

# Dr Watt trainings

## Giving the power to act on your own electrical consumption

September 2018



11/09/18



*This project has received funding from the European Union's Horizon 2020 research and innovation programme under grant agreement No 696084*





# Summary

- Dr Watt is an off and online learning program (6 weeks long) to reduce home electricity consumption, it is sold to both households and organizations
- 39 € tax-included for households
- Developed by the network of co-operatives ENERCOOP (France) – with an IT subcontractor
- Launched in 2013, 1100 users as of September 2018
- ENERCOOP is a co-operative created in 2005 with the objective of decentralizing energy transition issues for and by the citizens
- The software is developed on a PHP framework and with a GPL licence
- It's one of the « best practices » identified in the REScoop Plus project



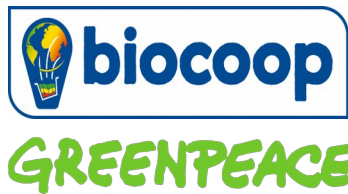
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# Enercoop – The developer

Created in **2005** by:



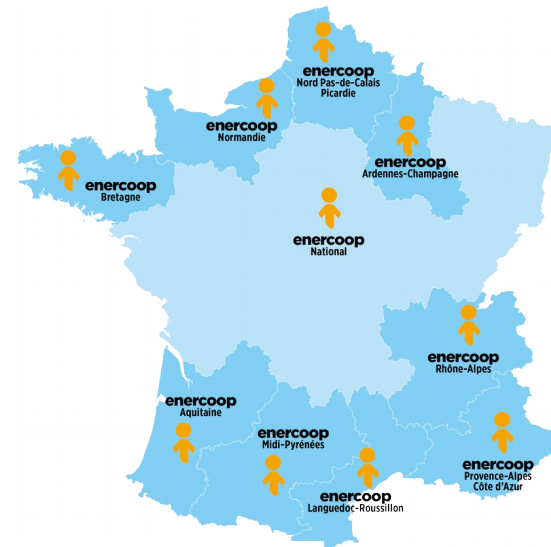
**Main Activity :** Supplier of renewable electricity

**60 000**  
clients

**32 000**  
members

**180**  
employees

**170**  
producers



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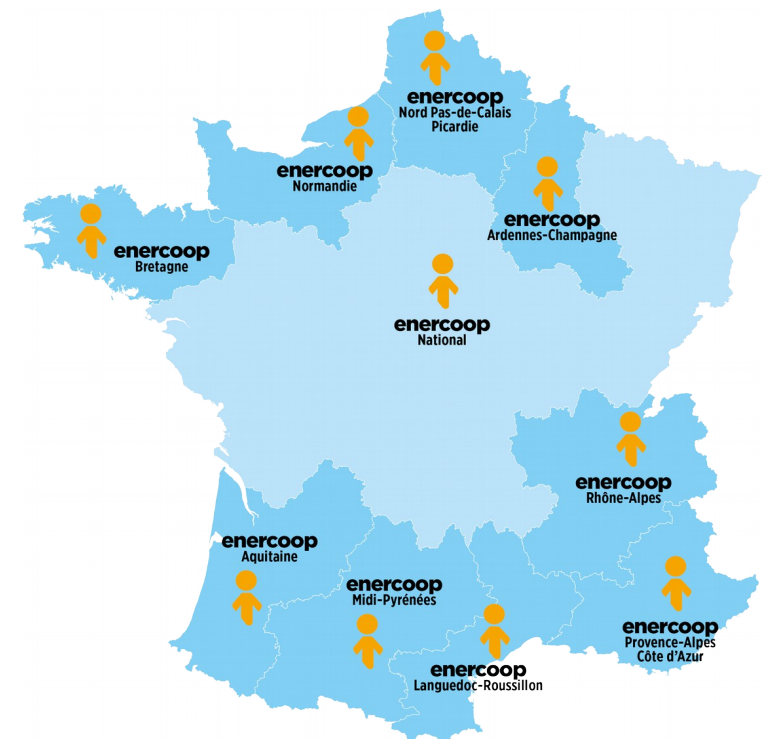




# Enercoop – The developer

## 10 local cooperatives

- Creation of short and local circuits of energy between producers and consumers
- Share services and experiences
- Solidarity between local cooperatives
- Guarantee of respect for the ethics and values of Enercoop
- Each local cooperative is legally independent but the network has a single governance system



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# Why develop this tool ?

## Strengthening of the political project

## Acquisition and development

- A coherent project and a coherent speech → « a higher price but provides support in the reduction of energy consumption »
- Enrich the offer of energy services and start anticipating energy market developments oriented towards new services (EE, production, etc.)

