

D6.4 Final Conference Proceedings





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			CentERdata		

DISSEMINATION LEVEL

- Public
- Confidential, only for members of the consortium (including the Commission Services)

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This report reflects only the author's view and EASME is not responsible for any use that may be made of the information it contains.





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1. Introduction

This report presents the preparation phase and the proceedings of START2ACT's final conference, which was organised as a session within the EU Sustainable Energy Week 2019 (EUSEW19). The session took place on 20th June 2019 at 09:00 – 10:30 at the Maelbeek Room of the Residence Palace, one of the venues of the Policy Conference of EUSEW19.

START2ACT's final conference had the aim to share the project's findings with a wide range of stakeholders as well as to further promote the tools and materials which were produced within the framework of the project. With the six-month extension of the project, the START2ACT consortium had the opportunity to organise the project's final conference within the framework of the EUSEW19 since the final period of the project was in this way aligned with the dates of this annual event in Brussels.

Given that the EU Sustainable Energy Week is a high-profile event on sustainable energy and energy efficiency in the EU, this opportunity was considered favourable by the START2ACT team in terms of gaining a stronger visibility for the project and a higher potential for the promotion and exploitation of its results.

Section 2 of this reports presents the background, preparation and implementation phases of START2ACT's session at the EUSEW19, while the annexes provide a compilation of the official agenda, presentations and the summary and conclusions.



2. START2ACT at the EUSEW19

2.1 Background and preparation

START2ACT's final conference was planned to be organised in Brussels back to back with the consortium's final project meeting. The goal of the final conference was on one hand to inform a wide range of stakeholders about START2ACT's findings on saving energy at workplace of young SMEs and startups, and on the other hand to further promote the project's tools such as the online platform and training kits with a view to boosting their exploitation.

According to its original timeline, START2ACT was due to finish at the end of February 2019, but with a six-month extension, the end date of the project has become 31st August 2019. This extension allowed the START2ACT consortium to apply for a session at the EU Sustainable Energy Week 2019 (EUSEW19), which takes place in June every year. The consortium considered that having a session within the framework of the EUSEW19 would provide a much bigger added value and impact than a standalone event organised solely by START2ACT.

To apply for a session at the EUSEW19, START2ACT teamed up with the **eTEACHER** and **REScoop Plus** projects, and between November 2018 and February 2019 prepared a joint application for a session within the Policy Conference of EUSEW19. This application focussed on the effective actions and tools that the three Horizon 2020 projects have utilised to empower consumers for energy conscious behaviour. The results of the EUSEW19 Evaluation Committee was announced in March 2019, and while Geonardo's application with START2ACT was selected for a 90-minute session, it was merged with two other applications.

According to the new setup, **ESMIG** – The European Smart Energy Solution Providers (presenting the results of a new report with residential consumers¹), **Geonardo** (presenting the START2ACT project) and **Jacques Delors Institute** (presenting the ENABLE.EU project²) were invited to submit a final session title and update the description, agenda, speakers and other details of the session during the April-June 2019 period.

Through various coordination meetings, our team finalised the session's scope, agenda, speakers and other details, and submitted the information to EUSEW19 organisers. As all the three organisers aimed to discuss energy behaviour and consumer engagement towards more energy conscious behaviours as well as to introduce effective tools and solutions, our session title was decided as **“What makes consumers tick? Best practices and tools”**.

This session's scope was defined as **to shed new light on consumer motivations, engagement and learning patterns, challenge existing thinking and provide real examples that can help decision-makers in their mission of reaching ambitious energy efficiency targets**. For deciding on the details of the 90-minute agenda, our team considered having on board the following main elements:

- Short introduction of each project with lessons learned;
- Panel discussion with external speakers representing different perspectives;
- Interactive session allowing exchanges with the audience via the use of the Slido³ tool.

Annex 1 provides the full session description and the final agenda.

¹ <https://esmig.eu/resource/report-role-data-consumer-centric-energy>

² <http://www.enable-eu.com>

³ Slido is an audience interaction tool for meetings, events and conferences, offering interactive Q&A, live polls and insights about the audience (www.sli.do).



Home > What makes consumers tick? Best practices and tools

WHAT MAKES CONSUMERS TICK? BEST PRACTICES AND TOOLS

Getting consumers on board is essential in shaping Europe’s energy future. However, despite a range of research and policy initiatives, there is a lack of understanding of the underlying factors that drive consumer choices and of the effective solutions and tools that increase their participation in the energy system.

This session is meant to shed new light on consumer motivations, engagement and learning patterns, challenge existing thinking and provide real examples that can help decision-makers in their mission of reaching ambitious energy efficiency targets.

The session will consist of two parts:

1. Learning – best practices and tools

We will present three different initiatives that aim at understanding and changing consumer behaviour in energy consumption and their conclusions:

- The results of a [new report](#) that gathered 578 pilots involving 5.5 million residential consumers over the past 10 years and that focuses on consumer behaviour around gas and electricity consumption feedback.
- The Horizon 2020-funded project [ENABLE.EU](#) that looks at drivers of individual energy choices, such as the decision to become a prosumer.
- The Horizon 2020-funded project [START2ACT](#) that targets energy consumers at their workplace and tries to unleash the energy and cost saving potentials of young SMEs and start-ups by introducing simple yet effective energy efficiency and behavioural change measures.

2. Discussing and formulating recommendations

A discussion between different stakeholders will help elaborate on the best practices and tools presented and will aim to ground them in the market realities. The audience is invited to interfere with comments, questions and experiences to stimulate the discussions.

SPEAKERS



[Patrick CAIGER-SMITH](#)
CEO
[Green Energy Options](#)



[Ömer CEYLAN](#)
COO
[Geonardo Environmental Technologies](#)



[Thomas PELLERIN-CARLIN](#)
Head of the Jacques Delors Energy Centre
[Jacques Delors Institute](#)



[Karina STANDAL](#)
Senior researcher
[CICERO – Center for Climate Research](#)



[Dr. Roxanne VAN GIESEN](#)
Researcher in Consumer Behavior
[CentERdata](#)



[Frances WILLIAMSON](#)
Head of Communications and Industry Engagement
[Chameleon Technology](#)



[Annette JANTZEN](#)
Secretary General
[NEOH](#)



[Anna COLUCCI](#)
Head of the Retail markets, Coal and Oil Unit
[Directorate-General for Energy](#)



ADDITIONAL INFORMATION

- Thursday 20 June 09:00 - 10:30
- Brussels, Belgium
- Residence Palace, Maelbeek
- Conference, Consumers
- ESMIG, Geonardo, Jacques Delors Institute



ADDITIONAL DOCUMENTS

- [Agenda of the session](#)
- [All the presentations of the session](#)
- [Summary and conclusions of the session](#)

During the April-June 2019 period, our team intensively promoted the session which was scheduled to take place on **20th June 2019 at 09:00 – 10:30 at the Maelbeek Room of the Residence Palace**, one of the venues of the Policy Conference of EUSEW19. During this period, we also brainstormed on and identified the list of speakers, in particular the panellists, in a way to ensure a balanced representation of our own representatives and external speakers as well as of the different stakeholders (see the list and profiles of our speakers in Annex 1).

All three organisers promoted the session through their networks, including their social media channels. Thanks to START2ACT's well-established collaboration with other initiatives, the event was promoted also by third parties such as the H2020 project ENERGISE. Below is a collection of the screenshots from various promotional efforts.

Join START2ACT's Final Event at the EU Sustainable Energy Week

3 June 2019

Join START2ACT's Final Event at **THE EU SUSTAINABLE ENERGY WEEK**

Thursday, 20 June 2019, 09:00 - 10:30
Brussels, Belgium

Speakers from **GEONARDO** and **CentERdata**

Our session, organized together with ESMIG and ENABLE EU under the title **What makes consumers tick? Best practices and tools**, is meant to shed new light on consumer motivations, engagement and learning patterns and challenge existing thinking by providing real examples that can help decision-makers in their mission towards reaching ambitious energy efficiency targets.

The session delivered by START2ACT partners will consist of two parts:

1. **Learning** – best practices and tools. In the frame of this, the COO of Geonardo, Ömer Ceylan, will present our project and its findings.
2. **Panel discussion**, involving, among others, our S2A expert on consumer behaviour, Roxane van

START2ACT @START2ACT

Hurry up and register for our **#EUSEW19** session in **#Brussels** until 12.00 (CEST) on 12 June!
Join us and learn about **#consumer** motivations, engagement & learning patterns with real examples & recommendations

Info here bit.ly/2WnkPxt

#EnergyEfficiency #H2020

What makes consumers tick? Best practices and tools

ENERGISE
EUROPEAN NETWORK FOR RESEARCH, GOOD PRACTICE AND INNOVATION FOR SUSTAINABLE ENERGY

Home About ENERGISE ENERGISE Living Labs News and Events Publications Database Contact us

What makes consumers tick? Best practices and tools

2019-06-20 - 2019-06-20

Share on Twitter Share on Facebook

Join START2ACT's Final Event at the EU Sustainable Energy Week on Thursday, 20 June 2019 in Brussels. START2ACT's session, organized together with ESMIG and ENABLE.EU under the title "**What makes consumers tick? Best practices and tools**", is meant to shed new light on consumer motivations, engagement and learning patterns and challenge existing thinking by providing real examples that can help decision-makers in their mission towards reaching ambitious energy efficiency targets.

Emilie Magdalinski @e_magdalinski

Join us on June 20 for **#EUSEW19** session "What makes consumers tick? Best practices and tools" to discuss ⚡ consumption feedback, how ♀ & ♂ become prosumers and how to save energy at the workplace with **@ENABLE_EU @START2ACT @ESMIG_EU**
Info here: [eusew.eu/what-makes-con ...](https://eusew.eu/what-makes-con)

What makes consumers tick? Best practices and tools
20 June, 09:00 – 10:30

Getting consumers on board is essential in shaping Europe's energy future. However, despite a range of research and policy initiatives, there is a lack of understanding of the underlying factors that drive consumer choices and of the effective solutions and tools that increase their participation in the energy system.

This session is meant to shed new light on consumer motivations, engagement and learning patterns, challenge existing thinking and provide real examples that can help decision-makers in their mission of reaching ambitious energy efficiency targets.

2:15 PM - 4 Jun 2019

6 Retweets 6 Likes

Thanks to these promotional efforts over two months, **130 people registered** for our session. Although the available number of seats in the room allocated for our session was 56, we were content with the number of registrations considering a possible low turnout rate, which is increasingly common in similar events.

2.2 Implementation and follow up

Our session at the EU Sustainable Energy Week 2019 took place on 20th June 2019 from 09:00 to 10:30 at the Maelbeek room of the Residence Palace in Brussels. As our session was one of the very first morning sessions on the third day of the EUSEW19, we carried out some last-minute promotional efforts to be able to attract as many attendees as possible (see below).



Soon after the opening of the session, we were pleased to have been able to fill up the room and had even to turn down further participants since the size of the room was limited to a maximum of 56 participants. In addition, we had **full house throughout the entire duration of the session**, which showed that we had achieved the expected level of engagement with our participants. Also during the speeches, we continued live coverage of the session and further promotion, in particular through our Twitter accounts. We appreciate especially the support of the **EASME's Twitter account @H2020EE**, which tweeted about us and re-tweeted us, helping us to get even bigger coverage and visibility.

Our 90-minute session was very dynamic, engaging and fruitful, and provided useful insight on consumer engagement and behaviour patterns when it comes to taking energy saving measures. It also provided useful tips and tools which could be easily adopted to become more energy efficient at workplace, at home and in people's everyday lives. START2ACT's actions and tools were found particularly interesting given its specific target groups of young SMEs and startups, which were not tackled or studied in detail earlier.

After the session, our team prepared the **summary and conclusions** of the event, which were made available on the homepage of EUSEW19 together with the **presentations** of the session. These are also annexed to this report as Annex 2 and Annex 3.

Emilie Magdalinski @e_magdalinski Follow

Learning about #H2020 project @START2ACT and its tools to help SMEs save energy! #EUSEW19

12:49 am - 20 Jun 2019

4 Retweets 5 Likes

Ömer Ceylan, ENABLE.EU, START2ACT and ESMIG

H2020EfficientEnergy @H2020EE Follow

How to save energy on the workplace? #H2020EE project @START2ACT now presenting their main learnings, focusing on actions to change consumers behaviour of young #SMEs and #startups 🚀 Discover more! ➡ start2act.eu #energyefficiency #EUSEW19

12:53 am - 20 Jun 2019

4 Retweets 10 Likes





Annex 1: Agenda and Speakers



What makes consumers tick? Best practices and tools

20 June, 09.00 – 10.30

Getting consumers on board is essential in shaping Europe's energy future. However, despite a range of research and policy initiatives, there is a lack of understanding of the underlying factors that drive consumer choices and of the effective solutions and tools that increase their participation in the energy system.

This session is meant to shed new light on consumer motivations, engagement and learning patterns, challenge existing thinking and provide real examples that can help decision-makers in their mission of reaching ambitious energy efficiency targets.

The agenda

09.00 Introduction, by ESMIG

09.10 Report presentation - How do consumers react to feedback on their electricity and gas consumption, by Patrick Caiger Smith, CEO, geo

09.20 Learnings from the Horizon 2020 project ENABLE.EU on social and cultural factors that drive prosumers motivations and energy practices, by Karina Standal, Senior Researcher, CICERO, Norway

09.30 Learnings from the Horizon 2020 project START2ACT aiming to save energy at the workplaces of young SMEs and startups, by Ömer Ceylan, COO, Geonardo, Hungary

09.40 Panel discussion with:

- Roxane van Giesen, Researcher at CentERdata (NL) -START2ACT
- Frances Williamson, Head of Communications and Industry Engagement at CHAMELEON TECHNOLOGY (UK) LIMITED
- Annette Jantzen, Secretary General, NEON Ombudsman
- Anna Colucci, Head of Unit, Retail Markets, at DG Energy, European Commission
- CEZ Distribuce, TBC

Moderated by Thomas-Pellerin Carlin, Jacques Delors Institute – ENABLE.EU

10.20 – 10.30 Conclusions, by Thomas-Pellerin Carlin, Jacques Delors Institute



SPEAKERS



Patrick CAIGER-SMITH

CEO

Green Energy Options

When the sustainability agenda was still a novelty, Patrick saw the need to generate consumer interest and understanding of household energy consumption. He co-founded his current Cambridge based business in 2006 which helps consumers manage energy at home with smart home products and services. This is particularly the case in using data science to generate insight for consumers and channel partners alike. This interest has now evolved towards how 'Hybrid Homes' integrate with smart, flexible grids and providing systems in the home which provide demand response in the residential sector with integrated control of tariffs, energy storage and local generation.

