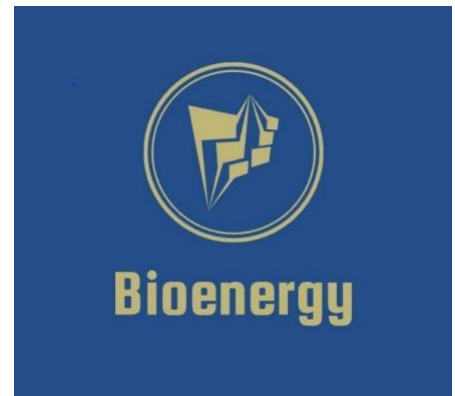


# BIOENERGY

## USED COOKING OIL (UCO)



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### Project Aim

The aim of the project is to identify the level of awareness among general residents on the impact caused by improper disposal of Used Cooking Oil (UCO). The project team identified that there is lack of awareness among general public on the environmental impact due to improper disposal of UCO which will affect SDG goals 7, 14 and 15. Improper disposal can cause block in pipelines, fires at landfills, water pollution and some impact on ground water.

Hence this project is to identify the awareness and work out suitable solutions for proper disposal of UCO.

### Support

The Project Team received support from around 200 participants who did the online survey.

The Project Team initiated discussions with industry leaders and obtained feedback from them on various aspects of UCO.

We also received immense support from the GSL team in guiding us throughout the project phase.

Our school teacher also encouraged us to complete the project before the deadline.

### Existing Buildings Solution

Create awareness among residents on proper disposal of UCO. Collect all UCO in bottles and then engage with waste collection companies to consolidate all the waste and send to recycling companies.

### New Buildings Solution

Design proper UCO drain pipeline connecting all kitchens to a central waste collection unit. The recycling company to collect the waste from the central collection unit and use the UCO for recycling to Bio Fuel.

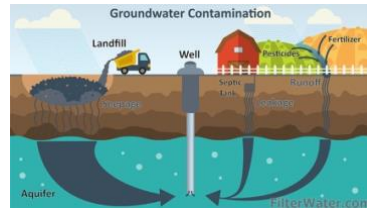
# Online Survey Outcome (Top Results)

1. How Big is your Family – 56% - 4 to 6 members
2. How many liters of cooking oil do you use in a week – 36.50% - quarter a liter
3. How often do you throw away cooking oil per month – 44.72% - 1 to 4 times
4. How do you usually dispose used cooking oil – 41.12% - pour it down the drain
5. Are you aware that improper disposal of used cooking oil can cause environmental pollution – 37.88% - I am generally aware
6. Do you know any method of reusing or recycling used cooking oil – 56.30% - No
7. Are you aware that used cooking oil can be used to recycle to Biofuel – 45.73% - No until now
8. Are you aware about the usage of Biofuel – 41.71% - I am generally aware

## Environmental Impact



**Clogged Drainage Pipe**



**Ground Water Contamination**

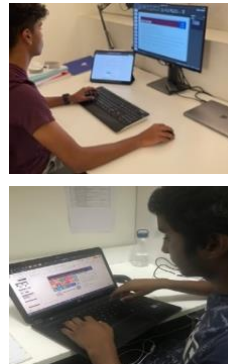
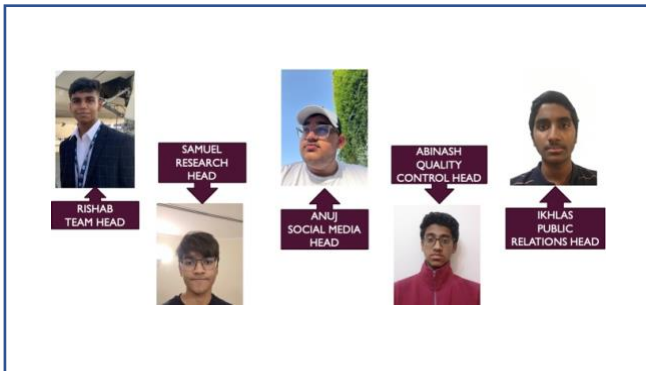


**Fire at Landfill Sites**



**Water Pollution**

### The Working Team



### Knowledge Gained

- ❖ About Companies that recycle UCO
- ❖ Process of converting UCO to Fuel
- ❖ Commercial Firm such as Mc Donalds have successfully implemented
- ❖ Environmental Impacts of Improper disposal of UCO

## Impact

- ❖ Creating Awareness among the public on the impacts of improper disposal of UCO on the environment
- ❖ Implement the right strategy of proper disposal of UCO for the residents.
- ❖ Tie up with waste collection companies
- ❖ Engage with waste recycling companies who can produce biofuels form UCO
- ❖ Manage the end to end distribution mechanism of the recycled product

Propect Source : Various websites for Photos and information, Surveymoney.com, Instagram, Youtube Videos