



ENERGY STAR[®] Residential Light Fixtures & The Advanced Lighting Package

Ask the Experts

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Hewan Tomlinson, US EPA

Today



- About ENERGY STAR Residential Light Fixtures
- The Advanced Lighting Package
- ENERGY STAR Tools & Resources

What are ENERGY STAR Qualified Light Fixtures?



- Use about **75% less energy**—saving in lifetime energy costs
- Produce about **75% less heat**—reducing home cooling demands
- **Last up to 10 times longer** than incandescent bulbs—great for hard-to-reach fixtures
- **More than 160 fixture manufacturers** qualified decorative light fixtures available in nearly 20K models
- **Non-regressive design** delivers permanent energy savings.
- **High color rendering** (≥ 80 CRI) means colors look natural



A Growing Role for Fixtures



- Represent one of the largest savings opportunities in the home
 - Hard-wired fixtures lock in energy savings for the long term
 - Multiple sockets offer substantial savings
 - Models average ~2 sockets/fixture with some models featuring 4+ sockets
 - Integrated system design ensures
 - Optimal lamp sizing and positioning
 - Better light distribution and color characteristics
 - Less risk of early failure



ENERGY STAR Light Fixtures & Applications



Hanging Fixtures

foyer, dining, kitchen



Close-to-Ceiling

hallway, kitchen, bath



Ceiling Fans

living, kitchen, patio



Wall Mounted

bath,,living



Recessed

living, kitchen,
hallway



Outdoor

yard, walkway,
facade lighting



Understanding the Lighting Fixture Market



Lighting
Manufacturer



Showrooms (36% of market) / Distributors



Retail (38% of market)



Home Builder



Home Owner



ENERGY STAR Advanced Lighting Package (ALP)



- Lighting packages that consist of a minimum of 60% ENERGY STAR qualified hard-wired fixtures
 - In addition to the light fixture requirements, all installed ceiling fans (*with or without lighting kits*) must be ENERGY STAR qualified
 - ENERGY STAR qualified ceiling fan light kits (not just the fan) can be counted toward the ALP 60% requirement

Benefits to Builders & Homebuyers



Builder

- Increased revenue
- Market differentiation
- Design flexibility and fixture aesthetics
- Enhanced customer satisfaction

Homebuyer

- Selection
- Improved quality
- Reduced maintenance
- Enhanced comfort
- Energy cost savings
- Environmental protection
- Aesthetics...

“What really convinced me, and what means the most to my clients is that the ENERGY STAR qualified fixtures are beautiful – I am ‘wowed’ by the design of the fixtures.”

ENERGY STAR Offers



- Program design guidance
- Partner matchmaking/exchange
- Supply-side marketing and training materials
- Consumer marketing materials
- Sales training resources

Partner Matchmaking/Exchange



- Partner Matchmaking/Exchange
 - Lists of participating manufacturers
 - Lists of distributors and showrooms that sell qualified products
 - Annual Lighting Partner Meeting brings together manufacturers, lighting suppliers, and energy efficiency program sponsors
- Partner resources
 - ENERGY STAR Training Center
 - Marketing Materials, Tools & Resources

Marketing Materials for Builders



Advanced Lighting Package Builder Brochure Describes the ENERGY STAR Advanced Lighting Package, the benefits to the builder for participating in the program, and the added value the builder can provide their customers



LEARN MORE AT
energystar.gov

ENERGY STAR® is a U.S. Environmental Protection Agency and U.S. Department of Energy program, helps us all save money, and protect our environment through energy efficient products and practices. For more information, visit www.energystar.gov.

Bennett Homes: Moving Ahead of the Competition with ENERGY STAR® Qualified Lighting Fixtures and the Advanced Lighting Package

Bennett Homes, an award-winning builder in the Seattle, Washington area, has built a reputation on their commitment to protect our environment by offering energy-efficient homes. When planning their WoodDale and WoodGrove ENERGY STAR Homes communities they enhanced their commitment by including the ENERGY STAR Advanced Lighting Package. The ENERGY STAR Advanced Lighting Package requires that at least 60% of the hard-wired lighting fixtures and all of the ceiling fans meet the ENERGY STAR guidelines for energy-efficiency and quality.

Bennett chose to set their company apart from the competition by offering the ENERGY STAR Advanced Lighting Package to their homebuyers. To showcase their ENERGY STAR qualified light fixtures and fans and to educate their customers, Bennett built four model homes. The model homes help sell the benefits of ENERGY STAR by allowing the potential buyers to evaluate the style and aesthetics of the fixtures as well as the light quality.

