

How to change peoples energy behavior to
save energy.

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VEAB

VÄXJÖKÖLLEN

Kolla resultat Tävlning 2 Kolla resultat Tävlning 3 (namn på tävling)

Mästerskapet i smart energianvändning är avgjort!
 en "Växjömästerskapet i smart energianvändning" är nu avslutad.
 Utlärar den lycklige vinnaren och vill passa på att tacka för visat
 intresse och hoppas att du lärt dig något nytt om din energianvändning.

Man ser du slutresultatet för topp 5 och ditt eget resultat.

	Besparing
1. Kalle El	45%
2. Kalle Kund	34%
3. Lisa Visa	23%
4. Filittiga Lisa	21%
23. Du	2%

Visa resultat plats 1-100

13,7%

Sammanlagt sparande
 Tillsammans har alla i tävlingen sparat en
 årsförbrukning av elenergi som motsvarar
 80 000 kWh!
 Planeten Jordan tackar och bockar!

Miljö
 Minskningen av belastningen på miljön
 från denna tävling motsvarar en
 besparing på 28 800 kg koldioxid, eller
 användningen av en tv i 800 000 timmar.



How to change peoples energy behavior to save energy

- Young Energy 2 Project
 - Engage the youth
- Sesac project (small scale)
 - Development and testing of equipment
 - Development and testing of methodology
- Sesac project (large scale)
 - Web based system for visualization
 - Act and Do
 - Engage by interaction

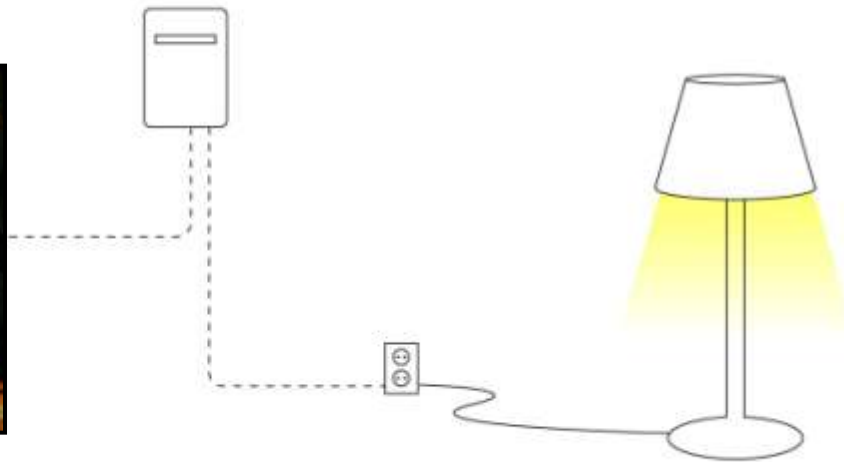
Young Energy 2

① Mobile gaming
Energy consumption



② Energy meter
Connected to game

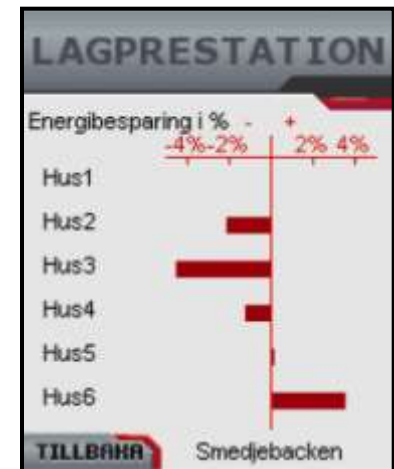
③ Energy consumption
Results to game



Young Energy 2

Energy saving through making the energy discussion into something in youths everyday life.

-37%



SESAC small scale Demand side management in Välle Broar - Portvakten

Individual metering system for hot- and cold tap water and electricity creates energy awareness.

Visualization by a display in the apartment.

A Demand side management method (DSM) have been used for creating a more energy efficient behavior.





Individual measurement system

- Hot tap water
- Cold tap water
- Electricity
- Heating?

