

## Social dimension of the monitoring and regulation

23/10/2018 – Empower - Almada

## The context of the SOLENN project

### a Breton smart grid project

*How to help the consumer contain his electricity demand  
Means used and analysis carried on*



# Targets



**Testing different ways to inform citizens about controlling their energy consumption and change practices**



**Securing the power supply with new alternative to load shedding**



**Collection, transmission and exploitation of data from Linky meters**



Citizens, associations, public institutions, academics and industry ... all mobilized around these 3 issues

# Control of electric demand

Different ways to raise awareness

# Energy Demand Management

*"What is the best way to educate individuals to control their consumption? "*

## Principle

To Compare different methods implemented in the project

## What was tested in SOLENN

**collective** animation (50-700 people),

**individual** coaching (70 people),

provision of electrical information via websites (**home automation**, ENEDIS, Ti SOLENN)

- **Practice analyzes and statistics on these methods**
- **Adjustment of methods** for the 3rd winter according to the results



## Focus on :

- Contribution of human sciences
- How do we use it to raise awareness and change practices?

## Social Sciences and Humanities: Key Issues

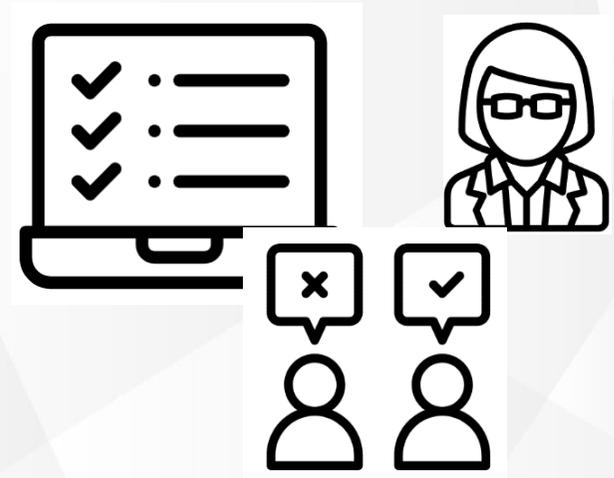
### ► Socio-ergonomic studies

*"What would be the ideal platform? "*

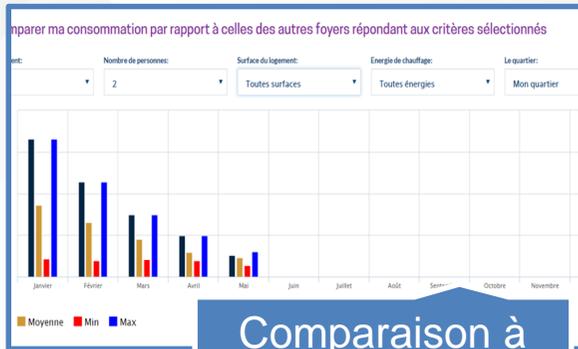
(Deposit of the **software "Appliconso"**)

- About implementation of different internet portals

*"How do users take ownership of technologies, what makes it difficult?"*



# Ti Solenn : A tool for experimenters of individual coaching and collective animation



Comparaison à d'autres foyers



Courbe de charge J-2



Tableau de bord individuel



Eco-gestes

## Social Sciences and Humanities: Key Issues

### ► Socio-ergonomic studies

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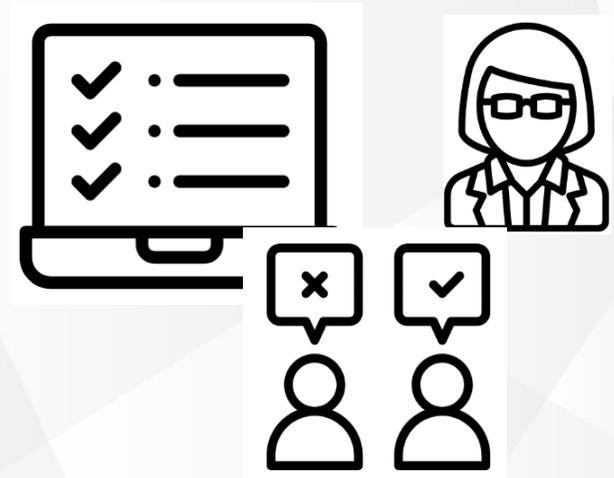
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- About implementation of different internet portals  
*"How do users take ownership of technologies, what makes it difficult?"*

