Roinn Cumarsáide, Gníomhaithe
ar son na hAeráide & Comhshaoil
Department of Communications,
Climate Action & Environment

Consumer Feedback through ICT Situation in Ireland

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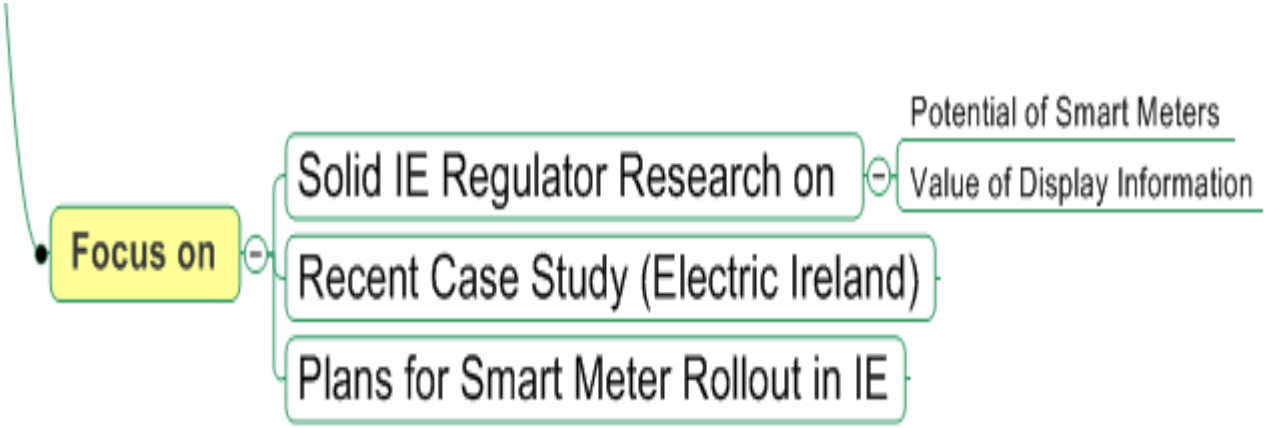
IE CA EED NCP


Focus on
Solid IE Regulator Research on
Potential of Smart Meters
Value of Display Information
Recent Case Study (Electric Ireland)
Plans for Smart Meter Rollout in IE

Electricity

Objective - Customer Behavior Trial - ascertain potential for smart metering technology, when combined with time of use tariffs and different DSM stimuli, to effect measurable change in consumer behavior .....

Approach

Main Findings - Residential

- **ToU tariffs and DSM stimuli are found to reduce overall electricity usage by 2.5% and peak usage by 8.8%**
- bill, energy usage statement and electricity monitor found to be more effective than other DSM stimuli in reducing peak usage with a peak shift of 11.3%
- **no evidence of a tipping point, ... with demand for peak usage estimated as being highly inelastic relative to price**
- The electricity monitor was deemed to be effective as a support to those achieving peak reduction (91% rated it as an important support) and shifting to night rates (87% deemed it an important support).

Main Findings SME/Commercial

- the deployment of ToU tariffs and DSM stimuli are found to reduce overall electricity usage by 0.3% and peak usage by 2.2%, although **neither result is found to be statistically significant;**
- Among participants who reduced either peak or overall usage, **the electricity monitor was deemed to be effective with 93% of those reducing overall usage stating it was important and 85% of those reducing peak usage stating it was important;**
- In contrast, the web-site information was rated as important to overall usage by 24% of reducing businesses with access to the stimulus. This reflects the **low level of usage of the system (at 15% stating they logged in).**

Key Message = in general, the **most significant savings** were **achieved with IHD** providing near real-time data in the home.

Gas

CER
Commission for Energy Regulation
An Coimisiún um Rialáil Fuinnimh

Smart Metering Information Paper
Gas Customer Behaviour Trial Findings Report

DOCUMENT TYPE:	Information Paper
REFERENCE:	CER11180a
DATE PUBLISHED:	11th October 2011

Objective - look at measurable reduction in customer demand through the use of smart meters combined with information stimuli (i.e. detailed billing on a bi-monthly and monthly frequency, **in-home displays**) and a variable tariff.

