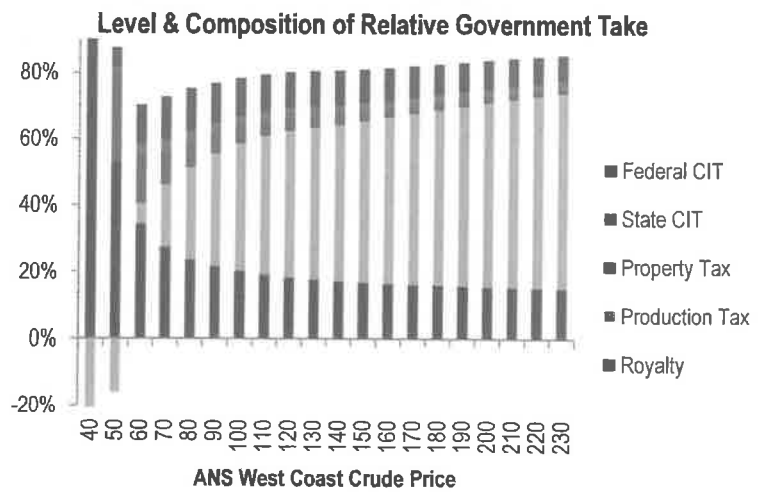
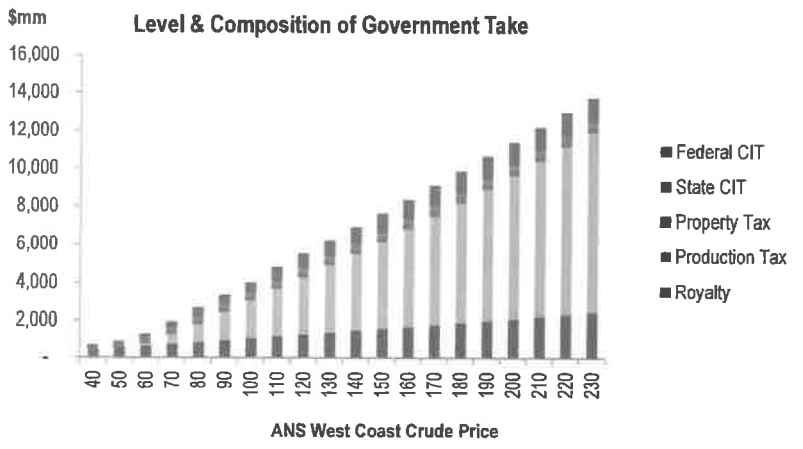
Price	Royalty	Production Tax	Property Tax	State CIT	Total State Take	Federal CIT	Total GT
40	174%	-147%	129%	0%	156%	0%	156%
50	49%	-15%	29%	2%	65%	7%	72%
60	33%	6%	16%	3%	58%	13%	71%
70	27%	18%	11%	3%	59%	13%	72%
80	23%	26%	9%	3%	62%	13%	75%
90	21%	33%	7%	3%	65%	12%	76%
100	20%	38%	6%	3%	67%	11%	78%
110	19%	41%	5%	3%	68%	11%	79%
120	18%	43%	4%	3%	68%	11%	79%
130	17%	44%	4%	3%	68%	11%	79%
140	17%	45%	4%	3%	69%	11%	80%
150	17%	47%	3%	3%	69%	11%	80%
160	16%	48%	3%	3%	70%	10%	80%
170	16%	49%	3%	3%	71%	10%	81%
180	16%	50%	3%	3%	71%	10%	81%
190	16%	52%	2%	3%	72%	10%	82%
200	15%	53%	2%	2%	73%	9%	82%
210	15%	54%	2%	2%	74%	9%	83%
220	15%	55%	2%	2%	74%	9%	83%
230	15%	56%	2%	2%	75%	9%	84%



# “Field B”, under ACES as enacted, with \$17/bl costs and flatter production profile



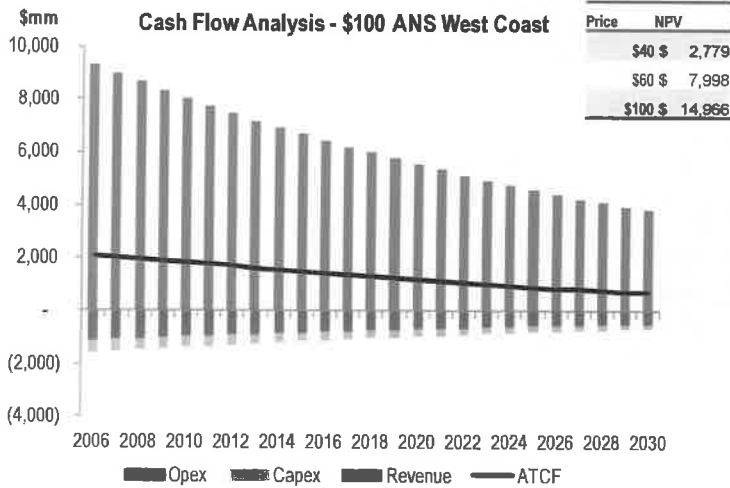
Price	Royalty	Production Tax	Property Tax	State CIT	Total State Take	Federal CIT	Total CIT
40	269%	-229%	176%	0%	218%	0%	218%
50	53%	-16%	28%	1%	66%	6%	71%
60	34%	6%	15%	3%	59%	12%	70%
70	27%	19%	10%	3%	60%	13%	73%
80	24%	27%	8%	3%	63%	13%	75%
90	22%	34%	6%	3%	65%	12%	77%
100	20%	38%	5%	3%	67%	11%	78%
110	19%	42%	5%	3%	68%	11%	80%
120	18%	44%	4%	3%	69%	11%	80%
130	18%	46%	4%	3%	70%	11%	81%
140	17%	47%	3%	3%	70%	10%	81%
150	17%	49%	3%	3%	71%	10%	81%
160	16%	50%	3%	3%	72%	10%	82%
170	16%	51%	3%	3%	73%	10%	82%
180	16%	53%	2%	2%	73%	9%	83%
190	16%	54%	2%	2%	74%	9%	83%
200	15%	55%	2%	2%	75%	9%	84%
210	15%	57%	2%	2%	76%	8%	84%
220	15%	58%	2%	2%	77%	8%	85%
230	15%	59%	2%	2%	78%	8%	85%



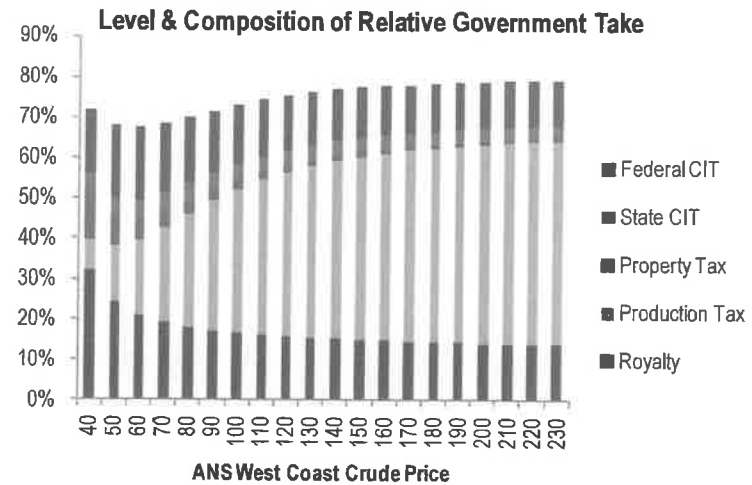
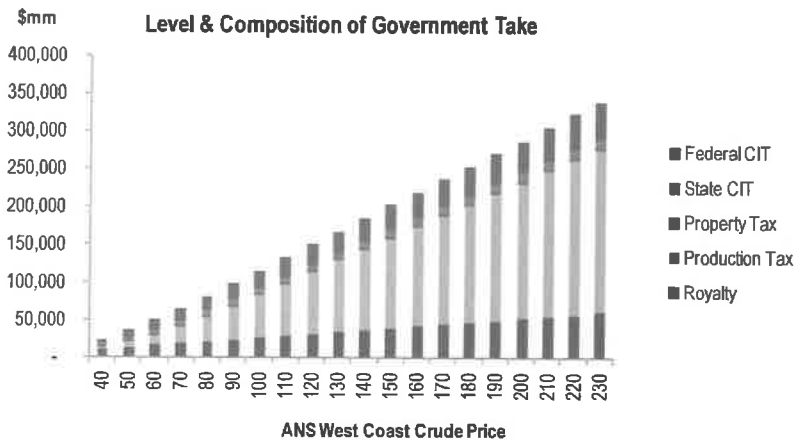
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# **Impact of Revised Production Tax Floor**

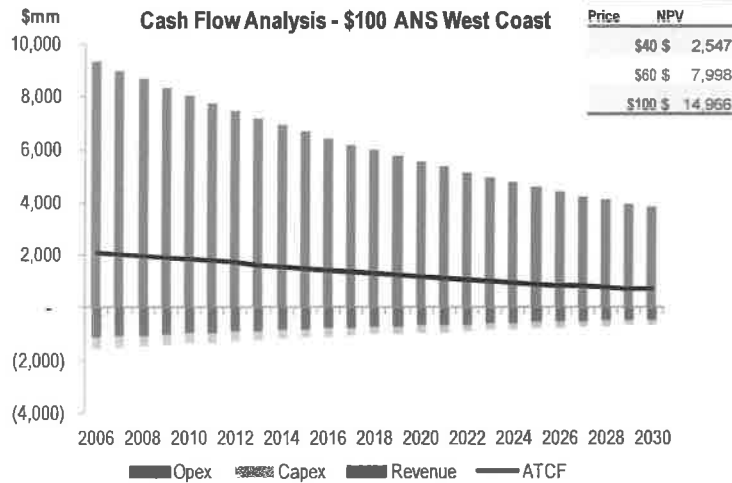
# CSSB 192 Using ACES Minimum PTV (Existing Producer)



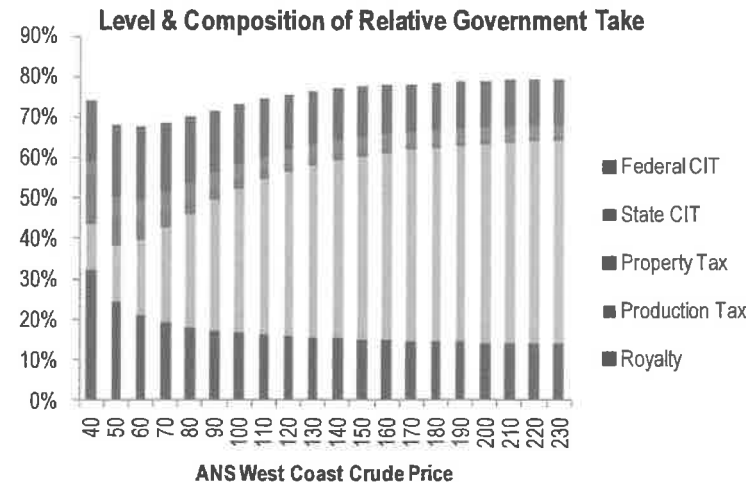
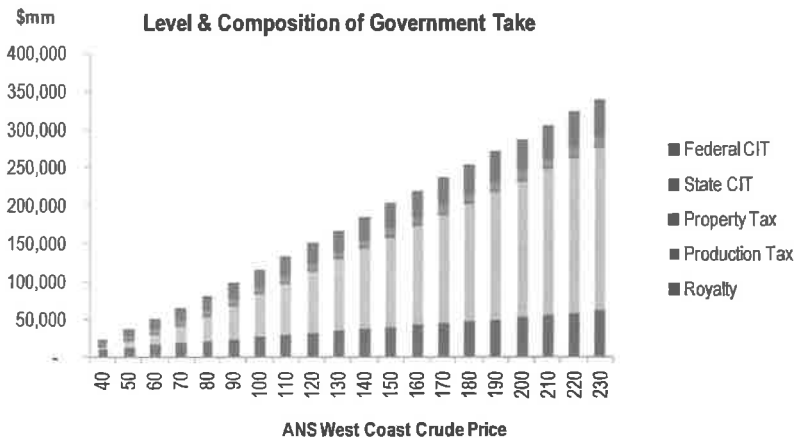
Price	Royalty	Production Tax	Property Tax	State CIT	Total State Take	Federal CIT	Total GT
40	32%	8%	12%	4%	56%	16%	72%
50	24%	14%	8%	5%	50%	18%	68%
60	21%	18%	5%	5%	50%	18%	67%
70	19%	24%	4%	4%	51%	17%	69%
80	18%	28%	3%	4%	54%	16%	70%
90	17%	32%	3%	4%	56%	15%	72%
100	17%	35%	3%	4%	58%	15%	73%
110	16%	38%	2%	4%	60%	14%	74%
120	16%	41%	2%	3%	62%	13%	75%
130	15%	43%	2%	3%	63%	13%	76%
140	15%	44%	2%	3%	64%	13%	77%
150	15%	45%	2%	3%	65%	12%	77%
160	15%	46%	1%	3%	66%	12%	78%
170	15%	47%	1%	3%	66%	12%	78%
180	14%	48%	1%	3%	67%	12%	78%
190	14%	49%	1%	3%	67%	12%	79%
200	14%	49%	1%	3%	67%	11%	79%
210	14%	50%	1%	3%	68%	11%	79%
220	14%	50%	1%	3%	68%	11%	79%
230	14%	50%	1%	3%	68%	11%	79%



# CSSB 192 Using 10% of Revenues for Minimum PTV (Existing Producer)



Price	Royalty	Production Tax	Property Tax	State CIT	Total State Take	Federal CIT	Total GT
40	32%	11%	12%	4%	60%	14%	74%
50	24%	14%	8%	5%	50%	18%	68%
60	21%	18%	5%	5%	50%	18%	67%
70	19%	24%	4%	4%	51%	17%	69%
80	18%	28%	3%	4%	54%	16%	70%
90	17%	32%	3%	4%	56%	15%	72%
100	17%	35%	3%	4%	58%	15%	73%
110	16%	38%	2%	4%	60%	14%	74%
120	16%	41%	2%	3%	62%	13%	75%
130	15%	43%	2%	3%	63%	13%	76%
140	15%	44%	2%	3%	64%	13%	77%
150	15%	45%	2%	3%	65%	12%	77%
160	15%	46%	1%	3%	66%	12%	78%
170	15%	47%	1%	3%	66%	12%	78%
180	14%	48%	1%	3%	67%	12%	78%
190	14%	49%	1%	3%	67%	12%	79%
200	14%	49%	1%	3%	67%	11%	79%
210	14%	50%	1%	3%	68%	11%	79%
220	14%	50%	1%	3%	68%	11%	79%
230	14%	50%	1%	3%	68%	11%	79%

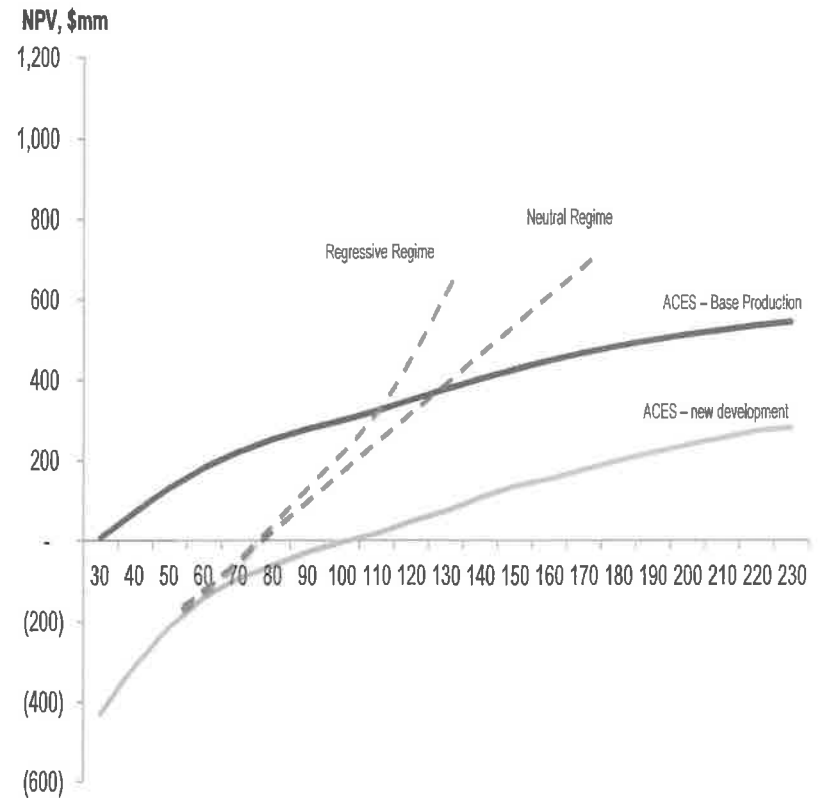


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# Incentivizing New Production

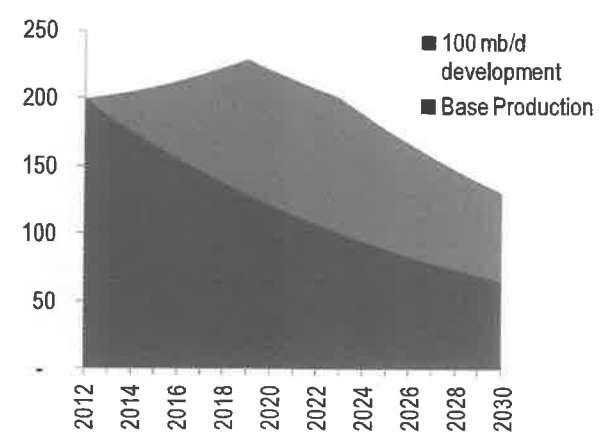
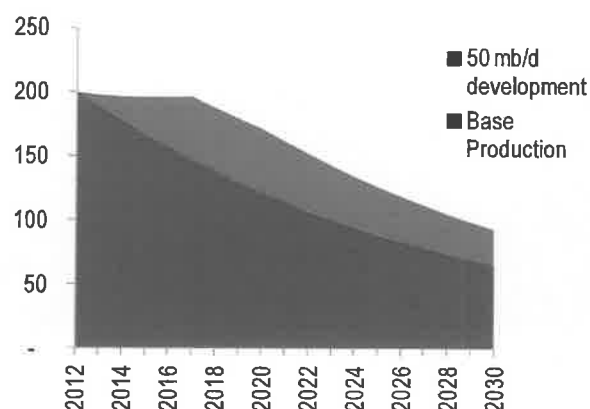
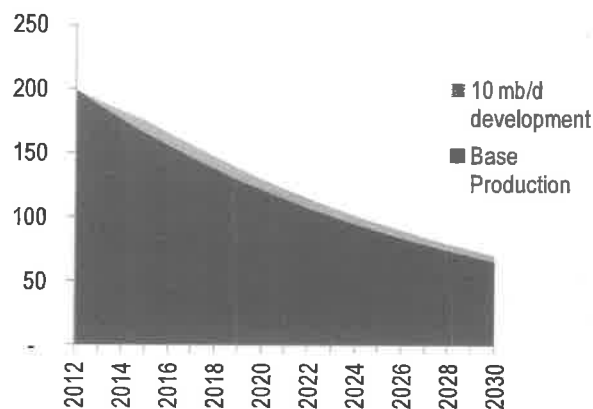
# ACES – A Harvest Area Regime, Not a Growth Regime

- ACES appears to work well as a “harvest” regime
  - Existing **mature fields remain profitable**, including capital work required to achieve ~6% decline (renewal capex)
  - **Maximum ‘rent’** extracted from a declining production base is captured for the state
- ACES inhibits the development of new projects and resources that might help stem or even reverse the decline
  - ACES is **not progressive with regard to costs**, so high government take applies even to very high cost projects
  - Existing system of capital credits etc appears to do more to encourage ‘renewal capex’ than it does new production spending
  - Progressivity can have a major **detrimental impact on breakeven prices** for high-cost projects at current oil prices



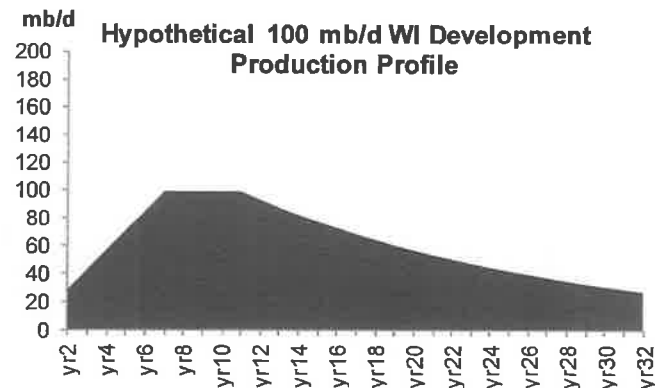
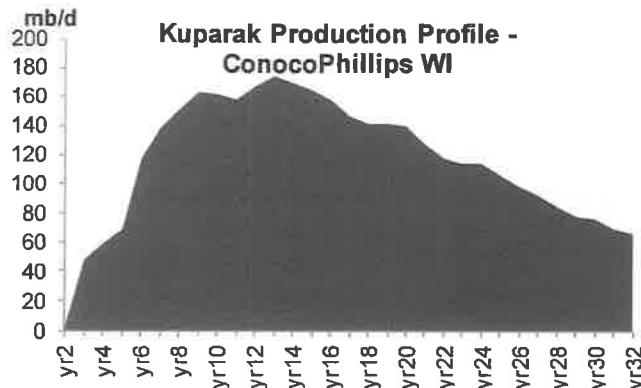
# New Oil Allowance: Incremental Production on a Declining Base

- Central to understanding the impact of the “allowance for ‘new oil’” is an understanding of the impact of new source production on a company’s total production volumes, when that new source production is added to a declining base portfolio
  - The charts below assume a 6% decline rate for an existing North Slope producer currently producing 200 mb/d, and examine hypothetical new source projects that peak at 10mb/d, 50 mb/d and 100 mb/d respectively (on a working interest basis)
  - Given the pace at which such projects typically reach peak production, only the 100 mb/d peak production new source development is actually capable of adding production that is incremental to prior years’ volumes



# A Hypothetical 100 mb/d (Working Interest) development

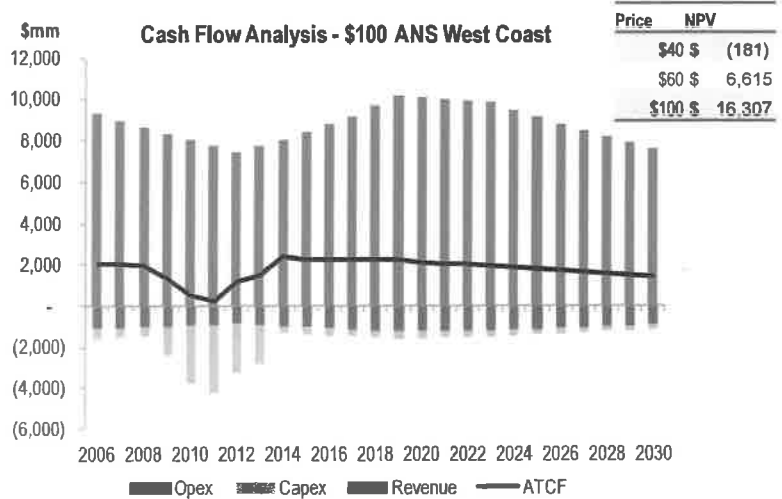
- A new source development that produced 100 mb/d at peak for a working interest partner would be a very significant new development. By way of comparison, Kuparak, the second largest field in North America, peaked at ~320 mb/d gross production
  - This represented **working interest production** to ConocoPhillips (the operator and majority shareholder) of **170 mbo/d**
  - Kuparak took 11 years (from 1981 to 1992) to reach this peak level of production
- Since it would take a development on the scale of 100 mb/d (working interest) to achieve “new oil” for an existing producer under the terms of the amendment, a development of this size has been modeled in the following analysis
  - A 7 year ramp-up to peak production has been assumed
  - Such a development would likely eclipse today’s production from Kuparak (122 mb/d gross, 66mb/d working interest to the majority shareholder)
  - It is important to note that this is a significantly more aggressive new-source production profile than is currently foreseen in recent statements by the major operators on their current development pipelines, even in the most optimistic circumstances



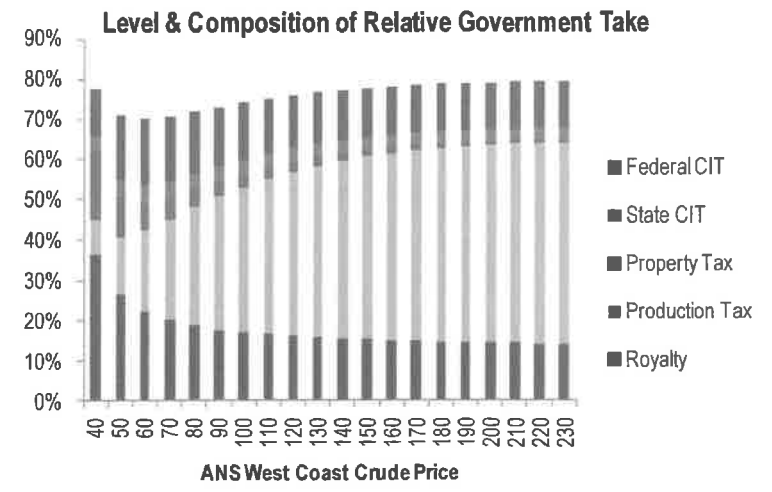
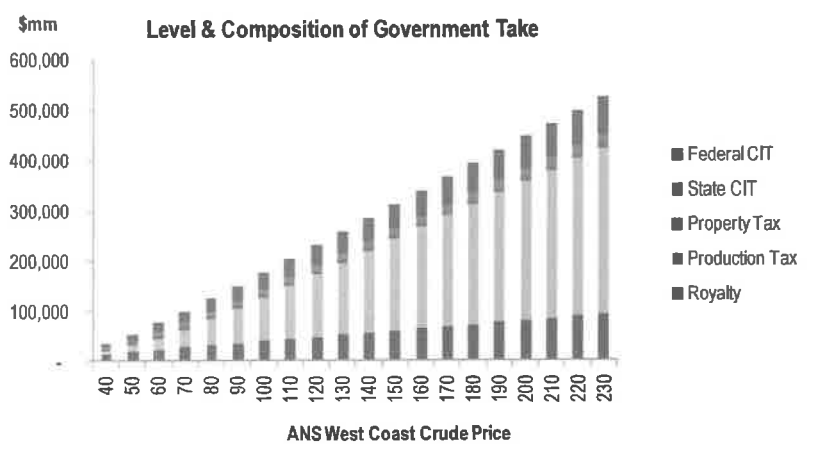
# Assumptions

- The following analysis assumes
  - A 6% base portfolio decline, in the case of a producer currently producing 200 mb/d
  - Costs for the base production portfolio of:
    - \$12/ flowing bbl operating expenditure
    - \$5/ flowing bbl maintenance capital expenditure
  - Costs for the 100 mb/d (working interest) New Development project of:
    - \$13/ flowing bbl operating expenditure
    - \$13/bbl reserves development capital expenditure
    - \$1/ flowing bbl maintenance capital expenditure
  - These costs are deliberately somewhat lower than the previously referenced 10 mb/d new development, since the hypothetical development modeled is significantly larger, and thus likely to have somewhat lower costs on a \$/bbl basis

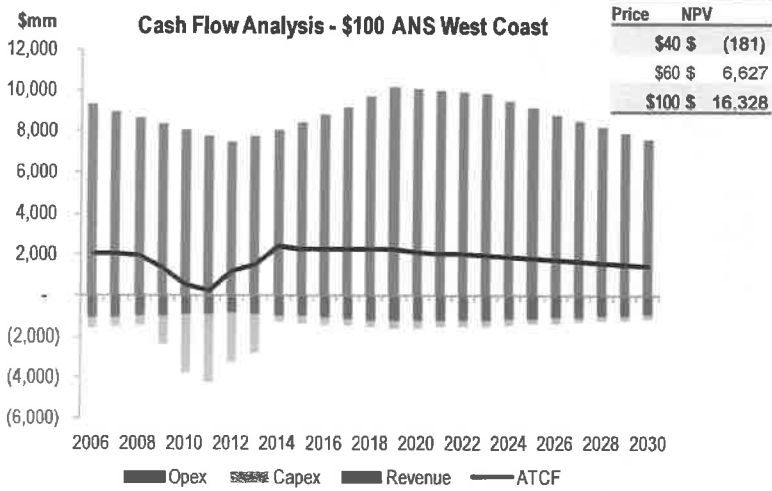
# CSSB 192 Excluding New Oil Allowance (Existing Producer)



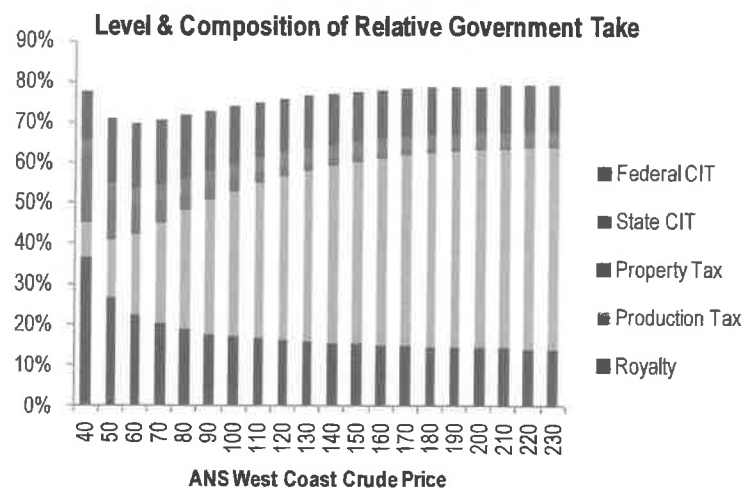
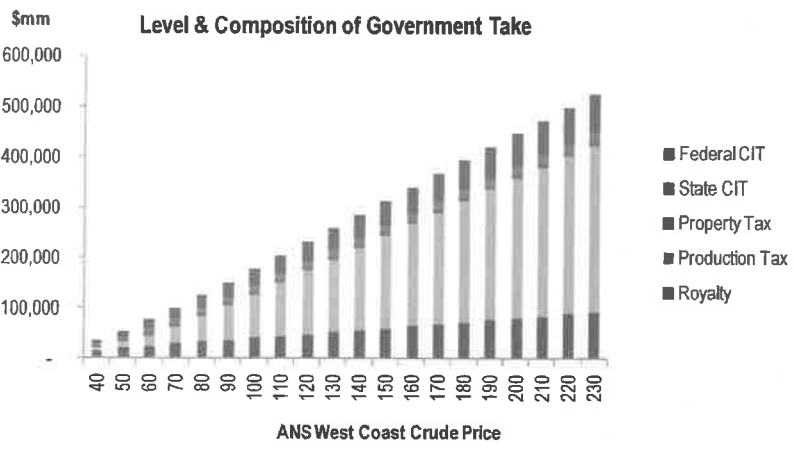
Price	Royalty	Production Tax	Property Tax	State CIT	Total State Take	Federal CIT	Total CIT
40	37%	9%	17%	3%	56%	12%	78%
50	26%	14%	10%	4%	55%	16%	71%
60	22%	20%	7%	4%	54%	16%	70%
70	20%	25%	5%	4%	55%	16%	71%
80	19%	29%	4%	4%	56%	15%	72%
90	18%	33%	4%	4%	59%	15%	73%
100	17%	36%	3%	4%	60%	14%	74%
110	16%	39%	3%	4%	61%	14%	75%
120	16%	41%	3%	3%	63%	13%	76%
130	16%	43%	2%	3%	64%	13%	76%
140	15%	44%	2%	3%	65%	12%	77%
150	15%	45%	2%	3%	66%	12%	78%
160	15%	46%	2%	3%	66%	12%	78%
170	15%	47%	2%	3%	67%	12%	78%
180	15%	48%	2%	3%	67%	12%	79%
190	15%	48%	1%	3%	67%	11%	79%
200	14%	49%	1%	3%	68%	11%	79%
210	14%	49%	1%	3%	68%	11%	79%
220	14%	49%	1%	3%	68%	11%	79%
230	14%	50%	1%	3%	68%	11%	79%



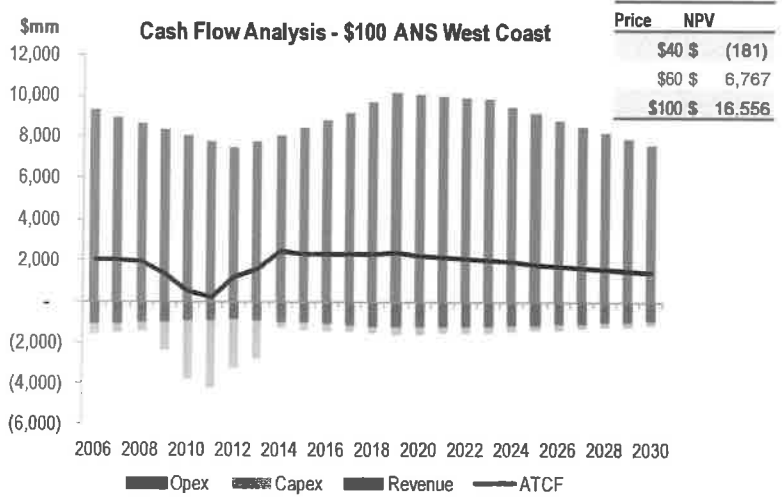
# CSSB 192 Including \$10 New Oil Allowance Over 1 Year (Existing Producer)



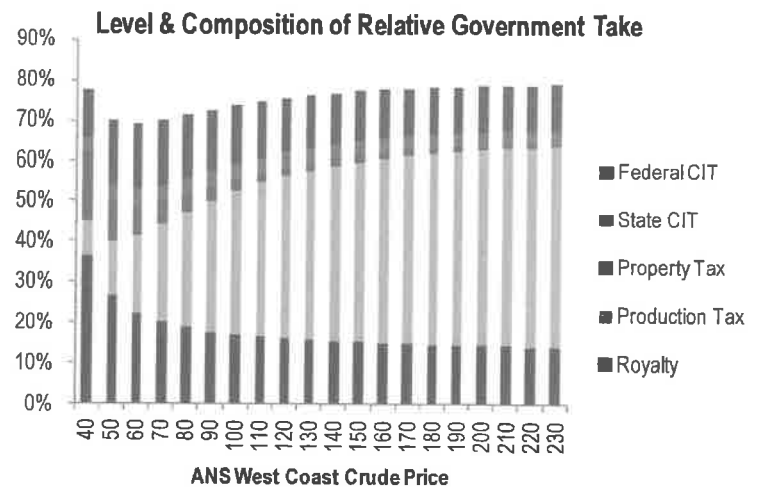
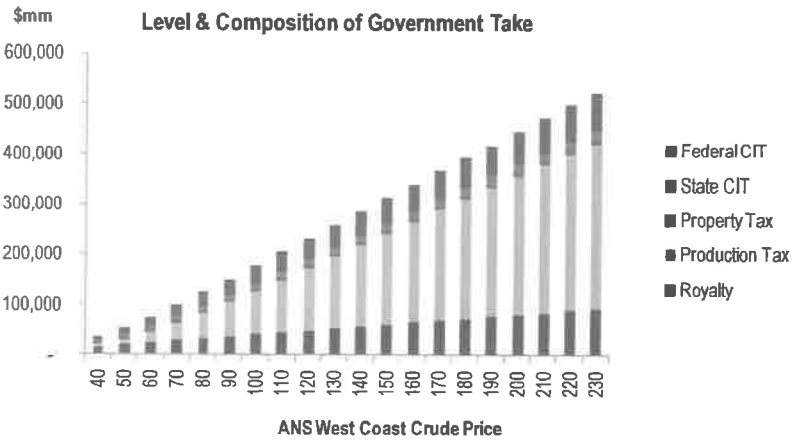
Price	Royalty	Production Tax	Property Tax	State CIT	Total State Take	Federal CIT	Total GT
40	37%	9%	17%	3%	66%	12%	78%
50	26%	14%	10%	4%	55%	16%	71%
60	22%	20%	7%	4%	54%	16%	70%
70	20%	25%	5%	4%	55%	16%	71%
80	19%	29%	4%	4%	56%	15%	72%
90	18%	33%	4%	4%	58%	15%	73%
100	17%	36%	3%	4%	60%	14%	74%
110	16%	39%	3%	4%	61%	14%	75%
120	16%	41%	3%	3%	63%	13%	76%
130	16%	42%	2%	3%	64%	13%	76%
140	15%	44%	2%	3%	65%	12%	77%
150	15%	45%	2%	3%	66%	12%	78%
160	15%	46%	2%	3%	66%	12%	78%
170	15%	47%	2%	3%	67%	12%	78%
180	15%	48%	2%	3%	67%	12%	78%
190	15%	48%	1%	3%	67%	11%	78%
200	14%	49%	1%	3%	68%	11%	79%
210	14%	49%	1%	3%	68%	11%	79%
220	14%	49%	1%	3%	68%	11%	79%
230	14%	50%	1%	3%	68%	11%	79%



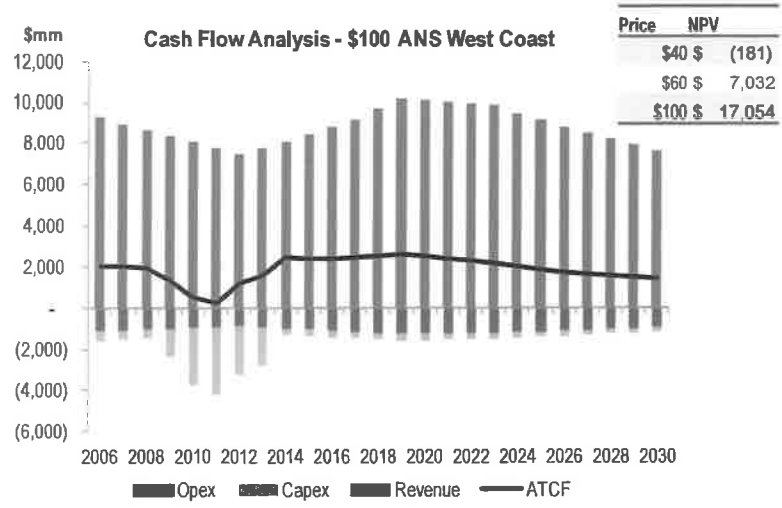
# CSSB 192 Including \$20 New Oil Allowance Over 7 Years (Existing Producer)



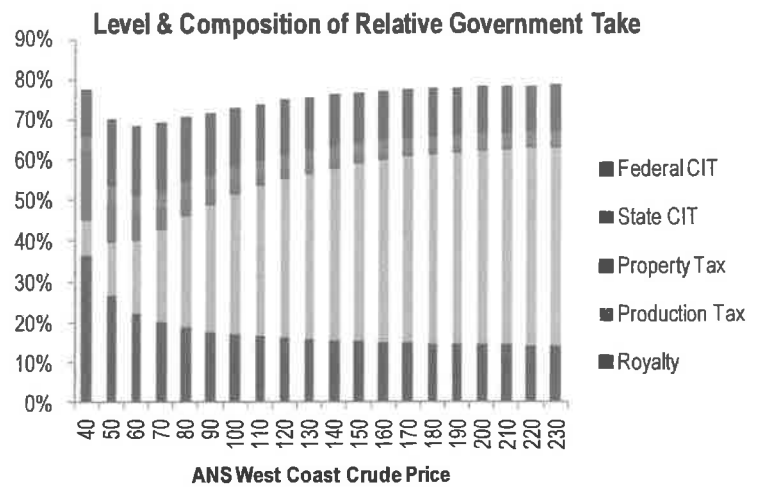
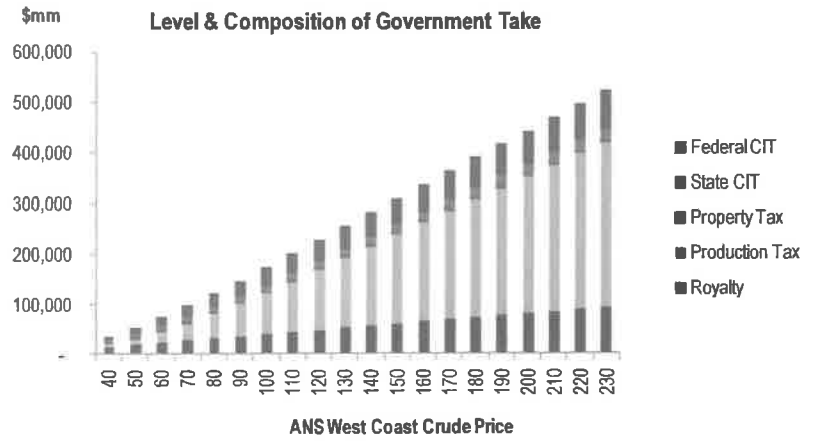
Price	Royalty	Production Tax	Property Tax	State CIT	Total State Take	Federal CIT	Total GT
40	37%	9%	17%	3%	66%	12%	78%
50	26%	13%	10%	4%	54%	16%	70%
60	22%	19%	7%	4%	53%	17%	69%
70	20%	24%	5%	4%	54%	16%	70%
80	19%	29%	4%	4%	56%	16%	71%
90	18%	32%	4%	4%	58%	15%	73%
100	17%	35%	3%	4%	59%	14%	74%
110	16%	38%	3%	4%	61%	14%	75%
120	16%	40%	3%	3%	62%	13%	75%
130	16%	42%	2%	3%	63%	13%	76%
140	15%	44%	2%	3%	64%	13%	77%
150	15%	45%	2%	3%	65%	12%	77%
160	15%	46%	2%	3%	66%	12%	78%
170	15%	47%	2%	3%	66%	12%	78%
180	15%	47%	2%	3%	67%	12%	78%
190	15%	48%	1%	3%	67%	12%	79%
200	14%	48%	1%	3%	67%	11%	78%
210	14%	49%	1%	3%	67%	11%	79%
220	14%	49%	1%	3%	68%	11%	79%
230	14%	49%	1%	3%	68%	11%	79%



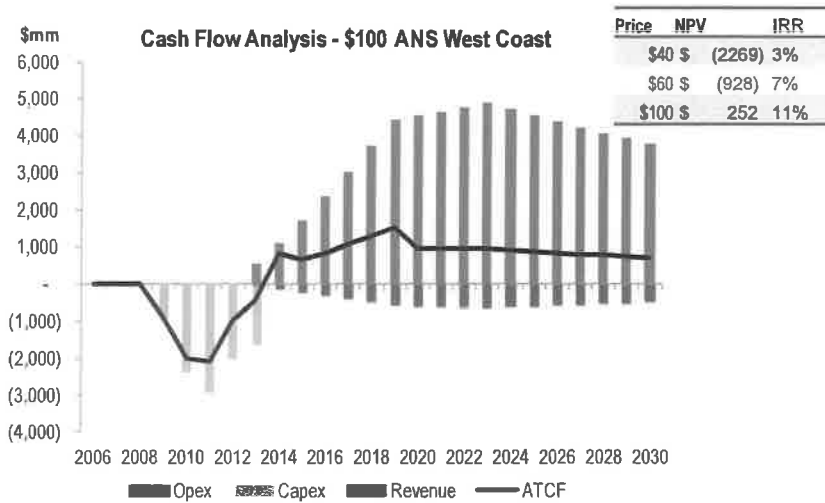
# CSSB 192 Including \$60 New Oil Allowance Over 7 Years (Existing Producer)



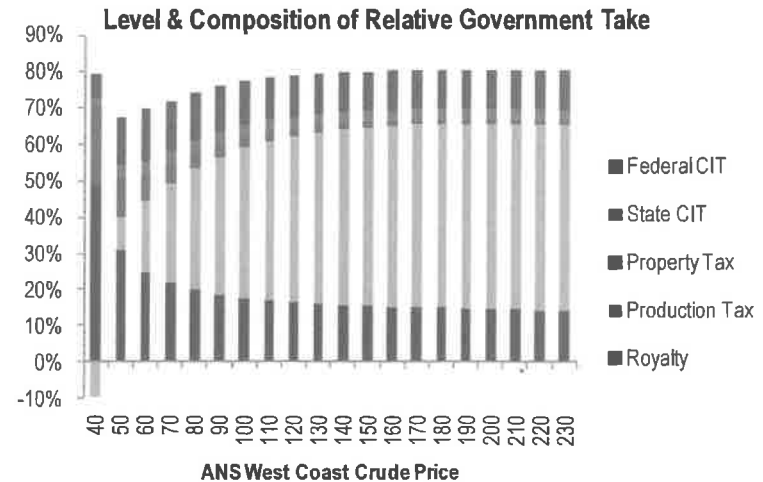
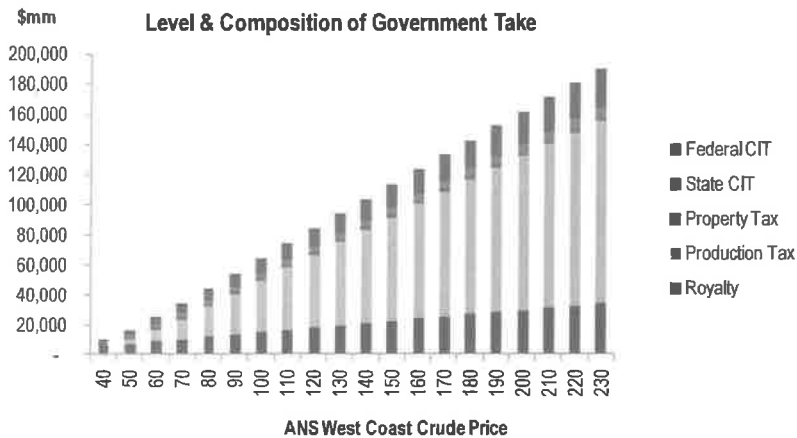
Price	Royalty	Production Tax	Property Tax	State CIT	Total State Take	Federal CIT	Total GT
40	37%	9%	17%	3%	66%	12%	78%
50	26%	13%	10%	4%	54%	16%	70%
60	22%	17%	7%	4%	51%	17%	68%
70	20%	23%	5%	4%	52%	17%	69%
80	19%	27%	4%	4%	54%	16%	70%
90	18%	31%	4%	4%	56%	15%	72%
100	17%	34%	3%	4%	58%	15%	73%
110	16%	37%	3%	4%	60%	14%	74%
120	16%	39%	3%	4%	61%	14%	75%
130	16%	41%	2%	3%	62%	13%	75%
140	15%	42%	2%	3%	63%	13%	76%
150	15%	44%	2%	3%	64%	13%	77%
160	15%	45%	2%	3%	65%	12%	77%
170	15%	46%	2%	3%	65%	12%	78%
180	15%	47%	2%	3%	66%	12%	78%
190	15%	47%	1%	3%	66%	12%	78%
200	14%	48%	1%	3%	67%	12%	78%
210	14%	48%	1%	3%	67%	12%	78%
220	14%	48%	1%	3%	67%	12%	79%
230	14%	49%	1%	3%	67%	12%	79%



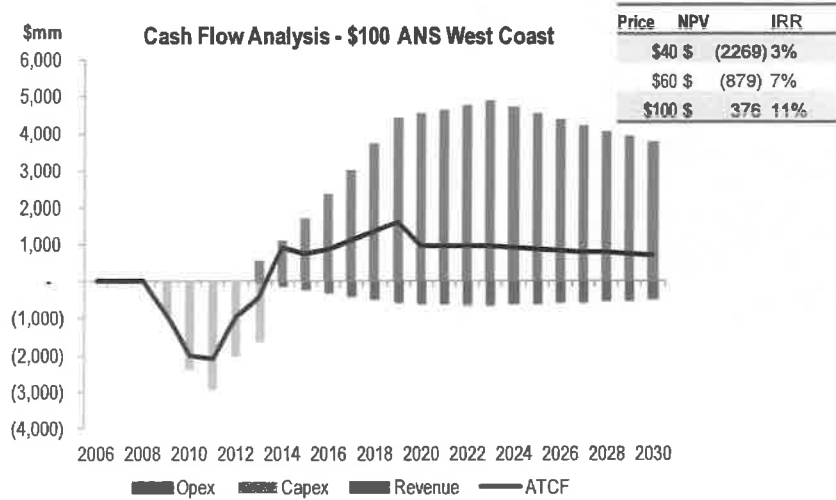
# CSSB 192 Excluding New Oil Allowance (New Producer)



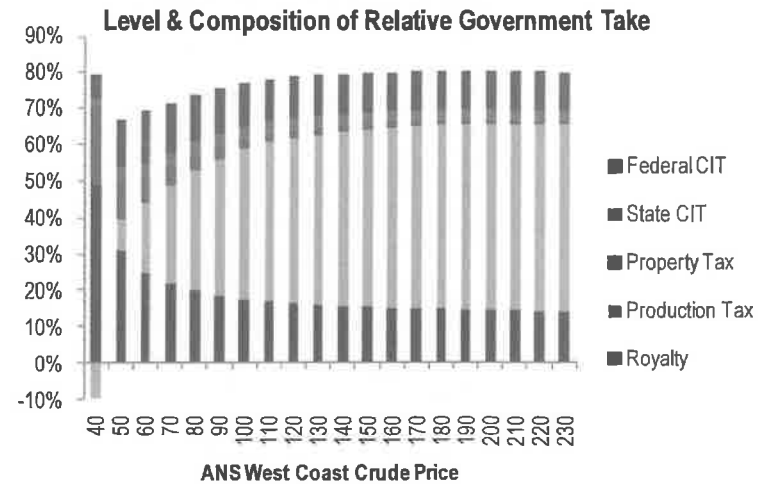
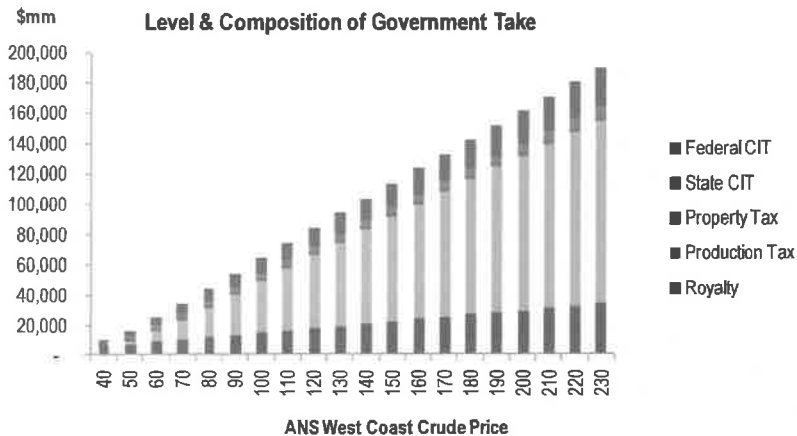
Price	Royalty	Production Tax	Property Tax	State CIT	Total State Take	Federal CIT	Total GT
40	49%	-10%	22%	2%	63%	7%	70%
50	31%	9%	11%	3%	55%	13%	68%
60	25%	20%	7%	4%	56%	14%	70%
70	22%	28%	6%	4%	58%	14%	72%
80	20%	33%	4%	3%	61%	13%	74%
90	19%	38%	4%	3%	64%	12%	76%
100	18%	41%	3%	3%	65%	12%	78%
110	17%	44%	3%	3%	67%	12%	78%
120	17%	46%	2%	3%	68%	12%	79%
130	16%	47%	2%	3%	68%	11%	80%
140	16%	48%	2%	3%	69%	11%	80%
150	16%	49%	2%	3%	69%	11%	80%
160	15%	50%	2%	3%	70%	11%	80%
170	15%	50%	2%	3%	70%	11%	80%
180	15%	51%	1%	3%	70%	11%	80%
190	15%	51%	1%	3%	70%	11%	80%
200	15%	51%	1%	3%	70%	11%	81%
210	15%	51%	1%	3%	70%	11%	81%
220	14%	51%	1%	3%	70%	11%	80%
230	14%	51%	1%	3%	70%	11%	80%



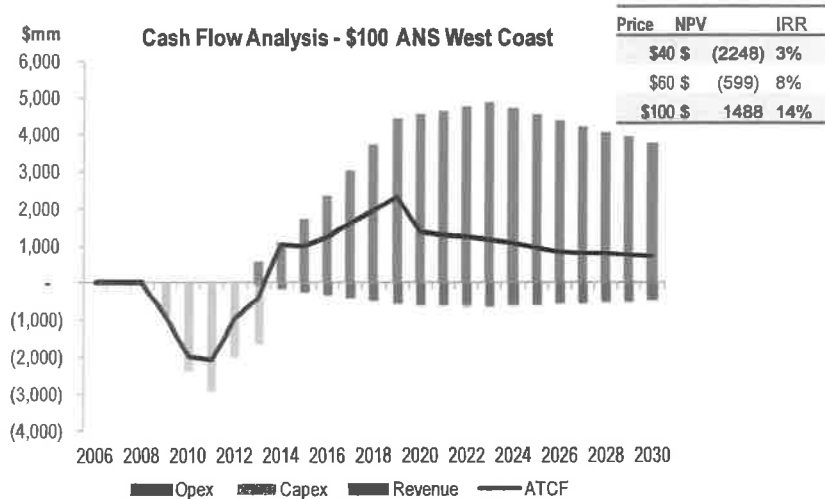
# CSSB 192 Including \$10 New Oil Allowance Over 1 Year (New Producer)



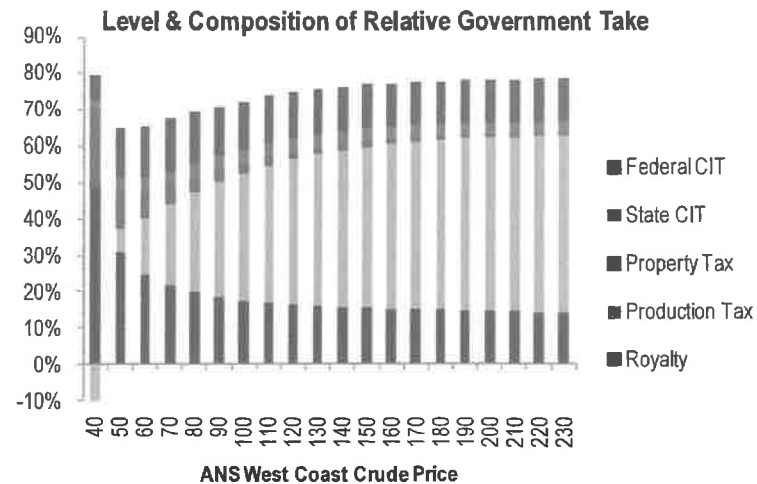
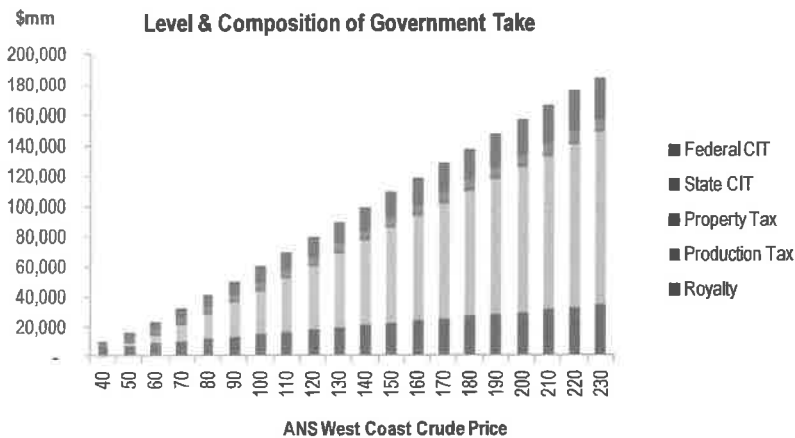
Price	Royalty	Production Tax	Property Tax	State CIT	Total State Take	Federal CIT	Total GT
40	49%	-10%	22%	2%	63%	7%	70%
50	31%	9%	11%	3%	54%	13%	67%
60	25%	19%	7%	4%	55%	14%	69%
70	22%	27%	6%	4%	58%	14%	72%
80	20%	33%	4%	3%	61%	13%	74%
90	19%	37%	4%	3%	63%	12%	75%
100	18%	41%	3%	3%	65%	12%	77%
110	17%	43%	3%	3%	66%	12%	78%
120	17%	45%	2%	3%	67%	12%	79%
130	16%	47%	2%	3%	68%	11%	79%
140	16%	48%	2%	3%	69%	11%	79%
150	16%	49%	2%	3%	69%	11%	80%
160	15%	49%	2%	3%	69%	11%	80%
170	15%	50%	2%	3%	70%	11%	80%
180	15%	50%	1%	3%	70%	11%	80%
190	15%	51%	1%	3%	70%	11%	80%
200	15%	51%	1%	3%	70%	11%	80%
210	15%	51%	1%	3%	70%	11%	80%
220	14%	51%	1%	3%	70%	11%	80%
230	14%	51%	1%	3%	69%	11%	80%



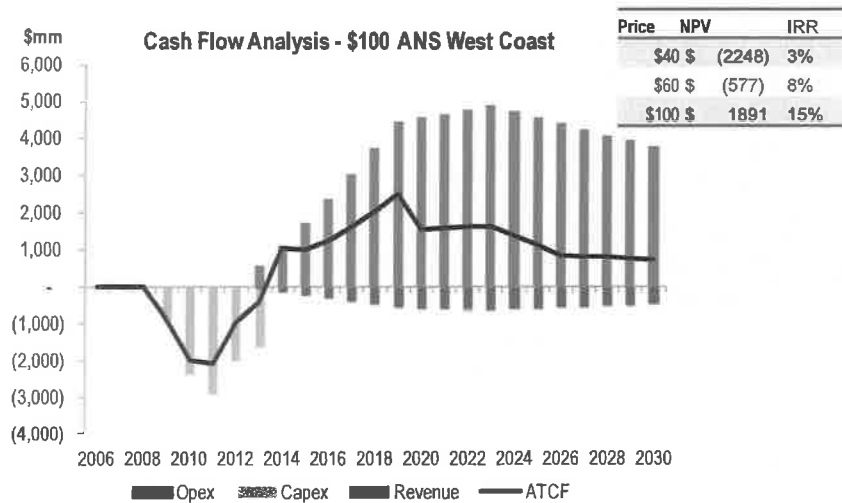
# CSSB 192 Including \$20 New Oil Allowance Over 7 Years (New Producer)



