Tibber – User interface for better flexibility

Participants: Tibber
Category: Customer-side systems
Time plan: Launched in 2016
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Background

The idea of Tibber is to use present technology like connected thermostats, electric cars and residential solar power solutions, and make them work together in a smarter way. By doing this, buildings and facilities can optimize their energy use according to their needs and the electricity prices. This in turn makes it possible to utilize the grid in a better way. One of the challenges that Tibber tries to address, is how to make the user interface simple and understandable for the customer.

Implementation of the project

Tibber offers an extensive digital platform for automatic power purchases and smart energy control. Initially it has been launched to focus on private customers, who can replace their earlier electricity vendor with Tibber.

In addition to the power purchase mechanism, Tibber also uses data from intelligent appliances in the household in order to optimize the usage of electricity. The module Electric intelligence calculates how the energy use in household can be optimized. The algorithms utilize the available data from different appliances, to assist the owner in controlling energy and heating.

The customer can also use the app to set certain requirements, such as the latest time when an EV battery needs to be charged. It is then possible to follow how the consumption and related costs are optimized according to this on an hourly basis.

Benefits

Tibber gives their customers an opportunity to lower their electricity bill by using and purchasing electricity when it is cheap. Also, it is sometimes possible to lower the subscription's maximum power rating when electricity consumption is distributed differently over time. What sets Tibber apart from other services that at first look similar, is that it integrates data from smart appliances in the household with algorithms that optimize electricity usage. This, combined with being the electricity vendor, gives Tibber a combined optimization and control of the energy management, that is not present in other systems. It also means that the user can optimize both their energy usage in itself and buy electricity at the lowest price available.

The service also benefits the grid, as energy is utilized in a more efficient manner and power peaks can be lowered. By using algorithms that optimizes electricity usage bases on pricing, high use during peaks can be avoided.

Scalability

The service has potential for upscaling within the whole market of electricity consumption.

Interoperability

The service can interact with most smart equipment that is present in a local energy system. Tibber also give customers and developers access to their API for anyone building their own smart home. As Tibber is a cloud service, the physical grid is not affected by it, and there is no need to make changes or additions.

They also seek collaboration with organizations that develop apps, smart home platforms or any kind of 3rd party systems. Examples of collaborations established up until today is Nibe, Audi, BMW, Tesla, Volvo, Netatmo, Samsung and Telldus.

Investment horizon

The business model is set up by a low monthly fixed fee for the customer, which makes the payback period short.

International potential

While Tibber is not available globally at the time being, the service has potential be used by all electricity customers in regions with an electric spot market.