

Customer Program Case Studies

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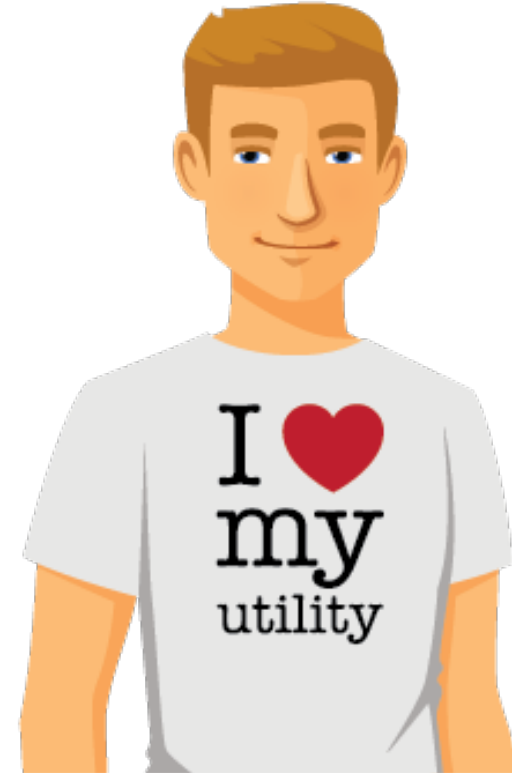


E Source

2018 E Source Summit for the Tennessee Valley

Utility Programs and Customer Satisfaction

Program
participation



Non-monetary incentives

1. SEM and technical assistance
2. Customer engagement platforms
3. Online energy marketplaces
4. Midstream & upstream programs
5. Training and workforce development



Case studies

Otter Tail Power Co. House Therapy Program

Fort Collins Utilities Solar Affordability program

CPS Energy Solar Host San Antonio program

DTE Energy Midstream Food Service program

ComEd C&I New Construction program

Tacoma Power Video Chat Inspection pilot



Otter Tail Power Co. House Therapy program

Financial Model

- Homeowners pay ZERO upfront costs
- CPS agrees to BUY solar produced energy for 20 years @ contracted price
- Private investment finances the purchase and installation
- Only subsidy comes from the fed government


Benefits to utility and customer

Utility benefits

- Customer engagement
- Credit below retail rate
- Utility control over distributed solar
- Happy customer and enhanced brand

Customer benefits

- Simple solar adoption!
- No participation fees
- Bill credits
- Covered maintenance
- Solar tied to the home
- No minimum credit score



DTE Energy Midstream Food Service program

DTE Energy Midstream Food Service program



Utility supplies the measure rebates to distributors



Instant discounts at the point of sale



Electric **and** gas food service equipment

DTE Energy Midstream Food Service program (cont.)

Distributors must follow a specific process to receive reimbursement:

- 1 Verify customer's eligibility
- 2 Make the sale at a discounted price, reflecting the incentive on that unit
- 3 Enter the incentive as a discount on the sales invoice
- 4 Submit the sale to the program team for reimbursement of the incentive

Distributor best practices

- Allow easy participation in the program
- Display the instant discount on customer invoices
- Offer in-person administrative training
- Conduct distributor roundtables
- Provide continued engagement




Food Service Technology Centers

- Demo and test energy-efficiency food service equipment
- No cost to visit
- More than 125 pieces of equipment on-site



Source: Southern California Gas Co.



ComEd C&I New Construction program

Commercial and industrial (C&I) new-construction programs



Rising building codes making it difficult to claim savings



Advancing pace of new construction project delivery



Costs associated with building modeling and analyses



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ComEd C&I New Construction program



Tiered incentive structures

INCENTIVE RATE GUIDELINES

PROJECT ENGAGEMENT	INCENTIVE RATE
Accelerate Performance	
Prior to design team selection and including energy performance requirement	\$0.14/kWh up to 5 million kWh* and \$0.70/therm up to \$50,000
Comprehensive Assistance	
Prior to 50 percent design completion for two building systems	\$0.10/kWh up to 5 million kWh* and \$0.50/therm up to \$50,000
Expedited Assistance	
At least six weeks prior to the design completion for two building systems	\$0.07/kWh up to 5 million kWh* and \$0.35/therm up to \$50,000

ENGAGED DESIGNER INCENTIVES

Fully engaged through technical assistance process	10 percent of measure incentive
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*Savings above 5 million kWh are provided at a reduced rate.

