



# LNG Futures: The Missing Link in the Value Chain



Presented by GPD Systems, LLC

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# Where the Gas Pipeline Ends

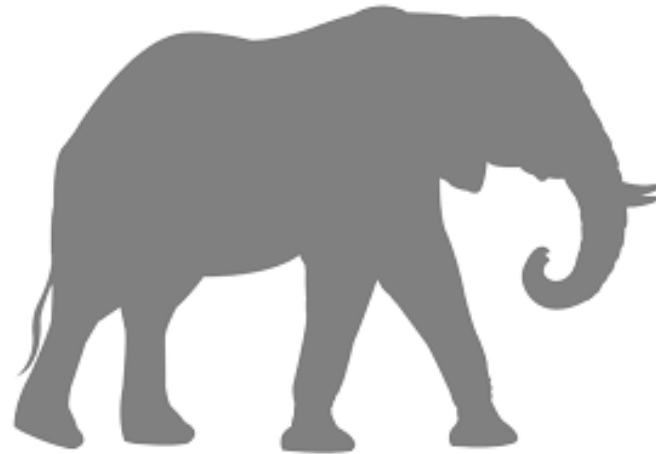


Today's reality:

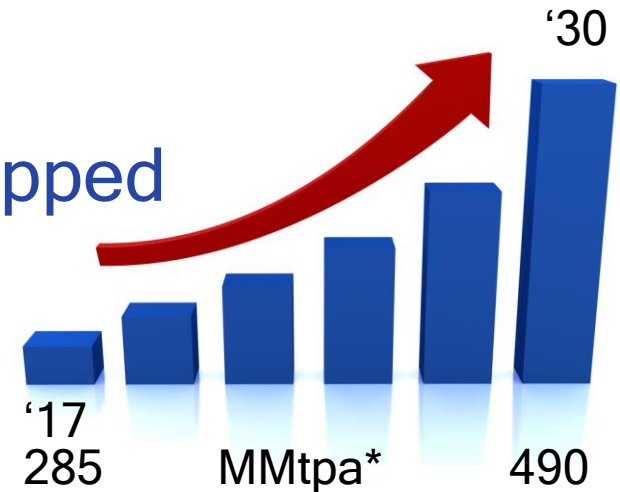
1. Countries worldwide are demanding cleaner energy
2. Natural gas is no longer just a regional commodity
3. LNG, the energy bridge to the global marketplace...



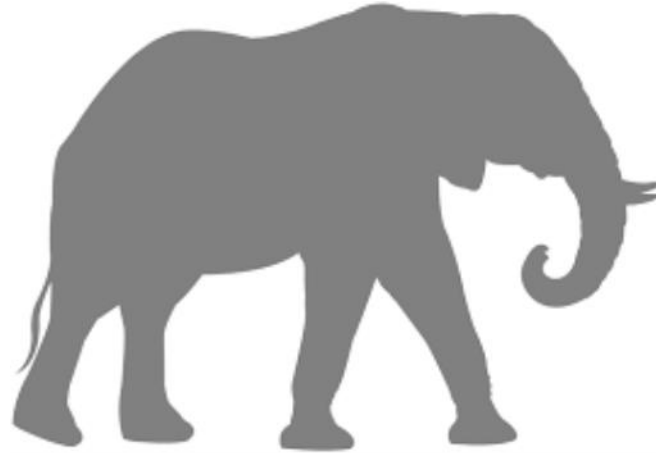
# LNG: The Top Energy Growth Story of the 21<sup>st</sup> Century



...is also the world's last big untapped commodity futures market!



