Jump into Savings: New Opportunities for ENERGY STAR Certified Pool Pumps

By Rosemarie Stephens-Booker, EPA ENERGY STAR

Presented on September 13, 2018
Background: ENERGY STAR Certified Pool Pumps

• Pool pumps are home’s second largest energy use
• ENERGY STAR Certified Pool Pumps:
  – Use up to 70% less energy than standard pool pumps
  – Save you $290 - $350 per year in energy bills
  – Run quieter and prolong the life of your pool’s filtering system
• ENERGY STAR Version 1.0 Pool Pump Specification
  – Effective 2013
  – Targeted largest market – in-ground, standard-sized residential pool pumps with huge saving opportunity

ENERGY STAR Certified Pool Pump Savings

<table>
<thead>
<tr>
<th>Type of Pool Pump</th>
<th>Annual Savings ($)</th>
<th>Annual Savings (kWh)</th>
<th>Lifetime Savings ($)</th>
<th>Payback (years)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Variable Speed</td>
<td>$350</td>
<td>2,800</td>
<td>$2,900</td>
<td>1.6</td>
</tr>
<tr>
<td>Two Speed</td>
<td>$290</td>
<td>2,300</td>
<td>$2,400</td>
<td>0.8</td>
</tr>
</tbody>
</table>
ENERGY STAR Certified Standard-Sized Inground Pool Pump Incentives

- ENERGY STAR partners have included standard-sized, inground pool pumps as part of their incentive programs
  - 50 provide incentives for VS
  - 18 provide incentives for 2S
- Find pool pump rebate programs at:
  - [https://www.energystar.gov/rebate-finder](https://www.energystar.gov/rebate-finder)

<table>
<thead>
<tr>
<th>State</th>
<th>Utility</th>
<th>Incentive</th>
</tr>
</thead>
<tbody>
<tr>
<td>HI</td>
<td>Hawaii Energy</td>
<td>$125</td>
</tr>
<tr>
<td>IL</td>
<td>ComEd</td>
<td>$275</td>
</tr>
<tr>
<td>MD</td>
<td>BGE</td>
<td>$150-$400</td>
</tr>
<tr>
<td>NC</td>
<td>Duke Energy</td>
<td>$300</td>
</tr>
<tr>
<td>NY</td>
<td>PSEG Long Island</td>
<td>$150-$350</td>
</tr>
<tr>
<td>PA</td>
<td>PPL</td>
<td>$350</td>
</tr>
<tr>
<td>TX</td>
<td>Austin Energy</td>
<td>$300</td>
</tr>
</tbody>
</table>
New Version 2.0 ENERGY STAR Pool Pump Spec Expands Scope!

• Goes into effect January 1, 2019
• Uses new DOE pool pump test procedure
• More stringent spec for standard-sized inground pool pumps
• Expands the options for ENERGY STAR certification to include:
  – Above-ground pool pumps (see below)
  – **Small** in-ground pool pumps
  – Booster pumps used for pressure cleaning applications
Savings/Paybacks for Different Types of Pool Pumps will Vary

Version 2.0 ENERGY STAR Certified Pool Pump Savings

<table>
<thead>
<tr>
<th>Type of Pool Pump</th>
<th>Annual Savings</th>
<th>Payback (years)</th>
<th>% Market</th>
</tr>
</thead>
<tbody>
<tr>
<td>Small In-Ground</td>
<td>$84</td>
<td>1.2</td>
<td>7%</td>
</tr>
<tr>
<td>Standard In-Ground</td>
<td>$310 - $445</td>
<td>1.2</td>
<td>52%</td>
</tr>
<tr>
<td>Extra Small Above-Ground</td>
<td>$7</td>
<td>2.7</td>
<td>3%</td>
</tr>
<tr>
<td>Standard Above-Ground</td>
<td>$28</td>
<td>1.0</td>
<td>28%</td>
</tr>
<tr>
<td>Pressure Cleaner Booster</td>
<td>$13</td>
<td>3.2</td>
<td>11%</td>
</tr>
</tbody>
</table>

- Depending on pump types, makers meet ENERGY STAR standard by using efficient motors, advanced hydraulic designs, and/or 2S/VS capabilities.
- Up to $445 in annual savings
- Paybacks from 1 to 3 years
Doubles Number of Pool Pumps Eligible for ENERGY STAR Certification!

