COMPETITIVENESS, PROJECT STRUCTURE & CASH EXPOSURE

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JANAK MAYER Partner *en*alytica JANAK.MAYER@ENALYTICA.INFO Before co-founding *en*alytica, Janak led the Upstream Analytics team at PFC Energy, focusing on fiscal terms analysis and project economic and financial evaluation, data management and data visualization.

Janak has modeled upstream fiscal terms in all of the world's major hydrocarbon regions, and has built economic and financial models to value prospective acquisition targets and develop strategic portfolio options for a wide range of international and national oil company clients. He has advised Alaska State Legislature for multiple years on reform of oil and gas taxation, providing many hours of expert testimony to Alaska's Senate and House Finance and Resources Committees.

Prior to his work as an energy consultant, Janak advised major minerals industry clients on a range of controversial environmental and social risk issues, from uranium mining through to human rights and climate change. He has advised bankers at Citigroup and policy-makers at the US Treasury Department on the management and mitigation of environmental and social impacts in major projects around the world, and has undertaken macroeconomic research with senior development economists at the World Bank and the Peterson Institute for International Economics.

Janak holds an MA with distinction in international relations and economics from from the Johns Hopkins School of Advanced International Studies (SAIS), and a BA with first-class honors from the University of Adelaide, Australia.





NIKOS TSAFOS Partner *en*alytica Nikos.tsafos@enalytica.info Nikos Tsafos has a diverse background in the private, public and non-profit sectors. He is currently a founding partner at *en*alytica. In his 7 ½ years with PFC Energy, Nikos advised the world's largest oil and gas companies on some of their most complex and challenging projects; he also played a pivotal role in turning the firm into one of the top natural gas consultancies in the world, with responsibilities that included product design, business development, consulting oversight and research direction.

Prior to PFC Energy, Nikos was at the Center for Strategic and International Studies (CSIS) in Washington, DC where he covered political, economic, and military issues in the Gulf, focused on oil wealth, regime stability and foreign affairs. Before CSIS, he was in the Greek Air Force, and prior to his military service, Nikos worked on channeling investment from Greek ship-owners to Chinese shipyards.

Nikos has also written extensively on the domestic and international dimensions of the Greek debt crisis. His blog (Greek Default Watch) was listed as one of "Europe's Top Economic Blogs" by the Social Europe Journal, and his book "Beyond Debt: The Greek Crisis in Context" was published in March 2013.

Nikos holds a BA with distinction in international relations and economics from Boston University and an MA with distinction in international relations from the Johns Hopkins School of Advanced International Studies (SAIS).



