



INSTITUTE OF  
TECHNOLOGY  
ASSESSMENT

# E-participation in local climate initiatives:

Participants' assessments of process and impacts

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TECHNOLOGY ASSESSMENT AND POLICY  
AREAS OF GREAT TRANSITIONS  
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**OAW**  
Austrian Academy  
of Sciences

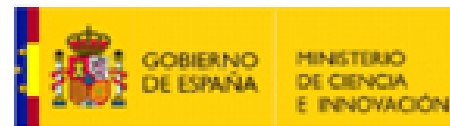
**Georg Aichholzer, Doris Allhutter, Stefan Strauß**

# „e2democracy“: **E**nvironmental **E**lectronic **D**emocracy

- (E-)participation of citizen panels in local climate policies
- European collaborative project ([www.e2democracy.eu](http://www.e2democracy.eu))
- Sponsored via ESF programme by grants from:
  - Austrian Science Fund (FWF): I 169-G16,  
German Research Foundation (DFG), Spanish Ministry of  
Science and Innovation

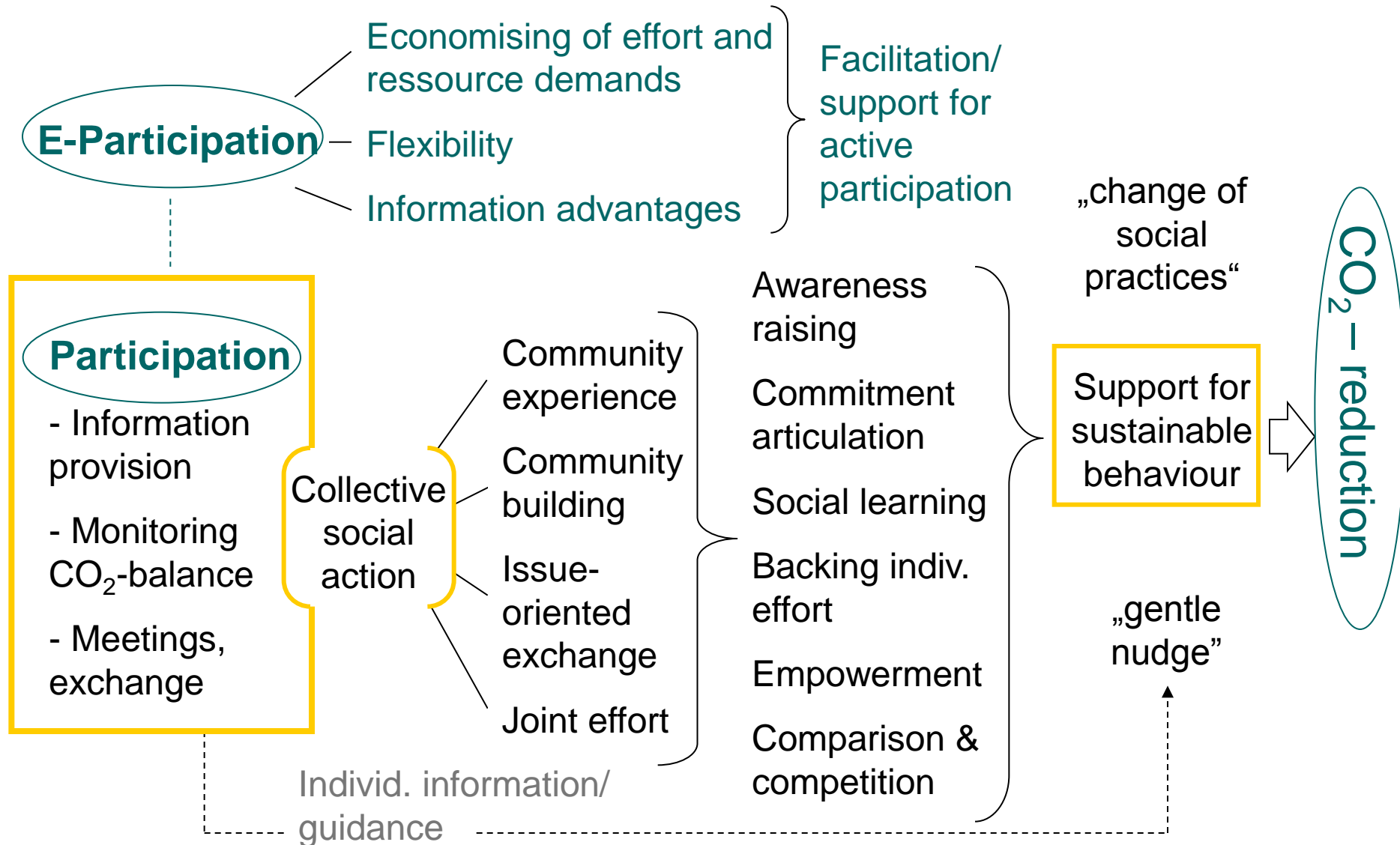
**FWF**

Deutsche  
Forschungsgemeinschaft  
**DFG**



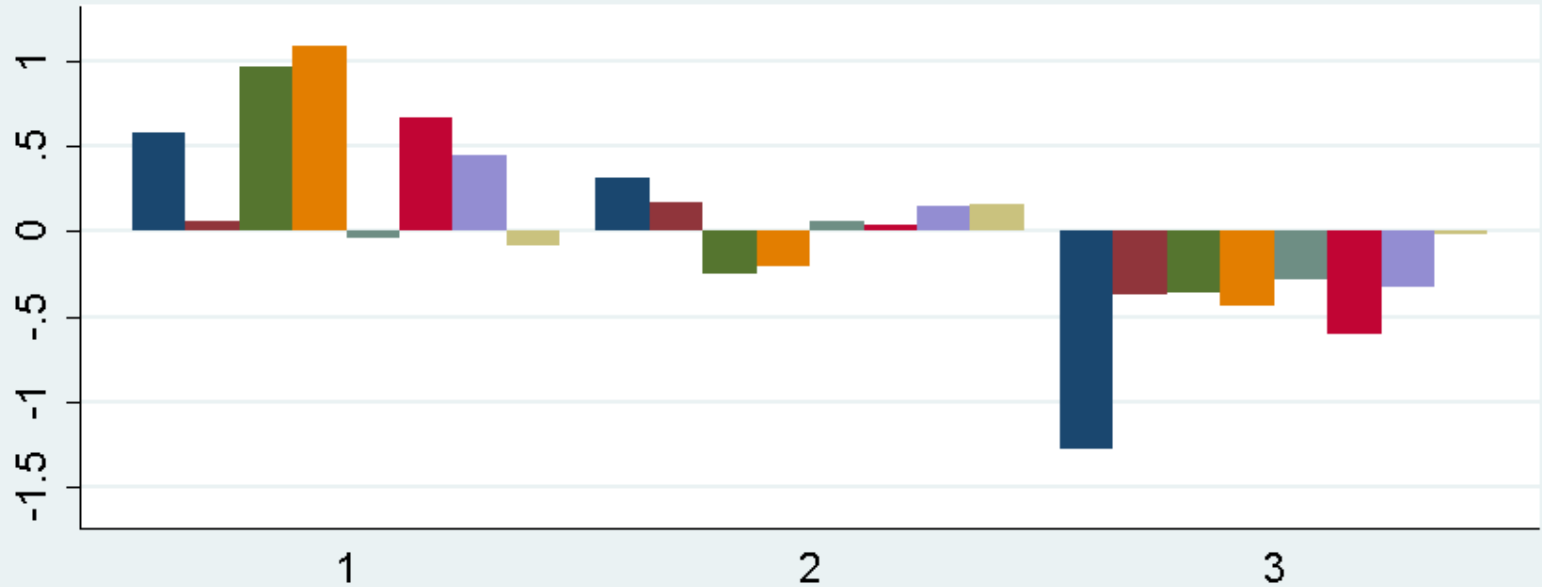
- View on participants' views and assessments
- Data base: panel surveys; local population surveys
- Links to current debates on role of behaviour change
  - „sustainable consumption“, „sustainable citizenship“
- Cleavage in theoretical discourse on effective response to climate change
  - “individualist” versus “systemic” approaches
  - rational choice models (e.g. Thaler/Sunstein 2008) versus
  - theories of social practice and system transition (e.g. Shove 2012)
- Focus here is on exploring participation potentials, partly against this background

# Hypotheses on participation effects



# Exploring panel profiles (cluster analysis)

Environmentalists 28%    Sensitised 51%    Less interested 21%



- information about climate change
- satisfaction with action against climate change
- interest in politics
- interest in environmental policies and climate saving
- satisfaction with local participation opportunities
- information about local measures
- motivation environmental issues
- motivation to save energy costs

# Cluster differences by country

	Austria	Germany	Spain	Total
<b>Cluster 1</b>	61% (19)	43% (51)	13% (26)	28% (96)
<b>Cluster 2</b>	29% (9)	41% (49)	60% (118)	51% (176)
<b>Cluster 3</b>	10% (3)	16% (19)	27% (52)	21% (74)
<b>Total</b>	100% (31)	100% (119)	100% (196)	100% (346)

