

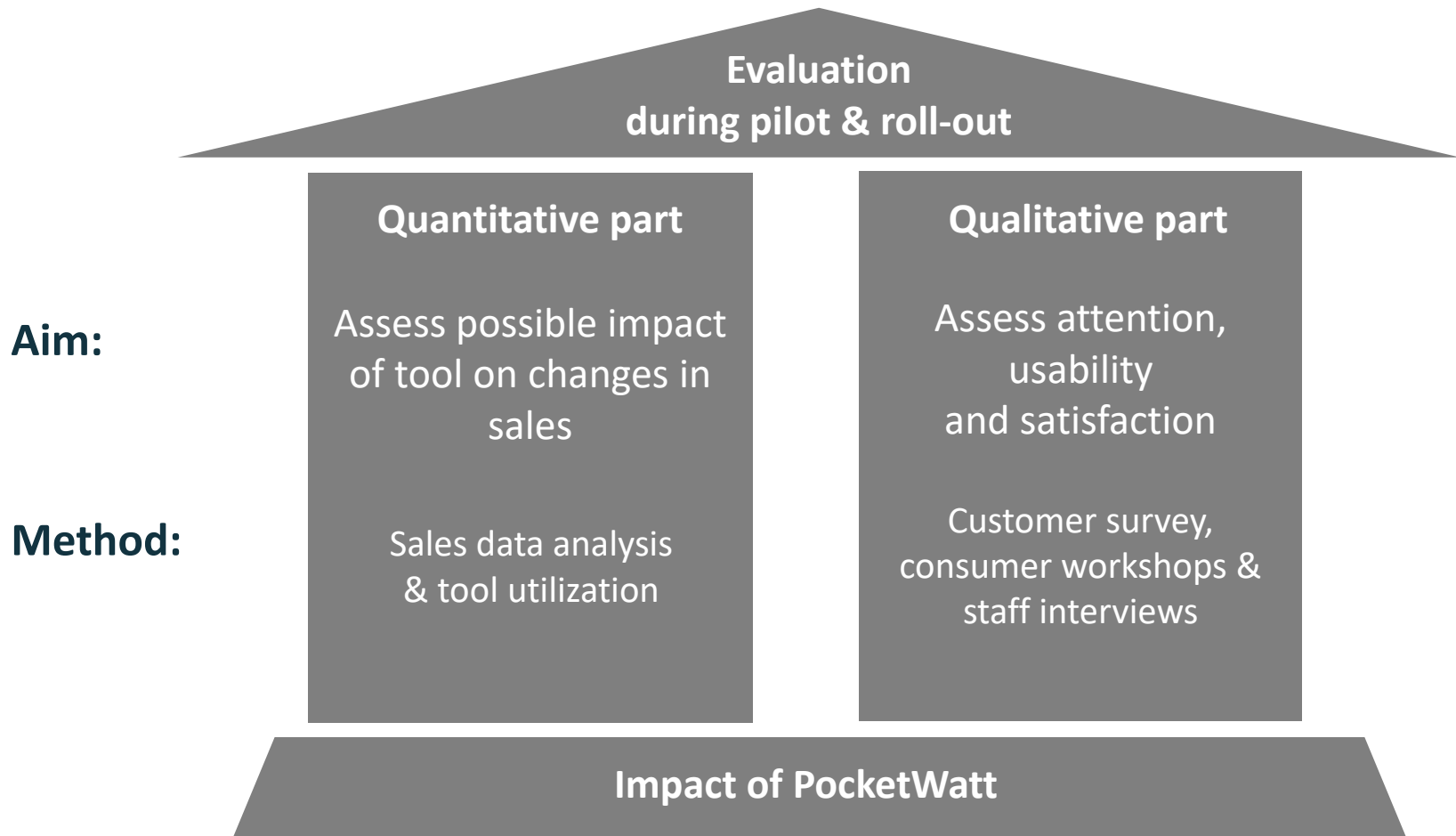


# Digi-Label Tool – Project Evaluation and Impact

Final Project Meeting, Brussels, 26<sup>th</sup> March 2019

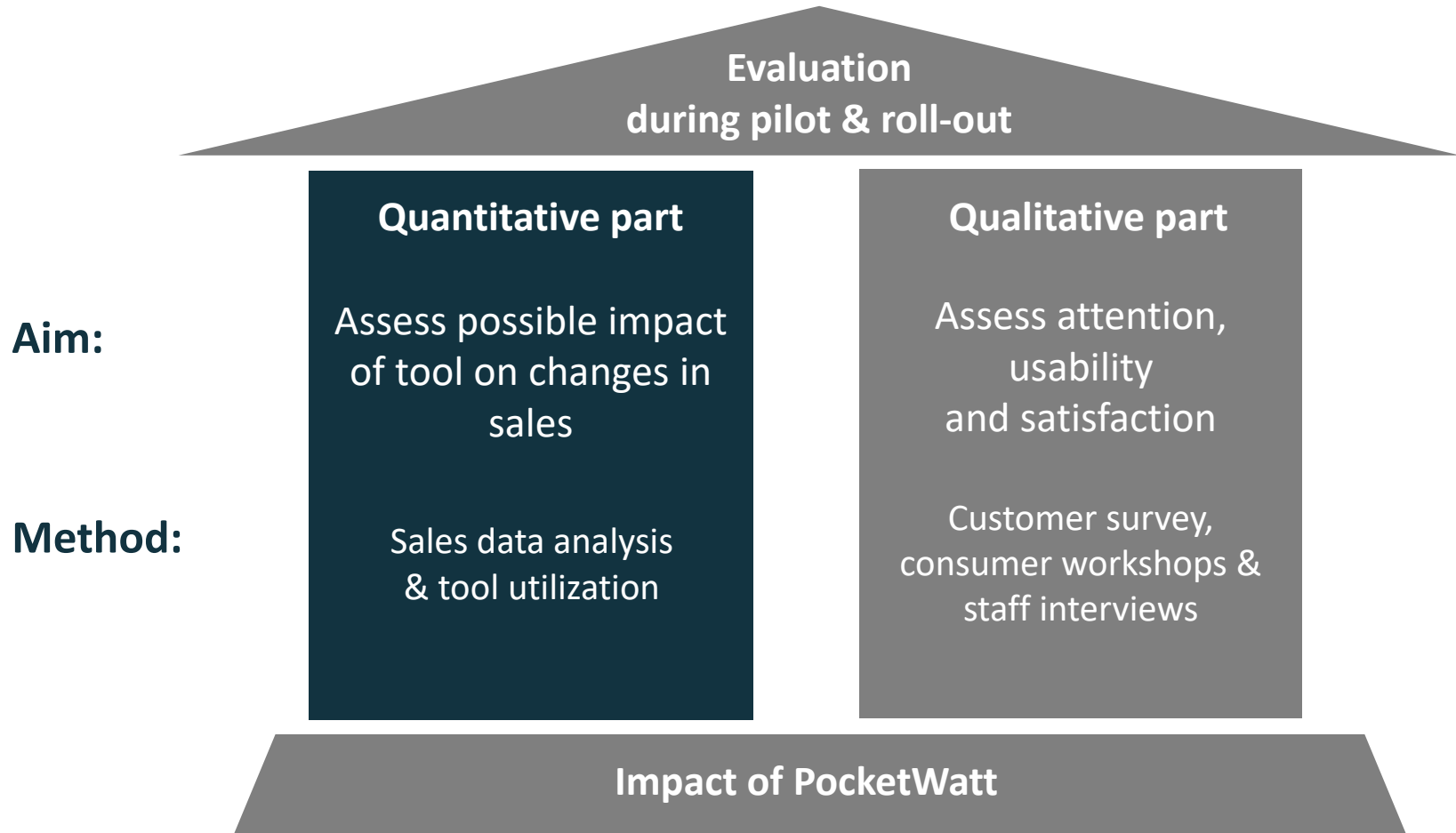
# Overview of the evaluation

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# Quantitative analysis

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# About the quantitative part

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**Aim:** Identify energy savings due to the implementation of the Digi-Label project / usage of PocketWatt

