Introduction

Human development during the modern era made numerous environmental changes. The cause for those changes lies within the growing demand for natural resources which are meant to improve human well-being and life quality. As a result, the ecological systems, which supply diverse system services such as water purification or temperature regulation, are damaged. Those system services influence human well-being, hence it is necessary to preserve the environment in order to preserve human well being and the existence of the human race (MEA 2005).

During electricity production air pollutants are emitted to the atmosphere and effect the environment in local, regional and worldwide scales (IPCC 2014).

.

House hold energy consumption is driven by the tenants which have their unique behavior and habits. The behavior is driven by socio-economic characteristics and the physical properties of their homes, all those influence and shape the way and the amount of households energy consumption.

Economic status and household income is one of the most researched variables which influence electricity consumption. Researchers showed that high income level is correlated with high electricity consumption (Yohanis 2013).

Income level influences other factors which have direct or undirect influence on electricity consumption. For instance as the income level increases the number of electricity appliances increases as well (Yohanis, 2013). Another correlation is between income and house size while large houses consume more electricity (Santamouris et al, 2007)

Studies have shown that apartments consume less electricity than detached houses because of their relatively smaller size (McLoughlin et al, 2012). Comparison between new houses that have better isolation and have been built by the latest modern standards to older houses has shown that newer houses consume more electricity because of the high income level population that usually lives in such houses (Santamouris et al, 2007)

Another factor that influences households' electricity consumption is the age of the household's head. An adult household head is usually at the peak of his career which raises the household's income and increases energy consumption (McLoughlin et al, 2012). Special attention was given to elderly household heads', studies have shown that those above the age of 65 consume less energy (Yohanis, 2013).

The addition of another person to the household increase household's energy consumption. However examination of household's consumption per capita diminishes because of the shared consumption in the house (Yohanis, 2013).

(Ipcc, 2014; McLoughlin, Duffy, & Conlon, 2012; MEA, 2005; Santamouris et al., 2007; Yohanis, Mondol, Wright, & Norton, 2008)

**The aim of this study is to examine the factors which affect household electricity consumption: case study of "Mitzpe Yam" neighborhood in Eilat.**

Ipcc. (2014). *Summary for Policymakers*. *Climate Change 2014: Synthesis Report. Contribution of Working Groups I, II and III to the Fifth Assessment Report of the Intergovernmental Panel on Climate Change*. https://doi.org/10.1017/CBO9781107415324

McLoughlin, F., Duffy, A., & Conlon, M. (2012). Characterising domestic electricity consumption patterns by dwelling and occupant socio-economic variables: An Irish case study. *Energy and Buildings*, *48*(July 2009), 240–248. https://doi.org/10.1016/j.enbuild.2012.01.037

MEA. (2005). *Ecosystems and human well-being*. *Ecosystems* (Vol. 5). https://doi.org/10.1196/annals.1439.003

Santamouris, M., Kapsis, K., Korres, D., Livada, I., Pavlou, C., & Assimakopoulos, M. N. (2007). On the relation between the energy and social characteristics of the residential sector. *Energy and Buildings*, *39*(8), 893–905. https://doi.org/10.1016/j.enbuild.2006.11.001

Yohanis, Y. G., Mondol, J. D., Wright, A., & Norton, B. (2008). Real-life energy use in the UK: How occupancy and dwelling characteristics affect domestic electricity use. *Energy and Buildings*, *40*(6), 1053–1059. https://doi.org/10.1016/j.enbuild.2007.09.001