



Minimum Energy and Water Efficiency Standards for Rental Units

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Energy & Business Services

Items Requested

- Energy Efficiency Ratings Programs
- Minimum Efficiency Standards for New Construction
- Minimum Suggested Energy & Water Efficiency Standards for Rental Units
- Utility Rental Loan Programs
- Program Options
- Rebates and Grants for Landlords
- Education

Types of Energy Efficiency Rating Programs

- Performance
- Prescriptive
- Custom to the organization
 - Residential Energy Conservation Ordinance
 - Point of Sale / Major Renovation
- Voluntary and/or Phased in over time

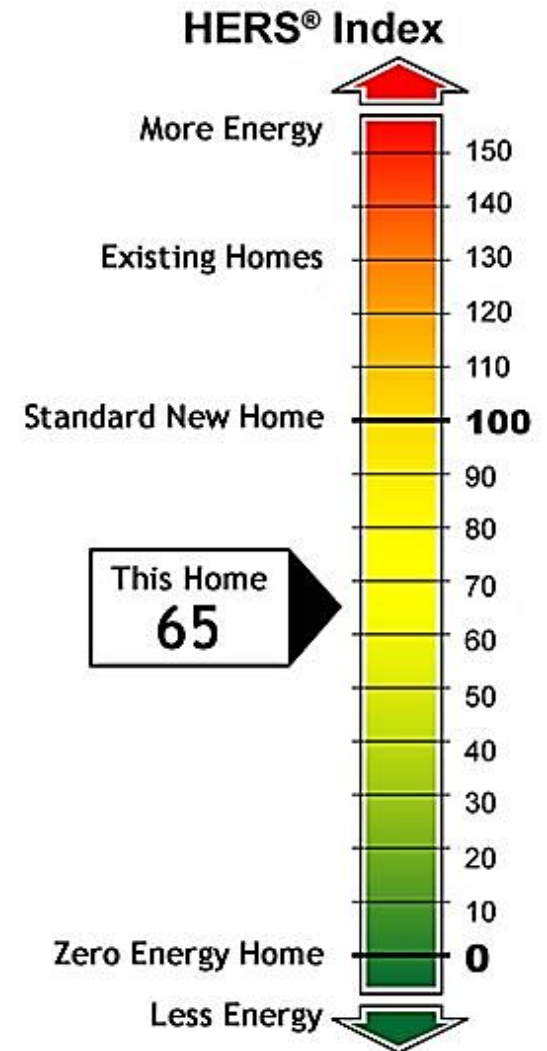
Home Energy Rating System (HERS)

- Nationally recognized system for inspecting and calculating a home's energy performance.
- The HERS Index Score, is a measurement that tells you how energy efficient a home is compared to a new code built home of similar size and shape.
- Performed by a Certified Rater
- Residential Energy Services Network, or RESNET – created in 1995 by reps of the national mortgage industry, National Association of State Energy Officials, and Energy Rates Homes of America

<https://www.resnet.us/hers-index>

<https://www.resnet.us/energy-rating>

<http://www.fsec.ucf.edu/en/consumer/buildings/homes/ratings/how.htm>



HERS Process

- Class 3 Rating: a projected energy rating, reserved for new buildings and clearly labeled as "projected rating based on plans"
- Class 2 Rating: a confirmed energy rating using site energy audit data as the source for the input data on which the rating is based (new or existing)
 - All exterior walls (both above and below grade)
 - Floors over unconditioned spaces (like garages or cellars)
 - Ceilings and roofs
 - Attics, foundations and crawlspaces
 - Windows and doors, vents and ductwork
 - HVAC system, water heating system, and thermostat.
- Class 1 Rating: a confirmed energy rating using site energy audit and performance test data as the sources for the input data on which the rating is based (new or existing buildings)
 - Blower door test to find the air leakage of the home
 - Duct testing to find the leakage in the heating and cooling distribution system

Projected Rating Based on Plans
Field Performance Test Required for Rating Confirmation

DCA Codes & Standards
456 Energy Star Way
Central Star, FL 32805-

Class 3 Rating
Registration No.:
Climate: Central Florida

FLORIDA BUILDING ENERGY RATING GUIDE

Best
\$381

\$818

Worst
\$2229



Submitted Home Plans
HERS Reference Home¹

Costs based on:
Central Default
Central Default

Electric Rate: \$0.082 /kWh
Gas Rate: \$1.077 /Therm

As compared with other 1500 square foot, 3 bedroom homes without pool pumps.

