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Gaffney, Cline & Associates (GCA) Property Tax Discussion

Municipal Advisory Gas Project Review Board

Anchorage, 11 September, 2014

Objectives

- Reprise key points of August meeting
- Add some numeric illustrations
- Opportunity to discuss
  - Methodology of analysis
  - "Missing information" to aid decision making
- Set path for next-step analysis to provide further inputs
  - Identify resources from Members to contribute, if applicable

Key Reminders

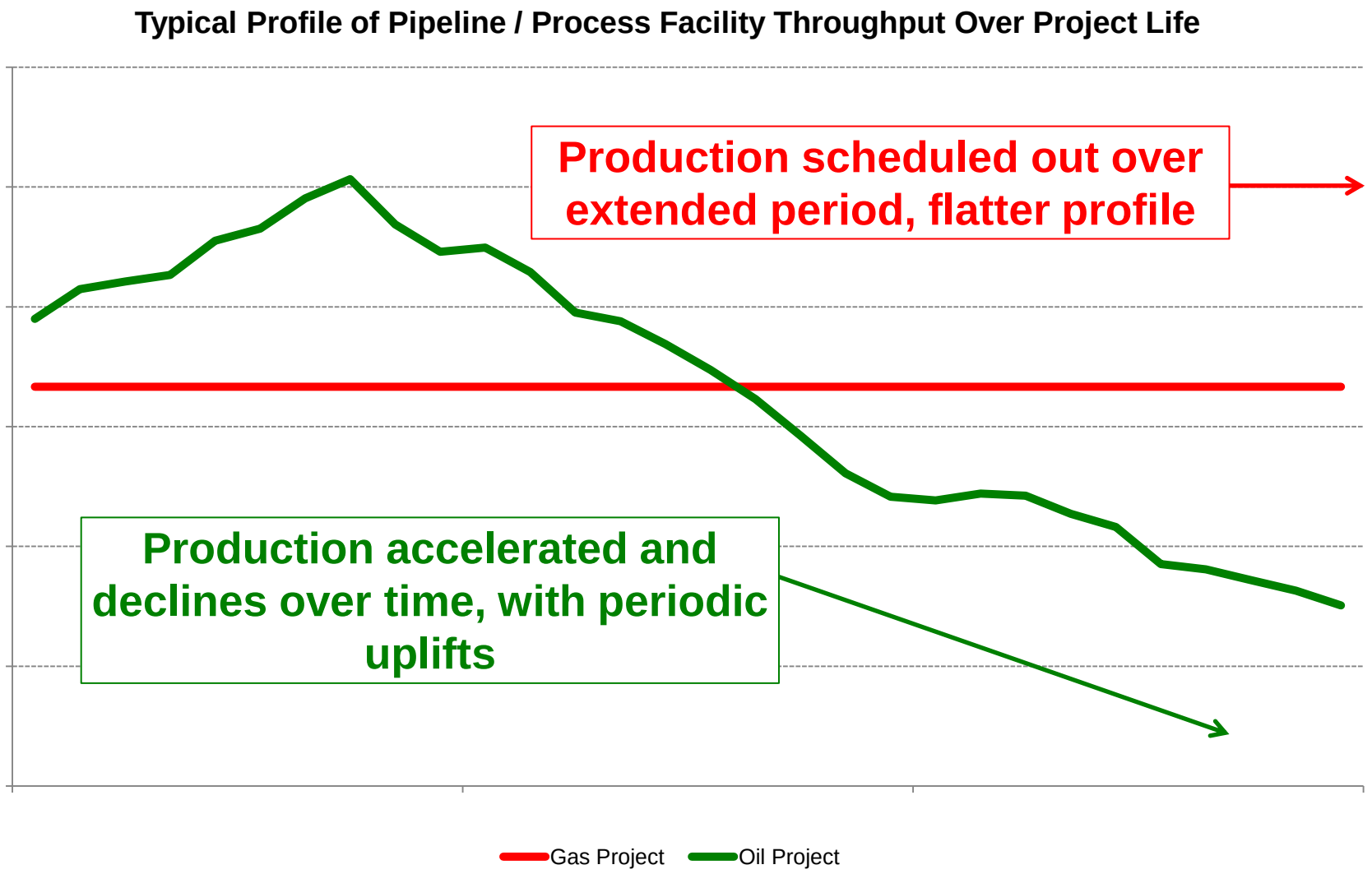
- LNG is different to oil

- LNG sales profile is flat
  - Efficiency improvements may provide small changes
  - Expansion projects will provide larger changes

- It is sold into international markets on long term contracts
  - 20 years typical

- Pricing still mostly linked to oil
  - Producers receive “Net Back” from market

Gas vs Oil Projects (Dedicated Facilities)