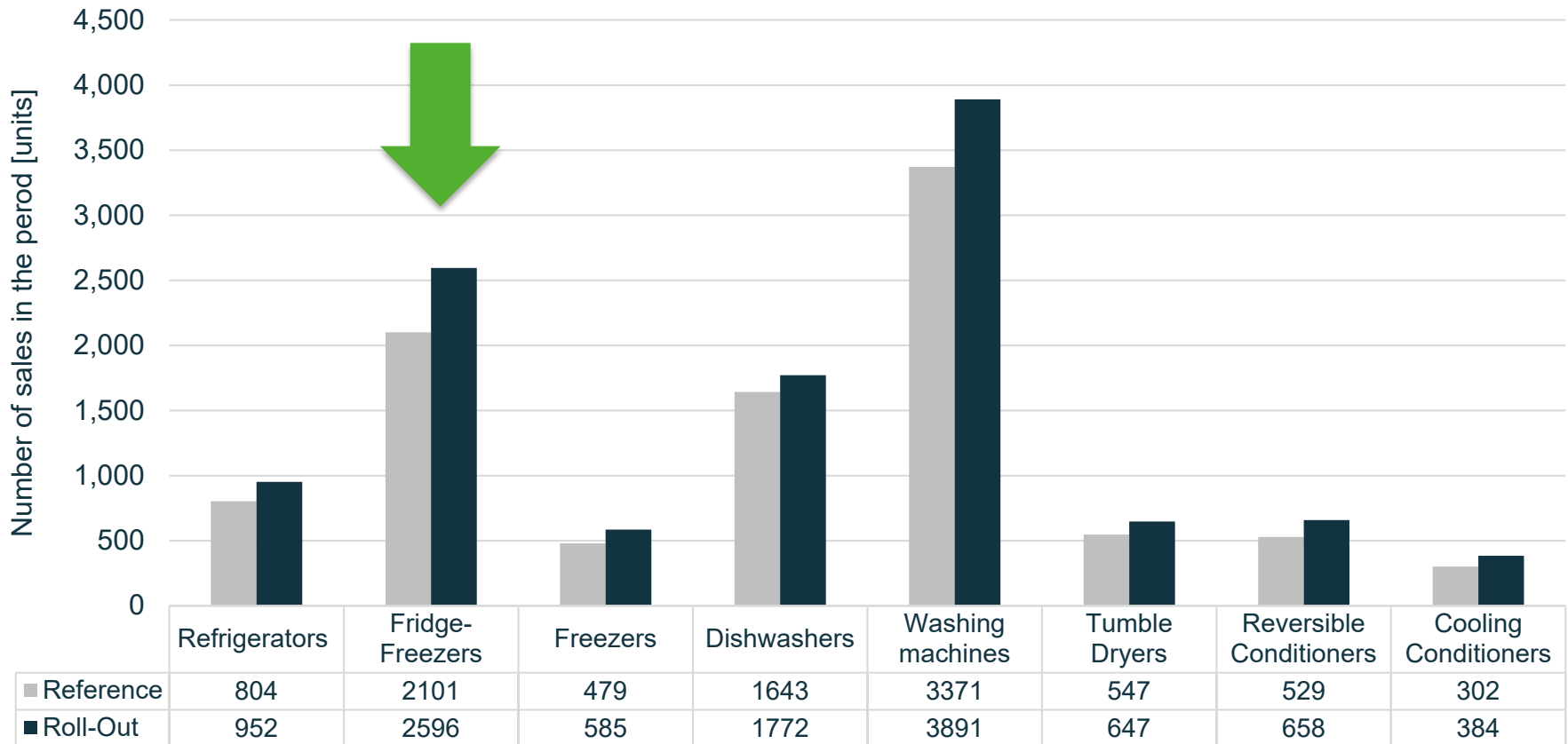


**Hypothesis:** Pocket-Watt will lead to a visible shift in sales of more energy-efficient appliances

➔ **Difficulty:** Need for a “counterfactual situation”

➔ **Idea:** Compare the structure of sales during roll-out to sales during a reference period

# Overview of products in evaluation sample from ES and CZ (11 stores)



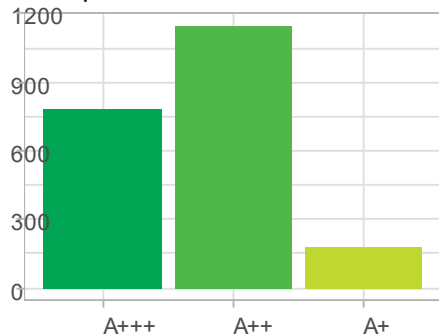
Sales data from periods of 3 months

# Fridge-Freezers: Sales by classes

Number of appliances

Reference: Refrigerator-freezer

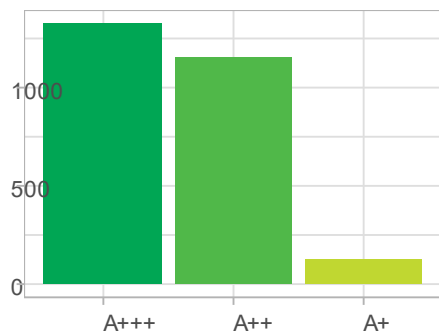
Samples: 2101 units



Number of appliances

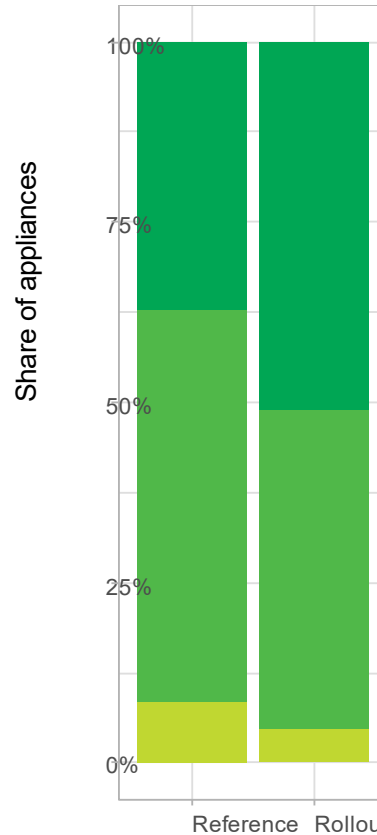
Roll-out: Refrigerator-freezer

Samples: 2596 units



Refrigerator-freezer

Samples: 2101 ref. / 2596 rol.