Active with Industry Groups, Patrick is currently President and a director of the trade association BEAMA, chairs the Consumer Committee for ESMIG, chairs the Consumer Energy Data group at BEAMA and is a member of the Enterprise and Innovation Councils of the CBI. Patrick is a Chartered Engineer with a degree in Mechanical Engineering from Imperial College and an MBA from Cranfield University. Prior to starting geo, Patrick's career has been in manufacturing industry where he has run several international businesses as Managing Director.



Ömer CEYLAN

COO

Geonardo Environmental Technologies

Ömer Ceylan, COO at Geonardo Environmental Technologies, has 15 years of experience in conceiving and implementing projects in the energy, environment and sustainable development fields. He has extensive experience in developing and managing research and innovation projects under the EU's research and innovation programmes such as FP6/7, H2020, LIFE/LIFE+, CIP-IEE and CIP Eco-innovation.

Ömer is currently overseeing the implementation of projects at Geonardo, coordinating an international and multidisciplinary team of project managers. Earlier, he was involved in the strategic development and implementation of communication campaigns in the field of the environment under contract with DG ENV and acted as an expert for the LIFE+ Information Sessions in Malta and UK under contract with DG ENV's LIFE Units. He has extensive experience in designing and implementing targeted capacity-building activities and communication campaigns within the framework of projects in the energy and environmental fields.

Ömer is an Environmental Engineer graduated from Istanbul Technical University and holds an MSc in Environmental Management from Aalborg University.





Thomas Pellerin-Carlin

Head of the Jacques Delors Energy Centre
Jacques Delors Institute

Thomas joins the Jacques Delors Institute in 2015 and is now Head of the Jacques Delors Energy Centre and Jacques Delors Institute research fellow.

Thomas works on the European Union energy policy, with a focus on energy innovation. He also teaches at the College of Europe Energy Union Training Programme and at the Sorbonne. He is also a member of the Policy Advisory Council of the European University Institute's Florence School of Regulation.

Thomas previously worked in the French Army, the French Administration (General Secretariat for European Affairs, 2012) in Academia for the College of Europe, (Belgium, 2013-2015) and its European Energy Policy Chair. Thomas studied political science and holds a MA from the College of Europe (2012-2013, Václav Havel Promotion) and an MA from Sciences-Po Lille (2007-2012, Promotion George Orwell).



Karina STANDAL

Senior researcher
CICERO – Center for Climate Research

Karina Standal is a senior researcher at CICERO –Center for Climate Research in Oslo, Norway. Her main research interests are within the fields of political and development geography, with a specific focus on adoption of decentralized renewable energy systems, electrification, sustainable energy consumption and gender relations.



Dr. Roxanne VAN GIESEN

Researcher in Consumer Behavior
CentERdata

Dr. Roxanne van Giesen is a researcher in Consumer Behavior within the Quantitative Analysis department of CentERdata. Roxanne conducts contract research in the field of consumer behaviour.

She has been involved as key researcher and coordinator in several EC-projects for DG Just, DG Energy, DG Environment, DG Research and Innovation. She conducts behavioural experiments, examining consumer attitudes, motivations, decisions and choice. Roxanne has substantive experience with a diverse set of data-collection methods and advanced statistical techniques (i.e. experimental research, survey research, longitudinal research, eye-tracker research).

Roxanne studied social psychology at Tilburg University and graduated in 2010 with a (research) master degree in social and behavioural sciences. During her master she specialized in social and economic psychology. After her study she started her PhD research at Wageningen University. Her PhD research focused on consumer attitude formation, applying this to the case nanotechnology. During her PhD she further specialized in consumer behaviour and judgment and decision making.





Frances WILLIAMSON

Head of Communications and Industry Engagement
Chameleon Technology

Frances Williamson is Chair of ESMIG's Regulatory and Policy Group as well as Head of Communications and Industry Engagement at Chameleon Technology. She has worked in the energy industry in the UK and EU for over 15 years holding a number of different roles including Regulation and Communications Director at Smart DCC and Deputy Director at Energy UK, the trade association for energy companies in the UK.

She is knowledgeable in all areas of energy retail, including smart meters, technology and digitalisation, consumer engagement and protection, regulation, energy efficiency and market design.



Annette JANTZEN

Secretary General
NEON

Annette Jantzen is the Secretary General of National Energy Ombudsmen Network (NEON). NEON the European network of independent, not-for-profit consumer dispute-resolution services and ombudsmen active in the energy sector. Annette manages the NEON Secretariat, based in Brussels, and leads the associations' strategy, policy and communication activities. She has extensive experience in EU consumer rights in the public services and utilities sector.

Before joining NEON in March 2018, Annette worked for the European association of public water operators and assisted the European Institutions in communicating on energy, trade and consumer policies towards citizens and companies. She holds a master's degree in Environmental Science and Management from the Université Libre de Bruxelles and a diploma in European Studies and International Relations.



Anna COLUCCI

Head of the Retail markets, Coal and Oil Unit
Directorate-General for Energy

Anna Colucci is currently head of the Retail markets, Coal and Oil Unit. She joined DG Energy on 1st February 2016.

From 2007 to 2016 she held several management positions in DG Competition. In particular, she managed the State aid unit dealing with "Post, Health and other services" and was also head of the Strategy unit. Prior to her joining DG Competition, she had thirteen years' experience in transport policy within DG Move. She was, amongst other, in charge of the European Aviation Safety Agency.

Ms Colucci has a degree in Political Sciences from the Institut d'Etudes Politiques of Strasbourg, a master in European Studies from the College of Europe of Bruges and a diploma in International Relations Studies from the Johns Hopkins University Bologna.

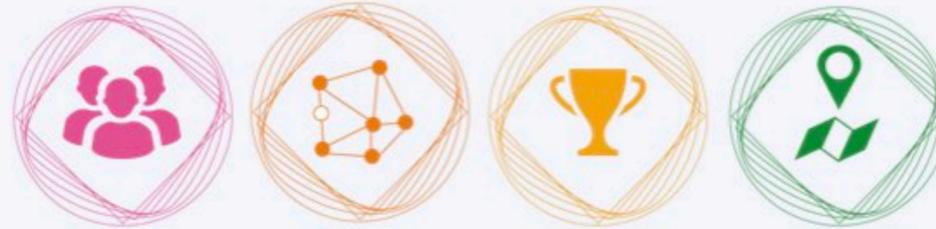




Annex 2: Presentations



17-21 JUNE 2019
EU SUSTAINABLE ENERGY WEEK
SHAPING EUROPE'S ENERGY FUTURE



#EUSEW19

What makes consumers tick?

Best practices and tools



Agenda

1. Introduction, by ESMIG

2. Report presentation - How do consumers react to feedback on their electricity and gas consumption, by Patrick Caiger Smith, CEO, geo

3. Learnings from the Horizon 2020 project ENABLE.EU on social and cultural factors that drive prosumers motivations and energy practices, by Karina Standal, Senior Researcher, CICERO, Norway

4. Learnings from the Horizon 2020 project START2ACT aiming to save energy at the workplaces of young SMEs and startups, by Ömer Ceylan, COO, Geonardo, Hungary

5. Panel discussion with:

- Roxane van Giesen, Researcher at CentERdata (NL) -START2ACT
- Frances Williamson, Head of Communications and Industry Engagement at CHAMELEON TECHNOLOGY (UK) LIMITED
- Annette Jantzen, Secretary General, NEON Ombudsman
- Anna Colucci, Head of Unit, Retail Markets, at DG Energy, European Commission

Moderated by Thomas-Pellerin Carlin, Jacques Delors Institute – ENABLE.EU

6. Conclusions, by Thomas-Pellerin Carlin, Jacques Delors Institute

1. Introduction

Patrick Caiger Smith

ESMIG Chair of the Consumer Energy Management Group
CEO, geo

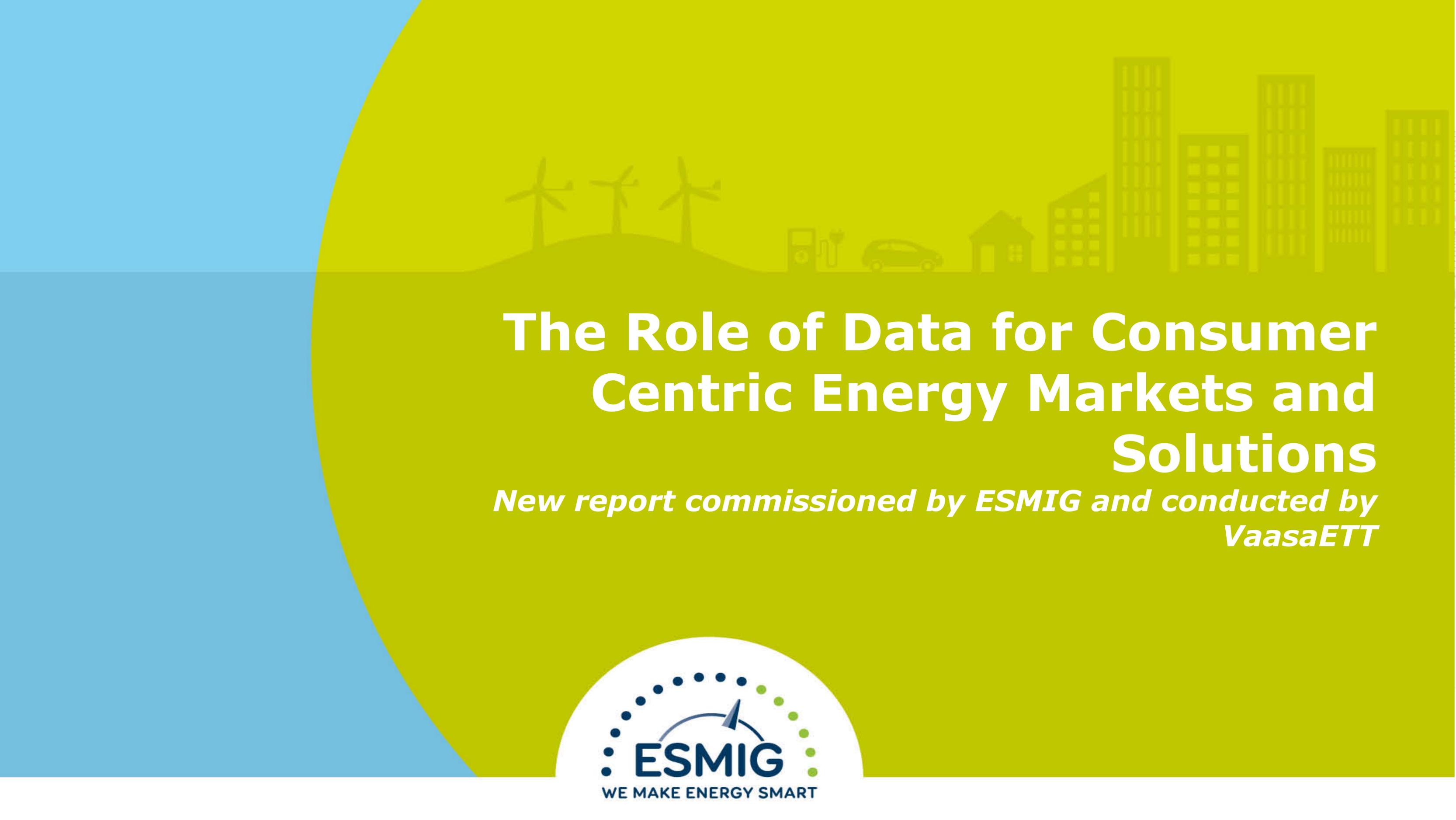
Time for sli.do!

