

MUNICIPAL ADVISORY GAS PROJECT REVIEW BOARD

Agenda Item: “Status Quo Property Tax Model”

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November 12th, 2014

The Disclaimer

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This Excel spreadsheet model has been prepared by Gaffney, Cline & Associates ("GCA") on behalf of the State of Alaska ("SoA") for the purposes of supporting the Municipal Advisory Gas Project Review Board's evaluation of the Alaska LNG project. It is referred to below as "the GCA/SoA Model".

Estimating the future liabilities of the AK LNG project under the Alaska Oil and Gas Property Tax AS 43.56 is a very challenging task and subject to significant uncertainties due, among other things, to the wide range of interpretation possible under the existing statute, the uncertainties surrounding the project itself, and the general uncertainty caused by the nature of the annual assessment process called for under the statute, which looks at each year afresh, without reference to prior determinations.

The GCA/SoA Model is a good faith attempt to independently allow interested parties who wish to examine potential applications of AS 43.56 on the Alaska LNG Project; including by applying different input assumptions.

The GCA/SoA Model does not purport to be all inclusive, nor to contain all of the information that an interested party might need to understand the application of AS 43.56 in any particular circumstance. All of the information included is drawn from public domain sources and has not been independently verified. The GCA/SoA Model and the methodology reflected therein should not be relied upon in assessing any transaction, investment, liability, or other matter and neither GCA nor the SoA shall be responsible for any conclusions, direct or implied, arising from its use.

Further, GCA and its respective officers, directors, employees, agents, advisors and representatives make no representations or warranties, expressed or implied, concerning the GCA/SoA Model, nor the methodology or information employed therein, and does not make any claim as to the accuracy or appropriateness of the methodology or calculations in relation to any current or future interpretation of AS 43.56.

Recap on previous MAGPR discussions

Moving From Current Legislation to a Suitable PT basis for AK LNG project

Defining principles for new LNG PT

- **Fair**
 - Must be fair and equitable to all stakeholders
- **Clarity**
 - Must be easy to be understood
- **Robust**
 - Should be able to cope with changing future needs
- **Unambiguous**
 - Should not be subject to judgement and interpretation
- **Commercially sound**
 - Must enable Alaskan LNG project to compete in global market

There are key defining principles that a new PT methodology for LNG should take into consideration

Agenda:

- Overall process stages
- Excel model inputs, capabilities and limitations
- Parameters and risks that are difficult to predict going forward and not addressed by the Excel model
- Concept of maintaining an “area under the curve”
- Property Tax in context of AK LNG competitiveness

Overall Process Stages

- ❑ 5-6 August
 - Background on LNG value chain and global perspective
 - Initial insights into Property Tax alternatives

- ❑ 11 September
 - Oil and gas value chain comparison
 - Basic Property Tax design parameters

- ❑ 27 October
 - Project Presentations

- ❑ 12 November
 - Model distributed to MAG Board members ca. 29 October
 - Initial Property Tax spreadsheet model workshop

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- ❑ Excel model inputs, capabilities and limitations
- ❑ Parameters and risks that are difficult to predict going forward and not addressed by the Excel model
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- ❑ Property Tax in context of AK LNG competitiveness

PT Excel model – summary, capabilities and limitations

Background and Approach

- ❑ On behalf of the State of Alaska ("SoA"), GCA prepared a model for estimating indicative Property Tax under various assumptions, for the purposes of supporting the Municipal Advisory Gas Project Review Board's evaluation of the Alaska LNG project
 - GCA worked closely the Department of Revenue economics, tax and legislature teams
 - Insight was sought from other global projects and domestic projects in Alaska

- ❑ Model being developed in two stages
 - Basic functionality and design for single case (*this is what has been distributed*)
 - Expanded capability to address additional / alternate structures

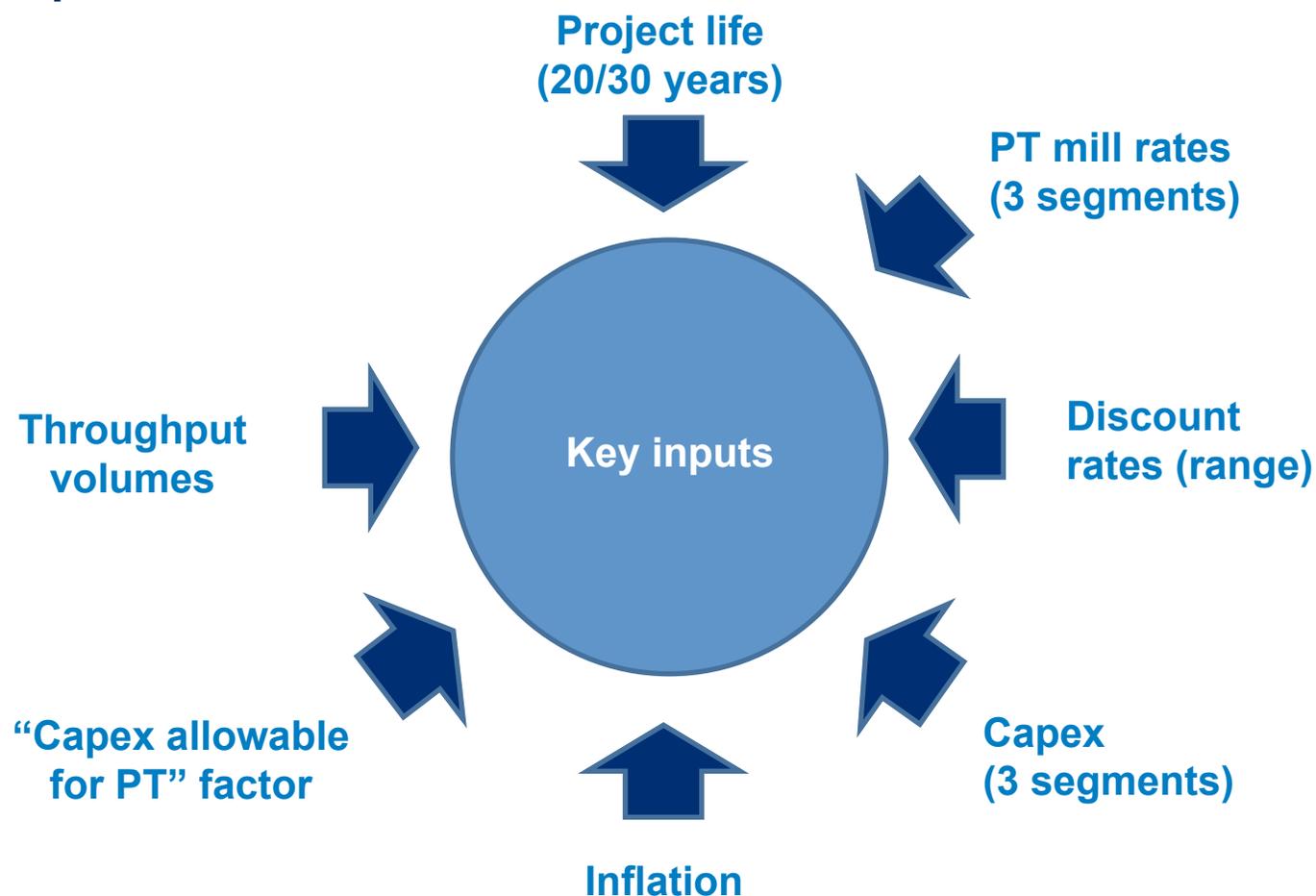
- ❑ The model has capability allow the user to change a variety of inputs, to drive a series of fixed outputs
 - The key inputs and outputs are discussed later in this presentation

- ❑ Given that it is designed to be a simplistic model, there are known limitations
 - The known limitations are discussed later in this presentation

The Model has several key capabilities, but there are also limitations that should be borne in mind

The model allows for the user to adjust several inputs...

