



Title Should Be Concise And Informative Abbreviation And Formulae Should Be Avoided

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Abstract

A concise and factual abstract is required. Approximately 200 words, outlining in a single paragraph the aims, scope and conclusions of the paper.

Keywords- Authors should select a maximum of five keywords related to the research studies. Each Keyword should be accompanied by the capital letter.

1. Introduction

Bangladesh, a developing country, has experienced a sustained economic growth over the last two decades mainly due to its increased industrialization despite the lack of industry friendly policies. Even with the insufficient energy production, Bangladesh had a steady increase in industrial index over the last few years [1].

2. Energy Situation and Textile Industry Context in Bangladesh

2.1 Use of Energy in Bangladesh

Bangladesh, located in Asia, has an area of 147,570 km² [11]. The GDP of Bangladesh is following an upward trend for the recent few years despite of having lack of sufficient energy generation and supply [12], [13]. Many studies have showed that there is a relation between growth of GDP and energy consumption of a country [14], [15], [16].

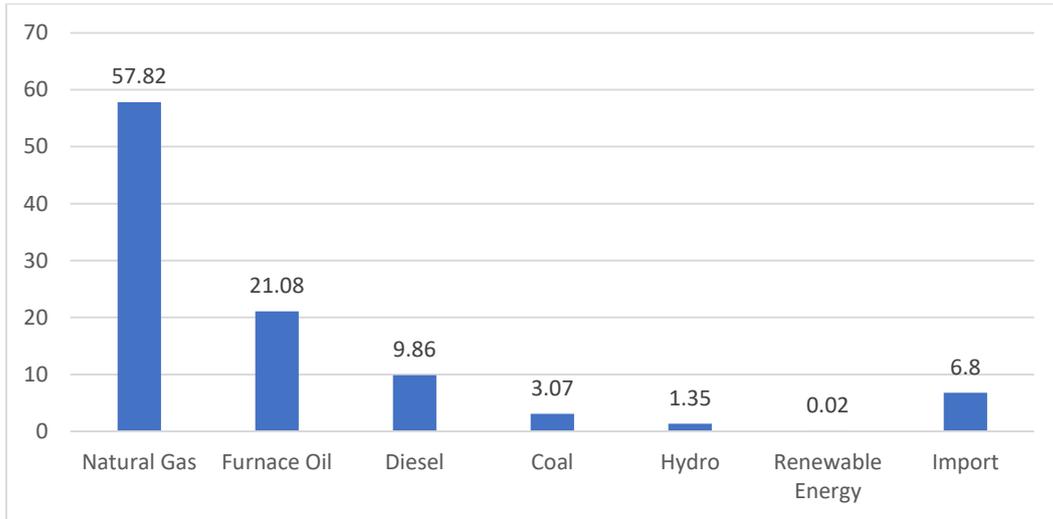


Fig. 1. Power generation by Fuel Type (percentage) in Bangladesh [17]

2.2. Textile industry in Bangladesh

All figures and tables should have a title with chronological numbers, appropriate captions. Figure captions should be placed below the figures. Tables should not duplicate results presented elsewhere in the manuscript. Footnotes to tables should be typed below the table and should be referred to by superscript lowercase letters.

Table 2: Renowned retailers and brands import from Bangladesh [26], [27], [28]

Brand Name	Remark
H&M	Swedish multinational clothing-retail company
Walmart	American multinational retailing corporation
C&A	Dutch chain of fashion retail clothing stores
Zara	Spanish multinational clothing and accessories retailer company
GAP	American worldwide clothing and accessories retailer
Levi's	American clothing company

3. Energy management in Industry

Math formulae: Equations and formulae should be typewritten wherever possible. Equations should be numbered consecutively on the right hand side of the page.

Units: All measurements and data should be given in SI units, or if SI units do not exist, in an internationally accepted unit. If you use any symbol or unit that may not be generally recognized, please include an explanatory footnote the first time it is used.

