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## Analysis of optimization and reduction of IoT-based energy consumption in buildings

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### **Abstract**

One of the new technologies that is heard a lot these days is the Internet of Things (IoT) technology. The IoT is generally referred to as a state of technology in which all the technologies and objects around us are connected to the network and can exchange information and data together. Today, comfort and convenience is one of the most important issues in the residential construction industry, people are always looking for comfort and try to improve their homes as much as possible in accordance with aesthetic principles and on the other hand in line with technology, and this is why The people of the construction and construction industry have also started to work and advance this industry in line with technology. For people improving the energy-saving performances of buildings, the applications of information communication, computer network, automation control and etc. are the current building energy-saving technologies. They form with a serial of technique measures for buildings with energy management systems running implementation and intelligent monitoring. This paper introduces and analyzes the information technology in building energy-saving. For building energy-saving on the demand for intelligent building energy monitoring, this paper proposed a system framework of Building Energy Monitoring and Analysis System based on the Internet of things, which has some enlightening in Building energy consumption further to achieve real-time monitoring and control, and improve the energy-saving of intelligent building.

**Keywords:** Building energy-saving, Intelligent Building, Wireless sensor network, Internet of things.