

Four Nanotech Scenarios

IOM

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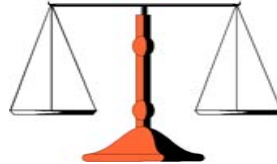
A KEY QUESTION



ASSET OR LIABILITY?

FOUR NANO SCENARIOS

- Tipping Scales



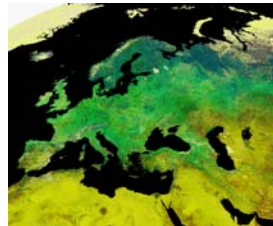
- Nano Bhopal



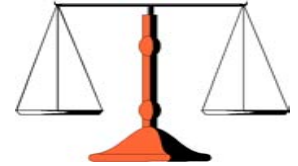
- Hollywood Wins



- Old Europe



TIPPING SCALES

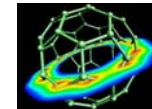


- Mounting evidence of negative environmental and health impacts from nanotechnology

- Risk amplification



- Continued flow of new nano-based products into the marketplace (30-50/month)



- Existing regulatory frameworks prove inadequate in addressing risks and boosting public confidence

- Continued low trust in government by the public undermines interventions

NANO BHOPAL

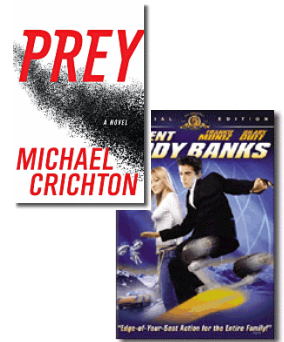
- An incident (accidental release/exposure) in a developing country
- Small business or research lab affected
- Poorly handled emergency response followed by global press coverage
- Low trust in industry undermines credibility of subsequent corporate interventions



HOLLYWOOD WINS



- Release of film **Prey** (25 million plus viewers in 3 weeks) followed by other films



- Release of a number of console video games and massive multiplayer online games (could reach 10-20 million players worldwide)

- Made-for-TV films

- Embedded messages in ads



Nanobreaker for PS2

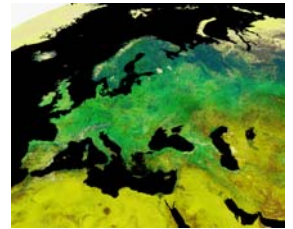
The plots:

Accidental release

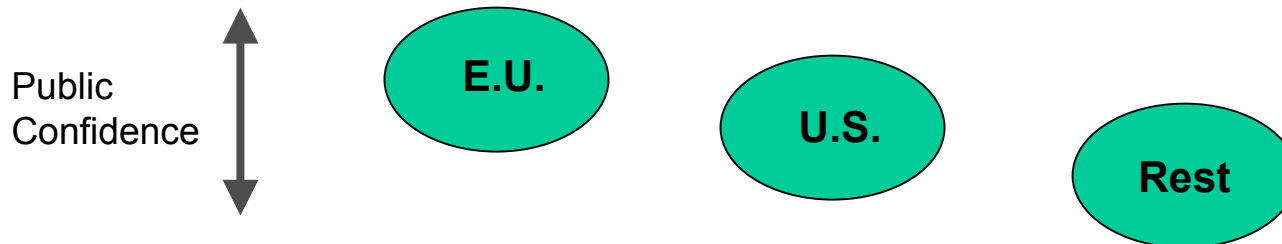
Compromised scientist

Technology bites back

OLD EUROPE



- Radicalized civil society actors raise concerns
- Application of the “precautionary principle” in:
 - Individual European countries
 - E.U. as a whole
 - Insurance industry, banks, etc.
- Rigorous and early technology assessment provides actionable policy interventions
- Tripartite regulatory/protective spheres arise globally



POSSIBLE FIXES



- Full blown media strategy including social marketing
- More funding for research on environmental and health implications (should be viewed as an insurance policy on ~ \$1 billion annual federal investment)
- Beefed-up science/policy interface
- Voluntary agreements by industry covering the responsible use of nanotechnology
- Bilateral and multilateral agreements on responsible research, development, and use of nanotechnology
- Nano labeling for consumer products, foods, etc.

For more information:

www.wilsoncenter.org/foresight

www.foresightandgovernance.org

www.nanodialogues.org

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