4. Methodology

There are five types of research strategies to pursue any research. They are classified as experimental approach, surveying, archival analysis, histories and analysis of case study [49], [50]. Case study strategy is an observational strategy to investigate a phenomenon in-depth in practical context where the connections between phenomenon and context are not clearly visible[51], [50]. The case study methodology holds the capacity to close imminent of hypothetical development to the researchers[50],

[54]. Moreover, it gives a platform to perform casual argumentation on the basis of theoretical construction [50], [55].

5. Results

5.1 Barriers to energy efficiency

The major hindrances to energy efficiency in textile mills of Bangladesh were “*Inadequate technical cost-effective measures*” and “*Inadequate capital expenditure*”. Twelve textile mills have identified these as the most significant barriers. “*Poor research and development*”, “*Inadequate technical experts*” were rated by six out of eighteen textile mills that participated. “*Risk of high energy prices in future*”, “*Assistance from energy professionals*” and “*Energy management scheme*” were identified as the most important drivers for energy efficiency among the studied textile mills. The lowest ranked drivers were “*Acquaintances within the energy sector*” and “*Agreements with tax dispensation*”. The drivers for energy efficiency in the textile mills of Bangladesh are shown at Figure 6.

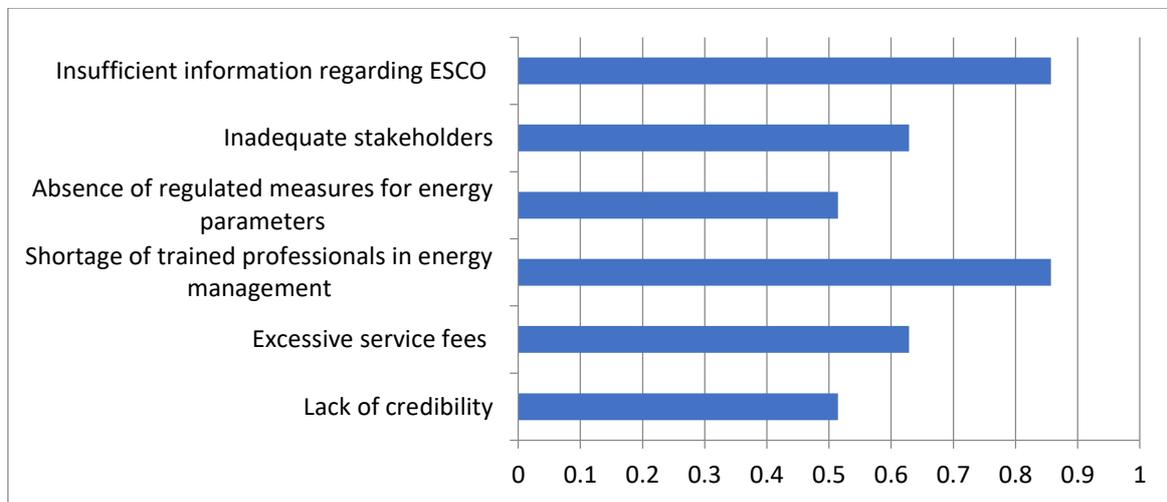


Fig.8: The perceived barriers for consulting with energy service companies

6. Discussion

According to the result of the study, the primary barriers for energy efficiency is " *Inadequate technical cost-effective measures*", " *Inadequate capital expenditure*", "*poor research and development*", " *Inadequate technical experts*" and " *Inadequate financial incentives*". Compared to the result of a similar study for steel and iron industry of Bangladesh, the primary barriers for textile industry provides a highly contrasted result. Even with same energy infrastructure and policy, the textile industry has significantly different barriers than the steel and iron industry.

7. Conclusions

The objective of this work is to study different aspects of energy efficiency and energy management practices of the textile industry in Bangladesh. This study of energy efficiency is novel for the textile industry of Bangladesh as the only other similar work was carried out for the steel industry of Bangladesh by the same authors[10].

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