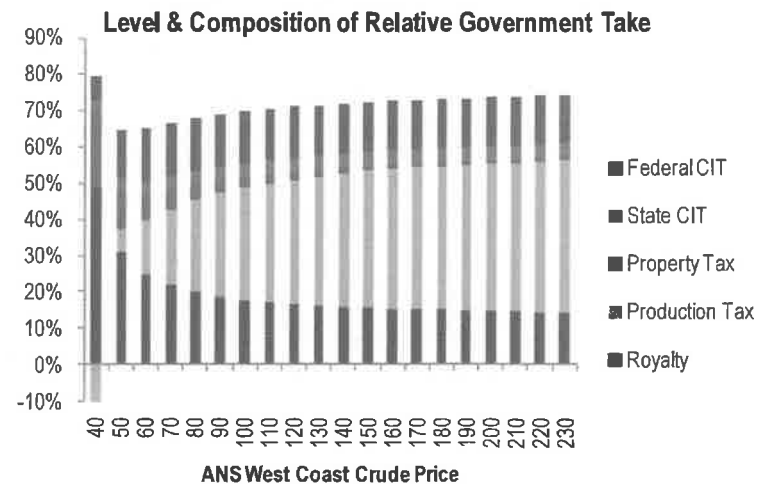
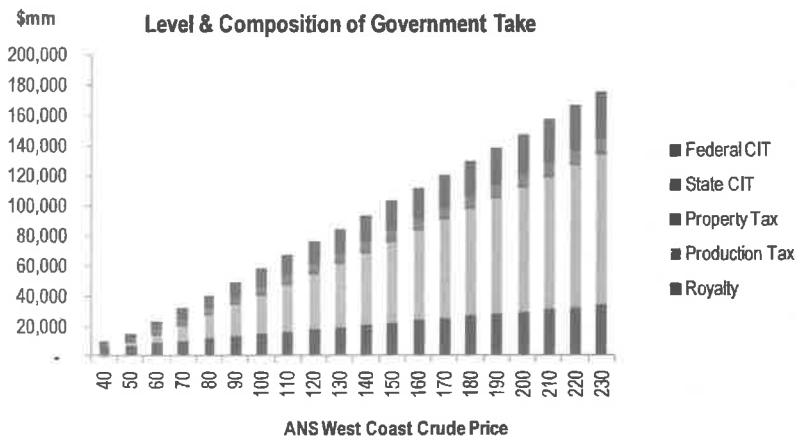
Price	Royalty	Production Tax	Property Tax	State CIT	Total State Take	Federal CIT	Total CIT
40	49%	-10%	22%	2%	62%	7%	69%
50	31%	6%	11%	3%	52%	13%	65%
60	25%	15%	7%	4%	51%	14%	66%
70	22%	22%	6%	4%	53%	14%	67%
80	20%	27%	4%	4%	55%	14%	69%
90	19%	31%	4%	4%	57%	13%	71%
100	18%	35%	3%	3%	59%	13%	72%
110	17%	37%	3%	3%	61%	13%	73%
120	17%	40%	2%	3%	62%	13%	75%
130	16%	42%	2%	3%	63%	12%	75%
140	16%	43%	2%	3%	64%	12%	76%
150	16%	44%	2%	3%	65%	12%	77%
160	15%	45%	2%	3%	65%	12%	77%
170	15%	46%	2%	3%	66%	12%	78%
180	15%	47%	1%	3%	66%	12%	78%
190	15%	47%	1%	3%	66%	12%	78%
200	15%	48%	1%	3%	67%	12%	78%
210	15%	48%	1%	3%	67%	12%	78%
220	14%	48%	1%	3%	67%	12%	78%
230	14%	48%	1%	3%	67%	12%	78%



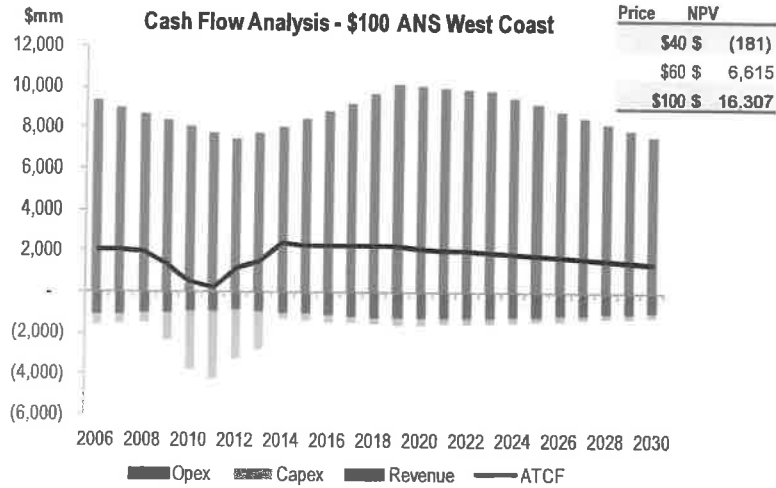
# CSSB 192 Including \$60 New Oil Allowance Over 7 Years (New Producer)



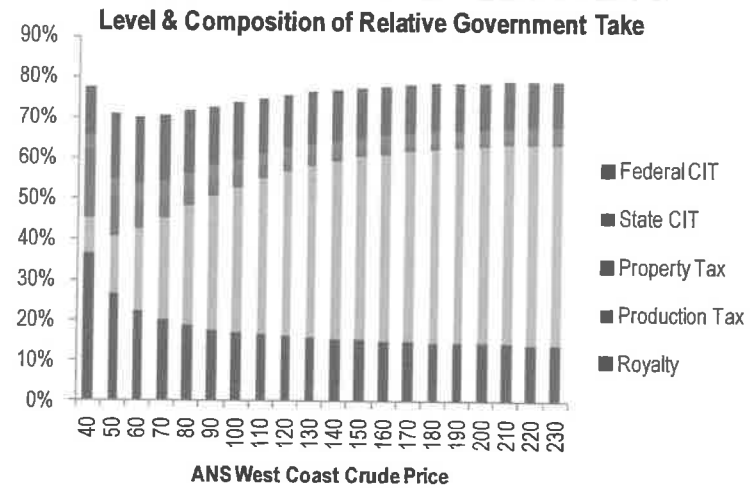
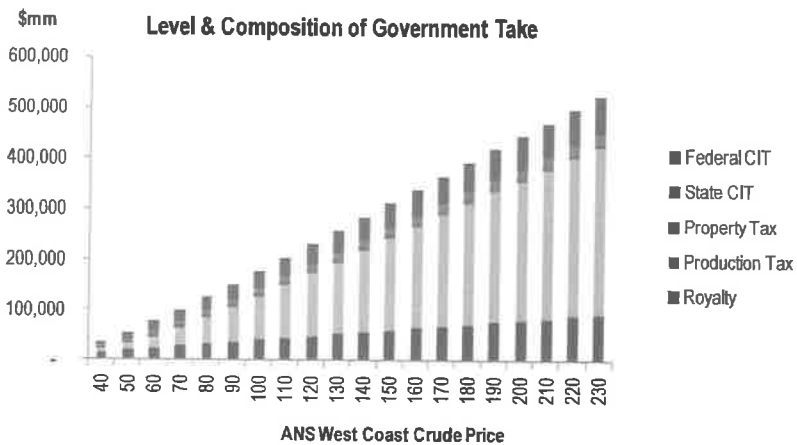
Price	Royalty	Production Tax	Property Tax	State CIT	Total State Take	Federal CIT	Total GT
40	49%	-10%	22%	2%	62%	7%	69%
50	31%	6%	11%	3%	52%	13%	65%
60	25%	15%	7%	4%	51%	14%	65%
70	22%	21%	6%	4%	52%	15%	67%
80	20%	25%	4%	4%	54%	14%	68%
90	19%	29%	4%	4%	55%	14%	69%
100	18%	31%	3%	4%	56%	14%	70%
110	17%	33%	3%	4%	56%	14%	70%
120	17%	34%	2%	4%	57%	14%	71%
130	16%	36%	2%	4%	58%	14%	72%
140	16%	37%	2%	4%	58%	14%	72%
150	16%	38%	2%	4%	59%	14%	72%
160	15%	39%	2%	4%	59%	14%	73%
170	15%	39%	2%	4%	59%	14%	73%
180	15%	40%	1%	4%	60%	14%	73%
190	15%	40%	1%	4%	60%	13%	73%
200	15%	41%	1%	4%	60%	13%	74%
210	15%	41%	1%	4%	60%	13%	74%
220	14%	42%	1%	3%	61%	13%	74%
230	14%	42%	1%	3%	61%	13%	74%



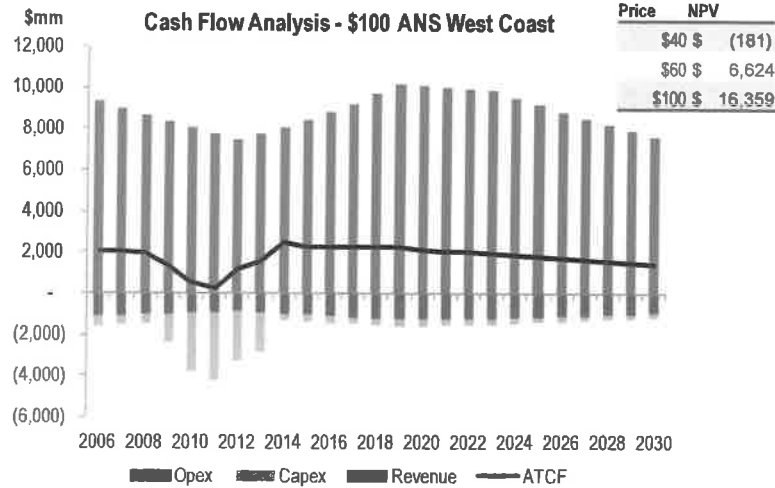
# CSSB 192 Excluding New Oil Allowance (Existing Producer)



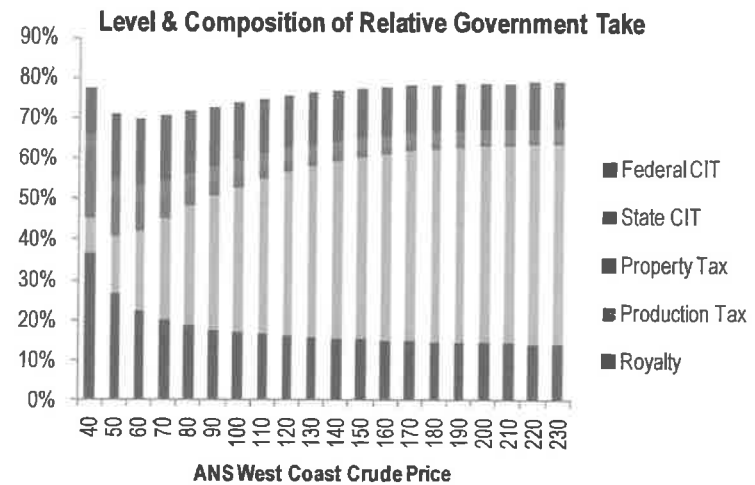
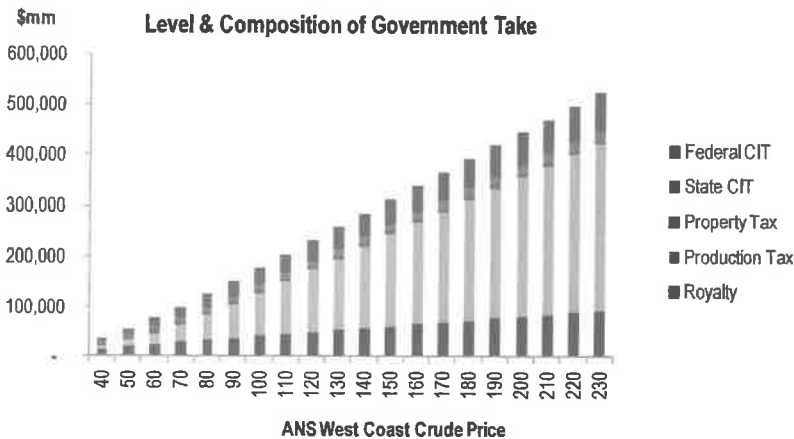
Price	Royalty	Production Tax	Property Tax	State CIT	Total State Take	Federal CIT	Total GT
40	37%	9%	17%	3%	66%	12%	78%
50	26%	14%	10%	4%	55%	16%	71%
60	22%	20%	7%	4%	54%	16%	70%
70	20%	25%	5%	4%	55%	16%	71%
80	19%	29%	4%	4%	56%	15%	72%
90	18%	33%	4%	4%	58%	15%	73%
100	17%	36%	3%	4%	60%	14%	74%
110	16%	39%	3%	4%	61%	14%	75%
120	16%	41%	3%	3%	63%	13%	76%
130	16%	43%	2%	3%	64%	13%	76%
140	15%	44%	2%	3%	65%	12%	77%
150	15%	45%	2%	3%	66%	12%	78%
160	15%	46%	2%	3%	66%	12%	78%
170	15%	47%	2%	3%	67%	12%	78%
180	15%	48%	2%	3%	67%	12%	79%
190	15%	48%	1%	3%	67%	11%	79%
200	14%	49%	1%	3%	68%	11%	79%
210	14%	49%	1%	3%	68%	11%	79%
220	14%	49%	1%	3%	68%	11%	79%
230	14%	50%	1%	3%	68%	11%	79%



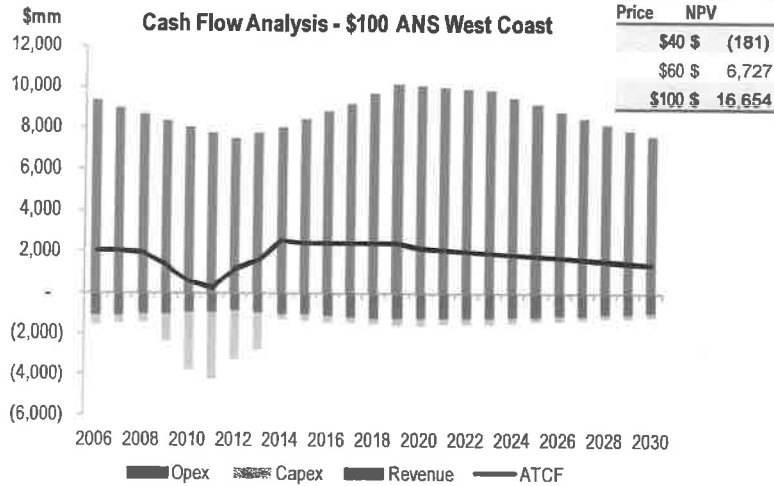
# CSSB 192 Including Tax Holiday Based on 3 Year Rolling Decline (Existing Producer)



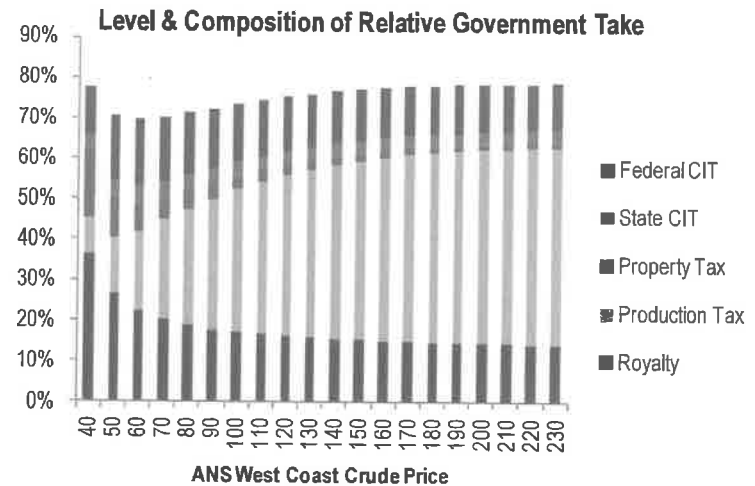
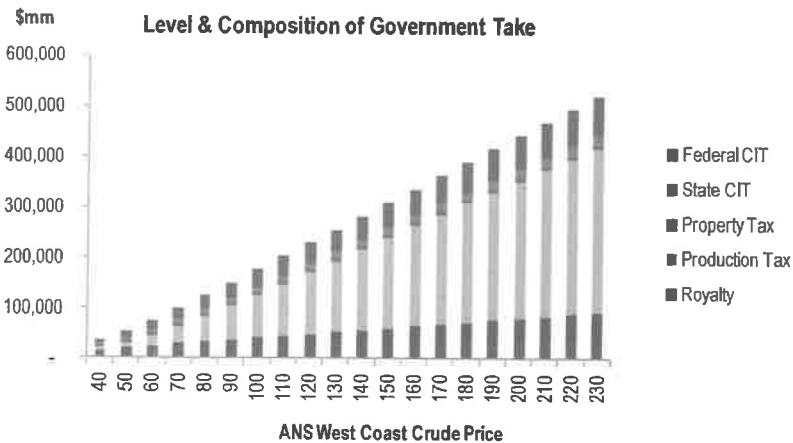
Price	Royalty	Production Tax	Property Tax	State CIT	Total State Take	Federal CIT	Total GT
40	37%	9%	17%	3%	66%	12%	78%
50	26%	14%	10%	4%	55%	16%	71%
60	22%	20%	7%	4%	54%	16%	70%
70	20%	25%	5%	4%	55%	16%	71%
80	19%	29%	4%	4%	56%	15%	72%
90	18%	33%	4%	4%	58%	15%	73%
100	17%	36%	3%	4%	60%	14%	74%
110	16%	39%	3%	4%	61%	14%	75%
120	16%	41%	3%	3%	63%	13%	76%
130	16%	42%	2%	3%	64%	13%	76%
140	15%	44%	2%	3%	65%	12%	77%
150	15%	45%	2%	3%	65%	12%	78%
160	15%	46%	2%	3%	66%	12%	78%
170	15%	47%	2%	3%	67%	12%	78%
180	15%	48%	2%	3%	67%	12%	79%
190	15%	48%	1%	3%	67%	11%	79%
200	14%	49%	1%	3%	67%	11%	79%
210	14%	49%	1%	3%	68%	11%	79%
220	14%	49%	1%	3%	68%	11%	79%
230	14%	50%	1%	3%	68%	11%	79%



# CSSB 192 Including Tax Holiday Based on 3 Year Rolling Decline for 7 Years (Existing Producer)

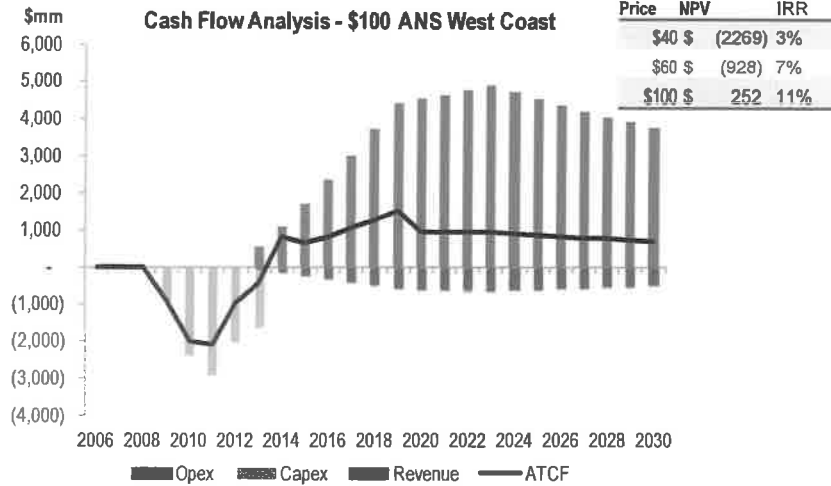


Price	Royalty	Production Tax	Property Tax	State CIT	Total State Take	Federal CIT	Total GT
40	37%	9%	17%	3%	66%	12%	78%
50	26%	14%	10%	4%	55%	16%	71%
60	22%	19%	7%	4%	53%	17%	70%
70	20%	24%	5%	4%	54%	16%	70%
80	19%	29%	4%	4%	56%	15%	71%
90	18%	32%	4%	4%	58%	15%	73%
100	17%	35%	3%	4%	59%	14%	74%
110	16%	38%	3%	4%	61%	14%	74%
120	16%	40%	3%	3%	62%	13%	75%
130	16%	42%	2%	3%	63%	13%	76%
140	15%	43%	2%	3%	64%	13%	77%
150	15%	44%	2%	3%	65%	12%	77%
160	15%	45%	2%	3%	65%	12%	77%
170	15%	46%	2%	3%	66%	12%	78%
180	15%	47%	2%	3%	66%	12%	78%
190	15%	47%	1%	3%	66%	12%	78%
200	14%	48%	1%	3%	67%	12%	78%
210	14%	48%	1%	3%	67%	12%	78%
220	14%	49%	1%	3%	67%	12%	79%
230	14%	49%	1%	3%	67%	12%	79%



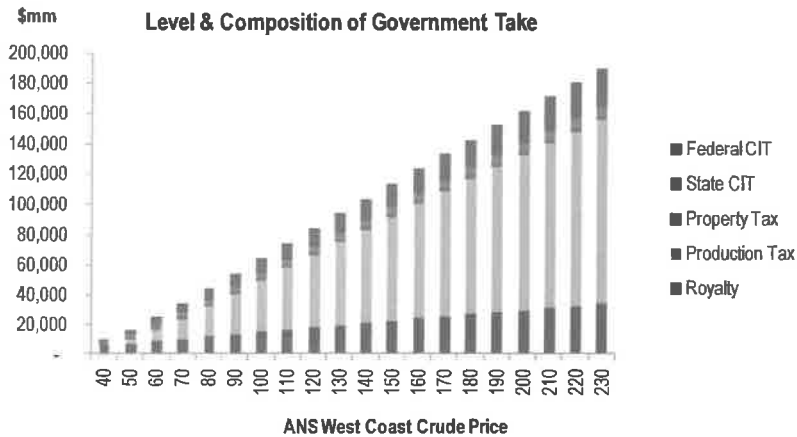
# CSSB 192 Excluding New Oil Allowance (New Producer)

Cash Flow Analysis - \$100 ANS West Coast

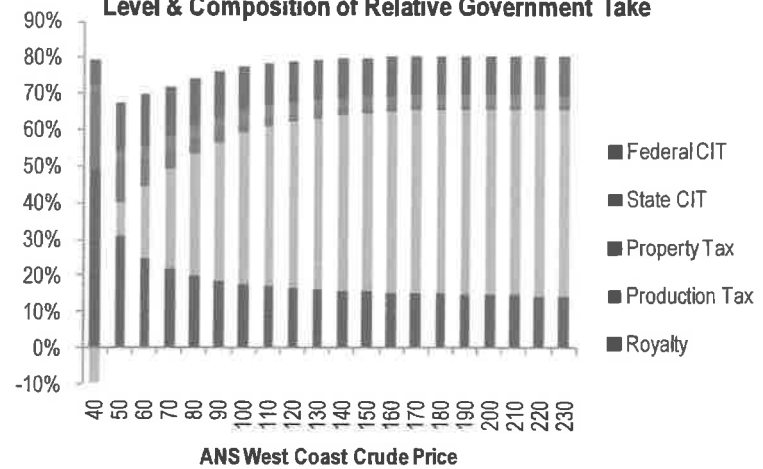


Price	Royalty	Production Tax	Property Tax	State CIT	Total State Take	Federal CIT	Total GT
40	49%	-10%	22%	2%	63%	7%	70%
50	31%	9%	11%	3%	55%	13%	68%
60	25%	20%	7%	4%	56%	14%	70%
70	22%	28%	6%	4%	58%	14%	72%
80	20%	33%	4%	3%	61%	13%	74%
90	18%	38%	4%	3%	64%	12%	76%
100	18%	41%	3%	3%	65%	12%	78%
110	17%	44%	3%	3%	67%	12%	78%
120	17%	46%	2%	3%	68%	12%	79%
130	16%	47%	2%	3%	68%	11%	80%
140	16%	48%	2%	3%	69%	11%	80%
150	16%	49%	2%	3%	69%	11%	80%
160	15%	50%	2%	3%	70%	11%	80%
170	15%	50%	2%	3%	70%	11%	80%
180	15%	51%	1%	3%	70%	11%	80%
190	15%	51%	1%	3%	70%	11%	80%
200	15%	51%	1%	3%	70%	11%	81%
210	15%	51%	1%	3%	70%	11%	81%
220	14%	51%	1%	3%	70%	11%	80%
230	14%	51%	1%	3%	70%	11%	80%

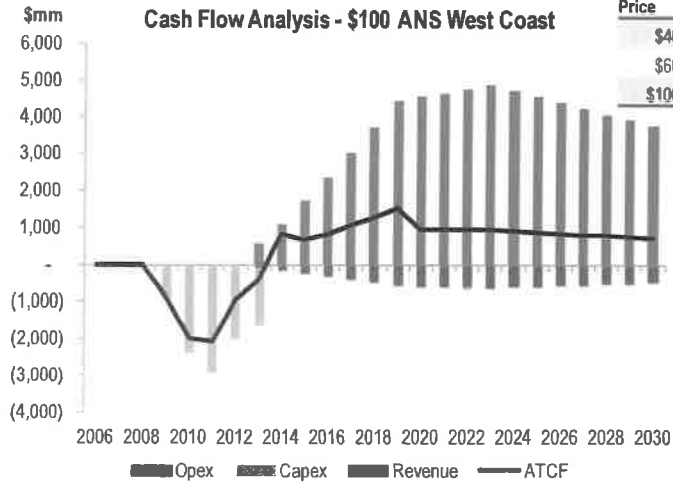
Level & Composition of Government Take



Level & Composition of Relative Government Take

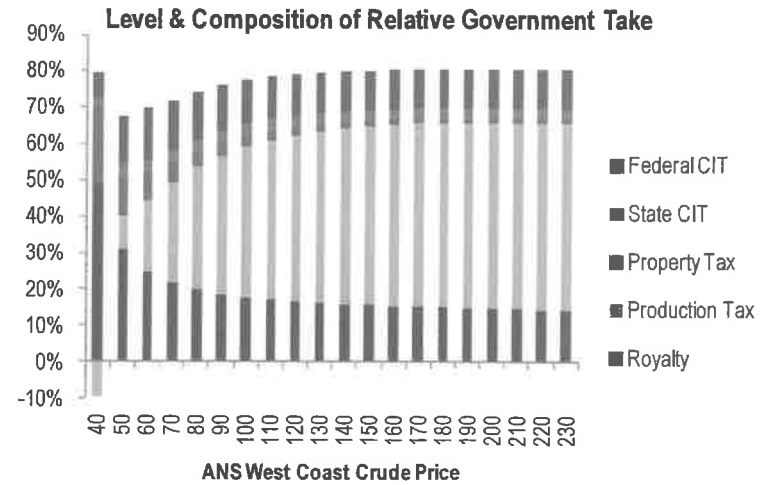
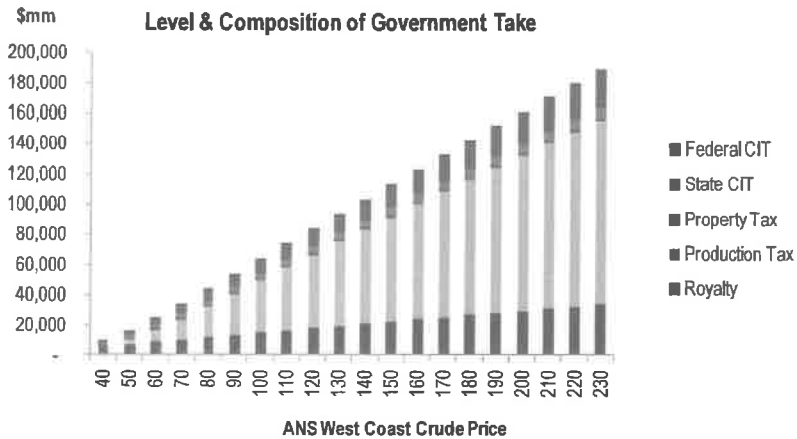


# CSSB 192 Including Tax Holiday Based on 3 Year Rolling Decline (New Producer)

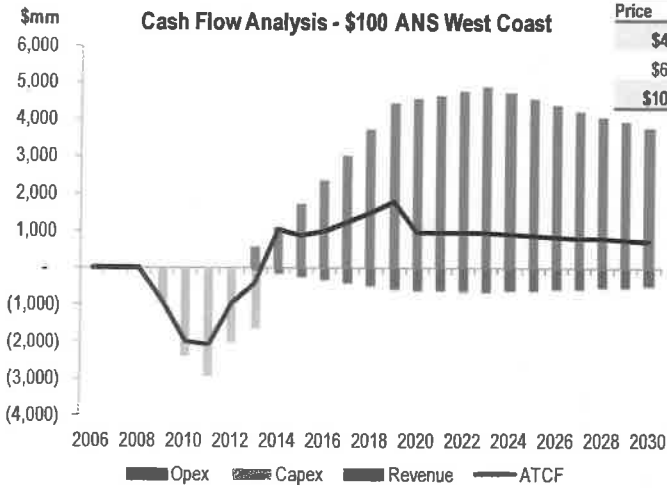


Price	NPV	IRR
\$40	\$ (2269)	3%
\$60	\$ (928)	7%
\$100	\$ 252	11%

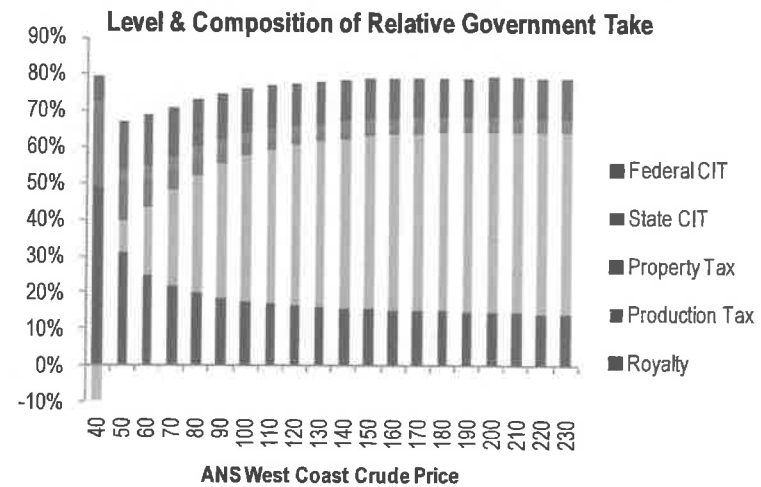
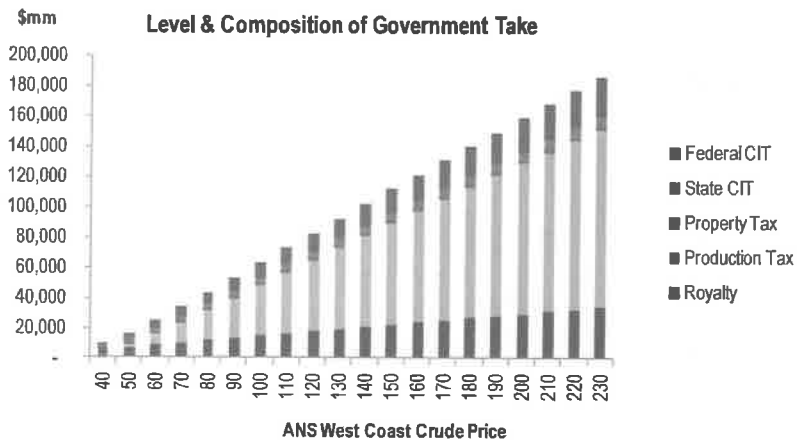
Price	Royalty	Production Tax	Property Tax	State CIT	Total State Take	Federal CIT	Total GT
40	49%	-10%	22%	2%	63%	7%	70%
50	31%	9%	11%	3%	55%	13%	68%
60	25%	20%	7%	4%	56%	14%	70%
70	22%	28%	6%	4%	58%	14%	72%
80	20%	33%	4%	3%	61%	13%	74%
90	19%	38%	4%	3%	64%	12%	76%
100	18%	41%	3%	3%	65%	12%	78%
110	17%	44%	3%	3%	67%	12%	78%
120	17%	46%	2%	3%	68%	12%	79%
130	16%	47%	2%	3%	68%	11%	80%
140	16%	48%	2%	3%	69%	11%	80%
150	16%	49%	2%	3%	69%	11%	80%
160	15%	50%	2%	3%	70%	11%	80%
170	15%	50%	2%	3%	70%	11%	80%
180	15%	51%	1%	3%	70%	11%	80%
190	15%	51%	1%	3%	70%	11%	80%
200	15%	51%	1%	3%	70%	11%	81%
210	15%	51%	1%	3%	70%	11%	81%
220	14%	51%	1%	3%	70%	11%	80%
230	14%	51%	1%	3%	70%	11%	80%



# CSSB 192 Including Tax Holiday Based on 3 Year Rolling Decline for 7 Years (New Producer)



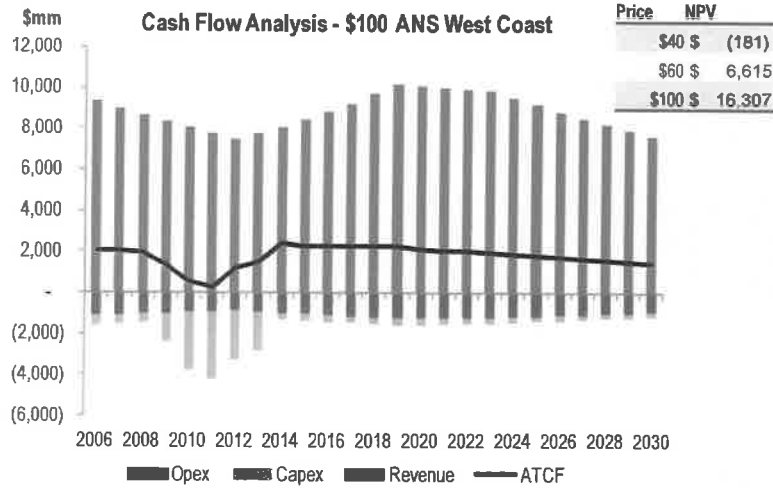
Price	Royalty	Production Tax	Property Tax	State CIT	Total State Take	Federal CIT	Total CIT
40	49%	-10%	22%	2%	63%	7%	70%
50	31%	9%	11%	3%	54%	13%	67%
60	25%	19%	7%	4%	55%	14%	69%
70	22%	27%	6%	4%	57%	14%	71%
80	20%	32%	4%	3%	60%	13%	73%
90	19%	37%	4%	3%	62%	12%	75%
100	18%	40%	3%	3%	64%	12%	76%
110	17%	42%	3%	3%	65%	12%	77%
120	17%	44%	2%	3%	66%	12%	78%
130	16%	45%	2%	3%	67%	11%	78%
140	16%	46%	2%	3%	67%	11%	78%
150	16%	47%	2%	3%	68%	11%	79%
160	15%	48%	2%	3%	68%	11%	79%
170	15%	49%	2%	3%	68%	11%	79%
180	15%	49%	1%	3%	68%	11%	79%
190	15%	49%	1%	3%	68%	11%	79%
200	15%	49%	1%	3%	68%	11%	79%
210	15%	50%	1%	3%	68%	11%	79%
220	14%	50%	1%	3%	68%	11%	79%
230	14%	50%	1%	3%	68%	11%	79%



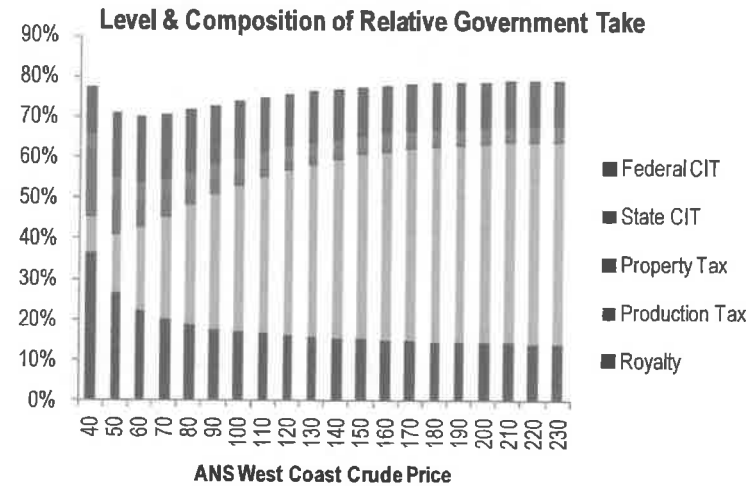
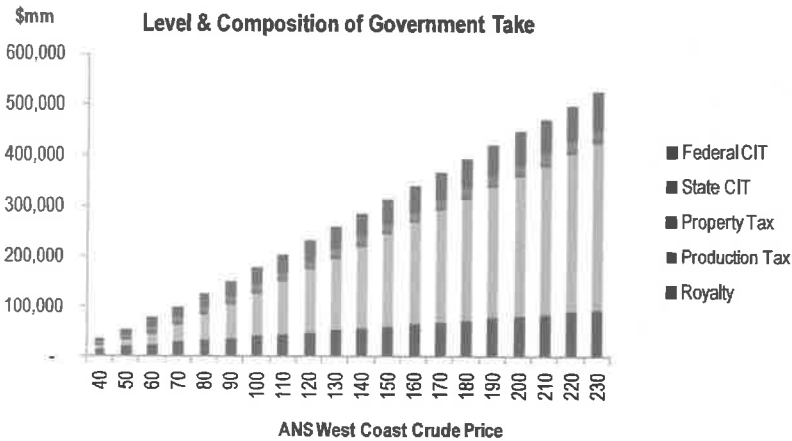
# Differences in Incremental Production

	2012	2013	2014	2015	2016	2017	2018	2019	2020
<u>3 year rolling decline</u>									
3 year rolling decline rate	6%	4%	1%	-1%	-2%	-2%	-2%	-3%	-1%
Target Production	175	169	175	182	186	190	195	201	202
Production Above Target	-	8	5	1	1	0	0	0	-
Percentage Above Target Forecast	0%	5%	3%	0%	0%	0%	0%	0%	0%
<u>Incremental</u>									
Target Production (prior year)	186	175	177	180	183	187	191	196	201
Production Above Target	-	2	3	3	4	4	5	5	-
Percentage Above Target Forecast	0%	1%	1%	2%	2%	2%	3%	3%	0%
<u>Decline above fixed forecast</u>									
Target Production	175	165	155	145	137	128	121	113	107
Production Above Target	-	13	25	38	50	62	75	87	88
Percentage Above Target Forecast	0%	8%	16%	26%	37%	49%	62%	77%	82%

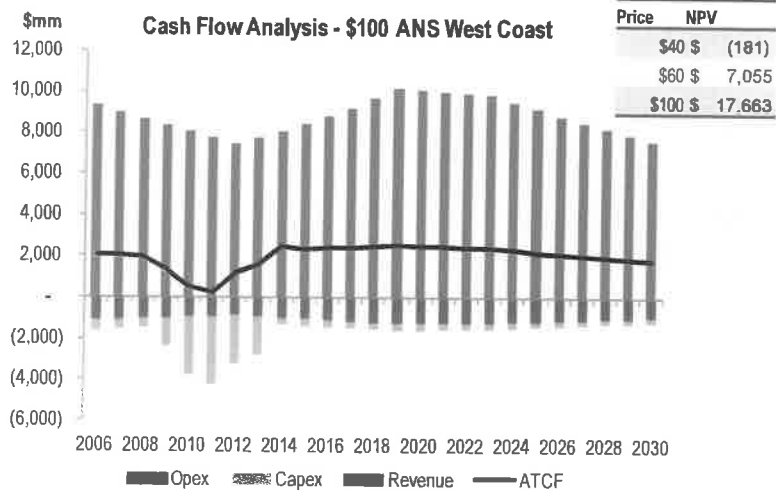
# CSSB 192 Excluding New Oil Allowance (Existing Producer)



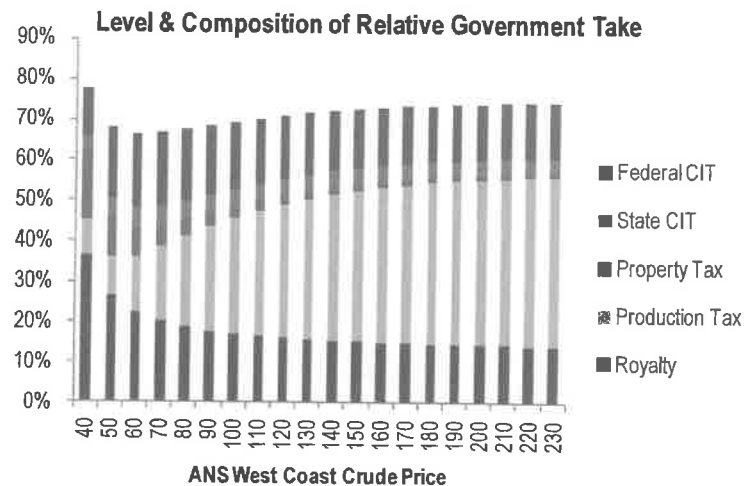
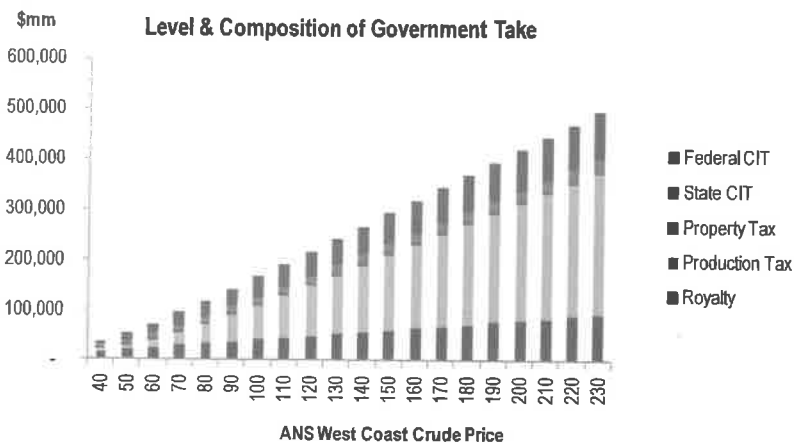
Price	Royalty	Production Tax	Property Tax	State CIT	Total State Take	Federal CIT	Total GT
40	37%	9%	17%	3%	66%	12%	78%
50	26%	14%	10%	4%	55%	16%	71%
60	22%	20%	7%	4%	54%	16%	70%
70	20%	25%	5%	4%	55%	16%	71%
80	19%	29%	4%	4%	56%	15%	72%
90	18%	33%	4%	4%	58%	15%	73%
100	17%	36%	3%	4%	60%	14%	74%
110	16%	39%	3%	4%	61%	14%	75%
120	16%	41%	3%	3%	63%	13%	76%
130	16%	43%	2%	3%	64%	13%	76%
140	15%	44%	2%	3%	65%	12%	77%
150	15%	45%	2%	3%	66%	12%	78%
160	15%	46%	2%	3%	66%	12%	78%
170	15%	47%	2%	3%	67%	12%	78%
180	15%	48%	2%	3%	67%	12%	79%
190	15%	48%	1%	3%	67%	11%	79%
200	14%	49%	1%	3%	68%	11%	79%
210	14%	49%	1%	3%	68%	11%	79%
220	14%	49%	1%	3%	68%	11%	79%
230	14%	50%	1%	3%	68%	11%	79%



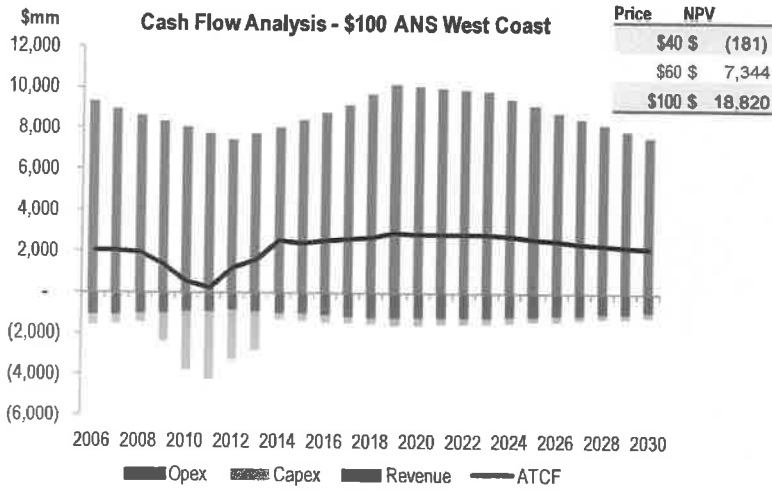
# CSSB 192 Including 20% Gross Revenue Allowance Above Fixed Decline Rate (Existing Producer)



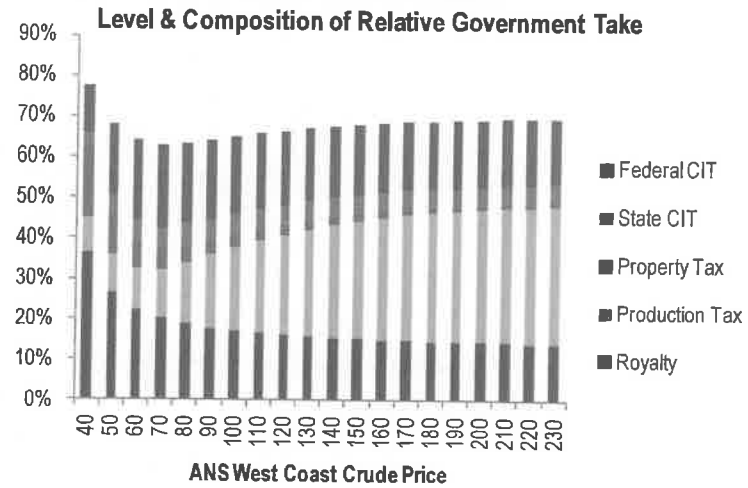
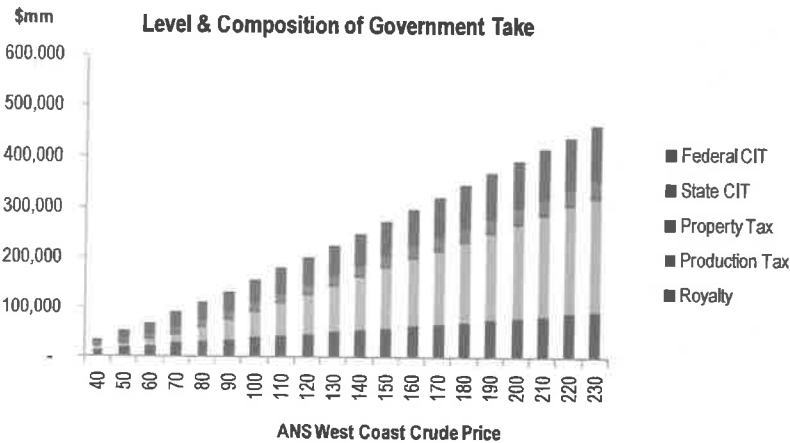
Price	Royalty	Production Tax	Property Tax	State CIT	Total State Take	Federal CIT	Total GT
40	37%	9%	17%	3%	66%	12%	78%
50	26%	10%	10%	5%	51%	17%	68%
60	22%	14%	7%	5%	48%	18%	66%
70	20%	18%	5%	5%	49%	18%	67%
80	19%	22%	4%	5%	50%	18%	68%
90	18%	26%	4%	4%	52%	17%	69%
100	17%	28%	3%	4%	53%	17%	69%
110	16%	31%	3%	4%	54%	16%	70%
120	16%	33%	3%	4%	56%	16%	71%
130	16%	35%	2%	4%	57%	15%	72%
140	15%	36%	2%	4%	57%	15%	72%
150	15%	37%	2%	4%	58%	15%	73%
160	15%	38%	2%	4%	59%	14%	73%
170	15%	39%	2%	4%	59%	14%	74%
180	15%	40%	2%	4%	60%	14%	74%
190	15%	40%	1%	4%	60%	14%	74%
200	14%	41%	1%	4%	60%	14%	74%
210	14%	41%	1%	4%	60%	14%	74%
220	14%	42%	1%	4%	61%	14%	74%
230	14%	42%	1%	4%	61%	14%	75%



# CSSB 192 Including 40% Gross Revenue Allowance Above Fixed Decline Rate (Existing Producer)



Price	Royalty	Production Tax	Property Tax	State CIT	Total State Take	Federal CIT	Total GT
40	37%	9%	17%	3%	56%	12%	78%
50	26%	10%	10%	5%	51%	17%	68%
60	22%	10%	7%	5%	45%	20%	64%
70	20%	12%	5%	5%	43%	20%	63%
80	19%	15%	4%	5%	44%	20%	63%
90	18%	18%	4%	5%	45%	19%	64%
100	17%	21%	3%	5%	46%	19%	65%
110	16%	23%	3%	5%	47%	19%	66%
120	16%	25%	3%	5%	48%	18%	66%
130	16%	27%	2%	5%	49%	18%	67%
140	15%	28%	2%	5%	50%	17%	68%
150	15%	29%	2%	5%	51%	17%	68%
160	15%	30%	2%	4%	51%	17%	68%
170	15%	31%	2%	4%	52%	17%	69%
180	15%	32%	2%	4%	52%	17%	69%
190	15%	32%	1%	4%	53%	17%	69%
200	14%	33%	1%	4%	53%	16%	69%
210	14%	33%	1%	4%	53%	16%	70%
220	14%	34%	1%	4%	53%	16%	70%
230	14%	34%	1%	4%	54%	16%	70%



# Conclusions – New Oil Allowance

- Even under highly aggressive assumptions regarding the potential for a new-source development for a given company, the impact of CSSB192's \$10 allowance for "new oil" is almost undetectable
  - By increasing the time horizon and value of the allowance, it is possible to increase the impact to the point at which it becomes noticeable in the specific hypothetical case of a 100 mb/d new development for an existing producer
  - This, however, is a highly unlikely scenario. Under any foreseeable scenario, regardless of rate or duration, it is unlikely to have any impact because it does not incentivize new production above the existing decline, only volumes incremental to prior years' production
- Senate Resources Amendment B2 instead proposed a tax holiday based on production above a target rate, set based on the rolling average decline rate for the prior 3 years
  - While the decline-curve approach is a sounder one, the impact of this proposal is also highly limited, for two reasons
    - The allowance applies each year only to production that year which exceeds the target
    - After a few years of production growth, the incentive no longer applies to new production, due to changes in the rolling-average decline curve
- An allowance based on a set decline-curve, based at a particular point in time, has a significantly greater impact than either of the other forms of allowance.
  - Determining the appropriate decline basis to use could pose difficulties
  - The decline curve concept could also be complemented with other incremental production definitions, such as production from new areas, and from approved development plans

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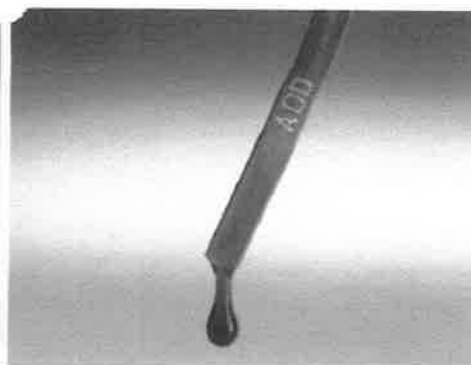
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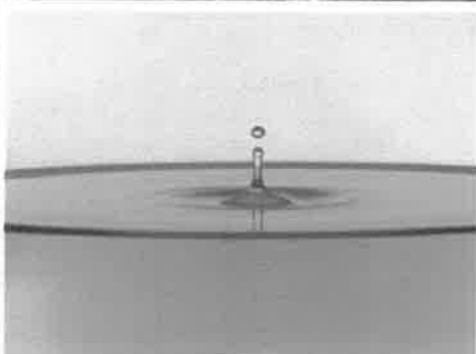
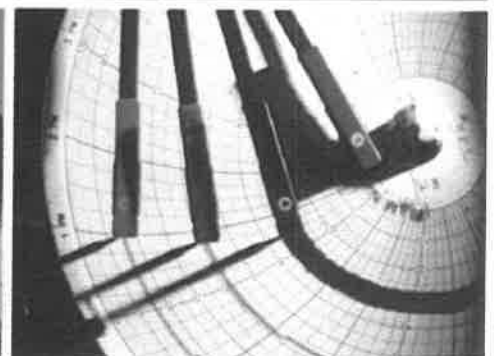
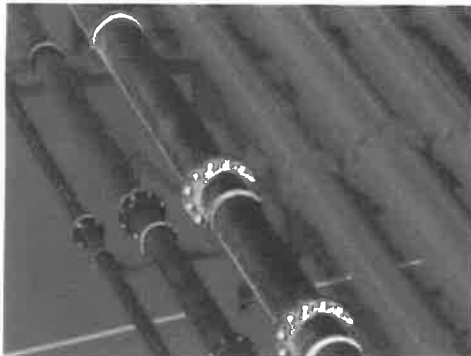
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The Palin-Parnell Administration presents

# ACES

*Alaska's Clear and Equitable Share*

Senate Resources  
House Oil and Gas  
Joint Hearing  
October 21, 2007

*Last Updated: 10-21-07*

# **ACES Preserves Investment Climate**

**An Economic Evaluation**

**Anthony Finizza, Ph. D.**

**October 21, 2007**

# **Framework and Methodology for Analysis**

## **Financial Metrics**

## **Producer Economic Metrics**

- **NPV – Net Present Value (“Value today of Project Cash Flows”)**

# Metrics Used



Alaska's Clear and Equitable Share

	Legacy Fields	New Fields	
<p><i>Producer Point-of-View</i></p> <p><b>Financial Evaluation</b></p>	<p><b>"Reinvestment Economics"</b></p> <p><b>Net Cash Flow NPV10</b></p>	<p><b>"Investment Economics"</b></p> <p><b>Net Cash Flow NPV10</b></p>	<p><b>Does the project have NPV&gt;0 at stress price?</b></p>
<p><i>Alaska Point-of-View</i></p> <p><b>"Fairness"</b></p>	<p><b>Marginal Government Take</b></p>	<p><b>Life Cycle Discounted (10%) Government Take</b></p>	<p><b>Does the SOA receive a fair share of the economic profit?</b></p>

## **Financial Criterion Net Present Value (NPV)**

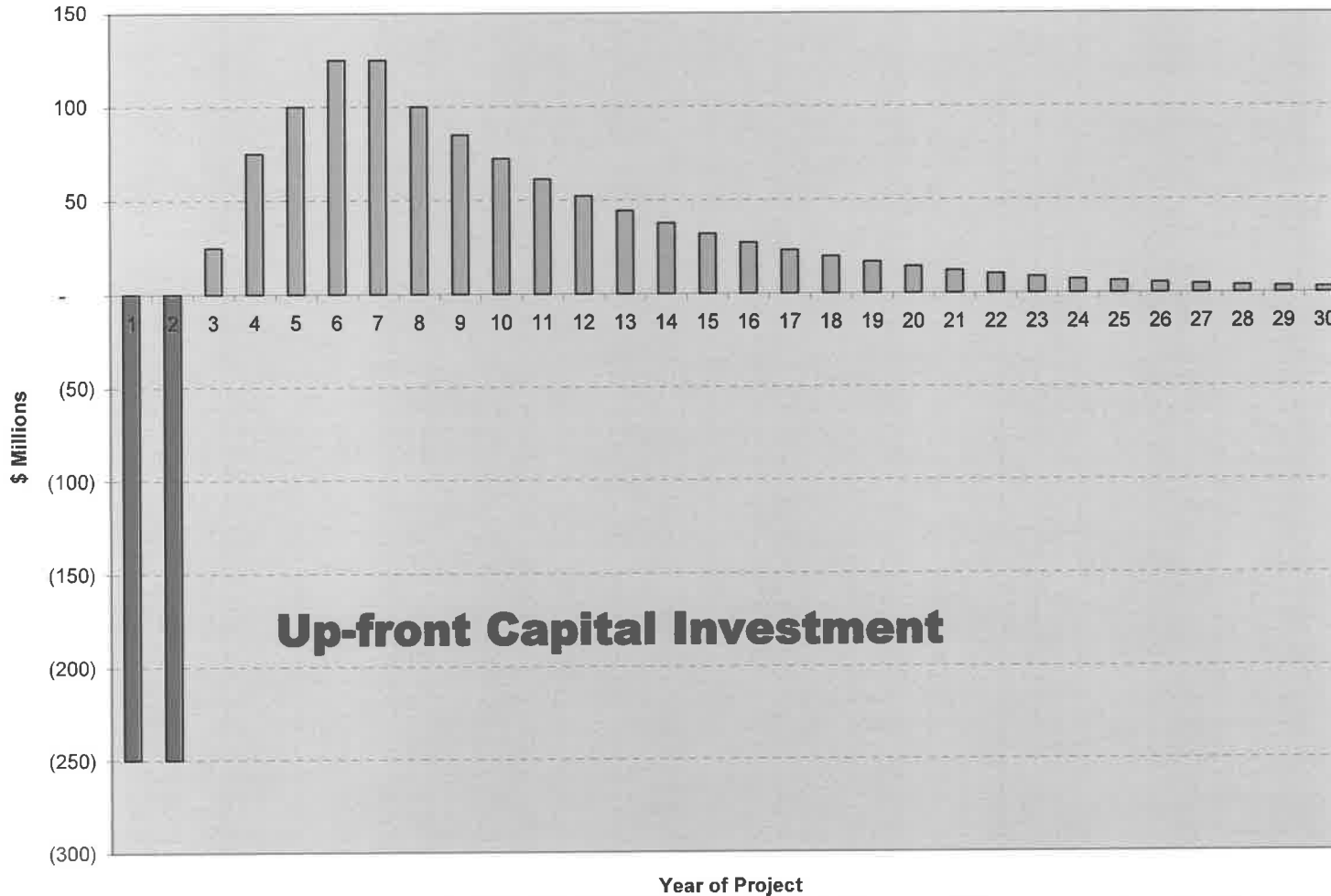


- **Present value of future cash flows including capital investment**
- **This is the “supreme” financial metric since a project with a positive NPV adds value to the firm**
  - **Value of the firm = PV of all future cash flows**
    - = PV of cash flows from assets in place**
    - + PV of cash flows from future investments**
- **Future cash flows discounted at rate that represents uncertainty of cash flows and when they are expected**
- **If a project generates cash in excess of that to compensate for the risk taken, the value of the firm increases**

# Stylized Project Cash Flow

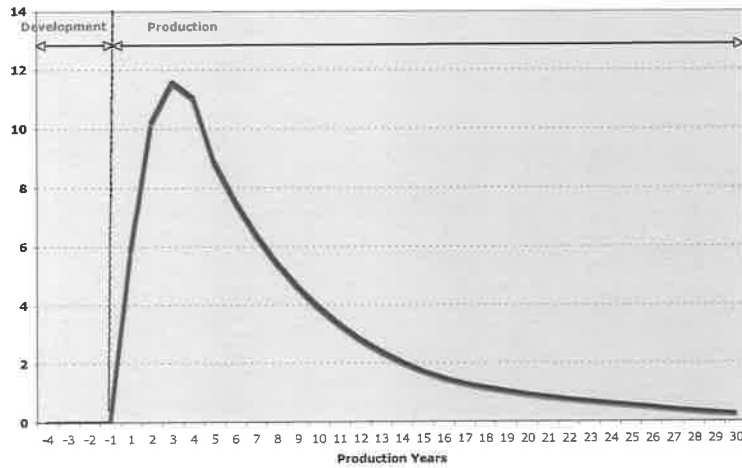


## Net Cash Flow from Production

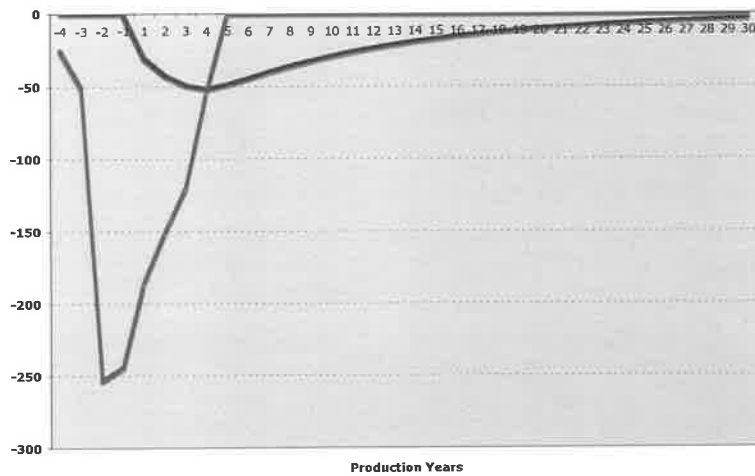


# Cash Flows for New Fields

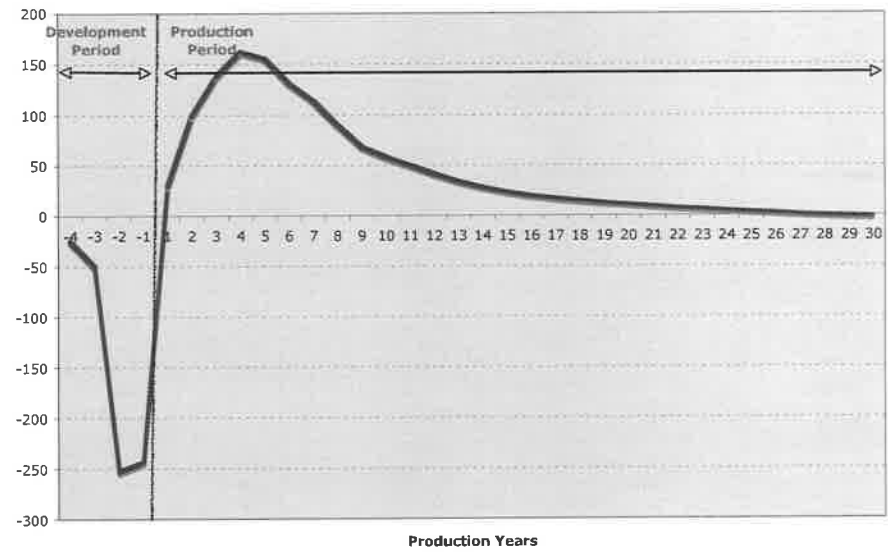
Annual Production



Capital and Operating Costs



Annual Net Cash Flow



## Producer View of Future Oil Prices



- **Producers have been “burned” by forecasts of high oil prices in the past**
- **The consequences of error are not symmetrical**
- **Producers will test their projects against a price path that is below their “Most Likely” view**
  - They use the “official price view” as a speed limit to signal caution
  - By “high-grading,” they will have a suite of projects resilient to price risk
  - Their price view lags the current market price by as much as 5-7 years as prices rise, and by 2 years as prices fall.
  - Current “best guess” view might be: \$50/barrel
  - Producers will also “stress” test their projects at \$40/barrel

