

# LNG investment in an era of uncertainty

Renee Pirrong | Director, Strategy



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The forward-looking statements made in or in connection with this presentation speak only as of the date hereof. Although we may from time to time voluntarily update our prior forward-looking statements, we disclaim any commitment to do so except as required by securities laws. greater risk of not being produced, than are estimates of proved reserves.

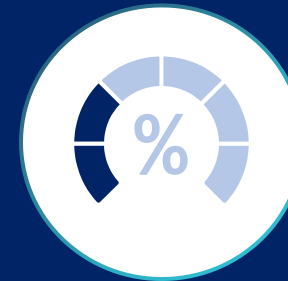
# Five key areas of uncertainty in the energy industry...

- 1 **Geopolitical** tensions eroding predictability of future energy trade flows
- 2 **Regulatory** forces blockading construction of new infrastructure
- 3 **Mixed signals from policy makers**, particularly in Europe and the US, deter energy investment
- 4 **ESG/Environmental** initiatives to direct investor capital away from energy investment
- 5 **Financial & Economic** landscape unclear with higher interest rates, costs and recession risks

...which are contributing to:



**Constrained capex**

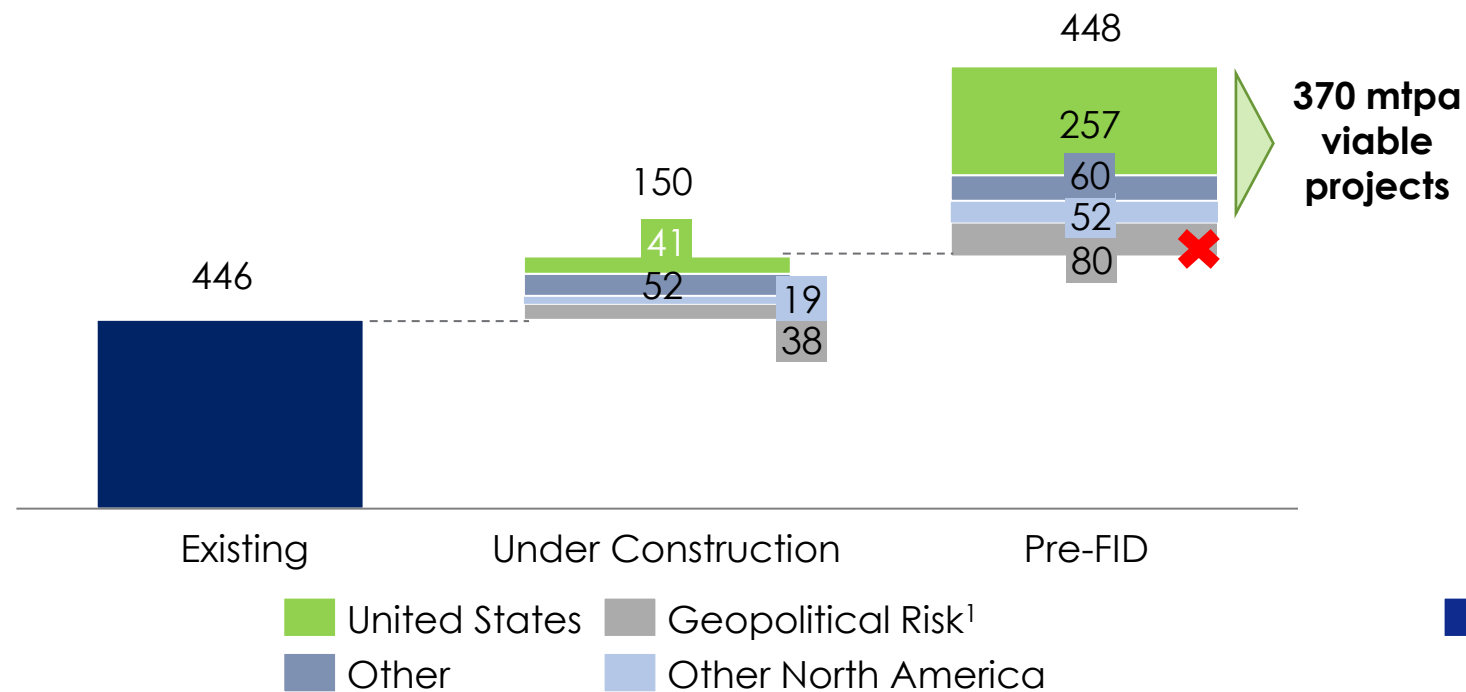


**Potential for higher inflation**

# Geopolitical tensions erode predictability of energy flows

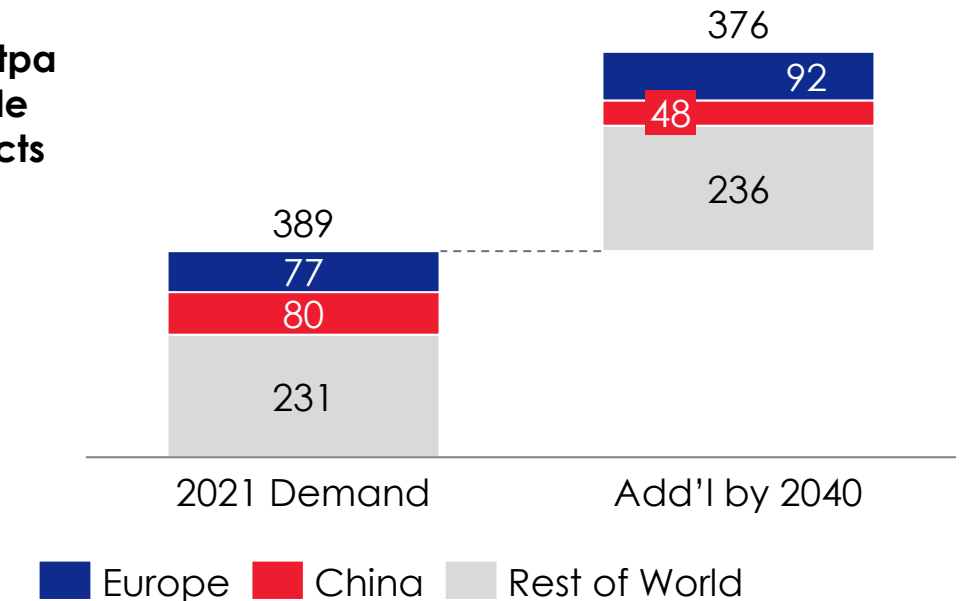
**~25% LNG plants under construction at geopolitical risk, and nearly all pre-FID plants are in US and N. America**

Global LNG capacity (mtpa)



**...meanwhile, key consuming regions also subject to geopolitical turmoil**

Global LNG demand (mtpa)



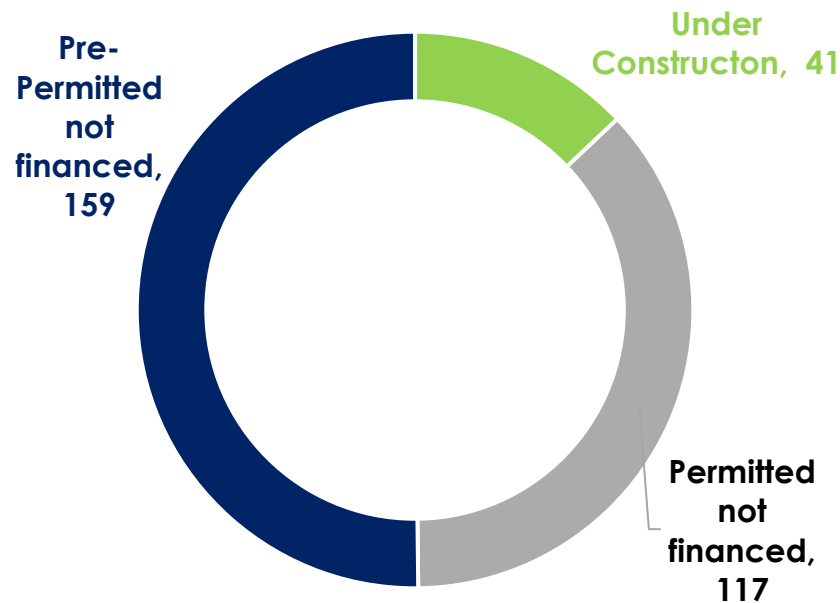
1. Includes projects in Russia and Mozambique; Source: Tellurian research, Wood Mackenzie

