





#### **Company Profile**

re.alto is the first European digital marketplace for energy data and services. The start-up was founded in 2019 by the Elia Group, the core investor, and is primarilyactive in UK, DE, FR, BE and NL. The young, currently thirteen-member strong team brings together a unique combination of industry experience and knowledge from the entire energy and technology sector and is dedicated to accelerating the digital revolution.

# The digital API marketplace for energy – a revolution

### Challenge

- Start-up with the aim of creating the "marketplace for energy"
- Obtain and bundle decentralized information and make it available to customers
- A solid technical platform had to be created with expandable possibilities

#### **Solution**

- Basic architecture uses Azure as platform
- Azure Services and Automation enable smooth operation in the API marketplace
- DevOps as a basis for development both in the project and in the company

#### **Benefit**

- With Azure, an agile and expandable architecture was created
- Coding & architecture standards and DevOps principles set the foundation for the further development of the start-up
- Value-added features can be made gradually available based on the created backend

#### **Technology**



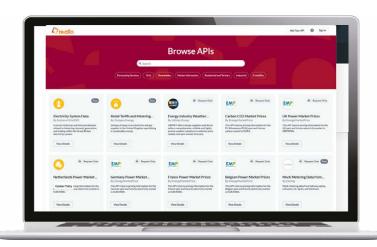
As an energy supplier, who can best tell me the expected consumption of my customers in real time, so that there is enough energy in the grid to satisfy all needs? And what role does the price development of alternative energy providers or even the weather play? When will everyone charge their electric cars? And when is there a particularly high demand for wind energy?

If one imagines a decentralized, consumer-oriented energy market, this is all the information and more that should

be available to ensure a constant, price-intelligent, market-oriented supply of energy and further services in the energy market. And this is exactly where the young start-up re.alto comes in. All this data is made available to companies in the energy industry via programming interfaces, so-called APIs (application programming interfaces).

## A new start with a big goal

The idea was clear, nothing less than a digital revolution in the European energy market was to be triggered. The idea was to create a store where energy providers and various service providers could exchange relevant information via API. In a second step, smart services, for example for forecasts, can bring added benefits, which



# Ready for the future with Azure and DevOps

By means of a sophisticated microservice architecture, Azure SQL database, the connection to the Active Directory for seamless user management and the establishment of a DevOps pipeline, the basis for the backend and the smooth administration and further development of the platform was created. The implementation of Azure DevOps and thus of Continuous Integration (automated testing with every commit in the Azure pipeline), Continuous Deployment (fully automated deployments to one or more target systems) and Continuous Monitoring (Azure Application Insights for the detection of performance anomalies and problem diagnostics) can guarantee high quality and rapid deployment at any time in

Bringing an external specialist on board in this early phase was definitely worthwhile for us. For future projects we would always trust the expertise of Samuel and novaCapta again.

Marcel Felder - CTO re.alto

are to be developed together with experts from the industry. But the technical basis for doing just that had yet to be created. This is where the re.alto team, which itself consists of specialists from the energy and IT sector, has brought in reinforcements from novaCapta. Marcel Felder, CTO of re.alto, had the basis for this from the outset – Microsoft Azure as the platform was set. Now the entire architecture had to be set up with Samuel Weber, Senior IT Architect at novaCapta.

the future. The marketplace interface itself is developed as a web application and accessible to API providers and consumers. In addition, a management portal can be accessed by external consultants, who then can offer their expertise. This way, even companies that would like to be part of the energy revolution but do not have the know-how or the digital requirements can be put on the right track. So nothing stands in the way of the digital revolution to "Energy as a Service".

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