



The Public(s) and CCS: “Caught Off Guard” or Back to the Future?

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Slide 1



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www.electricitypolicy.org.uk

déjà vu all over again...

- Before the outreach program was set to begin, the public learned of the project through an article in the local newspaper. A few members of the community organized a group, the Coalition Against CO2 Dumping, to protest the project.
- The group's concerns went well beyond [the environment] and included sentiments ranging from “Not-In-My-Backyard”, [...] to opposition to fossil fuels.
 - de Figueiredo, Reiner & Herzog, GHGT-6, 2002

Dutch CCS in disarray as 'on land' storage ruled out

“Dutch carbon capture and storage (CCS) projects have been thrown into confusion by the government's decision late on Monday to rule out carbon storage on land. Maxime Verhagen, the minister for economic affairs, said that the lack of local support for 'on land' storage meant such projects could not proceed. Instead, he announced a consultation would take place on the possibility of storing captured carbon offshore.”

ICIS Heren, 15 Feb, 2011

Public Protest: Barendrecht



Public Protest: Beeskow, Germany



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Recent European Experience: Cases from nearCO2 Project

Comparison across several EU CCS cases:

- Barendrecht, the Netherlands
- Beeskow, Germany
- Ketzin, Germany (CO2SINK)

Comparison of CCS cases with non-CCS cases:

1 Wind case in the Netherlands, 2 pipeline and biomass cases in UK, one gas-fired plant in Spain

Case study report available at:

<http://www.communicationnearco2.eu>



Meeting UK Energy and Climate Needs:

The Role of Carbon Capture and Storage

Committee Findings:

The Government has done little so far to engage the public in a dialogue about CCS technology. We accept that it is early days for the technology but previous experience has emphasised the value of early engagement. The evidence we have seen does not support the view that the Minister's confident and relaxed attitude towards the Government's performance on this issue is justified.

- *Promises, Promises:* By early in 2006, the Department would “draw together an expert group to define a communications strategy that will promote consistent and effective messaging, based on research into public perceptions and attitudes, and drawing from the best communications materials available. It is planned to complete a provisional strategy by late Spring 2006.”

ZEP Strategic Deployment Document

Action Plan (Nov 06)

Plan an information campaign - now

- Groups such as national and European parliamentarians, journalists, environmental pressure groups and representatives of civil society are particularly important targets.

Ensure communication is a dialogue, not one way

- we must use professional agencies to help define the message, the messenger, the medium used and the target public

Assign a significant budget

- A well-organised outreach campaign is not cheap – around €250k per country

Regularly monitor the public reaction & respond when necessary

- Both before and after the launch of any campaign, we will need to gauge public opinion, and listen to it regularly (Eurobarometer plus focus groups)

deFRH (2002) Conclusions

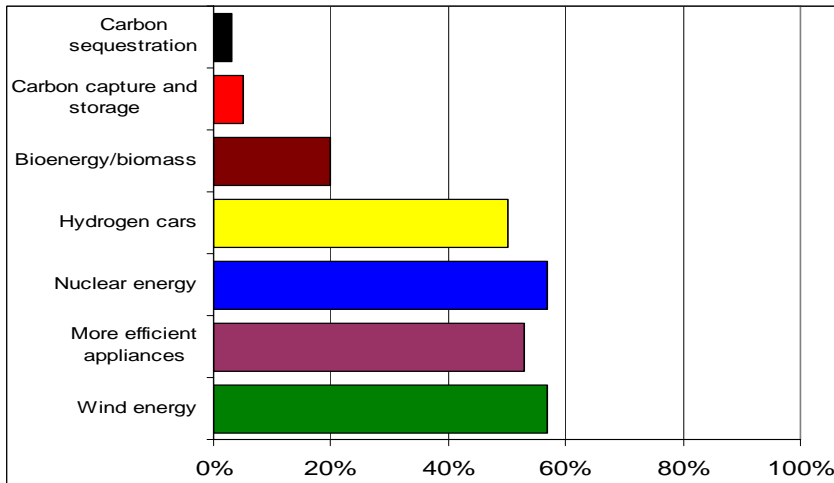
- The project was a lightning rod
- Pay attention to local benefit
- If you want to make a splash, you better have enough resources
- The public can become fearful when a new technology is not explained and skeptical when it appears that the public has been excluded from the decision-making process