Class	Sample 2017 [%]	Sample 2018 [%]	Change [%-points]
A+	8.5%	4.8%	-3.7%
A++	54.4%	44.2%	-10.2%
A+++	37.1%	51.0%	+13.9%

## Note:

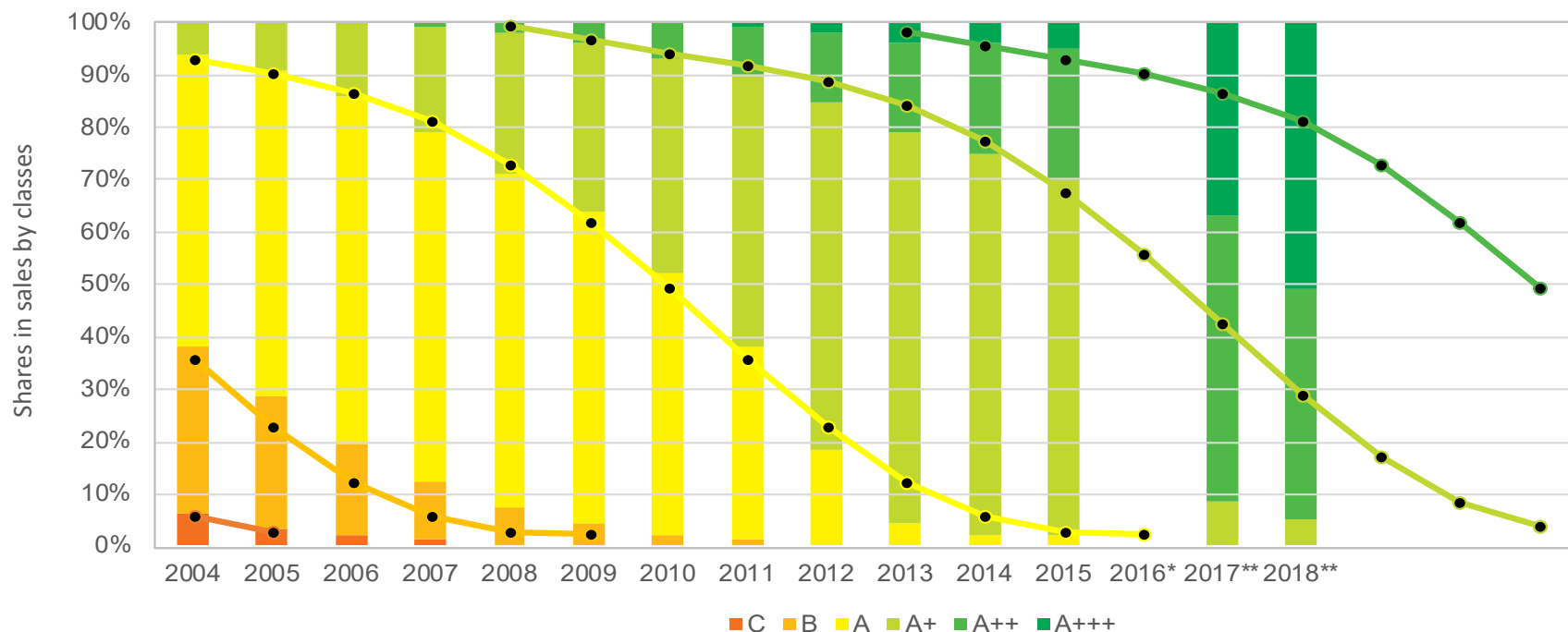
- Available labels limited to A+++ to A+

## Observations:

- Many A+++ units
- Clear trend towards more efficient devices

# Fridge-Freezers: Market comparison

Source: Shares 2004 to 2015: Michel et al. (2016); Lines: own extrapolation; Shares 2017 and 2018: Reference and roll-out shares



Class	Expected change in projection [%-points]	Observed change in sample [%-points]
A+	-13.4%	-3.7%
A++	+7.8%	-10.2%
A+++	+5.6%	+13.9%

- **Observation:** Stronger shift towards more efficient sales as market projection
- **Note:** Limits of available data (historical data: “refrigerators”, projection, generality, etc.)

# Further insights and conclusions from quantitative data

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- Reduction in average absolute consumptions: The averages in terms of consumption per **fridge/freezer** for the rollout is approximately **-9.4 kWh/a** or about **4% lower** than in the reference case.