### ► Longitudinal Marketing Studies

*"Why do people do eco-gestures? "*

- Identification of "values" that interfere with practices for controlling energy consumption



Now let's see the studies results,  
And try to answer to the QUIZZ!

## Results of socio ergonomics studies

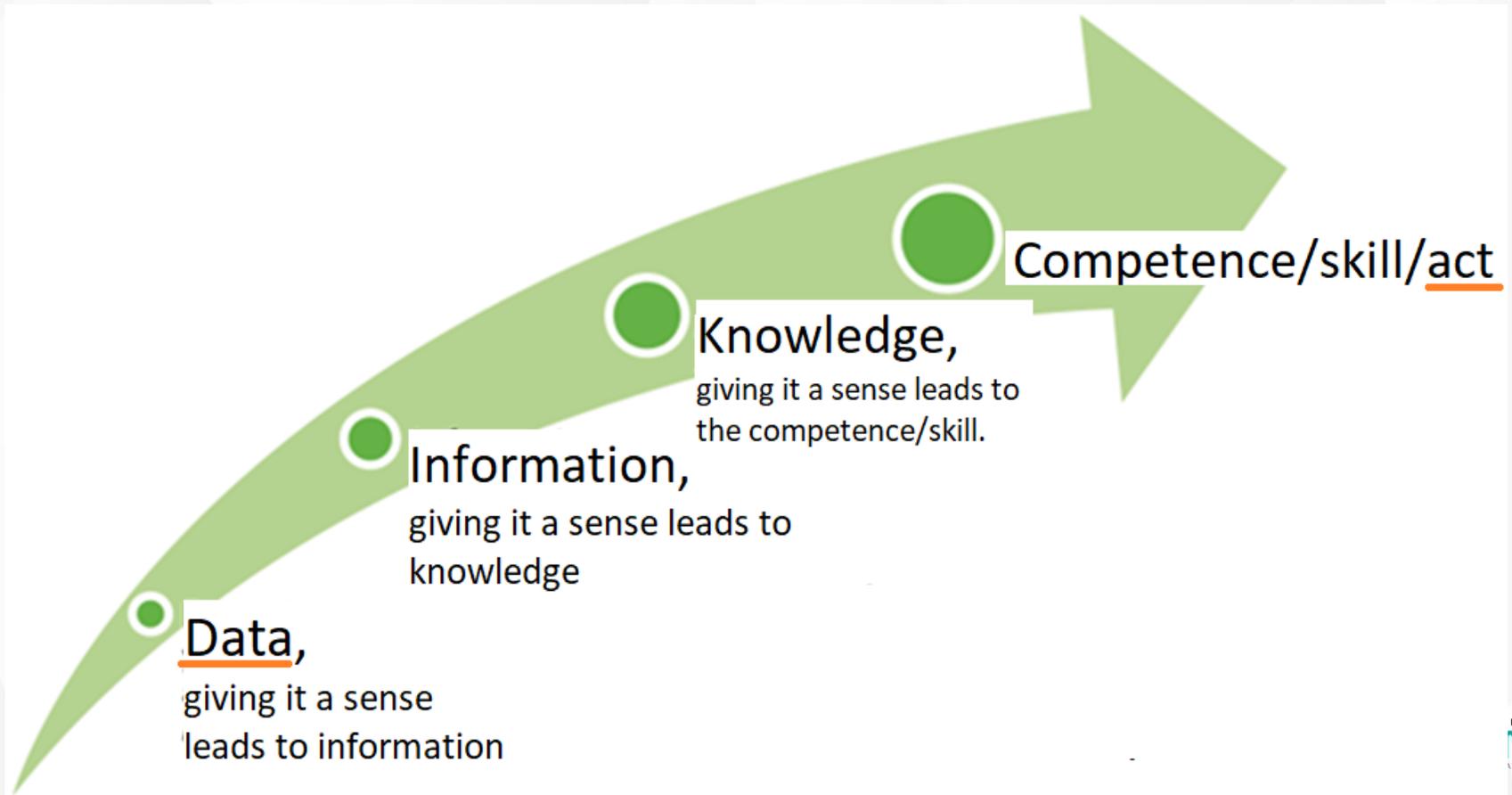
In video (3 minutes)