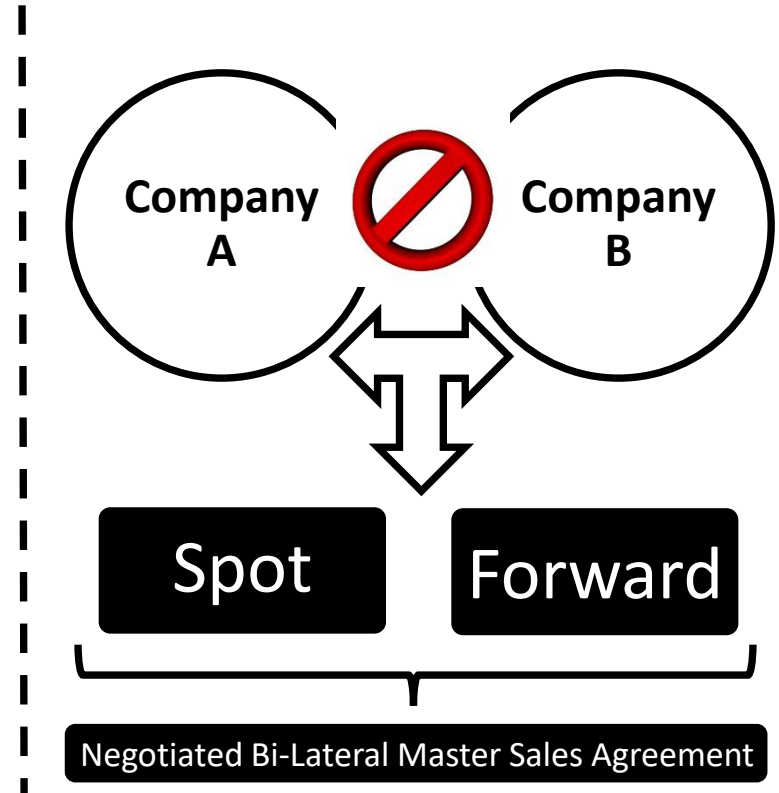
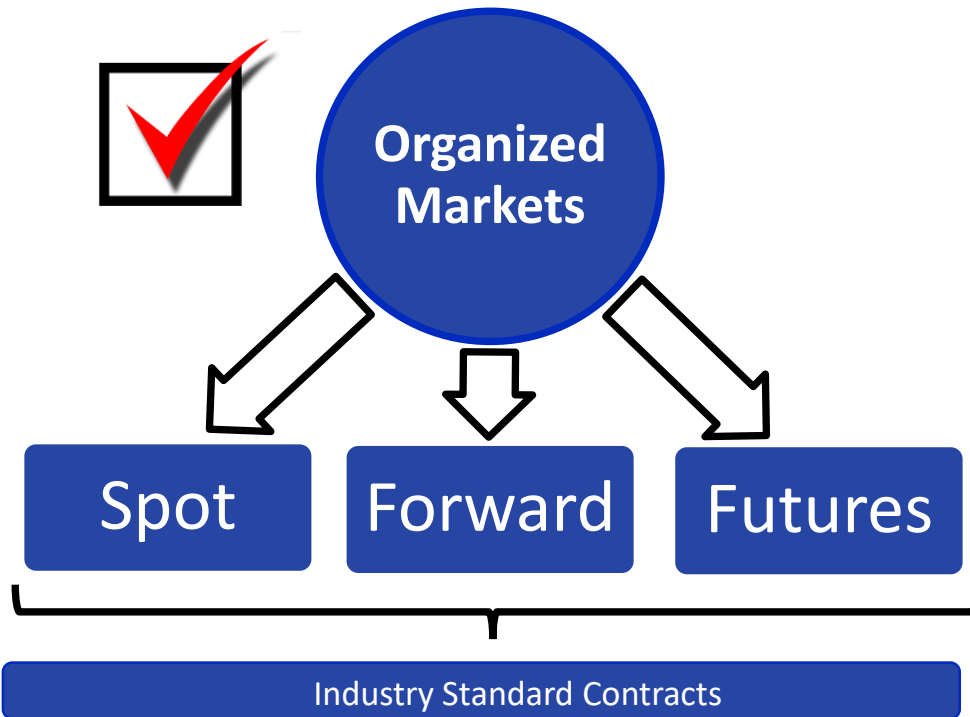
# How Does a Futures Exchange Land the LNG Elephant?



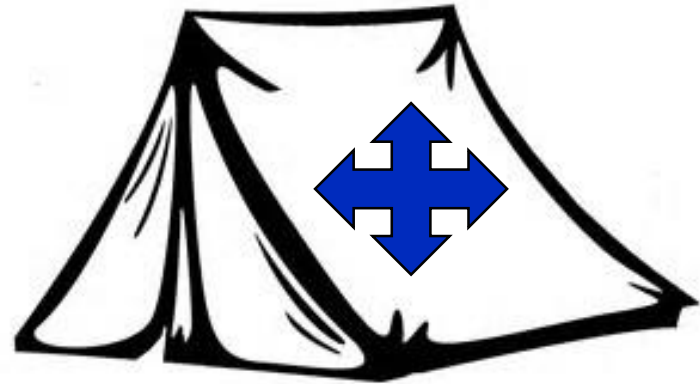
1. Learn from the past
2. Listen to the diverse needs of customers worldwide
3. Make innovative plans for the future
4. Boldly execute the plans