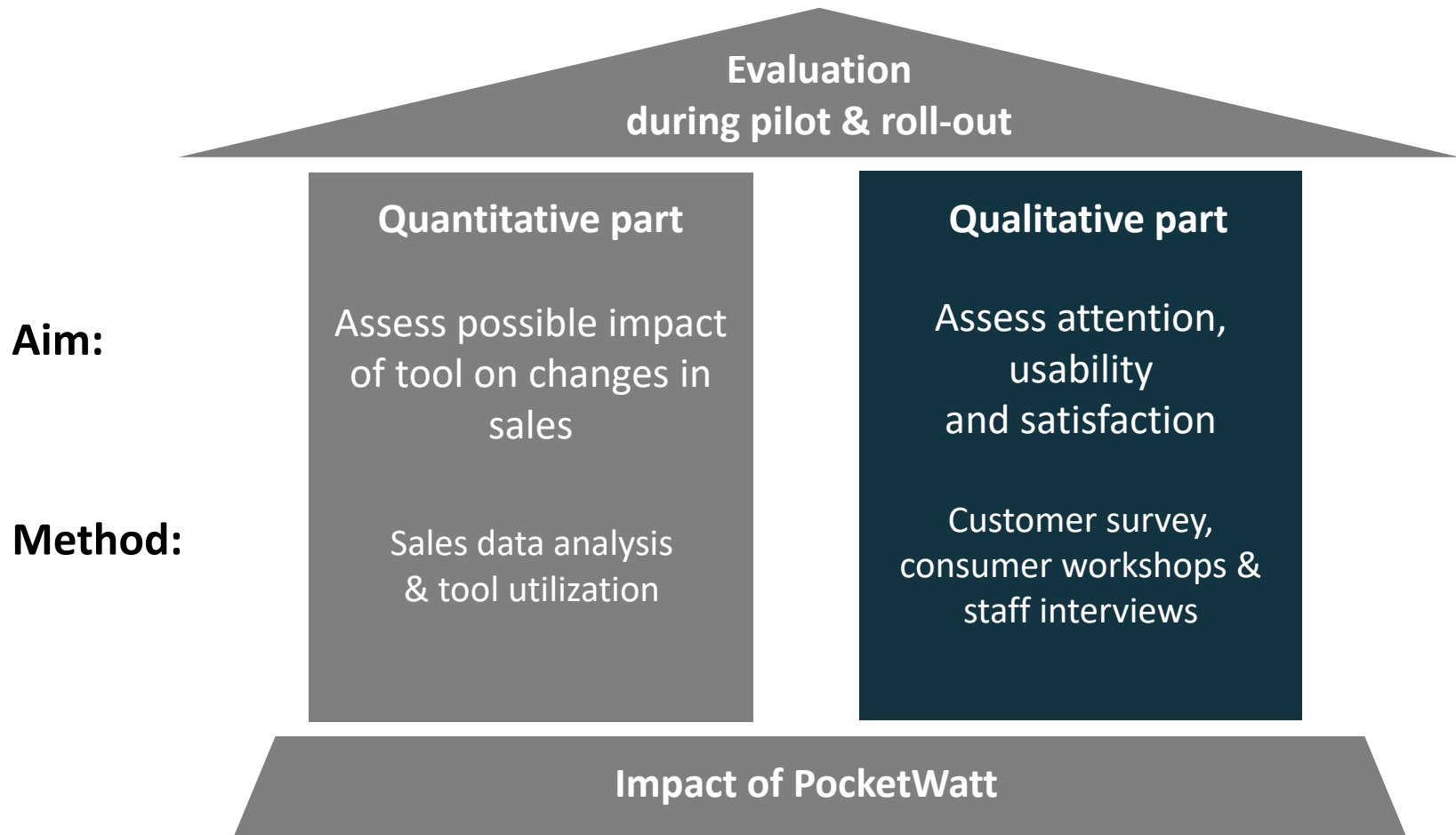
## *Other product groups:*

- Trend towards more efficient classes from reference to roll-out
  - Exception: Reversible and cooling conditioners
- General trend towards less consumption
  - Refrigerators increase despite slight improvement in efficiency classes; cooling conditioners decrease despite slight deterioration in classes



# Qualitative analysis

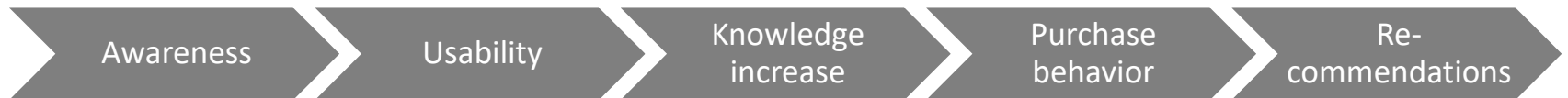
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# Approach for the qualitative evaluation in the rollout

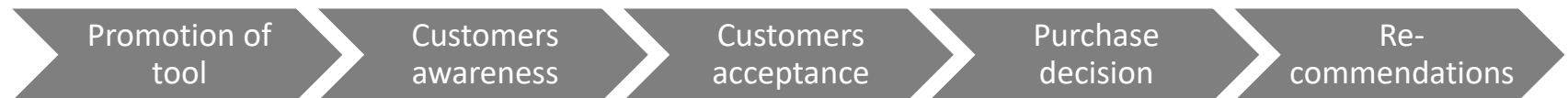
## Customer perspective: variety of sources