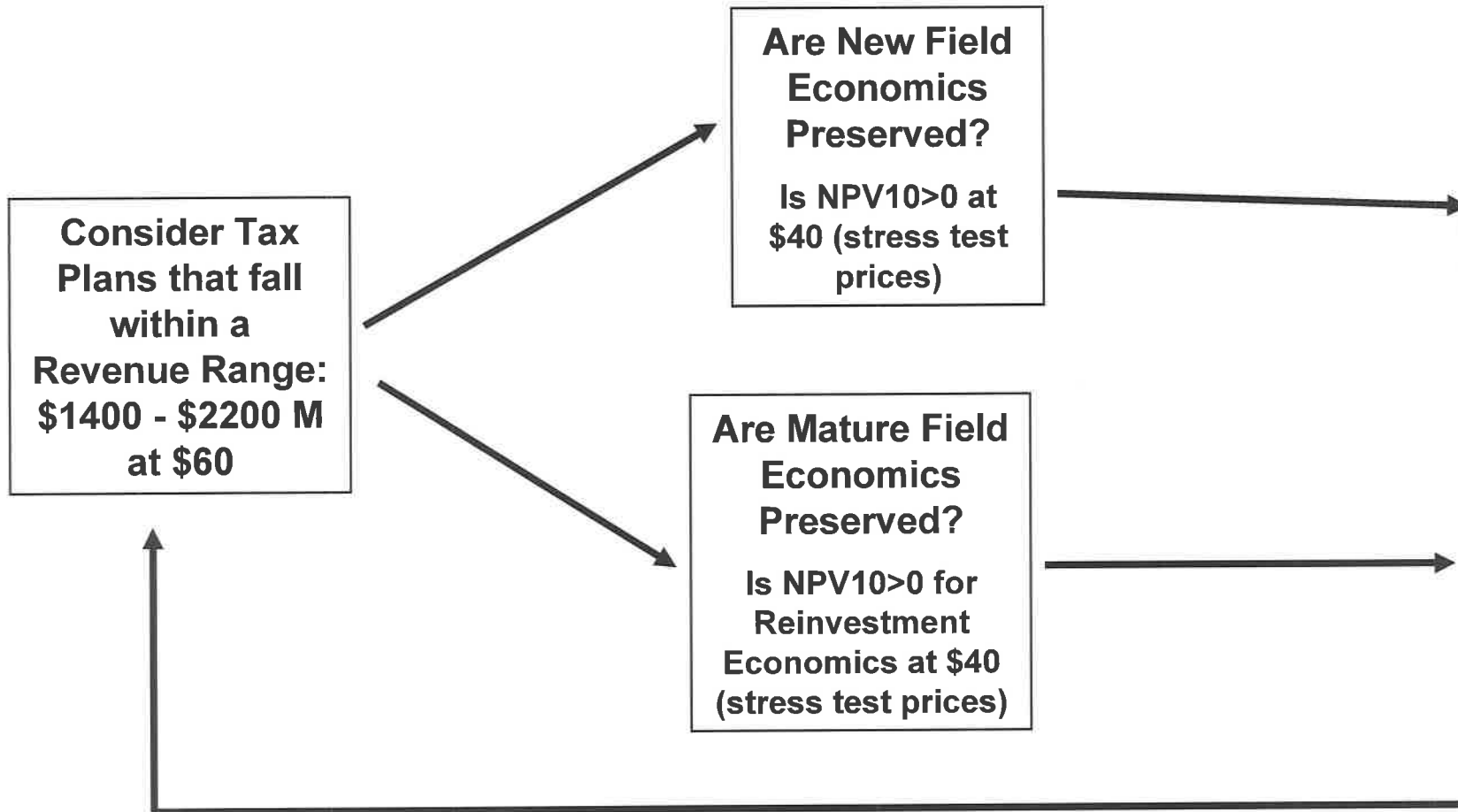
## Common Assumptions Used In Analyses



**For comparing results, we have used a common set of assumptions:**

- **Oil prices:**
  - **Base case price; \$60**
  - **Stress test price: \$40**
  - **Analysis done at price continuum from \$20 to \$100**
- **Inflation: 3% per year**
- **Producer discount rate: 10% and 15% (results shown at 10%)**
- **State discount rate: 5% and 8% (results shown at 5%)**

# Tax Plan Evaluation Process



## **Analysis of New Fields**

## Seven New-Fields Analysis



- Hypothetical fields based on operating and capital costs, and production profiles of known field types
- Source of information derived from publicly available data, and industry information supplied in state agency interactions

## Characteristics of Seven Fields



A: Medium heavy oil satellite in existing mature unit

B: Offshore small reserves

C: Satellite in existing unit

D: Remote field

E: New unit with very heavy oil

F: Offshore medium reserves

G: New unit with large reserves

- Reserves range from 40 to 300 MB
- Various combinations of ownerships among incumbents, small producers, new entrants

## Characteristics of the Seven Fields

	Field A	Field B	Field C	Field D	Field E	Field F	Field G
<b>Legacy Field</b>	●						
<b>Satellite</b>	●	●	●		●		
<b>Stand Alone</b>				●		●	●
<b>Heavy Oil</b>	●				●		
<b>Reserves (MMB)</b>	80	60	40	200	100	120	320
<b>Ownership</b>	Existing	New	Existing	New	Existing	New	Existing
<b>Capital (\$ / B)</b>	\$11	\$10	\$11	\$13	\$16	\$8	\$5
<b>Expense (\$ / B)</b>	\$7	\$9	\$8	\$12	\$8	\$5	\$6

# Tax Scenarios

(A small sample of scenarios considered)



- **Net**
  - ACES: 10% Floor
  - ACES: No Floor
  - PPT (Status Quo)
  - 35% Mature Fields / 22.5% Other
- **Gross**
  - 13% / No credits
  - 16% / With 20% credits
  - 16% / No credits
  - 19% / With 20% credits
  - Back-end loaded progressive tax table / With 20% Credits

**\*\* All Models use a progressivity factor**

### CASH FLOW SCHEMATIC FOR SINGLE YEAR

### NET PRESENT VALUE

TOTAL REVENUES: (VOLUME X ANS WEST COAST PRICE)	DISCOUNTED NET CASH FLOW YEAR	1
Less:	+ DISCOUNTED NET CASH FLOW YEAR	2
Shipping	+ DISCOUNTED NET CASH FLOW YEAR	3
TAPS Tariff =	+ DISCOUNTED NET CASH FLOW YEAR	4
<input type="checkbox"/> GROSS VALUE (AT THE POINT OF PRODUCTION)	+ DISCOUNTED NET CASH FLOW YEAR	5
Less:	+ DISCOUNTED NET CASH FLOW YEAR	6
Upstream Capital Costs	+ DISCOUNTED NET CASH FLOW YEAR	7
Upstream Operating Costs =	+ DISCOUNTED NET CASH FLOW YEAR	8
DIVISIBLE INCOME	+ DISCOUNTED NET CASH FLOW YEAR	9
Less:	+ DISCOUNTED NET CASH FLOW YEAR	10
Royalties =	+ DISCOUNTED NET CASH FLOW YEAR	...
TAXABLE INCOME FOR PRODUCTION TAX	+ DISCOUNTED NET CASH FLOW YEAR	...
Less:	+ DISCOUNTED NET CASH FLOW YEAR	...
Production Tax =	+ DISCOUNTED NET CASH FLOW YEAR	...
TAXABLE INCOME FOR INCOME TAX	+ DISCOUNTED NET CASH FLOW YEAR	...
Less:	+ DISCOUNTED NET CASH FLOW YEAR	...
State Corporate Income Tax	+ DISCOUNTED NET CASH FLOW YEAR	Last Year =
Federal Corporate Income Tax =		
<b>NET CASH FLOW FOR A SINGLE YEAR</b>	<b>NET PRESENT VALUE</b>	

# ACES

Alaska's Clear and Equitable Share

## New Field Tax Analysis - NPV Impact

### NET PRODUCTION TAX SCENARIOS

Scenario	Rate		Progressivity		Capital Investment Credit	Industry NPV @ 10% at \$40/bbl real ANS WC (mm\$)						
	Mature	Other	Trigger	Rate		Field A	Field B	Field C	Field D	Field E	Field F	Field G
	Fields	Fields										
ACES - 10% Floor	25.0%	25.0%	\$30	0.0020	20%	10	60	40	40	(500)	210	1,000
ACES - NO Floor	25.0%	25.0%	\$30	0.0020	20%	120	60	40	40	(300)	210	1,000
PPT Status Quo	22.5%	22.5%	\$40	0.0025	20%	180	50	60	10	(200)	220	1,100
High Net Tax	35.0%	22.5%	\$30	0.0030	20%	150	50	50	0	(200)	140	1,100

### GROSS PRODUCTION TAX SCENARIOS

Scenario	Rate	Other Incentives	Progressivity		Capital Investment Credit	Industry NPV @ 10% at \$40/bbl real ANS WC (mm\$)						
	(All Fields)		Trigger	Rate		Field A	Field B	Field C	Field D	Field E	Field F	Field G
Low Rate - No Credits	13%		\$40	0.0020	None	(30)	(40)	(30)	(500)	(600)	80	700
Medium rate	16%		\$40	0.0020	20%	30	0	0	(300)	(500)	130	800
Former Tax no ELF	16%		NA	NA	none	(40)	(50)	(30)	(400)	(600)	80	800
High Rate Flat Tax	19%		NA	NA	20%	20	(10)	0	(300)	(500)	130	900
Sliding Scale	Tax Table	5 Yr Holiday	NA	NA	20%	130	40	40	20	(400)	180	1,100

# ACES

Alaska's Clear and Equitable Share

## New Field Tax Analysis - NPV Impact

### NET PROFIT TAX SCENARIOS

Case	Tax Rate		Progressivity		Capital Investment
	Mature Fields	Other Fields	Trigger	Rate	Credit
ACES - 10% Floor	25%	25%	\$30	0%	20%
ACES - NO Floor	25%	25%	\$30	0%	20%
PPT Status Quo	23%	23%	\$40	0%	20%
High Net Tax	35%	23%	\$30	0%	20%

State NPV at 5% at \$60/bbl ANS WC (mm\$)						
Field A	Field B	Field C	Field D	Field E	Field F	Field G
1,000	530	610	2,000	1,000	1,800	5,700
1,000	530	610	2,000	740	1,800	5,700
850	500	550	1,800	480	1,700	5,300
1,100	550	580	2,000	590	1,800	5,700

**“Cradle to Grave” Government Share of Pre-Tax Income  
Discounted at 10% @ \$60 (Applicable to New Fields)**

# ACES

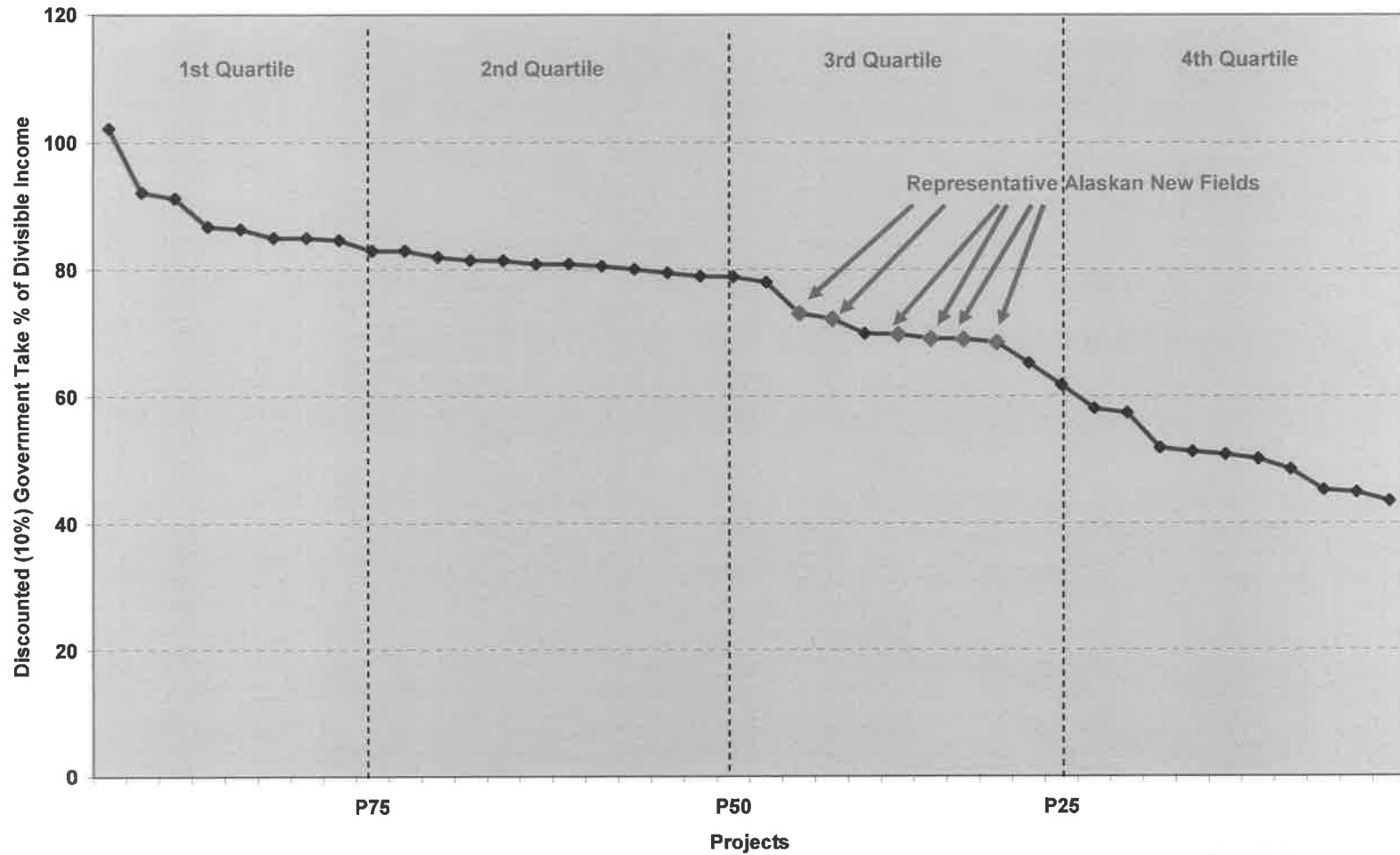
Alaska's Clear and Equitable Share

<b>Median Government Take By Tax Structures</b>	
	<b>Median (Mid-Point)</b>
All Governments	48%
Profit Sharing Governments	76%
Tax Royalty Governments	50%
Norway	81%
<b>Alaska - ACES Six Potential New Fields</b>	<b>68% to 74% (Median 70%)</b>
Alaska - PPT Six Potential New Fields	65% to 72% (Median 68%)
UK	51%
Gulf of Mexico	48%

# ACES

Alaska's Clear and Equitable Share

Discounted Government Take @ \$60  
Tax & Royalty Fiscal Regimes (excluding GOM)



## Conclusions



- New Fields would likely not be developed under a gross tax system
- Credits essential
- ACES levels the playing field for small producers and new entrants
  - 100 cents on the dollar for credits
  - Can monetize losses at same rate as large producers

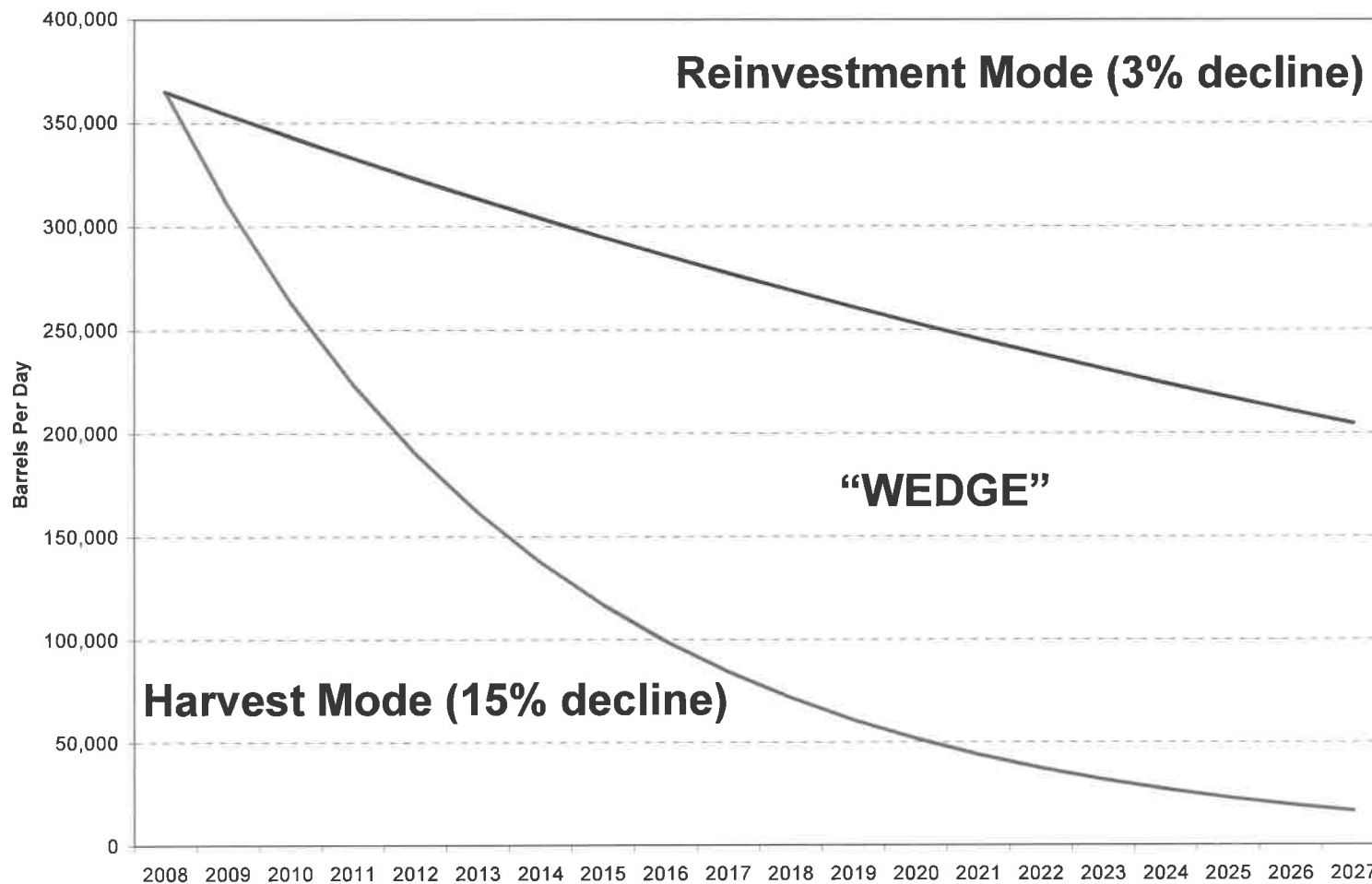
## **Analysis of Mature Fields**

- Hampered by lack of specific knowledge
- Recognize that reinvestment requires substantial capital
- Consider two modes:
  - Harvest: allow field to decline naturally (15% decline)
  - Reinvestment: invest to stem decline (3% decline)
- Treat each mode as a separate (mutually exclusive) project
- Compare the NPV of Reinvestment with the NPV of Harvest

# Legacy Field Scenarios



Alaska's Clear and Equitable Share



# Legacy Field Reinvestment Comparison @ \$40



	Sustain Production Mode	Harvest Mode	Difference	
Decline Rate	3% per year	15% per year		
Oil Produced (mm Barrels)	2026	854	1172	
	NPV10 (\$M)	NPV10 (\$M)	NPV Difference (\$M)	Implied Investment Decision
Net Cases:				
ACES	8235	6893	1342	Reinvest
PPT(SQ)	9176	7133	2042	Reinvest
35% tax rate	8022	6130	1892	Reinvest
Gross Cases:				
13% + no credits	6860	7207	(348)	DO NOT Reinvest
16% + no credit	6248	6889	(641)	DO NOT Reinvest
16% + 20% credit	7180	7027	152	DO NOT Reinvest
19% + no credit + no progressivity	6246	6706	(460)	DO NOT Reinvest

Assumes: 20 year horizon, OPEX+CAPEX=\$5/BOE for Harvest, \$15/BOE for Reinvestment. All cases assume 26 progressivity unless noted.

# How Much of a \$1.00 Oil Price Increase is Captured by Producer

(Mature fields - In production > 10 years)



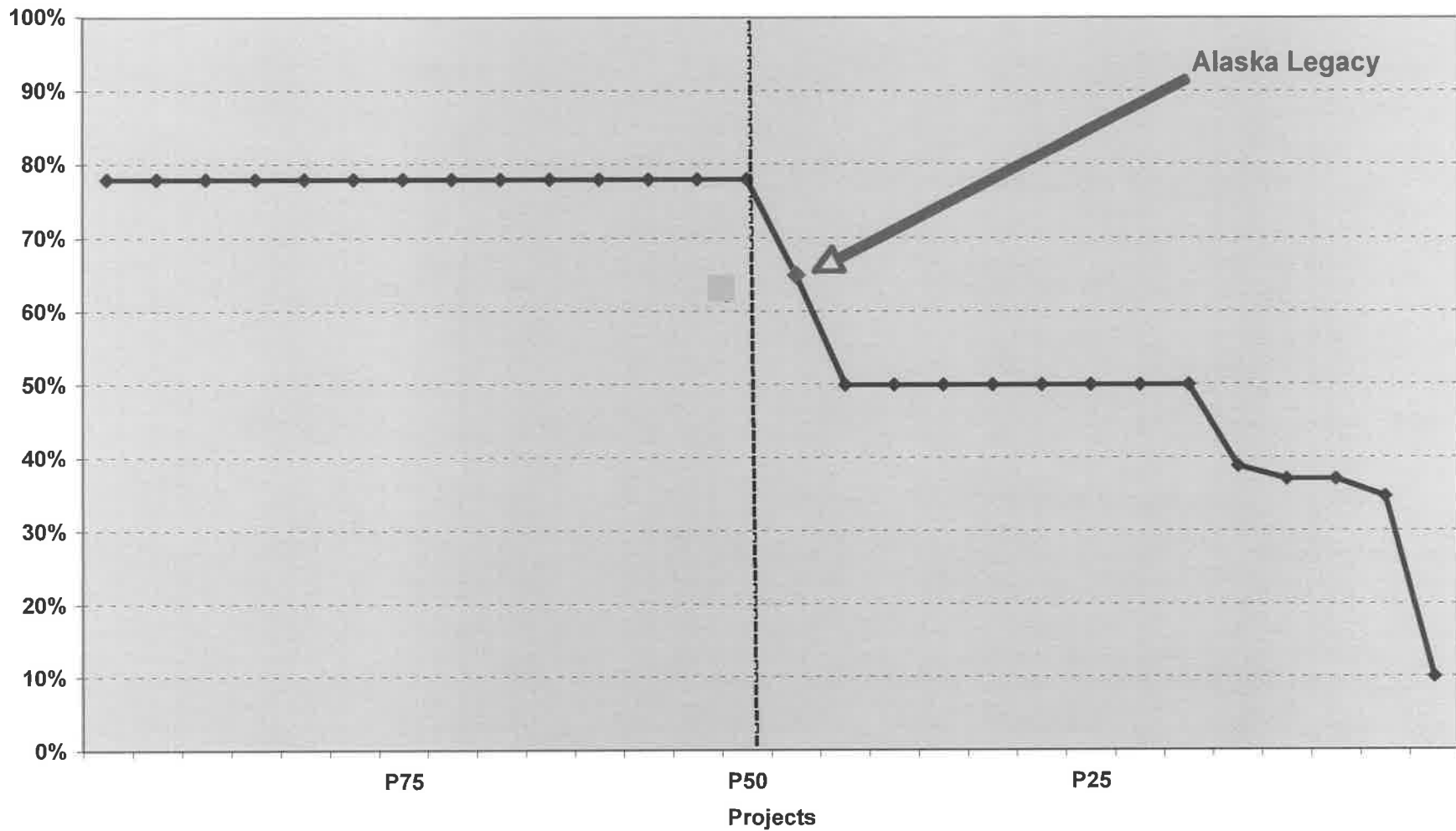
Alaska's Clear and Equitable Share

<b>Governmental Tax Structures</b>	
	Median (Mid-Point)
All Governments	57¢
Production Sharing Governments	15¢
Tax Royalty Governments	57¢
Norway	22¢
<b>Alaska - ACES</b>	<b>35¢</b>
Alaska - PPT (Status Quo)	39¢
UK	50¢
Gulf of Mexico	57¢

Marginal Government Take @ \$60  
Tax & Royalty Tax Regimes (excluding GOM)  
Mature Fields

# ACES

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## **Sensitivities**

## Sensitivity to Alternative Assumptions



### ACES at \$60

### North Slope Production Tax Revenues in Millions of Dollars

	FY 2008	FY 2009	FY 2010	Relative to ACES		
				FY 2008	FY 2009	FY 2010
ACES	1421	1977	2170	-	-	-
ACES w/ 22.5% rate	1320	1748	1928	-102	-229	-242
ACES w/ PPT Progressivity	1356	1826	2011	-65	-151	-159
ACES w/ TIE Credits in	1315	1789	1972	-107	-188	-198
ACES w/ credits all in first year	1324	2003	2160	-97	26	-9
ACES w/ 27% rate	1503	2160	2363	81	183	194
ACES w/ 30% rate	1625	2435	2653	203	458	484

**11.**

**Discussion**

**Slides:**

**Janak Mayer**

**Manager,**

**Upstream & Gas,**

**PFC Energy**

**March 23, 2012**



# Discussion Slides: Alaska Senate Finance Committee

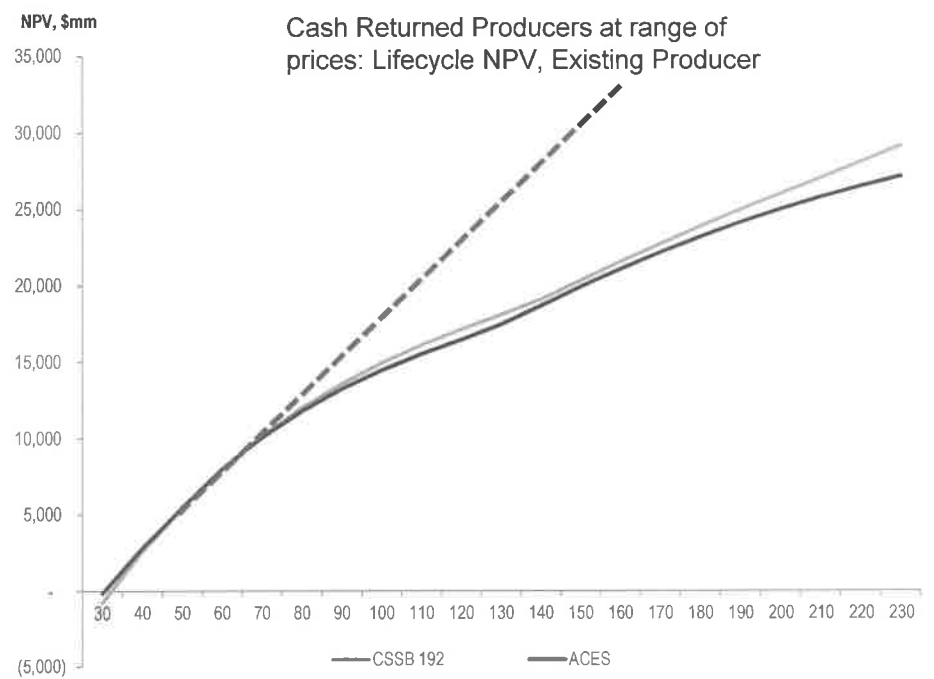
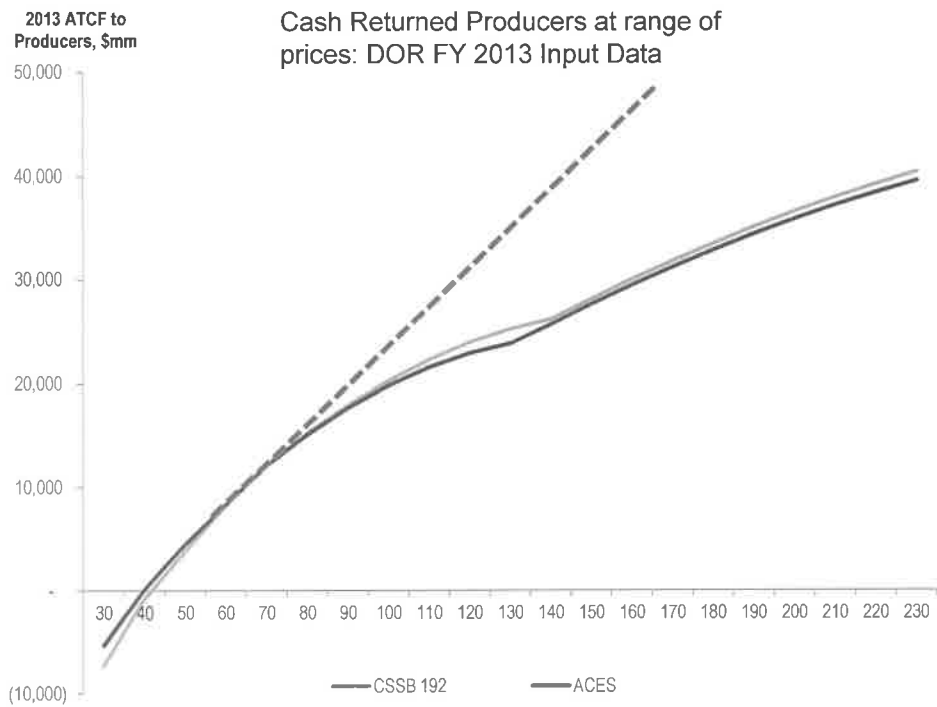
March 23, 2012

Janak Mayer

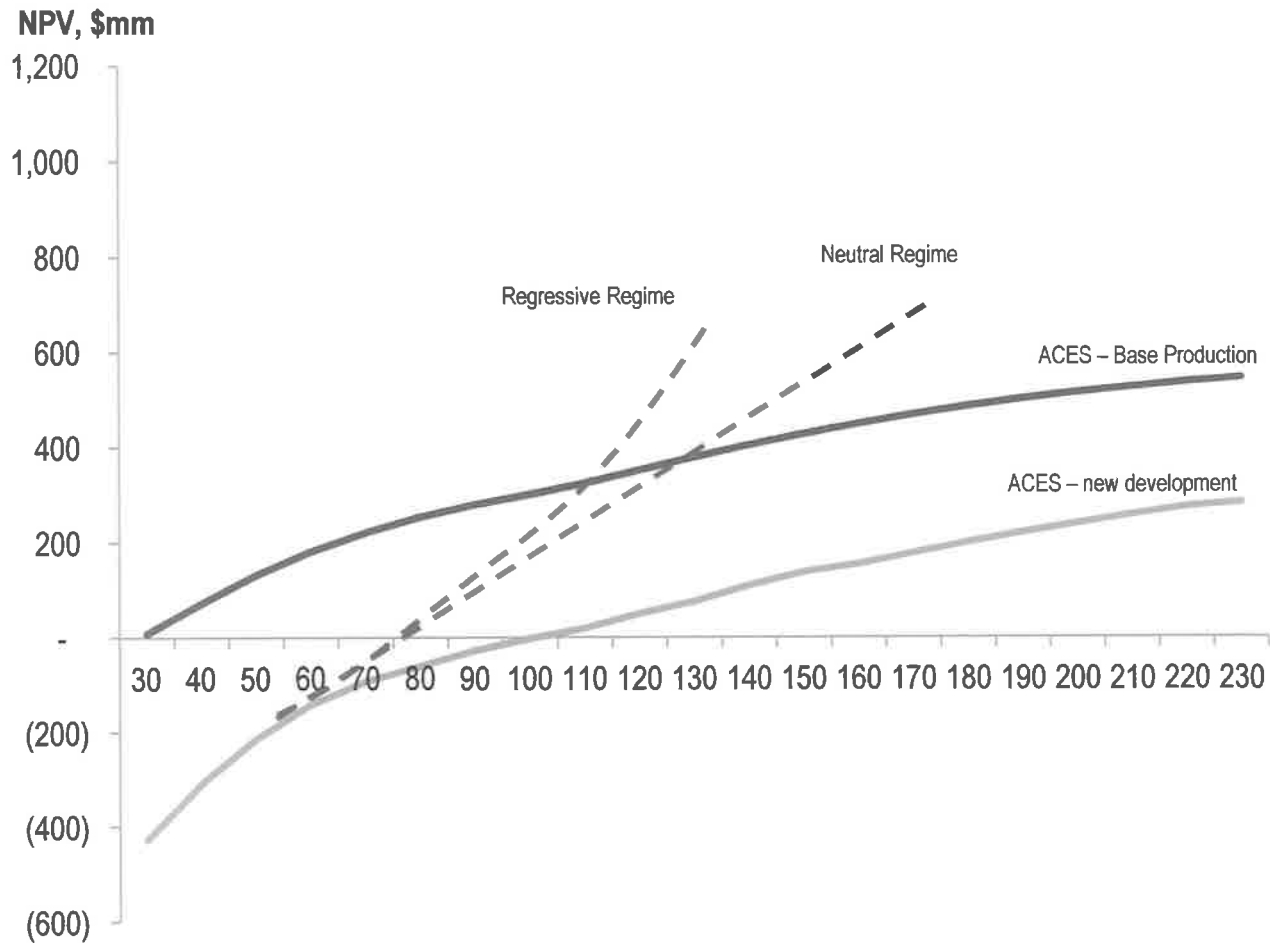
Manager, Upstream & Gas

PFC Energy

# Progressivity takes away upside at high prices...

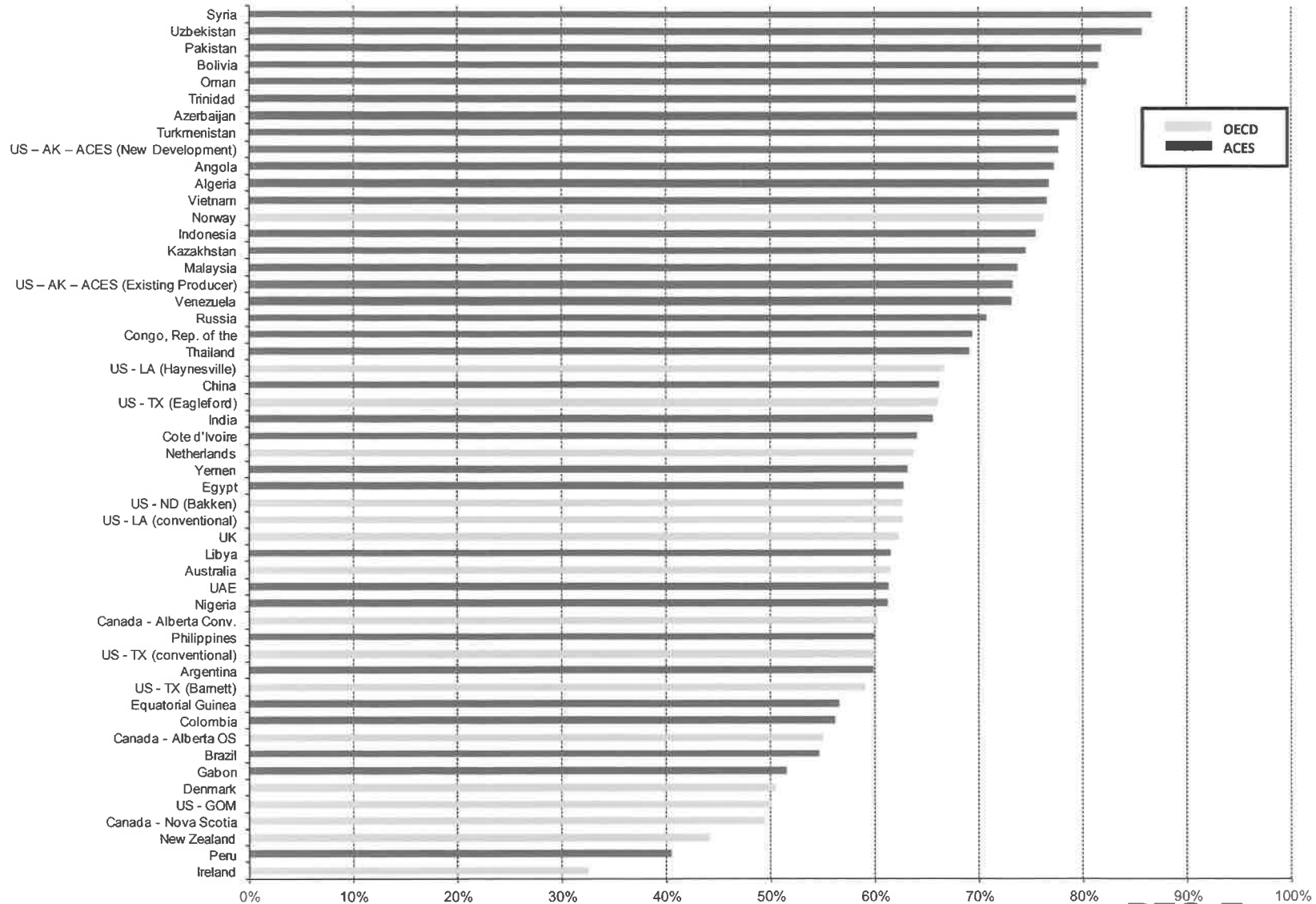


# ...and particularly challenges economics for new projects



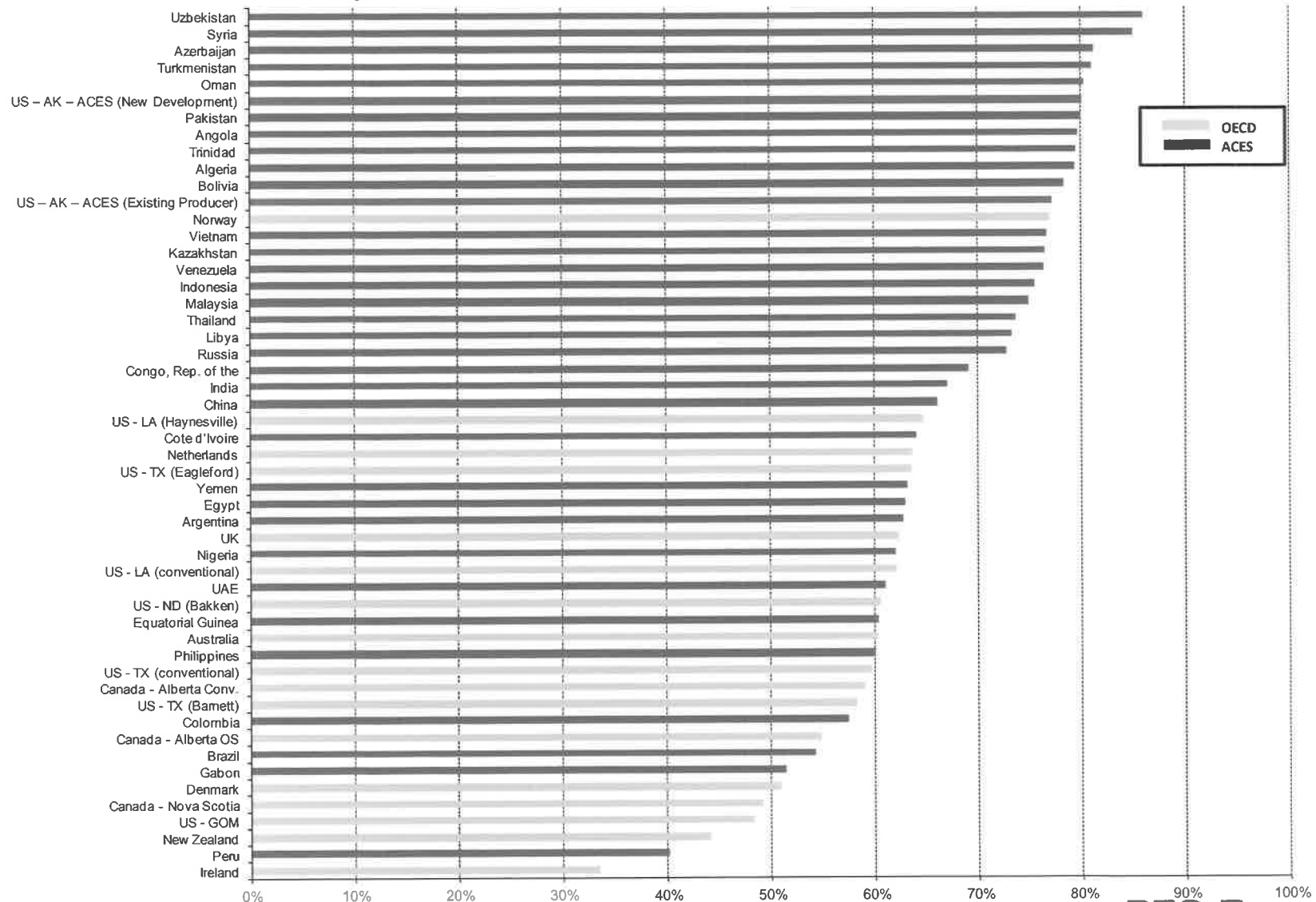
# Regime Competitiveness: Average Government Take

Average Government Take of Global Fiscal Regimes at \$100/bbl

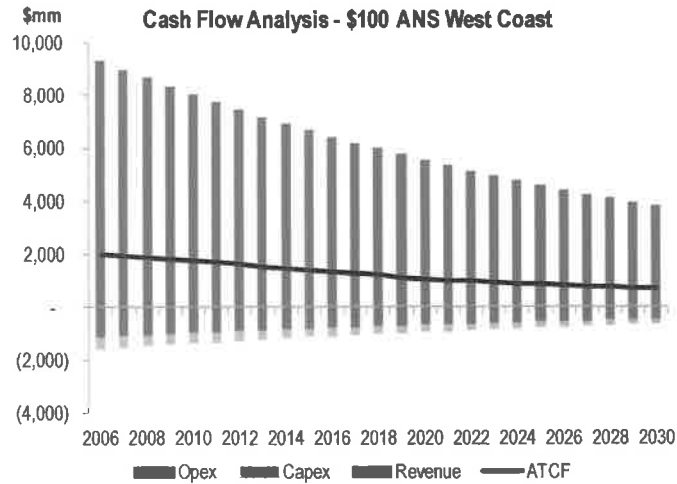


# Regime Competitiveness: Average Government Take

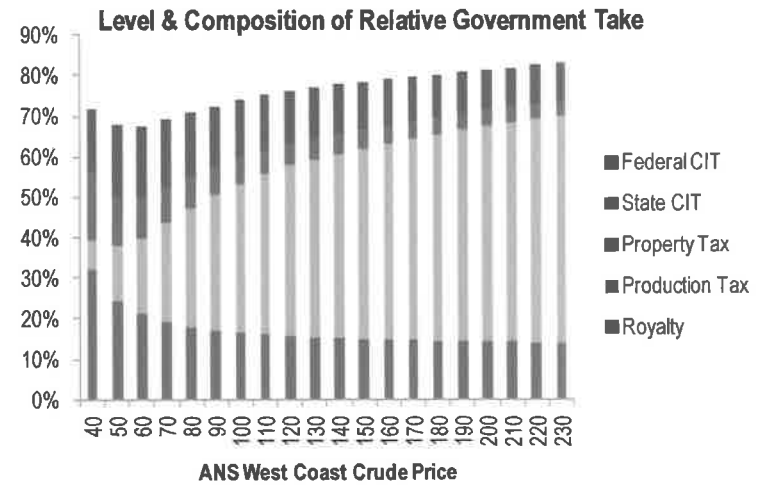
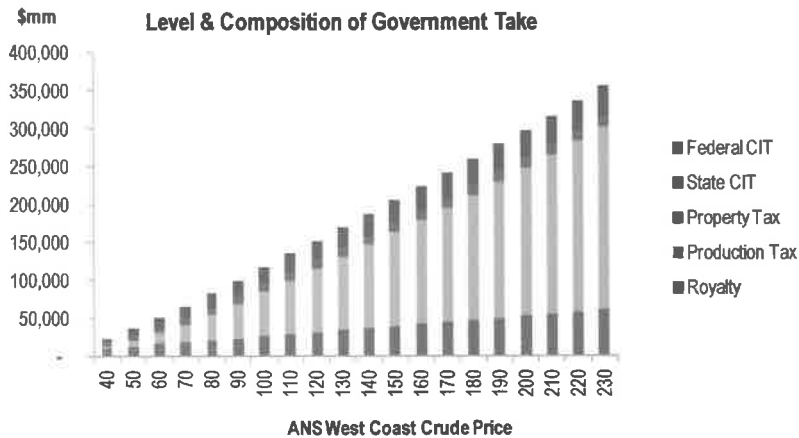
Average Government Take of Global Fiscal Regimes at \$140/bbl



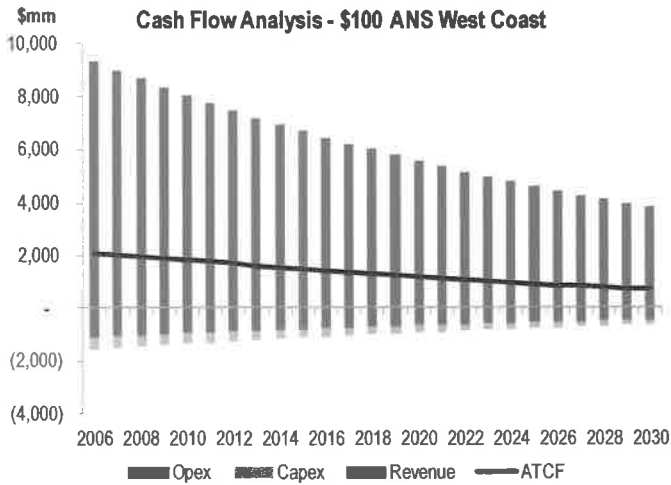
# ACES (Existing Producer)



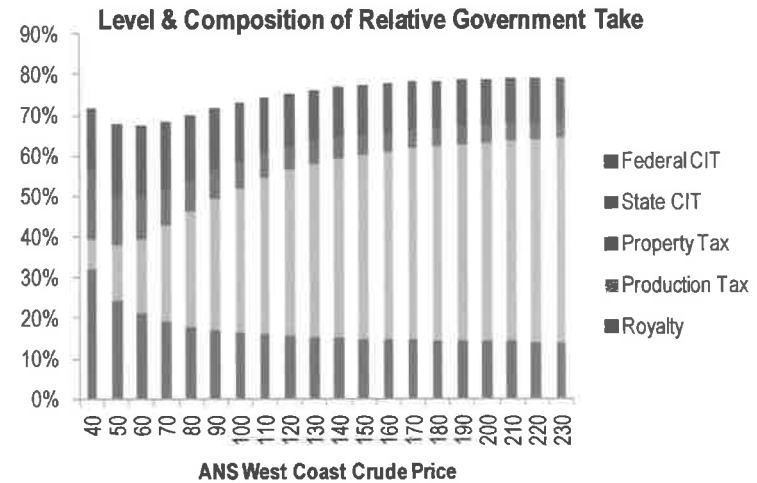
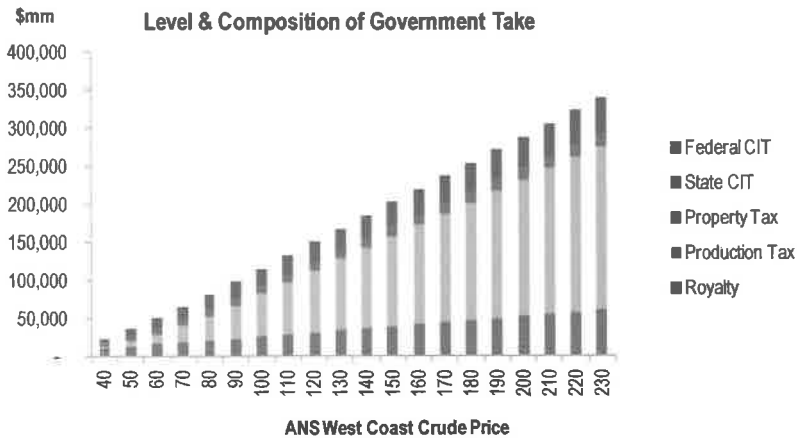
Price	Royalty	Production Tax	Property Tax	State CIT	Total State Take	Federal CIT	Total GT
40	32%	8%	12%	4%	56%	16%	72%
50	24%	14%	8%	5%	50%	18%	68%
60	21%	19%	5%	5%	50%	18%	68%
70	19%	24%	4%	4%	52%	17%	69%
80	18%	29%	3%	4%	55%	16%	71%
90	17%	33%	3%	4%	57%	15%	72%
100	17%	37%	3%	4%	60%	14%	74%
110	16%	40%	2%	4%	62%	13%	75%
120	16%	42%	2%	3%	63%	13%	76%
130	15%	44%	2%	3%	65%	12%	77%
140	15%	46%	2%	3%	66%	12%	78%
150	15%	47%	2%	3%	67%	12%	78%
160	15%	48%	1%	3%	68%	11%	79%
170	15%	50%	1%	3%	69%	11%	80%
180	14%	51%	1%	3%	69%	11%	80%
190	14%	52%	1%	3%	70%	10%	81%
200	14%	53%	1%	3%	71%	10%	81%
210	14%	54%	1%	3%	72%	10%	82%
220	14%	55%	1%	2%	73%	10%	82%
230	14%	56%	1%	2%	74%	9%	83%



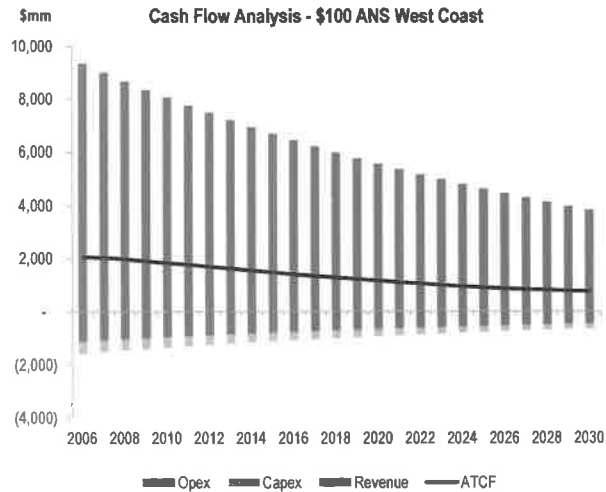
# CSSB 192 (Existing Producer)



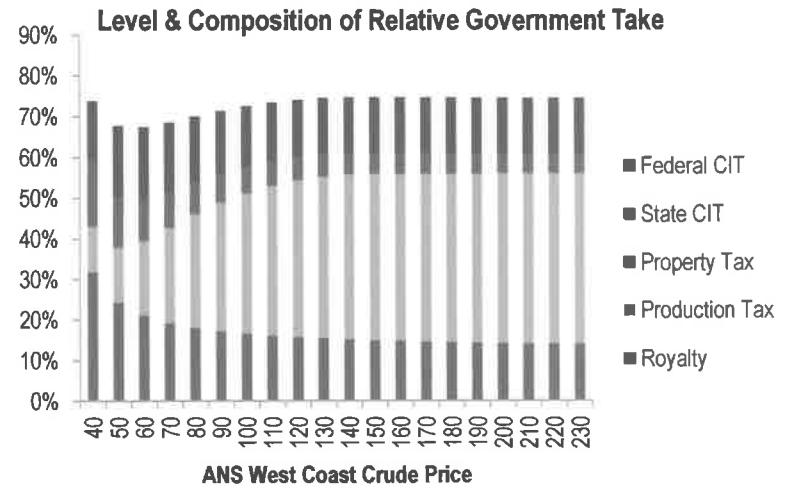
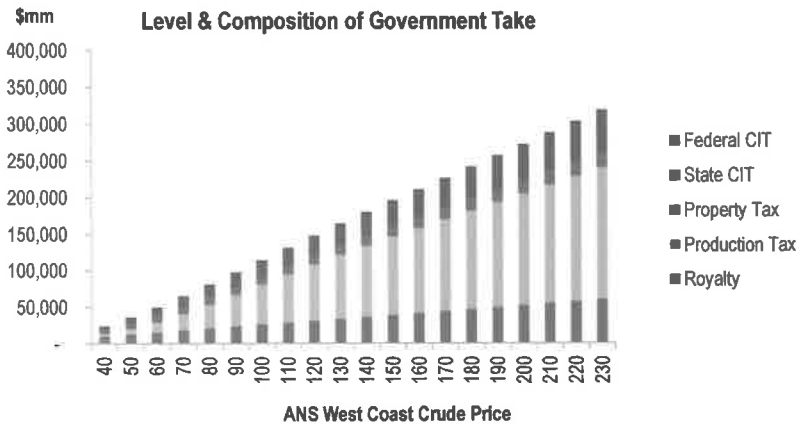
Price	Royalty	Production Tax	Property Tax	State CIT	Total State Take	Federal CIT	Total CIT
40	32%	8%	12%	4%	56%	16%	72%
50	24%	14%	8%	5%	50%	18%	68%
60	21%	18%	5%	5%	50%	18%	67%
70	19%	24%	4%	4%	51%	17%	69%
80	18%	28%	3%	4%	54%	16%	70%
90	17%	32%	3%	4%	56%	15%	72%
100	17%	35%	3%	4%	58%	15%	73%
110	16%	38%	2%	4%	60%	14%	74%
120	16%	41%	2%	3%	62%	13%	75%
130	15%	43%	2%	3%	63%	13%	76%
140	15%	44%	2%	3%	64%	13%	77%
150	15%	45%	2%	3%	65%	12%	77%
160	15%	46%	1%	3%	66%	12%	78%
170	15%	47%	1%	3%	66%	12%	78%
180	14%	48%	1%	3%	67%	12%	78%
190	14%	49%	1%	3%	67%	12%	79%
200	14%	49%	1%	3%	67%	11%	79%
210	14%	50%	1%	3%	68%	11%	79%
220	14%	50%	1%	3%	68%	11%	79%
230	14%	50%	1%	3%	68%	11%	79%



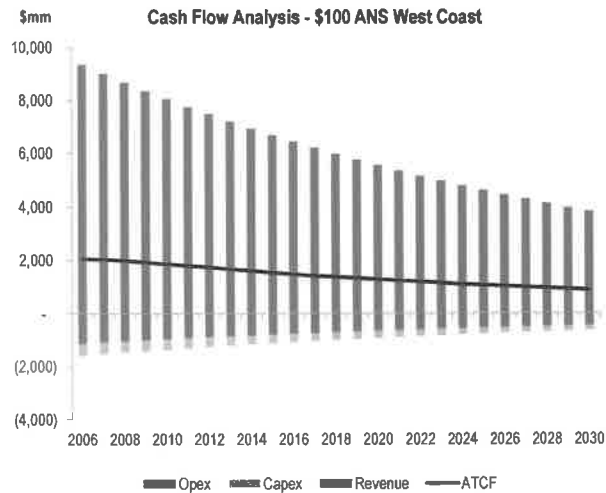
# CSSB 192 with 50% Cap (Existing Producer)



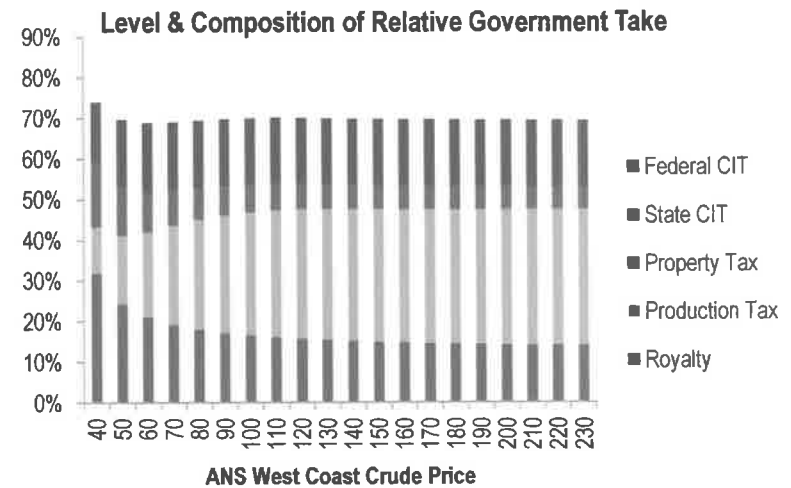
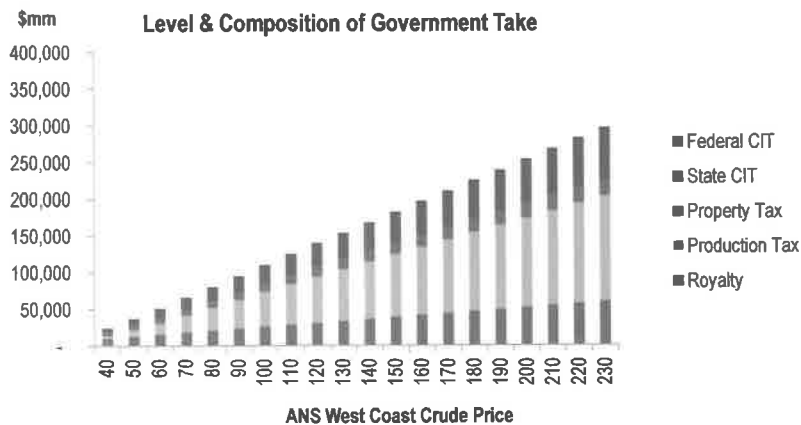
Price	Royalty	Production Tax	Property Tax	State CIT	Total State Take	Federal CIT	Total CIT
40	32%	11%	12%	4%	59%	15%	74%
50	24%	14%	7%	5%	50%	18%	68%
60	21%	19%	5%	5%	50%	18%	67%
70	19%	24%	4%	4%	51%	17%	69%
80	18%	28%	3%	4%	54%	16%	70%
90	17%	32%	3%	4%	56%	16%	71%
100	17%	35%	3%	4%	58%	15%	73%
110	16%	37%	2%	4%	59%	14%	73%
120	16%	39%	2%	4%	60%	14%	74%
130	15%	40%	2%	4%	61%	14%	75%
140	15%	41%	2%	4%	61%	14%	75%
150	15%	41%	2%	4%	61%	14%	75%
160	15%	41%	1%	4%	61%	14%	75%
170	15%	41%	1%	4%	61%	14%	75%
180	14%	42%	1%	4%	61%	14%	75%
190	14%	42%	1%	4%	61%	14%	75%
200	14%	42%	1%	4%	61%	14%	74%
210	14%	42%	1%	4%	61%	14%	74%
220	14%	42%	1%	4%	61%	14%	74%
230	14%	42%	1%	4%	61%	14%	74%



