

FENCO workshop “CCS and public engagement”
When science meets reality

The detached view from the gallery

Public engagement in a multi-level policy:
the example of CCS implementation in Germany

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Point of departure: the multi-level character of CCS policy

“We strongly support the launching of 20 large-scale CCS demonstration projects globally by 2010, taking into account various national circumstances, with a view to beginning broad deployment of CCS by 2020.” (G8 Hokkaido Toyako Summit Leaders Declaration, 2008)

“Carbon dioxide capture and geological storage (CCS) is a bridging technology that will contribute to mitigate climate change.” (...) The European Council of June 2008 called on the Commission (...) to ensure the construction and operation by 2015 of up to 12 CCS demonstration plants” (Directive 2009/31/EC)

“The technical, environmental and economic feasibility of CCS technologies is to be confirmed by demonstration power stations.” (Key Elements of an Integrated Energy and Climate Programme, Decision of German Cabinet on August 23rd/24th 2007 at Meseberg)

Outline of the talk

- What is the current status of public acceptance of CCS in Germany in comparison to other European countries?
- What is the current status of public acceptance of CCS in Germany on the local level?
- Conclusions
- Open-ended questions

Database for the comparison of public acceptance of CCS in Germany

- Data of three representative surveys of German citizens:
 1. Regional survey in the “Rhine-Area” where a CCS demonstration plant is planned
 2. Regional survey in “Northern Schleswig-Holstein” where potential storage sites are located
 3. Nationwide survey
- Data of representative nationwide surveys in Greece, Norway, the Netherlands, Romania and the UK
- Surveys were carried out within the framework of the project “Scrutinizing the impact of CCS communication on the general and local public” between October 2009 and January 2010

Indicators for assessing public acceptance of CCS

- Attitudes regarding CCS in general
- Attitudes regarding a CCS demonstration plant
- Willingness to engage against a CCS demonstration plant
- Awareness of CCS = important precondition for attitude formation

Self-reported awareness of CCS in Germany in comparison to other European countries

Awareness of CCS			GR	RO	NL	UK	NO	DE	Total
Have you ever heard about CCS?	No, never heard	Number	765	759	555	644	374	630	3727
		%	76.5%	75.7%	50.0%	61.9%	37.4%	61.9%	60.4%
	A little bit	Number	187	214	493	331	452	288	1965
		%	18.7%	21.4%	44.5%	31.8%	45.2%	28.3%	31.9%
	Yes, quite a bit	Number	48	29	61	65	174	99	476
		%	4.8%	2.9%	5.5%	6.3%	17.4%	9.7%	7.7%
Total		Number	1000	1002	1109	1040	1000	1017	1017
		%	100%	100%	100%	100%	100%	100%	100.0%

