Dual Power Generation via Wind & Photovoltaic Energy
Developed By: Your Engineering Solutions (YES)

Charles Sotto, Lorans Hirmez, Brandon Fong, Raizen Elia, Wissam Georges, Mohammad Alzamami, Adam Draxler, Abdullah Alrasheed, Joseph Morga, Jawa Alaskar, Ahmad Alsarhan
San Diego State University Department of Electrical and Computer Engineering

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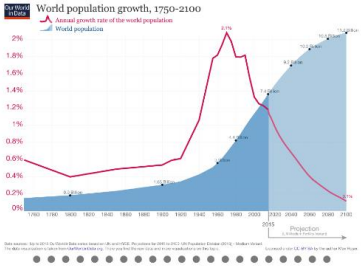
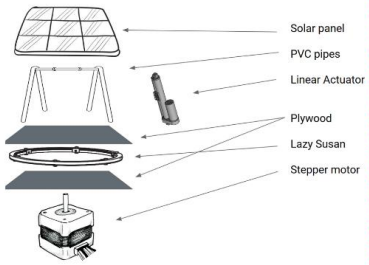
Abstract:

With the world's increasing population there is an increase in daily required energy. By 2050 the population is expected to rise to 9.7 billion, which would be an increase of 2 billion people from our present time. Earth itself cannot change in a way to provide the needed energy to supply the services to satisfy social and economic development, welfare and health. With the use of renewable energy resources we can help supply the energy demand for future generations.



Maneuvering System:

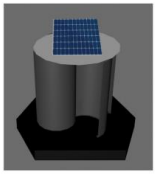


Special thanks to:

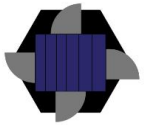
Dr. Chris Mi

Group Picture:

Promotional Flyer:



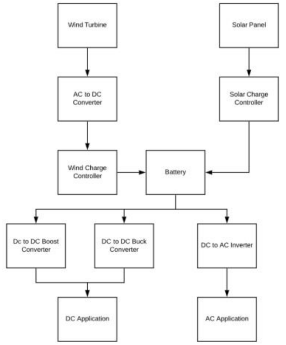
With the world's increasing population there is an increase in daily required energy. By 2050 the population is expected to rise to 9.7 billion, which would be an increase of 2 billion people from our present time. Earth itself cannot change in a way to provide the needed energy to supply the services to satisfy social and economic development, welfare and health. With the use of renewable energy resources we can help supply the energy demand for future generations. The renewable resources that we are implementing includes both solar and wind powe generation.

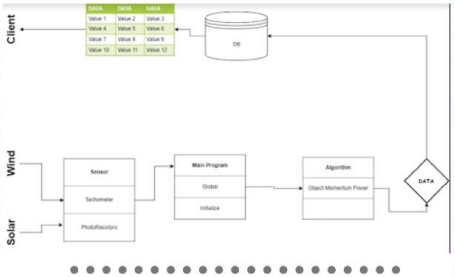


Our device will be installed in highways, and roads that are usually busy. Because we intended that the wind turbines near the track will be harvesting the wind energy while a train or car is passing by. Also, in the case that there is no train or car passing by, solar panels will be mounted on the wind turbines in order to harvest solar energy. For maximum energy efficiency, we will be using a bidirectional power converter in order to convert from DC-DC, DC-AC, AC-DC, or AC-AC. After the energy is converted, a Lithium Ion Battery will be used to store the renewable energy.

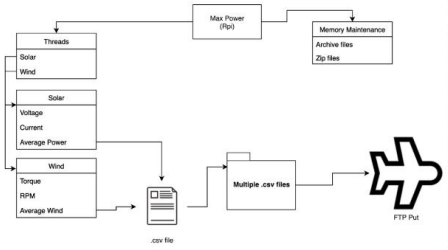
GoFundMe page:
https://qrgo.page.link/ph41h

Block Diagrams:

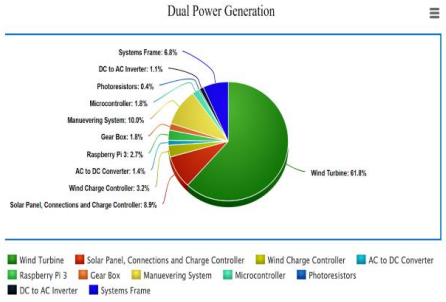




Max Pwer Function:



Budget:



Project:

GoFundMe Page:

https://bit.ly/3afpzFv