Three types of apartments

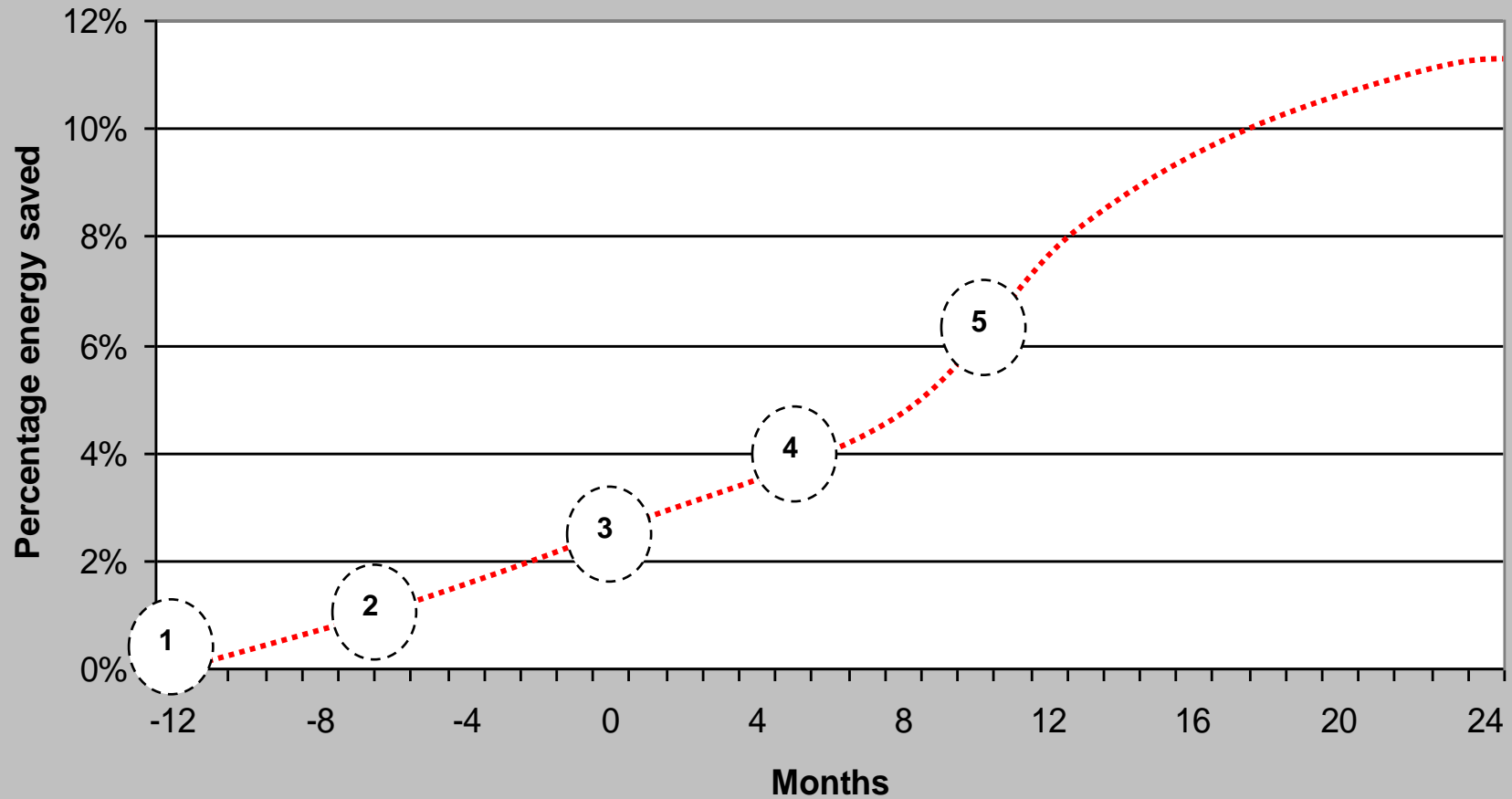
- *Reference apartments*
- *Apartments with display*
- *Apartments with display and DSM*





