

DOE Zero Energy Ready Home

U.S. DEPARTMENT OF
ENERGY | Energy Efficiency &
Renewable Energy

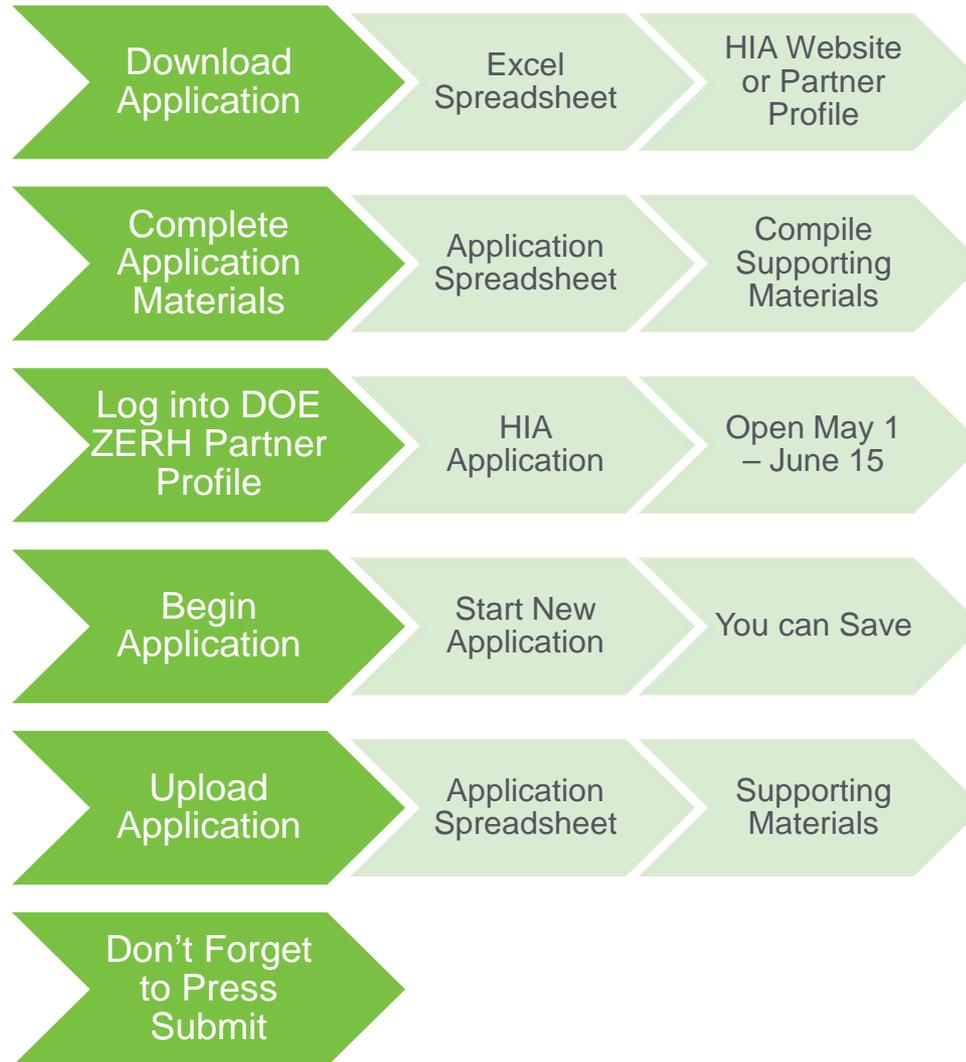


Housing Innovation Awards
Application Process

Monday, April 30, 2018

12:00-1:00 pm

Application Process



- **Custom for Buyer**
- **Custom Spec**
- **Production Homes**
- **Multi-Family**
- **Affordable**

