

## Eliq – Engaging the customer

**Participants:** Eliq. During the autumn of 2019, Swedish energy companies Bixia (electricity retail) and Mölndals energi (electricity retail and power grid) will start using Eliq's platform

**IEA categories:** Customer-side systems, Advanced meter infrastructure

**Time plan:** Started in 2016

**Web:** <https://www.eliq.io>

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**Location:** No physical location

### Background

Eliq offers a customer-side app to energy companies, that has been developed with the intent to engage the end customers in their energy usage. The company has a history that traces back to the early 2010's, when the company developed an energy display that allowed for the user to monitor their energy usage. Since then, the focus has shifted to offering an intelligent energy monitoring software platform to utilities, that in turn offer it to their customers. This approach sets Eliq apart from many similar solutions, that are targeted directly at the end customers.

By keeping the customer informed about how they use energy, the purpose of Eliq's software is to put them in a better position to make educated decisions. The application shows forecasts for both the electricity price and carbon dioxide footprint from electricity production for the upcoming day, which allows the customer to adapt when they intend to use electricity.

Another feature of the system is that it uses available data to track any unforeseen changes in power usage, which allows for the customer or grid owner to identify what's wrong and take measures to rectify the fault.

### Implementation of the project

Eliq gathers data from various sources, such as the smart meter at the end customer and the energy exchange, which in Sweden means Nord Pool. Depending on the needs and character of the utility, additional data sources can be added and other infra systems such as district heating or water can be added.

This data is analysed by algorithms, that for example can present forecasts about the upcoming day as well as detecting unexpected changes in the power usage by the customer. There is also a trial underway in Norway, where the Eliq system controls the smart thermostat in 300 households, which optimizes power performance without lowering comfort. This kind of active control of energy intensive household appliances such as heat pumps or electric vehicles, will make power flows and control of the local grid even more efficient.

### Benefits

By making the customer more aware about how they use energy, they are incentivized to use power when the demand is low and when they limit their carbon footprint. This helps the grid owner in the way that it shaves peaks in power demand, which in turn means that the grid is utilized in a better manner. Another important feature that is helpful is that the system can warn both customer and grid owner when there is a sudden change in the electricity usage. This makes the grid owner aware of possible faults at an earlier stage and gives them better a better opportunity to handle them in a timely fashion.

In addition to grid owners, the system is also used by energy suppliers and regulated utilities. One important driving force for Eliq, regardless of application, is to create a more transparent relationship between the utility and the customer.

### Scalability

Eliq is highly scalable. It is usable by both grid owners and electricity retailers, as well as other infra service providers such as district heating.

### Interoperability

The system is interoperable with data that is readily available from smart meters in the grid.

### Investment horizon

For an energy company, the investment horizon when offering Eliq to their customers is relatively short due to a number of factors. Better use of available data is intended to improve the relationship between customer and utility, which creates goodwill. Also, the system gives the grid owner better data about the low voltage network as it detects potential faults at the customers and can alert the grid owner as well as the customer.

### International potential

The system is already used by energy companies in for the United Kingdom, France, Norway, Chile and Spain. Across 15 energy companies in these countries, Eliq reach 2,5 million customers. While Eliq is a Swedish company and for example has sold energy displays at IKEA, 2019 marks the first time the current system will be used by Swedish utilities.