ses
Sustainable
Energy Systems
in Advanced

Creating Wanted Behaviour



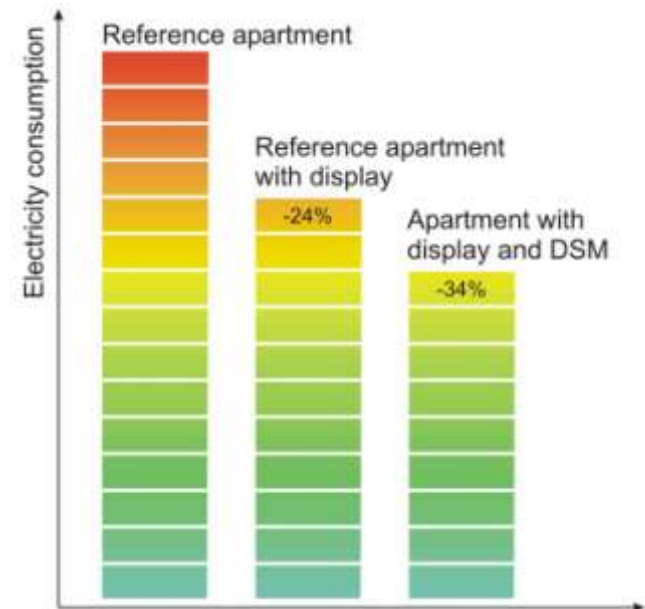
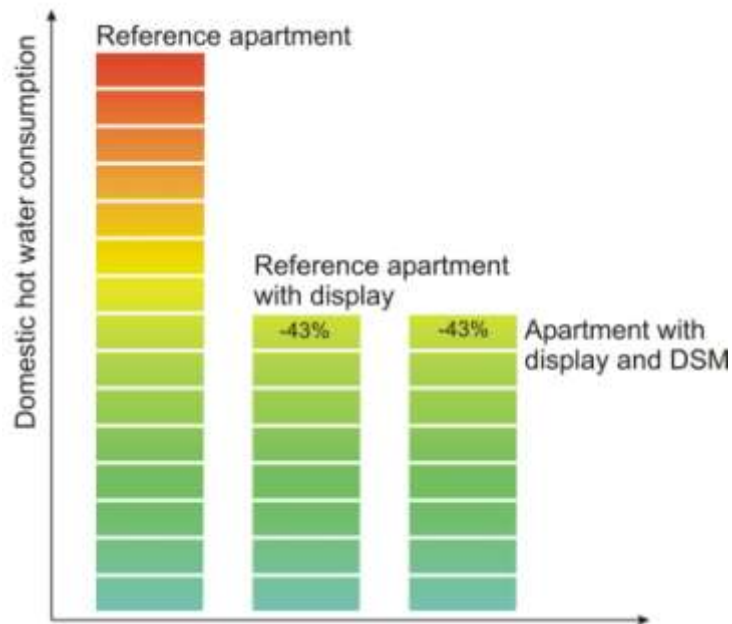
SESAC is a project of the CONCERTO initiative co-funded by the European Commission under the Sixth Framework Programme

