



Green Rental Housing

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A²ZERO

EQUITABLE • SUSTAINABLE • TRANSFORMATIVE

A²ZERO Plan



STRATEGY 2:

Switch our Appliances and Vehicles from Gasoline, Diesel, Propane, Coal, and Natural Gas to Electric

STRATEGY 3:

Significantly Improve the Energy Efficiency in our Homes, Businesses, Schools, Places of Worship, Recreational Sites, and Government Facilities

A²ZERO Plan



STRATEGY 3: Significantly Improve the Energy Efficiency in our Homes, Businesses, Schools, Places of Worship, Recreational Sites, and Government Facilities

8. PROMOTE GREEN RENTAL HOUSING PROGRAM

The Green Rental Housing Program improves energy efficiency and reduces greenhouse gas emissions associated with our rental buildings. Since rental units make up 55% of Ann Arbor's housing stock, actions in this area are vital to reducing greenhouse gas emissions. The Green Rental Housing program is accomplished by adding energy efficiency requirements into the existing City rental licensing process, thereby ensuring that every rental unit in Ann Arbor meets a minimum energy efficiency performance standard. Trainings, rebates, and financing support are provided as well to help transition rental units to greater efficiency.

Vision for Promoting Green Rental Housing Program

Renters are living in vastly more energy efficient homes and are saving on their energy bills and/or rents. Property owners are investing in the value of their properties and are seeing increased tenant retention and satisfaction.

Party Responsible for Implementation

- Office of Sustainability and Innovations and Community Services

Collaborators / Project Co-Designers

- Rocky Mountain Institute
- Urban Sustainability Directors Network
- University of Michigan's Beyond the Diag
- Washtenaw Area Apartment Association
- Michigan Saves
- DTE Energy

Equity Impacts

Renters in Ann Arbor may be able to rent more energy efficient homes as soon the ordinance goes into effect, and as more buildings become more energy efficient.

Indicators of Success / Goals

10% reduction in energy usage in rental properties within the City by 2030.

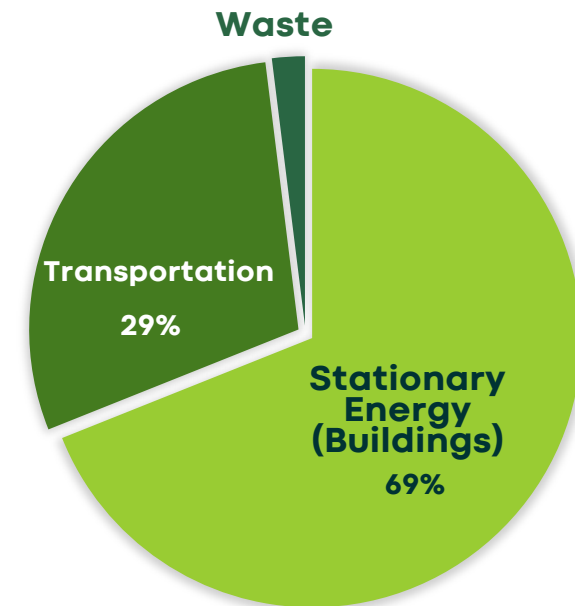
Assumptions

- We are able to integrate energy efficiency requirements into existing City rental licensing processes
- 80% compliance with the policy after the policy has been in effect for 4 years
- No net increase in average rents, outside of normal market inflation, 5 years post policy adoption

Where our Emissions Come From

- **In Ann Arbor...**
 - **Buildings: two-thirds total city GHG emissions**
 - **Rentals: 55% housing stock**
 - **No existing initiatives to target these emissions**

2023 GHG EMISSIONS



What is the Split Incentive?



Property Owner

- Owns the building
- Has the ability to make energy efficiency, electrification, and renewable energy upgrades
- Does not pay utility bills, so does not recoup cost savings

