

# Blockchain solution for electricity provider

Domain: **Energy sector**

Expertise: **Blockchain**

Duration: **~1 year**

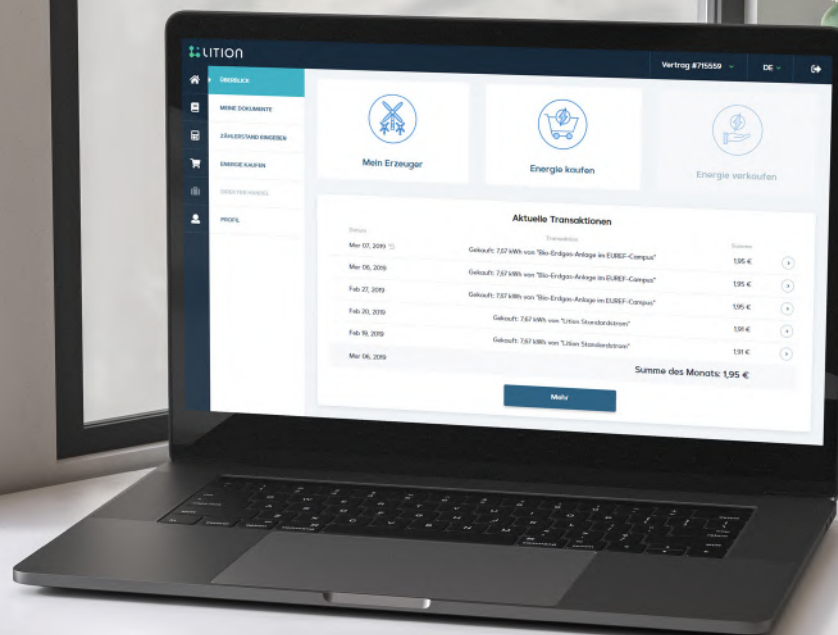


**Lition** is an innovative electricity provider that connects consumers directly with renewable energy producers - without detours and unnecessary additional costs.

## About the project

A P2P trading platform for an open and direct energy exchange which is now available for more than 41 million German households.

TRY LIVE DEMO



## Challenge

The Lition company came to \*instinctools with an idea of creating a platform for an open and direct energy exchange within Lition Energy System. The aim of the project was to simplify the legal, operational and economic hurdles for green power producers and allow customers to buy truly green electricity at an affordable price.



## Task

**Clarification of customer needs and purpose of the product helped determine the main tasks set for the \*instinctools team:**

- Trading platform development. It included Backend, Frontend and UI/UX Design reflecting Lition corporate style.
- Blockchain-based solution development.

BLOCKCHAIN DEVELOPMENT

- Integration of Project management methodology and configuration of PM processes.

## Solution

The final solution met all customer's requirements and expectations. Around 10 JavaScript frameworks were implemented to build reliable and functionally rich web application. Well-organized development process from goals and needs decision to solution architecture allowed to create the product with the following features:

## Key features



**High performance and usability**



**Informative dashboard** (with information about producers, types of energy, current rates, transactions and contract data)



**Option** to choose power plants and make several energy supply contracts with Lition



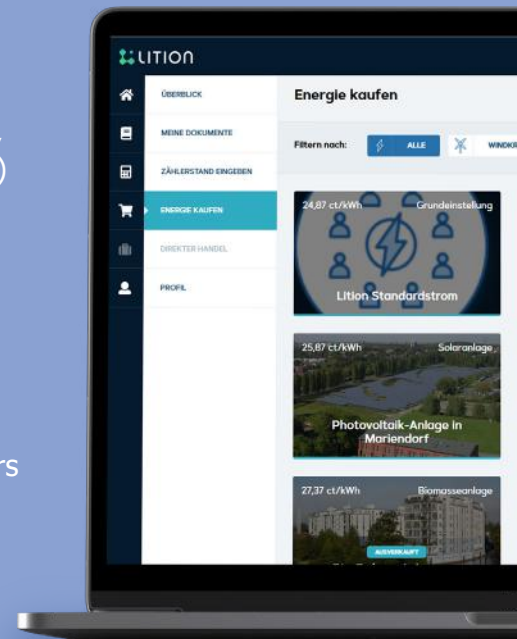
Productive on **Ethereum** and proprietary **blockchain**



**Access to energy market** - the platform connects customers and producers to trade energy and receive mutual revenues



Possibility to try **live demo** and experience the trading platform interface.



## Result

The platform is currently the key product of the Lition which is commercially available for 41 million German households. Customers from more than 30 cities save up to 20% on their monthly energy bill, and producers generate up to 30% more profit. The solution gives users a possibility to support ecological energy plants and help to save the environment.



**The feedback from CEO of Lition Richard Lohwasser about \*instinctools work**

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## Technologies

### #SCRUM

#### #FRONTEND

- React
- Axios
- Async-validator
- Babel-polyfill
- Iban
- Lodash
- Pickmeup
- Plotly.js
- Prop-types
- Redux
- Swiper
- Web3 and others.

#### #BACKEND

- Node.js
- Async
- Babel
- Bcryptjs
- Bluebird
- Cookie-parser
- Cors
- Dotenv
- Express
- Handlebars
- Joi
- Knex
- Moment
- Mysql
- Needle
- Nodemailer
- Package.json
- Redis
- Redlock
- Soap
- Sqs-consumer
- Winston and others.

#### #BLOCKCHAIN

- Solidity
- Quorum
- Web3
- Truffle
- Node-fetch
- Readline-sync and others
- Enzyme
- Eslint
- Jest
- Prettier
- Supertest.