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Key Considerations

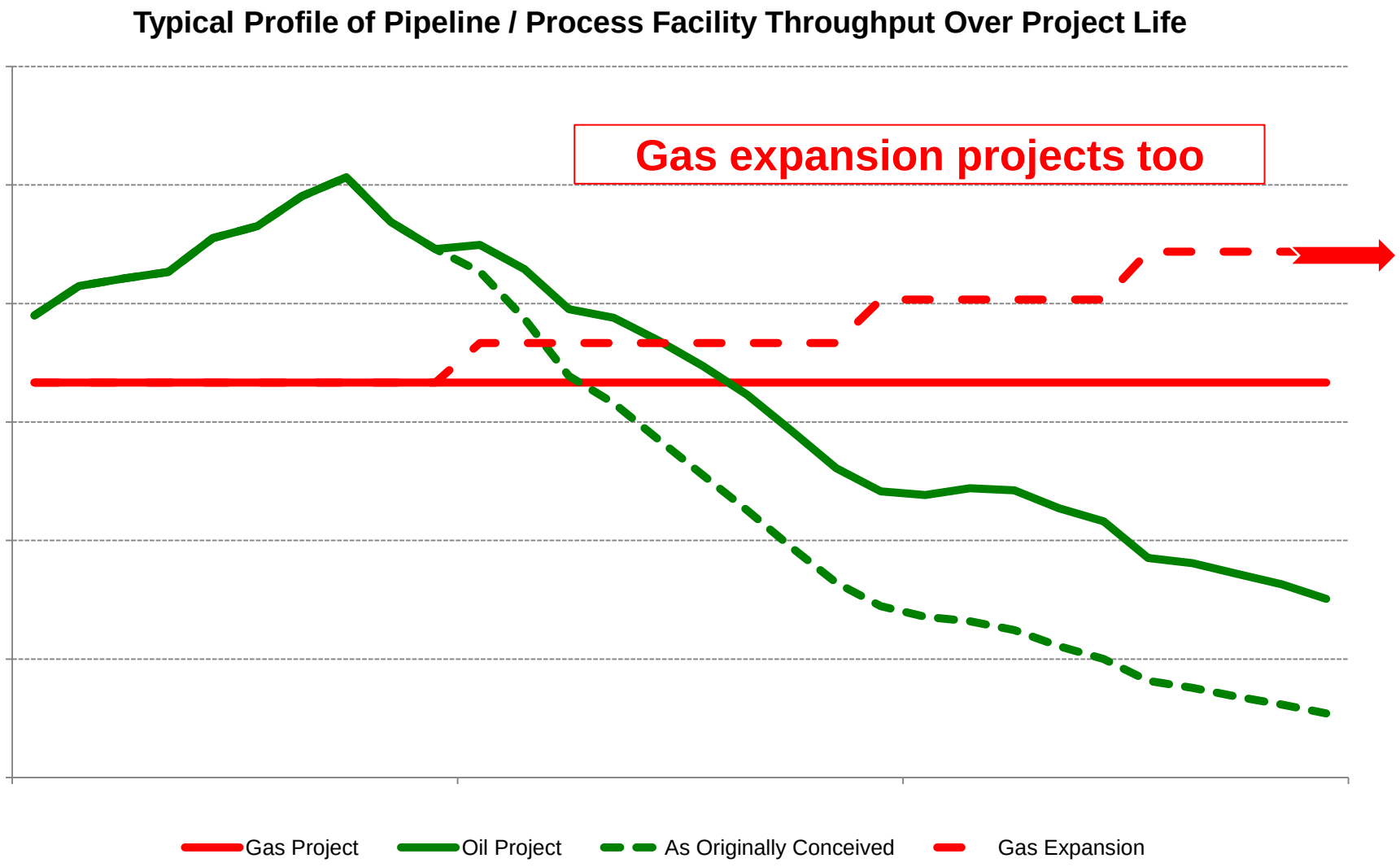
- Very high capital costs (~$45 billion – or more) and long term nature of contracts to be signed up front provide strong drivers for predictable and stable fiscal structure

- System still requires a mechanism to cope with:
  - Project expansion
  - Life extension
  - Significant changes in external environment

- PILT mechanism is a suggested format
  - $/Mcf arrangement

- Distribution metrics also required
  - Separate this debate from one on defining payment mechanism (eg PILT) and amount

Gas vs Oil Projects (Dedicated Facilities)



