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Strategies for Reducing Costs for Low-Income Customers: Solar Giving

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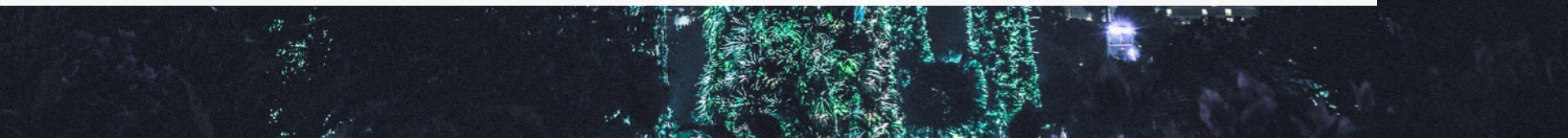


About RAP – US

- RAP provides technical and policy support at the federal, state and regional levels, advising utility and air regulators and their staffs, legislators, governors, other officials and national organizations.

- We help states achieve ambitious energy efficiency and renewable energy targets and we provide tailored analysis and recommendations on topics such as ratemaking, smart grid, decoupling and clean energy resources. RAP publishes papers on emerging regulatory issues and we conduct state-by-state research that tracks policy implementation.

About Your Presenter – Janine Migden-Ostrander

- Janine L. Migden-Ostrander advises regulators and advocates on energy efficiency, renewable energy, demand response, distributed generation, and integrated resource planning. Recent projects include working closely with the Arkansas Public Service Commission on energy efficiency as part of the Clean Energy Ministerial for the U.S. Department of Energy (DOE), facilitating the Mid-Atlantic Distributed Resources Initiative (MADRI), and providing workshops on energy efficiency policies as part of the SEE Action initiative for DOE. Her projects are predominantly in the U.S., but also overseas.

- Ms. Migden-Ostrander has worked in public utility law for approximately 35 years, most recently as the Ohio Consumers' Counsel, where she oversaw the state agency that represents the interests of Ohio's 4.5 million residential households with their investor-owned electric, natural gas, telephone, and water companies.

Low-Income Customers Struggle with Affordability of Energy Services

- LI customers are often forced to choose between, food, medicine, rent, and utilities
- Approximately one-third of residential customers struggle with affordability
- 67% of seniors on social security rely on it as their only source of income
- In Ohio in 2011, approximately 450,000 customers lost electric or gas service due to nonpayment (1 in 10 households)

Customer Energy Burden

- High energy burden –
  On average, LI customers spend 15% - 20% of their income on energy bills

- Whereas average American pays approximately 2-3% of income for energy

Impacts of Budget Cuts to Low-Income Assistance

Under President Trump's budget, the Low Income Energy Assistance Program (known as LIHEAP) is cut completely; it's expected to survive nevertheless.

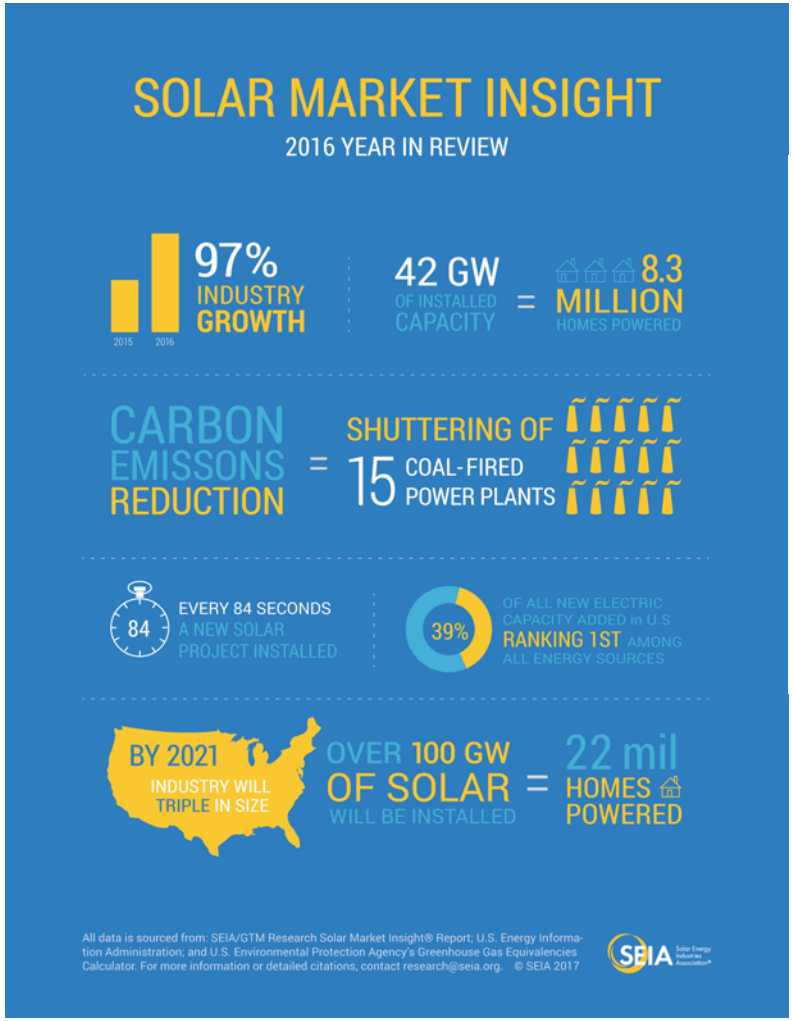
Significant cuts = millions of Americans unable to afford to pay their electric bills