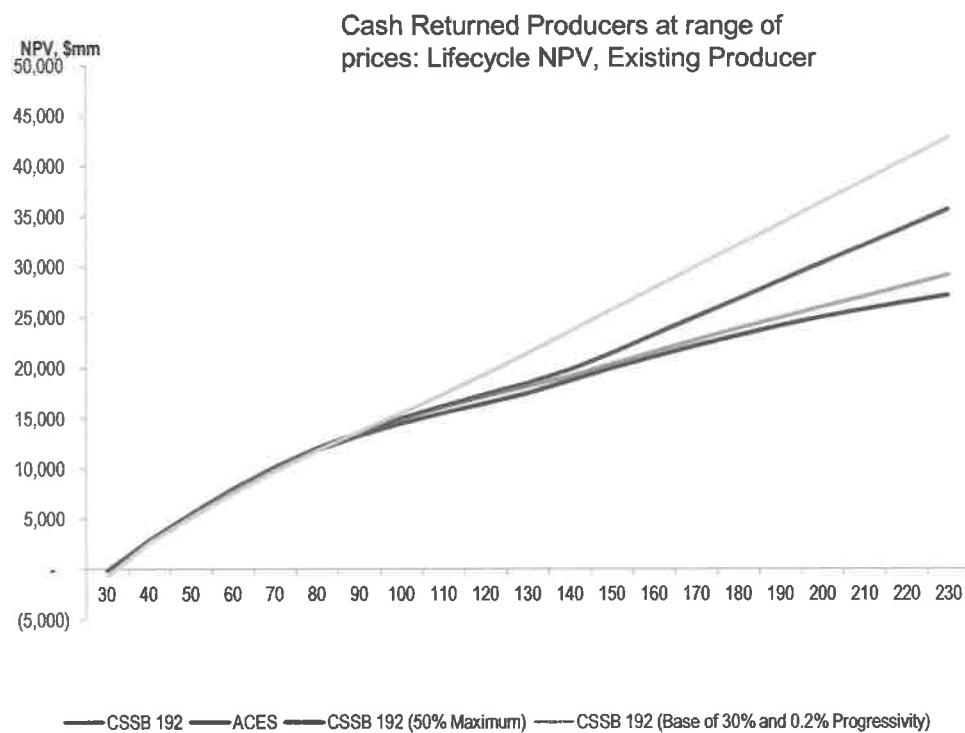
# 30% Base rate, 0.02% Progressivity, 40% Cap (Existing Producer)



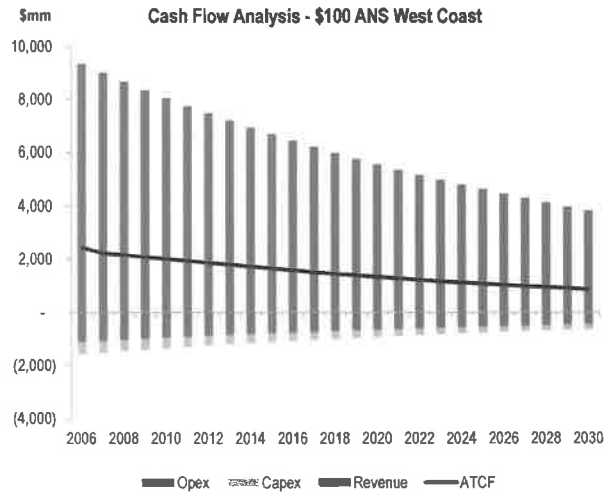
Price	Royalty	Production Tax	Property Tax	State CIT	Total State Take	Federal CIT	Total CIT
40	32%	11%	12%	4%	59%	15%	74%
50	24%	17%	7%	4%	53%	17%	70%
60	21%	21%	5%	4%	52%	17%	69%
70	19%	24%	4%	4%	52%	17%	69%
80	18%	27%	3%	4%	53%	17%	69%
90	17%	29%	3%	4%	53%	16%	70%
100	17%	30%	3%	4%	54%	16%	70%
110	16%	31%	2%	4%	54%	16%	70%
120	16%	32%	2%	4%	54%	16%	70%
130	15%	32%	2%	4%	54%	16%	70%
140	15%	32%	2%	4%	53%	16%	70%
150	15%	33%	2%	4%	53%	16%	70%
160	15%	33%	1%	4%	53%	16%	70%
170	15%	33%	1%	4%	53%	16%	70%
180	14%	33%	1%	4%	53%	16%	70%
190	14%	33%	1%	4%	53%	16%	69%
200	14%	33%	1%	4%	53%	16%	69%
210	14%	33%	1%	4%	53%	17%	69%
220	14%	33%	1%	4%	53%	17%	69%
230	14%	34%	1%	4%	53%	17%	69%



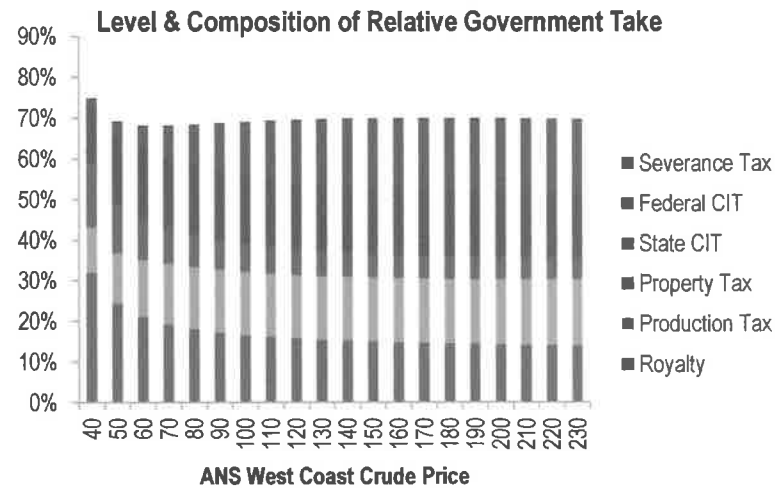
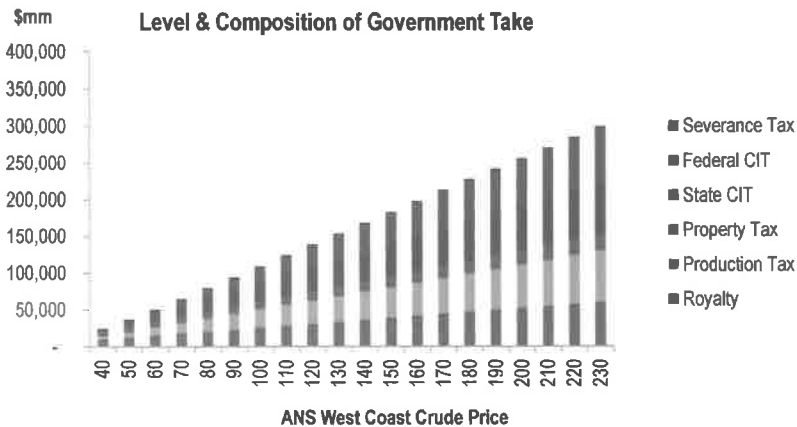
# Impact on Upside



# 25% Flat Production Tax, Progressive Severance Tax (Existing Producer)



Price	Royalty	Production Tax	Property Tax	State CIT	Total State Take	Federal CIT	Total GT
40	32%	13%	12%	4%	61%	14%	75%
50	24%	16%	7%	4%	52%	17%	69%
60	21%	20%	5%	5%	51%	17%	68%
70	19%	23%	4%	5%	51%	17%	68%
80	18%	25%	3%	4%	51%	17%	68%
90	17%	27%	3%	4%	52%	17%	69%
100	17%	29%	3%	4%	52%	17%	69%
110	16%	30%	2%	4%	53%	17%	69%
120	16%	31%	2%	4%	53%	16%	70%
130	15%	32%	2%	4%	53%	16%	70%
140	15%	33%	2%	4%	54%	16%	70%
150	15%	33%	2%	4%	54%	16%	70%
160	15%	33%	1%	4%	54%	16%	70%
170	15%	34%	1%	4%	54%	16%	70%
180	14%	34%	1%	4%	54%	16%	70%
190	14%	34%	1%	4%	54%	16%	70%
200	14%	34%	1%	4%	54%	16%	70%
210	14%	34%	1%	4%	54%	16%	70%
220	14%	34%	1%	4%	54%	16%	70%
230	14%	34%	1%	4%	53%	16%	70%



# FY 2013 Revenue Analysis

ACES

Price	Royalty	Production Tax	Property Tax	State CIT	Total State Take	Federal CIT	Total GT
40	986	(44)	386	180	1,508	687	2,195
50	1,232	217	386	303	2,138	1,157	3,295
60	1,479	648	386	412	2,925	1,571	4,496
70	1,725	1,104	386	518	3,733	1,978	5,712
80	1,971	1,827	386	603	4,787	2,300	7,086
90	2,218	2,687	386	675	5,966	2,577	8,543
100	2,464	3,686	386	736	7,273	2,810	10,082
110	2,711	4,823	386	786	8,705	2,998	11,703
120	2,957	6,097	386	823	10,264	3,143	13,407
130	3,204	7,510	386	850	11,949	3,243	15,192
140	3,450	8,610	386	902	13,348	3,443	16,791
150	3,696	9,679	386	957	14,719	3,653	18,372
160	3,943	10,782	386	1,009	16,121	3,853	19,973
170	4,189	11,920	386	1,059	17,555	4,041	21,595
180	4,436	13,093	386	1,105	19,020	4,218	23,238
190	4,682	14,300	386	1,149	20,517	4,384	24,901
200	4,929	15,542	386	1,189	22,045	4,539	26,585
210	5,175	16,818	386	1,227	23,606	4,683	28,289
220	5,421	18,128	386	1,262	25,197	4,816	30,013
230	5,668	19,473	386	1,294	26,821	4,938	31,759

CSSB 192

Price	Royalty	Production Tax	Property Tax	State CIT	Total State Take	Federal CIT	Total GT
40	986	284	386	153	1,808	582	2,390
50	1,232	456	386	283	2,358	1,080	3,437
60	1,479	648	386	412	2,925	1,571	4,496
70	1,725	1,101	386	519	3,731	1,979	5,710
80	1,971	1,787	386	606	4,750	2,312	7,063
90	2,218	2,594	386	683	5,881	2,607	8,488
100	2,464	3,522	386	750	7,122	2,862	9,984
110	2,711	4,570	386	807	8,474	3,079	11,553
120	2,957	5,740	386	853	9,936	3,257	13,194
130	3,204	7,030	386	890	11,509	3,397	14,906
140	3,450	8,441	386	916	13,193	3,497	16,690
150	3,696	9,508	386	972	14,562	3,708	18,270
160	3,943	10,596	386	1,025	15,950	3,912	19,862
170	4,189	11,719	386	1,076	17,370	4,106	21,475
180	4,436	12,876	386	1,123	18,821	4,288	23,109
190	4,682	14,067	386	1,168	20,304	4,459	24,762
200	4,929	15,293	386	1,210	21,818	4,619	26,437
210	5,175	16,554	386	1,249	23,364	4,767	28,132
220	5,421	17,849	386	1,285	24,942	4,905	29,847
230	5,668	19,179	386	1,318	26,551	5,032	31,583

CSSB 192, with 50% Cap

40	986	284	386	153	1,808	582	2,390
50	1,232	456	386	283	2,358	1,080	3,437
60	1,479	648	386	412	2,925	1,571	4,496
70	1,725	1,101	386	519	3,731	1,979	5,710
80	1,971	1,787	386	606	4,750	2,312	7,063
90	2,218	2,594	386	683	5,881	2,607	8,488
100	2,464	3,522	386	750	7,122	2,862	9,984
110	2,711	4,570	386	807	8,474	3,079	11,553
120	2,957	5,740	386	853	9,936	3,257	13,194
130	3,204	7,030	386	890	11,509	3,397	14,906
140	3,450	8,441	386	916	13,193	3,497	16,690
150	3,696	9,322	386	987	14,392	3,768	18,160
160	3,943	10,184	386	1,060	15,573	4,044	19,617
170	4,189	11,047	386	1,132	16,754	4,321	21,075
180	4,436	11,909	386	1,205	17,936	4,597	22,533
190	4,682	12,772	386	1,277	19,117	4,874	23,991
200	4,929	13,634	386	1,349	20,298	5,151	25,449
210	5,175	14,497	386	1,422	21,480	5,427	26,907
220	5,421	15,359	386	1,494	22,661	5,704	28,365
230	5,668	16,222	386	1,567	23,843	5,980	29,823

# FY 2013 Revenue Analysis

30% Base, .2% Progressivity, 40% Cap

Price	Royalty	Production Tax	Property Tax	State CIT	Total State Take	Federal CIT	Total GT
40	986	284	386	153	1,808	582	2,390
50	1,232	456	386	283	2,358	1,080	3,437
60	1,479	831	386	396	3,092	1,513	4,605
70	1,725	1,360	386	497	3,968	1,896	5,864
80	1,971	2,023	386	586	4,967	2,237	7,204
90	2,218	2,756	386	669	6,029	2,555	8,584
100	2,464	3,557	386	747	7,154	2,851	10,005
110	2,711	4,427	386	819	8,343	3,125	11,468
120	2,957	5,335	386	887	9,566	3,387	12,953
130	3,204	6,025	386	974	10,589	3,719	14,308
140	3,450	6,715	386	1,061	11,612	4,051	15,663
150	3,696	7,405	386	1,148	12,636	4,382	17,018
160	3,943	8,095	386	1,235	13,659	4,714	18,373
170	4,189	8,785	386	1,322	14,682	5,046	19,729
180	4,436	9,475	386	1,409	15,706	5,378	21,084
190	4,682	10,165	386	1,496	16,729	5,710	22,439
200	4,929	10,855	386	1,583	17,753	6,042	23,794
210	5,175	11,545	386	1,670	18,776	6,373	25,149
220	5,421	12,235	386	1,757	19,799	6,705	26,505
230	5,668	12,925	386	1,844	20,823	7,037	27,860

Flat Production Tax with Severance Example

Price	Royalty	Production Tax	Property Tax	State CIT	Total State Take	Federal CIT	Total GT
40	986	407	386	142	1,921	543	2,464
50	1,232	618	386	269	2,506	1,028	3,534
60	1,479	829	386	396	3,091	1,513	4,604
70	1,725	1,419	386	492	4,022	1,877	5,899
80	1,971	2,090	386	580	5,028	2,215	7,243
90	2,218	2,814	386	664	6,082	2,536	8,619
100	2,464	3,589	386	744	7,184	2,841	10,024
110	2,711	4,416	386	820	8,333	3,129	11,461
120	2,957	5,295	386	891	9,529	3,400	12,929
130	3,204	6,225	386	958	10,772	3,655	14,427
140	3,450	7,037	386	1,034	11,907	3,947	15,855
150	3,696	7,875	386	1,109	13,066	4,232	17,298
160	3,943	8,738	386	1,181	14,248	4,508	18,756
170	4,189	9,575	386	1,256	15,406	4,793	20,199
180	4,436	10,265	386	1,343	16,430	5,125	21,554
190	4,682	10,955	386	1,430	17,453	5,456	22,910
200	4,929	11,645	386	1,517	18,477	5,788	24,265
210	5,175	12,335	386	1,603	19,500	6,120	25,620
220	5,421	13,025	386	1,690	20,523	6,452	26,975
230	5,668	13,715	386	1,777	21,547	6,784	28,330

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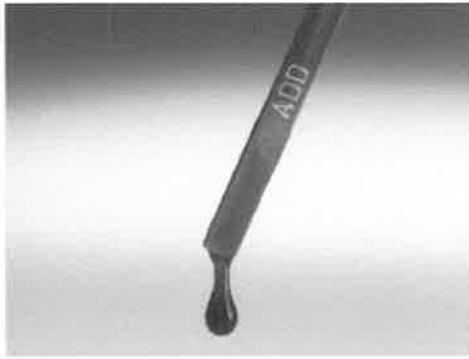
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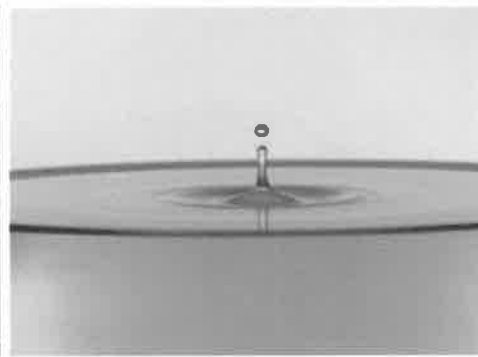
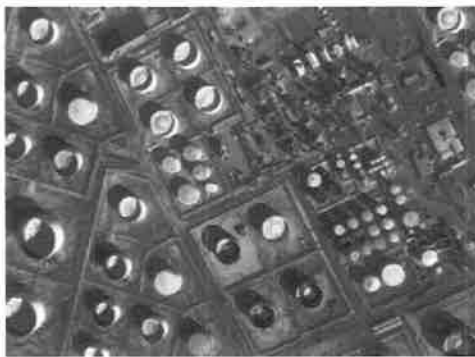
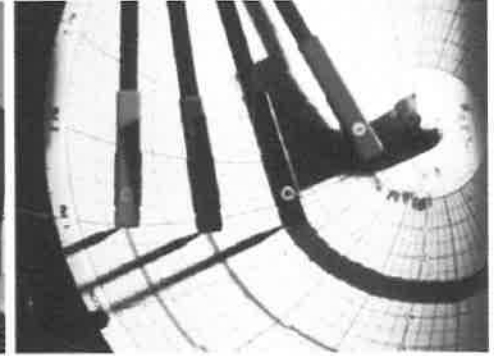
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PFC Energy

12.

Department of  
Revenue Response  
to Question from  
March 5, 2012  
(March 23, 2012)

**State of Alaska**  
Department of Revenue

*Commissioner Bryan Butcher*



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The Honorable Bert Stedman  
State Capitol Room 516  
Juneau AK, 99801

March 23, 2012

SUBJECT: Response to Questions from March 5, 2012 email

Dear Senator Stedman:

Thank you for your questions and the opportunity to provide our responses. The questions and responses follow.

- 1. During testimony given to the Senate Resources Committee on February 23<sup>rd</sup>, you stated that the Department of Revenue has "more information than any other jurisdiction in North America." Please expand on your comment by explaining the basis of your comparison and outlining what information the Department has access to that other jurisdictions typically do not.**

Most oil and gas jurisdictions in North America tax petroleum production under a gross value-based production tax. A production tax based on gross value is very simple to administer and audit, since the basis for the tax calculation is the value of the oil and/or gas usually at the sales point or at the wellhead. The only costs generally recognized in a gross value-based production tax system, if any, are the costs to transport the oil and/or gas to market.

Alaska's production tax is based on the net value of oil and gas production - that is, the value of the oil and/or gas minus the allowable expenditures to produce that oil and/or gas. In order to administer and audit the production tax under a net system, the Department of Revenue requires companies to report allowable operating and capital expenditures used in computing the production tax. This information is further delineated when audits on production tax and tax credits are performed.

Additionally, twice annually the Department of Revenue receives 5-year expenditure projections for capital and operating expenditures on the North Slope. The department also meets with company representatives at least once annually to discuss future work plans in North Slope units. This step is taken in addition to the department's review of company-submitted plans of development.

The Honorable Bert Stedman

March 23, 2012

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In response to a request for further information about types of expenditures, this past fall the department worked with industry to identify and organize the previous 5 years of capital expenditures into expenditure categories. This was an extensive process in which multiple workshops were held to come to agreement on category lists that span a wide list of companies with hundreds of thousands of lines of data. The department continues to work with the industry to provide further categorization of expenditures going forward.

The Alaska Department of Revenue had none of this data prior to the passage of a production tax on net profits as it was not required to administer or audit the tax system. It is highly unlikely that any other jurisdiction in North America has sought and obtained operating and capital expenditure data for their oil and/or gas production, and even less likely that the industry in those jurisdictions has compiled 5 years of this data into pre-defined categories.

- 2. Additionally, during that same testimony you stated that "there is information that we could certainly get that we haven't currently had...we are working to get that information." Please outline what types of information the Department is "working to get."**

At the request of the Department of Revenue Commissioner, in May 2011, the department launched a data assessment project with a purpose to establish the foundation of data types required by the department for establishing a centralized, reliable, secure, and automated database of oil and gas production and tax information for DOR staff to evaluate tax obligations, have efficient reporting and full compliance from oil and gas producers/explorers within the state of Alaska and for data integration into a revenue management system.

The objectives of the project were to assist in the design, development, and implementation of standardized reporting forms from industry leading to the development and implementation of a standardized and automated collection of oil and gas production volume, value, expense, credits, cost forecasts and revenue information to address tax related oil and gas economic, financial, and policy issues and questions for the legislature, the Governor and DOR.

During the data gathering exercise, the department identified the type and source of oil and gas data *currently received* by the DOR, DNR, and the AOGCC from various agencies and the oil industry. Identification included type of data, statutory authority which allowed the department's to receive the information, and the format in which the

Honorable Bert Stedman

March 23, 2012

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data was currently received. The exercise also identified *information shared*, in addition to specific DOR information needs *not currently received (data gaps)*. Attachment (A) called the "Industry Information Catalogue" contains the oil and gas information compiled.

Another aspect of the data assessment project included the 5 year look back of capital expenditures into pre-defined categories which was the beginning of the data gathering exercise undertaken by the Department of Revenue. The pre-defined categories for the look back were high level common categories used across the industry to serve as a historical baseline for analysis. Going forward the department has pre-defined and proposed more detailed capital expenditure and operating expenditure cost categories to the industry. The first workshop to discuss the pre-defined capital and operating expenditure cost categories with the industry was held in early December 2011. Industry comments were requested and the next workshop will be held in April 2012, after the annual production tax filing period was concluded. Attachment (B) titled "Proposed Master Expenditure Categories List" includes the detailed pre-defined capital and the operating expenditure categories published in the first industry workshop and is the additional information the department is working with the industry to obtain.

3. **Also, during their February 8<sup>th</sup> presentation to the Senate Resources Committee, Robin Brena and Craig Richards provided a list of industry documents and information which they opined should be available to policymakers (list attached). Please provide a brief analysis of that list and comment on whether or not you believe this information might aid policymakers (i.e. legislators and cabinet-level members of the executive branch) in setting oil and gas tax policy. In your consideration, please assume that there are no statutory barriers to providing policymakers that information.**

Generally speaking, more relevant information is always helpful in aiding policymakers who set oil and gas tax policy. However, we think it is important to fully understand: 1) what information we currently receive; 2) why we are asking for additional information; and 3) what we intend to use this new information for.

In reviewing the list that was presented to Senate Resources by Robin Brena and Craig Richards, it is clear that the State already receives some of the suggested items on the list from taxpayers (DOR and DNR both receive certain information on the list). Some of this information is received by DOR through the audit process, and other information is submitted at DOR's request. It is important to note that the information submitted to

Honorable Bert Stedman  
March 23, 2012  
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DOR voluntarily is offered because the taxpayers know that DOR is required to hold that information confidential. Overall, much of this data may be useful in the context of determining the right mix of fiscal terms or the effectiveness of tax credits, but proper analysis and compiling this information would be difficult and require significant resources.

DOR compiles and aggregates certain information it receives from industry, and utilizes it to create reports, forecasts, models, etc. for the executive branch, the legislature, and the general public. We believe that this type of information is most useful when it is analyzed and compiled into reports, forecasts, and models that are much easier to read than the documents where the information came from. The documents that contain the information, by themselves, would not necessarily be helpful to anyone.

You asked that we "assume that there are no statutory barriers to providing policymakers that information," and we have made that assumption in our responses below. However, we feel it is important to note that much of this information is highly confidential, company specific, proprietary type information that will not be easy to obtain. If the legislature adopted statutes to require this type of information, it may result in Alaska being viewed as "not" business friendly, thereby furthering the competitive disadvantage ACES has already put the State of Alaska in.

Following are comments/notes on each specific item in the list:

#### Information Used for Internal Decisions

- **The complete version of the last three field development plans, for each field, provided to the working interest owners.**
  - We believe that a unit plan of Development (POD) must be filed and approved by the commissioner of DNR. Those plans must include information, to the extent it exists, on long range development activities for the unit, including plans to delineate all underlying oil and gas reserves and detailed plans of proposed operations for at least one year after submission of the plan.
  - DOR has statutory authority to require a producer, explorer or an operator of a lease or property to provide reports or records necessary to forecast state revenues, including records relating to proposed, expected or approved unit expenditures (as long as relating to unit budget matters).
  - A "field development plan" may refer to documents provided to working interest owners or filed with DNR. DNR could perhaps provide further

Honorable Bert Stedman

March 23, 2012

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details. This information may be helpful, but may contain highly confidential, proprietary type information.

- **The resource support package for each field.**
  - No one within DOR seems to know what this entails, so we cannot comment.
- **All authorization for expenditures ("AFE"), or proposed AFEs that are for amounts over \$25 million and that were drafted in the last three years.**
  - DOR audit staff receives AFE's upon request during audit.
- **All annual and quarterly strategic and budget reporting documents (e.g., strategic planning unit and group financial outlooks), for the last two years, for each producer's Alaska operations.**
  - This information may be helpful, but again, this is highly confidential, proprietary type information that would not be easy to obtain.
- **All financial analysis and internal planning documents relating to heavy or viscous oil drafted in the last two years, including each producer's long term budget plan and production forecast for heavy oil and viscous oil development.**
  - Some of this is received by DOR staff at audit.
  - As noted above, information about development plans for heavy oil may be subject to PODs (DNR could confirm) and information is requested by **DOR in its twice yearly requests to industry for production forecasts and planned expenditures.**
- **A list of all projects made uneconomic by ACES, including the financial analysis supporting that conclusion.**
  - While a list like this (along with the supporting documentation) may be helpful to the legislature in setting oil and gas tax policy, the word "uneconomic" would need to be defined. An NPV of +\$1.00 "economic" and an NPV of \$0.00 "uneconomic".
  - While most of the ACES debate centered around Alaska's "fair share", deciding what is "uneconomic" cannot be analyzed in a vacuum. If modeling a hypothetical filed under ACES were to show a positive IRR or NPV (or whatever other index you choose), it may be "economic" but is it **competitive** when compared to other investment opportunities.
  - If we continue to focus on "economic vs uneconomic" and ignore whether or not we are **competitive**, we will go down the same rabbit trail that ACES lead us down.

Honorable Bert Stedman  
March 23, 2012  
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#### Information Developed for Regulatory Purposes

- **Everything provided to the BP Prudhoe Bay Royalty Trust or its auditors for yearend 2010 and 2011.**
  - Unsure of what this would show (the Trust is not a taxpayer, so it is outside of the realm of DOR).
- **The last two yearend review packages for each field.**
  - No one within DOR seems to know what this entails, so we cannot comment.

#### Information Provided to Potential Purchasers

- **In 2010, after the Gulf well blowout, BP considered selling its Alaska assets. BP set up electronic data rooms containing the documents about its Alaska operations that were necessary for potential purchasers to conduct their due diligence reviews. It would require little effort for BP to allow the Legislature access to those data rooms.**
  - This information may be helpful, but again, the information here was most likely highly confidential, company specific proprietary information. In addition, this specific example refers to documents that may or may not be related the administration of royalties and taxes. This type of information may be compiled for a potentially short time and for a specific purpose -- due diligence review. The purpose of the compilation should be of some consideration when considering whether information would be helpful to consider long-term policy decisions related to oil and gas tax policy or whether a state agency would have statutory authority to request the documents.
- 4. **Finally, on February 14<sup>th</sup>, Sen. Paskvan's staff forwarded your office a short list of requests from Senator Stedman (email attached). A few of those requests have been addressed. However, Senator Stedman is still very interested in seeing a graph depicting "projected capex of North Slope producers for FY2011-2016, delineated by type of producer (i.e. major vs. independent producers)".**

See answer to question #5 below.

- 5. **In a February 16<sup>th</sup> letter to the Senate Finance Committee re: "Response to questions from Senate Finance Hearing on February 2, 2012", you wrote in**

The Honorable Bert Stedman

March 23, 2012

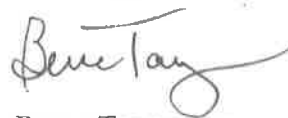
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**part, "the Department of Revenue is seeking clarification from the Department of Law on the extent to which it can disclose information about expenditure forecasts provided by companies." However, in a December 21<sup>st</sup> letter to Senator Paskvan, the Department provided a table depicting capital expenditure estimates for FY2007 to FY2016. Please comment on why you might not be able to convert previously distributed information into a format committee members are more accustomed to.**

As stated in our February 16, 2012 letter to the Senate Finance Committee, we are still seeking clarification about the level of disclosure the Department of Revenue can make with regard to company-submitted *expenditure projections*. In the letter to Senator Paskvan dated December 21, 2011, we provided aggregated data for North Slope capital and operating expenditure projections through FY 2016. We provided similar data in graphical form to the Senate Finance Committee on February 2, 2012. The request we noted from Senate Finance Committee, however, was that the committee requested that the department "provide further breakdown of the FY 13/14/15 expenditure forecasts as much as possible." There are several different ways that the expenditure projections could be further broken down, but we have not found clear statutory authority authorizing the department to make this information public. The department will continue to publish aggregated expenditure projection data that is used to compile revenue forecasts and seek clarification from the Department of Law on further delineation of this data.

We hope our responses fully answer your questions.

Sincerely,

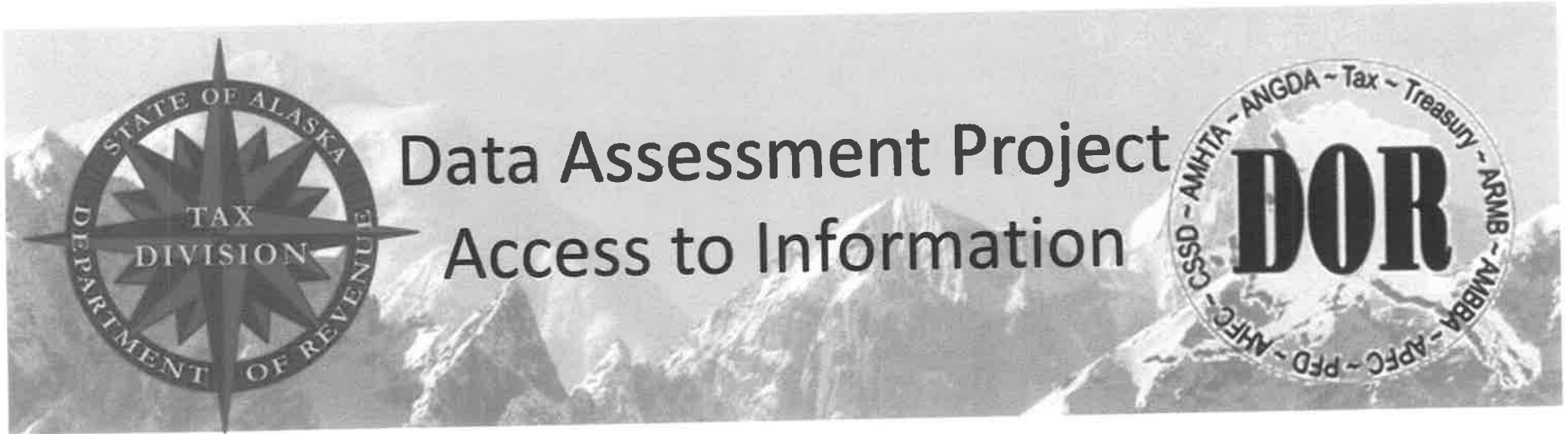


Bruce Tangeman  
Deputy Commissioner

cc: The Honorable Lyman Hoffman, Co-Chair Senate Finance Committee  
The Honorable Donald Olson, Senate Finance Committee Member  
The Honorable Dennis Egan, Senate Finance Committee Member  
The Honorable Joe Thomas, Senate Finance Committee Member  
The Honorable Johnny Ellis, Senate Finance Committee Member  
The Honorable Lesil McGuire, Senate Finance Committee Member

13.

**Department of  
Revenue  
Presentation:  
Data Assessment  
Project Access  
to Information  
March 26, 2012**



*Presentation to Senate Finance  
March 26, 2012  
Alaska Department of Revenue*



# Slide Index



- Project purpose and goals
- Accomplishments to Date
- Project Approach
- Five Focus Areas
- Cost Information Gathering Process
- Data Assessment – Over the Past Year
- Capital Expenditure Categories
- 5 Year Look Back Overview
- Data Assessment – Next 15 Months
- Data Assessment – Future 2014 Forward
- Benefits of the Project
- Next Steps
- Handout List
- Industry Information Catalogue
- SB 192, Amendment 26 Comparison to Currently Collected Data by Agency





# Accomplishments

## Spring 2011 to Spring 2012



- Gathered data, identified information needs and sources.
- Completed Industry Information Catalogue – *Handout 1*.
- Focused on 5 Areas of oil and gas tax information needs.
- Hosted 4 industry workshops to communicate goals.
- Requested and compiled 5-year look back (2006–2010) of capital expenditures (CAPEX) by high level category.
- Integrated, streamlined, and automated forms.
- Proposed work plan to obtain/report detail data for FY12.
- Proposed work plan to integrate (sub ledger) oil and gas accounting data into other information systems .



# Project Approach



DOR used an “integrated collaborative” approach among DOR , DNR, AOGCC, industry, and other agencies to gather current information.

- Identified current information received by DOR, DNR, AOGCC and other oil and gas industry associated agencies – “Industry Information Catalogue” – *Handout 1*.
- Identified and cross referenced statute and regulation requirements of data received and NOT received.
- Reviewed past and current DOR information requests.
- Reviewed compliance level of responses
- Identified type and format of information submitted by companies (PDF,'s Excel Spreadsheets, etc) for documents, graphs, charts, displays, narratives, spreadsheet data files.



## Focus on Current Areas



- Production Forecast Reporting
- Cost Forecast Reporting
- Monthly Information Reporting
- Credit Application Filing
- Annual Production Tax Return

These areas are the key sources of oil and gas tax related information and reporting activities.



# Cost Information Gathering Process



- Conducted in house discussion and review.
- Developed CAPEX & OPEX Expense Category Lists.
- Conducted 4 workshops with industry.
- Industry responsive in both active participation and written comments.
- Developed CAPEX 5 year look-back of high level cost categories.
- Proposed forward-looking more detailed CAPEX and OPEX cost categories – *Handout 2*.



# Data Assessment to Date



- Data Assessment Project accomplishments, forms & processes.
- 5 Year Look Back effort – compiled baseline data.
- Annual Cost Supplemental Information Report, rev 1.
  - Effective for CY 2011 tax reporting due March 31, 2012
  - Uses high level look back CAPEX categories
  - Filed by producers and explorers
- Near completion of Annual Production Tax Return



# Capital Expenditure Categories



- Look Back Categories for 2006-2010:
  - Geological & Geophysical Work (G&G)
  - Exploration Drilling
  - Development Drilling
  - Facilities
  - Other Capital
- High level categories were used as a result of workshop discussions with industry to balance the department's information needs and the industry's ability to respond in a short time frame for 5 years of historical data.
- Categorized capital expenditure data provided represents 90% of company reported capital expenditures relating to credits.





# Data Assessment Next 15 Months



- Host prospective Cost Information Workshops on CAPEX\OPEX.
- Update Annual Cost Supplemental Information Report , rev 2.
  - Effective for CY 2012 reporting due March 31, 2013
  - Uses more detailed categories following additional workshops – April 2012
  - Filed by producers and explorers
- Finalization of Annual Production Tax Return for 2012 reporting.
- Consolidating standardized forms to eliminate duplicate reporting.
  - Finalize oil and gas reporting processes, definitions
  - Compile 5 YLB historical cost data with 2012 cost data for analysis
- Complete the foundation and basis for data integration with a Tax Revenue Management System (“TRMS”).
- Refine proposed work plan to initiate development and integration of standardized oil and gas accounting information into a secured database once the Tax Revenue Management System (“TRMS”) project plans decisions advance.



# Data Assessment Future July 2014 Forward



- The project has defined what we need to do to organize the oil and gas accounting information.
- TRMS project needs to establish the project implementation plan in order for our project to integrate into that system.
- After TRMS project implementation plan is defined, the next step is to define how the oil and gas accounting information will be incorporated into TRMS and when it can begin.



# Benefits of Data Assessment Project



- Proposed reporting definitions and automation standards.
- Established reporting categories for qualified capital expenditures categories.
- Obtained historical capital expenditure information.
- Developed requirements to report cost categories going forward in 2012.
- Identified potential for electronic data sharing among associated agencies.



## Next Steps



- Continued interaction with stakeholders to complete indentifying and defining more detailed cost categories for both CAPEX and OPEX for 2012 tax reporting
- Complete standardization of forms, format and content
- Automation of the standardized forms





# Industry Information Catalogue



- The department's review catalogued information reported to the following State of Alaska agencies:
  - Department of Revenue, Tax Division
  - Department of Natural Resources, Division of Oil & Gas
  - Alaska Oil & Gas Conservation Commission



## SB 192, Amd 26 Petroleum Information Management System (PIMS)



- 90% of PIMS data requirements already collected by DOR, DNR and AOGCC.
- 4 out of 35 data items not currently collected and require further coordination with Department of Labor.
- More data collected by DOR, DNR and AOGCC than identified in SB 192, Amendment 26.



QUESTIONS?

## Proposed Master Expenditures Categories List

CAPEX Expenditure Categories	Category Definition
G&G	Includes work and or costs associated with the performance or acquisition of seismic and/or geological and geophysical data.
Exploration Drilling	Includes drilling an exploration well, drilling an appraisal well that is post discovery and prior to development and including side tracks on a discovery well, appraisal costs including coring and testing discovery wells.
Development Drilling	Includes costs associated with well drilling, completions, planned multilaterals of development wells, including costs upstream of the christmas tree.
Well Workovers	The process of performing major maintenance or remedial treatments on an oil or gas well to increase production. In many cases, workover implies the removal and replacement of the production tubing string after the well has been killed and a workover rig has been placed on location.
Production Facilities – Rate Increasing	Includes well tie-in costs, increases to choke capacity, expansions of existing facilities such as increasing oil, gas or water handling, debottlenecking, or processing facilities.
Production Facilities – Non-rate Increasing	Includes improvements to reliability or reduced operational costs, costs that do not contribute to the choke capacity of a production facility, and production control system upgrades.
Support Facilities	Includes costs for IT, communications equipment, non-production control systems, camp sites or accommodation facilities, medical facility, laboratories, warehouses, and maintenance buildings.
Transit and gathering/flow lines	Includes transit lines, gathering lines, and flow lines, or the addition of new production lines and/or pumps to trunk or downstream lines.
Transit and gathering/flow lines – Replacement	Includes replacement of transit lines, gathering lines, and flow lines to trunk or downstream lines. Does not include repairs to such lines.

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CAPEX Expenditure Categories	Category Definition
Other Capital	Includes significant capital equipment, health, safety, environment, and other non-drilling related costs not captured in other categories.
Exclusions (AS 43.55.165(e))	Include total amount of exclusions as described under AS 43.55.165(e).

OPEX Expenditure Categories	Category Definition
G&G (Geological & Geophysical Work)	Includes work and or costs associated with the performance or acquisition of seismic and/or geological and geophysical data that is not included in CAPEX "G&G" expenditures.
Wellwork	The process of performing major maintenance or remedial treatments on an oil or gas well to restore or maintain production. In many cases, workover implies the removal and replacement of the production tubing string after the well has been killed and a workover rig has been placed on location.
Platforms Operations	Includes operation, maintenance and repair expenditures for platforms and platform facilities for oil and gas production from marine platform operations. This should include lifting, gathering, treating, field processing, on site staff and support facilities, and other services.
Facility - Production – Operations & Maintenance	Includes operation, maintenance and repair expenditures for on-shore facilities for oil and gas production. This should include lifting, gathering, treating, field processing, on-site staff and support facilities, and other services.
Facility - Production – Major Repairs	Includes major repairs of facilities associated with oil and gas production operations. This should include major repair of lifting, gathering, treating, and field processing activities.

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OPEX Expenditure Categories	Category Definition
Facility - Support – Operations	Includes on-site housing, medical facilities, testing facilities, warehouse and workshop facilities, emergency services, and equipment fueling facilities, and their maintenance and repairs.
Transit Lines - Operation	Includes all in-field and connecting lines receiving oil or gas from gathering lines and transporting such to trunk and or sales points beyond gathering lines and centers.
Transit Lines - Major Repairs	Includes major repairs of transit and flow lines not covered by CAPEX pipeline expenditures.
Gathering Lines - Operation	Includes all in-field connecting, gathering, and flow lines delivering oil and/or gas to transit/flow lines, trunk lines or sales points.
Gathering Lines – Major Repairs	Includes major repairs of gathering lines and systems delivering oil and/or gas to transit/flow lines, trunk lines or sales points.
Fuel	The volume of gas purchased and used on the producing leases injected for reservoir maintenance or used as gas lift.
Roads, Pads & Runway Maintenance	Includes maintenance and repairs to access roads, pads used in those operations, and heliport or aircraft runway and facility maintenance within the area of oil and gas exploration, development and production activities.
Health, Safety & Environmental	Includes staff, facilities, and activities associated with personnel health, operations safety preservation and support, and maintaining environmental integrity.
Other Operating Expenses	Total other costs incurred in operations that are not included in any of the other categories defined in this list of OPEX expenditures, not to exceed 155 of the total OPEX expenditures.
Taxes - Property	Total ad valorem taxes paid to state and local government entities for facilities and property assessments.

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OPEX Expenditure Categories	Category Definition
Taxes - PILT - Payments in Lieu of Taxes	Total payments to a government that are not production or income taxes.
Net-Profit-Share Lease Payments	Total of all net-profit-share lease payments made during the calendar year.
Adjustments - Payments Under 43.55.170 (a)(1) Reimbursed Facility Charges & (a)(2) Reimbursed Lease Expenditures	List a total amount of all payments that were received during the calendar year for the calendar year being report that would be included as described in AS 43.55.170 (a)(1) & (a)(2).
Adjustments - Payments Under 43.55.170 (a)(3) Sale or Transfer of Asset or Oil or Gas	List a total amount of all payments were received during the calendar year for the calendar year being reported that would be included as described in AS 43.55.170(a)(3).
Exclusions - Under 15 AAC 55.520(f)(4)(G) which are the Exclusions under AS 43.44.165 (e)(19)	List a total amount of all expenditures made during the calendar year for the calendar year being reported that would be excluded as described under 15 AAC 55.520(f)(4)(G) that are the Exclusions under AS 43.44.165 (e)(19).

**SB 192, Amendment 26, PIMS Data Requirements  
Comparison to Currently Collected Data by Agency**

<b>SB 192, Amendment 26 Petroleum Info Mgmt System (PIMS)</b>	<b>INDUSTRY INFORMATION CATALOGUE</b>	<b>AGENCY</b>
(1) Unit Agreements	Unit Agreements	ADNR-DO&G-Units
(1) Joint Operating Agreements	Joint Operating Agreements	ADNR-DO&G-Permits
(2) O&G Exploration Licenses and Leases	Plan of Exploration	ADNR-DO&G-Units
(2)(A) Exploration Work Programs	Plan of Exploration	ADNR-DO&G-Units
(2)(A) Exploration Work Program Budgets	None	Not collected, No statutory requirement
(3)(B) Exploration Seismic Data	Seismic	ADNR-DO&G-Resource Evaluation
(3)(C) Exploration Drilling Reports	Daily Drilling Reports	AOGCC, ADNR-DO&G-Resource Evaluation, Permits and Units.
(3)(D) Exploration Logs	Well Logs	AOGCC, ADNR-DO&G-Resource Evaluation, Permits and Units.
(3)(E) Exploration Well Tests	Well Tests	AOGCC, ADNR-DO&G-Resource Evaluation, Permits and Units.
(3)(F) Exploration Geological Models & Maps	Geological Models and Maps	AOGCC, ADNR-DO&G-Resource Evaluation
(4)(A) Development Plans	Plan of Development	AOGCC, ADNR-DO&G Units.
(4)(A) Development Operating Plans	Plan of Operations	ADNR-DO&G-Permits
(4)(A) Development Plans Operating & Capital Expenditures Projections (Forecasts)	OPEX-Projections CAPEX-Projections	ADOR-Economic Research
(4)(B) Development Construction Progress Reports	Construction Progress Report (Completion Reports)	ADNR-DO&G-Permits
(4)(C) Development Drilling Reports	Daily Drilling Reports	AOGCC, ADNR-DO&G-Resource Evaluation, Permits and Units.
(4)(D) Development Reservoir Characterization	Reservoir characterization	ADNR-DO&G-Resource Analysis, Units

**SB 192, Amendment 26, PIMS Data Requirements  
Comparison to Currently Collected Data by Agency**

<b>SB 192, Amendment 26 Petroleum Info Mgmt System (PIMS)</b>	<b>INDUSTRY INFORMATION CATALOGUE</b>	<b>AGENCY</b>
(5)(A) Production Work Programs	None	Not collected by DOR, DNR, AOGCC - industry project accounting reporting to agencies not done at this level – Further research needed with Dept of Labor.
(5)(A) Production Work Program Budgets	None	Not collected by DOR, DNR, AOGCC - industry project accounting reporting to agencies not done at this level – Further research needed with Dept of Labor.
(5)(B) Production O&G Sales (By Sale – for Royalty)	Production (Total by Disposition and Individual Sales Contract)	ADNR-DO&G-Royalty Accounting
(5)(B) Production O&G Sales (Totals – for Tax)	Production (Totals for Tax)	ADOR-TD-Economic Research and Production Tax Audit
(5)(B) Production O&G Revenue (From Lease Bonuses, Royalty and Net Profit)	Sales Price and Netback Costs	ADNR-DO&G-O&G Leasing and Royalty Accounting
(5)(B) Production O&G Revenue (From Tax)	Sales Price and Netback Costs	ADOR-TD-Economic Research and Production Tax Audit
(5)(B) Production O&G Pricing (Royalty)	Sales Price and Netback Costs	ADNR-DO&G-O&G Leasing and Royalty Accounting
(5)(B) Production O&G Pricing (Tax)	Sales Price and Netback Costs	ADOR-TD-Economic Research and Production Tax Audit
(5)(C) Production Transportation Agreements (For Royalty)	Sales Price and Netback Costs	ADNR-DO&G-O&G Leasing and Royalty Accounting
(5)(C) Production Transportation Agreements (For Tax)	Sales Price and Netback Costs	ADOR-TD-Economic Research and Production Tax Audit
(5)(D) Production Data	Production	AOGCC, ADNR-DO&G-Resource Evaluation, Royalty Accounting, ADOR-TD-Economic Research and Production Tax Audit

**SB 192, Amendment 26, PIMS Data Requirements  
Comparison to Currently Collected Data by Agency**

<b>SB 192, Amendment 26 Petroleum Info Mgmt System (PIMS)</b>	<b>INDUSTRY INFORMATION CATALOGUE</b>	<b>AGENCY</b>
(5)(D) Production Injection Data	Injection and Injection – Gas Storage	AOGCC, ADNR-DO&G-Resource Evaluation
(5)(F) Production Operating & Capital Expenditures	OPEX-Actual CAPEX-Actual	ADOR-TD-Economic Research and Production Tax Audit
(5)(G) Production Facility Maps and Studies	Facility Maps and Studies	ADNR-DO&G-Resource Evaluation, Permits
(6)(A) Abandonment-Wells, Leases, Production, & Transportation Facilities Plans	Abandonment Plan	AOGCC
(6)(A) Abandonment-Wells, Leases, Production, & Transportation Facilities Budgets	None	Not collected by DOR, DNR, AOGCC
(6)(B) Abandonment-Wells, Leases, Production, & Transportation Facilities Progress Reports	Site Closure Well Site Clearance	ADNR-DO&G-Permits AOGCC
(7)(A & B) O&G Employment Information & Training	None	Further research needed with Dept. of Labor
(8) Other Information Deemed Necessary	To Be Determined	Appropriate Agency and Legislature

Oil and Gas Information Disclosure in Alaska									
Color Key: DOR Oil and Gas Information				DNR-DO&G Information	AOGCC Information	Other Agencies Not Detailed		Prepared by: Write Tech - February 1, 2012	
Type of Data	Agency Receiving Data	Statute/Regulation Authority	Agencies with which Data May be Shared	Reason for Data Submission	Disclosure Timeframe	Publication and Public Access	Form of Reported Info.	Data Provided By Source Agency	Additional Data Needs of DOR
<b>LAND AND LEASE OWNERSHIP</b>									
State of Alaska Lease Agreement	ADNR, Division of Oil and Gas - Lease Sales & Administration	AS 38.05.945(a)(4)	DOR-Tax Division upon request.	To obtain a state lease for oil and gas development.	At the time the lease is issued.	Public must come to physical location of office and sign-in.	Physical documents, and electronic document library.	Lease agreement and lessee ownership.	
Federal Lease Agreement	ADNR, Division of Oil and Gas - Royalty Audit	Federal 205 Program Agreement with states and tribes.	Confidential. Not generally shared with agencies, held under audit rules.	To audit oil and gas production and valuation on upland federal leases.	At the time the lease is issued.	Not shared with public or other agencies. May be public under U.S.D.I. Bureau of Land Management, or Outer Continental Shelf office.	Paper and digital data downloaded from federal royalty program files, and audit files copied at company records locations.	Lease agreement.	
<b>EXPLORATION AND APPRAISAL</b>									
Plan of Exploration	ADNR, Division of Oil and Gas - Units Administration, Resource Evaluation	AS 38.05.133 (Exploration) License Procedures, AS 38.05.020, AS 38.05.145, AS 38.05.180, 11 AAC 83.341 Unit Plan of Exploration.	None.	ADNR-DO&G Unitization	None	Not public information.	Electronic Application, PDF attachments.	Plan narrative, map, location description, method, etc.	
Joint Operating Agreements	ADNR, Division of Oil and Gas	11 AAC 83.306 Unitization Requirements AS 38.05.130 Damages and posting of bond 11 AAC 96.140 Conduct of Operations. State of Alaska Oil and Gas Lease Contract. 11 AAC 04 Payment of Oil and Gas Royalties, Rents, and bonuses.	AS 38.05.035(a)(12) May provide information to DOR (including confidential information). DOR-Tax Division upon request once plan is approved. May be confidential depending on the stage of development or production.	Unitization of production area, ADNR-DO&G Permits. Payment of royalties and net-profit-lease payments.	Due at the time of exploration or unitization application.	Not public information.	Electronic Application, PDF attachments.	Operations plan and procedures.	
Seismic	ADNR, Division of Oil and Gas - Units, Resource Evaluation	AS 38.05.133 (Exploration) License Procedures. AS 38.05.020 Duties of commissioner [AS 38.05.180] (Royalty Modification)] 11 AAC 83.341 Unit Plan of Exploration. 11 AAC 83.343 Plans of Development AS 43.55.025 and AS 43.55.023 Tax Credits	No data share.	Required for tax credits and MLUPs, and exploration license, Unit PODs and POEs. Required as part of unitization, Lease/Unit Plan of Operations when state lands are involved.	No disclosure Exceptions: EICs and exploration license confidentiality expires after ten years. If lease is created data remains confidential for life of the lease.	DNR-DO&G Data Vault, not public information.	Digital CD, scanned documents and map copies.	Geologic and geophysical information based on seismic testing.	
Seismic - (Exploration) Multiple Use Land Permit	ADNR, Division of Oil and Gas - Permits	11 AAC 96.210-240	Public Information.	Required as part of unitization, Lease/Unit Plan of Operations when state lands are involved.	Public information.	Public information	Paper and scanned documents.	Land use permit.	
Daily Drilling Reports, Well Logs, Well Tests	AOGCC	AS 31.05.090 and AS31.05.030(i) 20 AAC 25.070 Records and Reports	DNR-DOG authorized personnel upon request (confidential wells on state-lands only) NOTE: DNR-DOG has its own specific well log data submittal requirements.	Upon request by authorized DNR-DOG personnel.	Less than 10 days after request	AOGCC library and Internet (non-confidential wells only) available 30 days after completion. Exploration Stratigraphic Test Wells available 2 years after completion if granted extended confidentiality.	Printed (AOGCC library); scanned records (Internet)	Daily well drilling reports, well drill logs, and well test data.	
Daily drilling reports	ADNR, Division of Oil and Gas - Resource Evaluation, Permits, Units	AS 38.05.133 (Exploration) License Procedures. AS 43.55.025 and .023. Exploration Credits	Can share with DOR under AS 38.05.035(a)(12)	Fulfillment of Exploration Incentive Credit or Exploration License	Public Disclosure after 2 years for EIC wells drilled after 7/1/2007, or 10 years for wells drilled before 7/1/2007. 25-month confidentiality period for exploratory and stratigraphic test wells; development and service wells are not confidential. Excludes wells granted extended confidential status by the Commissioner of DNR.	Not shared with public or other agencies.	Paper, PFD format stored in in-house (DO&G) library depending on date of submission and the status of document automation.	Drilling depths, core geology, progress or completing reports.	
Well Logs	ADNR, Division of Oil and Gas - Units, Resource Evaluation, Permits	AS 38.05.133 (Exploration) License Procedures. 11 AAC 83.343 Plans of Development 11 AAC 83.158(g) Lease Plan of Operations?? 11 AAC 96.210 MLUP AS 38.05.180(x) All non-interpretive data	No data share.	Based on ADNR-DO&G permit on state owned lands.	Not shared with public or other agencies. 25-month confidentiality period for exploratory and stratigraphic test wells; development and service wells are not confidential. Excludes wells granted extended confidential status by the Commissioner of DNR.	Not shared with public or other agencies. Exception: Public if Exploration Tax Incentive Credit (EIC) issued. 25-month confidentiality period for exploratory and stratigraphic test wells; development and service wells are not confidential. Excludes wells granted extended confidential status by the Commissioner of DNR.	Paper, PFD format stored in in-house (DO&G Resource Evaluation)	Log curve digits, well files and databases	

Oil and Gas Information Disclosure in Alaska									
Color Key: DOR Oil and Gas Information			DNR-DO&G Information	AOGCC Information	Other Agencies Not Detailed	Prepared by: Write Tech - February 1, 2012			
Type of Data	Agency Receiving Data	Statute/Regulation Authority	Agencies with which Data May be Shared	Reason for Data Submission	Disclosure Timeframe	Publication and Public Access	Form of Reported Info.	Data Provided By Source Agency	Additional Data Needs of DOR
Well Tests	ADNR, Division of Oil and Gas - Resource Evaluation	AS 38.05.133 (Exploration) License Procedures. AS 38.05.020, AS 38.05.135, AS 38.05.180. 11 AAC 83.341 Unit Plan of Exploration.	No Data Share.	Based on ADNR-DO&G permit on state owned lands.	Not shared with public or other agencies. 25-month confidentiality period for exploratory and stratigraphic test wells; development and service wells are not confidential. Excludes wells granted extended confidential status by the Commissioner of DNR.	Not shared with public or other agencies. 25-month confidentiality period for exploratory and stratigraphic test wells; development and service wells are not confidential. Excludes wells granted extended confidential status by the Commissioner of DNR.	Paper, PFD format stored in in-house (DO&G) library depending on date of submission and the status of document automation.	Well stratigraphic test data.	
Geological Models and Maps	ADNR, Division of Oil and Gas (State Generated)	Internal Interpretation.	No data share.	N/A	Not shared with public or other agencies.	Not shared with public or other agencies.	Paper, PFD format stored in in-house (DO&G) library depending on date of submission and the status of document automation.	Internal geology interpretations and stratigraphic maps.	
Geological models and maps	AOGCC (Operator-supplied);	AS 31.05.030(d)(2) Filing of Reports, logs, etc. (20 AAC 25.520, Field and Pool Regulation and Classification, and 20 Arc 25.460, Area Injection Orders.)	DNR-DOG upon request (non-confidential information only)	Upon request (non-confidential information only); confidential information not available for release.	Less than 10 days after request	AOGCC library and Internet (non-confidential info only) (Most are confidential and not released to the public.)	Printed (AOGCC library)	Geologic models and geologic maps as provided by oil and gas or exploration companies.	
<b>DEVELOPMENT</b>									
Unit Agreement	ADNR, Division of Oil and Gas	11 AAC 83.306 Unitization Requirements 11 AAC 86.326 Standard Unit Agreement	AS 38.05.035(a)(12) May provide information to DOR (including confidential information). DOR-Tax Division upon request once plan is approved. May be confidential depending on the stage of development or production.	Unitization of production area.	Upon approval, a public version of the agreement is available, which may not include all financial aspects.	Files available upon request at the ADNR-DO&G office.	Paper, PFD copies, public files are all scanned for public records. Public uses paper files on site. Will generate PFD copies if requested and information is public.	Get raw data - geological, geophysical, engineering, well data as standard required data. May get data interpretations if company provides it voluntarily. Usually a company uses it to make their case for unitization or P.A. formation.	
Plan of Development	AOGCC	AS 31.05.030(i) Accept Written Plans. AS 31.05030(d)(9) Filing of Plan of Development and Operations. 20 AAC 25.517 Plan of Reservoir Development and Operation.	ADNR-DO&G	Plan of development to produce.	Less than 10 days after request.	AOGCC library and Internet (non-confidential info only) (Usually pool specific rules apply.)	Printed (AOGCC library)	Plan of development supplied by oil and gas development company	
Plan of Development	ADNR, Division of Oil and Gas - Units	AS 38.05.020 Authorities and Duties of (DNR) Commissioner AS 38.05.145 Leasing Procedure (Minerals) AS 38.05.180 Oil and Gas and Gas only Leasing 11 AAC 83.343 Unit Plan of Development 11 AAC 83.341 Unit Plan of Exploration	AS 38.05.035(a)(12) May provide information to DOR (including confidential information). DOR-Tax Division upon request once plan is approved. May be confidential depending on the stage of development or production.	Unitization of production area.	Upon approval, a public version of the agreement is available, which may not include all financial aspects.	Files available upon request at the ADNR-DO&G office.	Paper, PFD copies, public files are all scanned for public records. Public uses paper files on site. Will generate PFD copies if requested and information is public.	Get raw data - geological, geophysical, engineering, well data as standard required data. May get data interpretations if company provides it voluntarily. Usually a company uses it to make their case for unitization or P.A. formation.	
Geologic, geophysical and engineering PA Development	ADNR, Division of Oil and Gas - Units	11AAC 83.351 Participating Area Minimizing boundaries.	AS 38.05.035(a)(12) May provide information to DOR (including confidential information). DOR-Tax Division upon request once plan is approved. May be confidential depending on the stage of development or production.	Unitization of production area.	Upon approval, a public version of the agreement is available, which may not include all financial aspects.	Files available upon request at the ADNR-DO&G office.	Paper, PFD copies, public files are all scanned for public records. Public uses paper files on site. Will generate PFD copies if requested and information is public.	Geological, geophysical, engineering, well data, data interpretations, any supporting data to unitize the area.	
Unit Operating Agreement	ADNR, Division of Oil and Gas - Units	11 AAC 83.306 Unitization Requirements 11 AAC 83.366 Unit Operating Agreement	AS 38.05.035(a)(12) May provide information to DOR (including confidential information). DOR-Tax Division upon request once plan is approved. May be confidential depending on the stage of development or production.	Unitization of production area.	Upon approval, a public version of the agreement is available, which may not include all financial aspects.	Files available upon request at the ADNR-DO&G office.	Paper, PFD copies, public files are all scanned for public records. Public uses paper files on site. Will generate PFD copies if requested and information is public.	Geological, geophysical, engineering, well data, data interpretations, any supporting data to unitize the area.	
Plan of Operations	ADNR, Division of Oil and Gas - Permits	AS 38.05.850 Permits (Land Use) 11 AAC 83.158 Plan of Operations 11 AAC 83.346 Unit Plan of Operations	AS 38.05.035(a)(12) May provide information to DOR (including confidential information). DOR-Tax Division upon request once plan is approved. May be confidential depending on the stage of development or production.	Alaska State Lease Agreement and statute and regulatory authority.	N/A	Public information.	Paper, PFD format stored in in-house (DO&G) library depending on date of submission and the status of document automation.	Narrative plan descriptions, contracts, agreements, maps.	