2 Sectors
- Residential
- SME

Method
- 6 Month Benchmark period
- followed by 12 month test period

Main Findings Residential

Stimuli found to reduce overall gas consumption by a statistically significant 2.9%.

		Bi-monthly bill and energy usage statement (Stimulus 1) %	Monthly bill and energy usage statement (Stimulus 2) %	Bi-monthly bill , energy usage statement and IHDD (Stimulus 3) %	Bi-monthly bill, energy usage statement, IHDD and Variable tariff (Stimulus 4) %
Overall	-2.9*	-2.2%*	-2.8%*	-2.9%*	-3.6%*

* denotes results statistically significantly different from control group using a 90% confidence level.

Table 3: Overall Gas Usage reduction by Stimulus group compared with Control group

In-home display device was reasonably effective with 62% stating it helped them reduce their gas usage

The **variable tariff** (while achieving the greatest volume reduction) was not understood by most participants

Main Findings - Commercial

48% of SMEs reported reduced gas usage during the Trial with a typical estimated reduction of **5% to 10%**.

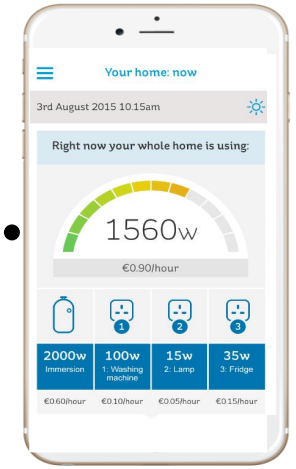
Participation in the Trial **led to reviews of gas usage** (61%), identification of easy to implement changes (61%) and **investment in more energy efficient equipment** (52%). - also led to **increases in the level of energy audits**, introduction of .... and **assignment of responsibility for energy usage monitoring.**

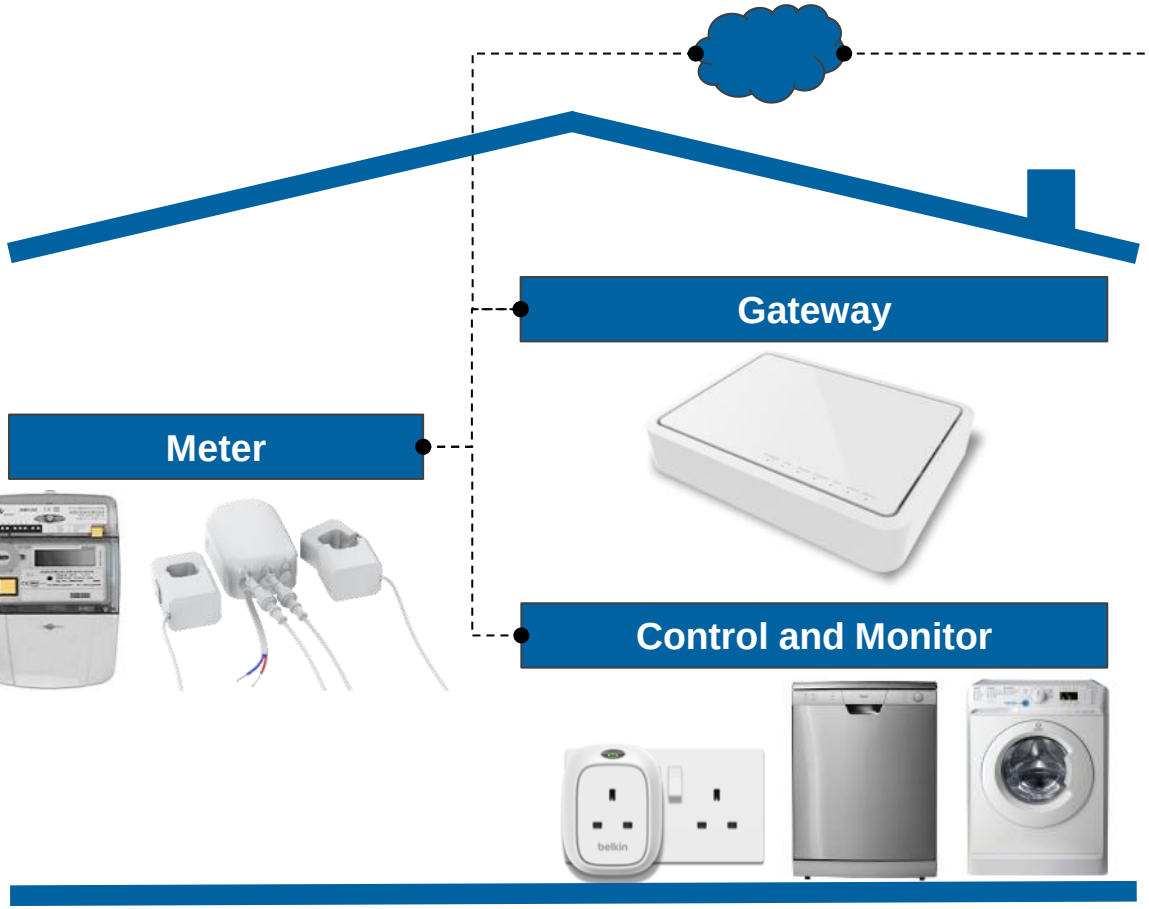
Case Study (Courtesy of Dave Phelan of Electric Ireland)