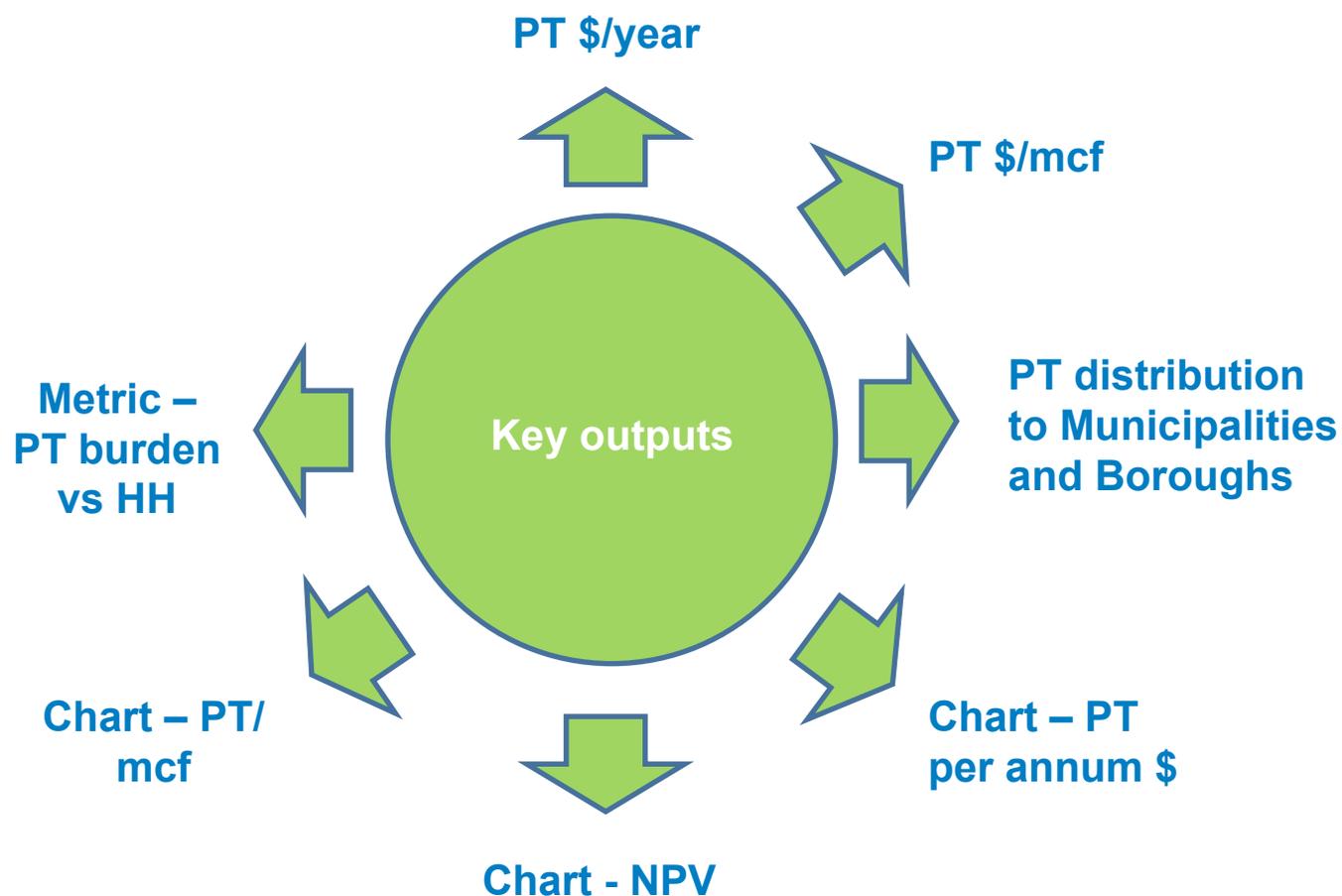
Key Inputs



These inputs reflect current basic version

... so that the model could provide a series of key outputs

Key Outputs



These outputs reflect current basic version

Inputs that can be changed by the user...

Headline project assumptions can be entered and changed

| ASSUMPTIONS | |
|---|-------|
| Key Inputs | |
| Project Life (years) | 30 |
| Depreciation Factor | 3.33% |
| Property Tax Rate (mills, note % equivalent) | |
| GTP | 18.5 |
| Pipeline | 20.0 |
| Liquefaction Terminal | 4.5 |
| Discount Rates (used for NPV comparisons) | |
| | 5.0% |
| | 6.0% |
| | 7.0% |
| | 8.0% |
| | 9.0% |
| | 10.0% |

PLEASE ONLY INPUT/OVERWRITE IN CELLS MARKED IN YELLOW.

*Model can currently model 20 or 30 year life
= 1 / Project Life (yrs)*

*e.g. 0.5% = 5 mills
e.g. 1.0% = 10 mills
e.g. 1.5% = 15 mills
e.g. 2.0% = 20 mills*

Range of discount rates for illustration purposes only and creating NPV chart

- Project life:** the present version of the model can accommodate a 20 or 30 year life
- Depreciation:** in present version calculated on a straight line basis over project life
- PT mill rates:** the model can handle different mill rates across each part of the project
- Discount rates:** can be selected by the user to calculate NPV's of PT cashflows

Inputs that can be changed by the user...

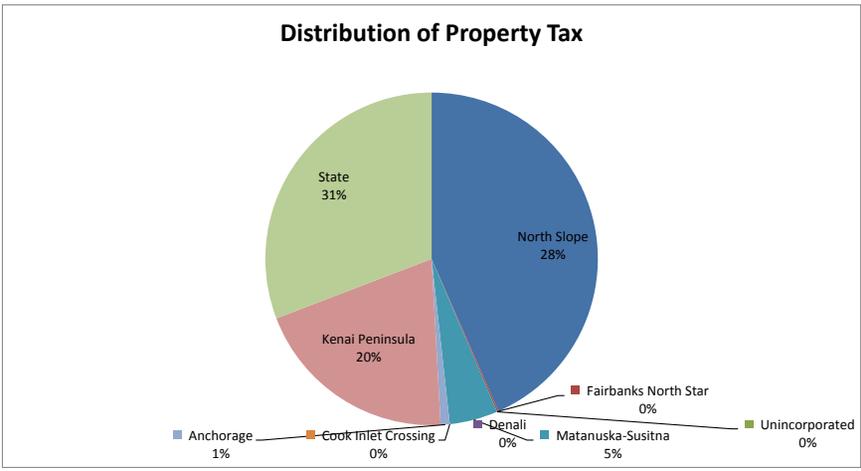
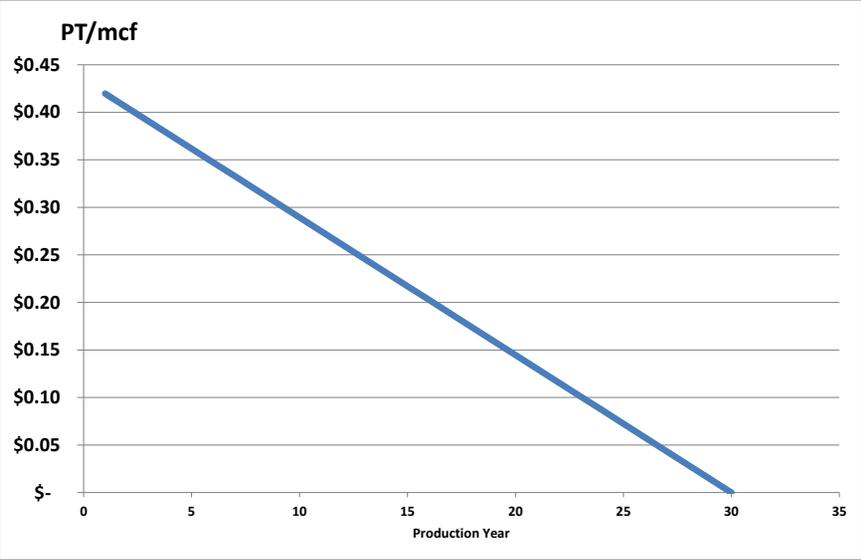
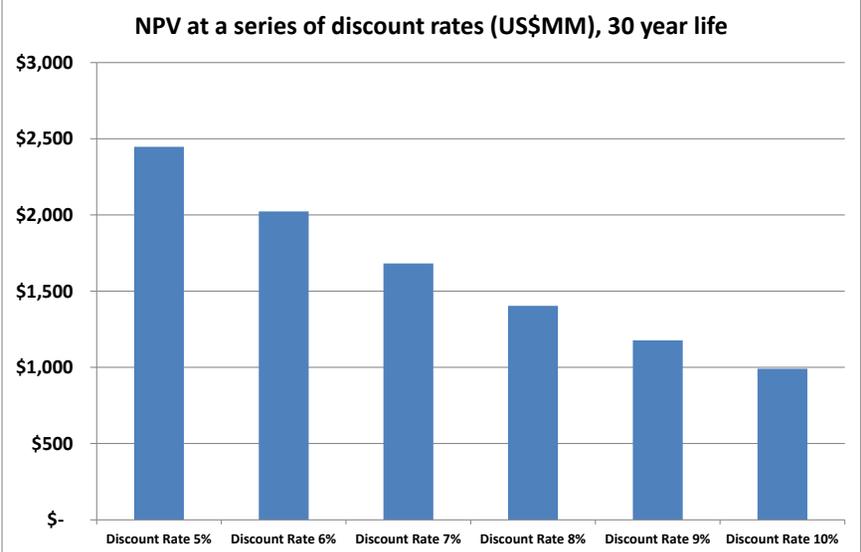
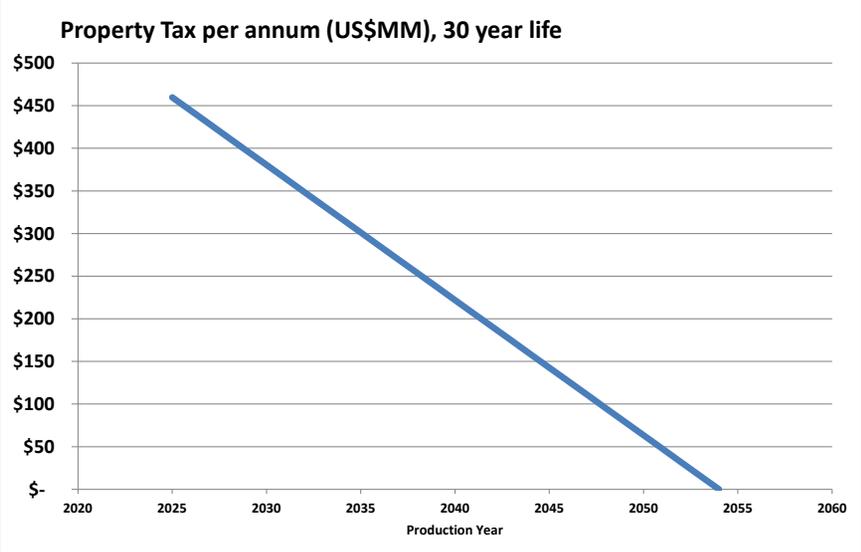
Capex is a key input assumption