Public Opinion Surveys

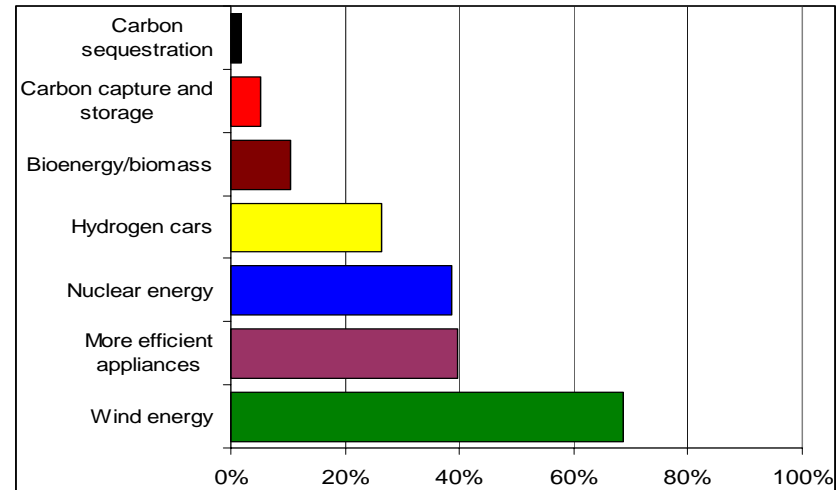
Public Awareness

(heard/read of the following in the past year)

