

# WARMIFY: AI-Driven Water Heater for Peak Efficiency and Comfort



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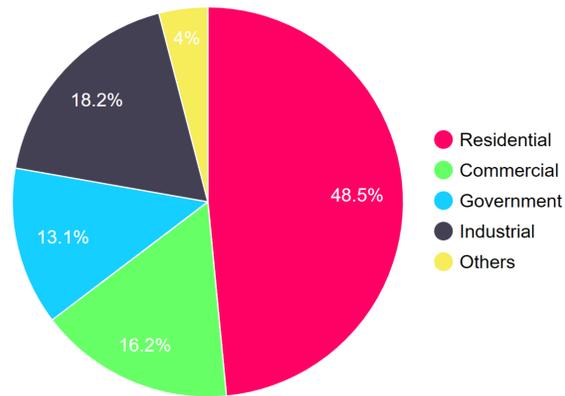
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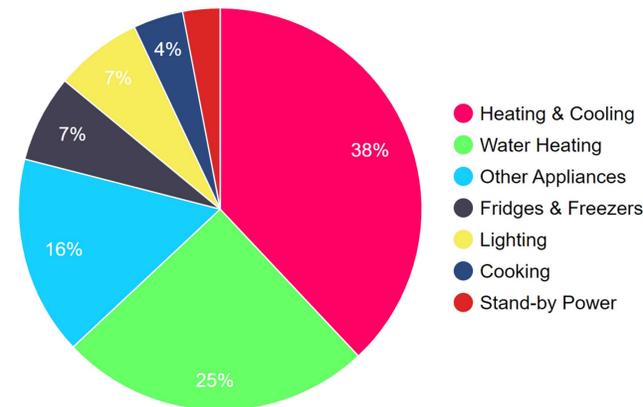
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## Introduction

Total Electrical Energy Intake per Sector in KSA in 2017



Household Energy Consumption



Traditional water heaters are energy-inefficient, leading to high bills and environmental waste, while their materials often corrode, causing a shorter lifespan and frequent maintenance. This demands a more efficient, durable, and eco-friendly water heating solution.

## Constraints

- Product Costs No More Than 700 SAR
- Resist Legionella Bacteria
- Chlorine Deposition Resistant
- Combustion Resistant

## Target Specifications

- Withstand 80° C
- Occupy Volume No more Than 0.192m<sup>3</sup>
- Survive 20 Years
- Heat 25L of Water Under 15 Minutes

## Market Concentration



Fragmented Saudi Market

Consolidated

## Project Impact

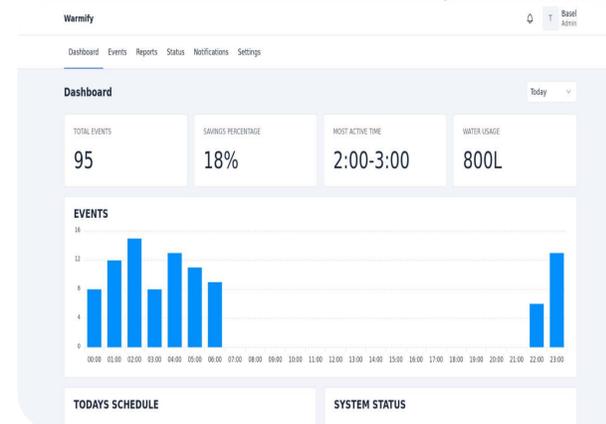
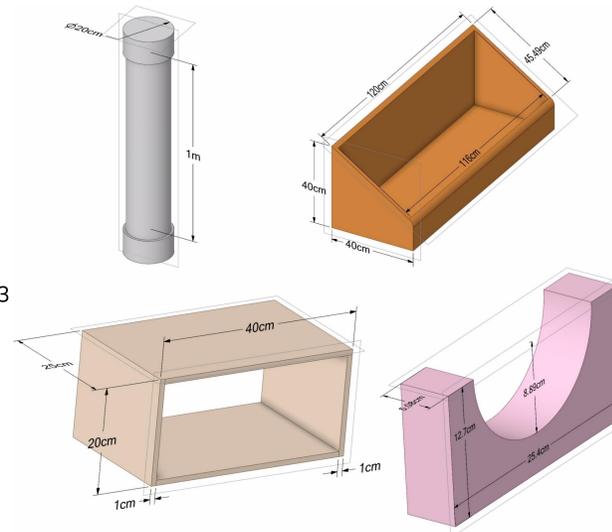
Energy Efficiency and Cost Savings

Environmental Sustainability

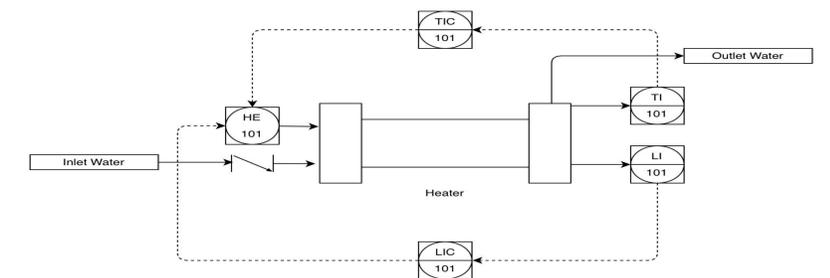
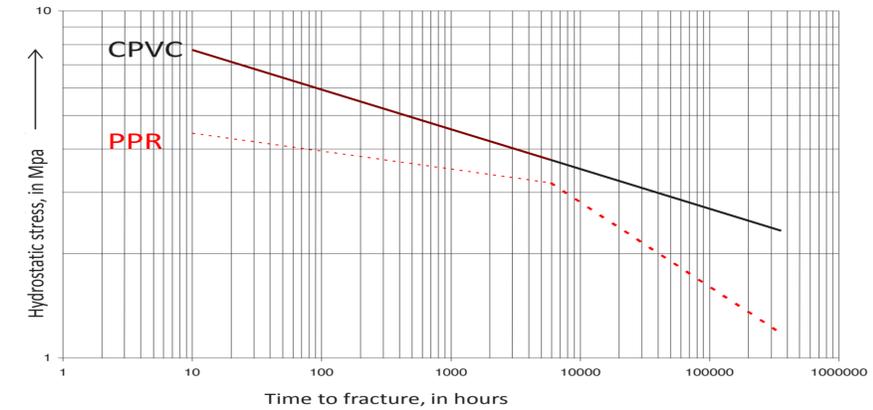
Improved Durability and Longevity

Enhanced User Experience

## Prototype Design



## Testing / Validation



## Conclusion

- Our water heater prototype reduces energy use through AI technology and efficient design.
- Durable materials prevent corrosion, boosting longevity and cutting maintenance costs.
- The design allows for easy control and customization.
- Improved efficiency and durability lower operational costs.