

# Investigating the role of socially normative behaviours to deliver water efficiency

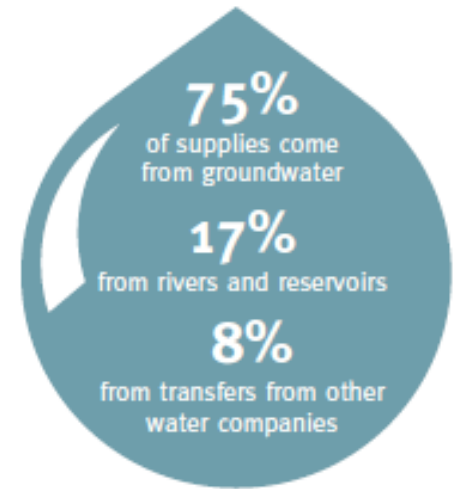


# Collaboration Background

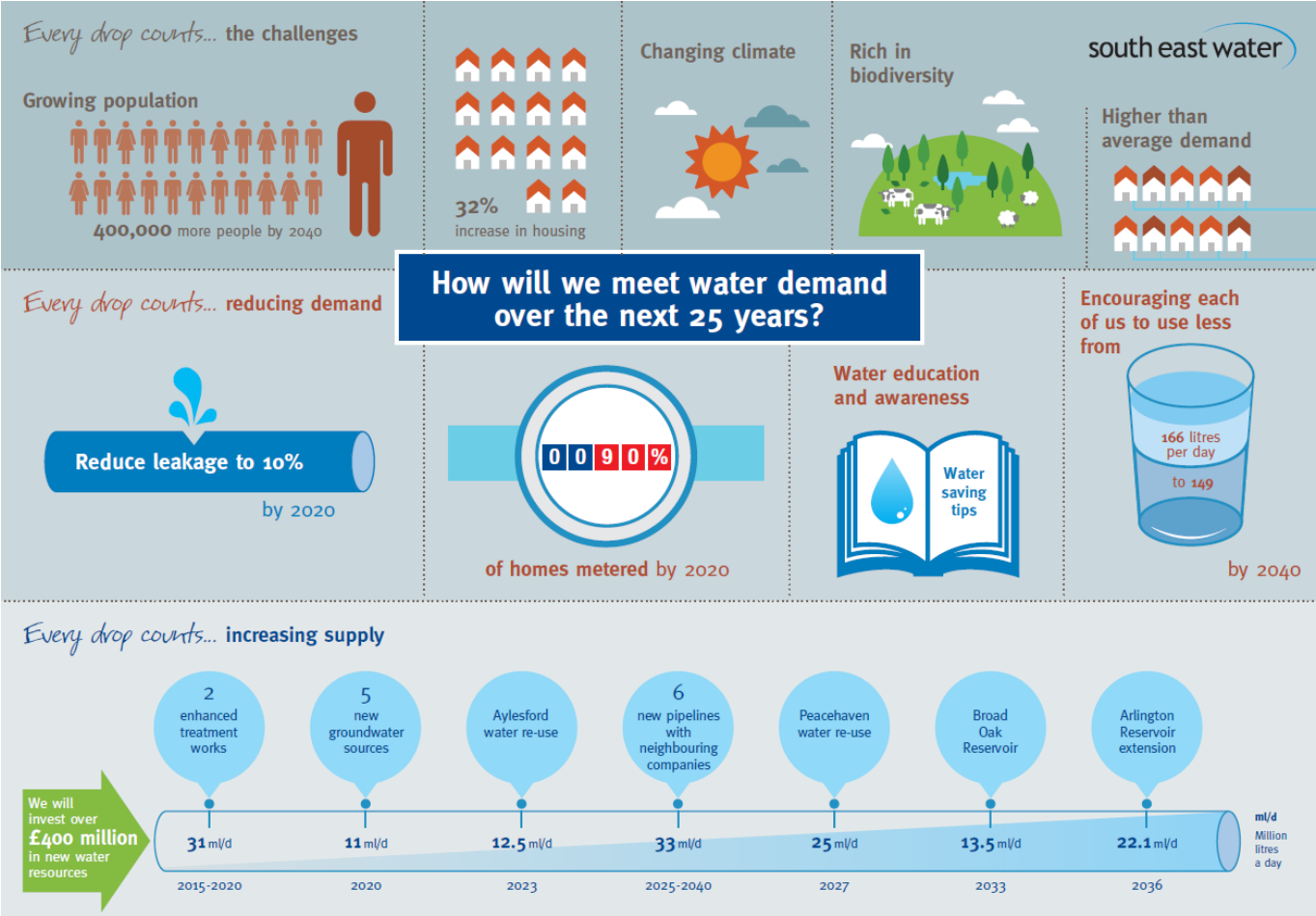
- » Collaboration began in June 2016
- » We went live with the first experiment in November 2016
- » Several run of experiments since Go-Live
- » New experiments commencing in April 2017