Comparison of ENERGY STAR Eligible Pool Pumps

Units Shipped in 2015 (Thousands)

- Standard Inground
- Small Inground
- Extra Small Aboveground
- Standard Aboveground
- Pressure Cleaner Booster
Tie Your Pool Pump Incentive Program to Version 2.0

• Ensure pool pumps in your incentive program exceed 2021 federal standards.
• Use an API to link directly to the ENERGY STAR certified pool pump list.
• Expand the types of pool pumps to include small in-ground, above-ground, and pressure cleaner booster pool pumps.
• Co-brand free ENERGY STAR pool pump marketing materials: [www.energystar.gov/marketing_materials](http://www.energystar.gov/marketing_materials)
Next Up….

• **Brian Wells, Leslie’s Pool Supply**
  – Learn why Leslie’s Pool Supply, the leading pool supply retailer, is looking to expand their groundbreaking instant rebate program to include the expanded scope of pool pumps.

• **Scott Petty, Hayward**
  – Hear how Hayward, one the largest makers of pool pumps, is certifying their inground, above ground and booster pumps NOW to qualify for ENERGY STAR 2.0 based incentives.

• **Bonnie Devlin, Lockheed Martin**
  – Hear about Mass Save’s successful midstream incentive program and other utilities can pursue this opportunity.
Variable Speed Pumps
Topics

Introduction
Market Overview
Instant POS Rebates
How Instant Works
AG and Booster Pumps
Market Overview

5M+ In Ground Pools

100,000 / year VS Pumps

1 in 10 have Booster Pump

3M+ Above Ground Pools

IG and AG markets are growing each year
Instant Rebate Programs @ Leslie’s

- Centerpoint, PG&E, SCE, SMUD, TEP, PSO
- APS, SRP, NVE, SDGE

4X - Instant
- Better performance vs No program

2X – MIR
- Better performance vs No program
Instant Rebate Success

SAVE UP TO $1,800/yr*
IN ENERGY COSTS WITH AN ENERGY STAR® CERTIFIED VS PUMP

FREE INSTALLATION

48 HOUR PROFESSIONAL INSTALL GUARANTEED!**
ASK ABOUT OUR FREE EXTENDED WARRANTIES!

*Ask a Leslie’s Associate for details or visit www.lesliespool.com to use our Energy Savings calculator. Savings based on a 50,000-gallon pool, 8 hrs runtime daily, 2.0 hp single speed pump. Savings may not be combined with any other offers. Residential only. Excludes booster pumps and above ground equipment. Additional materials and trip charge will apply. Free installation applies to Pentair® and Jacuzzi® pumps only. **48-hour installation on single speed and variable speed pumps only. 48-hour installation guaranteed on in-stock equipment. Expires 9/30/2015.
Instant Rebate Success

Rebates over $300 sell 5X more
Success still at $200 sell 3X more
Rebates at $100 or below aren’t successful

Leslie’s = **Free Professional Installation**
VS Pump avg retail $1,200
SS Pump avg retail $550

We embraced Instant because everyone loves immediate savings. We spent $ on IT infrastructure to update our POS software to handle and hired a resource to track/report.
Instant Rebate Mechanics

Requirements:

1. Trained/Certified installers @ Leslie’s
2. Capture customers utility account number
3. Store scans a job aid at the POS to apply the instant rebate tender after verification of replacing a single speed, utility account, etc.
4. Report in an upload format each week store location, VS pump model, transaction amount, etc.

Success is to the residential homeowner. No one sees more customers or advertises more – millions of VS pump and Utility company impressions a year.

Trade programs not successful – mid-stream not near as successful
AG and Booster Pumps

AG Pools

Opportunity and for the right price customers would switch.

Replace the SS pump @ avg retail around $300. The bridge is getting to a reasonably priced VS or dual speed pump. Dual speed pump avg retail is only about $100 more.

Booster pumps

Zodiac (Polaris) has the new booster pump that reduces energy and Leslie's sells thousands a year.
Jump into Savings:
New Opportunities for ENERGY STAR Certified Pool Pumps

Scott Petty
Global Product Manager, Pumps and Filters
Why Pool Pumps?

- Pool pumps can be the #2 consumption of energy in the house!

Source: SRP
Utility Rebates

- **26** states with utility rebates for energy efficient pumps
- Not just California!
- Rebates accelerate the adoption of energy efficient pumps!
# Hayward In-Ground Pumps

<table>
<thead>
<tr>
<th>Hayward Family of Pumps</th>
<th>Single &amp; Two Speed</th>
<th>Variable Speed</th>
<th>VS Omni</th>
</tr>
</thead>
</table>
| **High Performance**    | • Single speed still the most common type overall | • Ultimate energy efficiency  
• Advanced motor technology  
• Match pump speed to pool’s needs | • Controls up to four pieces of equipment  
• Easily installs in existing pools |
|                         | • Two-speed models available (external switch typically required) | | |
| Super II                | TriStar            | TriStar VS (2.7 hp) | TriStar VS 950 Omni |
|                         |                    | TriStar VS (1.85 hp) | TriStar VS 900 Omni |
| MaxFlo XL               | Super Pump         | Super Pump VS      | Super Pump VS 700 Omni |
|                         |                    | MaxFlo VS          | MaxFlo VS 500 Omni |
## Hayward ENERGY STAR 1.0 Pumps