Source: Pietzner et al. 2010

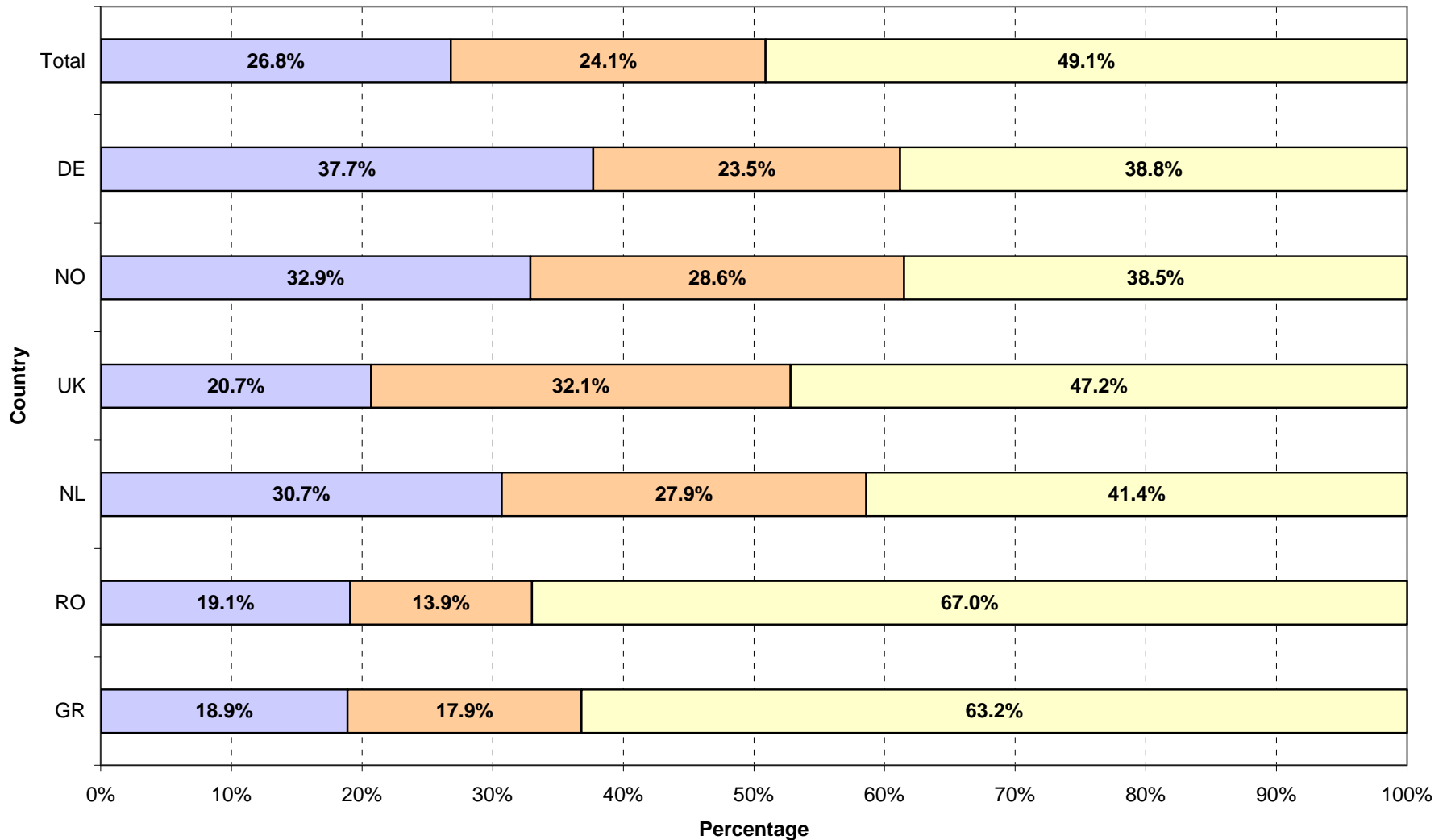
Self-reported awareness of CCS in Germany on the local level

Awareness of CCS			Rhine-Area	Schleswig-Holstein	Germany*	Total
Have you ever heard about CCS?	No, never heard	Number	291	237	545	1073
		%	58.2%	47.4%	61.9%	57.0%
	A little bit	Number	147	174	255	576
		%	29.4%	34.8%	28.9%	30.6%
	Yes, quite a bit	Number	62	89	81	232
		%	12.4%	17.8%	9.2%	12.3%
Total		Number	500	500	881	1881
		%	100%	100%	100%	100%

Source: WI/IEF-STE survey 2009 (n=881); WI/IEF-STE survey 2009a (n=500), WI/IEF-STE survey 2009b (n=500).