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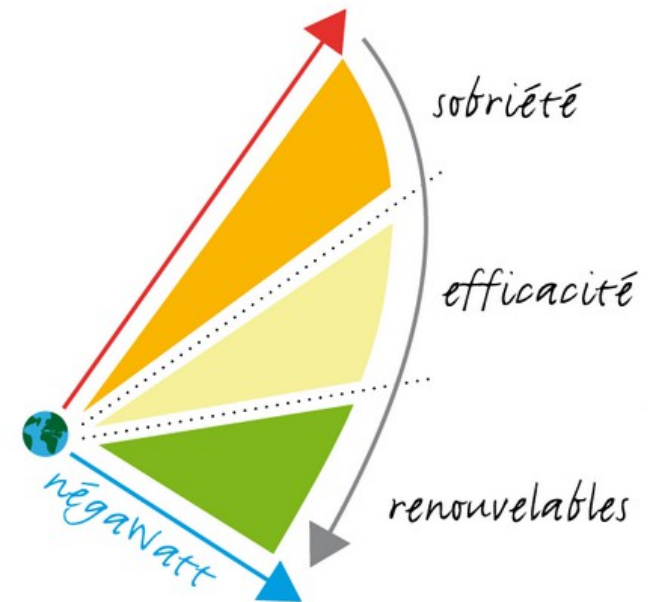




# Its purpose

**Essential for the energy transition** 20 % of the specific electricity to be reduced in the French prospective models of energy transition

- **Rational use:** Reducing energy consumption without reducing the level of comfort
- **Efficiency:** Right choice of equipment and appliances for energy consumption





# Added value for the users?

## For the individuals / households:

- A training program to become aware of one's consumption of electricity and to act concretely to reduce it

## For the organizations:

- Allows to build a coherence within corporate policies (CSR, Social Economy) of enterprises, associations or local communities by raising awareness of their employees, members or inhabitants

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# Who are the users of the service?

## Individuals

More than **750 households** have used and paid for the Dr Watt service

→ **3/4 were already clients and members of ENERCOOP**

→ **1/4 were not** – when they paid for the service

## Organizations







# A cocktail program (1/3)

OFFLINE  
PART

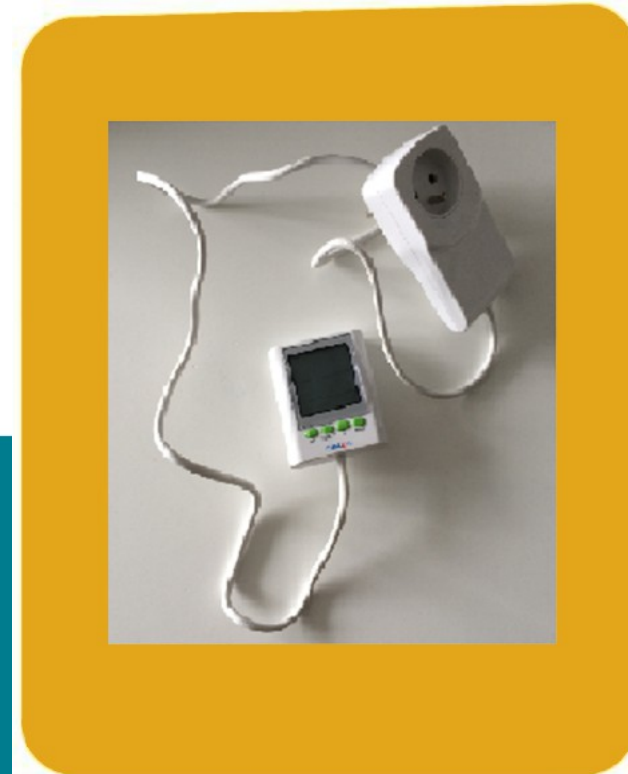
1

90 minutes

## 1st session with an expert

Learning to use a wattmeter, the online website and the method to do the self-diagnosis  
+ talk about climate change and energy transition

The screenshot shows the ENERCOOP website interface. On the left, there's a 'Feuille de relevés' (bill) titled 'LA CUISINE' with a cartoon scientist character. The bill text includes: 'Bienvenue dans l'outil énergétique d'ENERCOOP, fournisseur d'électricité 100% citoyenne et renouvelable', 'En savoir plus >>', and a quote: 'La cuisine est la pièce dans laquelle nous consommons le plus d'électricité spécifique ! Les appareils de froid y sont pour beaucoup... mais les appareils électriques du fait qu'ils sont nombreux ont leur rôle ! Ouvrez vos placards... il y en a certains qui se cachent... Bonne mesures !'. On the right, there's a login form titled 'S'identifier' with fields for 'Nom d'utilisateur :', 'Mot de passe :', a checkbox for 'Se souvenir de moi', and buttons for 'Connexion' and 'Créer un compte'.