| | | | |
|---|----|------------|---|
| Estimated Total Capex (2013 \$ real) | | | |
| GTP | \$ | 10,000 | 2013 \$ Headline Project Capex (will be escalated to 2025 and then reduced by allowable % factor below) US\$MM e.g. \$10 billion = \$10,000 |
| Pipeline | \$ | 12,000 | |
| Liquefaction Terminal | \$ | 23,000 | |
| Total Project Headline Capex (\$'000,000) | | | \$ 45,000 |
| Capex Annual Inflation Factor | | 0% | Enter a % <u>annual</u> inflation factor (to take 2013 \$ real estimate to 2025 \$) e.g. 2% per annum will inflate Headline Capex of \$100 to about \$127 |
| Estimated Total Capex (2025 \$ nominal) | | | |
| GTP | \$ | 10,000 | Calculated automatically by taking "2013 Capex x compounded Capex Annual Inflation Factor" |
| Pipeline | \$ | 12,000 | Calculated automatically by taking "2013 Capex x compounded Capex Annual Inflation Factor" |
| Liquefaction Terminal | \$ | 23,000 | Calculated automatically by taking "2013 Capex x compounded Capex Annual Inflation Factor" |
| Total Project Headline Capex (\$'000,000) | | | \$ 45,000 |
| Capex allowable for PT (enter %) | | 90% | Enter a %age to reduce Total Project Capex to "Capex Allowable for Property Tax" e.g. 90% will reduce \$100m to \$90m |
| Estimated Total Capex allowable for PT (2025 \$ nominal) | | | |
| GTP | \$ | 9,000 | Calculated automatically by taking "Headline Capex x Capex Allowable Factor" |
| Pipeline | \$ | 10,800 | Calculated automatically by taking "Headline Capex x Capex Allowable Factor" |
| Liquefaction Terminal | \$ | 20,700 | Calculated automatically by taking "Headline Capex x Capex Allowable Factor" |
| Total Capex (for PT calculation basis) | | | \$ 40,500 |
| | | | This number is used to calculate Property Tax (i.e. reduced for assumed disallowable capex under PT regime) |

- ❑ **Headline Capex (2013\$ real):** is split between the GTP, pipeline and liquefaction terminal
- ❑ **Headline Capex (2025\$ nominal):** 2013 real is inflated to a 2025 nominal figure using an assumed annual inflation factor
- ❑ **Capex for PT:** is adjusted by a reduction factor to give Capex component included in PT computation (allows for costs such as land, services, finance, other factors not subject to PT)

Output Dashboard generated by the model...

The model generates several charts



Additional outputs shown later

Calculation methodology in the model

- ❑ **Headline Capex (2013\$ real):** is split between the GTP, pipeline and liquefaction terminal
- ❑ **Headline Capex (2025\$ nominal):** 2013 real is inflated to a 2025 nominal figure using an assumed annual inflation factor. Model automatically calculates this based on input inflation rate
- ❑ **Capex for PT:** is adjusted by a reduction factor to give Capex allowable for PT
- ❑ **Depreciation:** calculated on a straight line basis over project life based on “2025\$ nominal capex” multiplied by “Capex for PT”
- ❑ **Property Tax:** is calculated separately for each of the 3 segments of the project at the input Mil rates
- ❑ **Property Tax:** is calculated on the closing Net Book Value each year
- ❑ **Volumes:** in this version of the model, are assumed to be continuous throughout the chain, with no separation for fuel gas or domestic gas use
- ❑ **NPV of cashflows:** calculated using Excel standard end of year discounting NPV formula
- ❑ **Distribution of PT:** Property tax from unincorporated boroughs and property tax levied in excess of local property tax rates is designated for the State’s account

Agenda:

- ❑ Overall process stages
- ❑ Excel model inputs, capabilities and limitations
- ❑ Parameters and risks that are difficult to predict going forward and not addressed by the Excel model
- ❑ Concept of maintaining an “area under the curve”
- ❑ Property Tax in context of AK LNG competitiveness

Project life considerations

- ❑ **Gas supply**
 - Existing Reserves capable of ~20 years supply before starting to decline
New supplies required to maintain output at initial rates (or expand)
 - Potentially large pool of additional gas, but economics as yet undefined

- ❑ **Duration of gas contracts**
 - 5-20 years historically
 - Shorter contract duration trend / spot markets

- ❑ **Life of physical assets**
 - Oldest LNG facilities approaching 50 years
 - Periodic major maintenance required

Project expansion considerations

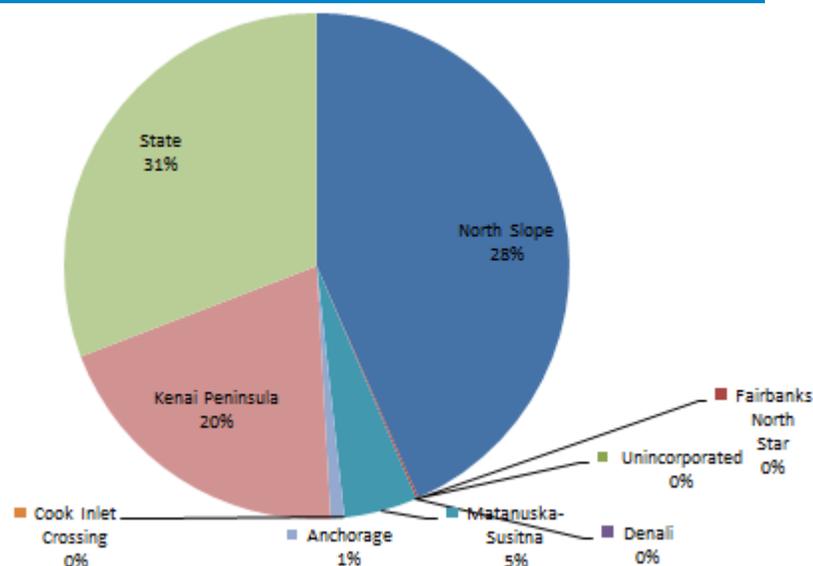
- Extending planned life
- De-bottlenecking
- Additional Trains

Other considerations

Distribution of Property Tax

- ❑ The Excel model calculates an assumed distribution of PT amongst municipalities and boroughs
- ❑ Property tax from unincorporated boroughs and property tax levied in excess of local property tax rates is designated in this analysis to be for the State's account
- ❑ The distribution of PT based on "default" parameters: 30 year project life, \$45bn headline (\$2013) capex, is illustrated below

Mill rates GTP 18.5, Pipeline 20, Liq Term 4.5



- ❑ The overall Property Tax liability and proportionate State share will increase if Mill rates are used in excess of the default values

Sharing of Property Tax Between Municipalities

| Full Property Tax distribution by Municipalities and Boroughs | | | | | | | | |
|---|------------------------|---------------------------------|-------------------------|-------------------|------------------------------|----------------------------|---------------------------|----------------------------|
| | North Slope Borough | Fairbanks North Star Borough | Unincorporated State | Denali Borough | Matanuska-Susitna Borough | Cook Inlet Crossing N/A | Anchorage Municipality | Kenai Peninsula Borough |
| Share of GTP PT | 100.0% | | | | | | | |
| Share of Pipeline PT | 20.0% | 0.5% | 37.5% | 10.5% | 21.0% | 3.5% | 2.5% | 4.5% |
| Share of Liq Term PT | | | | | | | | 100.0% |

Pipeline share estimated from regulatory filings, but can be varied by user

Distribution of Property Tax

| | North Slope | Fairbanks North Star | Unincorporated | Denali | Matanuska-Susitna | Cook Inlet Crossing | Anchorage | Kenai Peninsula |
|----------------------------|-------------|----------------------|----------------|--------|-------------------|---------------------|-----------|-----------------|
| Local Mill Rate | 18.5 | 12.971 | 0.0 | 0.0 | 9.852 | 0.0 | 15.56 | 4.50 |
| GTP Mill Rate | 18.5 | | | | | | | |
| Local share of GTP PT | 1.00 | | | | | | | |
| Pipeline Mill Rate | 20.0 | 20.0 | 20.0 | 20.0 | 20.0 | 20.0 | 20.0 | 20.0 |
| Local share of Pipeline PT | 0.93 | 0.65 | 0.00 | 0.00 | 0.49 | 0.00 | 0.78 | 0.23 |
| Liq Term Mill Rate | | | | | | | | 4.5 |
| Local share of Liq Term PT | | | | | | | | 1.00 |

Property tax from unincorporated boroughs and property tax levied in excess of local property tax rates is designated in this analysis for the State's account.

