

Finding A Way:

The Potential for Adoption and Diffusion of Carbon Dioxide Capture and Sequestration Technologies

Elizabeth L. Malone

Joint Global Change Research Institute

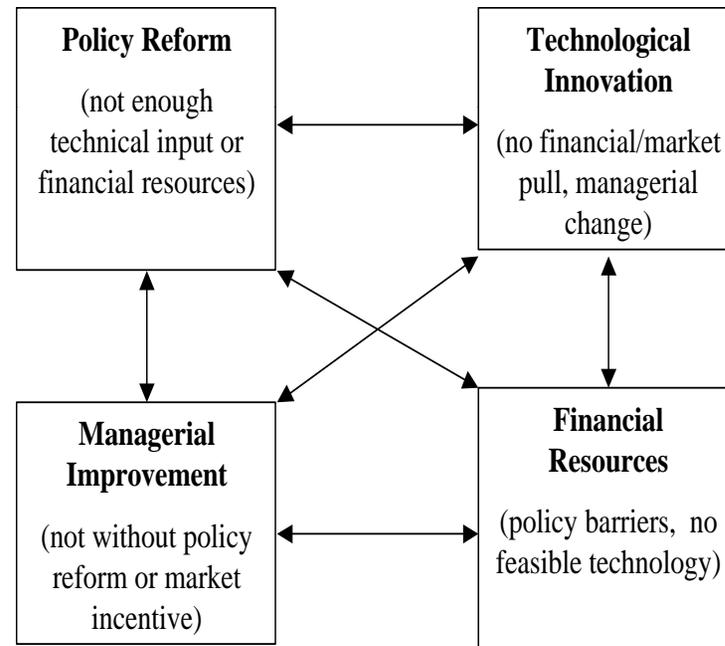
Comments to emalone@nsf.gov

Technology Diffusion: We Like to Think of It as Clean and Tidy (Linear and Well-Behaved)

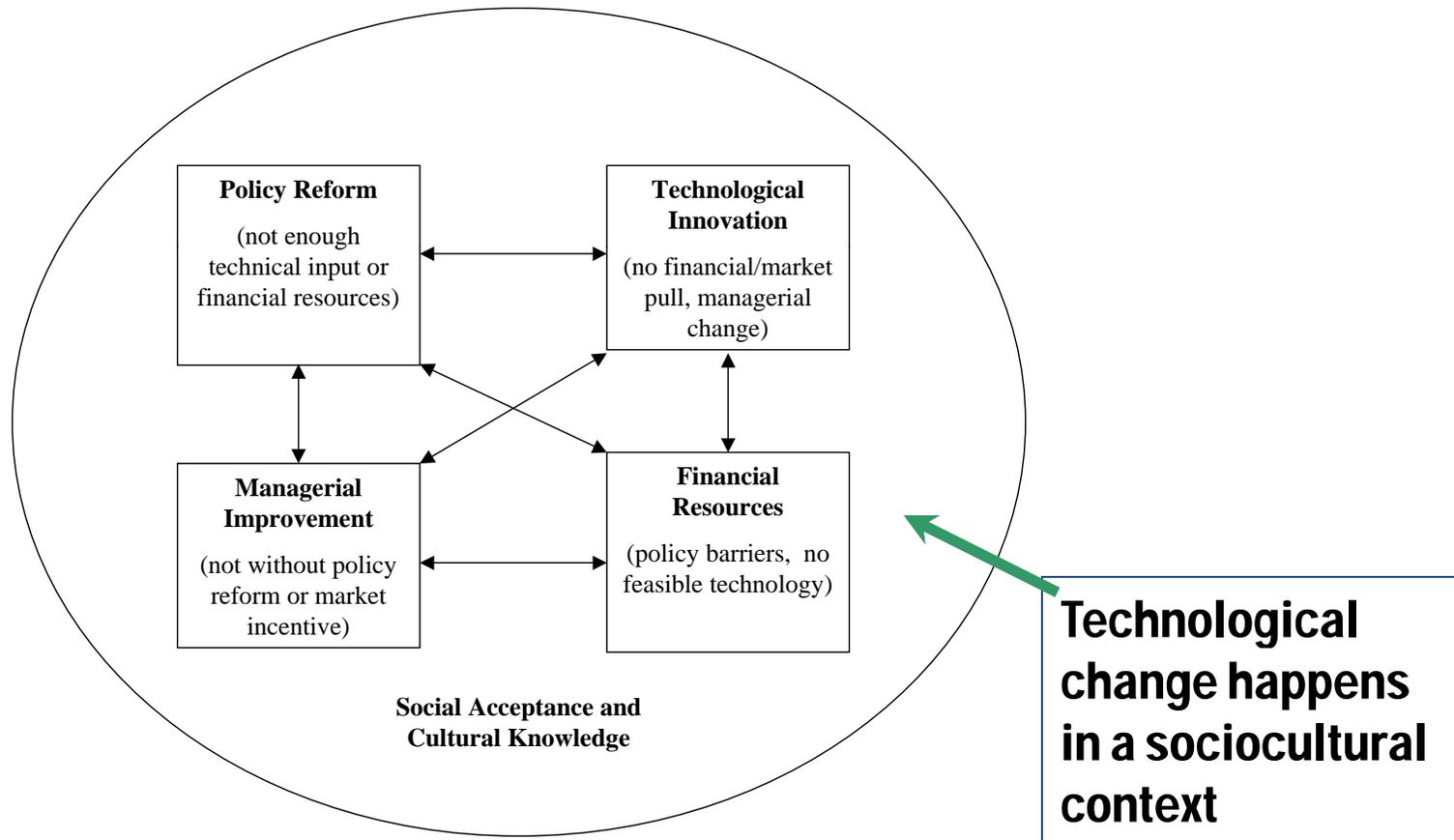
- Government policies
- Incentives and regulations
- Industry response – develop technologies
- Costs shared by government, industry, consumers
- Learning-by-doing lowers costs, increases efficiency

