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K&L Gates Blockchain Energizer - Volume 5

A bi-weekly update on applications of blockchain technology in the energy industry

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There is a lot of buzz around blockchain technology and its potential to revolutionize a wide range of industries from finance and healthcare to real estate and supply chain management. Reports estimate that over \$1.4 billion was invested in blockchain startups in 2016 alone, and many institutions and companies are forming partnerships to explore how blockchain ledgers and smart contracts can be deployed to manage and share data, create transactional efficiencies, and reduce costs.

While virtual currencies and blockchain technology in the financial services industry have been the subject of significant debate and discussion, blockchain applications that could transform the energy industry have received comparatively less attention. Every other week, the K&L Gates' Blockchain Energizer will highlight emerging issues or stories relating to the use of blockchain technology in the energy space. To subscribe to the Blockchain Energizer newsletter, please click [here](#).

Canada's TMX Natural Gas Exchange to Test Blockchain

- Blockchain technology is coming to natural gas trading. Canadian stock exchange operator TMX Group Limited [recently announced](#) that it plans to use a blockchain technology-powered trading platform to speed up and simplify natural gas transactions.
- TMX Group's blockchain software prototype, created in partnership with a blockchain developer, will allow market participants to track the flow of gas supplies at delivery locations in the United States. The goal is to speed up the processing and settlement times for natural gas transactions, which currently can take up to 48 hours.
- According to market analysts, faster settlement times associated with blockchain technology could increase price discovery and narrow the spread on natural gas transaction pricing.

Banks and Traders Begin to Consider the Implications of a Shift to Blockchain-Powered Networks

- With several proof-of-concept blockchain-powered transactions completed, market participants are now considering the implications and challenges associated with large-scale implementation of blockchain technology in the banking and trading sectors.
- Although the shift from traditional paper record-keeping to a blockchain-based system could result in significant cost savings, [there are a number of challenges](#) that will need to be addressed in order to ensure a viable and smooth transition.
- To broaden and scale-up blockchain networks, industry leaders will need to convince a wide-range of market participants to cooperatively develop blockchain platforms that sufficiently address all of the parties' needs. Blockchain platforms will need to be

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developed with market participants' security concerns in mind and be designed to assuage concerns over sharing proprietary data and protecting intellectual property.

- In addition to the need for collaboration and coordination among diverse groups of market participants, there are legal and regulatory hurdles to overcome. One such hurdle is the development of “smart contracts,” or contracts that are encoded within the blockchain and can automatically trigger electronic transactions if certain conditions are present. Efforts must be made to standardize legal agreements and other documentation so that these documents can be translated and reproduced in smart contract form, and common legal standards for recognizing and enforcing smart contracts must be developed.
- Despite the challenges associated with large-scale implementation, interest in leveraging blockchain technology continues to grow. As companies seek to capture the potential cost savings and efficiency gains that blockchain applications are expected to produce, blockchain will play a key role in transforming the commodities sector.

CFTC Launches FinTech Initiative

- Recognizing the regulatory uncertainty facing FinTech and blockchain innovators, the U.S. Commodity Futures Trading Commission (CFTC) [recently announced](#) the creation of LabCFTC, a [new initiative](#) aimed at promoting responsible FinTech innovation and fair competition.
- Located in New York City, LabCFTC will work to make the CFTC more accessible to FinTech innovators while serving as a platform to inform the CFTC's understanding of new technologies such as blockchain. Innovators will be able to more easily obtain guidance about the applicability of CFTC regulations. LabCFTC will also serve as an information source for the CFTC commissioners and staff who may serve to influence policy development moving forward.
- The hope is that LabCFTC will provide greater regulatory certainty to market participants in order to encourage market-enhancing FinTech innovation, while also serving as a platform to identify and utilize emerging technologies that can enable the CFTC to carry out its mission more effectively and efficiently.
- The CFTC's decision to launch LabCFTC follows regulatory initiatives in other countries to provide a “regulatory sandbox” for FinTech companies. For example, in the United Kingdom, the [Financial Conduct Authority](#) offers innovators a testing environment for new products, services, and business models and assistance in navigating regulatory requirements.

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