## Results of socio ergonomics studies And Longitudinal Marketing studies

1. Design **highly adaptive technologies to individual possibilities**, and offering **information that is easily accessible**, clear and diversified.
2. To develop a supportive environment and allow these technologies to become tools for transition : **they must be co-constructed with the people who will use them.**
3. **Multiply human and technological supports**, designed in synergy : to **develop the citizens' power to act** for energy and ecological transition.

# The most important you have to understand!

Monitoring and access information makes it possible to understand consumption BUT not to act



# In act, what you have to do now

## 1/ Apprehend the market, define what it needs- desires/reality

Use adapted representations

Encourage through **gamification, storytelling**, nudges

To do this, it is necessary to **be attentive to its users**

## 2/ Integrate the user need from the very beginning, and throughout the process, even after

for example, **create a community** to help you make a useful tool for displaying consumption → **this will allow the project to be sustained over time**

## 3/ Transform data into information and actions

A Platform is a tool, but it is ephemeral. Once the action is implemented, the information is no longer useful, but the follow up is.

We are thinking about an **economic model for monitoring rental and coaches in ecological transition**

# In summary

- ✓ Focus on the individual and domestic benefits for the user (to control his consumption)
- ✓ Focus on supporting the practice itself (workshops, home visits, teaching eco-gestures, etc.),
- ✓ **Human and technological support are complementary and require to be conducted together**



Understand to help citizens and consumers

to act for energy savings

*According to you, what are the two most important types of benefits for consumers in terms of electricity savings?*

1. An **environmental and civic** benefit
2. A benefit related to the **management of your home**
3. **Psychological well-being**
4. **Health and safety** benefits in housing



*According to you, what are the two most important types of benefits for consumers in terms of electricity savings?*

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*According to you, what is the most complicated for the consumer when he focuses on his electricity consumption?*

1. The **daily efforts** that this requires (time, constraints, changing habits...)
2. The **social image** it reflects
3. Lack of **skills and knowledge**



