



RES-
INTEL

Business Intelligence for Smart Utilities

DSM Prescriptive Analytics

efficiency
Energize!
economy equity

A Residential Building Renovation Competition

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To ask questions: Go to [Slido.com](https://www.slido.com) & enter event #SEEC19

I. Energize! Overview

Mass-Scale Benchmarking &
Lead Generation



Community-Based Social
Marketing Competition



Job Creation and Tax
Revenue Increases



Single Family & Apartment
Renovations

Innovations In Energize!

- Increase salience of Residential Energy Efficiency
 - Data-driven outreach
 - Best-in-class behavioral strategies to drive behavior change including competitions for prizes
- Marketing Channels
 - Engage with manufacturers and Trade Allies
 - Community-Based Social Marketing
- Integrate the above with;
 - On-bill finance and low interest rate green loans/leases
- M&V 2.0 to capitalize on EE and demand response savings

Home Energy Benchmarking

- SCE / SCG project
- Based on EPA Portfolio Manager methodology
- Intuitive 1-100 score for energy (and water) efficiency



Benchmarking Report

- Energize program and participant facing
 - No public confidential information
- Web and/or direct mail delivery



Customized Conservation Recommendations

- Based on how each residence uses energy and their incentives to improve
 - Gas vs electric heat efficiency
 - A/C efficiency
 - Lighting, water, refrigerator improvements
 - Based on existing rebates & program goals
- Master vs tenant metered (apartments)
- Owner vs renter occupied (single family)



Why Community-Based Social Marketing?



Participation

- Up to 90% participation rate



Saves Money

- Utilizes existing communication channels:
 - School flyers
 - Corporate email
 - Alumni newsletters



Deep Renovations

- Neighbor to neighbor advice on energy efficiency measures
 - Bottom up knowledge