Full Property Tax distribution by Municipalities and Boroughs

| | North Slope | Fairbanks North Star | Unincorporated | Denali | Matanuska-Susitna | Cook Inlet Crossing | Anchorage | Kenai Peninsula | STATE BALANCE | TOTAL |
|----------------------|-------------|----------------------|----------------|--------|-------------------|---------------------|-----------|-----------------|---------------|--------|
| Share of GTP PT | 100.0% | | | | | | | | | 100.0% |
| Share of Pipeline PT | 20.0% | 0.5% | 37.5% | 10.5% | 21.0% | 3.5% | 2.5% | 4.5% | | 100.0% |
| Share of Liq Term PT | | | | | | | | 100.0% | | 100.0% |
| 1 | 200 | 1 | 0 | 0 | 22 | 0 | 4 | 92 | 142 | 460 |
| 2 | 193 | 1 | 0 | 0 | 21 | 0 | 4 | 89 | 137 | 444 |
| 3 | 186 | 1 | 0 | 0 | 20 | 0 | 4 | 86 | 132 | 428 |
| 4 | 179 | 1 | 0 | 0 | 19 | 0 | 4 | 83 | 127 | 412 |
| 5 | 172 | 1 | 0 | 0 | 19 | 0 | 4 | 79 | 122 | 396 |
| 6 | 165 | 1 | 0 | 0 | 18 | 0 | 3 | 76 | 117 | 381 |
| 7 | 158 | 1 | 0 | 0 | 17 | 0 | 3 | 73 | 112 | 365 |
| 8 | 151 | 1 | 0 | 0 | 16 | 0 | 3 | 70 | 108 | 349 |
| 9 | 145 | 0 | 0 | 0 | 16 | 0 | 3 | 67 | 103 | 333 |
| 10 | 138 | 0 | 0 | 0 | 15 | 0 | 3 | 64 | 98 | 317 |
| 11 | 131 | 0 | 0 | 0 | 14 | 0 | 3 | 60 | 93 | 301 |
| 12 | 124 | 0 | 0 | 0 | 13 | 0 | 3 | 57 | 88 | 285 |
| 13 | 117 | 0 | 0 | 0 | 13 | 0 | 2 | 54 | 83 | 270 |
| 14 | 110 | 0 | 0 | 0 | 12 | 0 | 2 | 51 | 78 | 254 |
| 15 | 103 | 0 | 0 | 0 | 11 | 0 | 2 | 48 | 73 | 238 |
| 16 | 96 | 0 | 0 | 0 | 10 | 0 | 2 | 44 | 68 | 222 |
| 17 | 89 | 0 | 0 | 0 | 10 | 0 | 2 | 41 | 64 | 206 |
| 18 | 83 | 0 | 0 | 0 | 9 | 0 | 2 | 38 | 59 | 190 |
| 19 | 76 | 0 | 0 | 0 | 8 | 0 | 2 | 35 | 54 | 174 |
| 20 | 69 | 0 | 0 | 0 | 7 | 0 | 1 | 32 | 49 | 159 |
| 21 | 62 | 0 | 0 | 0 | 7 | 0 | 1 | 29 | 44 | 143 |
| 22 | 55 | 0 | 0 | 0 | 6 | 0 | 1 | 25 | 39 | 127 |
| 23 | 48 | 0 | 0 | 0 | 5 | 0 | 1 | 22 | 34 | 111 |
| 24 | 41 | 0 | 0 | 0 | 4 | 0 | 1 | 19 | 29 | 95 |
| 25 | 34 | 0 | 0 | 0 | 4 | 0 | 1 | 16 | 24 | 79 |
| 26 | 28 | 0 | 0 | 0 | 3 | 0 | 1 | 13 | 20 | 63 |
| 27 | 21 | 0 | 0 | 0 | 2 | 0 | 0 | 10 | 15 | 48 |
| 28 | 14 | 0 | 0 | 0 | 1 | 0 | 0 | 6 | 10 | 32 |
| 29 | 7 | 0 | 0 | 0 | 1 | 0 | 0 | 3 | 5 | 16 |
| 30 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| | 2,994 | 10 | - | - | 324 | - | 61 | 1,382 | 2,126 | 6,897 |
| | North Slope | Fairbanks North Star | Unincorporated | Denali | Matanuska-Susitna | Cook Inlet Crossing | Anchorage | Kenai Peninsula | State | |
| | 43.4% | 0.1% | 0.0% | 0.0% | 4.7% | 0.0% | 0.9% | 20.0% | 30.8% | 100.0% |

- ❑ Assumed Mill rates for example:
 - GTP 18.5
 - Pipeline 20
 - Liquefaction Terminal 4.5

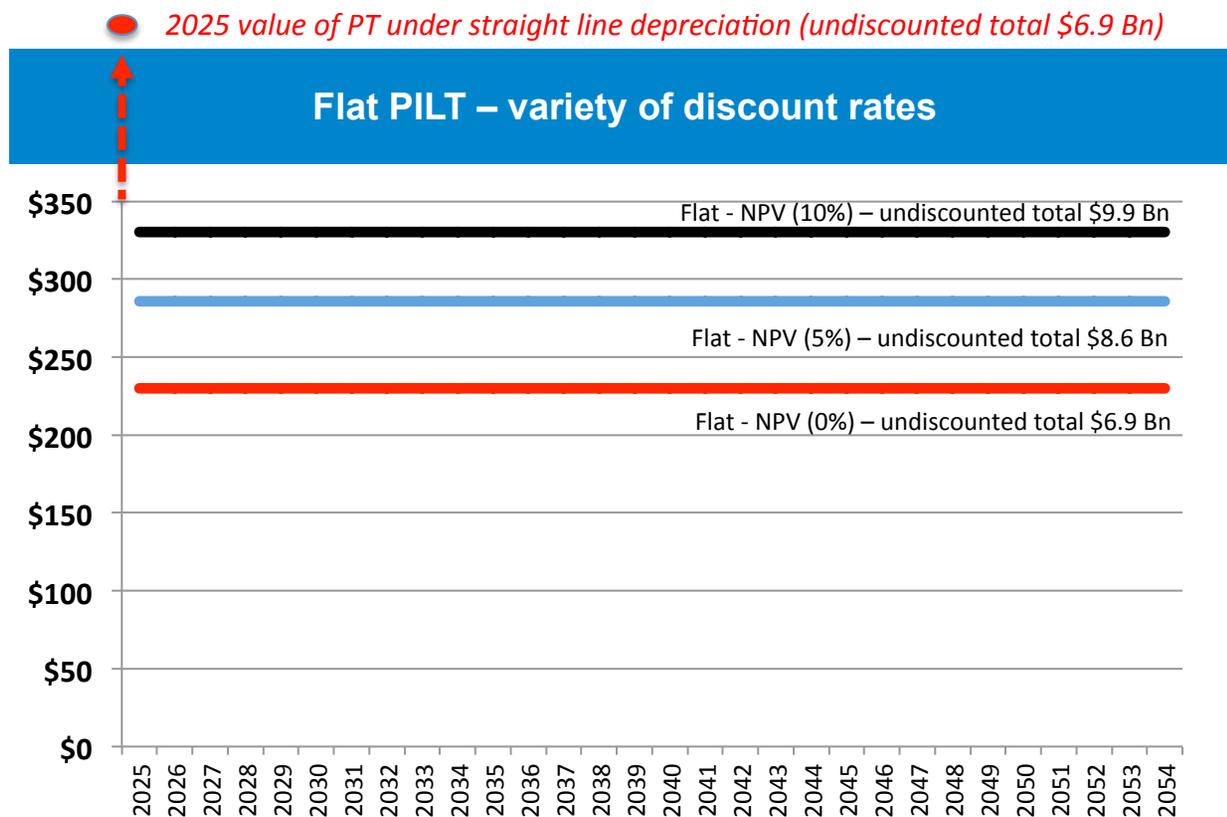
Agenda:

- ❑ Overall process stages
- ❑ Excel model inputs, capabilities and limitations
- ❑ Parameters and risks that are difficult to predict going forward and not addressed by the Excel model
- ❑ **NEXT STEP:** Concept of maintaining an “area under the curve”
- ❑ Property Tax in context of AK LNG competitiveness

Alternative cashflow profiles - PILT

- ❑ **Alternative profiles:** Having modelled the Property Tax cashflows from the basic depreciation methodology, the next step was taken to look at alternative cashflow profiles which could be derived
- ❑ **“Maintaining the area under the curve”:** This concept was taken as a pre-requisite for arriving at alternative cash flow profiles. Simply, it ensures that Municipalities receive equal value regardless of approach taken
- ❑ **PILT mechanism:** A Payment in Lieu of Tax (PILT) mechanism was used to generate the Property Tax (cash flow)
- ❑ **Different types of PILT structure:** consider alternatives such as a flat PILT and an escalating PILT in order to inform discussion at the municipality level. Further alternatives may include features such as gas price indexation.
- ❑ **Profiles at different discount rates:** In order to “maintain the area under the curve”, and calculate the alternative PILT structures, cash flow profiles were calculated for a series of NPV discount rates. This allows users to reflect different assumptions of the time value of money

