

# The Industrial Organization of Utility Energy Efficiency Programs\*

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## Abstract

Many of the energy efficiency programs available to homeowners and businesses are sponsored by utilities. The rationale for delegating the achievement of energy saving objectives to utilities is however unclear. In this paper, we seek to understand why and when utility-sponsored programs could be socially-preferable to government-led programs. We develop an industrial organization model with imperfectly informed energy users in which a utility is required to meet an exogenous energy efficiency policy objective. The model is then used to evaluate the welfare impacts of the programs that emerge in equilibrium. We show that the utility can reduce program costs and implement welfare-improving solutions, in particular, because it can credibly signal the energy performance of energy efficiency contractors.

*Keywords:* energy efficiency, demand-side management, white certificates, certification

*Classification JEL :*

## 1 Introduction

Many of the energy efficiency programs available to homeowners and businesses are sponsored by utilities. This approach was first implemented in the United States in the 1970-1990s in the wake of the first oil crisis (Joskow and Marron, 1992; Gillingham et al., 2006; Auffhammer et al., 2008). Europe followed in the 2000s in a context of liberalization of energy markets and

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