

## **Best Practice description**

**REScoop:** Enercoop

**Country:** France

**Name of Measure:** Dr. Watt

**Third party involved:** -

### ***Description of measure***

Dr Watt is an online tool including an offline training course to help consumers make a self-diagnosis of their specific electricity consumption. It is a tool for consumers to understand their consumption. With Dr. Watt you measure everything what has a plug. The diagnostics are made visual online. The report gives consumers the opportunity to look at every appliance separately instead of only general advice. This makes the advice very effective.

The service is offered to members and non-members of the REScoop. The aim is to help individual consumers reduce their energy consumption:

- By giving them the tools to measure their consumption and understand it.
- By reducing their consumption while maintaining the same comfort level with personal advises from Dr Watt.

### ***Description of actions***

First there will be a training with an energy expert. A meeting with a group and an energy expert is organised where the expert presents the importance of the energy saving and the expert explains how to do to the self-diagnosis by using a wattmeter (provided by the expert) and the online service.

Second, participants start with the self-diagnosis for six weeks. The participant will measure the consumption of every electrical device with the wattmeter and put the data on the online service. It does not register heating. Water electrical consumption and electrical heating of food are estimated by ratios. This data and the program will give the potential energy savings that can be achieved by the consumer and compare it to the other participant's results and personal made advices.

Finally there is a feedback meeting. In this meeting the expert will analyse the results of each participant, and answer their questions. It is also the opportunity for participants to share their experience and ask for advices within the group. Participants are also given access to different sharing tools in the platform to give them the possibility to exchange experiences online.

### ***Cost of implementation:***

The initial costs of the implementation and organisation of Dr. Watt is hard to measure. All time of the IT department and people working in Enercoop was not registered because it was seen as an extra service to the members of Enercoop. Also it included a lot of voluntary work of members. It is estimated that the initial investment was 90.000 euro's : 60.000 in R&D and 35.000 in IT. It is considered as an investment in the service for the members and there is no big ambition to have the money back, it was simply taken up on the overall cost of the organisation and seen as a marketing investment.

There are costs involved for the training of the experts. These costs are covered with the payments for individuals participating. One day training in total is enough where experts are trained in general knowledge of energy and energy savings and how to use the Dr. Watt platform.

The price to participate with Dr. Watt is €39 for individuals, this includes the use of the online tools and the offline trainings. Dr Watt is available to groups as well: collectives, associations, businesses can buy a group training session for their employees for example. Group price is €500 (up to 20 participants).

Criteria	Dr. Watt	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.	0/+	Statistical analysis was performed on only a small sample, since 6-monthly aggregations of measurements was required. Preliminary results show a 7.68% increase in 6-monthly kWh customer's consumption, but a 60.31% decrease in 6-monthly kWh/DD consumption. Both p-values are higher than 0.05, indicating insignificance of the results.
	<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. Important to note is that a measurement can have a specific goal in the energy saving process, for example visiting a website. We therefore look at the impact of reaching its goal.		
	<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.	+++	There are two trainings. How to use the Wattmeter, and what is energy. After six weeks there is another training and sharing of knowledge. Consequently with the tool it is easy to support people in their energy savings advice.
<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?		++++	The initial investment to set up the online system was a big investment 90.000 but was considered by Enercoop as marketing cost. For customers it's a low investment to participate €39,-Also new cooperatives in the Enercoop network can use Dr.Watt for free.
<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.		++	Experts need to be trained on how to use the platform. This training can be done in one day.

	<p><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.</p>	++++	<p>Once the system is set up the administration is very easy and reports on energy savings are made automatically. The personal reports are made automatically, but the group report/analysis is made by the expert trainer (it needs a half hour of work).</p>
	<p><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.</p>	++	<p>Trained volunteers and employees as an energy expert is needed. This is not a high level education.</p>
	<p><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.</p>	++++	<p>The measure is not dependent on any regulations or internal administration. It is a stand-alone solution that can be integrated everywhere. Well, it needs translations of course and also a contract of use between Enercoop and other cooperatives.</p>
<p><i>Market up take:</i> This criterion evaluates the possibility of replication with workable alterations in different cooperatives.</p>			
	<p>Regulatory context: 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.</p>	++	<p>Regular national privacy regulations apply. Customers need to agree to general conditions proposed by Enercoop.</p>
	<p>Organisational context: 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.</p>	++++	<p>The measure is a stand-alone measure. Any cooperative or energy group in Europe can use it.</p>
<p><i>Ethical performance:</i> This criterion looks at whether there are ethical procedures in place concerning control of end-user, transparency and data management.</p>	<p>Degree of control by end-user: In what terms can end users exercise control of the measures or organisation that implement the measures.</p>	+++	<p>Customers have a private login platform within Dr. Watt. They can change all information. Also they can erase all data on themselves by email the cooperative.</p>
	<p>Transparency: Is it clear how governance structures or cash flows are organised</p>	++	<p>The small cash flow is used for the payment of the trainings. Which is clear to the customer + cooperative governance of the Enercoop network</p>
	<p>Data management: How is data of the tools managed. Is there for example a privacy policy in place?</p>	+++	<p>There are general conditions set up by the cooperatives that customers have to agree to. Here the cooperative declares that they does not share or sell the data to third parties.</p>

## Expert involved

Mohamed Sifaoui has a MSc in Energy and advanced materials, renewable energy section at the Université de Cergy-Pontoise, Cergy-Pontoise, 2013 and a MSc - Management and sustainable development at ISEADD, Marne-la-Vallée, 2014

He is the project officer on energy saving issues for the Enercoop network of cooperatives. Making easy for all cooperatives and all functions to integrate energy savings services (Wiki, Dr Watt, Accompagnement des professionnels, etc).

Mohammed can help other REScoops to

- Understanding how the Dr Watt website/supercalculator works
- Understanding how the Dr Watt training can be sold in the local areas for residential clients and also for organizations
- Understanding the arguments of Dr Watt effectiveness and simplicity
- Understanding how the Dr Watt physical (group) trainings are working
- Understanding the costs and the benefits of Dr Watt

Understanding the whole scheme of a Dr Watt training (communication, selling, client relationship, 1st physical training, wattmeter lending, questions/answers during the 6 weeks auto-diagnostic, 2nd physical training, accounting, etc).

