

# Senate Resources Committee

## Alaska Fiscal System Discussion Slides

February 22 2013

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PFC Energy

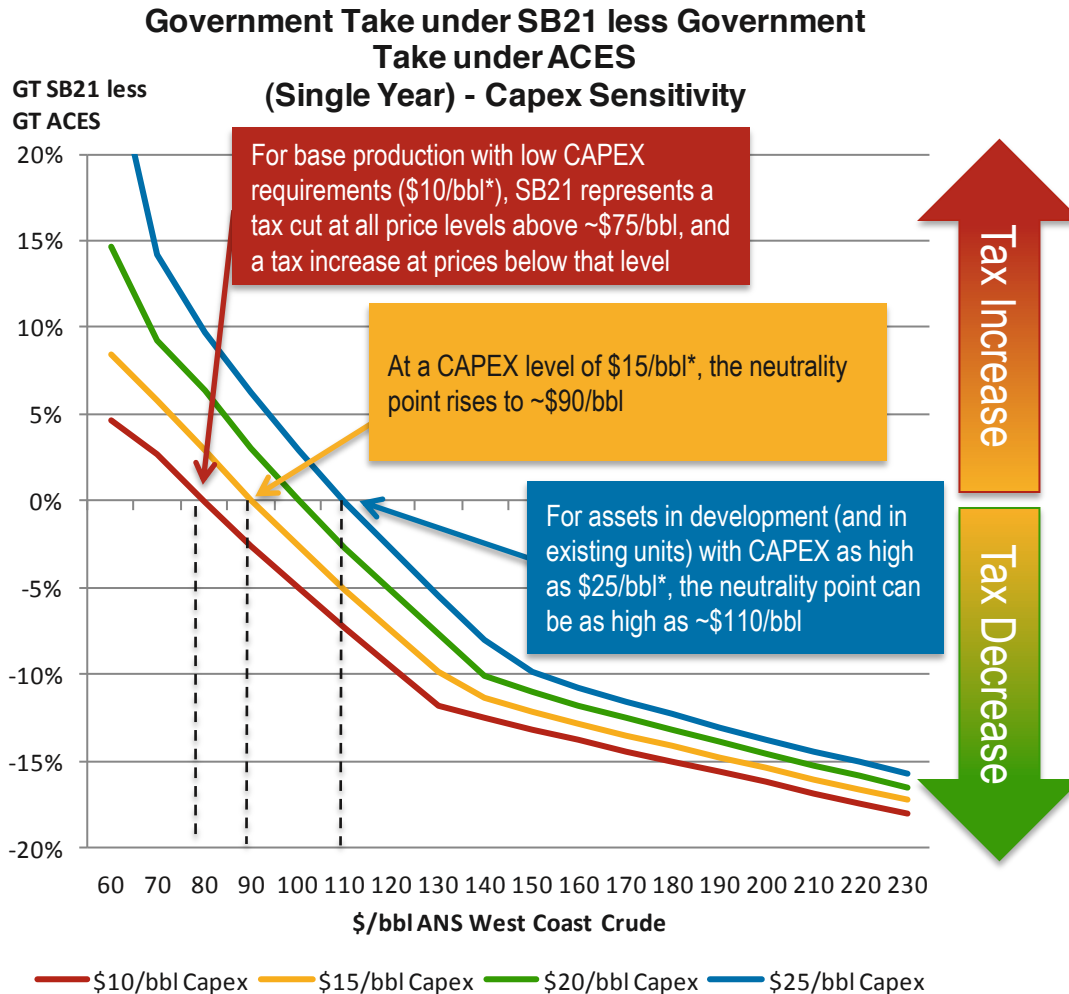
## Requested Analysis:

Letter of Intent recommendation for evaluation point 3 –  
impact of continuing capital credits for well expenditures

Impact of combining well credits with bracketed  
progressivity

Impact of instead using a 35% base rate tax, combined  
with a production-based credit of \$5/taxable bbl, claimable  
only in year of production

# Government Take under SB21/HB72 and ACES – Capex Sensitivity



\* All CAPEX figures are in gross bbl terms (\$15 per gross bbl is roughly equivalent to DOR 2014 average North Slope forecast of \$19.6 per bbl net of royalty, when adjusted for gross/net and for capital expenditures by non-taxable entities)

- As noted in PFC Energy testimony on 1/31/13, at low oil prices, Relative Government Take under SB 21 is higher than under ACES, due to the impact of low or no progressivity, combined with the elimination of the 20% capital credit under SB 21

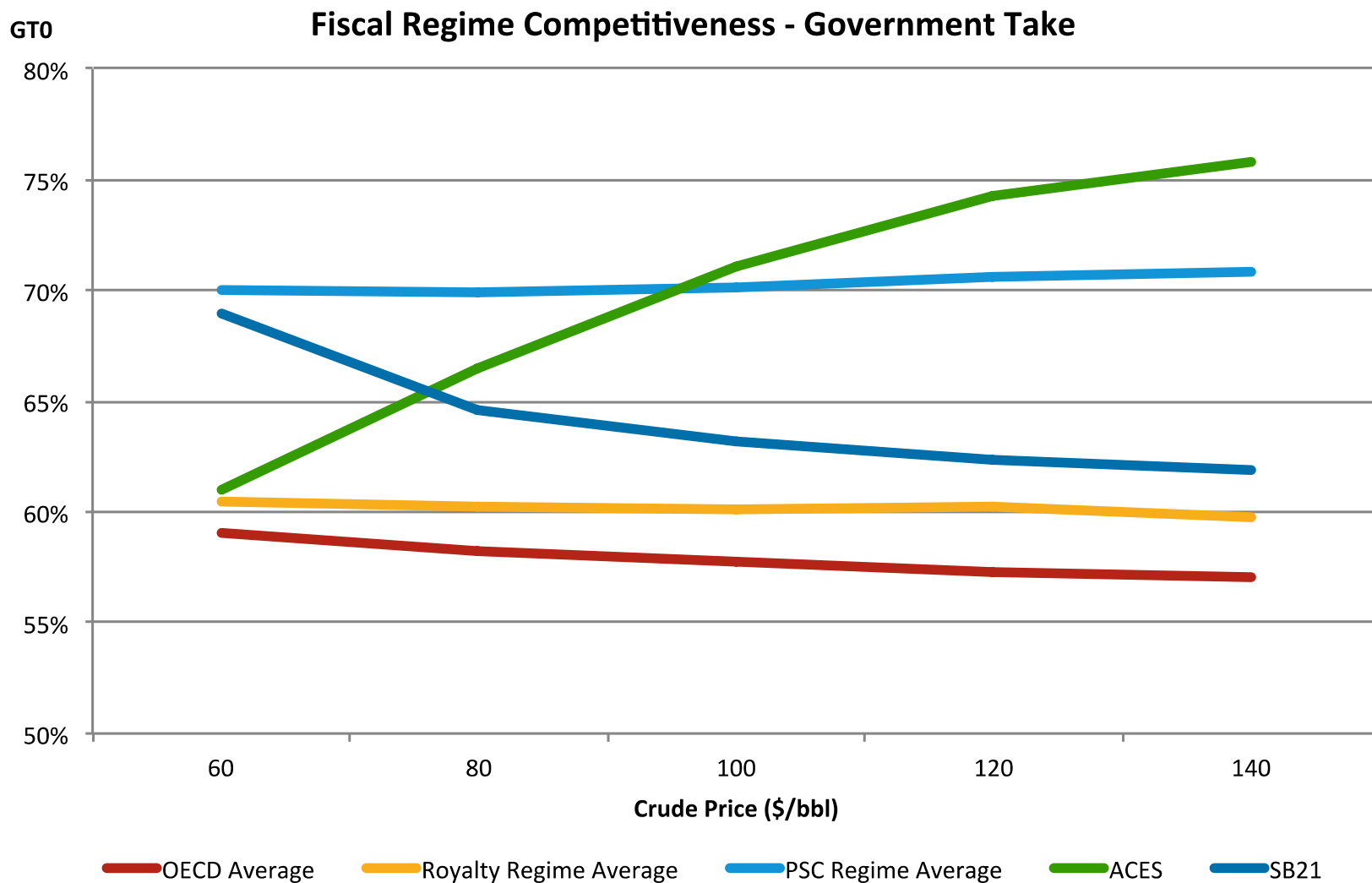
- The **oil price level** at which this occurs is highly **sensitive to annual levels of capital spending**, since CAPEX both reduces the oil price level at which progressivity kicks in under ACES, and determines the size of the available capital credit under ACES

- Looking at a **single year of production** also slightly raises this neutrality point, since over many years, inflation reduces the real price level at which progressivity starts under ACES

- For mature, producing assets with a low ongoing CAPEX requirement (\$10/bbl), SB21 represents a **reduction in government take at prices above ~\$75**, however for capital intensive new developments in existing units, that neutrality **point can be as high as \$110/bbl**

- It is thus important to understand that one impact of the removal of the 20% capital credit under SB 21 is that for companies with high development costs relative to overall production, it **can represent a tax increase at current prices**