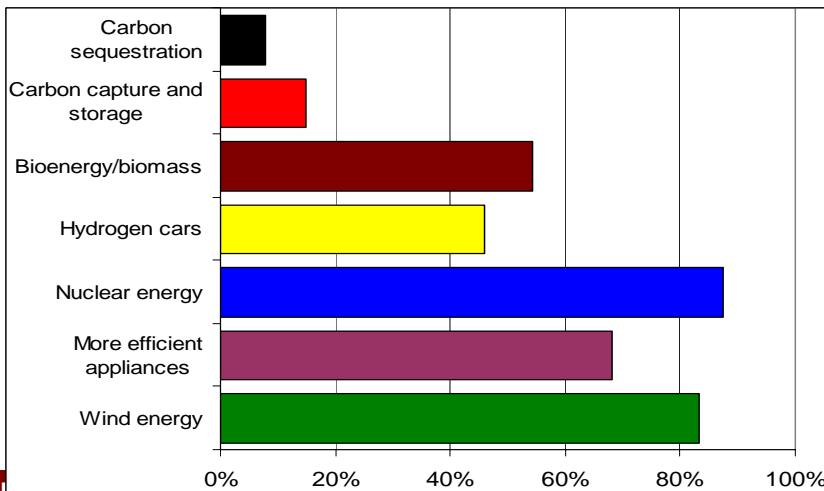
US



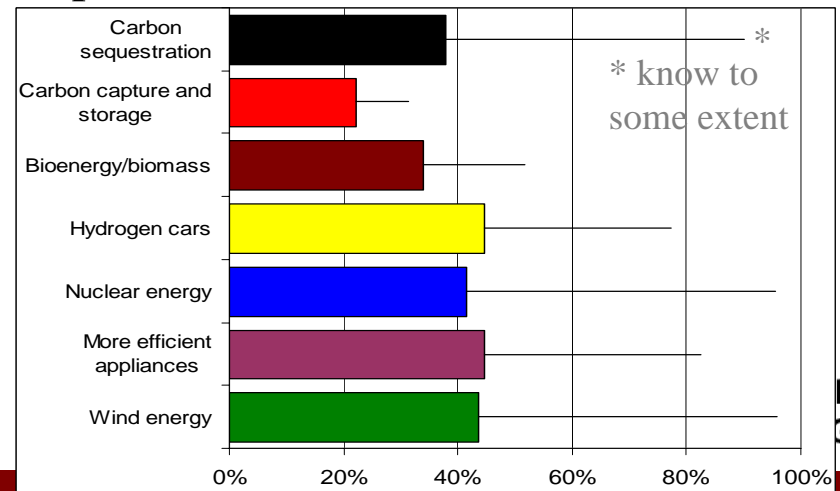
UK



Sweden



Japan

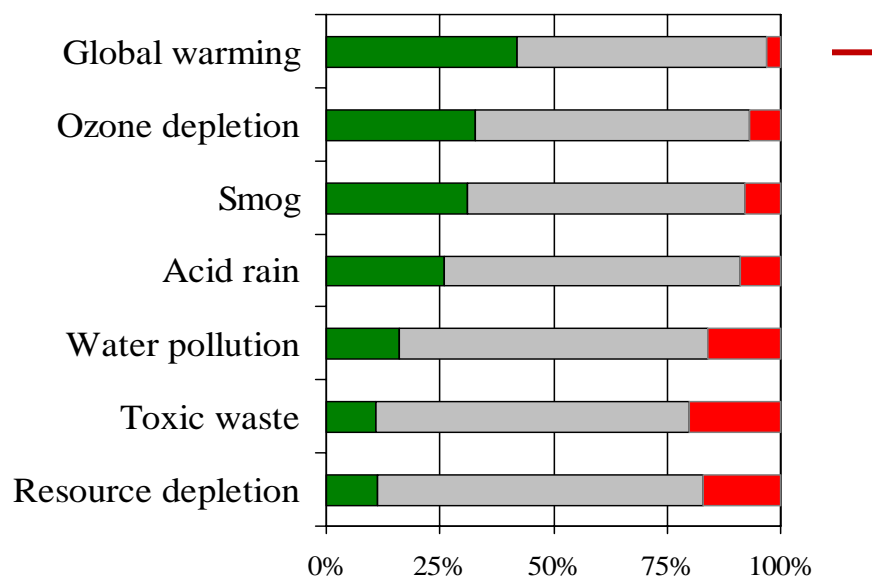
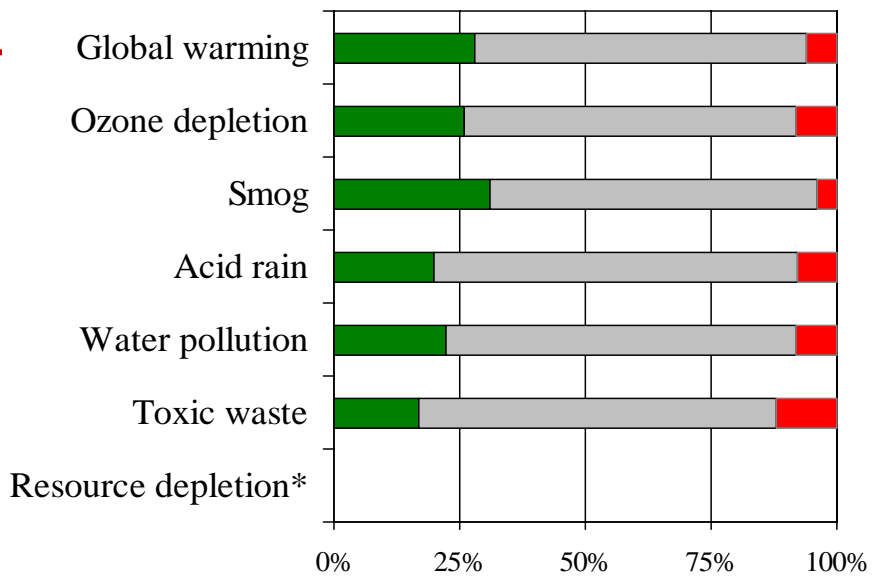


Policy Group

Can CCS Reduce These Environmental Concerns?