# U.S. regulatory environment blockades infrastructure development

Half of pre-operational LNG capacity is unpermitted

Regulatory ambiguity pervades the energy sector

U.S. LNG projects by status (mtpa)



**Time to permit** has surpassed the time it takes to build a project and there is debate if FERC will issue new approvals



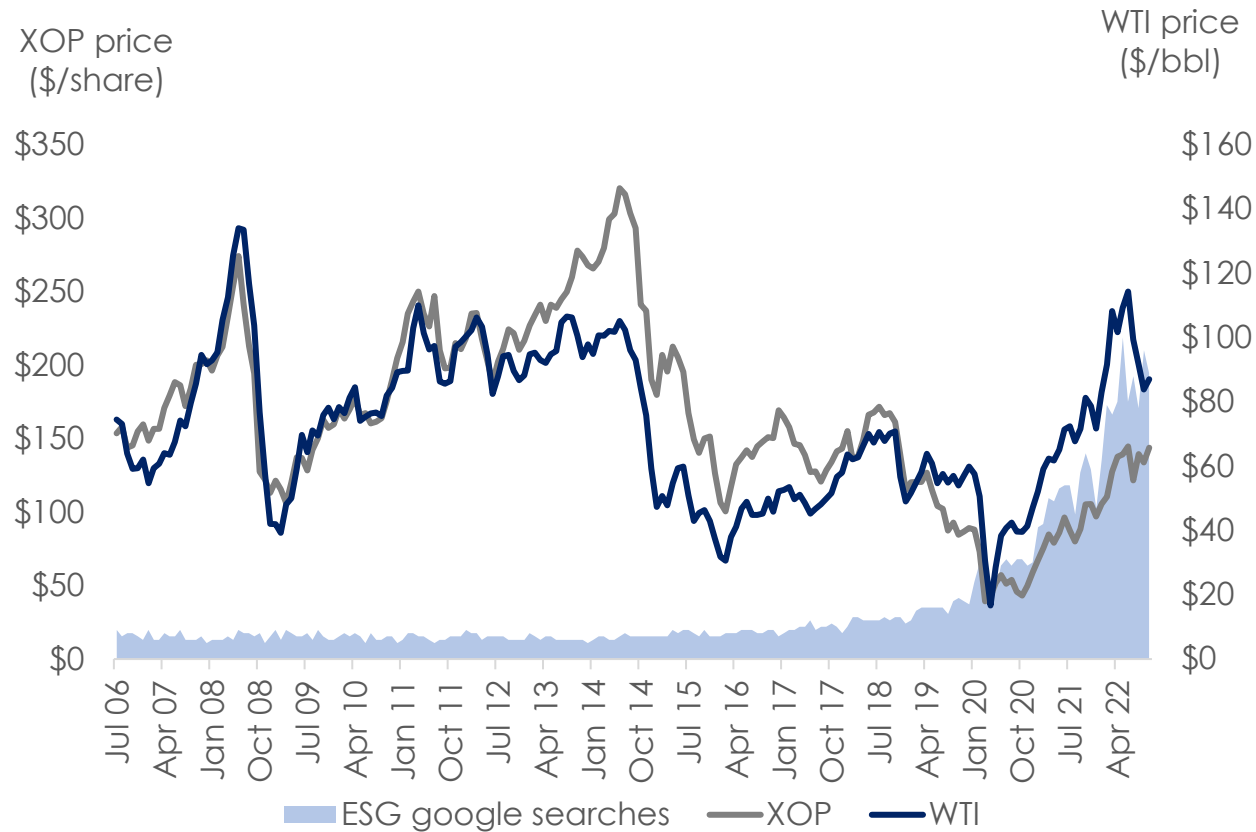
**Interstate Pipeline** construction and permitting complicated by NIMBYism and costly court battles, jurisdictional overlap and environmental activism