# About South East Water

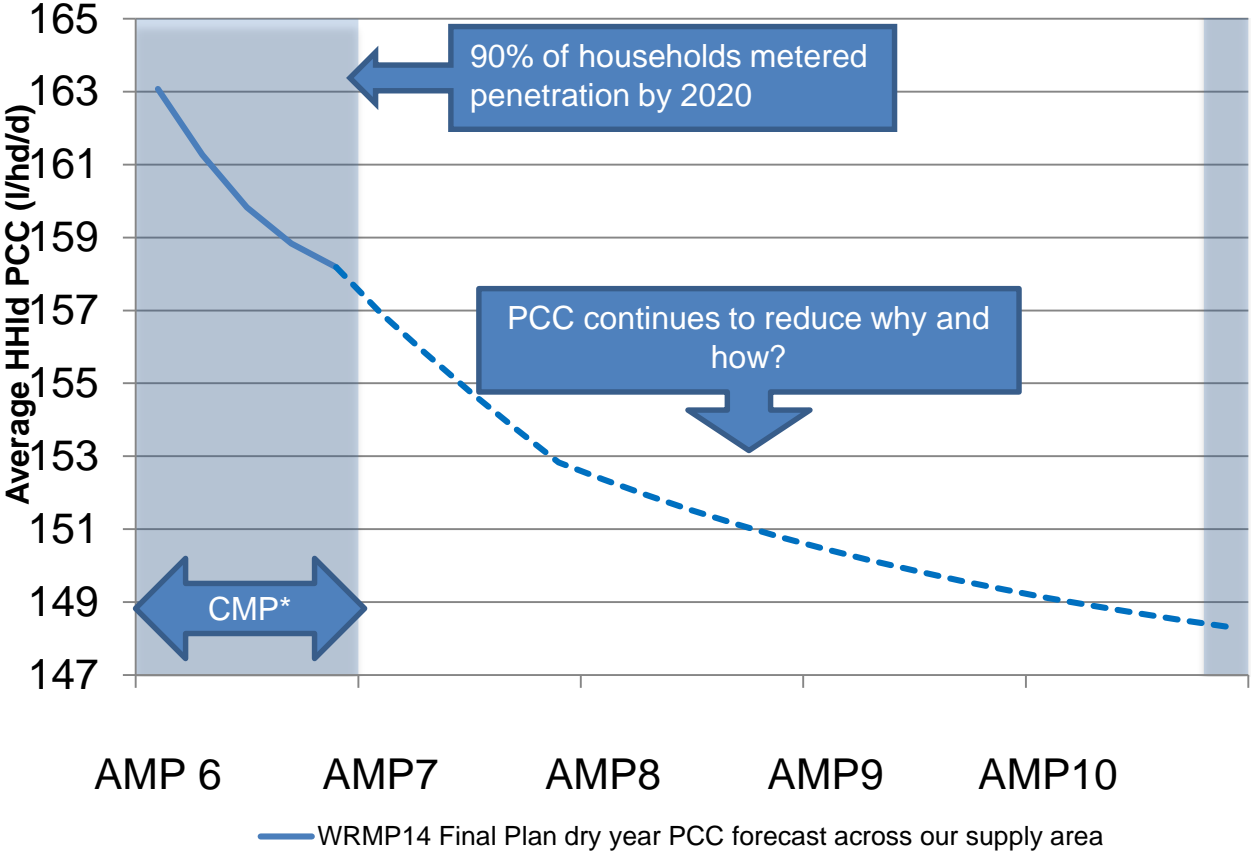
- » Supply drinking water to 2.1 million consumers, and over 890,000 properties across parts of Kent, Sussex, Surrey, Hampshire and Berkshire
- » Second largest water-only company in the UK. Largest is Affinity Water
- » Average use of water in normal years is 157 litres per person per day compared to industry average of 140 litres per person per day
- » Supply on average 540 million litres each day, rising to 700 million litres a day during summer peak periods
- » 14,500km mains, 93 treatment works, 150 boreholes, 339 pumping stations, 197 service reservoirs and 4 surface reservoirs