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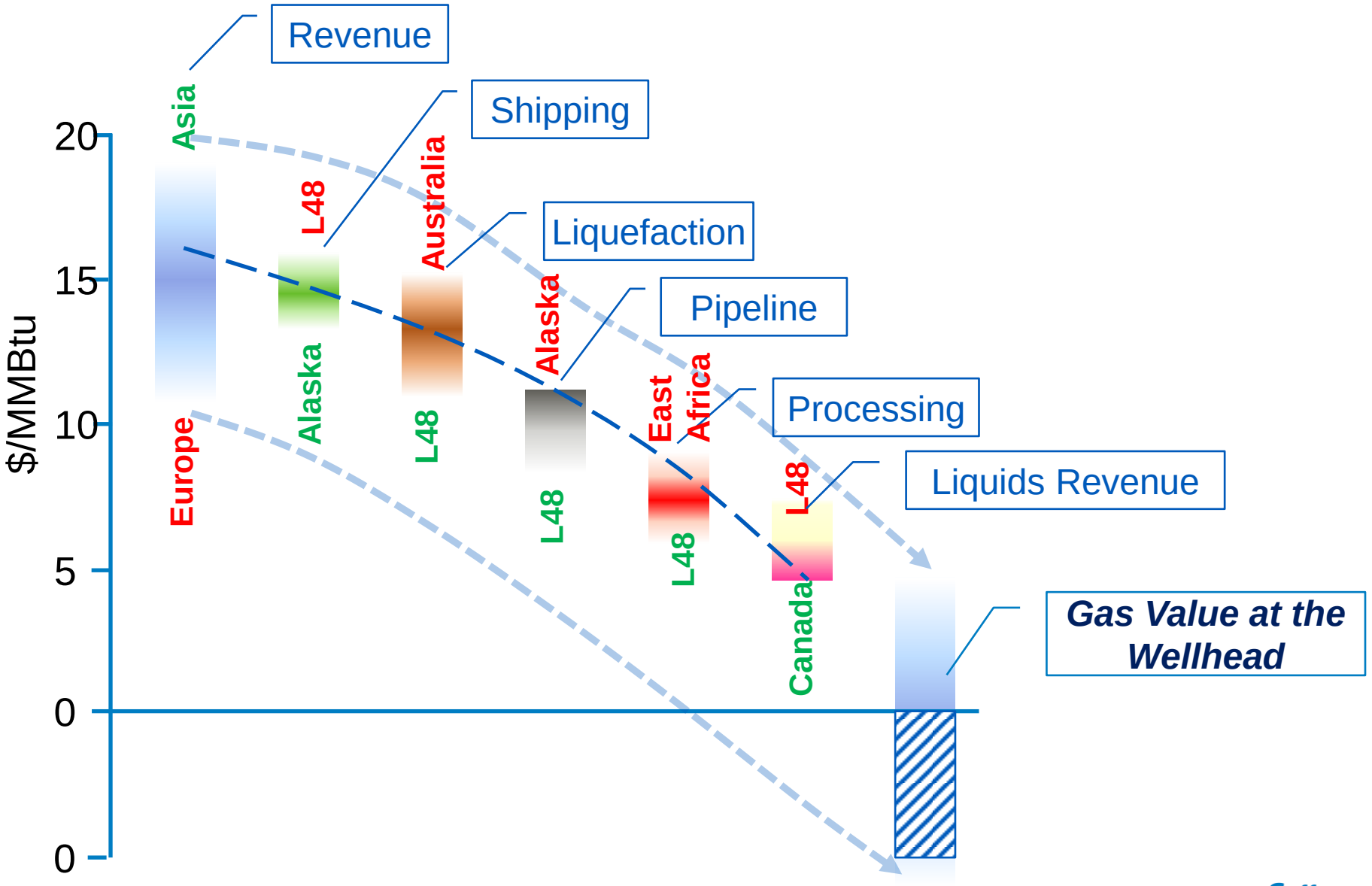
Illustrative Netback



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Netback Pricing: Gas vs Oil

Adapted from Enalytica presentation
House Finance Committee
28 March 2014

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Generic Health Warning !!

- All numbers shown at this stage are illustrative only !
- They may be indicative, but are subject to change
- There is still **A LOT** of work to be done

Oil Value Chain

FY 2015 PRODUCTION TAX ESTIMATE USING INCOME STATEMENT FORMAT

	Price	Barrels (Thousands)	Value ($ million)
Avg ANS Oil Price ($/bbl) & Daily Production	$105.06	498	$52.4
Annual Production			
Total		181,912	$19,111.7
Royalty, Federal & other barrels		(23,301)	($2,448.0)
Taxable bbls from companies w/ tax liability		158,611	$16,663.7
Downstream (Transportation) Costs ($/bbl)			
ANS Marine Transporation	($3.46)		
TAPS Tariff	($6.18)		
Other	($0.40)		
Total Transportation Costs	($10.03)	158,611	($1,591.0)
Deductable Lease Expenditures			
Deductible Operating Expenditures	($17.91)		($2,840.3)
Deductible Capital Expenditures	($28.08)		($4,453.4)
Total Lease Expenditures	($45.99)	158,611	($7,293.7)
Production Tax			
Gross Value Reduction			($63.8)
Production Tax Value (PTV)	$48.64		$7,715.2
Base Tax (35%*PTV)			$2,700.3
Total Tax before credits			$2,700.3