**Inconsistent and hostile rhetoric** from the Administration about oil and gas production, export restrictions

# ESG investing delays capital investment

## Interest in ESG correlates to sluggish O&G investment vs. oil price



## Pressure from investors and environmentalists contributes to curtailed upstream investment

- The price crash in 2014 diverted global hydrocarbon investment to short-cycle projects while overall investment declined due to poor returns
- ESG investing lengthened the period of underinvestment in energy, leading to a decoupling of commodity prices and the price of their underlying assets
- As a result, commodity prices must remain higher for longer to incentivize necessary long-cycle investments



# Energy policies send mixed signals: EU example

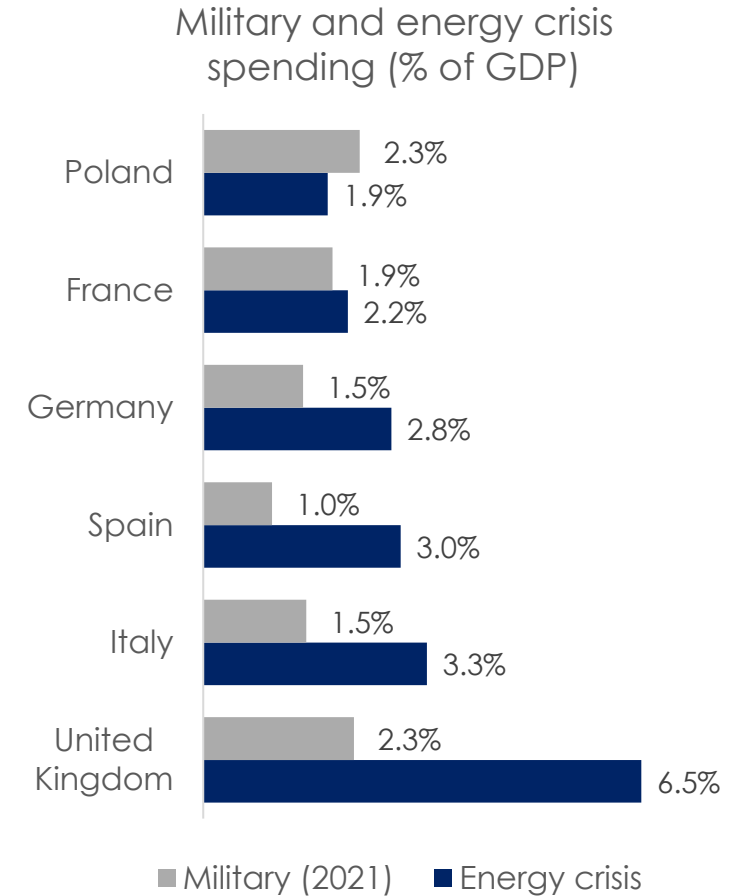
## Pre-crisis policy

- Emissions trading system
- Fracking bans
- North Sea + Groningen declines
- Nuclear decommissioning
- Subsidies for renewables
- Reliance on Russian gas

## Post-crisis policy

- Energy price caps
- Windfall taxes on profits
- Energy company nationalizations
- EU regasification investment without corresponding supply

## Misguided energy policies have costly results



# Financial & Economic landscape unclear, with near-term recessionary concerns looming

## Financing costs

**+200 bps** US interest rate<sup>1</sup>

High Yield bond interest rates + 480 bps in 2023

## Input costs

**+40%** EPC costs<sup>2</sup>

Geopolitics inc. material costs, labor costs inflating + labor constr.

## Recession concerns

**+67%** Recession likelihood

Open questions about impact of recession on commodity prices



## Uncertainty in landscape is leading to constrained capex and higher inflation:



Increased capital costs



Challenges refinancing debt



Commodity price volatility

1. Comparing Nov. 3 rate of 4% with ~2% rate in 2019; 2. Comparing EPC costs Nov. 2022 with those seen in 2019; Source: Tellurian research