# Fiscal Regime Competitiveness



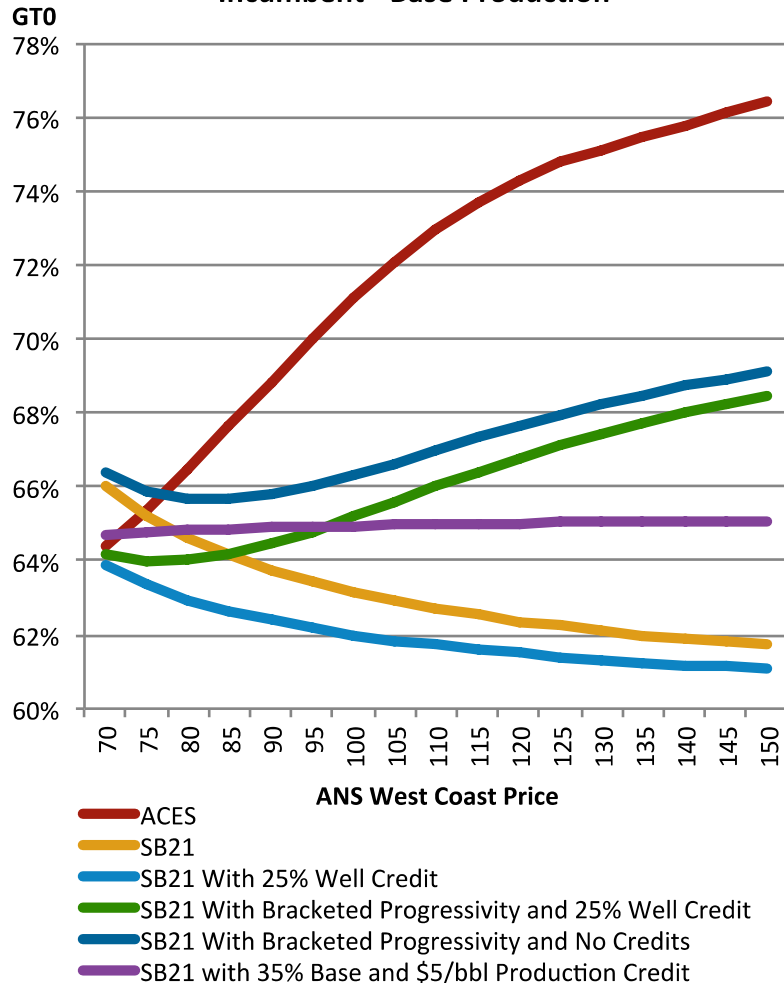
# Assumptions

- Well Credit
  - 50% of capex qualifies, credit level 25%
- Bracketed progressivity
  - Thresholds and rates as under HB110:
    - Base tax 25%
    - <\$30 PTV/bbl, 0% progressivity
    - \$30-\$42.5, 2.5% progressivity
    - \$42.5-\$55 – 7.5% progressivity
    - \$55-\$67.5 – 12.5% progressivity
    - \$67.5-\$80 – 17.5% progressivity
    - \$80-\$92.50 – 22.5% progressivity
    - >\$92.50 PTV/bbl – 25% progressivity

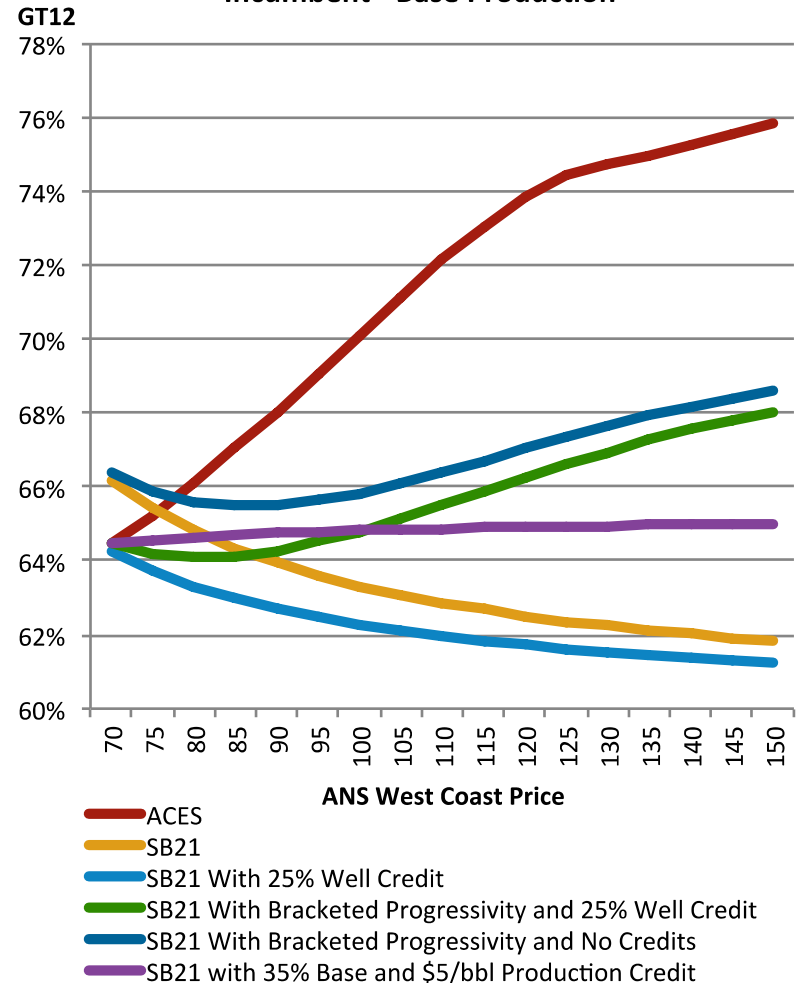
# Government Take Comparison

## Incumbent, Base Production

Undiscounted Government Take comparison -  
Incumbent - Base Production

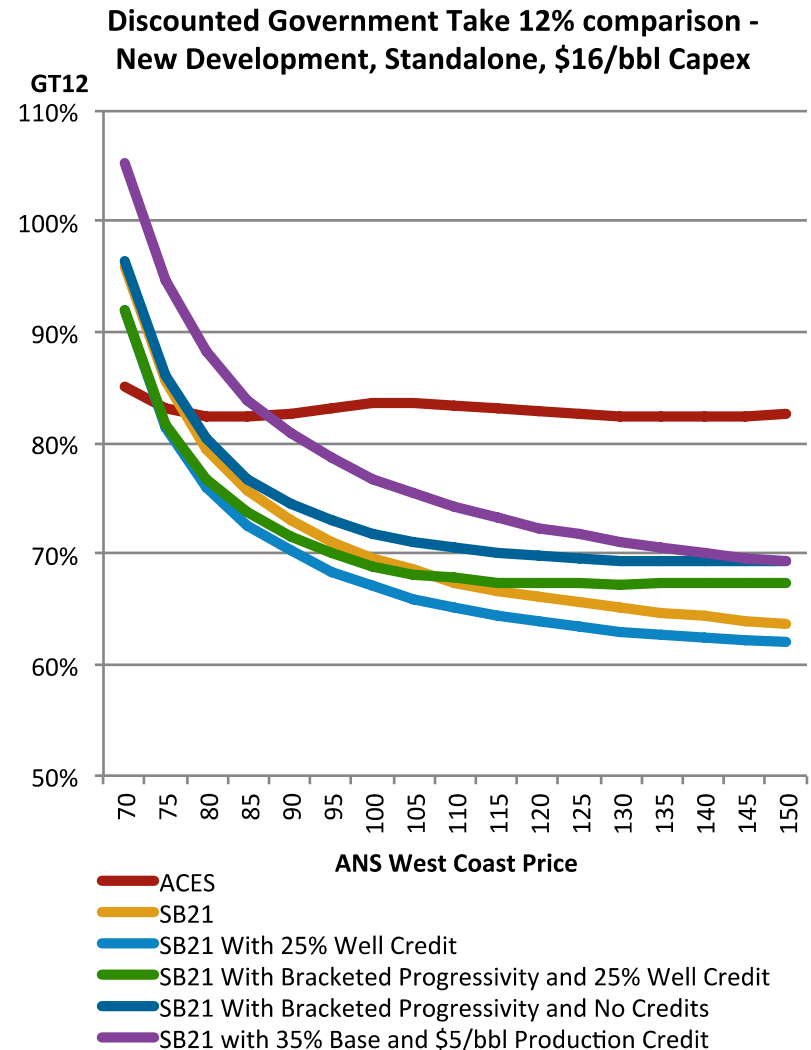
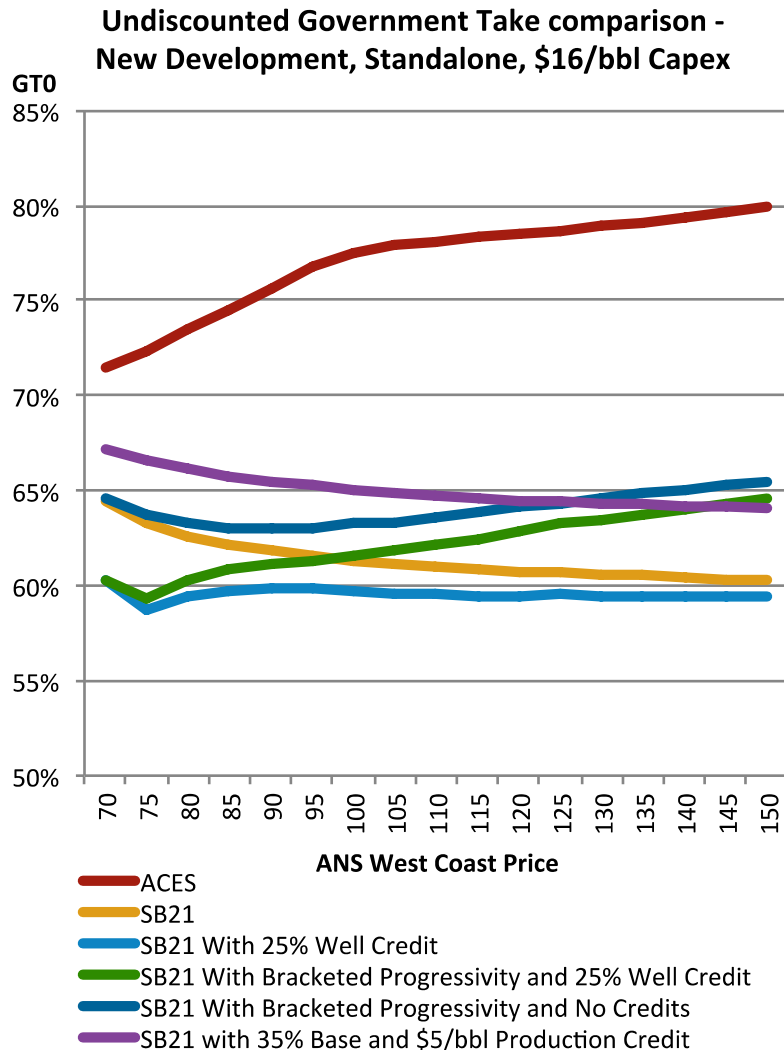