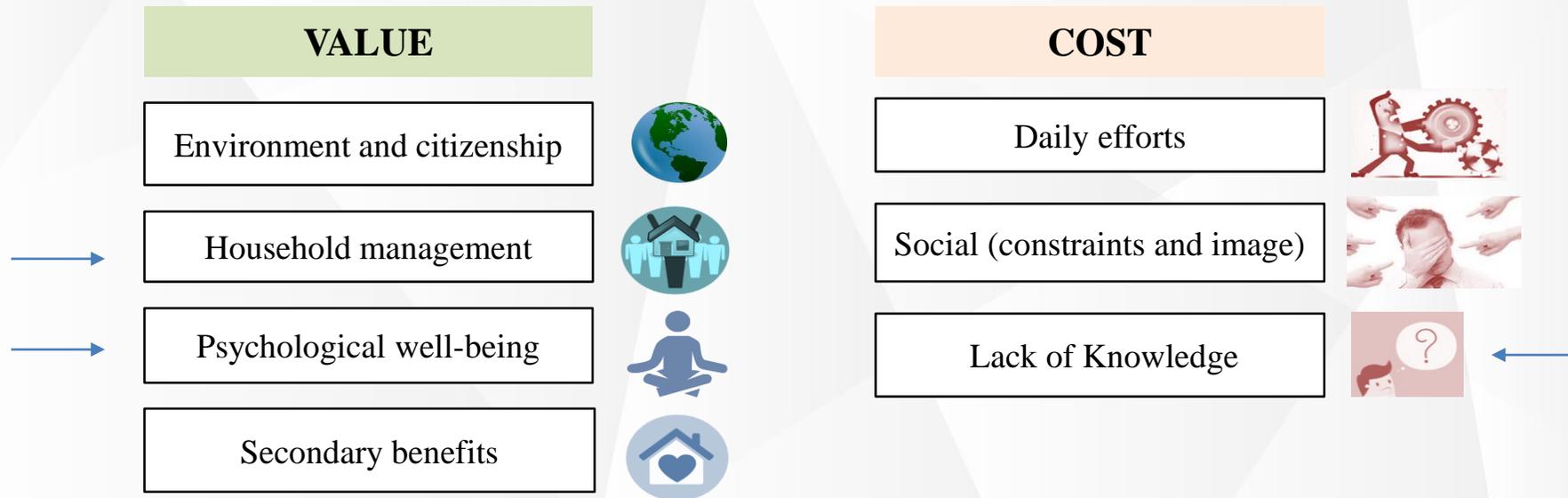
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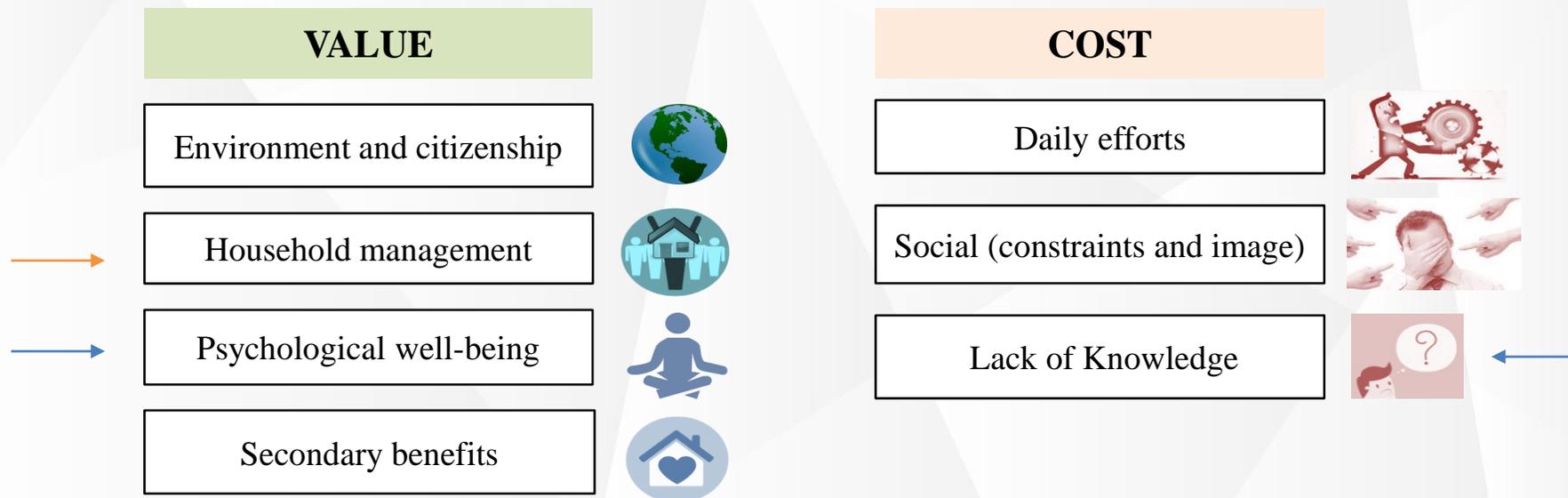
*What is the best motivation for a person to engage himself in a process of controlling their electricity consumption?*

