



**Whisper Valley/
EcoSmart:
The Model for
Sustainable
Communities**



September 2018

Introduction



Axel Lerche
Co-Founder of EcoSmart Solution

EcoSmart provides sustainable infrastructure as part of the planning process of community development



Taurus Investment Holdings



- EcoSmart is a subsidiary of Taurus
- Taurus was founded in 1976
- Over \$ 4 Billion in assets

Taurus believes that sustainability is a key driver of better projects, and the firm has been a pioneer in the advanced communities space, including the creation of ESS as an energy service delivery partner.

ADVANCED COMMUNITIES

- Sustainability is a matter of lifestyle
- Sustainability is a matter of profitability
- Sustainability is a matter of responsible investment

Taurus seek to create exceptional, affordable communities, harnessing and enabling technology, zero-energy capable and sustainable living spaces and innovation to do so.

“Sustainable real estate investment requires sustainable building solutions.”

Prof. Lorenz Reibling, Chairman of Taurus Investment Holdings

Topics today

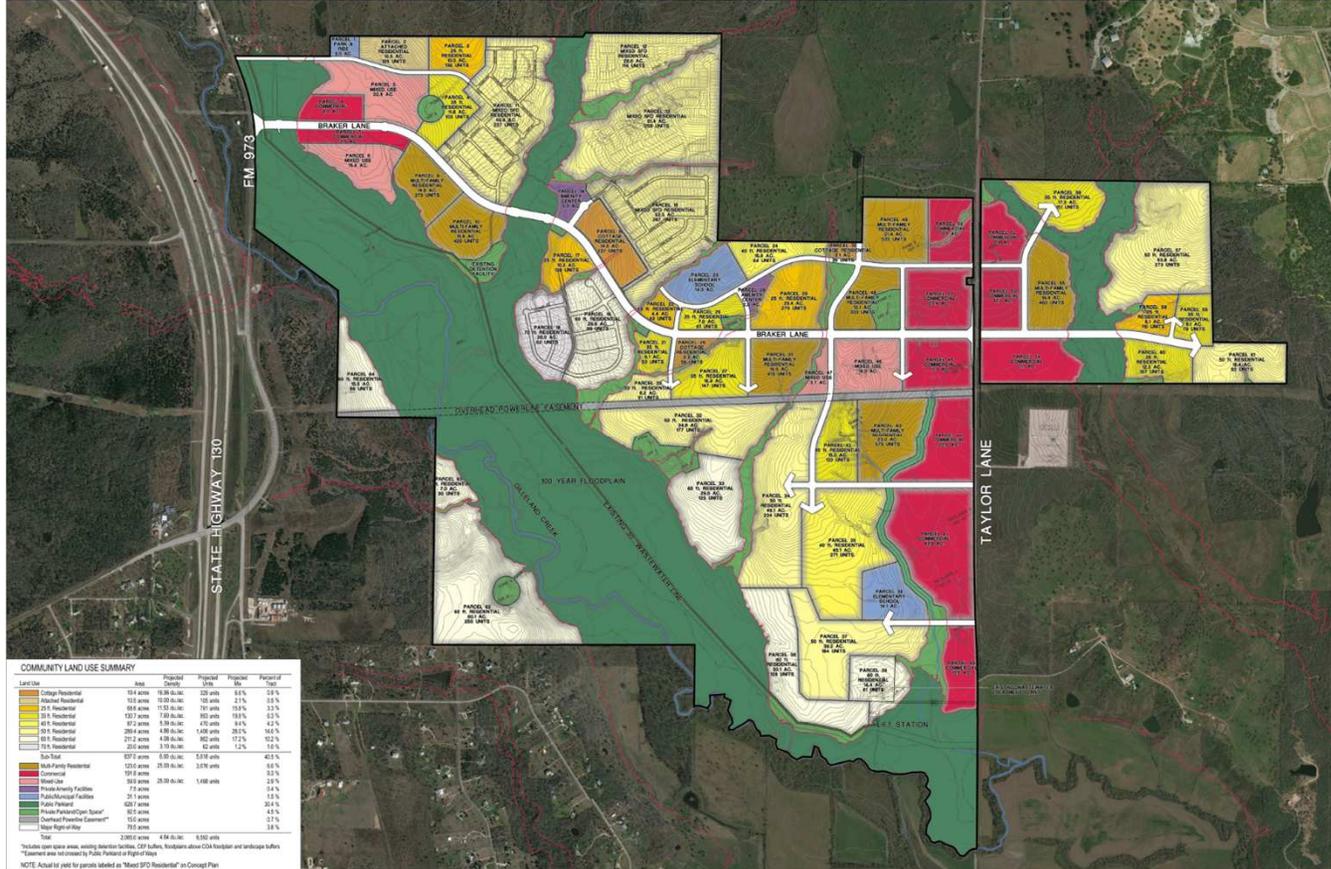


- **Why is the Whisper Valley community different ?**
- **How do we provide zero energy capable homes for an affordable price?**
- **How can the EcoSmart program be integrated in other communities in the country?**
- **Why do progressive building codes have such an impact on our business?**

Corporate video



Masterplan



Whisper Valley Concept Plan



The Package

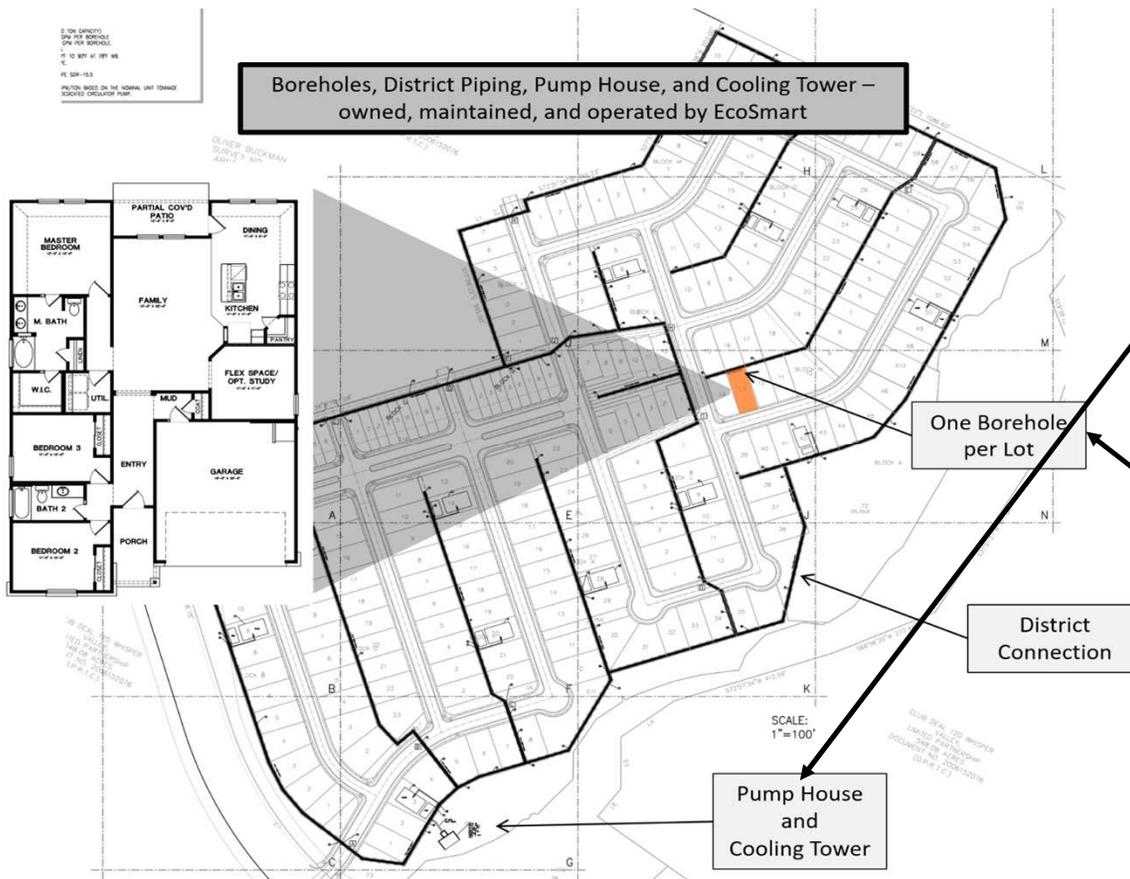


EcoSmart program in every home in Whisper Valley

- EV Charging
- Google Fiber also provides 1GB high speed internet service
- Solar PV system 4-6 kW
- Smart Home Technology
- Bosch Home Appliances – high tech and high efficiency smart appliances and comfort
Ground Source Heat pump (variable speed) with integrated Desuperheater to support Hot Water generation
- Ground Source Heat pump (variable speed) with integrated Desuperheater to support Hot Water generation