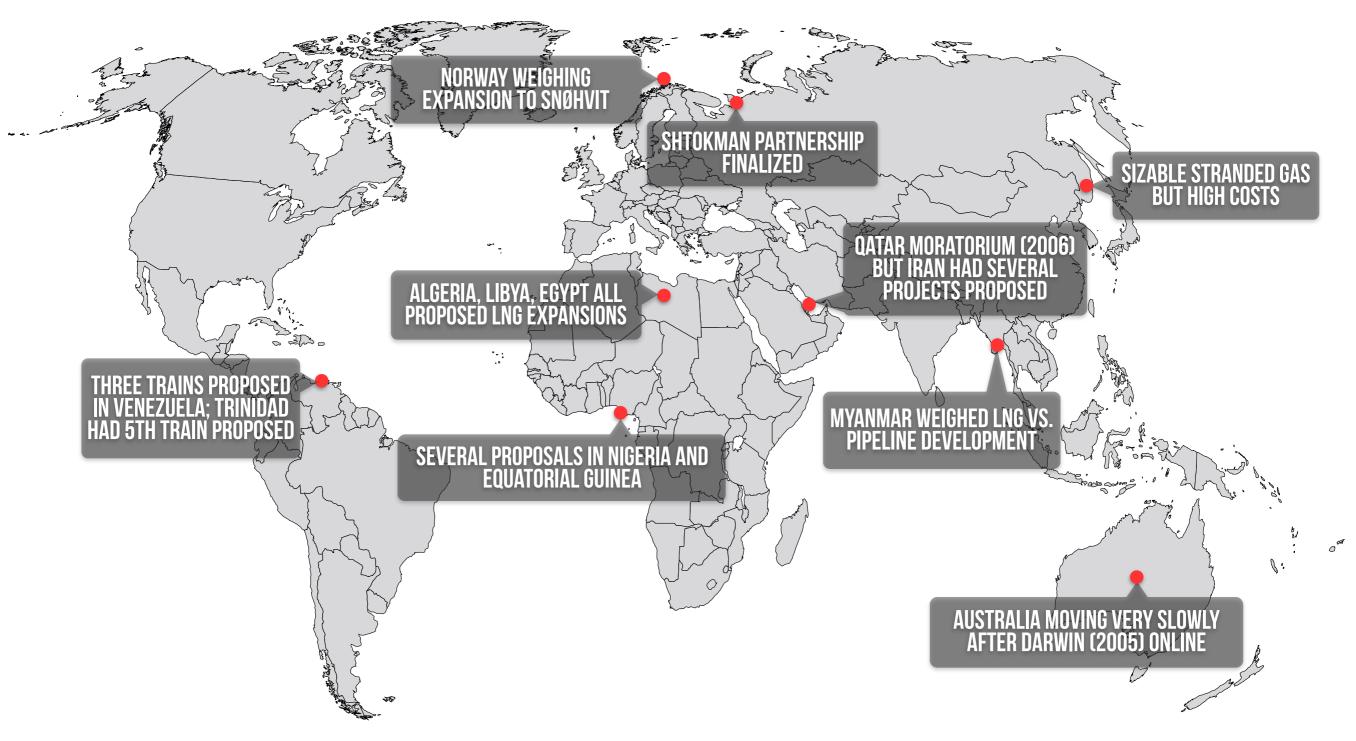
AK LNG OUT OF THE MONEY? > IN KIND VS. IN VALUE > MIDSTREAM OPTIONS > CASH EXPOSURE prospective suppliers > a look back to the 2000s outlook

AK LNG IS COMPETING IN A WORLD WITH MANY CHOICES



AK LNG OUT OF THE MONEY?) IN KIND VS. IN VALUE) MIDSTREAM OPTIONS) CASH EXPOSURE prospective suppliers > a look back to the 2000s