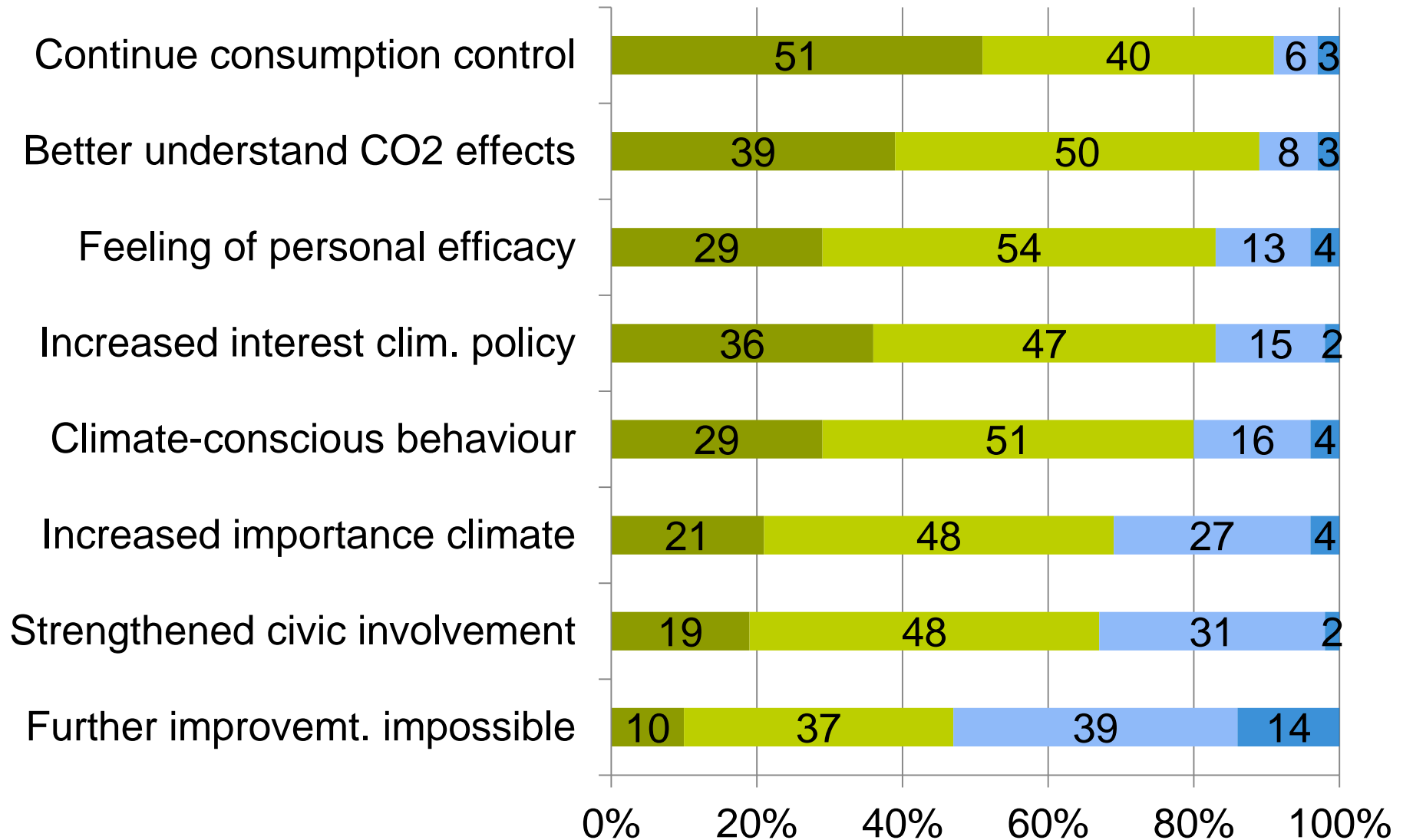
# Self-assessments of participation effects

(% agreeing “to a great / very great extent”)

	t <sub>1</sub> (N=372)	t <sub>2</sub> (N=342)
CO <sub>2</sub> -balancing shows relevance of my behaviour	89%	
.... provides action guidance	82%	
Community experience	67%	
Collective strengthens individual efforts	78%	
.... alleviates individual barriers	76%	46%
.... is irrelevant for personal CO <sub>2</sub> reduction	54%	
Comparison with others is important		61%
.... strengthens my efforts	57%	50%
.... shows I have contributed enough	40%	51%
Learned from exchange with others		30%

