

International Conference on Environment and Sustainable Development

21 - 23 August 2024 London -UK

A Study on Householder-Based Management of Energy Usage Data¹

Wooje Kim^{1, *}, Eunji Lee² and Juseung Lee²

¹Seoul National University of Science and Technology, Dept. of Industrial Engineering, Republic of Korea

²Seoul National University of Science and Technology, Dept. of ITM, Republic of Korea

*Corresponding author

Abstract

It is an important issue to solve sustainable environmental problems by increasing energy efficiency. A way to increase energy efficiency is possible by analyzing energy usage data and performing energy consulting. To this end, energy usage data must be managed mainly by householders, and data must be continuously accumulated for each household. However, energy usage data generated by householders has traditionally been collected for billing purposes and managed based on the residence. It is difficult to maintain the continuity of energy usage data when the householder moves out due to the residence-oriented energy usage data management. Therefore, energy usage data should be managed on the basis of the householder, not the residence. The purpose of this study is to present a householder-based energy usage data management plan. To this end, we propose a plan to realize a householder-based energy usage data management method through the process of householder authentication, identity authentication, and personal information consent. As a result of this study, it is possible to secure continuity of energy usage data, and it is expected that efficient energy management will be possible based on this study.

Keywords: Energy usage data, Householder based management, identifier management, householder authentication

www.esdconf.org info@esdconf.org

¹ This work was supported by the Korea Institute of Energy Technology Evaluation and Planning(KETEP), the Ministry of Trade, Industry & Energy(MOTIE) of the Republic Korea(No. 2021202090028D)