Energy cost is critical for industrial companies. Changes in the volume and market price of energy consumed can lead to serious deviations from the company’s financial budgeting. Volume of energy consumed from a factory can be accurately predicted. However, market price per unit of energy is much harder to predict and can vary up to 30% per year.

To address this issue the industrial consumer can sign a Power Purchase Agreement with a Renewable energy sources producer. During Industry 4.0 crowdhackathon Parity developed a platform to streamline matchmaking between Clean Energy Producers and Industrial consumers (factories, large offices). The platform automates the generation of a Virtual Power Purchase Agreement contract between the two parties. It also uses a proprietary algorithm to determine a fair fixed price per unit of energy used for the contract.

In this way industrial consumers lock a stable price for each unit of energy they consume within one year and hedge the risk of market price rises. By using the platform, they save time and cost by using standardized contracts and an existing database of energy projects in the platform instead of crafting a custom contract and seeking energy projects individually.

Next Steps:

* Preparing a standardized PPA contract.
* Writing PPAs as smart contracts on quorum blockchain.
* Integrate ABB Ability™ Electrical Distribution Control System to collect Plant’s consumption data