



I-RICE'25

Closing the Green Gap: A Market-Matching Framework for Viable and Sustainable Affordable Housing



INTRODUCTION

The Market-Matching Framework for Sustainable and Affordable Housing addresses the gap between homebuyers' demand for green yet affordable homes and developers' capacity to deliver viable projects. By integrating buyer preferences, developer insights, and sustainability criteria, the framework provides a practical tool to balance affordability, viability, and sustainability. This approach empowers policymakers, developers, and buyers to work towards greener housing solutions while reducing the risk of unsold units in Malaysia's property market.

PROBLEM STATEMENT

- Climate change and rising living costs create an urgent need for housing that is both green and affordable.
- There is a gap between green housing initiatives and affordability needs.
- House prices in major urban states remain significantly above affordable levels.

State / Territory	Avg. House Price (Q4 2024)	Overhang Value (MYR, Billion)
Kuala Lumpur	794,467	3.38
Selangor	553,693	1.59
Johor	437,280	2.89
Pulau Pinang	475,037	2.09

Sources: JPPH Q4, 2024

- Homebuyers increasingly demand sustainability features but face affordability barriers.
- Current green housing policies risk being environmentally sustainable but socially inaccessible.
- Developers struggle to balance affordability with sustainability, while buyers demand both affordability and quality.

IMPACT AND COMMERCIAL VALUE

01

For Buyers

Access to affordable, green, and healthier homes

02

For Developer

Decision-making tool to design affordable yet sustainable projects

03

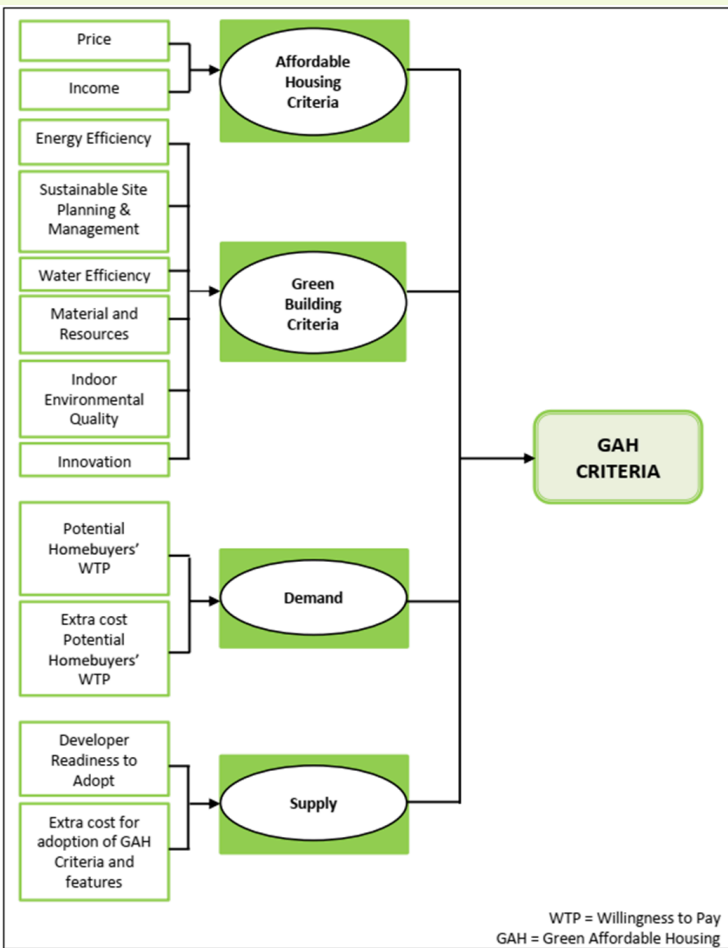
For Government

Supports sustainability goals, SDGs, and housing policy alignment.