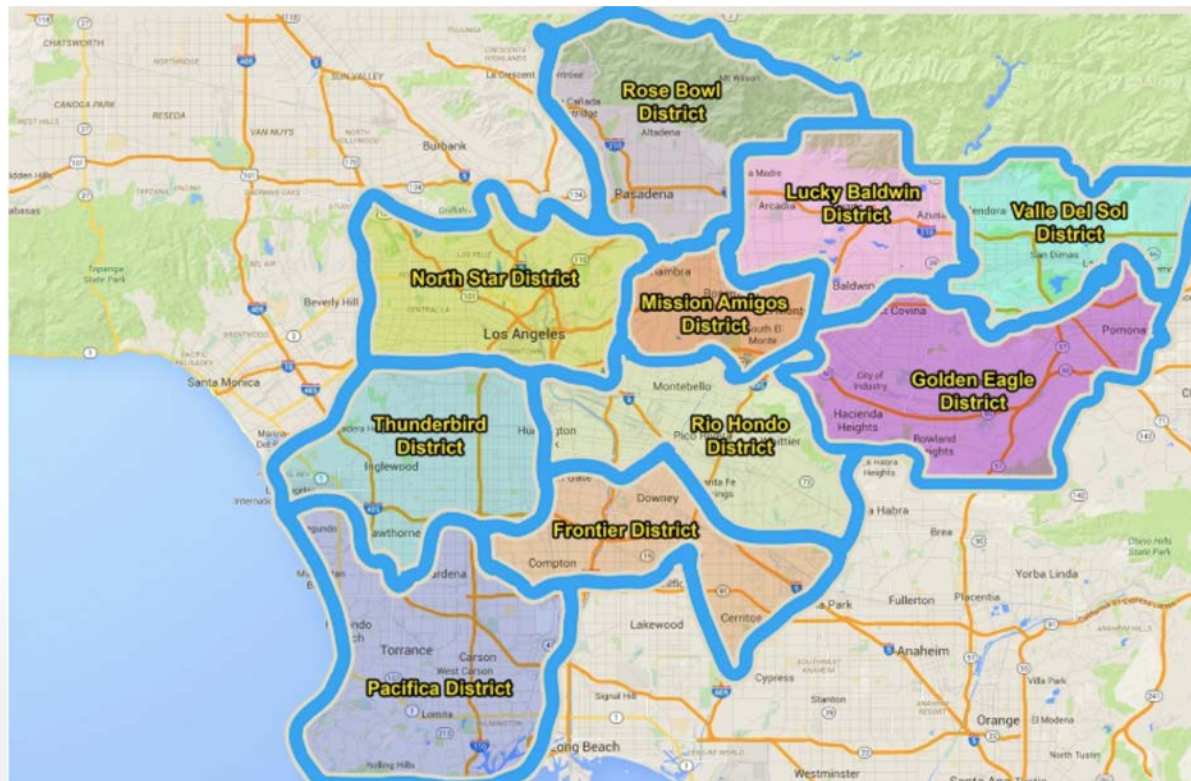
Energize! Social Marketing

- School / association organized competitions for home retrofits
- Neighbor to neighbor “delivery”
 - Fun!: FLIR thermal imagery parties



Possible Competitions

- Competition could be between school districts or municipalities.



Possible Rewards

- Municipal partnerships with local stakeholders
- Based on demographics of participants
 - Build community



Evaluation and Verification of Metered Savings

- SDG&E Project
- Possible pay for performance for:
 - Retrofits: whole house, HVAC, lighting, outdoor
 - Operational: thermostats, smart appliances
 - Behavioral: window opening/closing, conservation behavior
- Weather normalized energy metering allows for capitalizing performance
 - Energy efficiency
 - Demand response savings

Competition Brainstorm

- Elements:
 - Existing Rivalries: between governments, firms, high schools, etc
 - Easily Recognizable Geographies / Identities
 - Be As Inclusive As Possible
- To post ideas in live polls: Go to Slido.com & enter event #SEEC19



II. Program Design

by Hal T. Nelson
PSU / Res-Intel

Three Directives

1. Do No Harm
2. Optimize the Participants' Experience (Make it Fun!)
3. Secure Political Commitment and Creativity

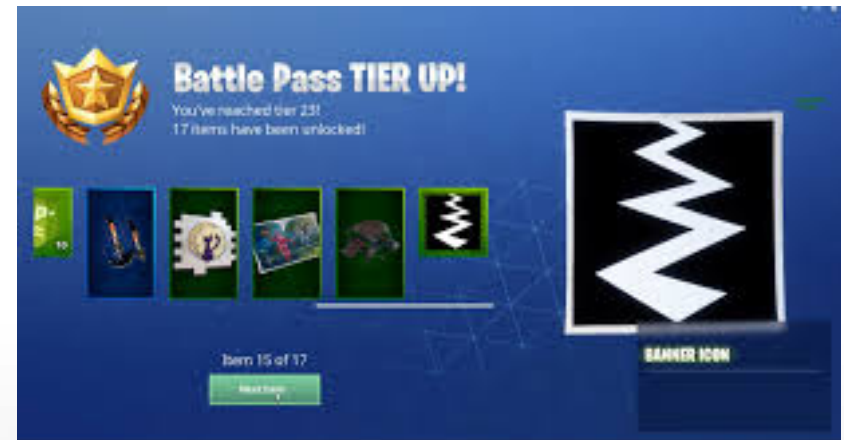
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Behavioral Elements

- Best-in-class behavioral tools to spur retrofit behavior
 - Peer comparison with average neighbor
 - Loss aversion: SAVE ENERGY should be “Avoid spending on utility bills”
 - Personalized messaging: Energy security (R’s) vs Protect the climate (D’s)
 - Information from “trusted networks” vs strangers
 - Public commitment to the program
 - Goal setting behavior

Individual-Level Competition

- Individuals become “Neighborhood Champions” and Coaches
 - Creates a social norm about retrofit behavior
 - “If I walk over to my neighbour's home and suggest that they need a weatherization audit, that sounds fussy and busybody. But if it's in the context of a competition--that if you cut your energy use you'll help us win the competition and beat our football rival--suddenly it's not considered weird behaviour anymore.” Yates, 2019
 - Gamification
 - Refer-a-friend
 - Scoring Tiers for Coaches and Champions
 - Earnings can be donated to local non-profits for low-income retrofits



