

# Opportunities and Barriers in Business and Consumer Electronics

*Marti Frank, Research Into Action, Inc., Portland, OR*  
*Roy Bragg, Southern California Edison, Irwindale, CA*  
*Caroline Chen, representing Southern California Edison, Irwindale, CA*  
*Jane Peters, Research Into Action, Inc., Portland, OR*  
*Shahana Samiullah, Southern California Edison, Irwindale, CA*

## The Electronics Challenge

Electronic devices have become an integral part of American life. The typical household owns 20 to 30 of them, including TVs, computers, set-top boxes, MP3 players, mobile phones, digital cameras, gaming consoles and audio equipment. Although the electricity consumed by a few of these products (TVs, set-top boxes and game consoles) is on par with a large appliance, most use comparatively little. Collectively, however, their impact is significant. Electronics account for 10 to 20% of a household's electricity use and their share is increasing faster than any other end use. Add to this the 7% of electricity consumed by electronics in commercial buildings and, in total, electronics likely consume upwards of 10% of all U.S. electricity.

## The Barriers

Billions of electronic devices are in use in the U.S. and consumers and businesses purchase millions of new products every year. But the large number of devices, and their variety, present only one of several challenges to energy efficiency program implementers. New products are released continuously. Technologies change rapidly. Consumers are not accustomed to thinking about the energy use of these products - feature sets and price are currently their top decision-making criteria. The relatively small energy use of some devices, and the high cost of others, suggests the downstream model of consumer-paid incentives will not be effective.

## The Opportunities

For all these obstacles, the consumer and business electronics market is not without opportunities. Manufacturers give high priority to energy efficiency and perceive increasing consumer demand for "green" products. Consumer awareness of the ENERGY STAR brand is high. Efficiency standards have been proven effective in driving market transformation. Manufacturers express interest in working with utilities to promote efficient products. Several industry-led organizations have taken interest in energy efficiency and can likely be leveraged by program managers for technical expertise and marketing support.

## The Poster

This poster draws on in-depth interviews with more than 50 market players and uses diagrams and graphical elements to illustrate the supply chain, potential points of intervention, and key characteristics of the market for selected consumer and business electronics products.