SOURCE: DEPARTMENT OF REVENUE, REVENUE SOURCES BOOK, FALL 2013, P. 106

OIL VALUE CHAIN

	US$/Bbl	US$/Mcfe
Market Price	100.00	16.67
Midstream	(10.00)	(1.67)
Lease	(46.00)	(7.67)
Upstream Netback	44.00	7.33

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Gas Price Factors

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PRICE FOR ALASKAN GAS WILL BE:

Less transparent

no readily available published price like ANS WC

Less consistent by destination

contract-by-contract differences can be large

Likely link to Japan Crude Oil Cocktail, JCC

in 2004-2013, JCC traded at $0.22/bbl discount to ANS

Lower value vs. oil (thermal equivalency)

e.g. $100/bbl ≠ $100/boe of LNG

$100/bbl = $78–$90/boe (13%–15% "slope")

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Midstream Factors

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MIDSTREAM COSTS WILL BE:

Order of magnitude higher

Gas is significantly more expensive to transport

Tariff not regulated by FERC

FERC will regulate permitting, not rate-setting

Tariff highly sensitive to capital structure

return on equity and /or assumed debt/equity ratio

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Gas Value Chain

US$ 100/Oil = $13.50/MMBtu gas

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GAS VALUE CHAIN

	US$/Bbl	US$/Mcfe
Market Price	81.00	13.50
Midstream	(66.00)	(11.00)
Lease	(6.00)	(1.00)
Upstream Netback	9.00	1.50

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Oil and Gas Netback Illustrations

Midstream costs in oil are around 20% of Netback

	Oil, US$/Mcfe	Gas, US$/Mcf
Market Price	16.67	13.50
Midstream	(1.67)	(11.00)
Lease	(7.67)	(1.00)
Upstream Netback	7.33	1.50

Netback in gas is around 20% of Midstream costs

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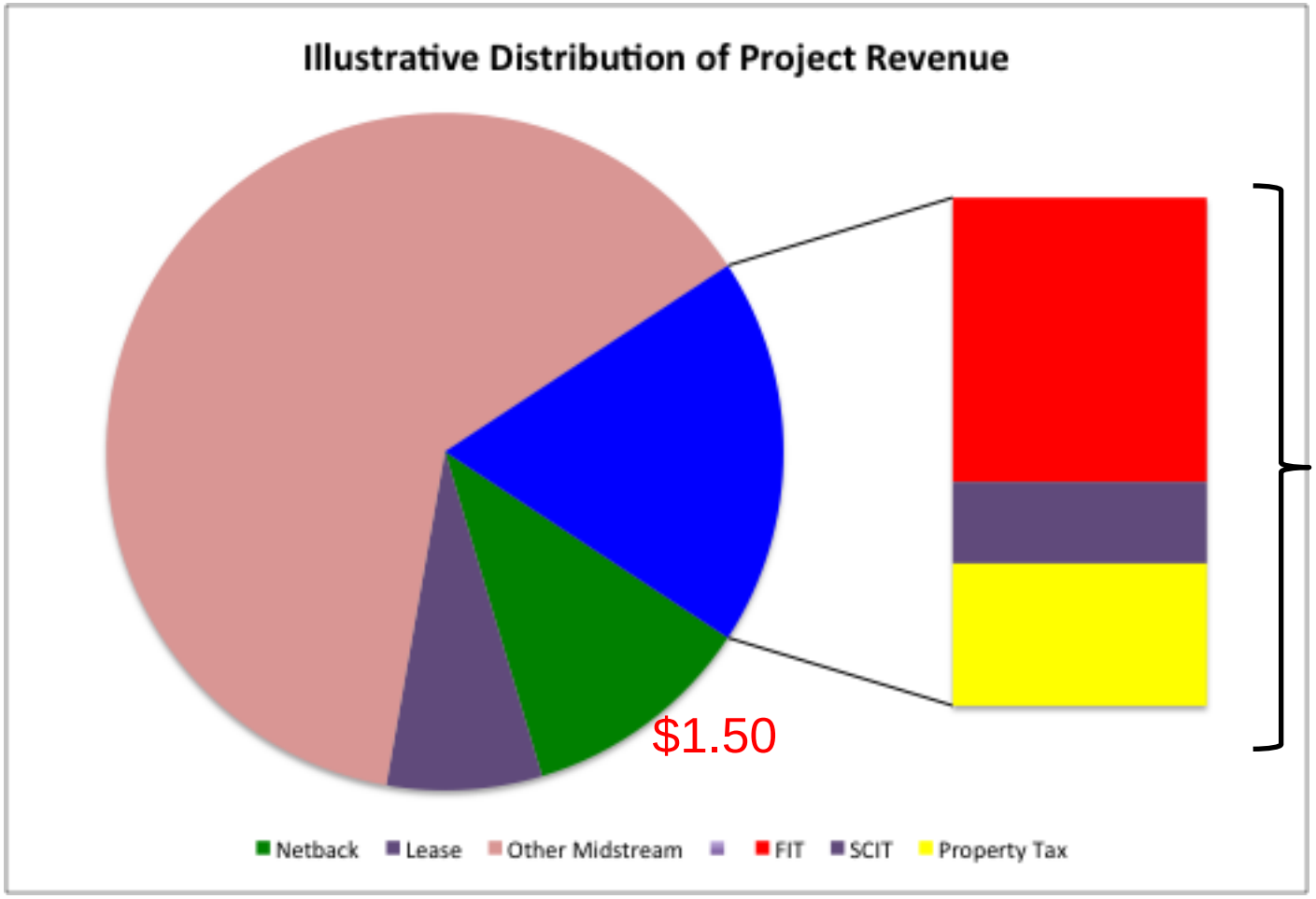
What Investors Care About