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2. Its **citizen engagement and/or for the planet**
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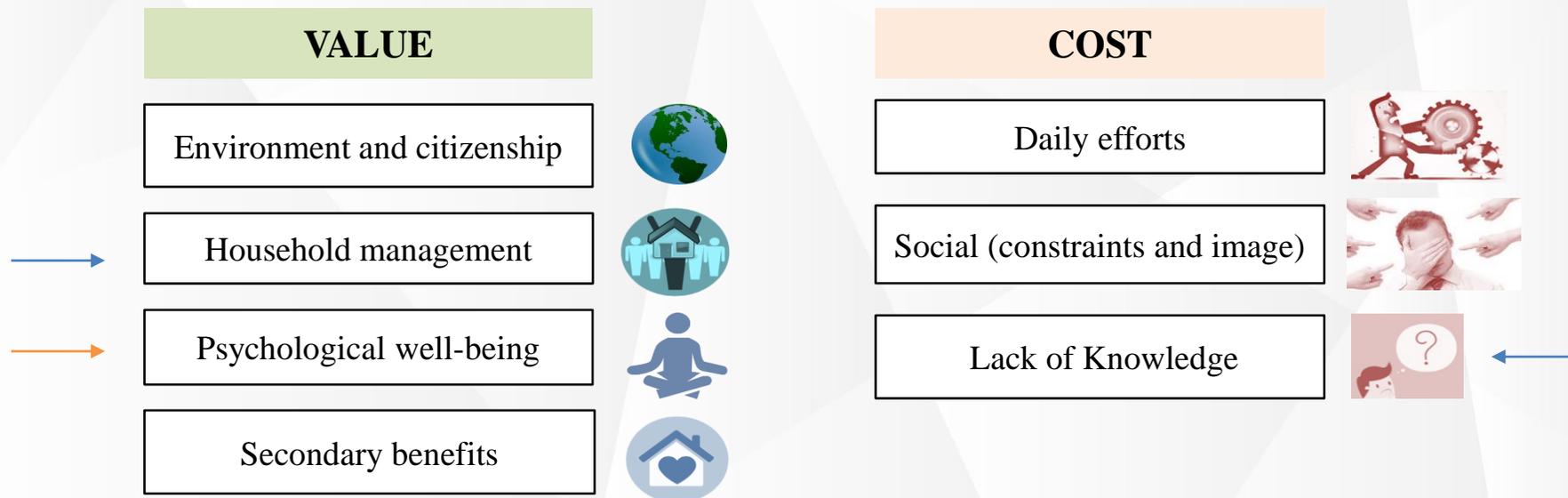
*What makes the practice of eco-actions a habit / a routine?*

