

# **Will California Ever Get the LED Out? Remaining Barriers and Short-term Energy Savings Potential for Residential LED Replacement Lamps**

*Kathleen Gaffney, DNV KEMA Energy & Sustainability, Oakland, CA*

Light-emitting diode (LED) replacement lamps are becoming more available, more applicable and more affordable in many US markets, following early advancements in Europe, Australia and other global markets. However, penetration rates remain very low for LEDs in residential applications. This poster will present recent data from research completed in California to both characterize the remaining barriers to adoption and quantify the short-term energy savings potential for LED replacement lamps in residential applications. Over 400 retail stores were visited to collect detailed LED replacement lamp product data, and over 1,000 homes were surveyed to assess LED replacement lamp penetration rates. This poster will present evidence to demonstrate that while certain barriers have been reduced and in some cases removed altogether – such as product diversity, availability and pricing – we have yet to observe significant changes in product purchase and penetration rates. The poster will also highlight key applications in the residential sector where we expect to see increased adoption in the coming years.