1. INTRODUCTION

1.1 BACKGROUND AND PURPOSE

Over the past decade, federal policy makers have expressed a growing desire to obtain a better return on federal research and development (R&D) investments through improved technology transfer. The nation's future economic productivity, trade balance, and foreign indebtedness depend in large part on how well new technologies are put to use. Since nearly one-half of the nation's R&D is federally-supported, much can be gained by improving the translation of publicly-sponsored research results into private-sector products and practices. The commercialization of energy-efficient innovations can play a particularly important role in improving our economic competitiveness because of its multiple benefits: it can enhance the productivity of our economy, reduce our dependence on oil, and create products for export (U.S. Department of Energy, 1988a).

Although improved technology transfer is clearly a high national priority, many dimensions of the technology transfer process are poorly understood. Transferring products from producers to consumers, the realm of market research, is fairly well understood, but moving ideas from the laboratory bench to the producer (when they are part of different organizations) is another matter entirely, relatively ignored as a generic research question. As a special case, technology transfer from the public to the private sector has been especially neglected.

> "In the rush to bring technology down from the federal shelf to industry's bench, only limited attention has been given to assessment of particular approaches and local effects....For the most part, opinions about the success of technology transfer policies is more a result of casual observation than of systematic inquiry" (Bozeman and Fellows, 1988).