Oil and Gas Information Disclosure in Alaska			Color Key: DOR Oil and Gas Information	DNR-DO&G Information	AOGCC Information	Other Agencies Not Detailed	Prepared by: Write Tech - February 1, 2012		
Type of Data	Agency Receiving Data	Statute/Regulation Authority	Agencies with which Data May be Shared	Reason for Data Submission	Disclosure Timeframe	Publication and Public Access	Form of Reported Info.	Data Provided By Source Agency	Additional Data Needs of DOR
Construction Progress Reports (Completion Reports)	ADNR, Division of Oil and Gas - Permits	11 AAC 96.140 Conduct of Operations	AS 38.05.035(a)(12) May provide information to DOR (including confidential information). DOR-Tax Division upon request once plan is approved. May be confidential depending on the stage of development or production.	Alaska State Lease Agreement and statute and regulatory authority. Unitization of production area.	N/A	Public information.	Paper, PFD format stored in in-house (DO&G) library depending on date of submission and the status of document automation.	Narrative progress report at intervals and/or project completion.	
Reservoir Characterization	ADNR, Division of Oil and Gas - Resource Evaluation/Units (Company provided analysis) (Also Independent State analysis)	11 AAC 83.306 Unitization Requirements	AS 38.05.035(a)(12) May provide information to DOR (including confidential information). DOR-Tax Division upon request once plan is approved. May be confidential depending on the stage of development or production.	Unitization of production area.	N/A	Not public information.	Paper, PFD format stored in in-house (DO&G) library depending on date of submission and the status of document automation.	Geological, geophysical, engineering, well data, data interpretations, any supporting data to unitize the area.	May be available in a ADNR-DO&G electronic database.
Reservoir Characterization	AOGCC	AS 31.05 Alaska Oil and Gas Conservation Act. (20 arc 25.071 Geologic Data and Logs)	Development and service well information is not confidential. (Exploratory and stratigraphic test well data subject to 2-year confidential period.) DNR-DOG on state owned lands only.	Required.	Development and service information: Upon receipt, information voluntarily submitted may be held confidential if requested by reporting company.	AOGCC library and Internet (non-confidential info only.) (Most are confidential and not released to the public.)	Printed (AOGCC library); scanned records (Internet).	Petroleum-related geologic interpretations and stratigraphic test data supplied by companies to support request for unitization.	
<b>PRODUCTION / OPERATIONS</b>									
Production	AOGCC	AS 31.05.027 Land subject to commission authority. AS 31.05.030 Powers and Duties of Commission. (20 AAC 25.230, Measurement, Allocation and reporting of Well Production.)	Regular production information is not confidential; electronic database transfer to ADNR DO&G completed monthly.	Timely ADNR-DO&G access to non-confidential information.	One-month reporting lag.	Internet (regular production data; AOGCC statistical report). Information is non-confidential.	Database in MS Access format; downloadable ASCII text file; production charts.	Daily well production reports and volume disposition.	May be available in a ADNR-DO&G electronic database.
Production	ADOR, Tax Division - Economic Research	AS 43.55.030 Filing of Statements AS 43.55.040 Powers of Department of Revenue 15 AAC 55.520 Monthly Filings	AS 38.05.036(c) and AS 43.55.230 specify the information DOR can share with DNR.	Administering the production tax (e.g. calculating the tax liability or issuing tax credit certificates.)	Supplied to DOR monthly (one-month lag) and in annual filings.	Some data in this category may be disclosed to the public provided it is properly aggregated and allowed to be released under 43.05.230 and 43.55.890.	Paper and/or spreadsheet format of specified data request for monthly and annual reporting.	Gross production volumes, taxable volumes and allocation to volume dispositions at the Participating Area level within specific Unit designations.	
Production	ADOR, Tax Division - Production Tax Audit	AS 43.44.011(e) Oil or Gas Produced and Taxable. AS 43.55.011(f) Oil or Gas Produced and Taxable. (Private Land Owners Interest.) AS 43.55.020(e) Gas Produced and Taxable (Excess flared gas). AS 43.55.900(24) Gas Used In State.	AS 38.05.036(c) and AS 43.55.230 specify the information DOR can share with DNR.	Administering the production tax (e.g. calculating the tax liability or issuing tax credit certificates.)	Supplied to DOR in annual tax filings.	Some data in this category may be disclosed to the public provided it is properly aggregated and allowed to be released under 43.05.230 and 43.55.890.	Paper and/or spreadsheet format of specified data request and tax filing on an annual basis.	Taxable oil and gas volumes, royalty volumes, taxable oil and gas volume and volume allocations to working interest owners.	
Production	ADNR, Division of Oil and Gas/ Royalty Accounting	AS 38.05.020 Authority and duties of (DNR) commissioner. AS 38.05.135 Leasing, royalty & NPSL Payments AS 38.05.180 Oil and Gas Leasing State of Alaska Oil and Gas Lease Contract. 11 AAC 04 Payment of Oil and Gas Royalties, Rents, and bonuses.	AS 38.05.035(a)(12) May provide information to DOR (including confidential information). DOR-Tax Division upon request once plan is approved. May be confidential depending on the stage of development or production.	Collection of royalties and net profit share lease payments.	One-month reporting lag	Volume information is public. Some value information is public and some is confidential as it relates to specific sales contracts.	Electronic Royalty Reports filed monthly by Accounting Unit.	Gross production volumes, royalty volumes and allocation to volume dispositions.	Data share from ADNR-DO&G would provided more detailed data in a consistent format.
Production	ADNR, Division of Oil and Gas/ Resource Evaluation	AS 38.05.020 Authority and duties of (DNR) commissioner. AS 38.05.180 Oil and Gas Leasing State of Alaska Oil and Gas Lease Contract.	AS 38.05.035(a)(12) May provide information to DOR (including confidential information). DOR-Tax Division upon request once plan is approved. May be confidential depending on the stage of development or production.	Resource evaluation.	One-month reporting lag	Volume information is public.	Data dump from AOGCC once a month of well production information.	Gross production volumes, royalty volumes and allocation to volume dispositions.	
Injection	AOGCC	AS 31.05.027 Land subject to commission authority. AS 31.05.030 Powers and Duties of Commission. (20 AAC 25.432, Report of Underground Injections.)	Regular injection information is not confidential; electronic database transfer to ADNR-DO&G completed monthly.	Timely DNR access to non-confidential information	One-month reporting lag	Internet (regular injection data; AOGCC statistical report). Information is non-confidential.	Database in MS Access format; downloadable ASCII text file; production charts.		

**Oil and Gas Information Disclosure in Alaska**

Color Key: DOR Oil and Gas Information

DNR-DO&G Information

AOGCC Information

Other Agencies Not Detailed

Prepared by: Write Tech - February 1, 2012

Type of Data	Agency Receiving Data	Statute/Regulation Authority	Agencies with which Data May be Shared	Reason for Data Submission	Disclosure Timeframe	Publication and Public Access	Form of Reported Info.	Data Provided By Source Agency	Additional Data Needs of DOR
Injection - Waste	EPA	EPA Class I & II Underground Injection Wells Class							
Injection - Gas Storage	AOGCC	11 AAC 83.500-520 Qualifications and Application for a Storage Lease, (20 AAC 25.252, Underground disposal of oil field wastes and underground storage of hydrocarbons.)	Regular injection information is not confidential; electronic database transfer to ADNR-DO&G completed monthly.	Timely DNR access to non-confidential information.	one-month reporting lag.	Internet (regular injection data; AOGCC statistical report.) Information is non-confidential.	Database in MS Access format; downloadable ASCII text file; production charts.		
Injection - Gas Storage	ADNR-Division of Oil & Gas - Permits	AS 38.05.180(v) 11 AAC 83.158 Plan of Operations 11 AAC 83.346 Unit Plan of Operations	AS 38.05.035(a)(12) May provide information to DOR (including confidential information).	Unitization and gas storage.	Public information.	Public information.	Paper, PFD and plan diagrams.	Engineering and operational storage and recovery of gas volumes.	
Injection	ADNR-DO&G - Resource Evaluation	AS 38.05.027 Oil and Gas Leasing	AS 38.05.035(a)(12) May provide information to DOR (including confidential information).	Unitization of production area.	Annually or as activities occur and permits are requested by a company.	Not public information.	Paper, PFD format stored in in-house (DO&G) library depending on date of submission and the status of document automation.	Well production data.	
Facility Maps and Studies	ADNR, Division of Oil and Gas, - Resource Evaluation	38.05.035(8) Powers and Duties of the Director 11 AAC 83.351 Unitization Requirements 11 AAC 96.140 Conduct of Operations	AS 38.05.035(a)(12) May provide information to DOR (including confidential information). DOR-Tax Division upon request once plan is approved. May be confidential depending on the stage of development or production.	Unitization of production area. Received from operators or working interest owners for established Pas and Units. Data is confidential.	Annually or as activities occur and permits are requested by a company.	Not public information.	Paper, PFD format stored in in-house (DO&G) library depending on date of submission and the status of document automation.	Geological, geophysical, engineering, well data, data interpretations, any supporting data to unitize the area.	
Facility Maps and Studies	ADNR, Division of Oil and Gas - Permits	11 AAC 96.070 Annual Report: Completion Statement 11 AAC 83.158 Plan of Operations 11 AAC 83.346 Unit Plan of Operations	AS 38.05.035(a)(12) May provide information to DOR (including confidential information). DOR-Tax Division upon request once plan is approved. May be confidential depending on the stage of development or production.	Permitting development activities.	Annually or as activities occur and permits are requested by a company.	Public information.	Paper, PFD format stored in in-house (DO&G) library depending on date of submission and the status of document automation.	Geological, geophysical, engineering, well data, data interpretations, any supporting data to unitize the area.	
Safety and Environmental Reports - Rig Inspections	AOGCC	20 AAC 25.005, 25.033, 25.035, 25.036, 25.037, 25.065, 25.066, 25.280, 25.285, 25.286, 25.287, 25.527	Upon request: Dept. of Labor Department of Environmental Conservation Department of Natural Resources	Info generated by AOGCC and operating companies.	7 - 10 days; rig inspection information is not confidential.	Not published, available upon request.	MS Word and Excel documents supported by photographs.	Info generated by AOGCC and operating companies.	
Work Commitments	ADNR, Division of Oil and Gas - Permits	AS 38.05.180 Oil and Gas Leasing	AS 38.05.035(a)(12) May provide information to DOR (including confidential information). DOR-Tax Division upon request once plan is approved. May be confidential depending on the stage of development or production.	Unitization of production area.	Annually.	Public information.	Paper, PFD format stored in in-house (DO&G) library depending on date of submission and the status of document automation.	Some leases and or Unit arrangements require specific expenditures that must be reported as part of the Unit or Plan of Development. Budgets may not be a part of it.	
<b>BUDGET / EXPENDITURE / COST DATA</b>									
Sales Price and Netback Costs	ADOR, Tax Division - Economic Research	AS 43.55.030 Filing of Statements AS 43.55.040 Powers of Department of Revenue 15 AAC 55.520 Monthly Filings	AS 38.05.036(c) and AS 43.55.230 specify the information DOR can share with DNR.	Administering the production tax (e.g. this is used in determining the gross value at point of production).	Supplied to DOR monthly (one-month lag) and in annual filings.	Some data in this category may be disclosed to the public provided it is properly aggregated and allowed to be released under 43.05.230 and 43.55.890.	Summarized data sent to DOR in Excel monthly information report. Detailed information provided in various formats.	Tax Base Sale Price, and Costs	Data share from ADNR-DO&G would provided more detailed data in a consistent format.
Sales Price and Netback Costs	DOR, Tax Division - Production Tax Audit	AS 43.55.030 Filing of Statements AS 43.55.040 Powers of Department of Revenue 15 AAC 55.520 Monthly Filings	AS 38.05.036(c) and AS 43.55.230 specify the information DOR can share with DNR.	Administering the production tax (e.g. this is used in determining the gross value at point of production).	Supplied to DOR monthly (one-month lag) and in annual filings.	Some data in this category may be disclosed to the public provided it is properly aggregated and allowed to be released under 43.05.230 and 43.55.890.	Provided to the DOR in detailed supplemental workbooks with the monthly installment payments and annual tax filings. Information is provided in Excel and PDF.	Lifted barrels, P5#1 price, quality bank adjustments, feeder pipeline tariffs and losses, taps Tariffs and losses, marine cost and losses, sales contract references, delivered barrels, and prevailing value, and destination values (per barrel).	

Oil and Gas Information Disclosure in Alaska			Color Key: DOR Oil and Gas Information	DNR-DO&G Information	AOGCC Information	Other Agencies Not Detailed	Prepared by: Write Tech - February 1, 2012		
Type of Data	Agency Receiving Data	Statute/Regulation Authority	Agencies with which Data May be Shared	Reason for Data Submission	Disclosure Timeframe	Publication and Public Access	Form of Reported Info.	Data Provided By Source Agency	Additional Data Needs of DOR
Sales Price and Netback Costs	ADNR, Division of Oil and Gas/Royalty Accounting	AS 38.05.020 Authority and duties of (DNR) commissioner. AS 38.05.135 Leasing, royalty & NPSL Payments AS 38.05.180 Oil and Gas Leasing State of Alaska Oil and Gas Lease Contract. 11 AAC 04 Payment of Oil and Gas Royalties, Rents, and bonuses.	AS 38.05.035(a)(12) May provide information to DOR (including confidential information).	Collection of royalties and net profit share lease payments.	One-month reporting lag	Volume information is public. Some value information is public when aggregated and some is confidential as it relates to specific sales contracts.	Electronic Royalty Reports filed monthly by Accounting Unit.	Destination of Sale value, transportation deductions, Quality Bank adjustments, royalty value, field costs allowed, wellhead value, royalty amounts owed/paid, Net profit share payments.	Data share from ADNR-DO&G would provided more detailed data in a consistent format.
Sales Contracts	DOR, Tax Division - Economic Research	AS 43.55.030 Filing of Statements AS 43.55.040 Powers of Department of Revenue 15 AAC 55.520 Monthly Filings	AS 38.05.036(c) and AS 43.55.230 specify the information DOR can share with DNR.	Administering the production tax (e.g. this is used in determining the gross value at point of production).	Supplied to DOR monthly (one-month lag) and in annual filings.	Some data in this category may be aggregated and used in calculations that are subsequently disclosed to the public.	Contracts provided in PDF or Word documents.	Occasionally obtain sales contract documents.	
Sales Contracts	DOR, Tax Division - Production Tax Audit	AS 43.55.11 Oil and Gas Production Tax AS 43.55.030 Filing of Statements	AS 38.05.036(c) and AS 43.55.230 specify the information DOR can share with DNR.	Administering the production tax (e.g. this is used in determining the gross value at point of production and Cook Inlet PV posted quarterly).	Upon request from Authorized DNR-DO&G personnel, otherwise information is confidential.	Not public information.	Copies of PDF documentation of oil and gas sales contracts.	Documents of contracts supplied by oil and gas producers.	Duplicated of information provided to DNR-DO&G in timely manner for reporting State oil and gas royalties on a monthly basis.
Sales Contracts and Sales Invoices	ADNR, Division of Oil and Gas/Royalty Accounting	AS 38.05.020 Authority and duties of (DNR) commissioner. AS 38.05.135 Leasing, royalty & NPSL Payments AS 38.05.180 Oil and Gas Leasing State of Alaska Oil and Gas Lease Contract.	AS 38.05.035(a)(12) May provide information to DOR (including confidential information).	Collection of royalties and net profit share lease payments.	One-month reporting lag	Not public information.	Paper, PFD format stored in in-house (DO&G) library depending on date of submission and the status of document automation. Reported royalty data compared to individual contracts and invoices.	Oil or gas sales volumes, contractual volumes and values and delivery obligations of seller to purchaser.	
Bonds	ADNR, Division of Oil and Gas - Permits	AS 38.05.130 Damages and Posting of Bond 11 AAC 82.600 Bonding 11 AAC 83.160 Oil and Gas Lease Bond	AS 38.05.035(a)(12) May provide information to DOR (including confidential information).	Unitization operations, drilling or other permitted activities.	At the time of Unitization approval or permit approval.	Some public information.	Paper or PDF or bank bond certificate.	Bonded conditions and amount of bond.	
Bonds - Lease Work	ADNR, Division of Land and Water Management								
Bonds - Solid Waste	ADEC								
Tax Credit Information (applications for tax credit certificates, credits claimed against tax liability)	ADOR, Tax Division - Production Tax Credits	AS 43.55.023 Tax Credits for Certain Losses and Expenditures AS 43.55.025 Alternative Tax Credit for Oil and Gas Exploration	AS 38.05.036(c) and AS 43.55.230 specify the information DOR can share with DNR.	Administering the production tax (e.g. calculating the tax liability or issuing tax credit certificates.)	Credit applications are received throughout the year.	Some data in this category may be disclosed to the public provided it is properly aggregated and allowed to be released under 43.05.230 and 43.55.890.	Credit information submitted through credit application forms (PDF files).	CAPEX by project or P.A. and/or CAPEX for exploration.	Standardized categories that reflect policy intent of statutes and regulations.
Tax Credit Information	ADOR, Tax Division - Economic Research	AS 43.55.030 Filing of Statements AS 43.55.040 Powers of Department of Revenue 15 AAC 55.520 Monthly Filings	AS 38.05.036(c) and AS 43.55.230 specify the information DOR can share with DNR.	Administering the production tax (e.g. calculating the tax liability or issuing tax credit certificates.)	Credit information is received by DOR on monthly information report (one-month lag) and in annual filings.	Some data in this category may be disclosed to the public provided it is properly aggregated and allowed to be released under 43.05.230 and 43.55.890.	Credit information submitted through monthly information report (Excel file).	Credits earned and applied toward the monthly tax payment.	
OPEX- Projections	ADOR, Tax Division - Economic Research	AS 43.05.040 Inspection of records or premises and issuance of subpoenas AS 43.55.040 Powers of Department of Revenue	AS 38.05.036(c) and AS 43.55.230 specify the information DOR can share with DNR.	Used in forecasting production tax revenue.	Supplied to DOR twice a year (fall and spring)	Some data in this category is aggregated and used in the ADOR forecast of total ANS expenditures, which is published in Revenue Source Book.	Copies of communications with WIOs is provided (PDF copies of letters).	General operating expenditures with non-specific classification as to object, facility or activity beyond production or exploration	
CAPEX- Projections	ADOR, Tax Division - Economic Research	AS 43.05.040 Inspection of records or premises and issuance of subpoenas AS 43.55.040 Powers of Department of Revenue	AS 38.05.036(c) and AS 43.55.230 specify the information DOR can share with DNR.	Used in forecasting production tax revenue.	Supplied to DOR twice a year (fall and spring)	Some data in this category is aggregated and used in the DOR forecast of total ANS expenditures, which is published in RSB.	Copies of communications with WIOs is provided (PDF copies of letters).	General operating expenditures with non-specific classification as to object, facility or activity beyond production or exploration	

**Oil and Gas Information Disclosure in Alaska**

Color Key: DOR Oil and Gas Information

DNR-DO&G Information

AOGCC Information

Other Agencies Not Detailed

Prepared by: Write Tech - February 1, 2012

Type of Data	Agency Receiving Data	Statute/Regulation Authority	Agencies with which Data May be Shared	Reason for Data Submission	Disclosure Timeframe	Publication and Public Access	Form of Reported Info.	Data Provided By Source Agency	Additional Data Needs of DOR
OPEX- Actual	ADOR, Tax Division - Economic Research	AS 43.05.040 Inspection of records or premises and issuance of subpoenas AS 43.55.040 Powers of Department of Revenue	AS 38.05.036(c) and AS 43.55.230 specify the information DOR can share with DNR.	Used in forecasting production tax revenue.	Summarized OPEX data is supplied to DOR monthly (one-month lag) with limited breakdown of the types of expenses.	43.55.890 allows for certain lease expenditure information to be disclosed to the public when aggregated among 3 or more companies.	Monthly Information Report and Annual Information Report.	P.A. field monthly lease expenditures, qualified capital expenditures, estimated credits claimed, estimated tax payment due and submitted.	More detail and standardized categories of OPEX expenditures reported by all producers and explorers via an annual cost true-up supplemental report.
OPEX- Actual	DOR, Tax Division - Production Tax Audit	AS 43.05.040 Inspection of records or premises and issuance of subpoenas AS 43.55.040 Powers of Department of Revenue. AS 43.55.023 Tax Credits for Certain Losses and Expenditures. AS 43.55.025. Alternative Tax Credit for Oil and Gas Exploration	AS 38.05.036(c) and AS 43.55.230 specify the information DOR can share with DNR.	Administering the production tax (e.g. this is used in determining the production value).	Summarized non-CAPEX data is provided with the annual tax return filing. Non-CAPEX data is also provided with applications for tax credits under AS 43.55.023 and AS 43.55.025.	43.55.890 allows for certain lease expenditure information to be disclosed to the public when aggregated among 3 or more companies.	Provided as supplemental information with the annual tax return filing.	Monthly lease expenditures by lease or property & segment.	No reported OPEX information is required for reporting purposes beyond what may be requested in audit of company records.
OPEX- Actual	ADNR, Division of Oil and Gas	AS 38.05.020 Authority and duties of (DNR) commissioner. AS 38.05.135 Leasing, royalty & NPSL Payments AS 38.05.180 Oil and Gas Leasing State of Alaska Oil and Gas Lease Contract. 11 AAC 83.241 Production Tax Lease Allowance and 243 Direct Charges	AS 38.05.035(a)(12) May provide information to DOR (including confidential information).	Collection of royalties and net profit share lease payments.	Two month reporting lag.	Not public information.	Electronic Royalty Reports filed monthly by Accounting Unit.	General overhead, production revenue, overhead, no operator charges, royalty payments, capital exclusion. Only on NPSL leases.	
CAPEX- Actual	ADOR, Tax Division - Economic Research	AS 43.05.040 Inspection of records or premises and issuance of subpoenas AS 43.55.040 Powers of Department of Revenue	AS 38.05.036(c) and AS 43.55.230 specify the information DOR can share with DNR.	Used in forecasting production tax revenue.	Summarized OPEX data is supplied to DOR monthly (one-month lag) with limited breakdown of the types of expenses.	43.55.890 allows for certain lease expenditure information to be disclosed to the public when aggregated among 3 or more companies.	Monthly Information Report and Annual Information Report.	Qualified lease expenditures and capital expenditures as generalized under monthly and annual report categories.	More detail and standardized categories of CAPEX expenditures reported by all producers and explorers via an annual cost true-up supplemental report.
CAPEX- Actual	DOR, Tax Division - Production Tax Audit	AS 43.05.040 Inspection of records or premises and issuance of subpoenas AS 43.55.040 Powers of Department of Revenue. AS 43.55.023 Tax Credits for Certain Losses and Expenditures. AS 43.55.025. Alternative Tax Credit for Oil and Gas Exploration	AS 38.05.036(c) and AS 43.55.230 specify the information DOR can share with DNR.	Administering the production tax (e.g. this is used in determining the production tax value).	Summarized CAPEX data is supplied to DOR annually with the tax return filing. CAPEX data is also supplied with tax credit applications made under AS 43.55.023 and AS 43.55.025.	Source data confidential. May be disclosed if averaged with a minimum of three companies and there are no other distinguishing characteristics that would identify individual tax payers.	AFEs and credit applications filed under provisions of statute authorities. Audit of companies' general ledgers and expense records. (Data confidential under taxpayer protections.)	Company expenditures for oil and gas exploration, development, and operations, including exclusions and adjustments. Data is confidential under tax payer protections.	Better coordination with the credits application forms and content. Potential to establish one form, format and content for all data needs, tax, credit and reporting so that one request is made once a year.
<b>ABANDONMENT</b>									
Abandonment Plan	AOGCC (well abandonment plan only)	AS 31.05.030 Powers and Duties of commission. 20 AAC 25.105 Abandonment of Wells.	DNR-DOG authorized personnel upon request (non-confidential wells and confidential wells on state-lands only)	Upon request by authorized DNR personnel	Less than 10 days after request	AOGCC library and Internet (non-confidential data only). (Exploratory and Stratigraphic testwell data held confidential for 2 years unless granted extended confidentiality by DNR-DOG.)	Printed (AOGCC library); scanned records (Internet)	Site abandonment status and inspection report.	
Site Closure	ADNR, Division of Oil and Gas - Permits	11 AAC 83.158 Plan of Operations 11 AAC 83.346 Unit Plan of Operations AS 38.05.020 Authority and duties of (DNR) commissioner. AS 38.05.180 Oil and Gas Leasing. State of Alaska Oil and Gas Lease Contract.	AS 38.05.035(a)(12) May provide information to DOR (including confidential information).	Unitization operations, drilling or other permitted activities.	Public information.	Public Information.	Paper and PDF.	Progress reports.	

Oil and Gas Information Disclosure in Alaska									
Color Key: DOR Oil and Gas Information			DNR-DO&G Information	AOGCC Information	Other Agencies Not Detailed		Prepared by: Write Tech - February 1, 2012		
Type of Data	Agency Receiving Data	Statute/Regulation Authority	Agencies with which Data May be Shared	Reason for Data Submission	Disclosure Timeframe	Publication and Public Access	Form of Reported Info.	Data Provided By Source Agency	Additional Data Needs of DOR
Site Closure	ADEC								
Site Closure	ADNR-DLW&A								
Environmental Clean-up Assessment - Well site Clearance Inspection (only)	AOGCC (Well site Clearance Inspection)	AS 31.05.035(b) 20 AAC 25.170, Onshore Location Clearance. 20 AAC 25.172, Offshore Location Clearance.	DNR-DOG authorized personnel upon request (non-confidential wells and confidential wells on state-lands only)	Upon request by authorized DNR personnel.	Less than 10 days after request.	AOGCC library and Internet (non-confidential data only). (Exploratory and Stratigraphic testwell data held confidential for 2 years unless granted extended confidentiality by DNR-DOG.) No chemical testing.	Printed (AOGCC library); scanned records (Internet)	Wellsite clearance inspection report.	

14.

Department of  
Natural  
Resources

Presentation:

William C.

Barron, Director,  
Division of Oil &  
Gas

March 26, 2012

# STATE OF ALASKA

DEPARTMENT OF NATURAL RESOURCES

DIVISION OF OIL & GAS

SEAN PARNELL, GOVERNOR

550 WEST 7<sup>TH</sup> AVENUE, SUITE 1400  
ANCHORAGE, ALASKA 99501-3650

PHONE: (907) 269-8431

FAX: (907) 269-8918

February 9, 2012

Senator Joseph Paskvan  
Senate Resources Committee Co-chair  
State Capitol Room 115  
Juneau AK, 99801

Senator Thomas Wagoner  
Senate Resources Committee Co-Chair  
State Capitol Room 427  
Juneau AK, 9980

Dear Senators:

I wanted to take this opportunity to thank you both for inviting me to testify before the Senate Resources Committee on February 3, 2012. The committee is trying to understand a very complex subject matter, and I am pleased that the Division has been called upon to provide the factual basis for crafting solutions to perceived facility issues. This correspondence allows me to reiterate a few of the more salient aspects of my testimony and present to the committee an updated table on Capacities of North Slope Facilities from page 11 of my February 3<sup>rd</sup> slide package (enclosed). It is crucial that we all operate under a similar framework and understanding of reservoir dynamics and facility capabilities; therefore, I offer the bulleted information below to clarify the main points of my testimony. Please keep in mind the underlying pretext of my comments involved the issue of third party access to existing process facilities.

- The Prudhoe and Kuparuk units are experiencing typical reservoir depletion which requires handling and processing of increasing amounts of water and gas, decisions on facility management, effective well utilization, and complex reservoir management.
- Facilities are designed to meet a wide range of production profiles with varying water-oil and gas-oil ratios (WOR and GOR, respectively). As the reservoir matures, reservoir management and facility debottlenecking for water and gas handling, water and/or gas injection to maintain reservoir pressure, well workovers, and new infield development drilling is required.
- Pipeline capacity is available throughout most of the North Slope, thus companies with new oil discoveries will need to negotiate to share the existing transport facilities.
- Corporate culture and size of a discovery typically dictate decisions whether to build new process facilities or enter into commercial agreements to access existing facilities.
- Statutory changes for facility access will be difficult and likely ineffective due to the complexity and idiosyncrasies of each field's physical assets, reservoir management approach, and commercial conditions.

Again, thank you for the opportunity and I look forward to future discussions.

Sincerely,



W.C. Barron

Director

Cc: Daniel Sullivan, Commissioner Department of Natural Resources  
Joseph Balash, Deputy Commissioner, Department of Natural Resources  
Senator Hollis French  
Senator Lesil McGuire  
Senator Bert Stedman  
Senator Gary Stevens  
Senator Bill Wielechowski, Senate Resources Committee Vice-Chair

Enclosed: *Capacities of North Slope Facilities.doc*

### **Capacity of North Slope Facilities**

<b>Unit</b>	<b>Oil and NGLs, standard barrels per day (stb/d)</b>	<b>Gas, million standard cubic feet per day (mmscfd)</b>	<b>Water (bwpd)</b>	<b>Water Injection (bwpd)</b>	<b>Handling Limitations, and comments</b>	<b>Field/Facility Startup</b>
<b><u>Badami</u></b>	35,000	25	12,000	30,000	No Limits	Aug 1998
<b><u>Colville River</u></b>	140,000	180	100,000	140,000	We know of no limits at this time	Nov 2000, expansions in 2004 and 2005
<b><u>Endicott</u></b>	115,000	455	225,000	245,000	Limited gas and water	Jul 1986
<b><u>Kuparuk</u></b>					Limited Gas, water, & total fluid handling	
<b><u>CPF-1</u></b>	170,000	200	250,000	250,000	Rates currently below referenced limits	Dec 1981
<b><u>CPF-2</u></b>	160,000	260	250,000	300,000	Rates currently below referenced limits; may be nearing water limits	Jun 1983
<b><u>CPF-3</u></b>	85,000	150	100,000	220,000	Rates currently below referenced limits	Jun 1985
<b><u>Milne Point</u></b>	75,000	42	99,000		None known for current development	Jul 1983
<b><u>Northstar</u></b>	77,000	555	30,000		Limited by gas handling, water production is not at limit. Uncertain whether rated capacity is current.	Oct 2001
<b><u>PBU</u></b>					Limited gas, water handling - Note: cannot add up each facility to obtain total field restrictions. SI wells to maintain field limits.	
<b><u>FS-1</u></b>	360,000	2,800	140,000		Limited gas and water handling	Jun 1977
<b><u>FS-2</u></b>	360,000	1,200	650,000		Possible water handling limit	Jun 1977

<b>FS-3</b>	360,000	1,300	300,000		Note: FS-3 and GC-3 production can be diverted to either/both gathering center. Combined FS-3 and GC-3 at gas handling limits	Mar 1979
<b>GC-1</b>	330,000	2,600	180,000		High GORs - some wells not competitive at field level.	May 1977
<b>GC-2</b>	250,000	1,070	300,000		Limited gas and water handling	Jun 1977
<b>GC-3</b>		1,100	275,000		Note: FS-3 and GC-3 production can be diverted to either/both gathering center. Combined FS-3 and GC-3 at gas handling limits	Apr 1978
<b>CGF</b>		8,700			Limited by gas handling. Note, while "Design" capacity is 8.7 BCF/D peak, actual operating capacity around 7.5 BCFD average yearly at the plant inlet, with peaks of around 8.2 BCFD.	Jun 1977 Full Start, (NGL initial prod 1980, expansions in 1986, 1990, and 1994)
<b>CCP</b>		8,700			Actual Injection Peaks at 7.2-7.8 BCFD. Limited by CGF gas handling capacity	Jun 1977 Expansions in 1986, 1990, and 1994, Peak NGL Rate 97,000/day in 1996
<b>LPC - Greater Pt. McIntyre</b>	205,000	450	120,000		Limited gas, water, and total fluid. Some wells from Pt. McIntyre flow into GC1	Dec 1986
<b>Oooguruk</b>					Production to Kuparuk CPF-3. No known handling limits at Oooguruk.	Jun 2008
<b>Nikaitchug</b>	40,000	unknown	120,000		No limits at this time	Jan 2011



**Senate Finance Committee**  
**26 March 2012**

William C. Barron  
Director  
Division of Oil and Gas



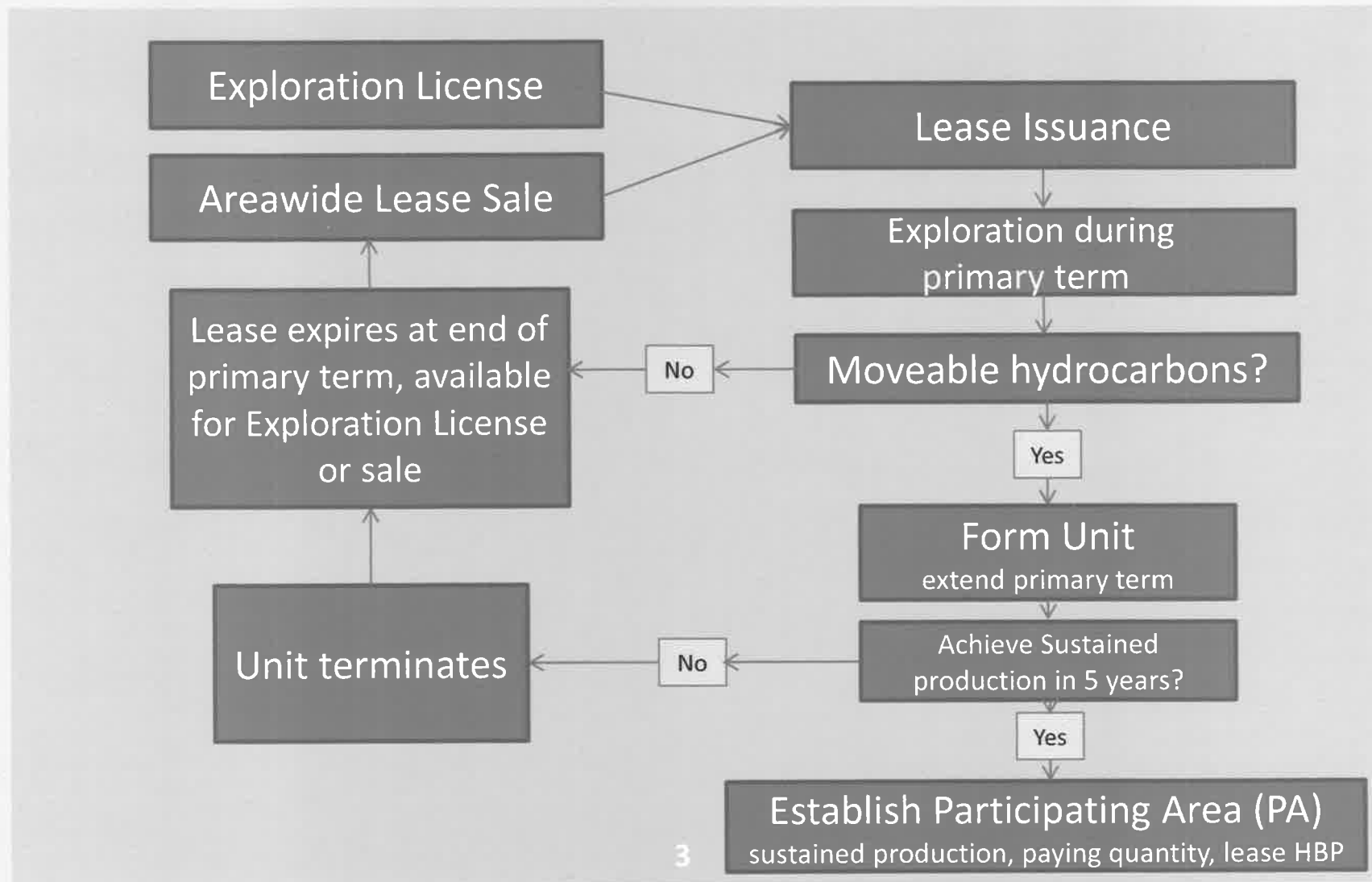


# Outline of Presentation

- Land Disposition
- Land Management
- Facility Capacity and Access



# Land Management: Life of Lease





# Alaskan Areawide Leasing System

- Covers areas where
  - limited or no data exists regarding actual resource potential
  - some basins have shown production or promise
- New rental rates provide a mechanism to encourage timely exploration without additional administrative burden to State
- Leaseholder has exclusive right to explore for resources
- System is a product of U.S. Oil and Gas law
  - Highest-bid lease sales (competitive)
  - Non-discriminatory: Encourages parties of all sizes and experiences to participate in an unbiased fair system
- State can impose work commitments and special terms in lease sales (AS 38.05.035 (h))





# Current Lease Terms

- Primary Producing Areas (North Slope, Cook Inlet)
  - Primary Term: 10 years
  - Minimum bid: \$25.00/acre
  - Rental:
    - Year 1-7: \$10.00/acre
    - Year 8+: \$250.00/acre
- North Slope Foothills
  - Primary Term: 10 years
  - Minimum bid: \$10.00/acre
  - Rental:
    - Year 1: \$1.00/acre
    - Year 2: \$1.50/acre
    - Year 3: \$2.00/acre
    - Year 4: \$2.50/acre
    - Year 5 and following: \$3.00/acre
- Lease term expenditures (20 tracts/5,760 acres each)
  - Minimum bonus bid for land is \$25/acre
  - 20 tracts @ 5760 acres X \$25 = \$2.88 million
  - Rentals: \$10/acre = \$1.15M each year in annual rentals years 1-7
  - Rentals: \$250/acre = \$28.8M each year in annual rentals years 8-10





# Exploration Licensing System

- Areas not within areawide lease sales
- No rental fee or upfront bonus payment
- Term up to 10 years
  - When work commitment is fulfilled, licensee may convert part or all of license area to leases (subject to \$3/acre rental fee and, when producing, no less than 12.5% royalty)
- State is provided all geological & geophysical information acquired
- If competing proposals, highest bid for minimum work commitment is selected
- Imposes financial work commitments (AS 38.05.131-.134)
- Licensee must commit 25% of total specified work commitment by fourth anniversary of license issuance





## Current Status of State Leases

- Active leases: 1416 leases (largest tract: 9 square miles)
- Of these, 46% of leases are in units (producing)
- 0.5% are leases producing without being in units
- 46% of leases are in the hands of companies currently actively exploring on part of their lease hold\*
  - Apache, Buccaneer, Nordaq, LINC, Repsol, Great Bear, Brooks Range, Anadarko
  - Included in this number are Foothills leases where lessees have conducted field work in the past (gas-prone areas)
- The remaining 7.5% may or may not be under exploration
  - A majority of these leases (approximately 95%) are held by individuals or groups of individuals, not major corporations

\*The list is not extensive; this only includes companies we know are currently actively exploring.





## Land Management: When is a PA formed?

- A PA is formed once the unitized reservoir is on “sustained production”: wells are producing into a pipeline or other means of transportation to market
- Separate PA required for each producing horizon
- Approval of a PA includes approval of allocation factors
  - Sets out proportions of costs and revenues paid and received by working interest owners
  - Approval meets 11 AAC 83.303: Protect all parties





# What is a Plan of Development (POD)?

- Once a PA is formed, a POD is required under 11 AAC 83.343
  - Must be filed for approval if a PA is proposed, or reservoir sufficiently delineated to initiate development activities
  - POD is submitted annually for review and approval
  - If POD deemed insufficient for approval, DNR may propose modifications. If Operator agrees to modifications, POD approved.
    - If not accepted by Operator, and no approved POD, current POD may expire.
  - **Development activities must be conducted under an approved POD**





# POD Requirements

## Unit Plan of Development: 11 AAC 83.343(a)(1-4)

- **Describes what the POD must include**
  1. long-range proposed development activities for the unit, including plans to delineate all underlying oil or gas reservoirs, bring the reservoirs into production, and maintain and enhance production once established
  2. plans for the exploration or delineation of any land in the unit not included in a PA;
  3. details of the proposed operations for at least one year following submission of the plan; and
  4. the surface location of proposed facilities necessary for unit operations (pads, roads, camps, etc.).





# North Slope Units and PAs: February 2012

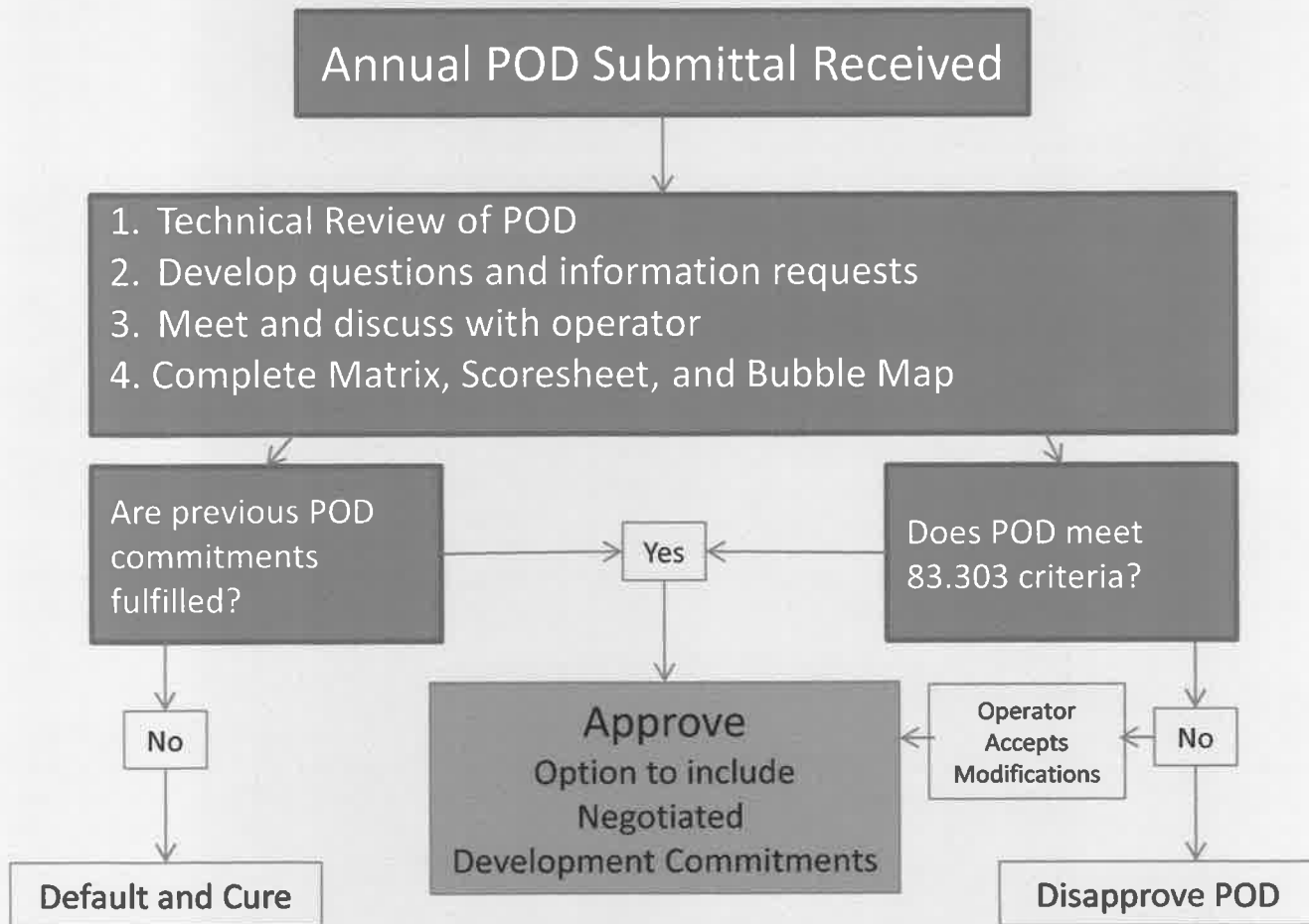
## 18 Existing SOA Units, 42 PAs, 2 Units Proposed

- Akjaq Unit (Proposed)
- Arctic Fortitude Unit
- Badami Unit
  - Badami Sands PA
- Bear Tooth Unit (Federal)
- Beechey Point Unit
- Colville River Unit
  - Alpine, Nanuq Nanuq, Nanuq Kuparuk, Fiord Kuparuk, Fiord Nechelik, Qannik PAs
- Dewline Unit
- Duck Island Unit
  - Eider, Endicott, Sag Delta North PAs
- Greater Moose's Tooth Unit (Federal)
- Kachemach Unit
- Kuparuk River Unit
  - Kuparuk, Meltwater, Tabasco, Tarn, West Sak, NEWS PAs
- Liberty Unit (Federal)
- Milne Point Unit
  - Kuparuk, Schrader Bluff, Sag River PAs
- Nikaitchuq Unit
  - Schrader Bluff PA
- Northstar Unit
  - Northstar PA
- Ooguruk Unit
  - Kuparuk, Nuiqsut, Torok PA's
- Placer Unit
- Prudhoe Bay Unit
  - Aurora, Borealis, Gas Cap, Lisburne, Midnight Sun, Niakuk, Combined Niakuk North Prudhoe Bay, Oil Rim, Orion, Polaris, Pt McIntyre, West Beach, West Niakuk, Raven PAs
- Putu Unit
- Qugruk Unit
- Southern Miluveach Unit
- Telemark Unit (Proposed)
- Tofkat Unit





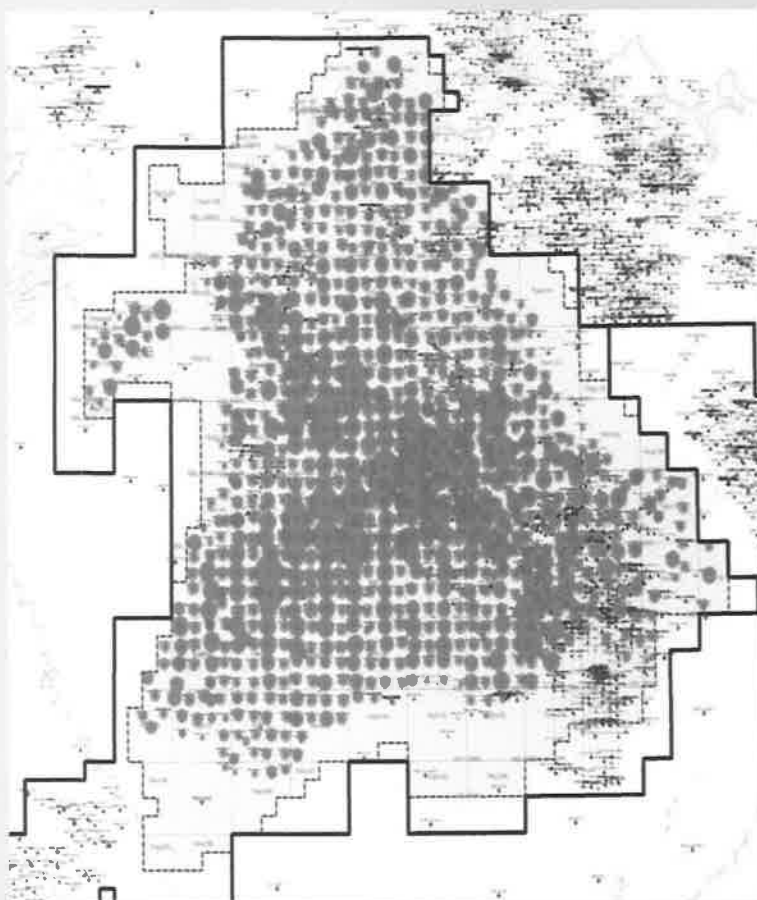
# POD Process





# Evaluating PODs on a complex unit - DOG Evaluation Tools

## Bubble Map



## Score sheet

<b>Unit Name:</b>	<b>POD Decision</b>	<b>Decision Due By Date:</b>					
<b>PA Name:</b>		<b>Form Submitted Date:</b>					
<i>Include Bubble Map as attachment, (drainage radius of all wells on all PA's)</i>							
<b>GG &amp; E Narrative Summary (ADGEE Post Statistics, 2010)</b>							
<b>Geology:</b>							
<b>Cum Production Stats:</b>							
DDP, CCR (Production)							
Cum Oil Produced to Date (YE 2008)	MMSTB						
% Recovery to Date							
Cum Volume Replacement to date (YE 2010)	MMB/MRDP						
<b>Average Daily Production:</b>		2008	2009	2010	2011	2012	2013
Oil	MSTB/D						
Water	MSTB/D						
Gas	MMSCF/D						
Average Water Cut	%						
Average Current COR	SCF/STB						
Original GOR	SCF/STB						
Average Current Reservoir Pressure	psi						
Original Reservoir Pressure	psi						
Bubble Point Pressure	psi						
<b>Average Daily Injection:</b>		2008	2009	2010	2011	2012	2013
Water	MSTB/D						
Gas	MMSCF/D						
<b>Well activity</b>		2008	2009	2010	2011	2012	2013
<b>Well Status</b>	# Active wells						
Producer (Active as of year end)							
Injector (Active as of year end)							
Shut in (through entire year)							
<b>Drilling Activity</b>							
New Wells							
ETD							
Workovers							
Sidetracks							
<b>Facilities (current capacities)</b>							
	Oil	Gas	Water				
<b>Current POD Pertinent Issues (Bullet Points)</b>							
<b>Recovery Factor (Inc? Dec? Causes)</b>							
<b>Field Decline</b>							
<b>Infrastructure</b>							
Facility Issues							
Pipeline Issues							
Well Issues							
<b>Data</b>							
Core							
Logging							
Well test data							
Seismic							
Facilities							
<b>Plan Forward</b>							
Explore							
Seismic							
Drilling / Workover							
Maintenance and Repair							
Production							



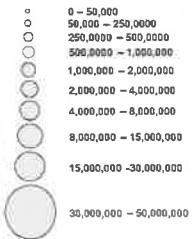


# Kuparuk River Unit (KRU) Bubble Map

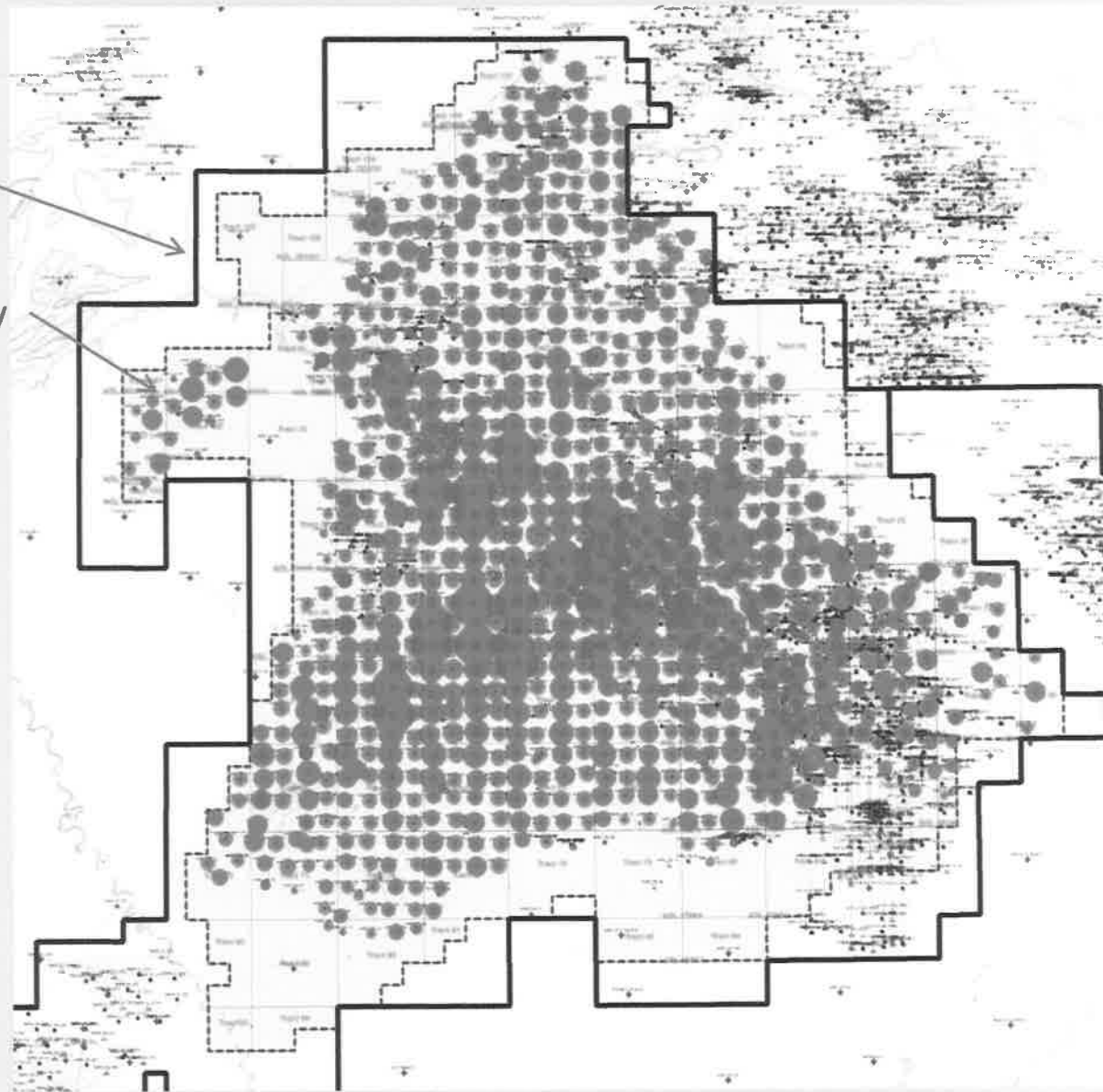
KRU Boundary

Kuparuk PA Boundary

## Cumulative Barrels (KPA)



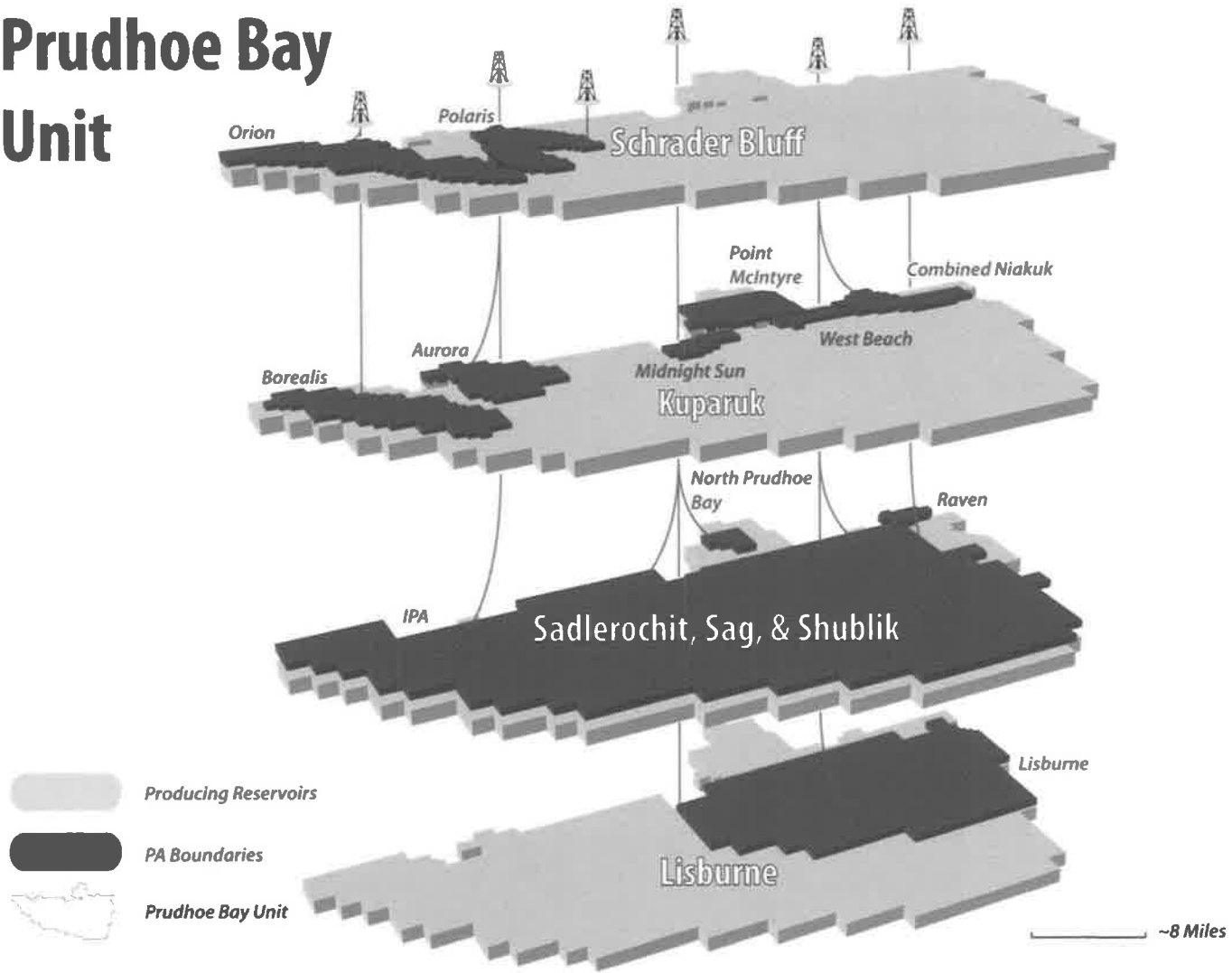
- Oil Produced
- Water Injected





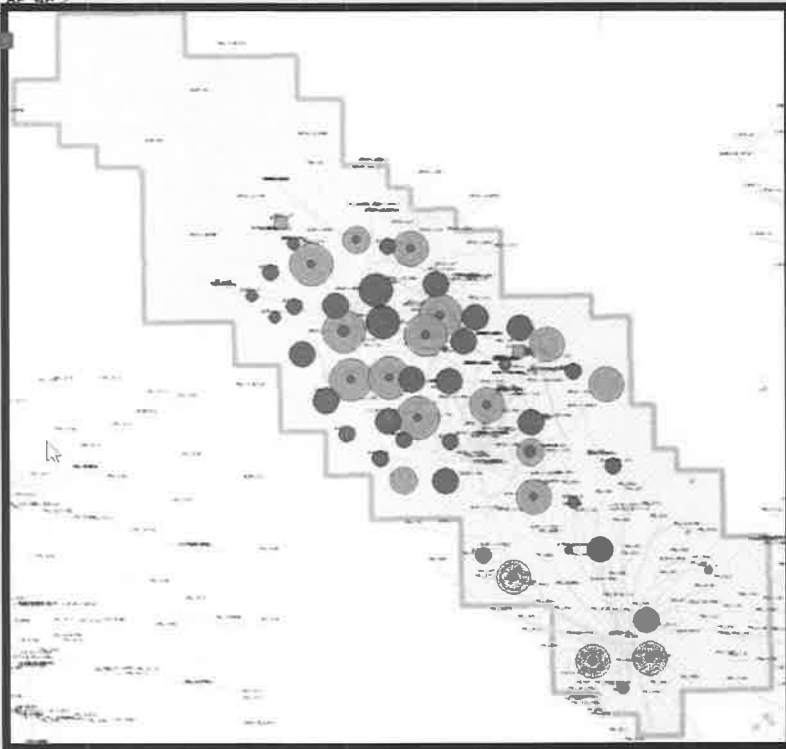


# Prudhoe Bay Unit





## Borealis Cumulative Production and Injection

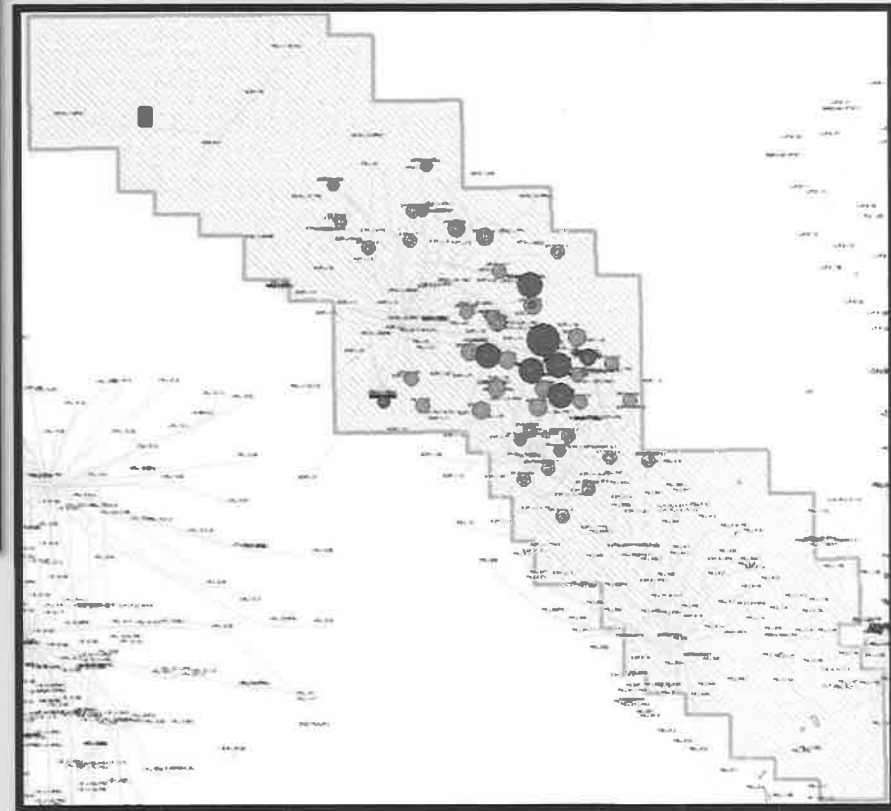


### Cum Barrels

- 0 – 50,000
- 50,000 – 1,000,000
- 1,000,000 – 2,000,000
- 2,000,000 – 4,000,000
- 4,000,000 – 8,000,000
- 8,000,000 – 15,000,000