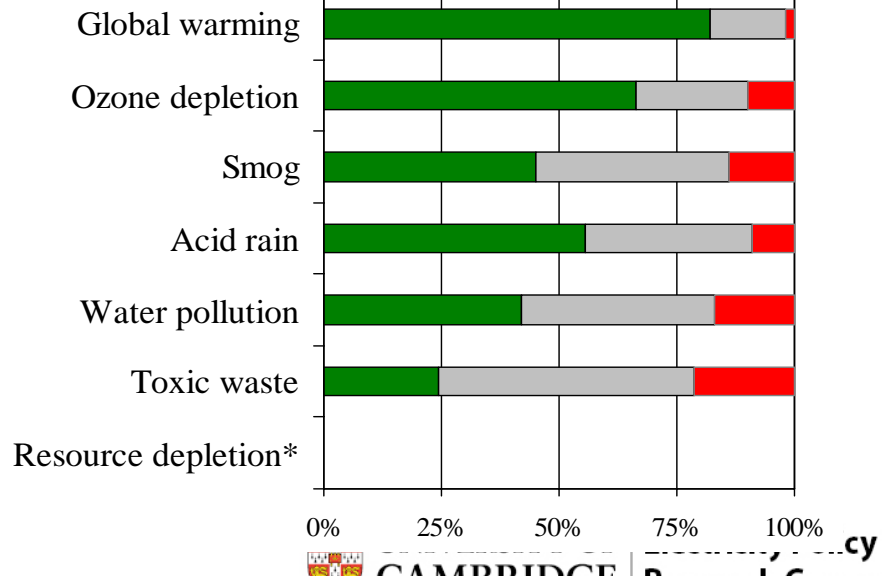
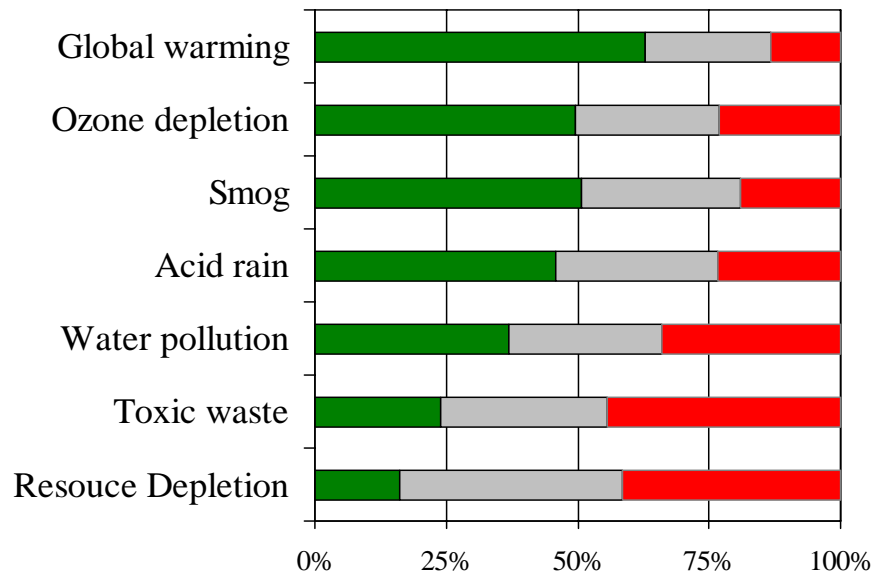
US 2006