DSM methodology in study

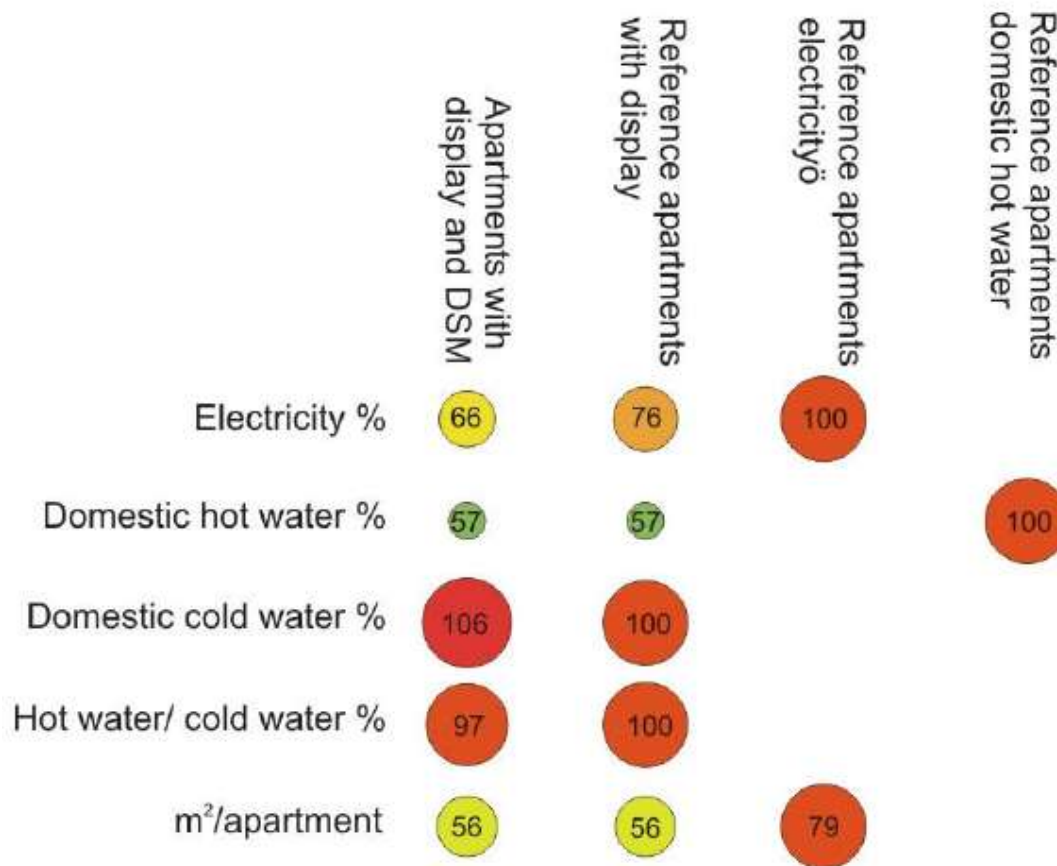
- I. Early information.*
- II. Early information of measurement system opportunities.*
- III. Easy task to illustrate possibilities. When tenants moved in to their apartments*
- IV. Easy information.*
- V. Informative leaflet.*
- VI. Survey.*
- VII. Results from survey 1.*
- VIII. Results from survey 2.*
- IX. Information regarding climate change and human behavior.*
- X. Text messages in display.*