* without Rhine-Area & Schleswig-Holstein

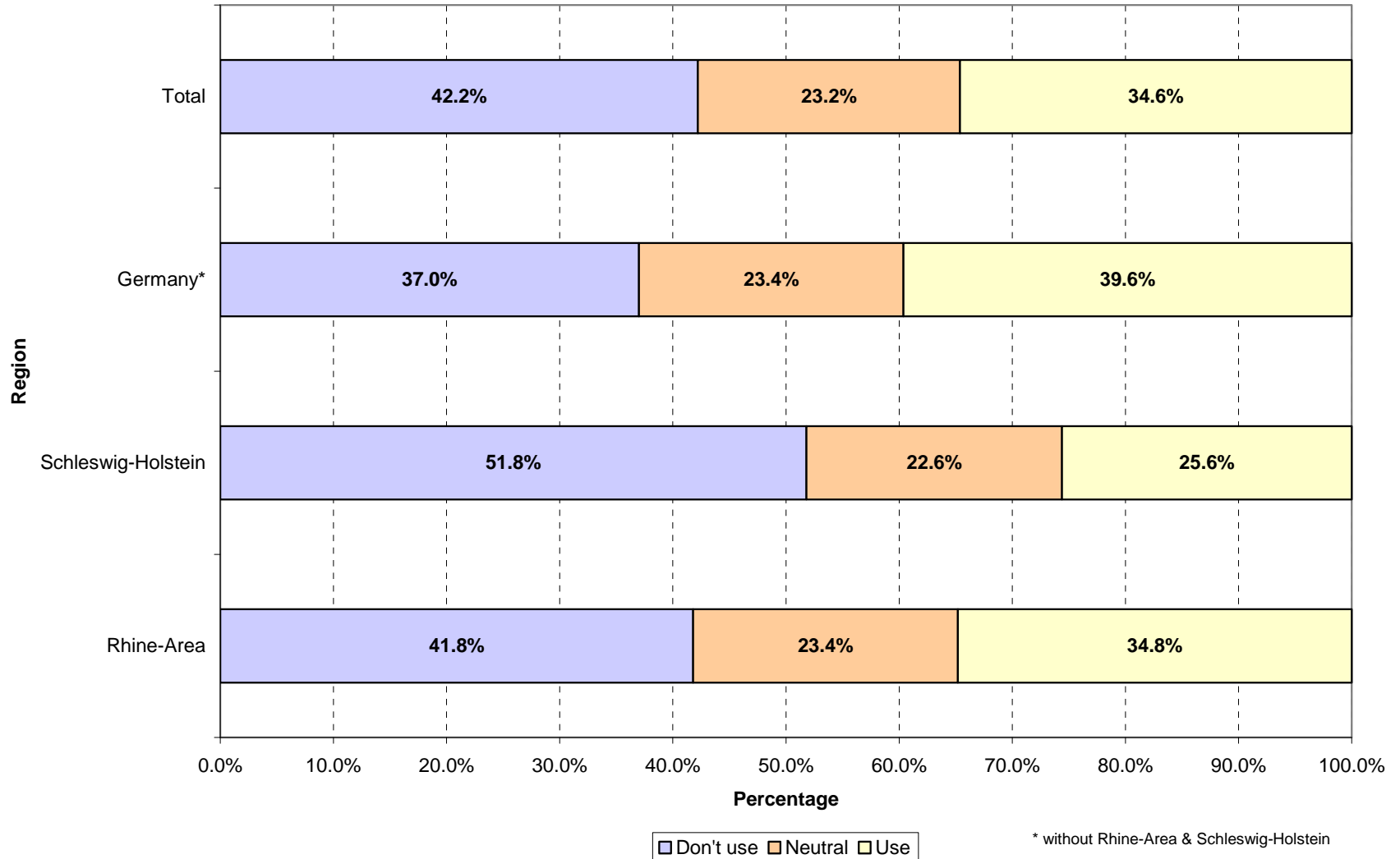
Attitudes regarding CCS in general in Germany in comparison to other European countries



