

A Case Study on Energy Conservation in a Governmental Entity to Lead the Energy Efficiency Promising Wheel

This paper addresses detailed data and analysis about energy aspects at “Energy and Minerals Regulatory Commission – EMRC” located at Amman-Jordan, which is based on ASHRAE Level II Energy Audit conducted during April-May 2016. The Energy Audit showed that EMRC is sharing the electricity supply with Seismic Monitoring Building where one electricity meter is installed for the two buildings. The electricity consumption breakdown showed that EMRC consumes about 75% of the meter readings and the Seismic Monitoring Building is consuming the rest. The total electricity meter reading in the year 2015 was JD 135,308 (\$190,709) where the EMRC consumes JD 101,481 (\$143,031). New electricity tariff was applied at the beginning of Jan 2016; this would lead the electrical energy bills for the EMRC to be JD 113,534 (\$160,019). Implementing the recommended energy management opportunities [EMOs] addressed in this paper will help EMRC in reducing energy bills, where the Energy Audit outcomes recommended the implementation of Twelve EMO’s; that would lead to monetary savings of JD 41,051 /year equivalent to 31.1 % of the annual energy bill. The required investment to implement the EMOs is about JD 37,248 (\$52,498), which would be returned back in 10.9 months. Those procedures lead to energy saving and less consumption, and a better consuming behaviour.