Demand side management in Välle Broar - Portvakten

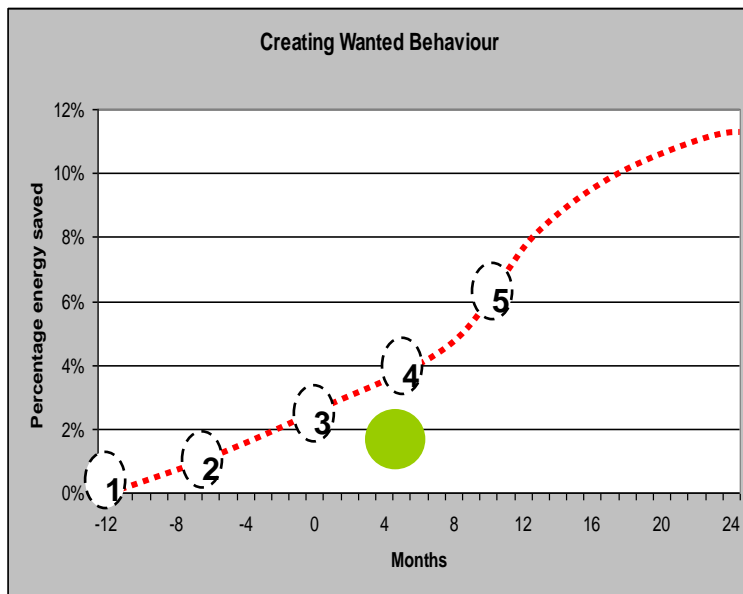


Demand side management in Välle Broar - Portvakten

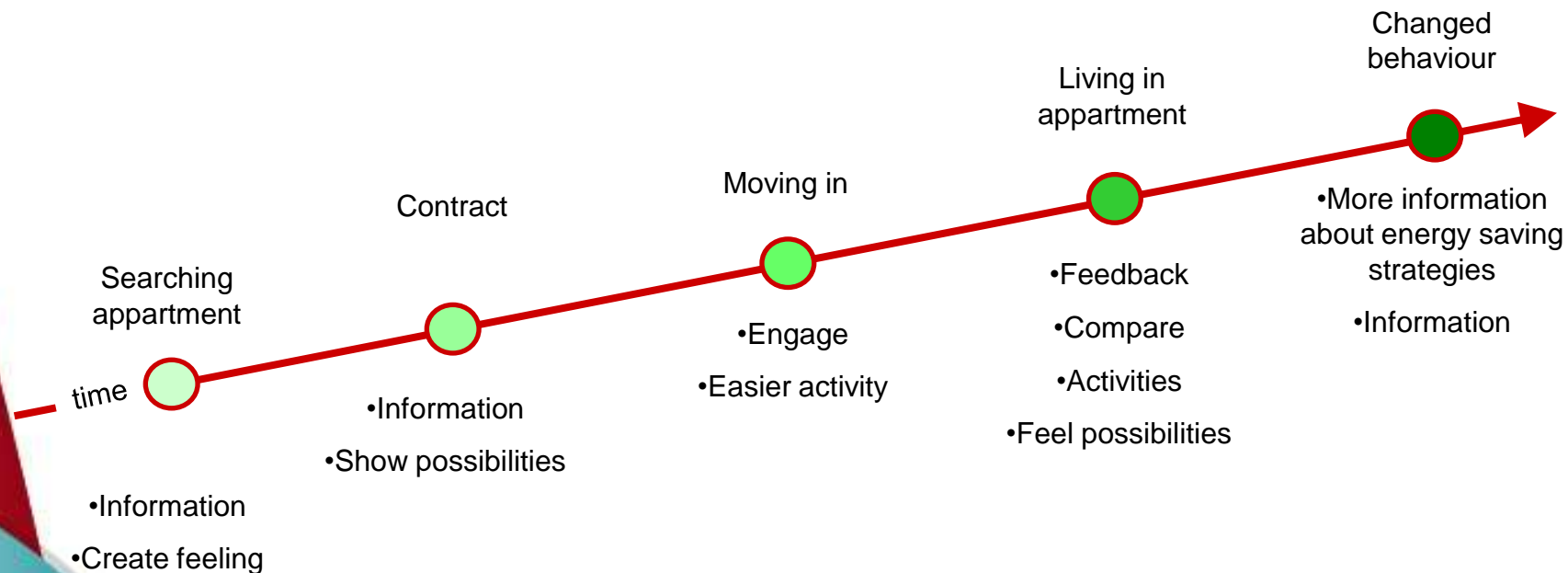


Demand side management – Next step

In Limnologen and Biskopshagen 222 apartments will be connected.



Demand side management



November

Wash your hands in cold water. Turn off the water while shaving and brushing your teeth.