UK



Sweden

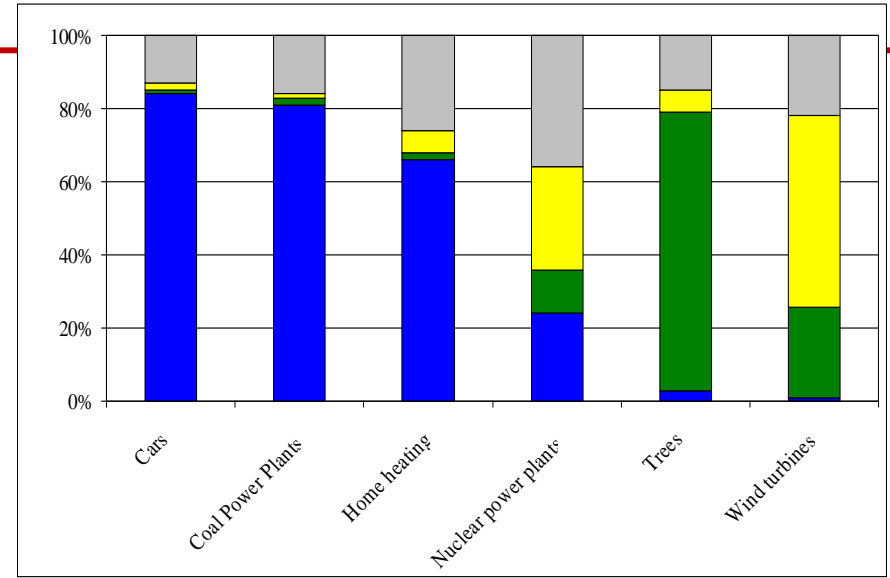
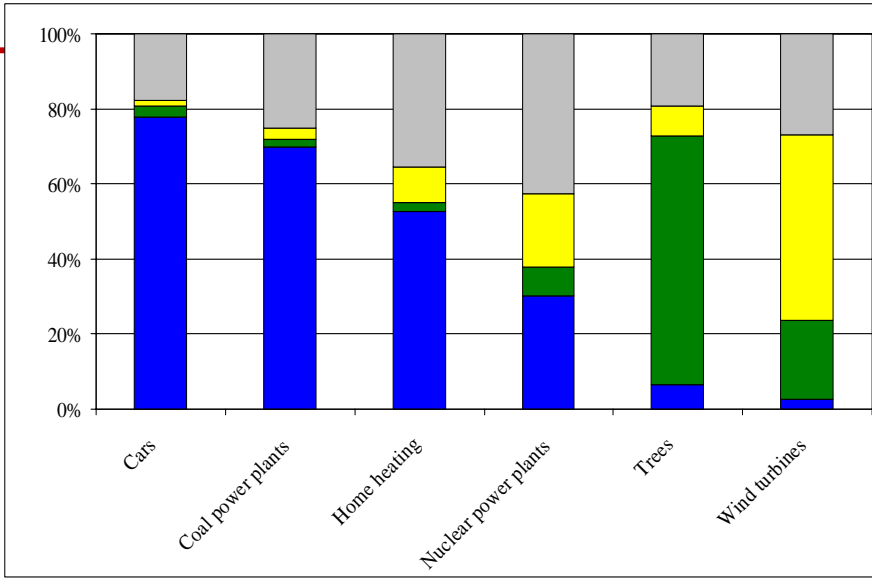
Japan



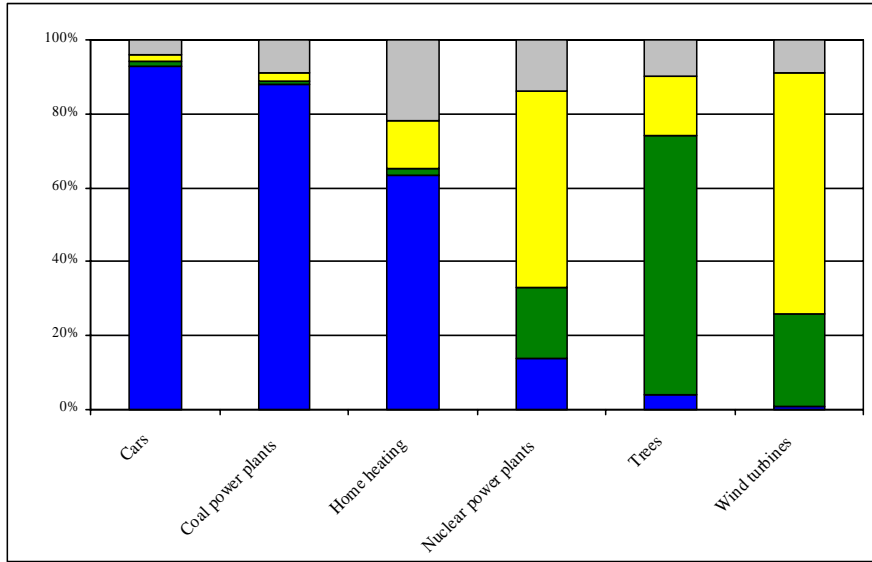
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How do the Following Contribute to Carbon Dioxide Levels?

