

## SEI Fiji Project Meeting, 10/9/08

- Overview of Fiji Project
  - A project using coconut oil in the diesel generator was developed last year
  - The goal for this term is to finish a proposal on Micro Hydro technology, a possible alternative to the coconut oil solution
- Benefits for club members:
  - Work on this project could qualify as one's Senior Project
  - Three members will travel to Fiji in December for a site assessment
- Introduction to Micro Hydro Technology

RIVER -----> PIPE (PENSTOCK) -----> TURBINE -----> GENERATOR

- This technology has been successfully implemented in India
- Columbia University is utilizing this plan in their own P3 grant
- Need to figure out optimal type of turbine
  - Reaction turbines include Kaplan and Banki
  - Impulse turbines include Pelton wheel and Turgo wheel
- Also need to investigate penstock (getting the water from the river to the turbine with optimal head, flow rate, etc.)
- Information about applying for the P3 grant
  - P3 stands for People, Prosperity and the Planet Student Design Competition for Sustainability
  - The club received the Phase 1 award of this grant last year but failed to receive Phase 2
  - The club needs to write up a specific proposal of our plan in order to qualify again
- Before the next project meeting:
  - Those interested should read through the literature posted in the "Library" section of the website to familiarize themselves with the technology
  - In addition, people should decide which aspect of the project they are most interested (turbine, penstock, etc.)