



Opportunities and experiences of using ICT to influence decision making and behaviour change

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Opower deploys energy efficiency at scale

Proven efficiency results

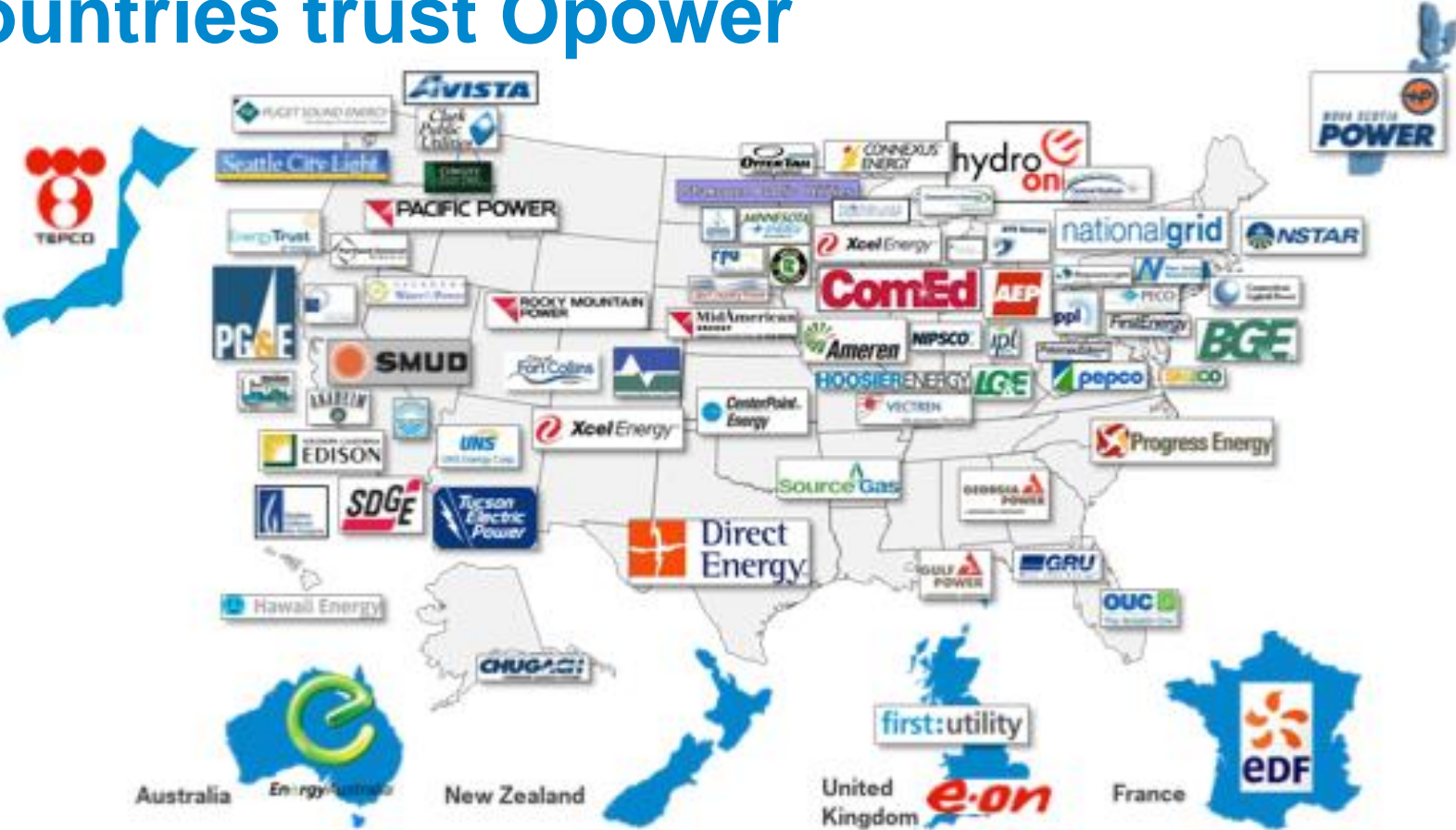
- Engaging over 70 M households on four continents in partnership with nearly 100 utilities
- Over 140 programmes deployed - 1.5% to 3.0% average savings
- ~ 8 TWh in energy savings impact

How?