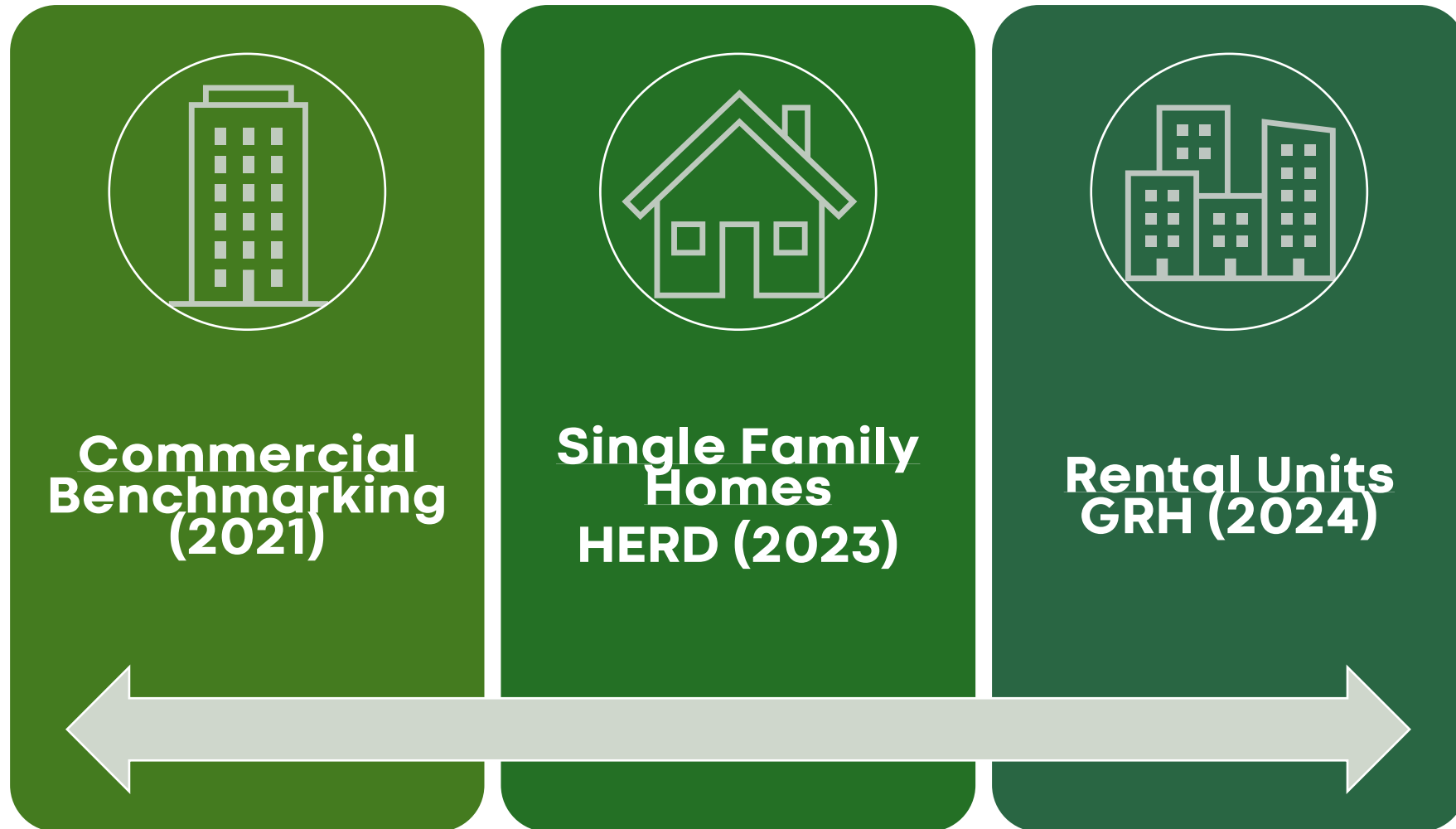
Tenant

- Lives in the unit
- Does not have the ability to make structural changes to the unit
- Pays utility bills but cannot make the kinds of upgrades needed to significantly reduce them

Existing Rental Process

- **Storage 8:509,8:504**
 - No storage within 5' of fuel fired furnace/boiler/water heater.
 - No storage on/under common area means of egress stairs in multifamily.
 - No storage within 2' of ceiling.
 - Storage in multifamily units must be 1 hour fire-rated rooms or sprinklered.
 - Must maintain 27" aisles throughout dwelling.
- **Sanitation 8:508**
 - Dwellings must be kept in a clean and sanitary condition.
 - Bathrooms, kitchens and toilet rooms must have impervious flooring.
 - Sink and tub coatings must be free of rust and chips.
- **Security 8:503**
 - Must have a privacy lock (chain, hotel bar, etc) on all unit entry doors.
 - Exception: Not required for Fraternity, Sorority, ICC Co-ops and State Licensed inspected group homes.
 - Must have deadbolts (1" throw) on all unit entry doors.
 - Must have peephole on main unit entry door unless door has window or sidelight.
 - Dowel rods (5/8") are required for all sliding windows/doors.
 - Pin locks or ventilation locks are required for double hung windows.
 - Window sash locks must be installed and operate properly.