Discounted Government Take 12% comparison -  
Incumbent - Base Production



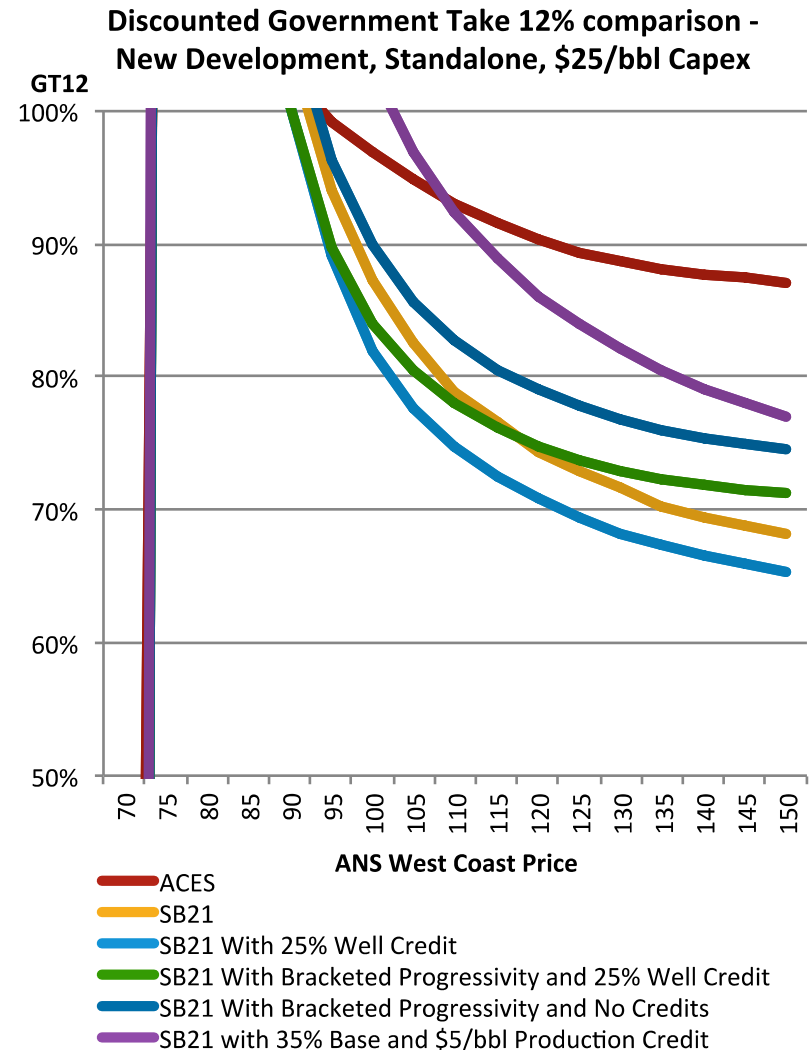
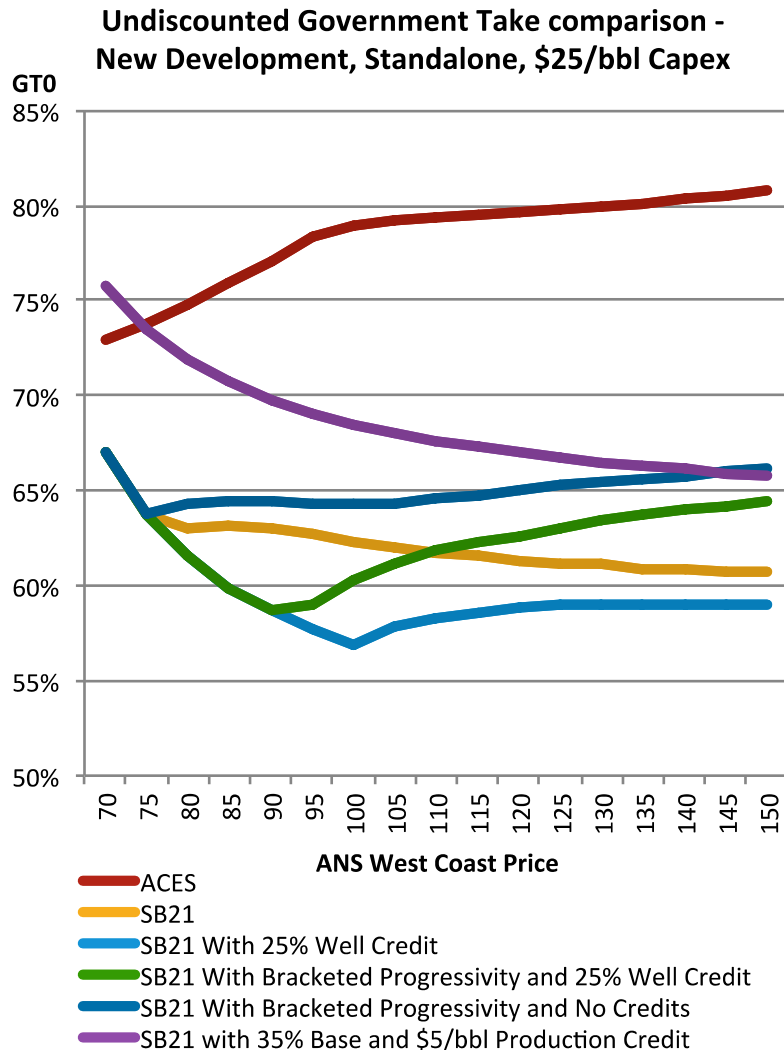
# Government Take Comparison

## \$16/bbl New Development, Standalone



# Government Take Comparison

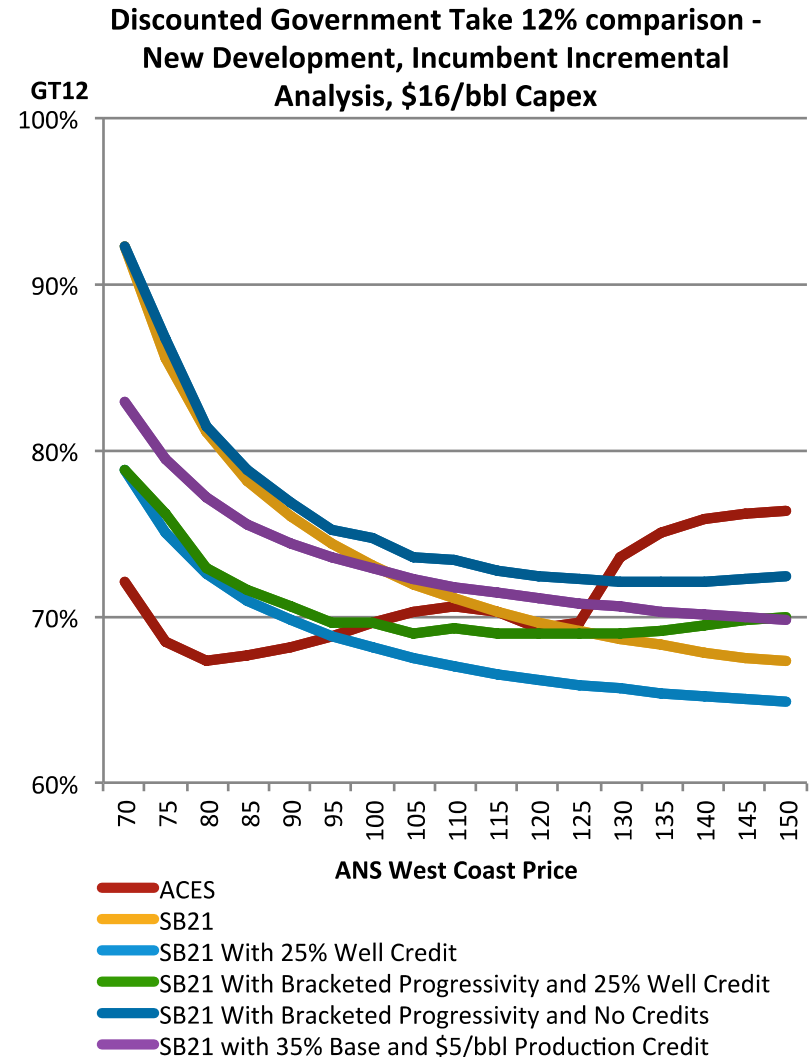
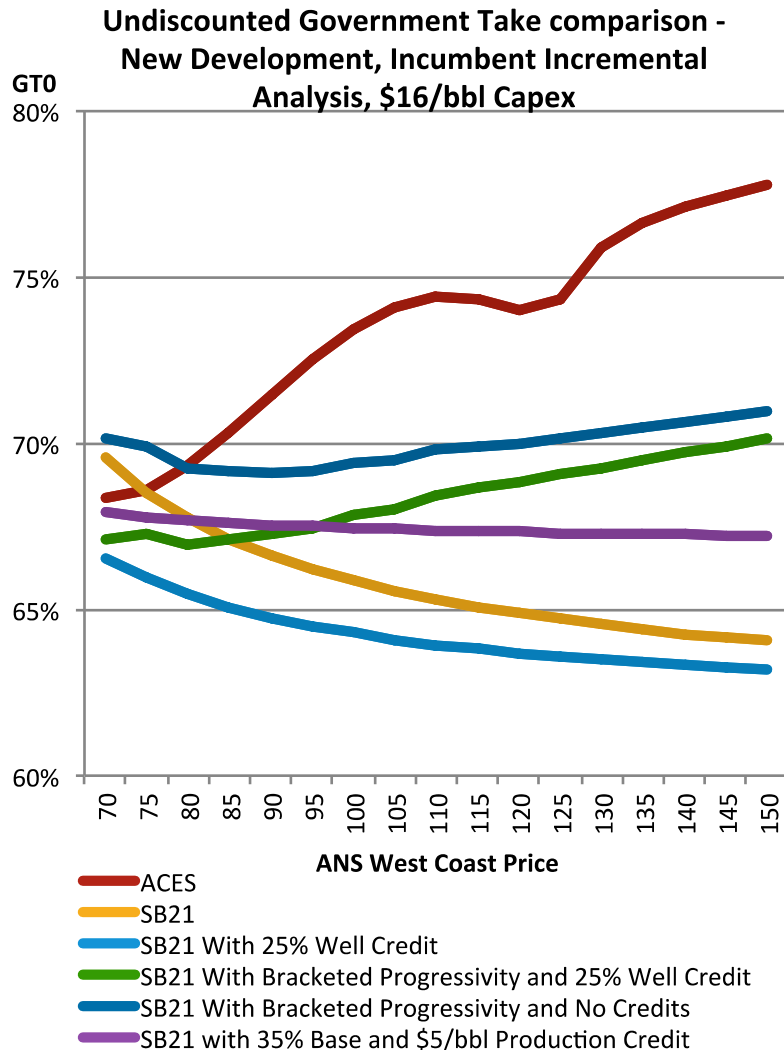
## \$25/bbl New Development (with GRE), Standalone