- Behavioral science software
- Data analytics
- Consumer marketing
- User-centric design

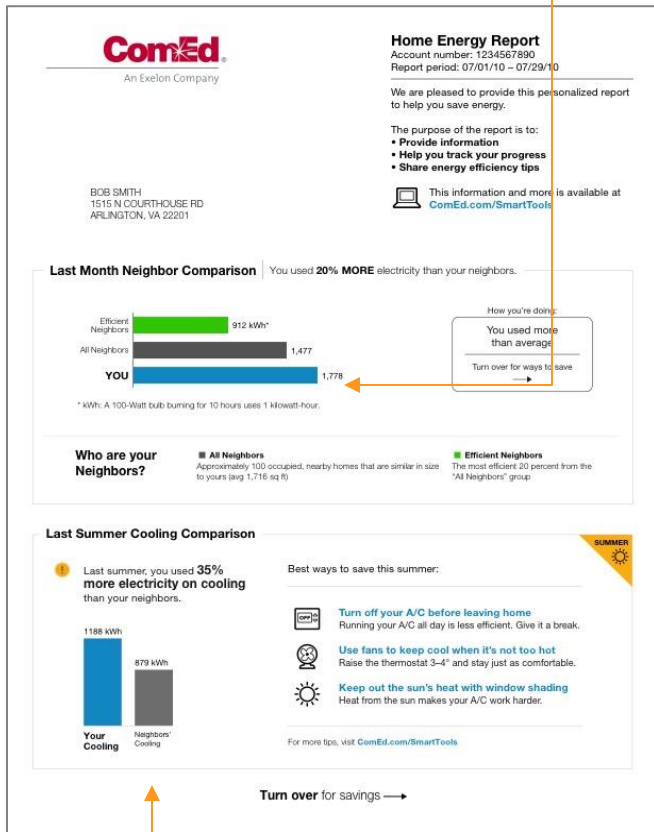


Engagement at Scale: Nearly 100 utilities in 9 countries trust Opower



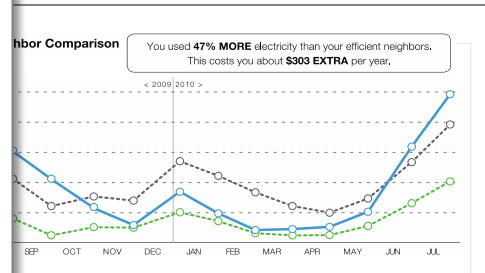
- 40% of US household energy data under management totaling 100 billion reads
- 15 million residential households on Opower platform, and over 1 million SMBs
- Data Center located in Toronto, Ontario
- 600 employees in Washington DC, San Francisco, London, Tokyo and Singapore

Engagement starts with paper...



Neighbor Comparison
Behavioral science helps motivate consumers to save energy

Mailed reports
Reach all consumers regardless of demographics



How you're doing: You used more than average. Turn over for ways to save.

Profile: Homeowner, High Cooling Use, 1716 Sq Ft, Home all day

Adjust your thermostat
Set your thermostat to 68 degrees when you're at home and 65 degrees when you're away. **Save up to \$165/year**

Seal gaps around windows and doors
Check for air leaks around windows and doors. Seal them with weatherstripping or caulk. **Save up to \$310/year**

Service your air conditioner yearly
Have a professional service your AC filter, coils and nearby areas. Clean the coil fins. **Save up to \$20/year**

How many can you check off?

PERSONALISED TIPS

To help consumers take action

Analytics

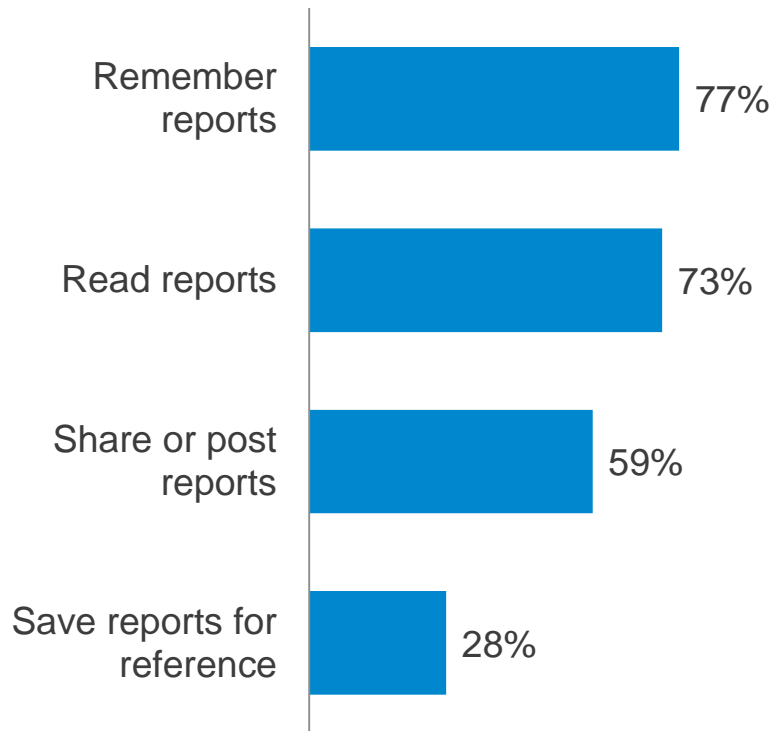
Insights that consumer care about, such as how their cooling use compares



