

**WRI CCS Community Engagement Guidelines:**

**Second Working Group Call Summary**

June 2, 2009 11 AM-EDT

**Discussion Topic:** Communicating Potential CCS Project Risks to Public

**Call Attendees:**

Name	Affiliation
Jason Anderson	World Wildlife Fund Europe
Judith Bradbury	Battelle
Steve Crookshank	American Petroleum Institute
Richard Esposito	Southern Company
Lauren Fleishman	Carnegie Mellon University
Sarah Forbes	World Resources Institute
Lori Gauvreau	Schlumberger Carbon Services
Sallie Greenberg	Illinois State Geological Survey
Ken Hnottavange-Telleen	Schlumberger Carbon Services
Gretchen Hund	Battelle
Jeremy Kranowitz	Keystone Center
Sarah Mander	University of Manchester
Sean McCoy	Carnegie Mellon University
Karen Obenshain	Edison Electric Institute
Darlene Radcliffe	Duke Energy
Jennie Stephens	Clark University
Paul Upham	Tyndall Center, Manchester UK
Preeti Verma	World Resources Institute
Sarah Wade	AJW Inc.
Elizabeth Wilson	University of Minnesota

**Discussion Questions:**

1. How will information regarding areas of uncertainty and unintended consequences be demonstrated and communicated to public?
2. Do traditional risk assessments address the public's biggest concerns?
3. What guidelines can we draft for risk communication? How do these guidelines fit into the current planned document outline?

**Key Outcomes of discussion:**

- Building and maintaining timely and open relationships with communities is always beneficial.
- The communities tend to think about risks in the context of benefits which make it important to frame risk communication carefully. Pairing risk communication with benefits and mitigation approaches should be considered.
- It is important to be aware of and be able to communicate to the public about other opportunities and approaches.
- Comparison of the risks of CCS with other technologies sometimes oversimplifies and may not always be the right thing to do. If it is brought up by communities then one should be able to address questions.
- Some participating stakeholders suggested considering unpacking the Guidelines into separate capture, transportation and storage risks (the challenge is that different projects will include different components; some stakeholders have recommended a storage-only focus).

**1. How will information regarding areas of uncertainty unintended consequences be demonstrated and communicated to public?**

- When talking about uncertainty with communities it may not always be a good idea to talk in numbers as probabilities are not always meaningful to public. It is important to be truthful and tell people but one should also be cautious about telling them numbers which they may not understand.
- Communities may perceive risks differently. Risk perception among communities varies and depends on individual situation and circumstances. What a project developer considers risky, communities may not.
- There are 3 dimensions of risk perception:
  - Dread Risk: “Perceived lack of control, dread, catastrophic potential, fatal consequences, and the inequitable distribution of risks and benefits”
  - Unknown Risks: Aspects of risk “judged to be unobservable, unknown, new, and delayed in their manifestation of harm”
  - Number of people exposed to the risk
- If a risk, perceived or real, has any of these dimensions, it may be seen as more risky to the public than it is in a probabilistic sense. In the case of CCS, all three of these could be applied to CCS in the minds of the non-technical public. When building risk communication strategies about CCS, we should keep these dimensions in mind and try to address all three of them.
- People tend to think about risks in the context of benefits. This risk-benefit equation should be presented together to the communities. The FutureGen project is a good example of how communities were receptive of a project due to associated economic benefits to the community.

- In addition to communicating benefits of a project it is also important to consider who the messenger is and if they can be trusted by the communities.
- Compensation makes people more receptive of the projects, particularly in countries like the United States where there is a history of landowner compensation for subsurface activities. This element may be a lower priority in countries where the pore space belongs to the government (EU).

## **2. What do you do when the project doesn't go as planned? How do you portray that risk and uncertainty to community?**

- If there is a risk involved, it might be best explained in the context of mitigation plan.
- While thinking about this, it is also important to consider the unintended consequences of the risk communication itself. With more information people can become more in favor or against a technology. It depends on how one frames the issues. It may be important to think about how the conversation on risks is risky in its own way.
- If there are going to be unintended/unanticipated consequences associated with a project it is always a good idea to communicate this early. Timeliness matters as well as openness and transparency.
- Building and maintaining relationships with communities with open and timely discussions is always useful. It's important to make sure that communities do not get surprised.
- It may be a good idea to not pull out the risk as a separate element when talking with communities. Correct framing of the risk issues is critical and pairing risks with benefits and mitigation approaches should be considered. To this end, the document outline will be revised to incorporate an integrated discussion of guidelines for risk, cost, and benefits.

## **3. What guidelines can we draft for risk communication? How do these guidelines fit into the current planned document outline?**

### **3a. Ideas for improving the risk section in the outline:**

- Combine section D and E, which will incorporate the risk discussion into the section on costs and benefits to community.
- Consider unpacking the Guidelines into separate capture, transportation and storage risks (the challenge is that different projects will include different components; some stakeholders have recommended a storage-only focus).
- Differentiate risk discussions as to scope (local - national - global), industrial activity (capture - transport - storage) and project stage (site studies - injection - post-)
- Important to acknowledge in the document:



- CCS is not just tied to coal and power plants.
  - CCS detracts with other energy technologies e.g. renewables.
  - Communicating the CCS risk profile- CCS risks decline over time- is important (Sally Benson's work)
  - CCS is not feasible in certain geographical areas. It is important to talk about other technologies and approaches with the community. For example, in a location where CCS is not geographically feasible the project developers should understand and be able to communicate other opportunities in the area, i.e., renewables.
  - Comparison of the risks of CCS with other technologies sometimes oversimplifies and may not always be the right thing to do. If it is brought up by communities then one should be able to address questions.
- Stress the importance of talking to communities about risk and benefits in the context of climate change
  - The scope of risk communication should be clear and well defined.

### **Risk References:**

(The following papers can be accessed at <http://docs.wri.org/share/ccs>. The hyperlinked file name for references is mentioned below each citation)

- Palmgren C R., Morgan M G., Bruin W B d and Keith D W., 2004 "Initial public perceptions of deep geological and oceanic disposal of carbon dioxide" Environment Science and Technology. 38 6441–50

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- Singleton, G., H. Herzog and S. Ansolabehere., 2009 "Public Risk Perspectives on the Geologic Storage of Carbon Dioxide," International Journal of Greenhouse Gas Control. 3:1. 100-107

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- Slovic, P., 1987 "Perception of risk' Science" 236. 280–285.

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- Slovic, P., 1999 "Trust, emotion, sex, politics, and science: surveying the risk-assessment battlefield" Risk Analysis. 19. 689–701.

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- Slovic, P., 2001 "The risk game' Journal of Hazardous Materials" 86. 17–24.



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