

#### European Nearly Zero Energy Buildings Conference 27<sup>th</sup> – 28<sup>th</sup> February 2014

## Do smart meters create smart consumers?

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### 1. What is Innovation?

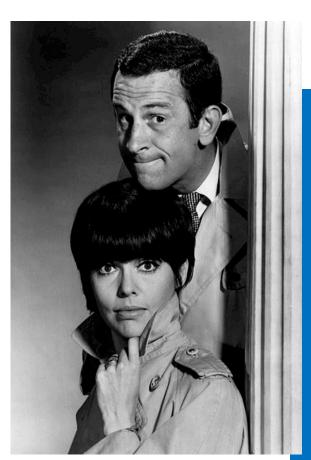
## 1965













#### 1. What is Innovation?

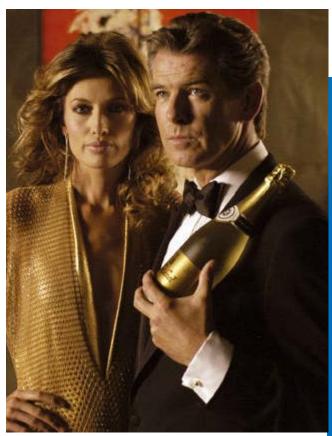
## 2005











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#### 1. What is Innovation?

Also in 2014, 2015, 2016,....2020?





FIRST CONCLUSION: In the overall, we can get more comfort, accuracy, gadgets, services, etc. from the newest technologies



#### 2. Are There Different Interests?



- Ministries
- Regulators
- Agencies
- Consumers Offices



## Business

- Electric Producers
- DSOs
- Suppliers
- Meter manufacturing industry
- Software programming
- Big data consulting



# onsumers

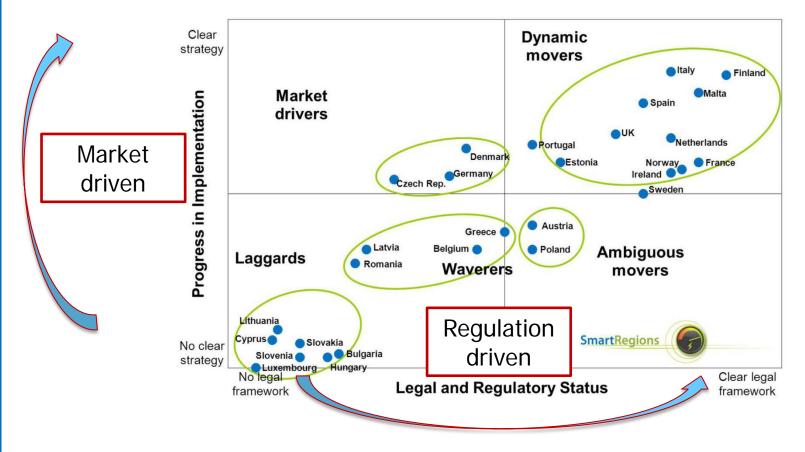
- Consumers
- Families
- Householder
- Consumer's representatives
- Families associations
- Neighbourhood associations

**SECOND CONCLUSION**: The smart meter is a very simple machine as such, but its use may affect to many organizations and individuals.



Ref.: Escan, SmartRegions Project (2010-2013)

FROM THE POINT OF VIEW OF THE MARKET: Each EU country has its own degree of development and strategy





#### FROM THE POINT OF VIEW OF THE MARKET:

.... and there is a great advancement in smart metering technology





#### THE POINT OF VIEW OF THE CONSUMERS, FAMILIES AND THEIR

REPRESENTATIVES: Sometimes don't know what all this is about, and sometimes are interested in smart technologies but thinking there are some questions not totally clear

Did I have a meter in my home???
Where??

Do I get any benefit from it, or it is again the electric company ripping me off?



