

JENOSYS: Application of a Web-Based Online Energy Performance Reporting Tool for Government Buildings in Malaysia

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Abstract : One of the areas that present an opportunity to reduce the national carbon emission is the energy management of public buildings. To our present knowledge, there is no easy-to-use and centralized mechanism that enables the government to monitor the overall energy performance, as well as the carbon footprint, of Malaysia's public buildings. Therefore, the Public Works Department Malaysia, or PWD, has developed a web-based energy performance reporting tool called JENOSYS (JKR Energy Online System), which incorporates a database of utility account numbers acquired from the utility service provider for analysis and reporting. For test case purposes, 23 buildings under PWD were selected and monitored for their monthly energy performance (in kWh), carbon emission reduction (in tCO₂eq) and utility cost (in MYR), against the baseline. This paper demonstrates the simplicity with which buildings without energy metering can be monitored centrally and the benefits that can be accrued by the government in terms of building energy disclosure and concludes with the recommendation of expanding the system to all the public buildings in Malaysia.

Keywords : energy-efficient buildings, energy management systems, government buildings, JENOSYS

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