4 or MORE
Since June
2017

Updated Spreadsheet and Scoring Rubric

Cost-effectiveness

Optimized Efficiency

Delete Button

Allows Removal of Files

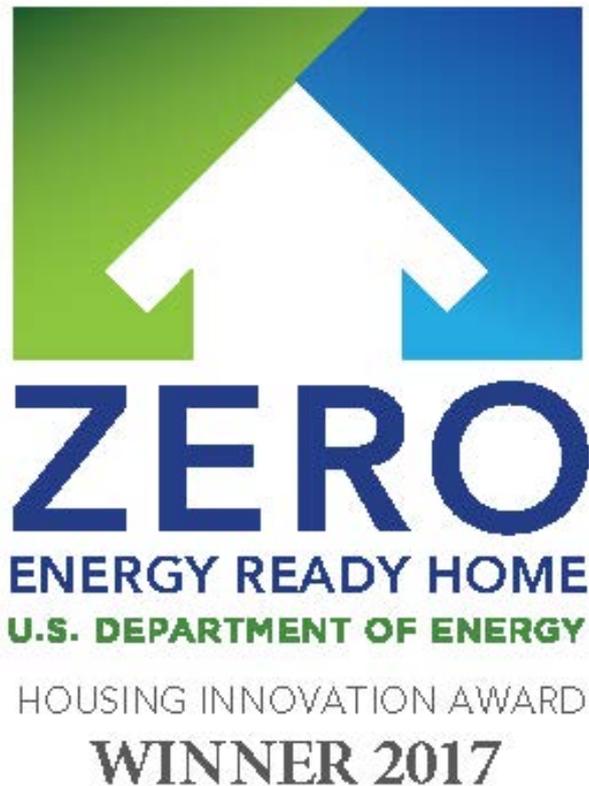
Easier fixes to Mistakes

Reminder: NO EXTENSIONS!

June 15
Deadline
5PM Eastern
Time

WILL NOT BE
EXTENDED

Awards



Winners Notified by August 1

Grand Awards



Photo Credit: Randy Martin

**Grand Winners Revealed at
EEBA High Performance Home
Summit in San Diego in
October**

Poster Display

Evolutionary Home Builders

The Adaptation Home | Geneva, IL | evolutionaryhomebuilders.com



Photos courtesy of Evolutionary Home Builders

"We wanted to take energy efficiency to the next level and not only have a smart home, but also have a home that would be healthy, safe, and non-toxic for our children." Home owners









PROJECT DATA

- **Layout:** 5 bdrm, 5 bath, 2 fr-bsmt, 4,798 ft²
- **Climate:** IECC 5A, cold
- **Completed:** June 2014
- **Category:** Custom

MODELED PERFORMANCE DATA

- **HERS Index:** without PV 30, with PV NA
- **Projected Annual Utility Costs:** without PV \$1,010, with PV NA
- **Projected Annual Energy Cost Savings:** (vs home built to 2012 IECC) without PV \$717, with PV NA
- **Annual Energy Savings:** without PV 7,018 kWh, with PV NA
- **Added Construction Cost, vs 2012 IECC:** without PV \$4,300, with PV NA

KEY FEATURES

- **Walls:** 2x8 24" o.c. advanced framed; blown fiberglass; CDX plywood sheathing; liquid-applied weather barrier; two 2" layers of polyiso rigid foam exterior, house wrap, 3/4" vented plastic furring strips, engineered wood siding.
- **Roof:** CDX plywood sheathing, 6 ft ice and water shield at eaves, 18" along all rakes, roof to wall joints, roof ridges; synthetic underlayment; 50-yr asphalt shingles.
- **Attic:** R-100 blown fiberglass over plywood attic floor, dropped drywall ceiling below to house electrical and ducts. All framing joints sealed with caulk, tape and/or gasket.
- **Foundation:** Poured concrete basement with two 2-inch layers of XPS outside wall, one 2" layer inside wall, and two 2-in. layers under slab and between footing and stem wall, and 2" between slab edge and stem wall. Liquid-applied water proofing.
- **Windows:** Triple-pane, argon-filled, PVC framed, low-e, U=0.08, SHGC=0.5.
- **Air Sealing:** 0.33 ACH 50.
- **Ventilation:** ERV run continuously with MERV 15 filters.
- **Hot Water:** Heat pump water heater (COP 2.4).
- **HVAC:** Two air-to-air heat pumps SEER 14.1, HSPF 9.6, COP 2.7, EER 9.3.
- **Lighting:** 100% LED.
- **Appliances:** ENERGY STAR refrigerator, dishwasher, clothes washer, ceiling fans.
- **Solar:** Ready.
- **Water Conservation:** 100% EPA WaterSense fixtures.
- **Energy Management System:** Yes.
- **Other:** Low/no VOC, no formaldehyde. Wired for back-up generator.