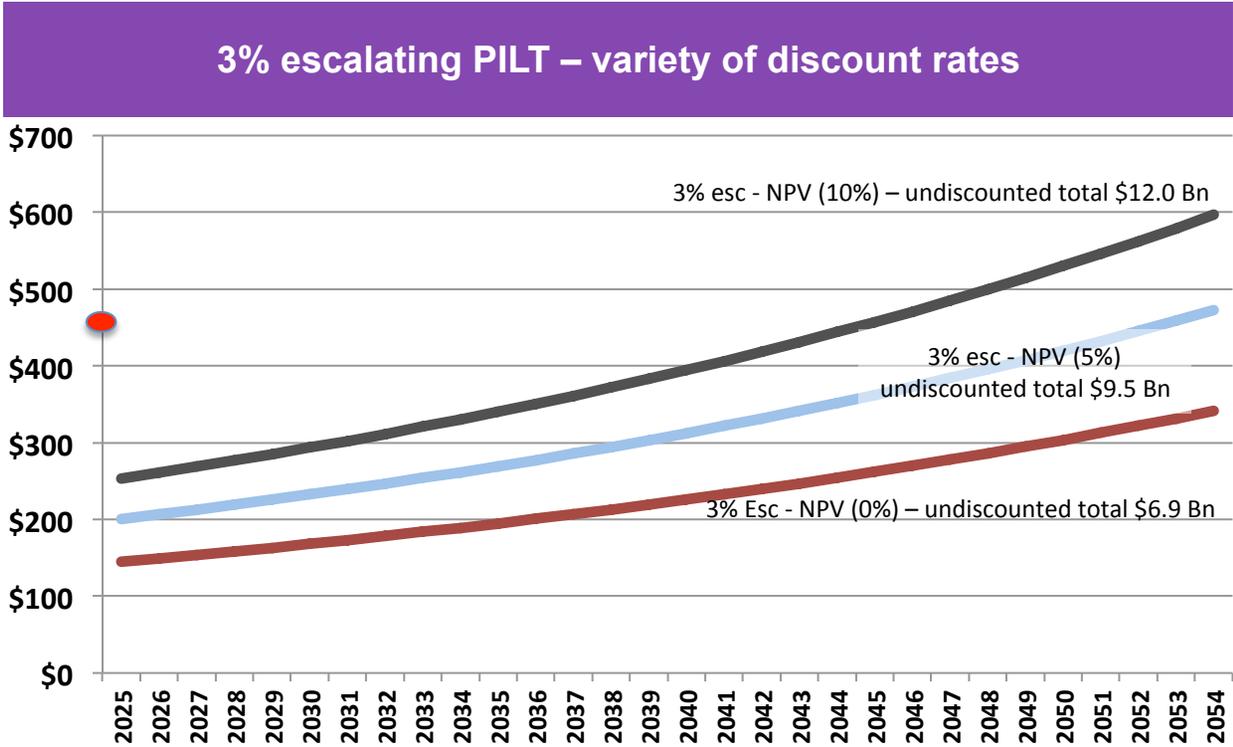
Example of a flat PILT



Note: Based on “default” parameters: 30 year project life, \$45bn headline capex, GTP mill rate 18.5, Pipeline mill rate 20, Liquefaction Terminal mill rate 4.5

| Year | Annual \$MM PT PILT Payments | | |
|------|------------------------------|-----|-----|
| | 0% | 5% | 10% |
| 2025 | 230 | 286 | 330 |
| 2026 | 230 | 286 | 330 |
| 2027 | 230 | 286 | 330 |
| 2028 | 230 | 286 | 330 |
| 2029 | 230 | 286 | 330 |
| 2030 | 230 | 286 | 330 |
| 2031 | 230 | 286 | 330 |
| 2032 | 230 | 286 | 330 |
| 2033 | 230 | 286 | 330 |
| 2034 | 230 | 286 | 330 |
| 2035 | 230 | 286 | 330 |
| 2036 | 230 | 286 | 330 |
| 2037 | 230 | 286 | 330 |
| 2038 | 230 | 286 | 330 |
| 2039 | 230 | 286 | 330 |
| 2040 | 230 | 286 | 330 |
| 2041 | 230 | 286 | 330 |
| 2042 | 230 | 286 | 330 |
| 2043 | 230 | 286 | 330 |
| 2044 | 230 | 286 | 330 |
| 2045 | 230 | 286 | 330 |
| 2046 | 230 | 286 | 330 |
| 2047 | 230 | 286 | 330 |
| 2048 | 230 | 286 | 330 |
| 2049 | 230 | 286 | 330 |
| 2050 | 230 | 286 | 330 |
| 2051 | 230 | 286 | 330 |
| 2052 | 230 | 286 | 330 |
| 2053 | 230 | 286 | 330 |
| 2054 | 230 | 286 | 330 |

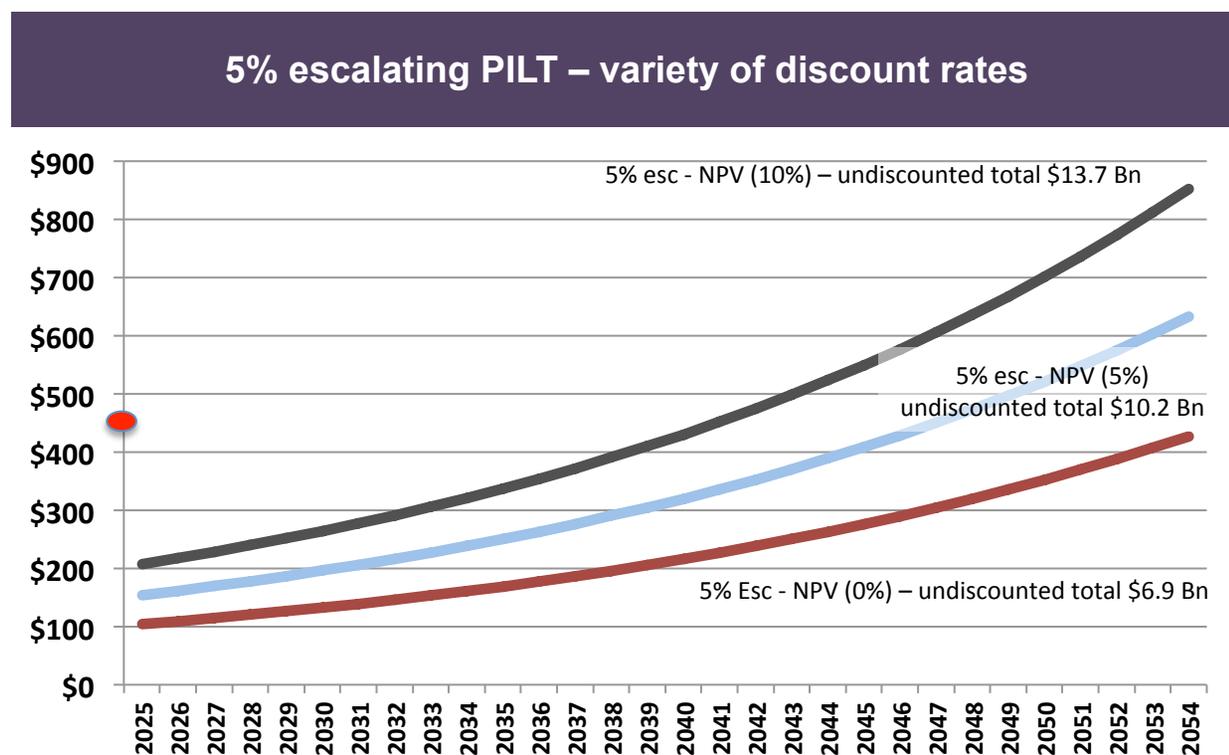
Example of a 3% escalating PILT



Note: Based on “default” parameters: 30 year project life, \$45bn headline capex, GTP mill rate 18.5, Pipeline mill rate 20, Liquefaction Terminal mill rate 4.5

| Year | Annual \$MM PT PILT Payments | | |
|------|------------------------------|-----|-----|
| | 0% | 5% | 10% |
| 2025 | 145 | 200 | 253 |
| 2026 | 149 | 206 | 261 |
| 2027 | 154 | 213 | 269 |
| 2028 | 158 | 219 | 277 |
| 2029 | 163 | 226 | 285 |
| 2030 | 168 | 232 | 293 |
| 2031 | 173 | 239 | 302 |
| 2032 | 178 | 247 | 311 |
| 2033 | 184 | 254 | 321 |
| 2034 | 189 | 262 | 330 |
| 2035 | 195 | 269 | 340 |
| 2036 | 201 | 278 | 350 |
| 2037 | 207 | 286 | 361 |
| 2038 | 213 | 294 | 372 |
| 2039 | 219 | 303 | 383 |
| 2040 | 226 | 312 | 394 |
| 2041 | 233 | 322 | 406 |
| 2042 | 240 | 331 | 418 |
| 2043 | 247 | 341 | 431 |
| 2044 | 254 | 352 | 444 |
| 2045 | 262 | 362 | 457 |
| 2046 | 270 | 373 | 471 |
| 2047 | 278 | 384 | 485 |
| 2048 | 286 | 396 | 500 |
| 2049 | 295 | 408 | 515 |
| 2050 | 304 | 420 | 530 |
| 2051 | 313 | 432 | 546 |
| 2052 | 322 | 445 | 562 |
| 2053 | 332 | 459 | 579 |
| 2054 | 342 | 472 | 597 |