# Start by Simplifying LNG Trade



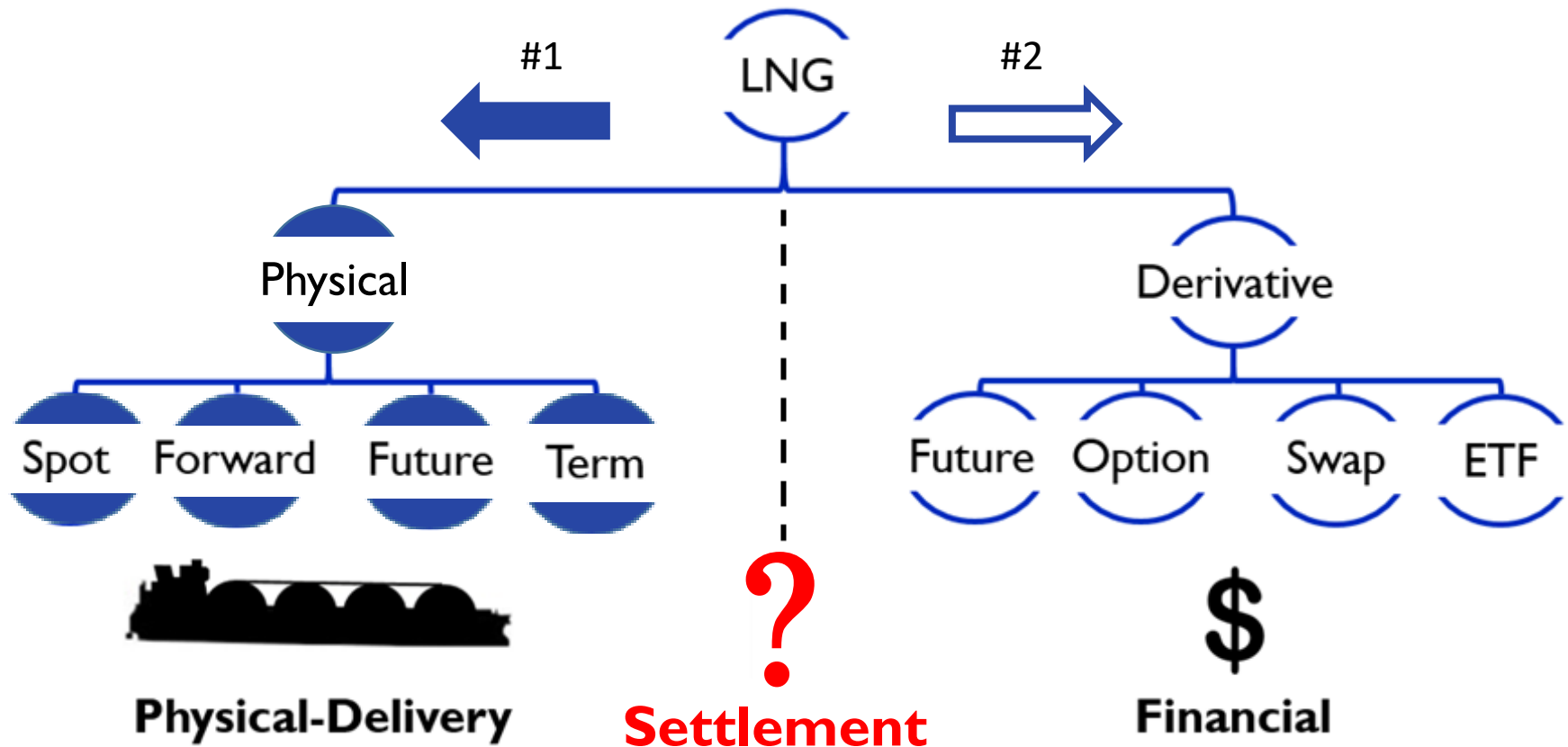
# Standardized Contracts: Key to Global Trade Growth