Wi-Fi network: **EUSEW2019** (no password)
On your browser, type sli.do

2. Report: How do consumers react to feedback on their electricity and gas consumption

Patrick Caiger Smith

ESMIG Chair of the Consumer Energy Management Group
CEO, geo



The Role of Data for Consumer Centric Energy Markets and Solutions

*New report commissioned by ESMIG and conducted by
VaasaETT*



A study authorized by  and performed by **Vaasa ETT**

Objectives

Sample and Data

Findings

Potential of feedback

Enhancing the potential of feedback

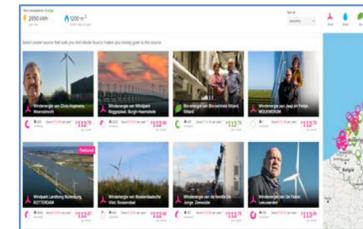
Home automation



Objectives

Reflect recent market and technological developments since 2011 and 2015 reports:

- Availability of real-time data
- Effects of feedback on gas consumption
- Present emerging business models and offerings in the residential segment



P-to-P Retailers



Distributed Retail



Smart Meters & Feedback



Solar Storage



Smart Energy



Blockchain Grid Edge



Crowd Sourcing



EV Centric

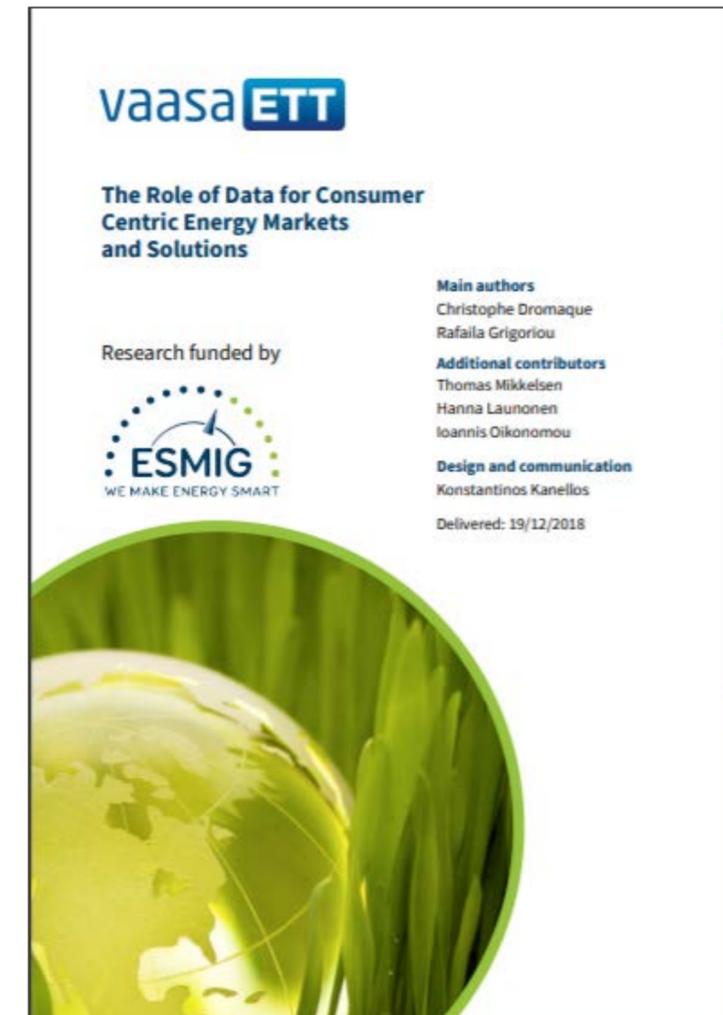


Community Energy

Mass pilot comparison

- **150** electricity feedback trials
- **31** gas feedback trials
- **397** dynamic electricity pricing trials
- **5,500,000** residential participants
- Rigorous rules for inclusion (age, size, duration)

Sources: ESMIG members, Intelligent Energy Europe project database, Academic publication databases, Research institutes (CRIEPI in Japan, CSIRO in Australia, EPRI in US), National energy efficiency agencies (NVE, ADEME, etc.), Vendors, Utilities, Our network



KPIs

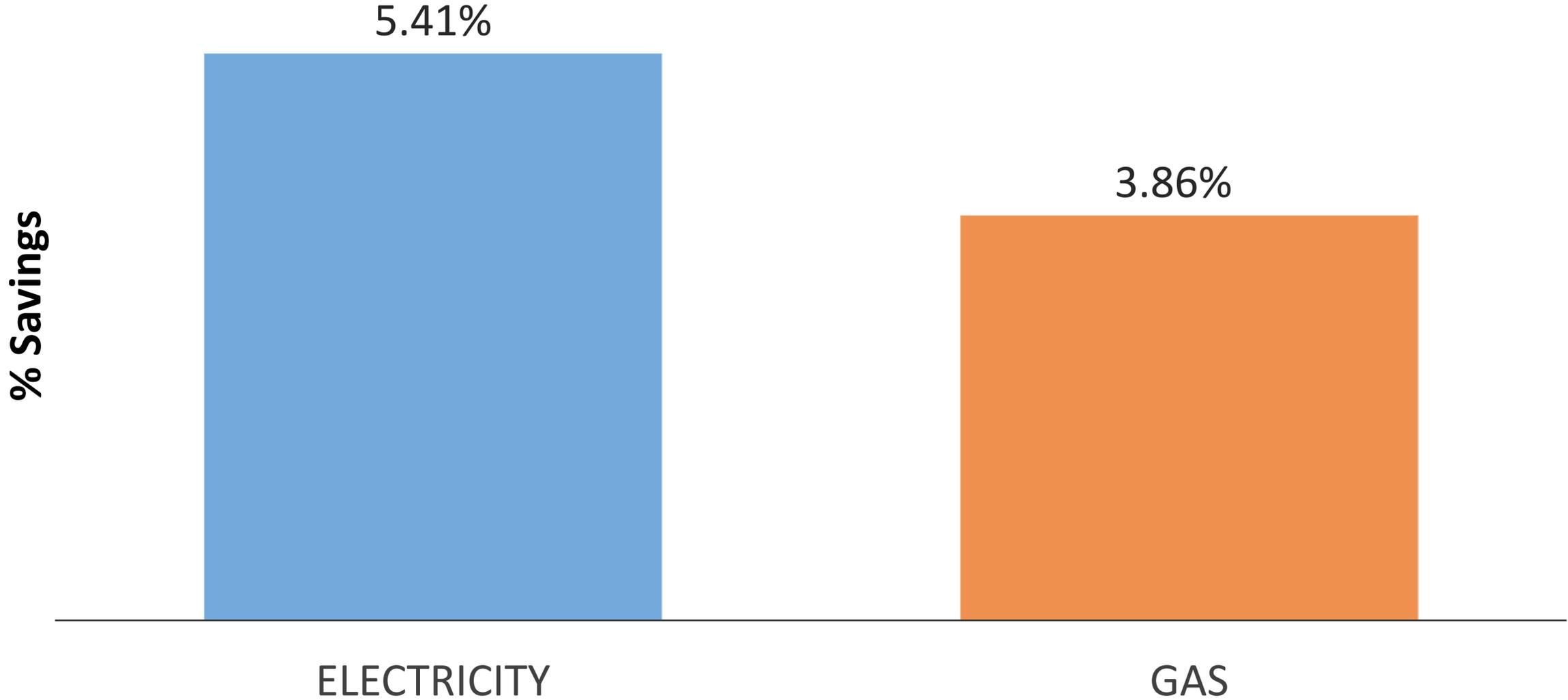
**Energy
conservation**
Overall Consumption

Demand flexibility
Peak clipping
Following peak hours

**Customer
satisfaction**



Findings - Impact of feedback on energy consumption

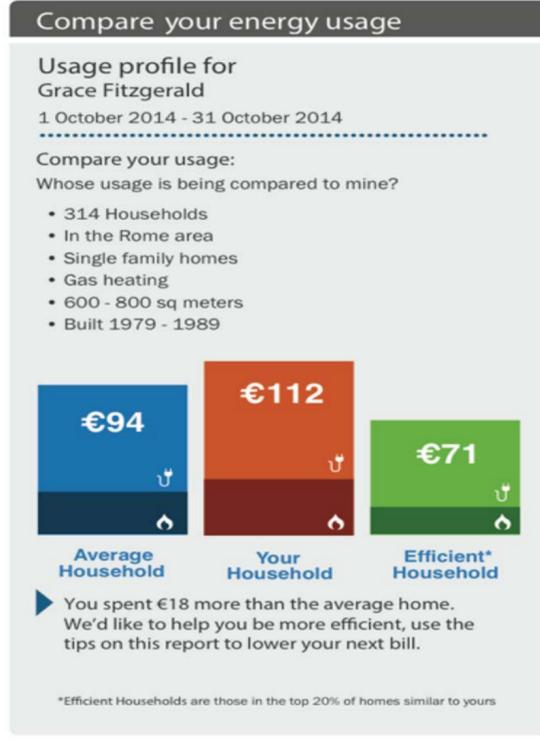


Feedback Types

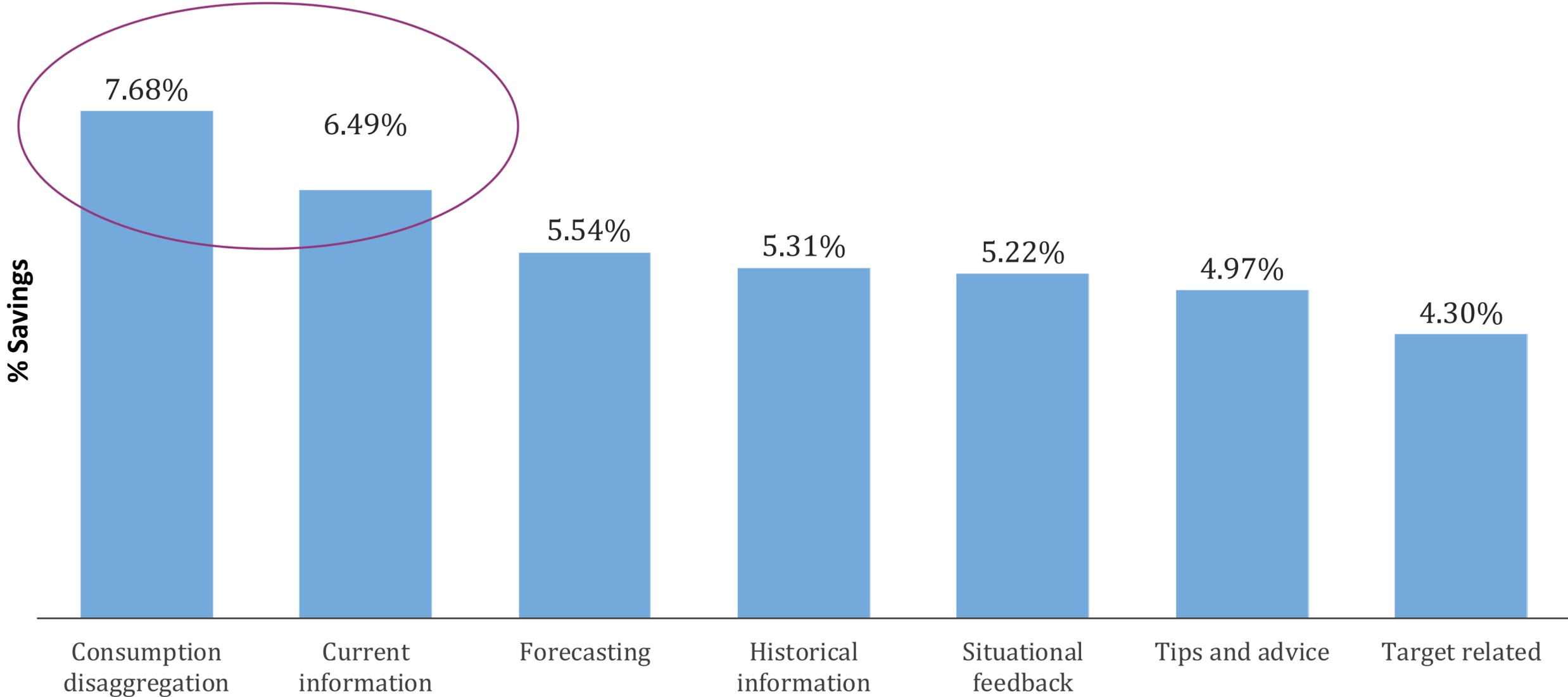
- Current information
- Situational feedback
- Historical information
- Target related
- Tips and advice
- Disaggregation
- Forecasting



Your standby is around 30% higher than that of an average household and has increased in the past months. Use an extension cord with ON/OFF button to shut down stand-by equipment and save up to 20 €/year