BUT WE'VE BEEN HERE BEFORE IN THE MID/LATE 2000S



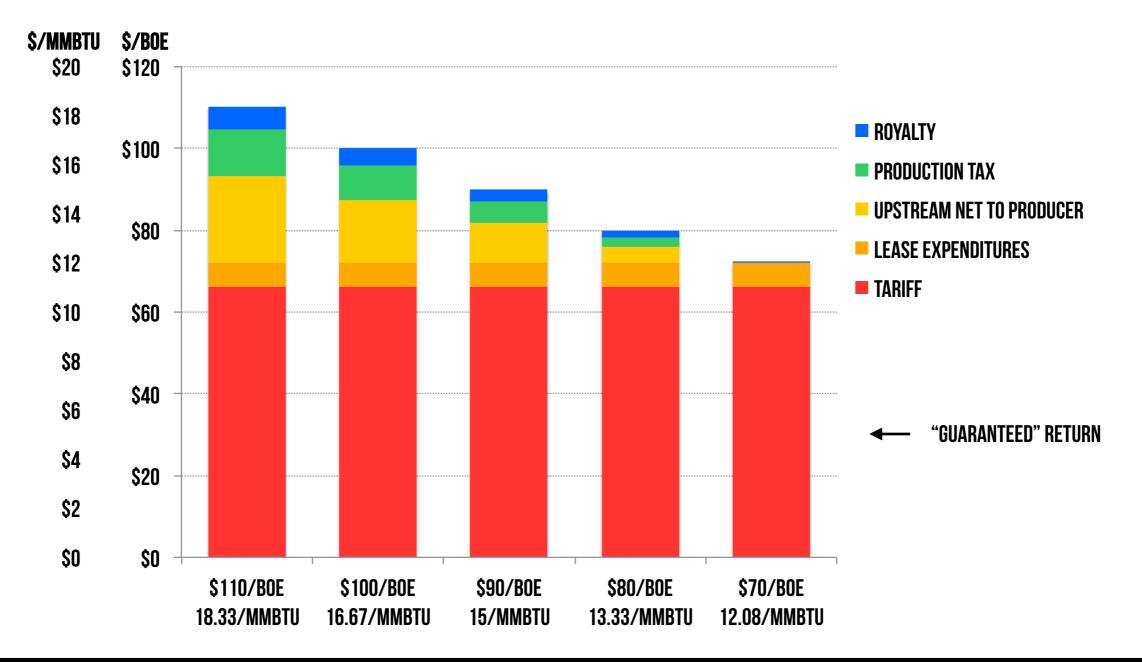


		<u>System</u> <u>SOA ownership percent</u>			<u>cent</u>	SOA share of CAPEX & OPEX			<u>SOA cash commitments</u>	
		Value / Kind	Upstream	GTP & Pipe	LNG	Upstream	GTP & Pipe	LNG	Debt	Tariffs
	Status Quo	in value	0%	0%	0%	Indirect (taxes)	0%	0%	No debt	Tariff matters for valuation
	HOA	in kind	0%	25 %	25%	Indirect (taxes)	25 %	25 %	Principal and interest	Tariff only notional
	MOU Option 1	in kind	0%	10% (40% x 25%)	25%	Indirect (taxes)	10% (40% x 25%)	25%	Principal and interest	Tariff payable to T/C
	MOU Option 2	in kind	0%	0%	25%	Indirect (taxes)	0%	25 %	Principal and interest	Tariff payable to T/C



RIV MAKES UPSTREAM THE SOLE PRICE ABSORBER

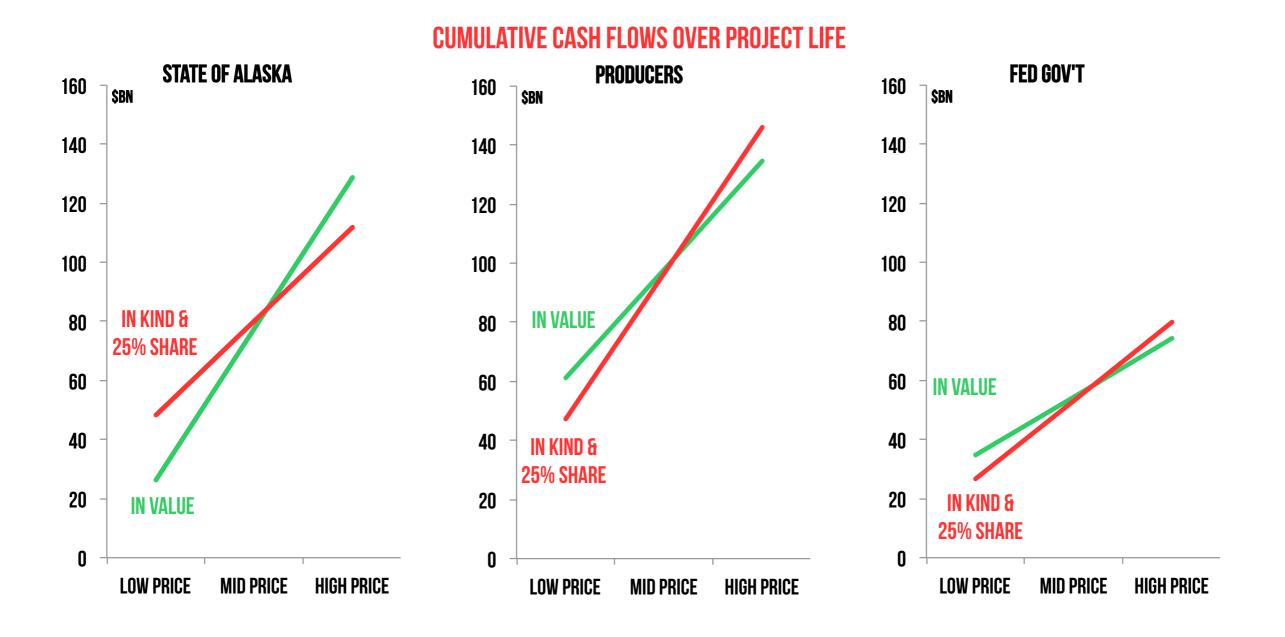
Fixed nature of tariff in 'in Value' alternative amplifies impact of price movement on state returns