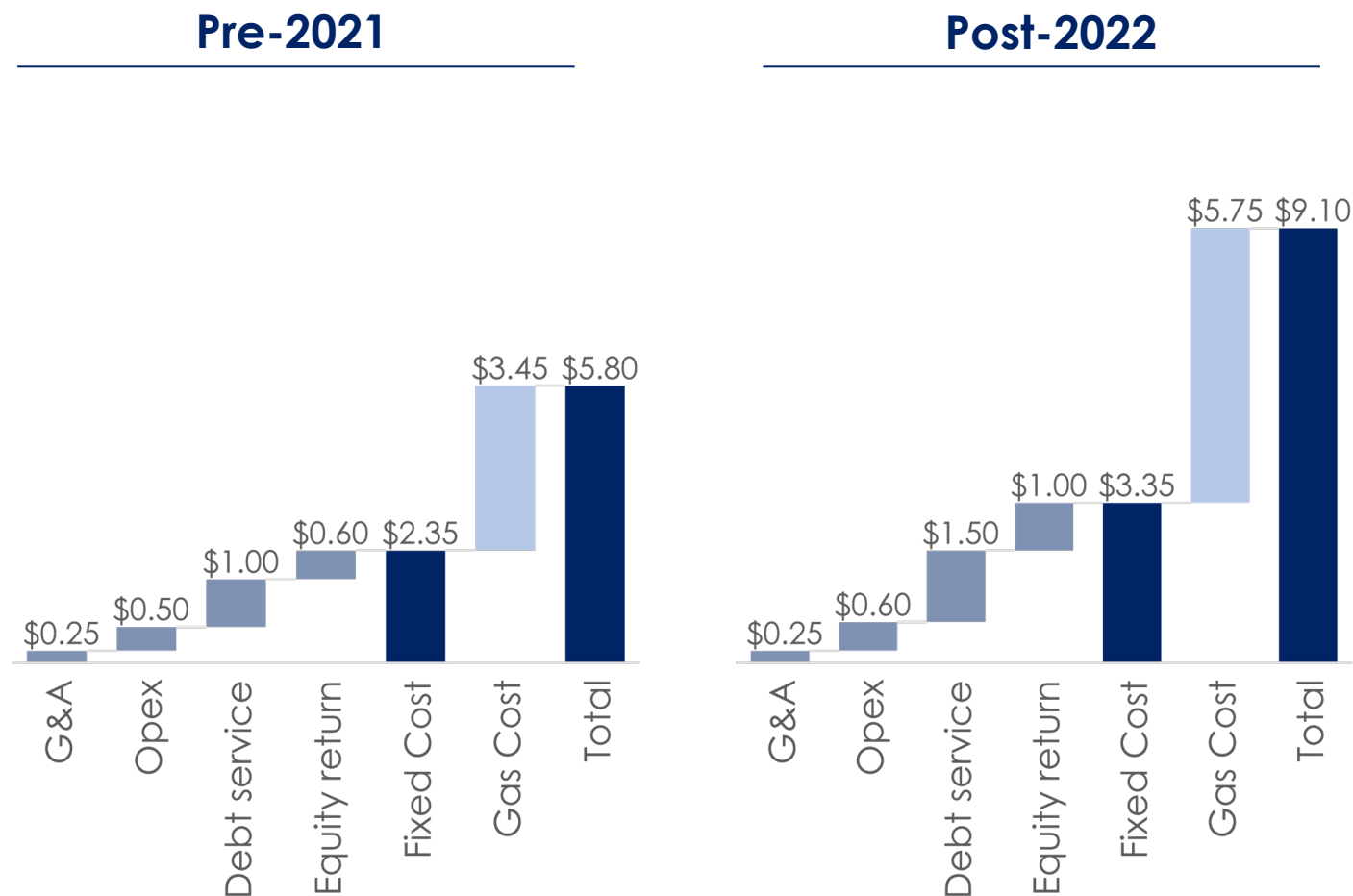


# LNG projects see substantial cost inflation

## Illustrative LNG project economics

Assumptions			
	Pre 2021	Post 2022	Delta
Cost of Debt	5%	7%	+56%
Cost of Equity	10%	14%	+40%
EPC + Owners	\$1,000	\$1,200	+20%
Henry Hub	~\$3	~\$5	+65%

~60% cost inflation in U.S. LNG projects



Sources: Tellurian analysis.

Notes: Assumes 10 mtpa project with 70/30 Debt/Equity.

# Takeaways and implications

- Policy makers must deliver clearer signals to encourage energy investment
- Long-run LNG prices will remain elevated to attract new projects
- Increasing interest rates to tackle inflation may paradoxically prolong it