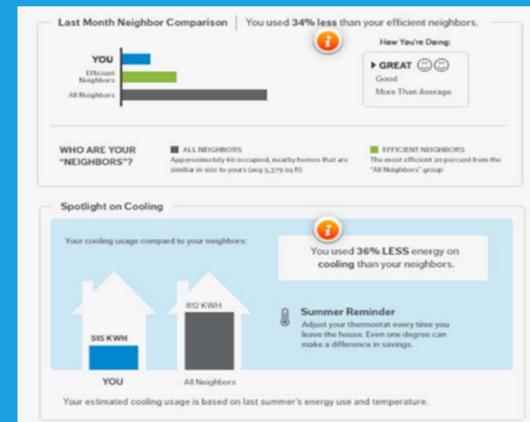


Impact of feedback types

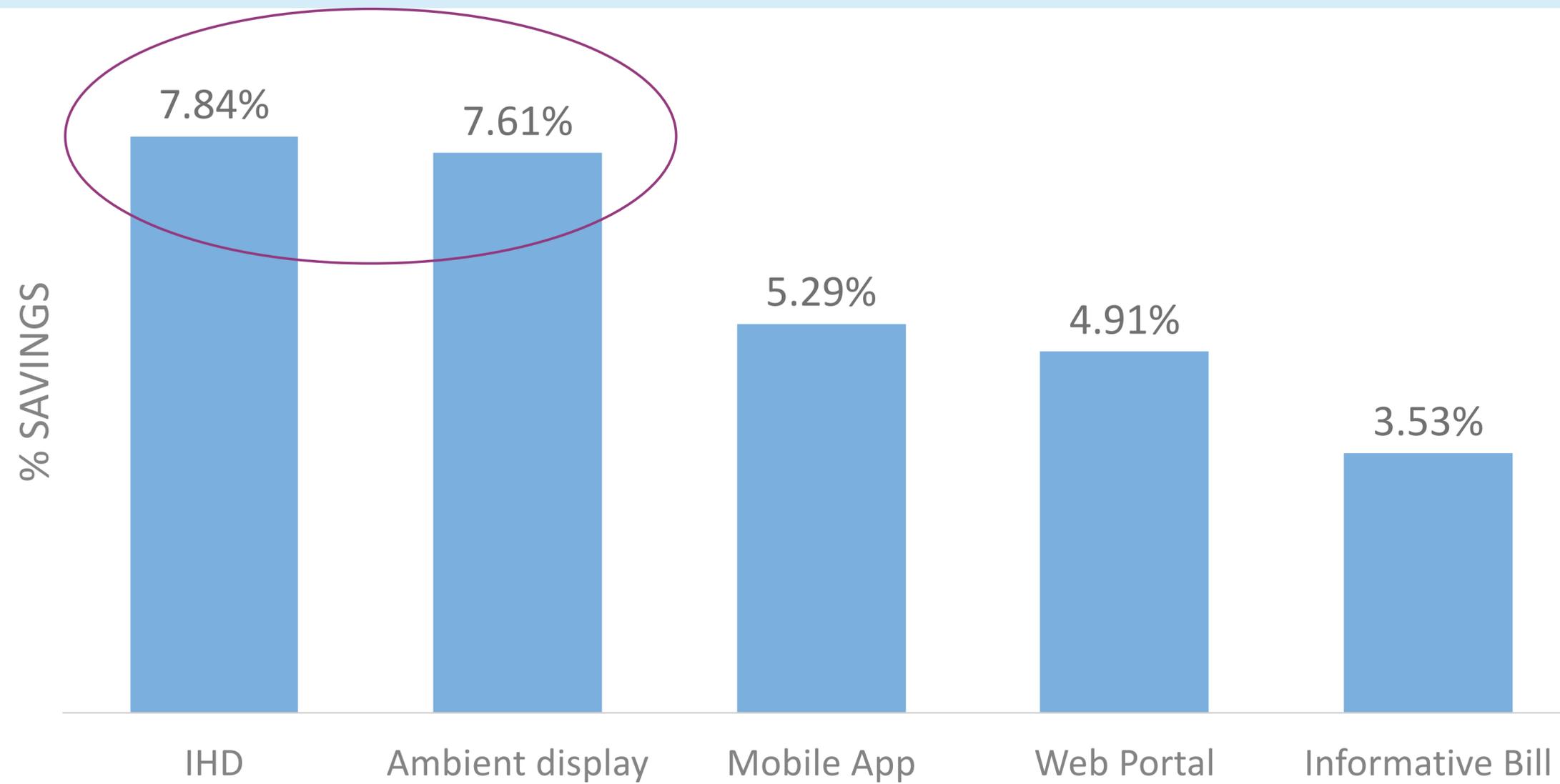


Feedback Channels

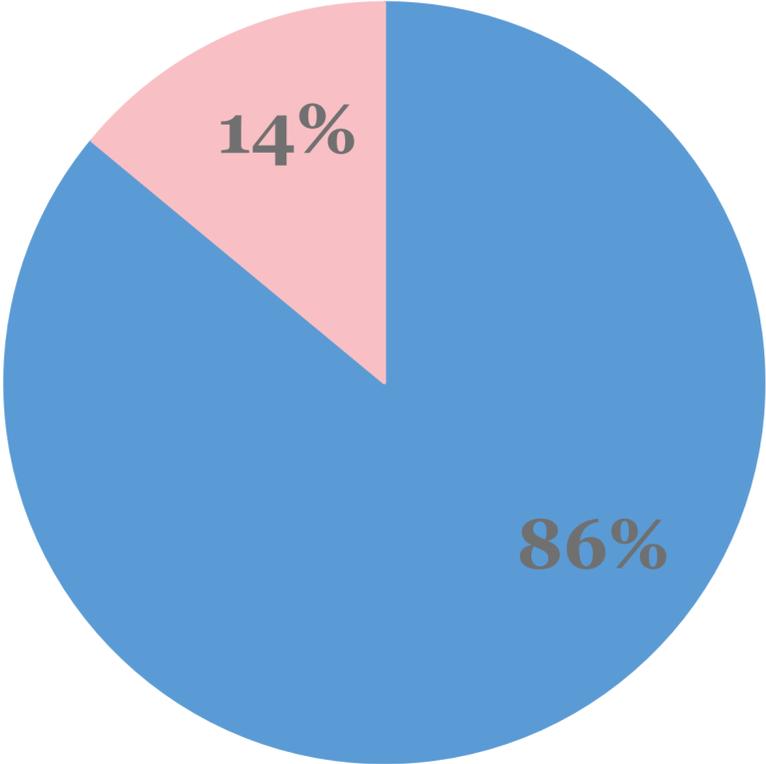
- In Home Displays (IHDs)
- Ambient displays
- Web portals and mobile applications
- Informative bills and consumption reports
- Smart thermostats



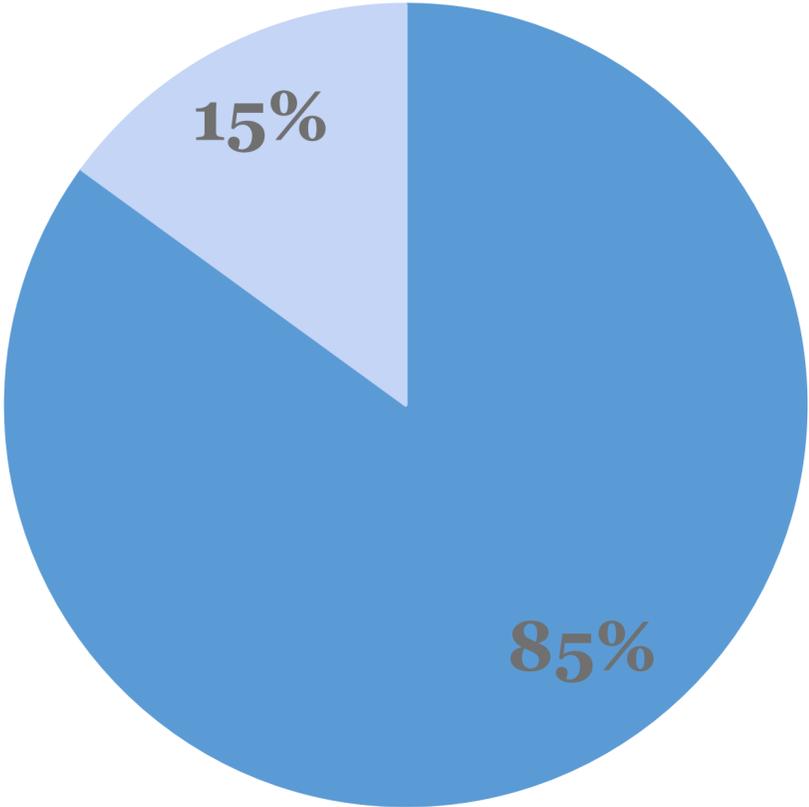
Impact of feedback channels



Satisfaction metrics



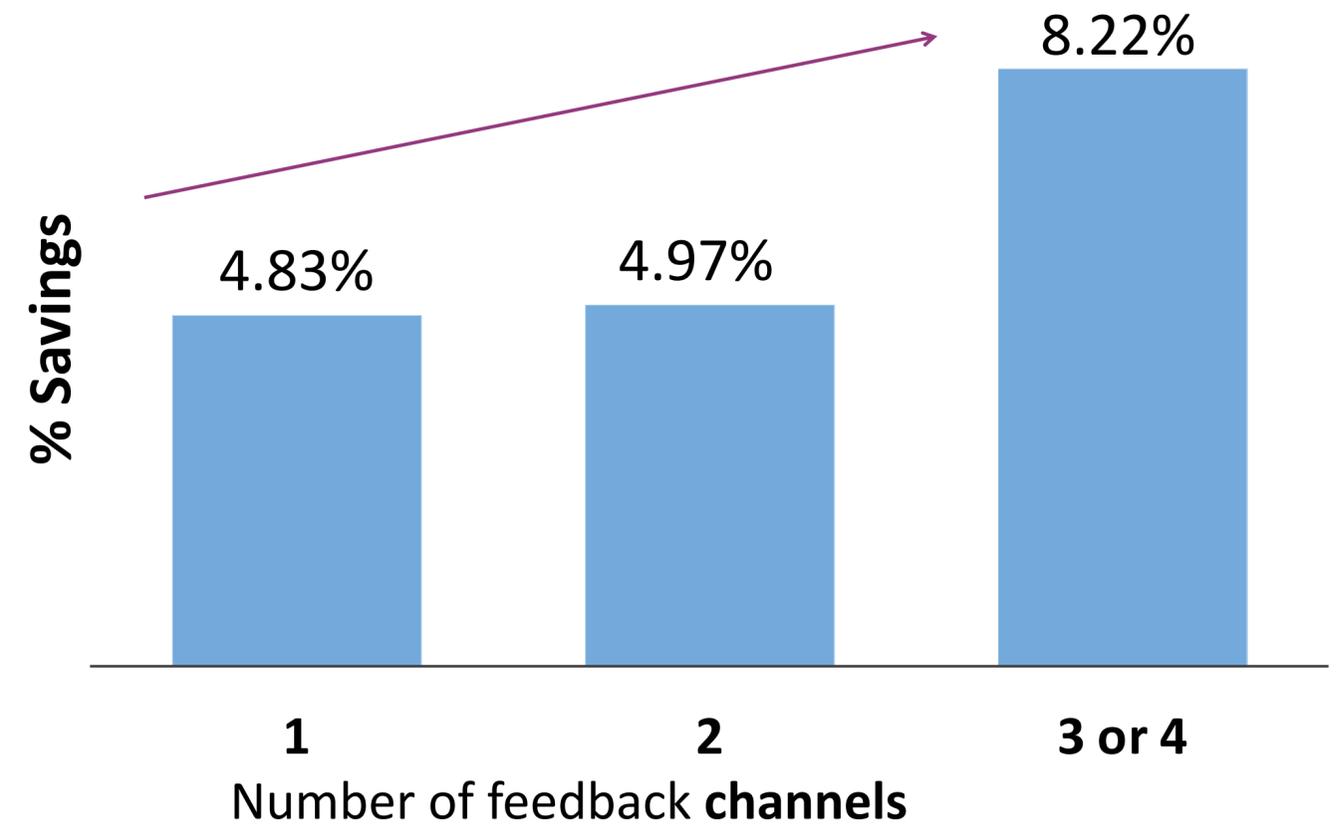
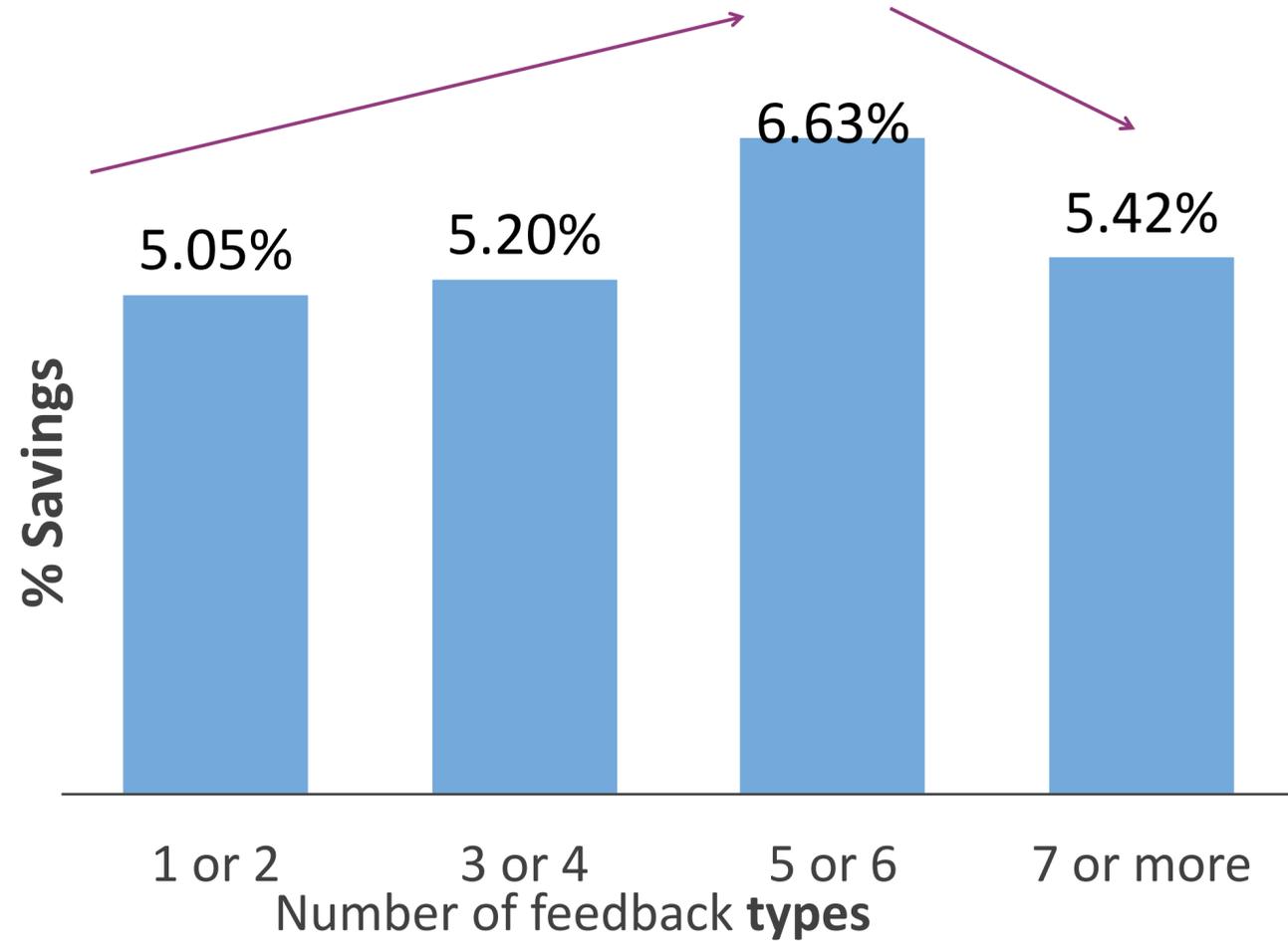
■ Generally satisfied ■ Generally dissatisfied