Energy demand reduction first – then clean energy generation

GeoGrid 1



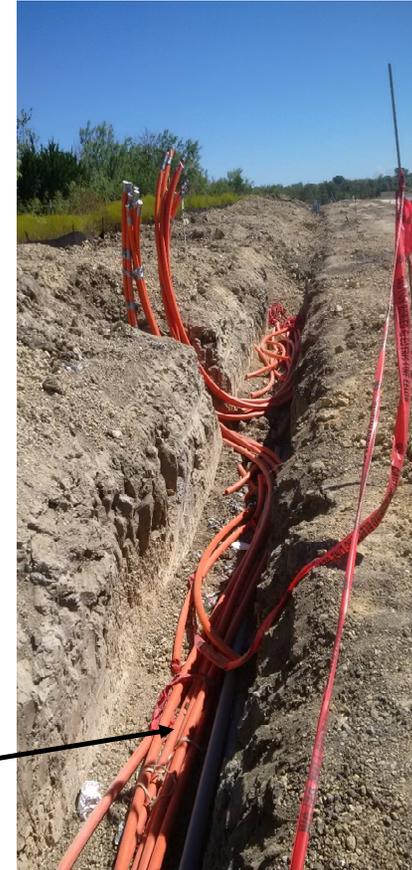
EcoSmart
GeoGrid 1



GeoGrid 1 + Google Fiber



Google Fiber Conduit



EcoSmart
GeoGrid 1



EcoSmart Strategic Partners



ESS HAS DEVELOPED A STRATEGIC PARTNER PLATFORM

Centralized procurement and planning, as well as the opportunity to develop additional strategic initiatives as well as to grow the business, are among the reasons for establishing this national platform



BOSCH

Google fiber

nest



REHAU
Unlimited Polymer Solutions

EcoSmart

Building or Land Developer

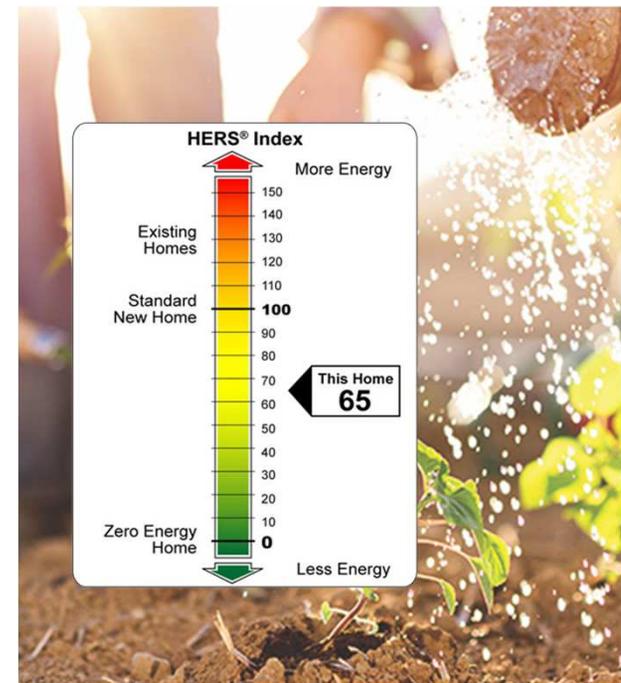
Builders/Owners/Te
nants

EcoSmart
SOLUTION LLC

Home Owner Advantages



- ✓ Homes are **Zero Energy Capable** but **affordable**
- ✓ **Green Investment** in each home of \$20-\$35,000
- ✓ Win-Win home owner pays for the investment through the **savings on their energy bill**
- ✓ Federal Tax Credits **up to \$ 10,000** value for Solar and Geo
- ✓ **Insurance policy** against rising energy costs
- ✓ Professional installations through **ESS trained** subcontractor
- ✓ **Eliminate outdoor noise pollution** no outdoor condensing units
- ✓ Reduced fossil fuel usage and green house gas emissions; **very low to no carbon foot print**
- ✓ **HERS rating** by a third party for each home (15-20)