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# A cocktail program (2/3)

ONLINE PART

2  
6 weeks

## Home self-diagnosis

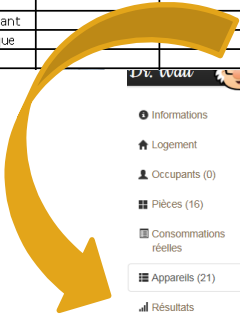
Mesures and online report of the electricity consumption. Personalized advices to reduce it



	Puissance en fonctionnement (W)	Puissance en veille (W)	Puissance juste branché éteint (W)
Four Micro-ondes			
Robot ménager			
Hachoir			
Presse-agrume			
Mixeur			
Mixeur plongeant			
Fouet électrique			
Batteur			

Just report the mesures and Dr Watt will do the rest...

Graphical visualization of the self-diagnosis results



**Mon appareil** Machine à café

Nom: Cafetière | Désignation: Machine à café | Pièce: Cuisine

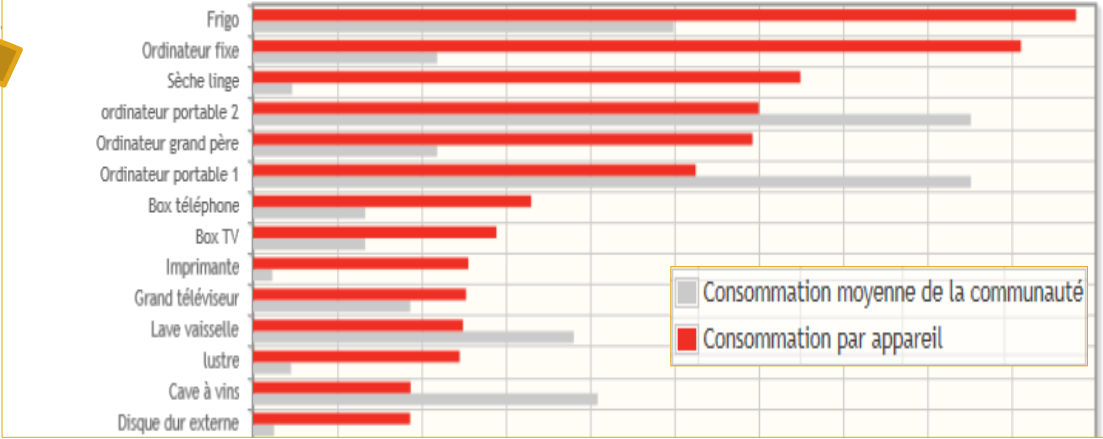
Consommation lors de la mesure: 0,32 kWh | Nombre de cycles: 1 /Jour | Etat de fonction: Branché

Expression des durées en: Heures/Jour (24h/jour)

Durée de fonctionnement en veille: 24.00 Heures/Jour (format hh:mm)

Puissance en veille: 2 W | Puissance seulement branché: 0 W

comparison to community





# A cocktail program (3/3)

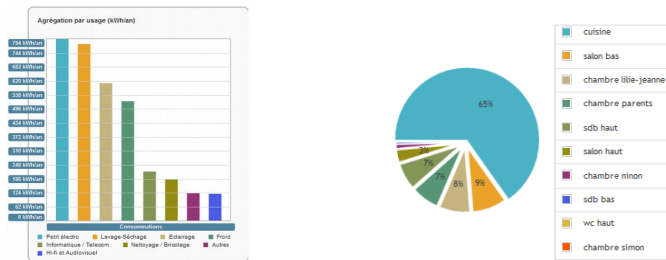
OFFLINE  
PART

# 3

2 hours

**2nd session with an expert**  
Sharing experiences. Group results analysis.  
Tips and advices. Focus on lighting purchase.

## Results discussion



By sharing their experiences, all participants can improve the group with some personal details which can be very useful for everyone

Make the understanding of how to buy lighting easier



Talks about tips and tools helping to reduce electricity consumption



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# A complementary tool

ONLINE  
FREE



Je fais des économies d'énergie - **Forum** Pour en savoir plus

Rechercher...  




L'énergie la plus propre est celle que n...  
Ce wiki est publié par Enercoop pour réduire vot...



Qui dit gros appareils dit généralement grosse consommation. C'est en effet le cas po...  
La **cuisson**, dans le cas d'une installation entièrement électrique (four, plaque, micro-onde...  
électrique totale d'un ménage.  
Le **lavage-séchage** représente 11% de la consommation d'électricité spéc...  
Selon une étude de l'ADEME, le poste **froid** (réfrigérateur, congélateur) représente 20 % d...  
communauté Dr Watt, il représente même 29% des consommati...

