



“New England on the Cutting Edge”

NECPUC Symposium 2016

June 7, 2016

Three Eras of Saving Energy

1. Conservation (doing less)
2. Energy Efficiency (doing it more efficiently)
3. Smart Efficiency (only doing it when you need it)

What Drives the Third Era?

Reductions in the cost of:

- Sensors
- Telecom
- Computing





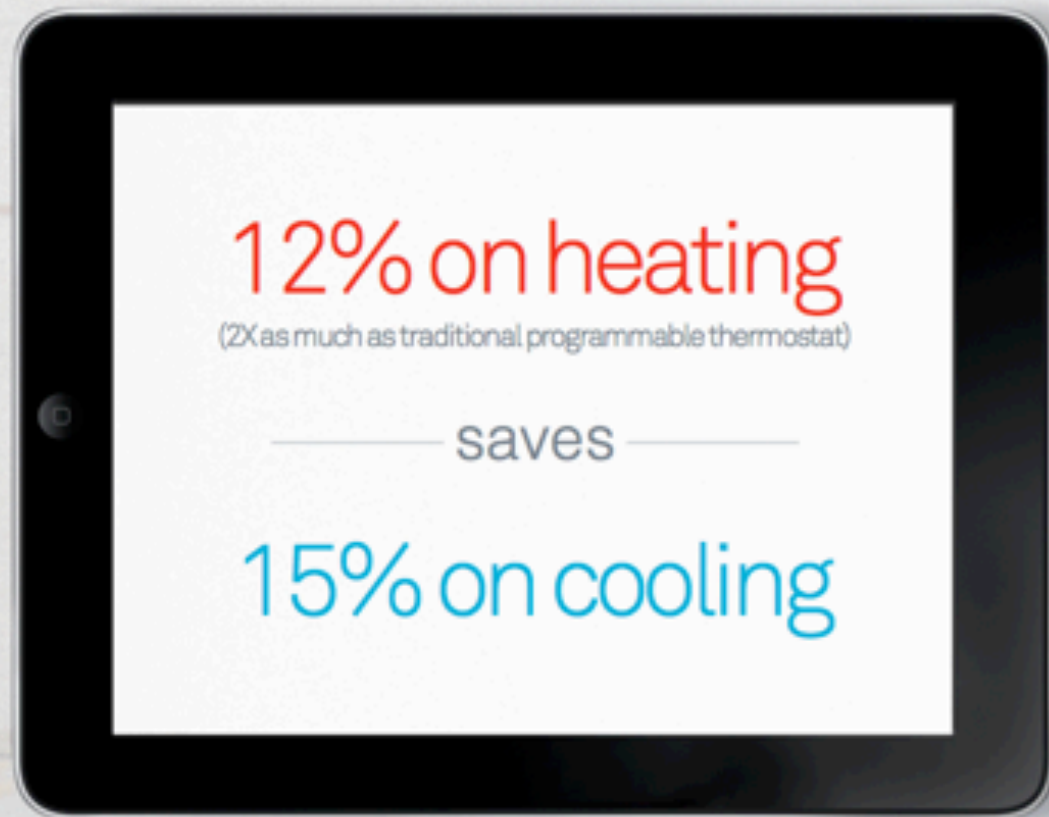
The Nest Learning Thermostat

How Can Thermostats Help?

- Cost?
- Carbon?
- Reliability?