CONTACT

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Palo Duro Homes

Via del Cielo | Santa Fe, NM | palodurohomes.com



Photos courtesy of Palo Duro Homes

"Since going 100% zero energy ready, we have seen our average sales price increase by \$30,000!" Tom Wade, Palo Duro









PROJECT DATA

- **Layout:** 4 bdrm, 2.5 bath, 2 fl, 2,215 ft²
- **Climate:** IECC 4B, mixed-dry
- **Completed:** August 2014
- **Category:** Production

MODELED PERFORMANCE DATA

- **HERS Index:** without PV 48, with PV NA
- **Projected Annual Utility Costs:** without PV \$1,483, with PV NA
- **Projected Annual Energy Cost Savings:** (vs home built to 2012 IECC) without PV \$833 with PV NA
- **Annual Energy Savings:** without PV 78,373 kWh, 114 therms; with PV NA

KEY FEATURES

- **Walls:** 2x6 24" o.c., advanced framed; R-21 blown fiberglass, double-layer tar paper, stucco.
- **Roof:** 4 ft ice and water shield, asphalt shingles
- **Attic:** Vented, 14" raised heel trusses, R-75 blown fiberglass, spray-on air sealant.
- **Foundation:** Slab on grade with 4 ft of R-10 rigid foam under slab around perimeter, R-5 slab edge insulation.
- **Windows:** Double-pane, vinyl-framed, low-e, argon fill, U=0.30, SHGC=0.21.
- **Air Sealing:** 2.02 ACH 50.
- **Ventilation:** Exhaust.
- **Hot Water:** 95% effic. tankless water heater.
- **HVAC:** Ducted minisplits 16.5 SEER, 9.5 HSPF.
- **Lighting:** 100% CFL, exterior sensors.
- **Appliances:** ENERGY STAR refrigerator, dishwasher.
- **Solar:** 3.0-kW.
- **Water Conservation:** EPA WaterSense fixtures.
- **Energy Management System:** Yes.
- **Other:** No/low-VOC.

CONTACT

Tom Wade
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505-934-2758



In San Diego Prior to the EEBA High Performance Home Summit



Builder

DESIGN MONEY BUILDING LAND BUILDER 100 PRODU

BUILDER

DOE HONORS HOUSING'S TOP INNOVATORS

The Housing Innovation Awards recognize top builders on the path to zero energy ready homes.

By Jennifer Goodman



The U.S. Department of Energy has recognized 34 of the nation's leading builders as [2016 Housing Innovation Award](#) winners. The honorees were selected by a diverse panel of builders, architects, and industry professionals for their outstanding accomplishments in designing and building Zero Energy-Ready Homes. (View the video above for a case study of one of the winners, Seattle-based green home builder Dwell Development.)

"Housing Innovation Award winners are leaders in the ongoing transformation of the housing industry as they strive to zero energy-ready homes," says Sam Rashkin, chief architect, DOE's Building Technologies Office. "The level of performance we saw from our awardees underscores the importance of building high-efficiency homes of the future. These homes provide Americans with the ability to save money through reduced or eliminated utility bills, engineered comfort, comprehensive health protection, and overall peace-of-mind they are making a smart investment."

The 2016 Housing Innovation Award Winners are:

ENERGY.GOV

Office of Energy Efficiency & Renewable Energy

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Home » Energy Department Announces 34 Winners of the 2016 Housing Innovation Awards

Energy Department Announces 34 Winners of the 2016 Housing Innovation Awards

September 28, 2016 - 4:00pm



The U.S. Department of Energy (DOE) today recognized 34 of the nation's leading builders at the 2016 Housing Innovation Awards during the Energy and Environmental Building Alliance's Excellence in Building Conference in Dallas, Texas. The winners were selected by a diverse panel of builders, architects, and industry professionals for their outstanding accomplishments in designing and building Zero Energy-Ready Homes.

"Housing Innovation Award winners are leaders in the ongoing transformation of the housing industry as they strive to zero energy-ready homes," said Sam Rashkin, Chief Architect, DOE's Building Technologies Office. "The level of performance we saw from our awardees underscores the importance of building high-efficiency homes of the future. These homes provide Americans with the ability to save money through reduced or eliminated utility bills, engineered comfort, comprehensive health protection, and overall peace-of-mind they are making a smart investment."