Whole Sector Approach



Background Research



- **Rental Cohort with RMI**
 - Understand rental policy basics
 - Review best practices
- **USDN & ACEEE: Rental Efficiency Learning Group**
 - Explore design & implementation
 - Equitable Policymaking



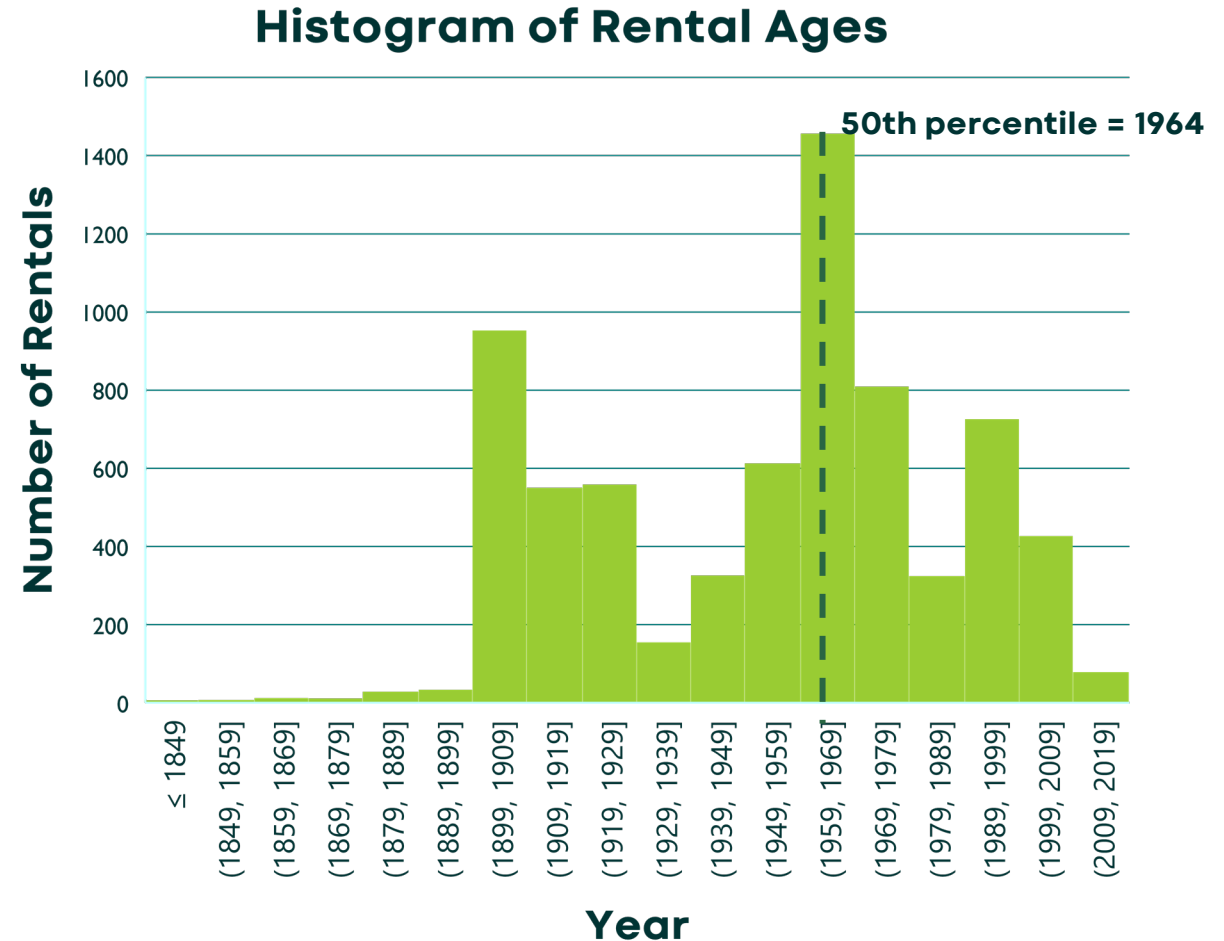
Background Research



- **Benchmarked other cities**
 - Milwaukee, WI: Rental Rehabilitation Program
 - Minneapolis, MN: 4D Housing & Energy Efficiency Program
 - Burlington, VT: Minimum Rental Efficiency Standards
 - Boulder, CO: SmartRegs
- **What worked and what didn't?**
- **What could work in Ann Arbor and what couldn't?**