# Our water resources management plan



# Our ambition to reduce per capita consumption



\*CMP – Customer Metering Programme

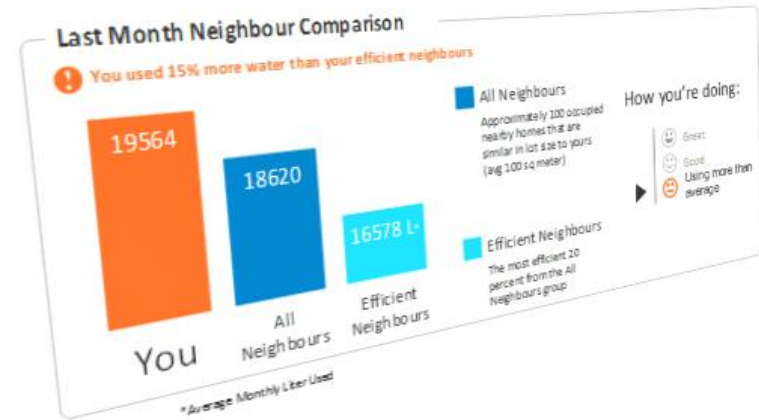
# About Advizzo

Helping Utilities to engage consumers to better understand their usage and motivate them to save water, energy and money, making them happy to do so.

Advizzo offers an agile and configurable, cloud based analytics **Behavioural Customer Engagement solution.**