Can make adjustments in form and type of take without impacting returns

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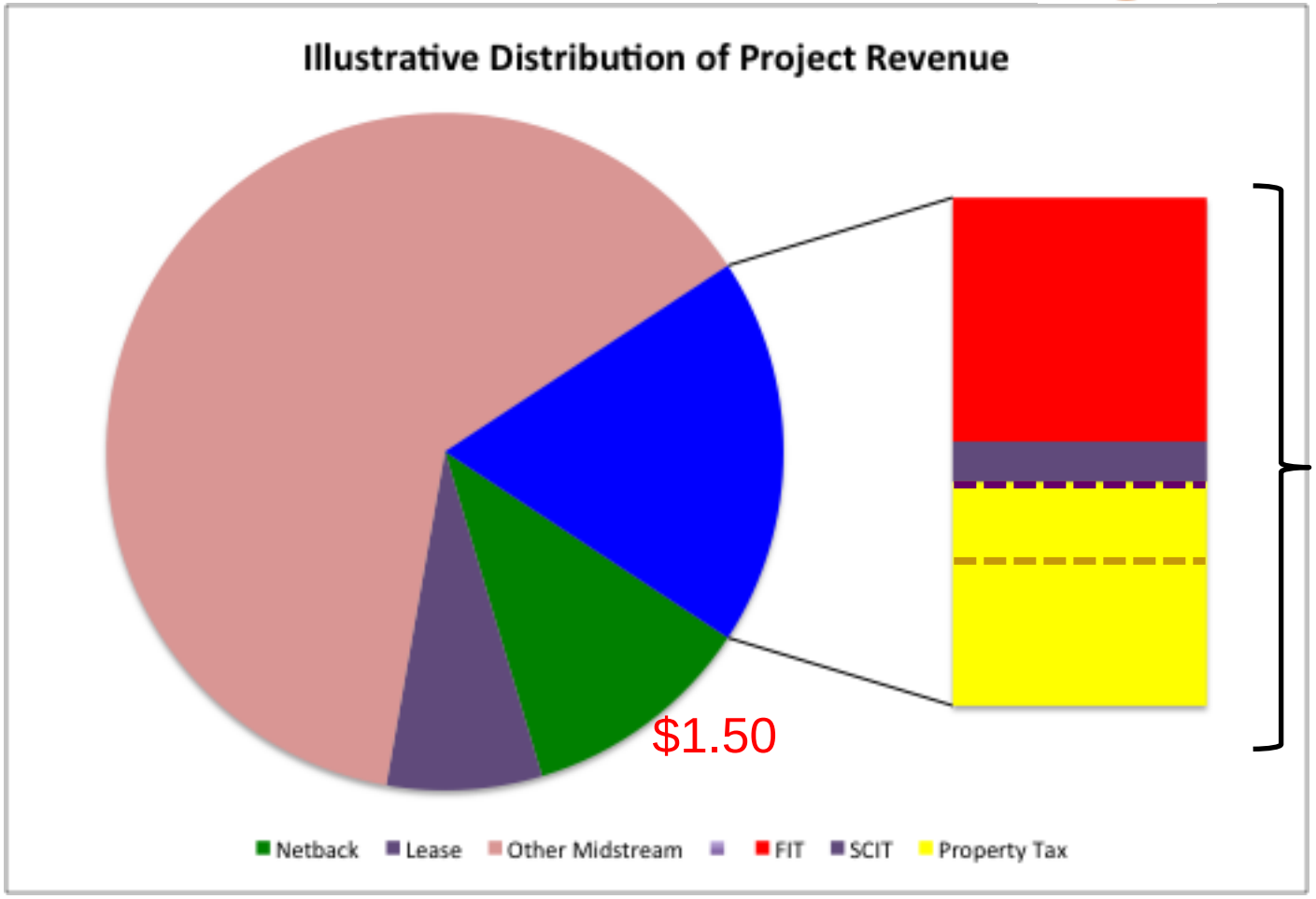
What Investors Care About – (OK)