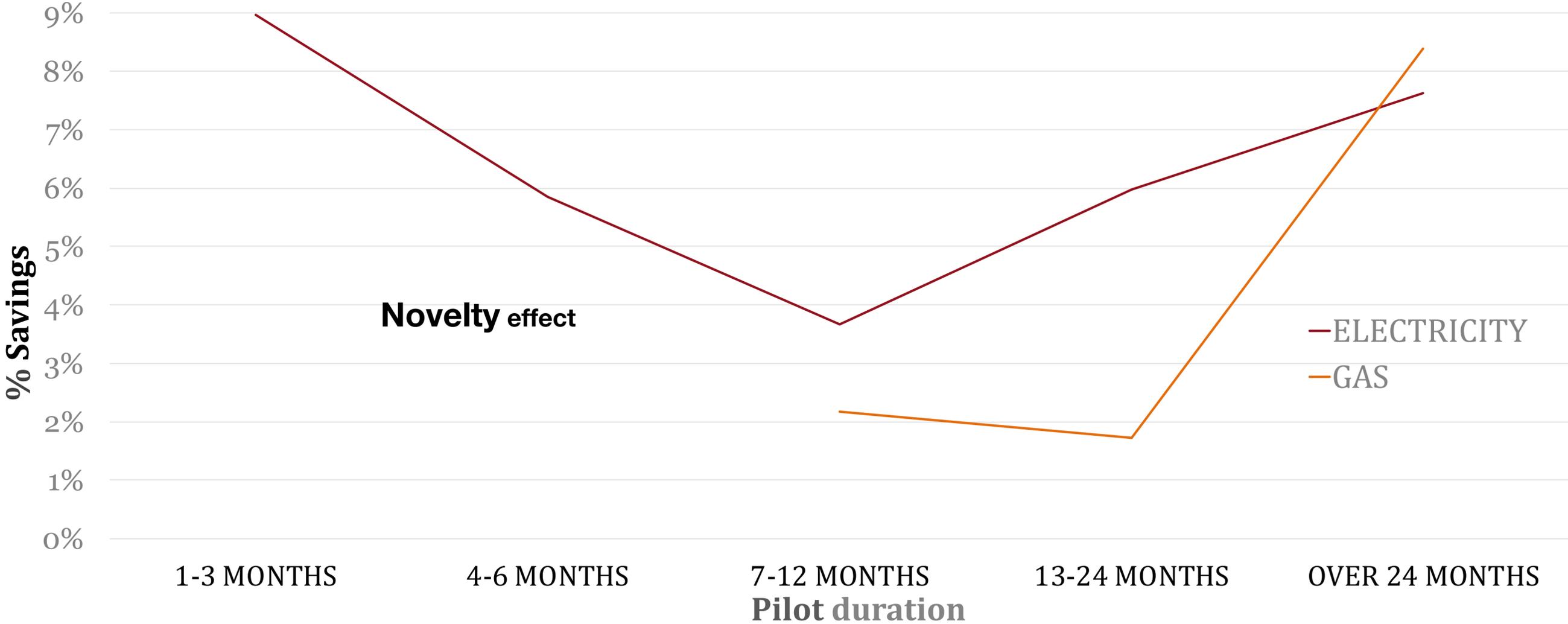
■ Would like to continue ■ Would not like to continue