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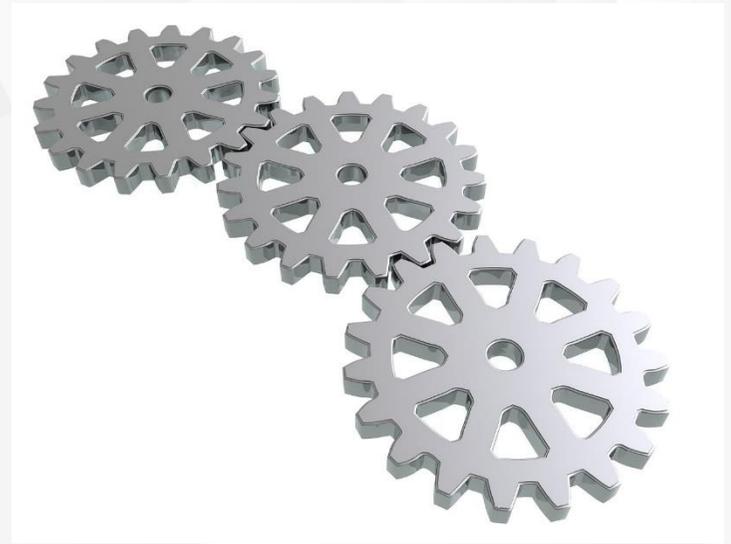
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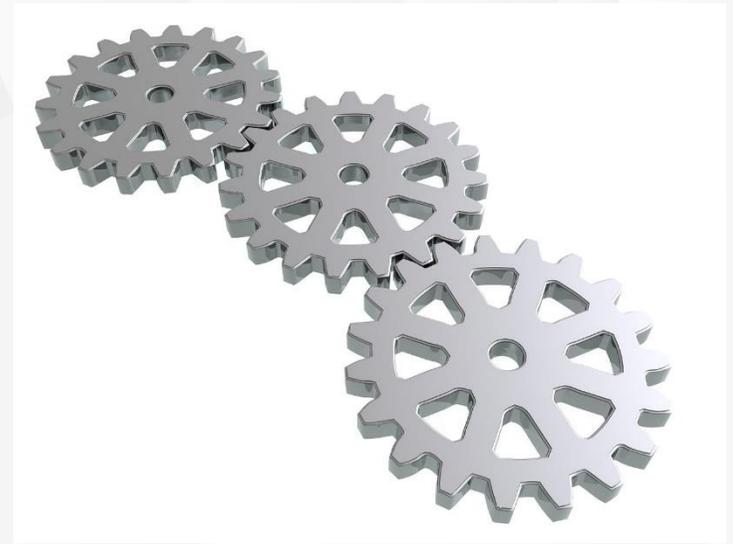
## *Realize more and more electric eco-gestures...*

1. ... It's getting **easier** and easier
2. ... It's getting more and more **complicated**



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*Being able to know exactly what you are consuming in electricity ( by visiting a website)...*

1. Makes it possible to **reduce** consumption
2. Makes it possible to implement **new practices**
3. Allows a **better understanding** of your consumption
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*What do we notice when there is coaching to understand the website?*

1. The user questions **notions that he does not usually use**
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*Once the tool and the connection have been made accessible, what is the main conclusion? User...*

1. shows **interest** in the result
2. Wishes **further information**
3. is **surprised** at the possibilities given by the results (I see that..... I could do...)
4. **wonders about his habits**



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2. To **reconsider your habits**
3. People want to **compare**



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## *What is important to create social group cohesion?*

1. Provide **food and drink**
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4. **Putting individuals in competition**

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*To promote change, is it better?*

1. To **Focus on one subject** = energy
2. To **Diversify the themes**: energy, food, transport, etc.

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- ✓<sub>2</sub> 2. To **Diversify the themes**: energy, food, transport, etc.

*Of these affirmations, which ones are the golden rules for talking about ecological transition?*

- 1. Argue and respond to each resistance**
- 2. Give plenty of information, facts and figures, etc.**
- 3. Encourage**
- 4. Be caring and attentive**

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## Humanities : What local energy agence do into this projet with social science

1st Year

- Our workshops are appreciated but
  - People do not come back to our workshops regularly
  - no lasting change in behavior
  - no group effect, no emulation

2<sup>nd</sup> Year

- Our efforts on the site TiSolenn are rewarded by numerous inscriptions (+600 users) but
  - there is still no group effect
  - users of the platform are not those who come to workshops to change (2 types of profiles)

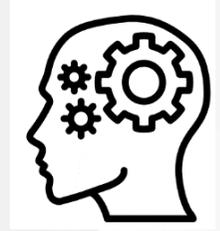
3rd year

- **We use sociological results to radically change our animation techniques**



Household  
management

I need educate  
I want master  
I don't want waste energy  
I like rewards



## We do



- ✓ Challenge creation
- ✓ Link with children
- ✓ Graphs on energy consumption
- ✓ Illustrated and simple energy saving indicators