Headquartered in London and founded in 2015

4+ clients in the UK



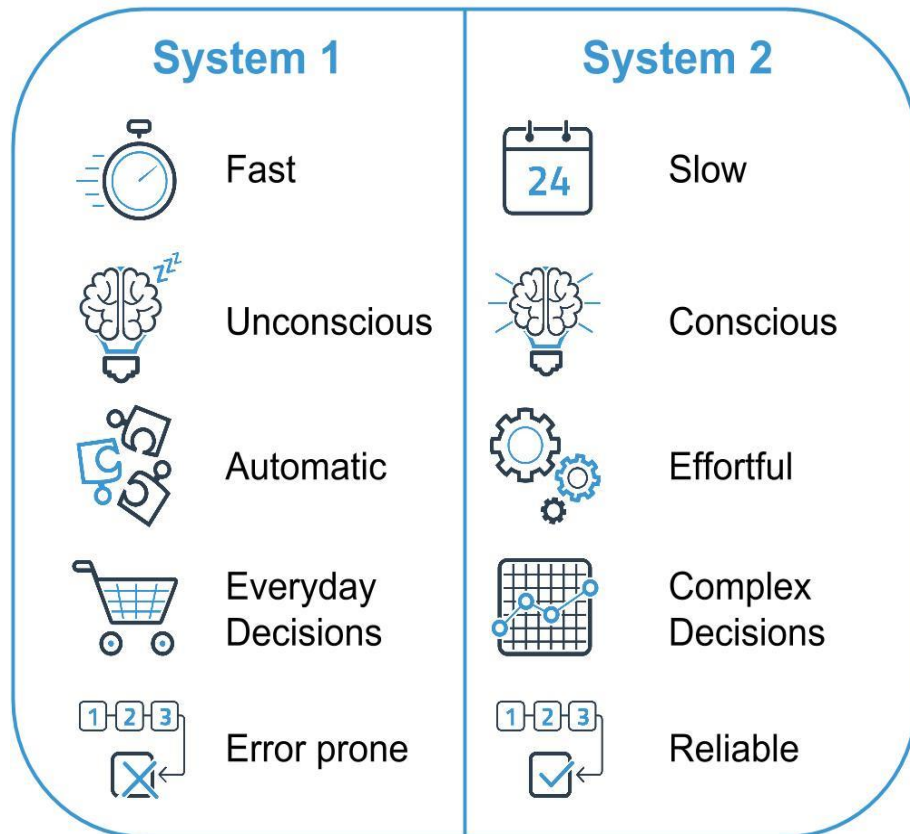
Partners involve in our projects

**waterwise**



Pure know h<sub>2</sub>ow

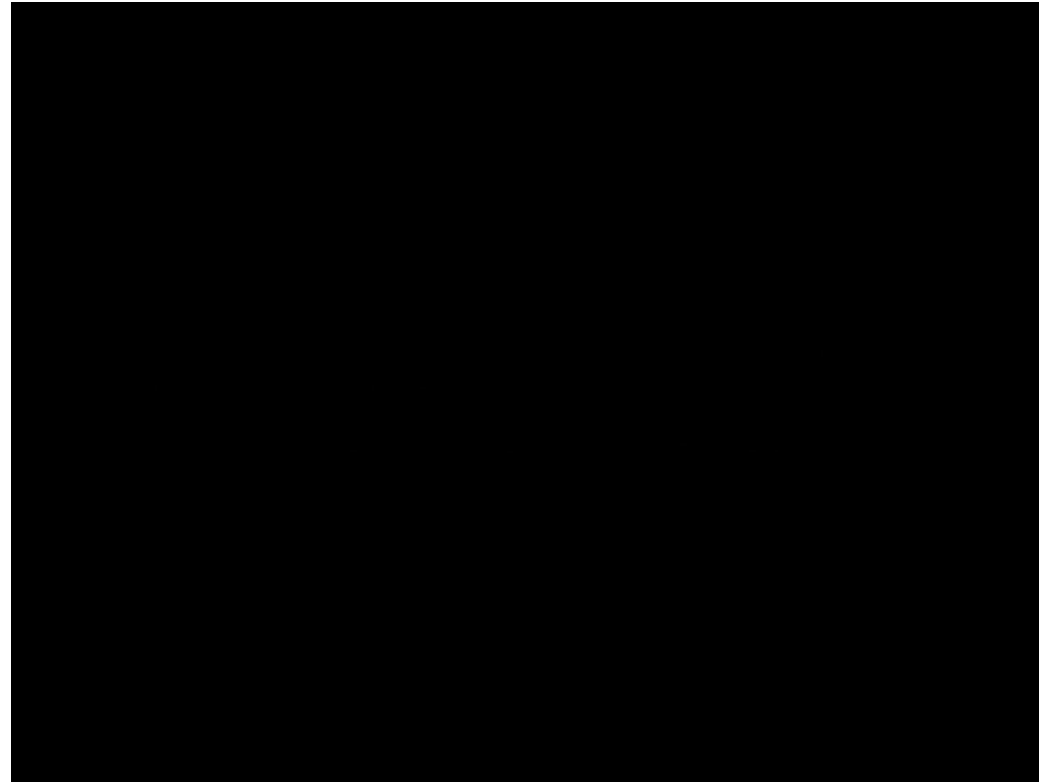
# Let's use **behavioural sciences** to unlock customer efficiency