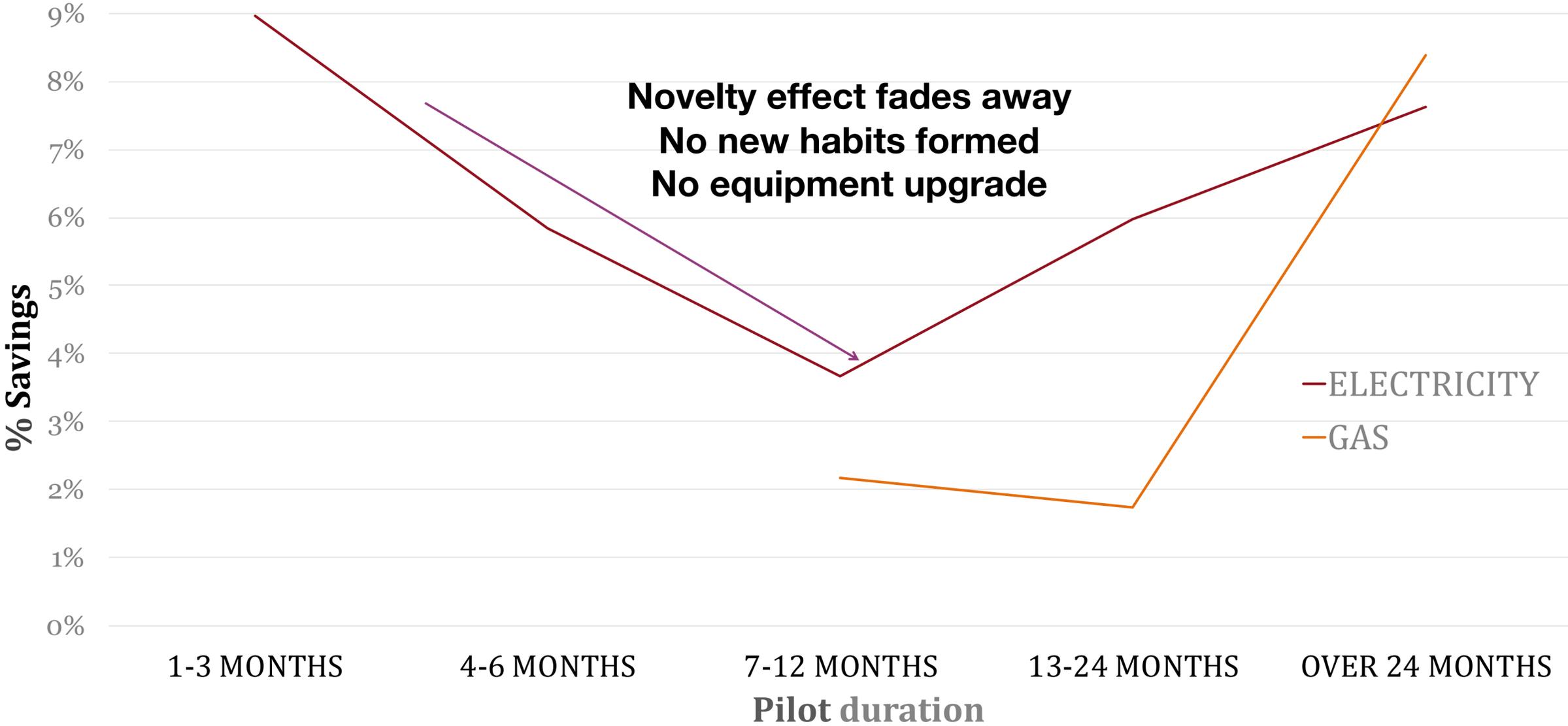
Additionality of feedback



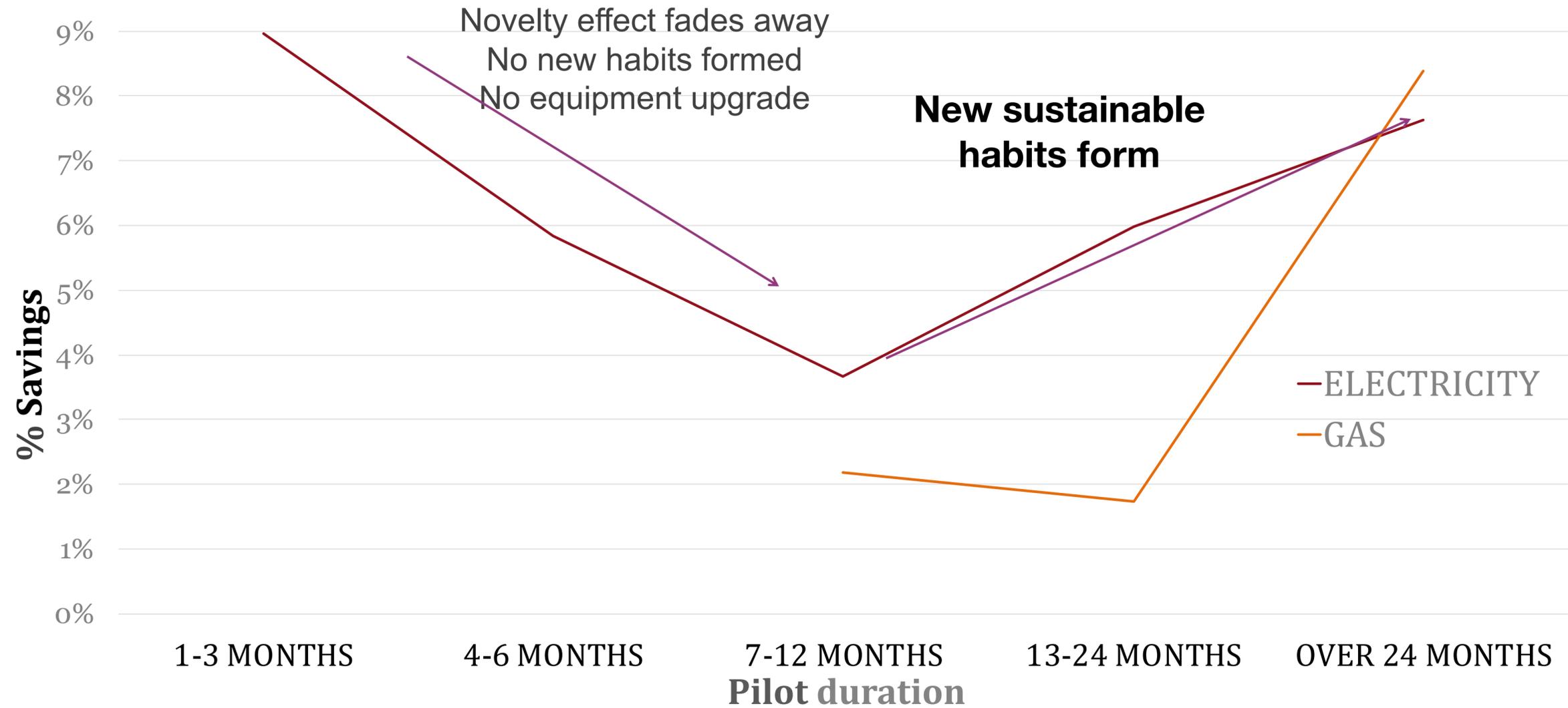
Sustainability of impacts



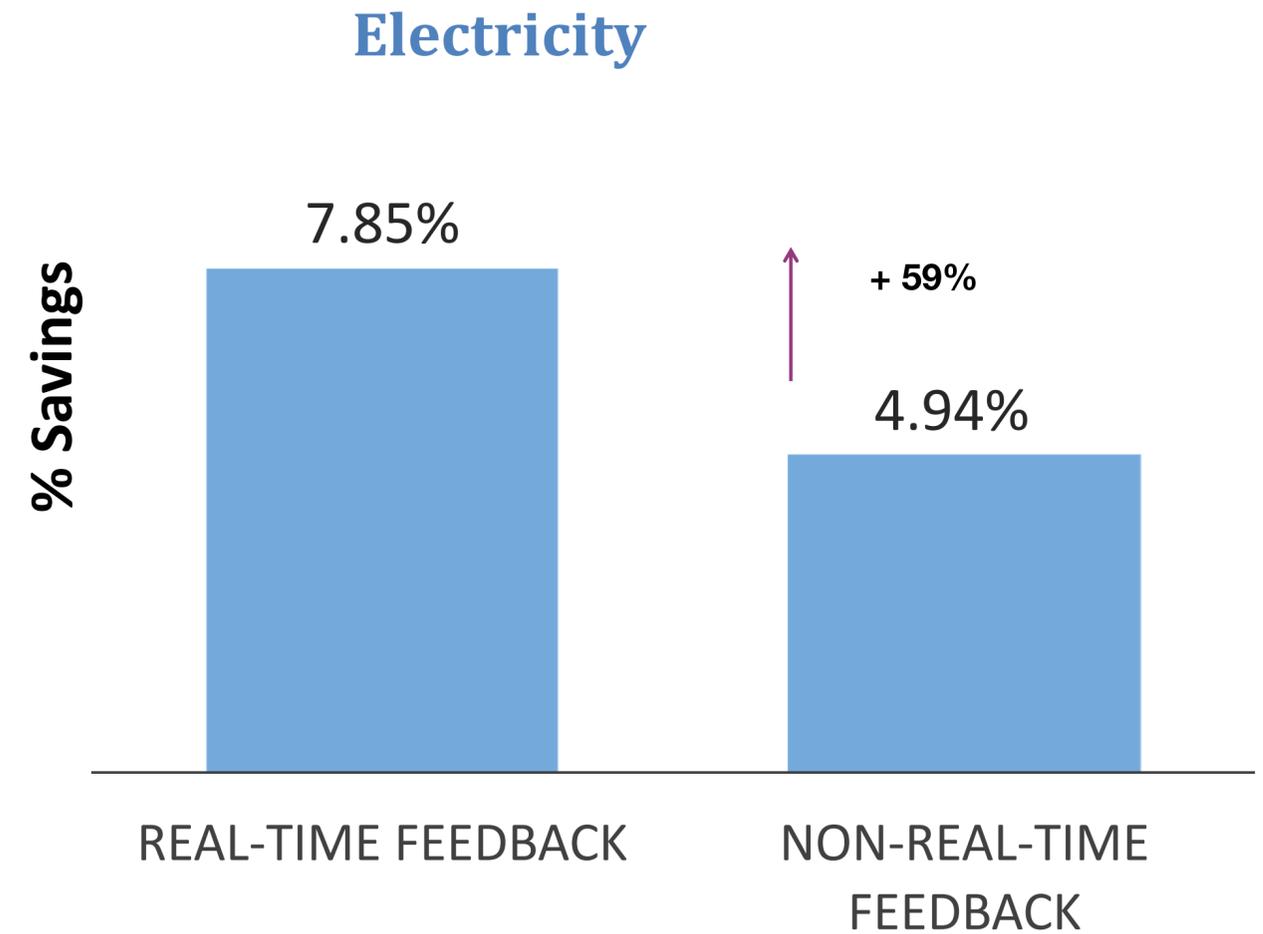
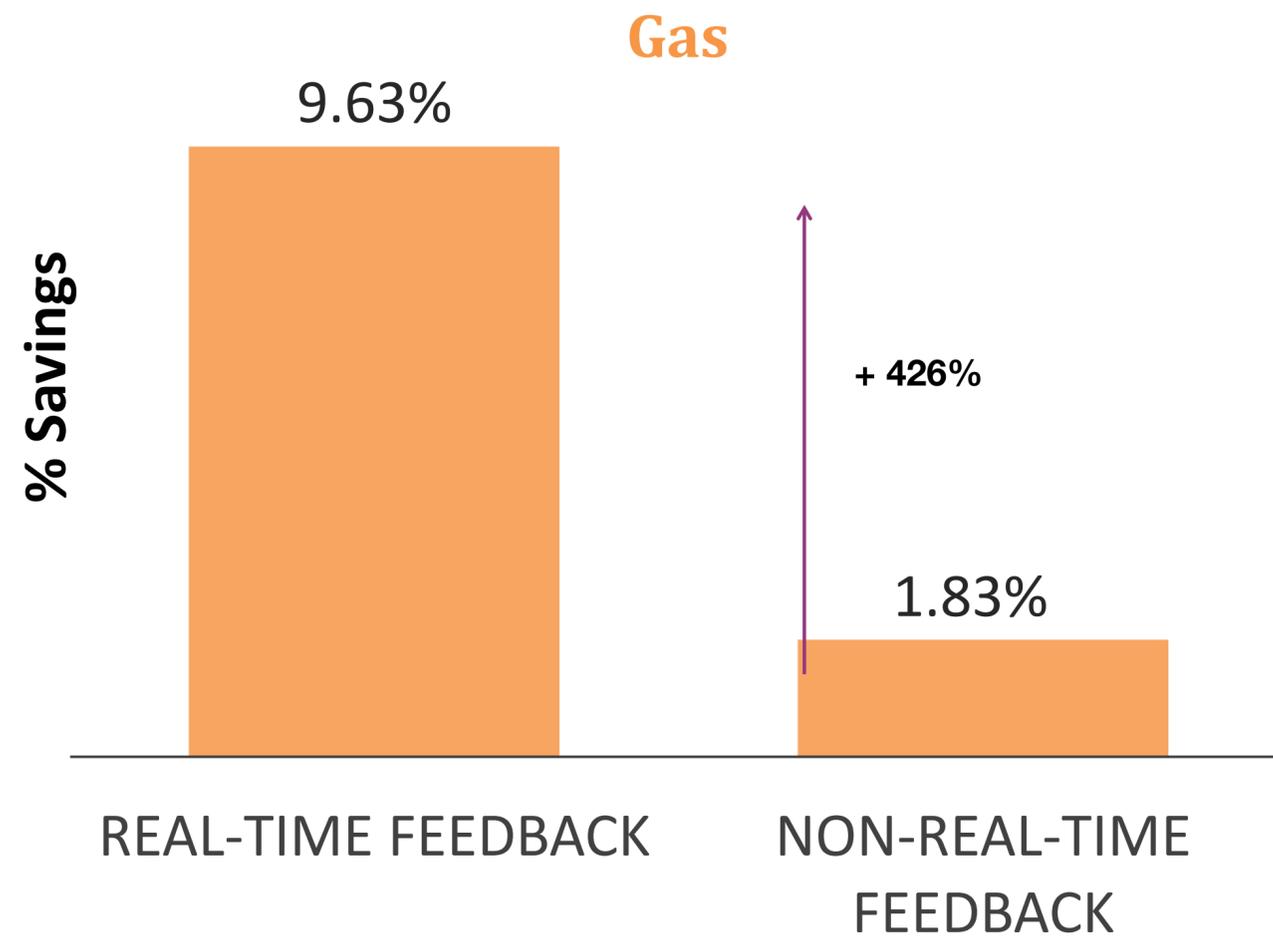
Sustainability of impacts



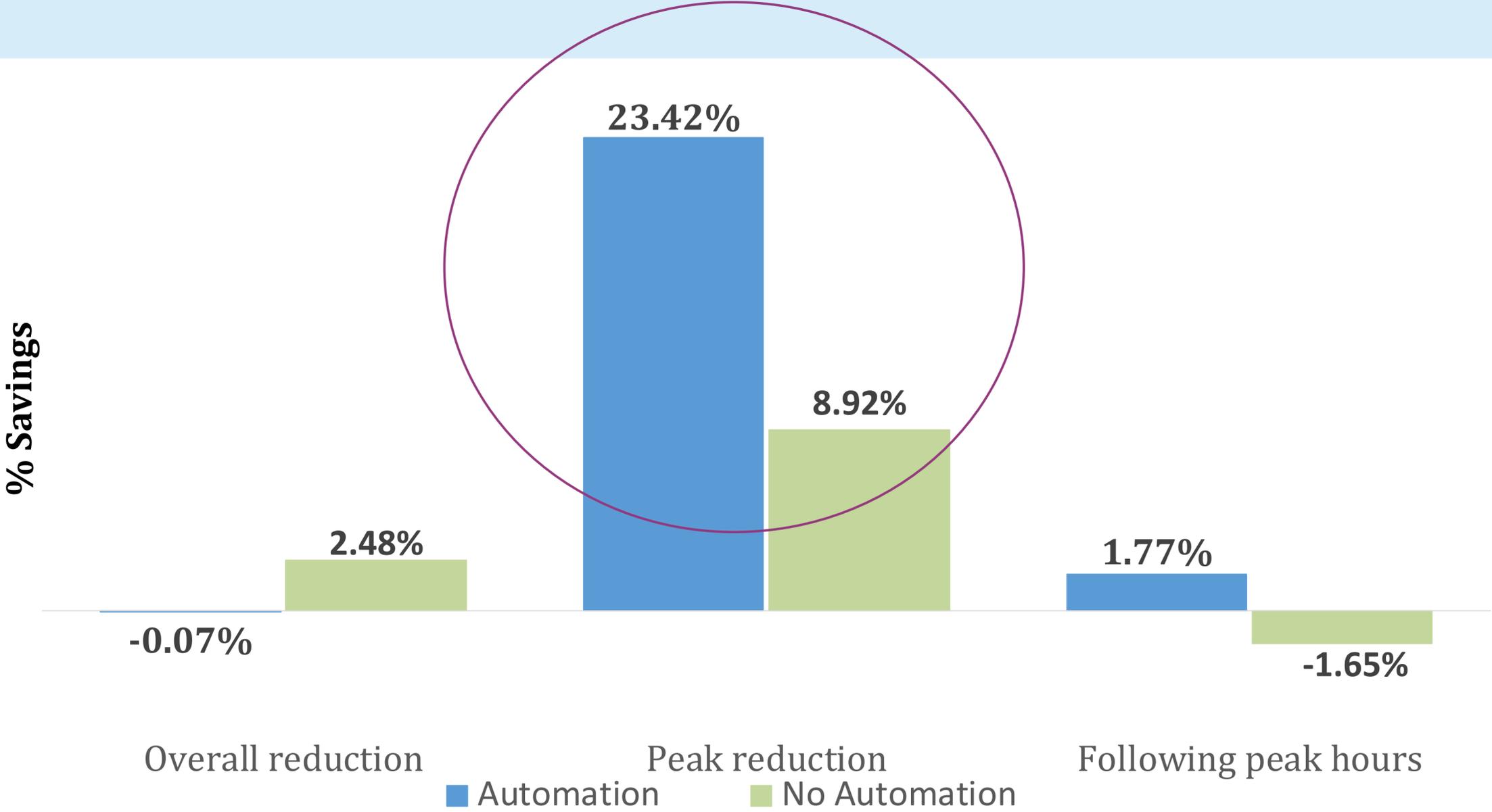
Sustainability of impacts



The added value of **real-time** feedback



The additional impact of automation



Conclusions and Summary

- Use of data for feedback is effective at reducing energy for both electricity and gas – evidence base conclusive
- Consumers value feedback
- All feedback is beneficial though In Home Displays are the most effective devices
- Multiple channels of feedback most enduring
- Automation very effective at shifting demand at critical times – manual response tires
- Real time data ports on smart meters are key enablers

Thank you

Patrick Caiger-Smith

CEO, Green Energy Options
Cambridge, UK

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3. Learnings from the Horizon 2020 project **ENABLE.EU** on social and cultural factors that drive prosumers motivations and energy practices

Karina Standal

Senior Researcher, CICERO, Norway



ENABLE.EU

Enabling the Energy Union

ENABLE.EU: 'From consumer to prosumer'

Paris 21.06.19

Karina Standal

CICERO – Center for International Climate Research



This project has received funding from the European Union's Horizon 2020 research and innovation programme under grant agreement number 727524.



Mapping and understanding prosuming in five countries

ENABLE.EU's partners



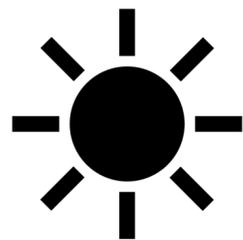
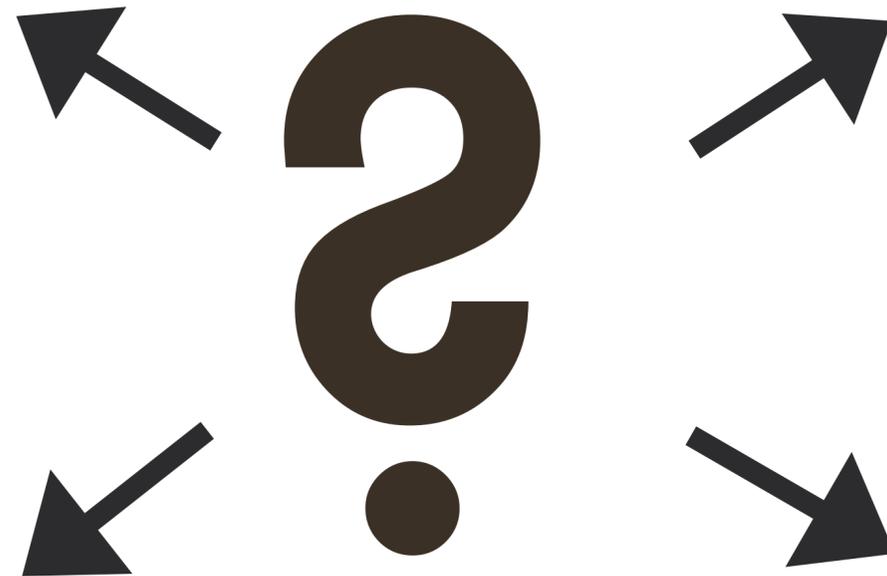
Key questions