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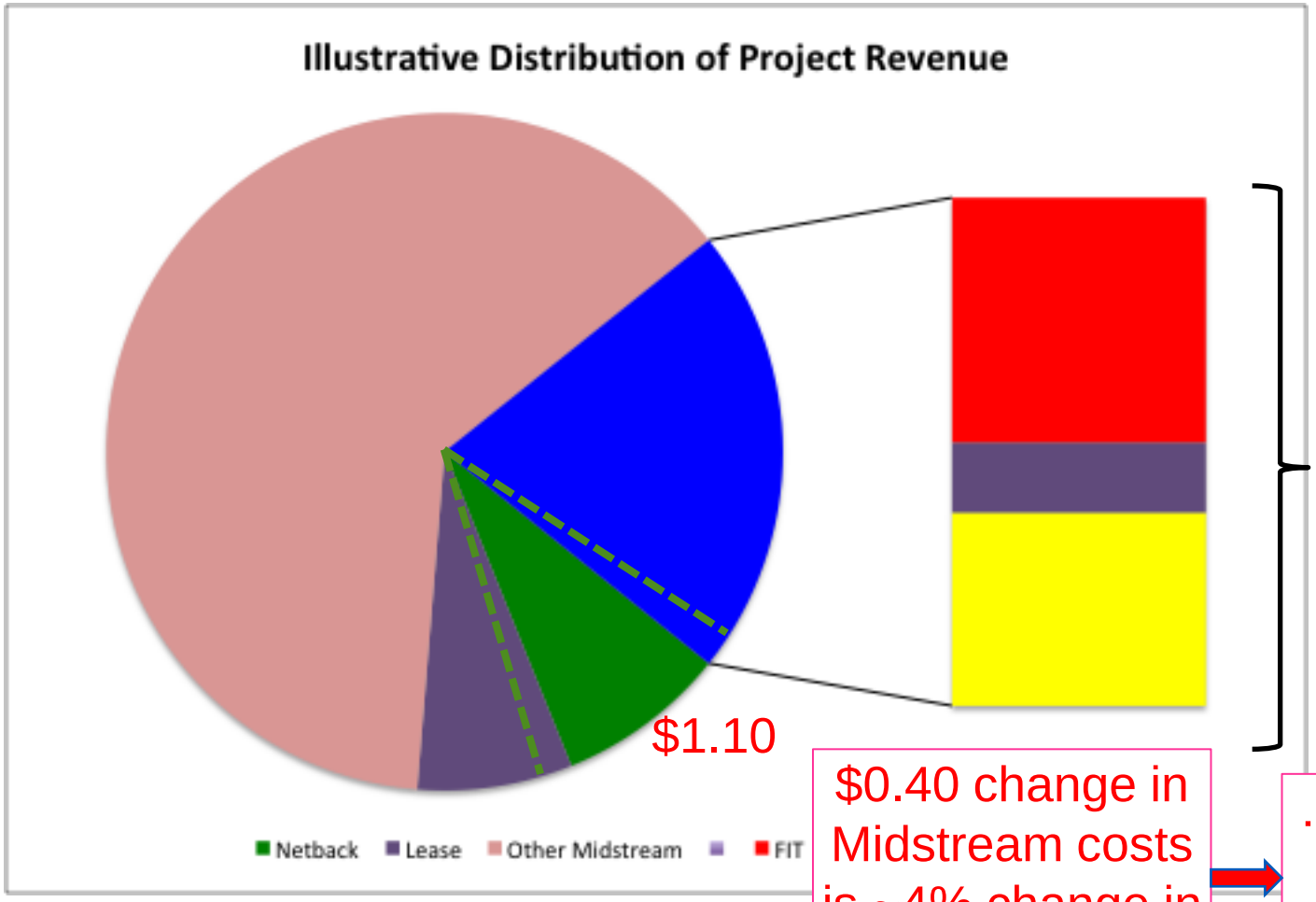
What Investors Care About – (!)



Can make adjustments in form and type of take without impacting returns

$0.40 change in Midstream costs is ~4% change in costs ….