Ann Arbor Context

- ~31,500 units across ~8,500 properties
- Median year built: 1964 (dating back to 1850s)
- No energy efficiency requirements in MI building codes prior to 1977



Program Development



- **Convened a Task Force to tailor policy to Ann Arbor**
- **Representatives for tenant advocacy, landlord advocacy, low-income housing, Building Department**
- **Saw presentations by RMI, USDN, ACEEE**
- **Defined challenges & opportunities**
 - **How to address split incentive**
- **Developed recommendations**

Task Force Recommendations



Policy Elements:

- **Appliance efficiency**
 - Time of replacement upgrades
- **Efficiency Pathways**
 - Prescriptive or Performance
- **Occupant weatherization**
- **Efficiency Disclosure**

Feedback



- **Shared the recommendations from the task force, including an initial draft of the checklist**
- **Collected feedback through a public survey, public meetings, and multiple stakeholder group meetings**
- **Common feedback included:**
 - **Not enough time to meet compliance**
 - **Points on the checklist felt inconsistent to the work required and impact generated**

Updates



- **Reworked checklist to be more consistent and backed by data**
- **Phasing in compliance over time**
- **Incorporated weatherization and appliance upgrades items into checklist**

Energy Efficiency Requirements



What

- **Sets an energy efficiency target for rentals through two pathways**
- **Gives choices & flexibility for compliance**
- **Will be added to the existing pre-inspection checklist**

Why

- **Current checklist does not include efficiency**
- **Equalizes market expectations for rentals**
- **Streamlined process**
- **Flexibility**

Two Pathways



Checklist Pathway

- Choose from a combination of items on the Green Rental Housing Checklist developed by OSI
- Achieve a minimum energy efficiency score

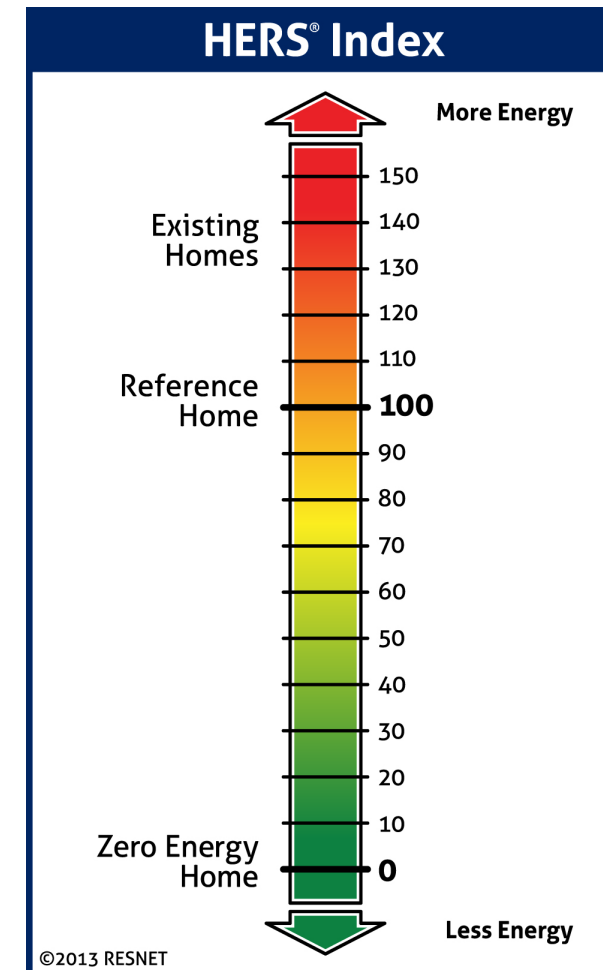
Home Energy Rating System Pathway

- Undergo a Home Energy Rating System (HERS) Assessment through a licensed Home Energy Rater
- Achieve a minimum HERS score

Home Energy Rating System Pathway



- Instead of using the checklist, can get a Home Energy Rating Score (HERS)
- Get a score of at least 110 (lower numbers are better)



Checklist Pathway



- Checklist developed by OSI and collaborators
- Need to achieve a certain number of points
 - Choose the options that work the best

