

Energy Trading Platform For a GreenTech Startup



How creating a trailblazing digital marketplace for renewable energy producers and local households with an opportunity to save up to **20%** on their monthly energy bill allowed a German startup to be available for **41 million** households across Germany.

Domain:
Energy

Expertise:
Blockchain

Duration:
~1 year

About the project

The objective of the project was to implement a blockchain infrastructure based trading platform for open and direct energy trading.

Challenge

Lition approached instinctools with an idea of creating a platform for direct energy exchange within Lition Energy System. The goal of the project was to simplify the legal, operational and economic hurdles for green power producers while facilitating customers to buy truly green electricity at a reduced price.

Tasks

An initial consulting phase ensured clarification of customer needs and purpose of the product. It helped to determine the main tasks for the *instinctools team:

- Trading platform development including backend, frontend and UI/UX design reflecting Lition corporate style
- Blockchain-based solution development
- Consulting and integration of project management methodology and configuration of project management 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.

Key features

Well-organized development process from goals and needs decision to solution architecture allowed to create the product with the following 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 create 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 and commercially available for 41 million households in Germany. 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.

Client's testimonial

*"The expectations for the quality of the initial product were very high. I think *instinctools did a great job ensuring those expectations are met. We met the developers we were going to be working with and it quickly became apparent that they are very qualified and were able to deliver the vision that we had from our side for the product. They clearly told us what they were going to do, and if there were questions or problems along the way, they clarified them really quickly thanks to transparent communication."*

- Richard Lohwasser, Co-founder and CEO of Lition



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
- Enzyme
- Readline-sync and others
- Eslint
- Jest
- Prettier
- Supertest

Do you have a similar project idea?

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