



Project design and ecological impacts of the e2democracy research collaboration

Workshop "Participation within the Field of Climate Change"

PACITA Conference "Technology Assessment and Policy Areas of Great Transitions"

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The e2democracy project

- Environmental Electronic Democracy
- Comparative Evaluation of Impacts of (e-)
 Participation in the field of climate protection

Impact:

i.e. has citizen participation led to long-term/ sustainable improvements of the situation (e.g. reduction of CO₂ emissions, change of behavior, ...)





Research Question

Does (e-)participation make a difference?

Application area

Environment / Climate protection

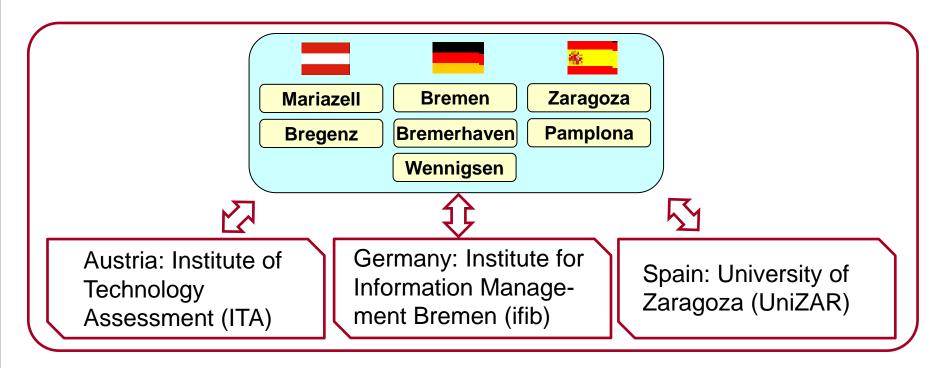
Basic Hypothesis

- "Information saves energy"
 - → Topic knowledge (what can I do?)
 - → Own consumption (where can I start to change?)
 - → Consumption of others (what do the others? / competition)





Research partners and participating cities



The project was supported by the European Science Foundation (ESF) as European Collaborative Research Project (ECRP) and was financed by the national research funding organisations in AT, DE and ES.







Evaluation subject: seven citizen panels

3-party contract

Local Admin.

Citizen

Enterprises

reduce CO₂ - 2%/year

Periodic Monitoring (CO₂-calculator)

Feedback

Newsletter

Public meetings

Consulting services





Monitoring instrument: CO₂-Calculator

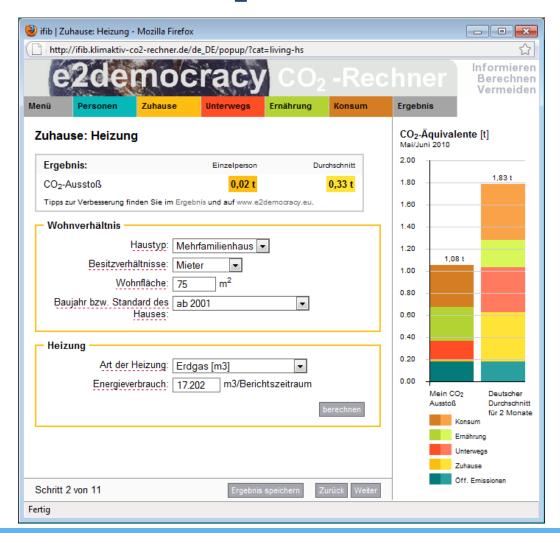
CO₂ reduction

At home (Energy)

