BROOKLYN MICROGRID

2016 Nominet Trust 100 Winner

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DEVELOPING A CLEANER, MORE RESILIENT ENERGY NETWORK IN BROOKLYN

By LO3 Energy

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- Community Strengthening
- Environment & Sustainability
- Safety & Security
- Physical Computing

Brooklyn resident Robert Sauchelli has always been devoted to energy efficiency, whether at his work at the Environmental Protection Agency, or as a consumer. He pays an extra 7.4 cents per kilowatt-hour to a clean power company Green Mountain Energy through his energy supplier Con Edison. The problem is that Green Mountain Energy is based in Texas, so Sauchelli never benefited from his efforts. Luckily, a new solar energy project was starting right on his doorstep.

The Brooklyn Microgrid makes use of the TransActive Grid, a blockchain-based platform that is based off the Ethereum blockchain and enables peer-to-peer transactions. It's a new way to trade solar energy among neighbours, creating a local market in Brooklyn between energy-producing households with solar panels, and energy-buying households with no solar panels.

The grid is still connected to the wider commercial grid, and makes use of the TransActive Grid platform to enable members to securely engage in automatically buying and selling energy from each other, enabled by smart meters and smart contracts.

Sauchelli now contributes an extra 7 cents per kilowatt-hour, which goes straight to his neighbour, whose rooftop solar panels produce more energy than he needs. "I know exactly where my money is going, and I know that the benefits are being engaged right here in my community," he says.

The experiment could be crucial in developing the emerging "internet of energy". LO3's founder Lawrence Orsini says that 130 more homes have expressed interest so far. He now wants to build an easy-to-use app letting people automate their choices, for example opting to sell their maximum output when they go on holiday, or donate excess energy to people struggling to pay their energy bills. Find out more at http://brooklynmicrogrid.com

Image courtesy of Brooklyn Microgrid

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