## Cuisson

Déroulez les fiches pour aller plus loin

- Fours 
- Micro-ondes 
- Plaques de cuisson 

### Questions et réponses récentes

- ▲ 0 ▼ votes **1** réponse **Micro-ondes ou plaques pour la soupe**  
répondu par anonyme **12-Décembre-2017** dans **Petit électroménager**  
micro-ondes plaque comparaison
- ▲ 0 ▼ votes **1** réponse **Je cherche un lave-linge compatible avec une installation photovoltaïque et que l'on puisse alimenter avec de l'eau déjà chaude.**  
répondu par anonyme **01-Décembre-2017**  
lave-linge eau-chaude
- ▲ 0 ▼ votes **2** réponses **Faut-il laisser un cumulus électrique (250l) sous tension en permanence ou attendre d'épuiser l'eau chaude avant de le remettre en tension ?**  
répondu par anonyme **28-Novembre-2017** dans **Confort thermique**
- ▲ 0 ▼ votes **1** réponse **Modem télé supporte mal d'être arrêté !**  
répondu par **Sophie** (140 points) **20-Octobre-2017** dans **Multimédia**

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# Technical information

- The online tool is developed with external web developers from the SSII PROBESYS → <https://www.probesys.com/>
- The tool licence is GPL, which is an OPEN SOURCE licence
- But not on Github. The developments are all made by Enercoop
- The translation of the tool can be done on the same web architecture
- The « Wiki of energy savings » is developed on an Open Source WIKI technology called YESWIKI

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# Timeframe for using of the tool

## Individuals

Communication starts at least 2 months before the starting of a « 6 weeks training session »

- E-mailing
- Newsletters
- Local press releases
- Social media
- Partners
- Regular communication : website, bills, welcoming letters, online customer account
- Special offers

A session is confirmed if there is at least 7 participants (max. 20) a week before the first meeting

The platform is still activated to use by participants after the 6 weeks

Possible to compare BEFORE and AFTER having implemented actions to reduce electricity consumption



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## Organizations

Selling actions and communication : e-mailings, phone calls, meetings

The organization has to find 20 participants: employees, members, citizens, etc

Enercoop supports the organization with its own communication

The organizations take care of the logistics

For the participants, it's the same process

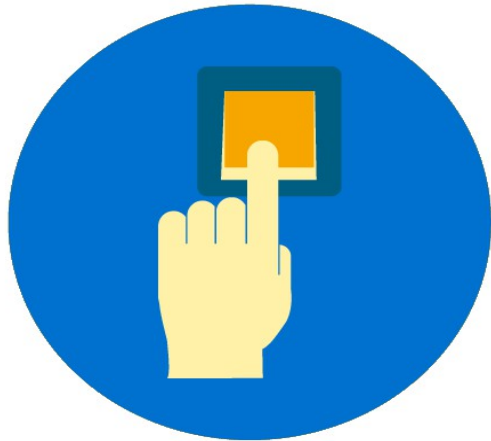
Additional focus on « energy savings in the office » when it's a company (during the second meeting)

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# Effectiveness in France



**34 € / an  
d'économies\***

**Éco-gestes, sobriété**

12,4 % of the appliances  
measured

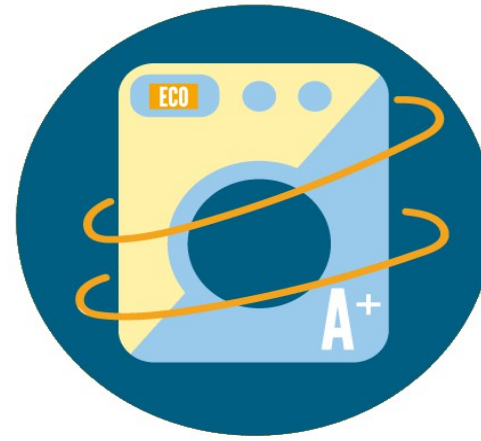
\*Économies d'énergie moyennes détectées chez les participants à la formation Dr Watt, sur la base du tarif Enercoop.



**32 € / an  
d'économies\***

**Changement de l'éclairage**

11,7 % of the appliances  
measured



**45 € / an  
d'économies\***

**Changement du matériel  
(froid, lavage...)**

16,6 % of the appliances measured

**Satisfaction note : 9/10**

University of Twente's analysis shows a **correlation between the use of Dr Watt and real energy savings**

Technological University of Crete's statistical analysis shows a reduction of 60 % comparing BEFORE and AFTER Dr Watt\*\*

\*\* But needs to be confirmed

The business model has to be linked to **others services** (supplying, production, memberships, public and private grants,..)



# How to make it work in other countries

## A shared perspective

- After 3 years of experimentation (2013-2015), we did a dissemination in our network of cooperatives in 2016-2017
- If European cooperatives are interested, it's possible to support thoughts and developments, inspired by the Dr Watt model

## How

- Exchange on your needs and your ideas on how to implement and adapt
- Using a REScoop Plus project's template: methodology and resources, timeline and budget for the support of ENERCOOP experts
- Have an agreement
- In-house training, transmission, supporting the implementation (selling kit and training kit)

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# Contact

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