

# BPA REGIONAL PROGRAMS

## EnergySmart Grocer



### Program Name: EnergySmart Grocer

*EnergySmart Grocer (ESG)* is Bonneville Power Administration's regional program designed to increase the energy-efficiency of grocery stores, convenience stores, restaurants and other businesses that have refrigeration load. ESG is a turnkey program that works with contractors and commercial businesses to develop projects that include a broad range of savings measures for refrigeration, lighting, HVAC and cooking equipment.



### Program Components

#### Turnkey Approach

ESG provides turnkey program delivery services to BPA's participating customer utilities, including utility outreach and enrollment, trade ally training, marketing, project development, rebate processing, budget management, and monthly reporting.

#### Energy Retrofits

ESG is primarily a refrigeration retrofit program, but it has also expanded into lighting, HVAC and cooking equipment, where it leverages deemed savings and prescriptive incentives to provide quick response times.

#### Custom Projects

New construction and commissioning opportunities are pursued through custom projects tailored to meet the comprehensive energy efficiency needs of businesses.

#### Promotions

ESG offers short-term promotions to boost uptake of featured measures. Full-cost incentives on certain measures encourage greater investment resulting in more substantial retrofits. ESG also works with interested vendors to offer promotional pricing to improve consumer paybacks.

#### Delivery Channels

The ESG program is delivered through three marketing channels:

- 1. Inform-to-Invest: ESG field energy analysts work with local stores to develop projects**
- 2. Key Accounts: ESG works with national chains and regional grocers to develop projects**
- 3. Contractor-Play: Local and regional contractors coordinate with ESG to deliver projects.**

### Program Background

ESG was launched in 2007 to target the hard-to-reach and under-served refrigeration market segment. PECL (now CLEAResult) was selected as the program partner because it had unique expertise in refrigeration along with a fully-developed program of turnkey services that no other program delivery vendor offered. With strong support from BPA's customers and businesses throughout the region, the program's market penetration and savings performance has exceeded expectations.



## Program Data (all information reflects FY2007 – FY2014)

Energy Savings	<ul style="list-style-type: none"> <li>201,872,622 kWh / 23 aMW</li> </ul>
Incentives	<ul style="list-style-type: none"> <li>\$24,500,000 of customer utility incentives have been provided to consumers.</li> </ul>
Projects Completed	<ul style="list-style-type: none"> <li>Completed 5,072 projects at 3,342 sites throughout the region including 827 regional grocery stores, 865 national grocery stores, 354 restaurants, 114 schools and 2,617 convenience stores.</li> </ul>
Specific Geographic Value	<ul style="list-style-type: none"> <li>102 utilities from five states have enrolled in the program to date.</li> </ul>
Contractor Reach	<ul style="list-style-type: none"> <li>ESG has trained and worked with over 130 contractor firms.</li> </ul>
Summary of Contract Terms	<ul style="list-style-type: none"> <li>The ESG program is delivered under contract by CLEARResult. Contract time period is every two years aligned with BPA's rate periods.</li> <li>The program delivery contract is a firm fixed price contract with semi-annual decreases in monthly payment, and with incentives for achieving seven pre-established performance thresholds, and a performance bonus for exceeding the contract goal.</li> <li>BPA also reimburses CLEARResult monthly for rebates paid.</li> <li>Overall program rebate cost per kWh is capped at 18 cents.</li> <li>Lighting savings are limited to 35% of overall savings to ensure that refrigeration savings remain the primary objective of ESG.</li> </ul>
Contract (Program Partner) Costs	<ul style="list-style-type: none"> <li>\$27,160,000 (program to date)</li> </ul>
Cost Structure (What is Paid and Under What Conditions)	<ul style="list-style-type: none"> <li>The monthly firm fixed price payment for program delivery pays for the full turnkey program services provided by CLEARResult, including utility outreach and enrollment, trade ally training, marketing, project development, rebate processing, budget management and reporting.</li> </ul>
Cost of Contract Structure (What is included)	<ul style="list-style-type: none"> <li>Energysmartonline.org website - provide program sign-up forms, rebate worksheets, program terms and conditions, case studies and utility and contractor tool kits.</li> <li>Web portal - provide real-time fiscal year and calendar year data reports of program activity, including audits, job completions and project pipeline.</li> <li>Monthly dashboards - program activity are mailed to utility customers and BPA.</li> <li>Program design – design and manage promotions and promotional calendar.</li> <li>Program targets and utility communication – meet/manage sales to utility goals.</li> <li>Program marketing – develop and execute marketing plan to achieve goals.</li> <li>Field services – provide regular visits to ensure participation and utility attribution.</li> <li>Quality assurance – post-install inspections on projects exceeding \$10,000 project cost.</li> </ul>
Summary of Administrative Responsibilities/Other Internal Support	<ul style="list-style-type: none"> <li>Program management and program and utility budget oversight.</li> <li>Rebate processing and quality assurance.</li> <li>Performance Payment processing.</li> <li>Measure development and management.</li> <li>Program records and data sets maintained in Sharepoint.</li> <li>Ad hoc reporting, as needed.</li> <li>Program file storage, retention, and management.</li> </ul>
Administrative and Other Costs	<ul style="list-style-type: none"> <li>All third-party administrative/management, marketing, and other overhead costs for the program are contained within the Contract Costs above. BPA's administrative costs are small at one FTE and one CFTE.</li> </ul>