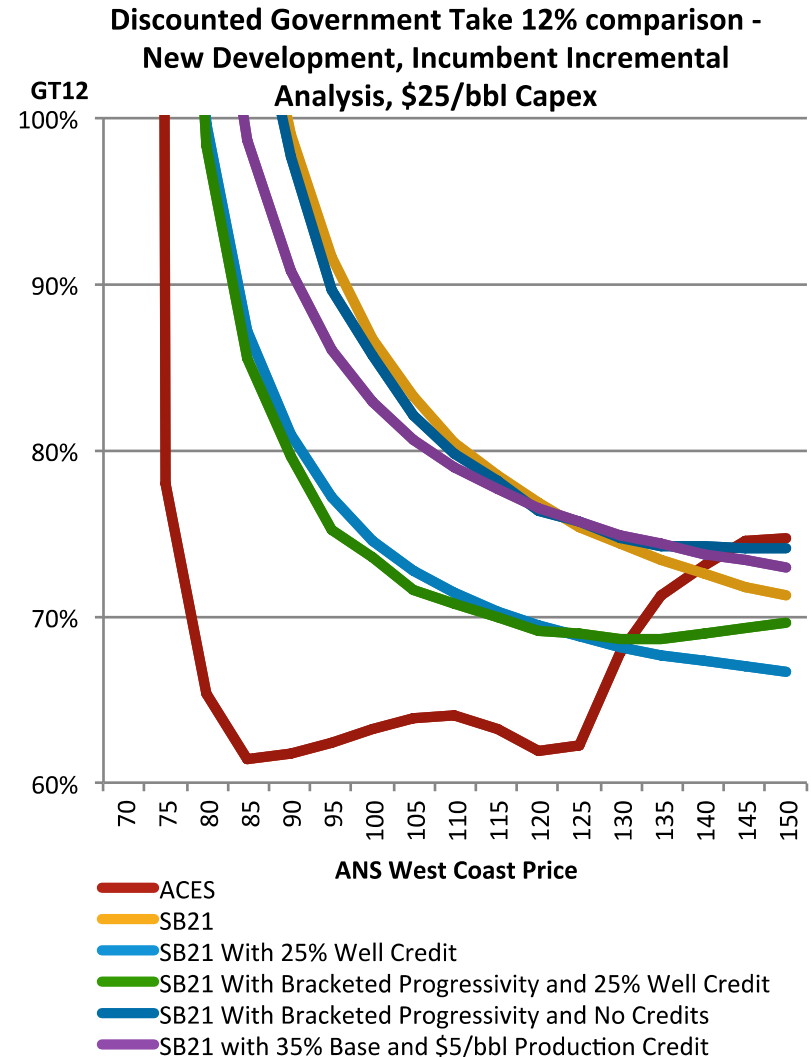
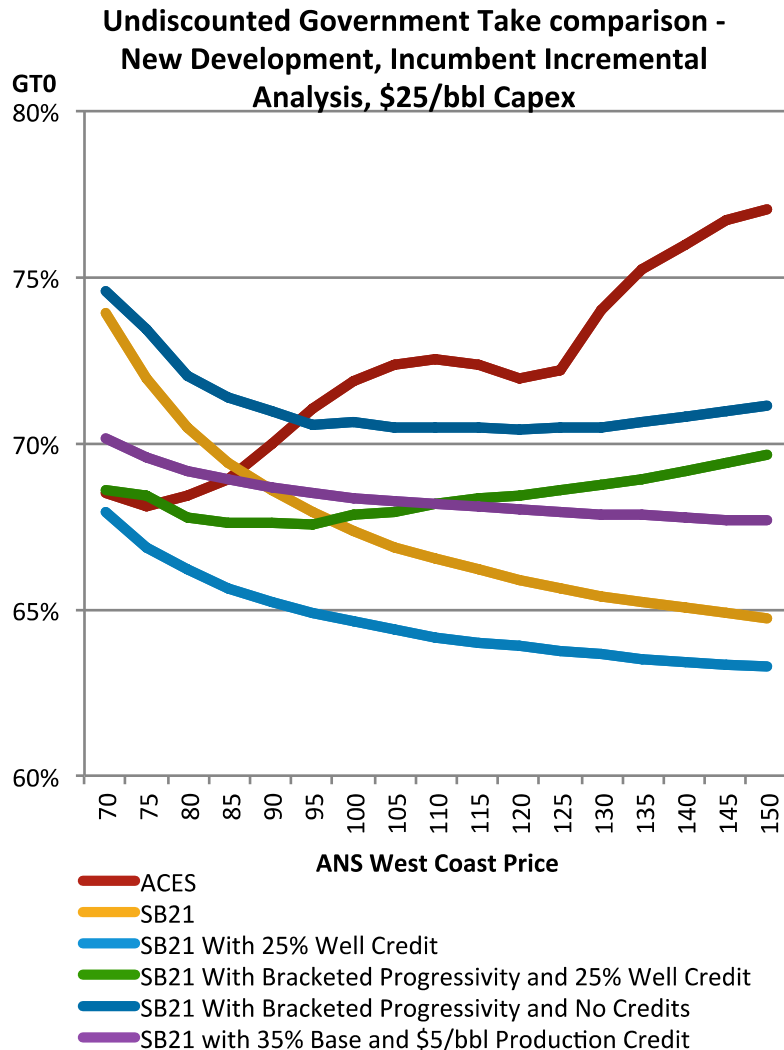
# Government Take Comparison

## \$16/bbl New Development, Incumbent Producer Incremental Analysis



# Government Take Comparison

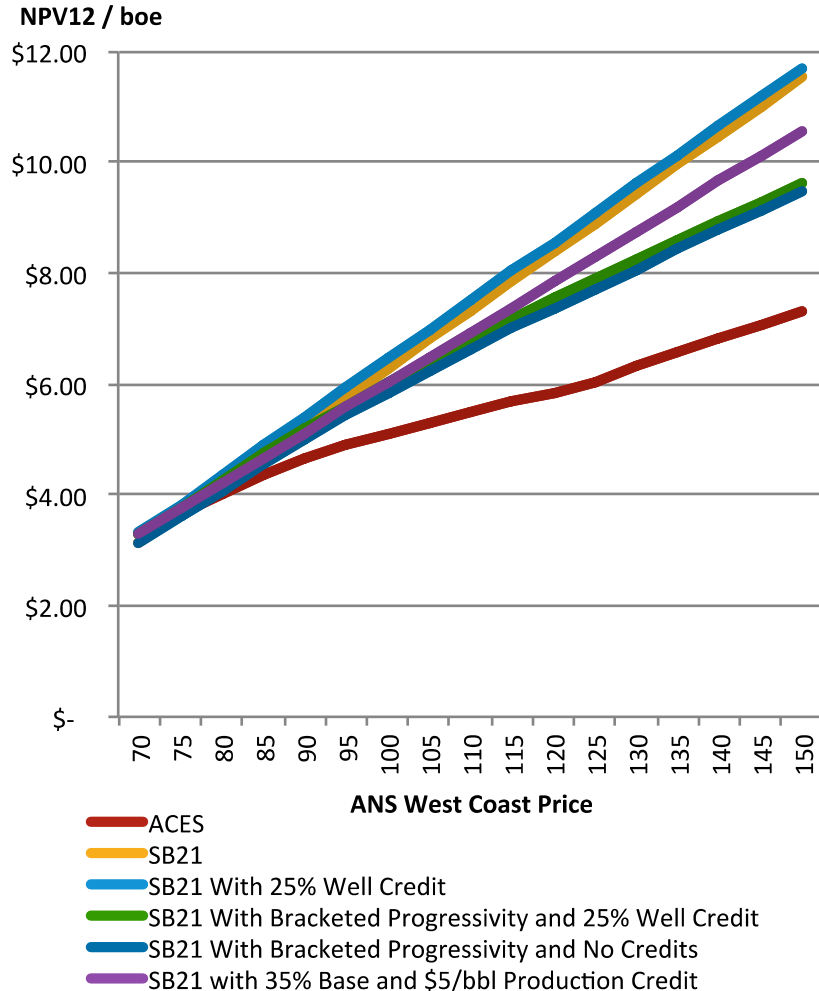
## \$25/bbl New Development, Incumbent Producer Incremental Analysis