The 2016 Housing Innovation Award Winners are listed below:

WINNERS FOR INNOVATION IN AFFORDABLE HOMES

- **Grand Winner: United Way of Long Island, Deer Park, New York**
- Carl Franklin/Green Extreme Homes, Lewisville, Texas
- Clifton View Homes (CVH) Inc., Coupeville, Washington
- Habitat for Humanity of Catawba Valley, Hickory, North Carolina
- Habitat for Humanity, Grand Traverse Region, Traverse City, Michigan
- Habitat for Humanity South Sarasota County, Venice, Florida
- Kalamazoo Valley Habitat for Humanity, Kalamazoo, Michigan
- Revival Homes, New Hartford, Connecticut
- Sunroc Builders, Lakeland, Florida

RELATED ARTICLES

[Energy Department Announces Winners of Housing Innovation Awards](#)

[Energy Department Announces Winners of Housing Innovation Awards](#)



[Housing Innovation Awards Recognize Leadership in Residential Efficiency](#)

Leveraging Success- Make Headlines



Inspiring HIGH PERFORMANCE HOMES

RESEARCH GREAT PRODUCTS & PROJECT RESOURCE EXPERT
CENTERS HOMES SUPPLIERS HELP LIBRARY INSIGHTS

Denver-based Zero Energy Builder a Grand Winner in Housing Innovation Awards (video)



Thrive Home Builders continues to be among the most innovative and recognized last month by the US Department of Energy at the agency's Housing Innovation Awards.

For the fourth consecutive year, Thrive was selected as a Grand Winner in the Zero Energy Ready Homes category. Only six Grand Winners were chosen in five categories. Thrive's outstanding Zero Energy Ready Homes designed by the nation's top architects were recognized for innovative design in its three-story rowhomes located in Lone Tree, Colorado.

The DOE launched its Housing Innovation Awards in 2013. Thrive has been a winner since the awards' inception.

[See More Housing Innovation Award Winners](#)

High Performance Homes Earns Prestigious Housing Innovation Award from the US Department of Energy

8/2/16



Depot Neighborhood Garners National Acclaim

August 16, 2016



The U.S. Department of Energy has announced that Habitat for Humanity Grand Traverse Region has been awarded a 2016 Housing Innovation Award in the Affordable Homes category. Habitat for Humanity Grand Traverse Region's Depot Neighborhood, located off Eighth Street near Woodmere, is considered an exceptional example of the movement towards Zero Energy Ready Homes. The homes incur small to non-existent utility bills, which allow families to focus their income on other areas.

"We are extremely honored to receive this recognition," says Wendy Irvin, Executive Director of Habitat for Humanity Grand Traverse Region. "We feel it's not only an acknowledgment of the way that we seek to innovate and build homes that are environmentally responsible, but that it's also a testament to how much we care about our Habitat families. We want them to

live in beautiful homes that also help their family to succeed in every way possible."

"Housing Innovation Award winners such as Habitat for Humanity Grand Traverse Region are leading a major housing industry transformation to zero energy ready homes," says Sam Rashkin, Chief Architect at the U.S. Department of Energy's Building Technologies Office. "This level of performance is the home of the future, because it improves the way Americans live by substantially reducing or eliminating utility bills, ensuring engineered comfort beyond traditional homes, protecting health with a comprehensive package of indoor air quality measures, and helping maximize the largest investment of a lifetime."

One other Michigan community, Kalamazoo Valley Habitat for Humanity, was among the nine winners listed. Grand Winners in each category will be announced at the 2016 Housing Innovation Awards Ceremony on September 27 at the EEBA Excellence in Building Conference in Dallas.

on the path to Zero Energy Ready Homes

of sustainable, new green homes has
rd in the **Custom (for**
at the 2016 Housing Innovation Awards
ilding Conference in Dallas, Texas. This is
novation Award winner. **HPH** is the only

s are leading a major housing industry
is the home of the future because it
ng utility bills, ensuring engineered comfort
package of indoor air quality measures,
ashkin, Chief Architect at the U.S.