Source: Pietzner et al. 2010

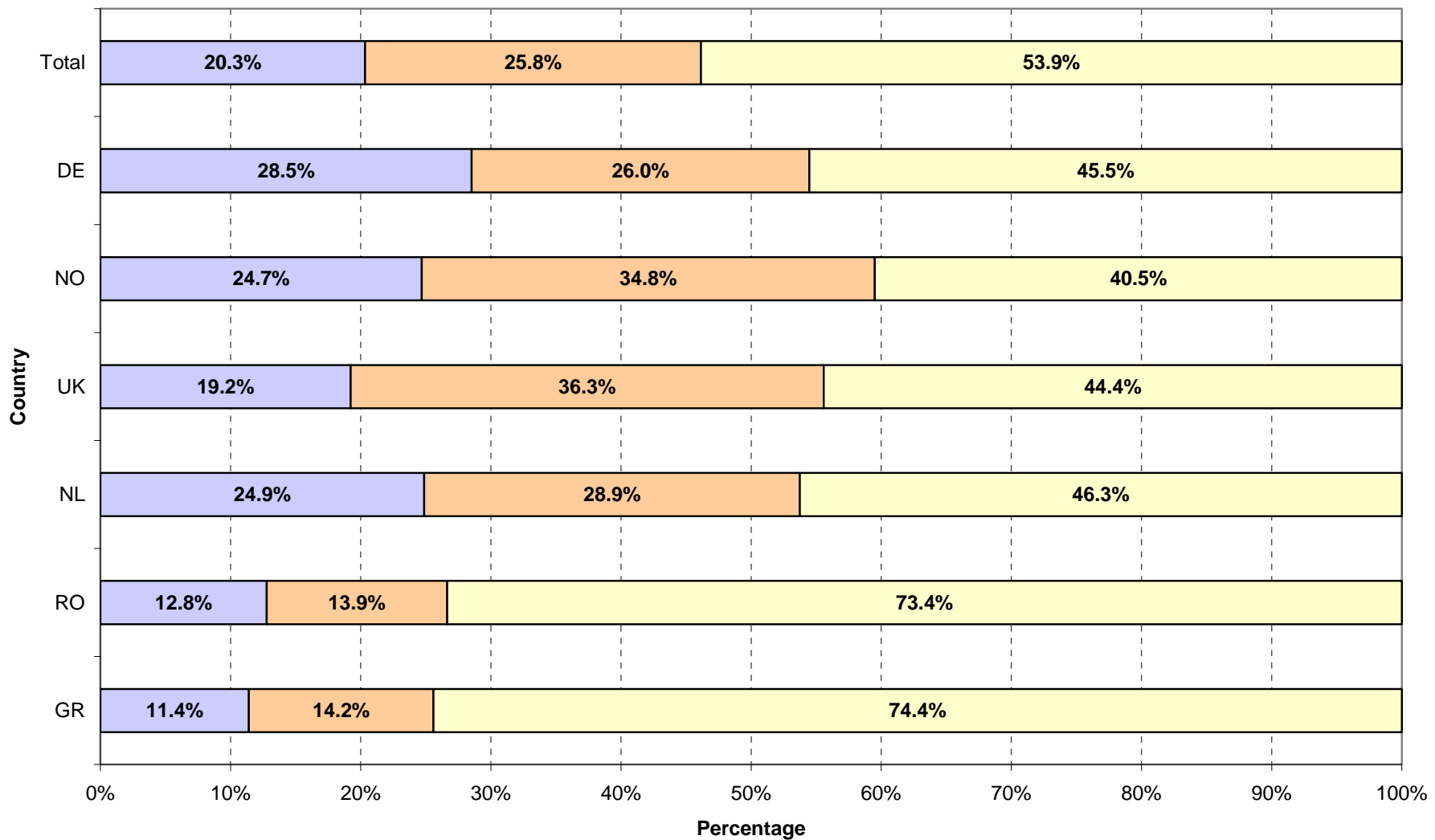
Don't use
 Neutral
 Use

Attitudes regarding CCS in general in Germany on the local level



Source: WI/IEF-STE survey 2009 (n=881); WI/IEF-STE survey 2009a (n=500), WI/IEF-STE survey 2009b (n=500).