**(2+2) vs (24 x 69)**

- System 1 is fast and intuitive
- System 2 is slow and deliberative

# We have an attention problem...





# Some hard facts

- » We spend around 550 hours a year on social media
- » Women spend around 90 hours a year deciding what to wear
- » Men spend around 90 hours a year staring at women
- » Households spend 9 minutes a year thinking about their utilities
- » That's less time than they spend a year thinking about the Kardashians (Alt-facts)



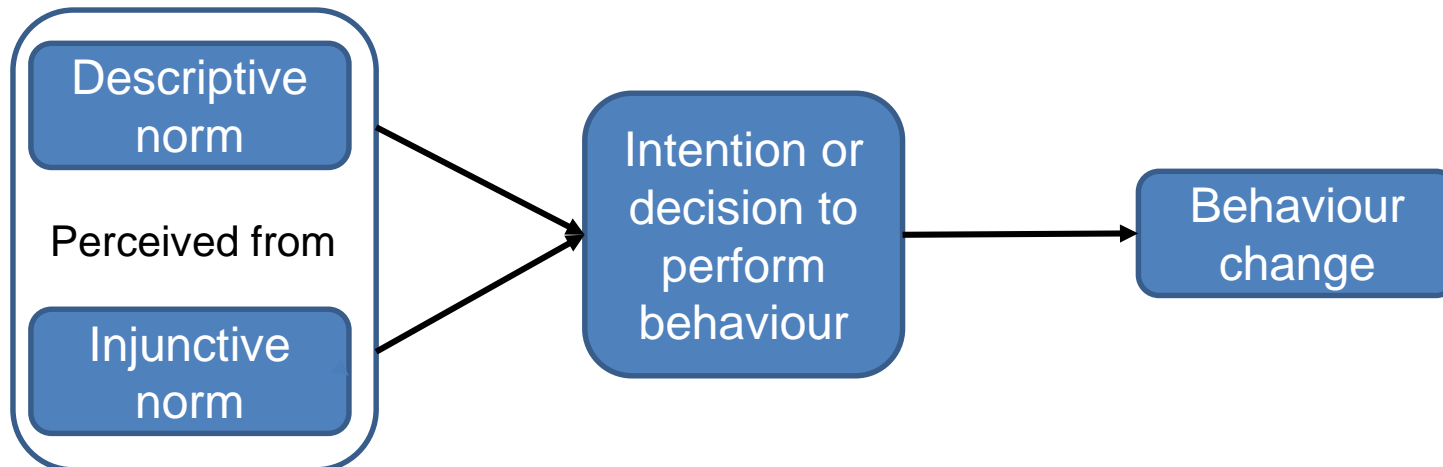
9 min

# Social information is important

- » Why do we spend so much time on social media?
  - » That's what everyone else is doing (reference point)
  - » We want to know how we fit in (reference point)
- » **Social information is useful to system 1**
- » So how can water companies make use of this?
  - ▶ **Implementing “Social Norm” comparison**

# Normative Social Influence

- » Descriptive norms
  - People's perceptions of how people actually behave
- » Injunctive norms
  - People's perceptions of which behaviours are approved of or disapproved of by others
  - What you 'ought' to do/the moral right



# Door hanger experiment



Schultz P. W., Nolan J. M., Cialdini R. B., Goldstein N. J., Griskevicius V. (2007). The Constructive, Destructive, and Reconstructive Power of Social Norms. *Psychological Science*, 18(5), 429-434.