<table>
<thead>
<tr>
<th>Pump Type</th>
<th>ENERGY STAR Approved</th>
<th>Examples of Hayward ENERGY STAR 1.0 Pumps</th>
</tr>
</thead>
<tbody>
<tr>
<td>VS Omni</td>
<td>All VS Omni models</td>
<td><img src="images" alt="Examples" /></td>
</tr>
<tr>
<td>Variable Speed</td>
<td>All Hayward VS models</td>
<td><img src="images" alt="Examples" /></td>
</tr>
<tr>
<td>Two Speed</td>
<td>All two-speed models*</td>
<td><img src="images" alt="Examples" /></td>
</tr>
<tr>
<td>Single Speed</td>
<td>Industry’s only single speed</td>
<td><img src="images" alt="Examples" /></td>
</tr>
</tbody>
</table>

* Except Super Pump (manual switch)
Federal mandatory regulation for pool pumps
  – Impacts all pumps up to ~ 5 HP*, both in-ground and above-ground
  – Enforcement starts July 2021

* Actual limit is less than 2.5 hydraulic horsepower (HHP); HHP is proportional to pump flow
ENERGY STAR 2.0

• Aligns with DOE by utilizing Equipment Classes vs. Application
  – For example, no longer “In-Ground” vs. “Above-Ground”

• Final Equipment classes for performance-based standards:
  1) **Self-priming** *(mostly in-ground)*
  
  2) **Non self-priming** *(mostly above-ground)*

  3) **Pressure Cleaner Booster Pump (PCBP)**

Expands the opportunity for ENERGY STAR pumps and utility rebates
Expanded Opportunity

- Approximately **3.5 million** above-ground pools in the US
  - Vast majority are **single speed** pumps
  - While often shorter seasons, many run **24 hours a day**
- **Great opportunity to promote new ENERGY STAR pumps**
- Analogous to in-ground market 10 years ago
# Hayward ENERGY STAR 2.0 Pumps

<table>
<thead>
<tr>
<th>Category</th>
<th>Detail</th>
<th># of Base Models</th>
<th># of SKUs</th>
<th>Examples of Hayward ENERGY STAR 2.0 Pumps</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Self-Priming (“In-Ground”)</strong></td>
<td>All variable speed and VS Omni models</td>
<td>6</td>
<td>29</td>
<td><img src="image1.png" alt="Pump 1" /> <img src="image2.png" alt="Pump 2" /></td>
</tr>
<tr>
<td><strong>Non Self-Priming (“Above-Ground”)</strong></td>
<td>Testing in process; completed by EOY</td>
<td>6</td>
<td>9+</td>
<td><img src="image3.png" alt="Pump 3" /> <img src="image4.png" alt="Pump 4" /></td>
</tr>
<tr>
<td><strong>Pressure Cleaner Booster Pump</strong></td>
<td>In process</td>
<td>2</td>
<td>2</td>
<td><img src="image5.png" alt="Pump 5" /> <img src="image6.png" alt="Pump 6" /></td>
</tr>
<tr>
<td><strong>Total ENERGY STAR 2.0 Pumps</strong></td>
<td></td>
<td>14</td>
<td>40+</td>
<td><img src="image7.png" alt="Pump 7" /> <img src="image8.png" alt="Pump 8" /></td>
</tr>
</tbody>
</table>
Go Forward

- Strongly encourage to expand incentive programs to include newly eligible pumps

- Rebates accelerate the adoption of energy efficient pumps!

- Can’t just rely on having the product
Myth #1: If you build it, they will come
Save energy...and money!

Sell the Benefits

Home energy use
- Pool Pump 13%
- Refrigerator 5%
- Electric Dryer 4%
- Water Heating 12%
- Other 15%
- Heating & Cooling 51%

#2!
Sell the Benefits

Save energy...and money!
But Wait, There’s More!

- Incredibly quiet operation
- Better filtration
- Less stress lengthens equipment life
- Longer filter cycles keep chemicals in circulation longer
Consumer Marketing

• Variety of **consumer marketing** materials from manufacturers, ENERGY STAR, utilities, etc.
Win-Win-Win

Consumer:
Energy Savings = Return on Investment

Trade:
Increased Revenue

OEM:
Increased Revenue

Win!
ENERGY STAR® Certified Pool Pump Incentive Program
What is Mass Save?

