

The Energy Saving Potential in the SMEs: Selected Case Studies from the Industrial Sector in Sri Lanka

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Energy efficiency in Sri Lankan SMEs in the industrial sector is typically low with a large untapped potential for energy saving. In order to enhance the effort of achieving Sustainable Development Goals 07: “clean and affordable energy” and Goal 12: “sustainable production and consumption”, it is important to study energy consumption behaviour of the SMEs sector in Sri Lanka. Thus, this study focused on identification, evaluation and analysing the energy saving potential of the selected SMEs in Sri Lanka. Five industrial sectors: printing and packaging, apparel, metal, chemical, and food and beverage which consume more than 50% of energy consumption of SMEs were selected. Two SMEs of each sector were selected to represent the sector and conducted comprehensive energy audits for a period of three weeks. Results showed that incorrect power factor adjustments, poor practice of switch off policy on lights and fans, inadequate modifications on lighting system, compressed air systems, boilers, and machineries were the most significant factors led to energy inefficiencies in the sector. Further, if prompt actions were to be taken for the above issue, the study estimated that the total energy saving potential for the selected firms would be about 20% to 30% of the total energy consumption. Moreover, it was about 10% to 15% of energy costs of the selected firms. The study concludes that SMEs in the industrial sector should focus on rectifying inefficient usage of energy.

Keywords: Energy efficiency, Energy cost, Energy saving potential, SMEs