Solar Program, real homes



House comparison



	Monthly Average
Monthly kWhs	1200
Customer Electricity Bill	\$128
Gas Bill	\$60
Mortgage Payments	\$955
Mortgage Interest Deduction	(\$132)
Annuity Value of Tax Credit	\$0
Total	\$980

	Monthly Average
Monthly kWhs	120
Customer Electricity Bill	\$33
ESS Service Fee	\$60
Mortgage Payments	\$1,062
Mortgage Interest Deduction	(\$147)
Annuity Value of Tax Credit	(\$33)
Total	\$975

Energy Savings





PO BOX 240 GIDDINGS, TX 78942-0240

Please check box to indicate mailing address/phone number changes and enter changes on the reverse side.

4717 1 JV 0 278 002700-0L107704-0L 10x_1-004717
 ALYSSA
 16304 ENAMORADO RD
 MANOR TX 78653-5437

Account Number	Bill Date
5500052432	05/07/18
Account Name	Due Date
ALYSSA COLLINS	05/23/18
After Due Date	Total Due
\$6.82	\$6.82

Recurring payment will be processed on 05/23/18.
 Do not send a check or other form of payment.
 Thank you for enrolling in Bluebonnet's Recurring Payment program!

9 5500052432 6605 000000682 000000682

Please mail this portion with your payment.

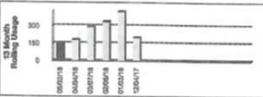
Account Name		Account Number		Bill Date		Important Contact Information	
ALYSSA COLLINS		5500052432		05/07/18		Member Service (800) 842-7706 Power Outages (800) 949-4414 bluebonnet.coop	
Meter Number	Rate	Meter Readings	Days	Multiplier	KWh	Charge	
71319274	DG Generation	1,446-1,905	28	1	459	\$-29.04	
71319274	Residential	2,309-2,512	06	1	153	\$35.88	
Current Charges						\$6.82	

Meter: 71319274 Service Address: 16304 ENAMORADO RD MANOR TX 78653

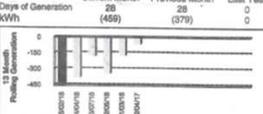
Service From: 04/04/18 to 05/02/18

Wholesale Power Cost 153 KWh	\$8.35
Bluebonnet Residential Service 153 KWh (Includes \$22.50 Service Availability Charge)	\$27.50
Member Generation 459 KWh	\$-29.04
Capital Credits	\$-0.05
Current Charges	\$6.82

Days of Service	Current Month	Previous Month	Last Year
KWh	86 153	28 182	0 0



Days of Generation	Current Month	Previous Month	Last Year
KWh	28 (459)	28 (379)	0 0



Bluebonnet Electric Cooperative

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Resident feedback



Whisper Valley by Pacesetter Homes

16504 Moonlight Dr, Manor, TX

[Write a review](#)

4.8 ★★★★★ 13 reviews

Sort by: Most helpful ▾



Daniel Ferguson

Local Guide · 54 reviews · 2 photos

★★★★★ 2 days ago

I love this community and my super energy efficient home. The insulation is insane and the geothermal unit works flawlessly and quietly. It's wonderful that none of the houses have noisy old fashioned air conditioning! Such a peaceful place, I'm truly lucky to have got in early.

Like



Mars Chapman

2 reviews

★★★★★ 2 months ago

Lovely energy efficient homes, good builders and sales people, and an involved developer keen of making a real community here. We love our new home and our buying experience.

1



Matt Jacobs

Local Guide · 90 reviews · 121 photos

★★★★★ 8 months ago -

This place looks like it's going to be amazing! The only thing I wonder is how long it will be "affordable" for. The list of planned amenities seems pretty endless. Very progressive.



