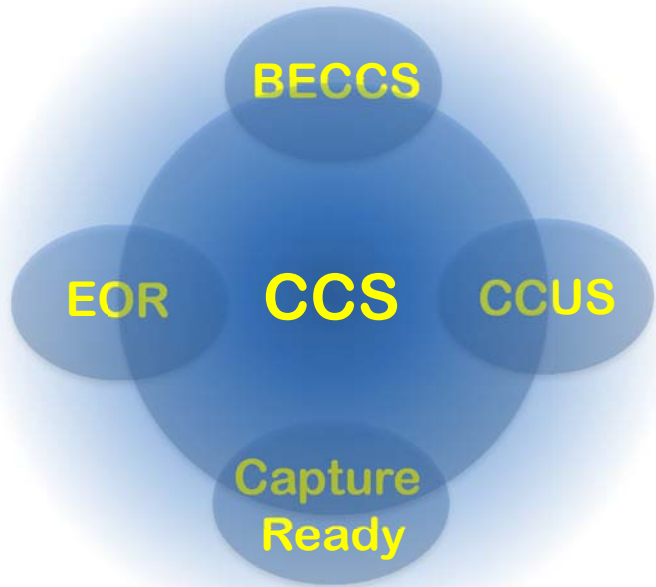

Issues for discussion

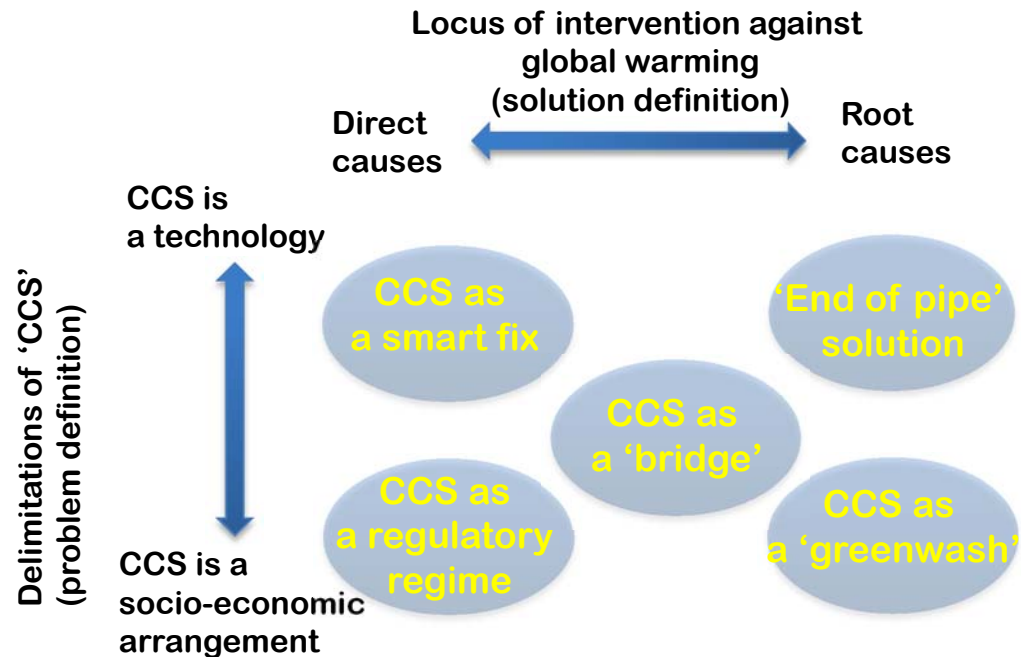
Hiroyasu Takase
Quintessa Japan

Ambiguity in definition/scope of CCS

What do we mean by “CCS”?



