

IoT Applications: Energy Sector

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Abstract—

Index Terms—

I. INTRODUCTION

Coming soon....

II. IOT IN THE ENERGY SECTOR

The role of IoT in the energy sector is discussed in this section, from fuel extraction to the operation and maintenance (OM) of energy-generating assets, as well as TD and end-use of energy. The Internet of Things (IoT) has the potential to significantly reduce energy losses and CO₂ emissions. At each level of the supply chain, an energy management system based on IoT may monitor real-time energy use and raise awareness about energy performance. [1]

III. IOT AND ENERGY GENERATION

In the 1990s, the power sector adopted automation of industrial processes as well as supervisory control and data gathering systems. Early phases of IoT began to contribute to the power sector by reducing the risk of output loss or black-out by monitoring and regulating equipment and operations. The main challenges of outdated power plants are reliability, efficiency, environmental concerns, and maintenance issues. [1]

IV. SMART USE OF ENERGY IN INDUSTRY

V. SMART CITIES

VI. SMART GRID

VII. SMART BUILDING

VIII. CHALLENGES OF APPLYING IOT

IX. CONCLUSION

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