… but 25%-30% change in Netback

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Evaluation Stages

Member Wants and Needs

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Evaluation Stages

- The Issue in Principle
  - Agree that PILT of some form is the appropriate way to go
- How Big Is The Pie
  - Mechanisms for Translating Modified Status quo to PILT
- What Shape Is Required
  - Construction Period
  - Flat
  - Escalating
  - Other Function ?
- Distribution amongst the Municipalities

Key Parameters

- Initial Design
  - Throughput
  - Costs
  - Assumed Returns
    - Debt + Equity = WACC
  - Depreciation
    - Modified Status Quo
  - Term

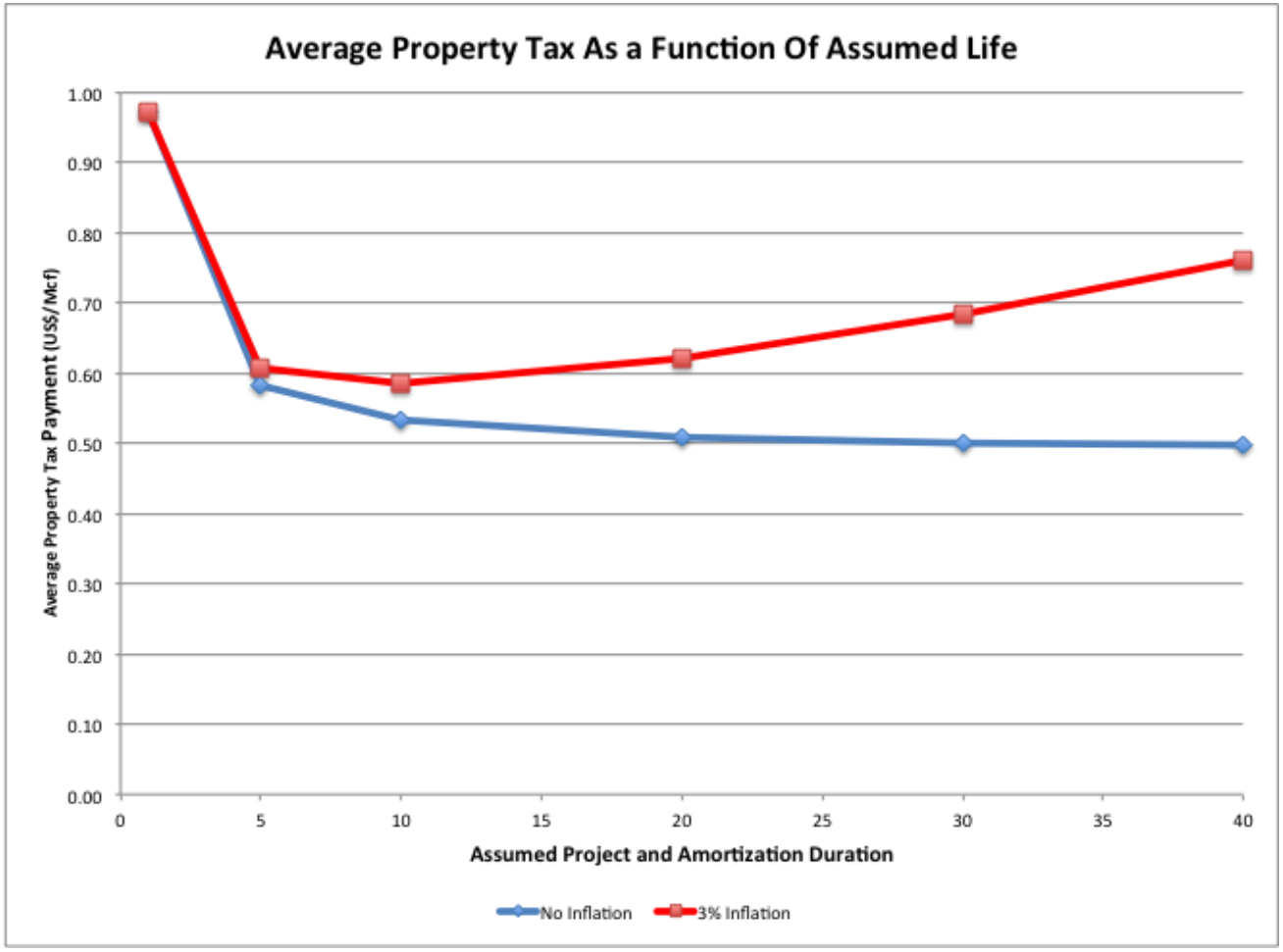
- Subsequent Considerations
  - Expansion / extension implications
  - Timing of take

How Might The Midstream Costs Divide ?