## Program Costs and Savings by Fiscal Year (cost includes both incentives and program delivery)

Costs below reflect all delivery, incentives (includes utility self-funding), and (BPA/Program Partner) overhead costs.

	2007 - 2009	2010 - 2011	2012 - 2014	TOTAL
<b>Cost in \$/kwh</b>	\$0.25	\$0.23	\$0.30	\$0.26
<b>Cost in \$/aMW</b>	\$2.18M	\$2.05M	\$2.61M	\$2.24M
<b>Savings in kWh</b>	51,414,008	92,996,365	57,462,249	201,872,622
<b>Levelized Cost (\$/kWh)</b>	\$0.029	\$0.027	\$0.040	\$0.031

## Program Evaluation

In 2013, ESG contracted with Cadmus Group to verify program savings for the 2010 through 2012 time period. Cadmus verified first-year program savings of 78,071,868 kWh, with a 98% realization rate and precision of 1.4% at a 90% confidence level. Over the three-year time period, persistence was also high, with savings of 79,448,975 kWh, with a 96% realization rate and precision of 2% at a 90% confidence level.

## Emerging Technology

In partnership with BPA's Technology Innovation (TI) team, BPA engineers evaluate cutting edge approaches to energy efficiency. For example, the Grocery Refrigeration Demand Response project aims to identify promising technologies for development into demand response strategies. In addition to the TI projects, BPA is exploring new, more sustainable refrigeration solutions, such as carbon dioxide based systems in place of glycol systems. The ESG program also facilitates monitoring-based commissioning pilots for refrigeration and HVAC systems.

## Conclusion

ESG has saved hundreds of millions of kWh in the grocery sector throughout the Pacific Northwest by becoming a trusted partner with contractors and businesses in the region. In addition to energy savings, ESG contributes to a better bottom line for both contractors and businesses, leading to a stronger local economy.

## Testimonials

*“The EnergySmart Grocer program has been very successful in Clark County. We’ve been pleased with the support our customers have received through participation and the great results they’ve reported.”*

~ **Debbie DePetris, Clark Public Utilities**

*“We appreciate the boots on the ground here. Having your people visit the construction site as they progress at the Rosauers is appreciated.”*

~ **Todd Williams – Inland Power**

*“We recently completed an LED case lighting retrofit at two of our stores and realized energy savings of over a thousand dollars a month for both stores versus the same month the previous year. The partnership that we’ve developed with our FEA is essential to our success. She identifies energy saving opportunities and available utility incentives and keeps projects moving forward by coordinating contractor bids, equipment installations and incentive processing.”*

~ **Grant Lunde, Marketing Manager, C&K Market**

*“When we completed the case lighting upgrade, the customers noticed, everybody noticed, because the lights are brighter and the store looks much nicer now. The biggest factor is the savings on our energy bill. The bill used to be \$1,400 to \$1,500 a month, and now it’s less than \$1,000 and I expect to see even more savings after the case lighting project.”*

~ **Paul Singh, owner of the 72nd and McKinley Chevron station**

*“There were many times that I needed support and ideas, and these were given even late in the evening sometimes. This was always impressive to me that they took the extra steps to help contractors, and to help customers.”*

~ **Brian D. Chapman, Arctic Lighting and Electric, LLC**