Program year 2016:
38,532 megawatt-hour savings
achieved (148% of
forecast) in 76
buildings

ComEd C&I New Construction program



Tiered incentive structures




Expedited building-modeling and analyses



Engagement with the architectural and engineering communities

**Program year 2016:
38,532 megawatt-
hour savings
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Tacoma Power Video Chat Inspection Pilot

How can we improve?



Tacoma Power (TPU)
conservation coordinators
spend about

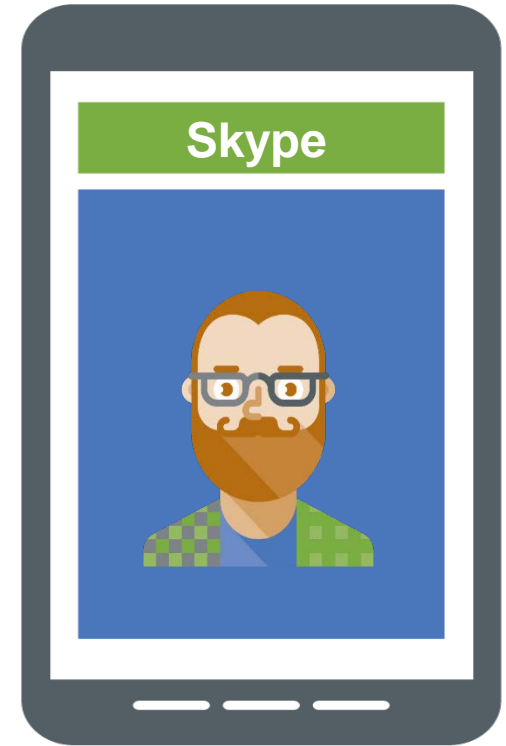
20%

of their work time traveling for
on-site inspections.

Video Chat Inspection (VCI) Pilot

Developed pilot to test whether:

- Video picture quality could effectively replace inspectors' on-site visual inspections
- The utility could reduce the time and cost of inspections
- Tablets and smartphones with free video-streaming apps are a viable option



Pilot details

- Rolled out VCIs across the 180-square-mile territory
- Completed 37 VCIs
 - 25 on ductless heat pumps (DHPs)
 - 4 on weatherization
 - 3 on combined DHPs and weatherization
- Average travel time for 37 projects was approximately 31 minutes

Pilot results

- Conducting 37 video chat inspections, TPU:
 - Saved **28 hours** of employee on-site inspection time
 - Enabled staff to drive **475 fewer miles** and **save about \$260** in fuel and maintenance costs on utility vehicles
 - Inspections went from **15 minutes to 6 minutes**—a 60% reduction



Courtesy: Tacoma Power

Pilot results (cont.)

Challenges

- Poor cellular coverage can limit use of mobile devices necessary for VCIs
- Not all contractors and their employees use mobile devices
- Not all projects lend themselves to a VCI