Data Requirements

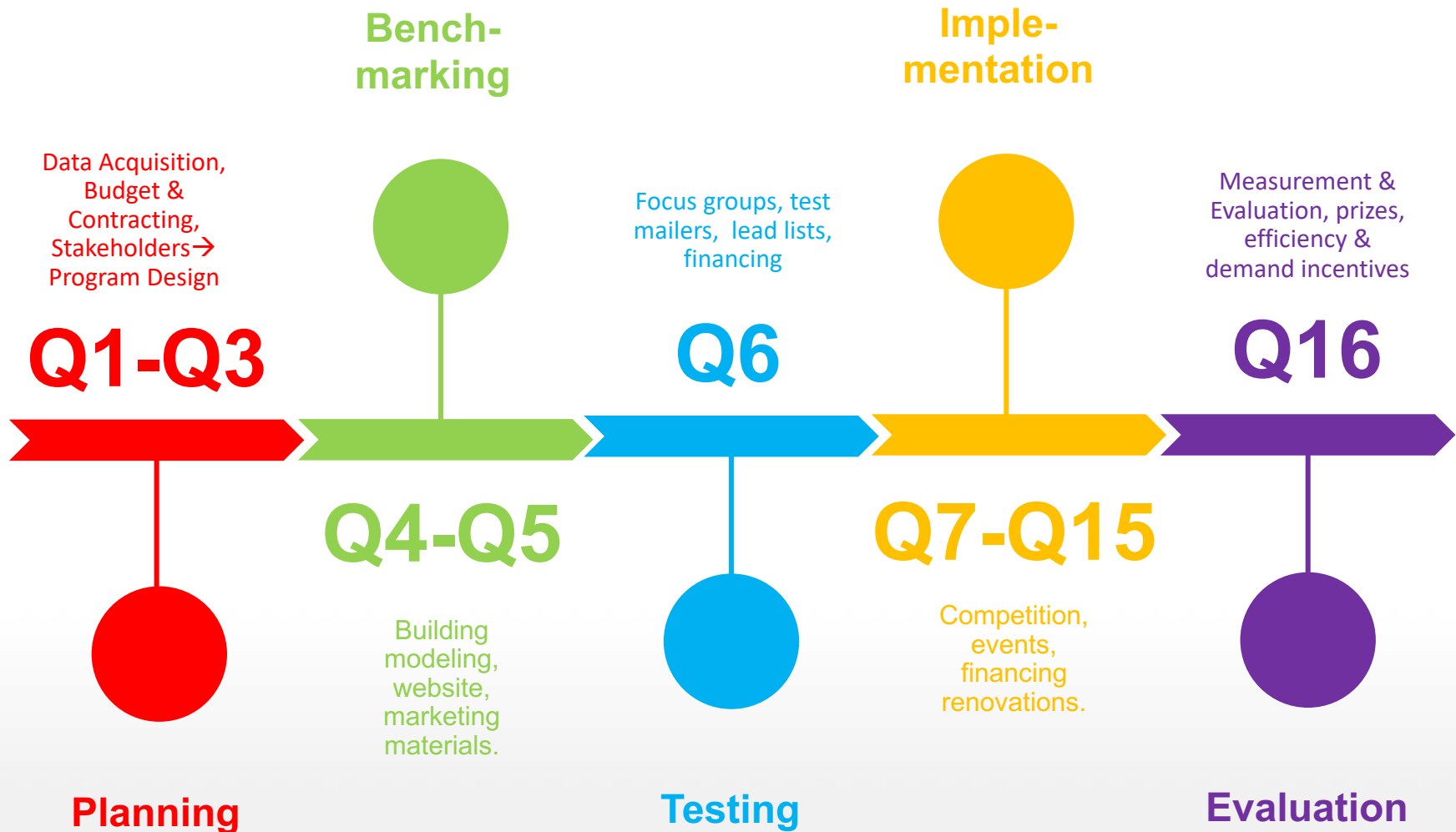
- Lots!
- CoStar and County Assessor property data
 - Aggregate multifamily properties (below)
 - Predict FT^2 for energy use intensity metric (kWh / FT^2)
- Building footprint data
- Benchmarking and customer experience mandates utility billing data
 - 3rd party cybersecurity / NDA with utilities



Stakeholder Responsibilities

- **Utility** – Rebate processing, data sharing
- **Municipality** – Program implementation, marketing administration, stakeholder coordination.
- **Trade Allies** – Perform deep retrofits
- **Project Implementor** – Deep retrofit project plan checks and post installation verification
- **Marketing Agency** – media creation, marketing automation, CRM development.
- **Analytics Provider**– Competition design, benchmarking, database management, EM&V 2.0 evaluation.