Mobility

Nutrition

Consumer Goods



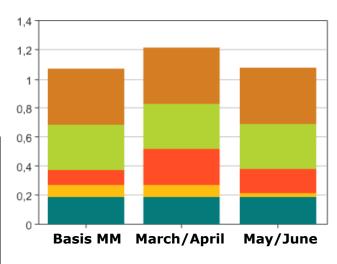




Example of feedback

My CO₂-Emissions

	Basiserhebung	März/April		Mai/Juni	
Consumption	0.386 t	0.386 t	<u> </u>	0.386 t	<u> </u>
Nutrition	0.310 t	0.310 t	<u> </u>	0.310 t	$\stackrel{oxdot}{=}$
Mobility	0.102 t	0.245 t		0.170 t	•
Private traffic	0.031 t	0.058 t		0.078 t	
Public transport	0.072 t	0.188 t		0.093 t	•
Flights	0.140 t	0.000 t		0.000 t	<u></u>
At home	0.085 t	0.085 t	<u> </u>	0.025 t	•
Electricity	0.006 t	0.005 t	•	0.008 t	
Heating	0.079 t	0.079 t	<u> </u>	0.017 t	•
Public CO ₂ -emissions	0.19 t	0.19 t		0.19 t	
Total CO ₂ -emissions	1.068 t	1.211 t		1.076 t	•
Water consumption	13 m ³	11,105 m ³	9	16,336 m ³	

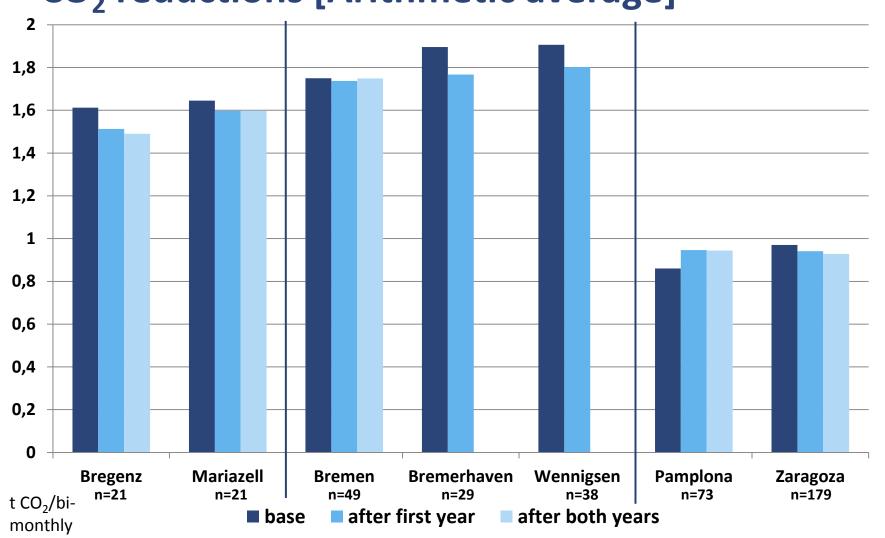


- → Basic measurement
- Twelve periodic measurements (two years)
- → Comparison of results





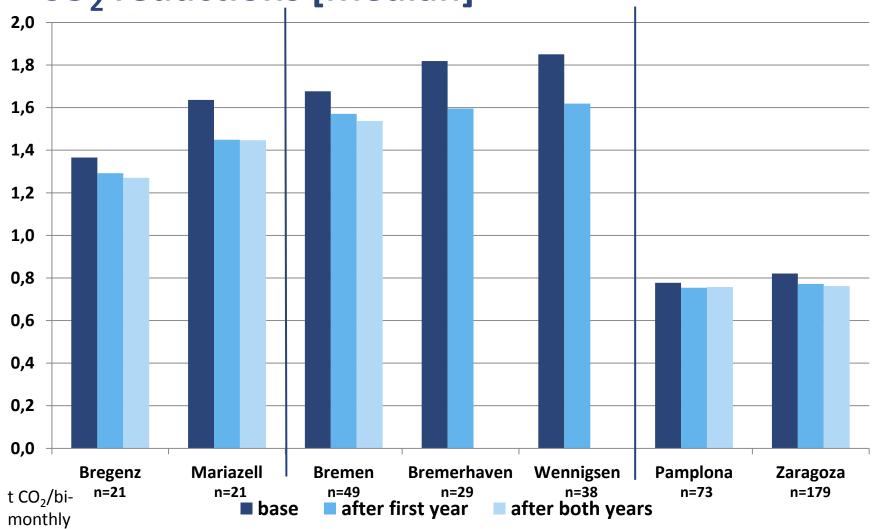
CO₂ reductions [Arithmetic average]