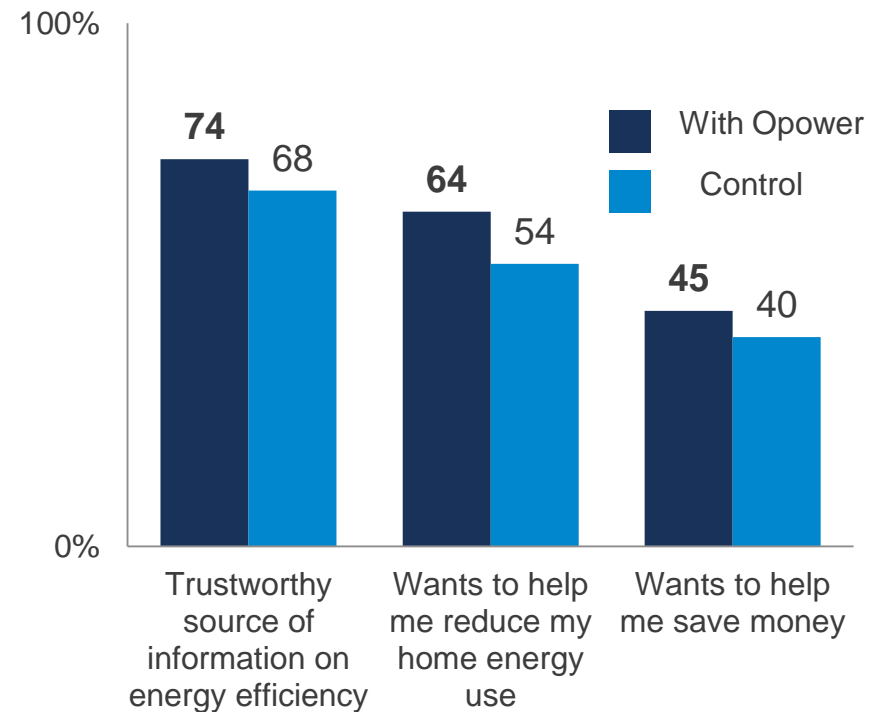
**Do behavioural energy
efficiency programmes
deliver?**

Paper reports have outstanding reach and impact

The vast majority of customers engage with Opower reports



Engagement translates into improved opinion of utility in key areas



Rigorous measurement with experimental design

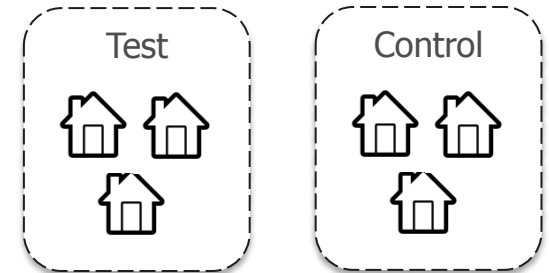
1. Identify eligible households



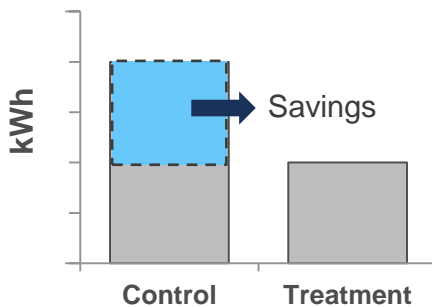
2. Match program size to desired impact



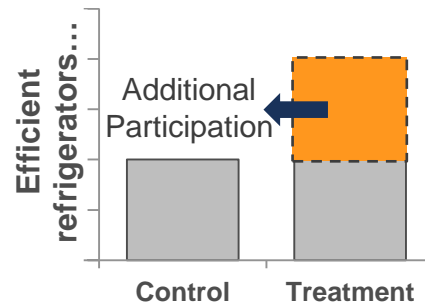
3. Establish statistically equivalent groups using randomization