Solar Customers Can Donate Excess Power

- Customers with solar panels sell the excess power back to the utility
- Another option - donate the excess kwh to low-income customers

Customer Empowerment

- Consumer engagement & satisfaction
- Energy efficiency & conservation
- Affordability



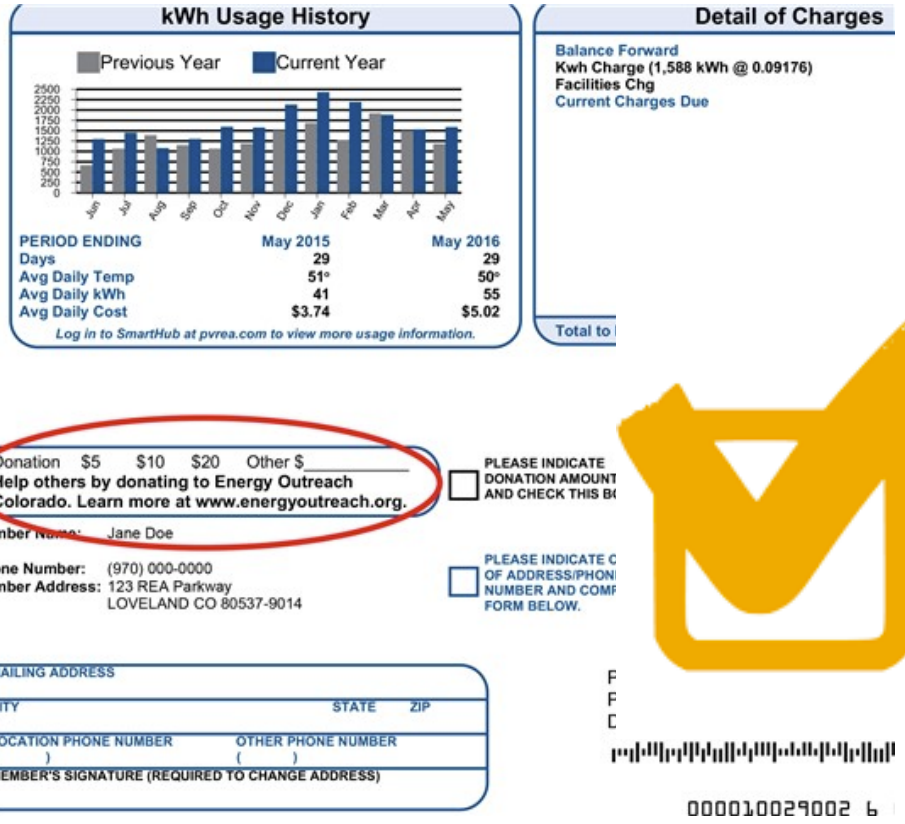
Statistics

Over **6.8 Million** households helped by LIHEAP in 2014

More than **35 Million** households eligible for assistance

LIHEAP funding down **35%** since 2010

Add Another Box to Utility Bill



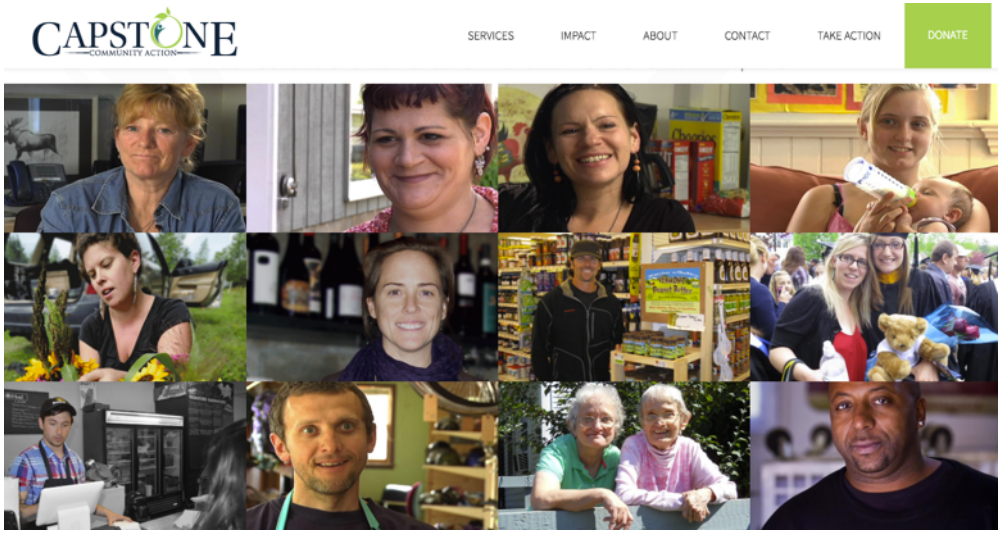
CHECK OFF

How the Program Works

- Utility monetizes value of the kwh's based on its existing tariffs for compensation of excess energy sold into the system.
- Utility aggregates total kwh produced in accordance with the check-off amount of each customer.
- This check-off would be available to all customers with solar or other kinds of distributed generation - residential, commercial, and industrial.