IN KIND W/ EQUITY OFFERS MORE DOWNSIDE PROTECTION

In-value structure protects producers, not state, in low price environment because of tariff component

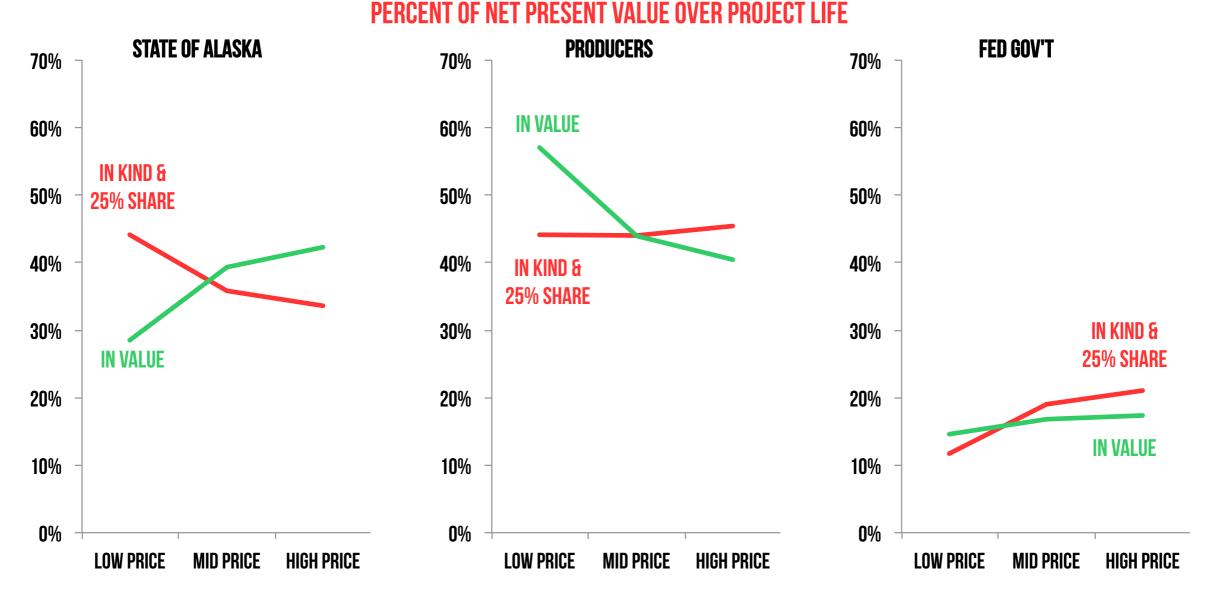




SOA SHARE OF VALUE HIGHER THAN SHARE (25%) EQUITY

SOA participation in midstream means fixed tariff for producers no longer "guaranteed"

Ability to maintain tax-exempt status is crucial to transfer value from federal government to SOA



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AK LNG OUT OF THE MONEY? > IN KIND VS. IN VALUE > MIDSTREAM OPTIONS > CASH EXPOSURE project structure options > financial analysis of the TransCanada option

