INDEX

PROBLEM STATEMENT:

World energy consumption is the total energy used by the entire human civilization. DUE to both the growth of concerns on environmental issues and the limited sources of fossil fuels.

OBJECTIVE:

The penetration of wind energy in future power systems is going to rapidly increase. The majority of wind turbines that are currently operating in wind farms present a classical three-bladed rotor configuration with a horizontal axis (HAWT, horizontal-axis wind turbine). Nevertheless, in recent years, a renewed interest in vertical-axis wind turbine (VAWT) architectures is being registered, especially for small scale rotors, motivated by a perceived future demand for decentralized electricity generation within cities and rural communities.

VAWT AND ITS BENFITS:

Vertical wind mill can able to rotate in the lower speed.It is easily installed in the ground. Efficiency – 50% to 60%- for minimum speed of the wind.

BILL OF THE MATERIAL

SERIAL NO.	**MATERIAL**	**QTY**
1	AIRFOIL 6692	9
2	STAND	1
3	BEARING	4
4	SOLAR PANEL	1
5	CONVEX LENS	1

RAW MATERIAL

SERIAL NO.	MATERIAL	DIMENSION	QTY
1	Aluminium sheet	2500*1000mm	7
2	Mild steel pipe	-	Required
3	Bearing	.0005*.7500*.1256	4
4	Solar panel	12 *12	1
5	Mirror	25mm dia	1
6	Dual generator	-	1
7	Electric circuit	-	1
8	Shaft	20mm dia	1
9	Hollow shaft	50mm dia	1

ASSEMBELY DETAILS:

This division will show the part and assembely of the vawt.

