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GREEN ENERGY ON THE CARIBBEAN SEA

SYNOPSIS

There is a global need for clean, viable alternative energy sources. The vast majority of efforts has been placed in the areas of solar and wind energy. It is our belief that ocean current is another viable clean energy source. Therefore, it is the purpose of this group to design, create and test an ocean current turbine.

There is a constant motion of oceanic currents that is driven by temperature and salinity differences in the ocean on earth. This water movement snakes around the planet on what is known as the Global Conveyor Belt. On this Global Conveyor Belt there is a warm, fast flowing portion in the Gulf of Mexico. This is the ideal location to launch this project.

The climate of this location is also suitable for wind and solar energy harvesting. As such, we will try to incorporate all three into our design a system to take advantage of this, and create a three point harvesting system to create maximum energy generation. It is also our goal to design a solution that will allow our turbine to utilize maximum current flow without the need to adjust its position due to directional or temperature changes.

Caribbean and Latin American countries are far behind in the development of alternative energy sources and are thus victims of escalating fossil fuel prices. The location of these countries would allow them to be greatly impacted by our project. It would not be able to meet their total energy requirements, but it would allow them to reduce their dependency on fossil fuels.