Suvitha Radhakrishnan

EAS-2803 3/6/2012

Narrowing the Energy Efficiency Gap

The energy efficiency gap refers to the potential improvement of energy efficiency resulting from the difference between the optimal and actual level of energy consumption. As a result of significant measures being taken to reduce this gap, U.S. energy efficiency is advancing considerably based on energy use per 2005 dollar of GDP. Numerous regulations and energy efficiency policies, such as the ENERGY STAR program and Energy Savings Performance Contracting have been implemented on a local and global scale in an effort to reduce the large energy efficiency gap that is currently present worldwide. One such effort included improving the efficiency of household refrigerators. The resulting amount of savings proved not only the potential for improved efficiency but also that this value of energy saved may contain more value than even conventional hydropower.

Despite evident energy improvements, the energy efficiency in the U.S. is still lagging behind many developed countries such as Japan, Switzerland, and Denmark. Japan, for example, has implemented a quick and successful Mandatory Top Runner Program that develops an energy standard for major appliances that is based on the current most efficient products and requires future production to meet that level. One program operating in the U.S. is Mortgage Backed Energy Efficiency Financing. Such financing provides additional borrowing capacity and better terms to borrowers who want to buy a new energy efficient home or invest in energy improvements in their current home. A globally recognized program to increase energy efficiency is ENERGY STAR, which is a government-backed program that aims to increase efficiency standards. ENERGY STAR products generally use 20-30% less energy than required

by national standards. Constant improvements in energy efficiency and successful implementation of new policies such as these serve to narrow the global energy efficiency gap.