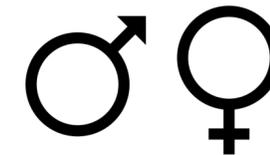
Decision-making



Division of labour



In society



Motives

Main findings: Interviews with prosumer households



Environmental and financial



Technological interest



Men take the initiative



Joint decision

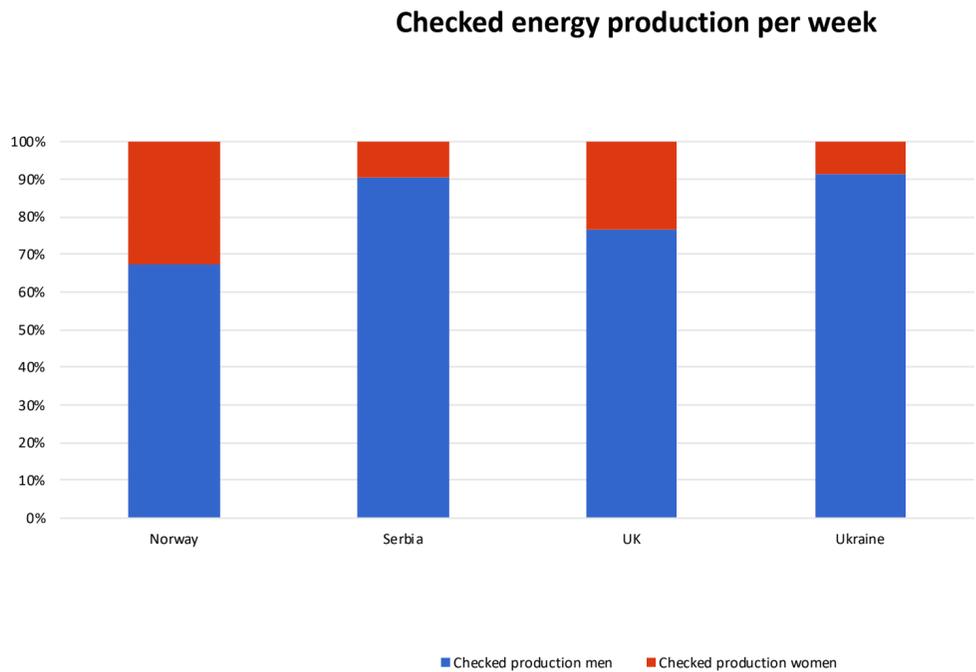
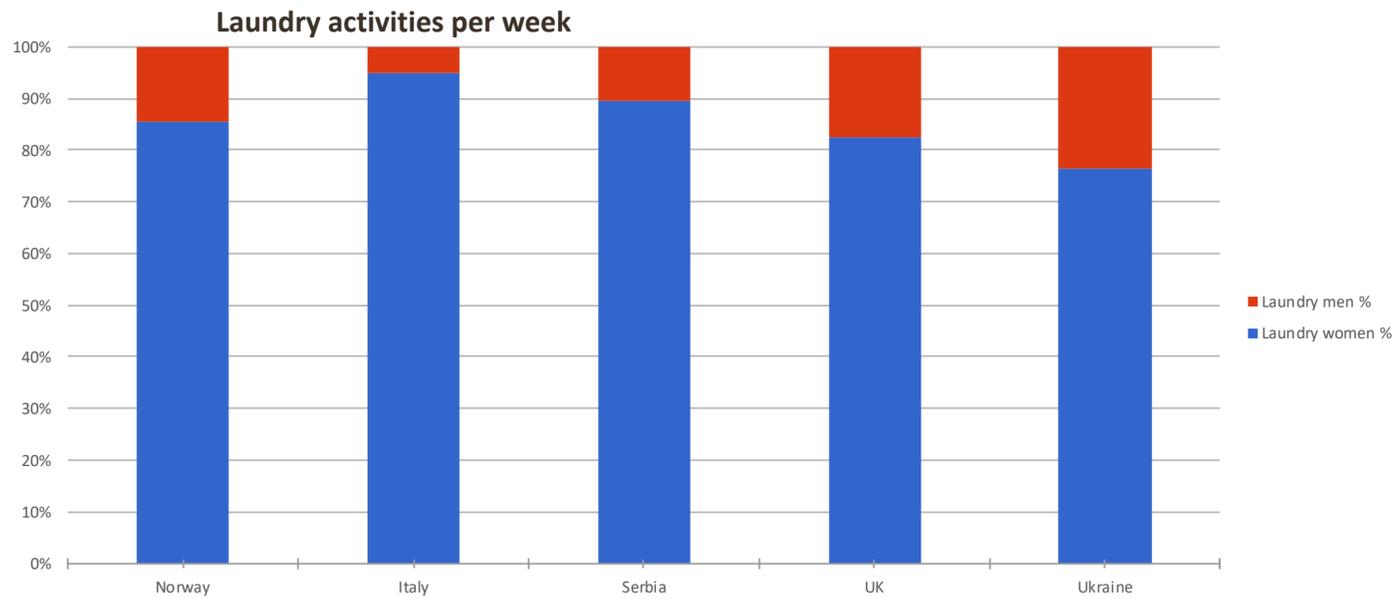
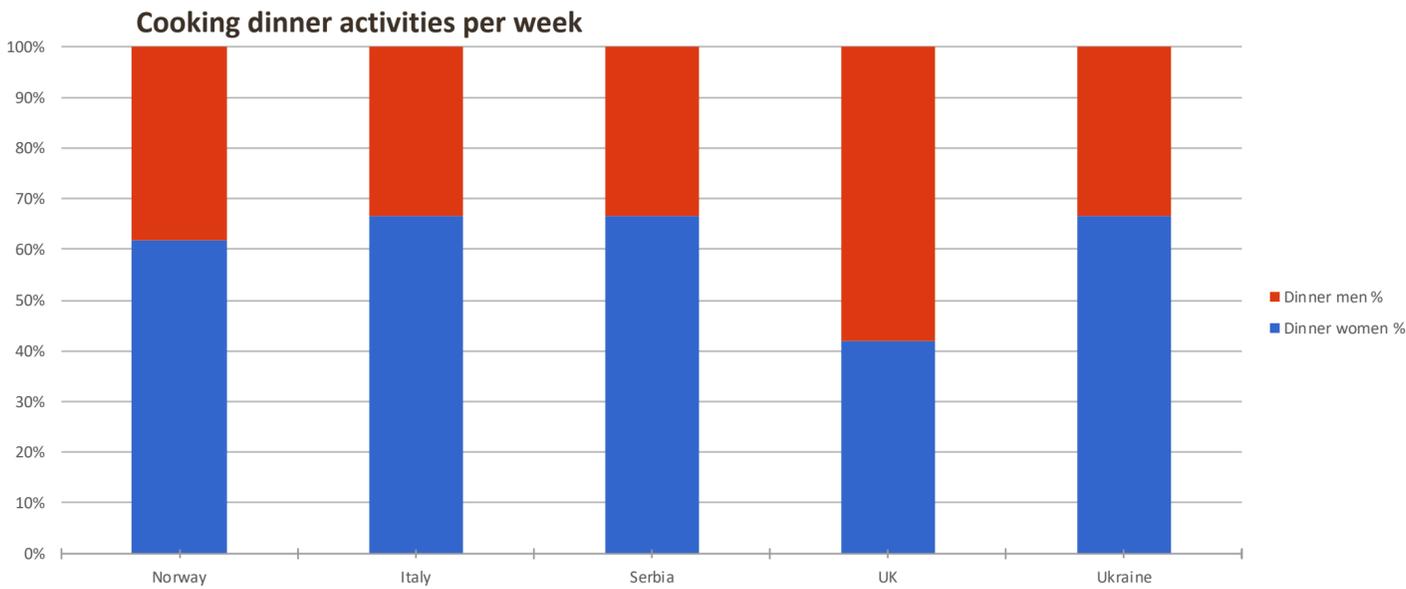


Women laundry and cooking



Prosumers are perceived as environmentally, technologically skilled, middle-class men

Gender and interaction with energy technology



Skills/knowledge, e.g.

- Education to make it easy to install
- Find and understand the information



Material conditions, e.g.

- Income
- Regulations – possible to feed in, Install yourself.
- Planning permission, building regulations
- Need of extra insurance?
- Energy access (Serbia).

PROSUMING: MOTIVATIONS AND PRACTICES

Attitudes/norms

- Want to compete with yourself.
- Neighborhood, friends, other.
- Comfort and technology drives your energy use, create new habits

Beliefs/values/identities E.g.

- Geopolitical issues (Ukraine)
- Environmental values/concerns.

Want to know more?
karina.standal@cicero.oslo.no



4. Learnings from the Horizon 2020 project **START2ACT** aiming to save energy at the workplaces of young SMEs and startups

Ömer Ceylan

COO, Geonardo, Hungary

Saving energy at the workplaces of young SMEs and startups



Ömer Ceylan, COO - Geonardo Environmental Technologies

EU Sustainable Energy Week 2019

What makes consumers tick? Best practices and tools

20th June 2019, Brussels – Belgium





About START2ACT

11 partners

9 countries

3 years

1 goal

Unleash the energy and cost saving potentials of young SMEs and start-ups.

Online tools and material as well as on-site consultancy and mentoring activities to help young businesses implement low- & no-cost measures.





Our purpose

To increase...

Energy Efficiency

at

young SMEs and startups

Around **20%** of energy, which is currently consumed, **can be saved through** measures targeting **behaviour change.**

Close to **two thirds** of SMEs operating in the EU are **lacking simple rules or devices for saving energy.** Startups are the spine of our future business landscape – **early education on energy efficiency is essential.**

... through behaviour change.





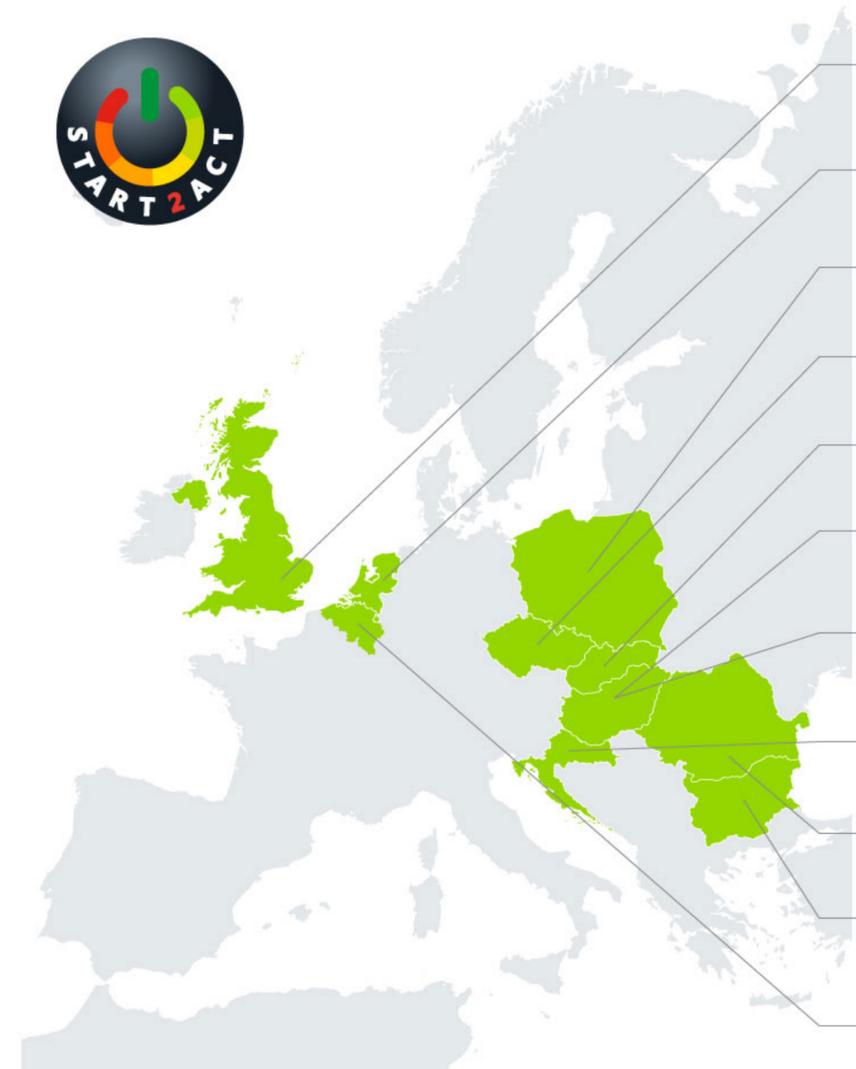
Our activities and geographical scope

On-site consultancy and mentoring

- » [Business Breakfasts](#)
- » [Consultancy for SMEs](#)
- » [Mentoring for startups](#)

Online tools & resources

- » [E-learning](#)
- » [Energy saving competition](#)
- » [Knowledge Base](#)
- » [START2ACT Forum & Ask The Expert \(on EE related issues\)](#)



- The Carbon Trust
- Stichting CentERdata
- Krajowa Agencja Poszanowania Energii S.A.
- ENVIROS, s.r.o.
- Slovak Innovation and Energy Agency
- Europa Media Non-profit Ltd.
- Geonardo Environmental Technologies Ltd.
- Energy Institute Hrvoje Požar
- Centre for Promotion of Clean and Efficient Energy in Romania
- Sofia Energy Agency
- startups.be





Energy Efficiency Business Breakfasts with young SMEs and startups



- ✓ Energy management in offices
- ✓ Data & bills
- ✓ Heating, cooling, ventilation
- ✓ Lighting
- Action plan to help save energy



60 business breakfasts
1,059 participants
794 companies (of which **322**
young SMEs and startups)



On-site consultancy at young SMEs

Activities for today

- Step 1**: Site orientation
- Step 2**: Create a company energy statement
Create a company Buy Smart Strategy
- Step 3**: Understand metering and monitoring
Check your meters
- Step 4**: Engage your staff in energy reduction
- Step 5**: Review your energy saving action plan
Next steps

- ✓ For the owners and staff of young SMEs
- ✓ START2ACT [Training Kit](#), [Handbook](#) and [ToT Manual](#)

304 SMEs visited
2,500 people reached

Top 3 Tips



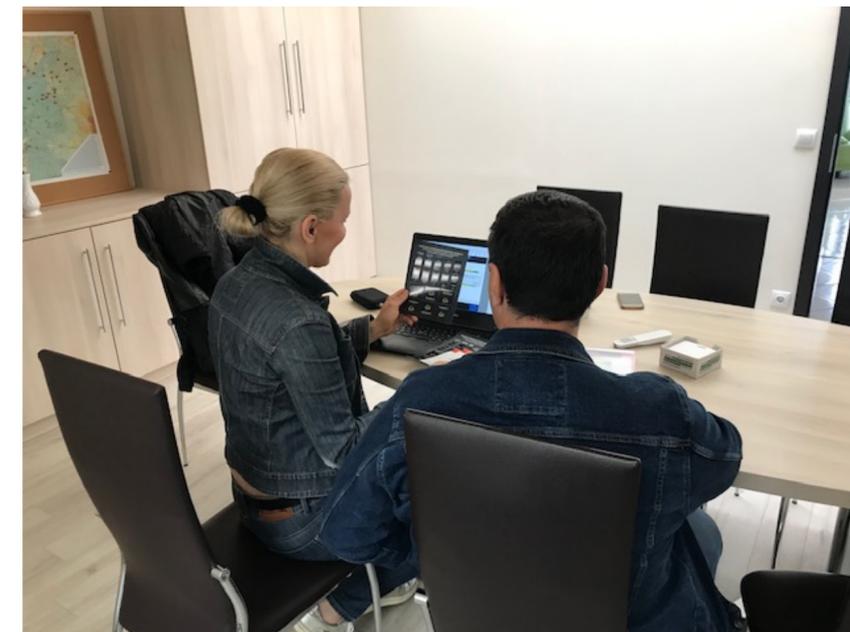
1. **TURN OFF UNNECESSARY EQUIPMENT DURING THE DAY AND ESPECIALLY OUT OF HOURS TO REDUCE HEAT BUILD-UP AND UNNECESSARY ELECTRICAL COSTS – TO SAVE 5% OF ENERGY COSTS**



2. **CARRY OUT A STAFF AWARENESS CAMPAIGN – TO SAVE 5% OF ENERGY COSTS**



3. **WALK AROUND YOUR OFFICE AT DIFFERENT TIMES OF THE DAY AND DURING DIFFERENT SEASONS TO SEE HOW AND WHEN HEATING AND COOLING IS WORKING. CHECK TIME AND TEMPERATURE SETTINGS - TO SAVE 5% OF HEATING AND COOLING COSTS**



Sustainable Energy Mentoring for Startups



- ✓ For startups and entrepreneurs
- ✓ START2ACT [Startup mentoring kit](#), [Handbook](#) and [ToT Manual](#).