Energy Efficiency		
Insulation and Air Sealing Options	Points	Requirement
Air Sealing	9	A blower door test showing an CFM50 roughly equal to the square footage of the household
Attic and Non-attic Roof Areas are Insulated	9	The attic is insulated to R-50 or greater. Finished attics and ceiling areas with no attic above should be insulated to R-30 or greater.
Ducts Sealed and Insulated	9	Ducts are sealed to 10% leakage or less and insulated with R-8 insulation or greater.
Foundation, Rim Joists, and Crawl Space are Insulated	9	Foundation walls and rim joists are insulated to R-10 or greater, and crawl space vents are air sealed.
Walls are Insulated	9	All exterior walls have R-13 or greater insulation.
Total Possible Insulation and Air Sealing Points	45	

Checklist Basics



- **Three sets of points are available for the checklist**
 - **Planning**
A set of points that represent a sustainable planning process resulting from determining which actions will be the most impactful and creating a plan for achieving them in the most sustainable manner.
 - **GHG Modeled Points**
A set of points based on modeled GHG reductions resulting from energy efficiency, electrification, and renewable energy.
 - **Non-Modeled Points**
A set of points with equal values that represent healthy, safe, and sustainable actions or improvements to rentals.
- **Do not have to obtain all points - choose what makes the most sense to your property**

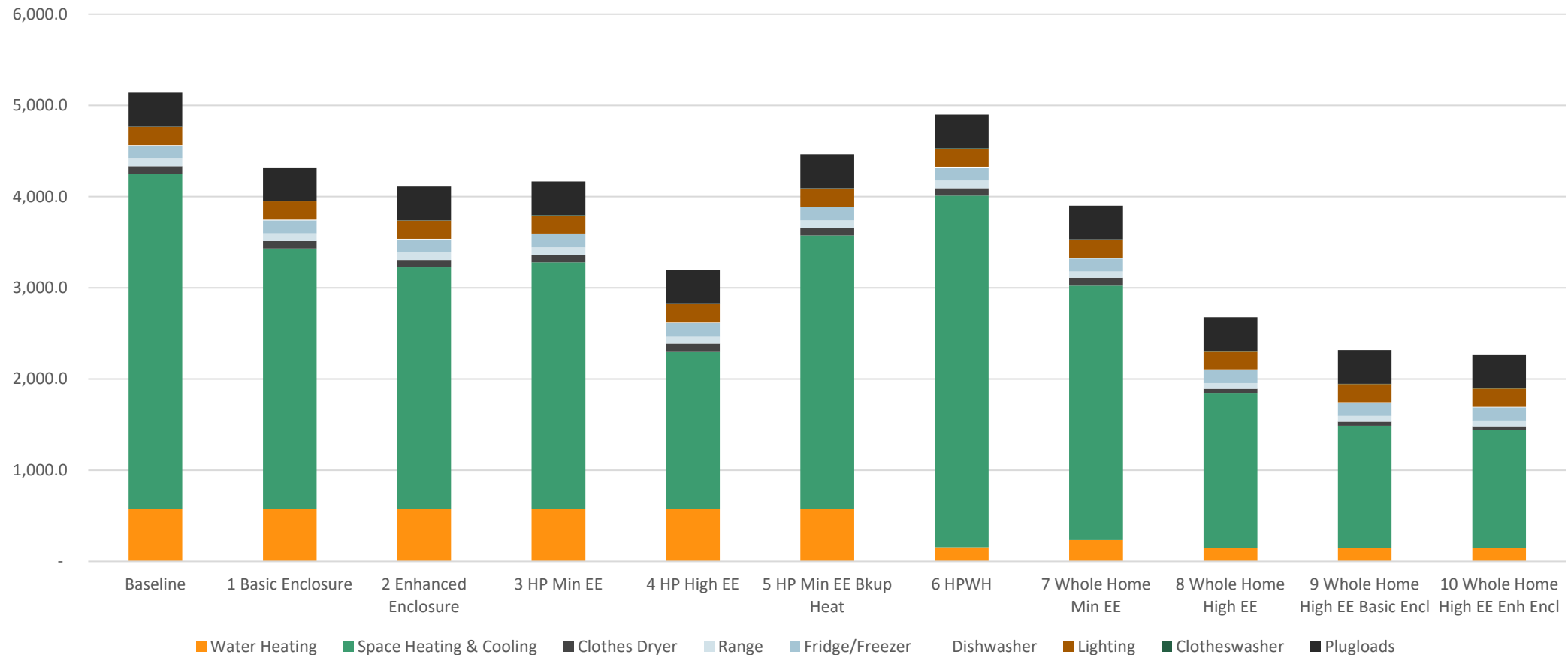
Checklist - Planning



- **Two items intended to identify how the unit is currently performing, what (if any) upgrades make the most sense, and incorporate that into existing planning processes**
 - **Conducting an energy assessment**
 - **Creating an energy improvement plan**