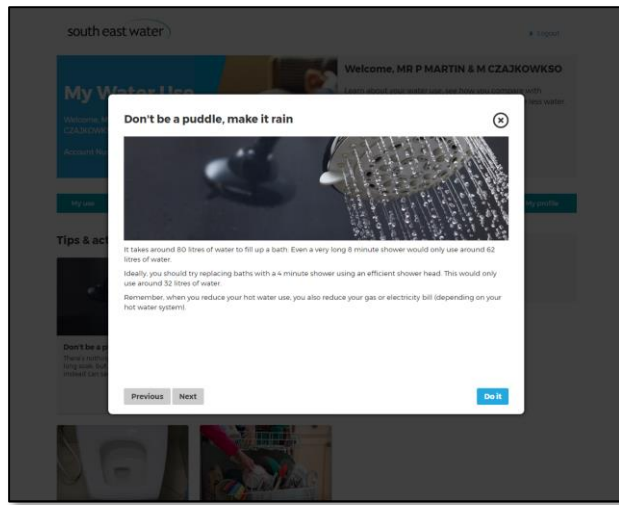
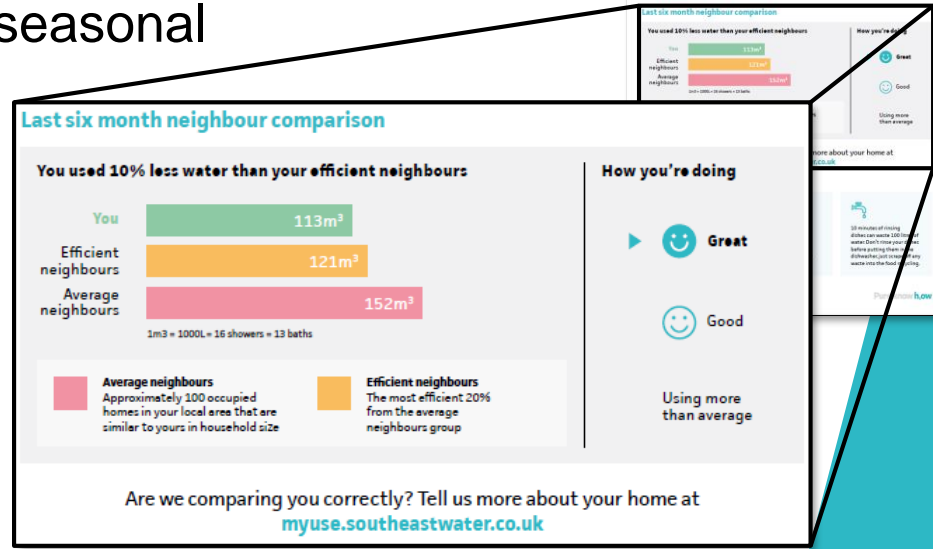
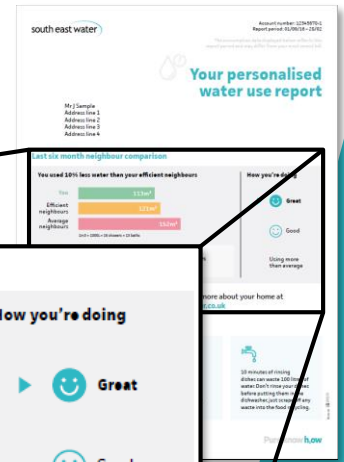
# Applied to water

- » Comparison of water consumption between similar households
  - » Similar means same occupancy and same property type (house vs flat)
- » Descriptive norm: How much you consume compared to your “neighbours”
- » Injunctive norm: You’re doing good or bad