71 mentoring sessions

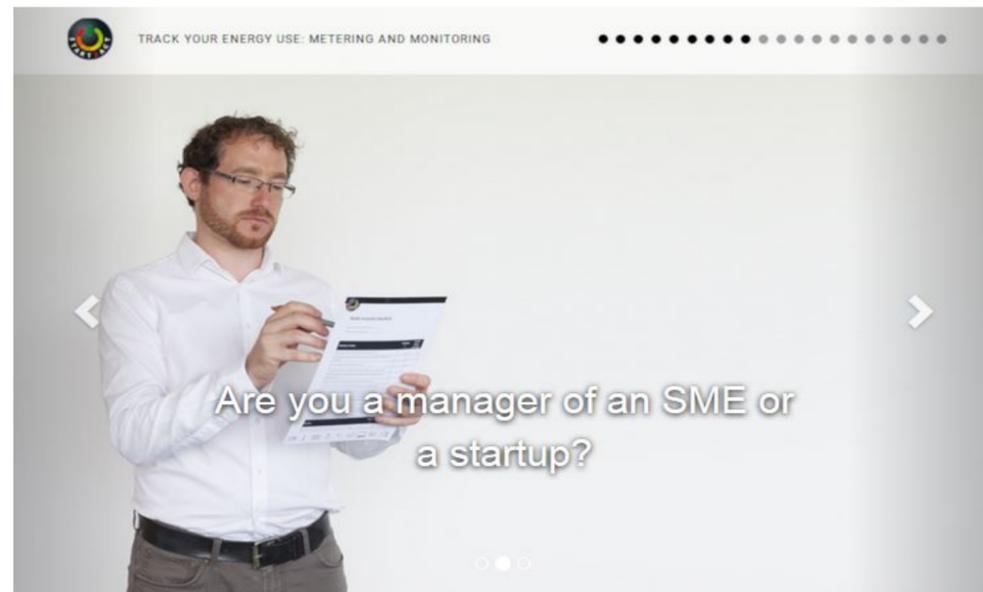
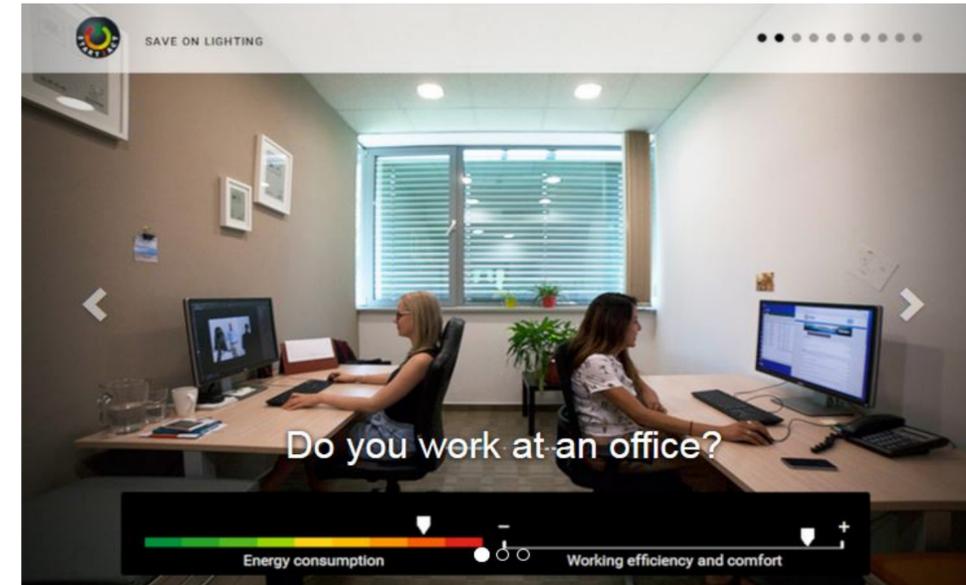
418 startups

2,019 entrepreneurs





Interactive e-Learning Platform





Energy saving competition

#S2Achallenge

The diagram consists of four numbered steps connected by a horizontal line. Each step has an icon above it: a lightbulb for #1, a camera for #2, a pencil for #3, and an envelope for #4.

- #1 How does your office save energy on lighting?
- #2 Show us in a photo or video!
- #3 Write a short description!
- #4 Send it to us!

This project has received funding from the European Union's Horizon 2020 research and innovation programme under grant agreement No 696069.

ARE YOU ENERGY EFFICIENT AT WORK?

SHOW US AND WIN AWESOME PRIZES!

Summer edition

How does your office save energy on heating?

#S2Achallenge



Energy saving competition

New entry for the #S2AChallenge from ECONS #energy, Košice 🇸🇰: 'We do not use A/C we keep our office chilled by green windows' 🌿🌱
#H2020



@START2ACT we are saving energy by reducing artificial lighting, and removing half the bulbs...! #S2Achallenge



"I strongly believe we should be committed to saving energy at work. The generation of today has to act up to mitigate the effects of climate change. I remember I was particularly happy when the Paris Agreement was ratified in 2015, however I also realised we can only achieve the goals of the Agreement if we act locally. I do my best to spread the word about climate actions and I'm happy that we can do something about it with my employees."

Tamas Tüske from Bacchus Kft.



Knowledge base

Knowledge Base / SME

Energy efficiency at an SME



I'm a manager at an SME



I'm an employee at an SME

Green finance for SMEs

There are plenty of financing options available-make sure you do your homework. Financing sustainability measures might be easier than you think.

[Read more](#)

Why save energy?

There are many reasons to save energy at work and at home. Check out this page and read why it will pay off for your business and for our climate.

[Read more](#)

Save energy at home

Making some simple changes and energy efficiency improvements in your home can make it more comfortable and cheaper to heat and cool, and has the added benefit of reducing your impact on the environment.

Knowledge Base / SME / Employee

I'm an employee at an SME



Save on heating and cooling: HVAC

Heating, ventilation and air conditioning (HVAC) systems typically account for over 40% of energy use in offices and form a significant proportion of energy use in other areas of a business. HVAC is a key area of focus for identifying energy saving measures.



Save on lighting

Lighting accounts for around a third of the energy use of a typical office.



Save on IT: Office equipment

Office equipment is one of the fastest growing areas of energy use. Effective management can reduce your equipment energy consumption by up to 70%.



Save energy at home

Space heating and domestic hot water normally accounts for the most energy used at home and can make up over half of your annual energy bill.



Share your Story: Promoting green credentials

Demonstrating your commitment to sustainability delivers hard business benefits.





START2ACT material and gadgets

We help young SMEs & startups to reduce energy use through simple, day-to-day actions

Take part in our free-of-charge activities in nine EU countries and boost the energy efficiency of your company!



WANT TO KNOW MORE?
Visit www.start2act.eu
Drop us a line: info@start2act.eu
Follow us and stay tuned!



Did you know that by taking low- and no-cost actions you could reduce energy consumption and costs by 20% at your office?

Our mission is to help young SMEs and start-ups to save energy and costs at their workplace by introducing simple yet effective energy efficiency measures in their daily routines. For this, we are offering free-of-charge consultations and training activities in nine European countries.



WANT TO KNOW MORE?
Visit our webpage and follow us on social media!

www.start2act.eu @start2act START2ACTproject START2ACT

To receive free tips and hear about our activities near you, just drop us an e-mail: info@start2act.eu



This project has received funding from the European Union's Horizon 2020 research and innovation programme under grant agreement No 696069.



Events





Thank you for your attention!

For more information and to download our reports and tools,
visit start2act.eu or write to us at info@start2act.eu!



This project has received funding from the European Union's Horizon 2020 research and innovation programme under grant agreement No. 696069.



5. Panel discussion – What makes consumers tick?

Moderated by Thomas-Pellerin Carlin, Jacques Delors Institute

- Anna Colucci, Head of Unit, Retail Markets, at DG Energy, European Commission
- Roxane van Giesen, Researcher at CentERdata (NL) -START2ACT
- Annette Jantzen, Secretary General, NEON Ombudsman
- Frances Williamson, Chair of ESMIG's Regulation and Policy Group and Head of Communications and Industry Engagement at CHAMELEON TECHNOLOGY (UK) LIMITED

6. Conclusions

Thomas-Pellerin Carlin

Head of the Jacques Delors Energy Centre

Time for sli.do!

Wi-Fi network: **EUSEW2019** (no password)
On your browser, type sli.do

Thank you!

www.esmig.eu @ESMIG_EU

www.enable-eu.com @ENABLE_EU

www.start2act.eu @START2ACT



Annex 3: Summary and Conclusions



What makes consumers tick? Best practices and tools

20 June 2019, Residence Palace – Brussels, Belgium

Summary and conclusions

Getting consumers on board is essential in shaping Europe's energy future. However, despite a range of research and policy initiatives, there is a lack of understanding of the underlying factors that drive consumer choices and of the effective solutions and tools that increase their participation in the energy system.

This is why ESMIG, the Jacques Delors Institute and Geonardo teamed up during the EU Sustainable Energy Week 2019 to shed new light on consumer motivations, engagement and learning patterns, challenge existing thinking and provide real examples that can help decision-makers in their mission of reaching ambitious energy efficiency targets.

The first part of the session focused on presenting three different initiatives that aim at understanding and changing consumer behaviour in energy consumption:

1) Patrick Caiger-Smith, CEO at geo and Chair of ESMIG's Consumer Energy Management group, presented the most authoritative and comprehensive report to date on how households react to consumption feedback. 578 pilots involving 5.5 million residential consumers over the past 10 years allowed the researchers, VaasaETT, to find strong patterns in terms of:

- savings: 5.41% savings on electricity when consumers received feedback
- the best channel for providing feedback: in-home displays
- the best type of feedback: consumption disaggregation
- satisfaction of consumers with feedback devices: 86%

and to respond to questions such as the sustainability of impact, the added-value of real-time feedback and the impact of automation. The full report is available [here](#).

2) The Horizon 2020-funded project [ENABLE.EU](#) looks at drivers of individual energy choices, such as the decision to become a prosumer. Karina Standal from CICERO presented the reasons behind becoming a prosumer. They are mainly of environmental and financial nature, and there is often a technological interest behind. While men tend to take the initiative, the decision is usually taken jointly by women and men within a household. The main motivations and best practices for becoming prosumers are:

- Knowledge: to make it easy to install, to find and understand information
- Attitudes: social norms, creating new habits due to the comfort created by technology
- Material conditions: income, regulations, bureaucracy, access to energy
- Beliefs/ values: environmental concerns, geopolitical situation

3) Ömer Ceylan, COO at Geonardo, presented the results of the Horizon 2020-funded project [START2ACT](#), which targets energy consumers at their workplace and tries to unleash the energy and cost saving potentials of young SMEs and start-ups by introducing simple yet effective energy efficiency and behavioural change measures, such as:

- Ensuring that the thermostats are set correctly
- Managing effectively office equipment to optimise their energy consumption
- Switching off the office equipment and other appliances (e.g. computer monitors, coffee machine) when not in use
- Printing documents that are essential to have in hard copy and storing and reading all other documents electronically
- Turning off the lights when leaving a room that is unoccupied or installing occupancy sensors
- Investing in / encouraging the management to invest in energy efficient office equipment and appliances
- Encouraging colleagues to behave in an environmentally conscious way

The second part of the session brought together industry (Frances Williamson, Chameleon Technology), policy makers (Anna Colucci, Head of Unit Retail Markets, at DG Energy, European Commission), consumer protection authorities (Annette Jantzen, Secretary General, NEON Ombudsman) and researchers (Roxanne van Giesen, CentERdata) for a broader discussion on consumer engagement with real examples, moderated by Thomas Pellerin-Carlin, Jacques Delors Institute.

Anna Colucci highlighted the regulatory framework for engaging consumers – one of the three main pillars of the Clean Energy Package of legislation that was finalised this year is having consumers at the core of the energy system. This is the only way to enable flexibility and decarbonise Europe.

Annette Jantzen mentioned the roll-out of smart meters needs to be followed by direct benefits for consumers through, for example, an easy way to visualise their real-time consumption or specific tariff patterns. The messaging is also very important to get consumers on board: in addition to the monetary benefits which can be limited, long-term environmental benefits should be emphasized.

Frances Williamson reinforced the fact that just installing the smart meters won't change anything: consumers need good explanations, tools to see their real-time energy consumption, as well as additional benefits in terms of services and savings.

Roxanne van Giesen talked about the need to overcome limited resources (time, money) and information for employees working for young SMEs and startups. Also, it is important to engage all sectors of society and target them based on their specific needs.

The conclusions brought forward by Thomas-Pellerin Carlin rounded up the presentations and discussions:

1. We need to always keep in mind that individuals don't "consume" energy, instead we cook, we travel, we work – activities that require energy
2. A system change is needed to actually engage consumers and get to an efficient energy system and this comes with 5 main changes: of technology, of infrastructure, of economic incentives, of habits and of social norms
3. Individual energy choices are deeply embedded in society's energy choices

More information about the organisers

ESMIG is the European association for smart energy providers. Our members provide products, information technology and services for multi-commodity metering, display and management of energy consumption and production at consumer premises. We advocate for a regulatory framework that accelerates the introduction of our members' innovative products and services, which are fundamental to the smart energy and water systems of Europe's future.

www.esmig.eu @ESMIG_EU

Geonardo is an innovation and technology company active in the energy, environment and sustainable development fields. We provide research, innovation and consultancy services and cutting-edge solutions in the renewable energy, resource efficiency, climate change and natural resources sectors. In close cooperation with universities, research institutions, industry as well as public administrations and civil society organisations, we conceive and implement projects aiming to provide innovative solutions to complex societal challenges.

www.geonardo.com @GeoEnvTech

The **Jacques Delors Institute** is the European think tank founded by Jacques Delors in 1996. We produce analyses and proposals to contribute to the debate in the European Union. The Jacques Delors Institute is in charge of dissemination in the Horizon 2020 ENABLE.EU project which aims to understand the drivers of individual and collective energy choices and to investigate the interrelations between these choices and their impact on regulatory, technological and investment decisions.

www.institutdelors.eu @DelorsInstitute www.enable-eu.com @ENABLE_EU