

WHITE PAPER

## **Energy Savings from Nest**

The impact of Nest Learning Thermostat

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## 1. Introduction

Nest has quantified the energy savings of Nest Learning thermostat by combining Nest usage data with smart meter data. From May 2012 to September 2013, we analyzed the energy usage of hundreds of Southern California Edison (SCE) customers, with their approval. While these results represent data from an actual Nest Energy Partner program, savings may vary based on a number of factors, including a customer's energy use, utility rates and plan. Savings numbers are not a guarantee.

To determine savings, we compared their 2012 summer energy usage without Nest to their summer 2013 usage with a Nest Thermostat. We applied a degree-day model to normalize for the weather variations across the two summers.

Highlights:

- Results show that customers in southern California saved an average of 1.16 kWh per day or 11.3% of AC-related energy usage after installing a Nest Thermostat.
- These savings result in an average peak demand reduction of 0.10 kW during 2-6 pm on weekdays.
- The results also show that AC-related electricity accounted for 25.9% of whole home electricity usage for users.

The full report is available to existing and future Nest partners by contacting Nest at <u>nest.com/contact/energy-partners</u>

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