- Smart Energy Controller (SEC) Project by Electric Ireland

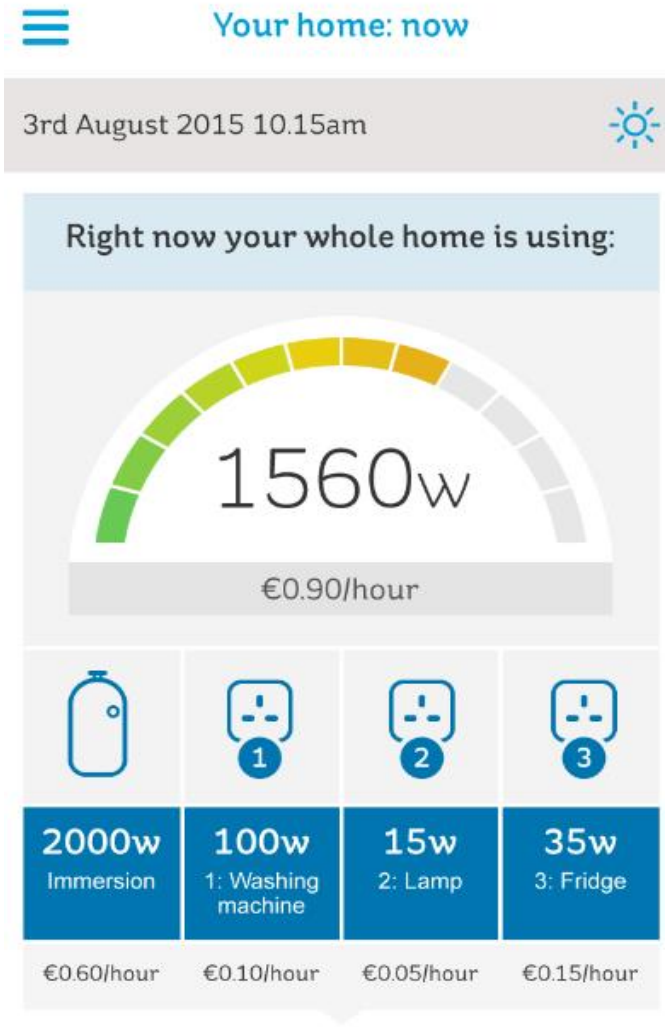
Smart Energy Controller

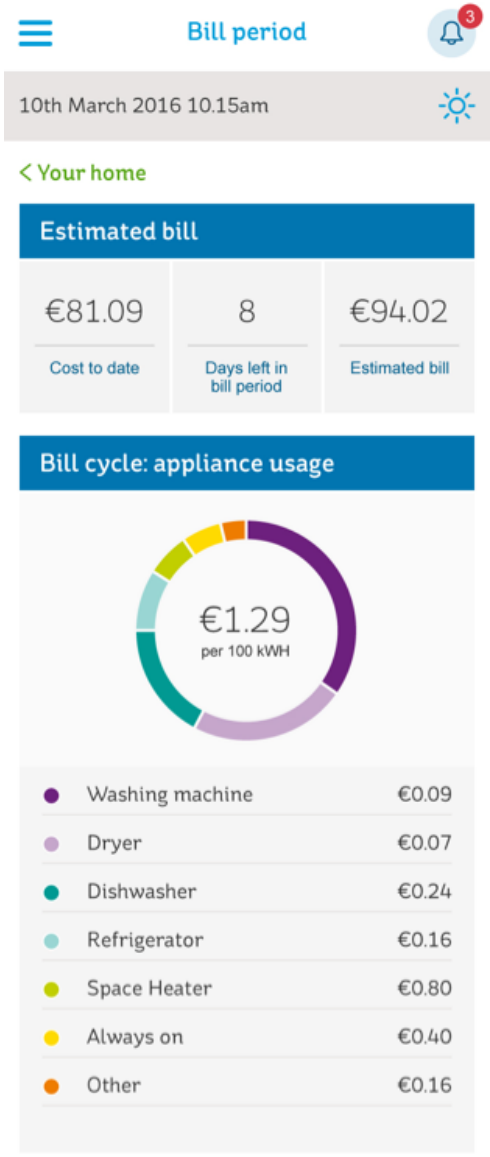
- Real time usage information and appliance control from a smart phone