"All of the ENERGY STAR qualified fixtures received positive reactions from potential buyers. They add to the integrity of the home, improve the buyer's investment, and are the next logical step in building green." Janice McNeal, Independent Realtor for Bennett Homes.



This Bennett Model Home has 29 ENERGY STAR qualified fixtures, and will save the home owner over \$200 per year in electricity costs.

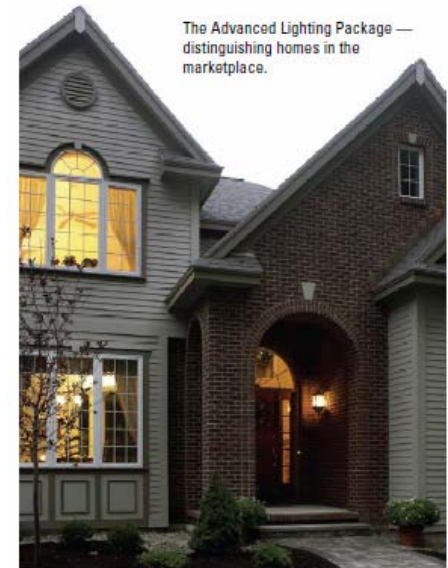
Benefits of ENERGY STAR Qualified Light Fixtures and The ENERGY STAR Advanced Lighting Package

- Use 75% less energy, reducing energy costs
- Produce 75% less heat, reducing cooling costs
- Meet strict performance guidelines to satisfy customer needs
- Provide an environmentally friendly alternative
- Help reduce greenhouse gas emissions
- Are available in over 16,000 models with a large variety of styles and finishes to choose from for every room in the home
- ENERGY STAR Point of Purchase marketing materials, the Builder Brochure, and the Consumer Brochure help builders distinguish their homes from the competition



Advanced Lighting Package Builder Case Studies

Feature success stories of builders who have used the Advanced Lighting Package to better their business



The Advanced Lighting Package — distinguishing homes in the marketplace.

Photograph Courtesy of Lighting Research Center (LRC). Photographer: Michael Kella.

Marketing Materials for Consumers



- Advanced Lighting Package Brochure
 - Educates customers on the key benefits
 - Quality
 - Performance
 - Cost savings
 - Environmental protection

The brochure cover features the Energy Star logo in the top left corner. The main title is "ADVANCED LIGHTING PACKAGE FOR NEW HOMES". The central image shows a man and a woman in a construction site, looking up at the wooden framing of a house. At the bottom, the text reads: "COMFORT. SAVINGS. A BRIGHTER ENVIRONMENT. WHAT MORE CAN YOU ASK FOR?"




BEAUTIFY THE ENVIRONMENT
INSIDE AND OUTSIDE YOUR
HOME WITH ENERGY STAR
QUALIFIED LIGHTING.

Marketing Tools



Advanced Lighting Package Savings Look-up Tool

Demonstrates to customers the potential energy bill savings that could be realized if a standard lighting housepack is replaced with varying numbers of fixtures (between 6 and 22) that have earned the ENERGY STAR

 ENERGY STAR® a U.S. Environmental Protection Agency program, helps us all save money and protect our environment through energy efficient products and practices. For more information, visit www.energystar.gov						
ENERGY STAR® Advanced Lighting Package (ALP) Energy Bill Savings Chart						
<i>This table illustrates the potential annual energy bill and bulb replacement savings that could be realized by using fixtures that earned the ENERGY STAR in your home. ENERGY STAR qualified lighting provides bright, warm light similar to incandescent while requiring less energy, generating less heat, and use bulbs lasting up to 10 times longer.</i>						
Electricity price per kilowatt-hour	Fixture quantity	Total annual electricity and bulb replacement savings	Increase to home sales price	Total annual mortgage increase	Net annual electricity and bulb replacement savings	Net savings over bulb life (approximately 9 years)
\$0.12	40	\$787	\$500	\$37	\$730	\$5,888
	36	\$690	\$450	\$33	\$657	\$5,299
	32	\$614	\$400	\$30	\$584	\$4,710
	28	\$537	\$350	\$26	\$511	\$4,121
	24	\$480	\$300	\$22	\$438	\$3,533
	20	\$384	\$250	\$18	\$365	\$2,944
	16	\$307	\$200	\$15	\$292	\$2,355
	12	\$230	\$150	\$11	\$219	\$1,766
	8	\$153	\$100	\$7	\$146	\$1,178