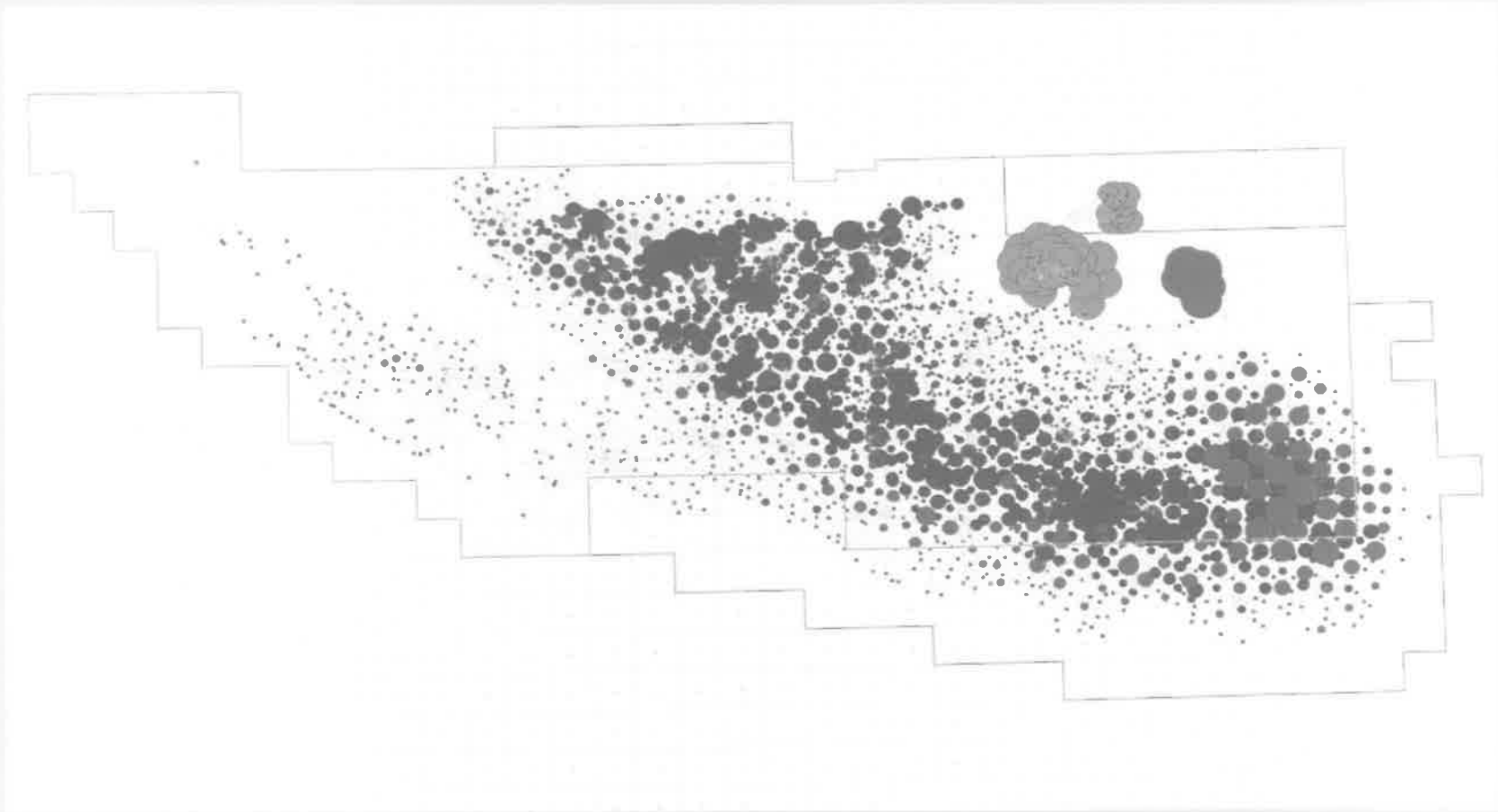
- Oil Produced
- Water Injected

## Orion Cumulative Production and Injection





# PBU IPA Bubble Map





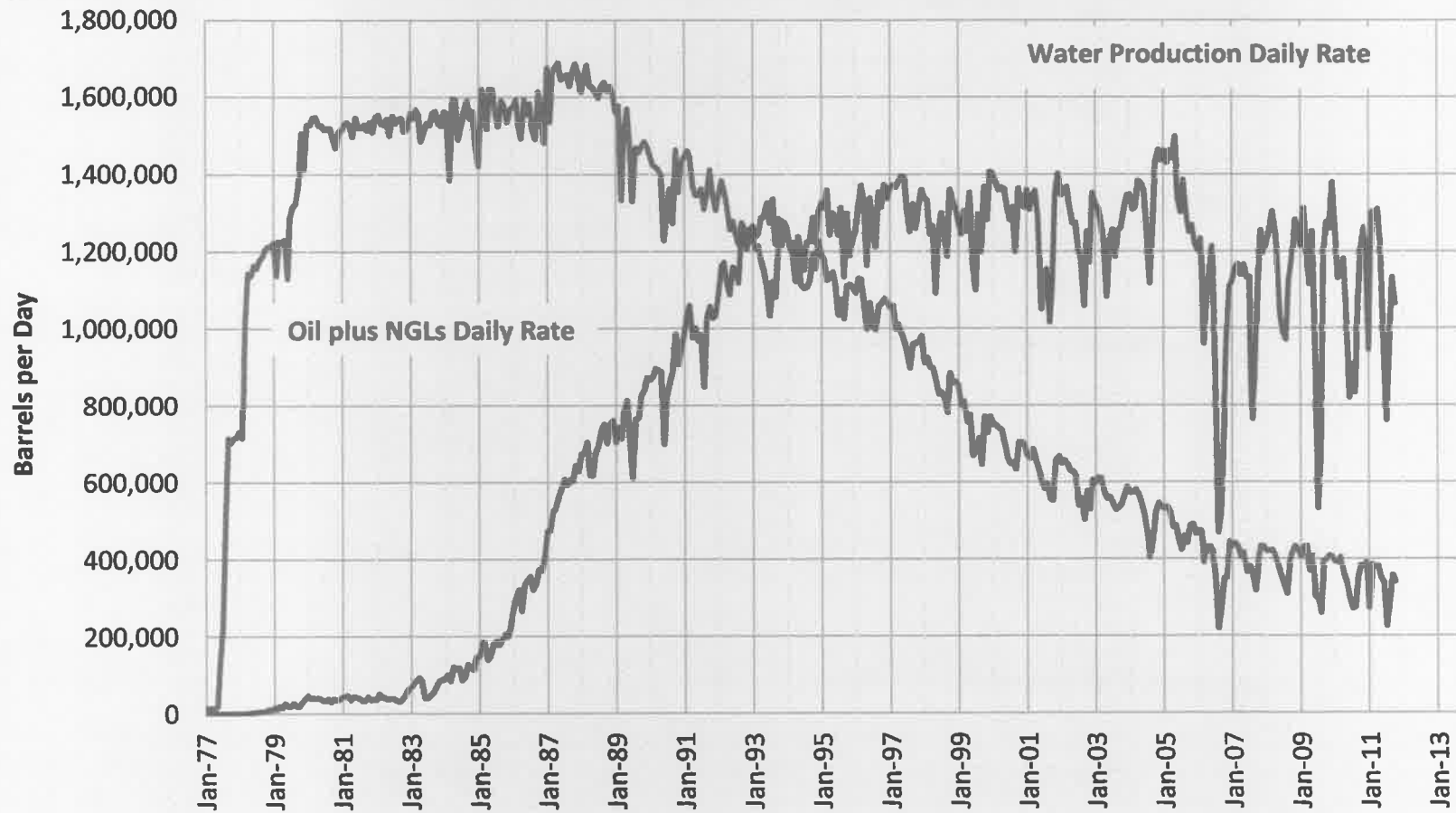
## Plans of Development: Summary

- **Utilizing detailed economic analyses to mandate development of fields or a specific project within a field is potentially counter to State interests.**
  - **Asset allocation is performed by companies and they may determine a project identified by the State does not meet the threshold for development; therefore, a DNR mandate to initiate and complete a project could promote resource waste and require companies to bring on developments that are less beneficial to the State.**
- **The Plan of Development (POD) is not a contract or legal device; however, there are legal consequences for default of a unit agreement that apply to PODs.**
- **The Plan of Development process has yielded tremendous value for the State through promoting technological advancements, maintaining the productivity of mature fields, and influencing higher recovery factors.**



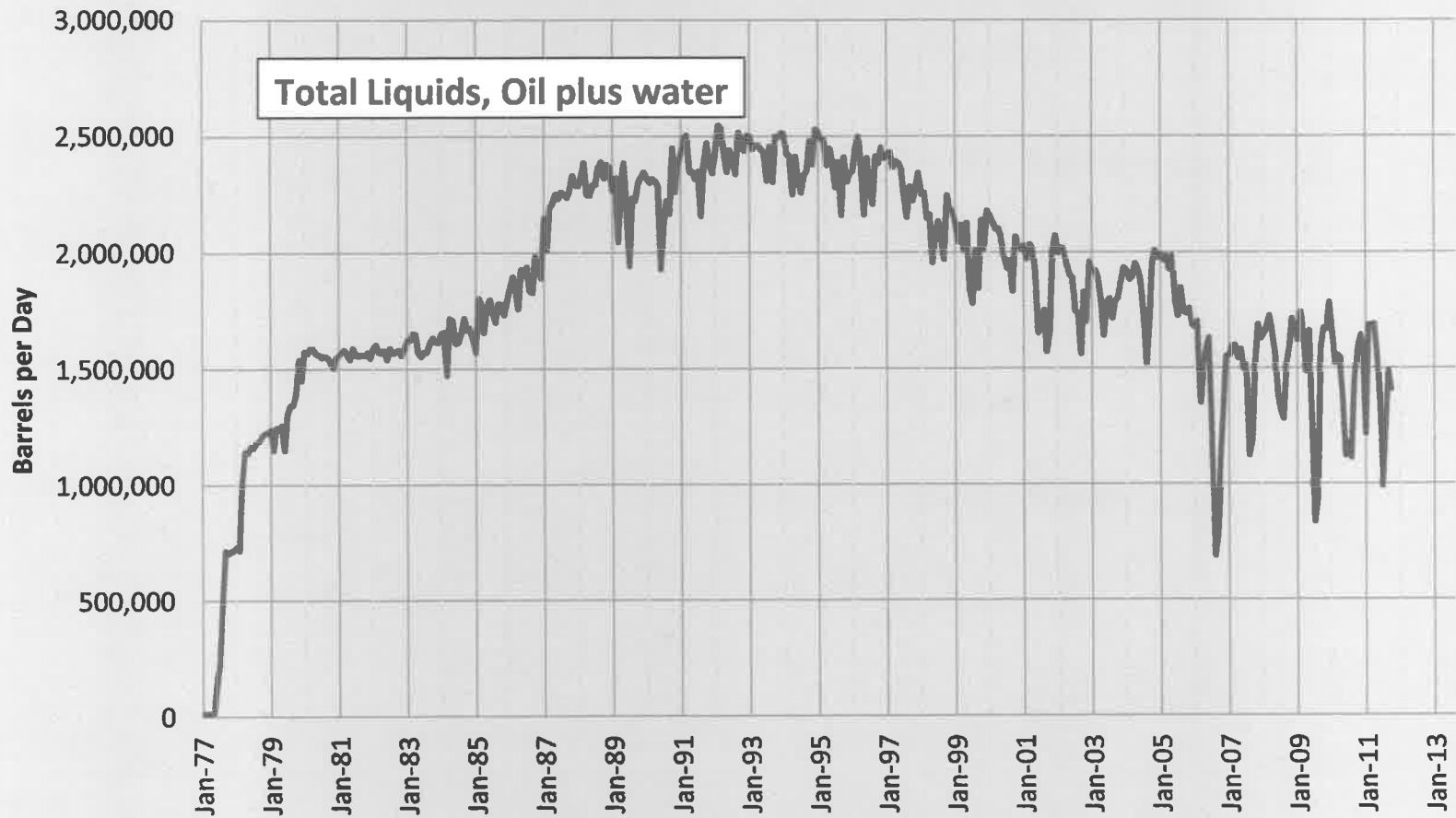


## Prudhoe Bay Unit, Oil and Water Production Rates





## Prudhoe Bay Unit, Total Fluid Production and Water Injection Rates

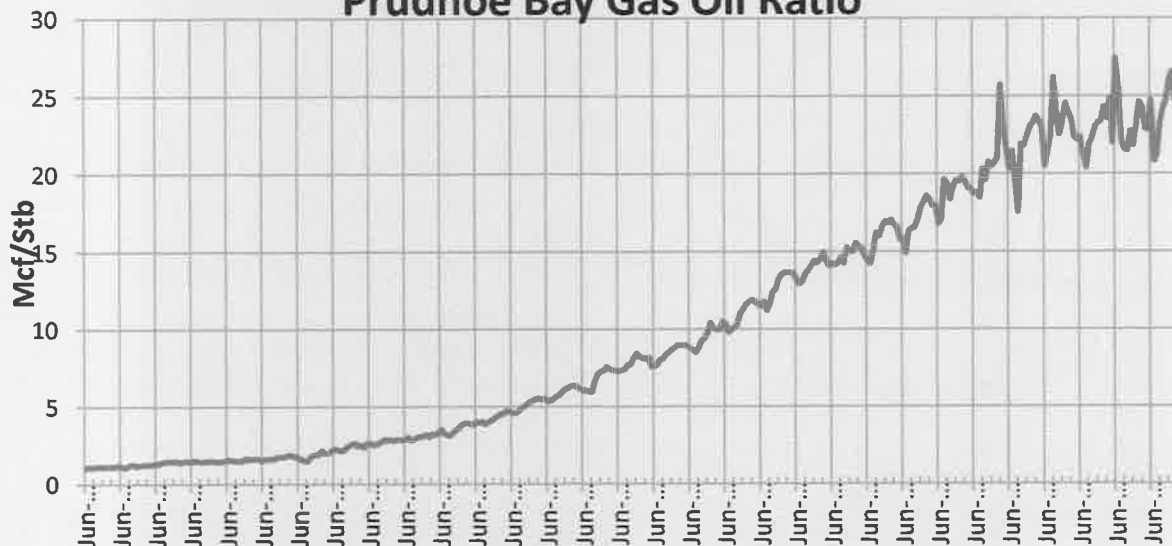




### Prudhoe Bay Water Oil Ratio

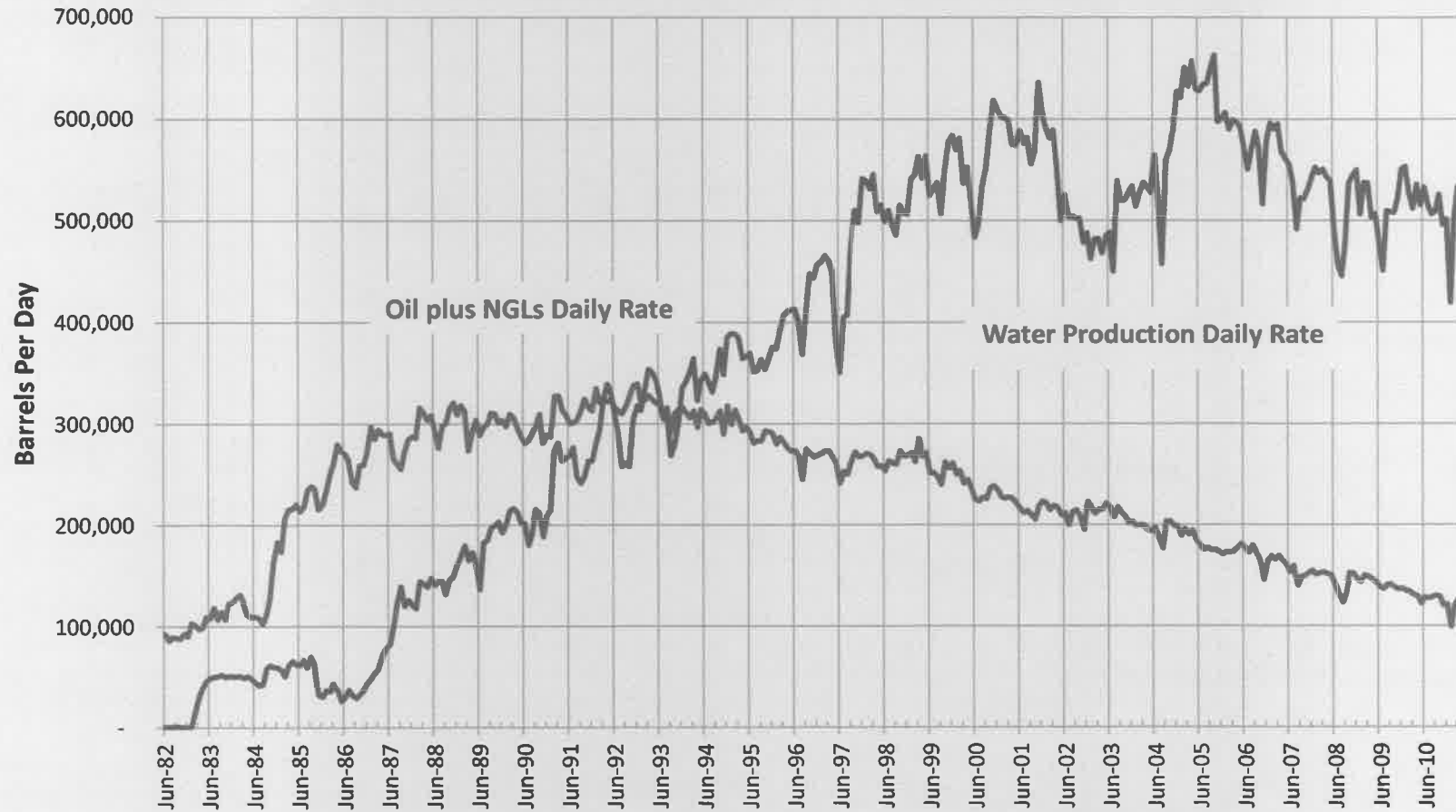


### Prudhoe Bay Gas Oil Ratio



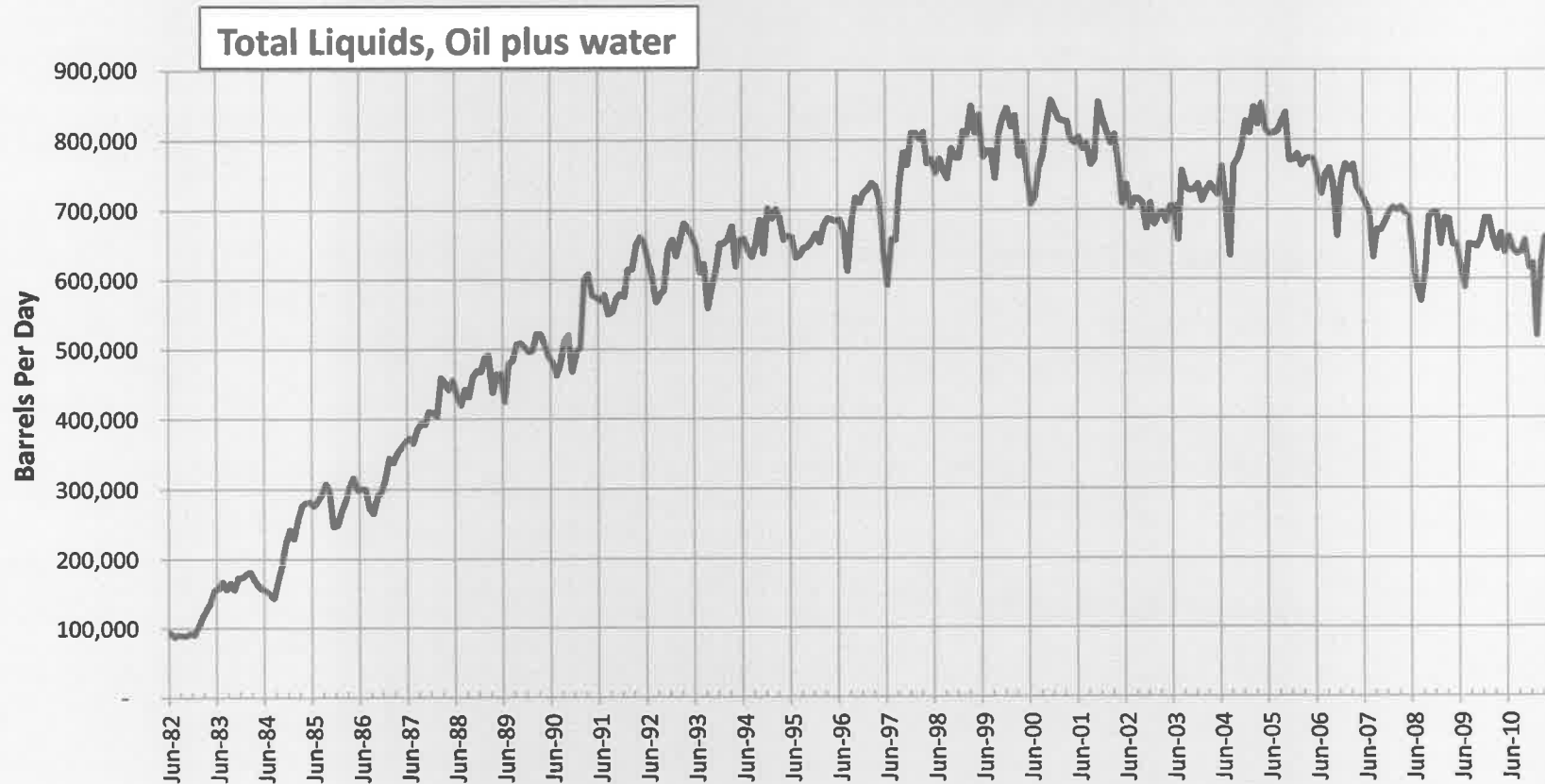


## Kuparuk River, Oil and Water Production Rates





## Kuparuk River, Total Fluid Production and Water Injection Rates

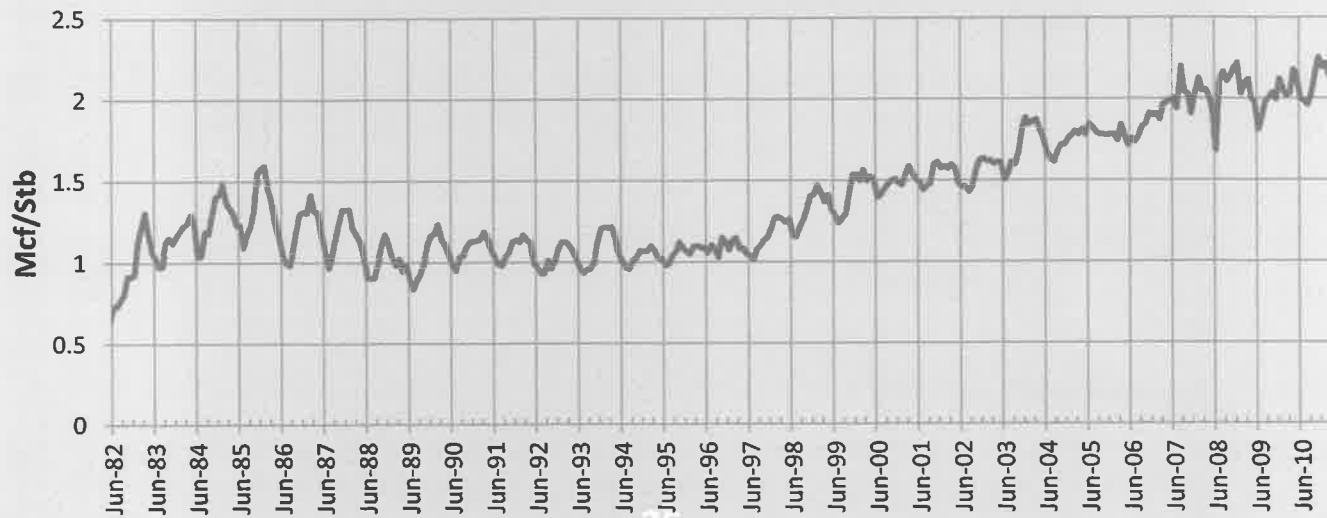




### Kuparuk River Water Oil Ratio



### Kuparuk River Gas Oil Ratio



Unit	Oil and NGLs, standard barrels per day (stb/d)	Gas, million standard cubic feet per day (mmscfd)	Water (bwpd)	Water Injection (bwpd)	Handling Limitations, and comments	Field/Facility Startup
<u>Badami</u>	35,000	25	12,000	30,000	No Limits	Aug 1998
<u>Colville River</u>	140,000	180	100,000	140,000	We know of no limits at this time	Nov 2000, exp.in 2004 & 2005
<u>Endicott</u>	115,000	455	225,000	245,000	Limited gas and water	Jul 1986
<u>Kuparuk</u>					Limited Gas, water, & total fluid handling	
CPF-1	170,000	200	250,000	250,000	Rates currently below referenced limits	Dec 1981
CPF-2	160,000	260	250,000	300,000	Rates currently below referenced limits; may be nearing water limits	Jun 1983
CPF-3	85,000	150	100,000	220,000	Rates currently below referenced limits	Jun 1985
<u>Milne Point</u>	75,000	42	99,000		None known for current development	Jul 1983
<u>Northstar</u>	77,000	555	30,000		Limited by gas handling, water production is not at limit. Uncertain whether rated capacity is current.	Oct 2001
<u>PBU</u>					Limited gas, water handling - Note: cannot add up each facility to obtain total field restrictions. SI wells to maintain field limits.	
FS-1	360,000	2,800	140,000		Limited gas and water handling	Jun 1977
FS-2	360,000	1,200	650,000		Possible water handling limit	Jun 1977
FS-3	360,000	1,300	300,000		Note: FS-3 and GC-3 production can be diverted to either/both gathering center. Combined FS-3 and GC-3 at gas handling limits	Mar 1979
GC-1	330,000	2,600	180,000		High GORs - some wells not competitive at field level.	May 1977
GC-2	250,000	1,070	300,000		Limited gas and water handling	Jun 1977
GC-3		1,100	275,000		Note: FS-3 and GC-3 production can be diverted to either/both gathering center. Combined FS-3 and GC-3 at gas handling limits	Apr 1978
CGF		8,700			Limited by gas handling. Note, while "Design" capacity is 8.7 BCF/D peak, actual operating capacity around 7.5 BCFD average yearly at the plant inlet, with peaks of around 8.2 BCFD.	Jun 1977 Full Start, (NGL initial prod 1980, expansions in 1986, 1990, and 1994)
CCP		8,700			Actual Injection Peaks at 7.2-7.8 BCFD. Limited by CGF gas handling capacity	Jun 1977 Expansions in 1986, 1990, and 1994, Peak NGL Rate 97,000/day in 1996
LPC - Greater Pt. McIntyre	205,000	450	120,000		Limited gas, water, and total fluid. Some wells from Pt. McIntyre flow into GC1	Dec 1986
<u>Oooguruk</u>					Production to Kuparuk CPF-3. No known handling limits at Oooguruk.	Jun 2008
<u>Nikaitchug</u>	40,000	unknown	120,000		No limits at this time	Jan 2011



# Facilities Access Agreements

- Facility access agreements are complicated commercial agreements between multiple parties
- Facility access agreements impact
  - Reservoir management
  - Process management
  - Influence and impact PODS, which in turn has an impact on expense and capital exposure in the state





# Facilities Summary

- The Prudhoe and Kuparuk units are experiencing typical reservoir depletion which requires handling and processing of increasing amounts of water and gas, decisions on facility management, effective well utilization, and complex reservoir management.
- Facilities are designed to meet a wide range of production profiles with varying water-oil and gas-oil ratios (WOR and GOR, respectively). As the reservoir matures, reservoir management and facility debottlenecking for water and gas handling, water and/or gas injection to maintain reservoir pressure, well workovers, and new infield development drilling is required.
- Pipeline capacity is available throughout most of the North Slope, thus companies with new oil discoveries will need to negotiate to share the existing transport facilities.
- Corporate culture and size of a discovery typically dictate decisions whether to build new process facilities or enter into commercial agreements to access existing facilities.



**15.**

**Discussion**

**Slides:**

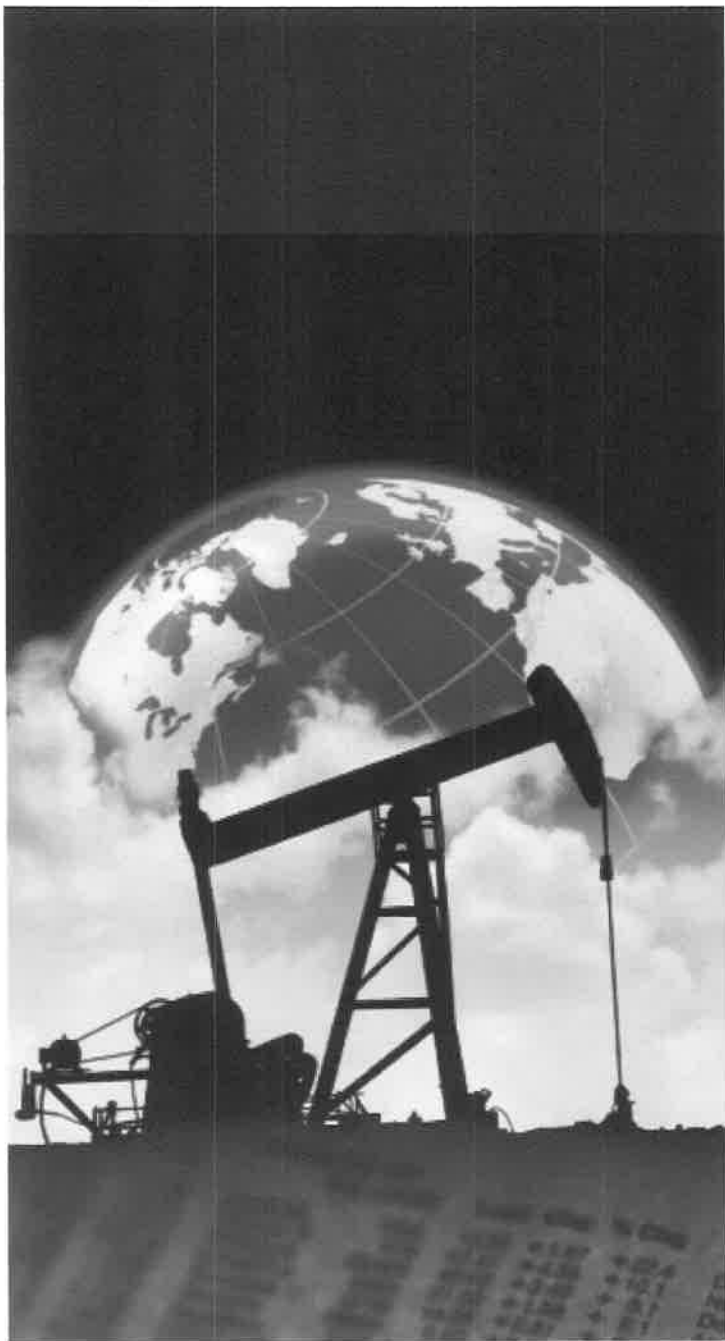
**Janak Mayer**

**Manager,**

**Upstream & Gas,**

**PFC Energy**

**March 27, 2012**



# Discussion Slides: Alaska Senate Finance Committee

March 27, 2012

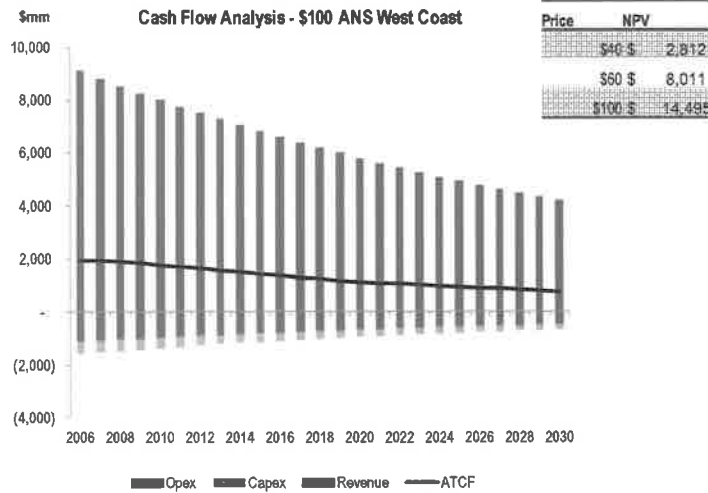
Janak Mayer  
Manager, Upstream & Gas  
PFC Energy

# Assessing 10 Different Fiscal Regime Options

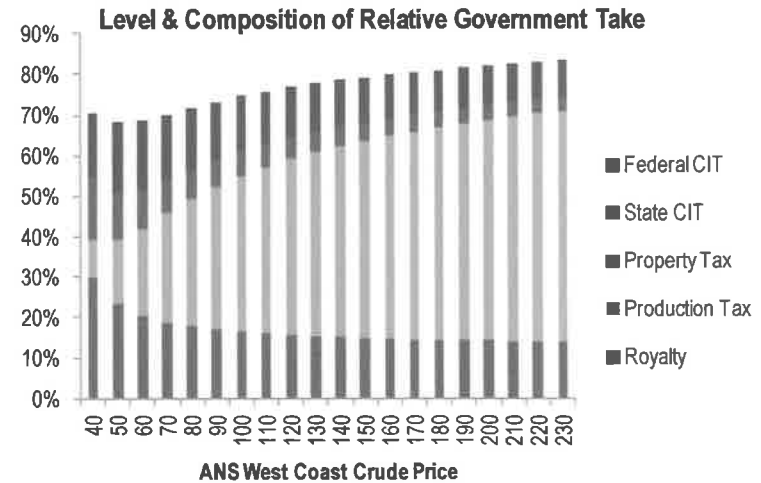
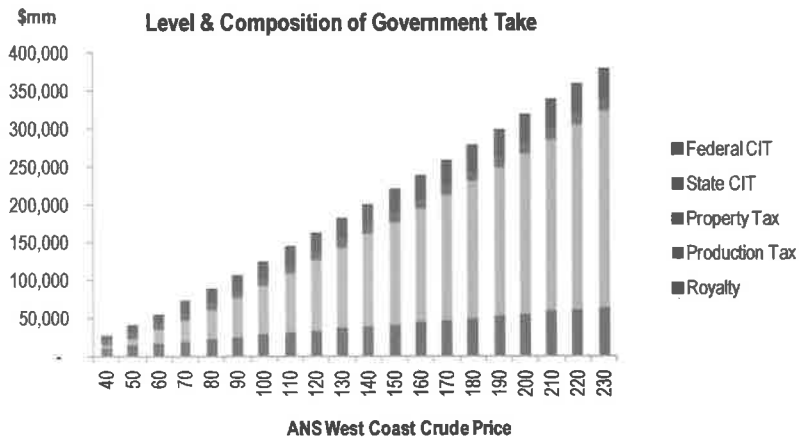
Table: Revenue Comparison of Different Fiscal Regime Options

	Price	ACES	HB110	HB110 (New)	CSSB 192	CSSB 192 (50% Maximum)	CSSB 192 (Base of 30% and 0.2% Progressivity)	CSSB 192 (40% Maximum)	Severance Tax - 20% maximum	Severance Tax - 6% maximum	25% Flat Production Tax
Production Tax Revenue (inc Severance)	40	(44)	(44)	(44)	284	284	284	284	284	284	(302)
	60	648	648	284	648	648	831	648	648	648	391
	100	3,686	2,721	1,667	3,522	3,522	3,557	3,522	3,047	2,508	2,116
	150	9,679	6,680	4,764	9,508	9,322	7,405	7,405	7,512	5,196	4,272
	200	15,542	10,993	8,214	15,293	13,634	10,855	10,855	11,645	8,174	6,428
Total State Take	40	2,195	2,195	2,195	2,390	2,390	2,390	2,390	2,390	2,390	2,042
	60	2,925	2,925	2,591	2,925	2,925	3,092	2,925	2,925	2,925	2,689
	100	7,273	6,389	5,423	7,122	7,122	7,154	7,122	6,687	6,194	5,834
	150	14,719	11,972	10,216	14,562	14,392	12,636	12,636	12,734	10,612	9,766
	200	22,045	17,879	15,333	21,818	20,298	17,753	17,753	18,477	15,297	13,698
Total Federal Take	40	2,195	2,195	2,195	2,390	2,390	2,390	2,390	2,390	2,390	2,042
	60	4,496	4,496	4,279	4,496	4,496	4,605	4,496	4,496	4,496	4,343
	100	10,082	9,508	8,880	9,984	9,984	10,005	9,984	9,702	9,381	9,147
	150	18,372	16,587	15,446	18,270	18,160	17,018	17,018	17,082	15,703	15,153
	200	26,585	23,876	22,221	26,437	25,449	23,794	23,794	24,265	22,198	21,158

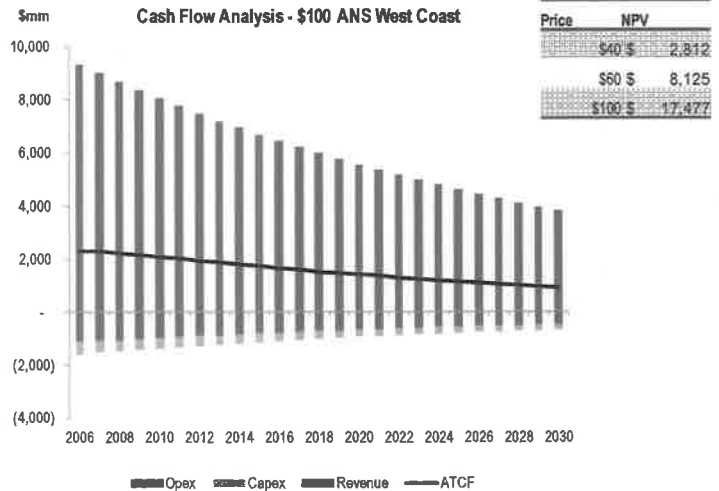
# ACES (Existing Producer)



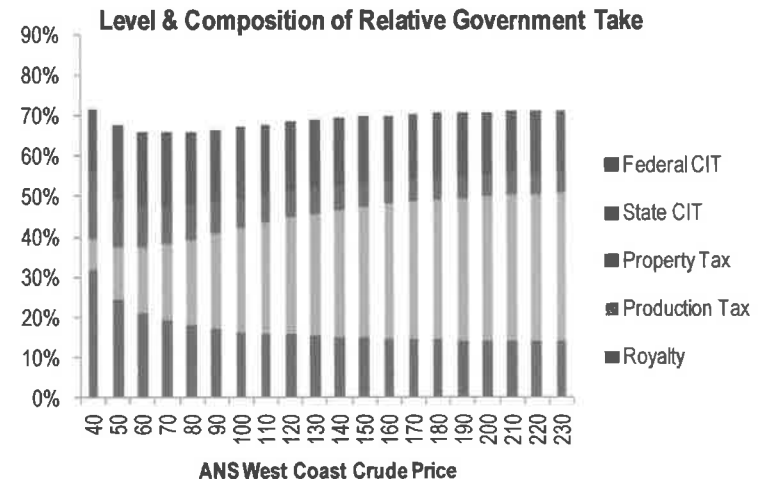
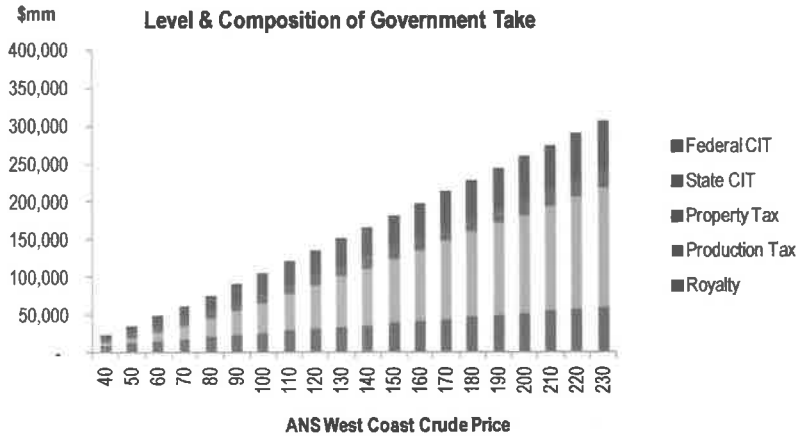
Price	Royalty	Production Tax	Property Tax	State CIT	Total State Take	Federal CIT	Total GT
40	30%	9%	11%	4%	54%	16%	71%
50	23%	16%	7%	5%	51%	17%	68%
60	20%	22%	5%	4%	52%	17%	69%
70	19%	27%	4%	4%	54%	16%	70%
80	18%	31%	3%	4%	56%	15%	72%
90	17%	35%	3%	4%	59%	15%	73%
100	16%	39%	2%	4%	61%	14%	75%
110	16%	41%	2%	3%	63%	13%	76%
120	16%	44%	2%	3%	64%	13%	77%
130	15%	46%	2%	3%	66%	12%	78%
140	15%	47%	2%	3%	67%	12%	79%
150	15%	49%	1%	3%	68%	11%	79%
160	15%	50%	1%	3%	69%	11%	80%
170	14%	51%	1%	3%	70%	11%	80%
180	14%	52%	1%	3%	71%	10%	81%
190	14%	54%	1%	3%	72%	10%	82%
200	14%	55%	1%	3%	72%	10%	82%
210	14%	55%	1%	2%	73%	9%	82%
220	14%	56%	1%	2%	74%	9%	83%
230	14%	57%	1%	2%	74%	9%	83%



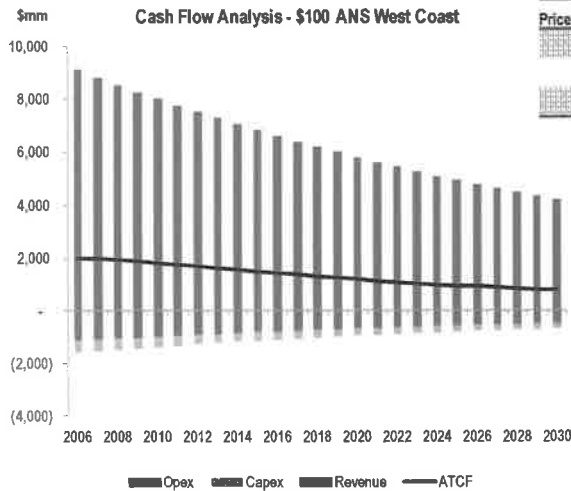
# HB110 (Existing Producer)



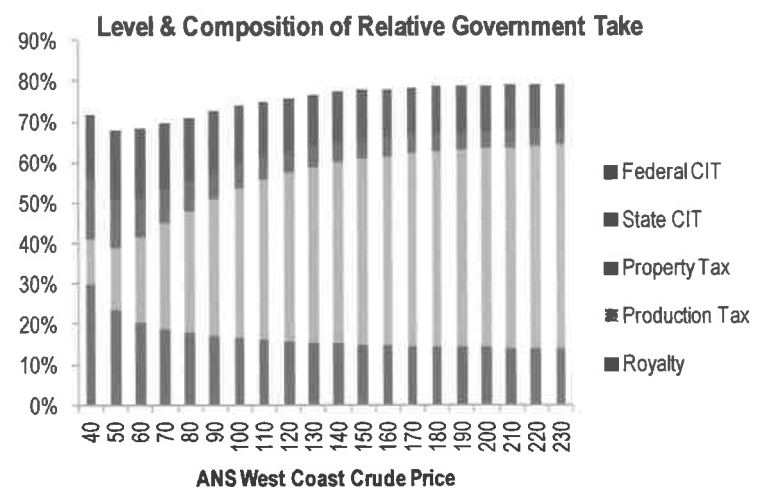
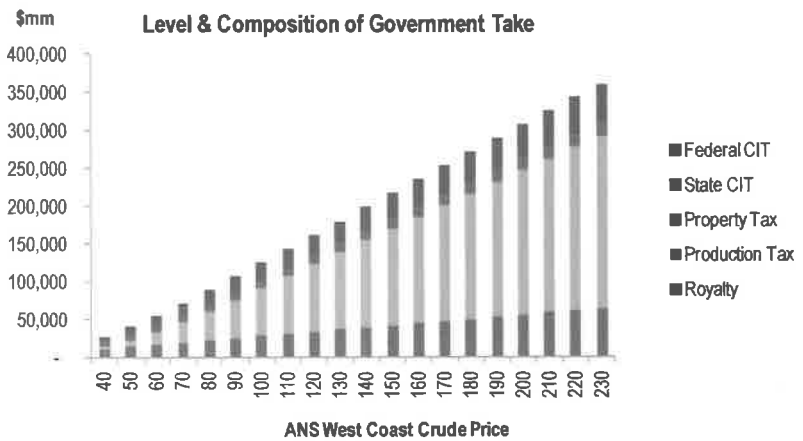
Price	Royalty	Production Tax	Property Tax	State CIT	Total State Take	Federal CIT	Total GT
40	32%	8%	12%	4%	56%	16%	72%
50	24%	13%	7%	5%	50%	18%	67%
60	21%	16%	5%	5%	48%	18%	66%
70	19%	19%	4%	5%	47%	19%	66%
80	18%	21%	3%	5%	48%	18%	66%
90	17%	24%	3%	5%	48%	18%	67%
100	17%	26%	3%	5%	49%	18%	67%
110	16%	27%	2%	5%	50%	17%	68%
120	16%	29%	2%	4%	51%	17%	68%
130	15%	30%	2%	4%	52%	17%	69%
140	15%	32%	2%	4%	53%	17%	69%
150	15%	33%	2%	4%	53%	16%	70%
160	15%	33%	1%	4%	54%	16%	70%
170	15%	34%	1%	4%	54%	16%	70%
180	14%	35%	1%	4%	55%	16%	70%
190	14%	35%	1%	4%	55%	16%	71%
200	14%	36%	1%	4%	55%	16%	71%
210	14%	36%	1%	4%	55%	16%	71%
220	14%	37%	1%	4%	56%	16%	71%
230	14%	37%	1%	4%	56%	15%	71%



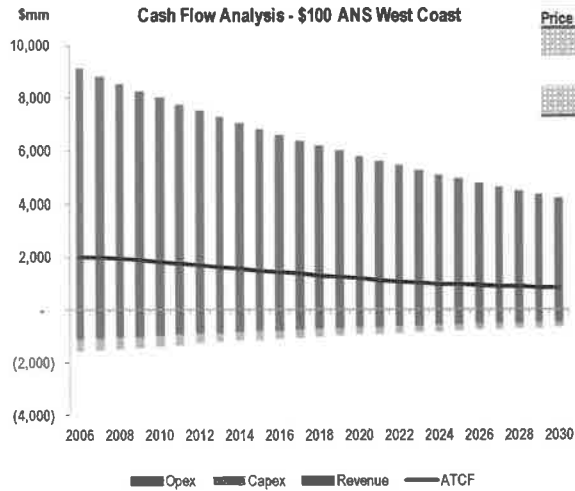
# CSSB 192 (Existing Producer)



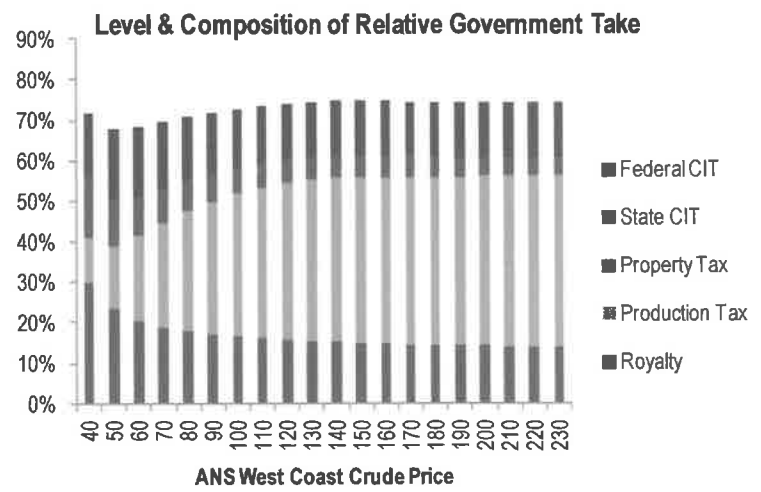
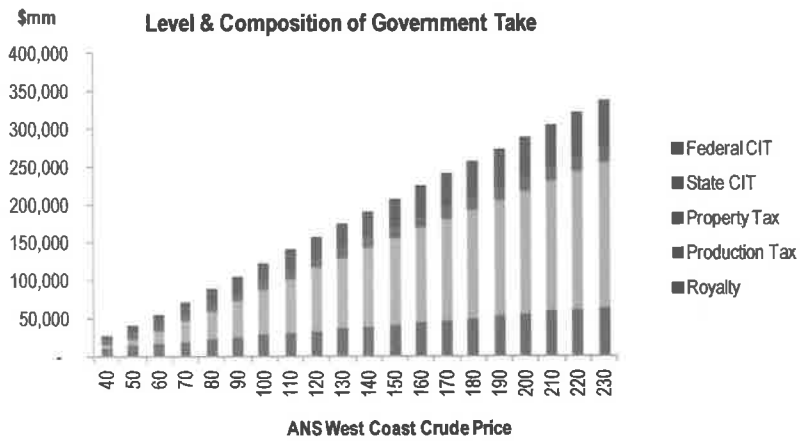
Price	Royalty	Production Tax	Property Tax	State CIT	Total State Take	Federal CIT	Total GT
40	30%	11%	11%	4%	56%	16%	72%
50	23%	16%	7%	5%	51%	17%	68%
60	20%	21%	5%	5%	51%	17%	68%
70	19%	26%	4%	4%	53%	17%	70%
80	18%	30%	3%	4%	55%	16%	71%
90	17%	34%	3%	4%	58%	15%	72%
100	16%	37%	2%	4%	60%	14%	74%
110	16%	40%	2%	4%	61%	14%	75%
120	16%	42%	2%	3%	63%	13%	76%
130	15%	44%	2%	3%	64%	13%	77%
140	15%	45%	2%	3%	65%	12%	77%
150	15%	46%	1%	3%	65%	12%	78%
160	15%	47%	1%	3%	66%	12%	78%
170	14%	48%	1%	3%	66%	12%	78%
180	14%	48%	1%	3%	67%	12%	78%
190	14%	49%	1%	3%	67%	12%	79%
200	14%	49%	1%	3%	67%	11%	79%
210	14%	50%	1%	3%	68%	11%	79%
220	14%	50%	1%	3%	68%	11%	79%
230	14%	50%	1%	3%	68%	11%	79%



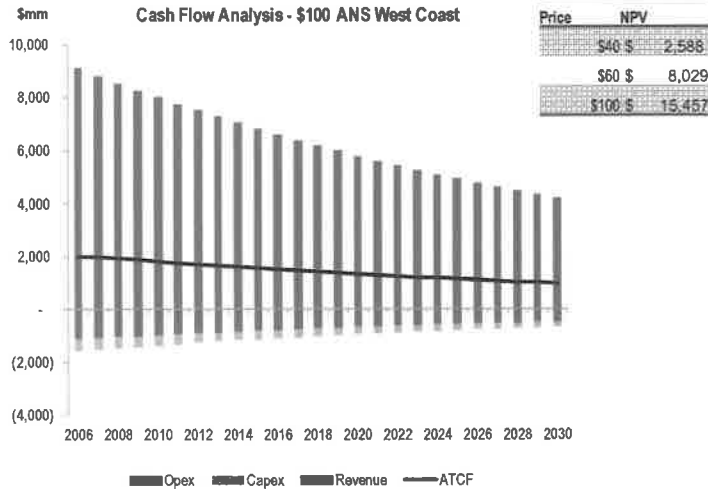
# CSSB 192 with 50% Cap (Existing Producer)



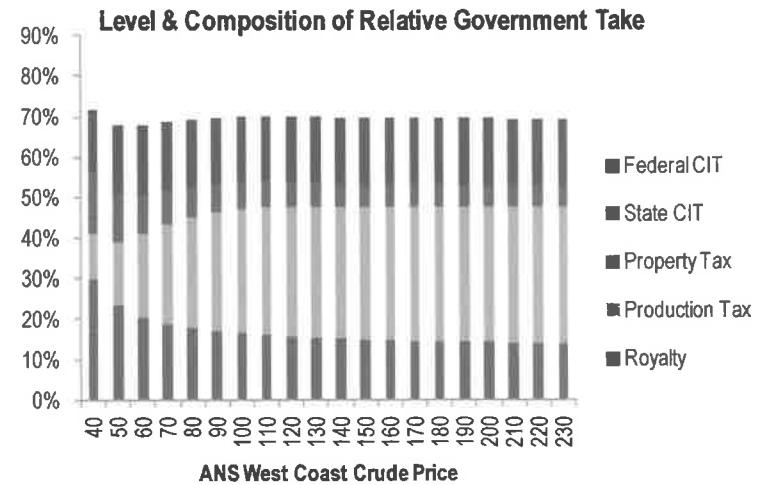
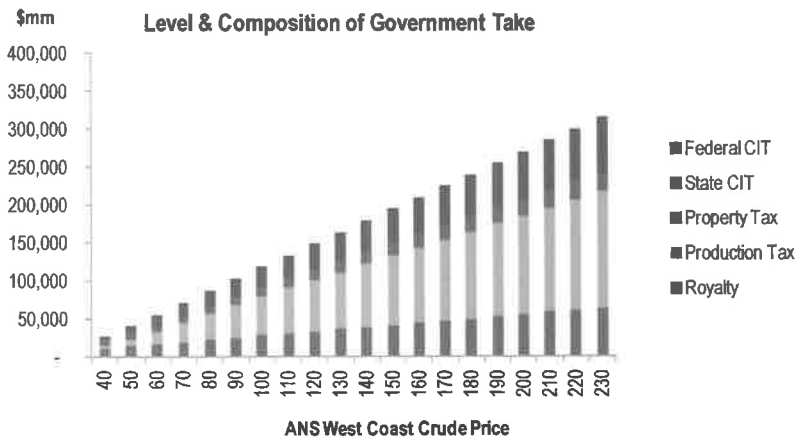
Price	Royalty	Production Tax	Property Tax	State CIT	Total State Take	Federal CIT	Total GT
40	30%	11%	11%	4%	56%	16%	72%
50	23%	16%	7%	5%	51%	17%	68%
60	20%	21%	5%	5%	51%	17%	68%
70	19%	26%	4%	4%	53%	17%	69%
80	18%	30%	3%	4%	55%	16%	71%
90	17%	33%	3%	4%	57%	15%	72%
100	16%	36%	2%	4%	58%	15%	73%
110	16%	37%	2%	4%	59%	14%	74%
120	16%	39%	2%	4%	60%	14%	74%
130	15%	40%	2%	4%	61%	14%	74%
140	15%	41%	2%	4%	61%	14%	75%
150	15%	41%	1%	4%	61%	14%	75%
160	15%	41%	1%	4%	61%	14%	75%
170	14%	41%	1%	4%	61%	14%	75%
180	14%	42%	1%	4%	61%	14%	75%
190	14%	42%	1%	4%	61%	14%	74%
200	14%	42%	1%	4%	61%	14%	74%
210	14%	42%	1%	4%	61%	14%	74%
220	14%	42%	1%	4%	61%	14%	74%
230	14%	42%	1%	4%	61%	14%	74%



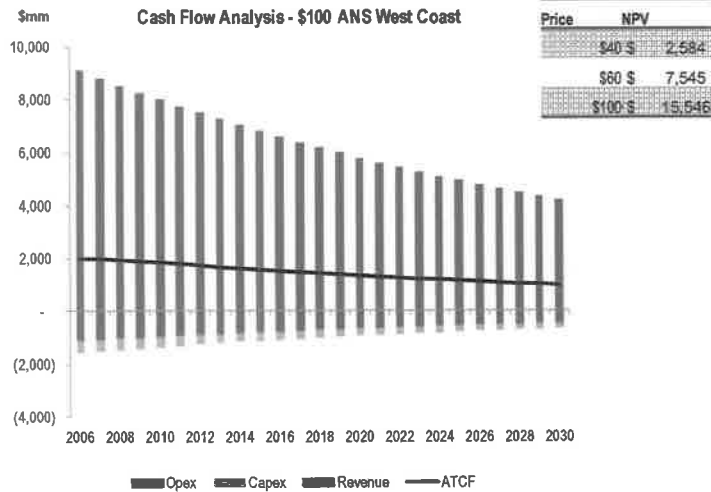
# CSSB 192 with 40% Cap (Existing Producer)