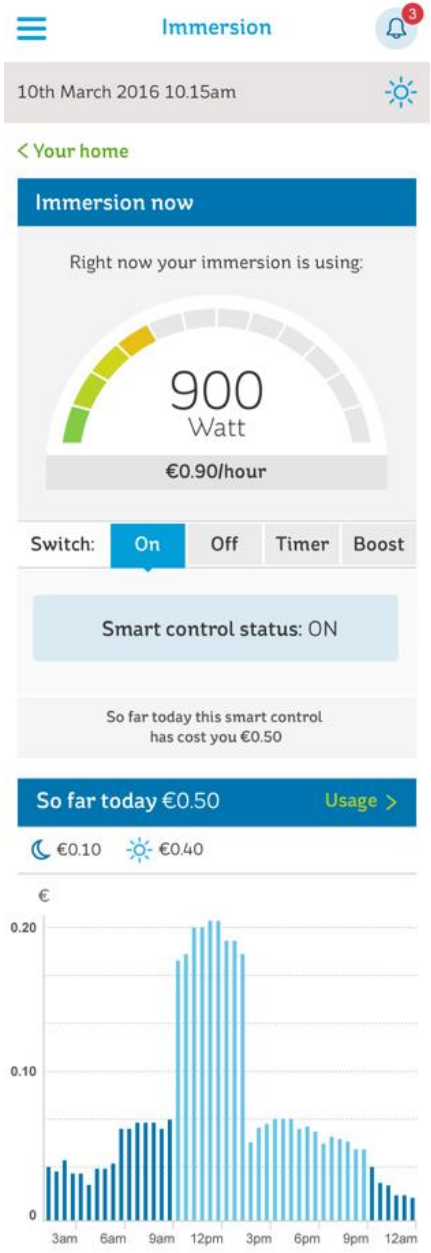




Sample screenshots of the App



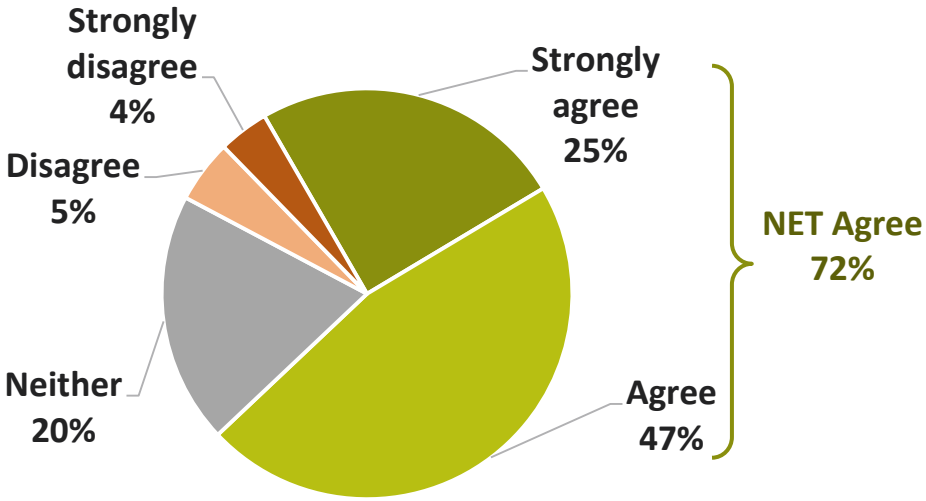




ACTIVE BEHAVIOUR CHANGE & PERCEIVED COST DIFFERENCE

One in Four Strongly Agree They Are Using Less

Actively trying to use less energy since SEC



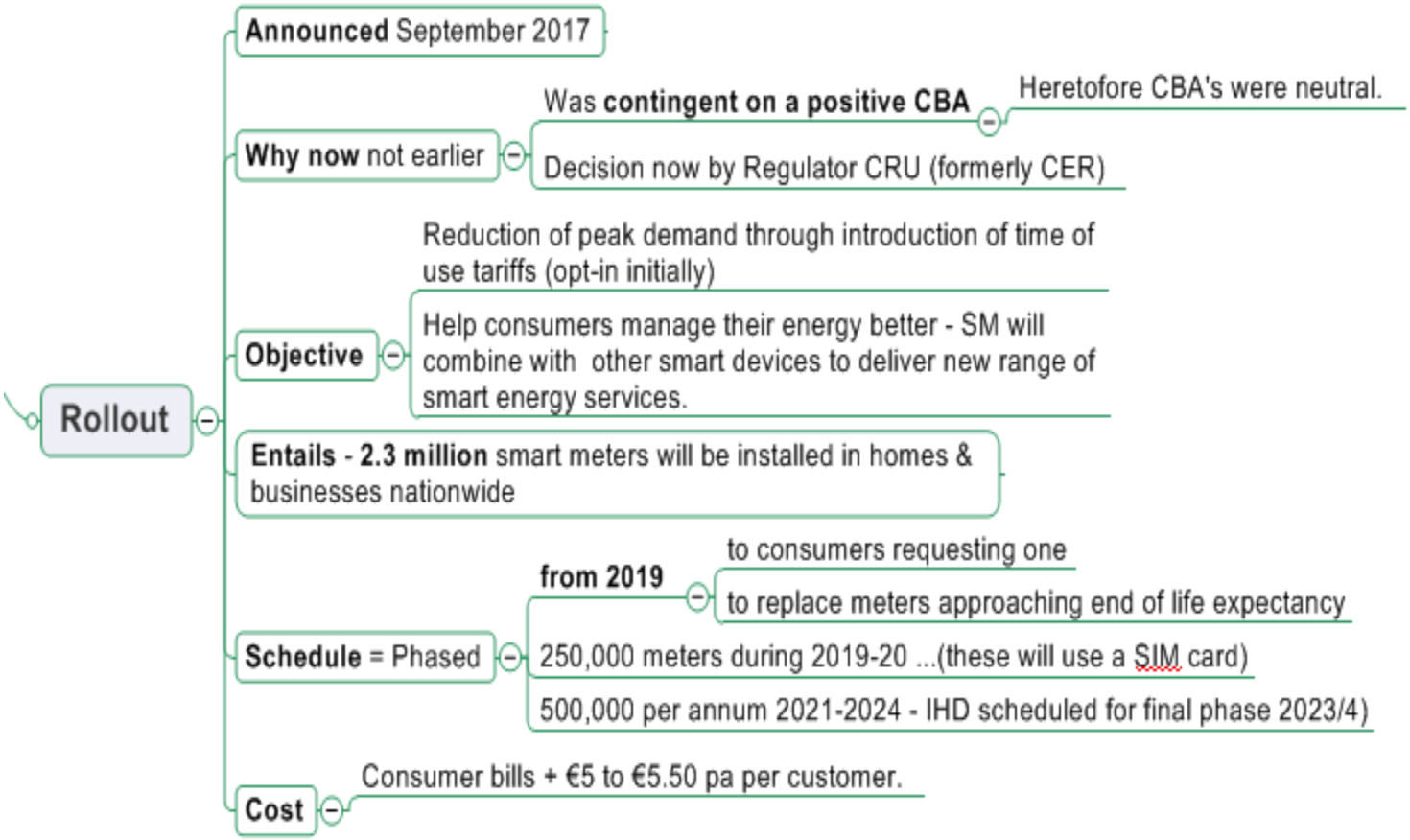
Actual cost of my energy bill/spend

Increased	↑	4%
Same	=	49%
Decreased	↓	24%
Don't know	?	23%

Q.16 Thinking specifically of the amount you are now spending on your energy bill comparing with before receiving the smart energy control, would you say your spend on energy has increased, stayed the same or decreased?
Q.17 Taking your overall experience with your smart energy control to date, please indicate the extent to which you agree or disagree with the following statement.