Psychological  
Well-being

I like to create  
I like sharing with others  
I like to set myself challenges  
I like to observe things  
I like learning stuffs



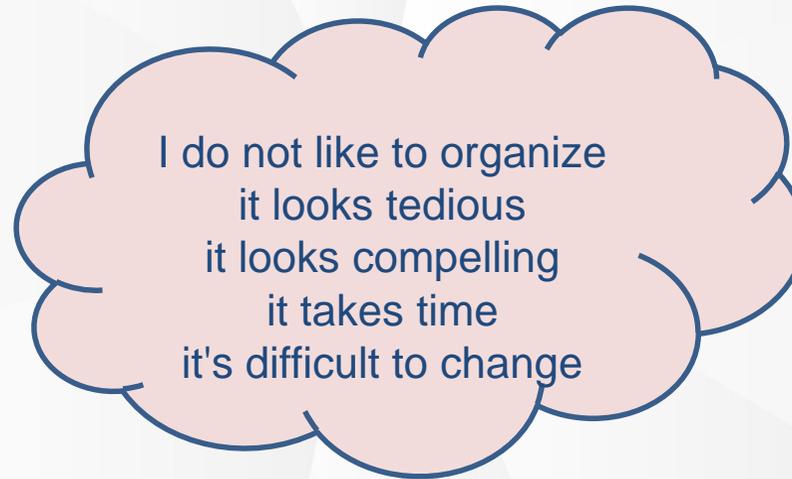
## We do



- ✓ Creative workshops,
- ✓ Speech, sharing and support group
- ✓ Setting individual and group goals
- ✓ Conviviality



Daily Efforts



I do not like to organize  
it looks tedious  
it looks compelling  
it takes time  
it's difficult to change



**We**



- ✓ We try to show people that it's not complicated, it can easily fit into their lifestyle
- ✓ Workshop of direct practice of eco-gestures
- ✓ Show that can make you happy
- ✓ repetition of simple gestures from the beginning of the workshops



Social constraints  
and image

I do not want to be a miser  
I'm going to lose comfort  
it's embarrassing to talk about it with people  
I will not go back and live with a candle



## We do

- ✓ We try to show that many people change their habits too
- ✓ group spirit with storytelling
- ✓ we make people talk to each other about societal changes
- ✓ engaging workshops in time

## In summary, sociology has allowed us to understand

### Maintain participant interest

- Involve users from the beginning (even for websites) - "Do with" and not "do for"
- Strengthen the group effect with engaging workshops over time
- Communicate regularly on their progress

### Transforming data into information and action

- Use adapted representations
- Encourage by gamification, storytelling, nudges

### Raising awareness through practice

- Virtuous Circle of Practice
- Behavioral changes are more sustainable if the benefits are felt directly and early

Involvement of users in the drafting of the Lorient Agglomération climate plan: "brainstorming" evening on April 19th

Devenez aventurier de...  
... la transition écologique

**Parcours 1**  
Économiser l'énergie en 3 étapes !

**Parcours 2**  
Je fais le plein de bonnes résolutions [...] et je m'y tiens !!

Vous voulez...  
... Passer à l'action avec un groupe motivé ?  
... Partager vos astuces et bons plans ?

**Après-découverte**  
Mercredi 11 octobre à 18h30  
Au bar M85, Quartier Lorient La Basse + Bâtiment Collège Submergé

En savoir plus...

Je m'inscris, c'est gratuit ! ✓

Limité à 20 participants  
Inscription et renseignements  
09 72 37 73 51 - soleinn@aloen.fr  
aloen.fr ou tsioleenn.lorient-agglo  
Et sur les réseaux sociaux...

La transition, c'est plus sympa ensemble !

