

Strategic Policy Approaches to Technological Development for Sustainability: The Role of Consensus Building and Experimentation

by

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Submitted to the Department of Urban Studies and Planning
on May 18, 2000, in partial fulfillment of the
requirements for the degree of
Master in City Planning

Abstract

This thesis explores how technological transitions can be better implemented in society, to help achieve sustainability goals. The focus is specifically on technologies that may imply a paradigm shift, which is a change in existing practices or norms. To overcome potential barriers to market and societal penetration, government has traditionally initiated regulations and economic incentives to help diffuse the technology. However, a major impediment to technological shifts is the lack of effective interaction among the relevant institutions and other stakeholders. Through case study examples, it is argued that effective interaction for technological transitions can best be achieved through the use of consensus building strategies which can help promote legitimacy, development of institutional relationships, and learning. In recognition of this, an additional strategy is proposed for government – creating a forum for effective interaction to test or experiment with new sustainable technologies.

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