- **Customer surveys** at the point of sale (standardized interview questionnaire for approx. 5 min) (*only Spain, n=53*)
- **Additional data sources:**
  - Short online-based customer surveys in the tool and on social media (reduced version of customer survey questionnaire) (*cross-country and UK, n=21 / n=22*)
  - Short customer surveys for participants of a fair (reduced version of customer survey questionnaire) (*Italy, n=119*)
  - Additional customer workshop: group discussion with customers at the point of sale (*Germany, n=7*)

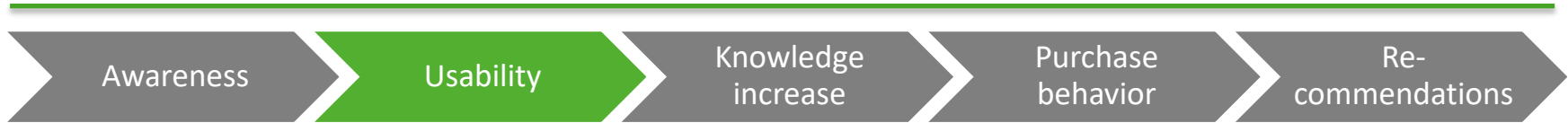


## Retailer perspective

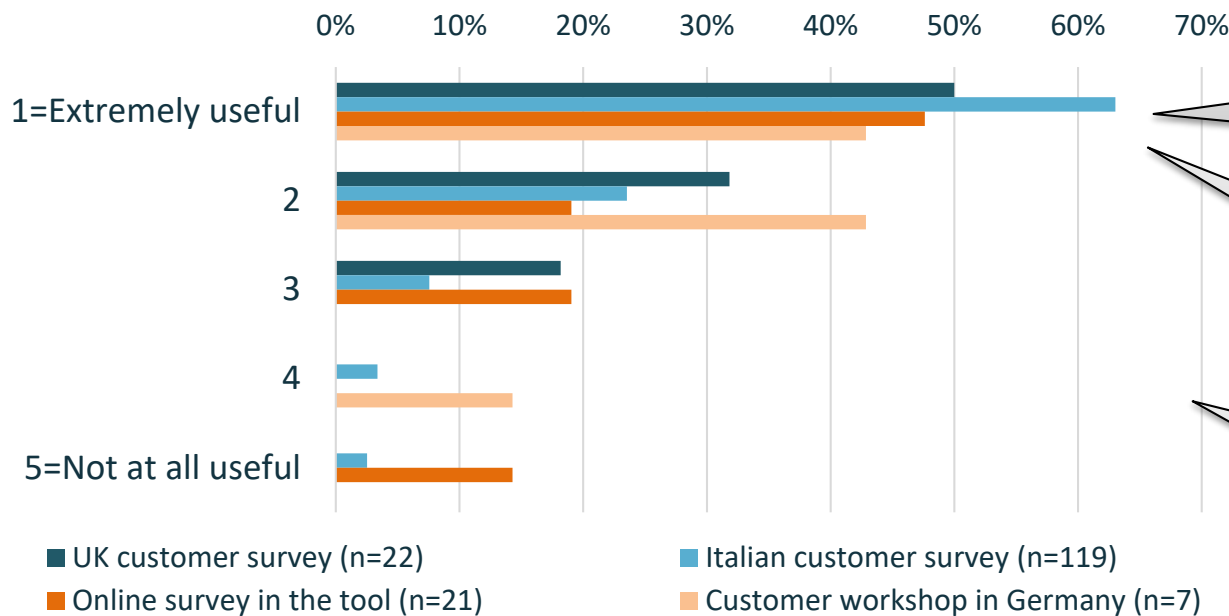
- **Interviews with shop employees** (interview guideline with open questions) (*Germany, UK, Spain, Czech Republic; n=19*)



# Results for the customer perspective



Overall evaluation of PocketWatt: Results from the additional data sources



Customer workshop:

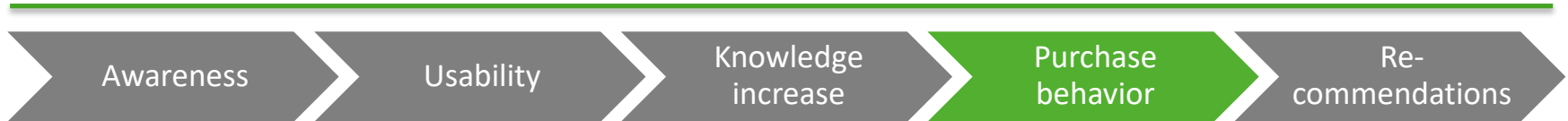
*'Works immediately [...] No mistakes in it, clean app. Works.'*

