

ABSTRACT

Environmental views of science and technology have always been complex. In the last 20 years, a set of theories and practices under the label of ecological modernization recasts the relationship between economic growth (usually associated with production and material growth) and the environment. Science and technology are recognized as tools for defining local and global problems and solutions, not simply as their cause. The purpose of this paper is to understand the framing of environmental concerns and definitions within the emerging field of nanotechnology in the context of ecological modernization theories of regulation. The approach, based on Maarten Hajer's (1995) work, is a discourse analysis of the practices of defining environment in nanotechnology through storylines and discourse-coalitions, using interviews and the transcription of the hearings on societal implications of nanotechnology in the U.S. House of Representatives during the formation of the 21st Century Nanotechnology Act (2003a). One storyline stresses the competitive benefits to the U.S. and the resulting applications that in turn will improve the environment. The main environmentalist storyline focuses on the handling of potential toxicity and calls for a moratorium on research and development. Though a storyline stressing potential environmental applications exists, it is equated with 'business as usual' and calls for the continuation of research. The paper addresses how problem closure in policy-making is achieved, and how storylines could bring about "reflexive" institutional arrangements.