



Bridging the Energy Efficiency Gap to drive Sustainable Development

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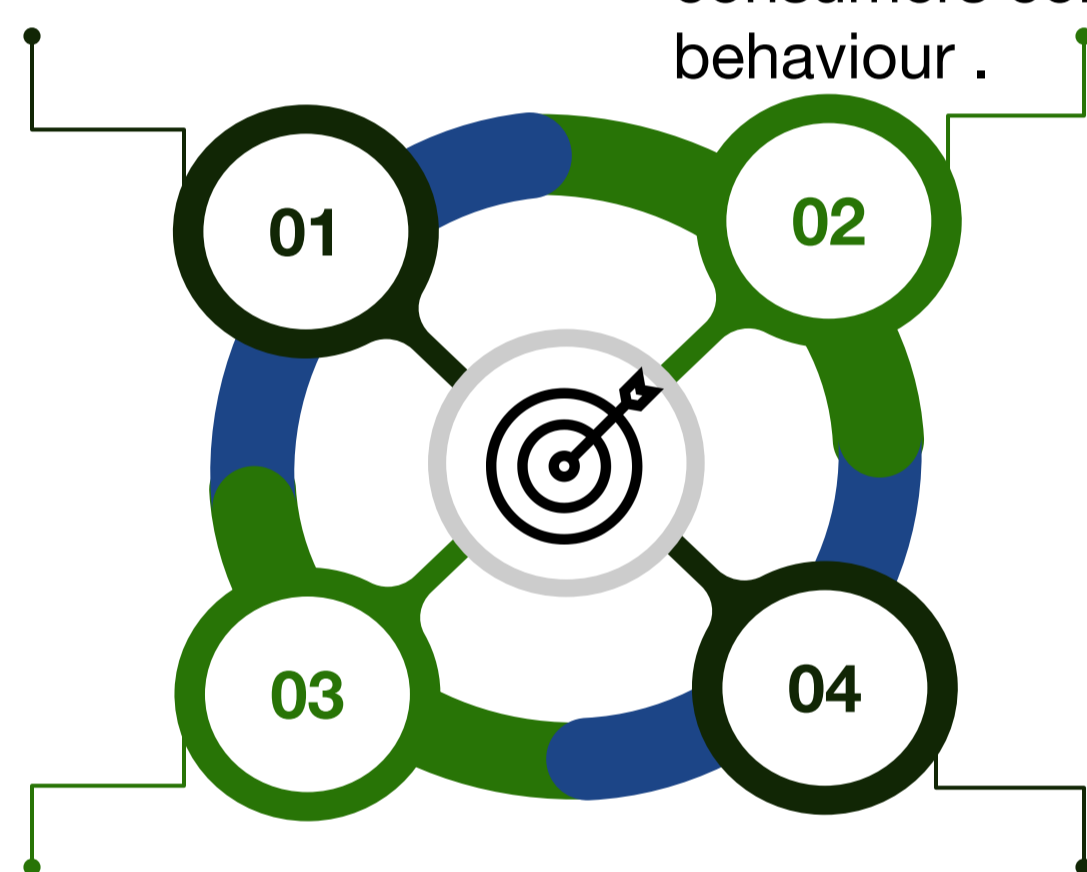
INTRODUCTION

Access to energy is seen as a key fundamental of any development drive. The increase in electricity generation and extraction of other forms of energy has been capital intensive and developing countries have continued to struggle to invent technologies that will enable them to produce more. The growth in urbanization, enormous increase in energy intensive economic activities and the growing increase in the middle class around the world have resulted in growing demand for energy far beyond many countries' installed capacity. Countries have continued to build new and improved energy systems but energy demand continues to grow at an exponential rate, the analysis from the study shows bridging the energy efficiency gap at all levels will be the most cost effective and environmental solution that will make the 2030 agenda achievable.

RESEARCH OBJECTIVES

To understand the common barriers towards achieving energy efficiency.

To examine the gaps between access to technology and energy consumers consumption behaviour .



To investigate regulatory and institutional barriers to enhancing access to energy efficient technologies.

To understand the role of policy and energy efficient education in promoting energy efficiency.

METHODOLOGY

01

Designed questionnaires with 30 open-ended and closed-ended questions.

02

Adapted a conceptual approach by using current literature on energy efficiency in evaluating its purpose in sustainable growth.

03

Using an Energy Efficiency Online Calculator (EEOC) a tool to test the impact of such tools on consumption behaviour

04

Manual coding and thematic analysis of the data.