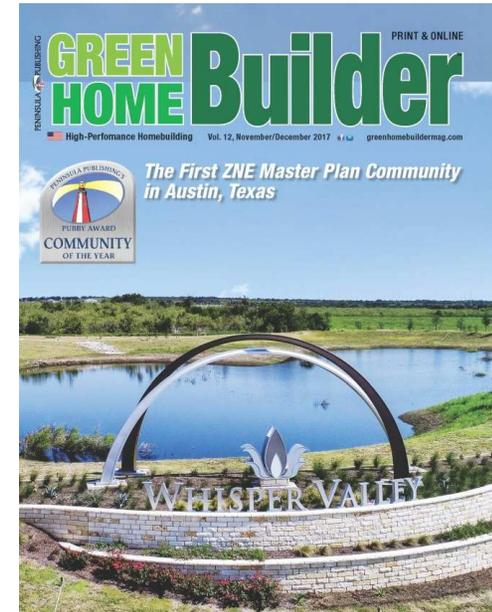
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National Recognition



Accolades

- Whisper Valley Discovery and Community Center – **Silver Award at NAHB’S The Nationals Awards Gala**
- **AEGB 3 Star Rating** from Austin Energy Green Building
- Named **2017 Green Community of the Year in America** by *Green Homebuilder Magazine*
- Voted **Best New Development in Austin 2018** by Home Builder Association
- Featured in Austin’s annual 2018 **Cool House Tour** in June
- Featured on **ASK THS OLD HOUSE- FUTURE** segment, May 2018
- Merrit Award Winner of PCBC 2018



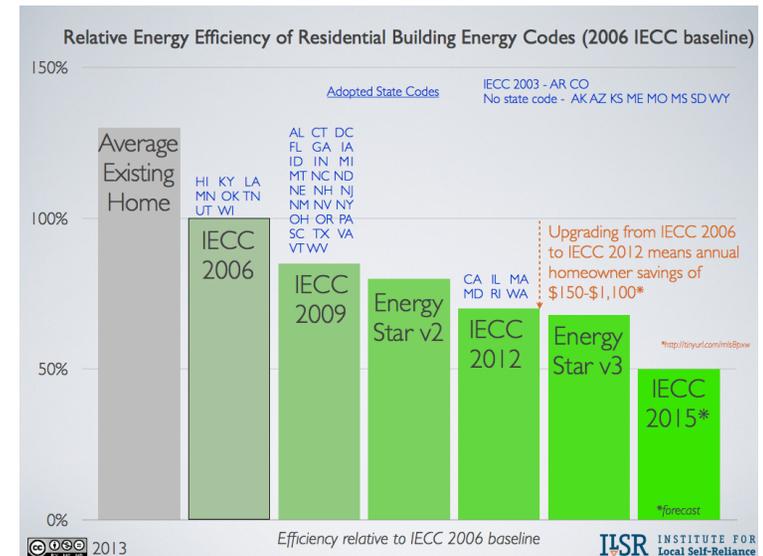
Code Requirements



Policies and Building Codes

Building Codes on local and state level require more energy efficiency in home construction. Builders have to meet more progressive standards as:

- Zero energy ready homes
- More efficient HVAC and Hot Water Systems
- Lower HERS ratings (more energy efficient score evaluation)
- Local amendments of national codes (minimum energy performance requirements)
- Approval of floorplans and HVAC sizing
- Air blower tests
- Energy Star Certification
- Disclosure of energy performance at home sale (higher value for energy efficient homes)



Production builders are challenged to meet standards without increasing prices.

NASEO and EcoSmart



Green Verification	Parallel Food Industry Product
<p>Green Certifications</p> <ul style="list-style-type: none"> Recognize homes for achieving specific thresholds, either related to energy features and/or overall performance. May have different levels of recognition (e.g., silver, gold, emerald, etc.) Popular programs vary by market. 	 <p>Certified Organic. Food items must achieve specific standards for verification.</p>
<p>Energy Labels</p> <ul style="list-style-type: none"> Provide standardized and reliable energy information for any home. Compare homes to an accepted standard, such as to building energy codes or average U.S. home energy use. Show current state of home's energy assets. 	 <p>Nutrition Facts. Any food item can feature this to clarify its contents in a standardized way.</p>
<p>Verified Energy Improvements</p> <ul style="list-style-type: none"> Provide proof of energy upgrades made to the homes. May highlight differences between upgraded homes and non-upgraded homes. Does not show whether specific thresholds have been achieved, but may include an estimate of energy savings associated with upgrades. 	 <p>Reduced Fat. Food items can show they are improved from a previous version.</p>

- Aspirational building codes can be a challenge for volume builders
- Energy efficiency is a matter of smarter land development
- EcoSmart Solution provides a program to make energy efficiency profitable and interesting for builder and home owner
- Every new community in the country can apply the EcoSmart program

Happy Home Owners



The Key to Sustainable Communities