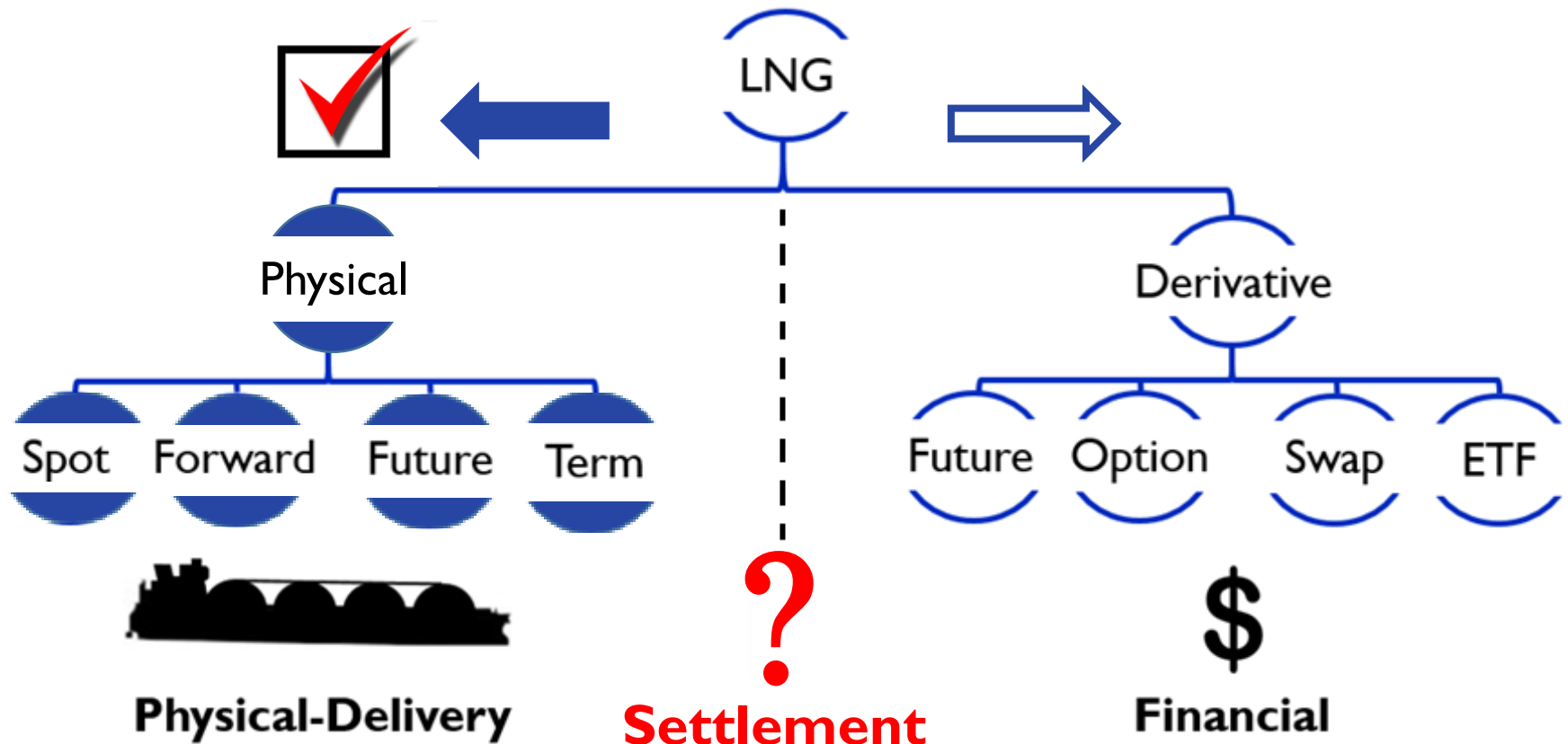
To build a “Bigger Tent” that encourages increased trading volume and open interest, the global LNG industry must first streamline the process by agreeing on a standard contract format with widely-accepted general terms and conditions.



# Building the Global Gas Futures Benchmark: 2 Choices



# Building the Global Gas Futures Benchmark: The Better Choice





# Why Physical-Delivery Futures?

1. Even though historically few commodity futures contracts are held for physical-delivery, this key provision assures LNG price convergence between futures and physical forward markets
2. Commercials worldwide have access to a platform providing a reliable source or outlet for natural gas
3. Price distortions are prevented as non-commercials cannot hold large positions through contract expiry for cash-settlement
4. Settlement prices are determined by actual futures trades, and published shortly after the close, not the following business day
5. Counterparty credit concerns are eliminated as performance is guaranteed by the “investment grade” exchange clearinghouse