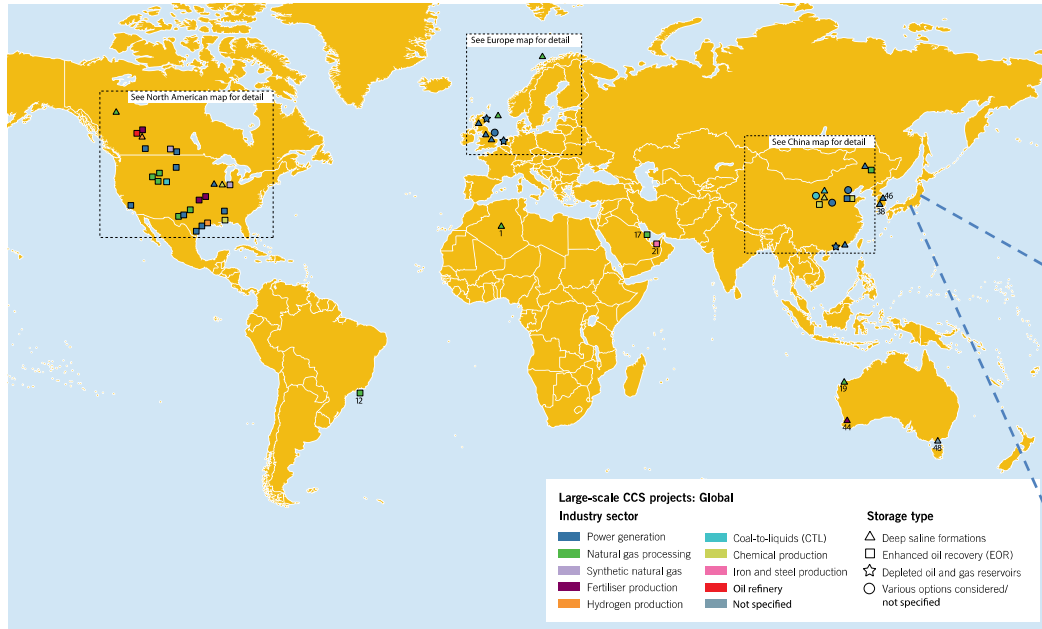
How can it be ‘conceptualised’ depending on varying stances?



Modified from Corry and Riesch (2012)

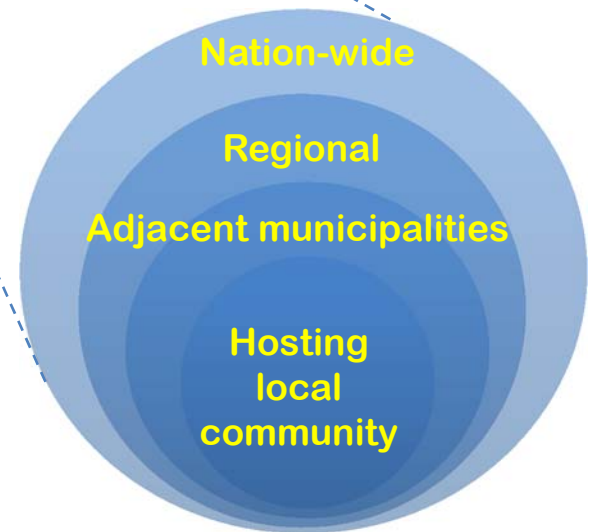
Olaf Corry and Hauke Riesch, BEYOND ‘FOR OR AGAINST’ Environmental NGO-evaluations of CCS as a climate change solution, The Social Dynamics of Carbon Capture AND STORAGE , 2012.

