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Energy Alert

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There is a lot of buzz around blockchain technology, distributed energy resources ("DERs"), microgrids, and other technological innovations in the energy industry. As these innovations develop, energy markets will undergo substantial changes to which consumer and industry participants alike will need to adapt and leverage. Every other week, K&L Gates' The Energizer will highlight emerging issues or stories relating to the use of blockchain technology, DERs, and other innovations driving the energy industry forward. To subscribe to The Energizer newsletter, please click [here](#).

FORD PROGRAM TO TEST TRACKING OF ELECTRIC HYBRID VEHICLES WITH BLOCKCHAIN TECHNOLOGY.

- On October 15, 2019, automotive giant Ford [announced](#) that its pilot program testing geofencing technology for its plug-in hybrid electric vehicles ("PHEV") will incorporate blockchain to help track the number of "green miles" logged by these vehicles. Through the pilot program, Ford has already installed plug-in geofencing technology to a few PHEVs in London, Valencia, and now Cologne to test the technology's ability to promote compliance with these cities' low-emission zones. Cologne, like many European cities, created low-emission zones to improve air quality by deterring high-emission vehicles from driving through them. Ford's program helps drivers understand how to comply with these zones' restrictions and alerts drivers to their location.
- By incorporating blockchain, Ford hopes to create a secure digital record of its test cars' emissions that demonstrates their compliance with the low-emission zones' restrictions. Once a vehicle enters a controlled zone, the vehicle's electric drive mode begins documenting its zero-emission miles. This information is recorded on a blockchain to which city officials have access. The geofencing capabilities allow the PHEVs to adjust in real time to specific emission zones, automatically switching to the low-emissions mode when needed, while the blockchain creates a golden record of the zero-emission miles driven because of the real-time switch to the low-emissions mode. The trial program will run for 12 months with 10 PHEVs enhanced with blockchain and geofencing abilities.

ENERGY INDUSTRY REPORT ESTIMATES BLOCKCHAIN PLATFORMS WITH CAGR OF 67 PERCENT OVER THE NEXT DECADE.

- On October 22, 2019, [Navigant Research released](#) a report entitled "[Energy Blockchain Applications Overview](#)" that forecasts the global development of blockchain-based energy industry applications

through 2028. The report recognizes and assesses how blockchain technology is being used throughout the energy industry value chain. Based on those use cases, Navigant Research projects that the blockchain-based energy industry will generate more than \$19 billion in revenue over the next decade. The annual market size of the technology will reach \$7.7 billion by 2028 with a compound annual growth rate of 66.9 percent.

- Navigant Research found that energy grids globally are becoming more digitally based, distributed, and decentralized. These features require advanced platforms to support the growing and complex transactions conducted. Navigant Research identifies Europe, the Asia-Pacific region, and parts of the United States as prime areas for further growth in such platforms. According to Johnathon de Villier, a research analyst at Navigant Research, "Blockchain is one of several distributed ledger technologies that could serve as a framework for these emerging markets by providing a mathematical basis for information management and coordination across participants in a network and minimizing the role of intermediaries while reducing transaction costs and friction."

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