



# AIUB DSpace Publication Details

<b>Title:</b>	Design of a Power System (Solar-Diesel Generator) for a Garment Industry and Load Optimization		
<b>Author(s) Name:</b>	Ahnaf Tahmid Nahian, Md.Tahmid Farhan Himel, Mahmudul Hasan, Nafeez Rahman, Chowdhury Akram Hossain		
<b>Contact Email(s):</b>	chowdhury.akram@aiub.edu		
<b>Published Journal Name:</b>	International Journal of Engineering Applied Sciences and Technology		
<b>Type of Publication:</b>	Journal		
<b>Volume:</b>	4	Issue	8
<b>Publisher:</b>	IJEAST		
<b>Publication Date:</b>	December 2019		
<b>ISSN:</b>	2455-2143		
<b>DOI:</b>	N/A		
<b>URL:</b>	<a href="https://www.ijeast.com/papers/1-8,Tesma408,IJEAST.pdf">https://www.ijeast.com/papers/1-8,Tesma408,IJEAST.pdf</a>		
<b>Other Related Info.:</b>	Page 1-8		



## AIUB DSpace Publication Details

### Abstract:

Due to adverse effect of global warming and environmental pollution, future world is looking for decontaminated green energy resources for power generation. Economy of today's world is based on commercial activities and rapid industrialization. To ensure sustainable economic activity we need to fulfil the energy demand of equipment as well as to serve the automation technology of industrial sector. This results an excess pressure on electricity demand significantly. In spite of many restrictions and proper technical support Bangladesh is looking forward to extract energy from its available renewable resources like other countries. Hybrid power system is a good choice to serve this purpose. This work mainly emphasis on the design and feasibility study of hybrid power system in the context of a particular garment industry, as the garments are the major source of foreign currency and employment in our country. The system is comprised of solar PV and diesel generator. Cost analysis and load optimization is done by HOMER Pro. System validity and advantages are also discussed in explicit way.