# The intervention

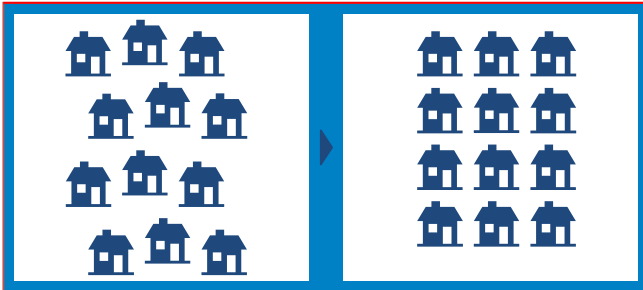
- » Complementing SEW User Experiences
- » Water use report every quarterly/six months
- » Bi-Monthly engagement around seasonal tips (emails, SMS)
- » Neighbour comparison graph
- » Localized tips to save water
- » Opt-out programme



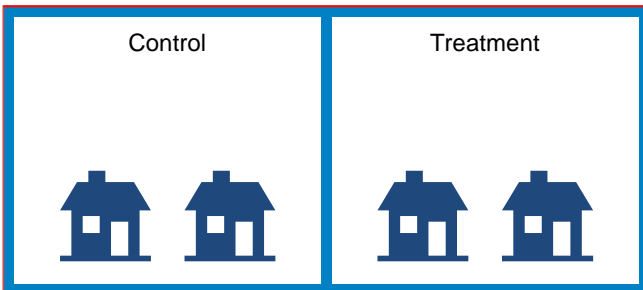
# How do we measure the programme results ?

**Measurement and Verification** (“M&V”) engine allowing us to run several **A/B Testing** processes at the same time, providing a **Randomised control trials** approach to accurately measure key program performance metrics

Segment households



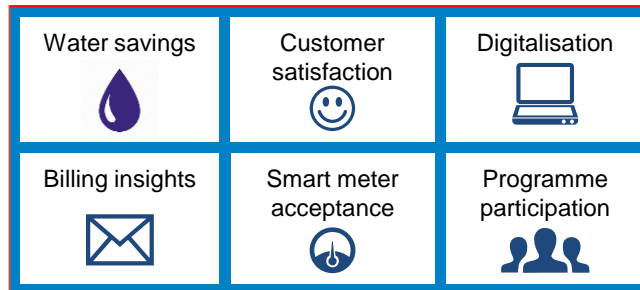
Establish statistically equivalent groups using randomisation



Qualify homes to ensure outliers are excluded from measurement



Measure key program metrics



**Measure and Verification** (M&V) using “Randomised Control Trial” allowing to measure every KPI with the most important accuracy and taking into account all external factors (such as weather or effect from other programmes).

We also collaborate with independent evaluators to verify the efficacy of our savings numbers.

# Early results and learnings

- » **Digitalisation :**
  - » Sign up/account creation/registration: + 300 % vs previous campaigns
- » **Better data accuracy:**
  - » Dramatically improve the customer data cleansing/accuracy (e.g. divorced couple, duplicate email address, capture of email addresses, etc...)
- » **Better knowledge of customers, enhanced customer segmentation**
  - » Home survey completed: over 65%
  - » Increase the detection social tariffs eligibility
  - » “After the meter” leaks detection
- » Increase **customer satisfaction, trust** and **brand image** of the company
  - » Enrichment of the call center agents customer support as “trusted advisors”
  - » One of the key success factor: unified customer experience (SEW look and feel), from consumer to call center agent
- » Behavioural science levers are local. Make it work locally.
- » **Water saving** verification is on the way (expt. to be between 2%-4%)



# We're always experimenting....

- » **Beyond Social Norms: Apply other behavioural principles :**  
Future experiments will determine the impact of other feedback interventions:
  - » Personal comparison, Public Commitments
  - » Loss aversion, Goal setting
  - » Increase Feedback, More targeted segmentation
  - » Advanced Insights Disaggregation
- » What is more effective, paper or email?
  - » When is the best time to send emails?
- » We know social norms work...but what could be better?
- » Customer Satisfaction vs. Customer Happiness
  
- » **Artificial Intelligence** Tips Engine - Tailored targeted tips for more savings
- » **Natural language Processing** to better support Customer Service team