# Changes of attitudes and behaviour (N=342)

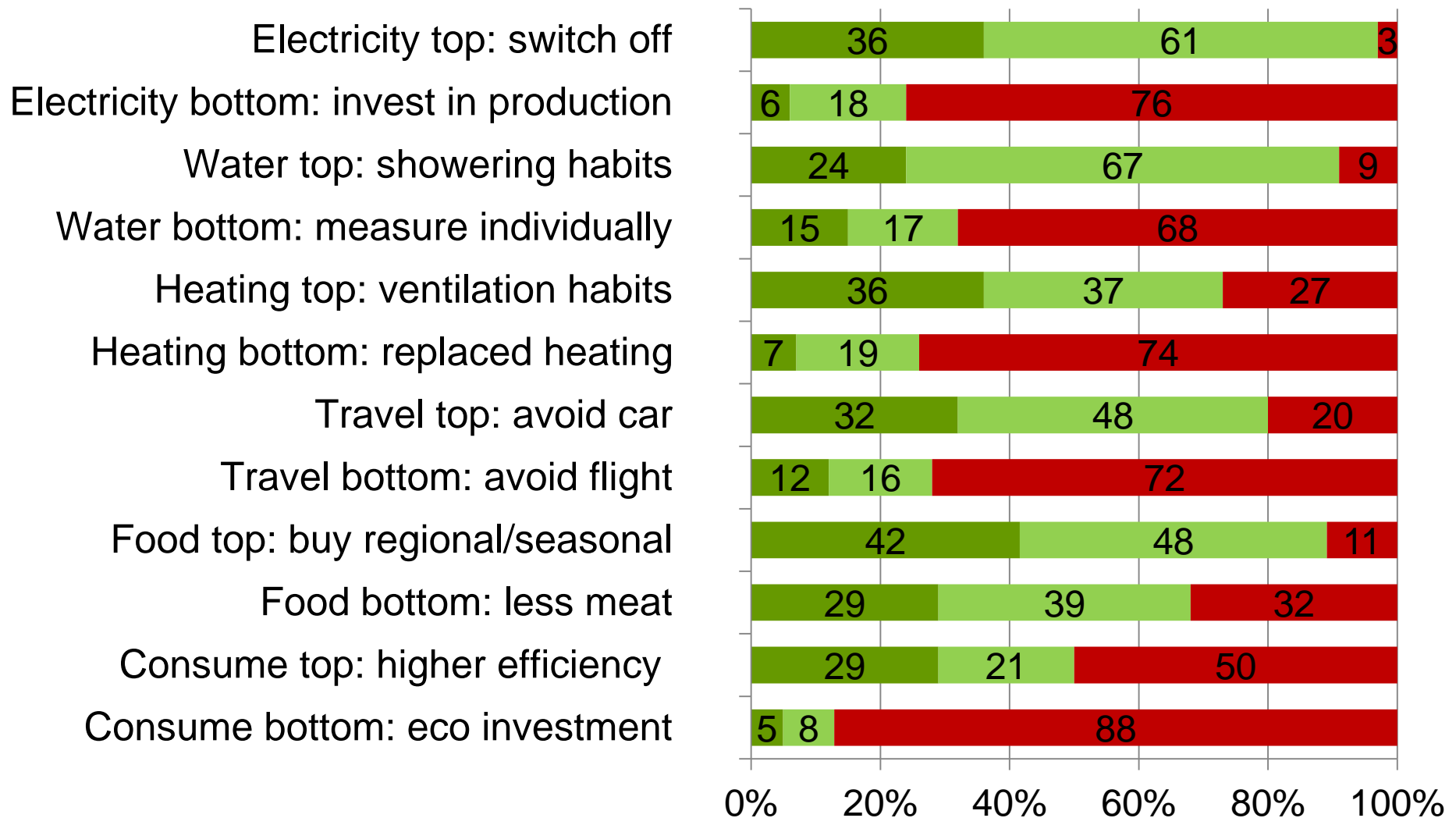
■ strongly applies   ■ rather applies   ■ rather not   ■ does not apply





# Top and bottom items of behaviour change (N=342)

■ since participation    ■ before participation    ■ no change



# Validation of behaviour change / impacts

- a) Consistency within survey data → relatively high
- E.g. Correlation between field-specific reports and general reports
- b) Correlation between reported behaviour change (surveys) and CO<sub>2</sub> calculator data → mixed / low
- Highly significant for Bremerhaven, Wennigsen; low among rest
- b) Comparison with trends in general local population (control group) → some supporting evidence
- E.g. with power consumption:

		2010/2011
Bregenz	population	- 1.4%
	panel	- 6.1%
Mariazell reg.	population	- 2.7%
	panel	- 2.9%

# Conclusions

- Participation approach with eco-feedback can foster sustainable behaviour and local climate protection
  - positive effects on attitudes, behaviour; mixed on CO<sub>2</sub> balances
- Attracts population sections with higher issue awareness and „sustainable citizenship“, less easily „mainstream“
- Offering choice and media-mix are important though e-participation is crucial and clearly preferred
- Major challenges:
  - widening and deepening participation
  - measuring and validating material impacts
  - impact on social practices and policies

# Thank you for your attention!

Contact:

Dr. Georg Aichholzer

A-1030 Vienna, Strohgasse 45/5

Tel: +43 (1) 51581 6591

Fax: +43 (1) 7109883

Email: [aich@oeaw.ac.at](mailto:aich@oeaw.ac.at)

WWW: [www.oeaw.ac.at/ita](http://www.oeaw.ac.at/ita)