JERT Whitepaper — USD & Dual Energy-Denominated Model
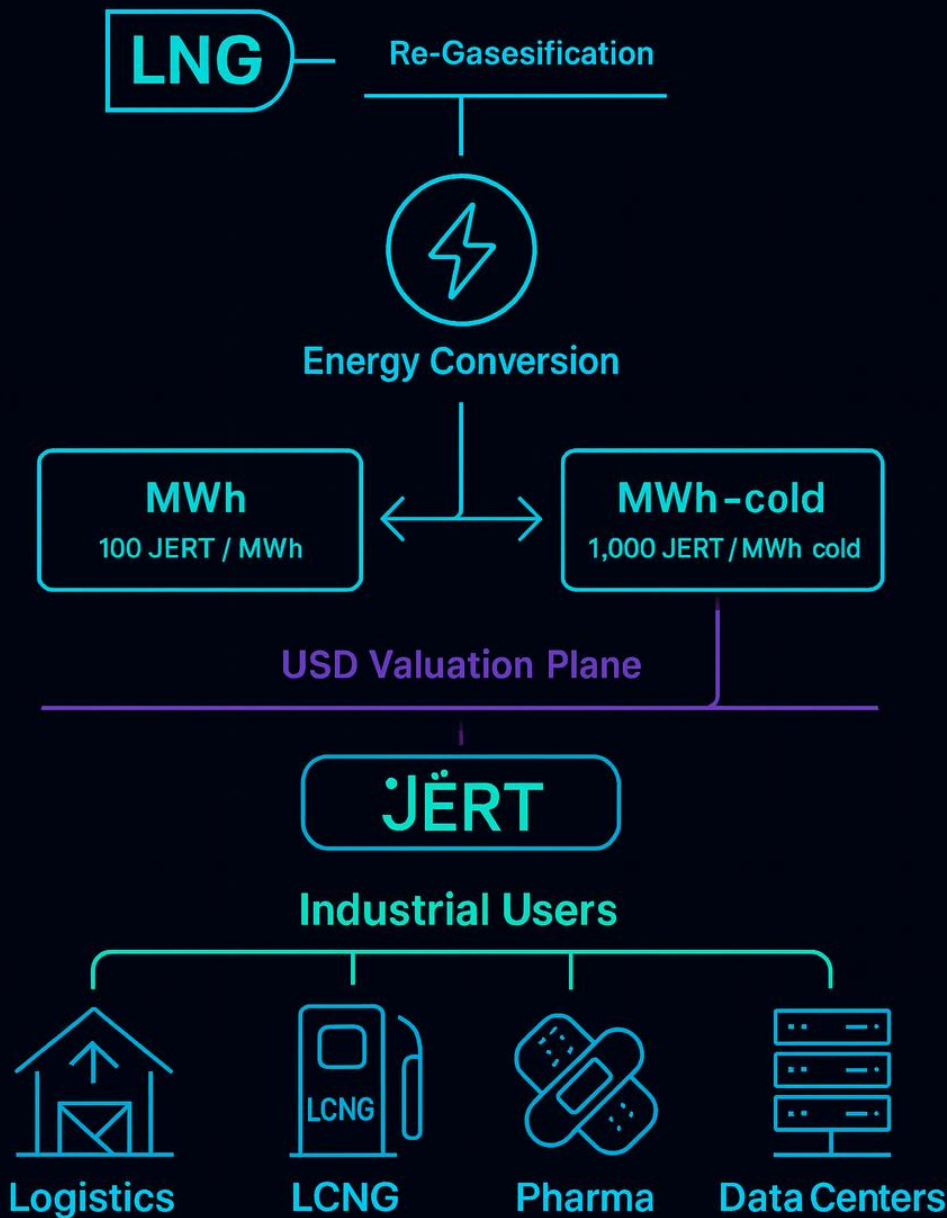## Building the Green Cold Energy Network Across Eurasia

Cryogas Dual Energy Settlement Architecture

LNG — Re-Gasesification

Energy Conversion

MWh
100 JERT / MWh

MWh–cold
1,000 JERT / MWh cold

USD Valuation Plane

JĔRT

Industrial Users

Logistics | LCNG | Pharma | Data Centers

JERT - introduces a fully USD-denominated and energy-denominated utility model designed to anchor the token in real industrial demand—energy consumption, cold-energy extraction, and logistics services across Cryogas infrastructure.

2. Dual Energy Settlement Model

Cryogas delivers two distinct industrial energy flows:
• Standard Electrical/Thermal Energy (MWh)
• Cryogenic Cold-Energy (MWh-cold) via LNG regasification BTU loops

Settlement formulas:

- • 100 JERT = 1 MWh Energy
- • 1000 JERT = 1 MWh Cold-Energy

2.1 Definition of MWh-Cold

MWh-cold is a unique industrial metric representing extractable cooling potential from LNG regasification. It is not equivalent to HVAC BTU or refrigeration tonnage. Its scarcity is defined by LNG mass-flow requirements (up to 100 tons per 1 MWh-cold).

3. USD-Denominated Valuation Layer

All pricing and valuation of JERT is expressed in USD for financial clarity across global markets. Energy-denomination determines *utility* while USD-denomination determines *valuation*. JERT remains a utility token—not a stablecoin—and contains no embedded redemption mechanisms.

4. Infrastructure-Driven Demand
JERT becomes a settlement unit across the Cryogas ecosystem:
• LCNG fueling stations
• Cold-energy storage terminals
• Pharmaceutical and food cold-chain logistics
• Data centers using LNG hybrid cooling
• Heavy warehouses and logistics hubs

5. API Energy Layer Integration

Two new API endpoints support energy settlement:
• GET /energy/rates — returns JERT/MWh and JERT/MWh-cold
• GET /energy/convert jert =X — returns equivalents for industrial billing

6. Smart Contract Architecture Alignment

Smart contracts remain ERC-20 compliant with no pricing logic. All energy computation is handled off-chain. NatSpec is updated for USD-denomination and industrial use-case alignment.

7. Architecture Diagrams

Cold Energy Loop Architecture

LNG → Re-gasaffication →

Cryogenic Cold Extraction

MWh
1,000 JERT / MWh

←→

MWh-cold
1,000 JERT/MWh cold

USD Valuation Plane

JÉRT

Industrial Users

- Cold Energy Industries
- Warehouses
- Pharma
- HVAC & Refrigerated Transport