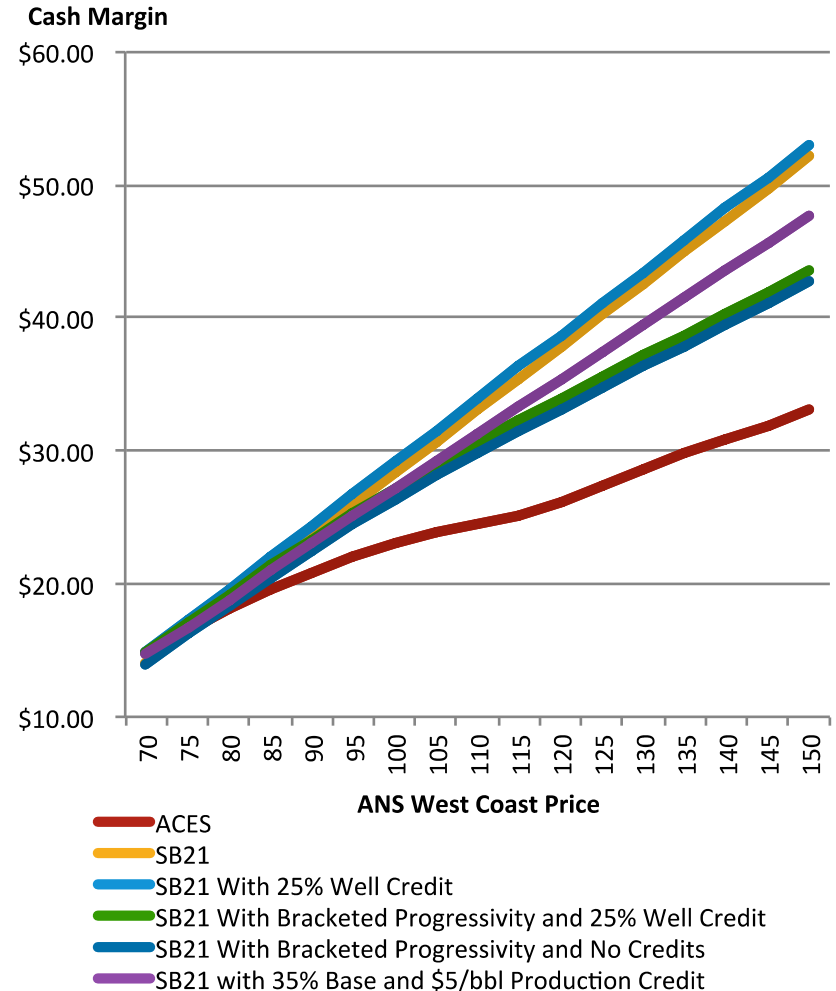
# NPV12/bbl & Cash Margin Comparison

## Incumbent, Base Production

NPV12 / boe comparison - Incumbent - Base Production



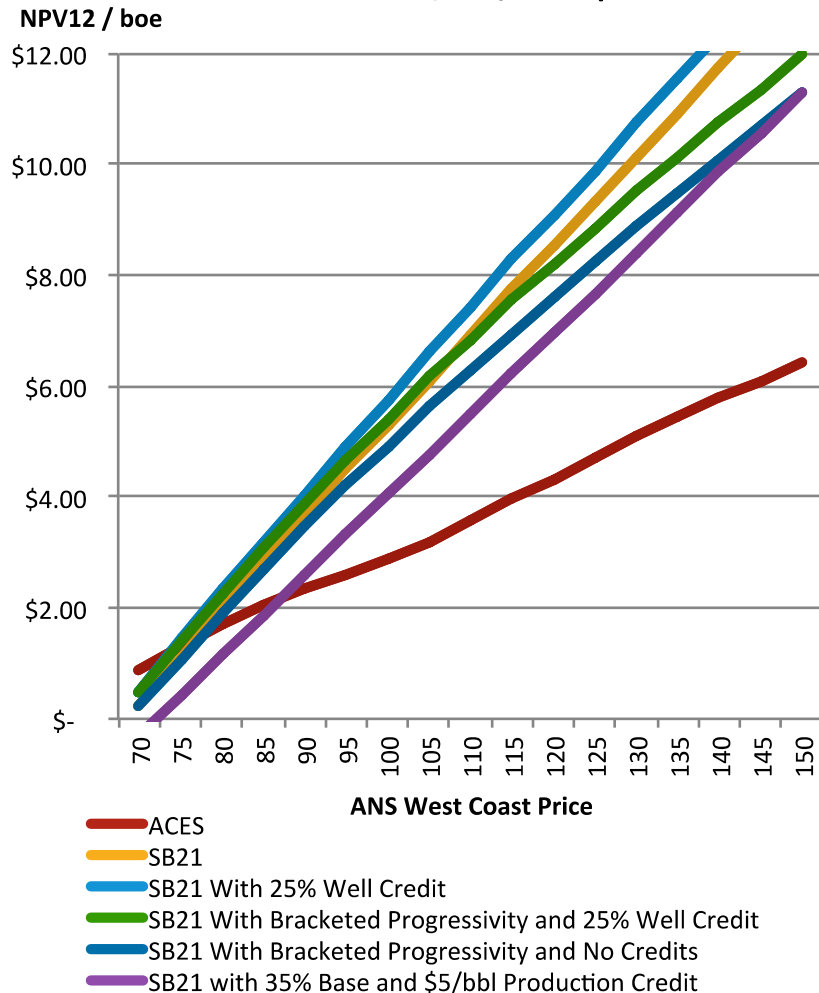
Cash Margin (2017 - 2022) comparison - Incumbent - Base Production



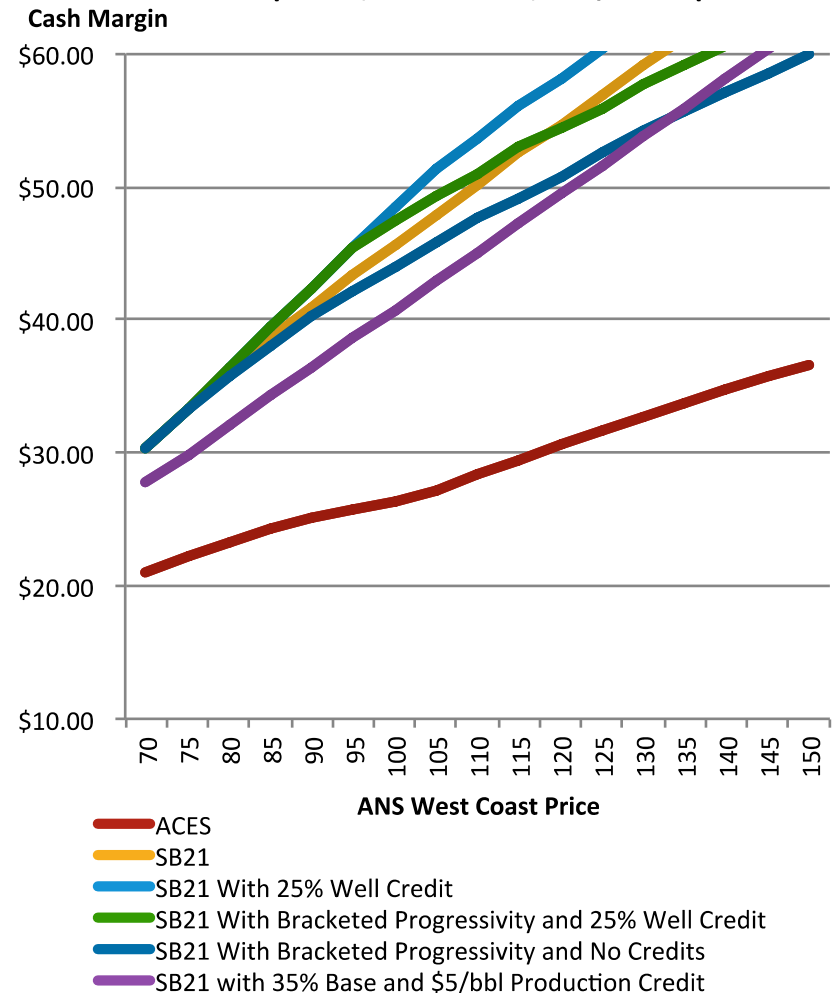
# NPV12/bbl & Cash Margin Comparison

## \$16/bbl New Development, Standalone

NPV12 / boe comparison - New Development,  
Standalone, \$16/bbl Capex



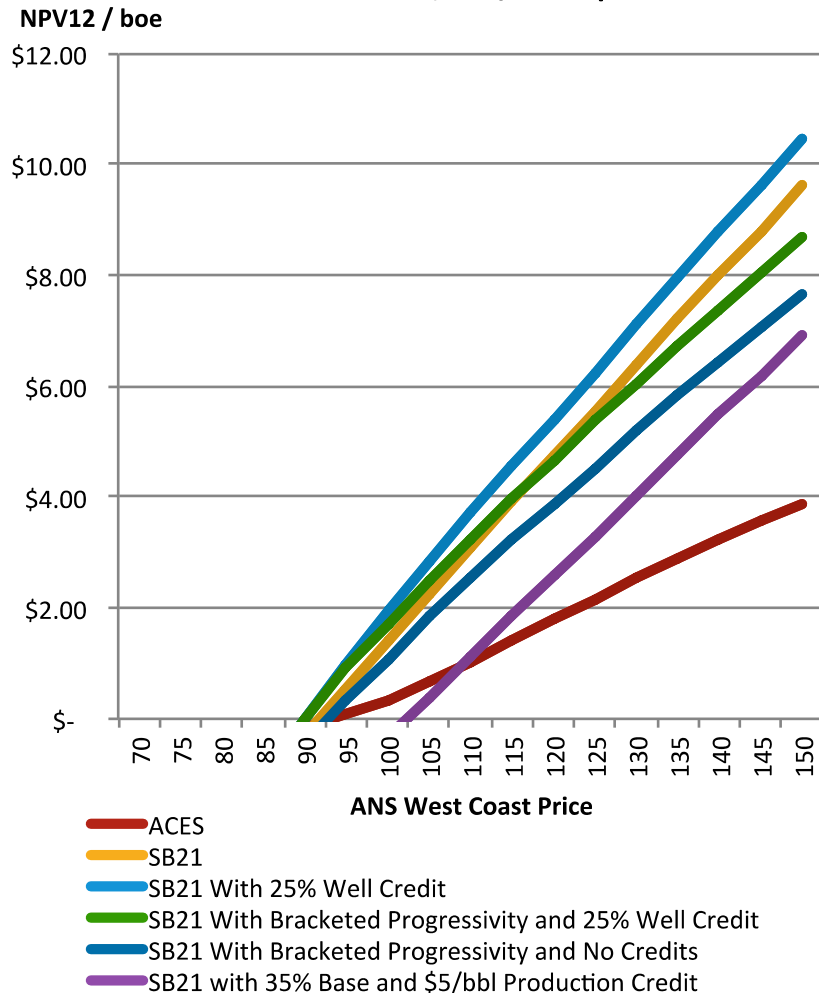
Cash Margin (2017 - 2022) comparison - New  
Development, Standalone, \$16/bbl Capex



