



# On Site Energy Consultation Evaluation of a Project of Verbraucherzentrale NRW

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Ministerium für Klimaschutz, Umwelt,  
Landwirtschaft, Natur- und Verbraucherschutz  
des Landes Nordrhein-Westfalen



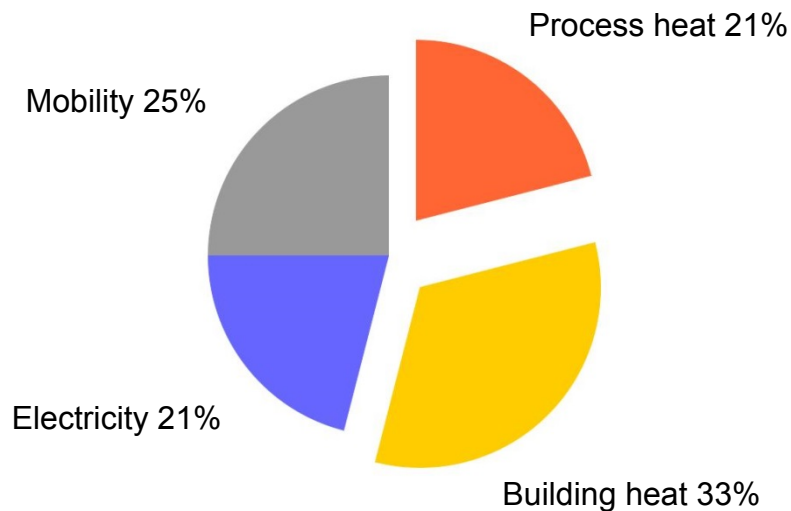
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Investitionen in Wachstum  
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## Background „Energiewende“

### Final Energy Germany 2013



- in Germany 33% of CO<sub>2</sub> emissions are connected with heating of buildings
- german „Energiewende“ targets a reduction of energy consumption in sector heating of buildings
  - 20 % until 2020
  - 80% until 2050
- we need to increase the rate of energetic renovation of buildings from about 1% to at least 2% per annum
- we have to adress mainly private owners
- NAPE (December 2014) policy - instruments: regulations, fundings, information+consulting



## Objectives of our Project in NRW



- establishes an attractive energy consultation on site
- addresses private owner of small residential buildings (max 6 units)
- easy access, low costs
- individual and useful recommendations and informations about energetic renovation measures
- funded mainly by EU EFRE program and NRW government



## Characteristics of the Consultation

- consultation on site, duration about 60-90 minutes
- performed by employed and self employed consultants
- total 6.000 consultations per year
- low cost for participants: 60 € per consultation
- overall costs: about 200 €
- active marketing
- additional offers like thermographic examination





## Scheme of Consultation Process

- easy access: information/registration at the hotline, we organize contact with consultant (and billing/payment)
  - consultation includes
    - assessment of status quo of building envelope, heating system
    - recommendations for measures, specific costs, approximate savings
    - funding programmes suiting to the recommendations
  - afterwords: hand over of the (standardized) short report per post/mail
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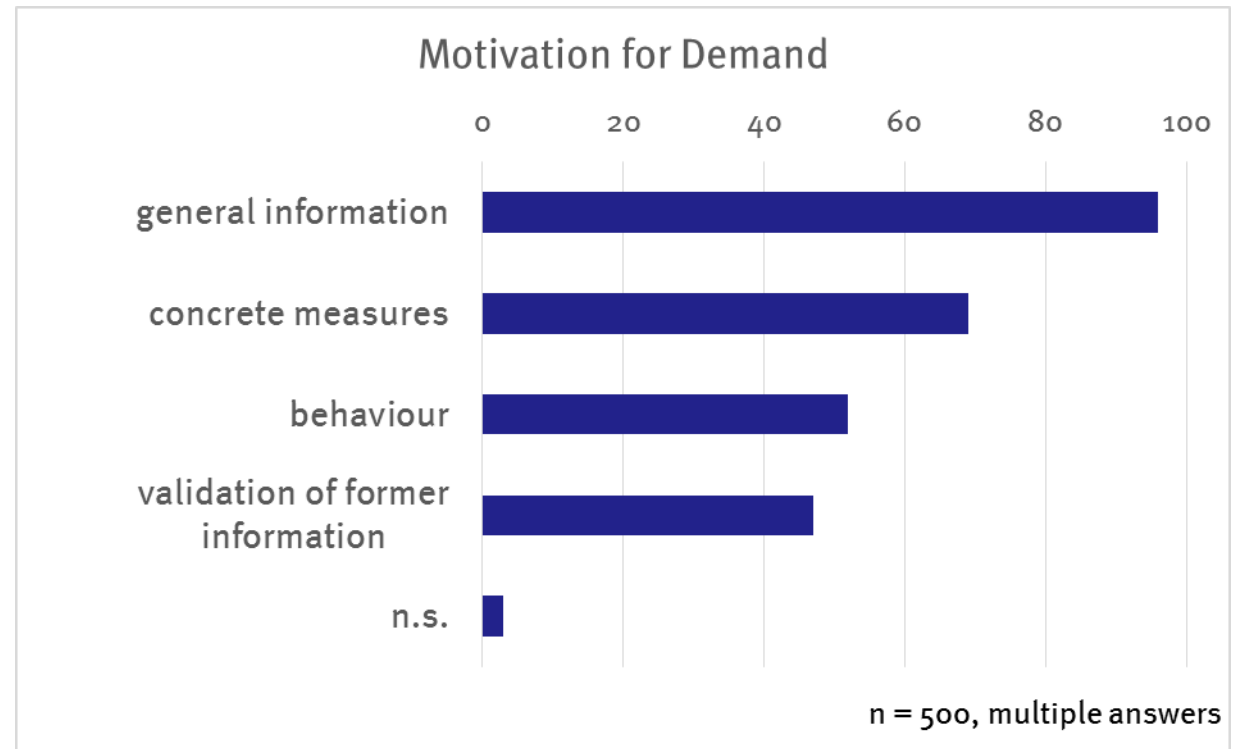
## Evaluation