Communication and interaction at multiple scales



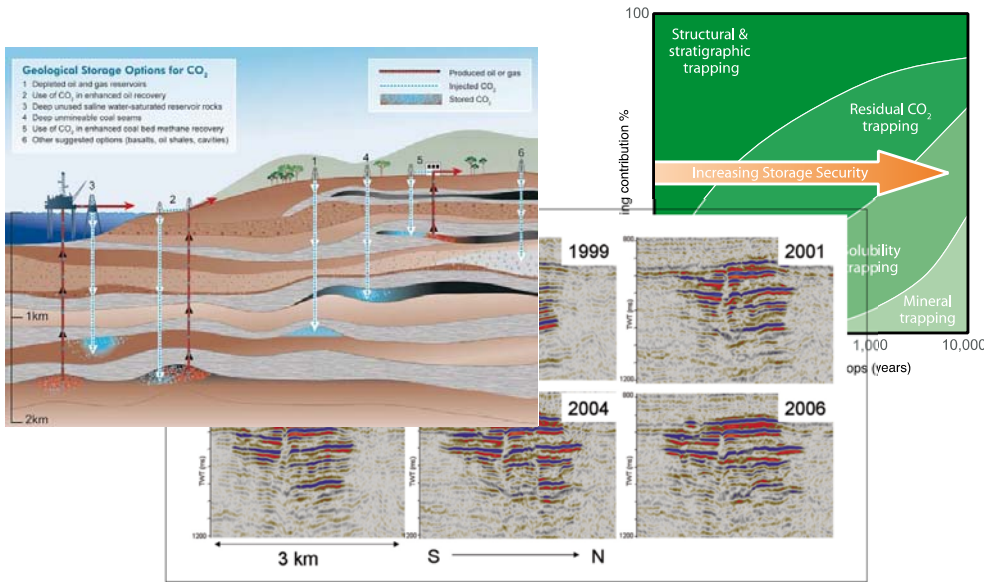
How should we organize and integrate communication/interactions at multiple scales?

What is common and different among public outreach/involvement in nations implementing CCS?

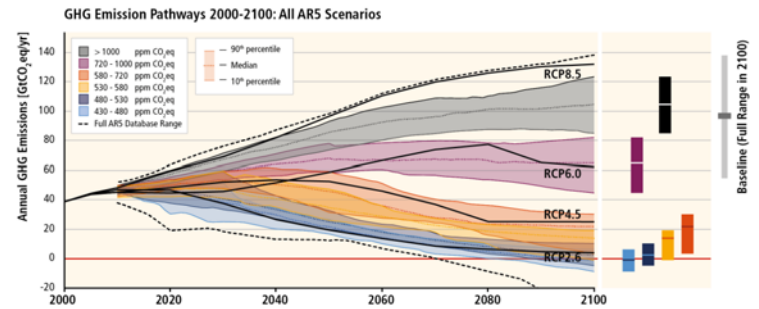


Knowledge sharing

Scientific



Socio-economical, political



	Consumption losses in cost-effective implementation scenarios				Increase in total discounted mitigation costs in scenarios with limited availability of technologies				Increase in mid- and long term mitigation costs due delayed additional mitigation up to 2030			
	[% reduction in consumption relative to baseline]		[% increase in annualized consumption growth rate]		[% increase in total discounted mitigation costs (2015-2100) relative to default technology assumptions]		[% increase in mitigation costs relative to immediate mitigation]		≤\$5 GtCO ₂ e/yr		>\$5 GtCO ₂ e/yr	
2100 Concentration (ppm CO ₂ e)	2030	2050	2100	2010-2100	No CCS	Nuclear phase out	Limited Solar / Wind	Limited Bio-energy	2030-2050	2050-2100	2030-2050	2050-2100
450 (430-480)	1.7 (1.0-3.7) [N: 14]	3.4 (2.1-6.2)	4.8 (2.9-11.4)	0.06 (0.04-0.14)	138 (29-297) [N: 4]	7 (4-18) [N: 8]	6 (2-29) [N: 8]	64 (44-78) [N: 8]	28 (14-50) [N: 34]	15 (5-59)	44 (2-78) [N: 29]	87 (16-42)
500 (480-530)	1.7 (0.6-2.1) [N: 33]	2.7 (1.5-4.2)	4.7 (2.4-10.6)	0.06 (0.03-0.13)								
550 (530-580)	0.6 (0.2-1.3) [N: 46]	1.7 (1.2-3.3)	3.8 (1.2-7.3)	0.04 (0.01-0.09)	39 (19-70) [N: 11]	13 (2-23) [N: 10]	8 (5-15) [N: 10]	16 (4-46) [N: 12]				
580-650	0.3 (0-0.9) [N: 16]	1.3 (0.5-2.0)	2.3 (1.2-4.4)	0.03 (0.01-0.05)								

Conceptual



CCS as a "bridging technology"

What do we (all of us) need to understand and share?