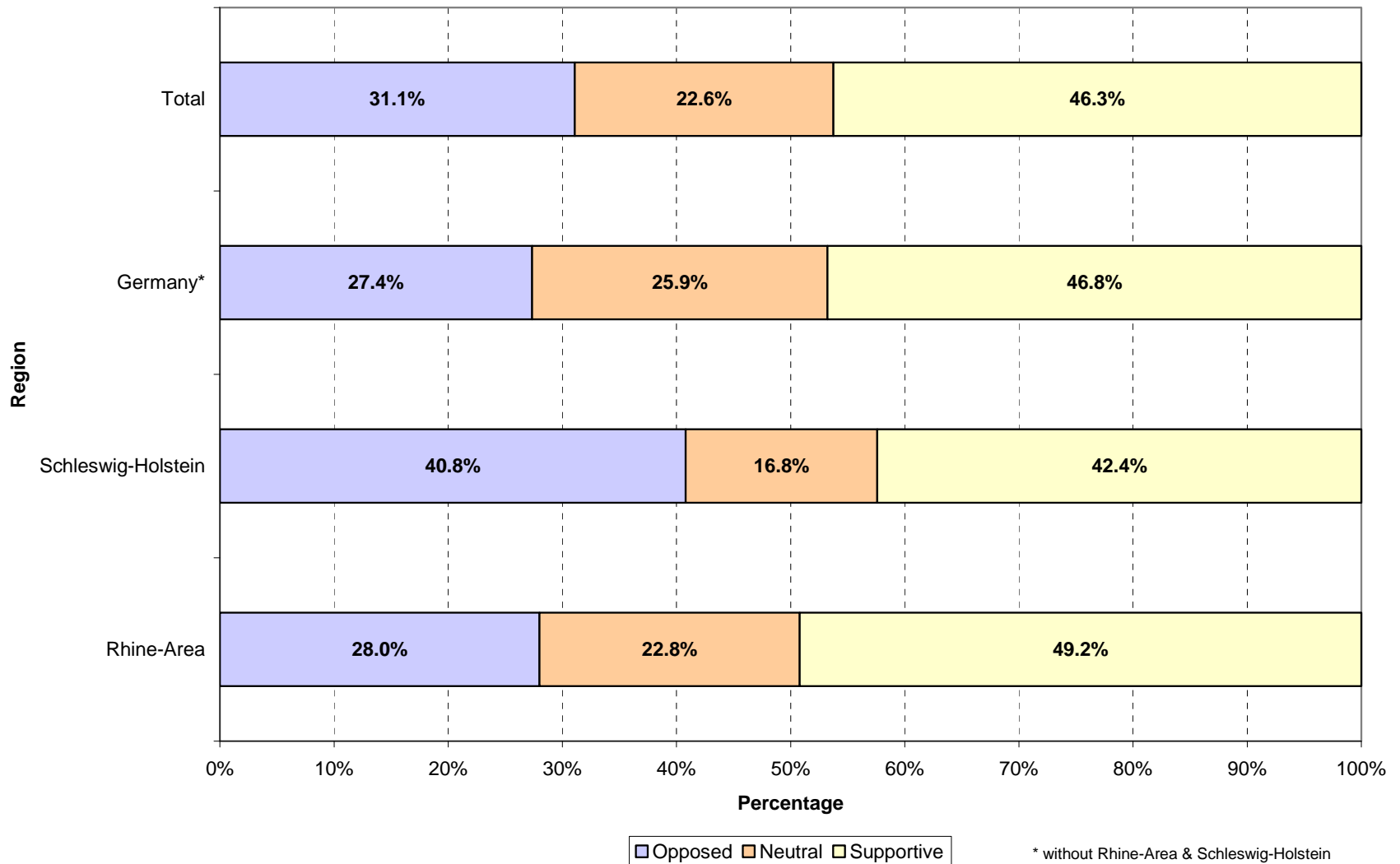
Attitudes regarding a CCS demonstration plant in Germany in comparison to other European countries



Source: Pietzner et al. 2010

Opposed
 Neutral
 Supportive

Attitudes regarding a CCS demonstration plant in Germany on the local level



Source: WI/IEF-STE survey 2009 (n=881); WI/IEF-STE survey 2009a (n=500), WI/IEF-STE survey 2009b (n=500).