Base: All Respondents: 415

Ipsos MRBI GAME CHANGERS

Smart Meter Rollout in IE



Other opportunities for Apps?

- DCCAE currently have open consultation with businesses in IE, Objective is twofold.....
  - outline benefits energy efficiency delivers for businesses and supports currently available
  - opportunity for businesses to be heard on how they could be better supported to improve energy efficiency.
- Taking opportunity to ask about apps.....

12. *Digital Technology Potential

Energy management is easier with the right information. Digital resources and technology can often help.

Do you use any form of digital technology (apps, sensors, etc.) to monitor or manage your energy consumption?

- (•) Yes
- ( ) No
- ( ) Dont Know

13. What do you use?

15. *Below are listed some technology related supports. Please indicate how useful you think each might be for your business.

	No Use	Little Use	Some Use	Very Useful
An online guide or App for digital devices which, based on answers input to questions would identify the main opportunities for energy saving in your business	( )	( )	( )	( )
An online resource or App to indicate how				

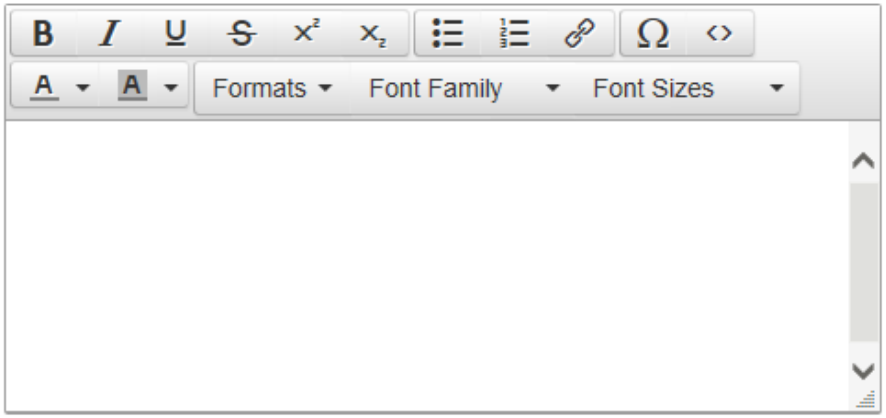
20. Suggestions

If you have any suggestions on

(A) - other ways energy efficiency could be made easier or supported for businesses such as yours, or

(B) - ideas on how digital (e.g. app or web-based) technology could improve your businesses capacity to manage your energy use

please state them briefly in the box below, otherwise just click "Next".



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