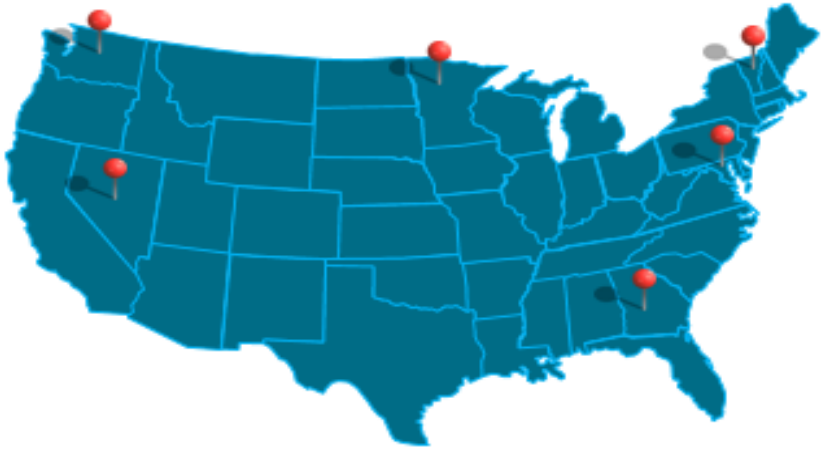
Working with Local Community Action Agencies

- Utility pays Community Action Agency a small administrative fee from proceeds, to cover cost of administering program.
- These agencies are often already partners in weatherization and bill Round-Up programs, doing a lot with a little, and could put additional resources to good use.
- Plus, these agencies are in a better position to determine need and make tough decisions on who should get funds and how to use them.



So What's it Worth? A Sampling Across States

- States Chosen: Georgia, Maryland, Vermont, Minnesota, Nevada, Washington



Installed Solar

- Georgia – 1,432 MW
- Maryland – 638 MW
- Vermont – 168.5 MW
- Minnesota- 372.5 MW
- Nevada – 2,191 MW
- Washington – 90 MW

Source: http://www.seia.org/policy/state-solar-policy, 2016 data

Annual Amount of Solar Energy Sold Back to the Grid (kWh)

- Georgia – 990,261
- Maryland – 17,226,583
- Vermont – 278,200
- Minnesota- 622,195
- Nevada – 1,072,826
- Washington – 3,364,410

Source: EIA, https://www.eia.gov/electricity/data/eia861m/index.html

Average Residential Rates

- Georgia – $.1162
- Maryland – $.1436
- Vermont – $.1751
- Minnesota- $.1283
- Nevada – $.1191
- Washington – $.0927

Source: https://www.eia.gov/electricity/monthly/epm_table_grapher.cfm?t=epmt_5_6_a

Annual Energy Credit for LIHEAP Customers

- Georgia – $115,068.33
- Maryland – $2,473,737.31
- Vermont – $48,712.82
- Minnesota- $79,827.62
- Nevada – $127,773.58
- Washington – $311,880.81

Source: LIHEAP, https://liheapch.acf.hhs.gov/snapshots.htm

Renewable Portfolio Standard

- Georgia – N/A
- Maryland – 25% by 2020
- Vermont – 75% by 2032
- Minnesota- 26% by 2026
- Nevada – 25% by 2025
- Washington – 15% by 2020

Value of REC where REC Purchases are Mandated (1 MWh = 1 REC = $50)

- Georgia – $0
- Maryland – 17,226 x $50 = $861,300
- Vermont – 278 x $50 = $13,900
- Minnesota- 622 x $50 = $31,100
- Nevada – 1,072 x $50 = $53,600
- Washington – 3,364 x $50 = $168,200

Total Potential Benefit by State (Energy + RECs)

- Georgia – $115,068.33
- Maryland – $3,335,037.31
- Vermont – $62,712.82
- Minnesota- $110,927.62
- Nevada – $181,373.58
- Washington – $480,080.81

Number of LIHEAP Customers and Average Benefit

- Georgia – 122,161/$350
- Maryland – 117,748/$496
- Vermont – 31,216/$858 (with State Funds)
- Minnesota- 156,068/$500
- Nevada – 30,000/$684
- Washington – 71,592/$450

Source: LIHEAP, https://liheapch.acf.hhs.gov/snapshots.htm

Number of Customers Potentially Served: Total Potential Benefit/Average LIHEAP Payment

- Georgia – 329
- Maryland – 6,724
- Vermont – 73
- Minnesota- 222
- Nevada – 265
- Washington – 1067

Possible Uses of Funds

- Bill Assistance
- Weatherization/Energy Efficiency
- Community Solar

About RAP

The Regulatory Assistance Project (RAP)® is an independent, non-partisan, non-governmental organization dedicated to accelerating the transition to a clean, reliable, and efficient energy future.

Learn more about our work at raponline.org

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