Checklist - Modeled Points

ResStock Scenario Emissions Profiles by End-Use



Checklist - Non-modeled Points



- **A set of health, safety, and sustainability actions**
- **Points are awarded in equal amounts, with few exceptions, for health and safety items and sustainability measures**
- **Examples:**
 - **Providing bus passes**
 - **Using electric lawn equipment**
 - **Community garden**
 - **Tenant education**

Checklist Examples



Planning		
Planning Options	Points	Requirement
Completed Energy Assessment	10	An energy assessment has been completed that is inclusive of the unit.
Energy Improvement Plan	10	Submit a plan detailing planned improvements.
Total Possible Planning Points	20	

Sustainability, Health, and Education		
Sustainability, Health, and Education Options	Points	Requirement
Bike Parking	2	One space is available per five units. Alternative, occupants are allowed to lock bike in an exterior location of the unit.
Curbside Compost Bins Provided Where Available	2	At least one compost bin is available in each location where trash and recycling are present.
Energy Efficient Windows	4	Windows are Energy Star rated or have a low-e coated window film applied.
Free or Discounted Bus Passes	2	Each occupant has access to a free or discounted bus pass provided by the Owner.

Checklist Examples



Renewable Energy and Electrification		
Renewable Energy and Electrification Options	Points	Requirement
Majority of Electricity Provided by Renewable Energy Either Onsite or Through a Green Pricing Program	8	At least 51% of the electricity used on-site is generated by renewable energy on-site or through a green pricing program.
Electricity is the Primary Type of Energy Used for Space Heating	15	Any type of primary heating that uses electricity to provide heating. Examples include baseboard heat, an electric furnace, a heat pump (air source or geothermal), or a hybrid electric and a gas backup system.
Electricity is the Primary Type of Energy Used for Water Heating	4	Any type of water heater that uses electricity to heat water. Examples include electric tank water heaters, electric on-demand water heaters, and heat pump water heaters.

Energy Efficiency		
Insulation and Air Sealing Options	Points	Requirement
Air Sealing	9	A blower door test showing an CFM50 roughly equal to the square footage of the household
Attic and Non-attic Roof Areas are Insulated	9	The attic is insulated to R-50 or greater. Finished attics and ceiling areas with no attic above should be insulated to R-30 or greater.
Ducts Sealed and Insulated	9	Ducts are sealed to 10% leakage or less and insulated with R-8 insulation or greater.

Requirements



Phase 1

- 6 months after passage
- 30/220 points required

Phase 2

- 3 years after passage
- 80/220 points required

Efficiency Disclosure



What

- **Public access to score from the checklist pathway or the Home Energy Rating System Pathway**

Why

- **Empowers tenants to better understand energy costs before signing a lease**
- **Inspection results already publicly available**

Compliance



- **During the regularly scheduled inspection process, properties will submit how many points their energy efficiency score and how they achieved it to be verified during the inspection**
- **If the unit does not achieve the required point total, a fine will be issued, recurring each day until the unit is brought into compliance**

Resources



Resources

While the GRH program may still be in development, we have created resource hubs for both tenants and landlords to continue making Ann Arbor rental housing as safe, healthy, comfortable, and energy efficient as possible.

[Landlord Resources](#)

[Renter Resources](#)

Resource Hub for Rental Property Owners

Resources to help finance and accomplish energy efficiency projects at rental housing properties

Resources On This Page

[Financial Resources](#)

[Educational Resources](#)

[Incentive Databases](#)

[Local Resources](#)

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For Renters

Energy efficiency tips for renters

On This Page

[Energy Efficiency Strategies](#)

[Apartment Hunting Tips](#)

[Resident Hall Strategies](#)

[Additional Resources](#)



THANK YOU

Questions? Feedback?

Learn more:

[A2gov.org/sustainability/GreenRentalHousing](https://a2gov.org/sustainability/GreenRentalHousing)