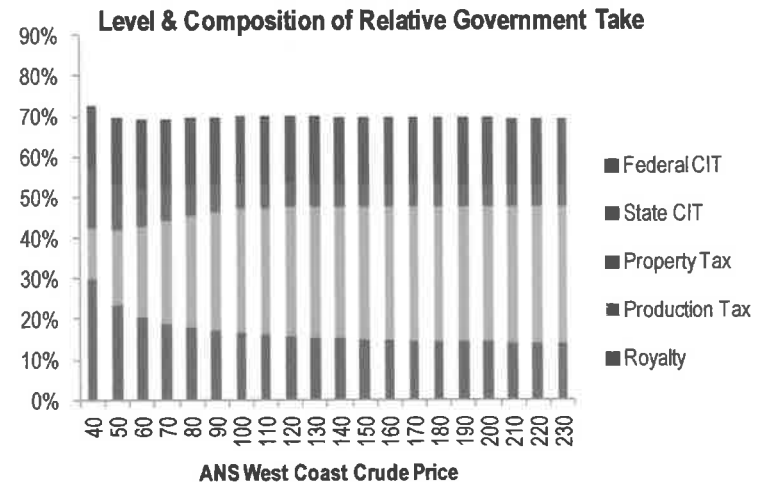
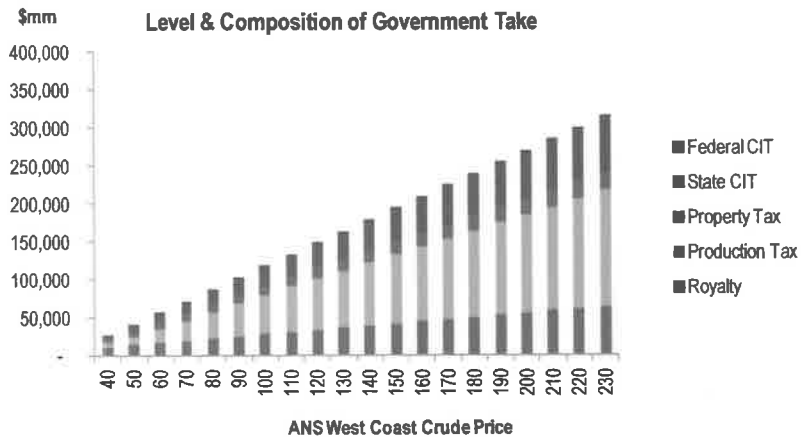
Price	Royalty	Production Tax	Property Tax	State CIT	Total State Take	Federal CIT	Total CIT
40	30%	11%	11%	4%	56%	16%	72%
50	23%	16%	7%	5%	51%	17%	68%
60	20%	20%	5%	5%	51%	17%	68%
70	19%	24%	4%	4%	52%	17%	69%
80	18%	27%	3%	4%	53%	17%	69%
90	17%	29%	3%	4%	53%	16%	70%
100	16%	31%	2%	4%	54%	16%	70%
110	16%	32%	2%	4%	54%	16%	70%
120	16%	32%	2%	4%	54%	16%	70%
130	15%	32%	2%	4%	54%	16%	70%
140	15%	33%	2%	4%	53%	16%	70%
150	15%	33%	1%	4%	53%	16%	70%
160	15%	33%	1%	4%	53%	16%	70%
170	14%	33%	1%	4%	53%	16%	70%
180	14%	33%	1%	4%	53%	16%	69%
190	14%	33%	1%	4%	53%	16%	69%
200	14%	33%	1%	4%	53%	17%	69%
210	14%	33%	1%	4%	53%	17%	69%
220	14%	34%	1%	4%	53%	17%	69%
230	14%	34%	1%	4%	53%	17%	69%



# 30% Base rate, 0.02% Progressivity, 40% Cap (Existing Producer)

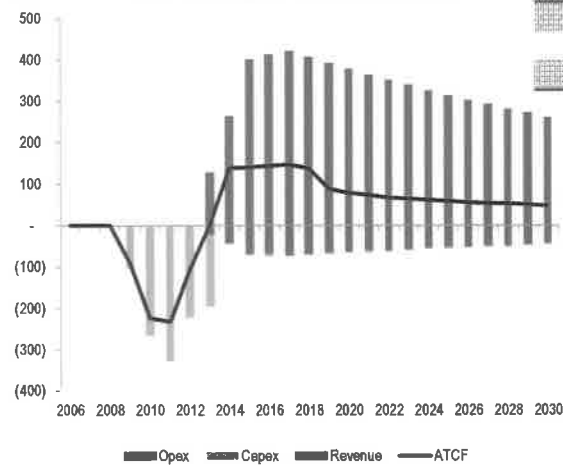


Price	Royalty	Production Tax	Property Tax	State CIT	Total State Take	Federal CIT	Total GT
40	30%	12%	11%	4%	57%	15%	73%
50	23%	18%	7%	4%	53%	17%	70%
60	20%	22%	5%	4%	52%	17%	69%
70	19%	26%	4%	4%	53%	17%	69%
80	18%	28%	3%	4%	53%	17%	70%
90	17%	29%	3%	4%	53%	16%	70%
100	16%	31%	2%	4%	54%	16%	70%
110	16%	31%	2%	4%	54%	16%	70%
120	16%	32%	2%	4%	54%	16%	70%
130	15%	32%	2%	4%	54%	16%	70%
140	15%	33%	2%	4%	53%	16%	70%
150	15%	33%	1%	4%	53%	16%	70%
160	15%	33%	1%	4%	53%	16%	70%
170	14%	33%	1%	4%	53%	16%	70%
180	14%	33%	1%	4%	53%	16%	69%
190	14%	33%	1%	4%	53%	16%	69%
200	14%	33%	1%	4%	53%	17%	69%
210	14%	33%	1%	4%	53%	17%	69%
220	14%	34%	1%	4%	53%	17%	69%
230	14%	34%	1%	4%	53%	17%	69%



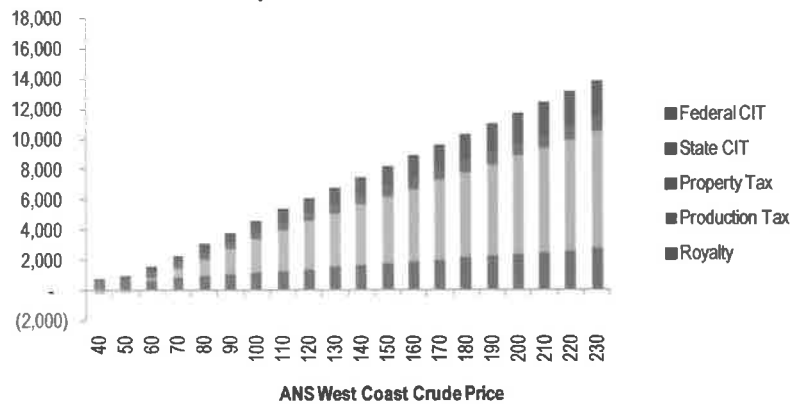
# CSSB 192 with 50% Cap (New Development)

Cash Flow Analysis - \$100 ANS West Coast

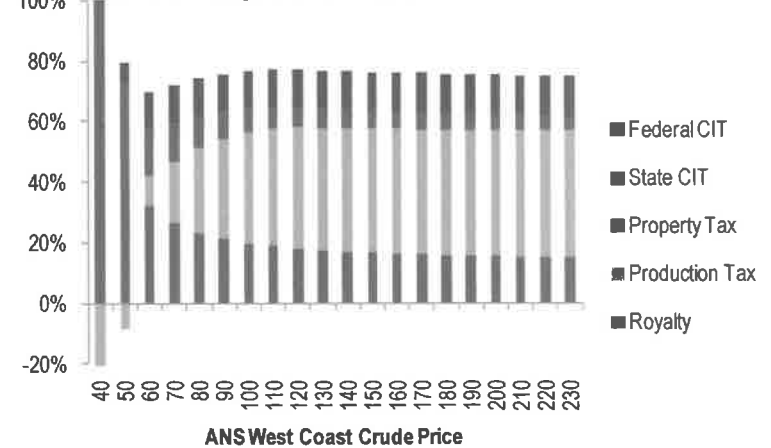


Price	Royalty	Production Tax	Property Tax	State CIT	Total State Take	Federal CIT	Total GT
40	156%	-115%	96%	0%	136%	0%	136%
50	47%	-10%	23%	2%	62%	7%	69%
60	32%	9%	13%	3%	58%	12%	69%
70	26%	20%	9%	3%	59%	13%	71%
80	23%	28%	7%	3%	61%	13%	74%
90	21%	33%	6%	3%	63%	12%	75%
100	20%	36%	5%	3%	64%	12%	76%
110	19%	38%	4%	3%	64%	12%	77%
120	18%	40%	4%	3%	64%	12%	77%
130	17%	40%	3%	3%	64%	13%	77%
140	17%	40%	3%	3%	64%	13%	76%
150	17%	41%	3%	3%	63%	13%	76%
160	16%	41%	2%	3%	63%	13%	76%
170	16%	41%	2%	3%	63%	13%	76%
180	16%	41%	2%	3%	62%	13%	75%
190	16%	41%	2%	3%	62%	13%	75%
200	15%	41%	2%	3%	62%	13%	75%
210	15%	42%	2%	3%	62%	13%	75%
220	15%	42%	2%	3%	62%	13%	75%
230	15%	42%	2%	3%	62%	13%	75%

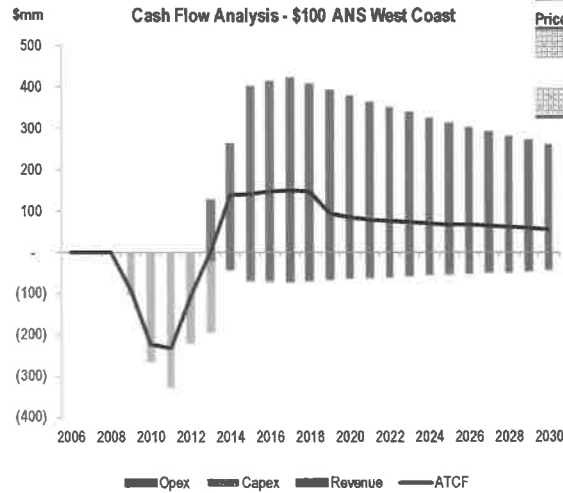
Level & Composition of Government Take



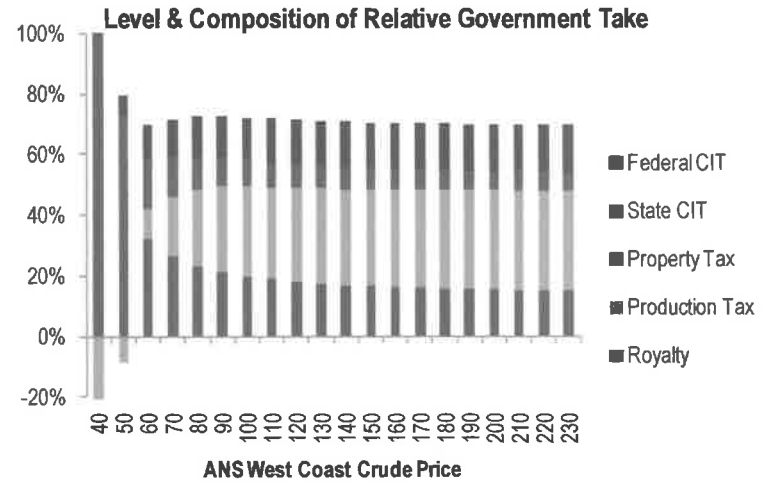
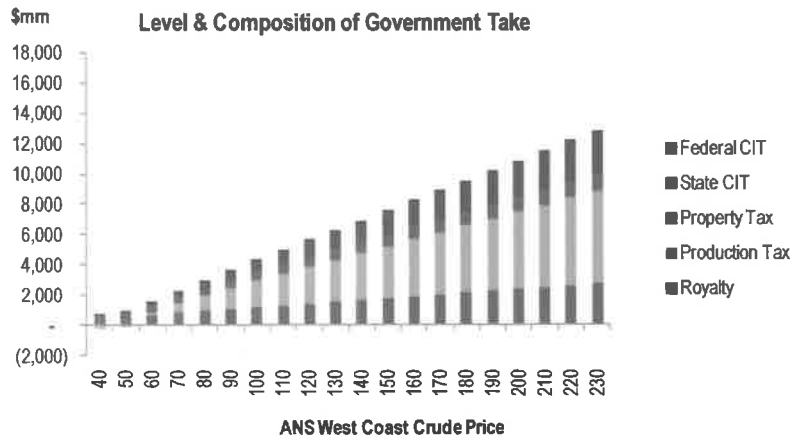
Level & Composition of Relative Government Take



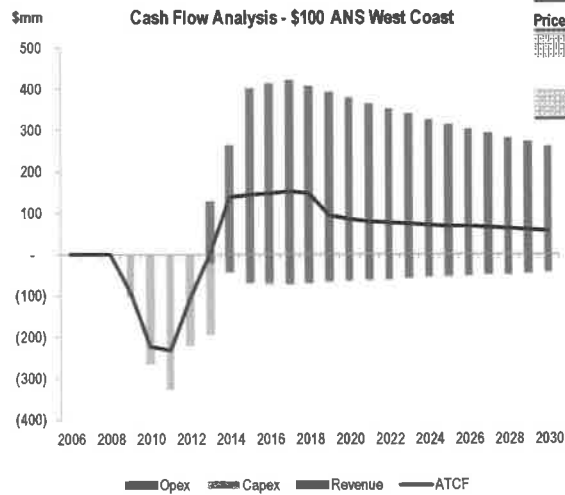
# CSSB 192 with 40% Cap (New Development)



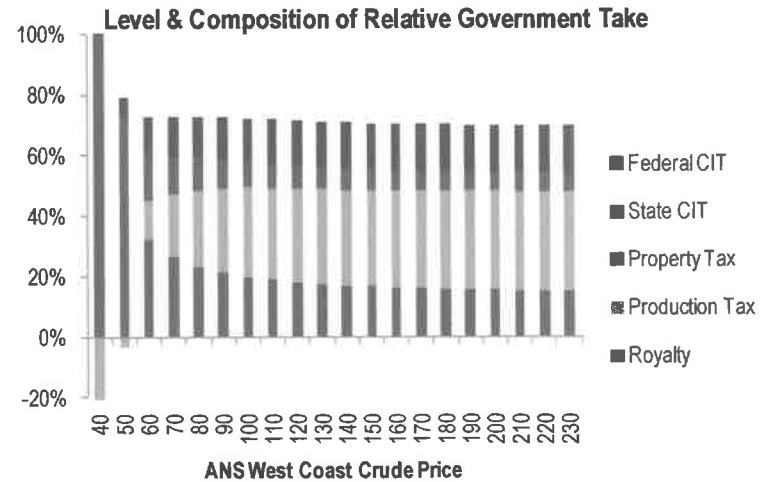
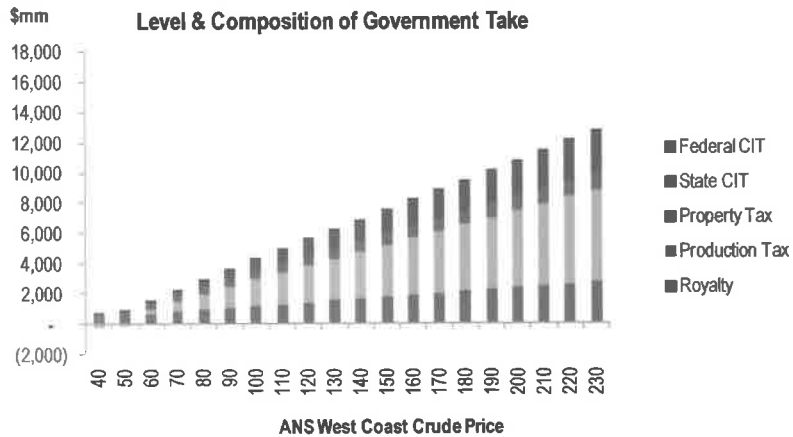
Price	Royalty	Production Tax	Property Tax	State CIT	Total State Take	Federal CIT	Total GT
40	156%	-115%	96%	0%	136%	0%	136%
50	47%	-10%	23%	2%	62%	7%	69%
60	32%	9%	13%	3%	58%	12%	69%
70	26%	19%	9%	3%	58%	13%	71%
80	23%	25%	7%	4%	59%	14%	72%
90	21%	28%	6%	4%	58%	14%	72%
100	20%	29%	5%	4%	58%	14%	72%
110	19%	30%	4%	4%	57%	15%	72%
120	18%	31%	4%	4%	56%	15%	71%
130	17%	31%	3%	4%	56%	15%	71%
140	17%	31%	3%	4%	55%	15%	70%
150	17%	32%	3%	4%	55%	15%	70%
160	16%	32%	2%	4%	55%	16%	70%
170	16%	32%	2%	4%	54%	16%	70%
180	16%	32%	2%	4%	54%	16%	70%
190	16%	32%	2%	4%	54%	16%	70%
200	15%	33%	2%	4%	54%	16%	70%
210	15%	33%	2%	4%	54%	16%	70%
220	15%	33%	2%	4%	54%	16%	70%
230	15%	33%	2%	4%	54%	16%	70%



# 30% Base rate, 0.02% Progressivity, 40% Cap (New Development)

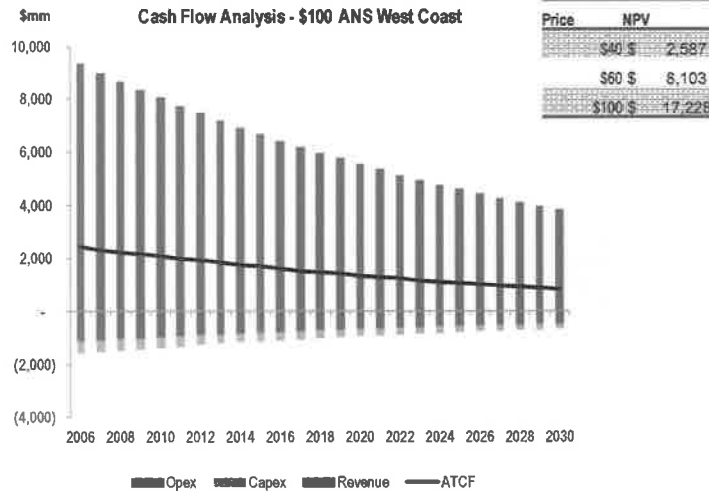


Price	Royalty	Production Tax	Property Tax	State CIT	Total State Take	Federal CIT	Total GT
40	156%	-104%	96%	0%	148%	0%	148%
50	47%	-4%	23%	2%	68%	7%	75%
60	32%	12%	13%	3%	60%	11%	72%
70	26%	20%	9%	3%	59%	13%	72%
80	23%	25%	7%	4%	59%	14%	72%
90	21%	28%	6%	4%	58%	14%	72%
100	20%	29%	5%	4%	58%	14%	72%
110	19%	30%	4%	4%	57%	15%	72%
120	18%	31%	4%	4%	56%	15%	71%
130	17%	31%	3%	4%	56%	15%	71%
140	17%	31%	3%	4%	55%	15%	70%
150	17%	32%	3%	4%	55%	15%	70%
160	16%	32%	2%	4%	55%	16%	70%
170	16%	32%	2%	4%	54%	16%	70%
180	16%	32%	2%	4%	54%	16%	70%
190	16%	32%	2%	4%	54%	16%	70%
200	15%	33%	2%	4%	54%	16%	70%
210	15%	33%	2%	4%	54%	16%	70%
220	15%	33%	2%	4%	54%	16%	70%
230	15%	33%	2%	4%	54%	16%	70%

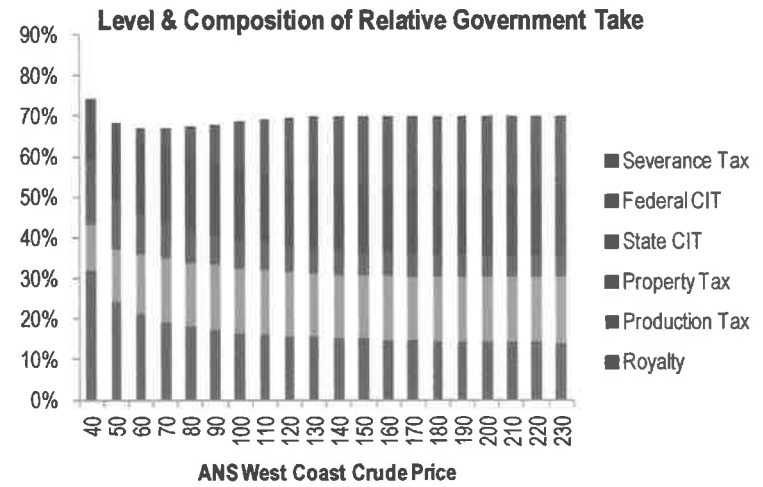
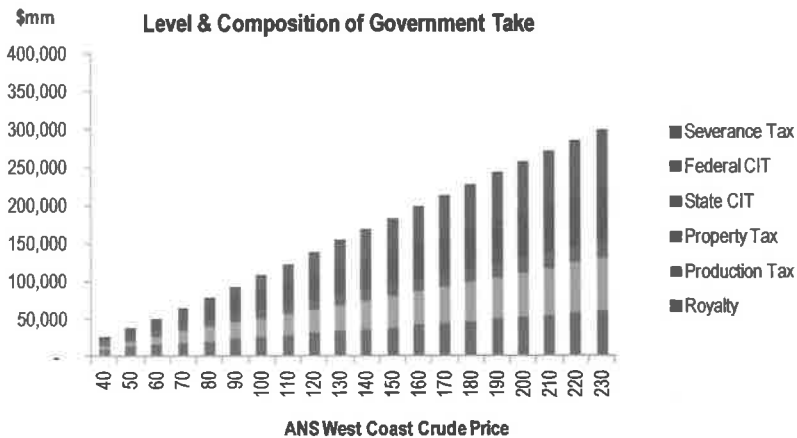


# Severance Tax - 20% maximum (Existing Producer)

.25% progressivity from \$70 to \$130, then .10% progressivity to 180

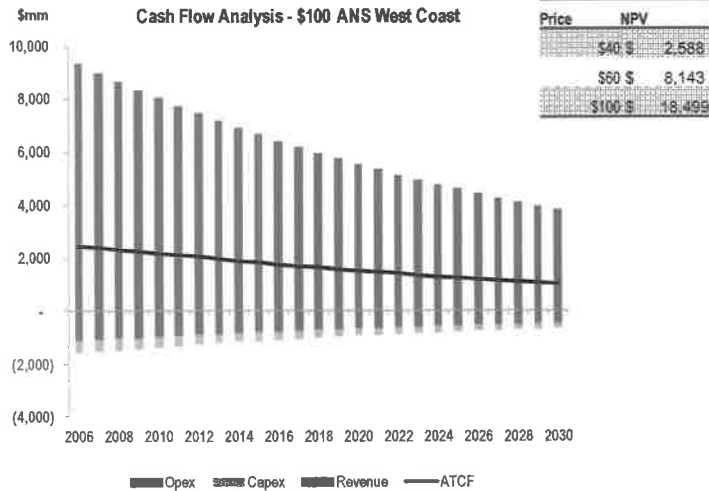


Price	Royalty	Severance Tax	Production Tax	Property Tax	State CIT	Total State Take	Federal CIT	Total GT
40	32%	0%	11%	12%	4%	59%	14%	74%
50	24%	2%	13%	7%	5%	51%	17%	68%
60	21%	3%	15%	5%	5%	49%	18%	67%
70	19%	5%	16%	4%	5%	49%	18%	67%
80	18%	8%	16%	3%	5%	50%	18%	67%
90	17%	10%	16%	3%	5%	51%	17%	68%
100	17%	12%	16%	3%	4%	52%	17%	69%
110	16%	14%	16%	2%	4%	52%	17%	69%
120	16%	15%	16%	2%	4%	53%	17%	69%
130	15%	16%	16%	2%	4%	53%	16%	70%
140	15%	17%	16%	2%	4%	54%	16%	70%
150	15%	17%	16%	2%	4%	54%	16%	70%
160	15%	18%	16%	1%	4%	54%	16%	70%
170	15%	18%	16%	1%	4%	54%	16%	70%
180	14%	18%	16%	1%	4%	54%	16%	70%
190	14%	18%	16%	1%	4%	54%	16%	70%
200	14%	18%	16%	1%	4%	54%	16%	70%
210	14%	18%	16%	1%	4%	54%	16%	70%
220	14%	18%	16%	1%	4%	54%	16%	70%
230	14%	18%	16%	1%	4%	53%	16%	70%

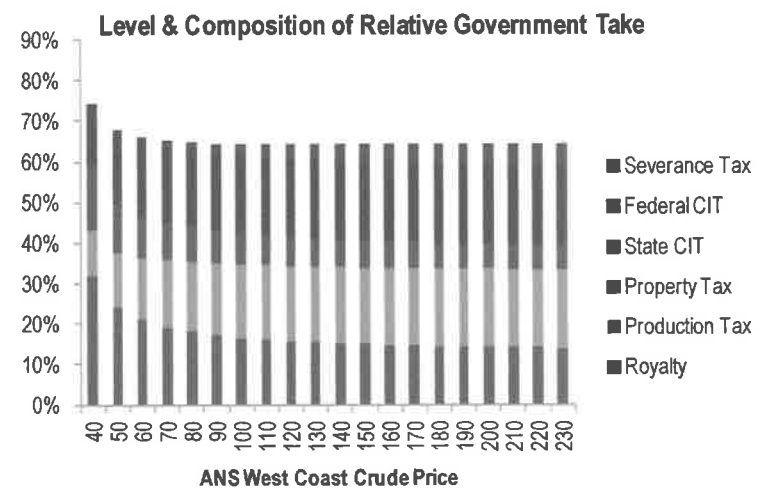
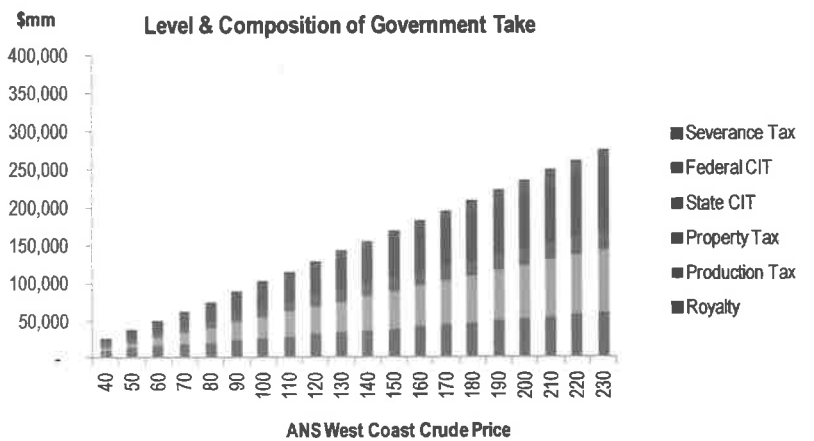


# Severance Tax - 6% maximum (Existing Producer)

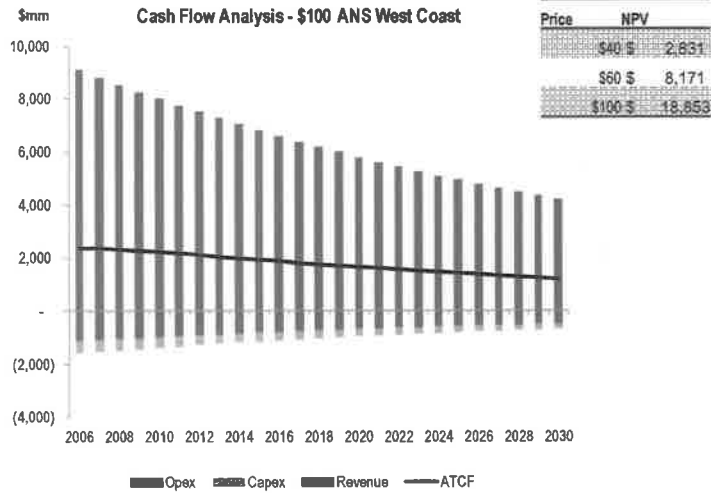
## .05% progressivity from \$70 to \$190



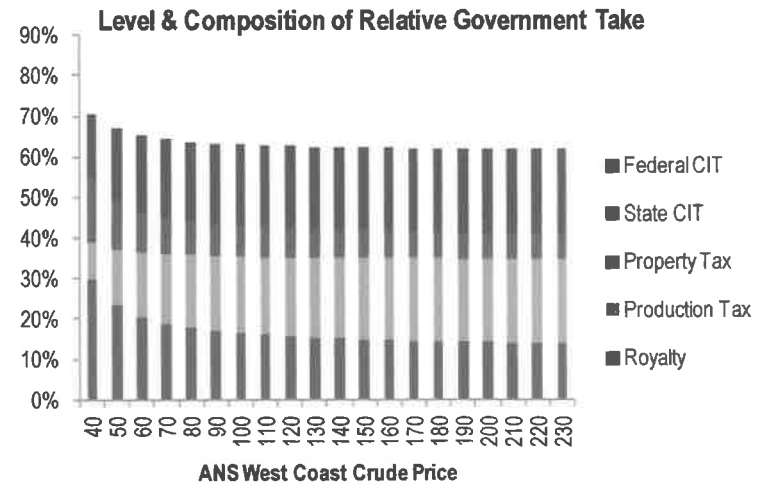
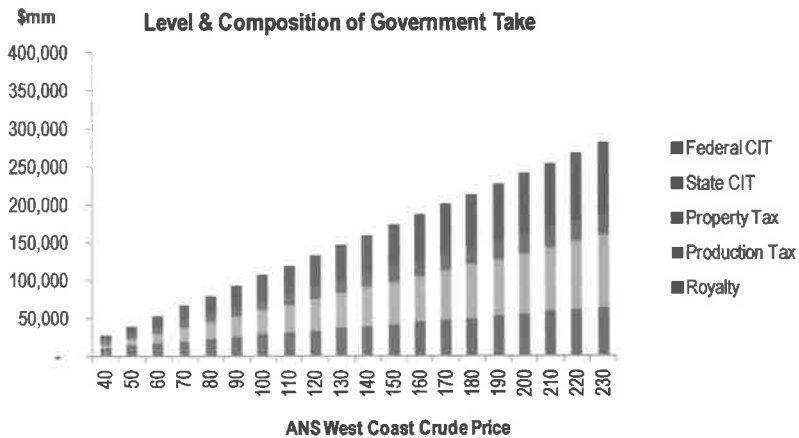
Price	Royalty	Severance Tax	Production Tax	Property Tax	State CIT	Total State Take	Federal CIT	Total GT
40	32%	0%	11%	12%	4%	59%	15%	74%
50	24%	0%	13%	7%	5%	50%	18%	68%
60	21%	1%	15%	5%	5%	47%	19%	66%
70	19%	1%	17%	4%	5%	46%	19%	65%
80	18%	2%	17%	3%	5%	46%	19%	65%
90	17%	2%	18%	3%	5%	45%	19%	65%
100	17%	3%	18%	3%	5%	45%	19%	64%
110	16%	3%	18%	2%	5%	45%	19%	64%
120	16%	4%	19%	2%	5%	45%	19%	64%
130	15%	4%	19%	2%	5%	45%	19%	64%
140	15%	4%	19%	2%	5%	45%	19%	64%
150	15%	5%	19%	2%	5%	45%	19%	64%
160	15%	5%	19%	1%	5%	45%	19%	64%
170	15%	5%	19%	1%	5%	45%	19%	64%
180	14%	5%	19%	1%	5%	45%	19%	64%
190	14%	5%	19%	1%	5%	45%	19%	64%
200	14%	5%	19%	1%	5%	45%	19%	64%
210	14%	5%	19%	1%	5%	45%	19%	64%
220	14%	5%	19%	1%	5%	45%	19%	64%
230	14%	5%	19%	1%	5%	45%	19%	64%



# 25% Flat Production Tax (Existing Producer)



Price	Royalty	Production Tax	Property Tax	State CIT	Total State Take	Federal CIT	Total CIT
40	30%	9%	11%	4%	54%	16%	71%
50	23%	14%	7%	5%	49%	18%	67%
60	20%	16%	5%	5%	46%	19%	65%
70	19%	17%	4%	5%	45%	19%	64%
80	18%	18%	3%	5%	44%	20%	64%
90	17%	19%	3%	5%	43%	20%	63%
100	16%	19%	2%	5%	43%	20%	63%
110	16%	19%	2%	5%	43%	20%	63%
120	16%	20%	2%	5%	42%	20%	63%
130	15%	20%	2%	5%	42%	20%	62%
140	15%	20%	2%	5%	42%	20%	62%
150	15%	20%	1%	5%	42%	20%	62%
160	15%	20%	1%	5%	42%	20%	62%
170	14%	20%	1%	5%	42%	20%	62%
180	14%	21%	1%	5%	41%	21%	62%
190	14%	21%	1%	5%	41%	21%	62%
200	14%	21%	1%	5%	41%	21%	62%
210	14%	21%	1%	5%	41%	21%	62%
220	14%	21%	1%	5%	41%	21%	62%
230	14%	21%	1%	5%	41%	21%	62%



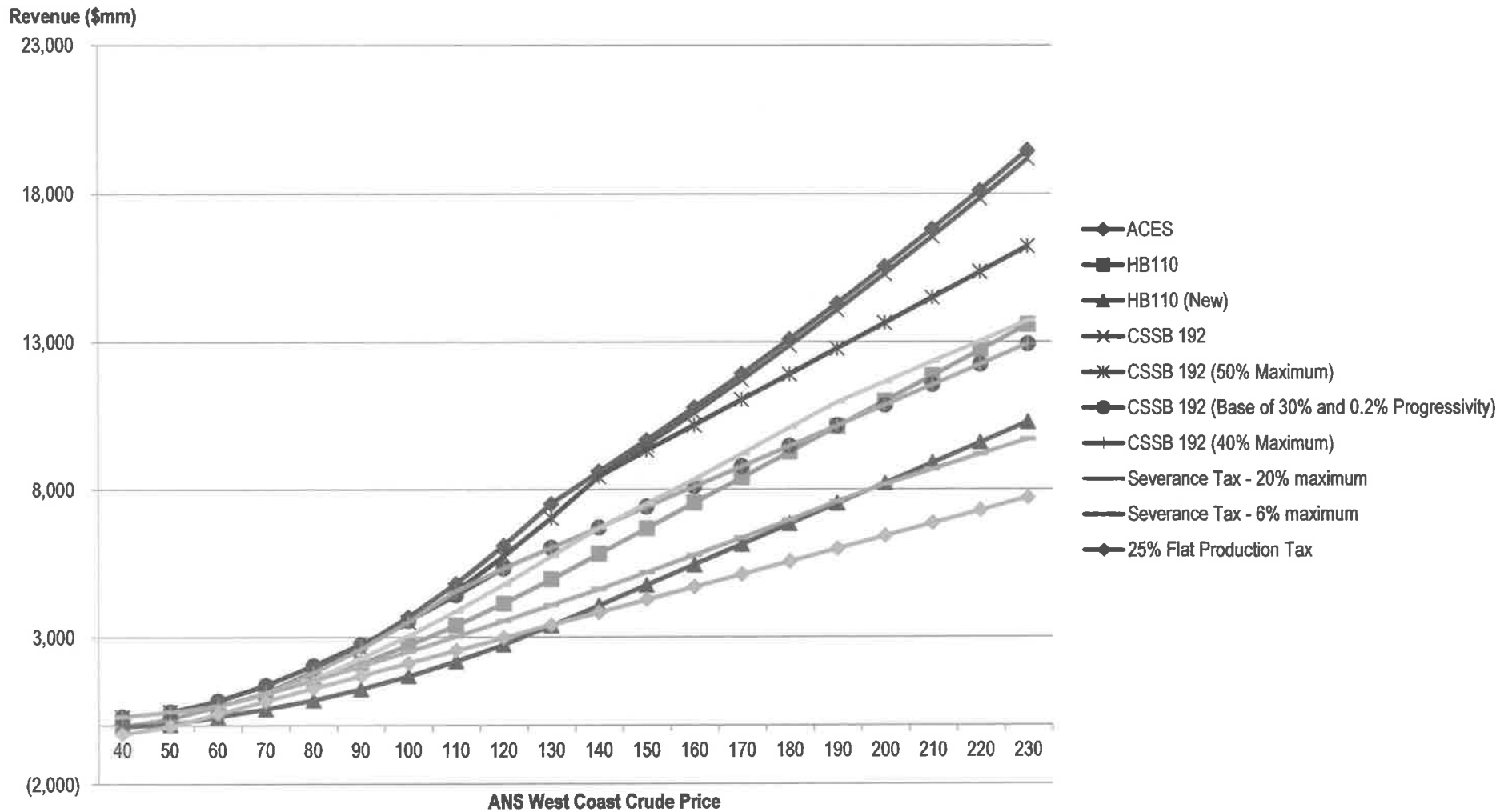
# Assessing 10 Different Fiscal Regime Options

Table: Revenue Comparison of Different Fiscal Regime Options

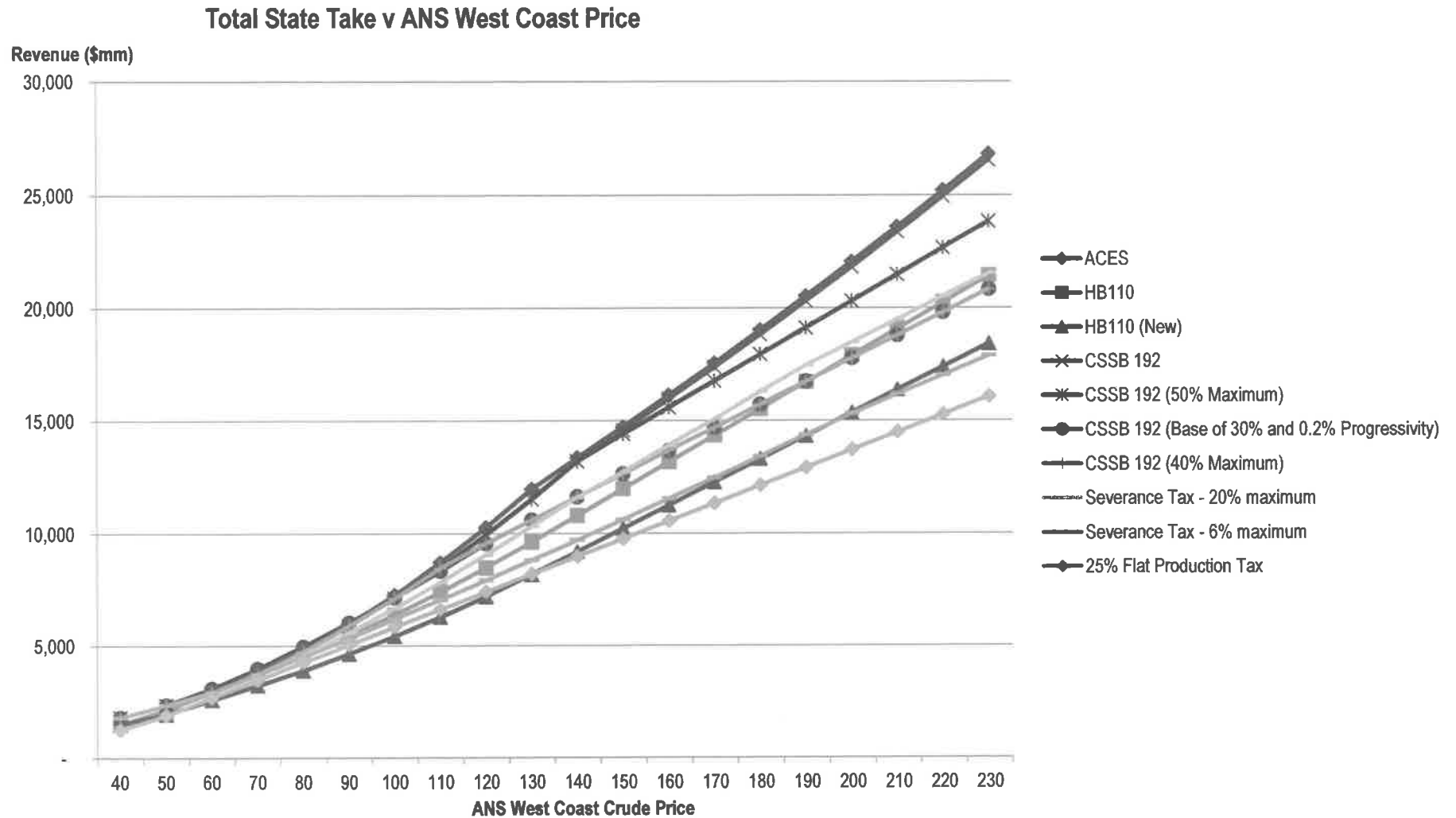
	Price	ACES	HB110	HB110 (New)	CSSB 192	CSSB 192 (50% Maximum)	CSSB 192 (Base of 30% and 0.2% Progressivity)	CSSB 192 (40% Maximum)	Severance Tax - 20% maximum	Severance Tax - 6% maximum	25% Flat Production Tax
Production Tax Revenue (inc Severance)	40	(44)	(44)	(44)	284	284	284	284	284	284	(302)
	60	648	648	284	648	648	831	648	648	648	391
	100	3,686	2,721	1,667	3,522	3,522	3,557	3,522	3,047	2,508	2,116
	150	9,679	6,680	4,764	9,508	9,322	7,405	7,405	7,512	5,196	4,272
	200	15,542	10,993	8,214	15,293	13,634	10,855	10,855	11,645	8,174	6,428
Total State Take	40	2,195	2,195	2,195	2,390	2,390	2,390	2,390	2,390	2,390	2,042
	60	2,925	2,925	2,591	2,925	2,925	3,092	2,925	2,925	2,925	2,689
	100	7,273	6,389	5,423	7,122	7,122	7,154	7,122	6,687	6,194	5,834
	150	14,719	11,972	10,216	14,562	14,392	12,636	12,636	12,734	10,612	9,766
	200	22,045	17,879	15,333	21,818	20,298	17,753	17,753	18,477	15,297	13,698
Total Federal Take	40	2,195	2,195	2,195	2,390	2,390	2,390	2,390	2,390	2,390	2,042
	60	4,496	4,496	4,279	4,496	4,496	4,605	4,496	4,496	4,496	4,343
	100	10,082	9,508	8,880	9,984	9,984	10,005	9,984	9,702	9,381	9,147
	150	18,372	16,587	15,446	18,270	18,160	17,018	17,018	17,082	15,703	15,153
	200	26,585	23,876	22,221	26,437	25,449	23,794	23,794	24,265	22,198	21,158

# Revenue From Production Tax under Different Options

Revenue From Production (inc Severance) Tax v ANS West Coast Price

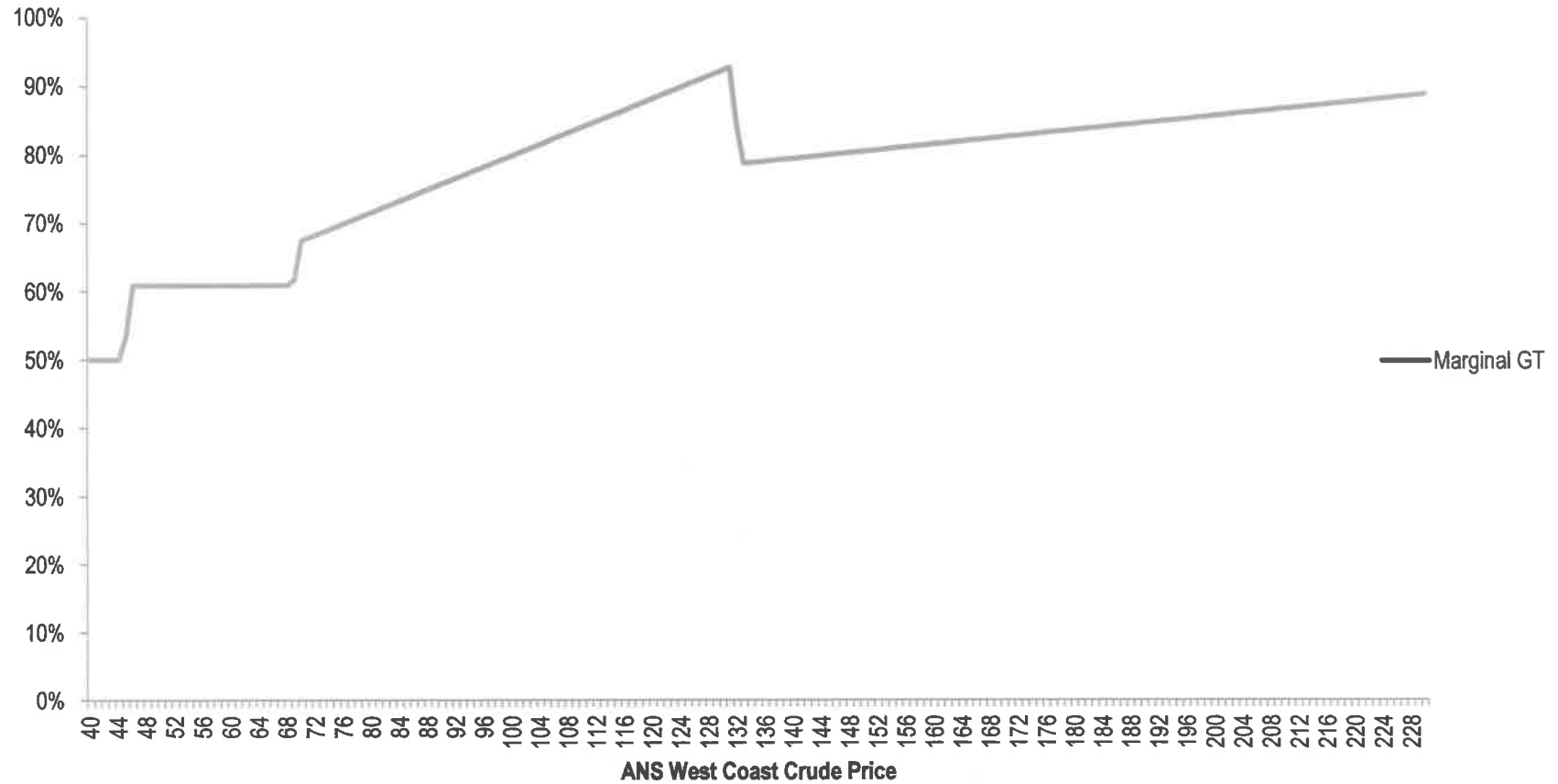


# Total State Take under Different Options



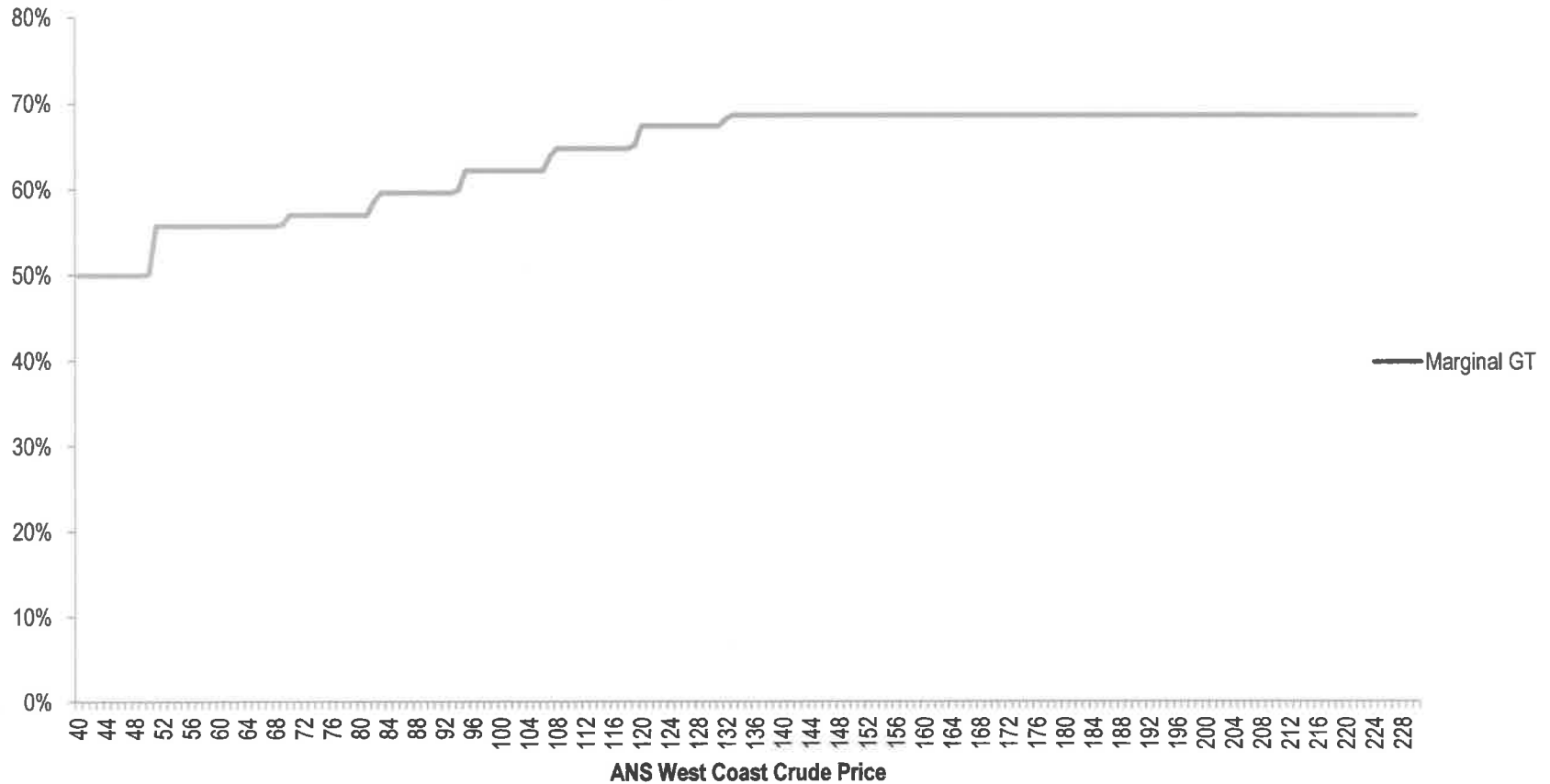
# ACES – Marginal Take (FY 2013 Data)

## ACES: Marginal Government Take



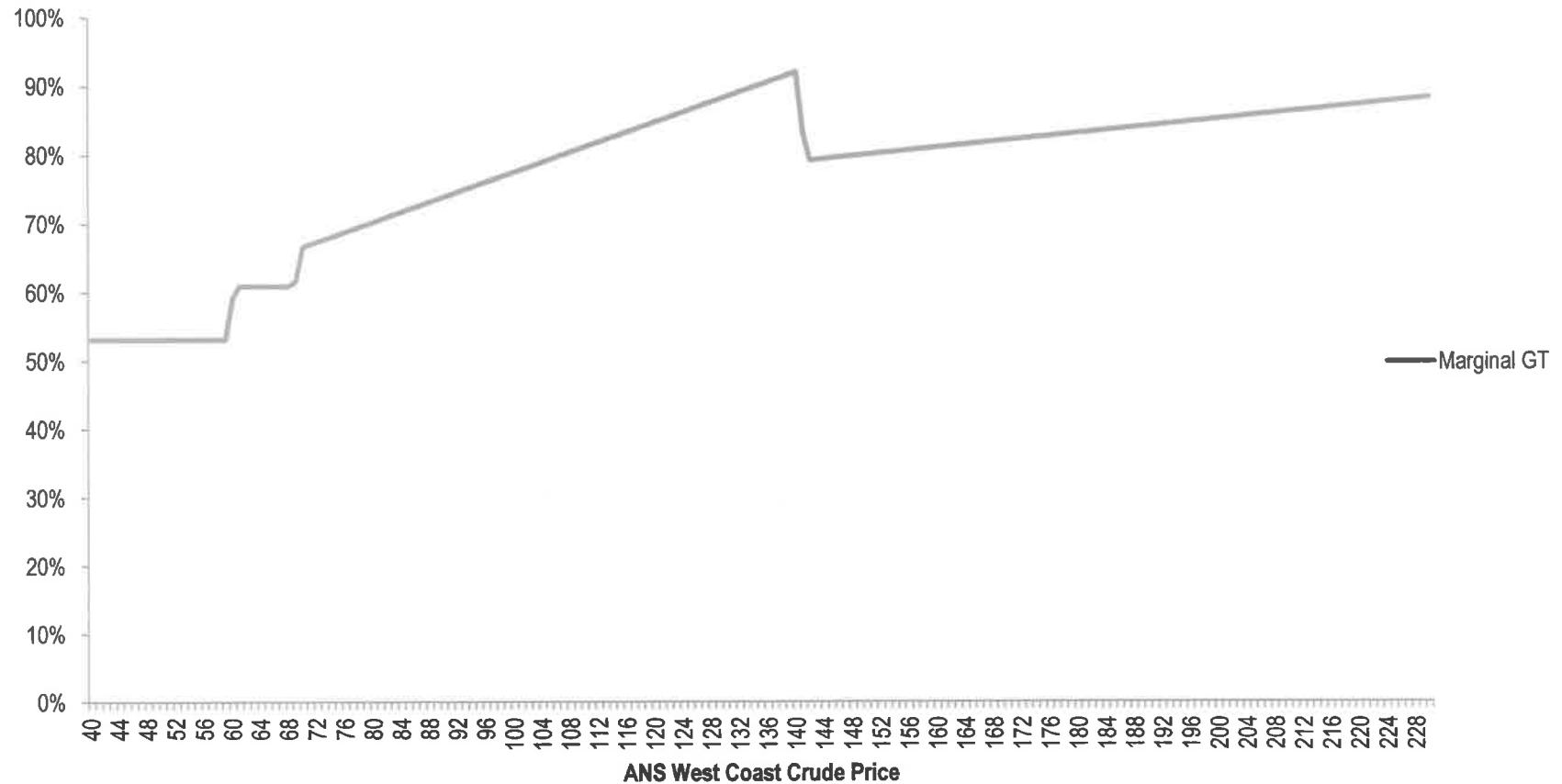
# HB110 – Marginal Government Take (FY 2013 Data)

## HB110: Marginal Government Take



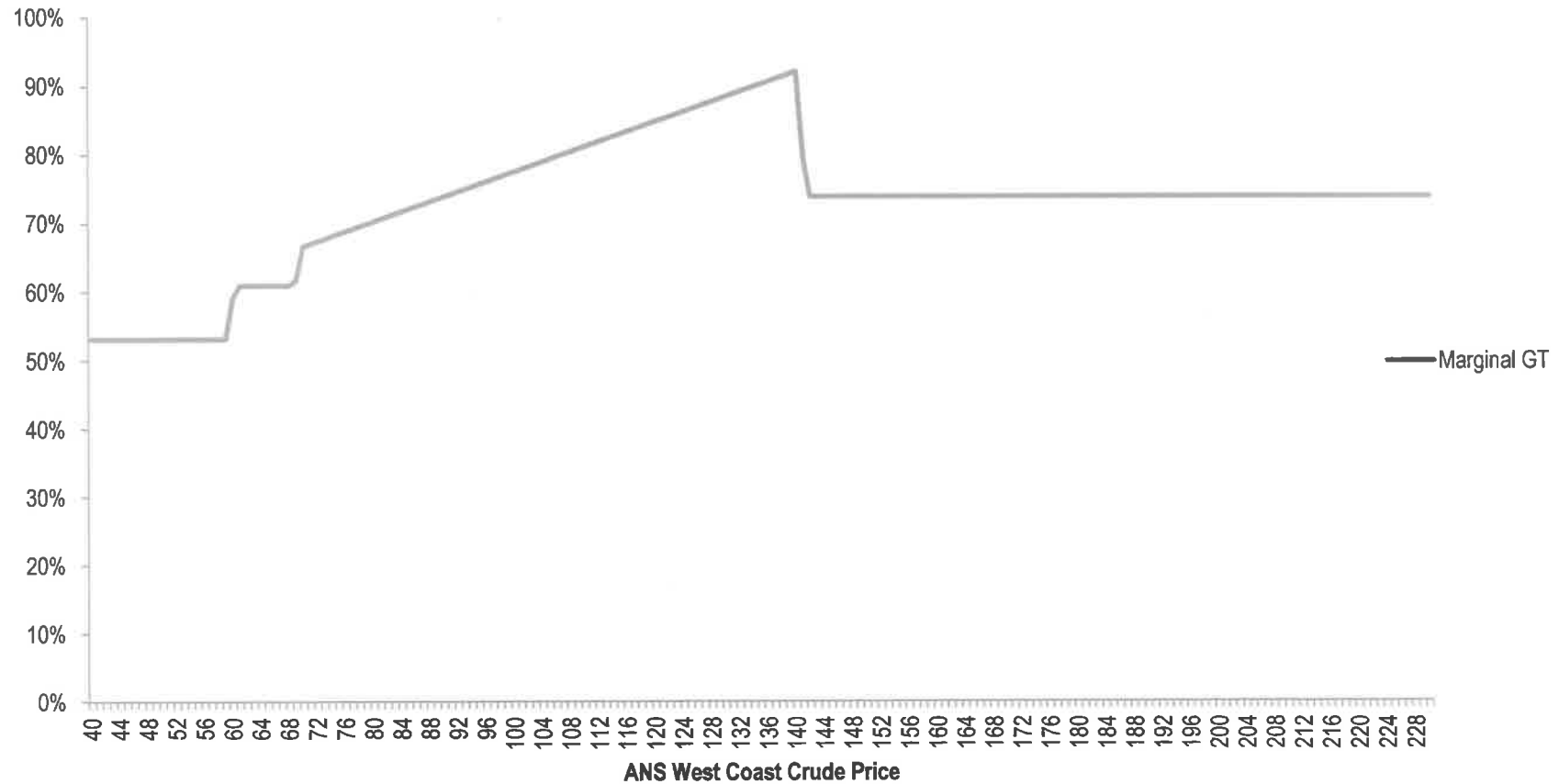
# CSSB 192 – Marginal Government Take (FY 2013 Data)

