

Energy Internet Smart Home



Overview

Today, 44% of global energy has been derived from fossil fuel, which currently poses a threat to inhabitants and well-being of the environment. In a recent investigation of the global demand for energy consumption across various ener. Today, 44% of global energy has been derived from fossil fuel, which currently poses a threat to inhabitants and well-being of the environment. In a recent investigation of the global demand for energy consumption across various energy consumption sectors, the building sector has been shown to be one of the primary energy consumers, with a high percentage of energy consumption deemed as unnecessary. This as a result of poor management practice and implementation of strategies to avoid excess energy consumption. Over the years, researchers in both academia and industries have focused on various techniques to deal with unnecessary energy consumption and ensuring a healthy living environment for green smart cities. Among these techniques is Smart Home Energy Mana. ••In this work, we study Smart Home Energy Management Systems. ••Researchers have focused on how to deal with unnecessary energy consumption. ••This study explores the top 10 SHEMs available in the market today. ••The result reveals a lack of quality attributes such as security and privacy. ••Smart home energy managementSmart thermostatSmart homeThermal comfort controlSmart energy controlSmart home energy management system opportunityThe global energy crisis has for decades been one of the significant challenges that pose a threat to the global economy and a healthy living environment. A recent report published in 2020 by Energy Outlook (Outlook, 2019) shows the increase of 2.9% global energy consumption in 2018, which is considered as the fastest increased rates for decades compared to its usual primary yearly average increase of 1.5% (see Fig. 1) and forecasted to increase rapidly in upcoming years. The same report shows the United States of America was the world's largest energy consumer until 2002, when it was overtaken by the Asian region.The trend s...

Article Content

May 29, 2026

Best Energy Monitoring Systems of 2026: 12 Top Picks

A great way to discover the amount of energy your home consumes is by getting a useful home energy tracking device. Explore a guide packed with ...

Jun 29, 2026

Empowering smart homes by IoT-driven hybrid renewable energy ...

This paper investigates combined renewable energy systems with the Internet of Things (IoT) and smart homes to increase efficiency, cost savings, and environmental sustainability.

Jun 22, 2026

Smart Home Energy Management Systems in Internet of Things ...

This study presents an analysis of smart home energy management system with the goal to identify current trends and challenges for future improvement.

Jul 24, 2026

Data-Driven Smart Home Automation for Energy Efficiency

The continuous advancement of smart home technologies, fueled by the integration of Internet of Things (IoT) and artificial intelligence (AI), has transformed modern residential ...

Oct 10, 2025

Smart Home Energy Management Systems

Suggesting energy saving actions based on usage patterns Automatically controlling smart home devices based on room or home occupancy Ask your smart home/security/cable providers if they ...

Jan 11, 2026

Internet-of-Things-Based Smart Home Energy ...

In this work, an IoT-based smart home energy management system with multi-sensor data fusion enables online management and access of ...

Sep 18, 2025

Smart Home devices to increase your energy efficiency

Creating a Smart Home that optimizes how and when it uses energy – connecting your home devices into a system that lets you control it from anywhere with your smartphone.

Mar 15, 2026

Smart Homes for Energy Efficiency | CEDIA

Find out which smart home devices boost energy efficiency and how smart homes save electricity in our guide to smart energy-efficient homes.

Oct 08, 2025

Internet-of-Things-Based Smart Home Energy Management System ...

In this work, an IoT-based smart home energy management system with multi-sensor data fusion enables online management and access of household utility and devices.

Apr 29, 2026

Energy Management in a Smart Home | Homey

So, how do you properly manage energy in your smart home? How do you make sure you balance energy with comfort and convenience? And how do you make sure you're using energy and money ...

Dec 30, 2025

Explore Smart Homes

Learn how to use smart home technology to maximize home comfort, convenience, security and energy savings.

Feb 24, 2026

The smart home dilemma: more devices, higher utility costs

Our broadband and energy expert explains which smart home devices are worth it and how to save money on your broadband and utility bills ...

Mar 05, 2026

Home energy management system boosts efficiency

Discover how a home management system optimizes solar, battery, and EV charging to cut costs, improve resilience, and simplify energy control.

Feb 10, 2026

Residential energy consumption and price forecasting in smart homes ...

Smart homes that use the Internet of Energy offer a promising approach to managing residential energy consumption more efficiently and cost-effectively. The proposed research aims to ...

Contact Us

For more information, pricing, or custom solutions, please contact us:

Website: <https://ntmmgroup.co.za>

Email: sales@ntmmgroup.co.za

Phone: +27 82 471 2596

Address: Unit 7, Optic Park, 24 High-Tech Lane, Century City, Cape Town, 7441, South Africa

This document is for informational purposes only. Specifications subject to change without notice.