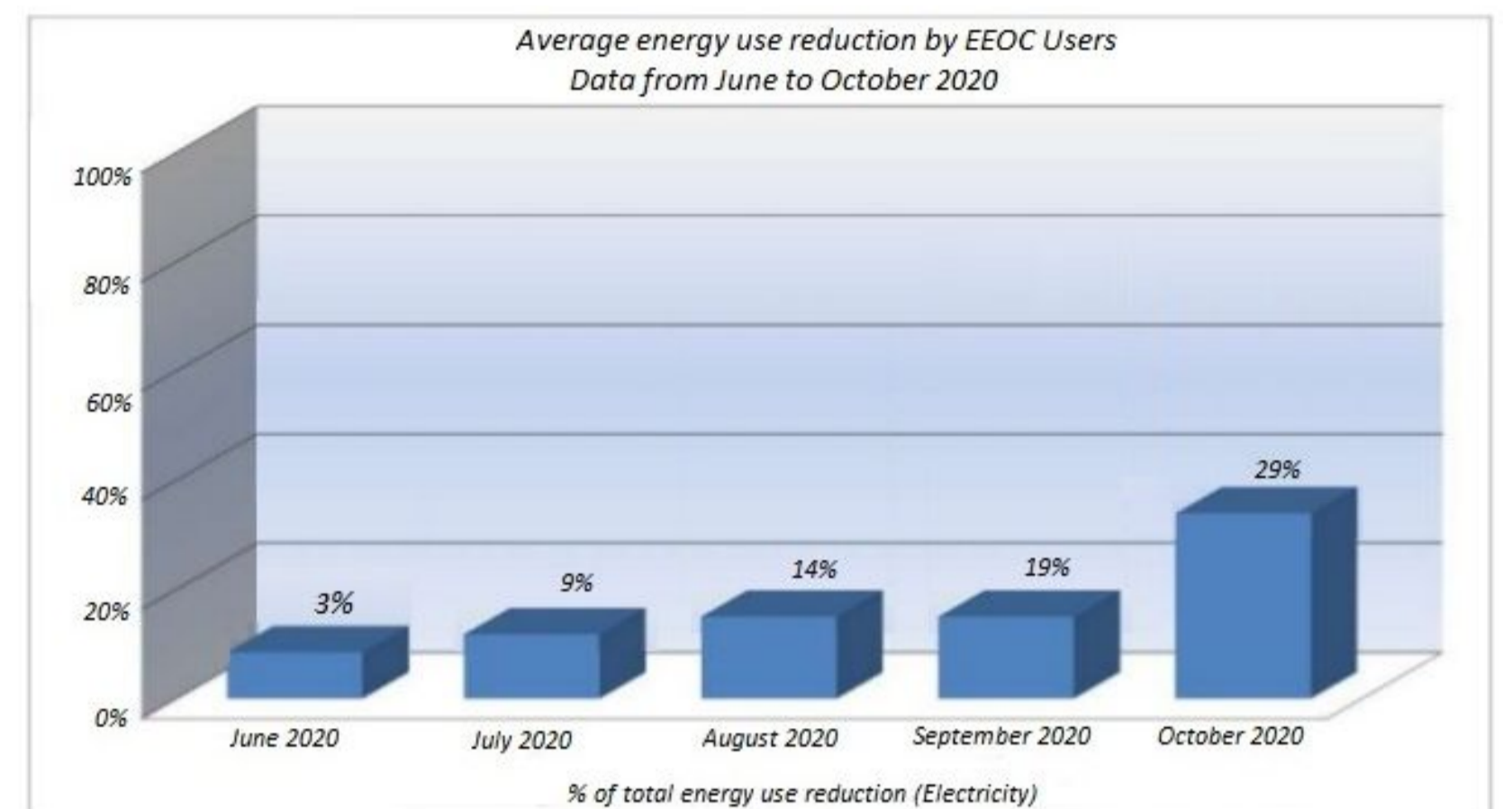
If only if I had knew I will have kept the bulbs off when not used (Participant, 2021)



RESULTS

Efficient Energy Use and the Environment

The EEOC reduced users' consumption behavior during its piloting



Lack of Timely data and Information

Little or no data available on energy efficiency consumption behaviour

Lack of Access to Capital and Education

The lack of access to capital was found to be an important issue that have mitigated the difussion of new technology; inaddition, the lack of awareness on consumption behavior was identified to be major barrier towards energy ffeicny

Low priority of energy efficiency projects

Energy efficiency almost always, sits outside the core competencies of most businesses.

CONCLUSION

Many factors influence consumers' energy consumption behaviour. Technology development, culture and economic situation are some factors that play an important role when consumers are considering what's a normal way of life. While innovation and new development is made on energy efficiency appliances, we have to tackle the human-related factors that will influence how these technologies will be used. Changing these human factors will be an uphill battle for policymakers. The Global concern on the continued unsustainable exploitation of nonrenewable resources, use of inefficient technology in the production and distribution of power, the use of weak policies to promote energy efficiency practice among citizen has have a huge impact on our efforts in getting close to the 2030 agenda.

RECOMMENDATIONS

The use of a behavioural rather than a techno-policy focused approach

This paper recommends authorities in the energy sector to start considering achieving energy efficiency from a behavioural perspective rather than just focusing on formulating policies or energy-efficient products. Using a consumer behavioral centered approach when products and policies are being developed will be the catalyst that will promote energy efficiency lifestyle and practices.

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