

## View results

Respondent

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42:50

Time to complete

## 1. Below please include a brief project summary and your requested changes. \*

The overarching goal is to divert landfilled plastic waste by collecting, processing, and converting the plastic waste from the U of I waste transfer station MRF to a usable fuel that can be used in University vehicles. This will be achieved by demonstrating the continuous pilot-scale catalytic pyrolysis system for conversion to fuel. The end goal is to examine if a business case exists for plastics to fuel conversion on campus.

CoVid, PI departures, and startup issues with the reactor caused delays. All of these issues have been resolved.

Continuous conversion of waste PP has been demonstrated. Distillation of fuel has been conducted, and fuel properties are being evaluated. These properties will be available by December 2023 end to assess fuel quality and determine the blend ratio of the corresponding fractions.

We are requesting a No-Cost extension to June 2024 to process additional quantities of PP, PE, and PS waste segregated from UIUC waste transfer and Vet Med and assess fuel quality. This will provide insight into variations in fuel quality as well as test the equipment's reliability over more hours.

## 2. Project Name: \*

Diversion of Non-Recyclable Plastic using Pyrolysis Process to Produce Fuels for Campus

## 3. Date of Scope Change Submission \*

Nov 4, 2023

## 4. Type of Scope Change: \*

- Project Direction
- Budget
- Timeline
- Project Advisor/Financial contact
- Project Lead

## 5. Please provide a detailed summary of the requested timeline change. \*

Currently, plastic waste from the UIUC waste transfer station and from Vet Med is being segregated. The segregated plastics (PE, PP, and PS) will be processed early next year as they have to be processed (i.e., cleaned and granulated) prior to being converted. They will then be separated into fuel fractions and analyzed for properties to assess suitability for use as fuel.

We are seeking a NO-COST extension to June 2024 to carry out the above-detailed tasks.

6. Additional comments (Optional) \*

4 students have worked on this project to date. Additional students will be employed next semester.