Willingness to engage against a CCS demonstration plant in Germany compared to other European countries

		No	Neutral	Yes	Total
GR	Number	41	20	53	114
	%	36,0%	17,5%	46,5%	100,0%
RO	Number	69	11	48	128
	%	53,9%	8,6%	37,5%	100,0%
NL	Number	110	65	101	276
	%	39,9%	23,6%	36,6%	100,0%
UK	Number	61	56	83	200
	%	30,5%	28,0%	41,5%	100,0%
NO	Number	126	63	58	247
	%	51,0%	25,5%	23,5%	100,0%
DE	Number	111	67	112	290
	%	38,3%	23,1%	38,6%	100,0%
Total	Number	518	282	455	1255
	%	41.3%	22.5%	36.3%	100,0%

Source: Pietzner et al. 2010

Willingness to engage against a CCS demonstration plant in Germany on the local level

		No	Neutral	Yes	Total
Rhine-Area	Number	53	31	56	140
	%	37.9%	22.1%	40.0%	100%
Schleswig-Holstein	Number	55	26	123	204
	%	27.0%	12.7%	60.3%	100%
Germany*	Number	92	54	95	241
	%	38.2%	22.4%	39.4%	100%
Total	Number	200	111	274	585
	%	34.2%	19.0%	46.8%	100%

Source: WI/IEF-STE survey 2009 (n=881); WI/IEF-STE survey 2009a (n=500), WI/IEF-STE survey 2009b (n=500).

Conclusions

- CCS is not unknown anymore in European countries
- The self-reported awareness of CCS in Germany is higher compared to countries where the implementation of CCS is less advanced (Greece, Romania), but lower in comparison to countries where the implementation is more advanced (the Netherlands, the UK, Norway)
- On the local level in Germany the self-reported awareness of CCS is the highest in the region where the sites for CO₂ storage are located (Schleswig-Holstein)
- Regarding the use of CCS in general and the permission of a CCS demonstration plant in particular the German citizens are the most sceptical compared to the citizens of other European countries
- On the local level in Germany the citizens of Schleswig-Holstein are the most sceptical regarding the use of CCS in general and concerning the permission of a CCS demonstration plant

Conclusions (II)

- The willingness to engage against a CCS demonstration plant in Germany is lower than in Greece and the UK, but higher than in the Netherlands, Norway and Romania (caveat: small number of respondents)
 - On the local level in Germany the willingness to engage against a CCS demonstration plant is the highest in Schleswig-Holstein
- ⇒ It can be assumed that the German survey data reflect a different status of attitude formation regarding CCS due to real-life engagement of the public on the local level

Conclusions (III)

- Public engagement in Germany is expressed mainly in citizens' initiatives, demonstrations and petitions against CCS in general and against CO₂ storage in particular, but also in policy programs of state governments
- The real public engagement against CCS in Germany differs regionally with strongest opposition in the regions where sites for CO₂ storage are planned (Brandenburg, Saxony-Anhalt, Schleswig-Holstein)
- In Schleswig-Holstein the state government also oppose to CO₂ storage:
“CDU and FDP oppose to CO₂ storage in Schleswig-Holstein. (...) Schleswig-Holstein must be enabled not to allow the geological storage on its territory” (Coalition agreement Schleswig-Holstein 2009)
- The local opposition against CO₂ storage was one of the main reasons that the first version of the German draft carbon storage law has failed

Open-ended questions

- Is the local opposition against CCS already successful?
“I suppose that our (Germany’ CCS) chances are considerably small.” (European Union Energy Commissioner Guenther Oettinger, April 26, 2009)
- And if yes, how can local resistance be integrated in activities which seek to facilitate the large-scale demonstration and application of CCS in Europe?
- Which of the following criteria should be fulfilled to classify CCS as “accepted” by a society?
 - If the decisions concerning demonstration and application of CCS are democratically legitimized? (=acceptability)
 - If all governments on state and local level support the implementation of CCS?
 - If there is no public resistance on a local level regarding the demonstration and application of CCS?

Open-ended questions

How to cope with the last resisting village?



Thank you very much for your attention!