This Home Qualifies for EPA's Energy Star Label²
This Home Qualifies for an Energy Efficient Mortgage (EEM)

Cooling	\$212
Heating	\$35
Hot Water	\$179
Refrig	\$62
Dryer	\$62
Stove	\$52
Lighting	\$80
Misc	\$136
Pool	

HERS Score³: 86.8



NOTES:

- The HERS Reference Home is constructed to comply with the 1992 CABO Model Energy Code (MEC) at a HERS score of 80 or greater.
- The home builder must have signed a Memorandum of Understanding with EPA as an Energy Star Homes partner.
- Home Energy Rating Systems (HERS) Score calculated in accordance with national HERS Guideline rating method.

Form 11B

EnGauge (Version: FLR1NA-200)

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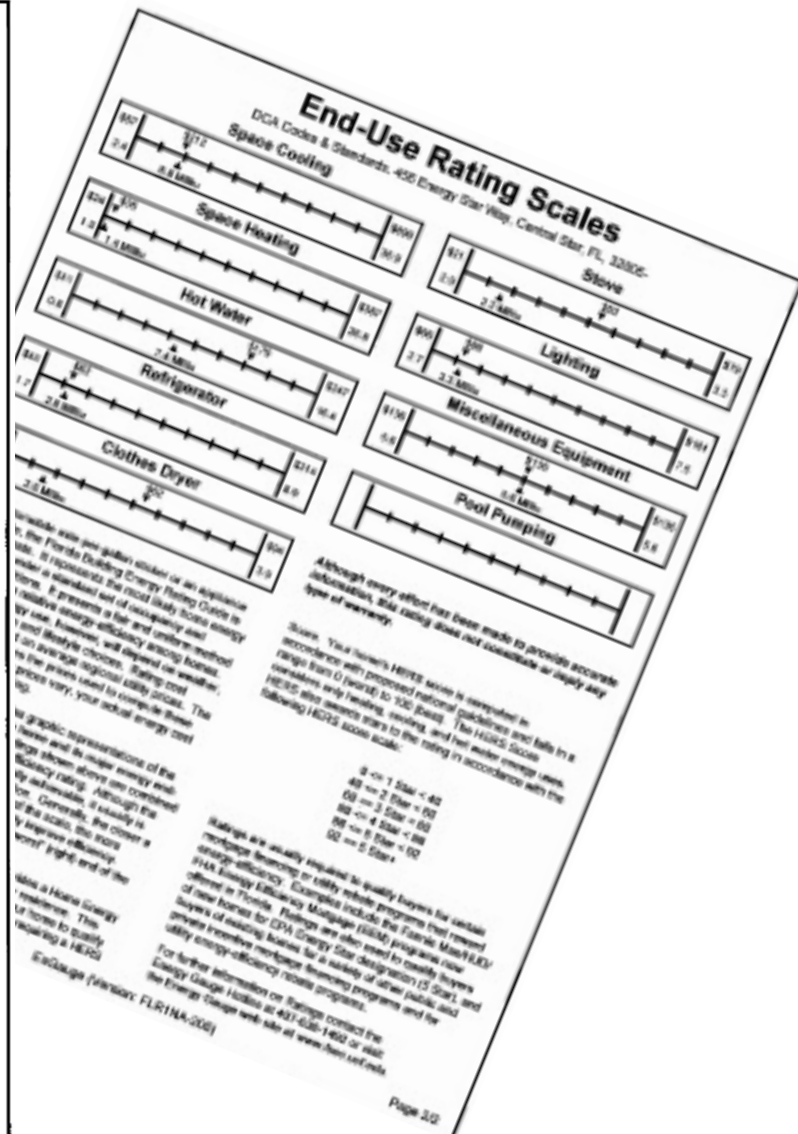


I. M. Certified
Certified Rater

000000
I.D. Number

I.M. Certified
Signature Date

This notice is provided to you by an individual certified by the Florida Department of Community Affairs to perform a building energy rating evaluation. Any questions, comments, or complaints regarding the person or Agency performing this service may be directed to the Florida Department of Community Affairs, Building Energy Rating System Program, 2555 Shumard Oak Boulevard, Tallahassee, Florida, 32399-2100, 904-487-1824.



