

Best Practice description

REScoop: Ecopower cvba

Country: Belgium

Name of Measure: EnergielD

Third party involved: EnergielD cvba

Description of measure

EnergielD cvba was founded in 2014 as a cooperative under Belgian law. The organisation is active in Belgium and the Netherlands and recently Portugal and has one main goal: contribute to the transition to an environmentally sustainable, socially just and economically stable society by setting up services in the field of information technology. Cooperatives can become a member of EnergielD. It pays EnergielD to use the tool for their customers.

As a first service, EnergielD has set up a SaaS-platform (software as a service) to help families and organisations to manage their energy and water consumption as well as their transport kilometres and renewable energy production. For example, it can be used as a platform for an energy saving competition between schools. Users can create an account for free, compare their consumption with similar user profiles and can share their data with the service providers of their choice. Meter readings can be entered manually or automatically by compatible smart energy devices (e.g. Flukso.net, Smappee.com, Arcus-EDS KNX IP gateway,...) or smart meters (DSMR P1 Smart Meters)

EnergielD shares costs with its co-operative members and provide a shared and secure database to help as much users with their energy management. By sharing the platform, EnergielD can gather relevant data more quickly to compare and analyse. As of beginning of August 2017, almost 18.000 users are active on the platform.

Description of actions

EnergielD is a platform for active customers of a cooperative. It is expected from those customers who want to participate to fill in their own data and for the cooperative to be the first line of support. Customers sign up with an account on EnergielD and on a monthly basis they fill in their energy use. Data-integrations are provided for some systems to automate data entry. Then together with the help desk service of Ecopower the invoice and consumption is analysed and discussed. This can be done by phone or email.

Questions by the help desk asked are for example:

- Are the meter readings real or estimated (correct or incorrect)?
- Does the meter function right? What to do when your meter appears to be defect?
- If there is a PV installation: do they function correct? Has the convertor broken down?
- Did you buy new devices last year? Were you home more? Did your family situation change?
- Did you use electric heating, airco, electric boiler, Jacuzzi, heat pump,
- Maybe there's an energy loss on some (old) devices, ...

The customers fill in the data. EnergielD follows up on the consumption of customers using EnergielD and compare it with similar households.

Cost of implementation:

In countries where EnergieID is already implemented the licence costs for cooperatives are around €2000,- to track 500 sites. It is expected that the service and first line of support is carried out by the local cooperative and not by EnergieID. For starting cooperatives, this amount can be lower and can grow along with the growth of the cooperative.

In countries where it is not implemented it cost are around € 3000,- to implement it in that country. This cost can be shared with multiple cooperatives. It is expected that the local cooperative do the translations themselves. This will take a couple of days work and translation support with new developments.

The costs of EnergieID can also be shared with local governments that want to promote energy efficiency among certain groups in their community, f.i. when the community joins The Covenant of Mayors. EnergieID is good tool to measure and compare either the effectiveness of energy savings program or as an incentive to start energy efficiency in schools, or local companies.

Criteria	Energie ID	Score	Explanation of Scale
<i>Effectiveness:</i> The effectiveness of energy saving measures exists of different parts			
	<i>Impact:</i> Is there a clear impact on the energy savings of households where the measures were targeted or implemented. The researchers aim to find meaningful correlations between the measures and the variables that determine energy saving in households.	+++	There is a clear impact on energy savings. Statistical analysis shows 11.42% yearly kWh consumption reduction for a typical consumer that has registered in EnergieID, with a p-value of less than 0.05.
	<i>Goal efficiency:</i> This criterion looks at the reach in relation to impact. How easy is it to reach a large group of consumers and have an impact on energy saving in that group. Or the other way around, when the measure was implemented in a small group did it had a substantial impact to justify this reach.	++	When adopted by a cooperative it is very easy to reach a large group of customers. However, the incentive of the customer needs to be there.
	<i>Time Efficiency:</i> This criterion looks at how much time does it takes to implement the measure and the duration between implementation and first results. An example of a best practice would be a short time span (months rather than years) between the implementation of a measure and the first measurable results.	+++	Energie ID is a developed platform. Participating is very easy for consumers and cooperatives.
<i>Pre-investments and share of costs:</i> Who bears the pre-investments of implementing the measures and who benefits? How long does it take to cover the pre-investments?		+++	Cooperatives pay a fee depending on usage for using EnergieID. Ecopower considers this a service to the members and includes this in the overall cost. For members the use of the platform is free. First development of the platform is paid by early adaptors like Ecopower. Now fees of the cooperatives cover the exploitation of EnergieID and new developments.
<i>Implementation:</i> This criterion looks at the complexity of implementing the measure. This includes the above criteria of cost, but also administrative burdens, training of employees or volunteers and integration into existing systems.			
	<i>Administrative burdens:</i> Here we will look at the administrative burden that is created with the implementation of the measures, and if it is possible to reduce them with automatization, for example with a basic administrative system. This criterion will always be applied in relation to the impact and reach.	++++	The system is mostly automated and relies on input of customers. There is almost no administration needed, apart from when one wants to use the data to improve service to members. EnergieID has three employees to keep the system working and bug free.