	20 Years	30 Years
	$/Mcf	
Debt + Equity Capital	3.00	2.25
Interest	1.70	1.80
ROE	1.95	2.10
Opex	1.10	1.40
Project and Financing Costs	***7.75***	***7.55***
Property Tax	**0.65**	**0.75**
SCIT	0.35	0.40
FIT	1.25	1.30
Alaska Costs	***10.00***	***10.00***
Shipping	1.00	1.00
Midstream Costs	**11.00**	**11.00**

All numbers are illustrative.
Property Tax here ignores ownership considerations, and reflects financing assumptions in B&V Royalty Study

Illustrative Impact of Life Assumptions



These are average values over assumed project life.
If an actual PILT were structured it would be slightly different to account for the time value of money and that under this model annual payments decline steadily over time.

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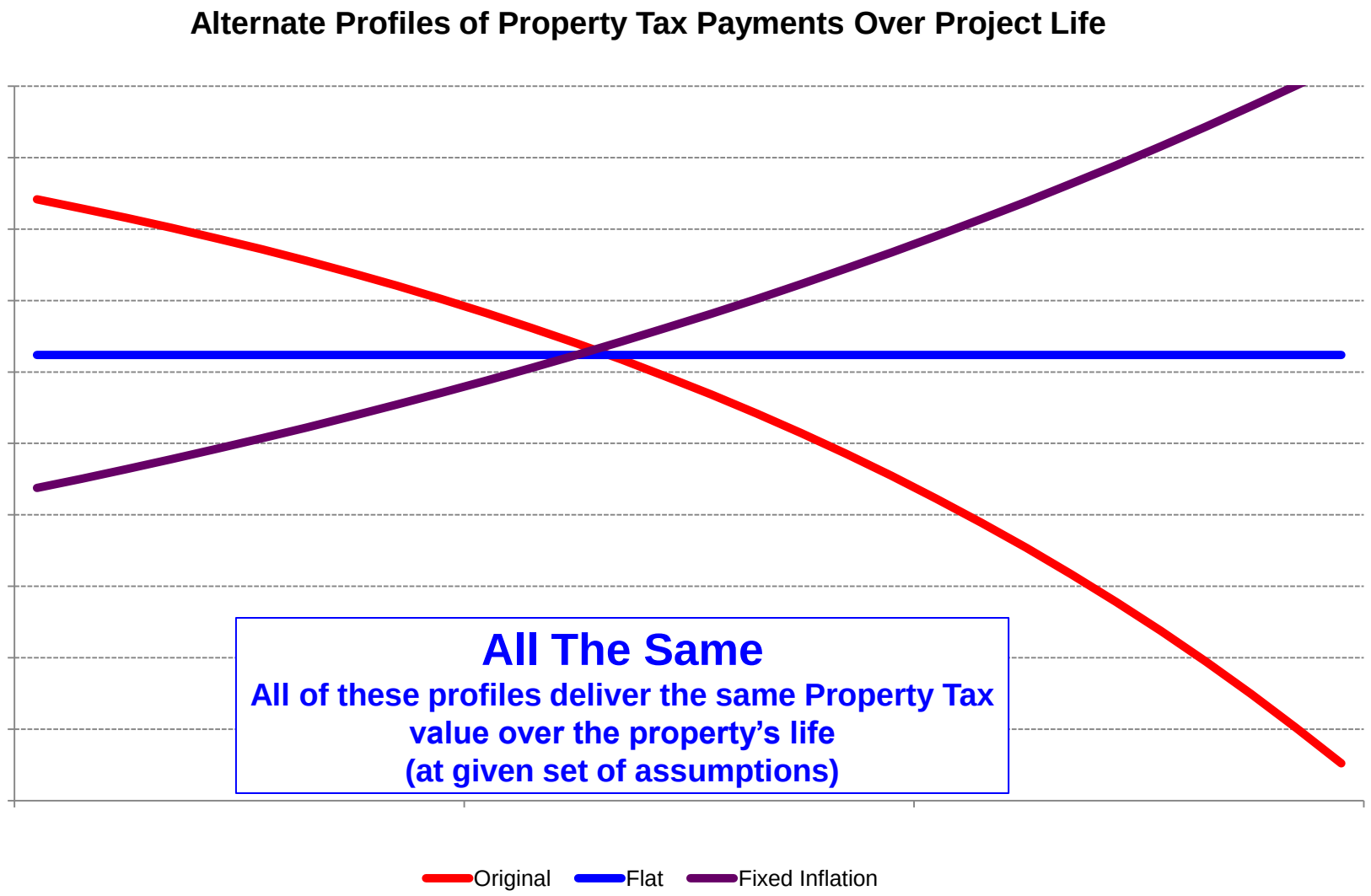
Potential Alternative Property Tax Profiles



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Member Inputs

- What do Members need/want to know as each of the evaluation stages are progressed ?
- What risks are Members trying to mitigate ?
- What exposure might Members be interested in ?

Thank You

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