Commercial Potential:

High adoption likelihood as 75.8% of buyers are willing to pay 10% more for GAH

CONCEPTUAL FRAMEWORK



KEY FINDINGS

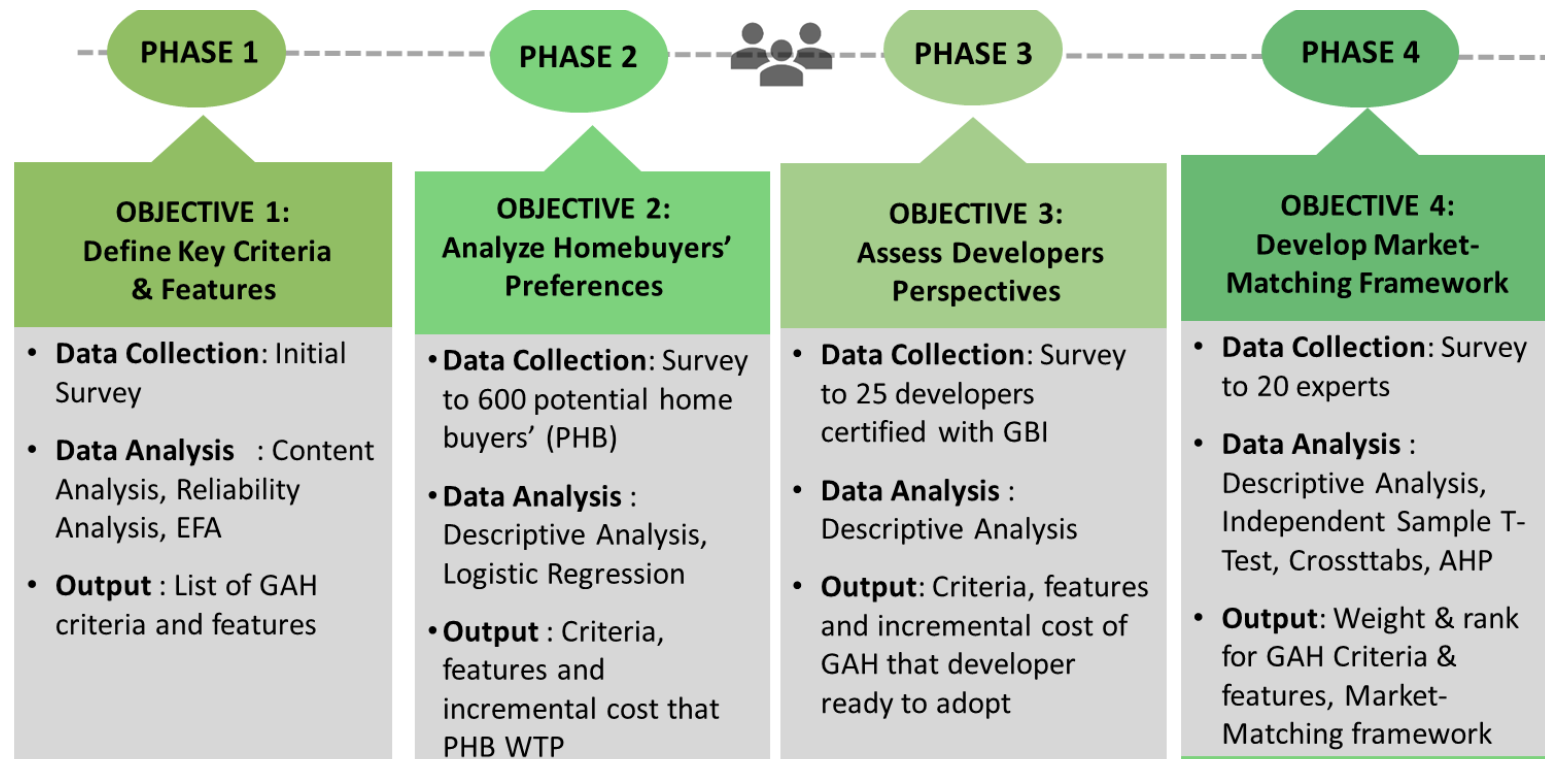
Top 5 Priorities:

- Water-saving appliances and fittings
- Design for Low-pollutant
- Reduce, reuse, recycle Materials
- Energy-saving appliances & lighting
- Extensive landscaping