**omes that provide better places for
y and environmentally resilient nation,"**

Winner

Winner

Leveraging Success - Social Media

 **Garbett Homes** ✓
October 18 · 🌐

Garbett Homes is recognized by the US Department of Energy as an "Innovator" in zero energy ready home technology <http://ow.ly/fftG>

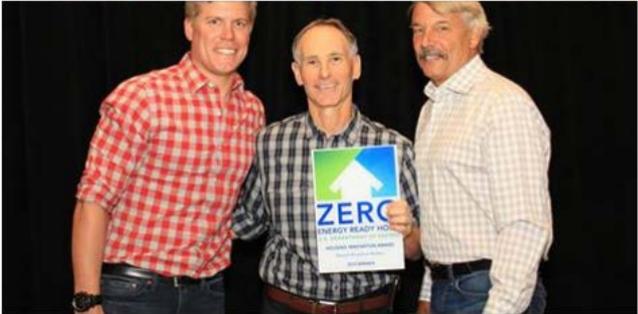


DOE Honors Housing's Top Innovators
The Housing Innovation Awards recognize top builders on the path to zero energy ready homes.
BUILDERONLINE.COM

 **Mantell-Hecathorn Builders, Inc.** added 2 new photos — with Hunter Mantell-Hecathorn and GregTara Mantell-Hecathorn.
October 19 at 1:29pm · 🌐

We are proud to have received our U.S. Department of Energy 2015 Housing Innovation Award at the Energy & Environmental Building Alliance

"M-H Builders' leadership is "paving the way for the rest of the U.S. housing industry to provide zero energy ready homes that are better for our nation, our communities, and individual homeowners". This award recognizes the very best in innovation on the path to zero energy ready homes."



👍 Like 💬 Comment ➦ Share



- Can I apply if my home is not a Certified DOE Zero Energy Ready Home?
- Do I have to answer all of the required sections?
- Can I submit more than one home?
- Where do I upload my application?
- My files won't upload – What do I do?
- I submitted my application – can I change something?

Chrome



Firefox



Lower Chances of Browser Problems

File Name =

- Newport.Partners.Illc.application.housing.innovation.awards.xls
- #NewportPartners&llc\$application04192017finaldraft!!!!!!
- Newport:HIA;CustomSPEC_Applications
- Here is are some file name examples:
 - Newportapplication
 - Frontelevation1
 - Floorplan1
 - DOEZERHCertificate

Letters and Numbers ONLY – As Simple As You Can Make It

Don't Upload.....



Newport Partners

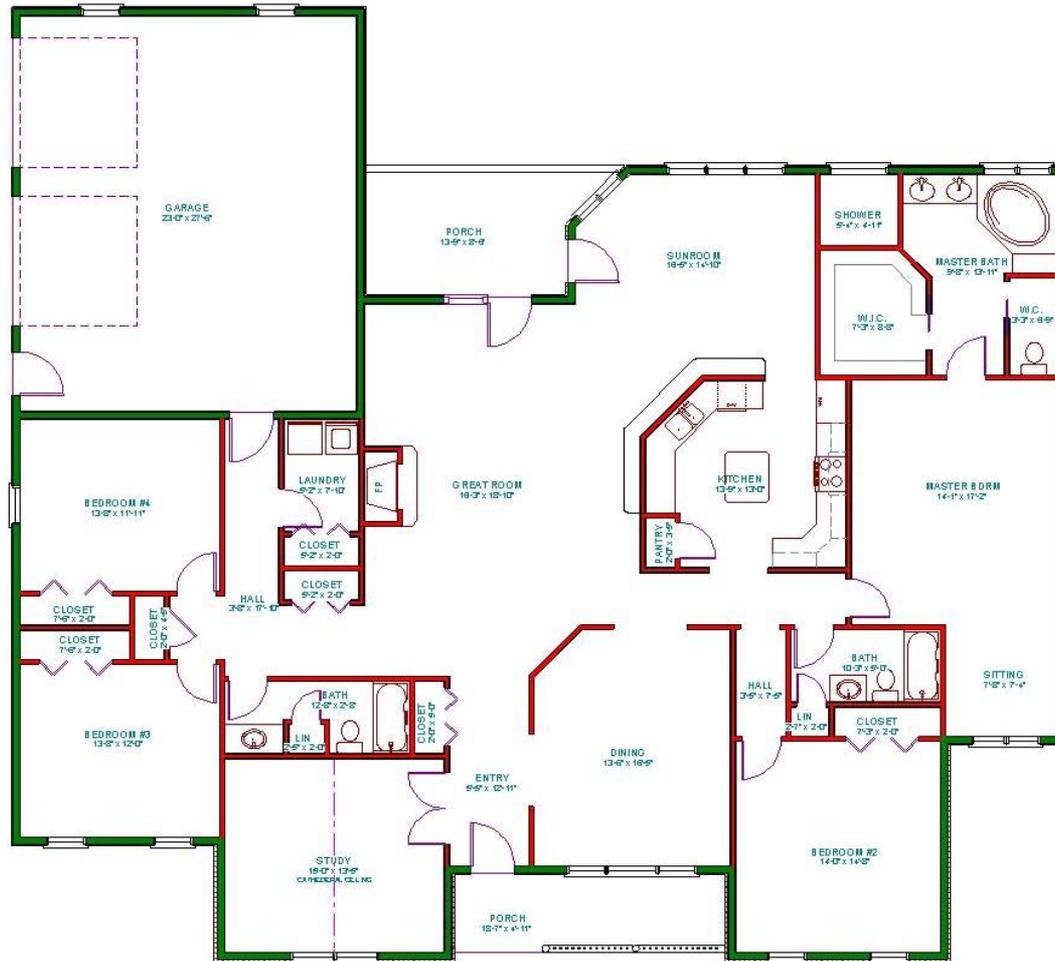
Pictures with Incorrect Installations of Materials