*'Sure, great at first sight. Very user-friendly.'*

*'...a few more arguments have to be added. But that's a solid basis.'*

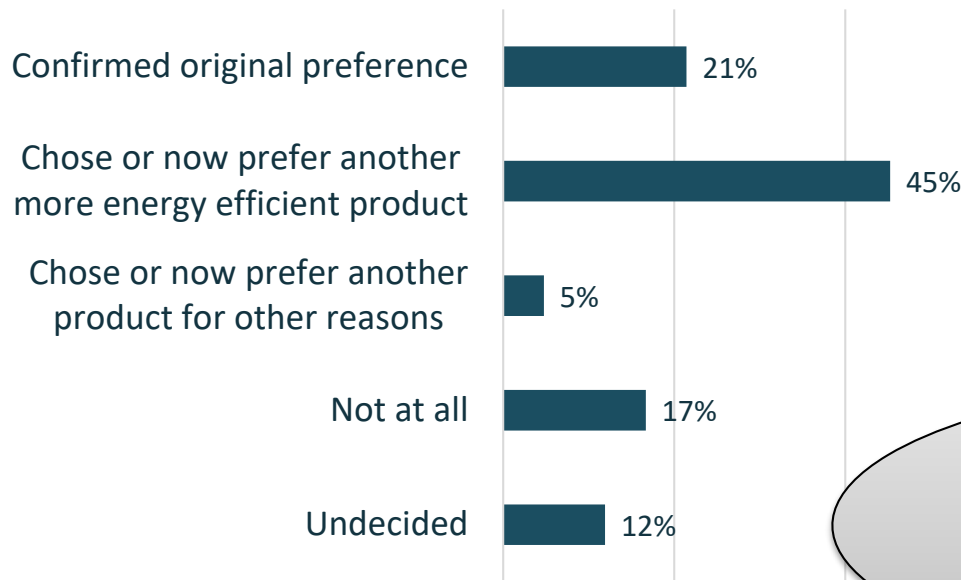
**Note:** Due to the very small sample sizes, especially at the customer workshop, the percentage values are for comparison only, but not to be generalised

# Results for the customer perspective



How did PocketWatt influence the (planned) purchase decision?

Results from the customer surveys  
(Spain, n=53)



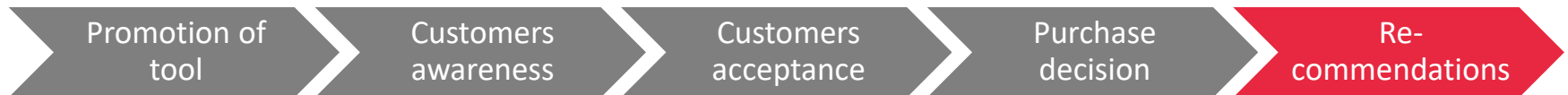
Results from customer survey in Spain were confirmed by the other surveys.

Expected influence on the purchase decision discussed in more detail in customer workshop:

- Household appliances are not bought as often and are used for a long time → purchase is well considered, variety of information sources is used.
- PocketWatt can act as orientation guide in purchasing process by simplifying the research process.

*'I wouldn't buy [the appliance] at that moment either, but I think that simplifies the research process for the purchase. You just have everything together, [...]*

# Results for the retailer perspective



- **Increase retailer engagement:**
  - More training and support for the retailers (e.g. printing the QR codes etc.) to implement the tool
- **Increase customer awareness and acceptance for the tool:**
  - **Highlight** QR code visually
  - **Advertise** PocketWatt (e.g. in mass media or social media)
  - **Improve** the tool (include more features like break-even analysis, runtime of the appliances or more filtering options)
  - **Link** PocketWatt und EU Energy Label more closely:
    - Integrate energy efficiency class in the QR code to understand reference to energy efficiency
    - Integration of PocketWatt in EU Energy Label and make PocketWatt mandatory
    - Change names of PocketWatt to something EU related to create official and familiar character