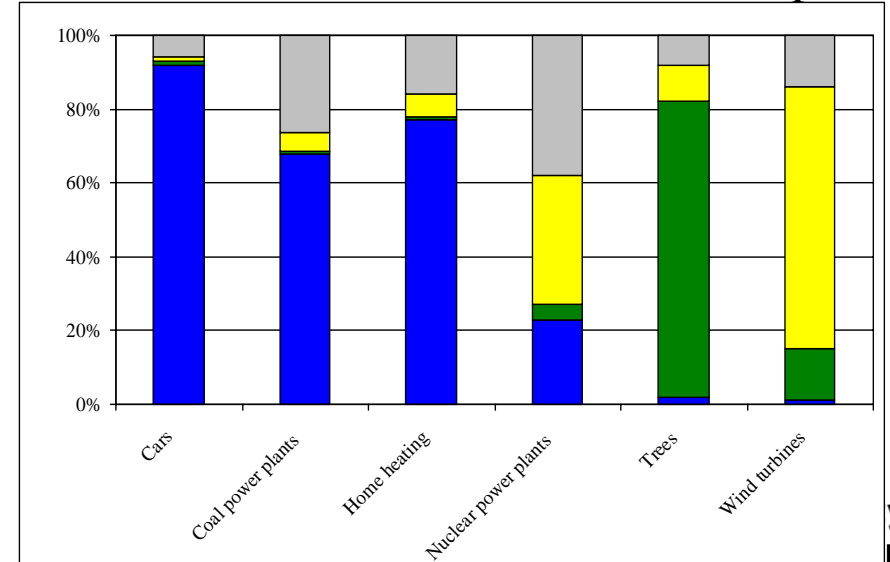
UK



Sweden



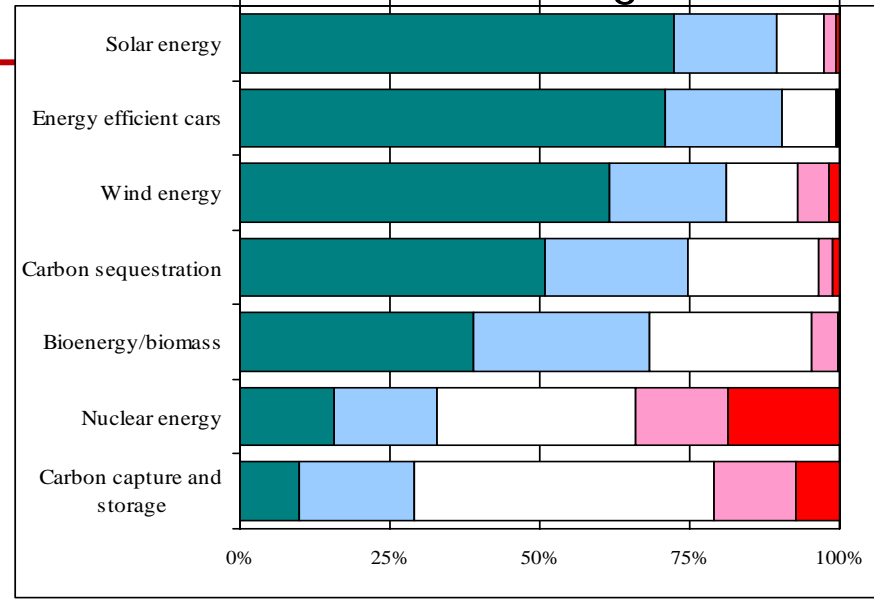
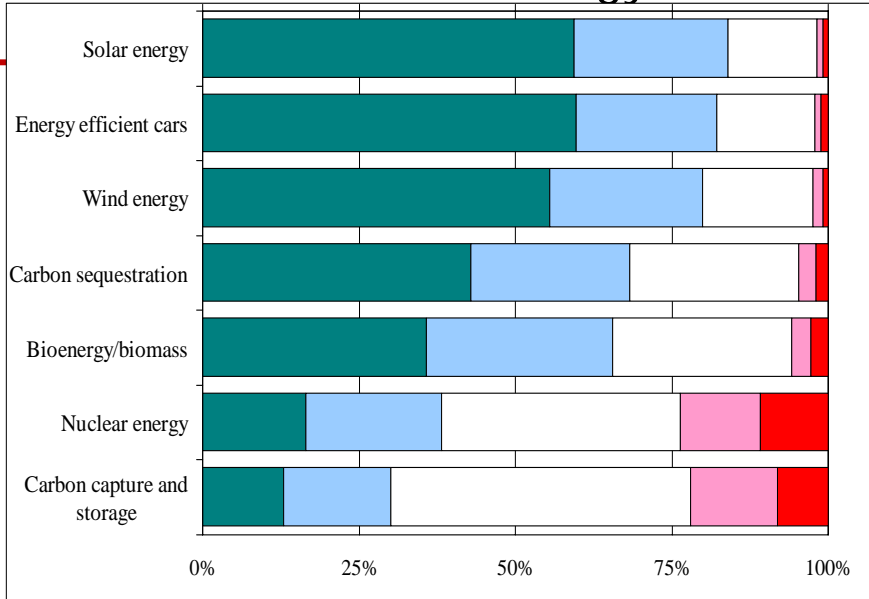
Japan



