

# **Biodiesel Pre-treatment**

GreenBiofuels

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# System

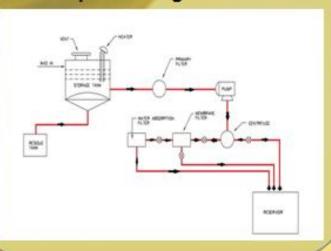
#### **Problem Statement**

- ·High dependency on fossil fuels.
- Find a suitable use for Waste Vegetable Oil.
- WVO must be extensively filtered for future use.
- •WVO is typically contaminated with foreign particles.

#### Motivation

- Provide an environmentally friendly alternative resource to fossil fuels.
- Improve efficiency of WVO filtration.
- Acquire a 95% oil purity after one filtration cycle.

### **Proposed Design Schematic**



#### Objective

- Develop functioning prototype of Waste Vegetable Oil filtration.
- Separate water and debris from Waste Vegetable Oil.
- Reduce energy consumption necessary to filter WVO.

#### **Proposed Design**

- Develop a prototype that accommodates to different compositions of WVO.
- Successfully treat the WVO, while increasing efficiency and reducing power consumption.

#### Timeline

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## Responsibilities

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#### Team Members







Rainer Rodriguez Harrison Mejia

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