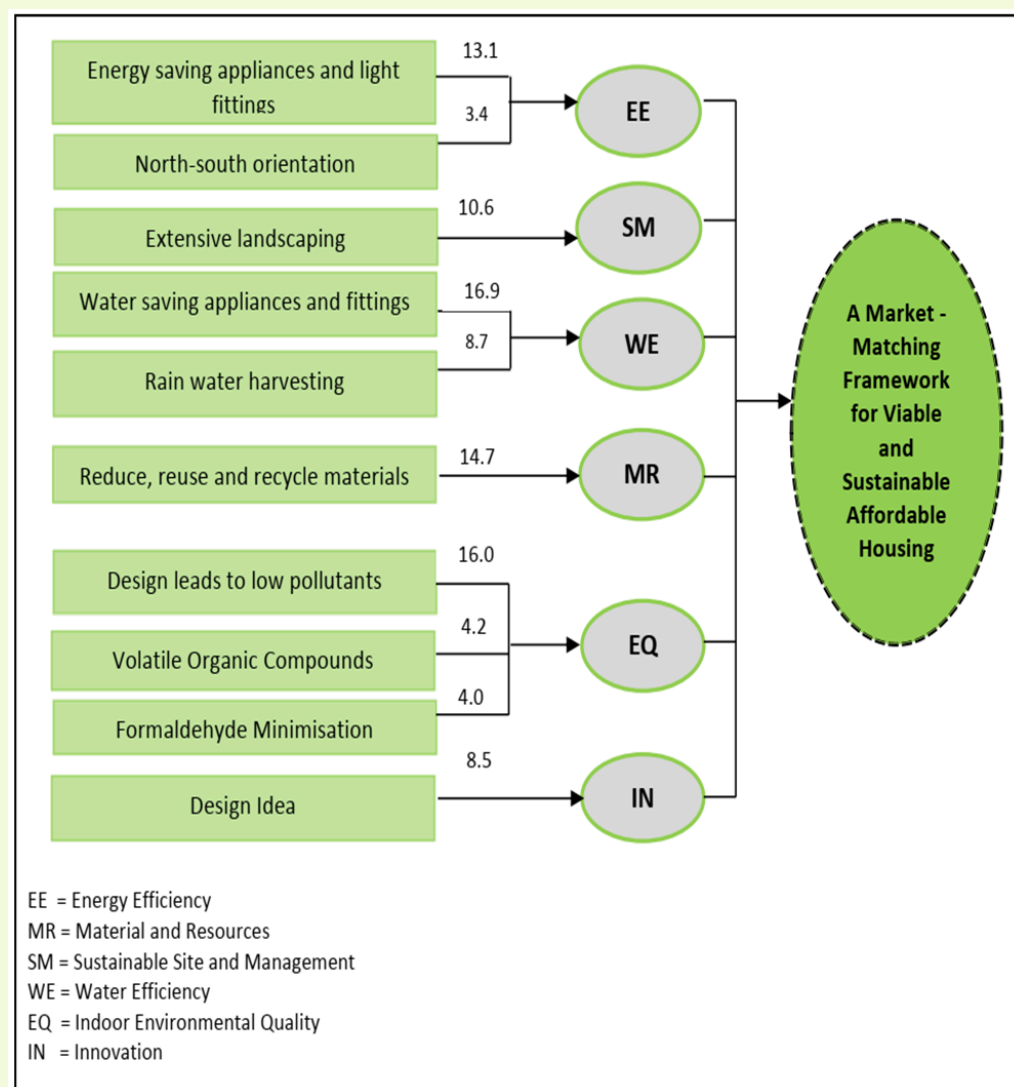
GAH CRITERIA	GAH FEATURES	WEIGHT	TOTAL
EE2	Energy saving appliances and light fittings	13.1	16.5
EE5	North-south orientation	3.4	
EQ1	Design leads to low pollutants	16.0	24.2
EQ2	Volatile Organic Compounds	4.2	
EQ3	Formaldehyde Minimisation	4.0	
SM2	Extensive landscaping	10.6	
MR2	Reduce, reuse and recycle materials	14.7	14.7
WE1	Water saving appliances and fittings	16.9	25.6
WE2	Rain water harvesting	8.7	
IN2	Design Idea	8.5	8.5
TOTAL			100

- 75.8% buyers willing to pay more for GAH.
- Both buyers & developers agree on 10% extra cost.
- 6 criteria, 10 features identified.

OBJECTIVES & METHODOLOGY



NOVELTY & ORIGINALITY



- First framework integrating demand & supply perspectives.
- Incorporates 29 eco-labeling components.
- Market-tested tool for sustainable housing design.

CONCLUSION

This project transforms green housing from aspiration to reality by bridging **affordability and sustainability** in a single framework. The proposed **market-matching model** aligns buyer preferences with developer supply, creating a replicable solution for Malaysia and beyond. By integrating social, economic, and environmental dimensions, the framework empowers policymakers, developers, and homebuyers to make informed housing decisions. With this approach, **affordability and sustainability are no longer competing goals—they are partners for future living.**

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SDG ALIGNMENT



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"When affordability meets sustainability, we don't just build houses – we build a better future"