HERS Ratings

Pros

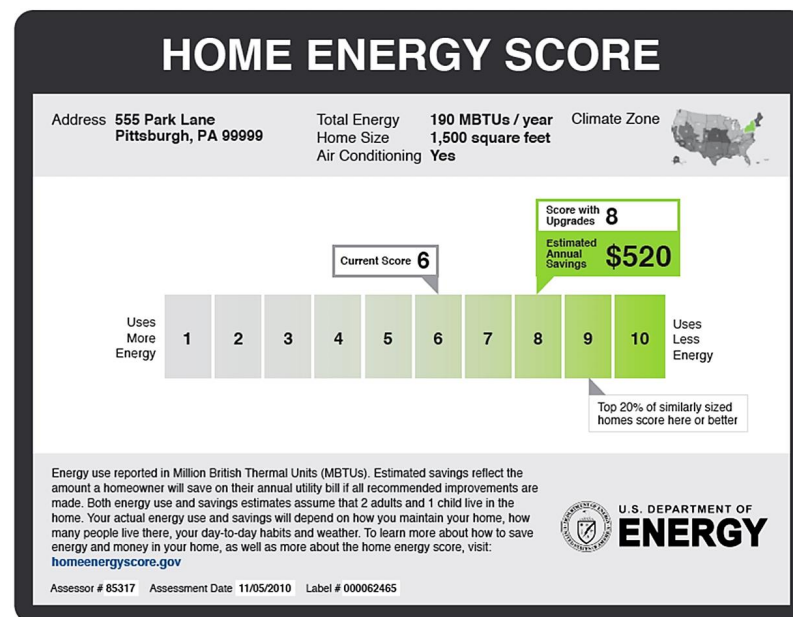
- Detailed report regarding the house
- Recommendations for improvement
- HERS Index Score
- Green Financing
- % Air Leakage
- % Duct Leakage

Cons

- Cost: \$250-\$3000/home
- Time: 2-4 hours per rating
- Does not take into account occupant behavior
- Historically for new construction
- Few Raters in the area

Home Energy Score (HES)

- A standard assessment of energy-related assets
- Provides information about a home's overall energy efficiency based on its size, building envelope, HVAC systems, and hot water system
- Simple one-to-ten scale
- Can include a more extensive whole-house energy audit that considers occupant behavior, can include blower door testing
- DOE-trained HES Assessors
- Developed in 2011 by DOE and National Renewable Energy Laboratory



Home Energy Score

Pros

- Simple 1-10 range
- Low to no-cost
- Time: about an hour
- Designed for new or existing homes
- Can take into account occupant behavior
- Similar to Class 2 Rating

Cons

- No known assessors in Alachua County
- No required blower door testing
- No required duct testing

Minimum Efficiency Standards for New Home Construction

2017 Florida Building Code, Energy Conservation, Chapter 4 [RE]
Residential Energy Efficiency

- Attic Insulation of R30, floor and walls of R-13
- Air leakage rate not exceeding seven air changes per hour
- Duct leakage ≤ 4 cfm/100 s.f.
- HVAC SEER ≥ 14.0 , HSPF ≥ 8.2 , AFUE $\geq 80\%$
- Wood-burning fireplaces shall have tight-fitting flue dampers or doors, and outdoor combustion air
- Programmable Thermostat
 - initially programmed by the manufacturer with a heating temperature set point no higher than 70°F and a cooling temperature set point no lower than 78°F
 - Heat pumps having supplementary electric-resistance heat shall have controls that, except during defrost, prevent supplemental heat operation when the heat pump compressor can meet the heating load

Minimum Efficiency Standards for Existing Homes

- Historically in Gainesville
 - Individual energy efficiency standards (ex. R19 insulation, mastic on ducts, weatherization measures) seem difficult to pass and difficult to regulate
 - Social pressure seems to be the City's best bet for increasing property owner's initiative to improve the energy efficiency of their property
- Current State/City requirements
 - The Florida Building Code is a uniform code and is part of the County Uniform Development Land Code
 - Prior to 1996 EE was not a component of the FBC
- The code when the home was built or when the last renovation permit was issued is what the home is required to have

Minimum Efficiency Standards

Section 8 Housing

Chapter 10: Housing Quality Standards, Thermal Environment
Tenant Preference

“The PHA has no control over energy conservation measures, such as dwelling insulation or installation of storm windows and doors. The family must assess whether a dwelling without these items is acceptable; the family must take into account the cost of utilities billed to the family and personal feelings about adequate heat. Dwellings that are poorly insulated or lack storm windows are generally drafty and more difficult to heat and cool.”