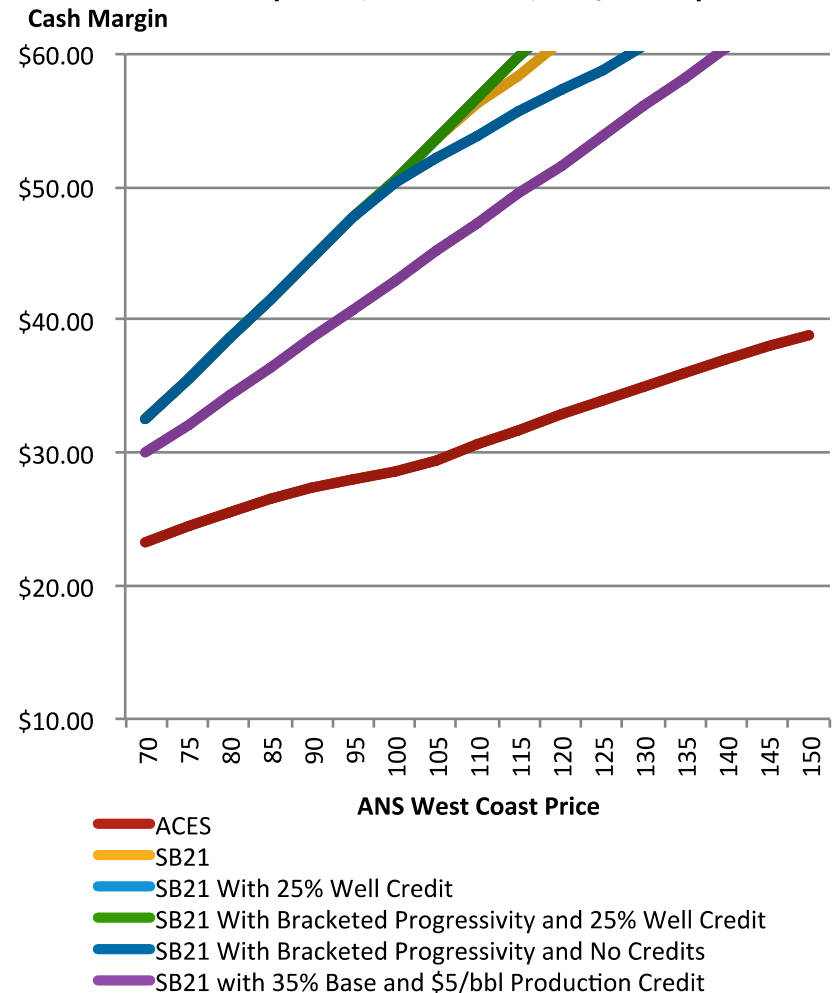
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NPV12 / boe comparison - New Development,  
Standalone, \$25/bbl Capex



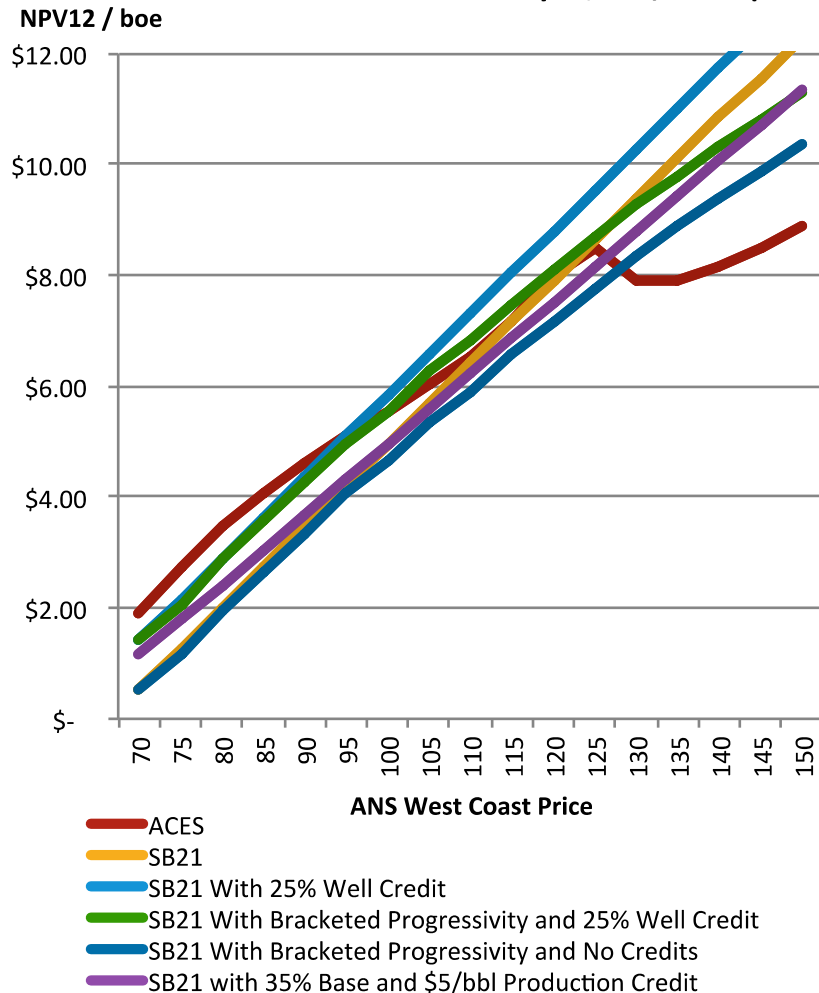
Cash Margin (2017 - 2022) comparison - New  
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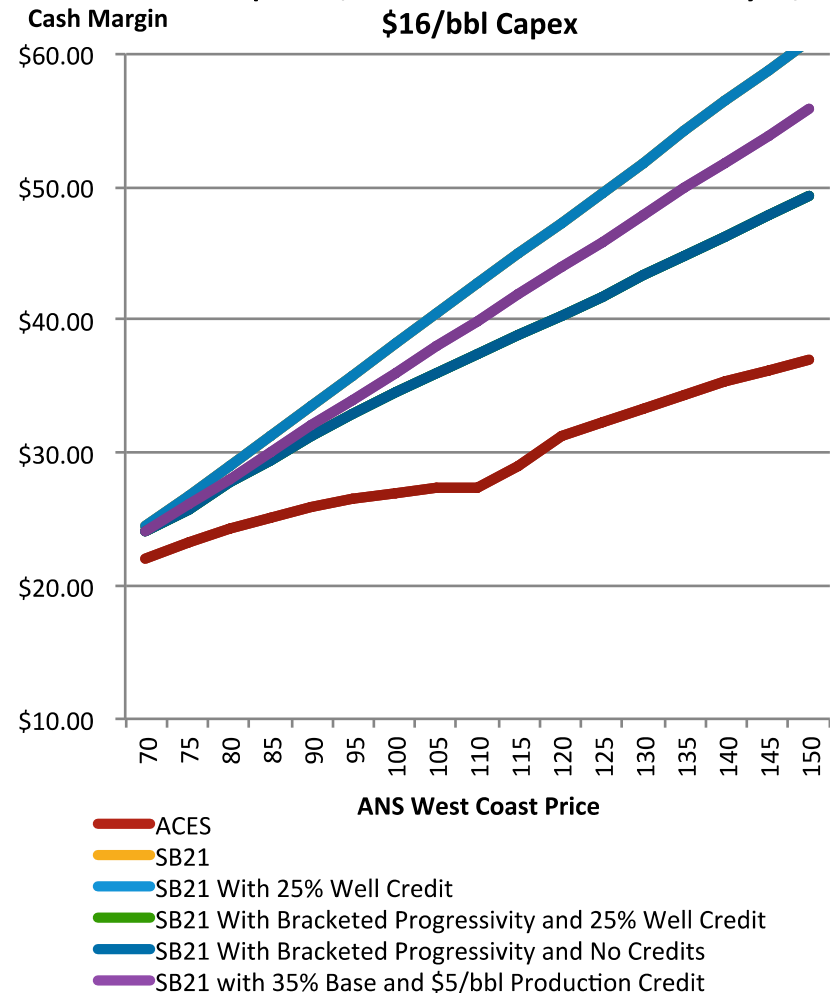
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NPV12 / boe comparison - New Development,  
Incumbent Incremental Analysis, \$16/bbl Capex



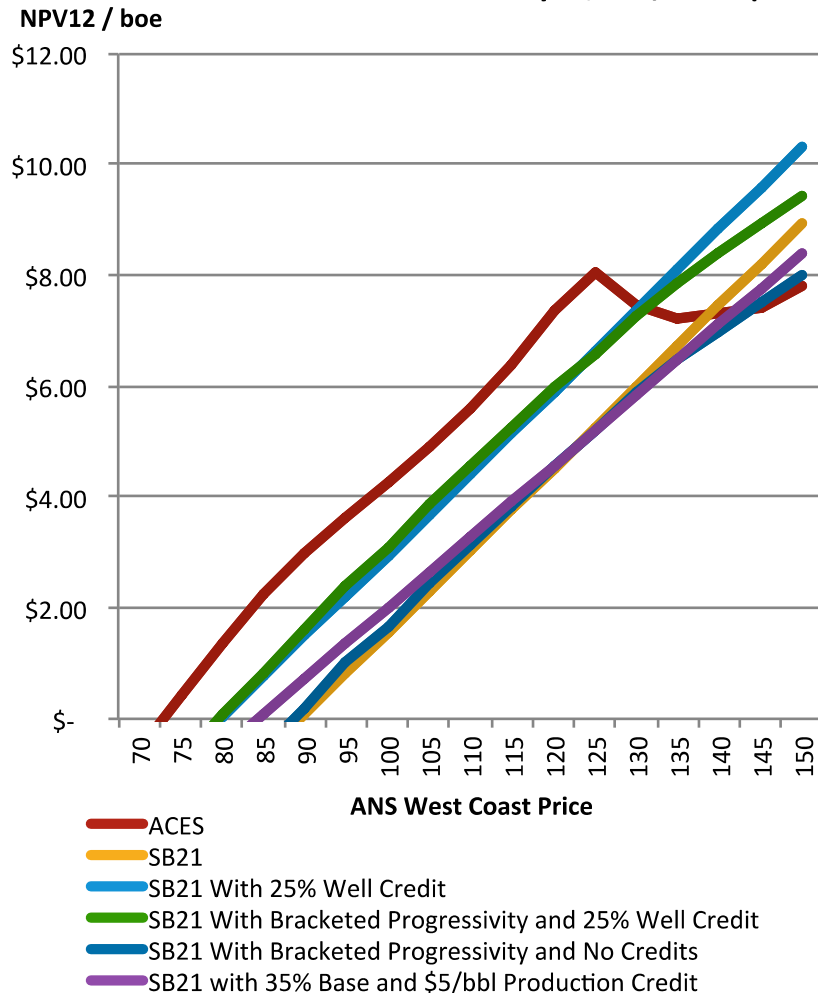
Cash Margin (2017 - 2022) comparison - New  
Development, Incumbent Incremental Analysis,  
\$16/bbl Capex