		<u>System</u>	<u>SOA ownership percent</u>			SOA share of CAPEX & OPEX			<u>SOA cash commitments</u>	
		Value / Kind	Upstream	GTP & Pipe	LNG	Upstream	GTP & Pipe	LNG	Debt	Tariffs
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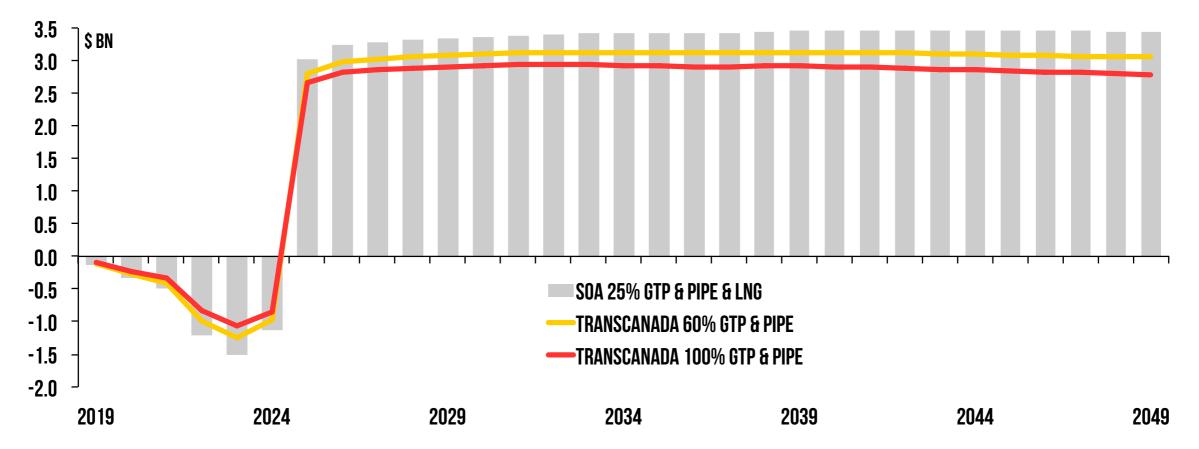


FINANCIALLY, TRANSCANADA DEAL IS AKIN TO A LOAN

TransCanada shoulders a share of SOA's capital commitments and Alaska repays over time with tariff

During construction period, SOA outlays are \$1.7 bn lower (average \$237 mm annually) on 70/30 equity

During operation period, SOA cash flows are \$522 mm lower annually (\$430–\$660 mm range)



STATE OF ALASKA: CASH FLOWS FOR ALASKA LNG



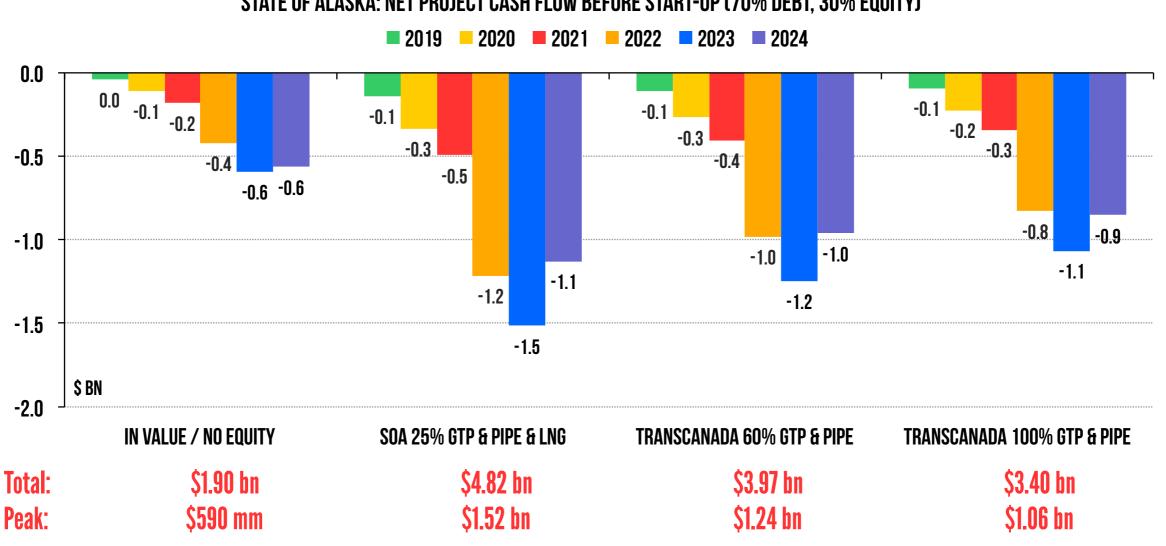
AK LNG OUT OF THE MONEY? > IN KIND VS. IN VALUE > MIDSTREAM OPTIONS > CASH EXPOSURE outlays (base case) > outlays (100% equity)