Utility Rental Programs In Florida

- Tallahassee – Rental Rehabilitation Program
 - Rental units up to 4 per building
 - Loan for up to 80% of rehab cost up \$20K with 0-3% deferred interest
 - Units must be rented to those at or below 80% area median income
- Most utilities have programs that are for both owner and renter occupied homes
 - Low Income, Insulation, Appliances, HVAC replacement, Loans*

Programs Around the U.S.

- Austin, TX: Energy Conservation section of City Code
- Berkeley, CA: RECO, Informative handbook
 - Point of sale or major renovation
- Boulder, CO: Smart Regs Program
 - Performance or prescriptive
- Burlington, VT: Minimum EE Standards Ordinance
 - Performance and prescriptive
- Memphis, TN: Minimum EE In Rental Property Ordinance
 - Prescriptive
- San Francisco: RECO
 - Point of Sale and a Certificate of Compliance

Program Option: Prescriptive

- Consider a yearly reduction in the Landlord Permit/License if the unit/structure meets and provides proof of minimum recommendations for:
 - Weatherization (caulk/weather strip/seal cracks & openings)
 - Duct inspection/seal
 - SEER 14
 - R-19 insulation levels (space allowing)
- This could be a possible minimum for a HES
- Landlords are required to disclose EE score/rating prior to lease signing
- This would not need to be checked yearly, perhaps a 5-year certificate or allowance

Program Option:

Residential Efficiency Conservation

- Amendment to the Minimum Housing code
- Complaint driven
- Initiated and enforced by Codes Enforcement
- Owner notification via mail
- Violations would allow 90-days to resolve
- Only enforceable within the City of Gainesville limits

Suggested EE Items

- Attic insulation levels at a minimum of R-19, except where there is insufficient space or the presence of attic flooring will not allow
- Attic access from conditioned to unconditioned spaces shall be weather stripped and insulated to a minimum of R-19
- All accessible duct joints sealed so the system is substantially free of leaks and all ducts must be insulated
- Insect screens on all windows that can open, all the operable windows close, all windows properly glazed, and any cracks sealed with long lasting tape
- Permanently affixed weather stripping and door sweeps on all exterior door & windows
- Fireplace chimneys with working dampers, doors, or closures
- All showerheads with a 3.0 gal/min flow rate or less
- All faucets aerators with a 2.75 gal/min flow rate or less
- Water heater(s) with a properly functioning Temperature/Pressure Relief Valve (TPRV), insulated pipes for the first 3 feet from the unit (excepting gas units), and all water lines not in enclosed space must be insulated
- Properly maintained refrigerator with door seal/gasket intact and clean coils
- HVAC filter(s) that are new or clean at time of survey
- HVAC system(s) have had maintenance performed by a currently licensed HVAC or mechanical contractor within the year prior to move-in.

Program Option: Single Family Point of Sale

- Point of Sale/Major Renovation: Percent of Sales Option
- Upgrades are done to the amount of a percent of the sales price of the home
 - \$170,000 home, would require 1-3% (\$1,700 – 5,100) worth of EE upgrades each time the home is sold
 - Based on age of home – newer homes would not require upgrades
 - Provide a list of possible upgrades
 - Can be built into the final cost of the home
- More flexible for the owner and less costly
- Much easier to track at the point of sale
 - Receipt(s) showing upgrades performed submitted at closing

Program Option: Multi-Family Point of Sale

- Point of Sale/Major Renovation: Percent of Sales Option
- Upgrades are done to the amount of a percent of the sales price of the complex
 - \$4,120,000 complex with 132 units, would require 3% (\$123,600 or \$936 per unit) of EE upgrades each time sold
 - Can be built into the closing cost of the complex
 - List of possible recommended upgrades provided
- Once again, this is more flexible for the owner and less costly
- Easier to track at the point of sale

Program Option: Loans

- Property Assessed Clean Energy (PACE)
- Low-Interest Loan Program
 - Very expensive and low participation
- Utility-Funded On-Bill Loan Program
 - Tallahassee Program example
 - Amount & interest rate

