HODLNG

JC FINIDORI, Founder

UNCEFACT – 1ST MEETING - ADVISORY GROUP

Geneva 30/01/2020
A Blockchain solution for liquefied natural gas (LNG); with smart contracts, we address anti-competitive clauses, triggering a fair profit-sharing mechanism. Our utility tokens generate additional revenue and contribute to social impact.
LNG MARKETS’ ISSUES

flexibility

transparency

fair revenue

pricing benchmark

Image
OUR VALUE PROPOSITION

- **To facilitate** the interactions in the LNG market.
- **To govern** LNG clauses by smart contracts
- **To manage** fair profit-sharing mechanisms
- **To support** projects with social impact
- **To improve** transparency
- **To serve** as an LNG pricing benchmark
- **To enhance** the natural gas industry image
- **To catalyze** industry stakeholders efforts in a virtual LNG hub
- **To participate** in a more secure, flexible, fair LNG trade system
CHALLENGES AND OBSTACLES

- Main chain, Private/Public/Consortium; and contracting languages
- Off-chain and Side chains (merger mining); Virtual Chains (VMs)
- Utility tokens: it’s an unit of gas; and an unit of valuation & exchange for beneficiaries
- Stacking – exchanges & Security tokens; and Stable coins
- Oracles: garbage in / garbage out

APIs integration:
- UNCEFACT LOCODE APIs
- IMO LNG Cargos # APIs
TRUSTED NEGOCIATION ENABLER (OFF-CHAIN SOLUTION)

Functionalities expected

- Integrity
- Authenticity
- Tracing and tracking (timestamping)
- Non-repudiation

The Trusted Negotiations enabler provides:

- Set of Distributed Applications (DAPPs) supporting the critical marketplace processes
- Set of DAPPs supporting the secure storage of the relevant agreement terms.
- Activation of external services when a DAPP event

Functionalities delivered Off-chain

- Runs on top of Ethereum and aims to make smart contracts scalable, fast, and private.
- A minimum of on-chain work to ensure correct execution: only a cryptographic hash of the VM’s state is stored on-chain.
- Allowing to push services, dApps, and tokens from ethereum to arbitrage, with privacy and scalability.
- Handling disputes cheaply and at low cost without significant load on the main chain.
Ways of implementing smart contracts: compiled Solidity codes and creation of VMs:
- Send-receive funds & messages as well as perform calculations and store data offline according to their code; capability to receive data from Ethereum smart contracts
- Manage the smart contracts, to be deployed; and management after the deployment

We tackle many of known attacks on Ethereum and if bug occurs in smart contracts:
- Timestamp dependence
- Access and privilege control vulnerability
- Integer overflow and underflow
- Transaction-ordering / Front-running dependence
What is in a smart contract? There are two aspects:

- Contractual elements implemented: volume, price, cargos, destinations; and managing Notice of Diversion (in case of changes of destinations, or re-export).

- The current paper contract: this should result in on transaction on the network, and storage on IPFS; we need a smart contract that contains:

  "deal = publishGasDeal(seller, buyer, conditions)";

- The re-export:

  "createOfferBasedOn(deal)"; "createDemand,.."
NEXT STEPS - PRIORITIZATION OF EPICS

- **High priority (essential features)**
  - Digitally-signed contracts by contracting-parties
  - Management of users (ID and prerogatives)
  - Notice of Diversion (changes of destination)
  - Compilation of Solidity code by Off-Chain solution
  - Profit-sharing mechanisms
  - Utility LNG tokens & Wallet
  - Integration of NGOs and local communities as beneficiaries
  - Redistribution mechanisms (tokens distr., donation)

- **Medium (mid-term)**
  - Integration of APIs for Ports and Cargos
  - Chat module for traders
  - Visibility of LNG volume available
  - Bidding on contracts for traders
  - Pricing benchmark and formation of price

- **Low priority (long-term)**
  - LNG asset-backed Stable coin
  - Algorithm for profit-sharing
  - Market data (LNG digital hub)
THANK YOU FOR YOUR ATTENTION

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CONFERENCES AND SPEAKING OPPORTUNITIES

- **BLOCK.IS. H2020 Programme** – Innovate event, (28-29 January, Istanbul)

- **AESCON** Asia-Europe Connectivity Scientific Conference (26-28 February, Sg)

- **IGRC** International Gas Research Conference (26-28 February 2020, Oman)

- **IGU** Deep-dive session: “Blockchain applications for the natural gas industry”

- **UNECE** - 7th Session of the Group of Experts on Gas (26-27 March, Geneva)
## Smart Contracts

<table>
<thead>
<tr>
<th>Smart Contract</th>
<th>Date</th>
<th>Contracting Partner</th>
<th>Amount</th>
<th>Cargo IMO</th>
<th>Destination</th>
<th>Status</th>
<th>Timeline</th>
<th>Action</th>
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<td>10-12-2019</td>
<td>Alex</td>
<td>SMN obtu</td>
<td>Cargo 1</td>
<td>Changra Manga</td>
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<td>View, Notice of diversion</td>
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<td>Ricky</td>
<td>SMN obtu</td>
<td>Cargo 2</td>
<td>Dara Ghazi Khan</td>
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Token Donation

Token Donations to Government

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<th>Contract Id</th>
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