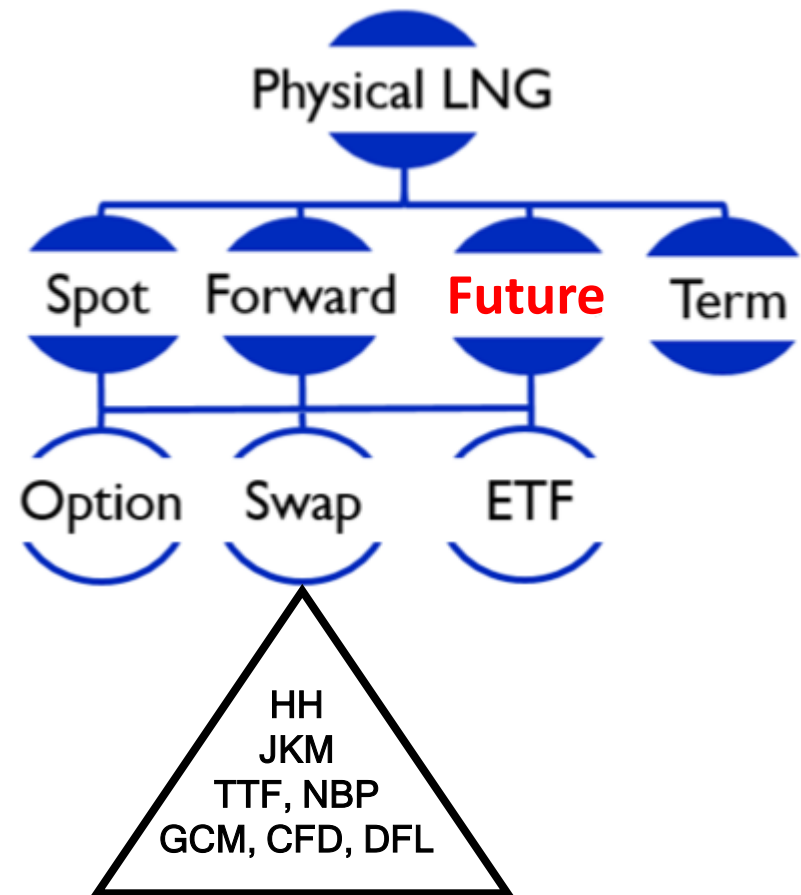


# Physical-Delivery Futures: The Global Gas Benchmark



A liquid and transparent **LNG futures** benchmark contract, with guaranteed physical-delivery provisions, offers new business development opportunities for:

1. Commercials and speculators
2. Over-the Counter (OTC) brokers
3. Price Reporting Agencies (PRA)
4. Physical Trading Platforms
5. Ship builders and merchants



# The Physical-Delivery Link

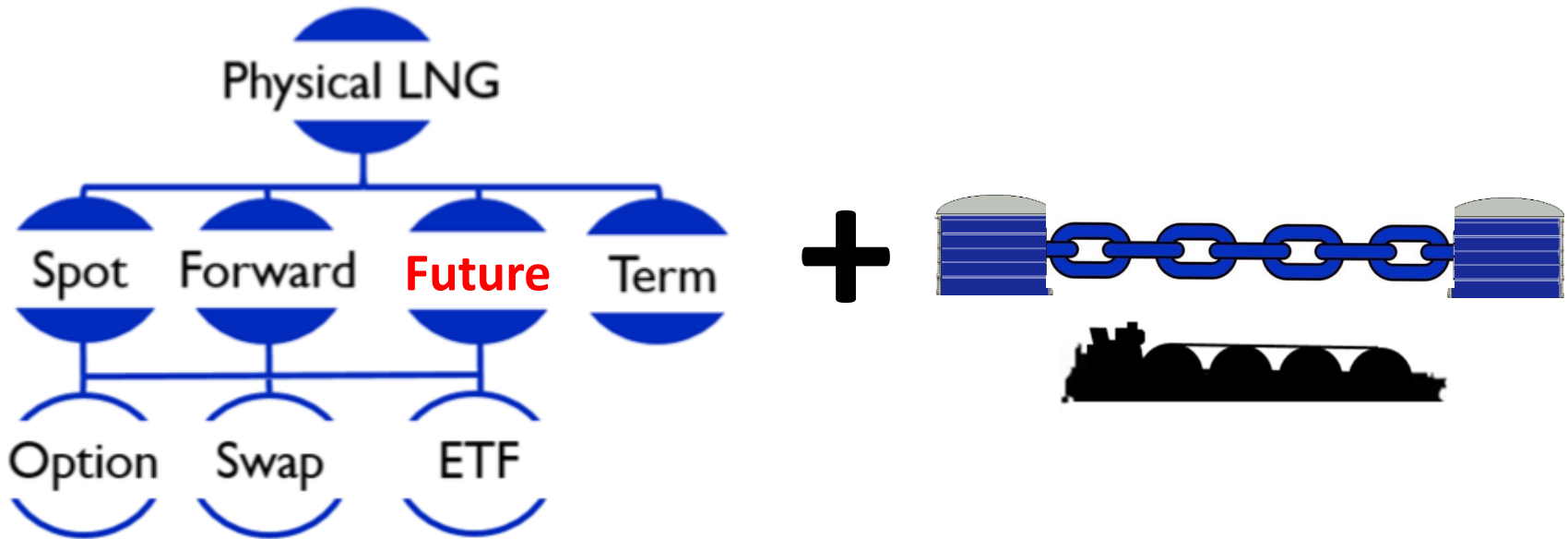
An organized global LNG marketplace supported by the “Three-Legged Stool”