ALDEN SOLEINN



## 2 types of "route of the adventurers of the ecological transition"

Les parcours de...

... la transition écologique

### Parcours 1

J'économise l'énergie en 3 étapes !

1

#### JE RÉALISE MON BILAN CARDONE

Objectif : évaluer mon empreinte carbone et apprendre à décortiquer mes factures d'eau, gaz et électricité pour démystifier les économies d'énergie.

Mercredi 25 octobre 2017 - de 19h à 20h30 - Lorient

2

#### JE VISITE UN CHANTIER DE MAISON EXEMPLAIRE

Objectif : découvrir un projet de rénovation efficace thermiquement et respectueux de son environnement, en présence d'un technicien et du maître d'ouvrage.

Samedi 18 novembre 2017 - de 10h à 12h - Floemeur

3

#### JE TRAQUE LES WATTS À LA MAISON

Objectif : identifier mes équipements énergivores à la maison et apprendre à mesurer ma consommation avec un wattmètre.

Mercredi 6 décembre 2016 - de 19h à 20h30 - Lorient

4

#### JE DÉCOUVRE L'AUTO-CONSTRUCTION

Objectif : m'initier au fonctionnement et à l'auto-fabrication d'un poêle bouilleur.

Mercredi 10 janvier 2018 - de 19h à 20h30 - Floemeur

5

#### ET SI ON JOUAIT COLLECTIF ?

Objectif : à travers un jeu interactif, imaginer ensemble un projet d'énergie citoyen collectif.

Vendredi 2 février 2018 - de 19h à 20h30 - Lorient

6

#### BILAN ET SOIRÉE FESTIVE

Objectif : fêter ensemble le chemin parcouru pour la transition!

Semaine du 23 février - Date à définir en fonction des disponibilités de chacun.



Je relève le défi,  
je m'inscris !



### Parcours 2

Je fais le plein de bonnes résolutions...

... et je les tiens !

1

#### J'AGIS AVEC MA COLLECTIVITÉ !

Objectif : imaginer ma collectivité idéale et découvrir ce que Lorient Agglomération met à ma disposition pour devenir un usager responsable.

Lundi 6 novembre 2017 - de 18h30 à 20h30 - Lorient

2

#### JE MANGE MIEUX SANS DÉPENSER PLUS

Objectif : partager bons plans et bonnes recettes pour la planète dans le plaisir des saveurs, en rencontrant des familles engagées dans le défi « Famille à Alimentation Positive ».

Mardi 28 novembre 2017 - de 18h30 à 20h30 - Lorient

3

#### JE METS MA POUCELLE AU RÉGIME

Objectif : m'initier au « Zéro Déchet » grâce à des jeux et discussions avec d'autres citoyens déjà engagés dans la démarche.

Semaine du 8 janvier (à définir) - Lorient

4

#### JE TRAQUE LES WATTS À LA MAISON

Objectif : identifier mes équipements énergivores à la maison et apprendre à mesurer sa consommation avec un wattmètre et réaliser des économies grâce à des trucs et astuces.

Jeudi 8 février 2018 - de 18h30 à 20h - Lorient ou Floemeur

5

#### JE DEVIENS ACTIF DANS MES DÉPLACEMENTS

Objectif : m'interroger sur les modes de transport et découvrir d'autres façons de se déplacer.

Semaine du 26 février (à définir) - Lorient

6

#### BILAN ET SOIRÉE FESTIVE

Objectif : fêter ensemble le chemin parcouru pour la transition!

Semaine du 19 mars - Date à définir en fonction des disponibilités de chacun.



# Conversations Carbone



"Dealing with climate change without going crazy and having fun"

*The "Carbon Conversations" are an original approach to support people in the change towards a more low-carbon lifestyle.*

1. The low carbon future
2. Energy at home
3. Mobility
4. Food and water consumption
5. Consumption and waste
6. Individual plans to reduce emissions defined over several years

***Thank you for your attention !***