# Conclusions from the evaluation

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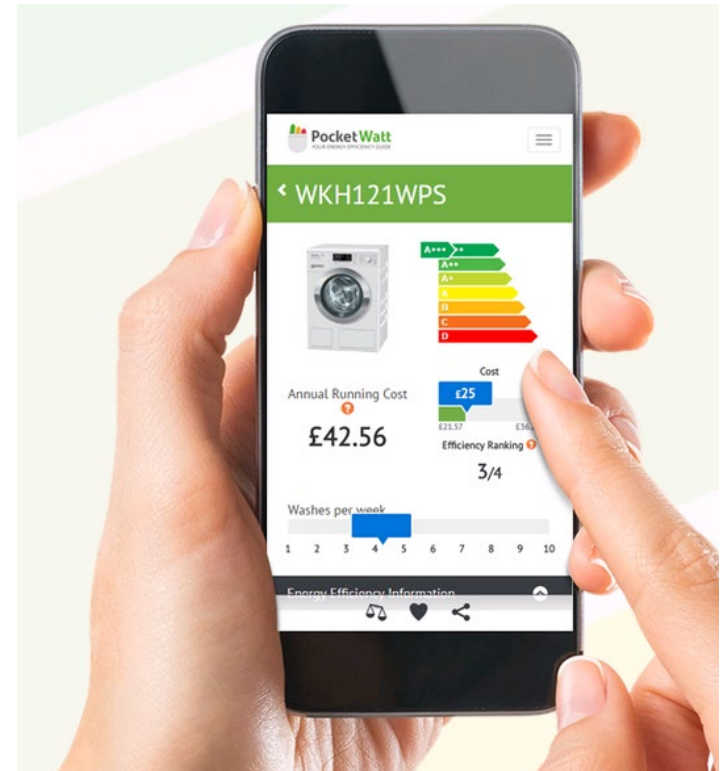
- Tool is perceived positively and useful by customers, in particular, if they receive assistance in accessing and using the tool.
- For the majority of customers using the tool leads to an increase of knowledge, that means, the **tool has achieved its objective by complementing the conventional energy label and making it more useful** for consumers
  - The tool has thus the potential to have an **impact on the purchase decisions** of customers
- The interviewed staff personnel was more sceptical...
  - because energy efficiency is not a top priority for many customers
  - because the technical requirements (smartphone, internet connection and QR-code scanner) can make the use of the tool difficult
  - because promoting the use of the tool in the shop requires effort... however, the majority is convinced of PocketWatt and believes it should be more advertised
  - **Cautious assumption:** Considerable energy savings could be achieved in case of a wide deployment

# Thank you

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# Impact (performance indicators)

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- To **achieve 90 GWh** of primary energy savings by consumers appliances
  - *first estimation on energy savings in roll-out: around 0.3 GWh*
- To **expose consumers** to enhanced and improved information on the energy consumption of appliances at the point of purchase
  - *see next slide*
- To **influence consumers** so they actively consider the energy consumption of appliances as part of their purchasing decision
  - *seems to be confirmed, see slide 16: 45 % state they now prefer to buy a more efficient product*
- To **instigate the wider adoption** of these digital solutions by policy makers and market actors

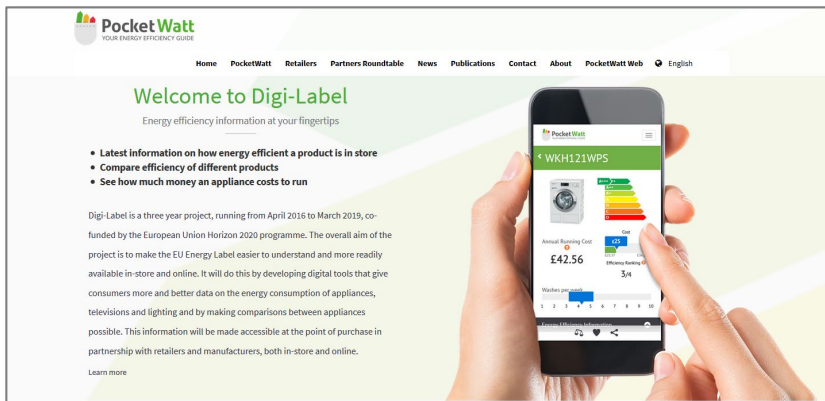
# Impact on customers (preliminary)



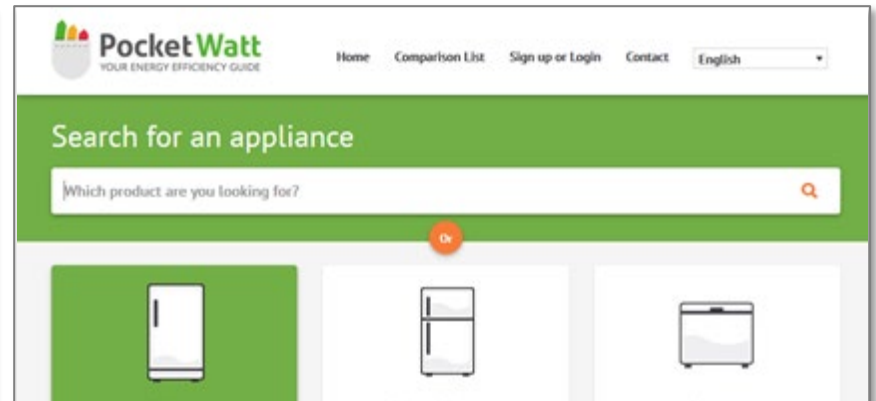
In-store: Up to 700 000 expositions



Widget: 200 000 renders & 1200 clicks



Website: ca. 5000 users & 7500 sessions (tbc)



Tool: ca. 1500 users (tbc)

# D6.5 Summary on evaluation activities including impact assessment

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- Overall aim: Compilation of results from the different data sources and implementation phases
- Contents
  - Comparison of roll-out and pilot results (perspective: aggregated instead of following individual data sources as in D6.3 and D6.4)
  - Success factors and barriers
  - Impact of digi-label and wider impact
  - Future of digi-label in the context of EPREL