Seamlessly connected standardized LNG contracts

1. Spot
2. Physical Forward
3. Physical-Delivery Futures



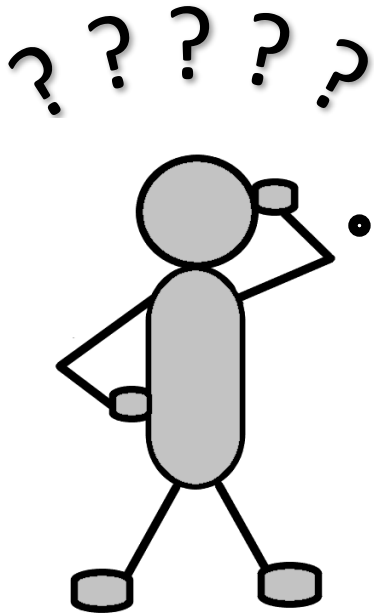
# Enhancing the LNG Value Chain



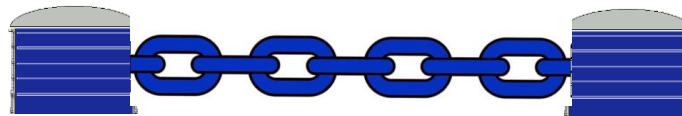
...through the introduction of an LNG futures contract with **Guaranteed Physical Delivery (GPD)** provisions



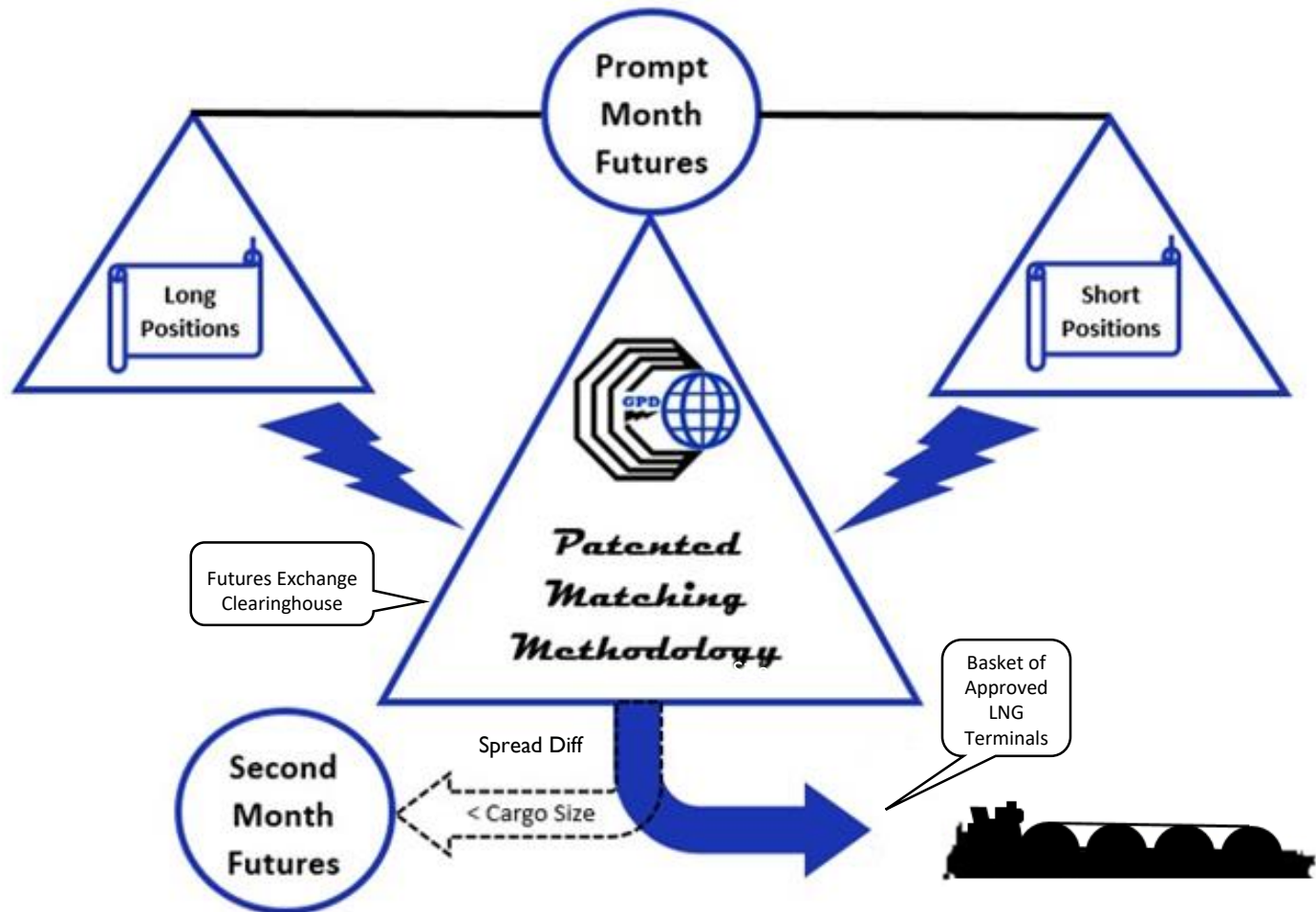
# GPD Futures: The Missing Link in the Global LNG Value Chain