Energize Timeline



Brainstorm on Barriers to Stakeholder Support

- Questions about the program (review Slido.com plus live questions)
- **What concerns do you think stakeholders might have regarding the implementation of *Energize!*?**
 - Go to Slido.com Event #SEEC19 Poll

Integration with Existing Utility Incentive Programs

- Two types of retrofits:
 1. Basic retrofit: utilizes existing downstream rebates from IOUs/municipal utilities
 2. Deep retrofit: the above plus additional measures. Requires project implementor to QC plans and verify installation for above-code retrofits.
 - Energy Upgrade California (EUCA) or Energy Star for Homes (SoCal Gas)
- Resident receives rebates and incentives at time of purchase/installation as with existing processes
- Pay-for-performance: 3rd party purchasing of efficiency savings above deemed savings associated with rebates
 - 1-2% benchmarking, additional measures installed, behavioral actions
 - Based on negotiated \$/kWh, \$/therm rate

Brainstorm on Financing and Staffing Strategies

- **Assume Energize!** requires 1.0 FTE for project management from the municipalities + marketing and fixed costs (analytics).
Where could this funding come from?

City Population	600,000
Energize Participation Rate/yr	5%
EE Savings %	26%
Jobs Created	2,600
Total Utility Bill Savings	\$2,295,193
City Sales Tax %	2%
Tax Revenue	\$2,698,674
GHG Savings - Total (tonnes)	13,120
Cars Taken off the Road	2,810
Avoided Vehicle Trips	3,366,463

-- Go to Slido.com Event #SEEC19 Poll



Energize!

III. Personalized Marketing for Improved Engagement on Residential Energy Retrofits

Alex Polamero

Culture Cube, [About Us](#)

- Digital marketing agency, Founded in 2013
- Team of experts, delivering holistic solutions
- Partners with top names: Google, Yelp & Marketo
- Making enterprise marketing accessible