- 500 (of 17.000) participants were selected and interviewed
  - we believe the survey to be (nearly) representative
  - the time gap between consultation and interview must be longer than one year
  - **research objective:**
    - who are the participants
    - what do they perform and what is the influence of the consultation
    - are there additional effects
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## Characteristic Features of the Participants

- 50% are older than 60 years
  - around period of retirement
  - children leave the home
  - phase of maximum income, money is available
- motivation: most frequently interested in general information

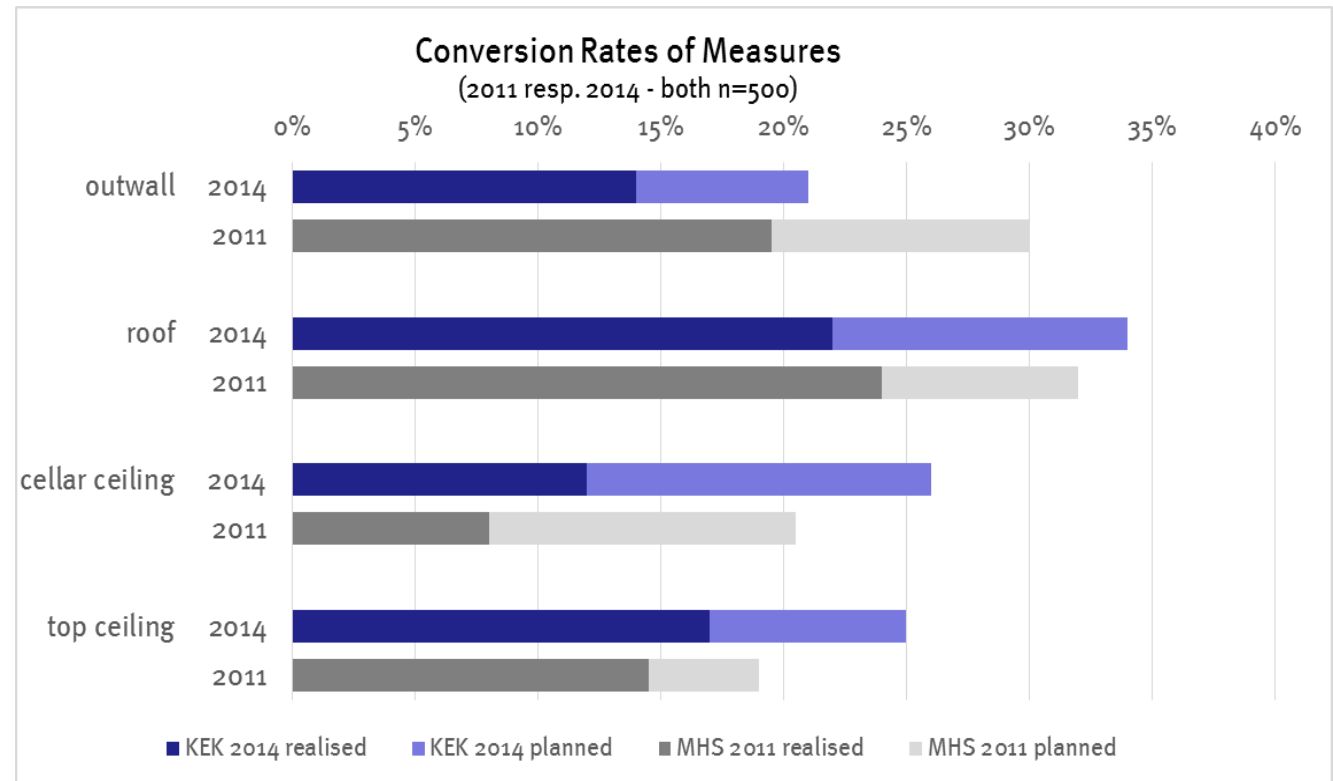






## Performing of Measures

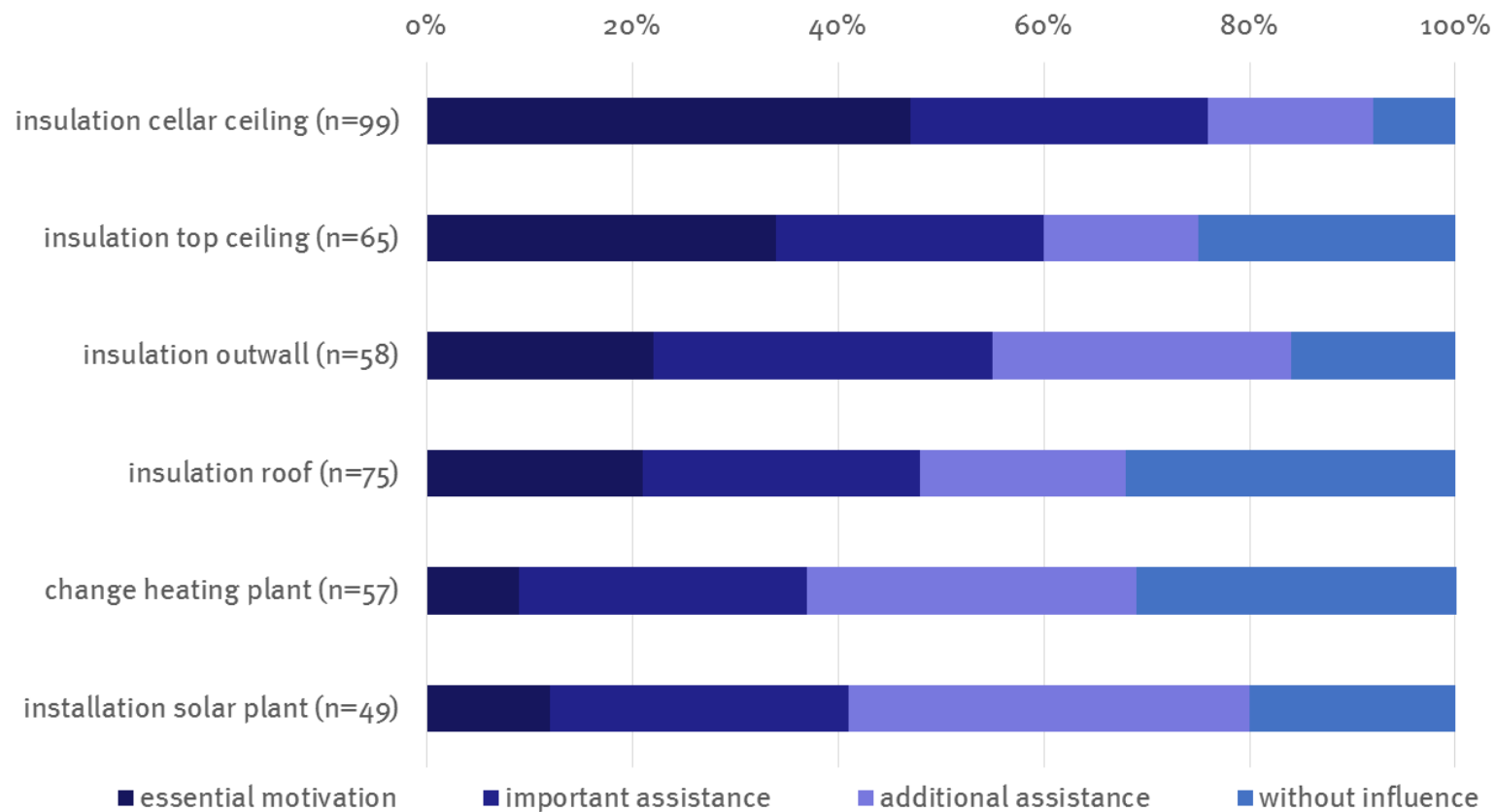
- only 12% haven't yet realised any measures
- already realised:  
2,4 measures per consultation
- realised and planned:  
2,9 measures