*A business-method patent\* enabling the launch of **Guaranteed Physical Delivery** futures contracts for commodities like LNG which load on large ocean-going vessels*



# The GPD Futures Post-Expiry Matching Solution



# An Efficient Path to the Future

## No need to reinvent the wheel

The practical solution for LNG contract challenges, a modified “Brent Template\*”

Title transfers FOB vessel at load port



Nearly 30-years of proven performance in the global marketplace

“Industry Standard” contract terms & conditions



# The GPD Futures Benchmark Price Minimizes Basis Risk

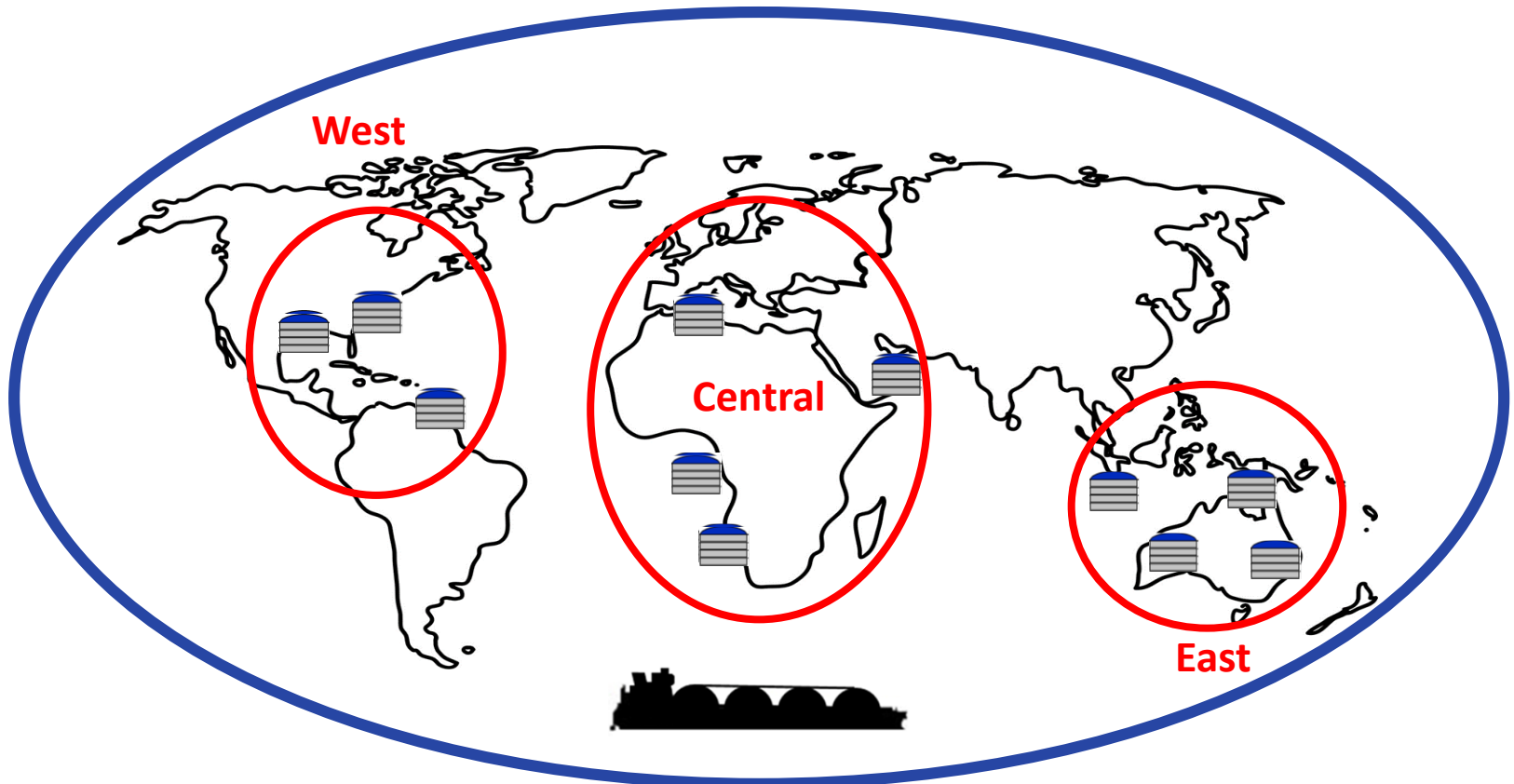
1. The GPD Futures Contract is seamlessly linked with GPD One Full Month notice physical-forward contract terms
2. Price risk covering the time period between futures settlement and the vessel loading date can be mitigated by Dated-to-Front-Line (DFL) futures swaps traded on exchange or Over-the-Counter (OTC), providing new revenue streams for brokers and price reporting agencies (PRA)
3. Futures delivery FOB buyer's vessel at load-port eliminates inland transportation cost and pipeline capacity basis risk
4. Ocean transportation basis risk can be managed by new freight futures contracts