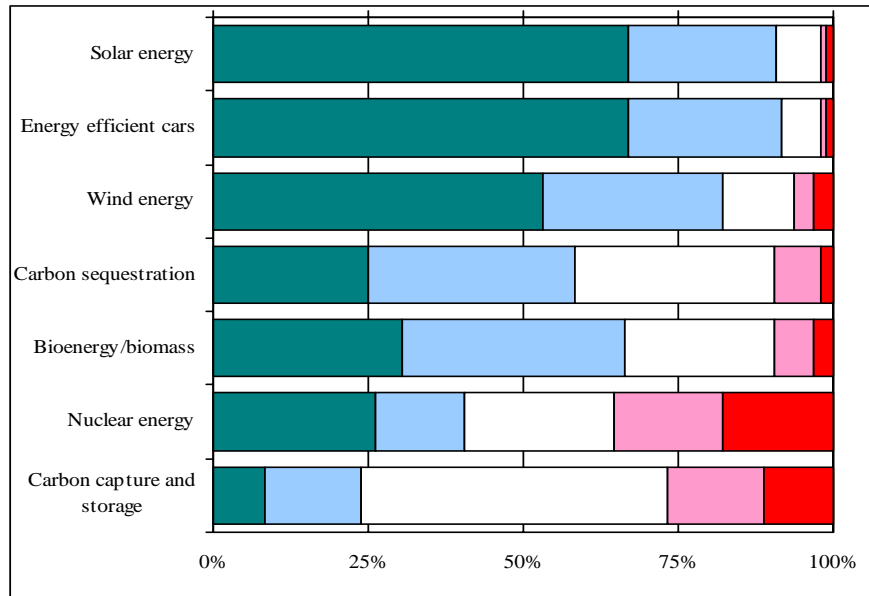
US 06

Preferred Energy Technology to Address Global Warming

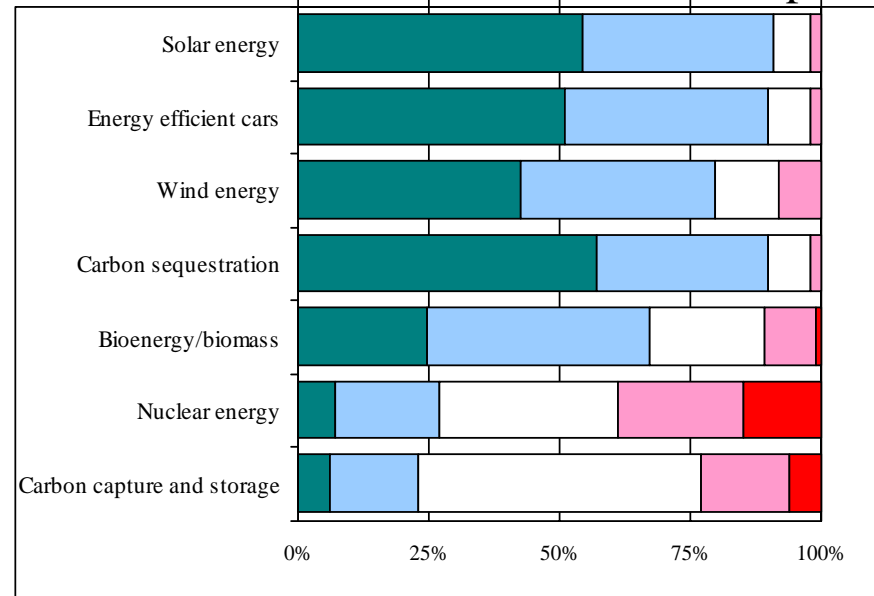
UK 04



Sweden



Japan



nearCO2 Survey

- As part of FP7 project, have conducted survey of “regional” and national public and regional stakeholder respondents in five countries in vicinity of EERP-funded projects
- Survey of >200 respondents from the region and >200 national respondents in UK, Germany, Netherlands, Poland and Spain in Feb-March, 2011

Differing National Priorities

Country	Environment	Energy Security
UK	10%	7%
Germany	13%	16%
Netherlands	17%	9%
Poland	5%	8%
Spain	10%	1%

Heard of CCS?