Loans & Grants for Rentals

- Fannie Mae Homestyle Energy Loans
- Home equity line of credit (HELOC)
- Green banks/credit unions
- Property Assessed Clean Energy (PACE)

- Main Street Grants (HUD)
- Housing Preservation Grants (USDA)
- Multi-family Housing Revitalization Demonstration Program (USDA)
- Weatherization Grants (DoE)

<https://www.sapling.com/8577835/grants-rental-property>

<https://www.usa.gov/repairing-home>

Education: Options

Will depend on which program or version selected

- Prescriptive and/or Performance
- Point of Sale and/or Major Renovation
- Phase-in or voluntary participation
- Available:
 - ToolsforTenants.com & GainesvilleGreen.com
 - New Customer Packets – regular & during rush

Tools for Tenants

[Home](#) | [About](#) | [Choose Apartments To Compare](#) | [Feedback](#)



Compare apartments for efficiency!

What Is Tools For Tenants?



Tools for Tenants is a website to help renters factor energy usage into their purchasing decisions. We display energy consumption statistics for many apartments in Gainesville, and provide comparisons and visualizations to help consumers choose an efficient place to live.

[Compare Apartments](#)

We combined energy consumption from the utility and apartment information from various websites and the property appraiser. Using this data, we compare and rank apartments based upon energy consumption.

How to use this site

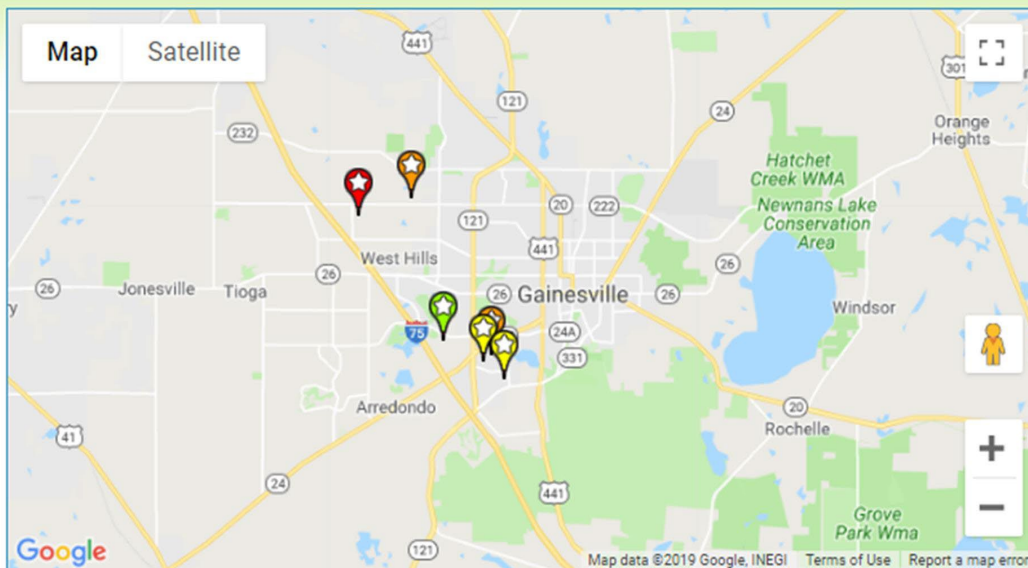
Choose Apartments
to Compare from a map of Gainesville.

Easily share your results
with friends, roommates, and the world.

See a sample
comparison of apartments based on energy consumption:



[Home](#) | [About](#) | [Choose Apartments To Compare](#) | [Feedback](#)
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Gainesville, FL Apartments (6 showing)

Search for Apartments

Name:

Floorplans:

 Studio ☐ 1 ☐ 2 ☐ 3 ☐ 4 ☐ No Info ☐  Show selected only ☒

Energy Usage:

 Low ☒  Below Average ☒  Average ☒  Above Average ☒  High ☒
Search
[Reset search options](#)

-  Addison Lane
-  Huntington Lakes Apts
-  Oxford Manor Apts
-  The Crossings At Santa Fe Apts
-  The Enclave
-  The Polos

☒ Select All ☒ Select None

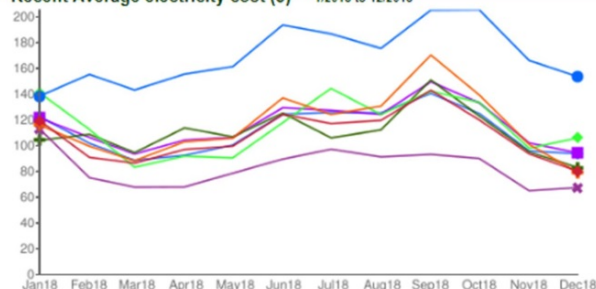
Compare Selected Apts.