Mass Save is an initiative sponsored by Massachusetts’ gas and electric utilities and energy efficiency service providers. The electric Sponsors of the Mass Save Lighting & Products Program are:

These Sponsors work closely with retailers, manufacturers, and distributors to provide a wide range of services, incentives, trainings, and information promoting energy efficiency that help consumers manage energy use and related costs.

Field services provided by Lockheed Martin:
Mass Save Midstream Program

ENERGY STAR certified pool pumps installed in Mass Save Utility Sponsors’ service territories are eligible for incentives.

2018 incentive amounts are as follows:

<table>
<thead>
<tr>
<th>Qualified Products</th>
<th>Incentive per unit</th>
</tr>
</thead>
<tbody>
<tr>
<td>ENERGY STAR certified variable-speed or variable-flow pump</td>
<td>Up to $500*</td>
</tr>
<tr>
<td>ENERGY STAR certified multi-speed / two-speed pump</td>
<td>Up to $200*</td>
</tr>
<tr>
<td>Other</td>
<td>Incentive per unit</td>
</tr>
<tr>
<td>Distributor Administrative Fee</td>
<td>$50</td>
</tr>
</tbody>
</table>

*Incentive not to exceed the dealer’s purchase price of the pump from distributor.

Program began in 2015 - Original incentive amounts:

<table>
<thead>
<tr>
<th>Qualified Products</th>
<th>Incentive per unit</th>
</tr>
</thead>
<tbody>
<tr>
<td>ENERGY STAR certified variable-speed or variable-flow pump</td>
<td>Up to $600*</td>
</tr>
<tr>
<td>ENERGY STAR certified multi-speed / two-speed pump</td>
<td>Up to $250*</td>
</tr>
<tr>
<td>Other</td>
<td>Incentive per unit</td>
</tr>
<tr>
<td>Distributor Administrative Fee</td>
<td>$50</td>
</tr>
</tbody>
</table>

*Incentive not to exceed the purchase price of the pump
Process

Distributor signs with Mass Save

Pool Installer purchases and installs eligible pump within Sponsor territory

Distributor collects install information en masse & submits monthly claim

Mass Save pays incentive to distributor

Distributor receives admin fee and passes incentive to installer

Pool Installer passes along incentive to pool owner
Participating Distributors

- Accu-Care Supply
- Baystate Pool Supplies
- Bel-Aqua Pool Supply Inc.
- CareCraft
- Imperial Pools Inc.
- Northern Supply Inc.
- SCP Distributors LLC
- United Aqua Group
Proven Success

Figure 4-6. Total Pool Pumps Invoiced by Year; MA and RI
Promoting the Midstream Program

Pool shows & seminars- Attend all major pre-season distributor and industry shows to promote program. Accept all manufacturer invites to speak in breakout sessions. Attend manufacturer shows at distributor branches. Accompany manufacturer reps to individual dealers.
Promoting the Midstream Program

Ads- Approved by Mass Save/ emailed to dealers by distributors
Promoting the Midstream Program

Dealer visits

Email Reminders, updated ENERGY STAR certified product lists, articles of interest.
"Our experience with the Mass Save pool program has been fantastic. We have seen an increase in customers interest to get more energy efficient with all their pool equipment. The incentive has made it more accessible to our customers to get energy efficient equipment without breaking the bank. We have been finding a lot of customers fall in love with their new variable speed pumps for the quiet operation and less energy consumption over the original equipment they had."

Jon Darling (Matley Pools, Pepperell, MA)

Family Pools is a family owned business in our 40th year of operation. In those 40 years we have seen many changes in the industry and what customers’ wants and needs are. None have had a more widespread effect as variable speed pumps. We have been selling variable speed pumps for ten plus years now. When they first came to market there was the thought that no one would ever buy a $1000-1500 pool pump, which we found to be true for the first few years. Then with the advent of the Mass Save program as well as the NHSaves program, our sales have grown 10-fold. These programs coupled with manufacturer rebates give the homeowner the incentive needed to push them over the hump on a decision between a standard pump and variable speed pump. Many of our customers are highly educated and have done research and testing on their own pumps. The energy savings that they find are noticeable. Some customers went from spending nearly $2.25 per day and got it down to $.75 per day. Even older customers who are leery of new technology have been turned on by the energy savings of variable speed pumps. When it’s time for a pump to be replaced most of our customers are leaning toward the variable speed option.

We also offer robotic cleaners and solar blankets as other energy saving solutions.

Will Murphy,
Service Manager

(Family Pools, Lawrence, MA)
Thank You!

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