## CSSB 192: Marginal Government Take



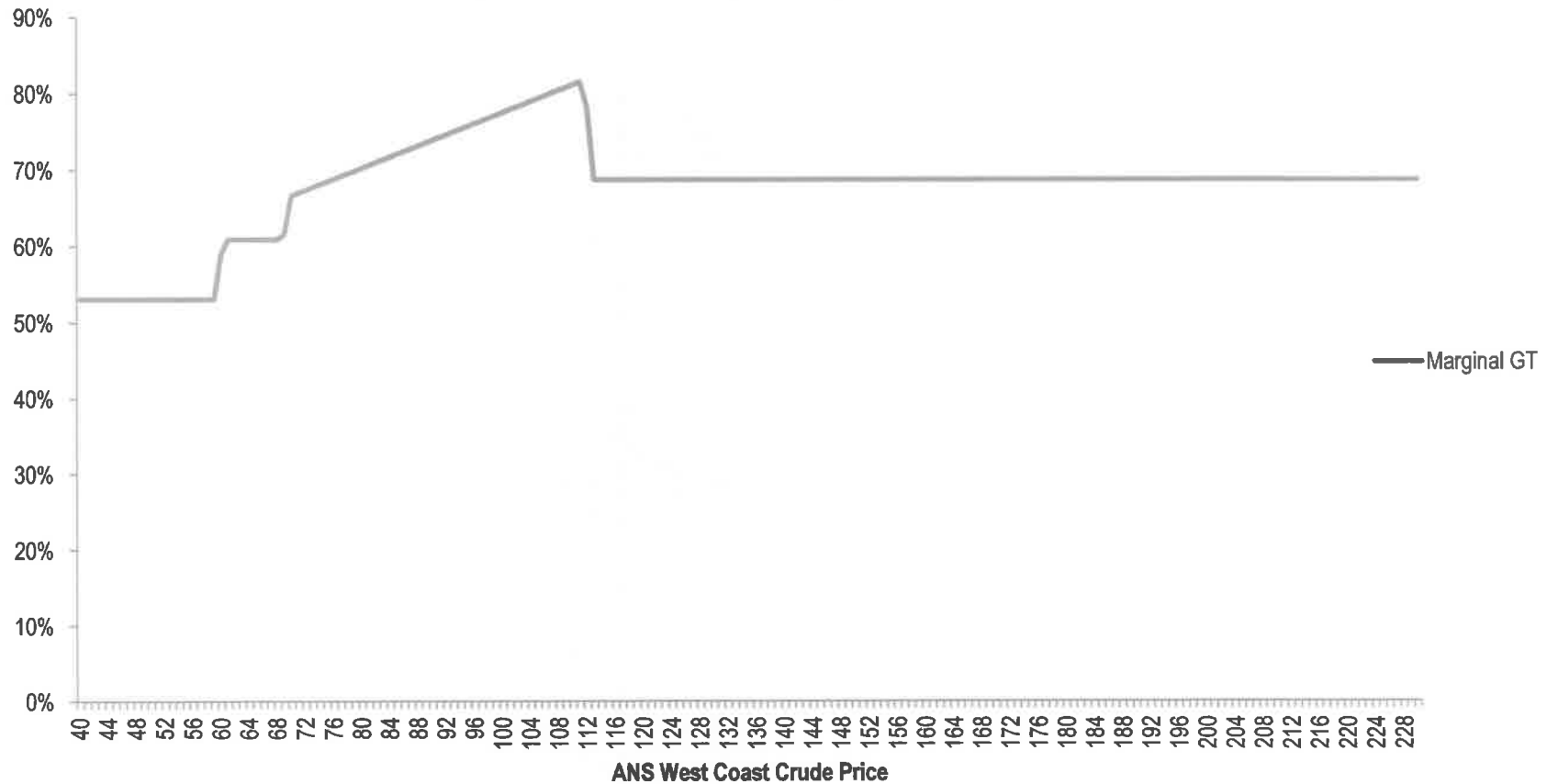
# CSSB 192 with 50% Cap – Marginal Government Take (FY 2013 Data)

## CSSB 192 (50% Maximum): Marginal Government Take



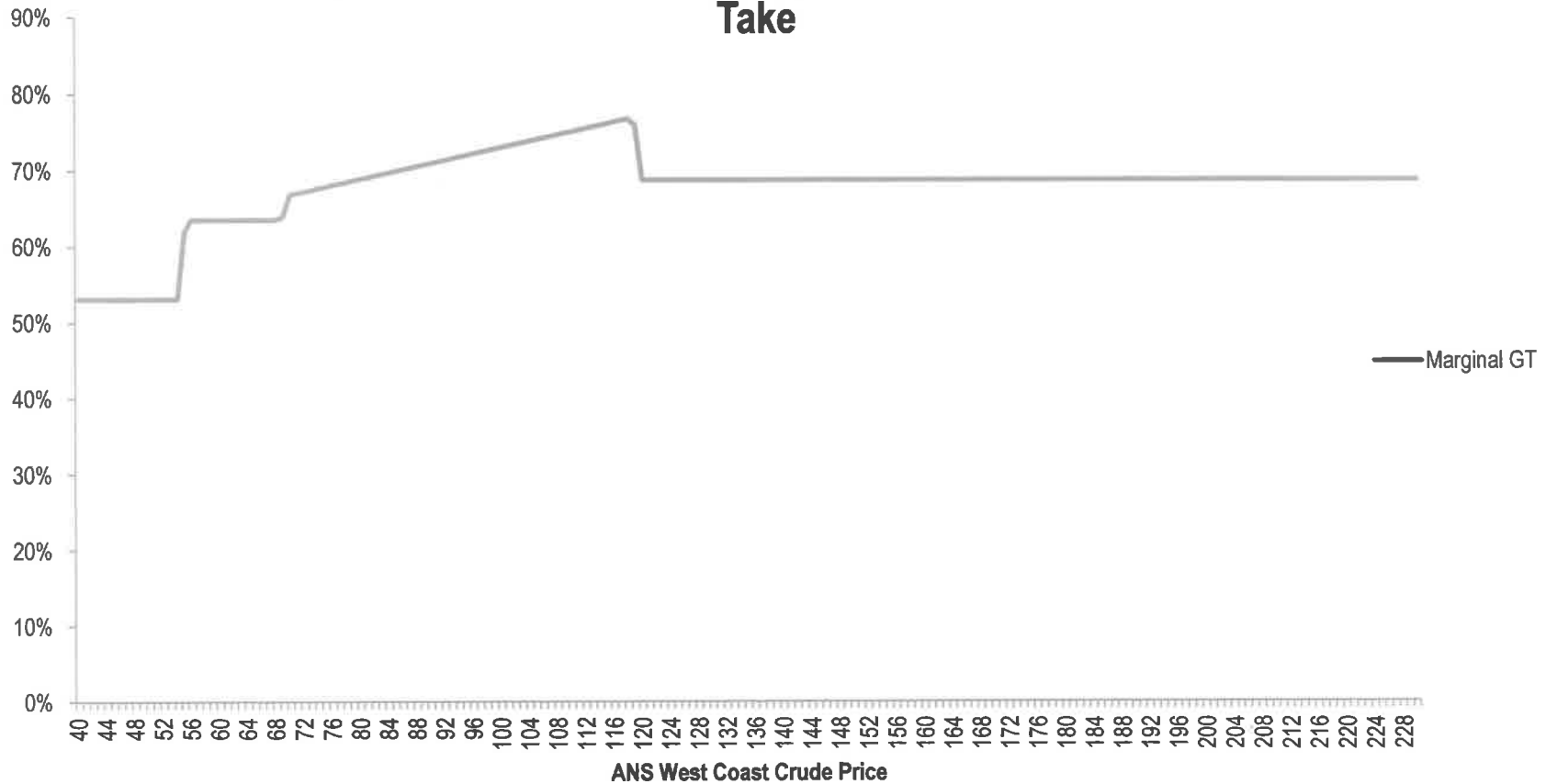
# CSSB 192 with 40% Cap – Marginal Government Take (FY 2013 Data)

## CSSB 192 (40% Maximum): Marginal Government Take



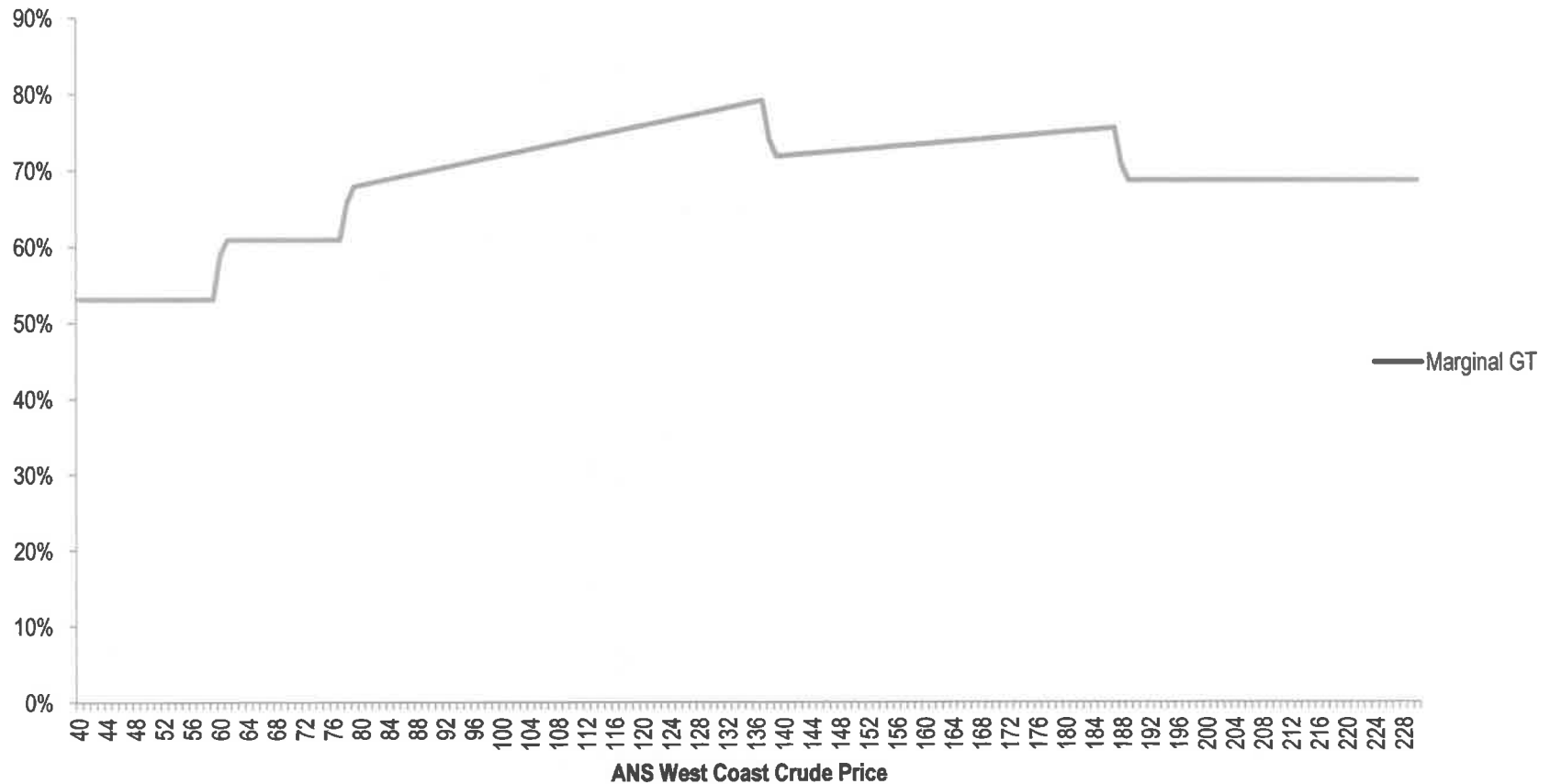
# 30% Base rate, 0.02% Progressivity, 40% Cap – Marginal Government Take (FY 2013 Data)

## CSSB 192 (Base of 30% and 0.2% Progressivity): Marginal Government Take



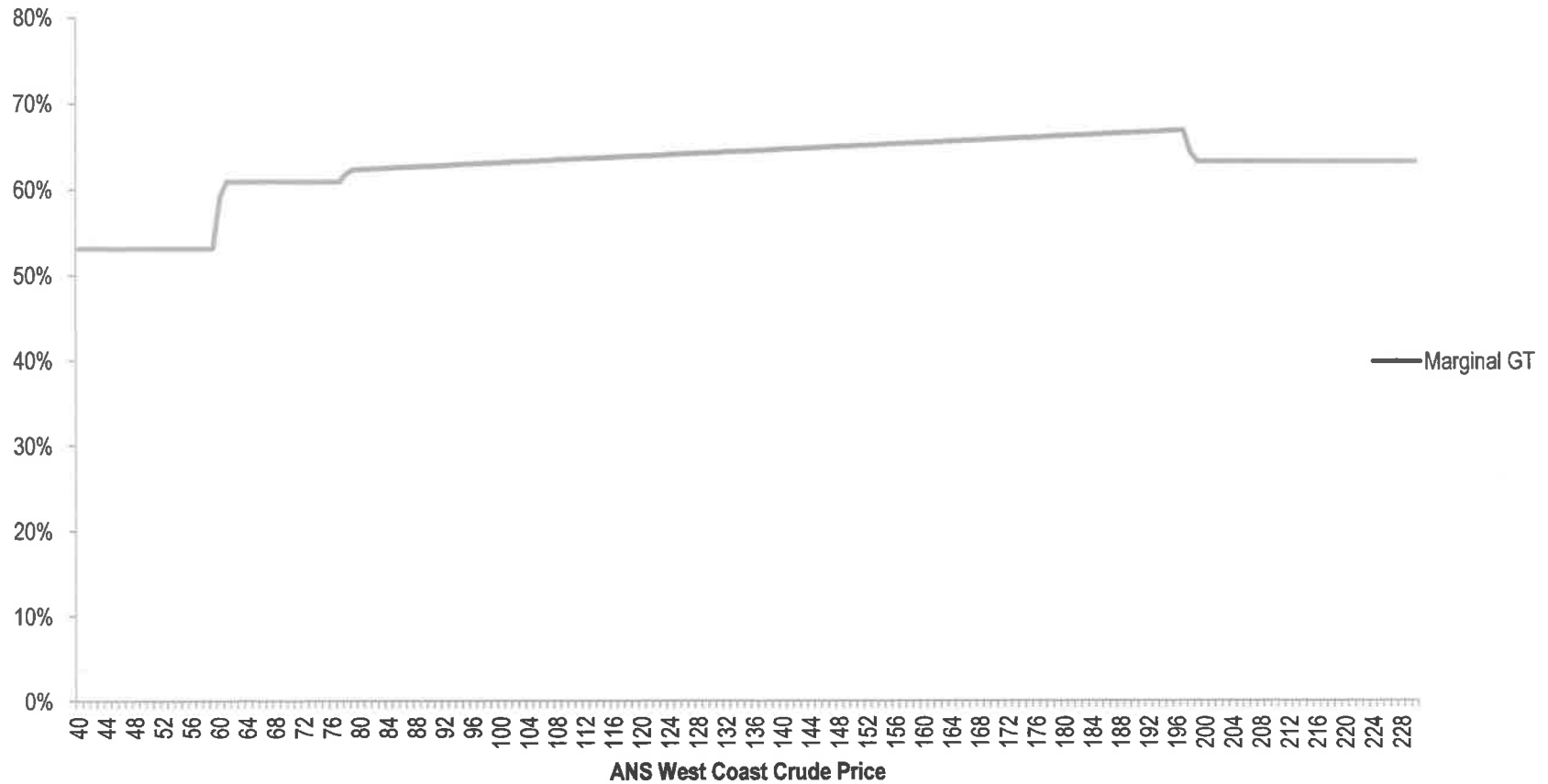
# Severance Tax - 20% maximum – Marginal Government Take (FY 2013 Data)

## Severance Tax - 20% maximum: Marginal Government Take



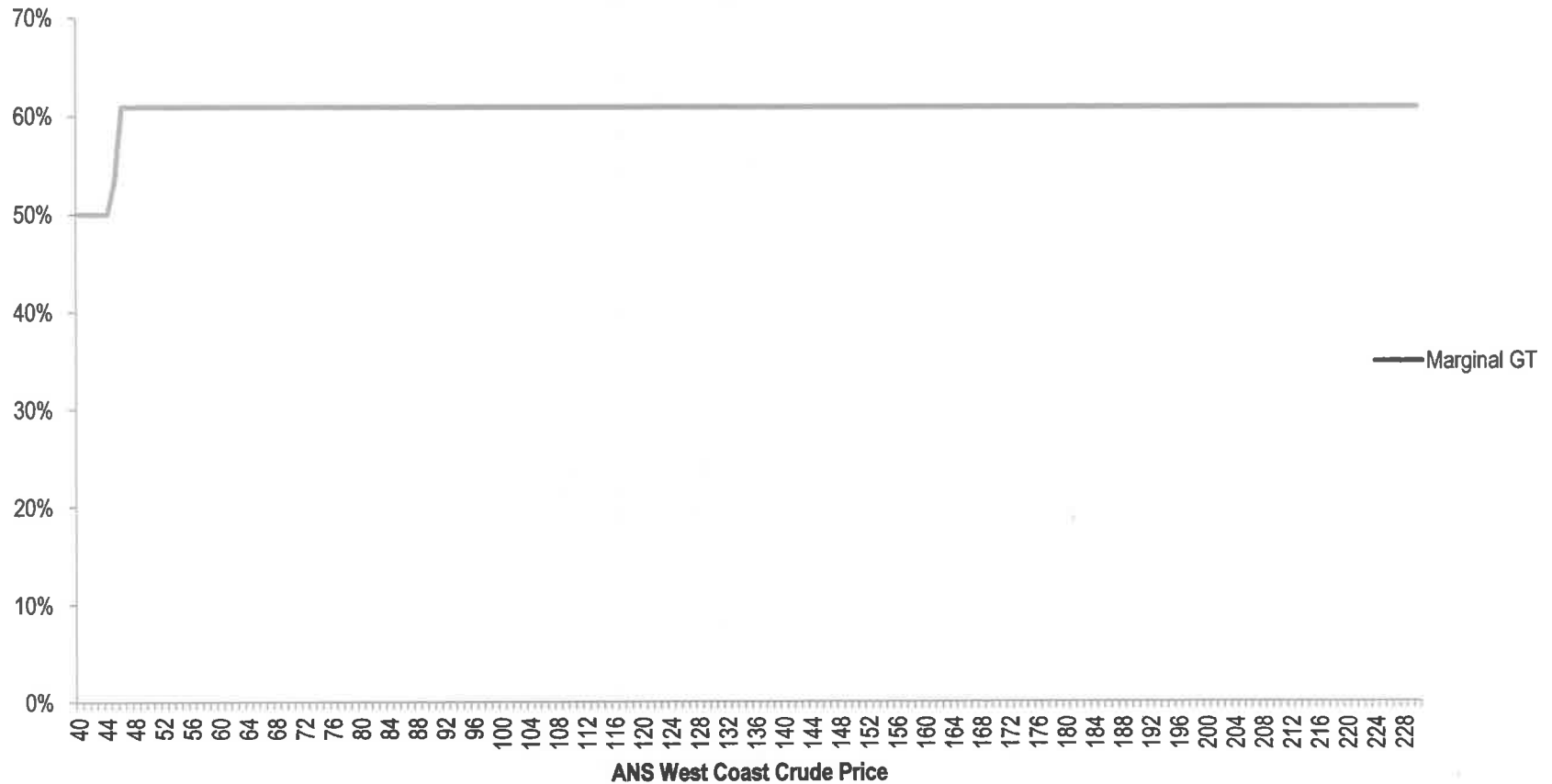
# Severance Tax - 6% maximum – Marginal Government Take (FY 2013 Data)

## Severance Tax - 6% maximum: Marginal Government Take



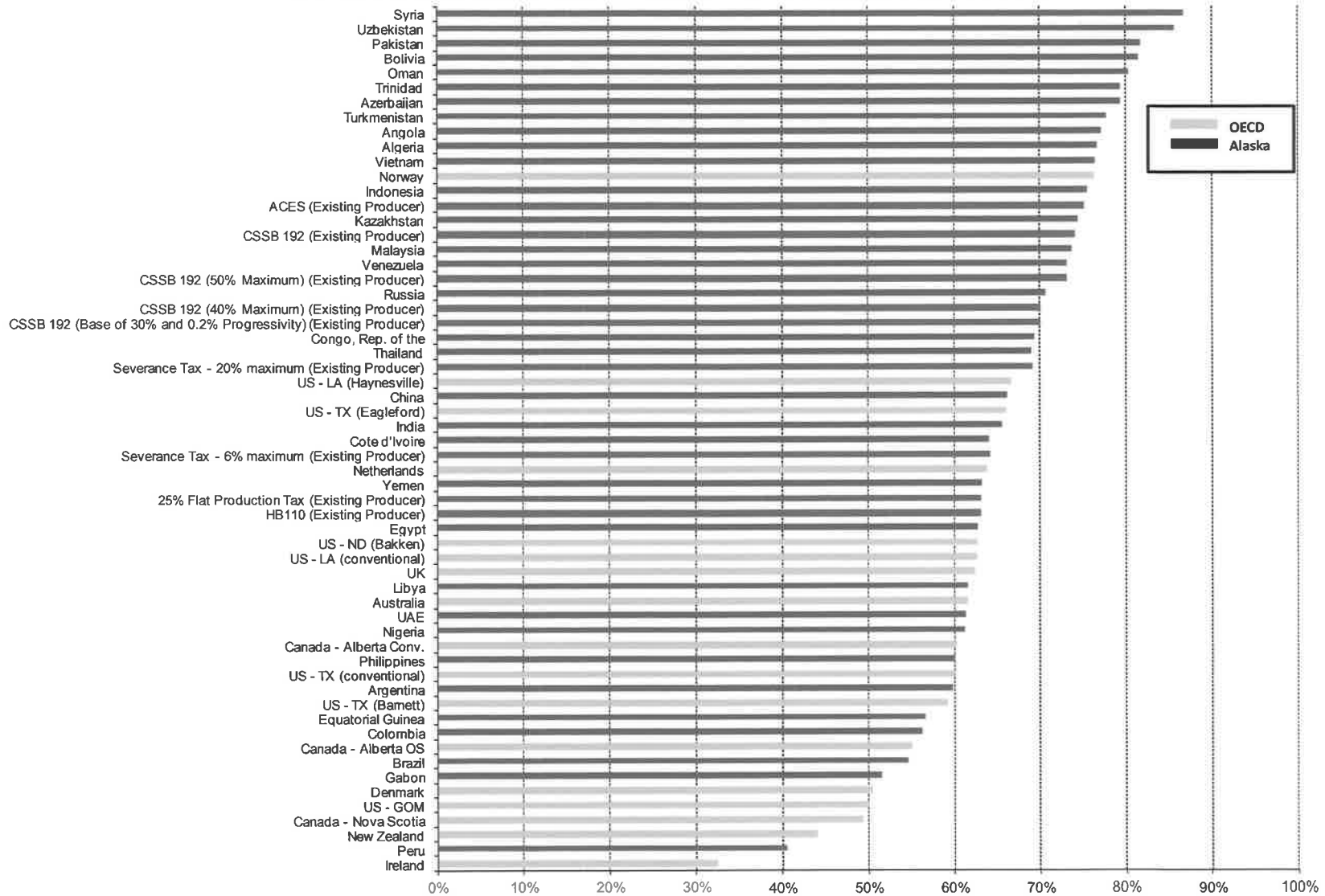
# 25% Flat Production Tax – Marginal Government Take (FY 2013 Data)

## 25% Flat Production Tax: Marginal Government Take



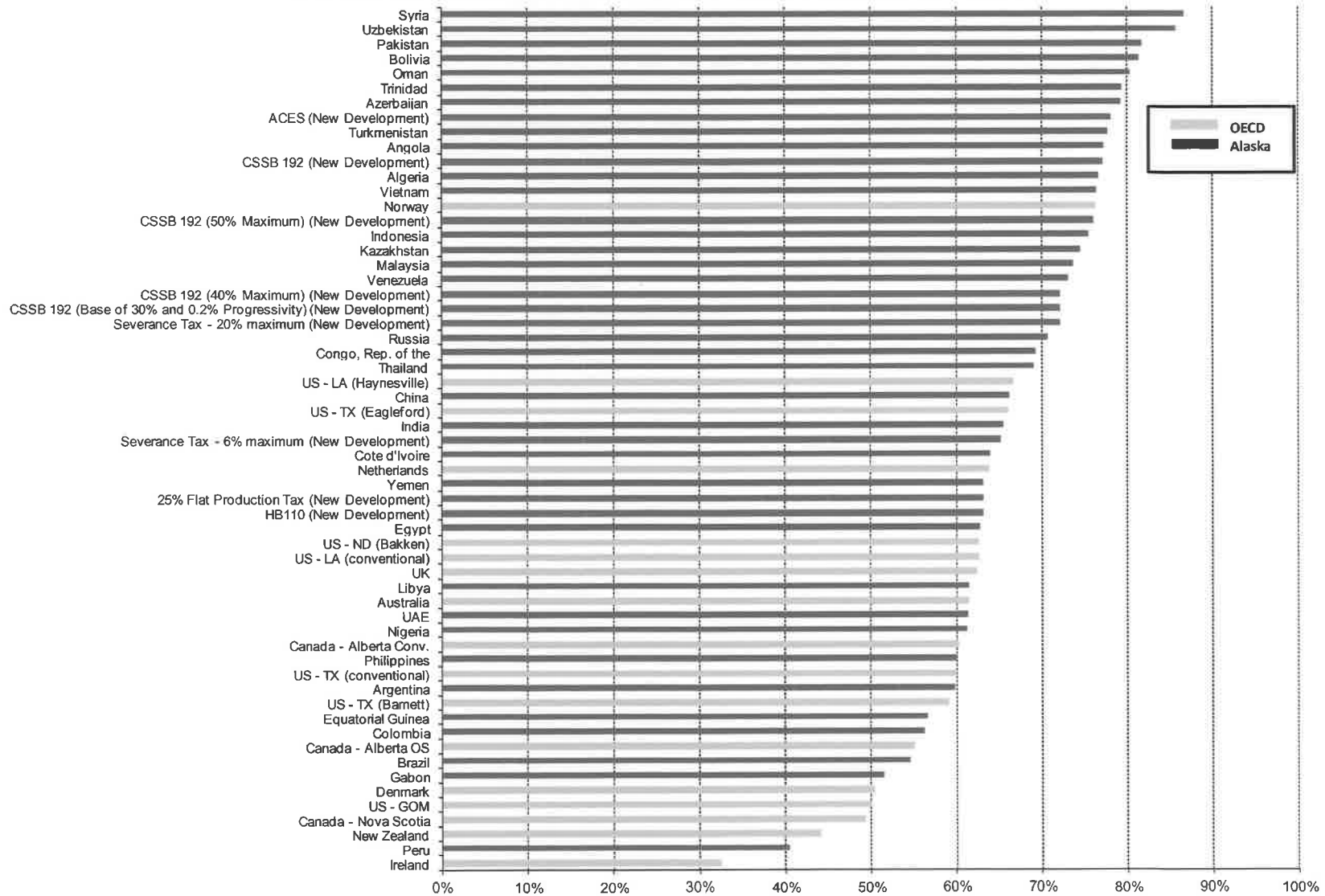
# Regime Competitiveness: Average Government Take

Average Government Take of Global Fiscal Regimes at \$100/bbl



# Regime Competitiveness: Average Government Take

Average Government Take of Global Fiscal Regimes at \$100/bbl



**16.**

**Discussion**

**Slides:**

**Janak Mayer**

**Manager,**

**Upstream & Gas,**

**PFC Energy**

**March 29, 2012**



# Discussion Slides: Alaska Senate Finance Committee

March 29, 2012  
Janak Mayer  
Manager, Upstream & Gas  
PFC Energy

# Difficulties in Existing Fiscal Structure

- The incorporation of progressivity into the Profit-Based Production Tax (Net) in ACES creates two significant problems
  - Large-scale gas production at low gas prices could in the future significantly reduce production tax revenue from existing oil production
    - Resolving this problem within the framework of ACES requires significant complexity
    - Approach to decoupling in CSSB 192 requires ability to split costs between oil and gas production, creating high degree of administrative burden, and limiting capacity of state to effectively audit
  - Options for incentivizing new production are limited, and relatively complex
    - Proposed incentives within existing framework focus on either allowances to reduce Production Tax Value , or revenue exclusions (tax holiday)

## Summary of Progressive Severance Tax (Gross) Option

- A Progressive Severance Tax (Gross) option would instead remove progressivity from the Profit-Based Production Tax (Net), instead levying this tax at the flat, base rate of 25%
- To retain an element of progressivity, a new Progressive Severance Tax (Gross) would then be added to the system. The tax would:
  - Be non-deductible for Profit-Based Production Tax purposes
  - Be levied on gross production (net of royalties)
  - Be levied solely on oil
  - The tax would use a progressivity structure not dissimilar to that under the current system, with progressivity coefficients that apply at different thresholds. The optioned modeled here has the following parameters:
    - Base rate of 0%
    - Progressivity of .25% commencing at a threshold of \$65 (gross value at point of production)
    - At \$125 GVPP, a tax rate of 15% is reached. At this point, progressivity is reduced to 0.05%
    - Progressivity is capped 20%

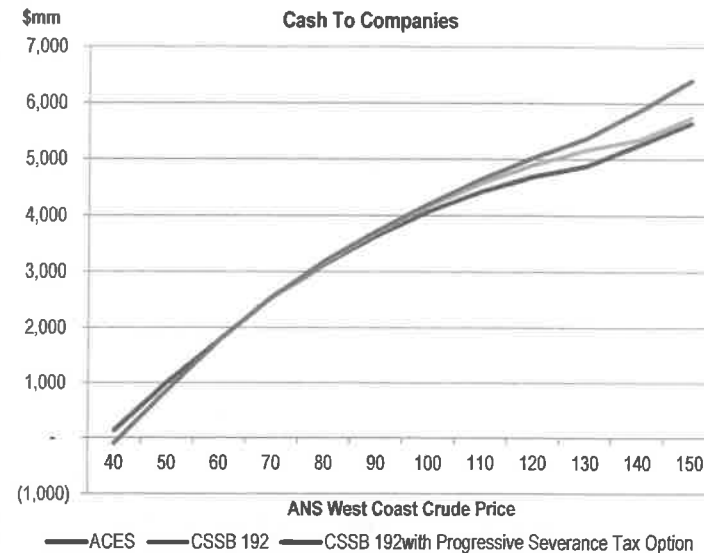
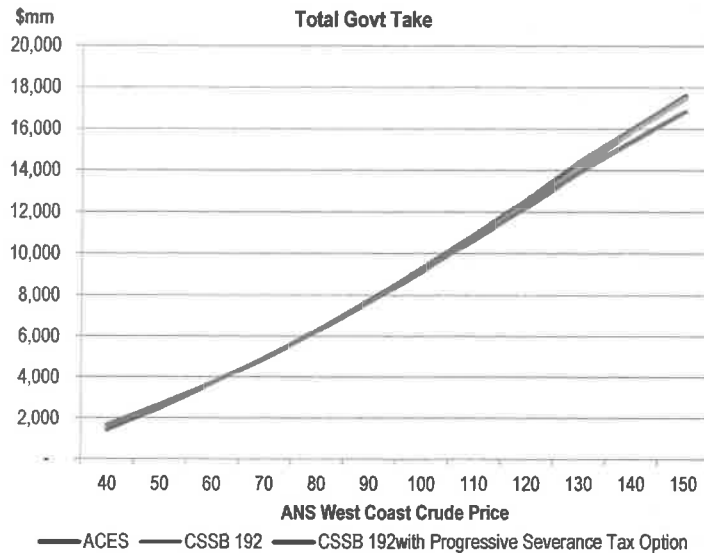
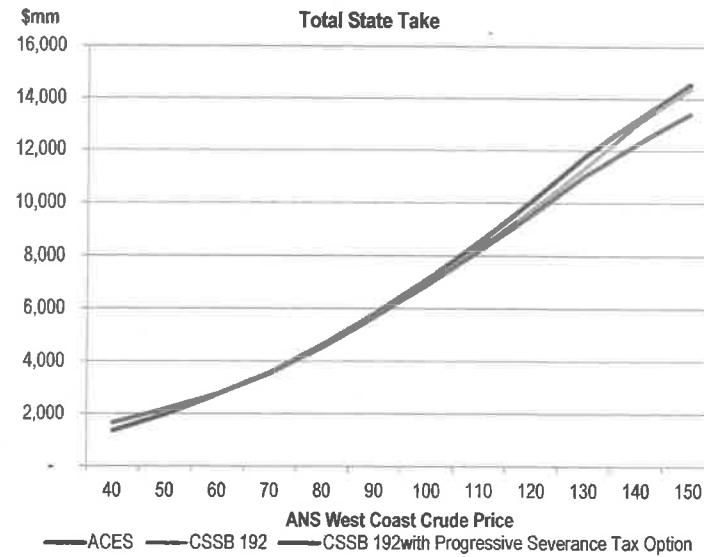
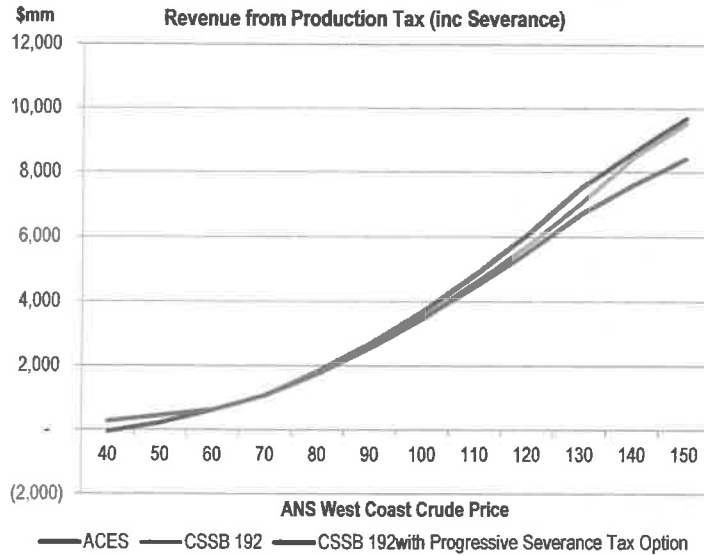
# Benefits of Progressive Severance Tax (Gross) Structure

- By removing progressivity from the Profit-Based Production Tax (Net), and having the progressive element of the structure be a Progressive Severance Tax (Gross), two things become much easier to achieve
  - The issue of gas production reducing production tax revenue ceases to be a problem without progressivity in the Profit-Based Production Tax
    - Complex provisions to split costs between oil and gas production under CSSB 192 are thus no longer required
  - Significant incentives can be provided to new production, by eliminating or reducing the Progressive Severance Tax (Gross) for new production
- A wide range of levels of government take can be achieved using this structure, depending on the parameters applied

# FY 2013 Revenue Comparison

	Production Tax			Total State Take			Total Government Take			Cash to Companies		
	ACES	CSSB 192	CSSB 192 with Progressive Severance Tax Option	ACES	CSSB 192	CSSB 192 with Progressive Severance Tax Option	ACES	CSSB 192	CSSB 192 with Progressive Severance Tax Option	ACES	CSSB 192	CSSB 192 with Progressive Severance Tax Option
ANS West Coast Oil Price												
40	(39)	289	289	1,352	1,660	1,660	1,427	1,660	1,660	139	(95)	(95)
50	222	461	461	1,983	2,202	2,202	2,527	2,669	2,669	1,010	868	868
60	653	653	653	2,769	2,769	2,769	3,728	3,728	3,728	1,780	1,780	1,780
70	1,109	1,106	1,084	3,577	3,575	3,555	4,943	4,941	4,929	2,536	2,538	2,551
80	1,831	1,792	1,754	4,631	4,595	4,560	6,318	6,294	6,272	3,133	3,157	3,179
90	2,692	2,599	2,571	5,811	5,725	5,699	7,775	7,719	7,703	3,648	3,703	3,720
100	3,691	3,527	3,474	7,117	6,966	6,918	9,314	9,216	9,184	4,080	4,178	4,209
110	4,827	4,575	4,463	8,549	8,318	8,215	10,935	10,785	10,718	4,430	4,581	4,647
120	6,102	5,744	5,538	10,108	9,781	9,592	12,638	12,425	12,302	4,698	4,911	5,034
130	7,515	7,035	6,700	11,794	11,354	11,047	14,424	14,138	13,939	4,884	5,170	5,370
140	8,614	8,445	7,598	13,192	13,037	12,261	16,023	15,922	15,417	5,257	5,357	5,862
150	9,684	9,512	8,417	14,563	14,406	13,402	17,604	17,502	16,849	5,647	5,749	6,402

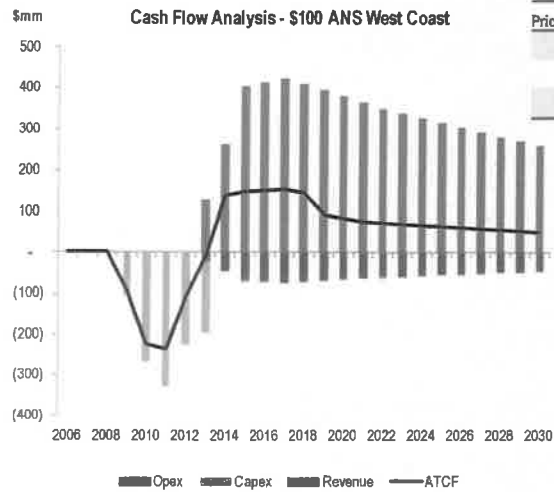
# FY 2013 Revenue Comparison



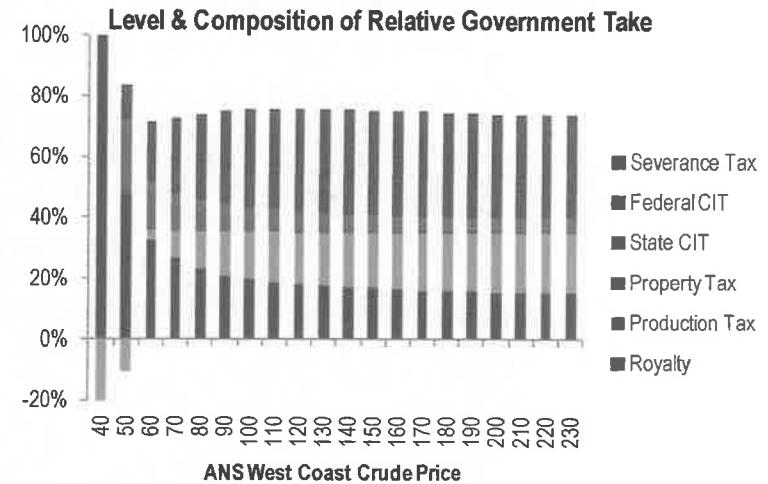
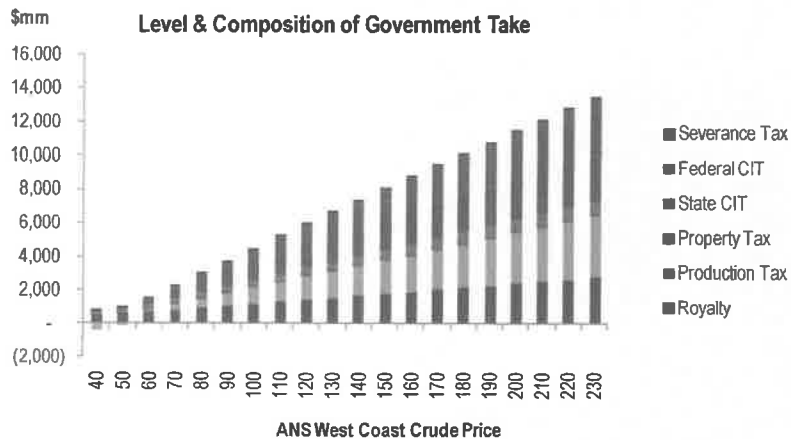
# Incentives for New Production

- Significant incentives can be provided to new production, by eliminating or reducing the Progressive Severance Tax (Gross) on any combination of:
  - Production from new areas
  - Production from new plans of development (determined through the regulatory process to be for “new production”)
  - Production above a fixed decline rate
- Here, a reduced rate of Progressive Severance Tax has been modeled, using the following parameters for new production:
  - Base rate of 0%
  - Progressivity of .05% commencing at a threshold of \$65 (gross value at point of production)
  - Progressivity is capped 5%
- Following slides show a new, high-cost 10 mb/d development under
  - The regular rate
  - The reduced rate (with a time limit of 7 years)
  - The reduced rate (with no time limit)

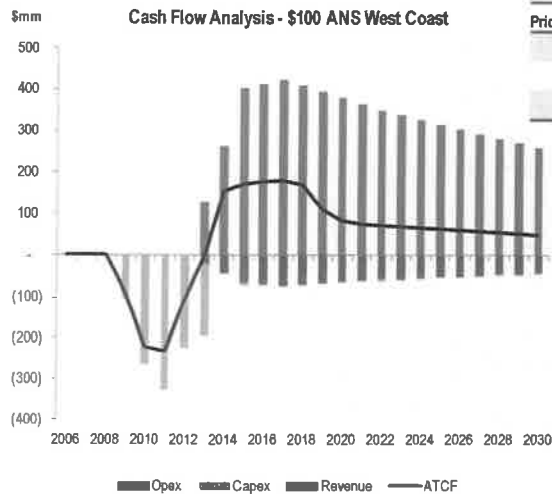
# Severance Tax – 20% Maximum (New Producer)



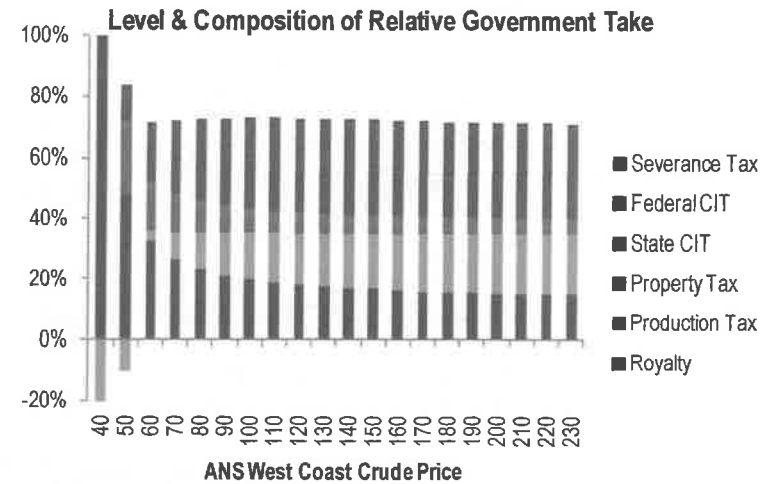
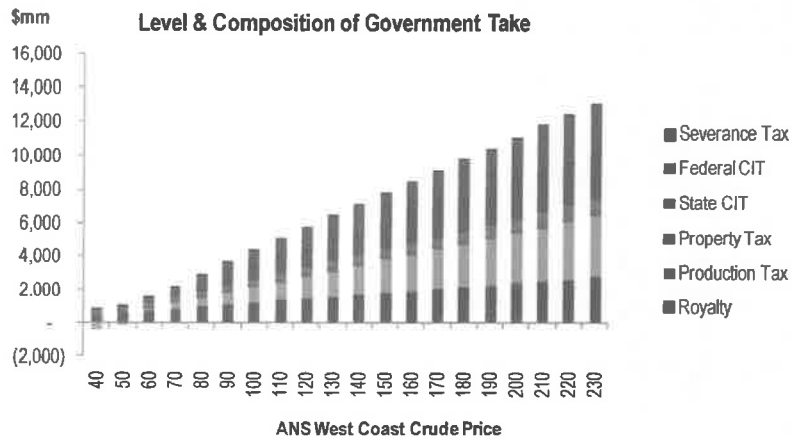
Price	Royalty	Severance Tax	Production Tax	Property Tax	State CIT	Total State Take	Federal CIT	Total GT
40	156%	4%	-115%	96%	0%	140%	0%	140%
50	47%	6%	-11%	23%	1%	67%	6%	73%
60	32%	9%	3%	13%	3%	51%	10%	71%
70	26%	13%	9%	9%	3%	51%	12%	73%
80	23%	16%	12%	7%	3%	62%	12%	74%
90	21%	18%	14%	6%	3%	63%	12%	75%
100	20%	20%	15%	5%	3%	63%	12%	75%
110	19%	21%	16%	4%	3%	63%	13%	76%
120	18%	21%	17%	4%	3%	63%	13%	76%
130	17%	22%	17%	3%	3%	63%	13%	76%
140	17%	22%	18%	3%	3%	63%	13%	75%
150	17%	22%	18%	3%	3%	62%	13%	75%
160	16%	21%	18%	2%	3%	62%	13%	75%
170	16%	21%	19%	2%	3%	62%	13%	75%
180	16%	21%	19%	2%	4%	61%	13%	75%
190	16%	21%	19%	2%	4%	61%	13%	74%
200	15%	21%	19%	2%	4%	60%	13%	74%
210	15%	20%	19%	2%	4%	60%	14%	74%
220	15%	20%	19%	2%	4%	60%	14%	74%
230	15%	20%	20%	2%	4%	60%	14%	74%



# Severance Tax – 20% Maximum with first 7 years at a 5% maximum (New Producer)

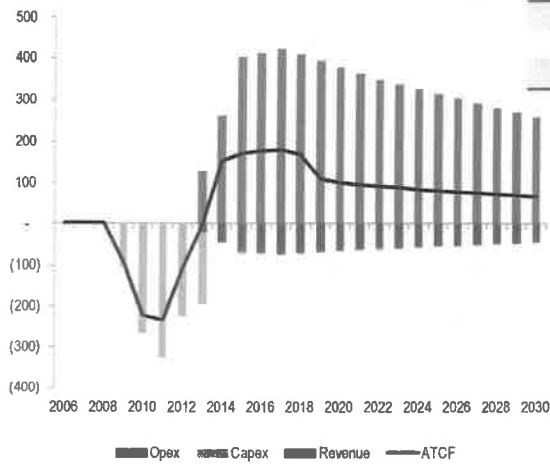


Price	Royalty	Severance Tax	Production Tax	Property Tax	State CIT	Total State Take	Federal CIT	Total GT
40	156%	4%	-115%	96%	0%	140%	0%	140%
50	47%	6%	-11%	23%	1%	67%	6%	73%
60	32%	9%	3%	13%	3%	61%	10%	71%
70	26%	12%	9%	9%	3%	60%	12%	72%
80	23%	15%	12%	7%	3%	60%	12%	73%
90	21%	16%	14%	6%	3%	61%	12%	73%
100	20%	17%	15%	5%	3%	60%	13%	73%
110	19%	18%	16%	4%	3%	60%	13%	73%
120	18%	18%	17%	4%	3%	60%	13%	73%
130	17%	18%	17%	3%	4%	59%	13%	73%
140	17%	18%	18%	3%	4%	59%	14%	73%
150	17%	18%	18%	3%	4%	59%	14%	72%
160	16%	17%	18%	2%	4%	58%	14%	72%
170	16%	17%	19%	2%	4%	58%	14%	72%
180	16%	17%	19%	2%	4%	57%	14%	72%
190	16%	17%	19%	2%	4%	57%	14%	71%
200	15%	17%	19%	2%	4%	57%	15%	71%
210	15%	16%	19%	2%	4%	57%	15%	71%
220	15%	16%	19%	2%	4%	56%	15%	71%
230	15%	16%	20%	2%	4%	56%	15%	71%



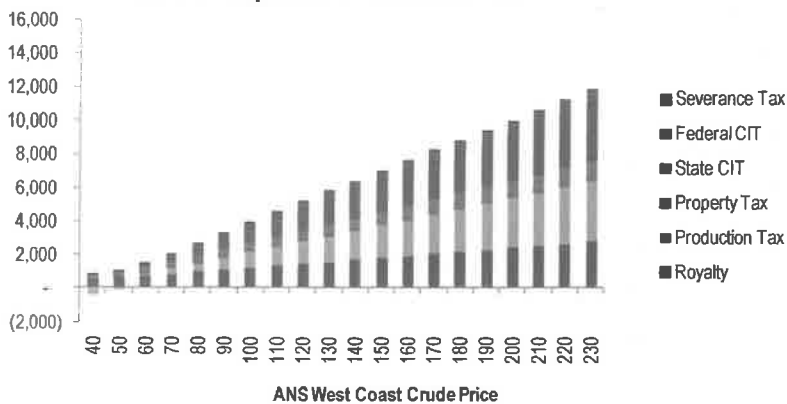
# Severance Tax – 5% Maximum (New Producer)

Cash Flow Analysis - \$100 ANS West Coast

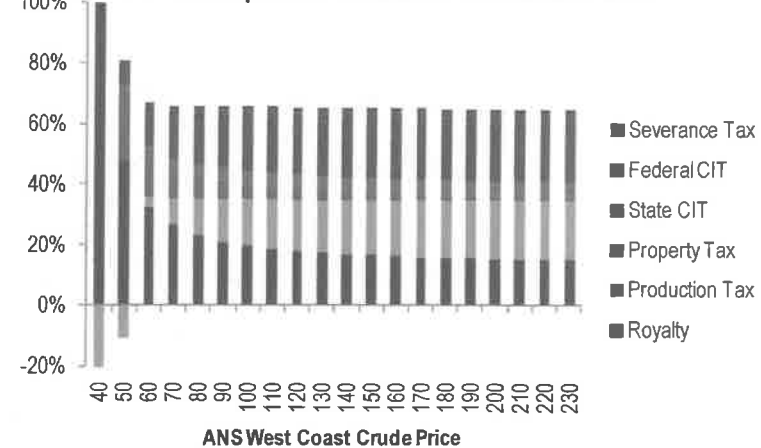


Price	Royalty	Severance Tax	Production Tax	Property Tax	State CIT	Total State Take	Federal CIT	Total GT
40	156%	1%	-115%	96%	0%	137%	0%	137%
50	47%	1%	-11%	23%	2%	63%	7%	69%
60	32%	2%	3%	13%	3%	54%	13%	67%
70	26%	3%	9%	9%	4%	51%	15%	66%
80	23%	4%	12%	7%	4%	50%	16%	66%
90	21%	4%	14%	6%	4%	49%	16%	66%
100	20%	5%	15%	5%	4%	49%	17%	66%
110	19%	5%	16%	4%	4%	49%	17%	66%
120	18%	5%	17%	4%	5%	48%	17%	65%
130	17%	5%	17%	3%	5%	48%	17%	65%
140	17%	5%	18%	3%	5%	48%	17%	65%
150	17%	5%	18%	3%	5%	47%	18%	65%
160	16%	5%	18%	2%	5%	47%	18%	65%
170	16%	5%	19%	2%	5%	47%	18%	65%
180	16%	5%	19%	2%	5%	47%	18%	65%
190	16%	5%	19%	2%	5%	46%	18%	65%
200	15%	5%	19%	2%	5%	46%	18%	65%
210	15%	5%	19%	2%	5%	46%	18%	65%
220	15%	5%	19%	2%	5%	46%	18%	65%
230	15%	5%	20%	2%	5%	46%	19%	64%

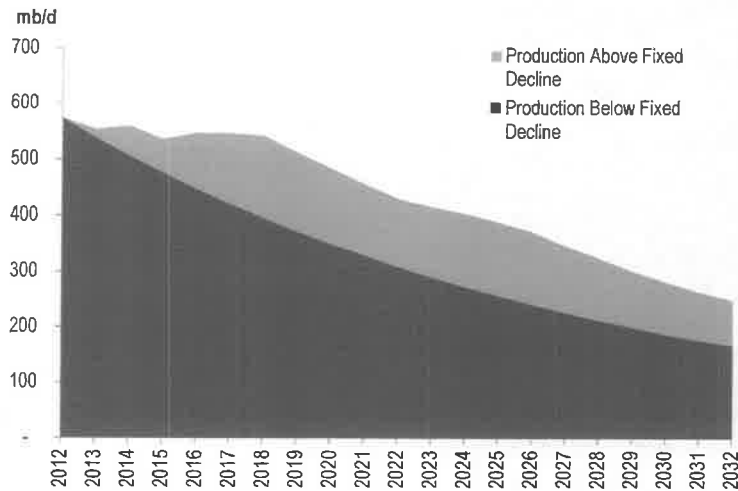
Level & Composition of Government Take



Level & Composition of Relative Government Take



# 20 Year Revenue Impact of Reduced Rate for New Production

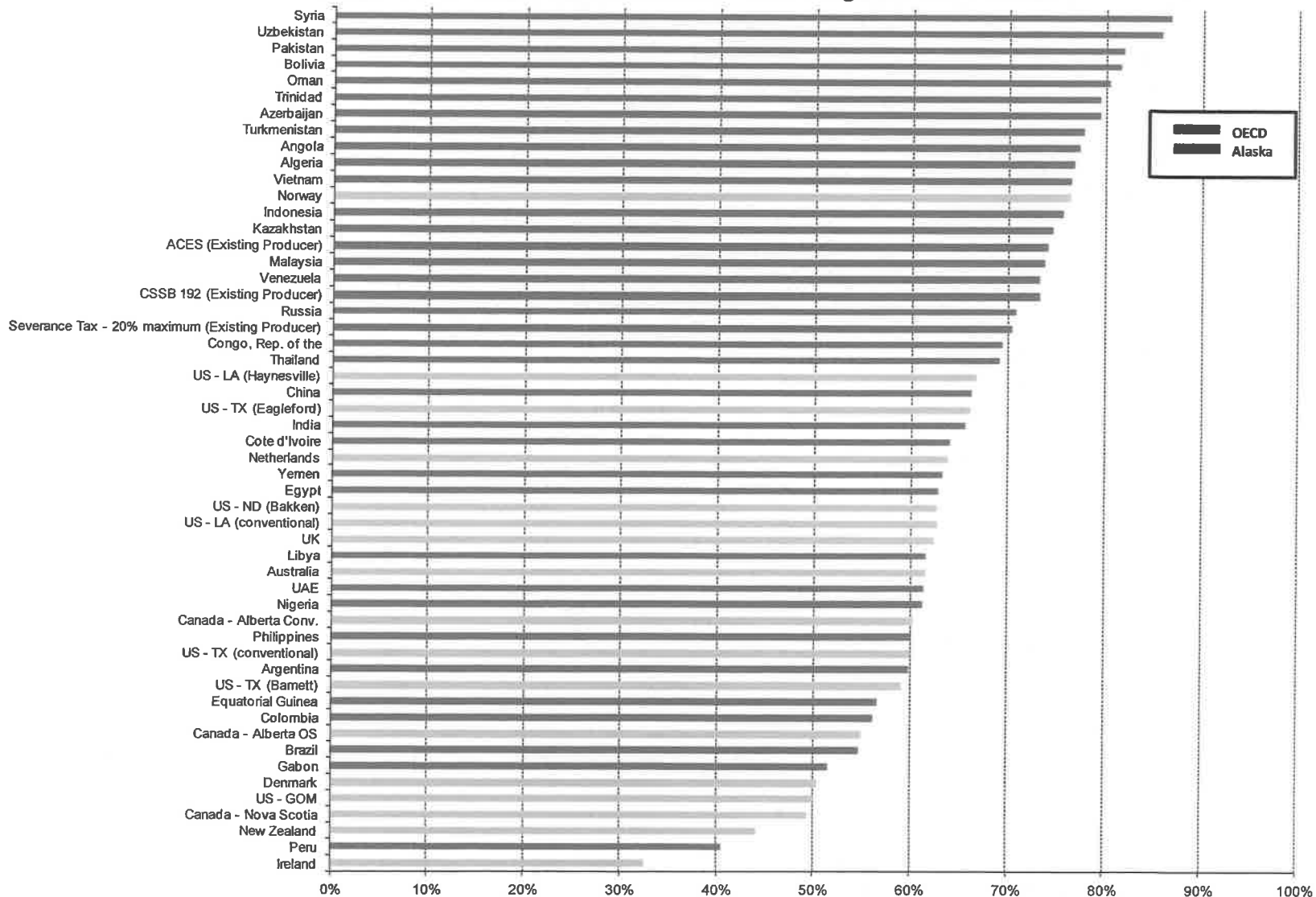


20 Year NPV of Cash Flows

ANS West Coast Oil Price	Production Tax		Total State Take		Total Government Tak		Cash to Companies	
	High Rate Only	Reduced Rate for New Production	High Rate Only	Reduced Rate for New Production	High Rate Only	Reduced Rate for New Production	High Rate Only	Reduced Rate for New Production
	40	1,371	1,371	13,913	13,913	16,480	16,480	3,921
50	3,155	3,099	19,190	19,139	26,324	26,290	12,448	12,481
60	7,165	6,682	26,510	26,068	37,511	37,224	19,631	19,918
70	13,448	11,636	35,911	34,252	50,052	48,973	25,461	26,539
80	21,499	17,178	46,933	42,975	63,646	61,073	30,238	32,811
90	30,322	23,008	58,661	51,962	77,699	73,344	34,555	38,910
100	39,594	29,019	70,801	61,114	92,020	85,723	38,605	44,902
110	48,994	35,114	83,058	70,344	106,416	98,152	42,579	50,843
120	58,108	41,164	95,053	79,532	120,643	110,554	46,723	56,812
130	66,508	47,183	106,394	88,692	134,444	122,938	51,293	62,799
140	74,430	53,233	117,297	97,881	147,961	135,340	56,147	68,767
150	82,491	59,251	128,327	107,040	161,560	147,724	60,918	74,755

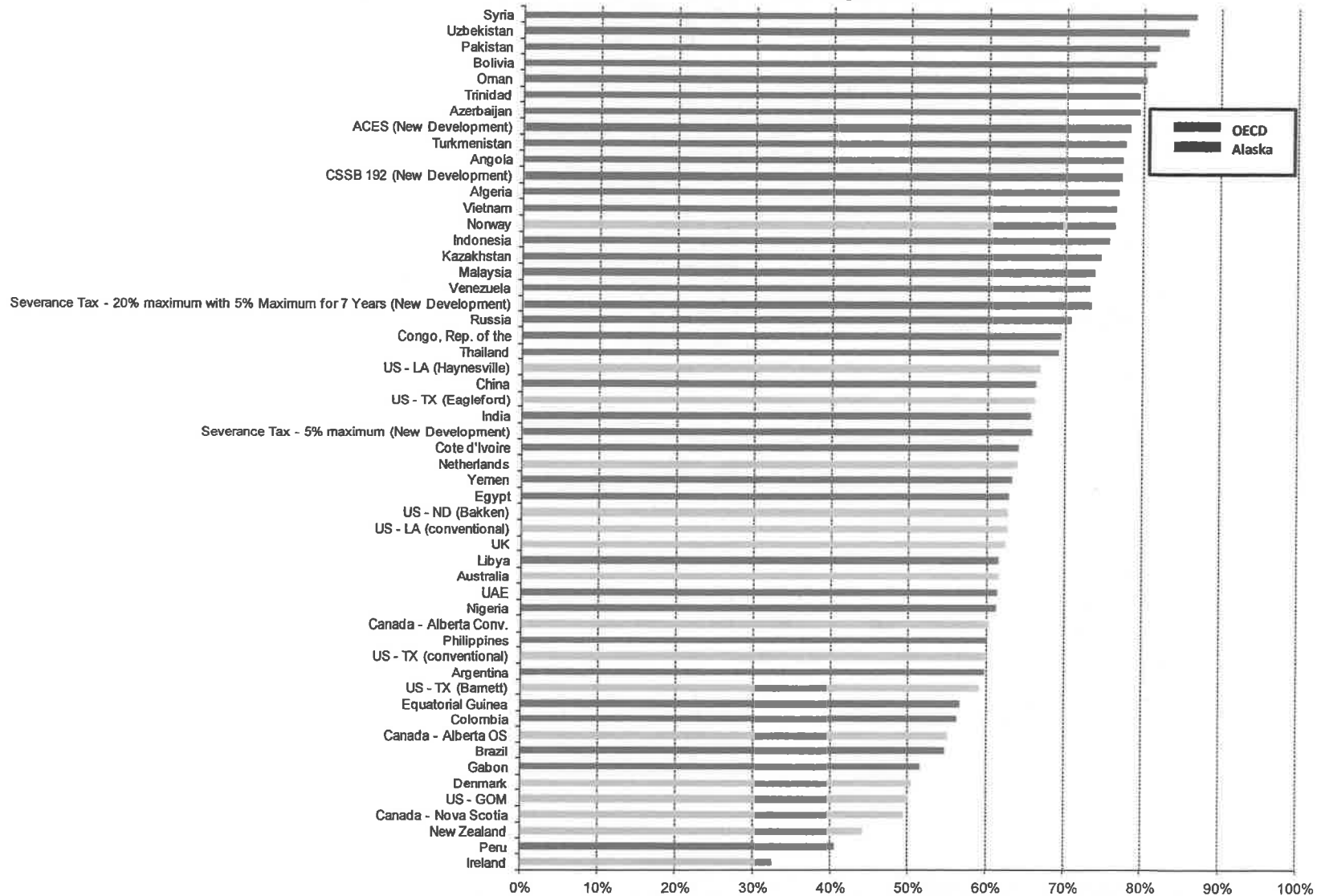
# Regime Competitiveness: Relative Government Take (Existing Production)

Average Government Take of Global Fiscal Regimes at \$100/bbl



# Regime Competitiveness: Relative Government Take (New Development)

Average Government Take of Global Fiscal Regimes at \$100/bbl



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**Continue in**  
**SB 192 (File 5)**