CDM Watch
Scrutinizing Carbon Offsets

Uncertainties in Risk Assessment for Major Projects

Eva Filzmoser, CDM Watch

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eva.filzmoser@cdm-watch.org

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Overview

- About CDM Watch
- Key Considerations
- Uncertainties
- Further Recommendations

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- **Watchdog organisation** on the CDM and carbon market developments
- **Advocacy activities** at international & European level
- **Capacity building** initiatives for host country NGOs and provide continuous support for public participation
- Membership of more than **800 grass-roots organisations** in CDM host countries
- **Scrutinizing individual CDM projects** and provide input on policy developments, including CCS
- **Coordinator of the Climate Action Network** on issues related to carbon markets, including CCS

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Key considerations (1):

1. **International guidance** and **independent assessment** on site selection, risk assessment and management is essential (7/CMP.6 para 3j)
2. **Site selection** is complex and challenging
3. There are substantial **data gaps** on the likely behaviour and impacts of storage and possible seepage/leakage. The LC-LP FRAM notes that data is *"mostly scarce, scattered and limited in detail"*

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Key considerations (2):

4. **Monitoring programmes** must include baseline surveys and risk characterisation, assessment and management
5. The possibility to detect leakages over a very wide monitoring area does not imply that **intervention/mitigation** will then be possible
6. **Transboundary movement** of CO2 streams for storage remain one of the most controversial issues on an international basis
7. **Public interest and concerns** must play a role in site selection, characterisation, assessment and management

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Key considerations (3):

8. Key concerns go beyond seepage and leakage and also relate to potential **impacts from displacement of brines and other materials**

9. Monitoring (process and environment) must support **reactive systems** of management and, where necessary, **review or revoking** of permitting decisions

10. It must be possible to **withheld permission** for a proposed CCS project in case of insufficient data

11. **Uncertainties** (monitoring data, model structures or data inputs) must be made explicit and, where possible, quantified at all stages

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Uncertainty… just a few:

- Knowledge of expected composition of injection streams from CO2 generation processes and its variation over time
- Behavior and interaction of other substances which maybe in the injection stream, once in the geological and marine environment
- How other substances may be mobilized by the CO2
- Development and application of simulation models for probability of exposure
- Understanding existing and abandoned well integrity and leakage processes

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Further recommendations

- Need for methodological guidance for EIA to avoid scattered standards (advise against 51a)
- Risk and safety assessment must be ongoing throughout the project duration and reported on regularly (50)
- Geopolitical assessment of political unrest is needed (18)
- Review of risk and safety assessments needed if CO2 migrates from the predefined project boundary (27)
- Boundaries should be subject to review as new information arises (30)
- Data must be evaluated for quality and to identify gaps (20a)

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Do we consider the outstanding issues (2/CMP.5 para 29) resolved in a satisfactory manner...

...when we know the right questions to ask?

...or only when these questions can be answered with real knowledge and data?