Utility benefits

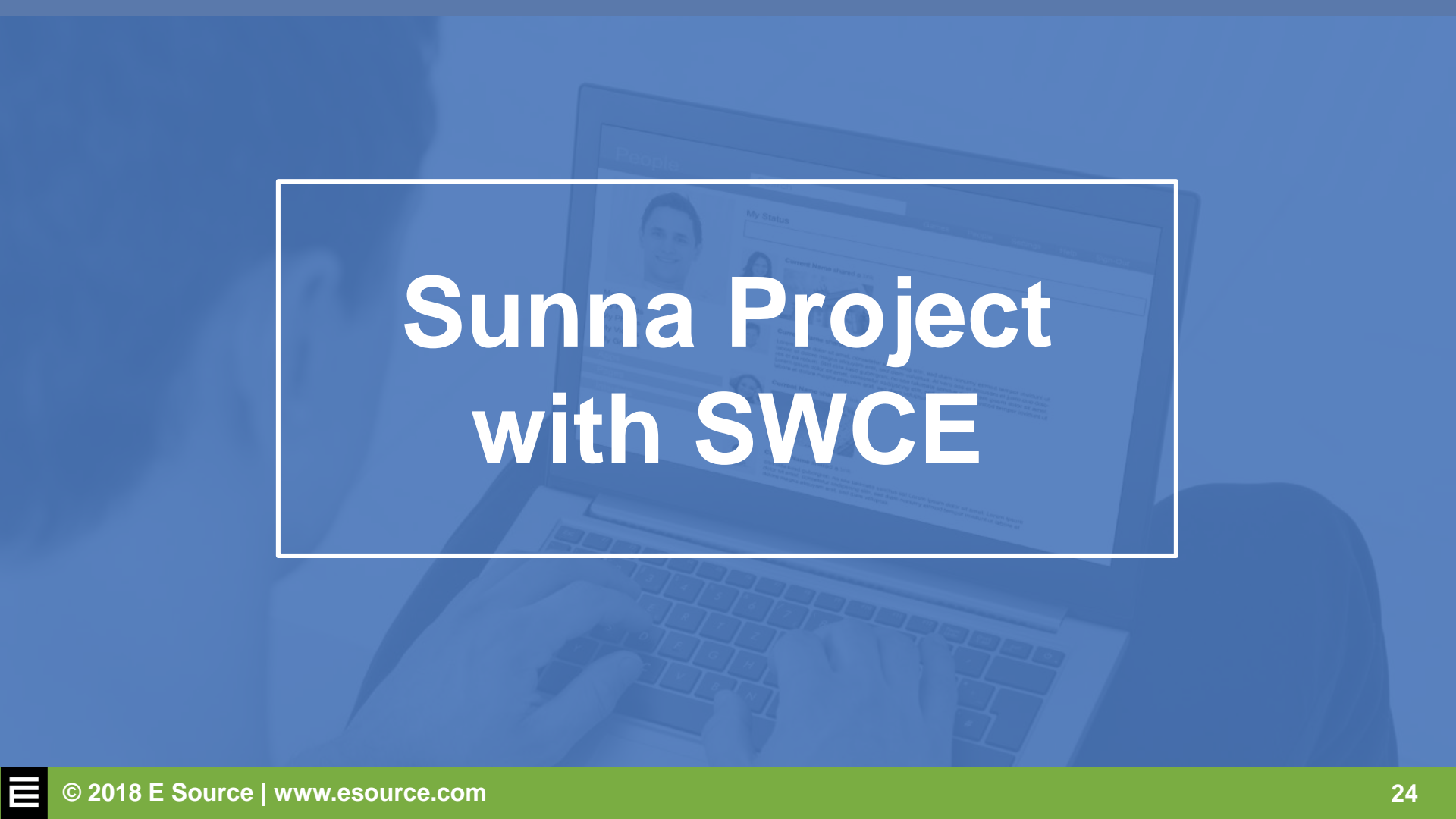
- VCIs reduce staff inspection times and time away from the office
- Reduced driving time can lower TPU's carbon footprint
- Less time on the road reduces the risk of employee vehicle accidents

Future Plans

- Since the pilot, TPU has used video inspections for 228 projects; the utility estimates it has:
 - Avoided driving about 3,000 miles
 - Saved about \$1,600 in fuel costs and vehicle wear and tear
 - Saved nearly \$7,000 in wages
- Due to the overall success of the pilot, TPU's residential team plans to implement VCIs fully in 2017 for DHP and weatherization inspections