Example of a 5% escalating PILT

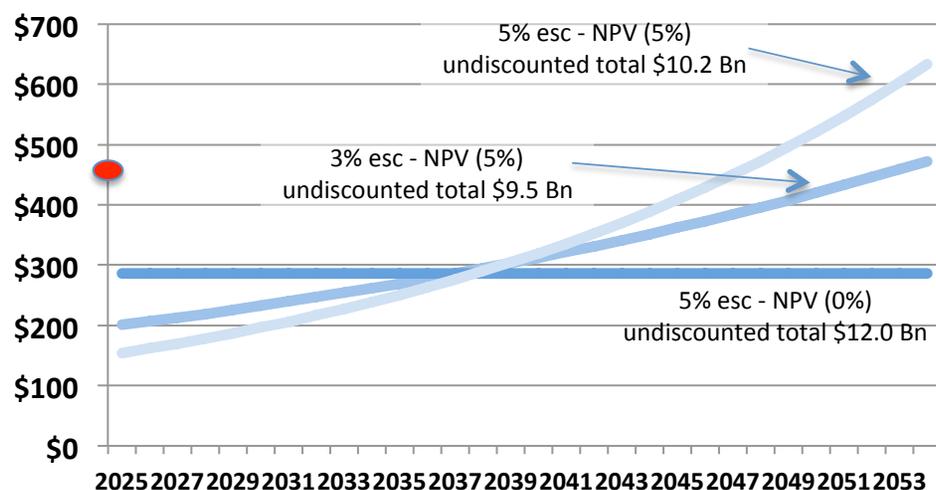


Note: Based on “default” parameters: 30 year project life, \$45bn headline capex, GTP mill rate 18.5, Pipeline mill rate 20, Liquefaction Terminal mill rate 4.5

| Year | Annual \$MM PT PILT Payments | | |
|------|------------------------------|-----|-----|
| | 0% | 5% | 10% |
| 2025 | 104 | 154 | 207 |
| 2026 | 109 | 161 | 217 |
| 2027 | 114 | 170 | 228 |
| 2028 | 120 | 178 | 240 |
| 2029 | 126 | 187 | 252 |
| 2030 | 132 | 196 | 264 |
| 2031 | 139 | 206 | 277 |
| 2032 | 146 | 216 | 291 |
| 2033 | 153 | 227 | 306 |
| 2034 | 161 | 239 | 321 |
| 2035 | 169 | 251 | 337 |
| 2036 | 178 | 263 | 354 |
| 2037 | 186 | 276 | 372 |
| 2038 | 196 | 290 | 390 |
| 2039 | 206 | 305 | 410 |
| 2040 | 216 | 320 | 430 |
| 2041 | 227 | 336 | 452 |
| 2042 | 238 | 353 | 474 |
| 2043 | 250 | 370 | 498 |
| 2044 | 262 | 389 | 523 |
| 2045 | 275 | 408 | 549 |
| 2046 | 289 | 428 | 576 |
| 2047 | 304 | 450 | 605 |
| 2048 | 319 | 472 | 636 |
| 2049 | 335 | 496 | 667 |
| 2050 | 352 | 521 | 701 |
| 2051 | 369 | 547 | 736 |
| 2052 | 388 | 574 | 773 |
| 2053 | 407 | 603 | 811 |
| 2054 | 427 | 633 | 852 |

PILTS – flat vs 3% esc vs 5% esc example (NPV5%)

Variety of PILTs – all at a 5% discount rate



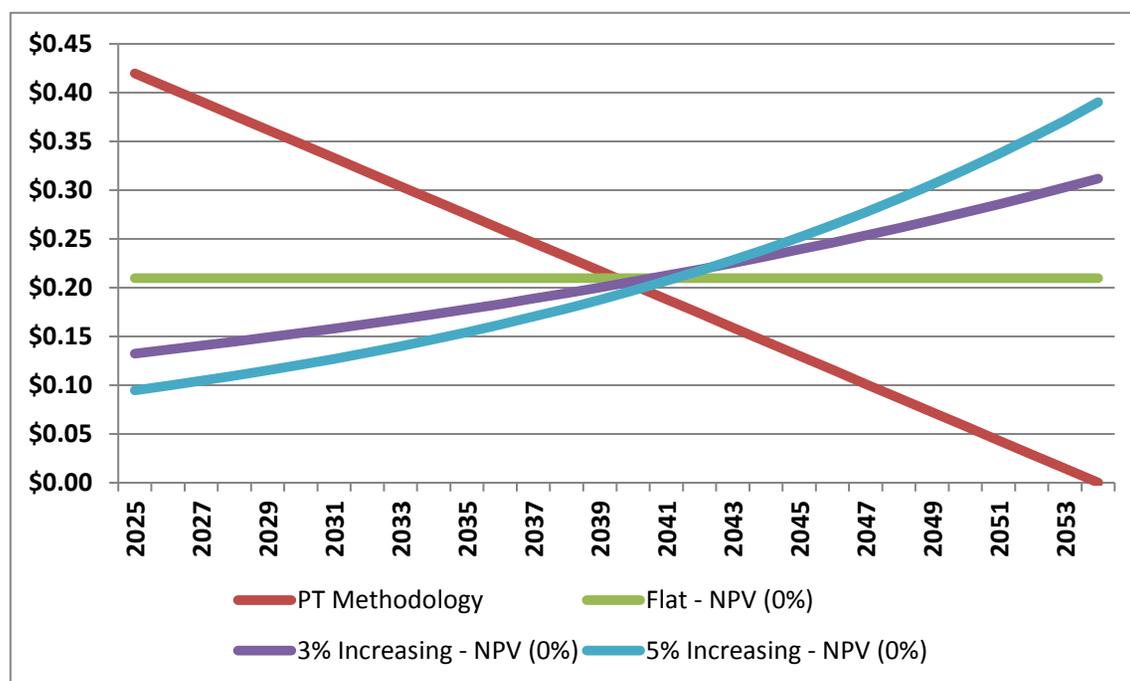
Note: Based on “default” parameters: 30 year project life, \$45bn headline capex, GTP mill rate 18.5, Pipeline mill rate 20, Liquefaction Terminal mill rate 4.5

- Even a small percentage change in escalation leads to a large change in \$ PILT payments

| Year | Flat - NPV (5%) | 3% Increasing - NPV (5%) | 5% Increasing - NPV (5%) |
|------|-----------------|--------------------------|--------------------------|
| 2025 | \$286 | \$200 | \$154 |
| 2026 | \$286 | \$206 | \$161 |
| 2027 | \$286 | \$213 | \$170 |
| 2028 | \$286 | \$219 | \$178 |
| 2029 | \$286 | \$226 | \$187 |
| 2030 | \$286 | \$232 | \$196 |
| 2031 | \$286 | \$239 | \$206 |
| 2032 | \$286 | \$247 | \$216 |
| 2033 | \$286 | \$254 | \$227 |
| 2034 | \$286 | \$262 | \$239 |
| 2035 | \$286 | \$269 | \$251 |
| 2036 | \$286 | \$278 | \$263 |
| 2037 | \$286 | \$286 | \$276 |
| 2038 | \$286 | \$294 | \$290 |
| 2039 | \$286 | \$303 | \$305 |
| 2040 | \$286 | \$312 | \$320 |
| 2041 | \$286 | \$322 | \$336 |
| 2042 | \$286 | \$331 | \$353 |
| 2043 | \$286 | \$341 | \$370 |
| 2044 | \$286 | \$352 | \$389 |
| 2045 | \$286 | \$362 | \$408 |
| 2046 | \$286 | \$373 | \$428 |
| 2047 | \$286 | \$384 | \$450 |
| 2048 | \$286 | \$396 | \$472 |
| 2049 | \$286 | \$408 | \$496 |
| 2050 | \$286 | \$420 | \$521 |
| 2051 | \$286 | \$432 | \$547 |
| 2052 | \$286 | \$445 | \$574 |
| 2053 | \$286 | \$459 | \$603 |
| 2054 | \$286 | \$472 | \$633 |