Country	No, never heard	A little bit	Yes, Quite a Bit
UK	56	37	7
Germany	46	39	15
Netherlands	23	66	11
Poland	42	50	8
Spain	49	42	9

Which of the following environmental concerns is CCS supposed to reduce?

	UK	Germany	Netherlands	Poland	Spain
Water pollution	6%	11%	12%	28%	9%
Toxic waste	10%	16%	12%	47%	19%
Smog	12%	14%	21%	42%	23%
Acid rain	15%	14%	28%	25%	24%
Ozone depletion	29%	45%	43%	60%	43%
Global Warming or Climate change	60%	70%	69%	63%	48%

Negative impact on housing prices

	UK	Germany	Nether -lands	Poland	Spain
1 - Strongly disagree	3%	3%	3%	4%	4%
2	7%	5%	6%	8%	5%
3	13%	6%	7%	14%	10%
4	22%	18%	17%	17%	23%
5	18%	12%	17%	15%	22%
6	15%	13%	1%	17%	10%
7 - Strongly agree	9%	21%	14%	12%	12%
Don't Know	13%	22%	19%	14%	14%

Positive impact on jobs

	UK	Germany	Nether -lands	Poland	Spain
1 - Strongly disagree	3%	8%	4%	2%	1%
2	3%	7%	7%	4%	2%
3	7%	9%	9%	9%	3%
4	18%	18%	21%	17%	18%
5	26%	18%	20%	16%	23%
6	20%	15%	15%	22%	25%
7 - Strongly agree	13%	15%	5%	23%	21%
Don't Know	10%	10%	20%	6%	6%

Germany Impact on Housing Prices

	Distance to capture site		Distance to storage site (Neutrebbin)		Distance to storage site (Beeskow)		Total
	<100km	100-200km	<100km	100-200km	<100km	100-200km	
1 - Strongly disagree	3%	4%	3%	2%	2%	6%	3%
2	5%	4%	4%	6%	5%	2%	5%
3	7%	8%	6%	10%	7%	8%	6%
4	16%	23%	15%	26%	17%	25%	18%
5	12%	15%	13%	11%	14%	6%	12%
6	12%	13%	12%	10%	12%	9%	13%
7 - Strongly agree	25%	17%	28%	16%	25%	19%	21%
Don't Know	20%	17%	20%	20%	18%	26%	22%
n	203	53	178	90	222	53	518

Germany Positive Impact on Jobs

	Distance to capture site		Distance to storage site (Neutrebbin)		Distance to storage site (Beeskow)		Total
	<100km	100-200km	<100km	100-200km	<100km	100-200km	
1 - Strongly disagree	9%	4%	10%	6%	9%	6%	8%
2	6%	4%	5%	9%	5%	13%	7%
3	9%	9%	11%	7%	9%	9%	9%
4	21%	11%	19%	22%	20%	15%	18%
5	19%	26%	21%	14%	19%	15%	18%
6	15%	15%	15%	12%	16%	9%	15%
7 - Strongly agree	12%	25%	11%	21%	13%	21%	15%
Don't Know	10%	6%	9%	9%	9%	11%	10%
n	203	53	178	90	222	53	518

Takeaway messages

- ***Don't Underestimate the Opposition:*** Necessary but controversial facilities have become increasingly difficult to site
- ***Survey the Field:*** Careful site selection can greatly reduce the chances that a new facility will meet with local opposition
- ***Think Team and Play Fair:*** Local community support for a facility can be achieved through meaningful public participation, trust building and compensation
- ***Read the Game Plan:*** Similar tactics are employed by different groups in their opposition to facilities
 - G. Heddle, MIT Master's Thesis (June 2003)

Thanks!

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