# GPD LNG Futures

- Ready to launch with liquefaction capacity in place today
- Delivery terms “FOB buyer’s vessel at load-port” minimalizes basis risk
- Offer venue optionality - **global** or **regional**



# The **GPD** Patent\* Protects the Listing Exchange



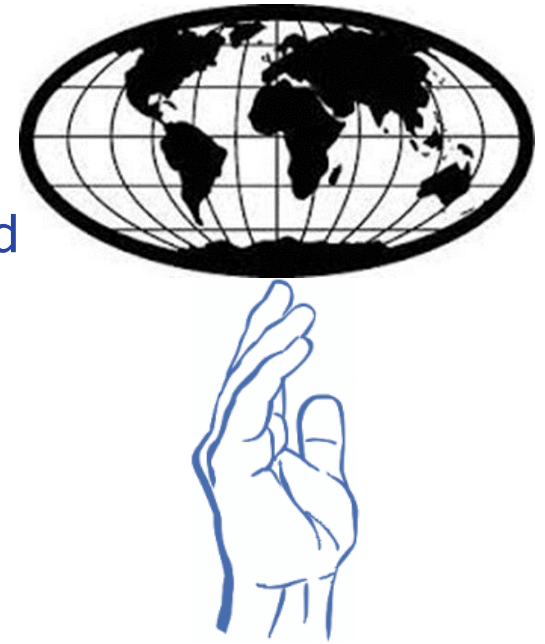
A moat to keep competitors out of LNG futures



# GPD Futures: A Reliable Source or Outlet for Physical LNG

GPD's "Invisible Hand" follows the sun 24-7

1. Assuring futures/physical price convergence for all traded contracts
2. Providing qualified buyers and sellers **guaranteed physical delivery** at approved LNG loading terminals worldwide
3. Eliminating counterparty credit and performance concerns using the patented **GPD** systems and methods for post-expiry position matching at the futures clearinghouse



# In Summary: Why GPD Futures?

1. The globalization of natural gas markets has resulted in an urgent need for both LNG contract standardization and the development of a liquid and transparent benchmark price.
2. A truly successful global natural gas benchmark must serve the broadest possible range of market participants. GPD futures contracts, with provisions for FOB vessel delivery at a diverse basket of approved export terminals is the solution.
3. The GPD systems and methods provide a solid platform to build on, enabling the world's fastest growing commodity to reach its full potential!
4. The GPD patent is available for single commodity licensing or outright purchase.

