# Manzili Energy Audit Service Report

Report Number: jdsk

## Overview

This report summarizes the results and recommendations following the energy audit conducted in your home as part of the Manzili home energy consultancy service in Ras Al Khaimah. The goal of the audit is to help reduce your electricity and water bills and make your home more comfortable and modern.

## Audit Details

|  |  |  |  |
| --- | --- | --- | --- |
| Item | Details | Item | Details |
| Date Of Audit | 2024-09-17 | Report Number | jdsk |
| Homeowner | kbdjb | Contact Number | 0568928939 |
| Location | ijnedk | Type Of Accommodation | Villa |
| House Number | 778878 | Year Of Construction | 2004 |
| Number Of Bedrooms | 3 | Number Of Floors | 1 |

## Notes

|  |  |
| --- | --- |
| Item | Details |
| Outdoor Garden | None |
| Swimming Pool | No |
| Ac Systems | ierhlvgknedik |
| Lighting | kjerfhujifewlkj |
| Water Taps | OJRE3HEUJGKBEWLKOJH |
| Water Heaters | JHERUGHEROJEROLKHJ |

## Recommendations

|  |  |  |
| --- | --- | --- |
| Recommendations | Benefits | Implementation |
| High Priority | | |
| Maintain the temperature at 24°C in 3 | You can reduce air conditioner consumption by 5% by increasing the temperature by one degree Celsius | You can do it yourself /DIY |
| Ensure regular maintenance of air conditioning units (at least twice a year) in 4 | Regular maintenance helps extend the life of the air conditioner, reduces dust entry into the house, decreases water leakage chances, and lowers the noise of the air conditioner | Contact maintenance companies [Click for list of maintenance contractors](https://docs.google.com/spreadsheets/d/1rqwzN-D2RJ2ac2QbBIL9fftC_7G5_BFo/edit) |
| Ensure complete sealing and insulation of door gaps (top and sides) and seal any cracks or gaps between windows and walls in 6 | Adding rubber insulation helps maintain the internal coolness of the house, reduces air conditioner consumption, and minimizes dust entry from outside | Contact maintenance companies [Click for list of maintenance contractors](https://docs.google.com/spreadsheets/d/1rqwzN-D2RJ2ac2QbBIL9fftC_7G5_BFo/edit?gid=2044373242#gid=2044373242) |
| Replace old lighting with LED lights in 1 | Replacing lighting with LED lights can save more than 50% of the home's lighting consumption | You can do it yourself /DIY |
| Consider replacing 2-star air conditioners with 4 or 5-star rated air conditioners in 7 | Replacing the device with a more efficient air conditioner can reduce air conditioning consumption by 20% | Visit a retailer or distributor and ensure installation warranty  [Click for list of AC distributors](https://docs.google.com/spreadsheets/d/1rqwzN-D2RJ2ac2QbBIL9fftC_7G5_BFo/edit?gid=2044373242#gid=2044373242) |
| Consider replacing electric water heaters with solar-powered water heater systems in 6 | Replacing electric water heaters with solar water heater systems can reduce electricity consumption by more than 30% | Contact water heater distributors [Click for list of hot water distributors](https://docs.google.com/spreadsheets/d/15EE5RY2HlkXwm8OqhwxHlcr4x5O19O1H/edit?gid=1168429725#gid=1168429725) |
| Install a smart thermostat in 7 | Smart thermostats equipped with sensors that can operate based on a schedule you set will cool the space only when needed. They also give you the ability to control them remotely (from outside the home) if you have an internet connection. | Contact smart thermostat distributors. [Click for list of smart solution providers](https://docs.google.com/spreadsheets/d/1rqwzN-D2RJ2ac2QbBIL9fftC_7G5_BFo/edit) |
| Medium Priority | | |
| Low Priority | | |

## AI-Generated Recommendations

1. AC-System:  
 a. Recommendation: Consider upgrading to a high-efficiency AC system with a higher SEER (Seasonal Energy Efficiency Ratio) rating.   
 Benefits: Newer models use significantly less energy, leading to lower electricity bills.  
 Implementation: Consult with a qualified HVAC technician to explore suitable options.  
 b. Recommendation: Implement a programmable thermostat to regulate temperature based on occupancy.   
 Benefits: Avoids unnecessary cooling when the villa is empty.  
 Implementation: Purchase a programmable thermostat and adjust settings for optimal comfort and savings.   
  
2. Lighting:  
 a. Recommendation: Replace all incandescent and halogen bulbs with energy-efficient LED bulbs.  
 Benefits: LEDs consume significantly less power and have a longer lifespan.  
 Implementation: Purchase LED bulbs with desired color temperature and brightness.  
  
3. Water Taps:  
 a. Recommendation: Install low-flow aerators on all faucets and showerheads.  
 Benefits: Reduces water consumption without compromising water pressure.  
 Implementation: Purchase aerators and easily screw them onto existing fixtures.  
  
4. Water Heaters:  
 a. Recommendation: Consider upgrading to a tankless water heater.  
 Benefits: Heats water on demand, eliminating standby heat loss associated with traditional tank heaters.  
 Implementation: Consult with a qualified plumber to assess feasibility and installation requirements.  
 b. Recommendation: Insulate the existing water heater tank and hot water pipes.  
 Benefits: Reduces heat loss and lowers energy consumption.  
 Implementation: Purchase insulation sleeves or blankets specifically designed for water heaters and pipes.  
  
5. Other Observations:  
 a. Recommendation: Conduct a home energy assessment to identify additional areas for improvement.  
 Benefits: Provides a comprehensive understanding of energy consumption patterns and potential savings.  
 Implementation: Contact your local utility company or hire a certified energy auditor.

## Disclaimer

This report is based on visual observations of the main equipment related to energy and water in your home by the Ras Al Khaimah Municipality. The observations do not include any detailed measurements or analyses.

Potential savings indicated in the report are estimates and not guaranteed. There is no obligation to implement any recommendations, and the Ras Al Khaimah Municipality will not be liable for any actions taken by the homeowner or any other party.

The information provided is based on available data from the Ras Al Khaimah Municipality and recommended suppliers and contractors. The municipality welcomes feedback on the listed companies and suggestions for new companies to be added to the list. For any suggestions, please email manzily@mun.rak.ae.