SOA OUTLAYS: \$3.4-4.8 BN IN BASE CASE & 25% EQUITY

Annual outlays could peak at \$1.5 bn if SOA took 25% equity and debt-financed 70% of its share

25% equity for SOA without a midstream partner is the scenario with highest outlays

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STATE OF ALASKA: NET PROJECT CASH FLOW BEFORE START-UP (70% DEBT, 30% EQUITY)

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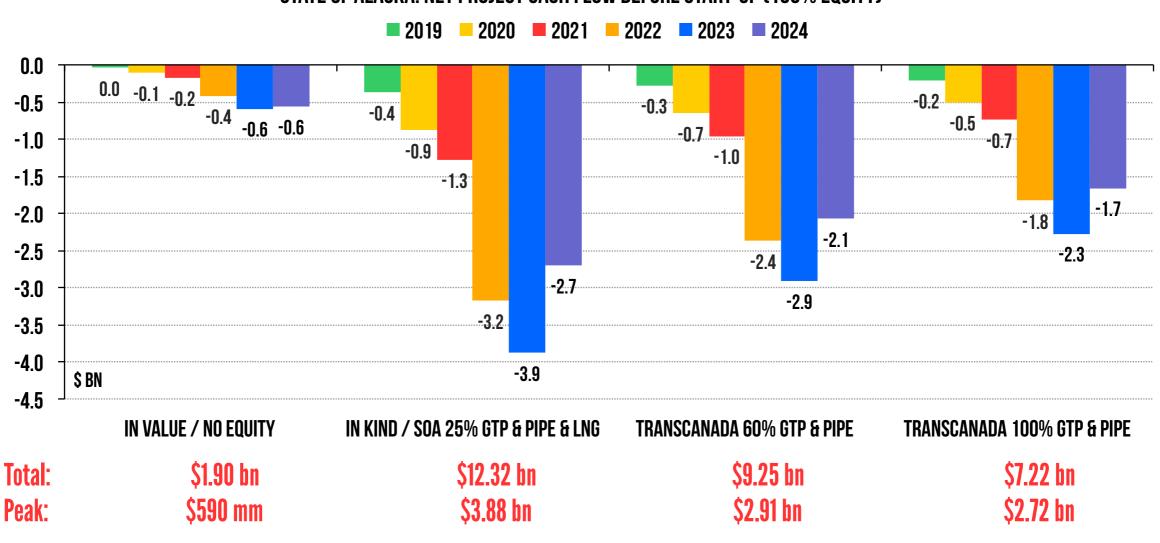
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100% EQUITY FINANCE PUSHES OUTLAYS TO \$12.3 BN

Annual outlays would peak at \$3.9 bn if SOA took 25% equity and financed its share with equity

Midstream partnership could reduce outlays by up to ~\$5 bn

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STATE OF ALASKA: NET PROJECT CASH FLOW BEFORE START-UP (100% EQUITY)

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