

DATA INVENTORY AND DATA GAP ANALYSIS REPORT

1. INTRODUCTION

This short report describes our work in compiling a data inventory and analyzing data gaps (Task 1) for the UB-DEC scrap tire project. As described in the scope of Task 1, the University at Buffalo team (UB) acquired two types of data: data from primary sources and secondary data. UB conducted interviews with tire to obtain primary data. In addition, UB developed and conducted a survey of Waste Tire Handling and Recovery Facilities (WTHRFs) and other players in the scrap tire supply chain to collect primary data.

2. DATA INVENTORY

a. Secondary Market Conditions

i. Data Gathering

1. UB compiled data on scrap tire receipts from 2013 to 2020 through DEC's Tire Storage Annual Reports.
2. UB received scrap tire transporter and scrap tire abatement data from DEC.
3. UB met with the U.S. Tire Manufacturers Association (USTMA) and obtained scrap tire market reports for the period 2001 to 2019.
4. UB interviewed Liberty Tire, CRM Rubber Manufacturers, Michigan DEQ (now EGLE), Product Stewardship Institute (PSI), eTracks (Canada) and ecoShred.
5. UB developed and conducted a survey targeting WTHRFs and scrap rubber processors and end-users.

ii. Data Inventory

1. Data in hand

- a. UB created a WTHRF database for New York State covering the years 2013 to 2020. It includes the names and addresses of active scrap tire processing facilities in, the monthly volume of scrap tires accepted, and some finished products destination information.
- b. UB created a transporter database that includes the volume of scrap tires transported, the permittee to

transport scrap tires, contact information for the person in charge, and the address of the disposal facility.

- c. UB created a sampling frame that contains 29 main contacts in New York State, 12 contacts out of New York State, and 18 other contacts. UB then conducted the survey and received 6 responses, 3 of which were from companies that handle significant volume of scrap tires, which is a 20% response rate. The response rate is consistent in size to that for other industry surveys conducted for DEC by UB (e.g., the plastics survey). UB primarily focused on companies who process large tire volumes in New York State.

b. Policy Analysis

i. Data Gathering

1. UB met with various industry experts and sought their views on current scrap tire policies and regulations.
2. UB included questions related to laws and regulations in the survey to ask about waste tire processing facilities.
3. UB included questions about infrastructure and market development opportunities in the survey.
4. UB reviewed news, articles, and literature to understand secondary tire-based material marketability.

ii. Data inventory

1. Data in hand

- a. Ontario's traditional Used Tire Program ended on December 31, 2018.
- b. Ontario currently has an Individual Producer Responsibility (IPR) system to enhance the waste tire recycling process. The program has achieved a 100% scrap tire recycling rate.
- c. UB conducted meetings and first-person interviews with eTracks, a non-profit Producer Responsibility Organization (PRO) incorporated to manage the recovery and recycling of ELTs (End of Life Tires) in Ontario.

3. DATA GAP

a. Secondary Market Conditions

- i. The numbers of scrap tires accepted and sent out in the WTHRF annual report do not match. The discrepancy may be due to scrap tire disposal facilities retaining a portion of the tires for internal use or scrap tire stockpiles, which are not reported in the WTHRF forms.
- ii. It is unclear from the Waste Tire Storage Annual Reports where some processed tires are sent. This makes it difficult to determine how many tires are used in landfill applications or tire-derived fuel (TDF) in New York State. Questions about end use destinations were included in the survey to address this concern.

b. Policy Analysis

- i. Although New York State has a scrap tire processing policy, there are still scrap tires stockpiled or dumped illegally each year. This data is not available to UB.

4. CONCLUSION

UB compiled and analyzed primary and secondary data, including but not limited to the volume of scrap tires disposed of and their final destination as listed in WTHRF annual report, the number and destination of scrap tires shipped annually by transporters, and the thoughts of experts on scrap tire recycling. UB actively reached out to additional companies to obtain more survey responses for the primary data. There are remaining data gaps related to the discrepancy between the numbers of scrap tires accepted and sent out, where some processed tires are sent by facilities and illegal tire stockpiles and dumps.