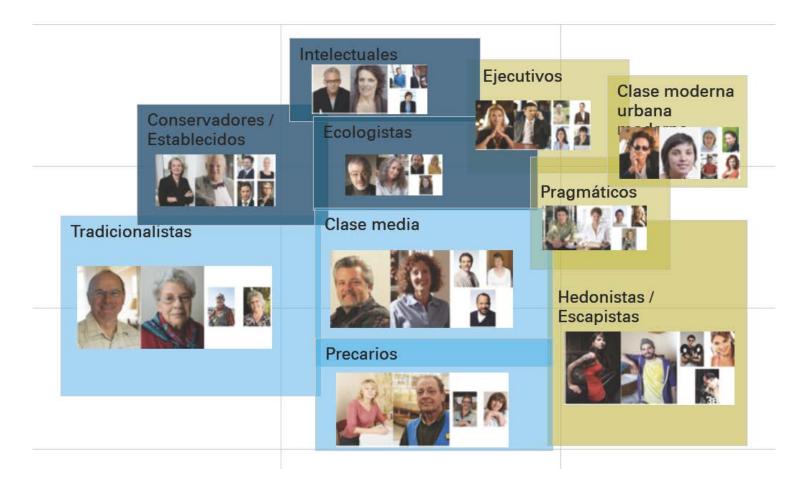
If it is electronic, and manages data, is it secure?

Does it affect employment, environment..?





BY THE WAY: How could we define a typical consumer? Does it exist?

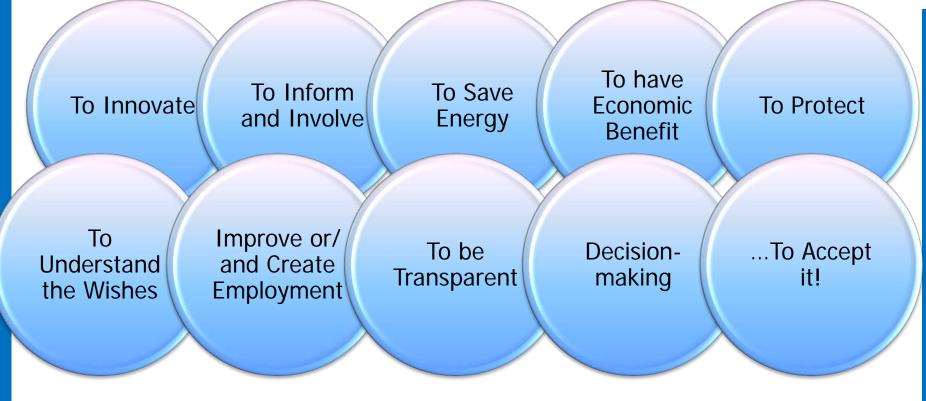




So a **THIRD CONCLUSION:** that becoming SMART CONSUMERS IS NOT ONLY related to having SMART METERS AT OUR HOMES

Just the installation of SMART METERS might save little or nothing!

To gain SMART CONSUMERS many factors should be integrated:





## 4. How would be the approach

#### Consumers and energy suppliers

The challenge is to make smart meters work benefitting consumers and energy suppliers at the same time

**Increase energy efficiency** 

Those countries with a wide

more potential to save energy,

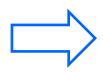
smart meters roll-out have

both at the home and the

overall national level







#### Improve the information provided to consumers

Informed consumers are free to take decisions, save more energy, improve their perception about the meters and increase businesses.

#### Innovative services and impact

The innovative services offered to the informed consumers should make them save money in their bills, be transparent and safe.

This services should be costeffective for the suppliers.

Regulations and laws should be adapted to allow it happen.



## 4. How would be the approach

#### Innovative services and impact,

#### What are they in practice?

## Examples of these innovative services:

- **Innovative bills** with real information, more frequent, benchmarks, efficiency info, etc.
- Real time information on the consumption and events by means of home displays, use of Internet, mobile, tablets, etc.(e.g. "You have consumed more than 100 € this month")
- Optimize selection of the best-suited tariffs for the consumer
- Maximum load direct control by the DSO, giving a discount (e.g. limit your max power)

#### Benefits at home, reducing our bill:

- Reduce monthly average energy consumption: being more efficient
- Reduce **peak** loads: avoid failures in equipments
- Reduce **stand-by** consumption: avoid wasting our energy
- Optimize selection of the tariff: not save energy, but improve our bill according to the time of the day we use it
- Receive information on efficient equipment and devices and improve our behavior related to energy use



## 4. How would be the approach

#### U are a Smart Consumer!

#### **Market activation**

Survey on the consumers interests and wishes, including segments. <u>Agreements</u> consumer-supplier-public bodies based on discussion (workshops, roundtables)

#### **Consumers involvement and information**

Training to consumers and families representatives and providing of <u>agreed</u> information. Dissemination to consumers by social networks, articles in press, radio, etc.

#### Projects on the field

Support to energy suppliers, public bodies and householders to develop **smart meter and consumer projects**, defining the innovative services, safety, benefits for the consumer, cost-effectiveness of the overall project, fulfilment of regulation









## Reflexion Time

### Thank you for your attention

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