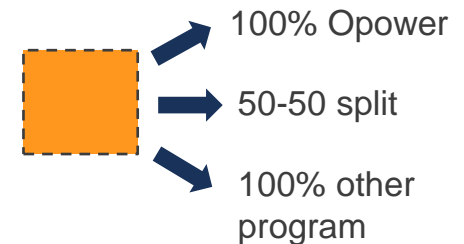
4. Measure program savings



5. Identify participation in other individually-tracked programs

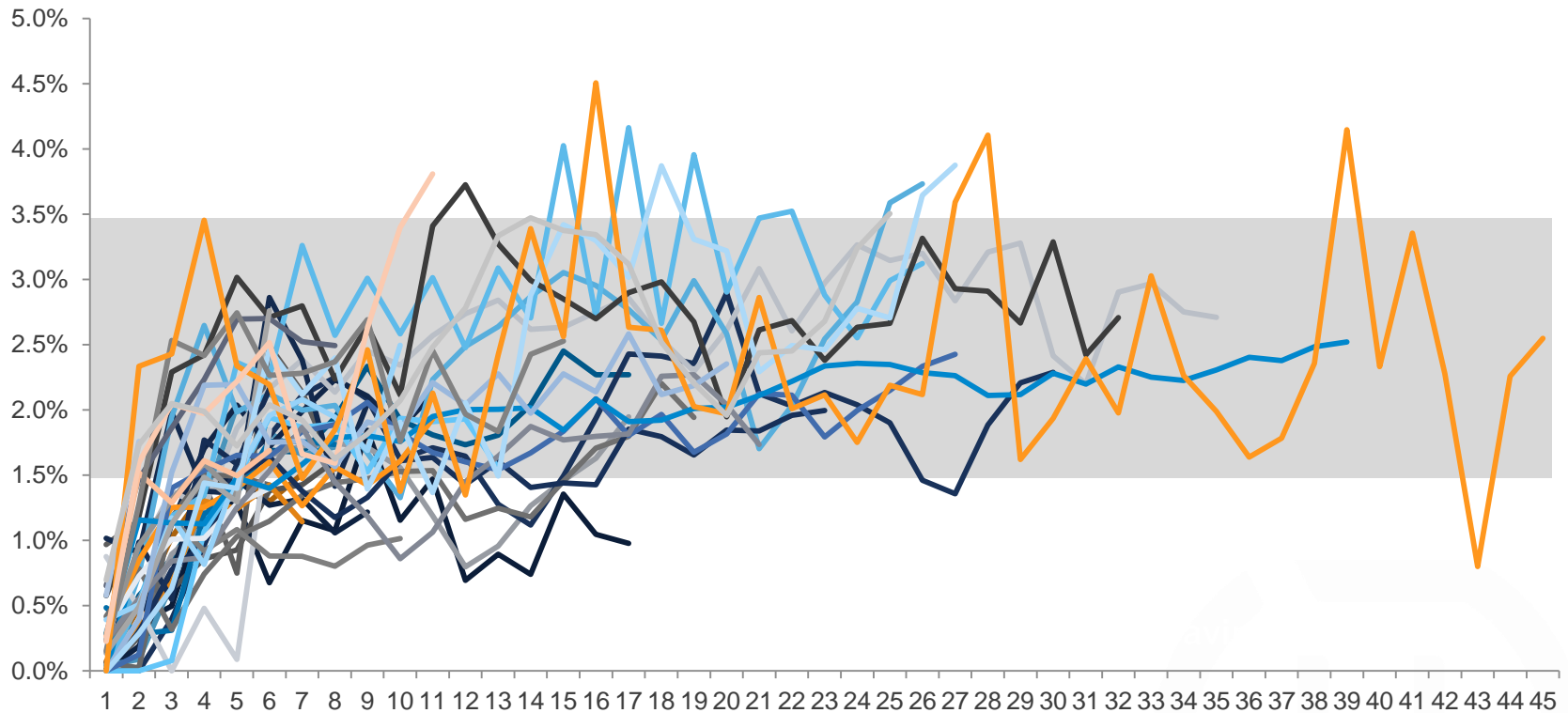


6. Attribute savings from other individually-tracked programs



Significant, persistent, sustained savings..

