

Title:	Optimization of grid-tied distributed microgrid system with EV charging facility for the stadiums of Bangladesh
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Page **3** of **24** 



## Abstract:

Photovoltaic system and wind power are the bright future of hybrid distributed renewable power generation for dreaming a decontaminated green world. Modern world's enhanced commercial activities and rapid industrialization are increasing the peak of electricity demand in a significant way. Integration of battery operated vehicles and upgraded automation technologies to conventional power systems are also consuming large amount of power from grids. On the verge of producing clean energy, the civilized world has all the reasons to generate power from hybrid power systems. Coping with the technological advancement and obsolescence, Bangladesh is also progressing to extract power from existing renewable energy resources and their integration to the national grid. To assist country's distributed generation plan, installation of photovoltaic-wind power based hybrid systems with charging facility for Electric vehicles in major stadiums in Bangladesh is proposed in this paper. Cost analysis is executed in HOMER. Proposals validity and usefulness both are also explicitly discussed.