Courtesy: iStock



Sunna Project with SWCE

Combining solar energy and water heaters

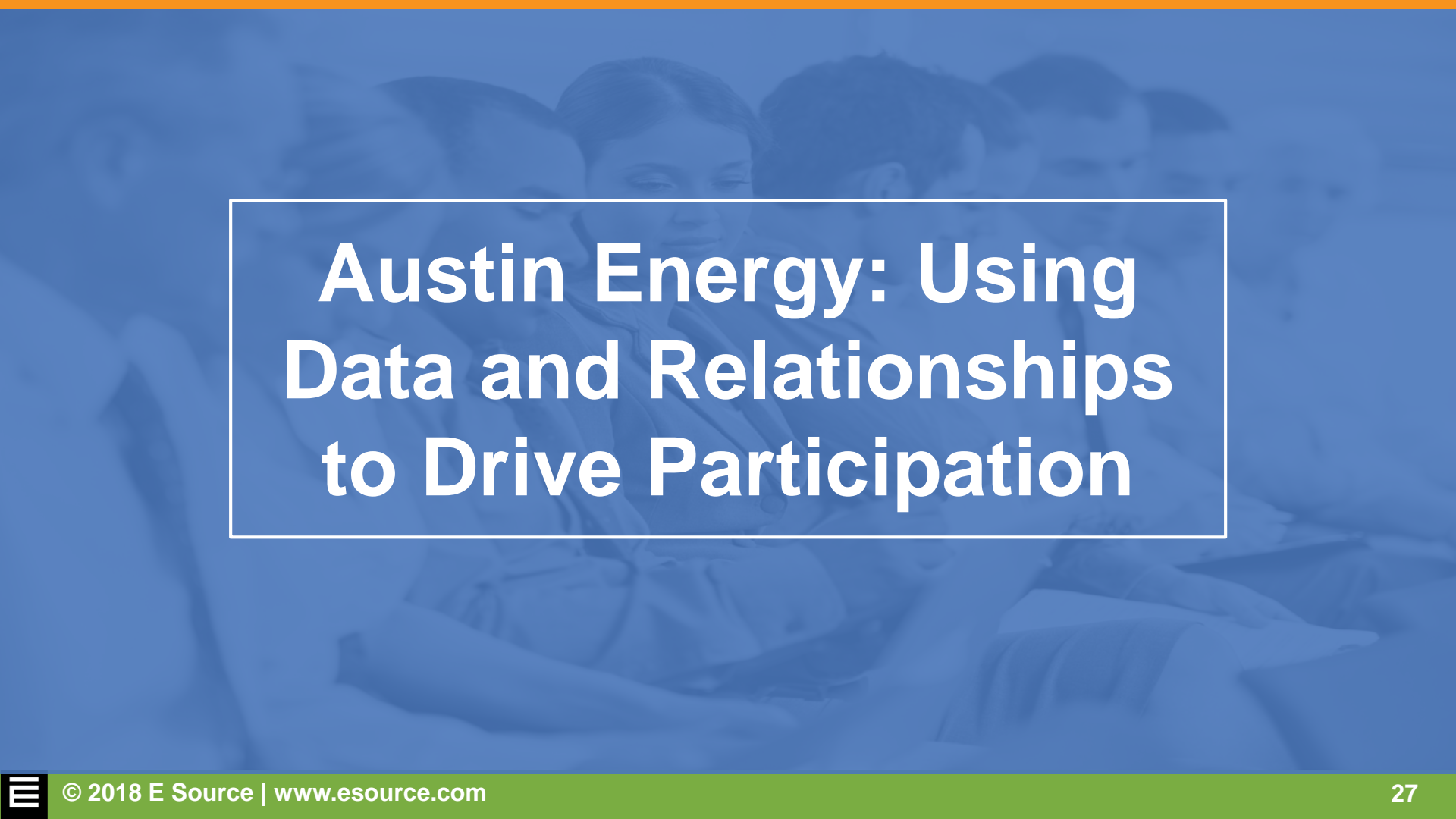
- 250-panel community solar
- Customer subscribes to (1) 410-watt solar panel for \$170
- Must install free grid-interactive electric water heater – 115 gallon / 224 lbs
 - Participate in 16-hour storage water heater program
 - 9 months out of the year



Sunna Project

- Over 20 years, each panel is expected to produce an average of 510 kWh per year
- Customer are limited to 20 panels
- 3,000 water heaters on the market = 20% of load shift potential
- Monthly credit to customers for 400 kWh or more is metered





Austin Energy: Using Data and Relationships to Drive Participation

Challenge

“

The programs' marketing budget continues to be challenged.

“

In order to reach ambitious targets, we should find new ways to reach potential participants.

“

It'd be easy to say this is a legacy program and it will organically grow.

“

We're experiencing limits of the low hanging fruit.

Solution

Austin Energy addressed these challenges by:

- Making program modifications
- Creating a plan to enhance contractor relationships
- Examining customer and contractor feedback
- Using Esri ArcGIS Business Analyst Tapestry Segmentation (also known as **Tapestry**) to better understand its DSM program customers



How It Worked



- Used a birds-of-a-feather and relationships-count strategy
- Built marketing messages off data, customer research, and contractor feedback; tailored messaging and media buys to particular segments
- Shifted thinking: “We should be listening to the research and further engaging the contractors!”

Why It's Innovative

Accessible

Low Cost and High Impact

Replicable

Results

1 25% growth year over year

2 Enhancing contractor relationships

3 Reaching a more targeted and attentive audience

4 Using program budget and resources more efficiently

“

The utility meets customer needs, prevents inefficiency, and provides value to drive program participation based on customer-preferred channels.

—Austin Energy



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BOOTCAMP

Focus on MarCom:

June 26–28, 2018

October 23–25, 2018

Focus on DSM & Tech:

May 15–17, 2018

June 19–21, 2018

July 17–19, 2018

Focus on Customer
Experience:

June 12–14, 2018

For more information



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