	<i>Training of employees or volunteers:</i> Here we will look at how much time it costs to train volunteers or employees that help with implementing the measures. Also, the level of education is considered.	++	The system is fairly simple to use and to understand. Small explanation of customer service is helpful to answer questions of customers using the system.
	<i>Integration into existing systems:</i> Here we will look at the ease by which the implementation of a measure can be transferred to another cooperative somewhere else. When adoption of a measure implies the adoption of a complex support system, this is likely to form a barrier for transfer of this practice to other cooperatives.	++++	The system is a stand-alone system. It can be implemented in every country and every group of citizens. The system accounts for smart meters but also manual input. For energy suppliers input and production and sending of reports to customers can be automated.
<i>Market up take:</i> This criterion evaluates the possibility of replication with workable alterations in different cooperatives.		+++	Implementation is possible in different countries. It needs extra development of the platform that comes with cost. Also the customer service of the system will need to be organised locally. EnergielD proved in Portugal that this is possible.
	<i>Regulatory context:</i> Important here is to look whether the measures can only be used when certain regulatory measures are in place or that they can be implemented in any regulatory context.	++	It is a web based platform and a tool. National privacy regulations apply.
	<i>Organisational context:</i> Another important aspect is to analyse whether the measures are linked to any specific organisational structures of the cooperative. For example, when a measure only works when the cooperative is the owner of the electrical grid it will get a low score on the market up take criteria.	++++	Any group can use the system, like schools or school classes or even football teams. Being an energy supplier makes it easier because data can be uploaded automatically.
<i>Ethical performance:</i> This criterion looks at whether there are ethical procedures in place concerning control of end-user, transparency and data management.	<i>Degree of control by end-user:</i> In what terms can end users exercise control of the measures or organisation that implement the measures.	++++	All users can access and modify their own data. EnergielD is a cooperative of different cooperatives and companies that use the system. This gives the groups that use the system control over the software company. Individual users can give permission to the admin to use its data or not.
	<i>Transparency:</i> Is it clear how governance structures or cash flows are organised	+++	The business model is mentioned on the website and transparent for users.
	<i>Data management:</i> How is data of the tools managed. Is there for example a privacy policy in place?	+++	Private data can only be used in the system and cannot be sold to third parties for commercial purposes. Data for research is sometimes used on an aggregated basis. This is stated in the internal regulations of the cooperative EnergielD.

Expert involved

Vincent Dierickx (°1978) works full-time on accelerating the energy transition. After studying civil engineering with major in mechatronics (KUL 2001), a malfunctioning torch at BASF Antwerp sowed the seed for his passion for energy efficiency. This resulted, after a stopover for artstudies (Jazzdrums) at the Lemmensinstitute in Leuven, in further specialization in energy monitoring and management. He worked in those years for diverse clients such as the Flemish Government, DSO Infrac, KBC, Medialaan, Brussels Environment, Intervest, Nike and Veolia.

His belief in cooperative entrepreneurship led him recently to co-found the co-operative EnergieID cvba-so (° 2014), provider and developer of the social energy monitoring platform energieid.be, and the engineering company Efika Engineering (°2015).