Energy saved

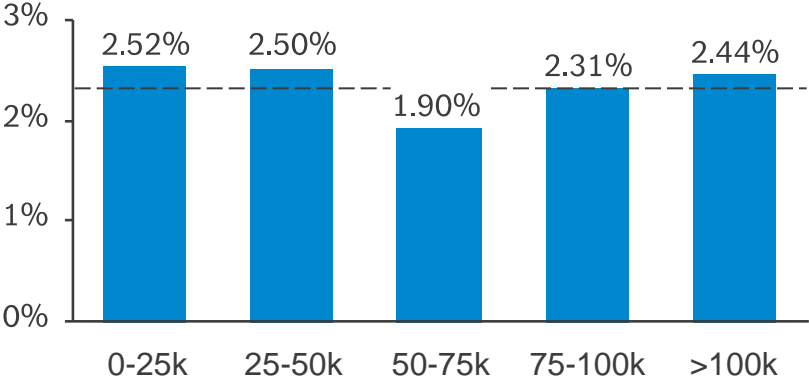


Months since program start

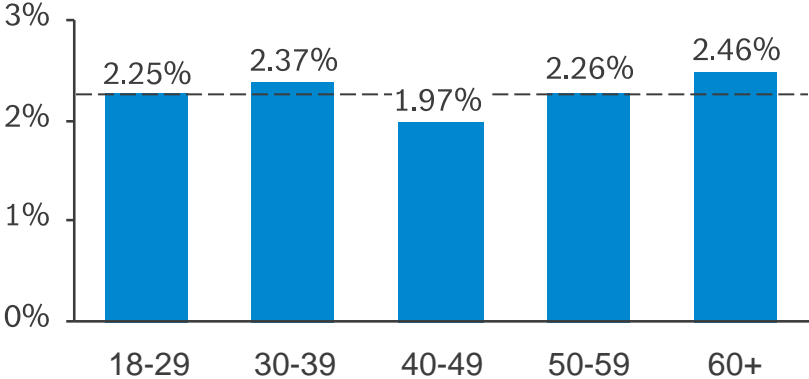


Impact Across All Segments

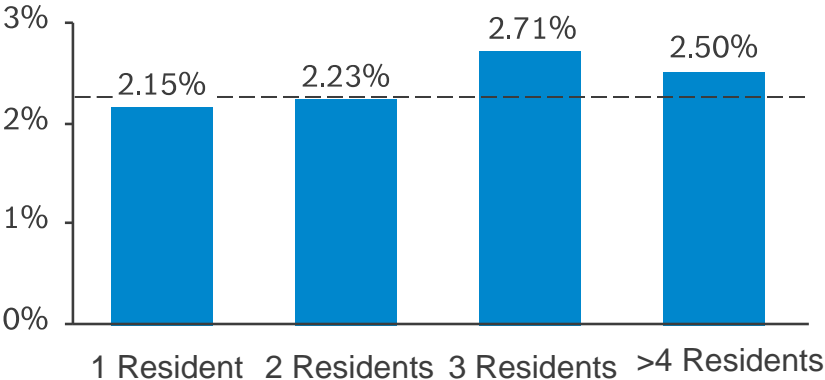
Energy Savings by Income



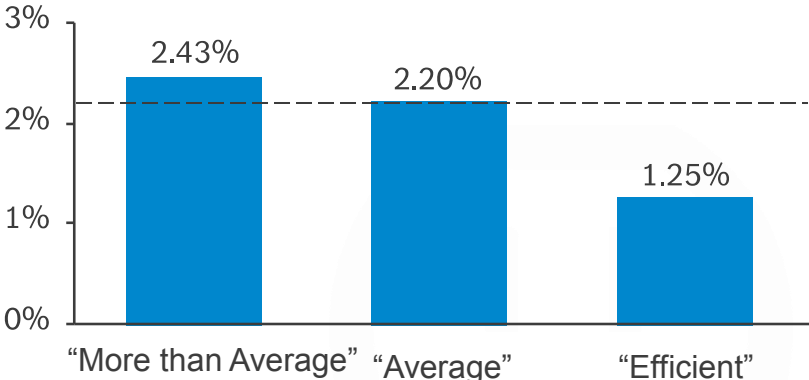
Energy Savings by Age



Energy Savings by # of Residents



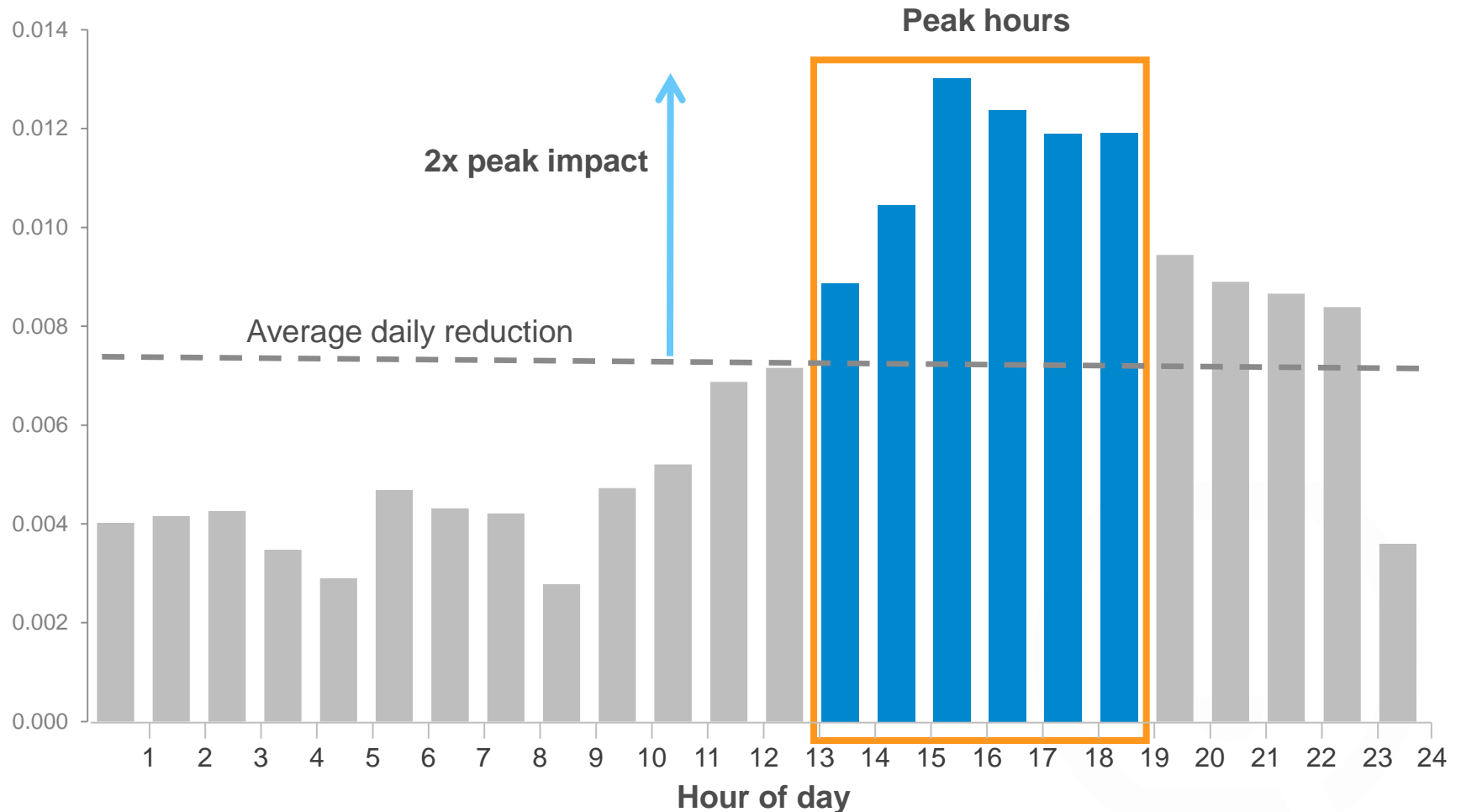
Energy Savings by Household Efficiency



Impact Variance Very Low Across Demographic Groups and Energy Profiles

Greater savings occur during times of peak demand, even without price signals or in-home devices

Average hourly kW reduction per home



Denmark, Ireland, Italy & UK approve behaviour as a measure for utilities to meet regulatory EE requirements





Thank you