Comparing 6 Apartments



Currently displaying some sample apartments chosen randomly. You can [choose apartments to compare](#) from a map of Gainesville.

Recent Average electricity cost (\$) 1/2018 to 12/2018



- ◆ All Gainesville Apartment average
- Group Average
- ✚ The Enclave
- ◆ Huntington Lakes Apts
- The Crossings At Santa Fe Apts
- ✕ Addison Lane

Click the labels above to toggle the associated chart line

 [View a map of these apartments](#)

 [How are these calculated?](#)

Apartment	Floorplans gathered from apartment websites	Units	Electricity average monthly kWh	Cost average monthly estimate based on published electricity rates	Gas average monthly therms	Carbon average monthly tons of CO ₂ e
The Enclave 3000 SW 35TH PL, Gainesville FL more	<ul style="list-style-type: none"> Beds: 2-4 Baths: 2-4 Size: 1080-1663 square feet Rent: 499-699 	412	689	\$110	-	0.49
Huntington Lakes Apts 5400 NW 39TH AVE, Gainesville FL 32606 more	<ul style="list-style-type: none"> Beds: 1-3 Baths: 1-2.5 Size: 760-1315 square feet Rent: 930-1257 	310	725	\$114	-	0.53
The Crossings At Santa Fe Apts 3205 NW 83RD ST, Gainesville FL more	<ul style="list-style-type: none"> Beds: 3-4 Baths: 3-4 Size: 1310-1387 square feet Rent: 335-404 	672	1089	\$169	-	0.80
Addison Lane 4117 SW 20TH AVE, Gainesville FL 32607 more	<ul style="list-style-type: none"> Beds: 1-2 Baths: 1 Rent: 559-689 	316	487	\$83	-	0.35
Oxford Manor Apts 2777 SW ARCHER RD, Gainesville FL 32608 more	<ul style="list-style-type: none"> Beds: 1-3 Baths: 1-3 Size: 457-560 square feet Rent: 435-795 	580	729	\$115	-	0.53
The Polos 2330 SW WILLISTON RD, Gainesville FL 32608 more	<ul style="list-style-type: none"> Beds: 1-3 Baths: 1-3 Size: 640-1093 square feet Rent: 794-1020 	560	669	\$107	-	0.49