	<p>The Advanced Lighting Package Defined:</p> <ul style="list-style-type: none"> + A comprehensive set of ENERGY STAR qualified light fixtures and ceiling fans. + Must consist of a minimum of 60% ENERGY STAR qualified hard-wired fixtures—indoor and/or outdoor. + All ceiling fans must be ENERGY STAR qualified. 	<p>ENERGY STAR QUALIFIED LIGHTING USES 75% LESS ENERGY THAN STANDARD LIGHTING AND LASTS UP TO 10 TIMES LONGER</p>	
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Advanced Lighting Package Declaration for Builders



- Designed to be provided to every homeowner to show the savings they are achieving by having the Advanced Lighting Package installed
- Provides a tangible record of the home's energy savings due to the Advanced Lighting Package
- Can be included in the welcome packet of documentation at each home's closing
- Also can be posted as information in each model home
- EPA maintains database of installations by zip code



This Bennett Homes House features the ENERGY STAR® Advanced Lighting Package


BENNETT
Living Architecture

PSE PUGET SOUND ENERGY
The Energy To Do Great Things

This Bennett Homes house features the ENERGY STAR Advanced Lighting Package, which means that more than 60% of the light fixtures and all of the ceiling fans are ENERGY STAR qualified.

The benefits of the ENERGY STAR Advanced Lighting Package at 21 Green St, Efficiency, WA 00000, include:

- Savings of more than \$131 per year in energy costs compared to an equivalent all-incandescent lighting package.*
- ENERGY STAR qualified fixtures use approximately 75% less energy than standard incandescent fixtures.
- ENERGY STAR qualified light fixtures generate about 75% less heat, reducing expensive home cooling needs and keeping you more comfortable.
- Light bulbs in ENERGY STAR qualified light fixtures last about ten times longer than standard incandescent bulbs. This means fewer bulb changes in hard to reach places.
- ENERGY STAR qualified light fixtures carry two-year warranties—twice the industry average.



With an ENERGY STAR Advanced Lighting Package, 6 out of 10 light fixtures and all ceiling fans use ENERGY STAR qualified, using less energy, saving you money and keeping your family more comfortable.

By including the ENERGY STAR Advanced Lighting Package, Bennett Homes helps reduce greenhouse gas emissions and saves customers money on their utility bills.

*The Advanced Lighting Package consists of 19 ENERGY STAR qualified fixtures. Savings and costs assume fixtures operating for 2 hours per day, at the local rate of \$0.09 per kilowatt-hour. All savings assumptions are available upon request. Packages declared by third parties, but not verified by USEPA.

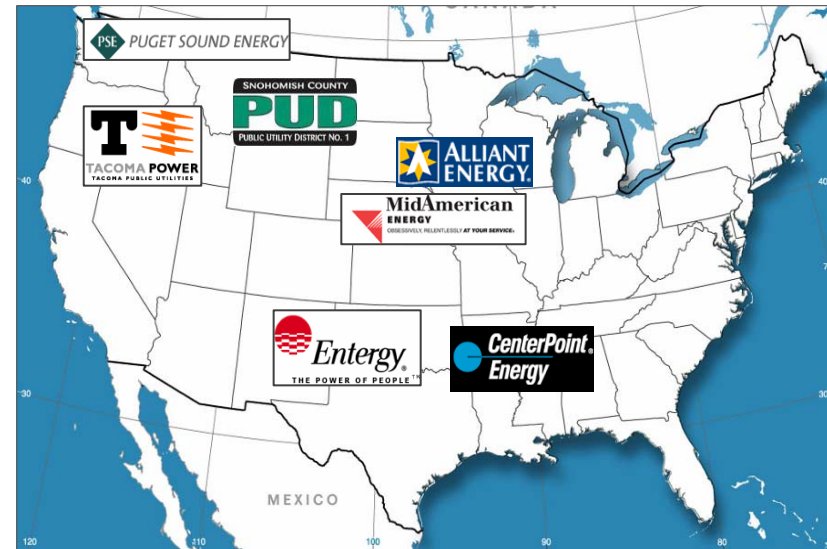
Products that earn the ENERGY STAR® prevent greenhouse gas emissions by meeting strict energy efficiency guidelines set by the U.S. Environmental Protection Agency and the U.S. Department of Energy. www.energystar.gov

