# Energy & blockchain: the state of play

John Kingston Executive Editor, FreightWaves Member outreach, BiTA NY Energy Forum March 15, 2018

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#### Blockchain in Transport Alliance (BiTA) Over 265 members and 1,400 applicants since launch in August 2017

BiTA is the go to forum and ecosystem for blockchain applications in freight.

Develop tech and market standards in freight among participants

Provide certification and accreditations on tech standards

Commercialize outcomes between tech companies and market participants through the market

Participate in the development of blockchain tech in freight, when multiple tech providers and partners are ideal for an application

### A quick review: why blockchain/DLT?

- Immutable because the records are shared throughout the network
- Lower cost because antiquated back-office practices can be eliminated or sharply reduced
- Speed compared to some applications...but not all
- Network provides trust, though how that will occur with enterprise ledgers will vary widely

#### Where does blockchain stand in energy now?

- In DG, they are substantial. Lots of ICO activity going on
- An example: micropayments for recharging an EV
- Across the river: the Brooklyn microgrid
- Oil ICOs: not as plentiful, but interesting approaches (drilling muds)
- Logistics ICOs: plentiful in general

## Trading or logistics?

- All signs point to logistics as the primary focus of blockchain efforts
- Reason: enormous cost savings. What are the cost savings in moving trading on to DLT?
- What drives the savings? The smart contract.
- Blockchain can't match speed of ICE/CME/Nodal/other exchanges
- But trading remains a possibility...Enerchain Proof of Concept

#### The rise of the consortia

- BP/Statoil/Shell/Trafigura/ABN Ambro/ING/Societe Generale/Gunvor/Koch Supply & Trading/Mercuria
- Shell isn't limiting itself: Applied Blockchain stake
- Natixis/IBM/Trafigura
- Energy Web Foundation: Tobalaba
- BP, Eni Trading & Shipping and Wien Energie
- The conflict between the headlines and the reality

#### The primary goals

- Speeding up antiquated processes: "no change in 30 years."
- Necessary data flows in via oracles
- More efficient margining
- Trust of a DLT provides significant boost to KYC requirements
- Compliance boosted
- Un-hackable...immutable

## To tokenize or not to tokenize?

- "Blockchain yes, bitcoin no": watch for the derision
- Stripping out the crypto madness and getting to realities
- Tokens allow frictionless commerce without being slowed by banking systems or other currencies
- The ability to incentivize
- Oil's special exception: it's all in dollars
- Problem: how stable does a token need to be? The idea of a ledger as a central bank

#### Private vs. public vs. consortium

- Public: bitcoin an obvious example. Also known as permissionless. The open nature provides trust (consensus)
- Consortium: Right here on stage. Differences in operations under this heading will be vast: how is trust provided?
- How much will be transparent in a consortium blockchain? The speed-trust tradeoff
- Private: sometimes confused with consortium. The Platts example

#### **Interoperabiilty**

- How many ledgers will there be?
- The ability to speak to each other will determine the impact of this technology
- Will two systems exist side-by-side going forward? Consortium that reconciles through blockchain and non-consortia that reconciles the old way with fierce pressure to adapt?
- Bottom line: the technology isn't hard. The socialization and implementation will be.

#### Is your company a leader or follower?

- The broad category: enterprise blockchains
- Inevitable answer is that if you're not a leader, you're in trouble. Is that true?
- If you're a leader, can you monetize that role? The free-rider problem
- Data provider: you need to ready yourself to be an oracle

Thank you on behalf of....

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From weather to fuel prices, truck movements to fluctuations in supply and demand, there are countless factors that impact the freight market every day.

FreightWaves products and solutions allow participants to turn these issues into opportunities, harnessing the vast information available and turning it into actionable indices. FREIGHT WAVES