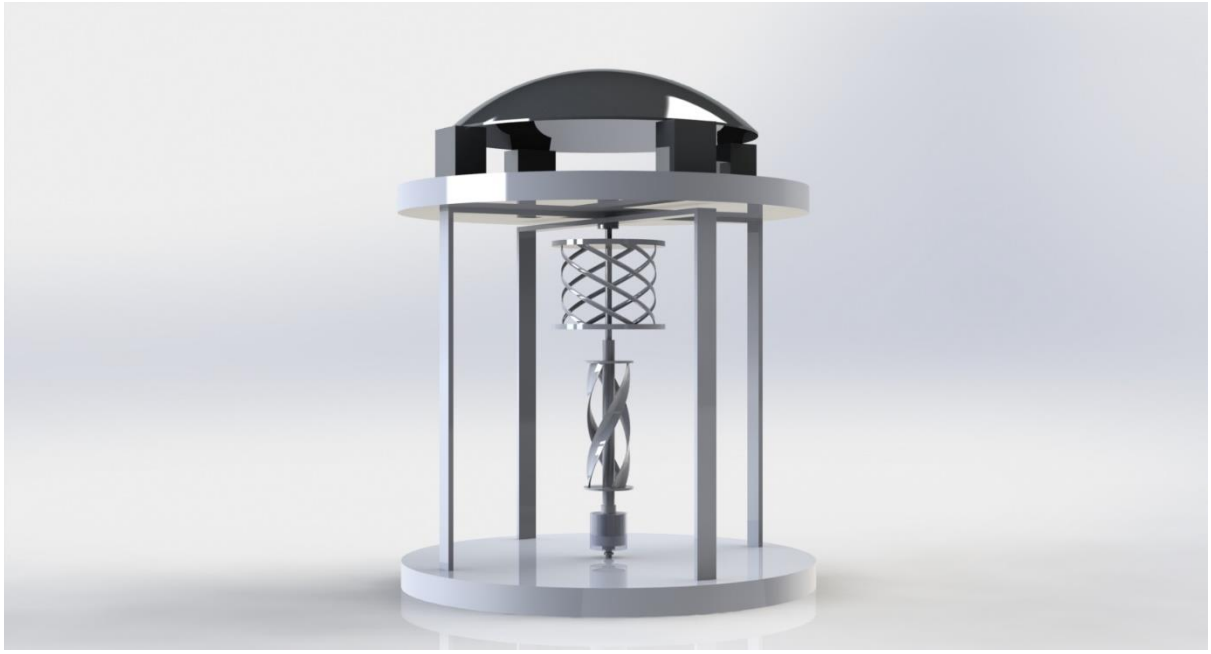

Fig.no.:1

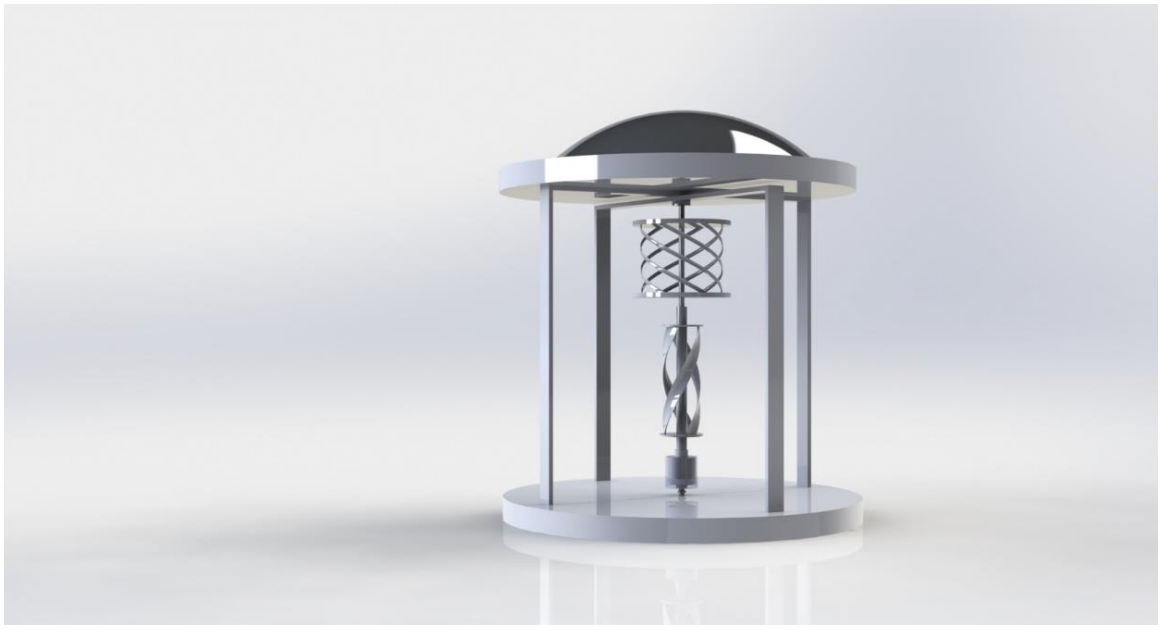

Fig.no:2

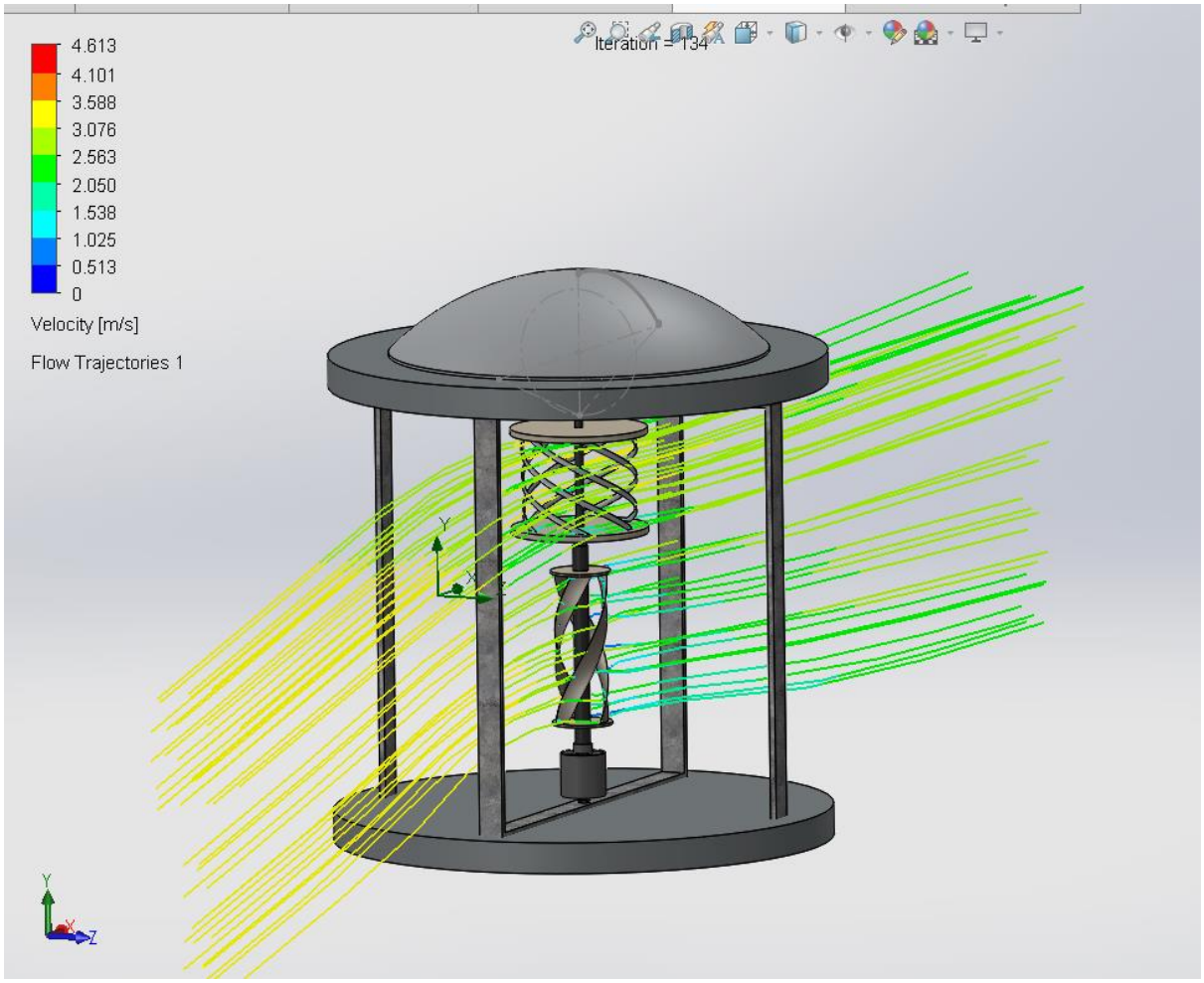

Fig.no:3