Comparing PT methodologies on a \$/mcf basis

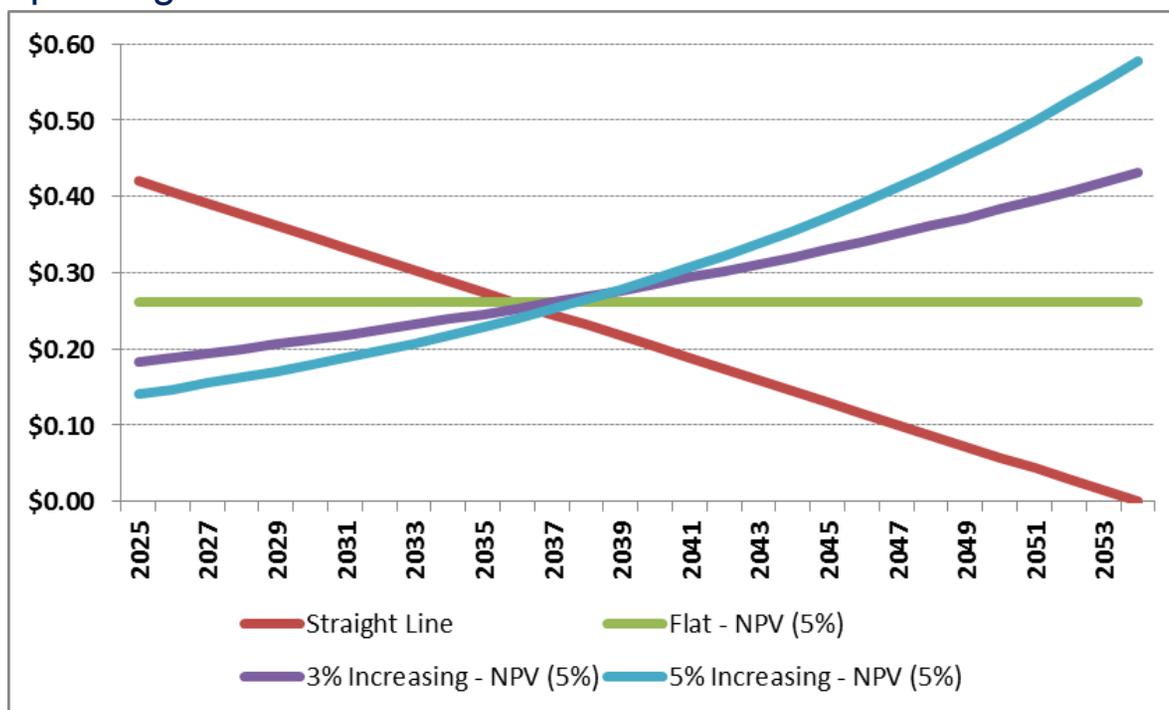
- ❑ Comparisons were calculated between the modelled PT methodology, a flat PILT, a 3% escalating PILT and a 5% escalating PILT
- ❑ These comparisons were compiled on a \$/mcf metric basis, assuming a single simplified gas flow rate



- ❑ Calculation on undiscounted (NPV 0%) basis

Comparing PT methodologies on a \$/mcf basis

- Comparisons were calculated between the modelled PT methodology, a flat PILT, a 3% escalating PILT and a 5% escalating PILT
- These comparisons were compiled on a \$/mcf metric basis, assuming a single simplified gas flow rate



- Calculation on an NPV 5% basis

Benefits of, and risks addressed using a PILT mechanism

Considerations in using a PILT mechanism

- ❑ **Unambiguous:** Once set, the PILT rate is not subject to judgement
- ❑ **Clarity:** the PILT rate is clear and the same for all
- ❑ **Greater certainty:** for producers and project shareholders
- ❑ **Tailored:** to nature of an LNG project
- ❑ **Budgeting:** gives a certain level of certainty to Municipality budgets given flat and stable volume profile of an LNG project during plateau (15-30 years)
- ❑ **Escalation:** allows for Municipality budgets to cope with general inflation

Issues addressed by using a PILT mechanism

- ❑ **Debottlenecking:** a greater flow leads to a greater PT payment
- ❑ **Expansion:** future users pay the same \$/mcf rate
- ❑ **Project life:** PILT carries on for as long as the project continues

Issues still to consider further

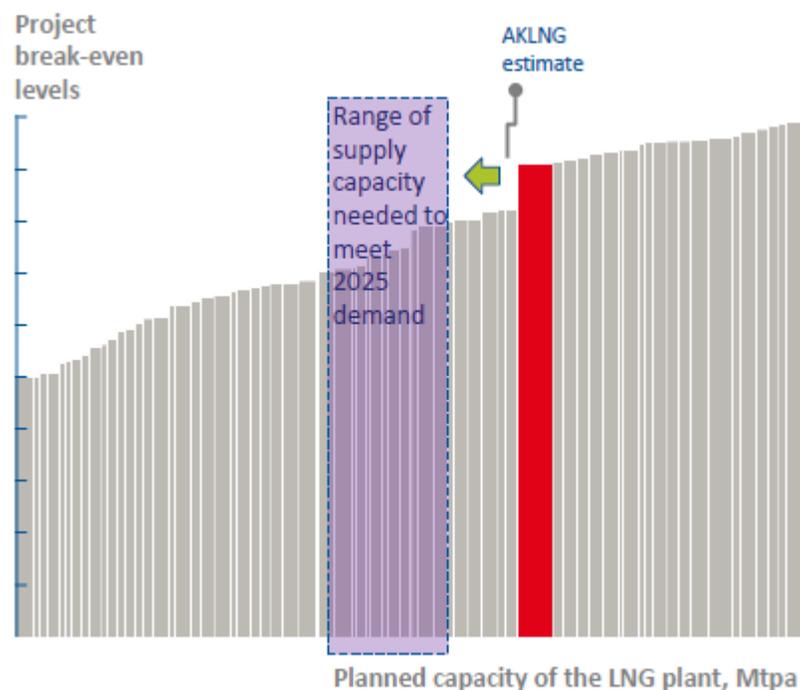
- ❑ **Gas Pricing:** Impact on project life and opportunity, profitability, indexation
- ❑ **Gas distribution:** Impact of in-State gas, losses through system

Agenda:

- ❑ Overall process stages
- ❑ Excel model inputs, capabilities and limitations
- ❑ Parameters and risks that are difficult to predict going forward and not addressed by the Excel model
- ❑ Concept of maintaining an “area under the curve”
- ❑ Property Tax in context of AK LNG competitiveness

Project Feasibility Hinges on Competitive Situation

- Two key considerations are
 - Feasibility of delivering gas at a price market can sustain
 - Other risk factors such as stable government, accessible workforce, supply chain etc
- AK LNG is challenged on the first, but has some advantages on the second



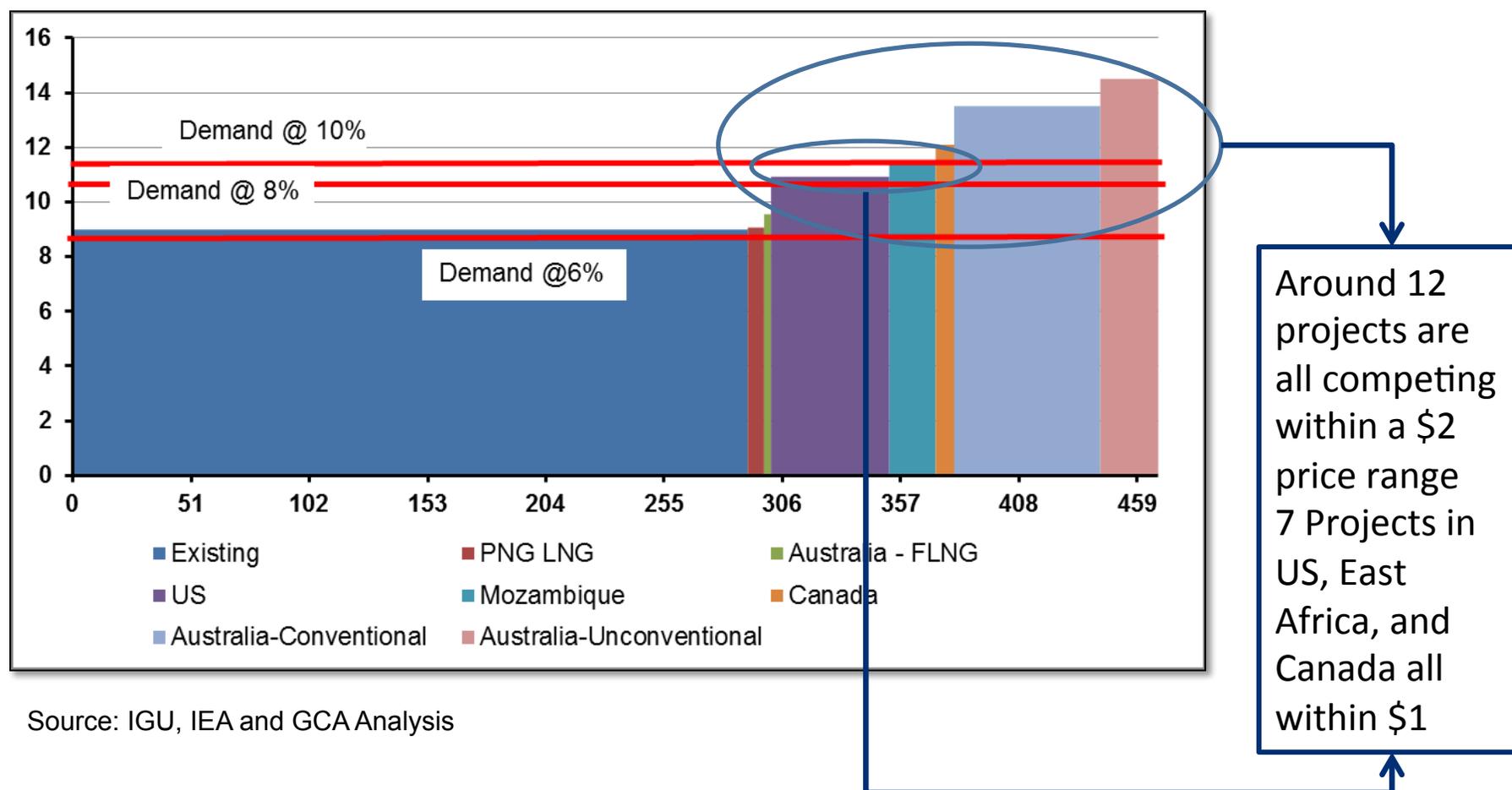
Illustrative diagram showing approximate LNG merit order for 2025 supply horizon:

“Projects more economic than Alaska can provide ~340 MTPA new supply, more than required to meet global LNG demand (~250-300 MTPA)”

Source: Alaska North Slope Royalty Study, November 2013

Near Term LNG Project Competitiveness (up to 2020)

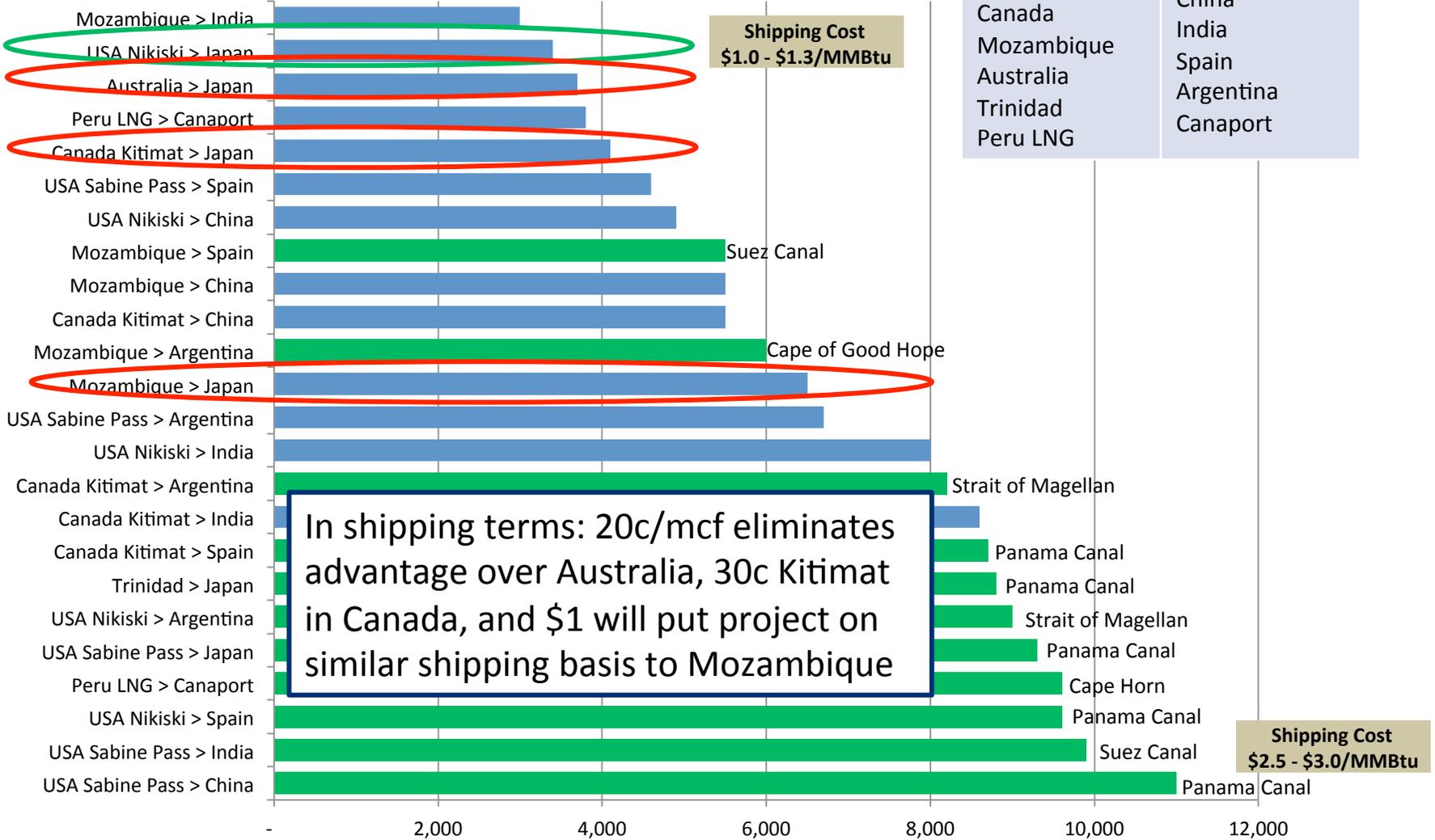
- ❑ LNG supply may exceed Asian demand in the next 5 years.
- ❑ Those projects with long term Take or Pay sales will be better insulated



Source: IGU, IEA and GCA Analysis

Alaska's Shipping Advantage

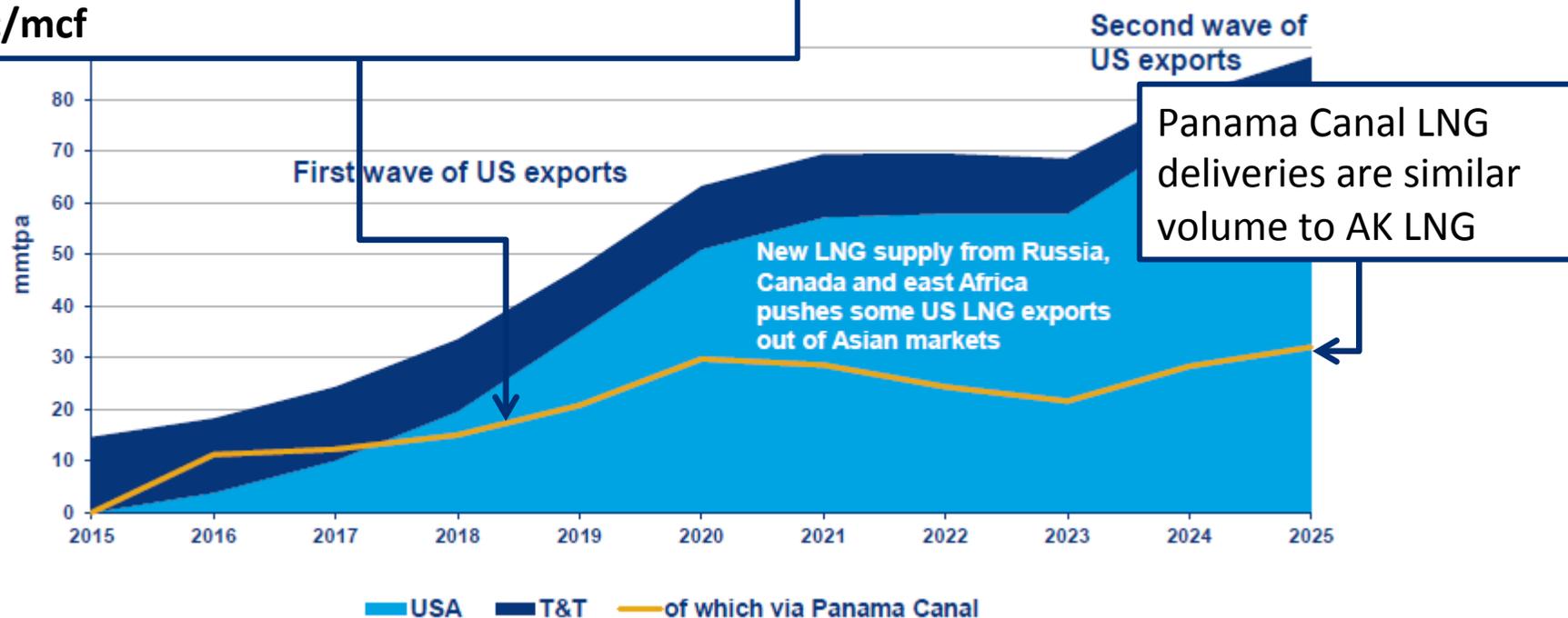
| Seller | Buyer |
|------------|-----------|
| USA Alaska | Japan |
| USA L48 | China |
| Canada | India |
| Mozambique | Spain |
| Australia | Argentina |
| Trinidad | Canaport |
| Peru LNG | |



In shipping terms: 20c/mcf eliminates advantage over Australia, 30c Kitimat in Canada, and \$1 will put project on similar shipping basis to Mozambique

Alaska's Advantage – no Panama Canal

Panama Canal is a vital link providing US Gulf Coast and Trinidadian LNG access to Asian markets. Estimated round trip charge for an LNG carrier is \$1m* - cost burden of **approx 25c/mcf**



Source: WoodMackenzie

* GCA Estimate, Shipping industry sources

Going Forward

- Defining principles for Property Tax
 - Confirm (adjust, or add to) principles identify and clarify as required

| Defining principles for new LNG PT |
|---|
| • Fair <ul style="list-style-type: none">○ Must be fair and equitable to all stakeholders |
| • Clarity <ul style="list-style-type: none">○ Must be easy to be understood |
| • Robust <ul style="list-style-type: none">○ Should be able to cope with changing future needs |
| • Unambiguous <ul style="list-style-type: none">○ Should not be subject to judgement and interpretation |
| • Commercially sound <ul style="list-style-type: none">○ Must enable Alaskan LNG project to compete in global market |

- Identify any changes to be embedded in process and modeling approach

- Model
 - Feedback with respect to current basic version
 - Particular assumptions or features to be incorporated
 - Await further feedback post this meeting
 - Issue updated model version shortly thereafter

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