We have proof.
nest.com/realsavings

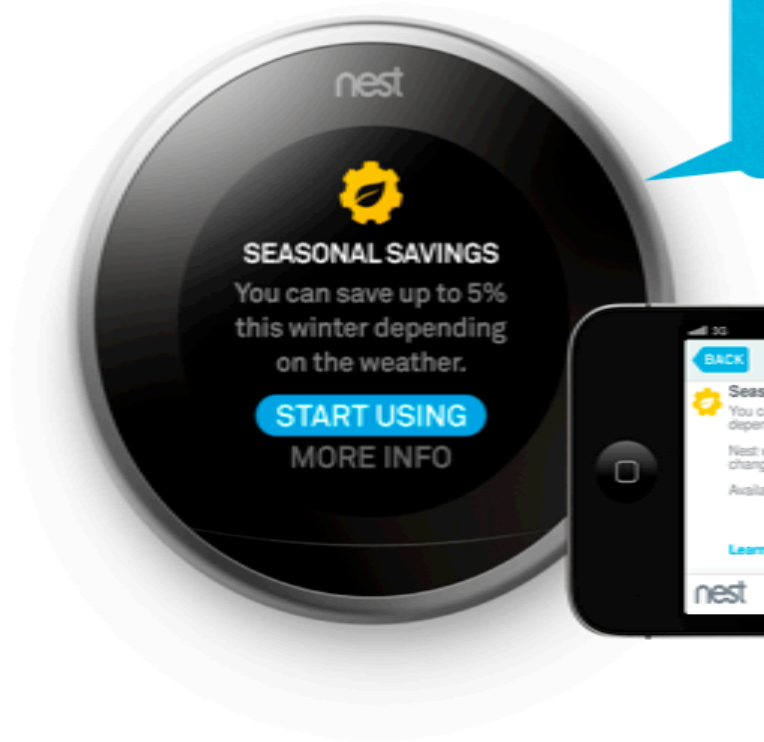
\$130 to \$145
average savings a year



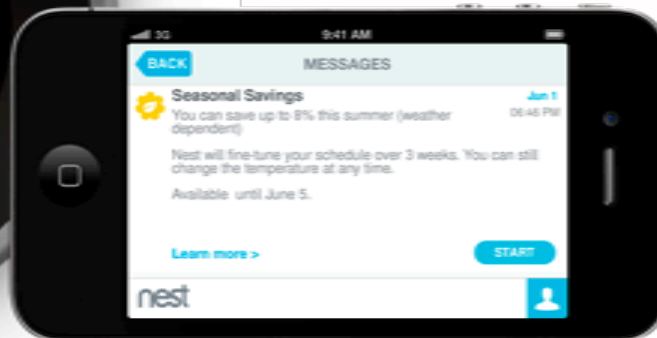
Based on independent studies by  EnergyTrust of Oregon and  VECTREN and  NIPSCO

Cost: MA DOER Winter 2015

>22,000 participants / 7 blizzards



Seasonal Savings cut heating use by an average of 3.6%!



87%

“Qualified “ for the program

68%

Opted in to the program

\$21

Average savings per thermostat

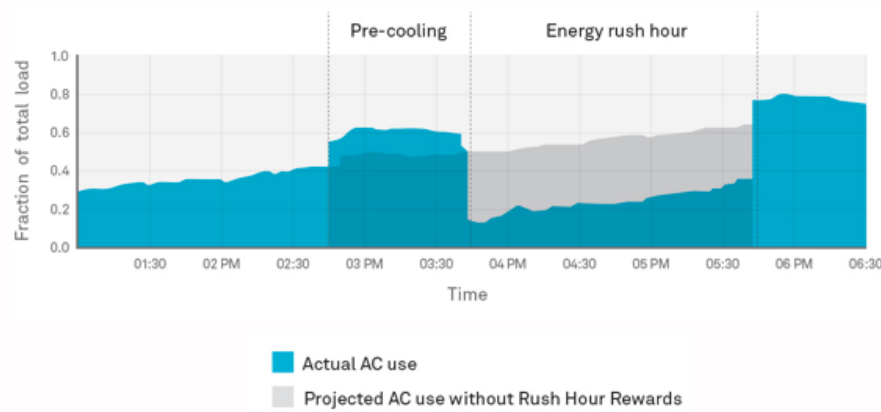
Carbon: Ontario Case Study

- Each Nest Thermostat can save .5 tonnes per year of carbon emissions, based on gas savings and the fuel mix of Ontario's electric system.
- 100,000 Nests equal taking 15,000 cars off the road for a year.



Reliability: Electric Demand Response

Data from 1000s of participants



85%

events completed without adjustment

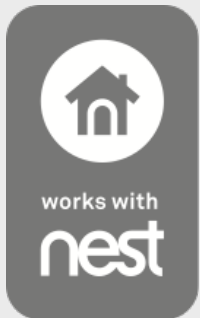
55%

cooling load reduction

1.2

kW reduction per thermostat

Plus: A Growing Ecosystem of Partners

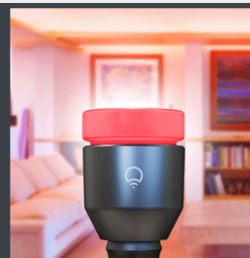


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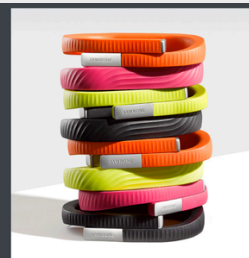
On the road to a more comfortable home.

Your car can tell Nest when you'll be home so your thermostat can start heating or cooling at exactly the right time. It keeps you from wasting energy, and means you're comfortable as soon as you walk in the door. [Get Connected >](#)



A brighter way to think about fire safety.

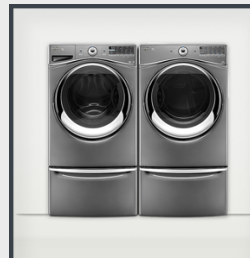
If Nest Protect detects smoke or CO, LIFX bulbs can flash red to let you know there might be danger and help alert those who are hearing impaired. [Get Connected >](#)



It wakes you up. And your thermostat.

Nest knows which temperature you like. And your UP24 band can tell when you wake up. Put them together and your thermostat will start to heat up or cool down your home before you even step out of bed. [Get Connected >](#)

JAWBONE



Helps with chores. Even when you're away.

If your Nest Thermostat notices you're away, it can have Whirlpool switch to a refresh mode when your cycle ends, so your clothes stay fresh and wrinkle-free. [Get Connected >](#)



Your garage knows when you're home. Or Away.

Open the garage when you arrive, and Chamberlain can tell Nest you're home. Close it on your way out, and your thermostat can go into Away mode so you don't waste energy heating or cooling an empty home. [Get Connected >](#)

CHAMBERLAIN

Questions?

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