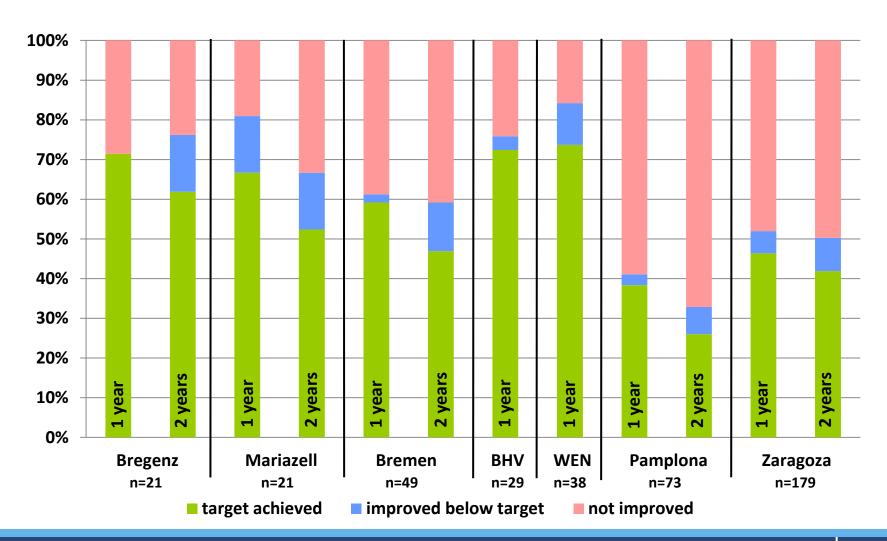








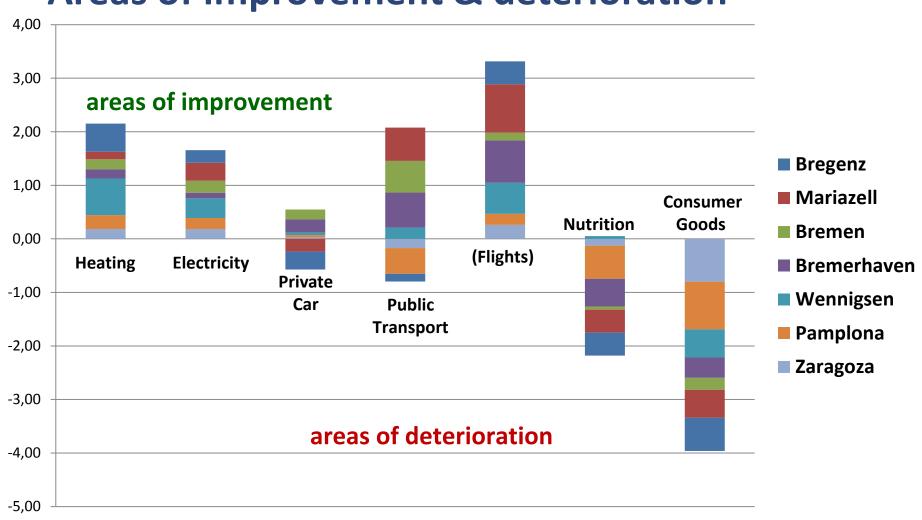
Target achievement (2% p.a.)







Areas of improvement & deterioration







Conclusion

- Participation has an impact (e.g. on CO₂ savings)
- Improvements in at home section (heating, electricity) are easier to achieve than in those who require real lifestyle changes (mobility, nutrition, consumer goods)
- Effects of changes can't be measured ad hoc. It takes some time until changes are implemented and come into effect
- Motivation falls in longer participation periods

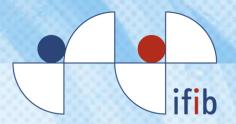




Conclusion

- Comparison on regional level, rather than on the international one
- Impact measurement in terms of CO₂ reduction is not a trivial task
- When evaluating the impact of participation, the context matters. The field of climate protection is particularly influenced by social and psychological factors and beliefs; behavior is not rational





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Thank you for your attention!

Any questions?

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