Technology Diffusion: Not Clean and Tidy but Messy...

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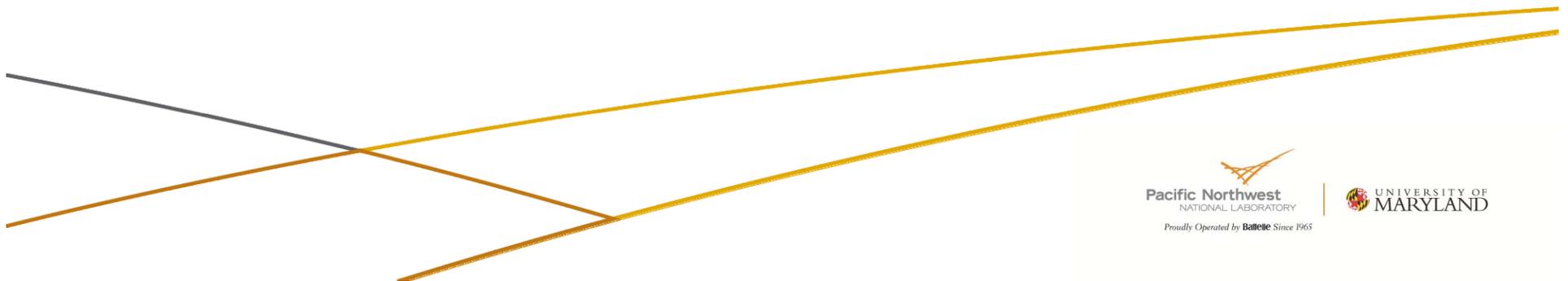


...Messy and Diffuse



Diffusion Can Be Facilitated by “Path Creation”

- ▶ Not a linear process, but configurational
- ▶ Not lockstep but interactive
- ▶ Involve all elements
- ▶ Do not focus on “barriers” but on opportunities (e.g., if cost is high, focus on providing desired “goods”)
- ▶ Find champions
- ▶ Create niche markets



Path Creation: Strategy #1

- ▶ Keep the conversation going –
- ▶ even when action is unlikely in the short term.

Path Creation: Strategy #2

- ▶ Develop policy alternatives and language informed by technological advances.

Path Creation: Strategy #3

- ▶ Continue research and development.

Path Creation: Strategy #4

- ▶ Locate potential leadership (both managerial and financial).

Path Creation: Strategy #5

- ▶ Enter into dialogue with the public in general and a more targeted set of stakeholders.

Path Creation: Strategy #6

- ▶ Continue creating networks among people interested in the issue – researchers, engineers, policymakers, industry decision-makers, and stakeholders.