Don't Upload.....



Poor Quality Photos that don't show anything

Wrong Category



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Starting at the Last Minute



[This Photo](#) by Unknown Author is licensed under [CC BY-NC-SA](#)

Don't Do This.....Insufficient Detail

The screenshot shows a web application interface. At the top, there is a navigation bar with a 'Back to Application Tracker' link. Below this is a question labeled 'A' with a green background. The question asks for business metrics for zero net-energy ready homes. Below the question is a dark blue bar labeled 'Narrative'. The answer area is mostly blank, with the text 'We sold the home.' at the bottom. A prominent red error message states 'There is still 0 question you have not answered!'. Below the error message is a 'Back to Application Tracker' link. At the bottom, there is a horizontal menu with several tabs: 'Application Tracker', 'General Information', 'Performance', 'Land Development', 'Design', 'Quality Construction', 'Business Metrics', and 'Sales & Marketing'. The 'Business Metrics' tab is currently selected.

Back to Application Tracker

A

6. Business Metrics. (REQUIRED) How did you measure the business results of your investment in zero net-energy ready homes? Examples: Incremental cost of construction above code; time-to-sale; number of home buyer visitors; media coverage; customer satisfaction surveys; actual energy billing data. (Note: for affordable or non-profit projects these may be different. Consider the metrics that you track to identify success in your programs or that fit within your organization's mission).

Narrative

We sold the home.

There is still 0 question you have not answered!

[Back to Application Tracker](#)

Application Tracker | General Information | Performance | Land Development | Design | Quality Construction | **Business Metrics** | Sales & Marketing

Don't Do This.....Insufficient Detail

A	
1	Performance. (REQUIRED) Please describe the key features driving the performance of this house-as-a-system package. Please address every bullet.
2	Component ▼
3	Walls (construction type; advanced framing details; insulation type, amount and R-value; type of sheathing; house wrap; drainage plane; siding): 2x6 Wall
4	Roof (material; extra air or water sealing measures; ENERGY STAR Cool Roof certified): White Roof
5	Attic (insulation type, amount, R-value, and location; any extra air sealing details): Trusses
6	Foundation (type; insulation type, amount, R-value, and location): Basement
7	Windows (# of panes, gas filled, frame type, low-e, U-value, SHGC): Double Paned
8	Air Sealing (air changes per hour at 50 Pa): Caulk
9	Ventilation (type; filter; timers): Yes
10	HVAC (type; fuel type, AFUE, SEER; duct type, location, sealing, and insulation): Yes
11	Hot Water (type and efficiency, location): insulated pipes
12	Lighting (% LED, % CFL; motion sensors; ENERGY STAR ceiling fans): All Good
13	ENERGY STAR Appliances (list all):
14	Renewables (kW of PV, solar water heating): Does Wood Burning Stove Count?
15	Water Conservation Features: Faucet Aerators
16	Energy Management system:

Ready

Application Tracker General Information Performance Land Development Design

**DOE Zero
Energy Ready
Home**

**Fill Out Entire
Application**

Process

Upload All Files

Press Submit

Embrace DOE ZERH

How is it Part
of Your
Business
Model?

Fully
Committed
Builders

Bonus Categories

Videos

Testimonials

Utility Bills

My Story

Details

Everything
Should Have
Details

Make Your
Home
Memorable

Let Us Help!!!!!!!

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