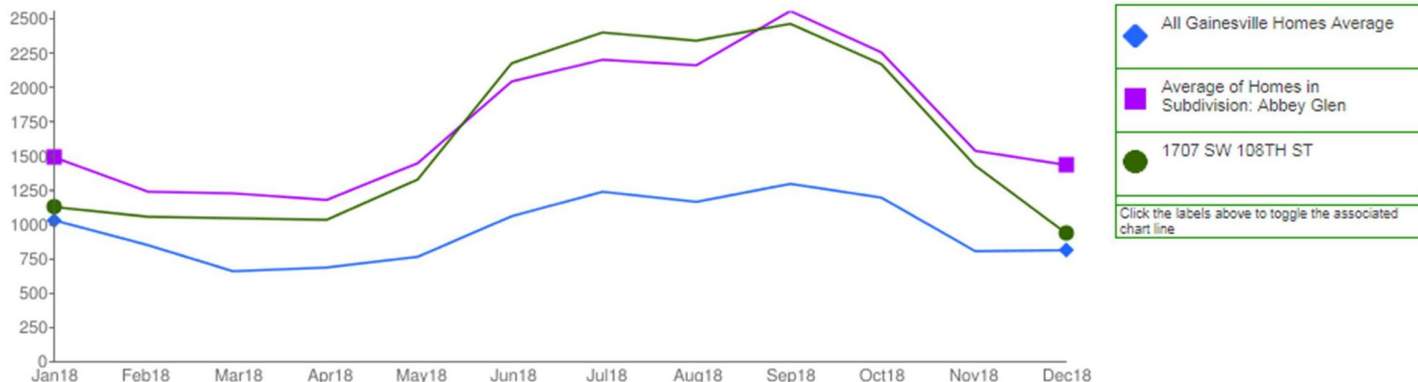
GRUSM
More than Energy

The screenshot displays the EnergySage website interface. At the top, a 'Select Type' menu allows users to filter data by Electricity (selected), Water, Gas, or Solar. Below this, a map of Gainesville, FL, is shown with numerous colored pins indicating energy bill levels for various properties. A detailed pop-up window for '1707 SW 108TH ST' provides specific information: 'GAINESVILLE, FL 32607', 'Abbey Glen', '~1626 kWh/month', 'Built in: 2001', 'Beds/Baths: 4/3', and 'Space: 3781 square ft.'. The map includes a legend at the bottom with a color gradient from green ('Low (\$ smaller bills)') to red ('(larger bills \$\$\$\$) High'). The website footer contains navigation links such as 'Address Search', 'Map Search', 'Groups', 'Overview', 'FAQ', 'Feedback', 'Web Tools', 'Technical Info', 'Privacy Policy', and 'Login'.

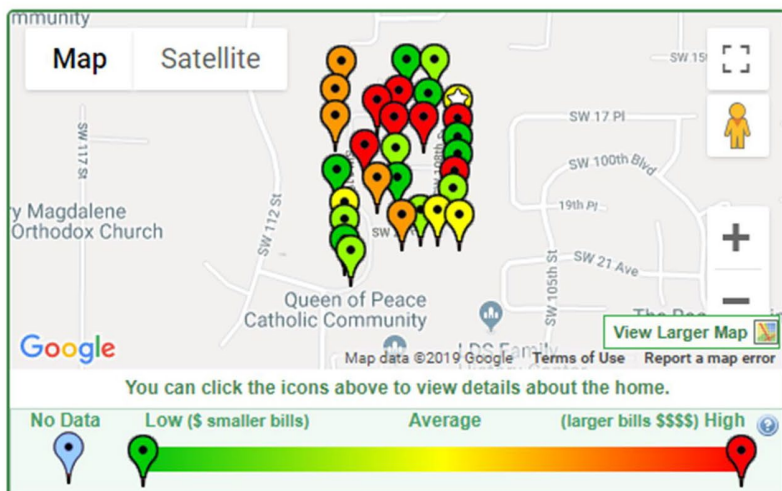
Home Energy Report for: 1707 SW 108TH ST

[Claim this Home](#)
[Add To Group](#)
[Print](#)
[f](#)
[t](#)
[e](#)
[ShareThis](#)

1/2018 to 12/2018 electricity consumption (kWh) - View More Graphs



Select Type:
 Comparing to: **ABBEY GLEN**
 For Year: **2018**
 Normalize per 1000 sq. feet. ☐ Yes ☒ No



Electricity makes up the bulk of most energy usage. The major factors here are your air conditioner, refrigerator, clothes dryer, water heater, and stove.

[Download this electricity data](#)

Home Information:

1707 SW 108TH ST, GAINESVILLE FL, 32607
Subdivision: Abbey Glen

Averages For 1/2018-12/2018	
Home	1626 kWh/month (better than 53%)
ABBEY GLEN	1733 kWh/month

Beds/Baths: 4/3
 Conditioned Space: 3781 square ft.
 Roof: ASPH/COMP SHINGL
 A/C: CENTRAL AIR
 Stories: 1
 Parcel: 04422-010-030
 Built in: 2001
 Lat: 29.6367038
 Lon: -82.4563858

[Export this comparison data](#)

Education: Tips for Renters

- Please keep in mind that the survey performed by GRU was to check the areas that may cause high energy and water use. These are only recommendations and not demands that work be performed. Savings after improvements are completed can be affected by equipment type, efficiency and condition, operation patterns, and weather.
- Make a copy of the survey for your landlord, property manager, or home owner.
- Review your lease paying special attention to the maintenance responsibilities:
 - What should you do as the tenant?
 - What should the owner/maintenance staff do?
 - What may need a licensed contractor?
- Work with your landlord or property owner on the recommended repair list.
- Be patient and remember that some repairs can take time, money, and experience that your landlord, property manager, or home owner may not have.
- Helpful Contacts List

Education: Future Efforts

- EE workshops at rental communities, HOA meetings, etc.
- Renter Power Program (Housing Dept.)
- Provide Spanish-language versions of some documents

Thank you,

QUESTIONS?