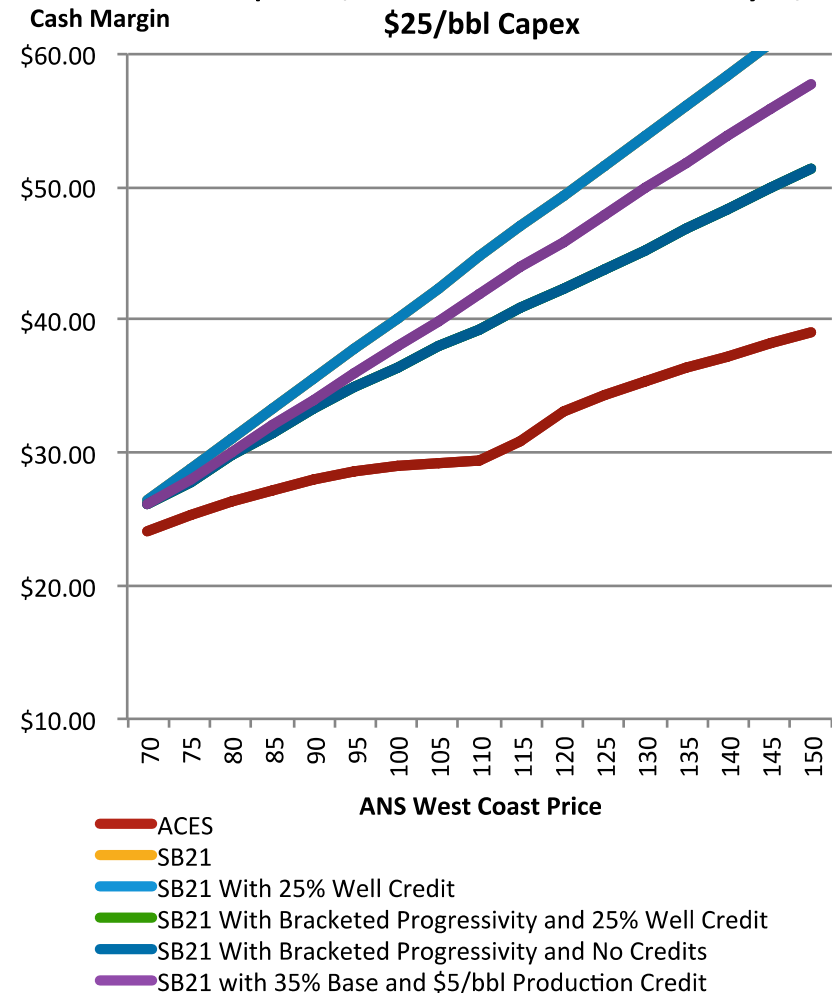
# NPV12/bbl & Cash Margin Comparison

## \$25/bbl New Development, Incumbent Producer Incremental Analysis

NPV12 / boe comparison - New Development,  
Incumbent Incremental Analysis, \$25/bbl Capex

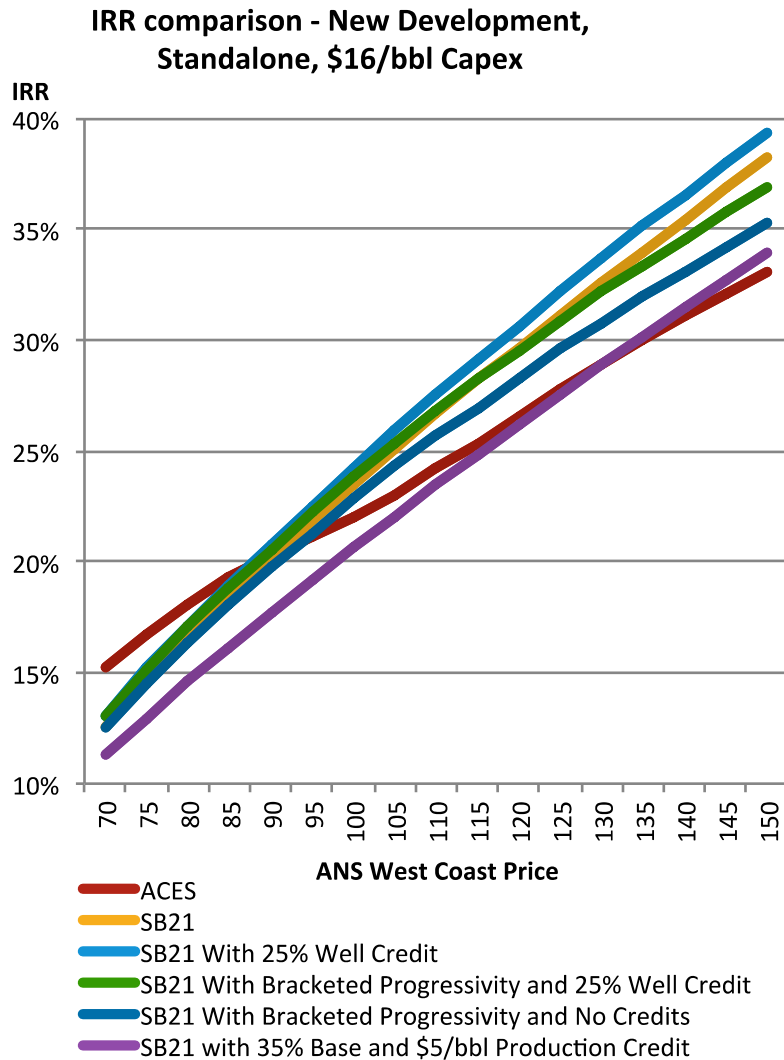


Cash Margin (2017 - 2022) comparison - New  
Development, Incumbent Incremental Analysis,  
\$25/bbl Capex