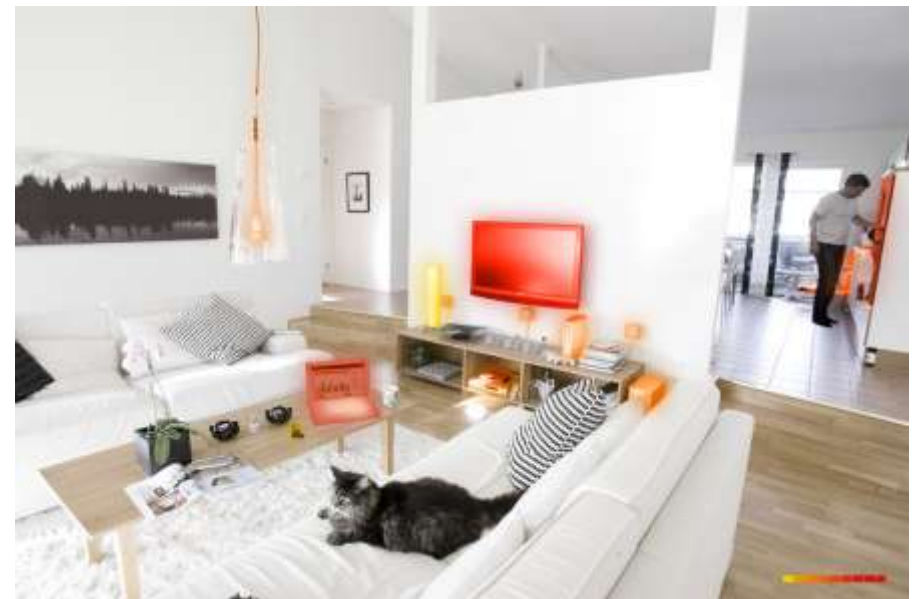
Demand side management – Large scale

- We want to make a difference, a difference in something small that in the end becomes big.
- If many people in Växjö saves a small amount of energy, we makes something together for reducing emissions of climate gases. We want to make is easier, funnier and more intresting to lowering your energy consumption.
- If we can make this in a city like Växjö, why should this not be possible in the rest of Europe?



ENERGIKOLLEN

AMR-systems creates
new possibilities for
visualisation and
pervasive gaming



ENERGIKOLLEN

- Makes it easier for consumers to understand their consumption
- Makes it easier to understand if a change is made in consumption patterns
- Smart feedback system!
- Interactive communication.



ENERGIKOLLEN

Engaging consumers in a new and interesting way by pervasive gaming.

Creates discussion which makes the consumers more aware and creates better control of their consumption patterns

12098

118



ENERGIKOLLEN

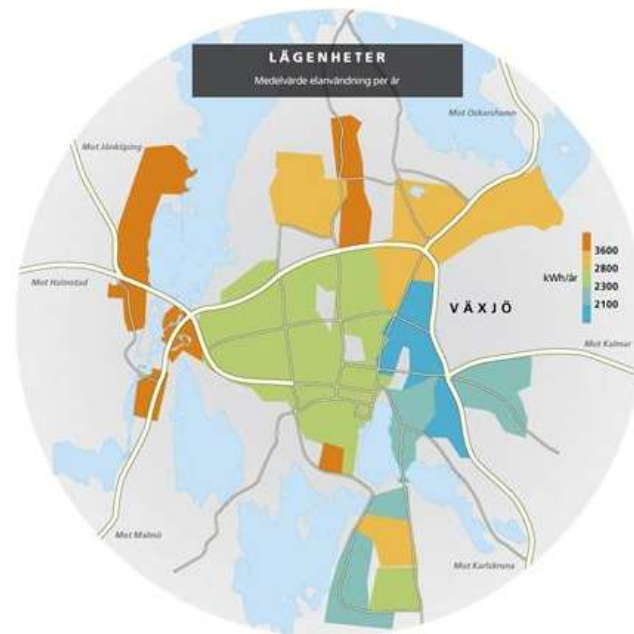
Växjö Energi AB & WM-data have developed and constructed a smart metering based feedback system that visualises energy usage in a pedagogical and interesting way to foster greater understanding by customers of their energy consumption.

The system also contains a pervasive gaming function. By letting the customers compete against each other in saving energy, the saving of energy starts to become more interesting for a greater number of customers.

Through this, customers are given a new way of thinking about their energy consumption.



- Co-operation (energy housing municipality) + others
- Save 5 % of electricity used by households in the city
- 56 000 inhabitants
- Low cost per saved CO2
(1 350 Tons/year) for 100 000 €



Demand side management strategies has a great potential for reducing energy consumption!

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