WE SELL ENERGY STAR

Utilities Offering Advanced Lighting Package Incentives



- CenterPoint: \$200/home
- Entergy: \$100/home
- Tacoma Power
 - ENERGY STAR RLF: \$20
 - ENERGY STAR ALP: \$150/home
- Puget Sound Energy:
 - ENERGY STAR RLF: \$20
 - ENERGY STAR ALP: \$1,000/model home
 - ENERGY STAR ALP: \$100/home
- Snohomish PUD:
 - ENERGY STAR ALP & fixtures: up to \$280/home
- MidAmerican: ENERGY STAR ALP & fixtures: up to \$200/home
- Alliant:
 - ENERGY STAR fixtures: \$20, 5 fixtures max (to customer)
 - ENERGY STAR ALP: \$250/home builder bonus



Exemplary Program: Puget Sound Energy



PUGET SOUND ENERGY



- Residential New Construction ENERGY STAR Lighting Program
 - Focus on industry relationship building and training
 - \$20/fixture showroom buydown
 - \$100 bonus to builders for installation of ENERGY STAR Advanced Lighting Package
 - \$1,000 ALP model home incentive to builders for installation & tours
- 2008 Results
 - 2x investment in partner outreach
 - 100% installation increase over 2007
 - 100% savings increase over 2007
 - 30+ showroom and distributor partners



Testimonial: D.R. Horton and Advanced Lighting Package



“We haven’t had to ‘sell’ the ENERGY STAR qualified light fixtures to customers, the lights sell themselves! The fixtures are very attractive and the lighting quality is very good...

...Using the Advanced Lighting Package is the right thing to do for our customers, the environment, and our business.”

— Rich Coyle, D.R. Horton (parent company of Cambridge Homes)





CHANGE FOR THE BETTER WITH ENERGY STAR

Products that earn the ENERGY STAR® prevent greenhouse emissions by meeting strict energy efficiency guidelines set by the U.S. Environmental Protection Agency and the U.S. Department of Energy.
www.energystar.gov

CASE STUDY: D.R. Horton Stays Ahead of the Competition with ENERGY STAR®

For D.R. Horton, entering the extremely competitive Sacramento, California market was challenging at first. But the national builder found quick success through a simple strategy: build the most energy efficient homes in the area to differentiate from the competition. Rich Coyle, the division purchasing director, accomplished this by partnering with ENERGY STAR to include value added features like the ENERGY STAR Advanced Lighting Package (ALP).

D.R. Horton was able to quickly attract interested home buyers to its newest development, Sierra Valley Oaks, by offering new home buyers an “environmentally friendly” package including the ENERGY STAR ALP as a standard feature in all homes. Coyle comments that buyers “immediately recognize ENERGY STAR,” and choose D.R. Horton homes for their ENERGY STAR features that lead to both energy savings and environmental protection.

“Using the Advanced Lighting Package is the right thing to do for our customers, the environment, and our business.”
—Rich Coyle, D.R. Horton Sacramento, CA Division

D.R. Horton promotes the ENERGY STAR Advanced Lighting Package because of increased profitability, quick home sales, environmental protection, staying ahead of the competition, and their commitment to high quality products.

The Bottom Line Advantage

According to Coyle, the ENERGY STAR Advanced Lighting Package has had a positive effect on the sales of the Sierra Valley Oaks community. “We haven’t had to ‘sell’



Sierra Valley Oaks at a Glance

Price Range: \$480,000 to \$580,000

Description: 71 homes, 2,190 to 3,300 square feet

Lighting: 100% ENERGY STAR qualified fixtures standard in every home. Three ENERGY STAR qualified “Luxury” lighting upgrade packages.

the ENERGY STAR lighting to customers, the lights sell themselves!” remarks Coyle. “The fixtures are very attractive and the lighting quality is very good. Using the Advanced Lighting Package is the right thing to do for our customers, the environment, and our business. You can do the right thing and make a profit.” Within three weeks of opening the model homes, 100 percent of the phase-one houses were sold. In the second month, all phase two homes also sold pre-construction.

Not only does D.R. Horton offer a 100 percent ENERGY STAR qualified fixtures as standard in every home, Coyle is happy to report that they also offer three “luxury” ENERGY STAR qualified upgrade options. The standard package features polished brass fixtures, while the “luxury” upgrades offer fixture packages from the Serenity or Brandywine families, all manufactured by Sea Gull Lighting. All Sierra Valley Oaks homebuyers visit D.R. Horton’s design center to select their lighting fixtures. The new homeowners are so pleased with the ENERGY





Thank You!

Hewan Tomlinson

Email: tomlinson.hewan@epa.gov

Tel: 202-343-9082