Our Clients

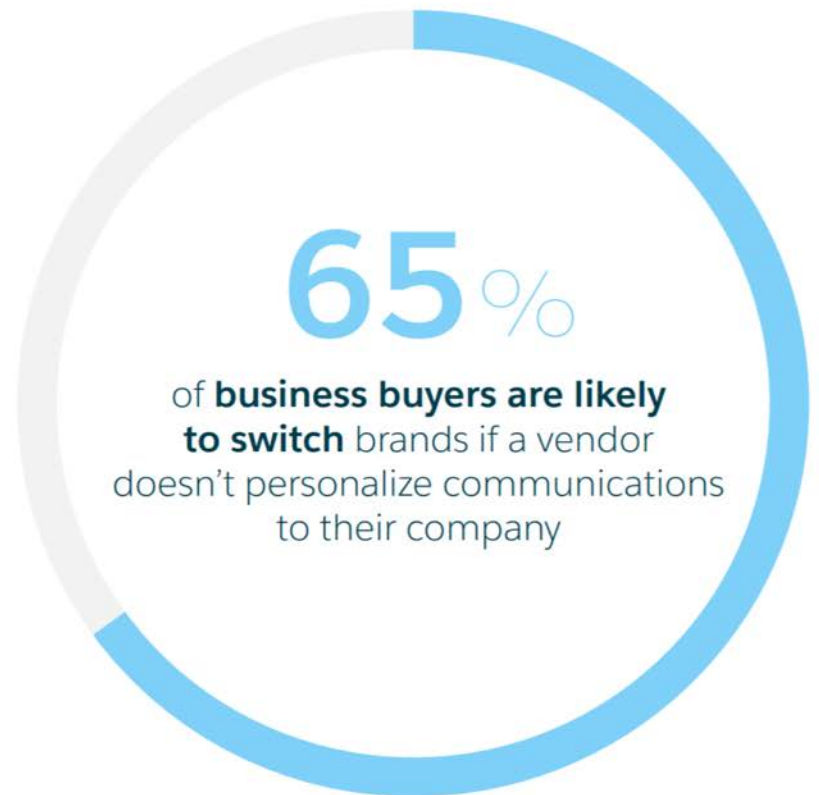
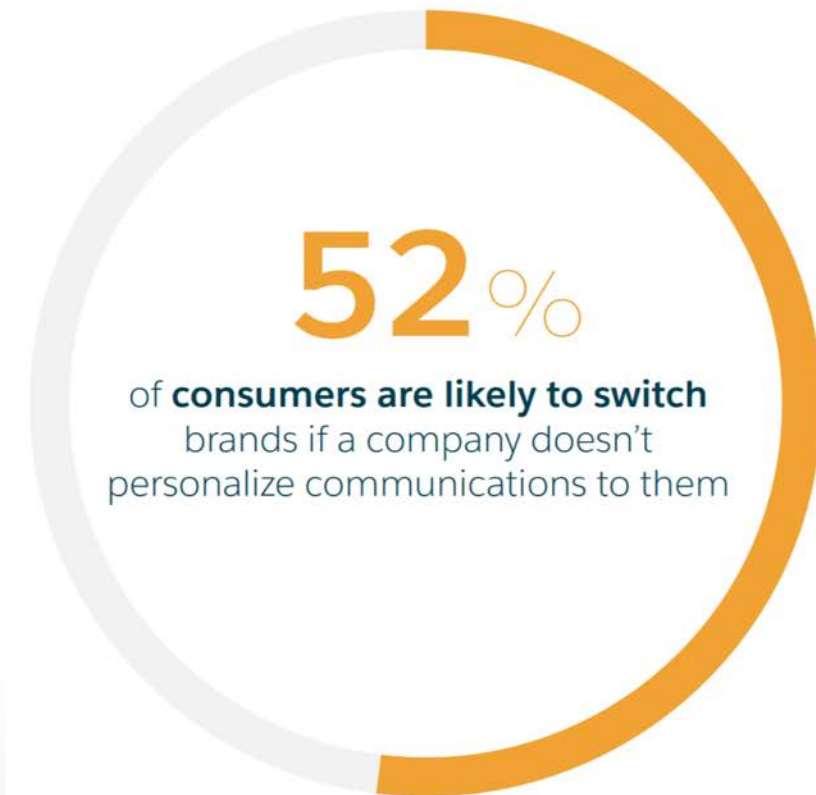


