

## عنوان مقاله:

Applications of Vertical Axis Wind Turbines for Remote Areas

## محل انتشار:

پنجمین همایش ملی انرژی (سال: 1384)

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## نویسندگان:

Islam - *Mechanical, Automotive and Materials Engineering Department, University of Windsor, Canada*

Esfahanian - *Mechanical Engineering Department, University of Tehran, Iran*

Ting - *Mechanical, Automotive and Materials Engineering Department, University of Windsor, Canada*

Fartaj - *Mechanical, Automotive and Materials Engineering Department, University of Windsor, Canada*

## خلاصه مقاله:

Wind energy systems have been utilized for centuries as a source of energy for mankind. At present, wind power is growing at a rate in excess of 35% per annum, which is predicted to continue at this rate at least until 2010. Modern wind turbines are categorized as Horizontal Axis Wind Turbines (HAWT) and Vertical Axis Wind Turbines (VAWT), which are currently being utilized for diversified remote applications. Most of the wind turbines installed today are HAWT largely due to significant investments made by many countries over the last ten years that have overshadowed progress in VAWT technology. Recently there is a resurgence of interests on different types of renewable energy technologies, including VAWT, because of growing environmental concerns and the demand for more enhanced energy security. The basic theoretical advantages of VAWTs are: they are omni-directional i.e. they accept the wind from any direction; and the generator, gearbox, etc. can be placed on the ground. Today, there are several commercial VAWT models that have guaranteed performance for diversified end-use applications. The paper outlines the current utilization scenario and the future prospects of these environmentally benign energy converters in remote .far-flung areas

## کلمات کلیدی:

Renewable Energy, VAWT, Wind Turbine, Wind Energy

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