# IRR Comparison

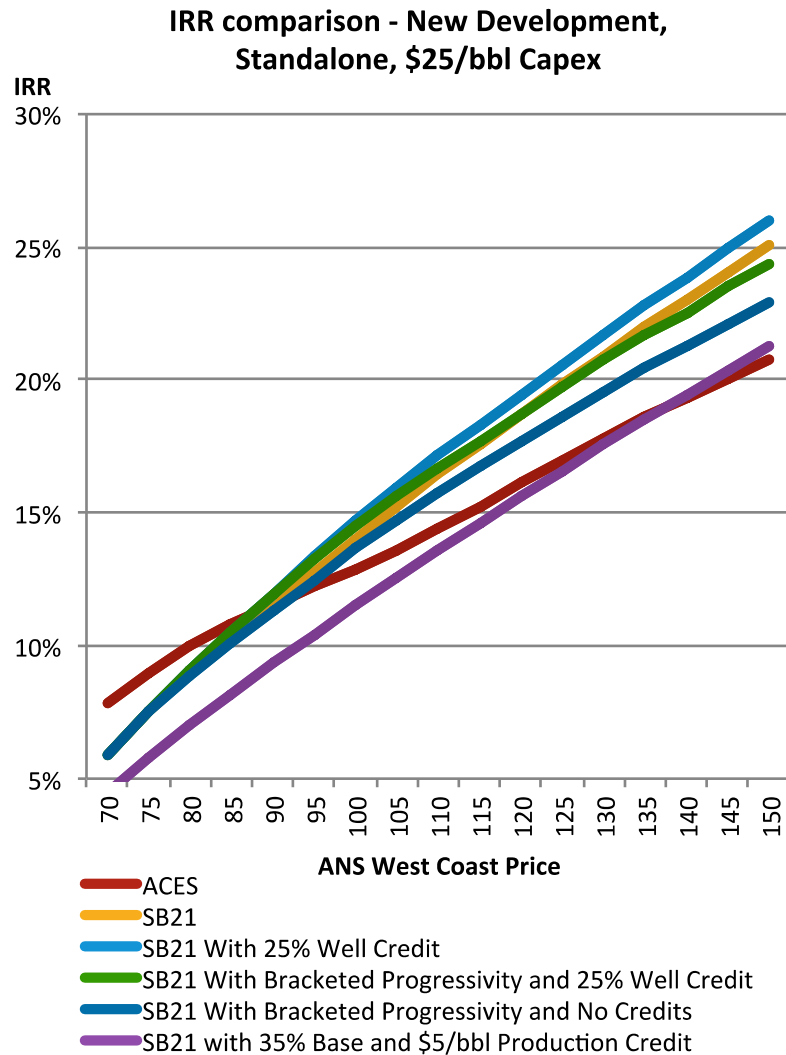
## \$16/bbl New Development, Standalone





# IRR Comparison

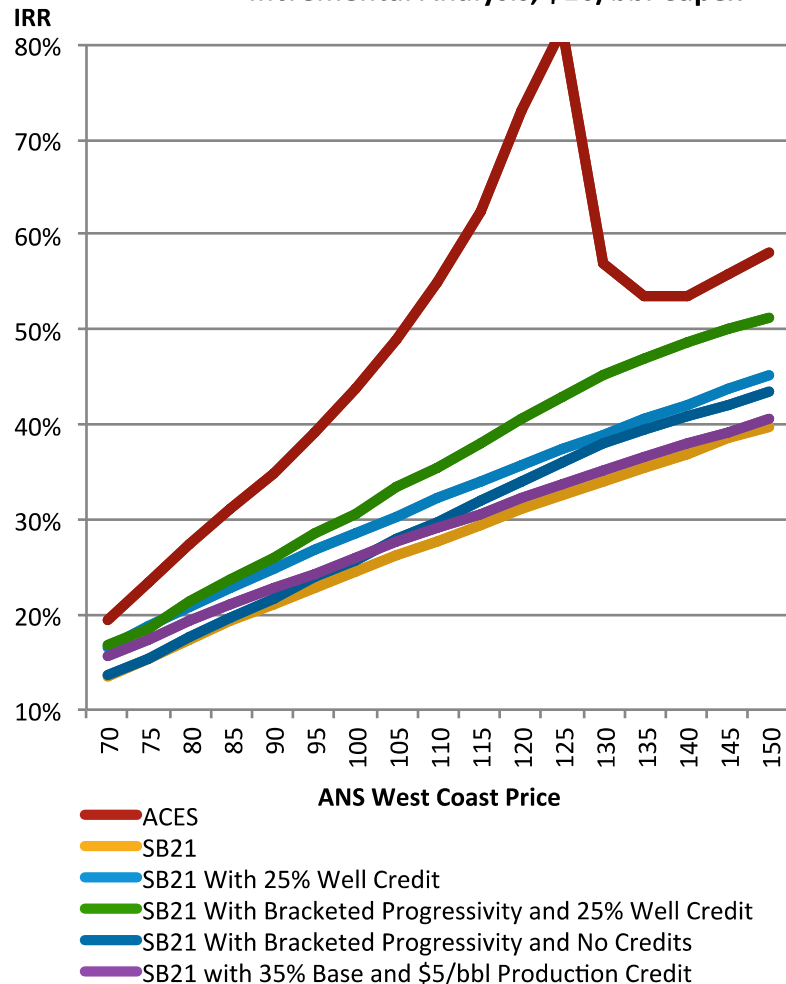
## \$25/bbl New Development, Standalone



# IRR Comparison

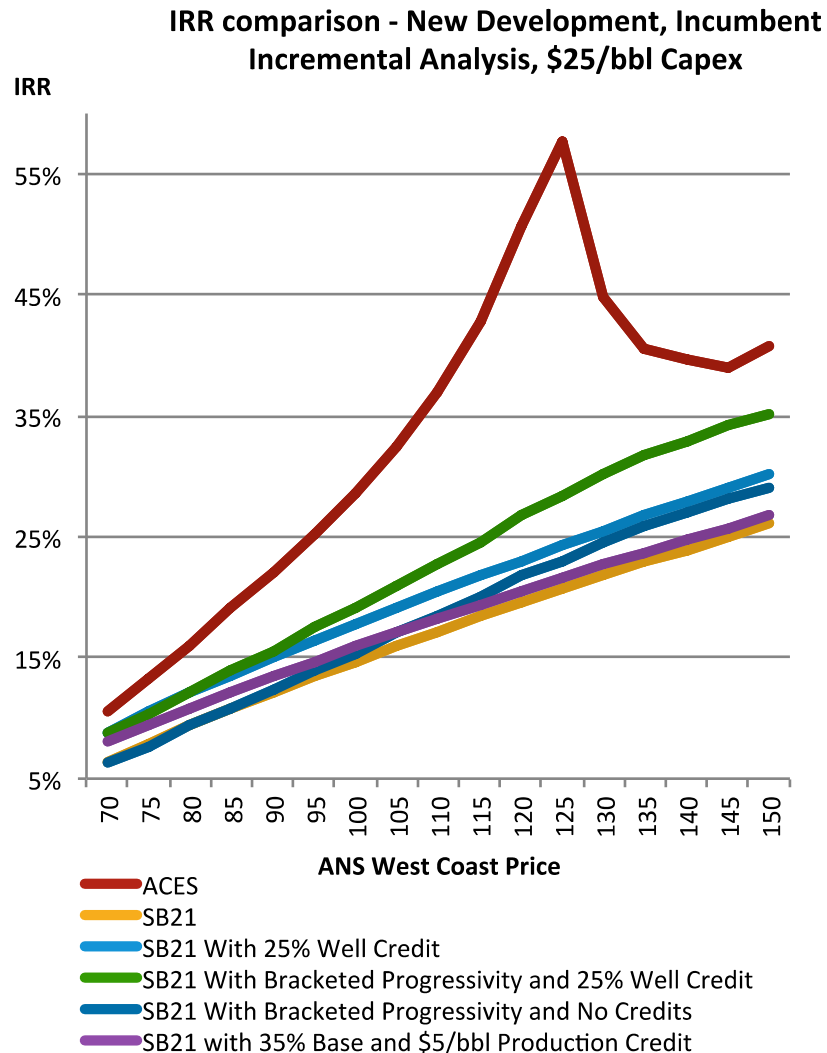
## \$16/bbl New Development, Incumbent Producer Incremental Analysis

IRR comparison - New Development, Incumbent  
Incremental Analysis, \$16/bbl Capex



# IRR Comparison

## \$16/bbl New Development, Incumbent Producer Incremental Analysis



# Conclusions

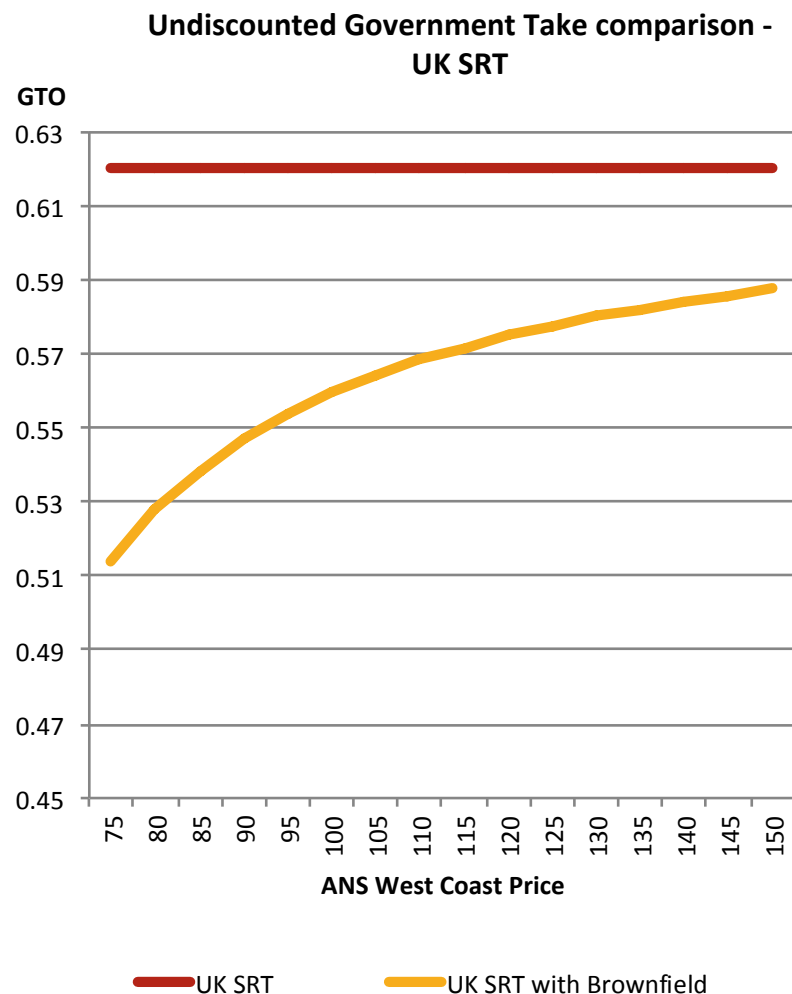
- Elimination of credit has a significant negative impact on project economics at low prices, or high development costs – though for new developments outside existing areas, this is more than offset by the GRE.
- Partial reinstatement of credits (for instance more targeted well expenditure credit) can partially mitigate this, but not fully.
- Bracketed progressivity a feasible approach to balancing revenue impact of partial or full reinstatement of credits.
- Higher base tax and production-based credit an interesting approach, and may help question of tax increase for base production at low prices. Since credit does not contribute when costs are incurred, does not address impact on higher-cost development.

Requested Analysis:

Impact of UK Brownfield Allowance

# Impact of UK Brownfield Allowance

- The UK's fiscal regime is a relatively simple one, with two core components – a Corporate Income Tax (CIT) of 30%, and a Supplemental Resource Tax (SRT) of 32%, levied on the CIT tax base
- The UK Brownfield Allowance is an income exclusion, used in calculating the SRT. Up to a total £250mm of income can be excluded, with up to 20% of the exclusion amount allowed in a given year. For projects subject to the additional Petroleum Tax (pre-1993 projects), the exclusion is up to £500mm of income
- Because it is a fixed exclusion, it has a greater impact at lower oil prices
- Projects are individually assessed for qualification, and for the total amount of relief available. Qualifying projects are incremental projects increasing production from mature fields.
- A 100mmb incremental development, with costs of \$25/bbl, could see its government take reduced by to anywhere from 3 to 11 percentage points, depending on the oil price level



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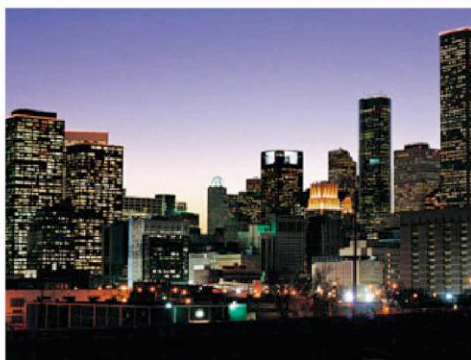
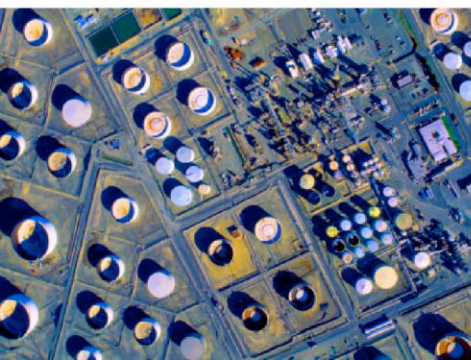
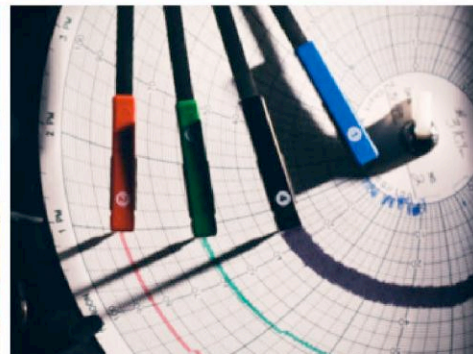
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