Marketing Shifts to Personalized Experiences

improve efficiency and speed to market. - Forrester

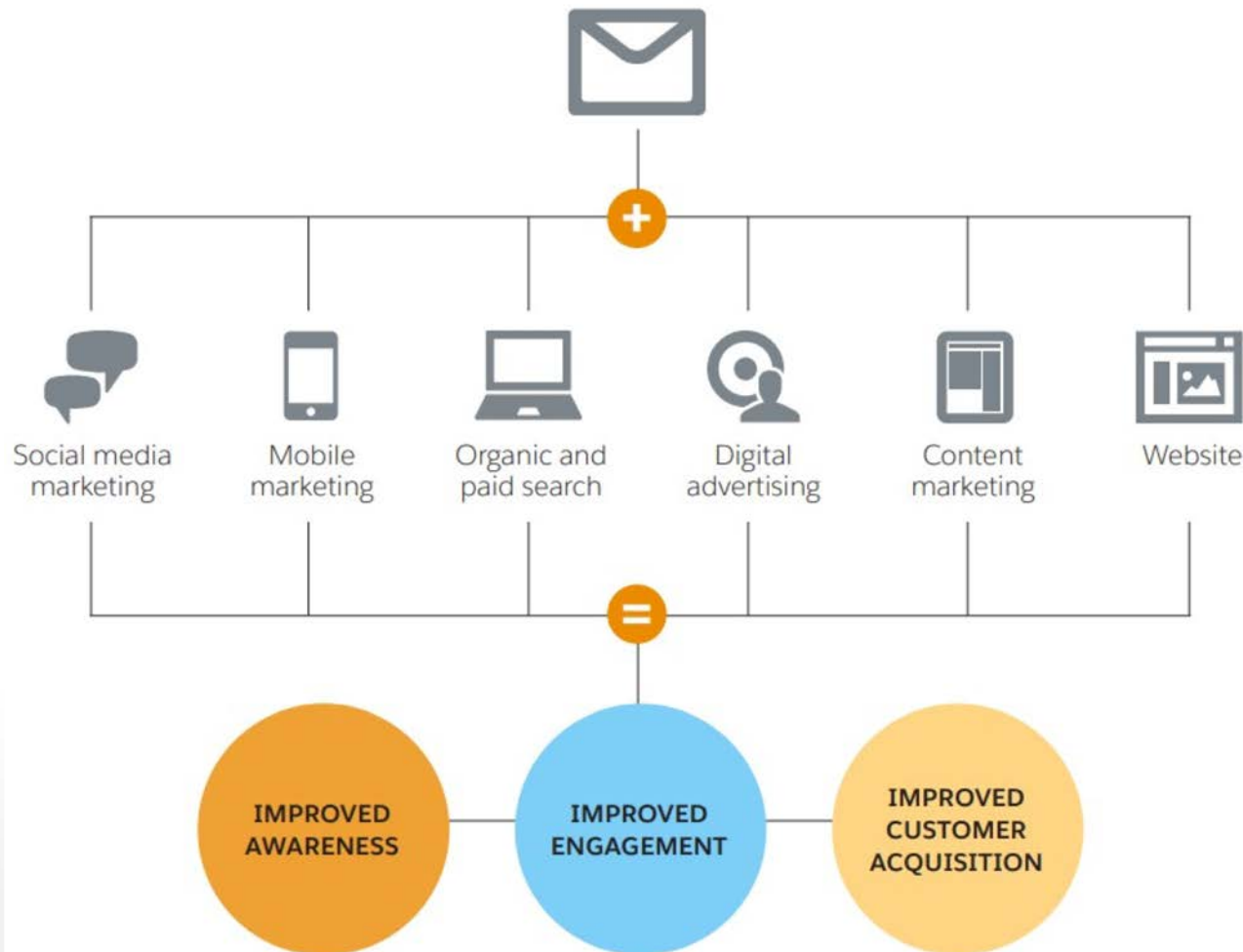
Forrester

Customers + Personalization



Salesforce State of Marketing 2018

Content + Promotion



Marketing + Automation



“Marketing Automation enables businesses to automate tasks and workflows for the marketing and sales process, including prospect and customer profiling on landing pages, lead scoring, sending automated personalised emails and web recommendations to support lead nurturing and customer engagement”.


SmartInsights.com

CRM + Engagement



Perfectview CRM

Benefits of Automation & CRM

- 
- 01 | Improved targeting of messages
 - 02 | Improved customer experience
 - 03 | Better quality leads / participants
 - 04 | Improved efficiency, ROI
 - 05 | Higher conversion
 - 06 | Increased web traffic

EmailMonday - Marketing Automation

Statistics Overview 2019

Energize! + Results

- 01 | Broader reach and brand awareness
- 02 | Convert leads into participants
- 03 | Improve customer experience & engagement
- 04 | Custom content via benchmarked program data
- 05 | Retrofit tips & school district scores to drive retrofit behavior
- 06 | Save time & staff resources by automating communications

Next Steps

- **Where to go from here?**
- **Conversations with your key stakeholders**
- **Last week, Res-Intel submitted an abstract to PG&E Local Government Partnership RFA**
 - RFP Letter of Support
- **Enter your email on Slido.com to obtain more information**
 - Webinars for your stakeholders
 - The *Energize!* program plan
 - *Energize!* program materials
 - Summary for stakeholders
 - Go to Slido.com Event #SEEC19 Poll

Thank you.



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