# Influence of the Consultation

Influence of the Counselling Process on the Conversion of Measures

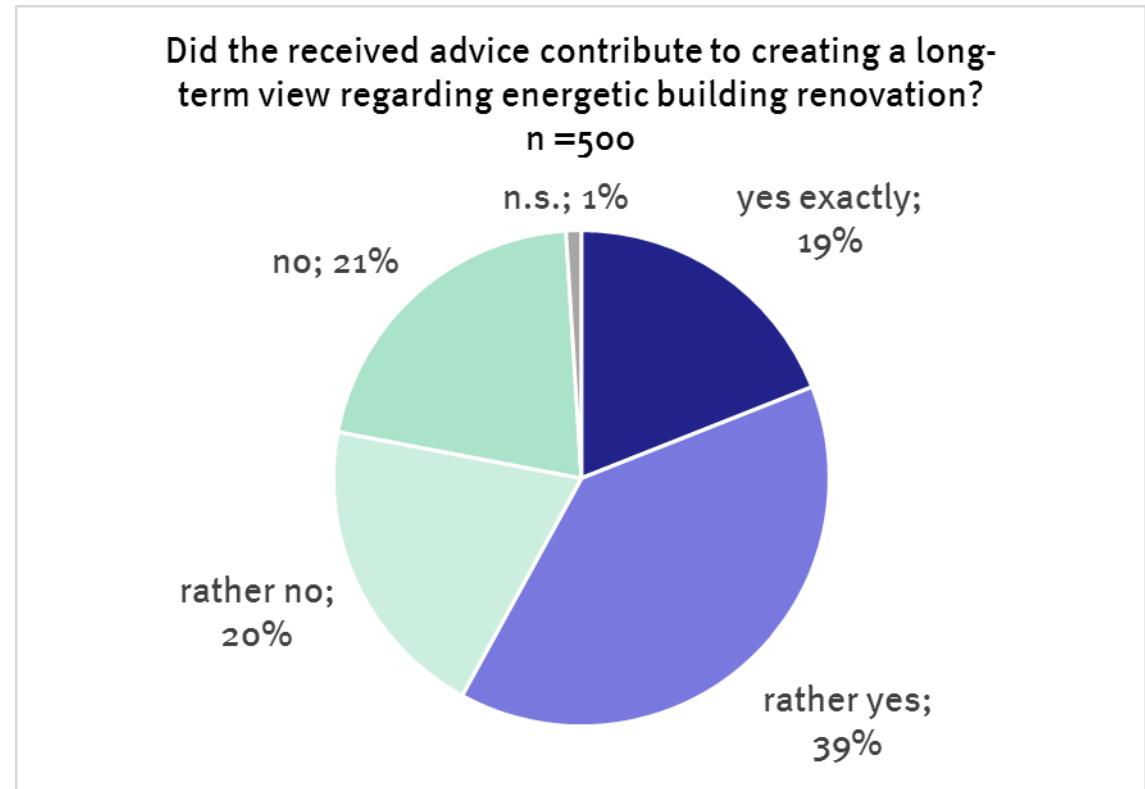


selection: only subjects who had not planned any measures before the advice



## Additional Effects of Consultation

- gives assessment of the current energy performance of the building
- reduces uncertainties if a measure makes sense at all
- helps avoiding wrong measures
- helps improving quality of measures and their realisation
- gives roadmap to comprehensive renovation





Last but not Least:

## Concrete Figures of Energy Saving Effects

- saving effects were calculated, not measured
  - energy saving effect of realised and planned measures is about 15% (4.500 kWh/a)
  - the net effect due to influence of the consultation is about one third (5%)
  - the average CO<sub>2</sub>-reduktion is about 2.7 t/a per building
  - the investment is about 14.000 € (only realised measures)
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## Conclusions

- on site energy consultation influences decisions concerning energetic renovations in a positive way
- it increases rates of measures and improves the performance

## Objectives for the Future

- more research to get insight in the motivation of target groups, their decision making, their barriers
  - more evaluation of realised savings, quality of measures
  - development of standards to evaluate the effects of (public) funding or consultation programs
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Energie ist unsere Sache

**verbraucherzentrale**

*Nordrhein-Westfalen*

Thank you!

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